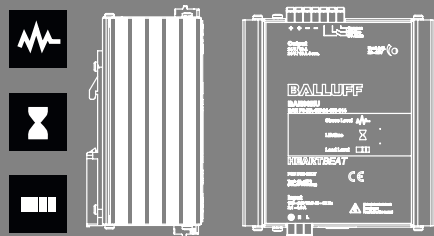


BALLUFF

sensors worldwide

Accessories

For perfect integration of sensors and systems





As the leading sensor specialist and system provider with more than 90 years of company tradition, Balluff GmbH has been a recognized partner in factory automation for decades. With 56 locations, Balluff has a strong presence on every continent. The corporate headquarters in Neuhausen a.d.F. is located near Stuttgart.

Balluff masters the entire technological variety with various operating principles, including high-quality sensors and systems for position measurement and identification, as well as sensors for detecting objects and measuring fluids. The full-range assortment includes optimal network and connection technology and a comprehensive line of accessory products.

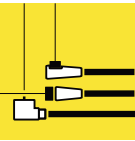
We offer innovative, first-class products tested in our own accredited laboratory, and maintain certified quality management in accordance with DIN EN 9001:2008. Our technology speaks for itself in international applications since it also meets regional standards.

Balluff stands for application-specific customer solutions, comprehensive services, individual consultation and prompt service. Our staff of more than 2450 employees is committed to providing outstanding service worldwide.

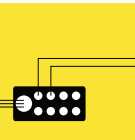
Easy handling, accurate positioning – take advantage of the optimal peripherals for sensors.



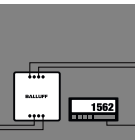
Connectors and Valve Connectors	16
Connectors and cables, special properties, valve connectors, fieldbus connectors and connection cables, accessories	



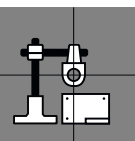
Passive Splitters	210
--------------------------	-----



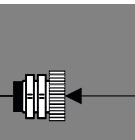
Electrical Devices	224
Power adapters, pulse extender, function diagnostics unit, analog switching amplifier, sensor tester, testing and setting device, signal adapter, digital display	



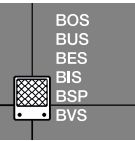
Mounting System	262
------------------------	-----



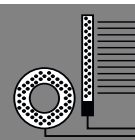
Fasteners	286
------------------	-----



Product-specific Accessories	312
Photoelectric sensors, positive stops and contact protector, ultrasonic sensors, Uni/Unicomact sensors, industrial RFID systems, position and distance measurement, pressure sensors, vision sensors, protective end caps and nuts	



Lights	404
---------------	-----



Basic Information and Definitions	422
--	-----



Alphanumeric Index	434
Worldwide Sales	474

Accessories

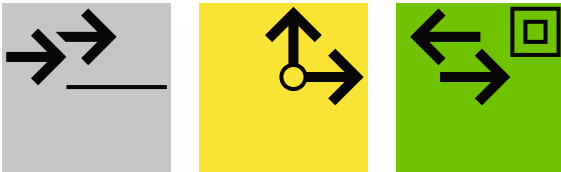
Fitting accessories are the optimal peripherals for sensors: We provide reliable products for time and cost-saving integration into your automation system and for reliable operation. We have put together a selection for you from our comprehensive product line.

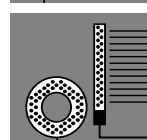
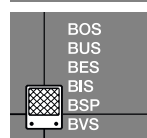
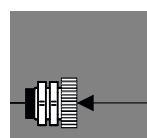
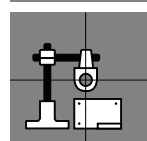
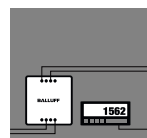
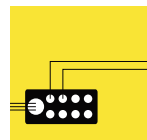
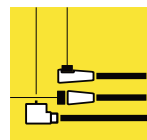
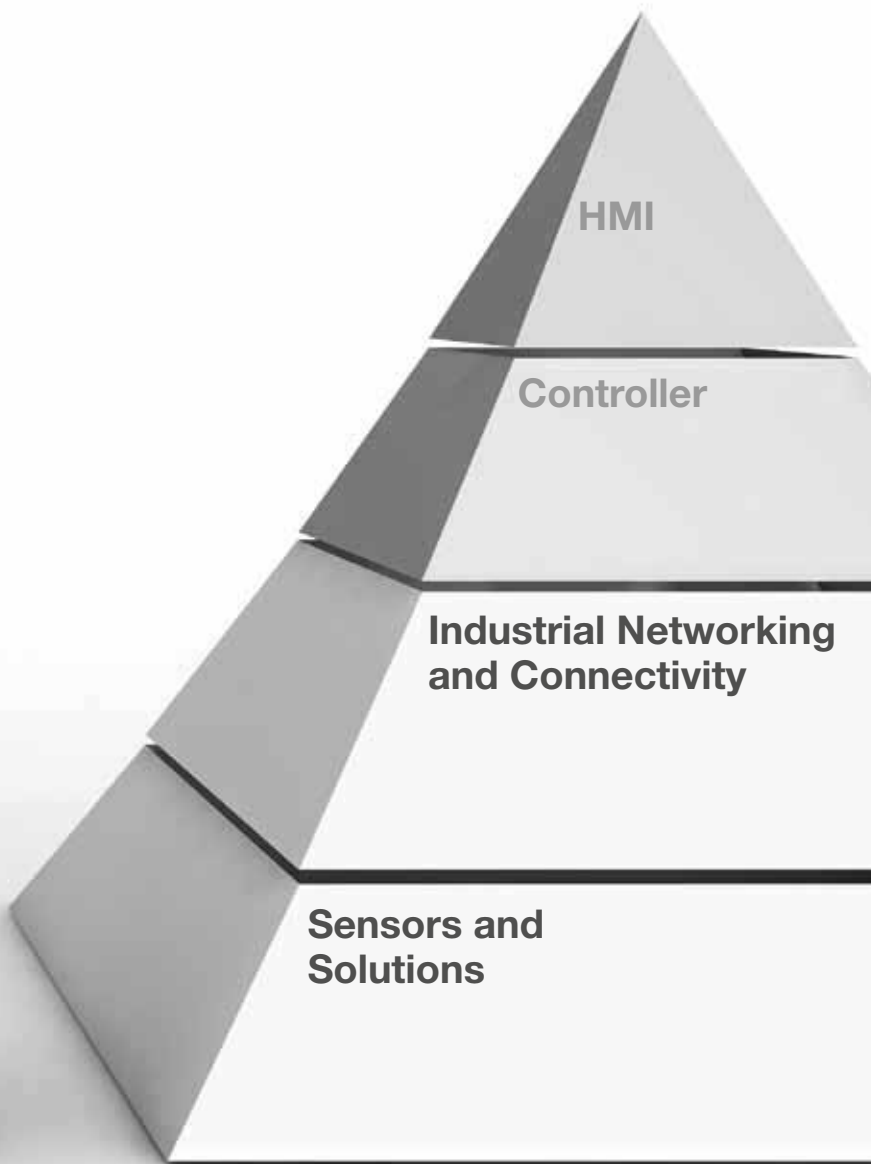
Customer-specific Services

Balluff stands for comprehensive systems from a single source

Systems and Service, Industrial Networking and Connectivity, Industrial Identification:

Industrial RFID systems, vision sensors, fieldbus modules, passive splitters, inductive couplers, IO-Link, connectors and connection cables



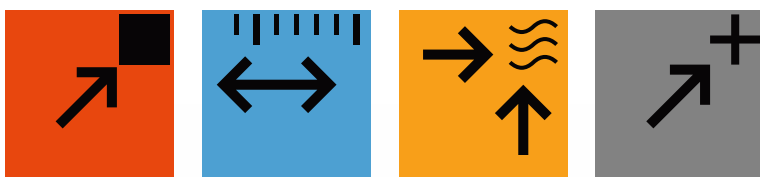


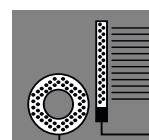
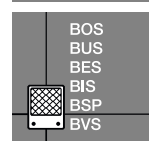
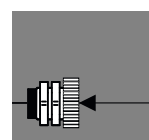
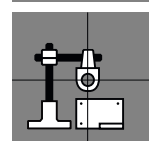
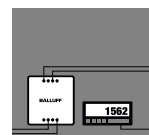
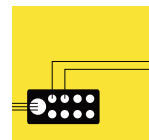
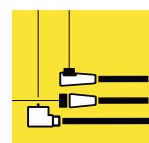
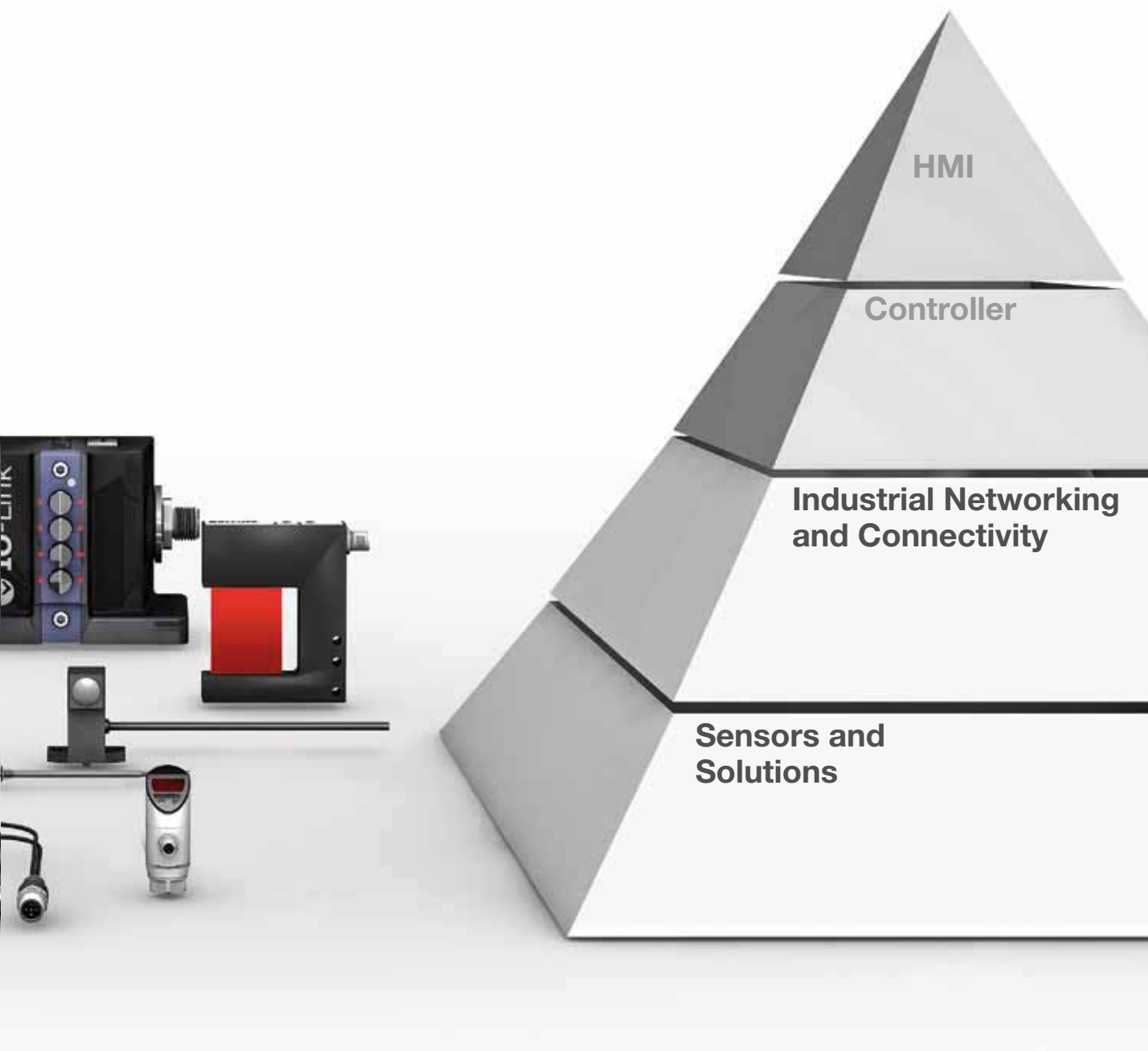
Sensor Solutions

For every application

Object detection, position and distance measurement, status monitoring and fluid sensors, accessories:

Inductive sensors, capacitive sensors, magnetic sensors, photoelectric sensors, mechanical sensors, ultrasonic sensors, inductive distance sensors, magneto-inductive displacement sensors, micropulse transducers, photoelectric distance sensors, magnetically coded position and angle measurement systems, inductive positioning systems, inclination sensors, pressure sensors, mechanical accessories, electrical accessories





Up-to-date Data

Global online availability

■ Products in overview



■ 2D and 3D product data



■ Current information at a glance



■ The company

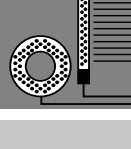
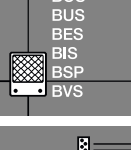
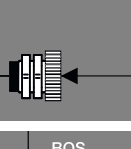
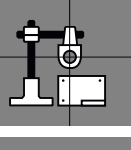
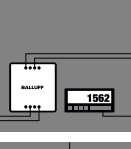
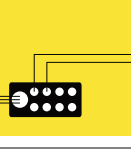
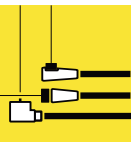


■ Service and support



■ We are happy to help





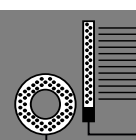
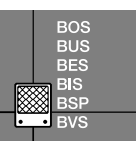
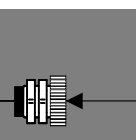
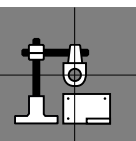
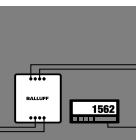
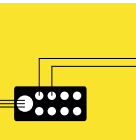
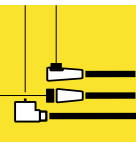
Matrix



Chapter	Connectors and Valve Connectors						
From page	16						
Description	Connectors and cables	With special properties	Valve connectors	Fieldbus connectors and cables	Accessories		
Application for							
Inductive sensors	■	■	■	■	■		
Photoelectric sensors	■	■	■	■	■		
Capacitive sensors	■	■	■	■	■		
Ultrasonic sensors	■	■	■	■	■		
Vision sensors	■	■	■	■	■		
Analog sensors	■	■	■	■	■		
Reflectors for photoelectric sensors	■	■	■	■	■		
Housing material							
Plastic							
Metal							
Stainless steel							
From page	20	116	154	166	202		



Passive splitters		Electrical devices						
210		224						
	Passive splitters	Power supplies	Pulse extender	Function diagnostics	Analog switching amplifier	Sensor tester, testing and setting device	Signal adapters	Digital display
	■	■	■	■	■	■	■	
	■	■	■			■	■	
	■	■	■		■	■	■	■
	■	■	■		■	■		■
	■	■						
	■	■						
		■	■	■	■	■	■	■
		■			■			
210		226	250	252	254	256	258	261



Matrix



Chapter	Mounting system							
From page	262							
Description								
	Base holder, articulated base holder, sensor holder	Cross-connector, clamping cylinder, reflector mount	Sensor holder, adjustment unit, adapter ring	Air Blow, mounting rods	Mounting kit			
Application for								
Inductive sensors	■	■	■		■			
Photoelectric sensors	■	■	■	■	■			
Capacitive sensors	■	■	■		■			
Ultrasonic sensors	■	■	■		■			
Vision sensors	■	■		■				
Analog sensors	■	■	■		■			
Cylinder designs								
Ø 3 mm								
Ø 4 mm								
Ø 5 mm, M5								
Ø 6.5 mm								
Ø 8 mm, M8			■		■			
Ø 10 mm								
Ø 12 mm, M12			■		■			
Ø 14.5 mm								
Ø 16 mm, M16			■		■			
Ø 18 mm, M18			■		■			
Ø 20 mm								
Ø 22 mm								
M24			■		■			
Ø 30 mm, M30			■					
Ø 36 mm, M36			■					
Cubical designs								
8×8 mm								
40×40 mm Unicomact		■	■		■			
40×40 mm Unisensor		■	■		■			
Through-beam fork sensors			■					
Angle sensors		■	■					
Other cubical designs		■	■					
Housing material								
Plastic	■	■	■	■				
Metal	■	■	■	■	■			
Stainless steel	■	■	■		■			
Special features								
With positive stop								
Without positive stop								
Weld-immune (PTFE coated)								
From page	264	266	270	283	285			

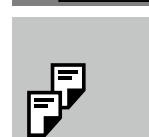
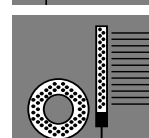
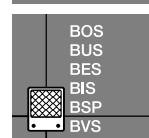
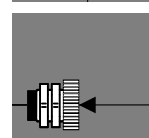
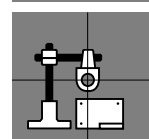
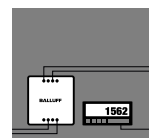
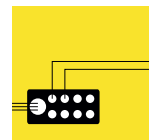
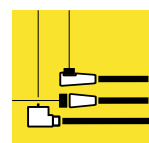
Matrix

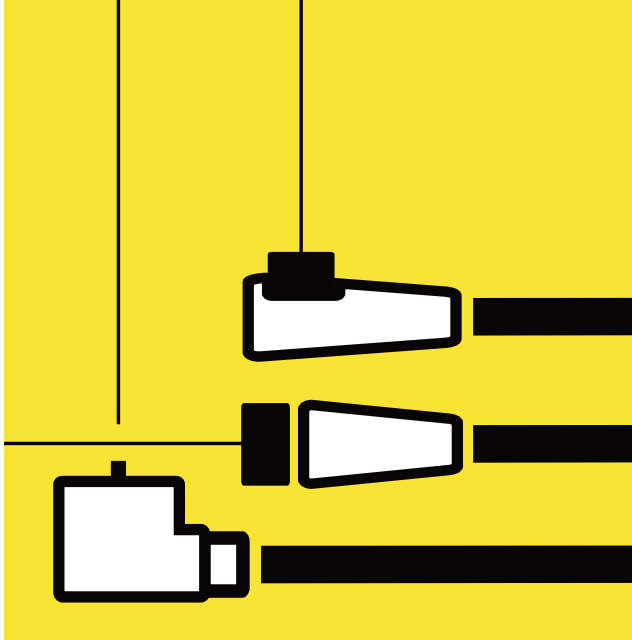


Chapter	Product-specific accessories							
From page	312							
Description	Fiber optics	Reflectors	Apertures	Lenses, air shield	Protective end caps	Deflection heads, diagonal mirrors, deflectors	Mounting brackets, Sensor holder	Starter set, clamping holder, adapter plate, adapter angle
Application for								
Inductive sensors					■			■
Photoelectric sensors	■	■	■	■	■	■	■	■
Capacitive sensors					■		■	■
Ultrasonic sensors						■	■	■
Vision sensors								
Analog sensors					■			■
Pressure sensors								
Position and distance measurement								
Industrial RFID								
Cylinder designs								
Ø 3 mm								
Ø 4 mm								
Ø 5 mm, M5								
Ø 6.5 mm								
Ø 8 mm, M8					■		■	
Ø 12 mm, M12					■	■	■	
Ø 16 mm, M16					■			
Ø 18 mm, M18			■	■	■	■	■	
Ø 30 mm, M30					■	■		
Ø 36 mm, M36					■			
Cubical designs								
8×8 mm							■	■
40×40 mm Unicomact								
40×40 mm Unisensor								
Other cubical designs			■				■	■
Housing material								
Plastic		■	■		■		■	■
Metal			■	■	■	■	■	■
Stainless steel					■		■	
Mounting characteristics								
With positive stop								
Without positive stop							■	
Weld-immune (PTFE coated)					■			
From page	314	340	348	353	392	356	358	365



										Lights	
										404	
	Tube switch, positive stops	Contact protector	Mounting plate, mounting aids, holder system, safety guard, weld protection	Protective cover, antenna holder, mounting bracket, shield	Mounting set, connection cable, handles	Sensor guide, cover strip	Nuts, sealing nuts	Adapters	Mounting bracket, 3D holder system, housing	Background, ring and strip lights	Spot, coaxial, dark field light, line lasers
	■	■	■				■				
		■					■				
							■				
		■					■		■	■	■
						■		■			
				■	■						
	■						■				
	■										
	■	■					■				
		■					■				
		■					■				
		■					■				
			■			■					
			■	■	■	■					
	■	■	■	■	■	■	■		■	■	■
	■					■	■	■	■	■	■
		■									
			■								
	372	370	380	384	388	390	394	396	398	408	416





Connectors and Valve Connectors

Connectors and Valve Connectors

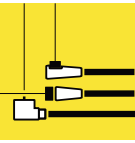


Connectors and Valve Connectors

Contents



Breakdown of the BCC Part Number	18
Dimensions	19
Connectors and Cables	
Connectors M5	22
Connection Cables M5 ↔ M8	24
Connectors M8	26
Connection Cables M8 ↔ M8	32
Connection Cables M8 ↔ M12	38
Connectors M12	50
Connection Cables M12 ↔ M8	68
Connection Cables M12 ↔ M12	74
Connectors M23	100
Connection Cables M23 ↔ M12	102
Connectors 7/8"	104
Connection Cables 7/8" ↔ 7/8"	108
Special Properties	
High-temperature Resistant	118
IP 69K-ECOLAB	120
Weld Spatter Resistant PUR Cables	124
Y Connectors, Weld Spatter Resistant	136
High Durability Cable	138
Valve Connectors	
Style A	156
Style B	158
Style C	162
Connectors for Pressure Switches	164
Fieldbus Connectors and Cables	
Profibus	168
Profinet	176
CC-Link	182
DeviceNet and CAN Bus	186
Ethernet/IP	194
Accessories for Connectors and Valve Connectors	
Tools	204
Screw Plugs	205
Integrated Tamper Protection	206
Label	206
Cable Clamp	206
Protective Cover	207
Anti-sabotage Protection, Coupling	207
Protective Hose/Jacket/Sleeve	208



Connectors and Valve Connectors

Breakdown of the part number BCC

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Head 1

Head 2

B	C	C		M	4	1	4	–	0	0	0	0	–	1	A	–	0	0	8	–	P	X	0	4	3	4	–	0	5	0
---	---	---	--	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---



Head 1

5th–8th digit

10th–13th digit

15th–16th digit

18th–20th digit

22nd–27th digit

29th–32nd digit

Head 1:

- Design
 - M = Metric
 - V = valve connector
- Size
 - .3 = M8
 - .4 = M12
- Type
 - ..1 = Plastic molded, straight
 - ..2 = Plastic molded, right-angle
 - ..3 = Plastic field attachable, straight
 - ..4 = Plastic field attachable, right-angle
- Number of visible holes or pins
 - ...3 = 3
 - ...4 = 4

Head 2:

- Design
 - 0 = not assigned
- Size
 - 0 = not assigned
- Type
 - 0 = not assigned
- Number of visible holes or pins
 - 0 = not assigned

Female/male

- Coding
 - 1 = female
 - 2 = male
- A = A-coded
- B = B-coded
- ...

Wiring

- 001 = 3 wires without LED
- 004 = 3 wires with LED
- ...

Cable

- Cable type
 - P = PUR
 - V = PVC
- Specification
 - .X = Standard
 - .W = Welding
 - .H = Higher temperatures
- Cable color
 - ..0 = Black
 - ..8 = Gray
- Number
 - ...3 = 3-wire
 - ...4 = 4-wire
 - ...5 = 5-wire
- Cross-section
 -34 = 0.34 mm²
 -50 = 0.50 mm²
 -A1 = 1.50 mm²

Cable length

- 020 = 2 m
- 100 = 10 m

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Head 1

Head 2

B	C	C		M	4	2	4	–	M	4	1	3	–	3	A	–	3	0	0	–	P	X	0	4	3	4	–	0	2	0
---	---	---	--	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---



Head 1 + Head 2

5th–8th digit

10th–13th digit

15th–16th digit

18th–20th digit

22nd–27th digit

29th–32nd digit

Head 1:

- Design
 - M = Metric
 - V = valve connector
- Size
 - .3 = M8
 - .4 = M12
- Type
 - ..1 = Plastic molded, straight
 - ..2 = Plastic molded, right-angle
 - ..3 = Plastic field attachable, straight
 - ..4 = Plastic field attachable, right-angle
- Number of visible holes or pins
 - ...3 = 3
 - ...4 = 4

Head 2:

- Design
 - M = Metric
 - V = valve connector
- Size
 - .3 = M8
 - .4 = M12
- Type
 - ..1 = Plastic molded, straight
 - ..2 = Plastic molded, right-angle
 - ..3 = Plastic field attachable, straight
 - ..4 = Plastic field attachable, right-angle
- Number of visible holes or pins
 - ...3 = 3
 - ...4 = 4

Female/male

- Coding
 - 3 = female/male
- A = A-coded
- B = B-coded
- 0 = without coding

Wiring

- 300 = 3 wires without LED
- 600 = 3 wires with LED
- 304 = 4 wires without LED

Cable

- Cable type
 - P = PUR
 - V = PVC
- Specification
 - .X = Standard
 - .W = Welding
 - .H = Higher temperatures
- Cable color
 - ..0 = Black
 - ..8 = Gray
- Number
 - ...3 = 3-wire
 - ...4 = 4-wire
 - ...5 = 5-wire
- Cross-section
 -34 = 0.34 mm²
 -50 = 0.50 mm²
 -A1 = 1.50 mm²

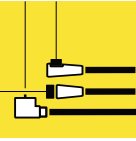
Cable length

- 006 = 60 cm
- 020 = 2 m

All order numbers illustrated are only examples and may vary from those of other BCC connectors.

Connectors and Valve Connectors

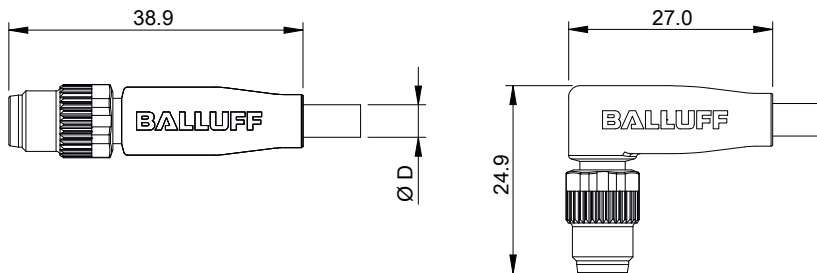
Dimensions



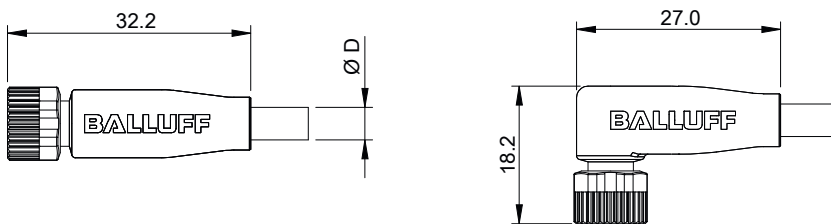
M5 connectors, female straight and right-angle



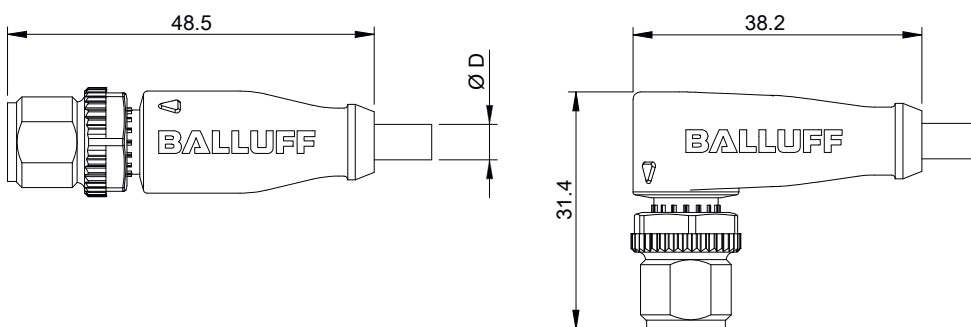
M8 connectors, male straight and right-angle



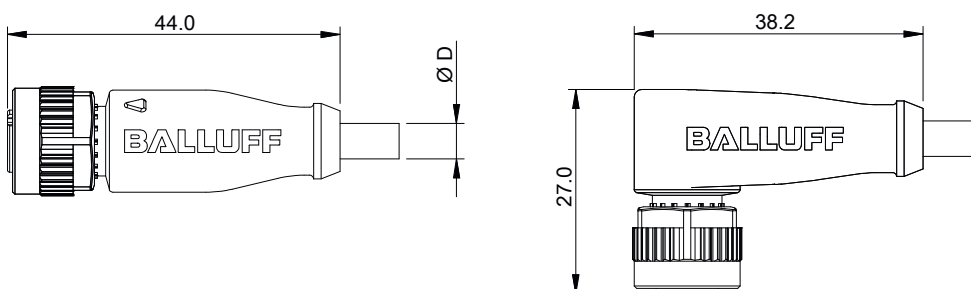
M8 connectors, female straight and right-angle

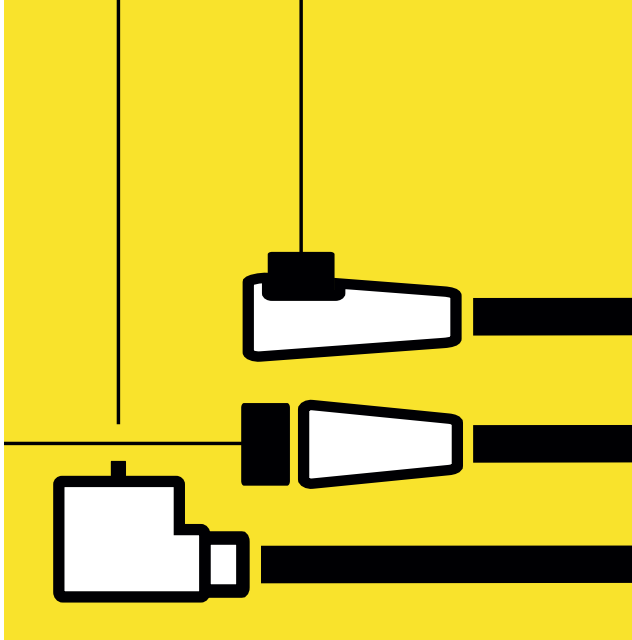


M12 connectors, male straight and right-angle



M12 connectors, female straight and right-angle





Connectors and Valve Connectors

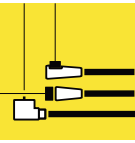
Connectors and Cables



Connectors and Cables

Contents

M5 Connector	3-pin	22
	4-pin	23
Connection Cables M5 ↔ M8	3-pin	24
M8 Connector	3-pin	26
	4-pin	29
Connection Cables M8 ↔ M8	3-pin	32
	4-pin	35
Connection Cables M8 ↔ M12	3-pin	38
	4-pin	39
M8 Connectors	User-fabricated	42
	Flange Socket/Plug	46
	Y Connectors	48
M12 Connector	3-pin	50
	4-pin	56
	5-pin	60
	8-pin	62
	12-pin	66
Connection Cables M12 ↔ M8	3-pin	68
	4-pin	71
Connection Cables M12 ↔ M12	3-pin	74
	4-pin	76
	5-pin	80
	8-pin	84
	12-pin	85
M12 Connectors	User-fabricated	86
	Flange Socket/Plug	94
	Y Connectors	98
	Tees	99
M23 Connector	12-pin	100
	19-pin	101
Connection Cables M23 ↔ M12	12-pin	102
Connector 7/8"	3-pin	104
	4-pin	105
	5-pin	107
Connection Cables 7/8" ↔ 7/8"	3-pin	108
	4-pin	109
	5-pin	110
Connectors 7/8"	User-fabricated	112
	Tees	114





Connector diagram
and wiring



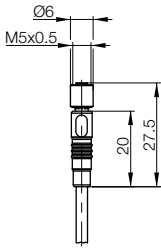
PIN 1: brown
PIN 3: blue
PIN 4: black



Supply voltage AC U _S	30 V AC
Supply voltage DC U _S	30 V DC
Cable	Molded
No. of wires × conductor cross-section	3×0.14 mm ²
Degree of protection as per IEC 60529	IP 67
Ambient temperature T _a	−25...+80 °C/−5...+80 °C
Static/moving	
Use	Normally open (NO)

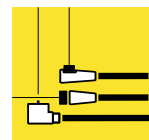
Cable material	Color	Length	Ordering code
			Part number
PUR	Black	3 m	BCC00HE
			BKS-B 25-1-PU-03
PUR	Black	5 m	

Other cable materials, colors
and lengths on request.



Connectors

M5 female, 3 and 4-pin



Connectors and Cables

Connectors M5

Connection Cables M5↔M8

Connectors M8

Connection Cables M8↔M8

Connection Cables M8↔M12

Connectors M12

Connection Cables M12↔M8

Connection Cables M12↔M12

Connectors M23

Connection Cables M23↔M12

Connector 7/8"

Connection Cables 7/8"↔7/8"



PIN 1: brown
PIN 3: blue
PIN 4: black



- 1 _____
- 2 _____
- 3 _____
- 4 _____

30 V AC

30 V DC

Molded

3x0.14 mm²

IP 67

-25...+80 °C/-5...+80 °C

Normally open (NO)



PIN 1: brown
PIN 2: white
PIN 3: blue
PIN 4: black



- 1 _____
- 2 _____
- 3 _____
- 4 _____

30 V AC

30 V DC

Molded

4x0.14 mm²

IP 67

-25...+80 °C/-5...+80 °C

Complementary (NO/NC)



PIN 1: brown
PIN 2: white
PIN 3: blue
PIN 4: black



- 1 _____
- 2 _____
- 3 _____
- 4 _____

30 V AC

30 V DC

Molded

4x0.14 mm²

IP 67

-25...+80 °C/-5...+80 °C

Complementary (NO/NC)

Ordering code

Part number

BCC00HM

BKS-B 26-1-PU-03

BCC00HK

BKS-B 25-3-PU-03

BCC00HP

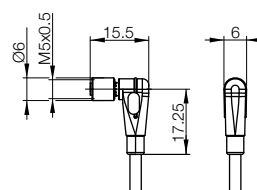
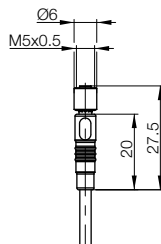
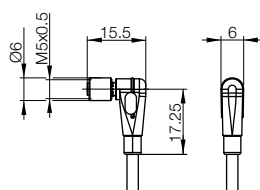
BKS-B 26-3-PU-03

BCC00HL

BKS-B 25-3-PU-05

BCC00HR

BKS-B 26-3-PU-05





Connector diagram
and wiring



Supply voltage AC U_S

60 V AC

60 V AC

Supply voltage DC U_S

60 V DC

60 V DC

Cable

Molded

Molded

No. of wires × conductor cross-section

3×0.14 mm²

3×0.14 mm²

Degree of protection as per IEC 60529

IP 67

IP 67

Ambient temperature T_a static/moving

−25...+80 °C/−5...+80 °C

−25...+80 °C/−5...+80 °C

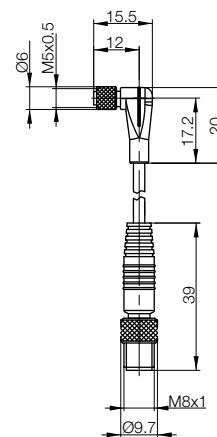
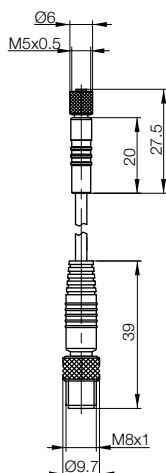
Use

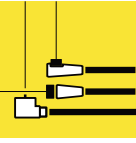
Normally open (NO) —

Normally open (NO) —

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	0.3 m	BCC00HF	
			BKS-B 25-1/GS49-PU-00,3	
PUR	Black	0.6 m	BCC00HH	
			BKS-B 25-1/GS49-PU-00,6	
PUR	Black	1 m	BCC00HJ	BCC00HN
			BKS-B 25-1/GS49-PU-01	BKS-B 26-1/GS49-PU-01

Other cable materials, colors and lengths on request.





Connectors
and Cables

Connectors
M5

**Connection
Cables M5↔M8**

Connectors
M8

Connection
Cables
M8↔M8

Connection
Cables
M8↔M12

Connectors M12

Connection
Cables
M12↔M8

Connection Cables
M12↔M12

Connectors M23

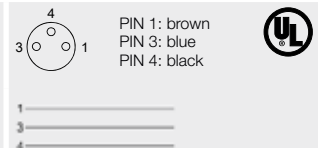
Connection
Cables
M23↔M12

Connector 7/8"

Connection
Cables
7/8"↔7/8"



Connector diagram and Wiring



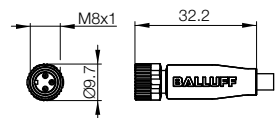
Supply voltage AC U_S	60 V AC
Supply voltage DC U_S	60 V DC
Cable	Molded
No. of wires × conductor cross-section	3×0.34 mm ²
Degree of protection as per IEC 60529	IP 67
Ambient temperature T_a	–25...+90 °C/–25...+90 °C (UL 80 °C)
static/ moving	PVC –25...+105 °C/–5...+90 °C (UL 80 °C)
LED	

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	2 m	BCC02M8	
			BCC M313-0000-10-001-PX0334-020	
PUR	Black	5 m	BCC02M9	
			BCC M313-0000-10-001-PX0334-050	
PUR	Black	10 m	BCC02MA	
			BCC M313-0000-10-001-PX0334-100	
PVC	Gray	2 m	BCC02NU	
			BCC M313-0000-10-001-VX8334-020	
PVC	Gray	5 m	BCC02NW	
			BCC M313-0000-10-001-VX8334-050	
PVC	Gray	10 m	BCC02NY	
			BCC M313-0000-10-001-VX8334-100	

Other cable materials, colors and lengths on request.

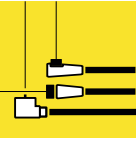
Connectors without LED are suitable for PNP and NPN switching functions.

NPN versions with LED on request.

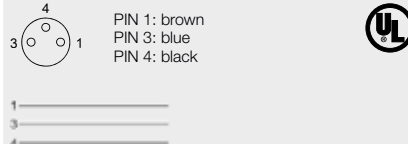


Connectors

M8 socket, 3-pin



Connectors and Cables
Connectors M5
Connection Cables M5↔M8
Connectors M8
Connection Cables M8↔M8
Connection Cables M8↔M12
Connectors M12
Connection Cables M12↔M8
Connection Cables M12↔M12
Connectors M23
Connection Cables M23↔M12
Connector 7/8"
Connection Cables 7/8"↔7/8"



30 V DC
Molded
3×0.34 mm²
IP 67
-25...+90 °C/-25...+90 °C (UL 80 °C)
-25...+105 °C/-5...+90 °C (UL 80 °C)
2× (PNP), green, yellow

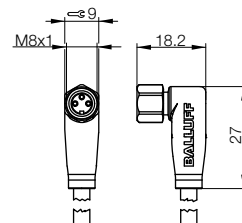
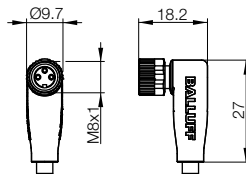
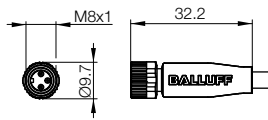
60 V AC
60 V DC
Molded
3×0.34 mm²
IP 67
-25...+90 °C/-25...+90 °C (UL 80 °C)
-25...+105 °C/-5...+90 °C (UL 80 °C)

30 V DC
Molded
3×0.34 mm²
IP 67
-25...+90 °C/-25...+90 °C (UL 80 °C)
-25...+105 °C/-5...+90 °C (UL 80 °C)
2× (PNP), green, yellow

Ordering code

Part number

BCC0AW9 BCC M313-0000-10-004-PX0334-020	BCC02ML BCC M323-0000-10-001-PX0334-020	BCC02MH BCC M323-0000-10-004-PX0334-020
BCC0AWA BCC M313-0000-10-004-PX0334-050	BCC02MM BCC M323-0000-10-001-PX0334-050	BCC02MJ BCC M323-0000-10-004-PX0334-050
BCC0AWC BCC M313-0000-10-004-PX0334-100	BCC02MN BCC M323-0000-10-001-PX0334-100	BCC02MK BCC M323-0000-10-004-PX0334-100
BCC0C06 BCC M313-0000-10-004-VX8334-020	BCC02P5 BCC M323-0000-10-001-VX8334-020	BCC02P2 BCC M323-0000-10-004-VX8334-020
BCC0AY0 BCC M313-0000-10-004-VX8334-050	BCC02P6 BCC M323-0000-10-001-VX8334-050	BCC02P3 BCC M323-0000-10-004-VX8334-050
BCC0C07 BCC M313-0000-10-004-VX8334-100	BCC02P7 BCC M323-0000-10-001-VX8334-100	BCC02P4 BCC M323-0000-10-004-VX8334-100

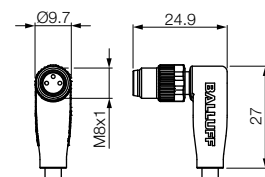
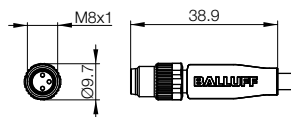




Connector diagram and wiring					
Supply voltage AC U _S	60 V AC		60 V AC		
Supply voltage DC U _S	60 V DC		60 V DC		
Cable	Molded		Molded		
No. of wires × conductor cross-section	3×0.34 mm ²		3×0.34 mm ²		
Degree of protection as per IEC 60529	IP 67		IP 67		
Ambient temperature T _a	PUR PVC	-25...+90 °C/-25...+90 °C (UL 80 °C) -25...+105 °C/-5...+90 °C (UL 80 °C)	-25...+90 °C/-25...+90 °C (UL 80 °C) -25...+105 °C/-5...+90 °C (UL 80 °C)		
Static/moving LED					

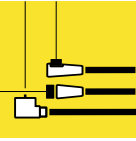
Cable material	Color	Length	Ordering code		
			Part number		
PUR	Black	2 m	BCC02M2	BCC02M5	
			BCC M313-0000-20-001-PX0334-020	BCC M323-0000-20-001-PX0334-020	
PUR	Black	5 m	BCC02M3	BCC02M6	
			BCC M313-0000-20-001-PX0334-050	BCC M323-0000-20-001-PX0334-050	
PUR	Black	10 m	BCC02M4	BCC02M7	
			BCC M313-0000-20-001-PX0334-100	BCC M323-0000-20-001-PX0334-100	
PVC	Gray	2 m	BCC02NL	BCC02NP	
			BCC M313-0000-20-001-VX8334-020	BCC M323-0000-20-001-VX8334-020	
PVC	Gray	5 m	BCC02NM	BCC02NR	
			BCC M313-0000-20-001-VX8334-050	BCC M323-0000-20-001-VX8334-050	
PVC	Gray	10 m	BCC02NN	BCC02NT	
			BCC M313-0000-20-001-VX8334-100	BCC M323-0000-20-001-VX8334-100	

Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions with LED on request.



Connectors

M8 socket, 4-pin



Connectors and Cables

Connectors M5

Connection Cables M5↔M8

Connectors M8

Connection Cables M8↔M8

Connection Cables M8↔M12

Connectors M12

Connection Cables M12↔M8

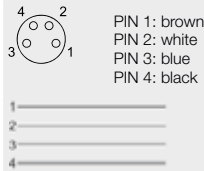
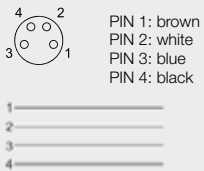
Connection Cables M12↔M12

Connectors M23

Connection Cables M23↔M12

Connector 7/8"

Connection Cables 7/8"↔7/8"



¹⁾ Green LED = Power
²⁾ Yellow LED = Switching output

30 V AC
30 V DC
Molded
4x0.34 mm²
IP 67
-25...+90 °C/-25...+90 °C (UL 80 °C)
-25...+105 °C/-5...+90 °C (UL 80 °C)

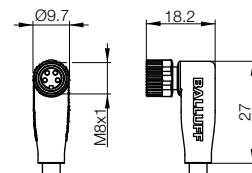
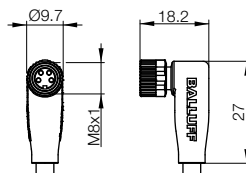
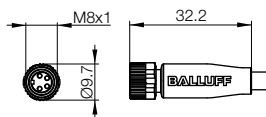
30 V AC
30 V DC
Molded
4x0.34 mm²
IP 67
-25...+90 °C/-25...+90 °C (UL 80 °C)
-25...+105 °C/-5...+90 °C (UL 80 °C)

30 V DC
Molded
4x0.34 mm²
IP 67
-25...+90 °C/-25...+90 °C (UL 80 °C)
-25...+105 °C/-5...+90 °C (UL 80 °C)
2x (PNP), green, yellow

Ordering code

Part number

BCC02N2 BCC M314-0000-10-003-PX0434-020	BCC02NC BCC M324-0000-10-003-PX0434-020	BCC02N8 BCC M324-0000-10-008-PX0434-020
BCC02N3 BCC M314-0000-10-003-PX0434-050	BCC02NE BCC M324-0000-10-003-PX0434-050	BCC02N9 BCC M324-0000-10-008-PX0434-050
BCC02N4 BCC M314-0000-10-003-PX0434-100	BCC02NF BCC M324-0000-10-003-PX0434-100	BCC02NA BCC M324-0000-10-008-PX0434-100
BCC02PL BCC M314-0000-10-003-VX8434-020	BCC02PZ BCC M324-0000-10-003-VX8434-020	BCC02PU BCC M324-0000-10-008-VX8434-020
BCC02PM BCC M314-0000-10-003-VX8434-050	BCC02R0 BCC M324-0000-10-003-VX8434-050	BCC02PW BCC M324-0000-10-008-VX8434-050
BCC02PN BCC M314-0000-10-003-VX8434-100	BCC02R1 BCC M324-0000-10-003-VX8434-100	BCC02PY BCC M324-0000-10-008-VX8434-100

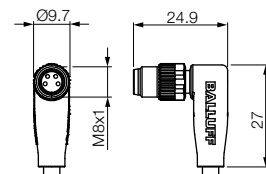
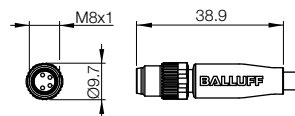


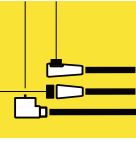


Connector diagram and wiring				
Supply voltage AC U _S	30 V AC		30 V AC	
Supply voltage DC U _S	30 V DC		30 V DC	
Cable	Molded		Molded	
No. of wires × conductor cross-section	4×0.34 mm ²		4×0.34 mm ²	
Degree of protection as per IEC 60529	IP 67		IP 67	
Ambient temperature T _a	PUR	-25...+90 °C/-25...+90 °C (UL 80 °C)	PVC	-25...+90 °C/-25...+90 °C (UL 80 °C)
Static/moving				

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	2 m	BCC02MU	BCC02MZ
			BCC M314-0000-20-003-PX0434-020	BCC M324-0000-20-003-PX0434-020
PUR	Black	5 m	BCC02MW	BCC02N0
			BCC M314-0000-20-003-PX0434-050	BCC M324-0000-20-003-PX0434-050
PUR	Black	10 m	BCC02MY	BCC02N1
			BCC M314-0000-20-003-PX0434-100	BCC M324-0000-20-003-PX0434-100
PVC	Gray	2 m	BCC02PC	BCC02PH
			BCC M314-0000-20-003-VX8434-020	BCC M324-0000-20-003-VX8434-020
PVC	Gray	5 m	BCC02PE	BCC02PJ
			BCC M314-0000-20-003-VX8434-050	BCC M324-0000-20-003-VX8434-050
PVC	Gray	10 m	BCC02PF	BCC02PK
			BCC M314-0000-20-003-VX8434-100	BCC M324-0000-20-003-VX8434-100

Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions with LED on request.





Connectors
and Cables

Connectors
M5

Connection Cables
M5↔M8

**Connectors
M8**

Connection
Cables

M8↔M8

Connection
Cables

M8↔M12

Connectors M12

Connection
Cables

M12↔M8

Connection Cables

M12↔M12

Connectors M23

Connection
Cables

M23↔M12

Connector 7/8"

Connection
Cables

7/8"↔7/8"

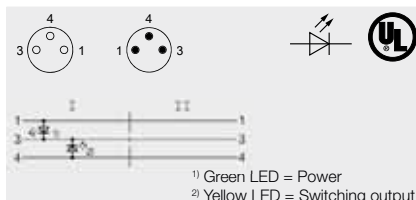
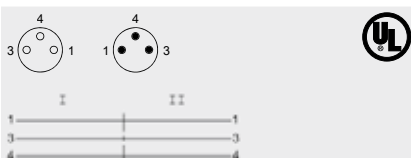
Connection Cables

M8 female ↔ M8 male, 3-pin

M8 ↔ M8



Connector diagram and wiring



Supply voltage AC U_S

60 V AC

Supply voltage DC U_S

60 V DC

Cable

Molded

No. of wires × conductor cross-section

3×0.34 mm²

Degree of protection as per IEC 60529

IP 67

Ambient temperature T_a PUR

–25...+90 °C/–25...+90 °C (UL 80 °C)

Static/moving PVC

–25...+105 °C/–5...+105 °C (UL 80 °C)

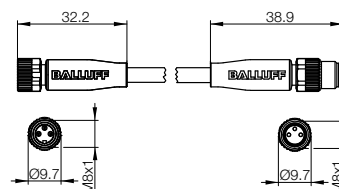
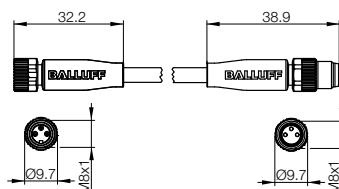
LED

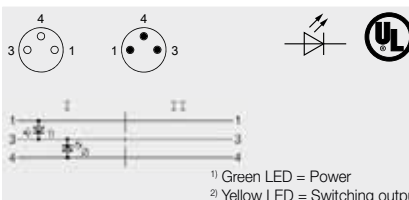
2× (PNP), green, yellow

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	0.3 m	BCC02R5 BCC M313-M313-30-300-PX0334-003	BCC0AZA BCC M313-M313-30-602-PX0334-003
PUR	Black	0.6 m	BCC02R6 BCC M313-M313-30-300-PX0334-006	BCC0AZC BCC M313-M313-30-602-PX0334-006
PUR	Black	1 m	BCC02R7 BCC M313-M313-30-300-PX0334-010	BCC0AZE BCC M313-M313-30-602-PX0334-010
PUR	Black	1.5 m	BCC02R8 BCC M313-M313-30-300-PX0334-015	BCC0AZF BCC M313-M313-30-602-PX0334-015
PUR	Black	2 m	BCC02R9 BCC M313-M313-30-300-PX0334-020	BCC0AZH BCC M313-M313-30-602-PX0334-020
PUR	Black	3 m	BCC02RA BCC M313-M313-30-300-PX0334-030	BCC0AZJ BCC M313-M313-30-602-PX0334-030
PUR	Black	5 m	BCC02RC BCC M313-M313-30-300-PX0334-050	BCC0AZK BCC M313-M313-30-602-PX0334-050
PVC	Gray	0.3 m	BCC02UR BCC M313-M313-30-300-VX8334-003	
PVC	Gray	0.6 m	BCC02UT BCC M313-M313-30-300-VX8334-006	
PVC	Gray	1 m	BCC02UU BCC M313-M313-30-300-VX8334-010	
PVC	Gray	1.5 m	BCC02UW BCC M313-M313-30-300-VX8334-015	
PVC	Gray	2 m	BCC02UY BCC M313-M313-30-300-VX8334-020	
PVC	Gray	3 m	BCC02UZ BCC M313-M313-30-300-VX8334-030	
PVC	Gray	5 m	BCC02W0 BCC M313-M313-30-300-VX8334-050	

Other cable materials, colors and lengths on request.

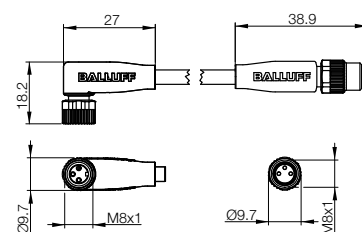
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions with LED on request.





30 V DC
Molded
3×0.34 mm²
IP 67
-25...+90 °C/-25...+90 °C (UL 80 °C)
-25...+105 °C/-5...+105 °C (UL 80 °C)
2× (PNP), green, yellow

BCC02RN
BCC M323-M313-30-602-PX0334-003
BCC02RP
BCC M323-M313-30-602-PX0334-006
BCC02RR
BCC M323-M313-30-602-PX0334-010
BCC02RT
BCC M323-M313-30-602-PX0334-015
BCC02RU
BCC M323-M313-30-602-PX0334-020
BCC02RW
BCC M323-M313-30-602-PX0334-030
BCC02RY
BCC M323-M313-30-602-PX0334-050
BCC02W8
BCC M323-M313-30-602-VX8334-003
BCC02W9
BCC M323-M313-30-602-VX8334-006
BCC02WA
BCC M323-M313-30-602-VX8334-010
BCC02WC
BCC M323-M313-30-602-VX8334-015
BCC02WE
BCC M323-M313-30-602-VX8334-020
BCC02WF
BCC M323-M313-30-602-VX8334-030
BCC02WH
BCC M323-M313-30-602-VX8334-050



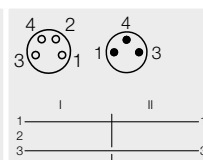
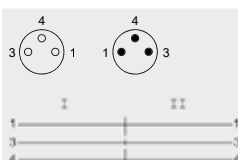
Connection Cables

M8 female ↔ M8 male, 3-pin

M8 ↔ M8



Connector diagram
and wiring



Supply voltage AC U_S
Supply voltage DC U_S
Cable

60 V AC
60 V DC
Molded

60 V AC
60 V DC
Molded

No. of wires × conductor cross-section
Degree of protection as per IEC 60529
Ambient temperature T_a PUR
static/moving PVC

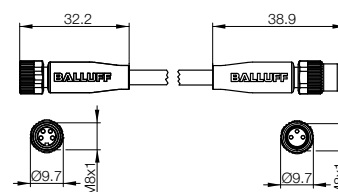
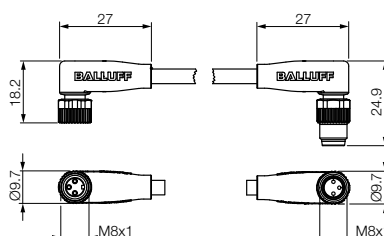
3×0.34 mm²
IP 67
−25...+90 °C/−25...+90 °C (UL 80 °C)
−25...+105 °C/−5...+105 °C (UL 80 °C)

3×0.34 mm²
IP 67
−25...+90 °C/−25...+90 °C (UL 80 °C)

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	0.3 m	BCC02T6 BCC M323-M323-30-300-PX0334-003	BCC0CAH BCC M314-M313-30-300-PX0334-003
PUR	Black	0.6 m	BCC02T7 BCC M323-M323-30-300-PX0334-006	BCC0AUL BCC M314-M313-30-300-PX0334-006
PUR	Black	1 m	BCC02T8 BCC M323-M323-30-300-PX0334-010	BCC0A77 BCC M314-M313-30-300-PX0334-010
PUR	Black	1.5 m	BCC02T9 BCC M323-M323-30-300-PX0334-015	
PUR	Black	2 m	BCC02TA BCC M323-M323-30-300-PX0334-020	BCC0A78 BCC M314-M313-30-300-PX0334-020
PUR	Black	3 m	BCC02TC BCC M323-M323-30-300-PX0334-030	BCC0C6A BCC M314-M313-30-300-PX0334-030
PUR	Black	5 m	BCC02TE BCC M323-M323-30-300-PX0334-050	BCC0C6C BCC M314-M313-30-300-PX0334-050
PVC	Gray	0.3 m	BCC02WT BCC M323-M323-30-300-VX8334-003	
PVC	Gray	0.6 m	BCC02WU BCC M323-M323-30-300-VX8334-006	
PVC	Gray	1 m	BCC02WW BCC M323-M323-30-300-VX8334-010	
PVC	Gray	1.5 m	BCC02WY BCC M323-M323-30-300-VX8334-015	
PVC	Gray	2 m	BCC02WZ BCC M323-M323-30-300-VX8334-020	
PVC	Gray	3 m	BCC02Y0 BCC M323-M323-30-300-VX8334-030	
PVC	Gray	5 m	BCC02Y1 BCC M323-M323-30-300-VX8334-050	

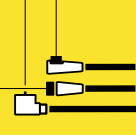
Other cable materials, colors and
lengths on request.

Connectors without LED are suitable
for PNP and NPN switching functions.
NPN versions with LED on request.

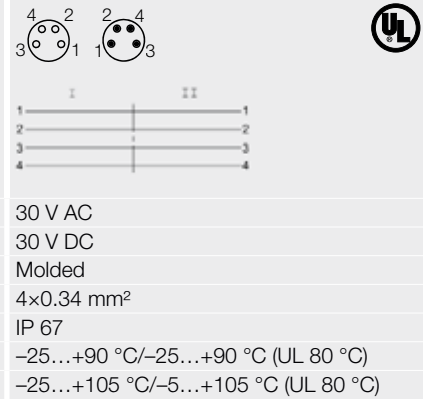
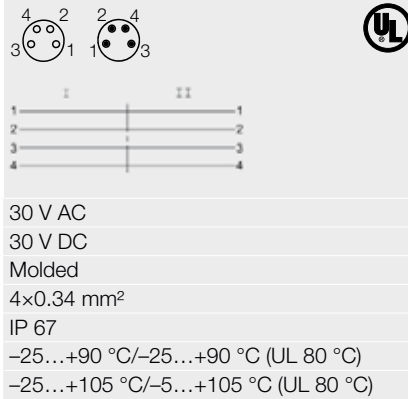
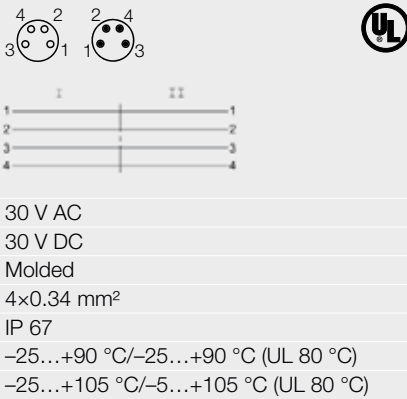


Connection Cables

M8 female ↔ M8 male, 4-pin



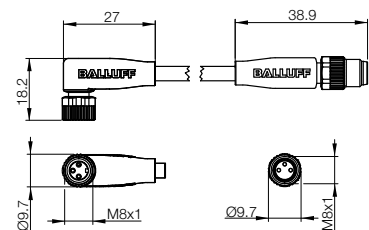
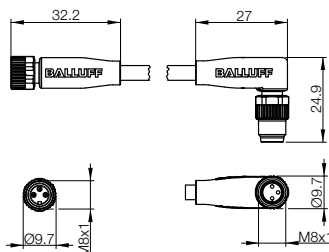
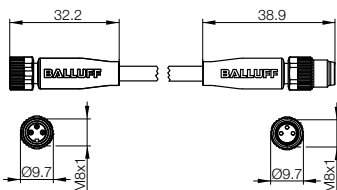
Connectors and Cables
Connectors M5
Connection Cables M5↔M8
Connectors M8
Connection Cables M8↔M8
Connection Cables M8↔M12
Connectors M12
Connection Cables M12↔M8
Connection Cables M12↔M12
Connectors M23
Connection Cables M23↔M12
Connector 7/8"



Ordering code

Part number

BCC02TF BCC M314-M314-30-304-PX0434-003	BCC02TP BCC M314-M324-30-304-PX0434-003	BCC02U7 BCC M324-M314-30-304-PX0434-003
BCC02TH BCC M314-M314-30-304-PX0434-006	BCC02TR BCC M314-M324-30-304-PX0434-006	BCC02U8 BCC M324-M314-30-304-PX0434-006
BCC02TJ BCC M314-M314-30-304-PX0434-010	BCC02TT BCC M314-M324-30-304-PX0434-010	BCC02U9 BCC M324-M314-30-304-PX0434-010
BCC02TK BCC M314-M314-30-304-PX0434-015	BCC02TU BCC M314-M324-30-304-PX0434-015	BCC02UA BCC M324-M314-30-304-PX0434-015
BCC02TL BCC M314-M314-30-304-PX0434-020	BCC02TW BCC M314-M324-30-304-PX0434-020	BCC02UC BCC M324-M314-30-304-PX0434-020
BCC02TM BCC M314-M314-30-304-PX0434-030	BCC02TY BCC M314-M324-30-304-PX0434-030	BCC02UE BCC M324-M314-30-304-PX0434-030
BCC02TN BCC M314-M314-30-304-PX0434-050	BCC02TZ BCC M314-M324-30-304-PX0434-050	BCC02UF BCC M324-M314-30-304-PX0434-050
BCC02Y2 BCC M314-M314-30-304-VX8434-003	BCC02Y9 BCC M314-M324-30-304-VX8434-003	BCC02YU BCC M324-M314-30-304-VX8434-003
BCC02Y3 BCC M314-M314-30-304-VX8434-006	BCC02YA BCC M314-M324-30-304-VX8434-006	BCC02YW BCC M324-M314-30-304-VX8434-006
BCC02Y4 BCC M314-M314-30-304-VX8434-010	BCC02YC BCC M314-M324-30-304-VX8434-010	BCC02YY BCC M324-M314-30-304-VX8434-010
BCC02Y5 BCC M314-M314-30-304-VX8434-015	BCC02YE BCC M314-M324-30-304-VX8434-015	BCC02YZ BCC M324-M314-30-304-VX8434-015
BCC02Y6 BCC M314-M314-30-304-VX8434-020	BCC02YF BCC M314-M324-30-304-VX8434-020	BCC02Z0 BCC M324-M314-30-304-VX8434-020
BCC02Y7 BCC M314-M314-30-304-VX8434-030	BCC02YH BCC M314-M324-30-304-VX8434-030	BCC02Z1 BCC M324-M314-30-304-VX8434-030
BCC02Y8 BCC M314-M314-30-304-VX8434-050	BCC02YJ BCC M314-M324-30-304-VX8434-050	BCC02Z2 BCC M324-M314-30-304-VX8434-050



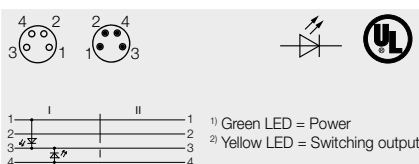
Connection Cables

M8 female ↔ M8 male, 4-pin

M8 ↔ M8



Connector diagram and wiring



Supply voltage AC U_S

Supply voltage DC U_S

Cable

No. of wires × conductor cross-section

Degree of protection as per IEC 60529

Ambient temperature T_a PUR

Static/moving PVC

LED

30 V DC

Molded

4×0.34 mm²

IP 67

–25...+90 °C/–25...+90 °C (UL 80 °C)

–25...+105 °C/–5...+105 °C (UL 80 °C)

2× (PNP), green, yellow

60 V AC

60 V DC

Molded

4×0.34 mm²

IP 67

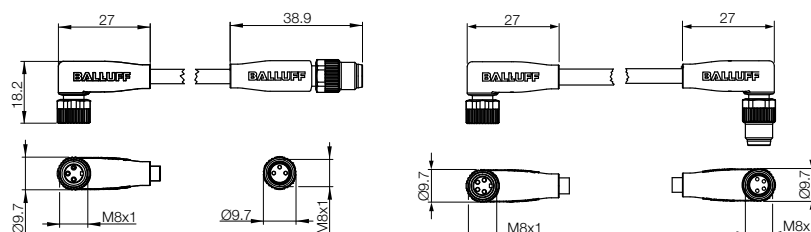
–25...+90 °C/–25...+90 °C (UL 80 °C)

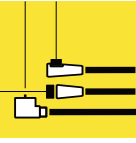
–25...+105 °C/–5...+105 °C (UL 80 °C)

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	0.3 m	BCC02U0 BCC M324-M314-30-606-PX0434-003	BCC02UH BCC M324-M324-30-304-PX0434-003
PUR	Black	0.6 m	BCC02U1 BCC M324-M314-30-606-PX0434-006	BCC02UJ BCC M324-M324-30-304-PX0434-006
PUR	Black	1 m	BCC02U2 BCC M324-M314-30-606-PX0434-010	BCC02UK BCC M324-M324-30-304-PX0434-010
PUR	Black	1.5 m	BCC02U3 BCC M324-M314-30-606-PX0434-015	BCC02UL BCC M324-M324-30-304-PX0434-015
PUR	Black	2 m	BCC02U4 BCC M324-M314-30-606-PX0434-020	BCC02UM BCC M324-M324-30-304-PX0434-020
PUR	Black	3 m	BCC02U5 BCC M324-M314-30-606-PX0434-030	BCC02UN BCC M324-M324-30-304-PX0434-030
PUR	Black	5 m	BCC02U6 BCC M324-M314-30-606-PX0434-050	BCC02UP BCC M324-M324-30-304-PX0434-050
PVC	Gray	0.3 m	BCC02YK BCC M324-M314-30-606-VX8434-003	BCC02Z3 BCC M324-M324-30-304-VX8434-003
PVC	Gray	0.6 m	BCC02YL BCC M324-M314-30-606-VX8434-006	BCC02Z4 BCC M324-M324-30-304-VX8434-006
PVC	Gray	1 m	BCC02YM BCC M324-M314-30-606-VX8434-010	BCC02Z5 BCC M324-M324-30-304-VX8434-010
PVC	Gray	1.5 m	BCC02YN BCC M324-M314-30-606-VX8434-015	BCC02Z6 BCC M324-M324-30-304-VX8434-015
PVC	Gray	2 m	BCC02YP BCC M324-M314-30-606-VX8434-020	BCC02Z7 BCC M324-M324-30-304-VX8434-020
PVC	Gray	3 m	BCC02YR BCC M324-M314-30-606-VX8434-030	BCC02Z8 BCC M324-M324-30-304-VX8434-030
PVC	Gray	5 m	BCC02YT BCC M324-M314-30-606-VX8434-050	BCC02Z9 BCC M324-M324-30-304-VX8434-050

Other cable materials, colors and lengths on request.

Connectors without LED are suitable for PNP and NPN switching functions. NPN versions with LED on request.





Connectors
and Cables

Connectors
M5

Connection Cables
M5↔M8

Connectors
M8

**Connection
Cables
M8↔M8**

Connection
Cables
M8↔M12

Connectors M12

Connection
Cables
M12↔M8

Connection Cables
M12↔M12

Connectors M23

Connection
Cables
M23↔M12

Connector 7/8"

Connection
Cables
7/8"↔7/8"

Connection Cables

M8 female ↔ M12 male, 3-pin

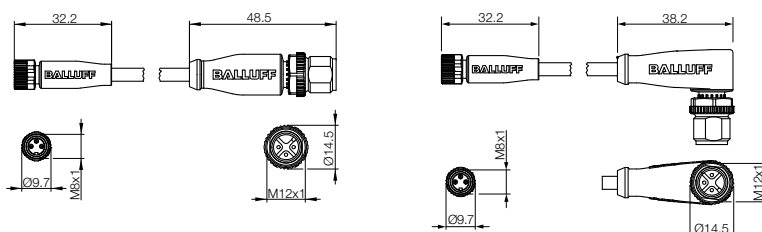
M8 ↔ M12

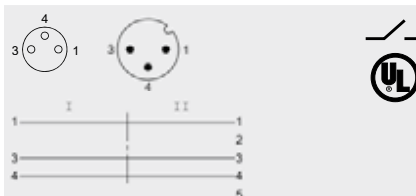


Connector diagram and wiring			
Supply voltage AC U _S	60 V AC	60 V AC	
Supply voltage DC U _S	60 V DC	60 V DC	
Cable	Molded	Molded	
No. of wires × conductor cross-section	3×0.34 mm ²	3×0.34 mm ²	
Degree of protection as per IEC 60529	IP 67	IP 67	
Ambient temperature T _a	PUR -25...+90 °C/-25...+90 °C (UL 80 °C)	PUR -25...+90 °C/-25...+90 °C (UL 80 °C)	
Static/moving	PVC -25...+105 °C/-5...+90 °C (UL 80 °C)	PVC -25...+105 °C/-5...+90 °C (UL 80 °C)	
Use	Normally open (NO) ✓	Normally open (NO) ✓	
LED			

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	0.3 m	BCC03F4 BCC M313-M413-3E-300-PX0334-003	BCC03FC BCC M313-M423-3E-300-PX0334-003
PUR	Black	0.6 m	BCC03F5 BCC M313-M413-3E-300-PX0334-006	BCC03FE BCC M313-M423-3E-300-PX0334-006
PUR	Black	1 m	BCC03F6 BCC M313-M413-3E-300-PX0334-010	BCC03FF BCC M313-M423-3E-300-PX0334-010
PUR	Black	1.5 m	BCC03F7 BCC M313-M413-3E-300-PX0334-015	BCC03FH BCC M313-M423-3E-300-PX0334-015
PUR	Black	2 m	BCC03F8 BCC M313-M413-3E-300-PX0334-020	BCC03FJ BCC M313-M423-3E-300-PX0334-020
PUR	Black	3 m	BCC03F9 BCC M313-M413-3E-300-PX0334-030	BCC03FK BCC M313-M423-3E-300-PX0334-030
PUR	Black	5 m	BCC03FA BCC M313-M413-3E-300-PX0334-050	BCC03FL BCC M313-M423-3E-300-PX0334-050
PVC	Gray	0.3 m	BCC03HE BCC M313-M413-3E-300-VX8334-003	BCC03HN BCC M313-M423-3E-300-VX8334-003
PVC	Gray	0.6 m	BCC03HF BCC M313-M413-3E-300-VX8334-006	BCC03HP BCC M313-M423-3E-300-VX8334-006
PVC	Gray	1 m	BCC03HH BCC M313-M413-3E-300-VX8334-010	BCC03HR BCC M313-M423-3E-300-VX8334-010
PVC	Gray	1.5 m	BCC03HJ BCC M313-M413-3E-300-VX8334-015	BCC03HT BCC M313-M423-3E-300-VX8334-015
PVC	Gray	2 m	BCC03HK BCC M313-M413-3E-300-VX8334-020	BCC03HU BCC M313-M423-3E-300-VX8334-020
PVC	Gray	3 m	BCC03HL BCC M313-M413-3E-300-VX8334-030	BCC03HW BCC M313-M423-3E-300-VX8334-030
PVC	Gray	5 m	BCC03HM BCC M313-M413-3E-300-VX8334-050	BCC03HY BCC M313-M423-3E-300-VX8334-050

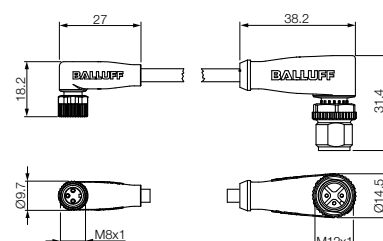
Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions with LED on request.





Connectors and Cables

- Connectors M5
- Connection Cables M5↔M8
- Connectors M8
- Connection Cables M8↔M8
- Connection Cables M8↔M12**
- Connectors M12
- Connection Cables M12↔M8
- Connection Cables M12↔M12
- Connectors M23
- Connection Cables M23↔M12
- Connector 7/8"
- Connection Cables 7/8"↔7/8"



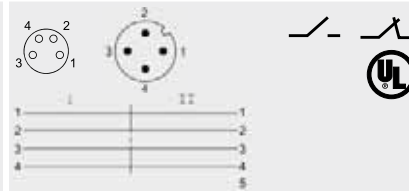
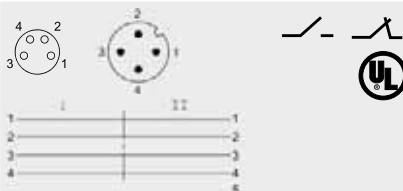
Connection Cables

M8 female ↔ M12 male, 4-pin

M8 ↔ M12



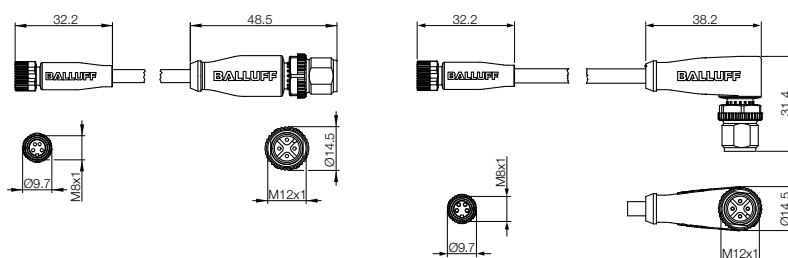
Connector diagram and wiring

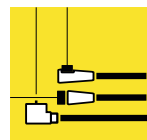


Supply voltage AC U _S	30 V AC	30 V AC
Supply voltage DC U _S	30 V DC	30 V DC
Cable	Molded	Molded
No. of wires × conductor cross-section	4×0.34 mm ²	4×0.34 mm ²
Degree of protection as per IEC 60529	IP 67	IP 67
Ambient temperature T _a	PUR -25...+90 °C/-25...+90 °C (UL 80 °C)	PUR -25...+90 °C/-25...+90 °C (UL 80 °C)
Static/moving	PVC -25...+105 °C/-5...+90 °C (UL 80 °C)	PVC -25...+105 °C/-5...+90 °C (UL 80 °C)
Use	Complementary (NO/NC) ✓ / ✗	Complementary (NO/NC) ✓ / ✗
LED		

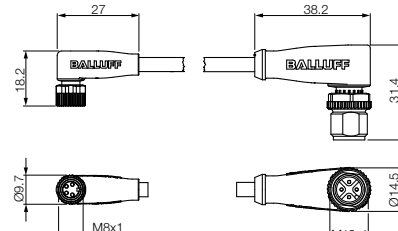
Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	0.3 m	BCC03JP BCC M314-M414-3E-304-PX0434-003	BCC03K0 BCC M314-M424-3E-304-PX0434-003
PUR	Black	0.6 m	BCC03JR BCC M314-M414-3E-304-PX0434-006	BCC03K1 BCC M314-M424-3E-304-PX0434-006
PUR	Black	1 m	BCC03JT BCC M314-M414-3E-304-PX0434-010	BCC03K2 BCC M314-M424-3E-304-PX0434-010
PUR	Black	1.5 m	BCC03JU BCC M314-M414-3E-304-PX0434-015	BCC03K3 BCC M314-M424-3E-304-PX0434-015
PUR	Black	2 m	BCC03JW BCC M314-M414-3E-304-PX0434-020	BCC03K4 BCC M314-M424-3E-304-PX0434-020
PUR	Black	3 m	BCC03JY BCC M314-M414-3E-304-PX0434-030	BCC03K5 BCC M314-M424-3E-304-PX0434-030
PUR	Black	5 m	BCC03JZ BCC M314-M414-3E-304-PX0434-050	BCC03K6 BCC M314-M424-3E-304-PX0434-050
PVC	Gray	0.3 m	BCC03L1 BCC M314-M414-3E-304-VX8434-003	BCC03L8 BCC M314-M424-3E-304-VX8434-003
PVC	Gray	0.6 m	BCC03L2 BCC M314-M414-3E-304-VX8434-006	BCC03L9 BCC M314-M424-3E-304-VX8434-006
PVC	Gray	1 m	BCC03L3 BCC M314-M414-3E-304-VX8434-010	BCC03LA BCC M314-M424-3E-304-VX8434-010
PVC	Gray	1.5 m	BCC03L4 BCC M314-M414-3E-304-VX8434-015	BCC03LC BCC M314-M424-3E-304-VX8434-015
PVC	Gray	2 m	BCC03L5 BCC M314-M414-3E-304-VX8434-020	BCC03LE BCC M314-M424-3E-304-VX8434-020
PVC	Gray	3 m	BCC03L6 BCC M314-M414-3E-304-VX8434-030	BCC03LF BCC M314-M424-3E-304-VX8434-030
PVC	Gray	5 m	BCC03L7 BCC M314-M414-3E-304-VX8434-050	BCC03LH BCC M314-M424-3E-304-VX8434-050

Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions with LED on request.





7/8"↔7/8"

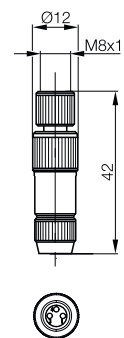
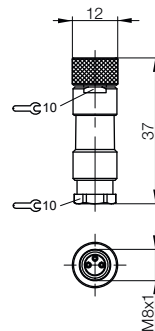
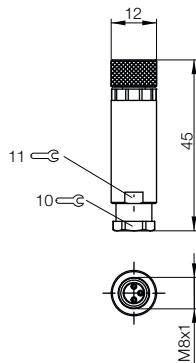


**M8 female, user-fabricated,
3-pin**

Quick-connect system

Connector diagram				
Supply voltage AC U_S	60 V	60 V	32 V	
Supply voltage DC U_S	60 V	60 V	32 V	
Cable	user-fabricated	user-fabricated	user-fabricated	
No. of wires × conductor cross-section	3×0.14...0.5 mm ²	3×0.14...0.5 mm ²	3×0.14...0.34 mm ²	
Cable diameter	Ø 3.5...5 mm	Ø 3.5...5 mm	Ø 3.2...5.4 mm	
Connection	Screw terminal	Soldered connection	Insulation displacement connector technology	
Degree of protection as per IEC 60529	IP 67	IP 67	IP 67	
Ambient temperature T_a	-25...+85 °C	-25...+85 °C	-25...+85 °C*	
Switching function	Ordering code			
	Part number			
no LED, NO or NC	BCC06Z1	BCC06YW	BCC02HC	
	BCC M333-0000-10-000-31X350-000	BCC M333-0000-10-000-34X325-000	BKS-S111-RT13	

* Cable installation on the plug in the temperature range -5...+50 °C



Connectors

M8 female, M8 male, user-fabricated, 3-pin



Quick-connect system



60 V
60 V
user-fabricated
3x0.14...0.38 mm²

Ø 3...5 mm
Penetration technology
IP 67
-25...+85 °C*



60 V
60 V
user-fabricated
3x0.14...0.5 mm²

Ø 3.5...5 mm
Soldered connection
IP 67
-25...+85 °C



60 V
60 V
user-fabricated
3x0.14...0.5 mm²

Ø 2.2...5 mm
Screw terminal
IP 67
-25...+85 °C



60 V
60 V
user-fabricated
3x0.14...0.5 mm²

Ø 3.5...5 mm
Soldered connection
IP 67
-25...+85 °C

Ordering code

Part number

BCC09EU

BCC M333-0000-10-000-22X334-000

BCC06YY

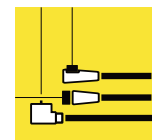
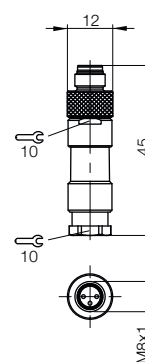
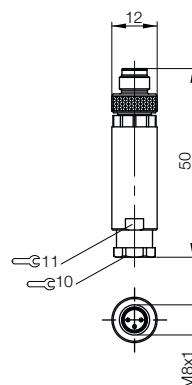
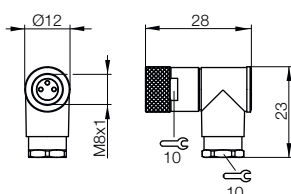
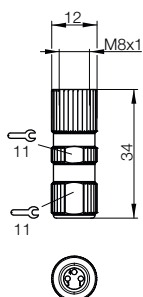
BCC M343-0000-10-000-34X325-000

BCC0E7N

BCC M333-0000-20-000-31X350-000-C027

BCC06YZ

BCC M333-0000-20-000-34X325-000



Connectors and Cables

Connectors M5

Connection Cables M5↔M8

Connectors M8

Connection Cables M8↔M8

Connection Cables M8↔M12

Connectors M12

Connection Cables M12↔M8

Connection Cables M12↔M12

Connectors M23

Connection Cables M23↔M12

Connector 7/8"

Connection Cables 7/8"↔7/8"

Connectors

M8 male, user-fabricated

3-pin

M8



Quick-connect system

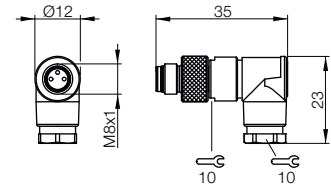
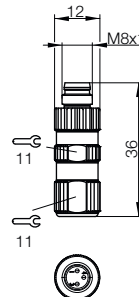
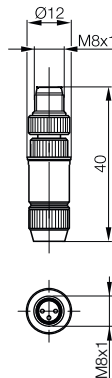


Quick-connect system



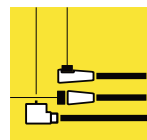
Connector diagram				
Supply voltage AC U _S	32 V	60 V	60 V	
Supply voltage DC U _S	32 V	60 V	60 V	
Cable	user-fabricated	user-fabricated	user-fabricated	
No. of wires × conductor cross-section	3×0.14...0.34 mm ²	3×0.14...0.38 mm ²	3×0.14...0.5 mm ²	
Cable diameter	Ø 3.2...5.4 mm	Ø 3...5 mm	Ø 3.5...5 mm	
Connection	Insulation displacement connector technology	Penetration technology	Soldered connection	
Degree of protection as per IEC 60529	IP 67	IP 67	IP 67	
Ambient temperature T _a	-25...+85 °C*	-25...+85 °C*	-25...+85 °C	
Switching function	Ordering code			
	Part number			
no LED, NO or NC	BCC02HE BKS-S113-RT13	BCC09EW BCC M333-0000-20-000-22X334-000	BCC06Z0 BCC M343-0000-20-000-34X325-000	
No LED, NO and NC				

* Cable installation on the plug in the temperature range -5...+50 °C



Connectors

**M8 female, M8 male, user-fabricated,
3 and 4-pin**



Connectors
and Cables

Connectors
M5

Connection Cables
M5↔M8

Connectors
M8

Connection
Cables

M8↔M8

Connection
Cables

M8↔M12

Connectors M12

Connection
Cables

M12↔M8

Connection Cables
M12↔M12

Connectors M23

Connection
Cables

M23↔M12

Connector 7/8"

Connection
Cables

7/8"↔7/8"



Quick-connect system



Quick-connect system



Quick-connect system



Quick-connect system



32 V
32 V
user-fabricated
4x0.14...0.34 mm²
Ø 3.2...5.4 mm
Insulation displacement connector technology
IP 67
-25...+85 °C*



30 V
30 V
user-fabricated
4x0.14...0.38 mm²
Ø 3...5 mm
Penetration technology
IP 67
-25...+85 °C



32 V
32 V
user-fabricated
4x0.14...0.34 mm²
Ø 3.2...5.4 mm
Insulation displacement connector technology
IP 67
-25...+85 °C*



30 V
30 V
user-fabricated
4x0.14...0.38 mm²
Ø 3...5 mm
Penetration technology
IP 67
-25...+85 °C

Ordering code

Part number

BCC02HF

BKS-S216-RT14

BCC09EY

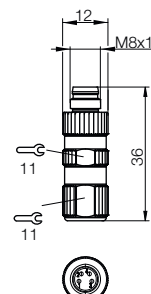
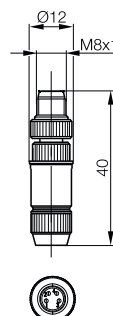
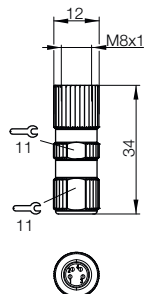
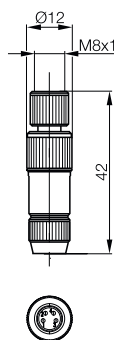
BCC M334-0000-10-000-22X434-000

BCC02HH

BKS-S218-RT14

BCC09EZ

BCC M334-0000-20-000-22X434-000



M8 flange socket and flange plug, 3-pin



Connector diagram and wiring



PIN 1: brown
PIN 3: blue
PIN 4: black

1 _____
3 _____
4 _____



PIN 1: brown
PIN 2: black
PIN 3: blue

1 _____
3 _____
4 _____

Supply voltage AC U_S

30 V

30 V

Supply voltage DC U_S

30 V

30 V

No. of wires $\times$ conductor cross-section3 $\times$ 0.25 mm²3 $\times$ 0.25 mm²

Degree of protection as per IEC 60529

IP 67

IP 67

Ambient temperature T_a

-25...+85 °C

-25...+85 °C

Cable length

Ordering code

Part number

0.5 m

BCC0E4Y**BCC0E50**

BCC M353-0000-10-RM049-005

BCC M353-0000-20-RM049-005

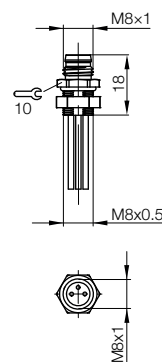
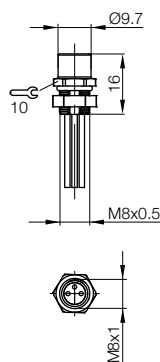
2 m

BCC0E4Z**BCC0E51**

BCC M353-0000-10-RM049-020

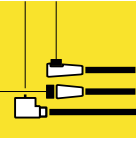
BCC M353-0000-20-RM049-020

Other cable lengths on request.



Connectors

M8 flange socket and flange plug, 4-pin



Connectors and Cables
Connectors
M5
Connection Cables
M5↔M8
**Connectors
M8**
Connection
Cables
M8↔M8
Connection
Cables
M8↔M12
Connectors M12
Connection
Cables
M12↔M8
Connection Cables
M12↔M12
Connectors M23
Connection
Cables
M23↔M12
Connector 7/8"



4 2
3 1
PIN 1: brown
PIN 2: white
PIN 3: blue
PIN 4: black

1
2
3
4

30 V
30 V
4×0.25 mm²

IP 67
-25...+85 °C

2 4
1 3
PIN 1: brown
PIN 2: white
PIN 3: blue
PIN 4: black

1
2
3
4

30 V
30 V
4×0.25 mm²

IP 67
-25...+85 °C

Ordering code

Part number

BCC0E35

BCC M354-0000-10-RM050-005

BCC0E2Z

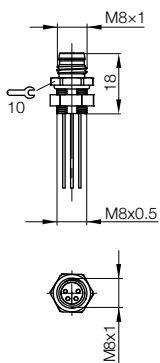
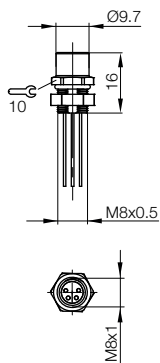
BCC M354-0000-20-RM050-005

BCC0E38

BCC M354-0000-10-RM050-020

BCC0E32

BCC M354-0000-20-RM050-020

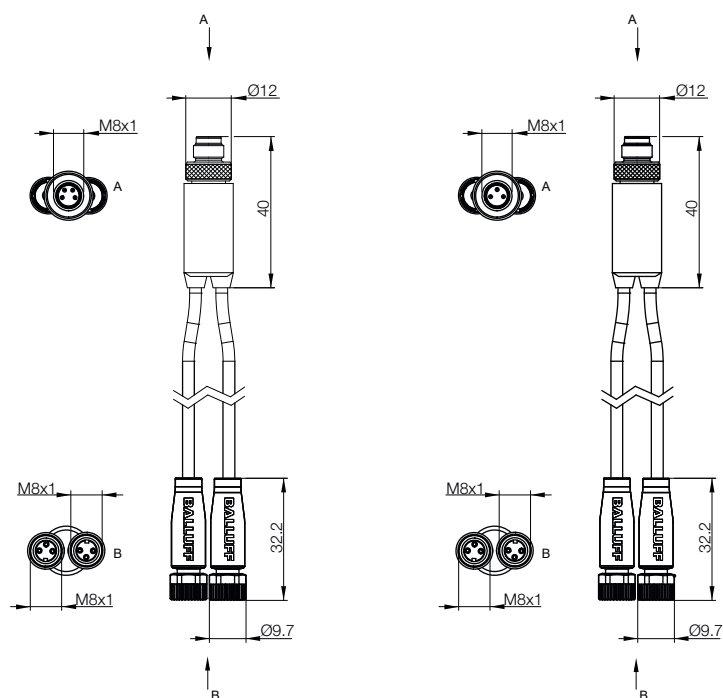


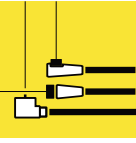


Connector diagram and wiring		
Supply voltage AC U_S	30 V	30 V
Supply voltage DC U_S	30 V	30 V
Cable	Molded	Molded
No. of wires × conductor cross-section	3×0.14 mm ²	3×0.14 mm ²
Degree of protection as per IEC 60529	IP 67	IP 67
Ambient temperature T_a	-25...+85 °C	-25...+85 °C

Cable material	Color	Length	Ordering code
PUR	Black	0.3 m	Part number BCC0AFL BCC M314-M313-M313-U2024-003
PUR	Black	1 m	BCC0AFM BCC M314-M313-M313-U2024-010
			BCC0A07 BCC M313-M313-M313-U2017-003

Other cable lengths on request.





Connectors
and Cables

Connectors
M5

Connection Cables
M5↔M8

**Connectors
M8**

Connection
Cables

M8↔M8

Connection
Cables

M8↔M12

Connectors M12

Connection
Cables

M12↔M8

Connection Cables
M12↔M12

Connectors M23

Connection
Cables

M23↔M12

Connector 7/8"

Connection
Cables

7/8"↔7/8"



Connector diagram
and wiring

Supply voltage AC U_S

Supply voltage DC U_S

Cable

No. of wires $\times$ conductor cross-section

Degree of protection as per IEC 60529

Ambient temperature T_a

Static/moving

PUR

PUR shielded

PVC

PVC shielded

Use

LED

Cable material	Color	Length	
PUR	Black	2 m	
PUR	Black	5 m	
PUR	Black	10 m	
PUR shielded	Black	2 m	
PUR shielded	Black	5 m	
PUR shielded	Black	10 m	
PVC	Gray	2 m	
PVC	Gray	5 m	
PVC	Gray	10 m	
PVC shielded	Gray	2 m	
PVC shielded	Gray	5 m	
PVC shielded	Gray	10 m	

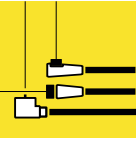
Other cable materials, colors and lengths on request.

Connectors without LED are suitable for PNP and NPN switching functions.

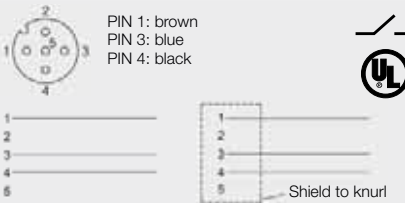
NPN versions with LED on request.

Connectors

M12 female, 3-pin



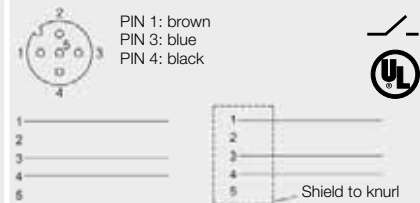
Connectors and Cables
Connectors M5
Connection Cables M5↔M8
Connectors M8
Connection Cables M8↔M8
Connection Cables M8↔M12
Connectors M12
Connection Cables M12↔M8
Connection Cables M12↔M12
Connectors M23
Connection Cables M23↔M12
Connector 7/8"
Connection Cables 7/8"↔7/8"



250 V AC
250 V DC
Molded
3×0.34 mm²
IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+80 °C/-25...+80 °C
-40...+105 °C/-5...+105 °C (UL 80 °C)
-20...+105 °C (UL 80 °C)
Normally open (NO) —



30 V DC
Molded
3×0.34 mm²
IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+105 °C/-5...+105 °C (UL 80 °C)
Normally open (NO) —
2× (PNP), green, yellow

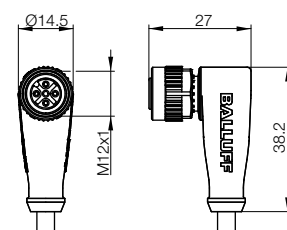
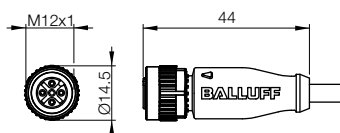
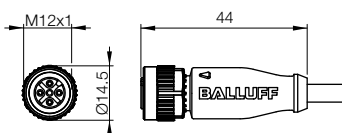


250 V AC
250 V DC
Molded
3×0.34 mm²
IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+80 °C/-25...+80 °C
-40...+105 °C/-5...+105 °C (UL 80 °C)
-20...+105 °C (UL 80 °C)
Normally open (NO) —

Ordering code

Part number

BCC030K BCC M415-0000-1A-001-PX0334-020	BCC030A BCC M415-0000-1A-004-PX0334-020	BCC0317 BCC M425-0000-1A-001-PX0334-020
BCC030L BCC M415-0000-1A-001-PX0334-050	BCC030C BCC M415-0000-1A-004-PX0334-050	BCC0318 BCC M425-0000-1A-001-PX0334-050
BCC030M BCC M415-0000-1A-001-PX0334-100	BCC030E BCC M415-0000-1A-004-PX0334-100	BCC0319 BCC M425-0000-1A-001-PX0334-100
BCC030T BCC M415-0000-1A-036-PS0334-020		BCC031F BCC M425-0000-1A-036-PS0334-020
BCC030U BCC M415-0000-1A-036-PS0334-050		BCC031H BCC M425-0000-1A-036-PS0334-050
BCC030W BCC M415-0000-1A-036-PS0334-100		BCC031J BCC M425-0000-1A-036-PS0334-100
BCC034A BCC M415-0000-1A-001-VX8334-020	BCC0344 BCC M415-0000-1A-004-VX8334-020	BCC0351 BCC M425-0000-1A-001-VX8334-020
BCC034C BCC M415-0000-1A-001-VX8334-050	BCC0345 BCC M415-0000-1A-004-VX8334-050	BCC0352 BCC M425-0000-1A-001-VX8334-050
BCC034E BCC M415-0000-1A-001-VX8334-100	BCC0346 BCC M415-0000-1A-004-VX8334-100	BCC0353 BCC M425-0000-1A-001-VX8334-100
BCC034K BCC M415-0000-1A-036-VS8334-020		BCC0357 BCC M425-0000-1A-036-VS8334-020
BCC034L BCC M415-0000-1A-036-VS8334-050		BCC0358 BCC M425-0000-1A-036-VS8334-050
BCC034M BCC M415-0000-1A-036-VS8334-100		BCC0359 BCC M425-0000-1A-036-VS8334-100



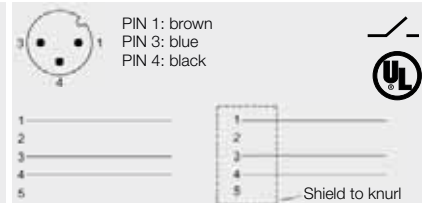
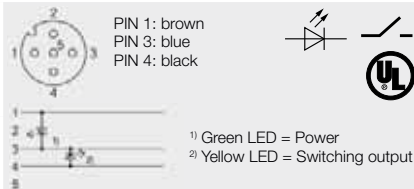
Connectors

M12 female, M12 male, 3-pin

M12



Connector diagram and wiring

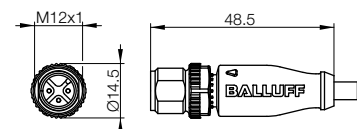
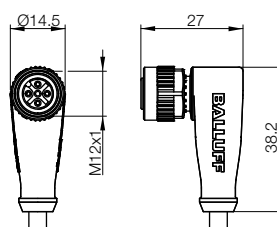


Supply voltage AC U_S		250 V AC
Supply voltage DC U_S	30 V DC	250 V DC
Cable	Molded	Molded
No. of wires × conductor cross-section	3×0.34 mm ²	3×0.34 mm ²
Degree of protection as per IEC 60529	IP 68	IP 68
Ambient temperature T_a	PUR	PUR
Static/moving	PUR shielded	PUR shielded
	PVC	PVC
	PVC shielded	PVC shielded
Use	Normally open (NO) —	Normally open (NO) —
LED	2× (PNP), green, yellow	

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	2 m	BCC0311 BCC M425-0000-1A-004-PX0334-020	BCC022A BCC M413-0000-2A-001-PX0334-020
PUR	Black	5 m	BCC0312 BCC M425-0000-1A-004-PX0334-050	BCC022C BCC M413-0000-2A-001-PX0334-050
PUR	Black	10 m	BCC0313 BCC M425-0000-1A-004-PX0334-100	BCC022E BCC M413-0000-2A-001-PX0334-100
PUR shielded	Black	2 m		BCC022K BCC M413-0000-2A-036-PS0334-020
PUR shielded	Black	5 m		BCC022L BCC M413-0000-2A-036-PS0334-050
PUR shielded	Black	10 m		BCC022M BCC M413-0000-2A-036-PS0334-100
PVC	Gray	2 m	BCC034T BCC M425-0000-1A-004-VX8334-020	BCC0334 BCC M413-0000-2A-001-VX8334-020
PVC	Gray	5 m	BCC034U BCC M425-0000-1A-004-VX8334-050	BCC0335 BCC M413-0000-2A-001-VX8334-050
PVC	Gray	10 m	BCC034W BCC M425-0000-1A-004-VX8334-100	BCC0336 BCC M413-0000-2A-001-VX8334-100
PVC shielded	Gray	2 m		BCC033A BCC M413-0000-2A-036-VS8334-020
PVC shielded	Gray	5 m		BCC033C BCC M413-0000-2A-036-VS8334-050
PVC shielded	Gray	10 m		BCC033E BCC M413-0000-2A-036-VS8334-100

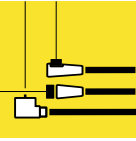
Other cable materials, colors and lengths on request.

Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions with LED on request.

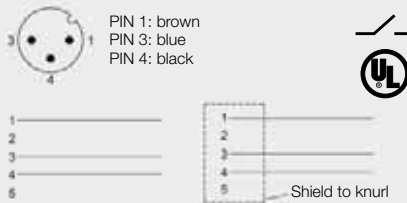


Connectors

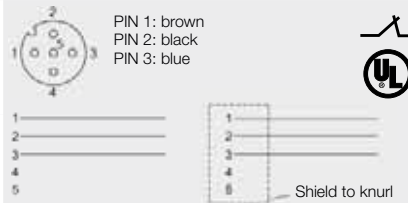
M12 female, M12 male, 3-pin



Connectors and Cables
Connectors M5
Connection Cables M5↔M8
Connectors M8
Connection Cables M8↔M8
Connection Cables M8↔M12
Connectors M12
Connection Cables M12↔M8
Connection Cables M12↔M12
Connectors M23
Connection Cables M23↔M12
Connector 7/8"
Connection Cables 7/8"↔7/8"



250 V AC
250 V DC
Molded
3×0.34 mm²
IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+80 °C/-25...+80 °C
-40...+105 °C/-5...+105 °C (UL 80 °C)
-20...+105 °C (UL 80 °C)
Normally open (NO) —

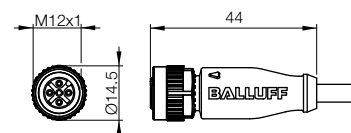
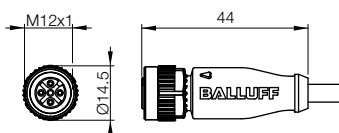
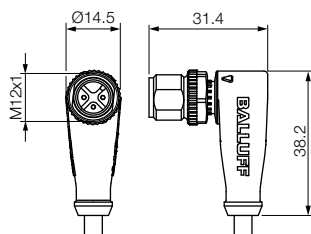


250 V AC
250 V DC
Molded
3×0.34 mm²
IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+80 °C/-25...+80 °C
-40...+105 °C/-5...+105 °C (UL 80 °C)
-20...+105 °C (UL 80 °C)
Normally closed (NC) —



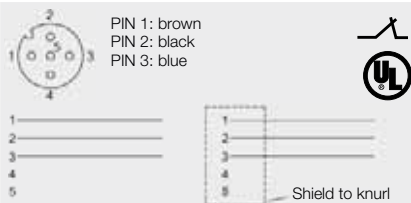
30 V DC
Molded
3×0.34 mm²
IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+105 °C/-5...+105 °C (UL 80 °C)
Normally closed (NC) —
2× (PNP), green, yellow

Ordering code		
Part number		
BCC02ZY	BCC030N	BCC030F
BCC M423-0000-2A-001-PX0334-020	BCC M415-0000-1A-002-PX0334-020	BCC M415-0000-1A-005-PX0334-020
BCC02ZZ	BCC030P	BCC030H
BCC M423-0000-2A-001-PX0334-050	BCC M415-0000-1A-002-PX0334-050	BCC M415-0000-1A-005-PX0334-050
BCC0300	BCC030R	BCC030J
BCC M423-0000-2A-001-PX0334-100	BCC M415-0000-1A-002-PX0334-100	BCC M415-0000-1A-005-PX0334-100
BCC0304	BCC030Y	
BCC M423-0000-2A-036-PS0334-020	BCC M415-0000-1A-037-PS0334-020	
BCC0305	BCC030Z	
BCC M423-0000-2A-036-PS0334-050	BCC M415-0000-1A-037-PS0334-050	
BCC0306	BCC0310	
BCC M423-0000-2A-036-PS0334-100	BCC M415-0000-1A-037-PS0334-100	
BCC033N	BCC034F	BCC0347
BCC M423-0000-2A-001-VX8334-020	BCC M415-0000-1A-002-VX8334-020	BCC M415-0000-1A-005-VX8334-020
BCC033P	BCC034H	BCC0348
BCC M423-0000-2A-001-VX8334-050	BCC M415-0000-1A-002-VX8334-050	BCC M415-0000-1A-005-VX8334-050
BCC033R	BCC034J	BCC0349
BCC M423-0000-2A-001-VX8334-100	BCC M415-0000-1A-002-VX8334-100	BCC M415-0000-1A-005-VX8334-100
BCC033Y	BCC034N	
BCC M423-0000-2A-036-VS8334-020	BCC M415-0000-1A-037-VS8334-020	
BCC033Z	BCC034P	
BCC M423-0000-2A-036-VS8334-050	BCC M415-0000-1A-037-VS8334-050	
BCC0340	BCC034R	
BCC M423-0000-2A-036-VS8334-100	BCC M415-0000-1A-037-VS8334-100	





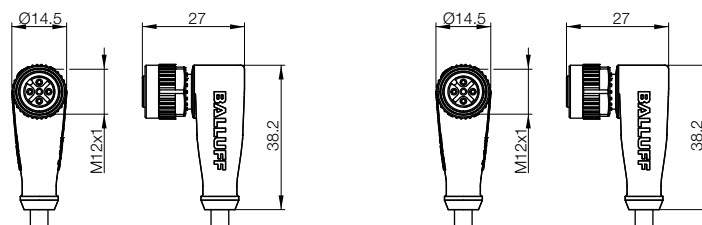
Connector diagram and wiring



Supply voltage AC U_S	250 V AC	
Supply voltage DC U_S	250 V DC	30 V DC
Cable	Molded	Molded
No. of wires $\times$ conductor cross-section	3 $\times$ 0.34 mm ²	3 $\times$ 0.34 mm ²
Degree of protection as per IEC 60529	IP 68	IP 68
Ambient temperature T_a	PUR -40...+90 °C/-25...+90 °C (UL 80 °C)	-40...+90 °C/-25...+90 °C (UL 80 °C)
Static/moving	PUR shielded -40...+80 °C/-25...+80 °C	
	PVC -40...+105 °C/-5...+105 °C (UL 80 °C)	-40...+105 °C/-5...+105 °C (UL 80 °C)
	PVC shielded -20...+105 °C (UL 80 °C)	
Use	Normally closed (NC)	Normally closed (NC)
LED		2 $\times$ (PNP), green, yellow

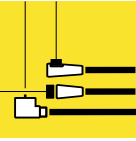
Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	2 m	BCC031A BCC M425-0000-1A-002-PX0334-020	BCC0314 BCC M425-0000-1A-005-PX0334-020
PUR	Black	5 m	BCC031C BCC M425-0000-1A-002-PX0334-050	BCC0315 BCC M425-0000-1A-005-PX0334-050
PUR	Black	10 m	BCC031E BCC M425-0000-1A-002-PX0334-100	BCC0316 BCC M425-0000-1A-005-PX0334-100
PUR shielded	Black	2 m	BCC031K BCC M425-0000-1A-037-PS0334-020	
PUR shielded	Black	5 m	BCC031L BCC M425-0000-1A-037-PS0334-050	
PUR shielded	Black	10 m	BCC031M BCC M425-0000-1A-037-PS0334-100	
PVC	Gray	2 m	BCC0354 BCC M425-0000-1A-002-VX8334-020	BCC034Y BCC M425-0000-1A-005-VX8334-020
PVC	Gray	5 m	BCC0355 BCC M425-0000-1A-002-VX8334-050	BCC034Z BCC M425-0000-1A-005-VX8334-050
PVC	Gray	10 m	BCC0356 BCC M425-0000-1A-002-VX8334-100	BCC0350 BCC M425-0000-1A-005-VX8334-100
PVC shielded	Gray	2 m	BCC035A BCC M425-0000-1A-037-VS8334-020	
PVC shielded	Gray	5 m	BCC035C BCC M425-0000-1A-037-VS8334-050	
PVC shielded	Gray	10 m	BCC035E BCC M425-0000-1A-037-VS8334-100	

Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions with LED on request.

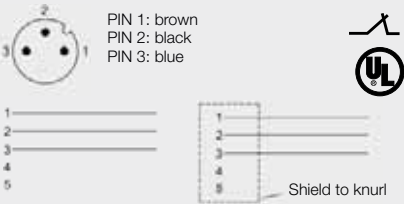


Connectors

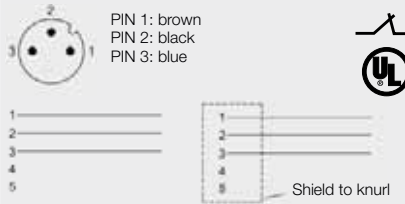
M12 male, 3-pin



Connectors and Cables
Connectors M5
Connection Cables M5↔M8
Connectors M8
Connection Cables M8↔M8
Connection Cables M8↔M12
Connectors M12
Connection Cables M12↔M8
Connection Cables M12↔M12
Connectors M23
Connection Cables M23↔M12
Connector 7/8"
Connection Cables 7/8"↔7/8"



250 V AC
250 V DC
Molded
3×0.34 mm²
IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+80 °C/-25...+80 °C
-40...+105 °C/-5...+105 °C (UL 80 °C)
-20...+105 °C (UL 80 °C)
Normally closed (NC)

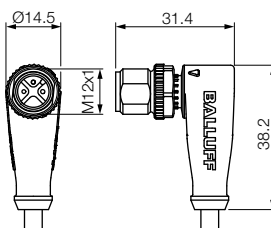
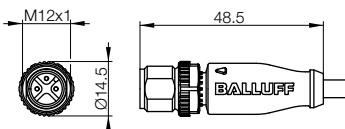


250 V AC
250 V DC
Molded
3×0.34 mm²
IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+80 °C/-25...+80 °C
-40...+105 °C/-5...+105 °C (UL 80 °C)
-20...+105 °C (UL 80 °C)
Normally closed (NC)

Ordering code

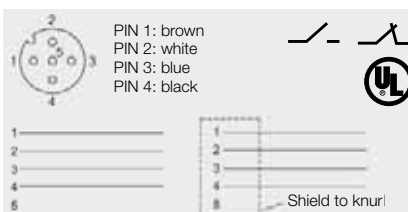
Part number

BCC02ZF BCC M413-0000-2A-002-PX0334-020	BCC0301 BCC M423-0000-2A-002-PX0334-020
BCC02ZH BCC M413-0000-2A-002-PX0334-050	BCC0302 BCC M423-0000-2A-002-PX0334-050
BCC02ZJ BCC M413-0000-2A-002-PX0334-100	BCC0303 BCC M423-0000-2A-002-PX0334-100
BCC02ZN BCC M413-0000-2A-037-PS0334-020	BCC0307 BCC M423-0000-2A-037-PS0334-020
BCC02ZP BCC M413-0000-2A-037-PS0334-050	BCC0308 BCC M423-0000-2A-037-PS0334-050
BCC02ZR BCC M413-0000-2A-037-PS0334-100	BCC0309 BCC M423-0000-2A-037-PS0334-100
BCC0337 BCC M413-0000-2A-002-VX8334-020	BCC033T BCC M423-0000-2A-002-VX8334-020
BCC0338 BCC M413-0000-2A-002-VX8334-050	BCC033U BCC M423-0000-2A-002-VX8334-050
BCC0339 BCC M413-0000-2A-002-VX8334-100	BCC033W BCC M423-0000-2A-002-VX8334-100
BCC033F BCC M413-0000-2A-037-VS8334-020	BCC0341 BCC M423-0000-2A-037-VS8334-020
BCC033H BCC M413-0000-2A-037-VS8334-050	BCC0342 BCC M423-0000-2A-037-VS8334-050
BCC033J BCC M413-0000-2A-037-VS8334-100	BCC0343 BCC M423-0000-2A-037-VS8334-100





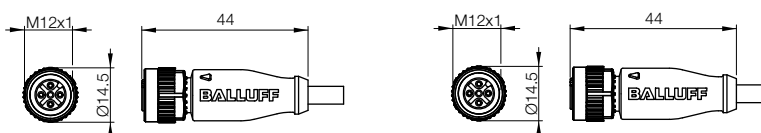
Connector diagram and wiring



Supply voltage AC U _S	250 V AC	
Supply voltage DC U _S	250 V DC	30 V DC
Cable	Molded	Molded
No. of wires × conductor cross-section	4×0.34 mm ²	4×0.34 mm ²
Degree of protection as per IEC 60529	IP 68	IP 68
Ambient temperature T _a	PUR -40...+90 °C/-25...+90 °C (UL 80 °C)	-40...+90 °C/-25...+90 °C (UL 80 °C)
Static/moving	PUR shielded -40...+80 °C/-25...+80 °C	
	PVC -40...+105 °C/-5...+105 °C (UL 80 °C)	-40...+105 °C/-5...+105 °C (UL 80 °C)
	PVC shielded -20...+105 °C (UL 80 °C)	
Use	Complementary (NO/NC)	Complementary (NO/NC)
LED		2× (PNP), green, yellow

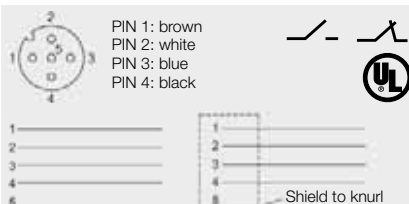
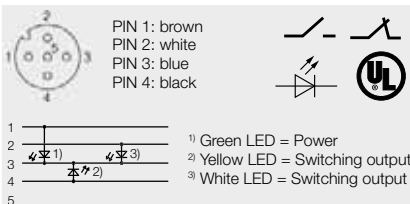
Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	2 m	BCC032F BCC M415-0000-1A-003-PX0434-020	BCC0327 BCC M415-0000-1A-008-PX0434-020
PUR	Black	5 m	BCC032H BCC M415-0000-1A-003-PX0434-050	BCC0328 BCC M415-0000-1A-008-PX0434-050
PUR	Black	10 m	BCC032J BCC M415-0000-1A-003-PX0434-100	BCC0329 BCC M415-0000-1A-008-PX0434-100
PUR shielded	Black	2 m	BCC032K BCC M415-0000-1A-014-PS0434-020	
PUR shielded	Black	5 m	BCC032L BCC M415-0000-1A-014-PS0434-050	
PUR shielded	Black	10 m	BCC032M BCC M415-0000-1A-014-PS0434-100	
PVC	Gray	2 m	BCC0367 BCC M415-0000-1A-003-VX8434-020	BCC0361 BCC M415-0000-1A-008-VX8434-020
PVC	Gray	5 m	BCC0368 BCC M415-0000-1A-003-VX8434-050	BCC0362 BCC M415-0000-1A-008-VX8434-050
PVC	Gray	10 m	BCC0369 BCC M415-0000-1A-003-VX8434-100	BCC0363 BCC M415-0000-1A-008-VX8434-100
PVC shielded	Gray	2 m	BCC036A BCC M415-0000-1A-014-VS8434-020	
PVC shielded	Gray	5 m	BCC036C BCC M415-0000-1A-014-VS8434-050	
PVC shielded	Gray	10 m	BCC036E BCC M415-0000-1A-014-VS8434-100	

Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions with LED on request.



Connectors

M12 female, 4-pin



30 V DC
Molded
4x0.34 mm²
IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+105 °C/-5...+105 °C (UL 80 °C)
Complementary (NO/NC) $\swarrow$ - / $\searrow$
3x (PNP), green, yellow, white

250 V AC
250 V DC
Molded
4x0.34 mm²
IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+80 °C/-25...+80 °C
-40...+105 °C/-5...+105 °C (UL 80 °C)
-20...+105 °C (UL 80 °C)
Complementary (NO/NC) $\swarrow$ - / $\searrow$

Ordering code

Part number

BCC032A

BCC M415-0000-1A-010-PX0434-020

BCC032C

BCC M415-0000-1A-010-PX0434-050

BCC032E

BCC M415-0000-1A-010-PX0434-100

BCC032Y

BCC M425-0000-1A-003-PX0434-020

BCC032Z

BCC M425-0000-1A-003-PX0434-050

BCC0330

BCC M425-0000-1A-003-PX0434-100

BCC0331

BCC M425-0000-1A-014-PS0434-020

BCC0332

BCC M425-0000-1A-014-PS0434-050

BCC0333

BCC M425-0000-1A-014-PS0434-100

BCC0364

BCC M415-0000-1A-010-VX8434-020

BCC0365

BCC M415-0000-1A-010-VX8434-050

BCC0366

BCC M415-0000-1A-010-VX8434-100

BCC036N

BCC M425-0000-1A-003-VX8434-020

BCC036P

BCC M425-0000-1A-003-VX8434-050

BCC036R

BCC M425-0000-1A-003-VX8434-100

BCC036T

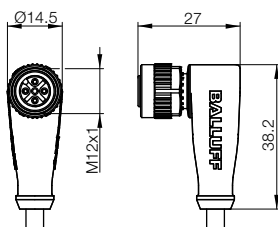
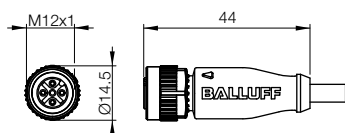
BCC M425-0000-1A-014-VS8434-020

BCC036U

BCC M425-0000-1A-014-VS8434-050

BCC036W

BCC M425-0000-1A-014-VS8434-100

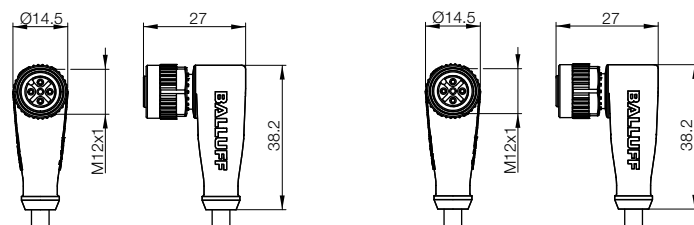




Connector diagram and wiring		PIN 1: brown PIN 2: white PIN 3: blue PIN 4: black ¹⁾ Green LED = Power ²⁾ Yellow LED = Switching output	PIN 1: brown PIN 2: white PIN 3: blue PIN 4: black ¹⁾ Green LED = Power ²⁾ Yellow LED = Switching output ³⁾ White LED = Switching output
Supply voltage AC U _S		30 V DC	30 V DC
Supply voltage DC U _S		Molded	Molded
Cable		4x0.34 mm ²	4x0.34 mm ²
No. of wires × conductor cross-section		IP 68	IP 68
Degree of protection as per IEC 60529		–40...+90 °C/–25...+90 °C (UL 80 °C)	–40...+90 °C/–25...+90 °C (UL 80 °C)
Ambient temperature T _a	PUR	–40...+105 °C/–5...+105 °C (UL 80 °C)	–40...+105 °C/–5...+105 °C (UL 80 °C)
Static/moving	PUR shielded		
	PVC		
	PVC shielded		
Use		Complementary (NO/NC) /	Complementary (NO/NC) /
LED		2× (PNP), green, yellow	3× (PNP), green, yellow, white

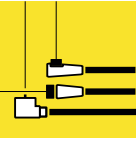
Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	2 m	BCC032N BCC M425-0000-1A-008-PX0434-020	BCC032T BCC M425-0000-1A-010-PX0434-020
PUR	Black	5 m	BCC032P BCC M425-0000-1A-008-PX0434-050	BCC032U BCC M425-0000-1A-010-PX0434-050
PUR	Black	10 m	BCC032R BCC M425-0000-1A-008-PX0434-100	BCC032W BCC M425-0000-1A-010-PX0434-100
PUR shielded	Black	2 m		
PUR shielded	Black	5 m		
PUR shielded	Black	10 m		
PVC	Gray	2 m	BCC036F BCC M425-0000-1A-008-VX8434-020	BCC036K BCC M425-0000-1A-010-VX8434-020
PVC	Gray	5 m	BCC036H BCC M425-0000-1A-008-VX8434-050	BCC036L BCC M425-0000-1A-010-VX8434-050
PVC	Gray	10 m	BCC036J BCC M425-0000-1A-008-VX8434-100	BCC036M BCC M425-0000-1A-010-VX8434-100
PVC shielded	Gray	2 m		
PVC shielded	Gray	5 m		
PVC shielded	Gray	10 m		

Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions with LED on request.



Connectors

M12 male, 4-pin



Connectors and Cables

Connectors M5

Connection Cables M5↔M8

Connectors M8

Connection Cables M8↔M8

Connection Cables M8↔M12

Connectors M12

Connection Cables M12↔M8

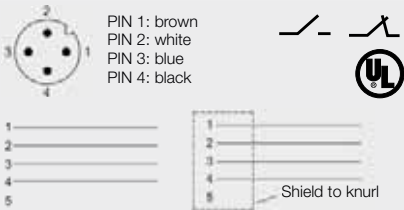
Connection Cables M12↔M12

Connectors M23

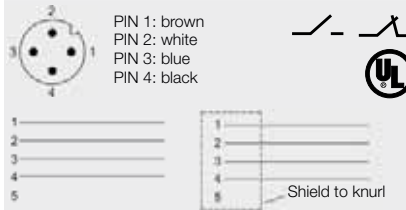
Connection Cables M23↔M12

Connector 7/8"

Connection Cables 7/8"↔7/8"



250 V AC
250 V DC
Molded
4x0.34 mm²
IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+80 °C/-25...+80 °C
-40...+105 °C/-5...+105 °C (UL 80 °C)
-20...+105 °C (UL 80 °C)
Complementary (NO/NC) $\swarrow$ / $\searrow$



250 V AC
250 V DC
Molded
4x0.34 mm²
IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+80 °C/-25...+80 °C
-40...+105 °C/-5...+105 °C (UL 80 °C)
-20...+105 °C (UL 80 °C)
Complementary (NO/NC) $\swarrow$ / $\searrow$

Ordering code

Part number

BCC031N

BCC M414-0000-2A-003-PX0434-020

BCC031P

BCC M414-0000-2A-003-PX0434-050

BCC031R

BCC M414-0000-2A-003-PX0434-100

BCC031T

BCC M414-0000-2A-014-PS0434-020

BCC031U

BCC M414-0000-2A-014-PS0434-050

BCC031W

BCC M414-0000-2A-014-PS0434-100

BCC035F

BCC M414-0000-2A-003-VX8434-020

BCC035H

BCC M414-0000-2A-003-VX8434-050

BCC035J

BCC M414-0000-2A-003-VX8434-100

BCC035K

BCC M414-0000-2A-014-VS8434-020

BCC035L

BCC M414-0000-2A-014-VS8434-050

BCC035M

BCC M414-0000-2A-014-VS8434-100

BCC0321

BCC M424-0000-2A-003-PX0434-020

BCC0322

BCC M424-0000-2A-003-PX0434-050

BCC0323

BCC M424-0000-2A-003-PX0434-100

BCC0324

BCC M424-0000-2A-014-PS0434-020

BCC0325

BCC M424-0000-2A-014-PS0434-050

BCC0326

BCC M424-0000-2A-014-PS0434-100

BCC042U

BCC M424-0000-2A-003-VX0434-020

BCC042W

BCC M424-0000-2A-003-VX0434-050

BCC035W

BCC M424-0000-2A-003-VX0434-100

BCC035Y

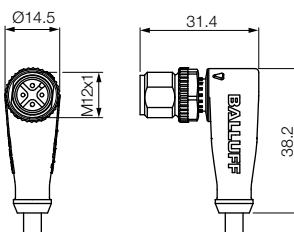
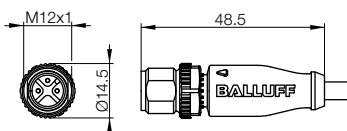
BCC M424-0000-2A-003-VS0434-020

BCC035Z

BCC M424-0000-2A-003-VS0434-050

BCC0360

BCC M424-0000-2A-003-VS0434-100

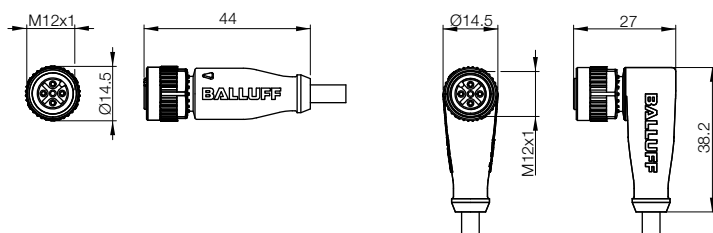




Connector diagram and wiring	PIN 1: brown PIN 2: white PIN 3: blue PIN 4: black PIN 5: gray or green/yellow		PIN 1: brown PIN 2: white PIN 3: blue PIN 4: black PIN 5: gray or green/yellow	
Supply voltage AC U_S	125 V AC		125 V AC	
Supply voltage DC U_S	125 V DC		125 V DC	
Cable	Molded		Molded	
No. of wires × conductor cross-section	5×0.34 mm ²		5×0.34 mm ²	
Degree of protection as per IEC 60529	IP 68		IP 68	
Ambient temperature T_a	PUR -40...+90 °C/-25...+90 °C (UL 80 °C) PVC -40...+105 °C/-5...+105 °C (UL 80 °C)		-40...+90 °C/-25...+90 °C (UL 80 °C)	
Static/moving Use	Complementary (NO/NC) /		Complementary (NO/NC) /	
LED				

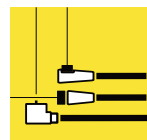
Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	2 m	BCC08FE	BCC09H7
Pin 5 gray			BCC M415-0000-1A-017-PX0534-020	BCC M425-0000-1A-017-PX0534-020
PUR	Black	5 m	BCC098C	BCC08FC
Pin 5 gray			BCC M415-0000-1A-017-PX0534-050	BCC M425-0000-1A-017-PX0534-050
PUR	Black	10 m	BCC0860	BCC08FA
Pin 5 gray			BCC M415-0000-1A-017-PX0534-100	BCC M425-0000-1A-017-PX0534-100
PUR	Black	2 m	BCC09H4	BCC08F9
Pin 5 green/yellow			BCC M415-0000-1A-034-PX0534-020	BCC M425-0000-1A-034-PX0534-020
PUR	Black	5 m	BCC09H5	BCC08F8
Pin 5 green/yellow			BCC M415-0000-1A-034-PX0534-050	BCC M425-0000-1A-034-PX0534-050
PUR	Black	10 m	BCC09H6	BCC08F7
Pin 5 green/yellow			BCC M415-0000-1A-034-PX0534-100	BCC M425-0000-1A-034-PX0534-100
PVC	Gray	2 m		
Pin 5 gray				
PVC	Gray	5 m	BCC0AT5	
Pin 5 gray			BCC M415-0000-1A-017-VX8534-050	
PVC	Gray	10 m	BCC0AN9	
Pin 5 gray			BCC M415-0000-1A-017-VX8534-100	

Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions with LED on request.

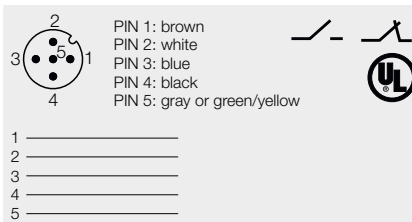
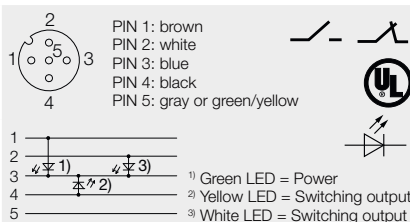


Connectors

M12 female, M12 male, 5-pin



Connectors and Cables
Connectors M5
Connection Cables M5↔M8
Connectors M8
Connection Cables M8↔M8
Connection Cables M8↔M12
Connectors M12
Connection Cables M12↔M8
Connection Cables M12↔M12
Connectors M23
Connection Cables M23↔M12
Connector 7/8"
Connection Cables 7/8"↔7/8"



30 V DC
Molded
5x0.34 mm²

IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)

Complementary (NO/NC) /
3x (PNP), green, yellow, white

125 V AC
125 V DC
Molded
5x0.34 mm²

IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+105 °C/-5...+105 °C (UL 80 °C)

Complementary (NO/NC) /

Ordering code

Part number

BCC08F6
BCC M425-0000-1A-039-PX0534-020

BCC08F5
BCC M425-0000-1A-039-PX0534-050

BCC08F4
BCC M425-0000-1A-039-PX0534-100

BCC08HP
BCC M425-0000-1A-040-PX0534-020

BCC08HR
BCC M425-0000-1A-040-PX0534-050

BCC08HT
BCC M425-0000-1A-040-PX0534-100

BCC0C76
BCC M415-0000-2A-017-PX0534-020

BCC0C77
BCC M415-0000-2A-017-PX0534-050

BCC0C78
BCC M415-0000-2A-017-PX0534-100

BCC08JE
BCC M415-0000-2A-034-PX0534-020

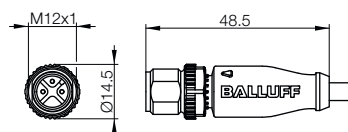
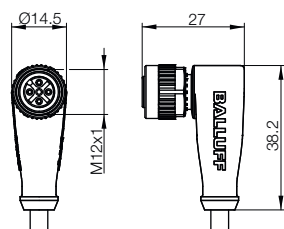
BCC08JC
BCC M415-0000-2A-034-PX0534-050

BCC08JA
BCC M415-0000-2A-034-PX0534-100

BCC0AU3
BCC M415-0000-2A-017-VX8534-020

BCC0AT6
BCC M415-0000-2A-017-VX8534-050

BCC0AUK
BCC M415-0000-2A-017-VX8534-100





Connector diagram and wiring

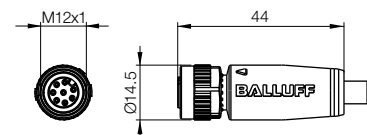
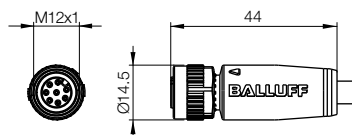


Supply voltage AC U_S	60 V AC
Supply voltage DC U_S	60 V DC
Cable	Molded
No. of wires × conductor cross-section	8×0.25 mm ²
Degree of protection as per IEC 60529	IP 68
Ambient temperature T_a	PUR PUR shielded
Static/moving	

Supply voltage AC U_S	60 V AC
Supply voltage DC U_S	60 V DC
Cable	Molded
No. of wires × conductor cross-section	8×0.25 mm ²
Degree of protection as per IEC 60529	IP 68
Ambient temperature T_a	-40...+80 °C/-25...+80 °C
Static/moving	-40...+80 °C/-25...+80 °C

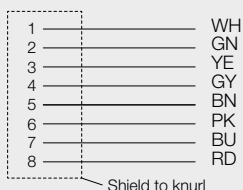
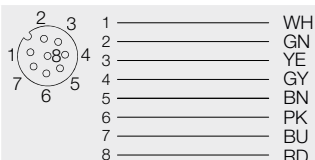
Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	2 m	BCC06K1 BCC M418-0000-1A-044-PX0825-020	BCC09J3 BCC M418-0000-1A-069-PX0825-020
PUR	Black	5 m	BCC06K2 BCC M418-0000-1A-044-PX0825-050	BCC09J4 BCC M418-0000-1A-069-PX0825-050
PUR	Black	10 m	BCC06K3 BCC M418-0000-1A-044-PX0825-100	BCC085Z BCC M418-0000-1A-069-PX0825-100
PUR shielded	Black	2 m		BCC0994 BCC M418-0000-1A-046-PS0825-020
PUR shielded	Black	5 m		BCC0995 BCC M418-0000-1A-046-PS0825-050
PUR shielded	Black	10 m		BCC0996 BCC M418-0000-1A-046-PS0825-100

Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions with LED on request.



Connectors

M12 female, 8-pin



60 V AC
60 V DC
Molded
8x0.25 mm²

IP 68
-40...+80 °C/-25...+80 °C

60 V AC
60 V DC
Molded
8x0.25 mm²

IP 68
-40...+80 °C/-25...+80 °C
-40...+80 °C/-25...+80 °C

Ordering code

Part number

BCC09HC
BCC M418-0000-1A-045-PX0825-020

BCC06K4
BCC M428-0000-1A-044-PX0825-020

BCC09HE
BCC M418-0000-1A-045-PX0825-050

BCC06K5
BCC M428-0000-1A-044-PX0825-050

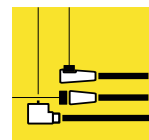
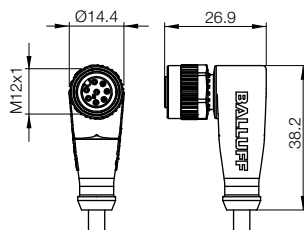
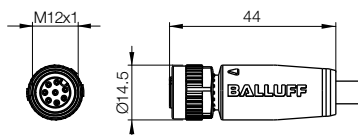
BCC09HF
BCC M418-0000-1A-045-PX0825-100

BCC06K6
BCC M428-0000-1A-044-PX0825-100

BCC0997
BCC M428-0000-1A-046-PS0825-020

BCC0998
BCC M428-0000-1A-046-PS0825-050

BCC0999
BCC M428-0000-1A-046-PS0825-100



Connectors and Cables

Connectors M5

Connection Cables M5↔M8

Connectors M8

Connection Cables M8↔M8

Connection Cables M8↔M12

Connectors M12

Connection Cables M12↔M8

Connection Cables M12↔M12

Connectors M23

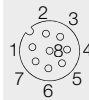
Connection Cables M23↔M12

Connector 7/8"

Connection Cables 7/8"↔7/8"



Connector diagram
and wiring



1	_____	BN
2	_____	WS
3	_____	BU
4	_____	BK
5	_____	GY
6	_____	PK
7	_____	VT
8	_____	OR



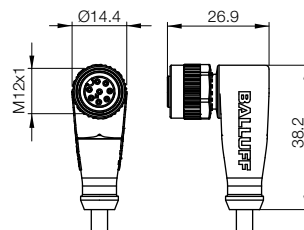
Supply voltage AC U _S	60 V AC
Supply voltage DC U _S	60 V DC
Cable	Molded
No. of wires × conductor cross-section	8×0.25 mm ²
Degree of protection as per IEC 60529	IP 68
Ambient temperature T _a	PUR -40...+80 °C / -25...+80 °C PVC
Static/moving	

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	2 m	BCC09H8	
			BCC M428-0000-1A-045-PX0825-020	
PUR	Black	5 m	BCC09H9	
			BCC M428-0000-1A-045-PX0825-050	
PUR	Black	10 m	BCC09HA	
			BCC M428-0000-1A-045-PX0825-100	
PVC	Gray	2 m		
PVC	Gray	5 m		
PVC	Gray	10 m		

Other cable materials, colors and lengths
on request.

Connectors without LED are suitable for PNP
and NPN switching functions.

NPN versions with LED on request.



Connectors

M12 male, 8-pin



1 WH
2 GN
3 YE
4 GY
5 BN
6 PK
7 BU
8 RD



1 WH
2 GN
3 YE
4 GY
5 BN
6 PK
7 BU
8 RD



60 V AC
60 V DC
Molded
8x0.25 mm²

IP 68
-40...+80 °C/-25...+80 °C
-40...+105 °C/-5...+105 °C (UL 80 °C)

60 V AC
60 V DC
Molded
8x0.25 mm²

IP 68
-40...+80 °C/-25...+80 °C
-40...+105 °C/-5...+105 °C (UL 80 °C)

Ordering code

Part number

BCC06JT

BCC M418-0000-2A-044-PX0825-020

BCC06JU

BCC M418-0000-2A-044-PX0825-050

BCC06JW

BCC M418-0000-2A-044-PX0825-100

BCC06K7

BCC M418-0000-2A-044-VX8825-020

BCC06K8

BCC M418-0000-2A-044-VX8825-050

BCC06K9

BCC M418-0000-2A-044-VX8825-100

BCC06JY

BCC M428-0000-2A-044-PX0825-020

BCC06JZ

BCC M428-0000-2A-044-PX0825-050

BCC06K0

BCC M428-0000-2A-044-PX0825-100

BCC06KA

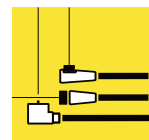
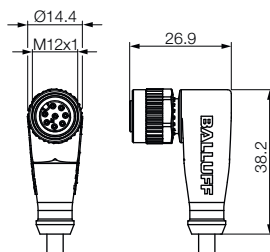
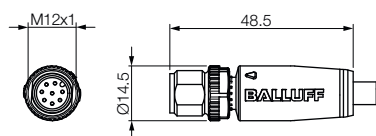
BCC M428-0000-2A-044-VX0825-020

BCC06KC

BCC M428-0000-2A-044-VX0825-050

BCC06KE

BCC M428-0000-2A-044-VX0825-100



Connectors and Cables

Connectors

M5

Connection Cables

M5↔M8

Connectors

M8

Connection Cables

M8↔M8

Connection Cables

M8↔M12

Connectors M12

Connection Cables

M12↔M8

Connection Cables

M12↔M12

Connectors M23

Connection Cables

M23↔M12

Connector 7/8"

Connection Cables

7/8"↔7/8"



Connector diagram and wiring



1	BN
2	BU
3	WH
4	GN
5	PK
6	YE
7	BK
8	GY
9	RD
10	VT
11	GY/PK
12	RD/BU



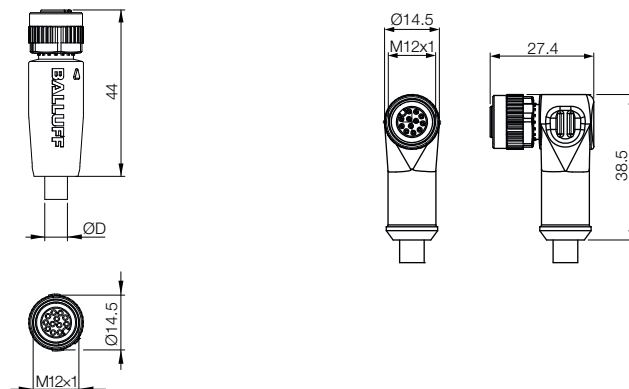
1	BN
2	BU
3	WH
4	GN
5	PK
6	YE
7	BK
8	GY
9	RD
10	VT
11	GY/PK
12	RD/BU



Supply voltage AC U _S	30 V AC	30 V AC
Supply voltage DC U _S	30 V DC	30 V DC
Cable	Molded	Molded
No. of wires × conductor cross-section	12×0.25 mm ²	12×0.25 mm ²
Degree of protection as per IEC 60529	IP 68	IP 68
Ambient temperature T _a	PUR -40...+90 °C/-25...+90 °C (UL 80 °C)	-40...+90 °C/-25...+90 °C (UL 80 °C)
Static/moving	PVC -40...+105 °C/-5...+105 °C (UL 80 °C)	

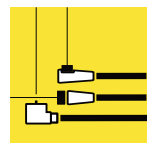
Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	2 m	BCC06UK BCC M41C-0000-1A-049-PX0C25-020	
PUR	Black	5 m	BCC06UL BCC M41C-0000-1A-049-PX0C25-050	BCC0942 BCC M42C-0000-1A-049-PX0C25-050
PUR	Black	10 m	BCC06UM BCC M41C-0000-1A-049-PX0C25-100	BCC0943 BCC M42C-0000-1A-049-PX0C25-100
PVC	Gray	2 m	BCC06UP BCC M41C-0000-1A-049-VX8C25-020	
PVC	Gray	5 m	BCC06UR BCC M41C-0000-1A-049-VX8C25-050	
PVC	Gray	10 m	BCC06UT BCC M41C-0000-1A-049-VX8C25-100	

Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions with LED on request.



Connectors

M12 male, 12-pin



Connectors and Cables

Connectors M5

Connection Cables M5↔M8

Connectors M8

Connection Cables M8↔M8

Connection Cables M8↔M12

Connectors M12

Connection Cables M12↔M8

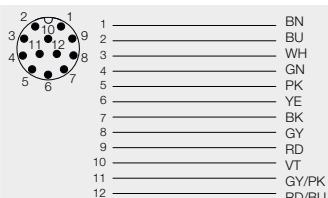
Connection Cables M12↔M12

Connectors M23

Connection Cables M23↔M12

Connector 7/8"

Connection Cables 7/8"↔7/8"



30 V AC
30 V DC
Molded
12x0.25 mm²

IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+105 °C/-5...+105 °C (UL 80 °C)

30 V AC
30 V DC
Molded
12x0.25 mm²

IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)

Ordering code

Part number

BCC06UU

BCC M41C-0000-2A-049-PX0C25-020

BCC06UW

BCC M41C-0000-2A-049-PX0C25-050

BCC06UY

BCC M41C-0000-2A-049-PX0C25-100

BCC06UZ

BCC M41C-0000-2A-049-VX8C25-020

BCC06W0

BCC M41C-0000-2A-049-VX8C25-050

BCC06W1

BCC M41C-0000-2A-049-VX8C25-100

BCC0941

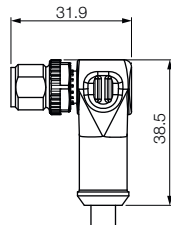
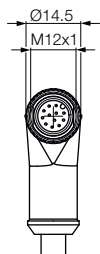
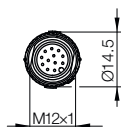
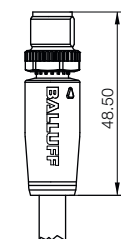
BCC M42C-0000-2A-049-PX0C25-020

BCC09M5

BCC M42C-0000-2A-049-PX0C25-050

BCC09M4

BCC M42C-0000-2A-049-PX0C25-100



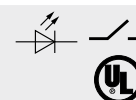
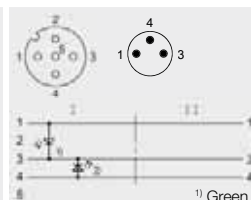
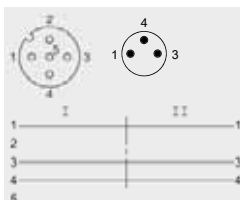
Connection Cables

M12 female ↔ M8 male, 3-pin

M12 ↔ M8



Connector diagram and wiring

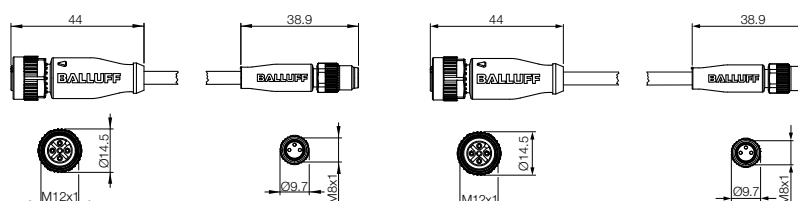


1) Green LED = Power
2) Yellow LED = Switching output

Supply voltage U _B	60 V AC/DC	60 V AC/DC
Cable	Molded	Molded
No. of wires × conductor cross-section	3×0.34 mm ²	3×0.34 mm ²
Degree of protection as per IEC 60529	IP 67	IP 67/IP 68
Ambient temperature T _a	PUR -40...+90 °C/-25...+90 °C (UL 80 °C)	PVC -40...+105 °C/-5...+90 °C (UL 80 °C)
Static/moving	PUR	PVC
Use	Normally open (NO) ✓	Normally open (NO) ✓
LED		2× (PNP), green, yellow

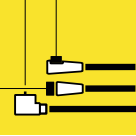
Cable material	Color	Length	Ordering code
			Part number
PUR	Black	0.3 m	BCC03M9 BCC M415-M313-3F-300-PX0334-003
PUR	Black	0.6 m	BCC03MA BCC M415-M313-3F-300-PX0334-006
PUR	Black	1 m	BCC03MC BCC M415-M313-3F-300-PX0334-010
PUR	Black	1.5 m	BCC03ME BCC M415-M313-3F-300-PX0334-015
PUR	Black	2 m	BCC03MF BCC M415-M313-3F-300-PX0334-020
PUR	Black	3 m	BCC03MH BCC M415-M313-3F-300-PX0334-030
PUR	Black	5 m	BCC03MJ BCC M415-M313-3F-300-PX0334-050
PVC	Gray	0.3 m	BCC03NW BCC M415-M313-3F-300-VX8334-003
PVC	Gray	0.6 m	BCC03NY BCC M415-M313-3F-300-VX8334-006
PVC	Gray	1 m	BCC03NZ BCC M415-M313-3F-300-VX8334-010
PVC	Gray	1.5 m	BCC03P0 BCC M415-M313-3F-300-VX8334-015
PVC	Gray	2 m	BCC03P1 BCC M415-M313-3F-300-VX8334-020
PVC	Gray	3 m	BCC03P2 BCC M415-M313-3F-300-VX8334-030
PVC	Gray	5 m	BCC03P3 BCC M415-M313-3F-300-VX8334-050

Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions with LED on request.

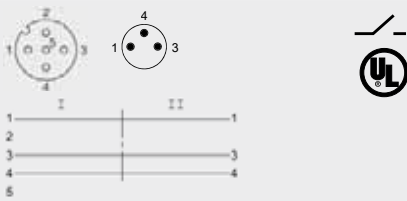


Connection Cables

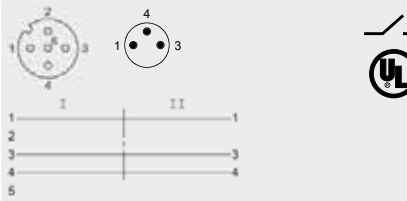
M12 female ↔ M8 male, 3-pin



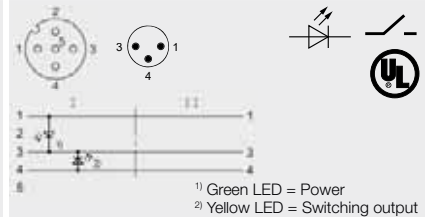
Connectors and Cables
Connectors M5
Connection Cables M5↔M8
Connectors M8
Connection Cables M8↔M8
Connection Cables M8↔M12
Connectors M12
Connection Cables M12↔M8
Connection Cables M12↔M12
Connectors M23
Connection Cables M23↔M12
Connector 7/8"
Connection Cables 7/8"↔7/8"



60 V AC/DC
Molded
3×0.34 mm²
IP 67/IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+105 °C/-5...+90 °C (UL 80 °C)
Normally open (NO) ✓



60 V AC/DC
Molded
3×0.34 mm²
IP 67
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+105 °C/-5...+90 °C (UL 80 °C)
Normally open (NO) ✓

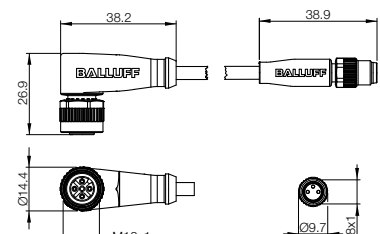
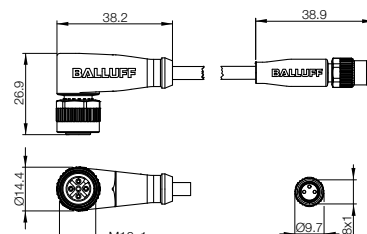
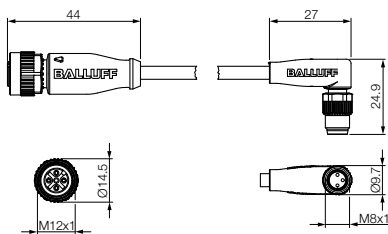


30 V DC
Molded
3×0.34 mm²
IP 67
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+105 °C/-5...+90 °C (UL 80 °C)
Normally open (NO) ✓
2× (PNP), green, yellow

Ordering code

Part number

BCC03MK BCC M415-M323-3F-300-PX0334-003	BCC03MU BCC M425-M313-3F-300-PX0334-003	BCC03NA BCC M425-M313-3F-602-PX0334-003
BCC03ML BCC M415-M323-3F-300-PX0334-006	BCC03MW BCC M425-M313-3F-300-PX0334-006	BCC03NC BCC M425-M313-3F-602-PX0334-006
BCC03MM BCC M415-M323-3F-300-PX0334-010	BCC03MY BCC M425-M313-3F-300-PX0334-010	BCC03NE BCC M425-M313-3F-602-PX0334-010
BCC03MN BCC M415-M323-3F-300-PX0334-015	BCC03MZ BCC M425-M313-3F-300-PX0334-015	BCC03NF BCC M425-M313-3F-602-PX0334-015
BCC03MP BCC M415-M323-3F-300-PX0334-020	BCC03N0 BCC M425-M313-3F-300-PX0334-020	BCC03NH BCC M425-M313-3F-602-PX0334-020
BCC03MR BCC M415-M323-3F-300-PX0334-030	BCC03N1 BCC M425-M313-3F-300-PX0334-030	BCC03NJ BCC M425-M313-3F-602-PX0334-030
BCC03MT BCC M415-M323-3F-300-PX0334-050	BCC03N2 BCC M425-M313-3F-300-PX0334-050	BCC03NK BCC M425-M313-3F-602-PX0334-050
BCC03P4 BCC M415-M323-3F-300-VX8334-003	BCC03PC BCC M425-M313-3F-300-VX8334-003	BCC03PY BCC M425-M313-3F-602-VX8334-003
BCC03P5 BCC M415-M323-3F-300-VX8334-006	BCC03PE BCC M425-M313-3F-300-VX8334-006	BCC03PZ BCC M425-M313-3F-602-VX8334-006
BCC03P6 BCC M415-M323-3F-300-VX8334-010	BCC03PF BCC M425-M313-3F-300-VX8334-010	BCC03R0 BCC M425-M313-3F-602-VX8334-010
BCC03P7 BCC M415-M323-3F-300-VX8334-015	BCC03PH BCC M425-M313-3F-300-VX8334-015	BCC03R1 BCC M425-M313-3F-602-VX8334-015
BCC03P8 BCC M415-M323-3F-300-VX8334-020	BCC03PJ BCC M425-M313-3F-300-VX8334-020	BCC03R2 BCC M425-M313-3F-602-VX8334-020
BCC03P9 BCC M415-M323-3F-300-VX8334-030	BCC03PK BCC M425-M313-3F-300-VX8334-030	BCC03R3 BCC M425-M313-3F-602-VX8334-030
BCC03PA BCC M415-M323-3F-300-VX8334-050	BCC03PL BCC M425-M313-3F-300-VX8334-050	BCC03R4 BCC M425-M313-3F-602-VX8334-050



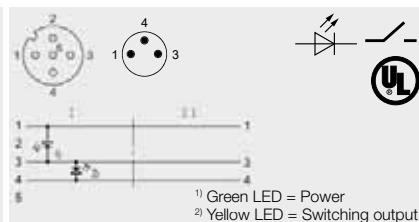
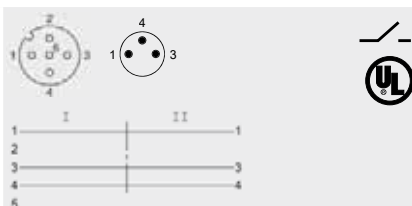
Connection Cables

M12 female ↔ M8 male, 3-pin

M12 ↔ M8



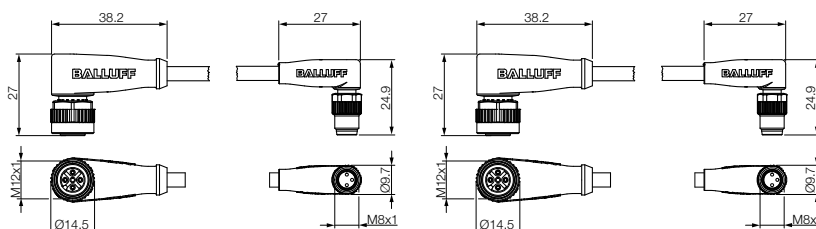
Connector diagram and wiring



Supply voltage U_B	60 V AC/DC	30 V AC/DC
Cable	Molded	Molded
No. of wires × conductor cross-section	3×0.34 mm ²	3×0.34 mm ²
Degree of protection as per IEC 60529	IP 67/IP 68	IP 67/IP 68
Ambient temperature T_a	PUR -40...+90 °C/-25...+90 °C (UL 80 °C)	-40...+90 °C/-25...+90 °C (UL 80 °C)
Static/moving	PVC -40...+105 °C/-5...+90 °C (UL 80 °C)	-40...+105 °C/-5...+90 °C (UL 80 °C)
Use	Normally open (NO) ✓	Normally open (NO) ✓
LED		2× (PNP), green, yellow

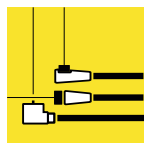
Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	0.3 m	BCC03N3 BCC M425-M323-3F-300-PX0334-003	BCC03NL BCC M425-M323-3F-602-PX0334-003
PUR	Black	0.6 m	BCC03N4 BCC M425-M323-3F-300-PX0334-006	BCC03NM BCC M425-M323-3F-602-PX0334-006
PUR	Black	1 m	BCC03N5 BCC M425-M323-3F-300-PX0334-010	BCC03NN BCC M425-M323-3F-602-PX0334-010
PUR	Black	1.5 m	BCC03N6 BCC M425-M323-3F-300-PX0334-015	BCC03NP BCC M425-M323-3F-602-PX0334-015
PUR	Black	2 m	BCC03N7 BCC M425-M323-3F-300-PX0334-020	BCC03NR BCC M425-M323-3F-602-PX0334-020
PUR	Black	3 m	BCC03N8 BCC M425-M323-3F-300-PX0334-030	BCC03NT BCC M425-M323-3F-602-PX0334-030
PUR	Black	5 m	BCC03N9 BCC M425-M323-3F-300-PX0334-050	BCC03NU BCC M425-M323-3F-602-PX0334-050
PVC	Gray	0.3 m	BCC03PM BCC M425-M323-3F-300-VX8334-003	BCC03R5 BCC M425-M323-3F-602-VX8334-003
PVC	Gray	0.6 m	BCC03PN BCC M425-M323-3F-300-VX8334-006	BCC03R6 BCC M425-M323-3F-602-VX8334-006
PVC	Gray	1 m	BCC03PP BCC M425-M323-3F-300-VX8334-010	BCC03R7 BCC M425-M323-3F-602-VX8334-010
PVC	Gray	1.5 m	BCC03PR BCC M425-M323-3F-300-VX8334-015	BCC03R8 BCC M425-M323-3F-602-VX8334-015
PVC	Gray	2 m	BCC03PT BCC M425-M323-3F-300-VX8334-020	BCC03R9 BCC M425-M323-3F-602-VX8334-020
PVC	Gray	3 m	BCC03PU BCC M425-M323-3F-300-VX8334-030	BCC03RA BCC M425-M323-3F-602-VX8334-030
PVC	Gray	5 m	BCC03PW BCC M425-M323-3F-300-VX8334-050	BCC03RC BCC M425-M323-3F-602-VX8334-050

Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions with LED on request.



Connection Cables

M12 female ↔ M8 male, 4-pin



Connectors and Cables

Connectors M5

Connection Cables M5↔M8

Connectors M8

Connection Cables M8↔M8

Connection Cables M8↔M12

Connectors M12

Connection Cables M12↔M8

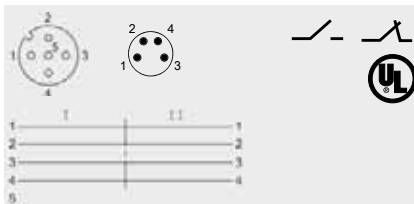
Connection Cables M12↔M12

Connectors M23

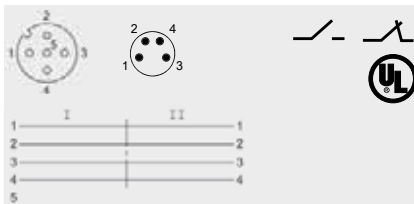
Connection Cables M23↔M12

Connector 7/8"

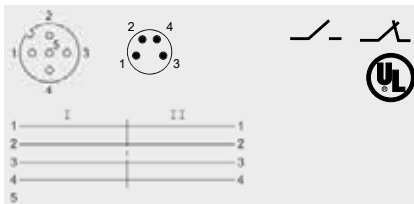
Connection Cables 7/8"↔7/8"



30 V AC/DC
Molded
4x0.34 mm²
IP 67
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+105 °C/-5...+90 °C (UL 80 °C)
Complementary (NO/NC) ✓ / ✗



30 V AC/DC
Molded
4x0.34 mm²
IP 67/IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+105 °C/-5...+90 °C (UL 80 °C)
Complementary (NO/NC) ✓ / ✗

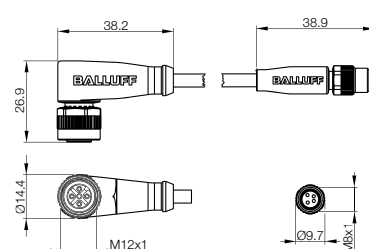
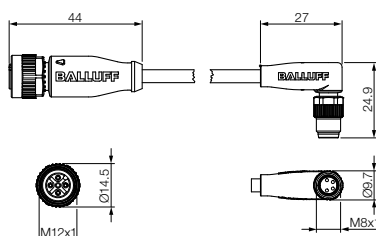
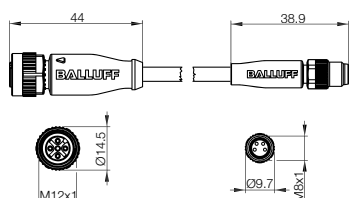


30 V AC/DC
Molded
4x0.34 mm²
IP 67
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+105 °C/-5...+90 °C (UL 80 °C)
Complementary (NO/NC) ✓ / ✗

Ordering code

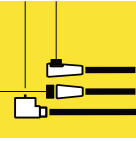
Part number

BCC03RE BCC M415-M314-3F-304-PX0434-003	BCC03RN BCC M415-M324-3F-304-PX0434-003	BCC03RZ BCC M425-M314-3F-304-PX0434-003
BCC03RF BCC M415-M314-3F-304-PX0434-006	BCC03RP BCC M415-M324-3F-304-PX0434-006	BCC03T0 BCC M425-M314-3F-304-PX0434-006
BCC03RH BCC M415-M314-3F-304-PX0434-010	BCC03RR BCC M415-M324-3F-304-PX0434-010	BCC03T1 BCC M425-M314-3F-304-PX0434-010
BCC03RJ BCC M415-M314-3F-304-PX0434-015	BCC03RT BCC M415-M324-3F-304-PX0434-015	BCC03T2 BCC M425-M314-3F-304-PX0434-015
BCC03RK BCC M415-M314-3F-304-PX0434-020	BCC03RU BCC M415-M324-3F-304-PX0434-020	BCC03T3 BCC M425-M314-3F-304-PX0434-020
BCC03RL BCC M415-M314-3F-304-PX0434-030	BCC03RW BCC M415-M324-3F-304-PX0434-030	BCC03T4 BCC M425-M314-3F-304-PX0434-030
BCC03RM BCC M415-M314-3F-304-PX0434-050	BCC03RY BCC M415-M324-3F-304-PX0434-050	BCC03T5 BCC M425-M314-3F-304-PX0434-050
BCC03TP BCC M415-M314-3F-304-VX8434-003	BCC03U0 BCC M415-M324-3F-304-VX8434-003	BCC03U7 BCC M425-M314-3F-304-VX8434-003
BCC03TR BCC M415-M314-3F-304-VX8434-006	BCC03U1 BCC M415-M324-3F-304-VX8434-006	BCC03U8 BCC M425-M314-3F-304-VX8434-006
BCC03TT BCC M415-M314-3F-304-VX8434-010	BCC03U2 BCC M415-M324-3F-304-VX8434-010	BCC03U9 BCC M425-M314-3F-304-VX8434-010
BCC03TU BCC M415-M314-3F-304-VX8434-015	BCC03U3 BCC M415-M324-3F-304-VX8434-015	BCC03UA BCC M425-M314-3F-304-VX8434-015
BCC03TW BCC M415-M314-3F-304-VX8434-020	BCC03U4 BCC M415-M324-3F-304-VX8434-020	BCC03UC BCC M425-M314-3F-304-VX8434-020
BCC03TY BCC M415-M314-3F-304-VX8434-030	BCC03U5 BCC M415-M324-3F-304-VX8434-030	BCC03UE BCC M425-M314-3F-304-VX8434-030
BCC03TZ BCC M415-M314-3F-304-VX8434-050	BCC03U6 BCC M415-M324-3F-304-VX8434-050	BCC03UF BCC M425-M314-3F-304-VX8434-050





Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	0.3 m	BCC03TF BCC M425-M314-3F-606-PX0434-003	BCC03T6 BCC M425-M324-3F-304-PX0434-003
PUR	Black	0.6 m	BCC03TH BCC M425-M314-3F-606-PX0434-006	BCC03T7 BCC M425-M324-3F-304-PX0434-006
PUR	Black	1 m	BCC03TJ BCC M425-M314-3F-606-PX0434-010	BCC03T8 BCC M425-M324-3F-304-PX0434-010
PUR	Black	1.5 m	BCC03TK BCC M425-M314-3F-606-PX0434-015	BCC03T9 BCC M425-M324-3F-304-PX0434-015
PUR	Black	2 m	BCC03TL BCC M425-M314-3F-606-PX0434-020	BCC03TA BCC M425-M324-3F-304-PX0434-020
PUR	Black	3 m	BCC03TM BCC M425-M314-3F-606-PX0434-030	BCC03TC BCC M425-M324-3F-304-PX0434-030
PUR	Black	5 m	BCC03TN BCC M425-M314-3F-606-PX0434-050	BCC03TE BCC M425-M324-3F-304-PX0434-050
PVC	Gray	0.3 m	BCC03UR BCC M425-M314-3F-606-VX8434-003	BCC03UH BCC M425-M324-3F-304-VX8434-003
PVC	Gray	0.6 m	BCC03UT BCC M425-M314-3F-606-VX8434-006	BCC03UJ BCC M425-M324-3F-304-VX8434-006
PVC	Gray	1 m	BCC03UU BCC M425-M314-3F-606-VX8434-010	BCC03UK BCC M425-M324-3F-304-VX8434-010
PVC	Gray	1.5 m	BCC03UW BCC M425-M314-3F-606-VX8434-015	BCC03UL BCC M425-M324-3F-304-VX8434-015
PVC	Gray	2 m	BCC03UY BCC M425-M314-3F-606-VX8434-020	BCC03UM BCC M425-M324-3F-304-VX8434-020
PVC	Gray	3 m	BCC03UZ BCC M425-M314-3F-606-VX8434-030	BCC03UN BCC M425-M324-3F-304-VX8434-030
PVC	Gray	5 m	BCC03W0 BCC M425-M314-3F-606-VX8434-050	BCC03UP BCC M425-M324-3F-304-VX8434-050



Connectors
and Cables

Connectors
M5

Connection Cables
M5↔M8

Connectors
M8

Connection
Cables
M8↔M8

Connection
Cables
M8↔M12

Connectors M12

**Connection
Cables
M12↔M8**

Connection Cables
M12↔M12

Connectors M23

Connection
Cables
M23↔M12

Connector 7/8"

Connection
Cables
7/8"↔7/8"

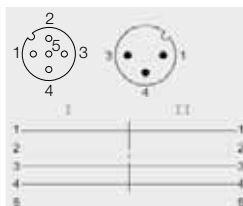
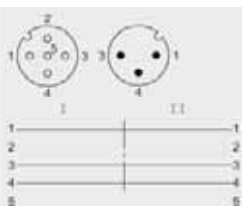
Connection Cables

M12 female ↔ M12 male, 3-pin

M12 ↔ M12



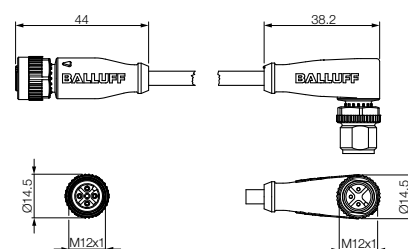
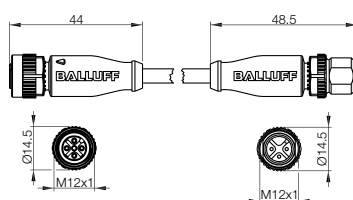
Connector diagram and wiring



Supply voltage U_s	250 V AC/DC	250 V AC/DC
Cable	Molded	Molded
No. of wires × conductor cross-section	3×0.34 mm ²	3×0.34 mm ²
Degree of protection as per IEC 60529	IP 68	IP 68
Ambient temperature T_a	PUR -40...+90 °C/-25...+90 °C (UL 80 °C)	PUR -40...+90 °C/-25...+90 °C (UL 80 °C)
Static/moving	PVC -40...+105 °C/-5...+105 °C (UL 80 °C)	PVC -40...+105 °C/-5...+105 °C (UL 80 °C)
Use	Normally open (NO) ✓	Normally open (NO) ✓
LED		

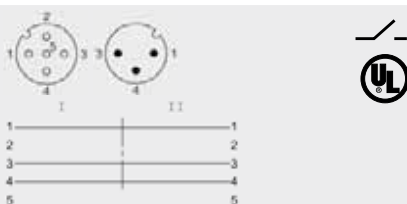
Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	0.3 m	BCC036Y BCC M415-M413-3A-300-PX0334-003	BCC0375 BCC M415-M423-3A-300-PX0334-003
PUR	Black	0.6 m	BCC036Z BCC M415-M413-3A-300-PX0334-006	BCC0376 BCC M415-M423-3A-300-PX0334-006
PUR	Black	1 m	BCC0370 BCC M415-M413-3A-300-PX0334-010	BCC0377 BCC M415-M423-3A-300-PX0334-010
PUR	Black	1.5 m	BCC0371 BCC M415-M413-3A-300-PX0334-015	BCC0378 BCC M415-M423-3A-300-PX0334-015
PUR	Black	2 m	BCC0372 BCC M415-M413-3A-300-PX0334-020	BCC0379 BCC M415-M423-3A-300-PX0334-020
PUR	Black	3 m	BCC0373 BCC M415-M413-3A-300-PX0334-030	BCC037A BCC M415-M423-3A-300-PX0334-030
PUR	Black	5 m	BCC0374 BCC M415-M413-3A-300-PX0334-050	BCC037C BCC M415-M423-3A-300-PX0334-050
PVC	Gray	0.3 m	BCC0386 BCC M415-M413-3A-300-VX8334-003	BCC038F BCC M415-M423-3A-300-VX8334-003
PVC	Gray	0.6 m	BCC0387 BCC M415-M413-3A-300-VX8334-006	BCC038H BCC M415-M423-3A-300-VX8334-006
PVC	Gray	1 m	BCC0388 BCC M415-M413-3A-300-VX8334-010	BCC038J BCC M415-M423-3A-300-VX8334-010
PVC	Gray	1.5 m	BCC0389 BCC M415-M413-3A-300-VX8334-015	BCC038K BCC M415-M423-3A-300-VX8334-015
PVC	Gray	2 m	BCC038A BCC M415-M413-3A-300-VX8334-020	BCC038L BCC M415-M423-3A-300-VX8334-020
PVC	Gray	3 m	BCC038C BCC M415-M413-3A-300-VX8334-030	BCC038M BCC M415-M423-3A-300-VX8334-030
PVC	Gray	5 m	BCC038E BCC M415-M413-3A-300-VX8334-050	BCC038N BCC M415-M423-3A-300-VX8334-050

Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions with LED on request.

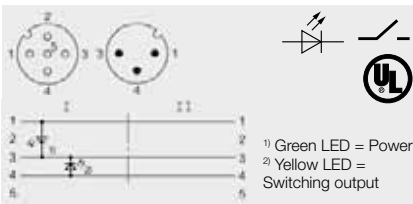


Connection Cables

M12 female ↔ M12 male, 3-pin



250 V AC/DC
Molded
3×0.34 mm²
IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+105 °C/-5...+105 °C (UL 80 °C)
Normally open (NO) ✓-

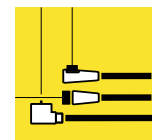
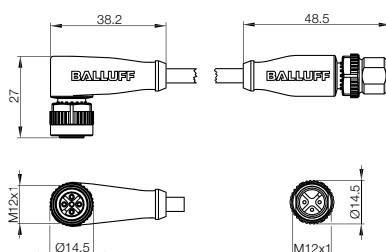
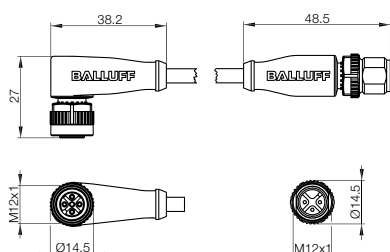


30 V DC
Molded
3×0.34 mm²
IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+105 °C/-5...+105 °C (UL 80 °C)
Normally open (NO) ✓-
2× (PNP), green, yellow

Ordering code

Part number

BCC037E BCC M425-M413-3A-300-PX0334-003	BCC037Z BCC M425-M413-3A-602-PX0334-003
BCC037F BCC M425-M413-3A-300-PX0334-006	BCC0380 BCC M425-M413-3A-602-PX0334-006
BCC037H BCC M425-M413-3A-300-PX0334-010	BCC0381 BCC M425-M413-3A-602-PX0334-010
BCC037J BCC M425-M413-3A-300-PX0334-015	BCC0382 BCC M425-M413-3A-602-PX0334-015
BCC037K BCC M425-M413-3A-300-PX0334-020	BCC0383 BCC M425-M413-3A-602-PX0334-020
BCC037L BCC M425-M413-3A-300-PX0334-030	BCC0384 BCC M425-M413-3A-602-PX0334-030
BCC037M BCC M425-M413-3A-300-PX0334-050	BCC0385 BCC M425-M413-3A-602-PX0334-050
BCC038P BCC M425-M413-3A-300-VX8334-003	BCC0397 BCC M425-M413-3A-602-VX8334-003
BCC038R BCC M425-M413-3A-300-VX8334-006	BCC0398 BCC M425-M413-3A-602-VX8334-006
BCC038T BCC M425-M413-3A-300-VX8334-010	BCC0399 BCC M425-M413-3A-602-VX8334-010
BCC038U BCC M425-M413-3A-300-VX8334-015	BCC039A BCC M425-M413-3A-602-VX8334-015
BCC038W BCC M425-M413-3A-300-VX8334-020	BCC039C BCC M425-M413-3A-602-VX8334-020
BCC038Y BCC M425-M413-3A-300-VX8334-030	BCC039E BCC M425-M413-3A-602-VX8334-030
BCC038Z BCC M425-M413-3A-300-VX8334-050	BCC039F BCC M425-M413-3A-602-VX8334-050



Connectors and Cables

Connectors M5

Connection Cables M5↔M8

Connectors M8

Connection Cables M8↔M8

Connection Cables M8↔M12

Connectors M12

Connection Cables M12↔M8

Connection Cables M12↔M12

Connectors M23

Connection Cables M23↔M12

Connector 7/8"

Connection Cables 7/8"↔7/8"

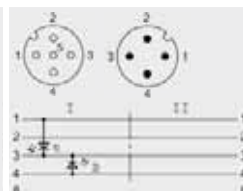
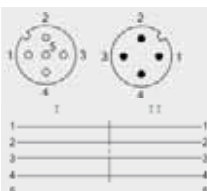
Connection Cables

M12 female ↔ M12 male, 4-pin

M12 ↔ M12



Connector diagram and wiring

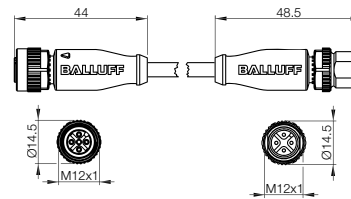
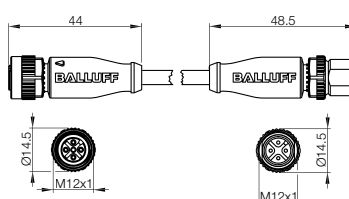


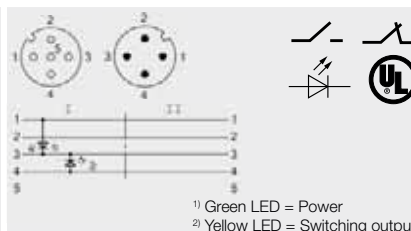
¹⁾ Green LED = Power
²⁾ Yellow LED = Switching output

Supply voltage U _S	250 V AC/DC	30 V DC
Cable	Molded	Molded
No. of wires × conductor cross-section	4×0.34 mm ²	4×0.34 mm ²
Degree of protection as per IEC 60529	IP 68	IP 68
Ambient temperature T _a	PUR -40...+90 °C/-25...+90 °C (UL 80 °C)	-40...+90 °C/-25...+90 °C (UL 80 °C)
Static/moving	PVC -40...+105 °C/-5...+105 °C (UL 80 °C)	-40...+105 °C/-5...+105 °C (UL 80 °C)
Use	Complementary (NO/NC) ✓ / ✗	Complementary (NO/NC) ✓ / ✗
LED		2× (PNP), green, yellow

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	0.3 m	BCC039H BCC M415-M414-3A-304-PX0434-003	BCC03A1 BCC M415-M414-3A-606-PX0434-003
PUR	Black	0.6 m	BCC039J BCC M415-M414-3A-304-PX0434-006	BCC03A2 BCC M415-M414-3A-606-PX0434-006
PUR	Black	1 m	BCC039K BCC M415-M414-3A-304-PX0434-010	BCC03A3 BCC M415-M414-3A-606-PX0434-010
PUR	Black	1.5 m	BCC039L BCC M415-M414-3A-304-PX0434-015	BCC03A4 BCC M415-M414-3A-606-PX0434-015
PUR	Black	2 m	BCC039M BCC M415-M414-3A-304-PX0434-020	BCC03A5 BCC M415-M414-3A-606-PX0434-020
PUR	Black	3 m	BCC039N BCC M415-M414-3A-304-PX0434-030	BCC03A6 BCC M415-M414-3A-606-PX0434-030
PUR	Black	5 m	BCC039P BCC M415-M414-3A-304-PX0434-050	BCC03A7 BCC M415-M414-3A-606-PX0434-050
PVC	Gray	0.3 m	BCC03C9 BCC M415-M414-3A-304-VX8434-003	BCC03CU BCC M415-M414-3A-606-VX8434-003
PVC	Gray	0.6 m	BCC03CA BCC M415-M414-3A-304-VX8434-006	BCC03CW BCC M415-M414-3A-606-VX8434-006
PVC	Gray	1 m	BCC03CC BCC M415-M414-3A-304-VX8434-010	BCC03CY BCC M415-M414-3A-606-VX8434-010
PVC	Gray	1.5 m	BCC03CE BCC M415-M414-3A-304-VX8434-015	BCC03CZ BCC M415-M414-3A-606-VX8434-015
PVC	Gray	2 m	BCC03CF BCC M415-M414-3A-304-VX8434-020	BCC03E0 BCC M415-M414-3A-606-VX8434-020
PVC	Gray	3 m	BCC03CH BCC M415-M414-3A-304-VX8434-030	BCC03E1 BCC M415-M414-3A-606-VX8434-030
PVC	Gray	5 m	BCC03CJ BCC M415-M414-3A-304-VX8434-050	BCC03E2 BCC M415-M414-3A-606-VX8434-050

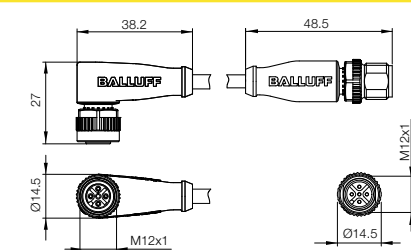
Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions with LED on request.





30 V DC
Molded
4x0.34 mm²
IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)
-40...+105 °C/-5...+105 °C (UL 80 °C)
Complementary (NO/NC) $\swarrow$ / $\searrow$
2x (PNP), green, yellow

TABLE 1



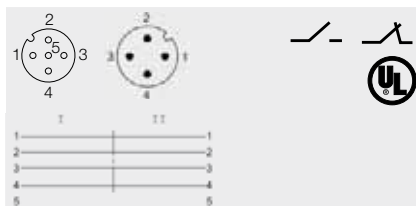
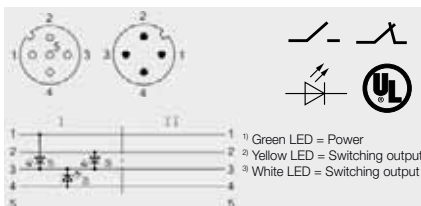
Connection Cables

M12 female ↔ M12 male, 4-pin

M12 ↔ M12



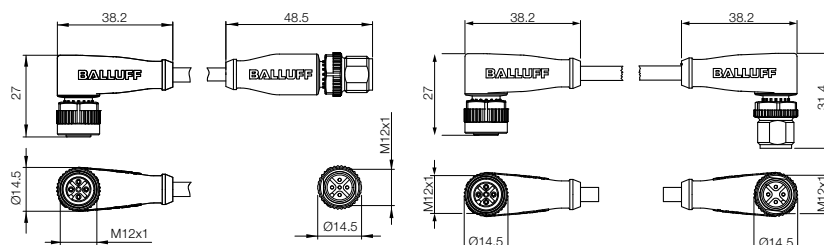
Connector diagram and wiring

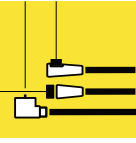


Supply voltage U_S	30 V DC	250 V AC/DC
Cable	Molded	Molded
No. of wires × conductor cross-section	4×0.34 mm ²	4×0.34 mm ²
Degree of protection as per IEC 60529	IP 68	IP 68
Ambient temperature T_a	PUR -40...+90 °C/-25...+90 °C (UL 80 °C)	PUR -40...+90 °C/-25...+90 °C (UL 80 °C)
Static/moving	PVC -40...+105 °C/-5...+105 °C (UL 80 °C)	PVC -40...+105 °C/-5...+105 °C (UL 80 °C)
Use	Complementary (NO/NC) $\swarrow$ / $\searrow$	Complementary (NO/NC) $\swarrow$ / $\searrow$
LED	3× (PNP), green, yellow, white	

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	0.3 m	BCC03C2 BCC M425-M414-3A-650-PX0434-003	BCC03AJ BCC M425-M424-3A-304-PX0434-003
PUR	Black	0.6 m	BCC03C3 BCC M425-M414-3A-650-PX0434-006	BCC03AK BCC M425-M424-3A-304-PX0434-006
PUR	Black	1 m	BCC03C4 BCC M425-M414-3A-650-PX0434-010	BCC03AL BCC M425-M424-3A-304-PX0434-010
PUR	Black	1.5 m	BCC03C5 BCC M425-M414-3A-650-PX0434-015	BCC03AM BCC M425-M424-3A-304-PX0434-015
PUR	Black	2 m	BCC03C6 BCC M425-M414-3A-650-PX0434-020	BCC03AN BCC M425-M424-3A-304-PX0434-020
PUR	Black	3 m	BCC03C7 BCC M425-M414-3A-650-PX0434-030	BCC03AP BCC M425-M424-3A-304-PX0434-030
PUR	Black	5 m	BCC03C8 BCC M425-M414-3A-650-PX0434-050	BCC03AR BCC M425-M424-3A-304-PX0434-050
PVC	Gray	0.3 m	BCC03EW BCC M425-M414-3A-650-VX8434-003	BCC03EA BCC M425-M424-3A-304-VX8434-003
PVC	Gray	0.6 m	BCC03Y4 BCC M425-M414-3A-650-VX8434-006	BCC03EC BCC M425-M424-3A-304-VX8434-006
PVC	Gray	1 m	BCC03EZ BCC M425-M414-3A-650-VX8434-010	BCC03EE BCC M425-M424-3A-304-VX8434-010
PVC	Gray	1.5 m	BCC03F0 BCC M425-M414-3A-650-VX8434-015	BCC03EF BCC M425-M424-3A-304-VX8434-015
PVC	Gray	2 m	BCC03F1 BCC M425-M414-3A-650-VX8434-020	BCC03EH BCC M425-M424-3A-304-VX8434-020
PVC	Gray	3 m	BCC03F2 BCC M425-M414-3A-650-VX8434-030	BCC03EJ BCC M425-M424-3A-304-VX8434-030
PVC	Gray	5 m	BCC03F3 BCC M425-M414-3A-650-VX8434-050	BCC03EK BCC M425-M424-3A-304-VX8434-050

Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions with LED on request.





Connectors
and Cables

Connectors
M5

Connection Cables
M5↔M8

Connectors
M8

Connection
Cables
M8↔M8

Connection
Cables
M8↔M12

Connectors M12

Connection
Cables
M12↔M8

**Connection
Cables
M12↔M12**

Connectors M23

Connection
Cables
M23↔M12

Connector 7/8"

Connection
Cables
7/8"↔7/8"

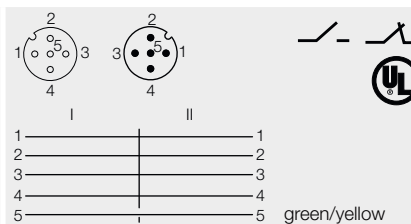
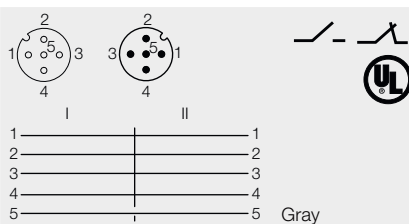
Connection Cables

M12 female ↔ M12 male, 5-pin

M12 ↔ M12



Connector diagram and wiring



Supply voltage U_S

125 V AC/DC

125 V AC/DC

Cable

Molded

Molded

No. of wires × conductor cross-section

5×0.34 mm²

5×0.34 mm²

Degree of protection as per IEC 60529

IP 68

IP 68

Ambient temperature T_a static/moving

−40...+90 °C/−25...+90 °C (UL 80 °C)

−40...+90 °C/−25...+90 °C (UL 80 °C)

Use

Complementary (NO/NC) $\swarrow$ / $\searrow$

Complementary (NO/NC) $\swarrow$ / $\searrow$

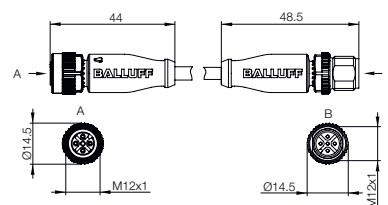
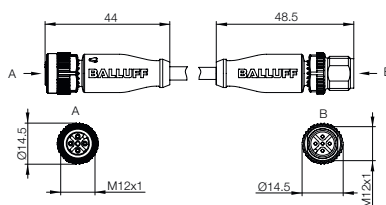
LED

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	0.3 m	BCC09FL BCC M415-M415-3A-312-PX0534-003	BCC09FW BCC M415-M415-3A-313-PX0534-003
PUR	Black	0.6 m	BCC09FM BCC M415-M415-3A-312-PX0534-006	BCC09FY BCC M415-M415-3A-313-PX0534-006
PUR	Black	1 m	BCC09FN BCC M415-M415-3A-312-PX0534-010	BCC09FZ BCC M415-M415-3A-313-PX0534-010
PUR	Black	1.5 m	BCC09FP BCC M415-M415-3A-312-PX0534-015	BCC09H0 BCC M415-M415-3A-313-PX0534-015
PUR	Black	2 m	BCC09FR BCC M415-M415-3A-312-PX0534-020	BCC09H1 BCC M415-M415-3A-313-PX0534-020
PUR	Black	3 m	BCC09FT BCC M415-M415-3A-312-PX0534-030	BCC09H2 BCC M415-M415-3A-313-PX0534-030
PUR	Black	5 m	BCC09FU BCC M415-M415-3A-312-PX0534-050	BCC09H3 BCC M415-M415-3A-313-PX0534-050
PUR	Black	10 m		BCC0AJC BCC M415-M415-3A-313-PX0534-100

Other cable materials, colors and lengths on request.

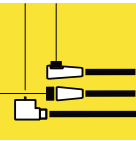
Connectors without LED are suitable for PNP and NPN switching functions.

NPN versions with LED on request.

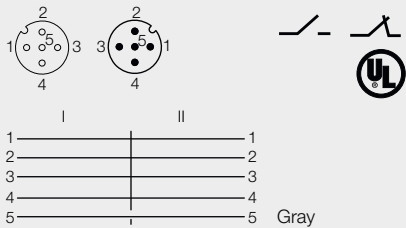


Connection Cables

M12 female ↔ M12 male, 5-pin



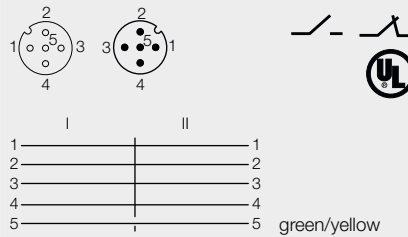
Connectors and Cables
Connectors M5
Connection Cables M5 ↔ M8
Connectors M8
Connection Cables M8 ↔ M8
Connection Cables M8 ↔ M12
Connectors M12
Connection Cables M12 ↔ M8
Connection Cables M12 ↔ M12
Connectors M23
Connection Cables M23 ↔ M12
Connector 7/8"
Connection Cables 7/8" ↔ 7/8"



125 V AC/DC
Molded
5x0.34 mm²

IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)

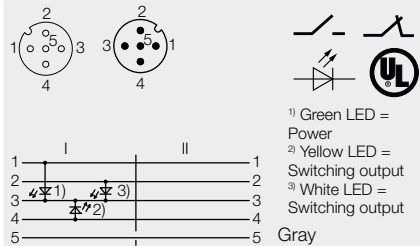
Complementary (NO/NC) — / —



125 V AC/DC
Molded
5x0.34 mm²

IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)

Complementary (NO/NC) — / —



30 V DC
Molded
5x0.34 mm²

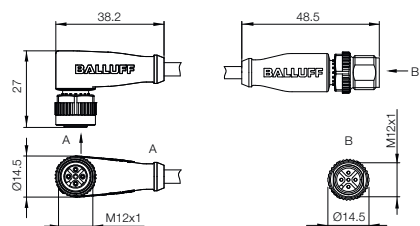
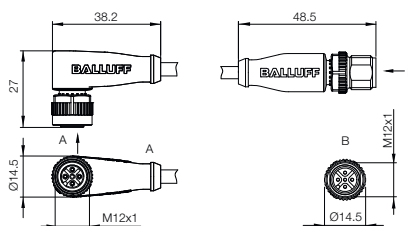
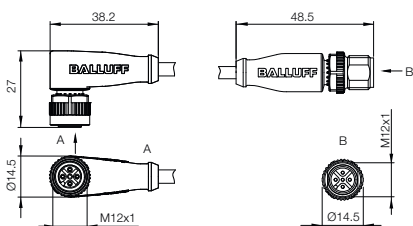
IP 68
-40...+90 °C/-25...+90 °C (UL 80 °C)

Complementary (NO/NC) — / —
3x (PNP), green, yellow, white

Ordering code

Part number

BCC08H8 BCC M425-M415-3A-312-PX0534-003	BCC08H0 BCC M425-M415-3A-313-PX0534-003	BCC09FA BCC M425-M415-3A-660-PX0534-003
BCC08H9 BCC M425-M415-3A-312-PX0534-006	BCC08H1 BCC M425-M415-3A-313-PX0534-006	BCC09FC BCC M425-M415-3A-660-PX0534-006
BCC08HA BCC M425-M415-3A-312-PX0534-010	BCC08H2 BCC M425-M415-3A-313-PX0534-010	BCC09FE BCC M425-M415-3A-660-PX0534-010
BCC08HC BCC M425-M415-3A-312-PX0534-015	BCC08H3 BCC M425-M415-3A-313-PX0534-015	BCC09FH BCC M425-M415-3A-660-PX0534-015
BCC08HE BCC M425-M415-3A-312-PX0534-020	BCC08H4 BCC M425-M415-3A-313-PX0534-020	BCC09FF BCC M425-M415-3A-660-PX0534-020
BCC08HF BCC M425-M415-3A-312-PX0534-030	BCC08H5 BCC M425-M415-3A-313-PX0534-030	BCC09FJ BCC M425-M415-3A-660-PX0534-030
BCC08HH BCC M425-M415-3A-312-PX0534-050	BCC08H6 BCC M425-M415-3A-313-PX0534-050	BCC09FK BCC M425-M415-3A-660-PX0534-050



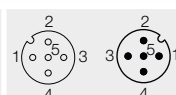
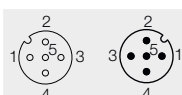
Connection Cables

M12 female ↔ M12 male, 5-pin

M12 ↔ M12



Connector diagram and wiring



Supply voltage U_B

30 V DC

30 V DC

Cable

Molded

Molded

No. of wires × conductor cross-section

5×0.34 mm²

5×0.34 mm²

Degree of protection as per IEC 60529

IP 68

IP 68

Ambient temperature T_a static/moving

−40...+90 °C/−25...+90 °C (UL 80 °C)

−40...+90 °C/−25...+90 °C (UL 80 °C)

Use

Complementary (NO/NC) $\swarrow$ / $\searrow$

Complementary (NO/NC) $\swarrow$ / $\searrow$

LED

3× (PNP), green, yellow, white

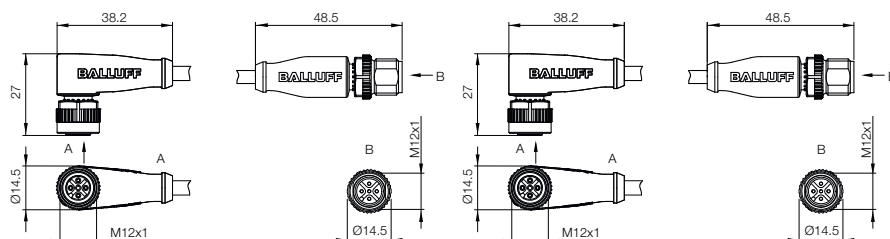
3× (PNP), green, yellow, red

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	0.3 m	BCC09F9 BCC M425-M415-3A-661-PX0534-003	BCC0C4J BCC M425-M415-3A-692-PX0534-003
PUR	Black	0.6 m	BCC09F8 BCC M425-M415-3A-661-PX0534-006	BCC0C4H BCC M425-M415-3A-692-PX0534-006
PUR	Black	1 m	BCC09F7 BCC M425-M415-3A-661-PX0534-010	BCC0C4F BCC M425-M415-3A-692-PX0534-010
PUR	Black	1.5 m	BCC09F3 BCC M425-M415-3A-661-PX0534-015	BCC0C4E BCC M425-M415-3A-692-PX0534-015
PUR	Black	2 m	BCC09F4 BCC M425-M415-3A-661-PX0534-020	BCC0C4C BCC M425-M415-3A-692-PX0534-020
PUR	Black	3 m	BCC09F5 BCC M425-M415-3A-661-PX0534-030	BCC0C4A BCC M425-M415-3A-692-PX0534-030
PUR	Black	5 m	BCC09F6 BCC M425-M415-3A-661-PX0534-050	BCC0C49 BCC M425-M415-3A-692-PX0534-050

Other cable materials, colors and lengths on request.

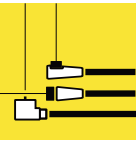
Connectors without LED are suitable for PNP and NPN switching functions.

NPN versions with LED on request.



Connection Cables

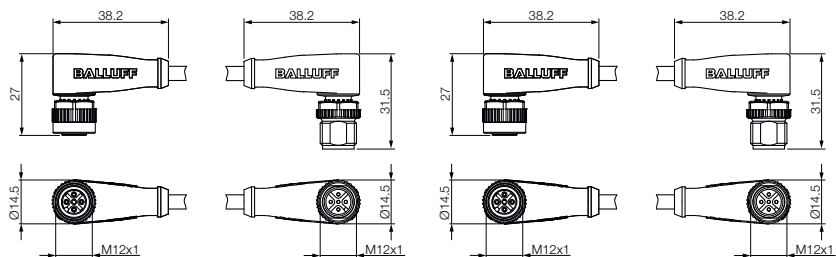
M12 female ↔ M12 male, 5-pin



Connectors and Cables
Connectors M5
Connection Cables M5↔M8
Connectors M8
Connection Cables M8↔M8
Connection Cables M8↔M12
Connectors M12
Connection Cables M12↔M8
Connection Cables M12↔M12
Connectors M23
Connection Cables M23↔M12
Connector 7/8"
Connection Cables 7/8"↔7/8"

30 V DC Molded 5x0.34 mm ²	30 V DC Molded 5x0.34 mm ²
IP 68 -40...+90 °C/-25...+90 °C (UL 80 °C)	IP 68 -40...+90 °C/-25...+90 °C (UL 80 °C)
Complementary (NO/NC) / 3x (PNP), green, yellow, white	Complementary (NO/NC) / 3x (PNP), green, yellow, white

Ordering code		
Part number		
BCC08FF	BCC08FP	
BCC M425-M425-3A-660-PX0534-003	BCC M425-M425-3A-661-PX0534-003	
BCC08FH	BCC08FR	
BCC M425-M425-3A-660-PX0534-006	BCC M425-M425-3A-661-PX0534-006	
BCC08FJ	BCC08FT	
BCC M425-M425-3A-660-PX0534-010	BCC M425-M425-3A-661-PX0534-010	
BCC08FK	BCC08FU	
BCC M425-M425-3A-660-PX0534-015	BCC M425-M425-3A-661-PX0534-015	
BCC08FL	BCC08FW	
BCC M425-M425-3A-660-PX0534-020	BCC M425-M425-3A-661-PX0534-020	
BCC08FM	BCC08FY	
BCC M425-M425-3A-660-PX0534-030	BCC M425-M425-3A-661-PX0534-030	
BCC08FN	BCC08FZ	
BCC M425-M425-3A-660-PX0534-050	BCC M425-M425-3A-661-PX0534-050	



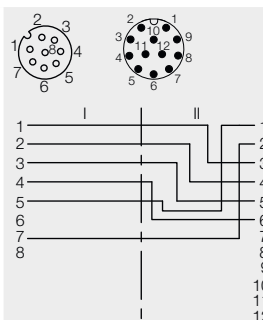
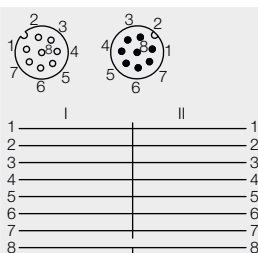
Connection Cables

M12 female ↔ M12 male, 8-pin

M12 ↔ M12



Connector diagram and wiring

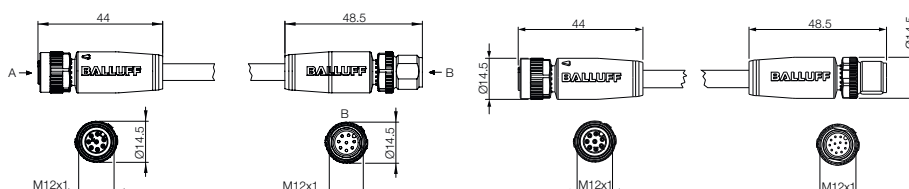


Supply voltage U_B	60 V AC/DC	60 V AC/DC
Cable	Molded	Molded
No. of wires × conductor cross-section	8×0.25 mm ²	8×0.25 mm ²
Degree of protection as per IEC 60529	IP 68	IP 68
Ambient temperature T_a	-40...+90 °C/-25...+90 °C (UL 80 °C)	-40...+90 °C/-25...+90 °C (UL 80 °C)
Static/moving		

Cable material	Color	Length	Ordering code		
			Part number		
PUR	Black	0.3 m	BCC0AC0 BCC M418-M418-3A-342-PX0825-003		
PUR	Black	0.6 m	BCC0AAZ BCC M418-M418-3A-342-PX0825-006	BCC088J BCC M418-M41C-3A-674-PX0825-006	
PUR	Black	1 m	BCC0AC1 BCC M418-M418-3A-342-PX0825-010	BCC088K BCC M418-M41C-3A-674-PX0825-010	
PUR	Black	1.5 m	BCC0AC2 BCC M418-M418-3A-342-PX0825-015		
PUR	Black	2 m	BCC0AC3 BCC M418-M418-3A-342-PX0825-020	BCC088L BCC M418-M41C-3A-674-PX0825-020	
PUR	Black	3 m	BCC0AC4 BCC M418-M418-3A-342-PX0825-030		
PUR	Black	5 m	BCC0AC5 BCC M418-M418-3A-342-PX0825-050		
PUR	Black	10 m			

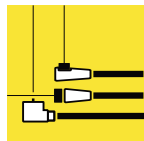
Other cable materials, colors and lengths on request.

Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions with LED on request.

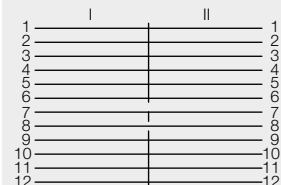


Connection Cables

M12 female ↔ M12 male, 12-pin



Connectors and Cables
Connectors M5
Connection Cables M5↔M8
Connectors M8
Connection Cables M8↔M8
Connection Cables M8↔M12
Connectors M12
Connection Cables M12↔M8
Connection Cables M12↔M12
Connectors M23
Connection Cables M23↔M12
Connector 7/8"
Connection Cables 7/8"↔7/8"



60 V AC/DC

Molded

12×0.25 mm²

IP 68

−40...+90 °C/−25...+90 °C (UL 80 °C)

Ordering code

Part number

BCC0AY4

BCC M41C-M41C-3A-325-PX0C25-003

BCC088E

BCC M41C-M41C-3A-325-PX0C25-006

BCC088F

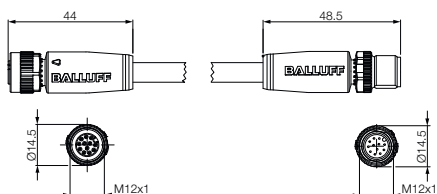
BCC M41C-M41C-3A-325-PX0C25-010

BCC088H

BCC M41C-M41C-3A-325-PX0C25-020

BCC0E9J

BCC M41C-M41C-3A-325-PX0C25-100



Connectors

M12 female, user-fabricated

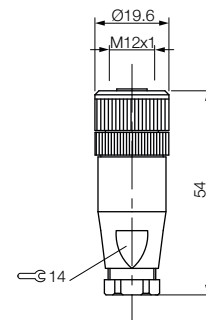
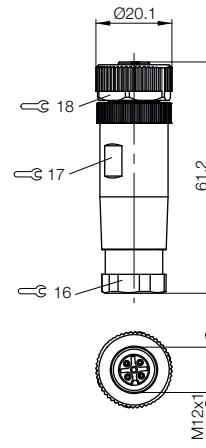
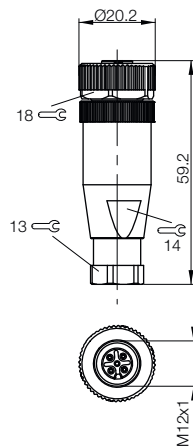
4-pin

M12



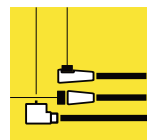
Connector diagram				
Supply voltage AC U _S	250 V AC	250 V AC		
Supply voltage DC U _S	250 V DC	250 V DC	30 V DC	
Cable	user-fabricated	user-fabricated	user-fabricated	
Number of conductors × Conductor cross-section	4×0.14...0.75 mm ²	4×0.14...0.50 mm ²	4×0.75 mm ²	
Cable diameter		Ø 6...8 mm	Ø 4...6 mm	
Connection	Screw terminal	Spring clamp terminal	Screw terminal	
Degree of protection as per IEC 60529	IP 67	IP 67	IP 68	
Ambient temperature T _a	−40...+85 °C	−25...+85 °C	−25...+100 °C	
Use				

Cable diameter	Ordering code			
	Part number			
Ø 4...6 mm, no LED, NO and NC	BCC06Z9 BCC M435-0000-1A-000-41X475-000		BCC0158 BKS-S144-00	
Ø 6...8 mm, no LED, NO and NC	BCC06F6 BCC M435-0000-1A-000-51X475-000	BCC06Y6 BCC M435-0000-1A-000-55X450-000		



Connectors

M12 female, user-fabricated 4-pin



Connectors and Cables
Connectors M5

Connection Cables M5↔M8

Connectors M8

Connection Cables M8↔M8

Connection Cables M8↔M12

Connectors M12

Connection Cables M12↔M8

Connection Cables M12↔M12

Connectors M23

Connection Cables M23↔M12

Connector 7/8"

Connection Cables 7/8"↔7/8"



Quick-connect system



Quick-connect system



Quick-connect system

125 V AC 125 V DC user-fabricated 4x0.14...0.34 mm²	30 V AC 30 V DC user-fabricated 4x0.14...0.34 mm²	250 V AC 250 V DC user-fabricated 4x0.14...0.75 mm²	30 V AC 30 V DC user-fabricated 4x0.25...0.5 mm²
Ø 3.5...6 mm Insulation displacement connector technology IP 67 -25...+80 °C Plug sensor S4	Ø 2.9...5.1 mm Insulation displacement connector technology IP 67 -25...+85 °C Plug sensor S4	Ø 4...6 mm Screw terminal IP 67 -40...+85 °C	Ø 4...5.1 mm Insulation displacement connector technology IP 67 -25...+85 °C Plug sensor S4

Ordering code

Part number

BCC06ZY

BCC M435-0000-1A-000-43X434-000

BCC02H8

BKS-S107-RT14

BCC06ZA

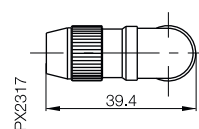
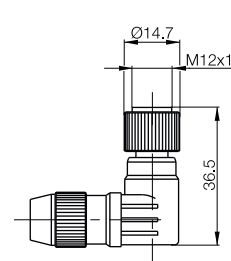
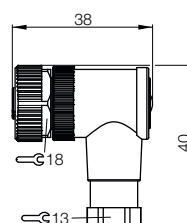
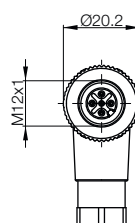
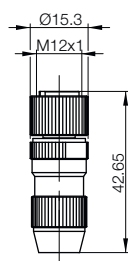
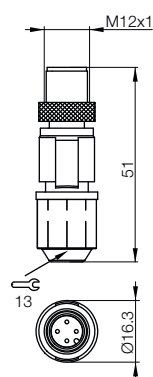
BCC M445-0000-1A-000-41X475-000

BCC02H6

BKS-S 76-RT04

BCC06Y8

BCC M445-0000-1A-000-51X475-000



Connectors

M12 male, user-fabricated

4-pin

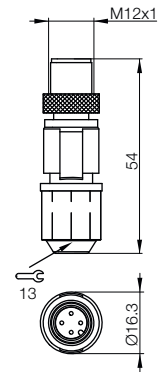
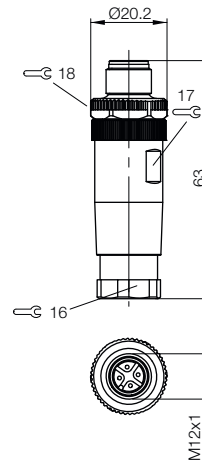
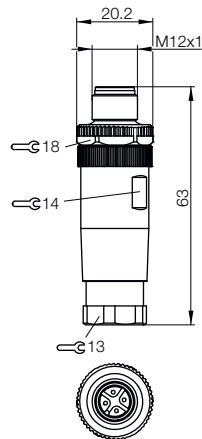
M12



Quick-connect system

Connector diagram				
Supply voltage AC U _S	250 V AC	250 V AC	125 V AC	
Supply voltage DC U _S	250 V DC	250 V DC	125 V DC	
Cable	user-fabricated	user-fabricated	user-fabricated	
No. of wires × conductor cross-section	4×0.14...0.75 mm ²	4×0.14...0.50 mm ²	4×0.14...0.34 mm ²	
Cable diameter			Ø 3.5...6 mm	
Connection	Screw terminal	Spring clamp terminal	Insulation displacement connector technology	
Degree of protection as per IEC 60529	IP 67	IP 67	IP 67	
Ambient temperature T _a	-40...+85 °C	-25...+85 °C	-25...+80 °C	
Use			Female S4	

Cable diameter	Ordering code		
	Part number		
Ø 4...6 mm, no LED, NO and NC	BCC06M4 BCC M434-0000-2A-000-41X475-000		BCC08C0 BCC M434-0000-2A-000-43X434-000
Ø 6...8 mm, no LED, NO and NC	BCC06F7 BCC M434-0000-2A-000-51X475-000	BCC06Y5 BCC M434-0000-2A-000-55X450-000	



Connectors

M12 male, user-fabricated

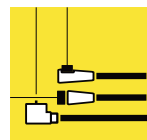
4-pin



Quick-connect system



Quick-connect system



Connectors and Cables

Connectors M5

Connection Cables M5↔M8

Connectors M8

Connection Cables M8↔M8

Connection Cables M8↔M12

Connectors M12

Connection Cables M12↔M8

Connection Cables M12↔M12

Connectors M23

Connection Cables M23↔M12

Connector 7/8"

Connection Cables 7/8"↔7/8"



30 V AC
30 V DC
user-fabricated
4x0.14...0.34 mm²

Ø 2.9...5.1 mm
Insulation displacement connector technology
IP 67
-25...+85 °C
Female S4



250 V AC
250 V DC
user-fabricated
4x0.14...0.75 mm²

Screw terminal
IP 67
-40...+85 °C



30 V AC
30 V DC
user-fabricated
4x0.25...0.5 mm²

Ø 4...5.1 mm
Insulation displacement connector technology
IP 67
-25...+85 °C
Female S4

Ordering code

Part number

BCC02H9

BKS-S109-RT14

BCC06ZC

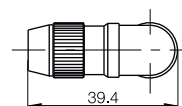
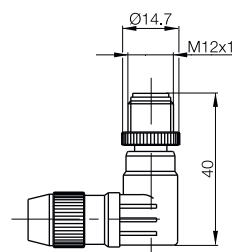
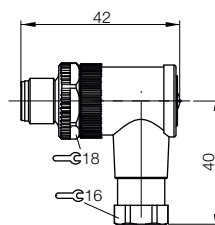
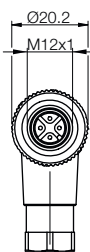
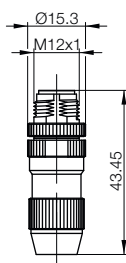
BCC M444-0000-2A-000-41X475-000

BCC02H7

BKS-S 77-RT04

BCC06ZE

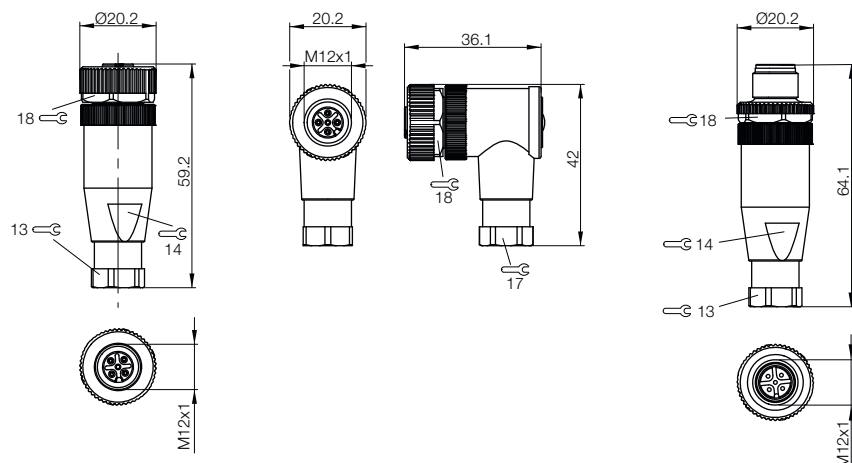
BCC M444-0000-2A-000-51X475-000



**M12 female, M12 male, user-fabricated,
5-pin**

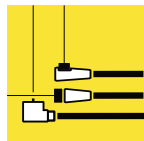
Connector diagram and wiring				
Supply voltage AC U _S	125 V AC	125 V AC	125 V AC	
Supply voltage DC U _S	125 V DC	125 V DC	125 V DC	
Cable	user-fabricated	user-fabricated	user-fabricated	
No. of wires × conductor cross-section	5×0.14...0.75 mm ²	5×0.14...0.75 mm ²	5×0.14...0.75 mm ²	
Cable diameter	Ø 4...6 mm	Ø 4...6 mm		
Connection	Screw terminal	Screw terminal	Screw terminal	
Degree of protection as per IEC 60529	IP 67	IP 67	IP 67	
Ambient temperature T _a	-40...+85 °C	-40...+85 °C	-40...+85 °C	

Cable diameter	Ordering code			
	Part number			
Ø 4...6 mm, no LED, NO and NC	BCC06ZF BCC M435-000-1A-000-41X575-000	BCC06ZH BCC M445-000-1A-000-41X575-000	BCC06YA BCC M435-0000-2A-000-41X575-000	
Ø 6...8 mm, no LED, NO and NC	BCC06W9 BCC M435-0000-1A-000-51X575-000	BCC06ZJ BCC M445-0000-1A-000-51X575-000	BCC06EY BCC M435-0000-2A-000-51X575-000	
PUR				



Connectors

**M12 female, M12 male, user-fabricated,
5 and 8-pin**



Connectors
and Cables

Connectors
M5

Connection Cables
M5↔M8

Connectors
M8

Connection
Cables
M8↔M8

Connection
Cables
M8↔M12

Connectors M12

Connection
Cables
M12↔M8

Connection Cables
M12↔M12

Connectors M23

Connection
Cables
M23↔M12

Connector 7/8"

Connection
Cables
7/8"↔7/8"



Quick-connect system

Quick-connect system



125 V AC
125 V DC
user-fabricated
5×0.14...0.75 mm²

Screw terminal
IP 67
-40...+85 °C



30 V AC
30 V DC
user-fabricated
8×0.14...0.25 mm²

Ø 4...8 mm
Insulation displacement connector technology
IP 67
-25...+85 °C



30 V AC
30 V DC
user-fabricated
8×0.14...0.25 mm²

Ø 4...8 mm
Insulation displacement connector technology
IP 67
-25...+85 °C

Ordering code

Part number

BCC06ZK

BCC M445-000-2A-000-41X575-000

BCC06ZL

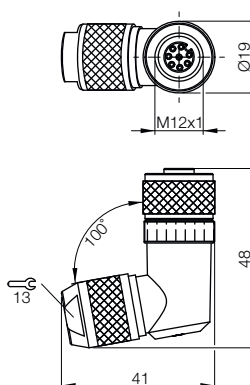
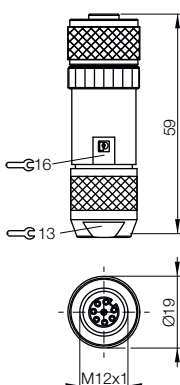
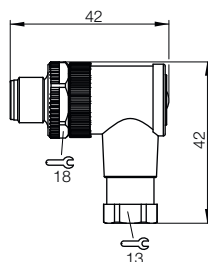
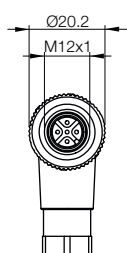
BCC M445-0000-2A-000-51X575-000

BCC04MC

BCC M478-0000-1A-000-43X834-000

BCC04ME

BCC M488-0000-1A-000-43X834-000



**M12 female, M12 male, user-fabricated,
Duo connector, 5-pin**

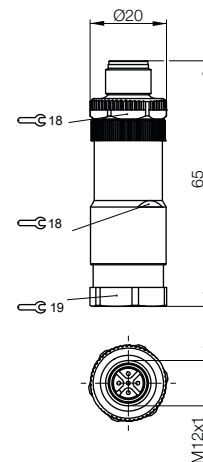
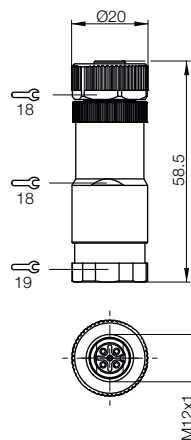

Duo connectors



Duo connectors

Connector diagram		
Supply voltage AC U _S	125 V AC	125 V AC
Supply voltage DC U _S	125 V DC	125 V DC
Cable	user-fabricated	user-fabricated
No. of wires × conductor cross-section	5×0.14...0.75 mm ²	5×0.14...0.75 mm ²
Cable diameter, Insert 1/Insert 2	2.1...3 mm/4...5 mm	2.1...3 mm/4...5 mm
Connection	Screw terminal	Screw terminal
Degree of protection as per IEC 60529	IP 67	IP 67
Ambient temperature T _a	-40...+85 °C	-40...+85 °C

Cable material	Ordering code	
	Part number	
PUR	BCC09JP	BCC09JW
	BCC M435-0000-1A-000-A1X575-000	BCC M435-0000-2A-000-A1X575-000



Connectors

M12 female, user-fabricated and moldable 5-pin

Hook up, seal, forget

Until now, you had a difficult choice when installing plug connectors. Either you could use a plug with molded cable and achieve higher leakproofness, or you could decide to use a field attachable connector if you needed flexible cable length.

Choosing one option over the other is now over - because the field-attachable and moldable BCC0CAA plug provides both: higher leakproofness and flexible cable length. The cable is shortened, connected and the plug is easily molded (see drawing). With the BCC0CAA, you increase the reliability of your installation and simultaneously decide the cable length yourself.

The Balluff BCC0CAA plug is ideal for use in harsh environments and extensive systems.

Features

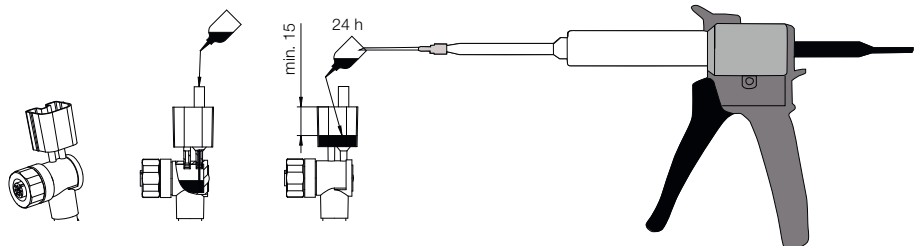
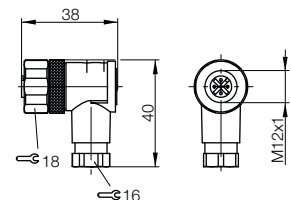
- Higher leakproofness
- Flexible cable length
- Reliable
- For harsh environments
- For extensive systems



Connector diagram and wiring	
Connectors	M12
Use	Female
Supply voltage AC U_S	125 V AC
Supply voltage DC U_S	125 V DC
Conductor cross-section	0.14...0.75 mm ²
Cable diameter	6...8 mm
Degree of protection as per IEC 60529	IP 67
Ambient temperature T_a	-25...+85 °C
Material	Grip body: PBT, transparent Contact: CuZn Contact holder: PA
Ordering code	
Part number	
BCC0CAA	
BCC S445-0000-1A-000-51X475-000-C024	



Connectors and Cables
Connectors M5
Connection Cables M5↔M8
Connectors M8
Connection Cables M8↔M8
Connection Cables M8↔M12
Connectors M12
Connection Cables M12↔M8
Connection Cables M12↔M12
Connectors M23
Connection Cables M23↔M12
Connector 7/8"
Connection Cables 7/8"↔7/8"



M12 flange socket, M12 flange plug 4-pin



Connector diagram
and wiring



1 ————— PIN 1: brown
2 ————— PIN 2: white
3 ————— PIN 3: blue
4 ————— PIN 4: black
5



1 ————— PIN 1: brown
2 ————— PIN 2: white
3 ————— PIN 3: blue
4 ————— PIN 4: black
5

Supply voltage AC U_S

250 V

250 V

Supply voltage DC U_S

250 V

250 V

No. of wires $\times$ conductor cross-section

4 $\times$ 0.25 mm²

4 $\times$ 0.25 mm²

Degree of protection as per IEC 60529

IP 68

IP 68

Ambient temperature T_a

-25...+85 °C

-25...+85 °C

Cable length

Ordering code

0.5 m

BCC099C

BCC099A

BCC M455-0000-1A-RM020-005

BCC M454-0000-2A-RM020-005

2 m

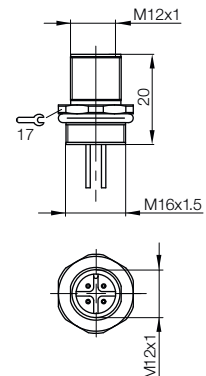
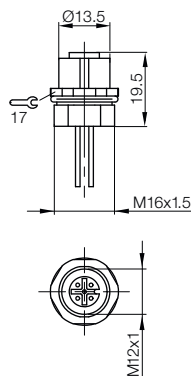
BCC0CAE

BCC0E53

BCC M455-0000-1A-RM020-020

BCC M454-0000-2A-RM020-020

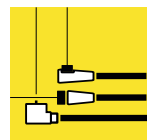
Other cable lengths on request.



Connectors

M12 flange socket, M12 flange plug

5-pin



Connectors and Cables
Connectors M5
Connection Cables M5↔M8
Connectors M8
Connection Cables M8↔M8
Connection Cables M8↔M12
Connectors M12
Connection Cables M12↔M8
Connection Cables M12↔M12
Connectors M23
Connection Cables M23↔M12
Connector 7/8"

Connection Cables 7/8"↔7/8"



1 ——— PIN 1: brown
2 ——— PIN 2: white
3 ——— PIN 3: blue
4 ——— PIN 4: black
5 ——— PIN 5: gray

250 V

250 V

5×0.25 mm²

IP 68

–25...+85 °C



1 ——— PIN 1: brown
2 ——— PIN 2: white
3 ——— PIN 3: blue
4 ——— PIN 4: black
5 ——— PIN 5: gray

250 V

250 V

5×0.25 mm²

IP 68

–25...+85 °C

Ordering code

Part number

BCC09JZ

BCC M455-0000-1A-RM014-005

BCC09K0

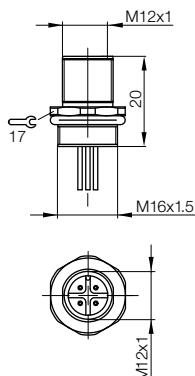
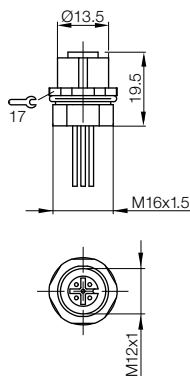
BCC M455-0000-2A-RM014-005

BCC0E54

BCC M455-0000-1A-RM014-020

BCC0E5F

BCC M455-0000-2A-RM014-020



M12 flange socket, M12 flange plug

8-pin



Connector diagram
and wiring



1	PIN 1: white
2	PIN 2: brown
3	PIN 3: green
4	PIN 4: yellow
5	PIN 5: gray
6	PIN 6: pink
7	PIN 7: blue
8	PIN 8: red



1	PIN 1: white
2	PIN 2: brown
3	PIN 3: green
4	PIN 4: yellow
5	PIN 5: gray
6	PIN 6: pink
7	PIN 7: blue
8	PIN 8: red

Supply voltage AC U_S

60 V

60 V

Supply voltage DC U_S

60 V

60 V

No. of wires $\times$ conductor cross-section

8 $\times$ 0.25 mm²

8 $\times$ 0.25 mm²

Degree of protection as per IEC 60529

IP 68

IP 68

Ambient temperature T_a

-25...+85 °C

-25...+85 °C

Cable length

Ordering code

Part number

0.5 m

BCC0E55

BCC0E57

BCC M458-0000-1A-RM015-005

BCC M458-0000-2A-RM015-005

2 m

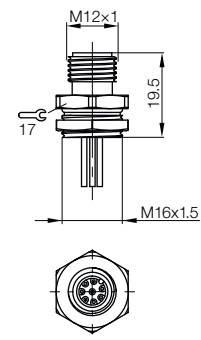
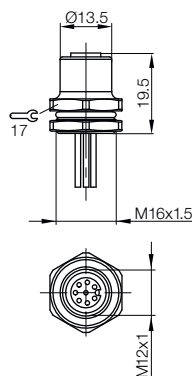
BCC0E56

BCC0E58

BCC M458-0000-1A-RM015-020

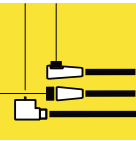
BCC M458-0000-2A-RM015-020

Other cable lengths on request.



Connectors

M12 flange socket, M12 flange plug 12-pin



Connectors and Cables
Connectors M5
Connection Cables M5↔M8
Connectors M8
Connection Cables M8↔M8
Connection Cables M8↔M12
Connectors M12
Connection Cables M12↔M8
Connection Cables M12↔M12
Connectors M23
Connection Cables M23↔M12
Connector 7/8"
Connection Cables 7/8"↔7/8"



1	PIN 1: brown
2	PIN 2: blue
3	PIN 3: white
4	PIN 4: green
5	PIN 5: pink
6	PIN 6: yellow
7	PIN 7: black
8	PIN 8: gray
9	PIN 9: red
10	PIN 10: purple
11	PIN 11: gray/pink
12	PIN 12: red/blue

30 V
30 V
12×0.25 mm²

IP 67
-25...+85 °C



1	PIN 1: brown
2	PIN 2: blue
3	PIN 3: white
4	PIN 4: green
5	PIN 5: pink
6	PIN 6: yellow
7	PIN 7: black
8	PIN 8: gray
9	PIN 9: red
10	PIN 10: purple
11	PIN 11: gray/pink
12	PIN 12: red/blue

30 V
30 V
12×0.25 mm²

IP 67
-25...+85 °C

Ordering code

Part number

BCC0E59

BCC M45C-0000-1A-RM081-005

BCC0E5C

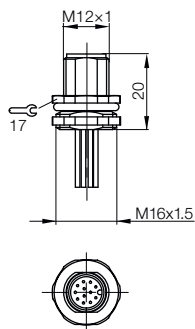
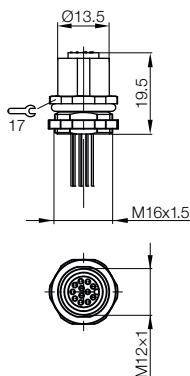
BCC M45C-0000-2A-RM081-005

BCC0E5A

BCC M45C-0000-1A-RM081-020

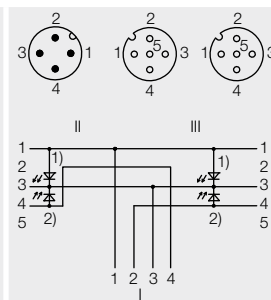
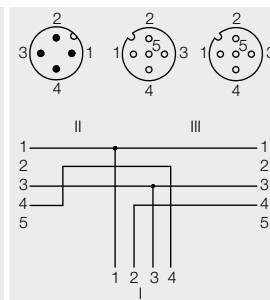
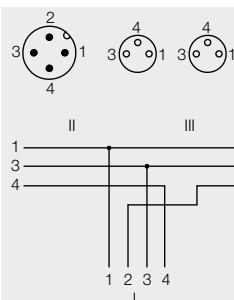
BCC0E5E

BCC M45C-0000-2A-RM081-020





Connector diagram and wiring



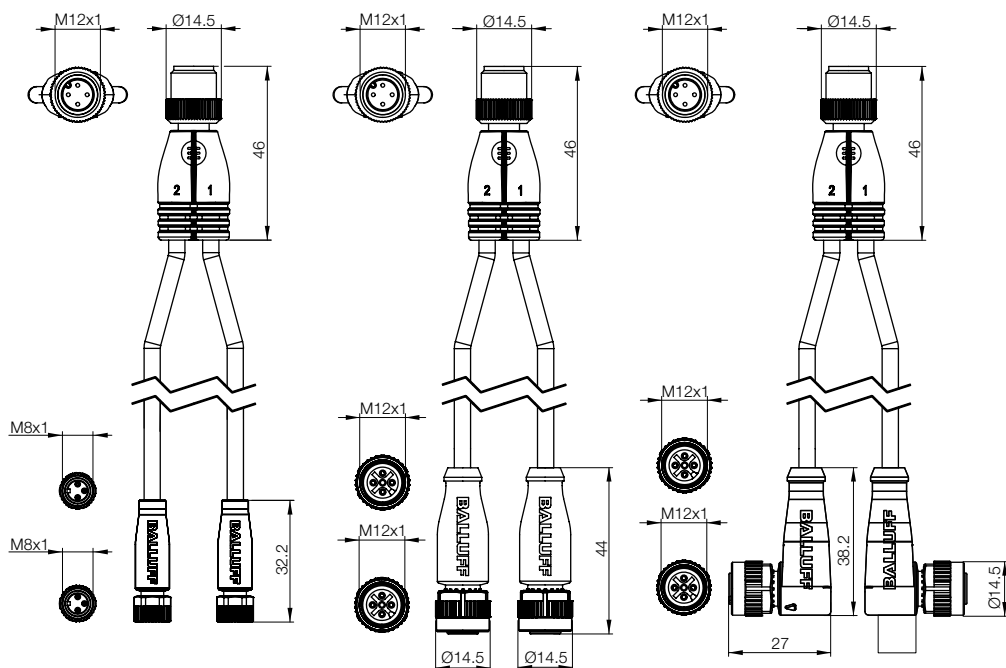
Supply voltage AC U_S
Supply voltage DC U_S
Cable
No. of wires $\times$ conductor cross-section
Degree of protection as per IEC 60529
Ambient temperature T_a
Static/moving

60 V AC
60 V DC
Molded in
4 $\times$ 0.34 mm²
IP 68
-40...+90 °C/-25...+90 °C

250 V AC
250 V DC
Molded in
4 $\times$ 0.34 mm²
IP 68
-40...+90 °C/-25...+90 °C

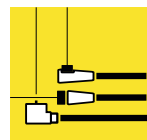
30 V DC
Molded in
4 $\times$ 0.34 mm²
IP 68
-40...+90 °C/-25...+90 °C

Cable length	Ordering code		
	Part number		
0.3 m		BCC0AUA BCC M414-M415-M415-U2028-003	BCC0C9U BCC M414-M425-M425-U2034-003
0.6 m	BCC0AFW BCC M414-M313-M313-U2026-006	BCC0AUC BCC M414-M415-M415-U2028-006	BCC0C9T BCC M414-M425-M425-U2034-006
1 m	BCC0AFY BCC M414-M313-M313-U2026-010	BCC0AUE BCC M414-M415-M415-U2028-010	BCC0C9R BCC M414-M425-M425-U2034-010
2 m	BCC0AFZ BCC M414-M313-M313-U2026-020	BCC0AUF BCC M414-M415-M415-U2028-020	BCC0C9P BCC M414-M425-M425-U2034-020
3 m	BCC0AH0 BCC M414-M313-M313-U2026-030	BCC0AUH BCC M414-M415-M415-U2028-030	BCC0C9N BCC M414-M425-M425-U2034-030



Connectors

Tees M12 ↔ M8, M12 ↔ M12



Connectors and Cables

Connectors M5

Connection Cables M5↔M8

Connectors M8

Connection Cables M8↔M8

Connection Cables M8↔M12

Connectors M12

Connection Cables M12↔M8

Connection Cables M12↔M12

Connectors M23

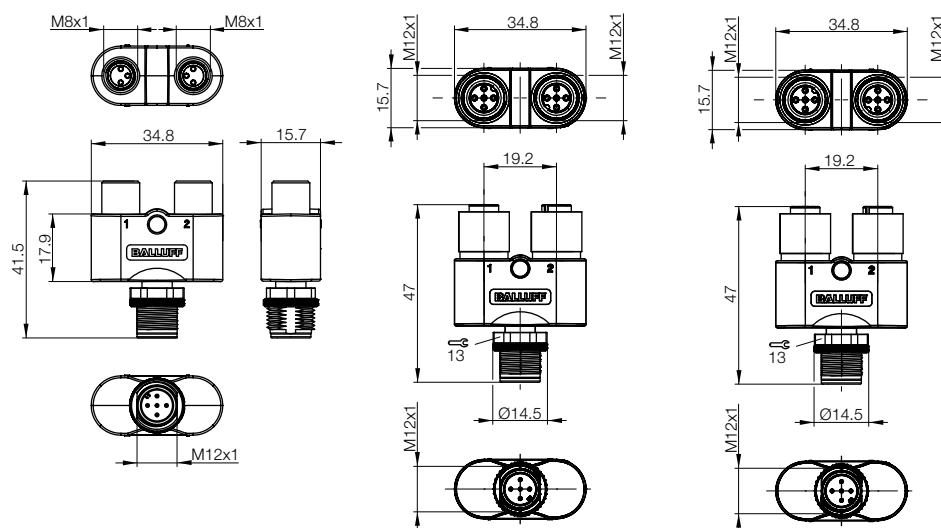
Connection Cables M23↔M12

Connector 7/8"

Connection Cables 7/8"↔7/8"

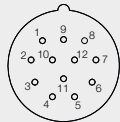
Connector diagram and wiring			
Supply voltage U_s	60 V AC/DC	125 V AC/DC	125 V AC/DC
Rated operating current I_o	4 A	4 A	4 A
Degree of protection as per IEC 60529	IP 67	IP 67	IP 67
Ambient temperature T_a	-25...+85 °C	-25...+85 °C	-25...+85 °C
Housing material	PA 6.6 + GF	PA 6.6 + GF	PA 6.6 + GF

Ordering code		
Part number		
BCC09JC	BCC089P	BCC09MU
BCC M415-M313-M313-U0014-000	BCC M415-M415-M415-U0003-000	BCC M415-M415-M415-U0016-000



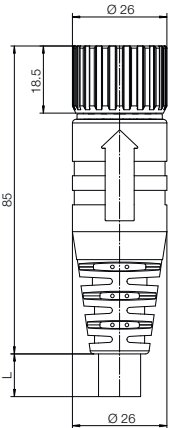


View of female side



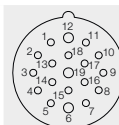
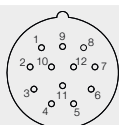
Supply voltage AC U_S	240 V AC
Supply voltage DC U_S	240 V DC
Cable	Molded
No. of wires $\times$ conductor cross-section	8 $\times$ 0.50 mm ² and 3 $\times$ 1.0 mm ²
Degree of protection as per IEC 60529	IP 67
Ambient temperature T_a	-25...+80 °C

Cable material	Color	Length	Ordering code
			Part number
PUR	Black	2 m	BCC06KN BCC M61C-0000-10-065-PX0BP4-020
PUR	Black	5 m	BCC06KP BCC M61C-0000-10-065-PX0BP4-050
PUR	Black	10 m	BCC06KR BCC M61C-0000-10-065-PX0BP4-100



Connectors

M23 female, 12 and 19-pin



240 V AC
240 V DC
Molded
8x0.50 mm² and 3x1.0 mm²
IP 67
-25...+80 °C

120 V AC
120 V DC
Molded
16x0.50 mm² and 3x1.0 mm²
IP 67
-25...+80 °C

120 V AC
120 V DC
Molded
16x0.50 mm² and 3x1.0 mm²
IP 67
-25...+80 °C

Ordering code

Part number

BCC06KT

BCC M62C-0000-10-065-PX0BP4-020

BCC06KU

BCC M62C-0000-10-065-PX0BP4-050

BCC06KW

BCC M62C-0000-10-065-PX0BP4-100

BCC06KY

BCC M61L-0000-10-022-PX0LP4-020

BCC06KZ

BCC M61L-0000-10-022-PX0LP4-050

BCC06L0

BCC M61L-0000-10-022-PX0LP4-100

BCC06L1

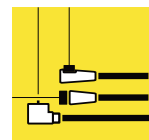
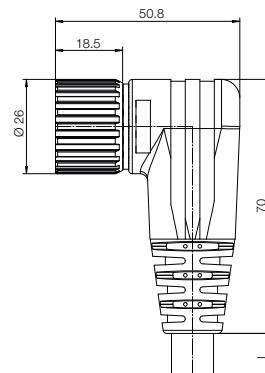
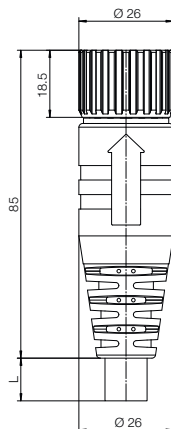
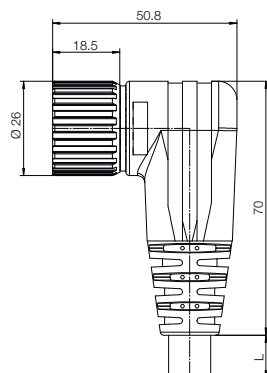
BCC M62L-0000-10-022-PX0LP4-020

BCC06L2

BCC M62L-0000-10-022-PX0LP4-050

BCC06L3

BCC M62L-0000-10-022-PX0LP4-100



Connectors and Cables

Connectors M5

Connection Cables M5↔M8

Connectors M8

Connection Cables M8↔M8

Connection Cables M8↔M12

Connectors M12

Connection Cables M12↔M8

Connection Cables M12↔M12

Connectors M23

Connection Cables M23↔M12

Connector 7/8"

Connection Cables 7/8"↔7/8"

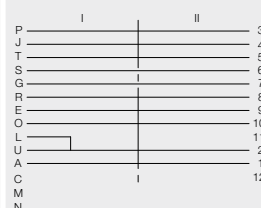
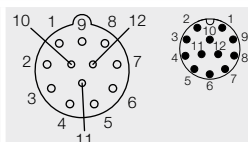
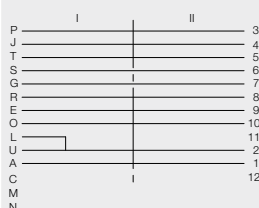
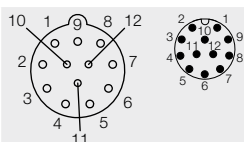
Connection Cables

M23 female ↔ M12 male, 12-pin

M23 ↔ M12



View of female/
male side



Supply voltage DC U_S

30 V DC

30 V DC

Cable

Molded

Molded

No. of wires × conductor cross-section

12×0.25 mm²

12×0.25 mm²

Degree of protection as per IEC 60529

IP 67/IP 68

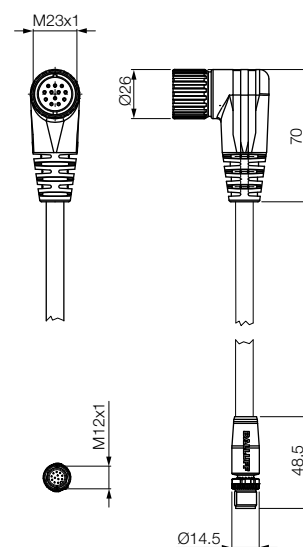
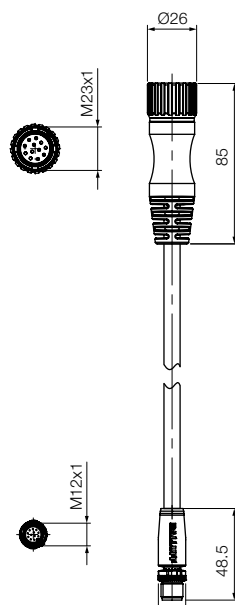
IP 67/IP 68

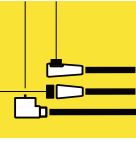
Ambient temperature T_a

-25...+80 °C

-25...+80 °C

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	0.6 m	BCC088M	BCC088R
			BCC M61C-M41C-3E-675-PX0C25-006	BCC M62C-M41C-3E-675-PX0C25-006
PUR	Black	1 m	BCC088N	BCC088T
			BCC M61C-M41C-3E-675-PX0C25-010	BCC M62C-M41C-3E-675-PX0C25-010
PUR	Black	2 m	BCC088P	BCC088U
			BCC M61C-M41C-3E-675-PX0C25-020	BCC M62C-M41C-3E-675-PX0C25-020





Connectors
and Cables

Connectors
M5

Connection Cables
M5↔M8

Connectors
M8

Connection
Cables
M8↔M8

Connection
Cables
M8↔M12

Connectors M12

Connection
Cables
M12↔M8

Connection Cables
M12↔M12

Connectors M23

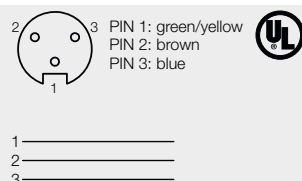
**Connection
Cables
M23↔M12**

Connector 7/8"

Connection
Cables
7/8"↔7/8"



Connector diagram and wiring

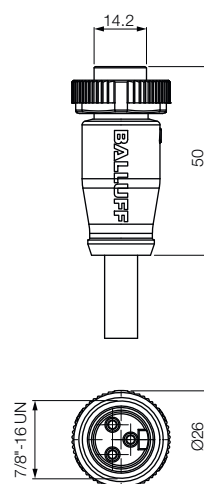


Supply voltage AC U_S
Supply voltage DC U_S
Cable
No. of wires $\times$ conductor cross-section
Degree of protection as per IEC 60529
Ambient temperature T_a

300 V AC
300 V DC
Molded
3 $\times$ 1.5 mm²
IP 68
-25...+80 °C

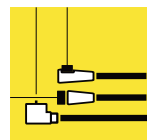
Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	2 m	BCC0AHZ	
			BCC A313-0000-10-097-PX03A5-020	
PUR	Black	5 m	BCC0AJ0	
			BCC A313-0000-10-097-PX03A5-050	
PUR	Black	10 m	BCC0AJ1	
			BCC A313-0000-10-097-PX03A5-100	

Other cable materials, colors and lengths on request.

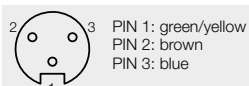


Connectors

7/8" female, 3 and 4-pin



Connectors and Cables
Connectors
M5
Connection Cables
M5↔M8
Connectors
M8
Connection Cables
M8↔M8
Connection Cables
M8↔M12
Connectors M12
Connection Cables
M12↔M8
Connection Cables
M12↔M12
Connectors M23
Connection Cables
M23↔M12
Connector 7/8"
Connection Cables
7/8"↔7/8"



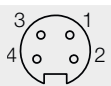
PIN 1: green/yellow
PIN 2: brown
PIN 3: blue



1 _____
2 _____
3 _____

300 V AC
300 V DC
Molded
3×1.5 mm²

IP 68
-25...+80 °C



PIN 1: brown
PIN 2: white
PIN 3: blue
PIN 4: black



1 _____
2 _____
3 _____
4 _____

300 V AC
300 V DC
Molded
4×1.5 mm²

IP 68
-25...+80 °C



PIN 1: brown
PIN 2: white
PIN 3: blue
PIN 4: black



1 _____
2 _____
3 _____
4 _____

300 V AC
300 V DC
Molded
4×1.5 mm²

IP 68
-25...+80 °C

Ordering code

Part number

BCC0AJ2

BCC A323-0000-10-097-PX03A5-020

BCC0AJ3

BCC A323-0000-10-097-PX03A5-050

BCC0AJ4

BCC A323-0000-10-097-PX03A5-100

BCC06HU

BCC A314-0000-10-003-PX04A5-020

BCC06HW

BCC A314-0000-10-003-PX04A5-050

BCC06HY

BCC A314-0000-10-003-PX04A5-100

BCC06HZ

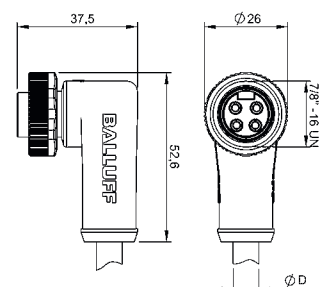
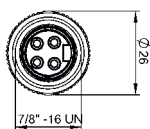
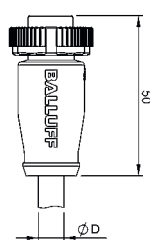
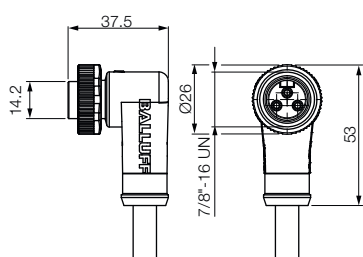
BCC A324-0000-10-003-PX04A5-020

BCC06J0

BCC A324-0000-10-003-PX04A5-050

BCC06J1

BCC A324-0000-10-003-PX04A5-100

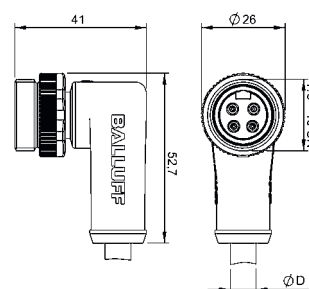
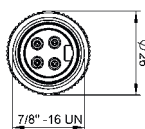
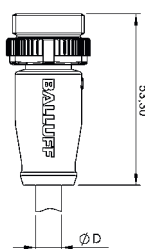




Connector diagram and wiring	PIN 1: brown PIN 2: white PIN 3: blue PIN 4: black 1 _____ 2 _____ 3 _____ 4 _____		PIN 1: brown PIN 2: white PIN 3: blue PIN 4: black 1 _____ 2 _____ 3 _____ 4 _____	
Supply voltage AC U_S	300 V AC		300 V AC	
Supply voltage DC U_S	300 V DC		300 V DC	
No. of wires × conductor cross-section	4×1.5 mm ²		4×1.5 mm ²	
Degree of protection as per IEC 60529	IP 68		IP 68	
Ambient temperature T_a	-25...+80 °C		-25...+80 °C	

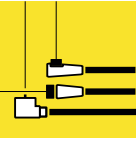
Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	2 m	BCC06HL BCC A314-000-20-003-PX04A5-020	BCC06HP BCC A324-0000-20-003-PX04A5-020
PUR	Black	5 m	BCC06HM BCC A314-000-20-003-PX04A5-050	BCC06HR BCC A324-0000-20-003-PX04A5-050
PUR	Black	10 m	BCC06HN BCC A314-000-20-003-PX04A5-100	BCC06HT BCC A324-0000-20-003-PX04A5-100

Other cable materials, colors and lengths on request.



Connectors

7/8" female, 7/8" male, 5-pin



Connectors and Cables

Connectors M5

Connection Cables M5↔M8

Connectors M8

Connection Cables M8↔M8

Connection Cables M8↔M12

Connectors M12

Connection Cables M12↔M8

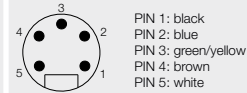
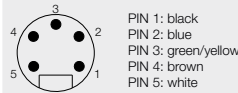
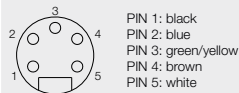
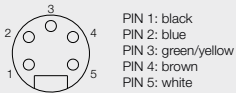
Connection Cables M12↔M12

Connectors M23

Connection Cables M23↔M12

Connector 7/8"

Connection Cables 7/8"↔7/8"



1 _____
2 _____
3 _____
4 _____
5 _____

300 V AC
300 V DC
5×1.5 mm²

IP 68
-25...+80 °C

1 _____
2 _____
3 _____
4 _____
5 _____

300 V AC
300 V DC
5×1.5 mm²

IP 68
-25...+80 °C

1 _____
2 _____
3 _____
4 _____
5 _____

300 V AC
300 V DC
5×1.5 mm²

IP 68
-25...+80 °C

1 _____
2 _____
3 _____
4 _____
5 _____

300 V AC
300 V DC
5×1.5 mm²

IP 68
-25...+80 °C

Ordering code

Part number

BCC06HC

BCC A315-0000-10-063-PX05A5-020

BCC06HE

BCC A315-0000-10-063-PX05A5-050

BCC06HF

BCC A315-0000-10-063-PX05A5-100

BCC06HH

BCC A325-0000-10-063-PX05A5-020

BCC06HJ

BCC A325-0000-10-063-PX05A5-050

BCC06HK

BCC A325-0000-10-063-PX05A5-100

BCC0886

BCC A315-0000-20-063-PX05A5-020

BCC0887

BCC A315-0000-20-063-PX05A5-050

BCC0888

BCC A315-0000-20-063-PX05A5-100

BCC0889

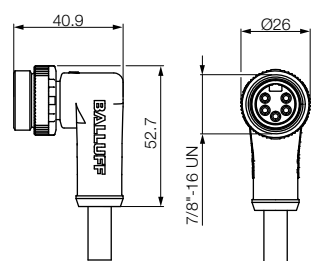
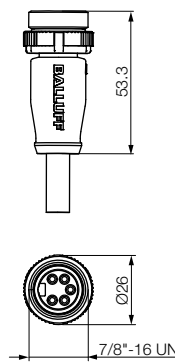
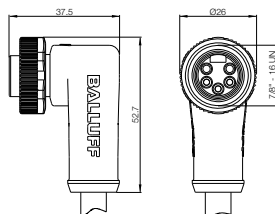
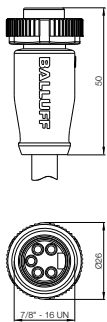
BCC A325-0000-20-063-PX05A5-020

BCC088A

BCC A325-0000-20-063-PX05A5-050

BCC088C

BCC A325-0000-20-063-PX05A5-100



Connection Cables

7/8" female ↔ 7/8" male, 3-pin

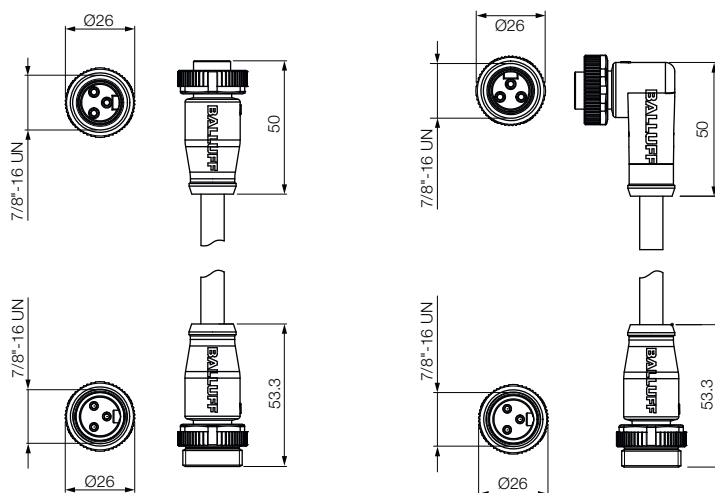
7/8" ↔ 7/8"



Connector diagram and wiring			
Supply voltage AC U _S	300 V AC	300 V AC	
Supply voltage DC U _S	300 V DC	300 V DC	
No. of wires × conductor cross-section	3×1.5 mm ²	3×1.5 mm ²	
Degree of protection as per IEC 60529	IP 68	IP 68	
Ambient temperature T _a	-25...+80 °C	-25...+80 °C	

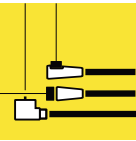
Cable material	Color	Length	Ordering code		
			Part number		
PUR	Black	0.6 m	BCC0AR6 BCC A313-A313-30-365-PX03A5-006	BCC0C3H BCC A323-A313-30-365-PX03A5-006	
PUR	Black	2 m	BCC0ARH BCC A313-A313-30-365-PX03A5-020	BCC0C3J BCC A323-A313-30-365-PX03A5-020	
PUR	Black	5 m	BCC0ARJ BCC A313-A313-30-365-PX03A5-050	BCC0C3K BCC A323-A313-30-365-PX03A5-050	
PUR	Black	10 m	BCC0ARK BCC A313-A313-30-365-PX03A5-100	BCC0C3L BCC A323-A313-30-365-PX03A5-100	
PUR	Black	15 m	BCC0ARL BCC A313-A313-30-365-PX03A5-150	BCC0C3M BCC A323-A313-30-365-PX03A5-150	

Other cable materials, colors and lengths on request.



Connection Cables

7/8" female ↔ 7/8" male, 4-pin



Connectors and Cables

Connectors M5

Connection Cables M5↔M8

Connectors M8

Connection Cables M8↔M8

Connection Cables M8↔M12

Connectors M12

Connection Cables M12↔M8

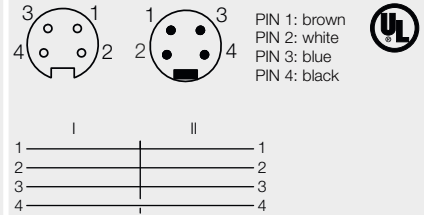
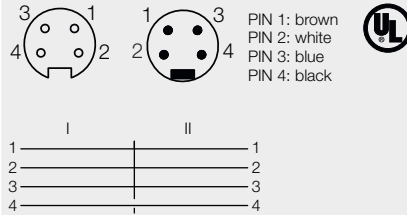
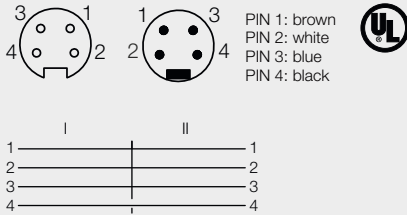
Connection Cables M12↔M12

Connectors M23

Connection Cables M23↔M12

Connector 7/8"

Connection Cables 7/8"↔7/8"



300 V AC
300 V DC
4×1.5 mm²

IP 68
-25...+80 °C

300 V AC
300 V DC
4×1.5 mm²

IP 68
-25...+80 °C

300 V AC
300 V DC
4×1.5 mm²

IP 68
-25...+80 °C

Ordering code

Part number

BCC06J2

BCC A314-A314-30-304-PX04A5-006

BCC06J3

BCC A314-A314-30-304-PX04A5-020

BCC06J4

BCC A314-A314-30-304-PX04A5-050

BCC06J5

BCC A314-A314-30-304-PX04A5-100

BCC06J6

BCC A314-A314-30-304-PX04A5-150

BCC06J7

BCC A314-A324-30-304-PX04A5-006

BCC06J8

BCC A314-A324-30-304-PX04A5-020

BCC06J9

BCC A314-A324-30-304-PX04A5-050

BCC06JA

BCC A314-A324-30-304-PX04A5-100

BCC06JC

BCC A314-A324-30-304-PX04A5-150

BCC06JE

BCC A324-A314-30-304-PX04A5-006

BCC06JF

BCC A324-A314-30-304-PX04A5-020

BCC06JH

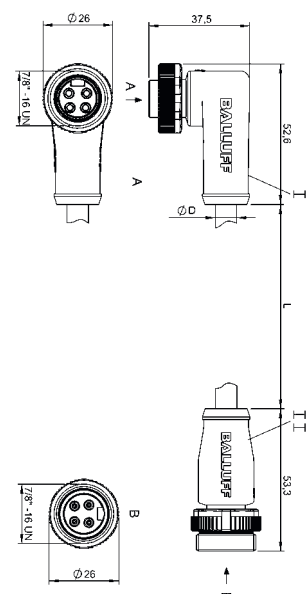
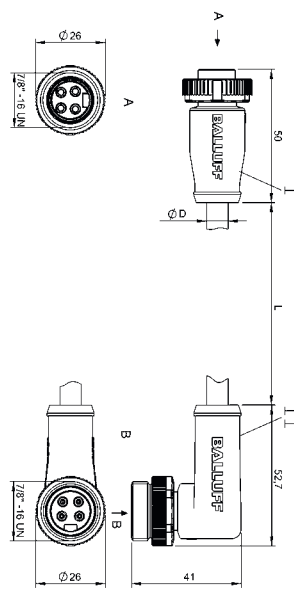
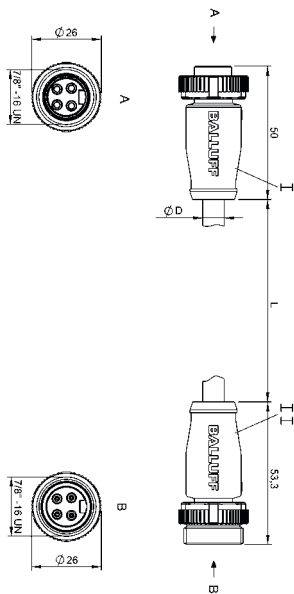
BCC A324-A314-30-304-PX04A5-050

BCC06JJ

BCC A324-A314-30-304-PX04A5-100

BCC06JK

BCC A324-A314-30-304-PX04A5-150



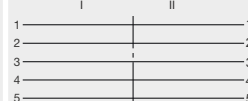
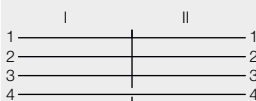
Connection Cables

7/8" female ↔ 7/8" male, 4 and 5-pin

7/8" ↔ 7/8"



Connector diagram and wiring



Supply voltage AC U_S
Supply voltage DC U_S
No. of wires × conductor cross-section

Degree of protection as per IEC 60529
Ambient temperature T_a

300 V AC
300 V DC
4×1.5 mm²

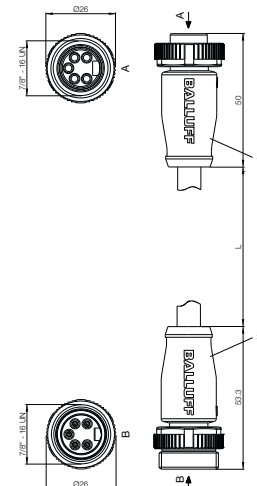
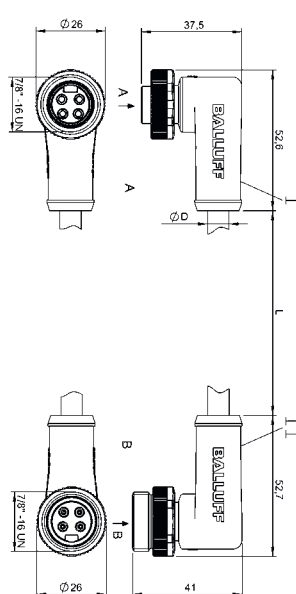
IP 68
-25...+80 °C

300 V AC
300 V DC
5×1.5 mm²

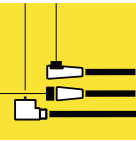
IP 68
-25...+80 °C

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	0.6 m	BCC06JL BCC A324-A324-30-304-PX04A5-006	BCC06FM BCC A315-A315-30-335-PX05A5-006
PUR	Black	2 m	BCC06JM BCC A324-A324-30-304-PX04A5-020	BCC06FN BCC A315-A315-30-335-PX05A5-020
PUR	Black	5 m	BCC06JN BCC A324-A324-30-304-PX04A5-050	BCC06FP BCC A315-A315-30-335-PX05A5-050
PUR	Black	10 m	BCC06JP BCC A324-A324-30-304-PX04A5-100	BCC06FR BCC A315-A315-30-335-PX05A5-100
PUR	Black	15 m	BCC06JR BCC A324-A324-30-304-PX04A5-150	BCC06FT BCC A315-A315-30-335-PX05A5-150

Other cable materials, colors and lengths on request.

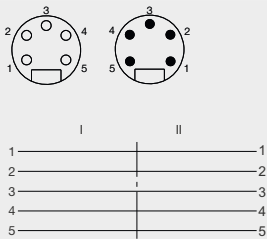


Connection Cables 7/8" female ↔ 7/8" male, 5-pin



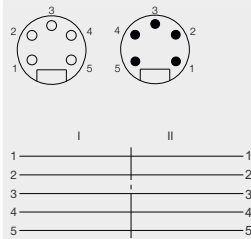
Connectors and Cables
Connectors M5
Connection Cables M5↔M8
Connectors M8
Connection Cables M8↔M8
Connection Cables M8↔M12
Connectors M12
Connection Cables M12↔M8
Connection Cables M12↔M12
Connectors M23
Connection Cables M23↔M12
Connector 7/8"

Connection Cables
7/8"↔7/8"



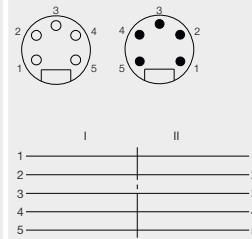
300 V AC
300 V DC
5×1.5 mm²

IP 68
-25...+80 °C



300 V AC
300 V DC
5×1.5 mm²

IP 68
-25...+80 °C



300 V AC
300 V DC
5×1.5 mm²

IP 68
-25...+80 °C

Ordering code

Part number

BCC06FU

BCC A315-A325-30-335-PX05A5-006

BCC06FW

BCC A315-A325-30-335-PX05A5-020

BCC06FY

BCC A315-A325-30-335-PX05A5-050

BCC06FZ

BCC A315-A325-30-335-PX05A5-100

BCC06H0

BCC A315-A325-30-335-PX05A5-150

BCC06H1

BCC A325-A315-30-335-PX05A5-006

BCC06H2

BCC A325-A315-30-335-PX05A5-020

BCC06H3

BCC A325-A315-30-335-PX05A5-050

BCC06H4

BCC A325-A315-30-335-PX05A5-100

BCC06H5

BCC A325-A315-30-335-PX05A5-150

BCC06H6

BCC A325-A325-30-335-PX05A5-006

BCC06H7

BCC A325-A325-30-335-PX05A5-020

BCC06H8

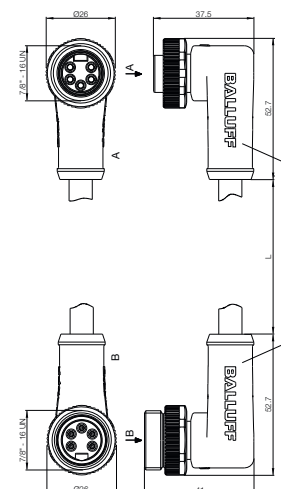
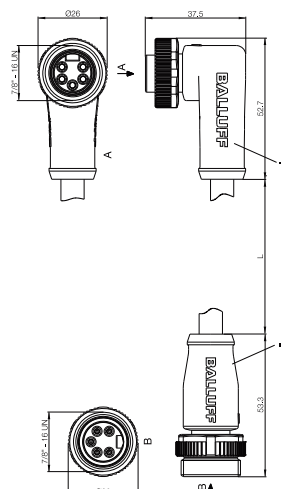
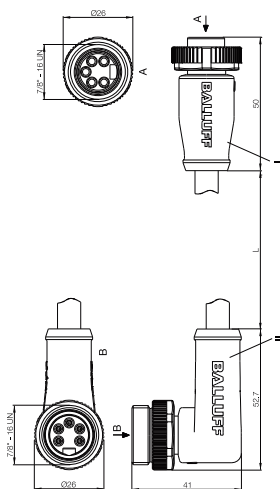
BCC A325-A325-30-335-PX05A5-050

BCC06H9

BCC A325-A325-30-335-PX05A5-100

BCC06HA

BCC A325-A325-30-335-PX05A5-150



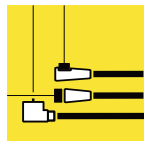
**7/8" male, 7/8" female, user-fabricated
3-pin**


Connector diagram and wiring			
Supply voltage AC U _S	250 V AC	250 V AC	
Supply voltage DC U _S	250 V DC	250 V DC	
No. of wires × conductor cross-section	3 × max. 1.5 mm ²	3 × max. 1.5 mm ²	
Connection	Screw terminal	Screw terminal	
Degree of protection as per IEC 60529	IP 67	IP 67	
Ambient temperature T _a	-25...+80 °C	-25...+80 °C	
Cable material	Ordering code		
Cable diameter	Part number		
PUR			
Ø 6...8 mm			
PUR	BCC0AT9	BCC0ATC	
Ø 8...10 mm	BCC A333-0000-10-000-61X3A5-000	BCC A333-0000-20-000-61X3A5-000	
PUR	BCC0ATA	BCC0ATE	
Ø 10...12 mm	BCC A333-0000-10-000-71X3A5-000	BCC A333-0000-20-000-71X3A5-000	

Other cable diameters on request.

Connectors

7/8" male, 7/8" female, user-fabricated
4 and 5-pin

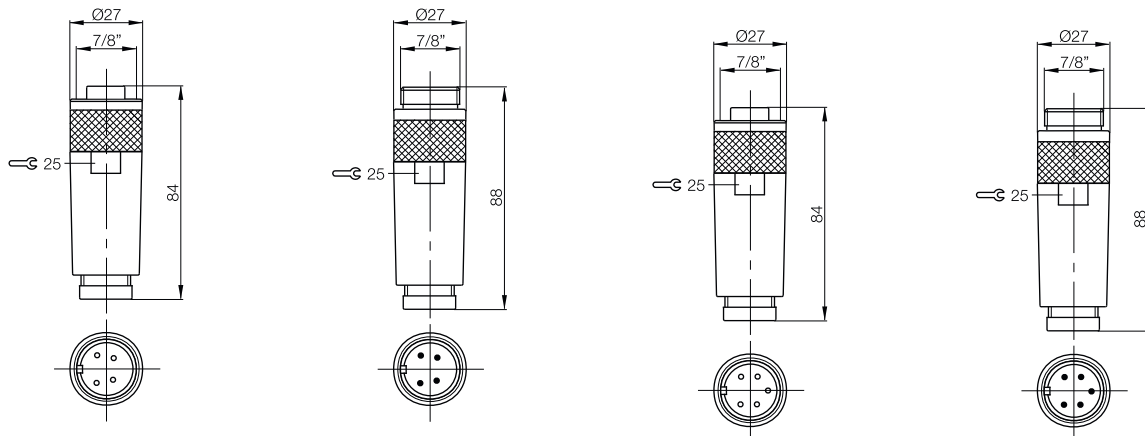


Connectors and Cables
Connectors M5
Connection Cables M5↔M8
Connectors M8
Connection Cables M8↔M8
Connection Cables M8↔M12
Connectors M12
Connection Cables M12↔M8
Connection Cables M12↔M12
Connectors M23
Connection Cables M23↔M12
Connector 7/8"
Connection Cables 7/8"↔7/8"



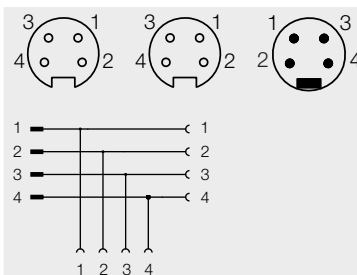
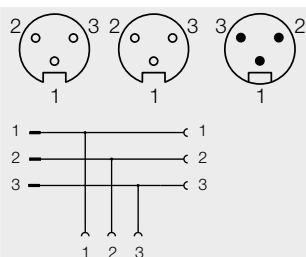
250 V AC 250 V DC 4× max. 1.5 mm ²	250 V AC 250 V DC 4× max. 1.5 mm ²	300 V AC 300 V DC 5× max. 1.5 mm ²	300 V AC 300 V DC 5× max. 1.5 mm ²
	Screw terminal		Screw terminal
IP 67 -25...+80 °C	IP 67 -25...+80 °C	IP 67 -25...+80 °C	IP 67 -25...+80 °C

Ordering code			
Part number			
BCC0706 BCC A334-0000-10-000-51X4A5-000	BCC0709 BCC A334-0000-20-000-51X4A5-000	BCC070E BCC A335-0000-10-000-51X5A5-000	BCC070J BCC A335-0000-20-000-51X5A5-000
BCC0707 BCC A334-0000-10-000-61X4A5-000	BCC070A BCC A334-0000-20-000-61X4A5-000	BCC070F BCC A335-0000-10-000-61X5A5-000	BCC070K BCC A335-0000-20-000-61X5A5-000
BCC0708 BCC A334-0000-10-000-71X4A5-000	BCC070C BCC A334-0000-20-000-71X4A5-000	BCC070H BCC A335-0000-10-000-71X5A5-000	BCC070L BCC A335-0000-20-000-71X5A5-000





Connector diagram
and wiring



Configuration

7/8" splitter

7/8" splitter

Version

Female/male, 3-pin

Female/male, 4-pin

Supply voltage AC U_S

300 V AC

300 V AC

Supply voltage DC U_S

300 V DC

300 V DC

Degree of protection as per IEC 60529

IP 67

IP 67

Ambient temperature T_a

-25...+80 °C

-20...+80 °C

Ordering code

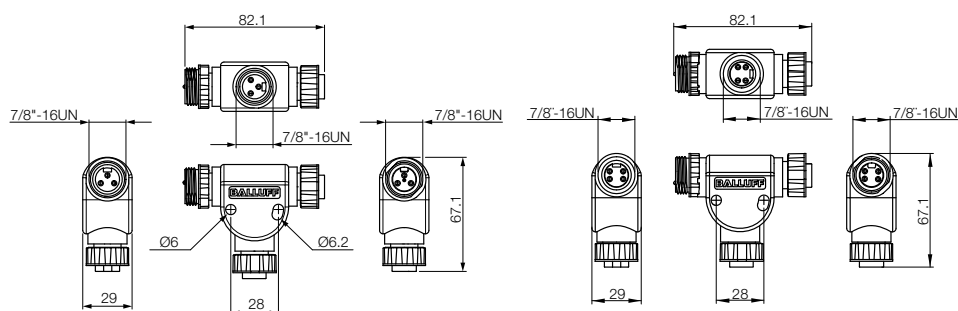
Part number

BCC0AA5

BCC A313-A313-A313-T0021-000

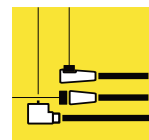
BCC0AA6

BCC A314-A314-A314-T0022-000



Connectors

7/8" tee



Connectors and Cables

Connectors M5

Connection Cables M5↔M8

Connectors M8

Connection Cables M8↔M8

Connection Cables M8↔M12

Connectors M12

Connection Cables M12↔M8

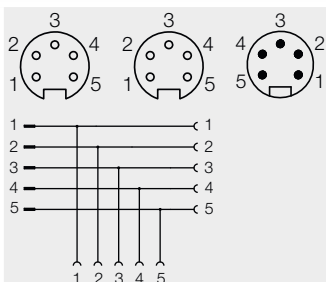
Connection Cables M12↔M12

Connectors M23

Connection Cables M23↔M12

Connector 7/8"

Connection Cables 7/8"↔7/8"



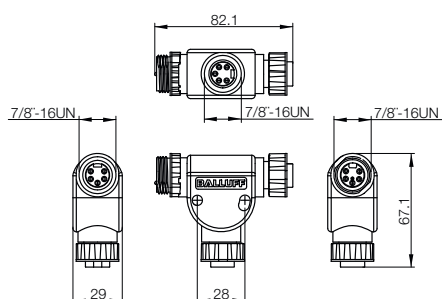
7/8" splitter
Female/male, 5-pin
300 V AC
300 V DC
IP 67
-20...+80 °C

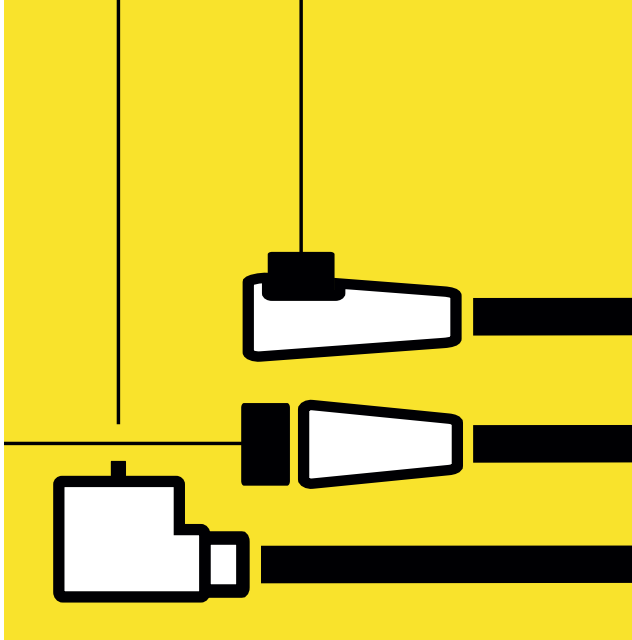
Ordering code

Part number

BCC0AA7

BCC A315-A315-A315-T0023-000





Connectors and Valve Connectors

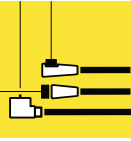
Special Properties



Special Properties

Contents

High-temperature Resistant	118
IP 69K-ECOLAB	120
Weld Spatter Resistant PUR Cables	124
Y Connectors, Weld Spatter Resistant	136
High Durability Cable	138



Special Properties for temperatures up to 120 °C M8 socket, 3-pin

Connector BCC up to 120 °C

The durable connectors BCC with IP protection are ideally matched to the wiring and suitable for rapid connection of sensors/actuators in the industrial automation sector. New products include versions for high-temperature applications up to 120 °C, for example, for the connection of high-pressure resistant sensors in hydraulic applications.

- Temperature range -25...+120 °C
- Flame-resistant
- Straight and right-angle
- 3-pin, 4-pin
- Easy to find notches on the handle body

120 °C

High Temperature



Connector diagram
and wiring



1 _____
3 _____
4 _____

Supply voltage AC U_S

250 V AC

Supply voltage DC U_S

250 V DC

Cable

Molded

No. of wires × conductor cross-section

3×0.34 mm²

Degree of protection as per IEC 60529

IP 67

Ambient temperature T_a

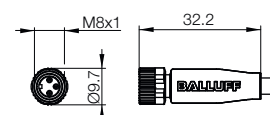
-25...+120 °C

Use

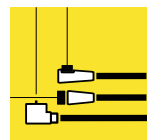
Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	2 m		
PUR	Black	5 m	BCC0836	
PUR	Black	10 m	BCC M313-0000-10-001-PH0334-050	

Other cable materials, colors and lengths on request.

Connectors without LED are suitable for PNP and NPN switching functions. NPN versions with LED on request.



Special Properties for temperatures up to 120 °C M12 female, 3 and 4-pin



Special Properties

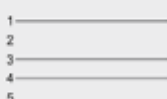
High-temperature Resistant

IP 69K-ECOLAB

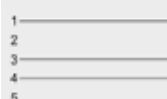
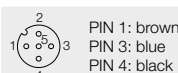
Weld Spatter Resistant
PUR Cables

Y Connectors, Weld Spatter Resistant

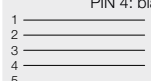
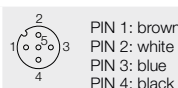
High Durability Cable



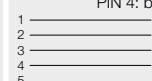
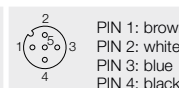
250 V AC
250 V DC
Molded
3x0.34 mm²
IP 68
-25...+120 °C
Normally open (NO) / -



250 V AC
250 V DC
Molded
3x0.34 mm²
IP 68
-25...+120 °C
Normally open (NO) / -



250 V AC
250 V DC
Molded
4x0.34 mm²
IP 68
-25...+120 °C
Complementary (NO/NC) / - / -



250 V AC
250 V DC
Molded
4x0.34 mm²
IP 68
-25...+120 °C
Complementary (NO/NC) / - / -

Ordering code

Part number

BCC082W

BCC M415-0000-1A-001-PH0334-020

BCC0832

BCC M425-0000-1A-001-PH0334-020

BCC0AA9

BCC M415-0000-1A-003-PH0434-020

BCC0AAE

BCC M425-0000-1A-003-PH0434-020

BCC082Y

BCC M415-0000-1A-001-PH0334-050

BCC0833

BCC M425-0000-1A-001-PH0334-050

BCC0AAA

BCC M415-0000-1A-003-PH0434-050

BCC0AAF

BCC M425-0000-1A-003-PH0434-050

BCC082Z

BCC M415-0000-1A-001-PH0334-100

BCC0AA8

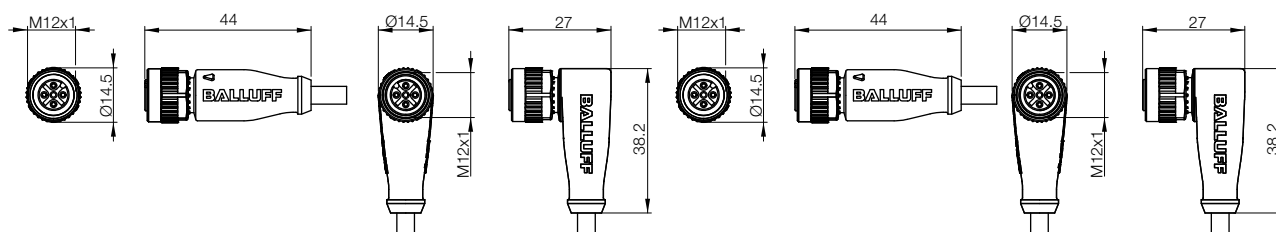
BCC M425-0000-1A-001-PH0334-100

BCC0AAC

BCC M415-0000-1A-003-PH0434-100

BCC0AAH

BCC M425-0000-1A-003-PH0434-100



Connector BCC IP 69K-ECOLAB

Food-safe stainless steel housing and certified resistance against aggressive chemicals and cleaning agents make Balluff BCC-IP-69K connectors the first choice for wet and hygienic applications in the pharmaceutical and food industry. Additional tests for resistance to hydrogen peroxide complete the application profile. The highest leakproofness thanks to IP 69K as well as certifications by ECOLAB guarantee the best quality: for a long service life and process reliability.

- IP 69K: Highest leakproofness
- ECOLAB: Resistant to aggressive cleaning and disinfecting agents
- Resistant to hydrogen peroxide (H₂O₂)
- Screw connection made of stainless steel
- Certification to UL

IP 69K

H₂O₂ resistant
ECOLAB®

Connector diagram
and wiring

Supply voltage AC U_S

Supply voltage DC U_S

Cable

No. of wires × conductor cross-section

Degree of protection as per IEC 60529

Ambient temperature T_a

PUR

Static/moving

PVC

Use

LED



Cable material	Color	Length	
PUR	Black	2 m	
PUR	Black	3 m	
PUR	Black	5 m	
PUR	Black	10 m	
PUR	Black	15 m	
PUR	Black	20 m	
PUR	Black	25 m	
PUR	Black	40 m	
PVC	gray, black	5 m	
PVC	gray, black	10 m	
PVC	gray, black	15 m	
PVC	gray, black	20 m	
PVC	gray, black	25 m	
PVC	Gray	30 m	
PVC	Gray	35 m	

Other cable materials, colors and lengths on request.

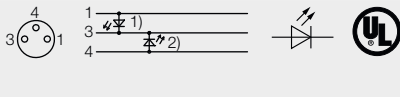
Connectors without LED are suitable for PNP and NPN switching functions.

NPN versions with LED on request.

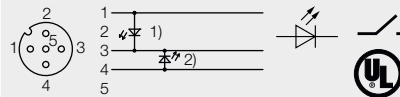
Special Properties

IP 69K-ECOLAB

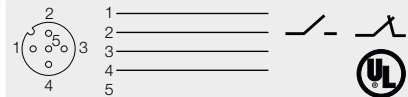
M8 female, M12 female, 3 and 4-pin



¹⁾ Green LED = Power
²⁾ Yellow LED = Function



¹⁾ Green LED = Power
²⁾ Yellow LED = Function



250 V AC
250 V DC
Molded
4x0.34 mm²
IP 69K
-40...+105 °C/-5...+105 °C (UL 80 °C)
Complementary (NO/NC) / - / -

Ordering code

Part number

BCC08CZ

BCC S323-0000-10-004-PX0334-020

BCC08CM

BCC S425-0000-1A-004-PX0334-020

BCC0A2F

BCC S323-0000-10-004-PX0334-030

BCC08CN

BCC S425-0000-1A-004-PX0334-030

BCC08E0

BCC S323-0000-10-004-PX0334-050

BCC08CP

BCC S425-0000-1A-004-PX0334-050

BCC0A2H

BCC S323-0000-10-004-PX0334-100

BCC08CR

BCC S425-0000-1A-004-PX0334-100

BCC06UE

BCC S425-0000-1A-004-PX0334-150

BCC06UF

BCC S425-0000-1A-004-PX0334-200

BCC06UH

BCC S425-0000-1A-004-PX0334-250

BCC06UJ

BCC S425-0000-1A-004-PX0334-400

BCC0A2L

BCC S425-0000-1A-004-VX8334-050

BCC0A2M

BCC S425-0000-1A-004-VX8334-100

BCC06U9

BCC S425-0000-1A-004-VX8334-150

BCC06UA

BCC S425-0000-1A-004-VX8334-200

BCC06UC

BCC S425-0000-1A-004-VX8334-250

BCC06M7

BCC S415-0000-1A-003-VX8434-100

BCC06M8

BCC S415-0000-1A-003-VX8434-150

BCC06M9

BCC S415-0000-1A-003-VX8434-200

BCC06MA

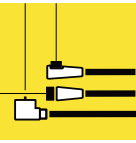
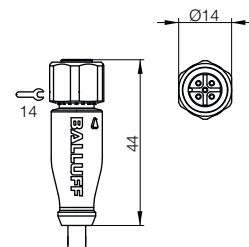
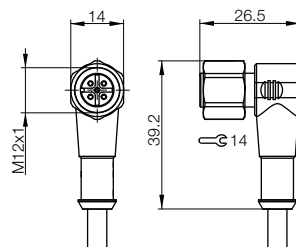
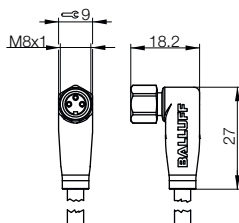
BCC S415-0000-1A-003-VX8434-250

BCC06MC

BCC S415-0000-1A-003-VX8434-300

BCC06ME

BCC S415-0000-1A-003-VX8434-350



Special Properties

High-temperature resistant

IP 69K-ECOLAB

Weld Spatter Resistant

PUR Cables

Y Connectors, Weld Spatter Resistant

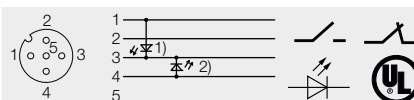
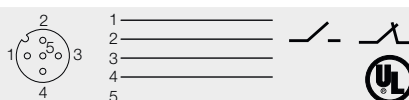
High Durability Cable

IP 69K

H₂O₂ resistant
ECOLAB



Connector diagram
and wiring



¹⁾ Green LED = Power
²⁾ Yellow LED = Function

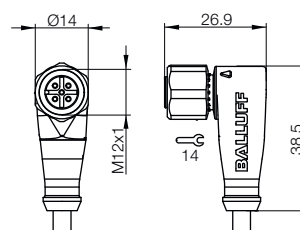
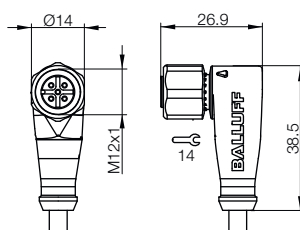
Supply voltage AC U _S	250 V AC
Supply voltage DC U _S	250 V AC
Cable	Molded
No. of wires × conductor cross-section	4×0.34 mm ²
Degree of protection as per IEC 60529	IP 69K
Ambient temperature T _a	PUR
Static/moving	PVC
Use	Complementary (NO/NC) ✓- / ✓
LED	2× (PNP), green, yellow

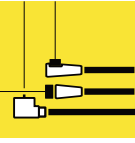
Supply voltage AC U _S	250 V AC
Supply voltage DC U _S	250 V AC
Cable	Molded
No. of wires × conductor cross-section	4×0.34 mm ²
Degree of protection as per IEC 60529	IP 69K
Ambient temperature T _a	PUR
Static/moving	PVC
Use	Complementary (NO/NC) ✓- / ✓
LED	2× (PNP), green, yellow

Supply voltage AC U _S	30 V DC
Supply voltage DC U _S	30 V DC
Cable	Molded
No. of wires × conductor cross-section	4×0.34 mm ²
Degree of protection as per IEC 60529	IP 69K
Ambient temperature T _a	-40...+90 °C/-25...+90 °C (UL 80 °C)
Static/moving	-40...+105 °C/-5...+105 °C (UL 80 °C)
Use	Complementary (NO/NC) ✓- / ✓
LED	2× (PNP), green, yellow

Cable material	Color	Length	Ordering code
			Part number
PUR	Black	5 m	BCC08CU BCC S425-0000-1A-008-PX0434-050
PUR	Black	10 m	BCC0A2K BCC S425-0000-1A-008-PX0434-100
PVC	gray, black	5 m	BCC0CTE BCC S425-0000-1A-008-VX0434-050
PVC	gray, black	10 m	BCC06MF BCC S425-0000-1A-003-VX8434-100
PVC	gray, black	15 m	BCC06MH BCC S425-0000-1A-003-VX8434-150
PVC	gray, black	20 m	BCC06MJ BCC S425-0000-1A-003-VX8434-200
PVC	gray, black	25 m	BCC06MK BCC S425-0000-1A-003-VX8434-250
PVC	Gray	30 m	BCC06ML BCC S425-0000-1A-003-VX8434-300
PVC	Gray	35 m	BCC06MM BCC S425-0000-1A-003-VX8434-350

Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions with LED on request.





Special Properties

High-temperature resistant

IP 69K-ECOLAB

Weld Spatter Resistant
PUR Cables

Y Connectors, Weld Spatter Resistant

High Durability Cable

Special Properties
Weld spatter resistant PUR cables

PUR cables for especially tough conditions

Standard PUR cables have numerous advantages. They are resilient, wear-resistant, impact-resistant and resistant against solvents. With the new weld spatter resistant versions that meet ISO 14001, you can cost-effectively replace crosslinked cables that become expensive hazardous waste after use. Possible field of applications include automobile manufacturing, in particular, bodyshell work.

- Resistant to sparks and weld spatter
- ISO 14001 compliant – not hazardous waste
- Replacement for crosslinked lines
- Torsional stress $\pm 180^\circ/\text{m}$
- Fulfill all requirements of the automotive industry



Connector diagram and wiring	
Supply voltage AC U_s	
Supply voltage DC U_s	
Cable	
No. of wires $\times$ conductor cross-section	
Degree of protection as per IEC 60529	
Ambient temperature T_a static/moving	

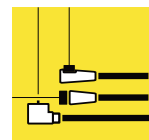
Cable material	Color	Length	
PUR	Black	5 m	
PUR	Black	10 m	

Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions. NPN versions with LED on request.

Special Properties

Weld spatter resistant PUR cables

M8 female, 3 and 4-pin



Special Properties

High-temperature Resistant

IP 69K-ECOLAB

Weld Spatter Resistant PUR Cables

Y Connectors, Weld Spatter Resistant

High Durability Cable



1 _____
3 _____
4 _____

60 V AC
60 V DC
Molded
3x0.34 mm²
IP 67
-25...+80 °C/-25...+80 °C



1 _____
3 _____
4 _____

60 V AC
60 V DC
Molded
3x0.34 mm²
IP 67
-25...+80 °C/-25...+80 °C



1 _____
2 _____
3 _____
4 _____

30 V AC
30 V DC
Molded
4x0.34 mm²
IP 67
-25...+80 °C/-25...+80 °C



1 _____
2 _____
3 _____
4 _____

30 V AC
30 V DC
Molded
4x0.34 mm²
IP 68
-25...+80 °C/-25...+80 °C

Ordering code

Part number

BCC0AJK

BCC M313-0000-10-001-PW0334-050

BCC0CAP

BCC M313-0000-10-001-PW0334-100

BCC0AJR

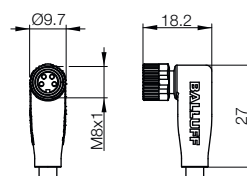
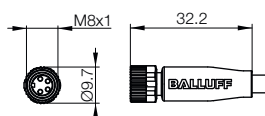
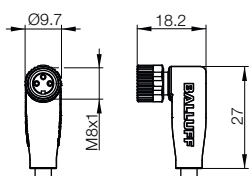
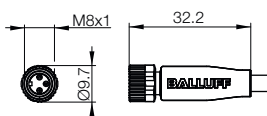
BCC M323-0000-10-001-PW0334-050

BCC0AJM

BCC M314-0000-10-003-PW0434-050

BCC0AJW

BCC M324-0000-10-003-PW0434-050



Connector diagram
and wiring

Supply voltage AC U_S

Supply voltage DC U_S

Cable

No. of wires $\times$ conductor cross-section

Degree of protection as per IEC 60529

Ambient temperature T_a static/moving

Use

Cable material	Color	Length	
PUR	Black	2 m	
PUR	Black	5 m	
PUR	Black	10 m	

Other cable materials, colors and lengths on request.

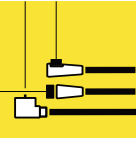
Connectors without LED are suitable for PNP and NPN switching functions. NPN versions with LED on request.



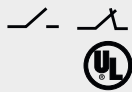
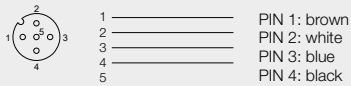
Special Properties

Weld spatter resistant PUR cables

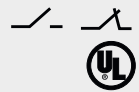
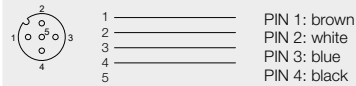
M12 female, 4-pin



Special Properties
High-temperature Resistant
IP 69K-ECOLAB
Weld Spatter Resistant PUR Cables
Y Connectors, Weld Spatter Resistant
High Durability Cable



250 V AC
250 V DC
Molded
4x0.34 mm²
IP 68
-40...+80 °C/-25...+80 °C
Complementary (NO/NC) /



250 V AC
250 V DC
Molded
4x0.34 mm²
IP 68
-40...+80 °C/-25...+80 °C
Complementary (NO/NC) /

Ordering code

Part number

BCC0AK4

BCC M415-0000-1A-003-PW0434-020

BCC0AK5

BCC M415-0000-1A-003-PW0434-050

BCC0AK6

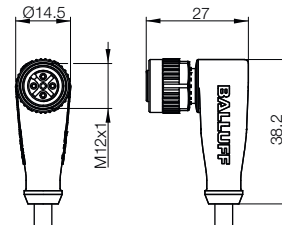
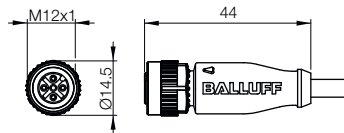
BCC M415-0000-1A-003-PW0434-100

BCC0AKE

BCC M425-0000-1A-003-PW0434-050

BCC0AKF

BCC M425-0000-1A-003-PW0434-100



Special Properties

Weld spatter resistant PUR cables

M12 female ↔ M12 male, 4-pin

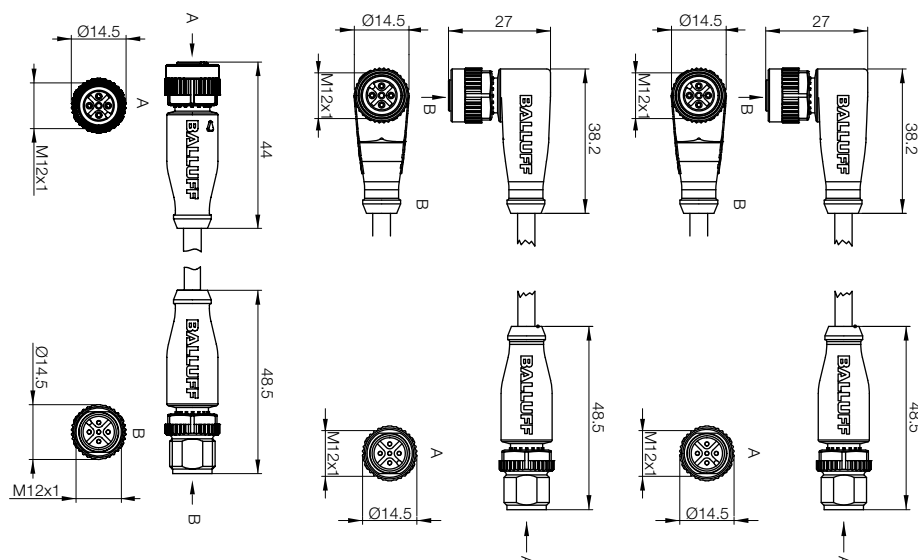
M12 ↔ M12



Connector diagram and wiring				
Supply voltage U_B	250 V AC/DC	250 V AC/DC	30 V DC	
Cable	Molded	Molded	Molded	
No. of wires × conductor cross-section	4×0.34 mm ²	4×0.34 mm ²	4×0.34 mm ²	
Degree of protection as per IEC 60529	IP 68	IP 68	IP 68	
Ambient temperature T_a	−40...+80 °C/−25...+80 °C	−40...+80 °C/−25...+80 °C	−40...+80 °C/−25...+80 °C	
static/moving				
Use	Complementary (NO/NC)	Complementary (NO/NC)	Complementary (NO/NC)	
LED			3× (PNP), green, yellow, white	

Cable material	Color	Length	Ordering code	Part number		
PUR	Black	0.3 m	BCC0AP1	BCC0ANP	BCC0ANE	
			BCC M415-M414-3A-304-PW0434-003	BCC M425-M414-3A-304-PW0434-003	BCC M425-M414-3A-650-PW0434-003	
PUR	Black	0.6 m	BCC0AP2	BCC0ANR	BCC0ANF	
			BCC M415-M414-3A-304-PW0434-006	BCC M425-M414-3A-304-PW0434-006	BCC M425-M414-3A-650-PW0434-006	
PUR	Black	1 m	BCC0AP3	BCC0ANT	BCC0ANH	
			BCC M415-M414-3A-304-PW0434-010	BCC M425-M414-3A-304-PW0434-010	BCC M425-M414-3A-650-PW0434-010	
PUR	Black	1.5 m	BCC0AP4	BCC0ANU	BCC0ANJ	
			BCC M415-M414-3A-304-PW0434-015	BCC M425-M414-3A-304-PW0434-015	BCC M425-M414-3A-650-PW0434-015	
PUR	Black	2 m	BCC0AP5	BCC0ANW	BCC0ANK	
			BCC M415-M414-3A-304-PW0434-020	BCC M425-M414-3A-304-PW0434-020	BCC M425-M414-3A-650-PW0434-020	
PUR	Black	3 m				
PUR	Black	5 m	BCC0AP7	BCC0ANZ	BCC0ANM	
			BCC M415-M414-3A-304-PW0434-050	BCC M425-M414-3A-304-PW0434-050	BCC M425-M414-3A-650-PW0434-050	

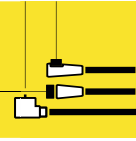
Other cable lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions. NPN versions with LED on request.



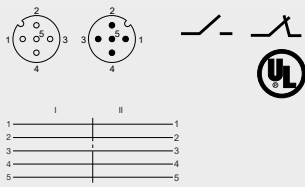
Special Properties

Weld spatter resistant PUR cables

M12 female ↔ M12 male, 3 and 5-pin



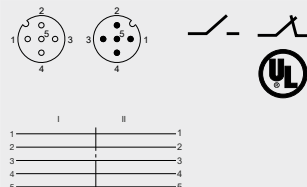
Special Properties
High-temperature Resistant
IP 69K-ECOLAB
Weld Spatter Resistant PUR Cables
Y Connectors, Weld Spatter Resistant
High Durability Cable



125 V AC/DC
Molded
5x0.34 mm²

IP 68
-40...+80 °C/-25...+80 °C

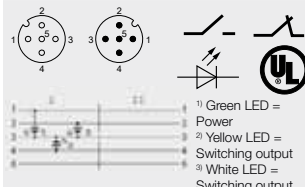
Complementary (NO/NC) — / —



125 V AC/DC
Molded
5x0.34 mm²

IP 68
-40...+80 °C/-25...+80 °C

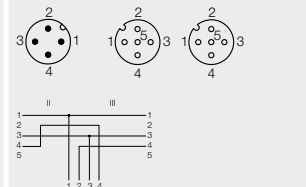
Complementary (NO/NC) — / —



30 V DC
Molded
5x0.34 mm²

IP 68
-40...+80 °C/-25...+80 °C

Complementary (NO/NC) — / —
3x (PNP), green, yellow, white



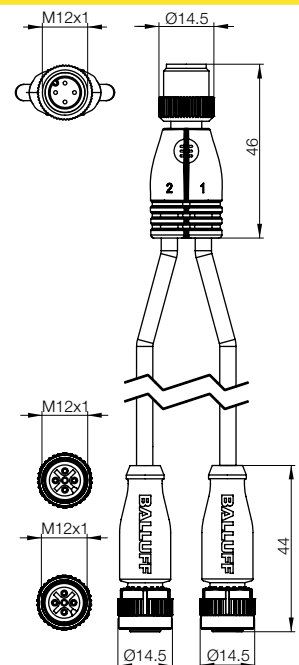
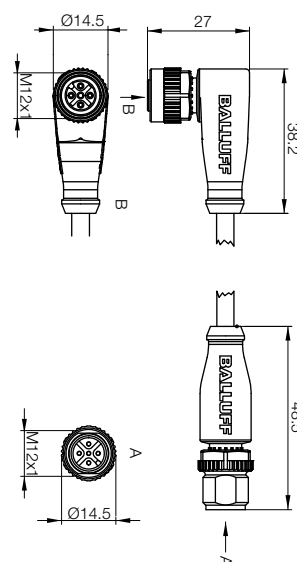
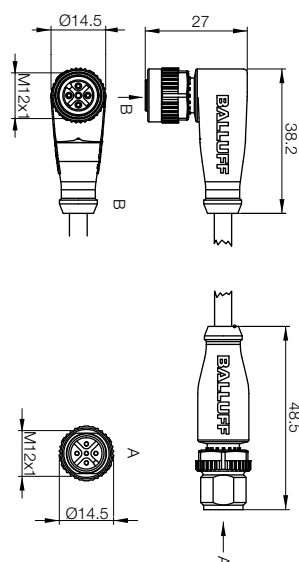
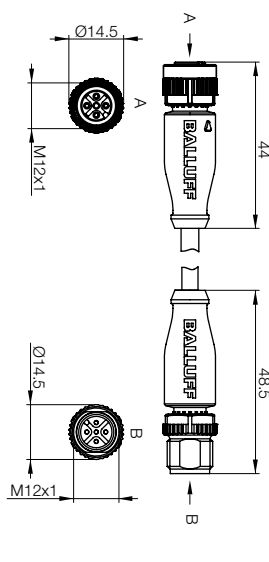
250 V AC/DC
Molded
3x0.34 mm²

IP 67
-40...+80 °C/-25...+80 °C

Ordering code

Part number

			BCC0AK1 BCC M414-M415-M415-U2027-003
BCC0AJJ BCC M415-M415-3A-313-PW0534-006	BCC0AKH BCC M425-M415-3A-313-PW0534-006	BCC0C0N BCC M425-M415-3A-661-PW0534-006	BCC0AK2 BCC M414-M415-M415-U2027-006
BCC0AK7 BCC M415-M415-3A-313-PW0534-010	BCC0AKJ BCC M425-M415-3A-313-PW0534-010	BCC0C0P BCC M425-M415-3A-661-PW0534-010	BCC0AK3 BCC M414-M415-M415-U2027-010
BCC0C0M BCC M415-M415-3A-313-PW0534-015		BCC0C0R BCC M425-M415-3A-661-PW0534-015	
BCC0AK8 BCC M415-M415-3A-313-PW0534-020	BCC0AKK BCC M425-M415-3A-313-PW0534-020	BCC0C0T BCC M425-M415-3A-661-PW0534-020	BCC0C27 BCC M414-M415-M415-U2027-020
BCC0AK9 BCC M415-M415-3A-313-PW0534-030	BCC0AKL BCC M425-M415-3A-313-PW0534-030	BCC0C0U BCC M425-M415-3A-661-PW0534-030	
BCC0AKA BCC M415-M415-3A-313-PW0534-050	BCC0AKM BCC M425-M415-3A-313-PW0534-050	BCC0C0W BCC M425-M415-3A-661-PW0534-050	



Connector diagram and wiring			
Supply voltage AC U_s			
Supply voltage DC U_s			
Cable			
No. of wires $\times$ conductor cross-section			
Degree of protection as per IEC 60529			
Ambient temperature T_a static/moving			
Cable material	Color	Length	
PUR	Orange	5 m	

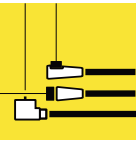
Other cable lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions. NPN versions with LED on request.



Special Properties

Weld spatter resistant PUR cables

M8 socket, 3 and 4-pin



Special Properties
High-temperature Resistant
IP 69K-ECOLAB
Weld Spatter Resistant PUR Cables
Y Connectors, Weld Spatter Resistant
High Durability Cable



4
3 1
PIN 1: brown
PIN 3: blue
PIN 4: black

1
3
4

60 V AC
60 V DC
Molded
3×0.34 mm²
IP 67
-25...+80 °C/-25...+80 °C

4
3 1
PIN 1: brown
PIN 3: blue
PIN 4: black

1
3
4

60 V AC
60 V DC
Molded
3×0.34 mm²
IP 67
-25...+80 °C/-25...+80 °C

4 2
3 1
PIN 1: brown
PIN 2: white
PIN 3: blue
PIN 4: black

1
2
3
4

30 V AC
30 V DC
Molded
4×0.34 mm²
IP 67
-25...+80 °C/-25...+80 °C

4 2
3 1
PIN 1: brown
PIN 2: white
PIN 3: blue
PIN 4: black

1
2
3
4

30 V AC
30 V DC
Molded
4×0.34 mm²
IP 67
-25...+80 °C/-25...+80 °C

Ordering code

Part number

BCC0C3A

BCC M313-0000-10-001-PW3334-050

BCC0C24

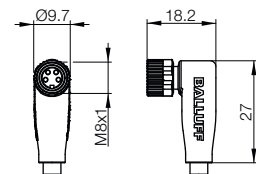
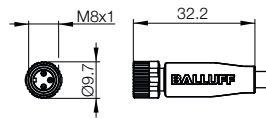
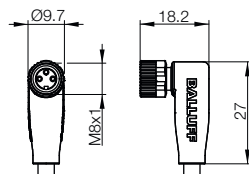
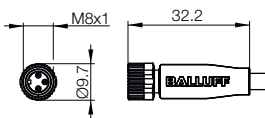
BCC M323-0000-10-001-PW3334-050

BCC0C21

BCC M314-0000-10-003-PW3434-050

BCC0C20

BCC M324-0000-10-003-PW3434-050



Special Properties

Weld spatter resistant PUR cables

M12 female, 3 and 4-pin

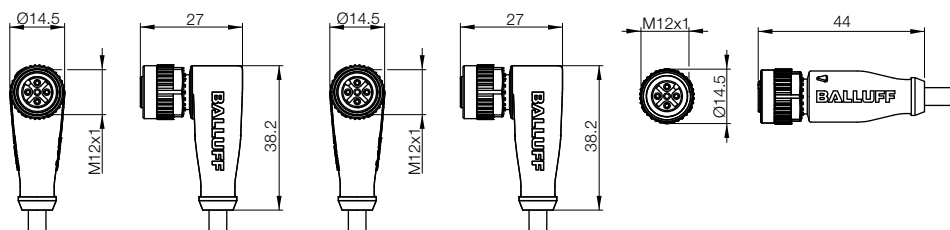
M12



Connector diagram and wiring				
Supply voltage U_B	250 V AC/DC	30 V DC	250 V AC/DC	
Cable	Molded	Molded	Molded	
No. of wires × conductor cross-section	3×0.34 mm ²	3×0.34 mm ²	4×0.34 mm ²	
Degree of protection as per IEC 60529	IP 68	IP 68	IP 68	
Ambient temperature T_a static/moving	-40...+80 °C/-25...+80 °C	-40...+80 °C/-25...+80 °C	-40...+80 °C/-25...+80 °C	
Use	Normally open (NO)	Normally open (NO)	Complementary (NO/NC)	
LED		2× (PNP), green, yellow		

Cable material	Color	Length	Ordering code	Part number	
PUR	Orange	1.5 m			
PUR	Orange	2 m	BCC086T	BCC09J8	BCC09J6
			BCC M425-0000-1A-001-PW3334-020	BCC M425-0000-1A-004-PW3334-020	BCC M415-0000-1A-003-PW3434-020
PUR	Orange	5 m	BCC086U	BCC08MZ	BCC0C23
			BCC M425-0000-1A-001-PW3334-050	BCC M425-0000-1A-004-PW3334-030	BCC M415-0000-1A-003-PW3434-050
PUR	Orange	7.5 m			
PUR	Orange	10 m	BCC086W	BCC08LE	BCC0C7W
			BCC M425-0000-1A-001-PW3334-100	BCC M425-0000-1A-004-PW3334-100	BCC M415-0000-1A-003-PW3434-100

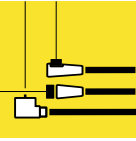
Other cable lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions. NPN versions with LED on request.



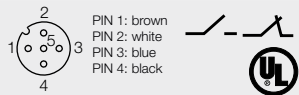
Special Properties

Weld spatter resistant PUR cables

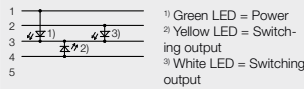
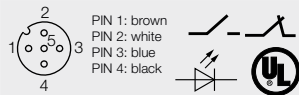
M12 female, 4 and 5-pin



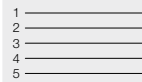
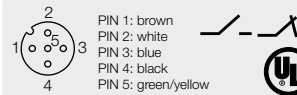
Special Properties
High-temperature resistant
IP 69K-ECOLAB
Weld Spatter Resistant PUR Cables
Y Connectors, Weld Spatter Resistant
High Durability Cable



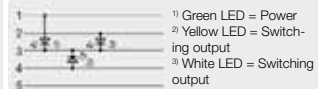
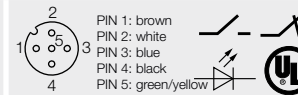
250 V AC/DC
Molded
4x0.34 mm²
IP 68
-40...+80 °C/-25...+80 °C
Complementary (NO/NC) — / — / —
3x (PNP), green, yellow, white



30 V DC
Molded
4x0.34 mm²
IP 68
-40...+80 °C/-25...+80 °C
Complementary (NO/NC) — / — / —
3x (PNP), green, yellow, white



125 V AC/DC
Molded
5x0.34 mm²
IP 68
-40...+80 °C/-25...+80 °C
Complementary (NO/NC) — / — / —
3x (PNP), green, yellow, white

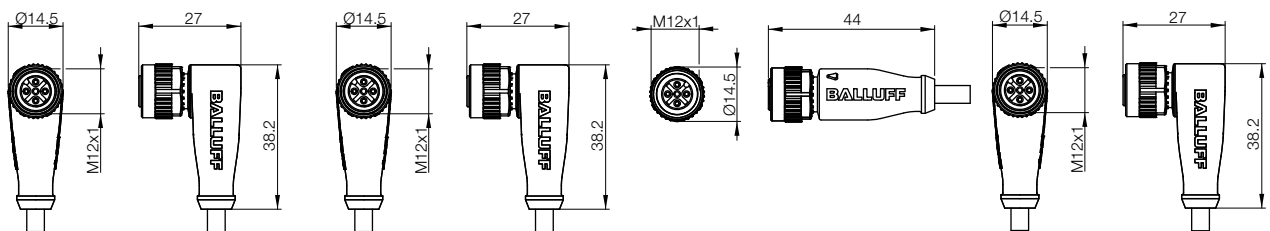


30 V DC
Molded
5x0.34 mm²
IP 68
-40...+80 °C/-25...+80 °C
Complementary (NO/NC) — / — / —
3x (PNP), green, yellow, white

Ordering code

Part number

		BCC087F BCC M415-0000-1A-034-PW3534-015	BCC087L BCC M425-0000-1A-040-PW3534-015
	BCC0C3Z BCC M425-0000-1A-099-PW3434-020		
BCC0C22 BCC M425-0000-1A-003-PW3434-050	BCC0C41 BCC M425-0000-1A-099-PW3434-050	BCC087H BCC M415-0000-1A-034-PW3534-050	BCC087M BCC M425-0000-1A-040-PW3534-050
		BCC087J BCC M415-0000-1A-034-PW3534-075	BCC087N BCC M425-0000-1A-040-PW3534-075
	BCC0C42 BCC M425-0000-1A-099-PW3434-100	BCC087K BCC M415-0000-1A-034-PW3534-100	BCC087P BCC M425-0000-1A-040-PW3534-100



Special Properties

Weld spatter resistant PUR cables

M12 female, 5-pin

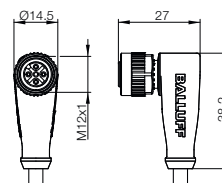
M12



Connector diagram and wiring	PIN 1: brown PIN 2: white PIN 3: blue PIN 4: black PIN 5: green/yellow ¹⁾ Green LED = Power ²⁾ Yellow LED = Switching output ³⁾ Red LED = Switching output	
Supply voltage DC U _S	30 V DC	
Cable	Molded	
No. of wires × conductor cross-section	5×0.34 mm ²	
Degree of protection as per IEC 60529	IP 68	
Ambient temperature T _a static/moving	−40...+80 °C/−25...+80 °C	
Use	Complementary (NO/NC) /	
LED	3× (PNP), green, yellow, red	

Cable material	Color	Length	Ordering code	
PUR	Orange	0.3 m	Part number	
PUR	Orange	0.6 m		
PUR	Orange	1 m		
PUR	Orange	1.5 m		
PUR	Orange	2 m	BCC0C7U	
PUR	Orange	3 m	BCC M425-0000-1A-100-PW3534-020	
PUR	Orange	5 m	BCC0C7T	
PUR	Orange	10 m	BCC M425-0000-1A-100-PW3534-050	
PUR	Orange		BCC0C7R	
PUR	Orange		BCC M425-0000-1A-100-PW3534-100	

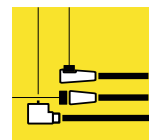
Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions with LED on request.



Special Properties

Weld spatter resistant PUR connection cables

M12 female ↔ M12 male, 4 or 5-pin



Special Properties

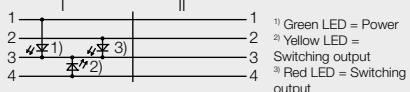
High-temperature resistant

IP 69K-ECOLAB

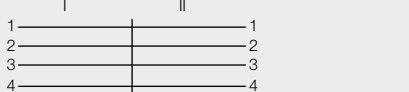
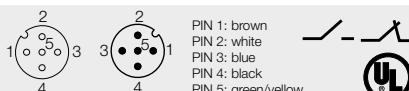
Weld Spatter Resistant PUR Cables

Y Connectors, Weld Spatter Resistant

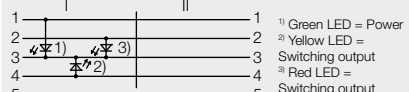
High Durability Cable



30 V DC
Molded
4×0.34 mm²
IP 68
-40...+80 °C/-25...+80 °C
Complementary (NO/NC) $\swarrow$ - / $\searrow$
3× (PNP), green, yellow, red



30 V DC
Molded
5×0.34 mm²
IP 68
-40...+80 °C/-25...+80 °C
Complementary (NO/NC) $\swarrow$ - / $\searrow$

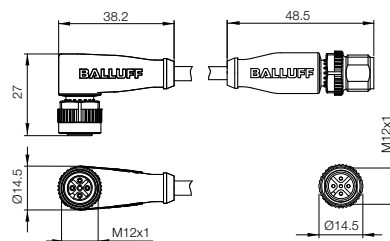
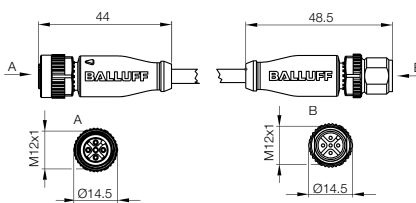
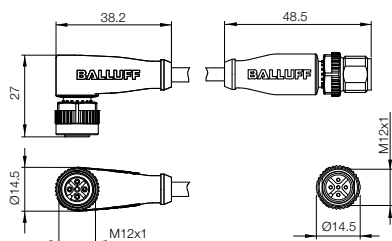


30 V DC
Molded
5×0.34 mm²
IP 68
-40...+80 °C/-25...+80 °C
Complementary (NO/NC) $\swarrow$ - / $\searrow$
3× (PNP), green, yellow, red

Ordering code

Part number

BCC0C4K BCC M425-M414-3A-691-PW3434-003	BCC087R BCC M415-M415-3A-313-PW3534-006	BCC0C4T BCC M425-M415-3A-692-PW3534-003
BCC0C52 BCC M425-M414-3A-691-PW3434-006	BCC087T BCC M415-M415-3A-313-PW3534-010	BCC0C4U BCC M425-M415-3A-692-PW3534-006
BCC0C4L BCC M425-M414-3A-691-PW3434-010	BCC087U BCC M415-M415-3A-313-PW3534-015	BCC0C4W BCC M425-M415-3A-692-PW3534-010
BCC0C4M BCC M425-M414-3A-691-PW3434-015	BCC087W BCC M415-M415-3A-313-PW3534-020	BCC0C4Y BCC M425-M415-3A-692-PW3534-015
BCC0C4N BCC M425-M414-3A-691-PW3434-020	BCC09M2 BCC M415-M415-3A-313-PW3534-030	BCC0C4Z BCC M425-M415-3A-692-PW3534-020
BCC0C4P BCC M425-M414-3A-691-PW3434-030	BCC09M1 BCC M415-M415-3A-313-PW3534-050	BCC0C50 BCC M425-M415-3A-692-PW3534-030
BCC0C4R BCC M425-M414-3A-691-PW3434-050		BCC0C51 BCC M425-M415-3A-692-PW3534-050



Special Properties

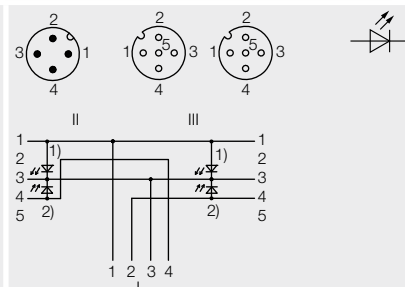
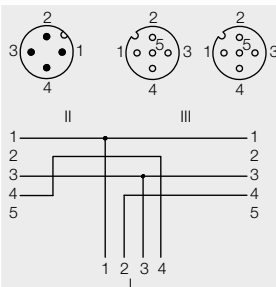
Weld spatter resistant PUR cables

Y connectors

M12



Connector diagram and wiring



Supply voltage AC U_s
Supply voltage DC U_s
Cable
No. of wires $\times$ conductor cross-section

250 V AC
250 V DC
Molded
 $3 \times 0.34 \text{ mm}^2$

30 V DC
Molded
 $3 \times 0.34 \text{ mm}^2$

Degree of protection as per IEC 60529
Ambient temperature T_a static/moving

IP 67
 $-40 \dots +80 \text{ }^\circ\text{C} / -25 \dots +80 \text{ }^\circ\text{C}$

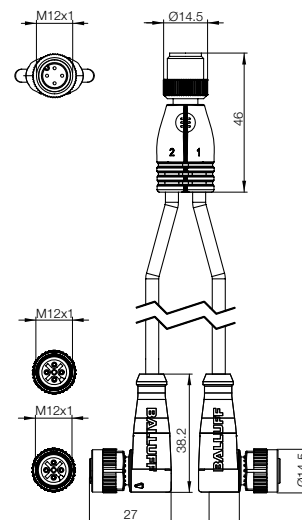
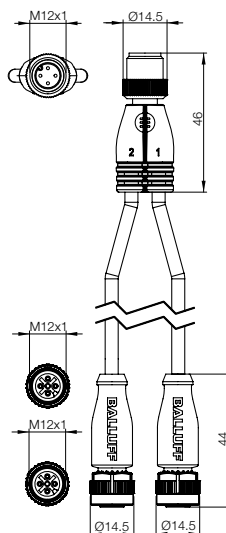
IP 67
 $-40 \dots +80 \text{ }^\circ\text{C} / -25 \dots +80 \text{ }^\circ\text{C}$

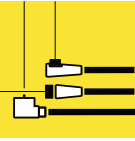
LED

2 $\times$ (PNP), green, yellow

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Orange	0.3 m	BCC0C7A BCC M414-M415-M415-U2032-003	BCC0CA2 BCC M414-M425-M425-U2035-003
PUR	Orange	0.6 m	BCC0C7C BCC M414-M415-M415-U2032-006	BCC0CA3 BCC M414-M425-M425-U2035-006
PUR	Orange	1 m	BCC0C7E BCC M414-M415-M415-U2032-010	BCC0CA4 BCC M414-M425-M425-U2035-010
PUR	Orange	2 m		BCC0CA5 BCC M414-M425-M425-U2035-020
PUR	Orange	3 m		BCC0CA6 BCC M414-M425-M425-U2035-030

Other cable lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions. NPN versions with LED on request.





Special Properties

High-temperature
Resistant

IP 69K-ECOLAB

Weld Spatter
Resistant
PUR Cables

**Y Connectors,
Weld Spatter
Resistant**

High Durability
Cable

NEW - High durability cable

Wherever connectors and cables are used in the immediate vicinity of welding work, they are subjected to extremely high stress from welding residue such as weld spatter and slag. Conventional versions are not an option in this harsh environment, as they would soon be rendered useless. In these applications, special weld-immune versions provide the solution, such as those just added by Balluff to its BCC product line. The newly developed cables have proven their particular suitability for long-term use compared to existing solutions in comprehensive tests.

Benefits

- Extremely resistant to sparks and weld spatter
- Reduction in machine downtime
- Resistant to short-time high temperature loads

Connector diagram
and wiring

Supply voltage AC U_S
Supply voltage DC U_S
Cable
No. of wires $\times$ conductor cross-section
Degree of protection as per IEC 60529
Ambient temperature T_a
Maximum temperature at outer jacket
caused by weld spatter/beads
Use

Cable material	Color	Length
Silicone	Black	2 m
Silicone	Black	3 m
Silicone	Black	5 m

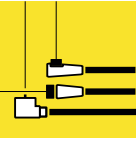
Other cable materials, colors and lengths
on request.
Connectors without LED are suitable for
PNP and NPN switching functions.
NPN versions with LED on request.



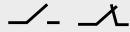
Special Properties

High durability cable, silicone cable

M12 male, 4-pin



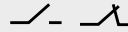
Special Properties
 High-temperature
 Resistant
 IP 69K-ECOLAB
 Weld Spatter
 Resistant
 PUR Cables
 Y Connectors,
 Weld Spatter
 Resistant
**High Durability
 Cable**



1
2
3
4
5

250 V AC
 250 V DC
 Molded
 4x0.34 mm²
 IP 67
 -60 °C...+200 °C
 Short-time 800 °C

Complementary (NO/NC) /



1
2
3
4
5

250 V AC
 250 V DC
 Molded
 4x0.34 mm²
 IP 67
 -60 °C...+200 °C
 Short-time 800 °C

Complementary (NO/NC) /

Ordering code

Part number

BCC0EFY

BCC W415-0000-1A-003-SW0434-020

BCC0EFZ

BCC W425-0000-1A-003-SW0434-020

BCC0EUY

BCC W415-0000-1A-003-SW0434-030

BCC0EW0

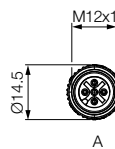
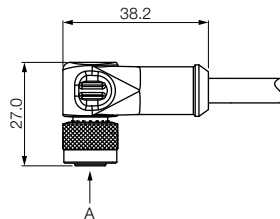
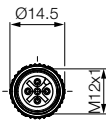
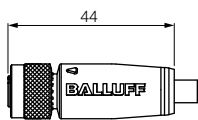
BCC W425-0000-1A-003-SW0434-030

BCC0EUZ

BCC W415-0000-1A-003-SW0434-050

BCC0EW1

BCC W425-0000-1A-003-SW0434-050



Special Properties
High durability cable, silicone cable
M8 female ↔ M8 or M12 male, 3 and 4-pin

M8 ↔ M8
M8/M12 ↔ M12

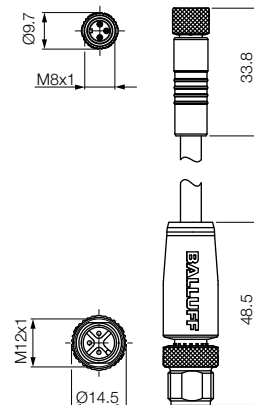
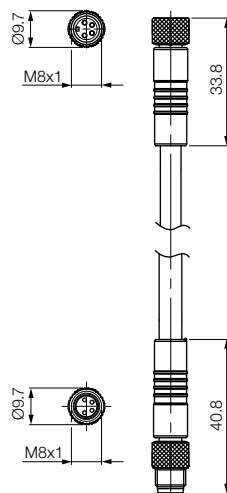


Connector diagram and wiring		
Supply voltage AC U_S	250 V AC	250 V AC
Supply voltage DC U_S	250 V DC	250 V DC
Cable	Molded	Molded
No. of wires × conductor cross-section	4×0.34 mm ²	3×0.34 mm ²
Degree of protection as per IEC 60529	IP 67	IP 67
Ambient temperature T_a	−60 °C...+200 °C	−60 °C...+200 °C
Maximum temperature at outer jacket caused by weld spatter/beads	Short-time 800 °C	Short-time 800 °C
Use	Complementary (NO/NC) /	Normally open (NO)

Cable material	Color	Length	Ordering code	
			Part number	
Silicone	Black	0.3 m	BCC0EH7	BCC0EMH
			BCC W314-W314-30-304-SW0434-003	BCC W313-W413-3E-300-SW0334-003
Silicone	Black	0.6 m	BCC0EH8	BCC0EMJ
			BCC W314-W314-30-304-SW0434-006	BCC W313-W413-3E-300-SW0334-006
Silicone	Black	1 m	BCC0EH9	BCC0EMK
			BCC W314-W314-30-304-SW0434-010	BCC W313-W413-3E-300-SW0334-010
Silicone	Black	1.5 m	BCC0EHA	
			BCC W314-W314-30-304-SW0434-015	
Silicone	Black	2 m	BCC0EHC	
			BCC W314-W314-30-304-SW0434-020	
Silicone	Black	3 m	BCC0EHE	
			BCC W314-W314-30-304-SW0434-030	
Silicone	Black	5 m	BCC0EHF	
			BCC W314-W314-30-304-SW0434-050	

Other cable materials, colors and lengths on request.

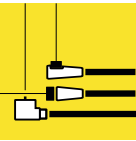
Connectors without LED are suitable for PNP and NPN switching functions.
 NPN versions with LED on request.



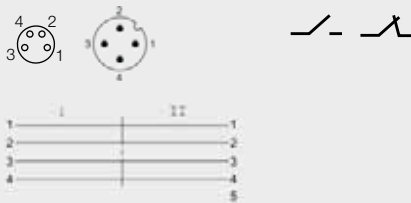
Special Properties

High durability cable, silicone cable

M8 or M12 female ↔ M12 male, 4-pin



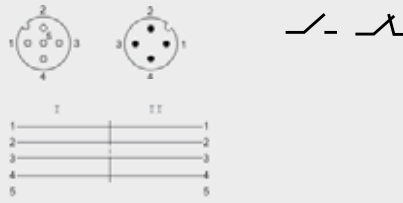
Special Properties
High-temperature resistant
IP 69K-ECOLAB
Weld Spatter Resistant
PUR Cables
Y Connectors, Weld Spatter Resistant
High Durability Cable



250 V AC
250 V DC
Molded
4×0.34 mm²

IP 67
-60 °C...+200 °C
Short-time 800 °C

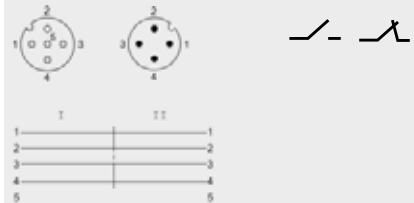
Complementary (NO/NC) /- / -



250 V AC
250 V DC
Molded
4×0.34 mm²

IP 67
-60 °C...+200 °C
Short-time 800 °C

Complementary (NO/NC) /- / -



250 V AC
250 V DC
Molded
4×0.34 mm²

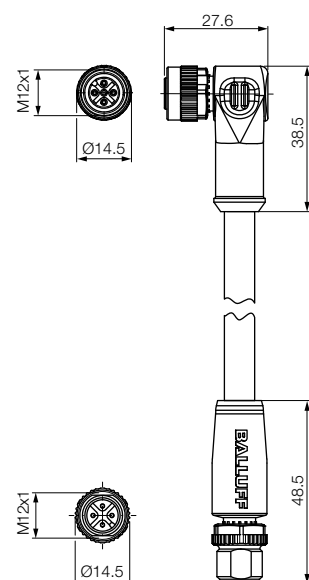
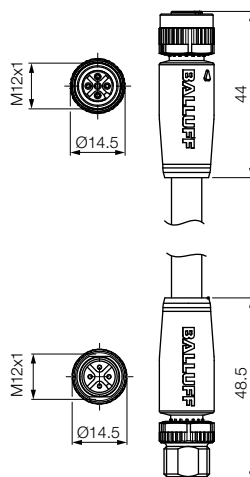
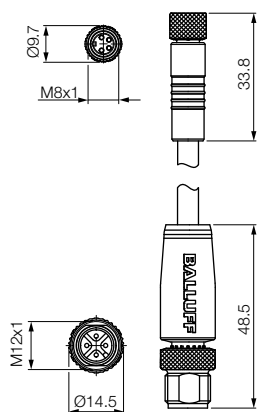
IP 67
-60 °C...+200 °C
Short-time 800 °C

Complementary (NO/NC) /- / -

Ordering code

Part number

BCC0EH0 BCC W314-W414-3E-304-SW0434-003	BCC0ELW BCC W415-W414-3A-304-SW0434-003	BCC0EU7 BCC W425-W414-3A-304-SW0434-003
BCC0EH1 BCC W314-W414-3E-304-SW0434-006	BCC0ELY BCC W415-W414-3A-304-SW0434-006	BCC0EU8 BCC W425-W414-3A-304-SW0434-006
BCC0EH2 BCC W314-W414-3E-304-SW0434-010	BCC0ELZ BCC W415-W414-3A-304-SW0434-010	BCC0EU9 BCC W425-W414-3A-304-SW0434-010
BCC0EH3 BCC W314-W414-3E-304-SW0434-015	BCC0EM0 BCC W415-W414-3A-304-SW0434-015	BCC0EUA BCC W425-W414-3A-304-SW0434-015
BCC0EH4 BCC W314-W414-3E-304-SW0434-020	BCC0EM1 BCC W415-W414-3A-304-SW0434-020	BCC0EUC BCC W425-W414-3A-304-SW0434-020
BCC0EH5 BCC W314-W414-3E-304-SW0434-030	BCC0EUU BCC W415-W414-3A-304-SW0434-030	
BCC0EH6 BCC W314-W414-3E-304-SW0434-050	BCC0EUW BCC W415-W414-3A-304-SW0434-050	

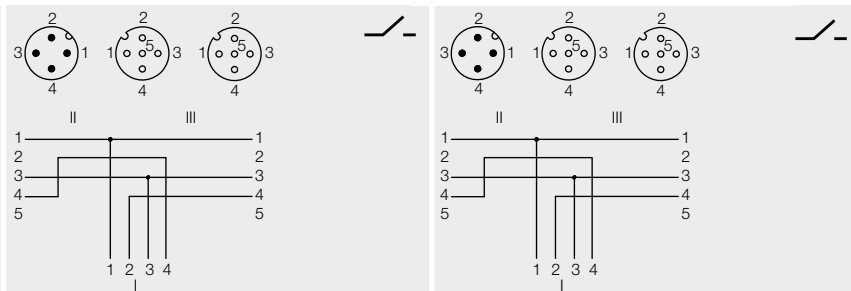


Special Properties
High durability cable, silicone cable
Y connectors, 3-pin

M8/M12



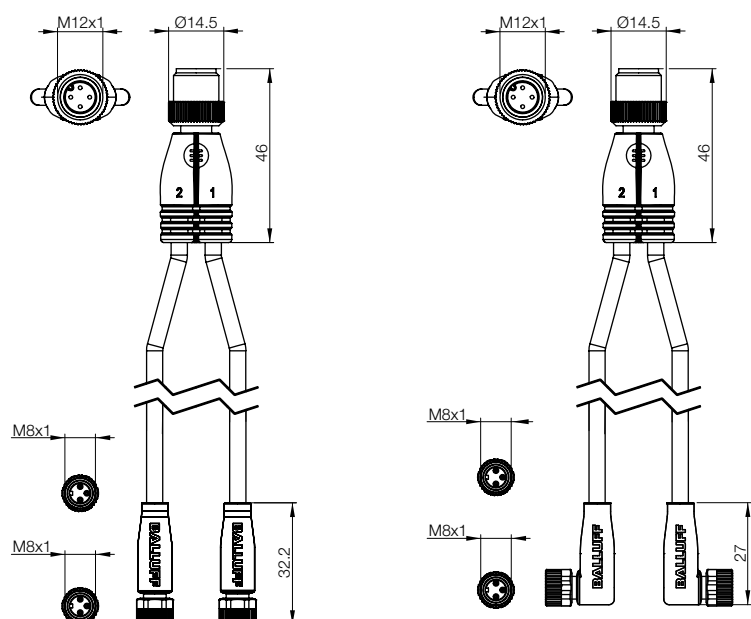
Connector diagram
and wiring



Supply voltage AC U_s	250 V AC	250 V AC
Supply voltage DC U_s	250 V DC	250 V DC
Cable	Molded	Molded
No. of wires × conductor cross-section	3×0.34 mm ²	3×0.34 mm ²
Degree of protection as per IEC 60529	IP 67	IP 67
Ambient temperature T_a	−60...+200 °C	−60...+200 °C
Maximum temperature at outer jacket caused by weld spatter/beads	Short-time 800 °C	Short-time 800 °C
Use	Normally open (NO) ✓-	Normally open (NO) ✓-

Cable material	Color	Length	Ordering code	
			Part number	
Silicone	Black	0.3 m	BCC0EW7 BCC W314-W313-W313-U2050-003	BCC0EW9 BCC W314-W323-W323-U2050-003
Silicone	Black	0.6 m	BCC0EW8 BCC W314-W313-W313-U2050-006	BCC0EWA BCC W314-W323-W323-U2050-006

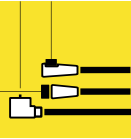
Other cable lengths on request.
Connectors without LED are suitable for
PNP and NPN switching functions.
NPN versions with LED on request.



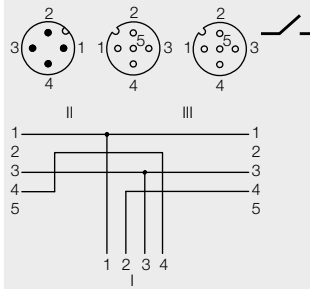
Special Properties

High durability cable, silicone cable

Y connectors, 3-pin



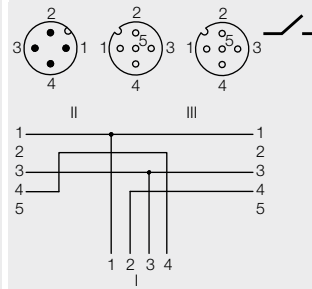
Special Properties
High-temperature resistant
IP 69K-ECOLAB
Weld Spatter Resistant
PUR Cables
Y Connectors, Weld Spatter Resistant
High Durability Cable



250 V AC
250 V DC
Molded
3x0.34 mm²

IP 67
-60...+200 °C
Short-time 800 °C

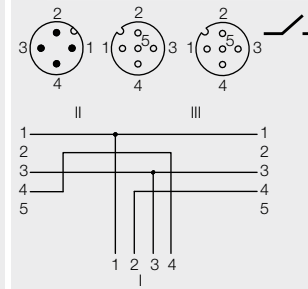
Normally open (NO) —



250 V AC
250 V DC
Molded
3x0.34 mm²

IP 67
-60...+200 °C
Short-time 800 °C

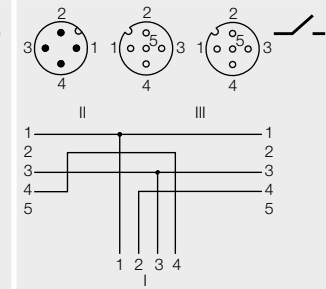
Normally open (NO) —



250 V AC
250 V DC
Molded
3x0.34 mm²

IP 67
-60...+200 °C
Short-time 800 °C

Normally open (NO) —



250 V AC
250 V DC
Molded
3x0.34 mm²

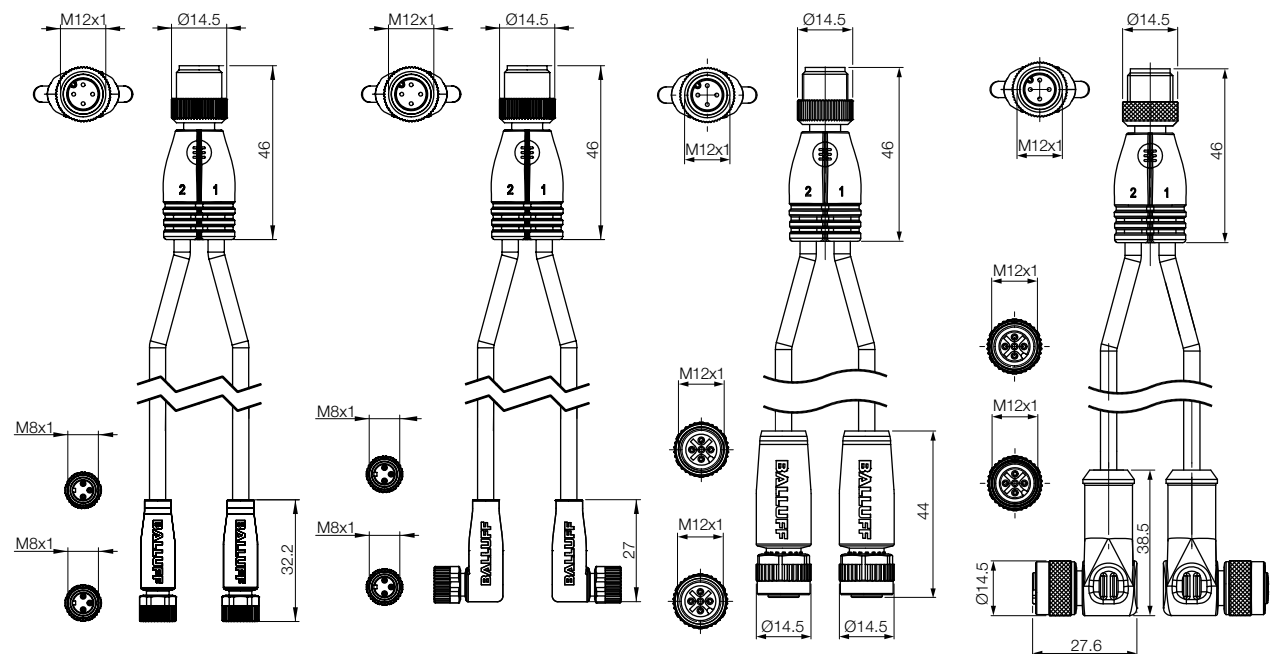
IP 67
-60...+200 °C
Short-time 800 °C

Normally open (NO)

Ordering code

Part number

BCC0EW3	BCC0EW5	BCC0EHM	BCC0EHP
BCC W414-W313-W313-U2049-003	BCC W414-W323-W323-U2049-003	BCC W414-W415-W415-U2046-003	BCC W414-W425-W425-U2046-003
BCC0EW4	BCC0EW6	BCC0EHN	BCC0EHR
BCC W414-W313-W313-U2049-006	BCC W414-W323-W323-U2049-006	BCC W414-W415-W415-U2046-006	BCC W414-W425-W425-U2046-006



Special Properties

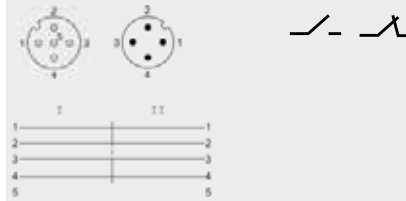
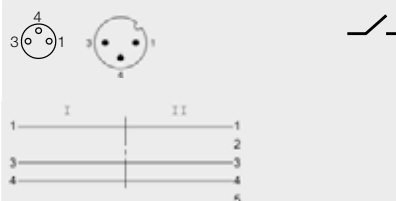
High durability cable, silicone-free cable

M8 and M12 female ↔ M12 male, 3 and 4-pin

M8 ↔ M12
M12 ↔ M12



Connector diagram
and wiring



Supply voltage AC U_s

250 V AC

250 V AC

Supply voltage DC U_s

250 V DC

250 V DC

Cable

Molded

Molded

No. of wires × conductor cross-section

3×0.34 mm²

4×0.34 mm²

Degree of protection as per IEC 60529

IP 67

IP 67

Ambient temperature T_a static/moving

−50 °C...+130 °C/ −40 °C...+125 °C

−50 °C...+130 °C/ −40 °C...+125 °C

Maximum temperature at outer jacket
caused by weld spatter/beads

Short-time 800 °C

Short-time 800 °C

Use

Normally open (NO)

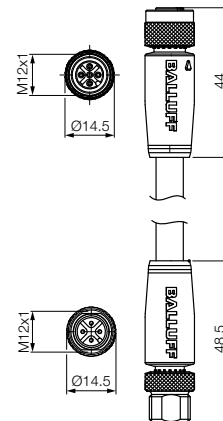
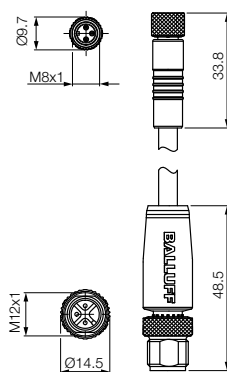
Complementary (NO/NC) /

Cable material	Color	Length	Ordering code	
			Part number	
TPE	Black	0.3 m	BCC0EHY	BCC0EJA
			BCC W313-W413-3E-300-BW8334-003	BCC W415-W414-3A-304-BW8434-003
TPE	Black	0.6 m	BCC0EHZ	BCC0EJC
			BCC W313-W413-3E-300-BW8334-006	BCC W415-W414-3A-304-BW8434-006
TPE	Black	1 m	BCC0EJO	BCC0EJE
			BCC W313-W413-3E-300-BW8334-010	BCC W415-W414-3A-304-BW8434-010
TPE	Black	1.5 m		BCC0EJF
				BCC W415-W414-3A-304-BW8434-015
TPE	Black	2 m		BCC0EJH
				BCC W415-W414-3A-304-BW8434-020
TPE	Black	5 m		BCC0EJJ
				BCC W415-W414-3A-304-BW8434-050

Other cable materials, colors and lengths
on request.

Connectors without LED are suitable for
PNP and NPN switching functions.

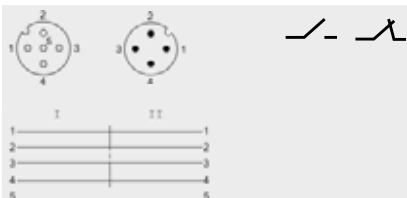
NPN versions with LED on request.



Special Properties

High durability cable, silicone-free cable

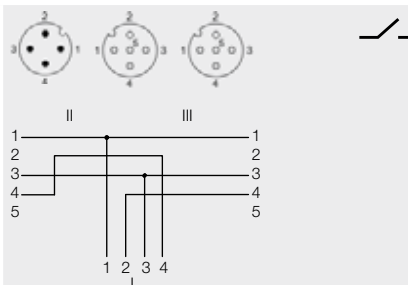
M12 female ↔ M12 male, Y connector, 4-pin



250 V AC
250 V DC
Molded
4x0.34 mm²

IP 67
-50 °C...+130 °C/ -40 °C...+125 °C
Short-time 800 °C

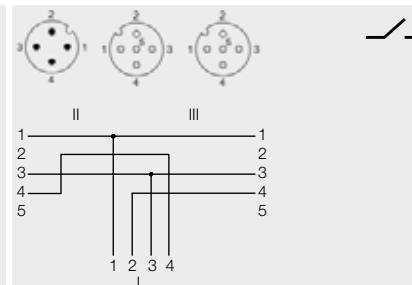
Complementary (NO/NC) /



250 V AC
250 V DC
Molded
4x0.34 mm²

IP 67
-50 °C...+130 °C/ -40 °C...+125 °C
Short-time 800 °C

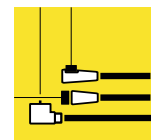
Normally open (NO)



250 V AC
250 V DC
Molded
4x0.34 mm²

IP 67
-50 °C...+130 °C/ -40 °C...+125 °C
Short-time 800 °C

Normally open (NO)



Special Properties

High-temperature Resistant

IP 69K-ECOLAB

Weld Spatter Resistant
PUR Cables

Y Connectors, Weld Spatter Resistant

High Durability Cable

Ordering code

Part number

BCC0EM8

BCC W425-W414-3A-304-BW8434-003

BCC0EM9

BCC W425-W414-3A-304-BW8434-006

BCC0EMA

BCC W425-W414-3A-304-BW8434-010

BCC0EMC

BCC W425-W414-3A-304-BW8434-015

BCC0EME

BCC W425-W414-3A-304-BW8434-020

BCC0EMF

BCC W425-W414-3A-304-BW8434-050

BCC0EHH

BCC W414-W415-W415-U2044-003

BCC0EHJ

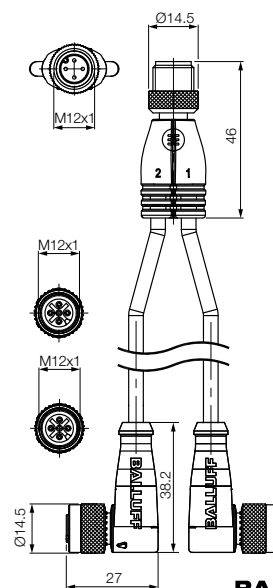
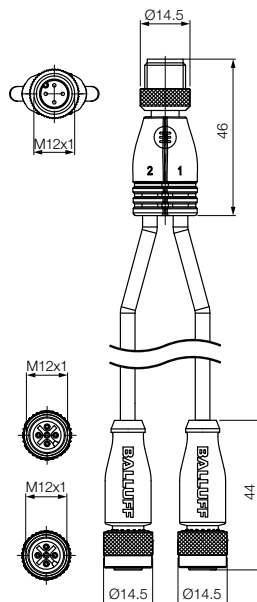
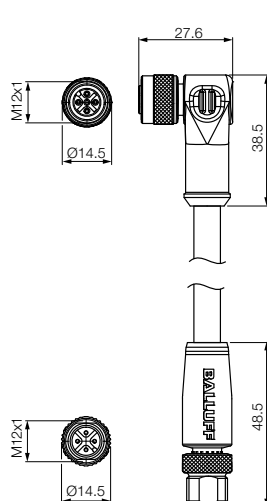
BCC W414-W415-W415-U2044-006

BCC0EHL

BCC W414-W425-W425-U2044-003

BCC0EHL

BCC W414-W425-W425-U2044-006



Special Properties

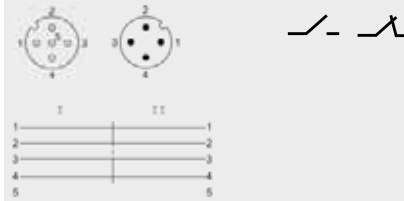
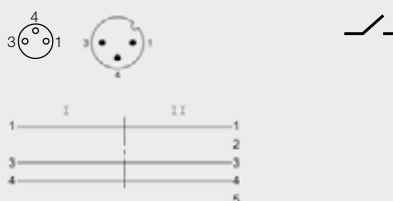
High durability cable, PTFE cable

M8 and M12 female ↔ M12 male, 3 and 4-pin

M8 ↔ M12
M12 ↔ M12



Connector diagram
and wiring



Supply voltage AC U_s
Supply voltage DC U_s
Cable
No. of wires × conductor cross-section

Degree of protection as per IEC 60529
Ambient temperature T_a
Maximum temperature at outer jacket
caused by weld spatter/beads
Use

250 V AC
250 V DC
Molded
3×0.34 mm²

250 V AC
250 V DC
Molded
4×0.34 mm²

IP 67
−40 °C...+200 °C
Short-time 800 °C

IP 67
−40 °C...+200 °C
Short-time 800 °C

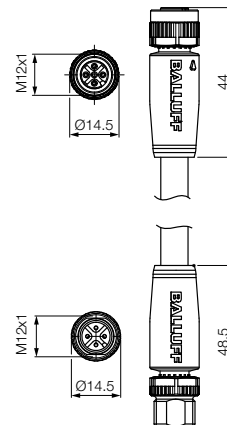
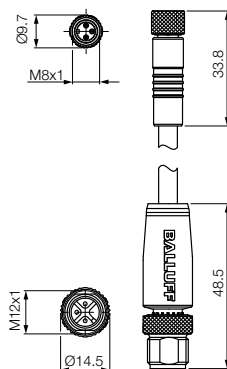
Normally open (NO)

Complementary (NO/NC) /

Cable material	Color	Length	Ordering code	
			Part number	
FEP	Black	0.3 m	BCC0EHT BCC W313-W413-3E-300-TW0334-003	BCC0EJ4 BCC W415-W414-3A-304-TW0434-003
FEP	Black	0.6 m	BCC0EHU BCC W313-W413-3E-300-TW0334-006	BCC0EJ5 BCC W415-W414-3A-304-TW0434-006
FEP	Black	1 m	BCC0EHW BCC W313-W413-3E-300-TW0334-010	BCC0EJ6 BCC W415-W414-3A-304-TW0434-010
FEP	Black	1.5 m		BCC0EJ7 BCC W415-W414-3A-304-TW0434-015
FEP	Black	2 m		BCC0EJ8 BCC W415-W414-3A-304-TW0434-020
FEP	Black	5 m		BCC0EJ9 BCC W415-W414-3A-304-TW0434-050

Other cable materials, colors and lengths
on request.

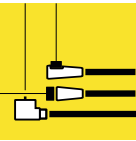
Connectors without LED are suitable for
PNP and NPN switching functions.
NPN versions with LED on request.



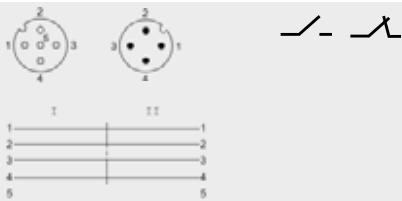
Special Properties

High durability cable, PTFE cable

M12 female ↔ M12 male, Y connector, 4-pin

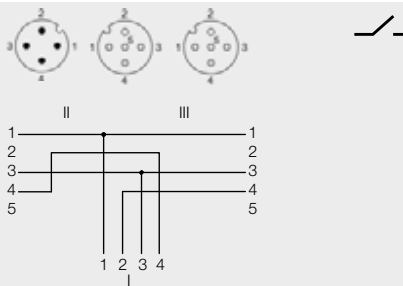


Special Properties
 High-temperature Resistant
 IP 69K-ECOLAB
 Weld Spatter Resistant
 PUR Cables
 Y Connectors, Weld Spatter Resistant
 High Durability Cable



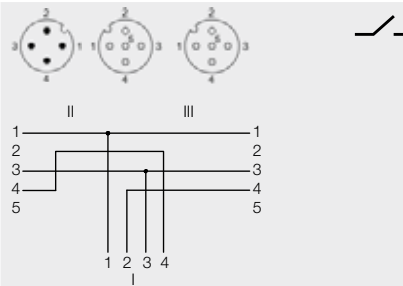
250 V AC
 250 V DC
 Molded
 4x0.34 mm²
 IP 67
 -40 °C...+200 °C
 Short-time 800 °C

Complementary (NO/NC) /



250 V AC
 250 V DC
 Molded
 4x0.34 mm²
 IP 67
 -40 °C...+200 °C
 Short-time 800 °C

Normally open (NO)



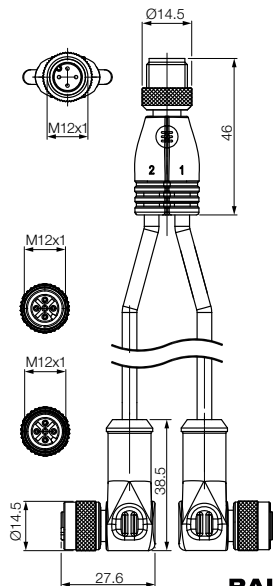
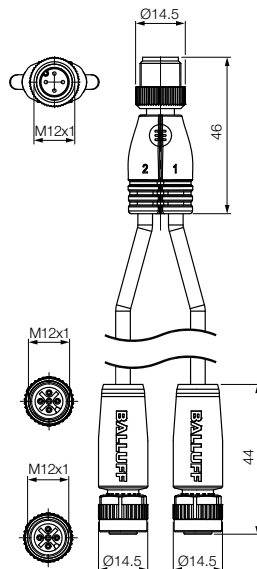
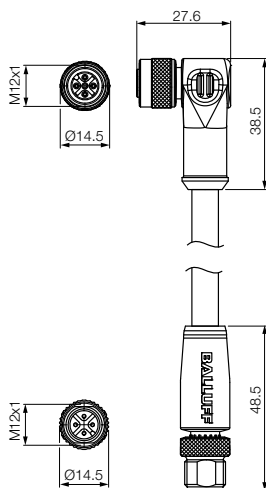
250 V AC
 250 V DC
 Molded
 4x0.34 mm²
 IP 67
 -40 °C...+200 °C
 Short-time 800 °C

Normally open (NO)

Ordering code

Part number

BCC0EM2 BCC W425-W414-3A-304-TW0434-003	BCC0EFF BCC W414-W415-W415-U2048-003	BCC0EFJ BCC W414-W425-W425-U2048-003
BCC0EM3 BCC W425-W414-3A-304-TW0434-006	BCC0EFH BCC W414-W415-W415-U2048-006	BCC0EFK BCC W414-W425-W425-U2048-006
BCC0EM4 BCC W425-W414-3A-304-TW0434-010		
BCC0EM5 BCC W425-W414-3A-304-TW0434-015		
BCC0EM6 BCC W425-W414-3A-304-TW0434-020		
BCC0EM7 BCC W425-W414-3A-304-TW0434-050		



Special Properties

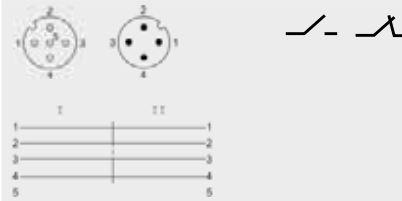
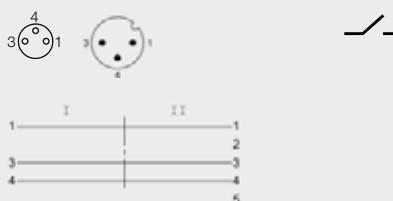
High durability cable, glass fiber cloth hose cable

M8 and M12 female ↔ M12 male, 3 and 4-pin

M8 ↔ M12
M12 ↔ M12



Connector diagram
and wiring



Supply voltage AC U_s
Supply voltage DC U_s
Cable
No. of wires × conductor cross-section

Degree of protection as per IEC 60529
Ambient temperature T_a static/moving
Maximum temperature at outer jacket
caused by weld spatter/beads
Use

250 V AC
250 V DC
Molded
3×0.34 mm²

IP 67
−40 °C...+180 °C/−25 °C...+180 °C
Short-time 800 °C
Normally open (NO) — / —

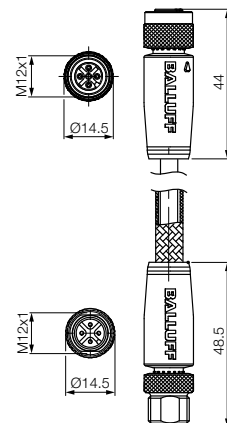
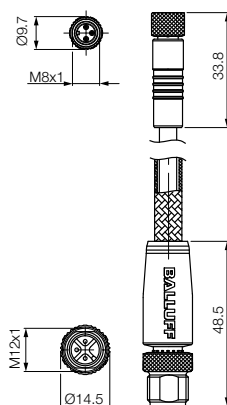
250 V AC
250 V DC
Molded
4×0.34 mm²

IP 67
−40 °C...+180 °C/−25 °C...+180 °C
Short-time 800 °C
Complementary (NO/NC) — / —

Cable material	Color	Length	Ordering code	
			Part number	
PUR/glass fiber cloth	Black	0.3 m	BCC0EJ1 BCC W313-W413-3E-300-FW9334-003	BCC0ELM BCC W415-W414-3A-304-FW9434-003
PUR/glass fiber cloth	Black	0.6 m	BCC0EJ2 BCC W313-W413-3E-300-FW9334-006	BCC0ELN BCC W415-W414-3A-304-FW9434-006
PUR/glass fiber cloth	Black	1 m	BCC0EJ3 BCC W313-W413-3E-300-FW9334-010	BCC0ELP BCC W415-W414-3A-304-FW9434-010
PUR/glass fiber cloth	Black	1.5 m		BCC0ELR BCC W415-W414-3A-304-FW9434-015
PUR/glass fiber cloth	Black	2 m		BCC0ELT BCC W415-W414-3A-304-FW9434-020
PUR/glass fiber cloth	Black	5 m		BCC0ELU BCC W415-W414-3A-304-FW9434-050

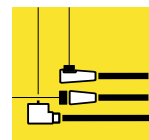
Other cable materials, colors and lengths
on request.

Connectors without LED are suitable for
PNP and NPN switching functions.
NPN versions with LED on request.



Special Properties

High durability cable, glass fiber cloth hose cable
M12 female ↔ M12 male, Y connector, 4-pin



Special Properties

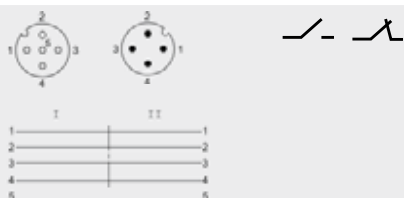
High-temperature Resistant

IP 69K-ECOLAB

Weld Spatter Resistant
PUR Cables

Y Connectors, Weld Spatter Resistant

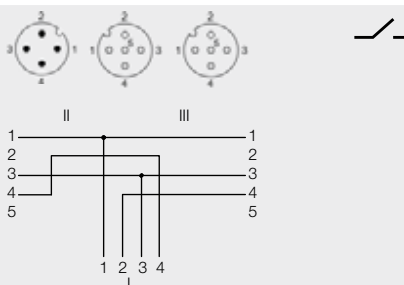
High Durability Cable



250 V AC
250 V DC
Molded
4x0.34 mm²

IP 67
-40 °C...+180 °C/-25 °C...+180 °C
Short-time 800 °C

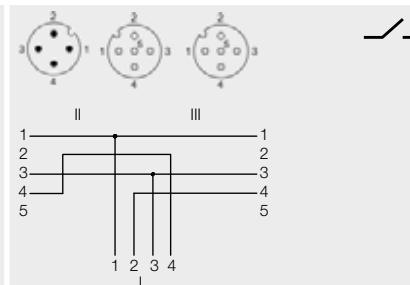
Complementary (NO/NC) /



250 V AC
250 V DC
Molded
4x0.34 mm²

IP 67
-40 °C...+180 °C/-25 °C...+180 °C
Short-time 800 °C

Normally open (NO)



250 V AC
250 V DC
Molded
4x0.34 mm²

IP 67
-40 °C...+180 °C/-25 °C...+180 °C
Short-time 800 °C

Normally open (NO)

Ordering code

Part number

BCC0EL7

BCC W425-W414-3A-304-FW9434-003

BCC0EL8

BCC W425-W414-3A-304-FW9434-006

BCC0EL9

BCC W425-W414-3A-304-FW9434-010

BCC0ELA

BCC W425-W414-3A-304-FW9434-015

BCC0ELC

BCC W425-W414-3A-304-FW9434-020

BCC0ELE

BCC W425-W414-3A-304-FW9434-050

BCC0EL3

BCC W414-W415-W415-U2045-003

BCC0EL4

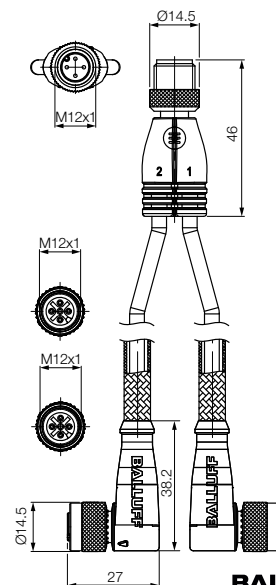
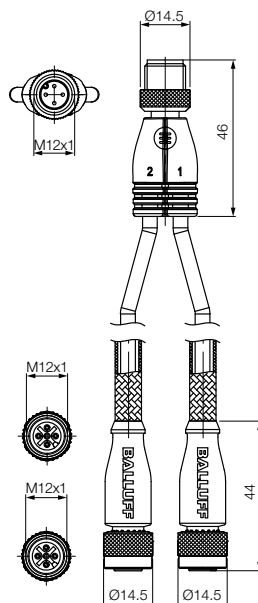
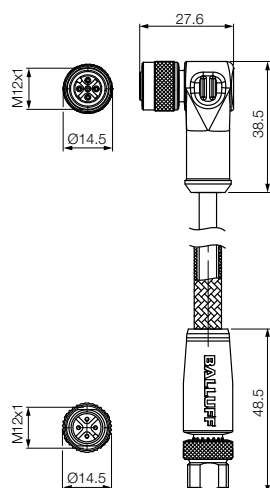
BCC W414-W415-W415-U2045-006

BCC0EL5

BCC W414-W425-W425-U2045-003

BCC0EL6

BCC W414-W425-W425-U2045-006



Special Properties
High durability cable, metal mesh hose cable
M12 female ↔ M12 male, 4-pin

M12 ↔ M12



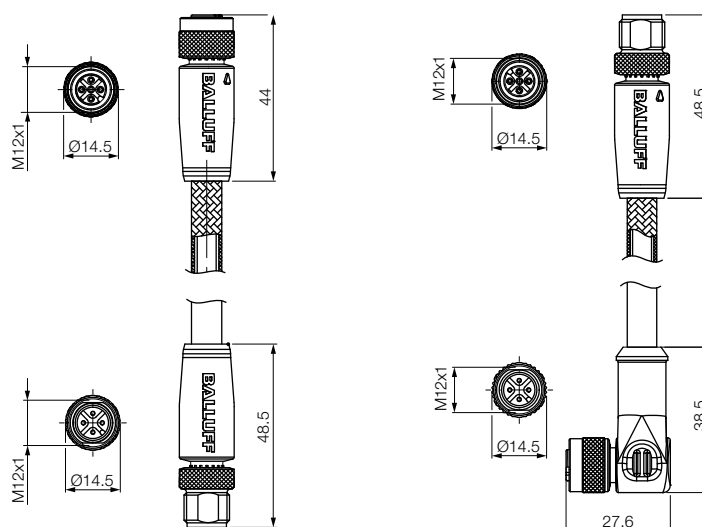
Connector diagram and wiring		
Supply voltage AC U_S	250 V AC	250 V AC
Supply voltage DC U_S	250 V DC	250 V DC
Cable	Molded	Molded
No. of wires × conductor cross-section	4×0.34 mm ²	4×0.34 mm ²
Degree of protection as per IEC 60529	IP 67	IP 67
Ambient temperature T_a static/moving	−40 °C...+80 °C/−25 °C...+80 °C	−40 °C...+80 °C/−25 °C...+80 °C
Use	Complementary (NO/NC) /	Complementary (NO/NC) /

Cable material	Color	Length	Ordering code	
			Part number	
PUR/metal mesh	Silver	0.3 m	BCC0EKP BCC W415-W414-3A-304-MW8434-003	BCC0EKA BCC W415-W424-3A-304-MW8434-003
PUR/metal mesh	Silver	0.6 m	BCC0EKR BCC W415-W414-3A-304-MW8434-006	BCC0EKC BCC W415-W424-3A-304-MW8434-006
PUR/metal mesh	Silver	1 m	BCC0EKT BCC W415-W414-3A-304-MW8434-010	BCC0EKE BCC W415-W424-3A-304-MW8434-010
PUR/metal mesh	Silver	1.5 m	BCC0EKU BCC W415-W414-3A-304-MW8434-015	BCC0EKF BCC W415-W424-3A-304-MW8434-015
PUR/metal mesh	Silver	2 m	BCC0EKW BCC W415-W414-3A-304-MW8434-020	BCC0EKH BCC W415-W424-3A-304-MW8434-020

Other cable materials, colors and lengths on request.

Connectors without LED are suitable for PNP and NPN switching functions.

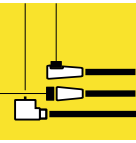
NPN versions with LED on request.



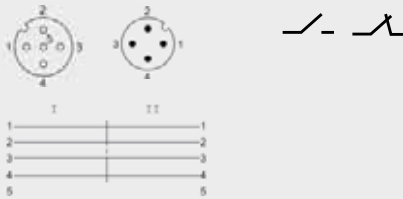
Special Properties

High durability cable, metal mesh hose cable

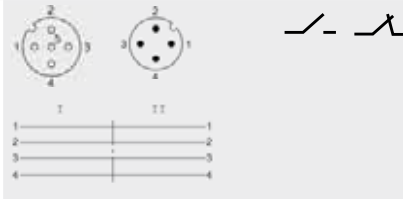
M12 female ↔ M12 male, 4-pin



Special Properties
 High-temperature Resistant
 IP 69K-ECOLAB
 Weld Spatter Resistant
 PUR Cables
 Y Connectors, Weld Spatter Resistant
 High Durability Cable



250 V AC
 250 V DC
 Molded
 4x0.34 mm²
 IP 67
 -40 °C...+80 °C/-25 °C...+80 °C
 Complementary (NO/NC) / - / -

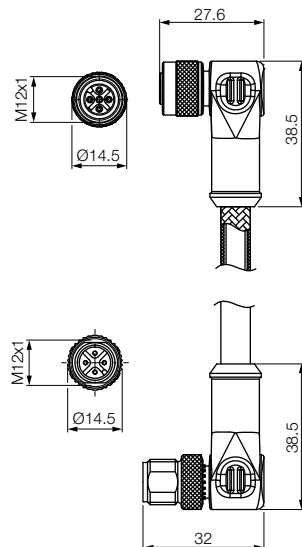
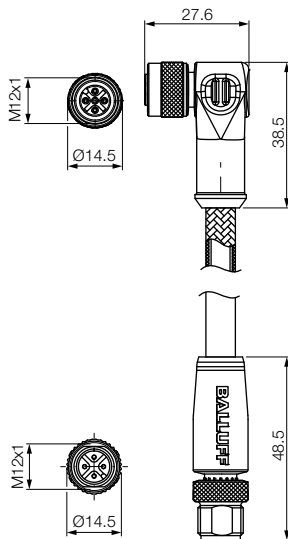


250 V AC
 250 V DC
 Molded
 4x0.34 mm²
 IP 67
 -40 °C...+80 °C/-25 °C...+80 °C
 Complementary (NO/NC) / - / -

Ordering code

Part number

BCC0EKY BCC W425-W414-3A-304-MW8434-003	BCC0EKJ BCC W425-W424-3A-304-MW8434-003
BCC0EKZ BCC W425-W414-3A-304-MW8434-006	BCC0EKK BCC W425-W424-3A-304-MW8434-006
BCC0EL0 BCC W425-W414-3A-304-MW8434-010	BCC0EKL BCC W425-W424-3A-304-MW8434-010
BCC0EL1 BCC W425-W414-3A-304-MW8434-015	BCC0EKM BCC W425-W424-3A-304-MW8434-015
BCC0EL2 BCC W425-W414-3A-304-MW8434-020	BCC0EKN BCC W425-W424-3A-304-MW8434-020



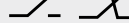
Special Properties

High durability cable, metal mesh hose cable

7/8" female ↔ 7/8" male, 4-pin

7/8" ↔ 7/8"



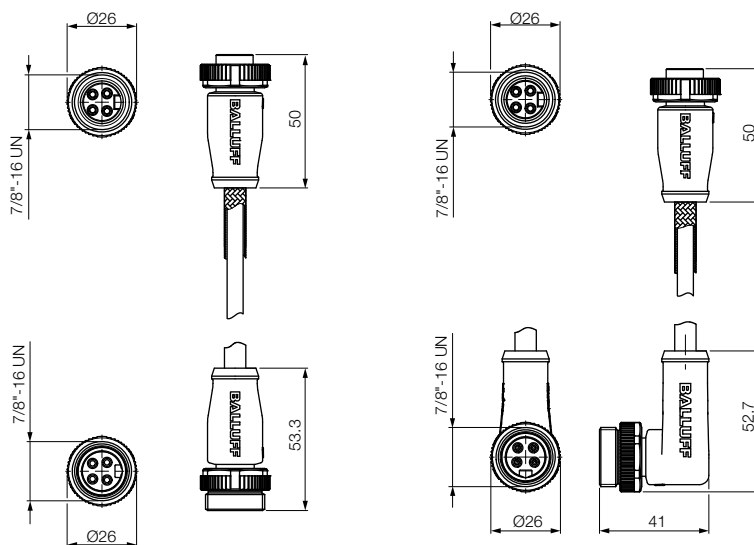
Connector diagram and wiring	  	  	
Supply voltage AC U _S	250 V AC	250 V AC	
Supply voltage DC U _S	250 V DC	250 V DC	
Cable	Molded	Molded	
No. of wires × conductor cross-section	4×0.34 mm ²	4×0.34 mm ²	
Degree of protection as per IEC 60529	IP 67	IP 67	
Ambient temperature T _a static/moving	−40 °C...+80 °C/−25 °C...+80 °C	−40 °C...+80 °C/−25 °C...+80 °C	
Use	Complementary (NO/NC)  / 	Complementary (NO/NC)  / 	

Cable material	Color	Length	Ordering code	
			Part number	
PUR/metal mesh	Silver	0.3 m	BCC0EJT	BCC0EK5
			BCC B314-B314-30-304-MW8434-003	BCC B314-B324-30-304-MW8434-003
PUR/metal mesh	Silver	0.6 m	BCC0EJU	BCC0EK6
			BCC B314-B314-30-304-MW8434-006	BCC B314-B324-30-304-MW8434-006
PUR/metal mesh	Silver	1 m	BCC0EJW	BCC0EK7
			BCC B314-B314-30-304-MW8434-010	BCC B314-B324-30-304-MW8434-010
PUR/metal mesh	Silver	1.5 m	BCC0EJY	BCC0EK8
			BCC B314-B314-30-304-MW8434-015	BCC B314-B324-30-304-MW8434-015
PUR/metal mesh	Silver	2 m	BCC0EJZ	BCC0EK9
			BCC B314-B314-30-304-MW8434-020	BCC B314-B324-30-304-MW8434-020

Other cable materials, colors and lengths on request.

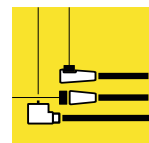
Connectors without LED are suitable for PNP and NPN switching functions.

NPN versions with LED on request.



Special Properties

High durability cable, metal mesh hose cable
7/8" female ↔ 7/8" male, 4-pin



Special Properties

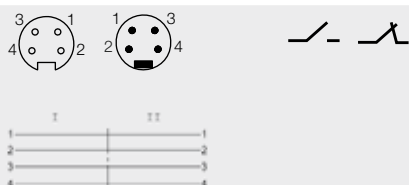
High-temperature Resistant

IP 69K-ECOLAB

Weld Spatter Resistant
 PUR Cables

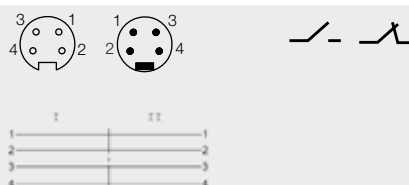
Y Connectors, Weld Spatter Resistant

High Durability Cable



250 V AC
 250 V DC
 Molded
 4x0.34 mm²

IP 67
 -40 °C...+80 °C/-25 °C...+80 °C
 Complementary (NO/NC) $\swarrow$ - / $\searrow$



250 V AC
 250 V DC
 Molded
 4x0.34 mm²

IP 67
 -40 °C...+80 °C/-25 °C...+80 °C
 Complementary (NO/NC) $\swarrow$ - / $\searrow$

Ordering code

Part number

BCC0EK0

BCC B324-B314-30-304-MW8434-003

BCC0EK1

BCC B324-B314-30-304-MW8434-006

BCC0EK2

BCC B324-B314-30-304-MW8434-010

BCC0EK3

BCC B324-B314-30-304-MW8434-015

BCC0EK4

BCC B324-B314-30-304-MW8434-020

BCC0EJL

BCC B324-B324-30-304-MW8434-003

BCC0EJM

BCC B324-B324-30-304-MW8434-006

BCC0EJN

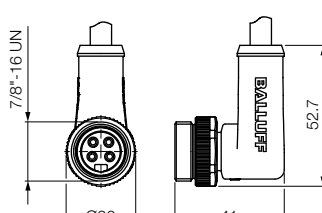
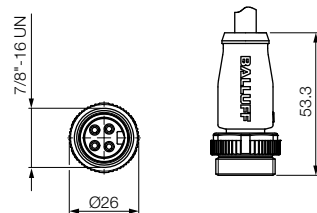
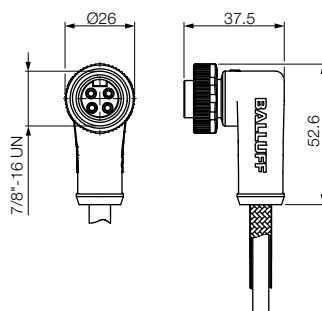
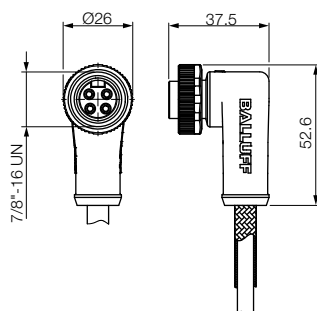
BCC B324-B324-30-304-MW8434-010

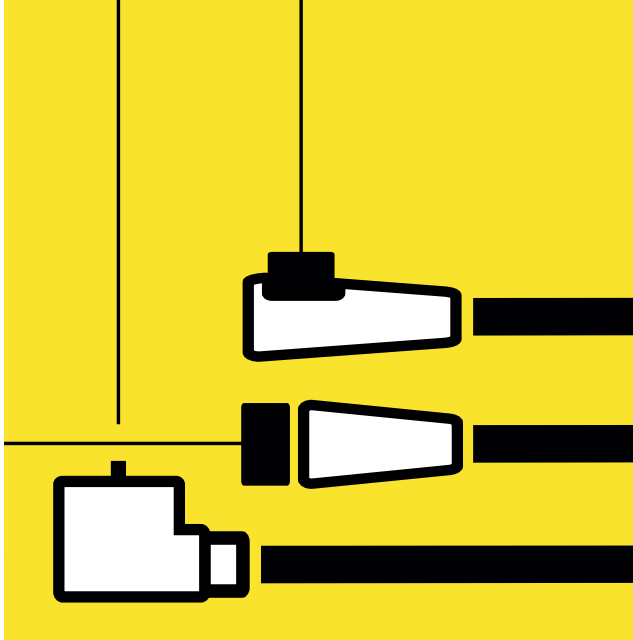
BCC0EJP

BCC B324-B324-30-304-MW8434-015

BCC0EJR

BCC B324-B324-30-304-MW8434-020





Connectors and Valve Connectors

Valve connectors

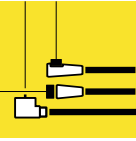


Valve Connectors

Contents

Valve Connectors

Style A	DIN	156
Style B	DIN	158
Style B	Industry	160
Style C	DIN	162
Style C	Industry	163
Connectors for Pressure Switches		164

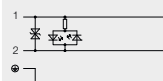




Connector diagram
and wiring



PIN 1: black
PIN 2: blue
PIN PE: green/yellow



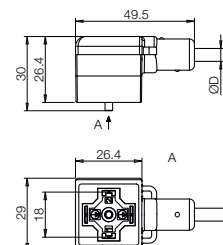
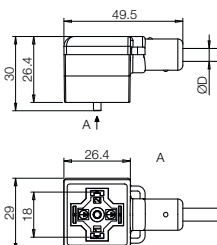
PIN 1: black
PIN 2: blue
PIN PE: green/yellow



Cable outlet		0°/180°	0°/180°
Supply voltage AC U_s		24 V AC	230 V AC
Supply voltage DC U_s		24 V DC	230 V DC
Cable		Molded	Molded
Current rating		4.0 A	4.0 A
Suppressor		Suppressor diode	No
No. of wires × conductor cross-section		3×0.5 mm ²	3×0.5 mm ²
Degree of protection as per IEC 60529		IP 67	IP 67
Ambient temperature T_a	PUR	-25...+90 °C/-25...+80 °C	-25...+90 °C/-25...+80 °C
static/moving	PVC	-25...+105 °C/-25...+105 °C	-25...+105 °C/-25...+105 °C
LED		1× (PNP), yellow	1× (PNP), yellow

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	2 m	BCC04W0	BCC04W6
			BCC VA04-0000-10-053-PX0350-020	BCC VA04-0000-10-054-PX0350-020
PUR	Black	5 m	BCC04W1	BCC04W7
			BCC VA04-0000-10-053-PX0350-050	BCC VA04-0000-10-054-PX0350-050
PUR	Black	10 m	BCC04W2	BCC04W8
			BCC VA04-0000-10-053-PX0350-100	BCC VA04-0000-10-054-PX0350-100
PVC	Gray	2 m	BCC04W3	BCC04W9
			BCC VA04-0000-10-053-VX8350-020	BCC VA04-0000-10-054-VX8350-020
PVC	Gray	5 m	BCC04W4	BCC04WA
			BCC VA04-0000-10-053-VX8350-050	BCC VA04-0000-10-054-VX8350-050
PVC	Gray	10 m	BCC04W5	BCC04WC
			BCC VA04-0000-10-053-VX8350-100	BCC VA04-0000-10-054-VX8350-100

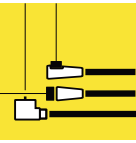
Other cable materials, colors and lengths
on request.



Valve Connectors

Style A, DIN, 18 mm, 4-pin

M12 male



Connectors

Style A
DIN

Style B
DIN

Style B
Industry

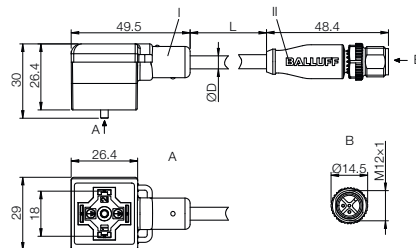
Style C
DIN

Style C Industry
Connectors
for pressure
switches

Connector diagram and wiring		
Cable outlet	0°/180°	
Supply voltage AC U_s	24 V AC	
Supply voltage DC U_s	24 V DC	
Cable	Molded/molded	
Current rating	4.0 A	
Suppressor	Suppressor diode	
No. of wires × conductor cross-section	3×0.5 mm ²	
Degree of protection as per IEC 60529	IP 67/IP 68	
Ambient temperature T_a	-25...+90 °C/-25...+80 °C	
Static/moving		
LED	1× (PNP), yellow	

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	0.3 m	BCC04WF	
			BCC VA04-M413-3E-664-PX0350-003	
PUR	Black	0.6 m	BCC04WH	
			BCC VA04-M413-3E-664-PX0350-006	
PUR	Black	1 m	BCC0502	
			BCC VA04-M413-3E-664-PX0350-010	
PUR	Black	1.5 m	BCC04WJ	
			BCC VA04-M413-3E-664-PX0350-015	
PUR	Black	2 m	BCC04WK	
			BCC VA04-M413-3E-664-PX0350-020	
PUR	Black	3 m	BCC04WL	
			BCC VA04-M413-3E-664-PX0350-030	
PUR	Black	5 m	BCC04WM	
			BCC VA04-M413-3E-664-PX0350-050	

Other cable materials, colors and lengths on request.

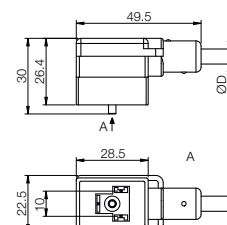
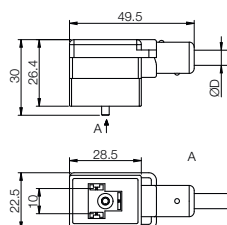




Connector diagram and wiring		
Cable outlet	0°	180°
Supply voltage AC U_s	24 V AC	24 V AC
Supply voltage DC U_s	24 V DC	24 V DC
Cable	Molded	Molded
Current rating	4.0 A	4.0 A
Suppressor	Suppressor diode	Suppressor diode
No. of wires × conductor cross-section	3×0.5 mm ²	3×0.5 mm ²
Degree of protection as per IEC 60529	IP 67	IP 67
Ambient temperature T_a	PUR static/moving	PUR static/moving
LED	1× (PNP), yellow	1× (PNP), yellow

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	2 m	BCC03YC	BCC03YH
			BCC VB03-0000-10-055-PX0350-020	BCC VB23-0000-10-055-PX0350-020
PUR	Black	5 m	BCC03YE	BCC03YJ
			BCC VB03-0000-10-055-PX0350-050	BCC VB23-0000-10-055-PX0350-050
PUR	Black	10 m	BCC03YF	BCC03YK
			BCC VB03-0000-10-055-PX0350-100	BCC VB23-0000-10-055-PX0350-100
PVC	Gray	2 m	BCC03ZZ	BCC0402
PVC	Gray	5 m	BCC0400	BCC0403
			BCC VB03-0000-10-055-VX8350-050	BCC VB23-0000-10-055-VX8350-050
PVC	Gray	10 m	BCC0401	BCC0404
			BCC VB03-0000-10-055-VX8350-100	BCC VB23-0000-10-055-VX8350-100

Other cable materials, colors and lengths on request.



BALLUFF | 159

Valve Connectors

Style B, Industry, 11 mm, 3-pin

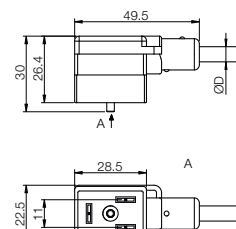
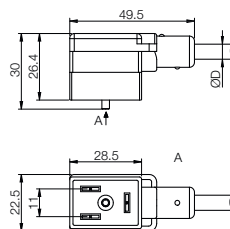
M12



Connector diagram and wiring		
Cable outlet	0°	
Supply voltage AC U_s	24 V AC	
Supply voltage DC U_s	24 V DC	
Cable	Molded	
Current rating	4.0 A	
Suppressor	Suppressor diode	
No. of wires × conductor cross-section	3×0.5 mm ²	
Degree of protection as per IEC 60529	IP 67	
Ambient temperature T_a	PUR -25...+90 °C/-25...+80 °C	
Static/moving	PVC -25...+105 °C/-25...+105 °C	
LED	1× (PNP), yellow	

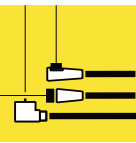
Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	2 m	BCC03YL	BCC03YP
			BCC VB43-0000-10-055-PX0350-020	BCC VB63-0000-10-055-PX0350-020
PUR	Black	5 m	BCC03YM	BCC03YR
			BCC VB43-0000-10-055-PX0350-050	BCC VB63-0000-10-055-PX0350-050
PUR	Black	10 m	BCC03YN	BCC03YT
			BCC VB43-0000-10-055-PX0350-100	BCC VB63-0000-10-055-PX0350-100
PVC	Gray	2 m	BCC0405	BCC0408
			BCC VB43-0000-10-055-VX8350-020	BCC VB63-0000-10-055-VX8350-020
PVC	Gray	5 m	BCC0406	BCC0409
			BCC VB43-0000-10-055-VX8350-050	BCC VB63-0000-10-055-VX8350-050
PVC	Gray	10 m	BCC0407	BCC040A
			BCC VB43-0000-10-055-VX8350-100	BCC VB63-0000-10-055-VX8350-100

Other cable materials, colors and lengths on request.



Valve Connectors

Style B, Industry, 11 mm, 3-pin M12 male



Connectors

Style A

DIN

Style B

DIN

Style B

Industry

Style C

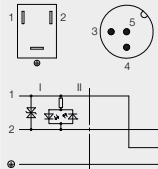
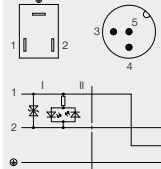
DIN

Style C Industry

Connectors

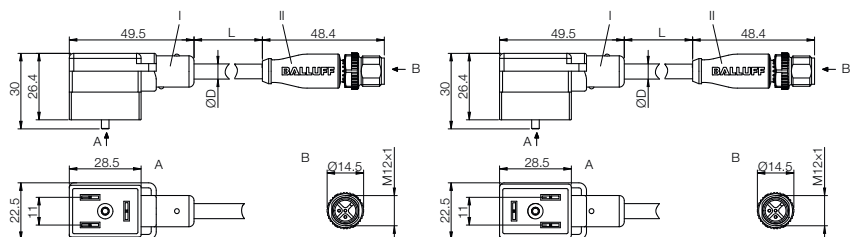
for pressure

switches

Connector diagram and wiring		
Cable outlet	0°	180°
Supply voltage AC U_s	24 V AC	24 V AC
Supply voltage DC U_s	24 V DC	24 V DC
Cable	Molded/molded	Molded/molded
Current rating	4.0 A	4.0 A
Suppressor	Suppressor diode	Suppressor diode
No. of wires × conductor cross-section	3×0.5 mm ²	3×0.5 mm ²
Degree of protection as per IEC 60529	IP 67/IP 68	IP 67/IP 68
Ambient temperature T_a	-25...+90 °C/-25...+80 °C	-25...+90 °C/-25...+80 °C
Static/moving		
LED	1× (PNP), yellow	1× (PNP), yellow

Cable material	Color	Length	Ordering code
			Part number
PUR	Black	0.3 m	BCC064Z BCC VB43-M413-3E-666-PX0350-003
PUR	Black	0.6 m	BCC0650 BCC VB43-M413-3E-666-PX0350-006
PUR	Black	1 m	BCC0651 BCC VB43-M413-3E-666-PX0350-010
PUR	Black	1.5 m	BCC0652 BCC VB43-M413-3E-666-PX0350-015
PUR	Black	2 m	BCC0653 BCC VB43-M413-3E-666-PX0350-020
PUR	Black	3 m	BCC0654 BCC VB43-M413-3E-666-PX0350-030
PUR	Black	5 m	BCC0655 BCC VB43-M413-3E-666-PX0350-050
			BCC0656 BCC VB63-M413-3E-666-PX0350-003
			BCC0657 BCC VB63-M413-3E-666-PX0350-006
			BCC0658 BCC VB63-M413-3E-666-PX0350-010
			BCC0659 BCC VB63-M413-3E-666-PX0350-015
			BCC065A BCC VB63-M413-3E-666-PX0350-020
			BCC065C BCC VB63-M413-3E-666-PX0350-030
			BCC065E BCC VB63-M413-3E-666-PX0350-050

Other cable materials, colors and lengths on request.



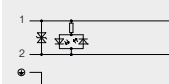
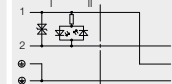
Valve Connectors

Style C, DIN, 8 mm, 4-pin

Style C, DIN, 8 mm, 4-pin, male M12

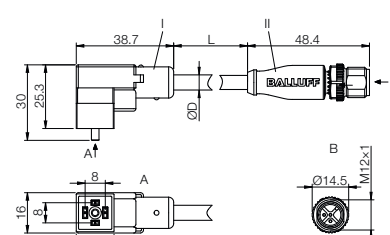
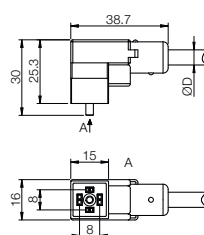
Connector diagram
and wiring

PIN 1: black
PIN 2: blue
PIN PE: green/yellow

Cable outlet		0°/180°	0°/180°
Supply voltage AC U_s		24 V AC	24 V AC
Supply voltage DC U_s		24 V DC	24 V DC
Cable		Molded	Molded/molded
Current rating		4.0 A	4.0 A
Suppressor		Suppressor diode	Suppressor diode
No. of wires × conductor cross-section		3×0.5 mm ²	3×0.5 mm ²
Degree of protection as per IEC 60529		IP 67	IP 67/IP 68
Ambient temperature T_a	PUR	-25...+90 °C/-25...+80 °C	-25...+90 °C/-25...+80 °C
Static/moving	PVC	-25...+105 °C/-25...+105 °C	
LED		1× (PNP), yellow	1× (PNP), yellow

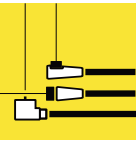
Cable material	Color	Length	Ordering code
			Part number
PUR	Black	0.3 m	BCC04NC BCC VC04-M413-3E-664-PX0350-003
PUR	Black	0.6 m	BCC04NE BCC VC04-M413-3E-664-PX0350-006
PUR	Black	1 m	BCC04NF BCC VC04-M413-3E-664-PX0350-010
PUR	Black	1.5 m	BCC04NH BCC VC04-M413-3E-664-PX0350-015
PUR	Black	2 m	BCC04MZ BCC VC04-0000-10-053-PX0350-020
PUR	Black	3 m	BCC04NK BCC VC04-M413-3E-664-PX0350-030
PUR	Black	5 m	BCC04N0 BCC VC04-0000-10-053-PX0350-050
PUR	Black	10 m	BCC04N1 BCC VC04-0000-10-053-PX0350-100
PVC	Gray	2 m	BCC04N2 BCC VC04-0000-10-053-VX8350-020
PVC	Gray	5 m	BCC04N3 BCC VC04-0000-10-053-VX8350-050
PVC	Gray	10 m	BCC04N4 BCC VC04-0000-10-053-VX8350-100

Other cable materials, colors and lengths
on request.

Valve Connectors

Style C, Industry, 9.4 mm, 4-pin

Style C, industry, 9.4 mm, 4-pin, M12 male



Connectors

Style A

DIN

Style B

DIN

Style B

Industry

Style C

DIN

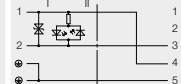
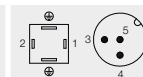
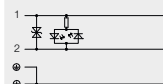
Style C Industry

Connectors

for pressure

switches

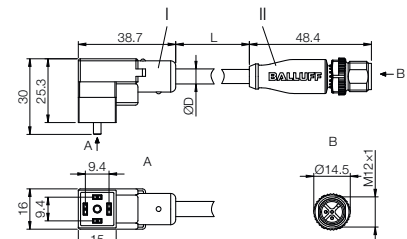
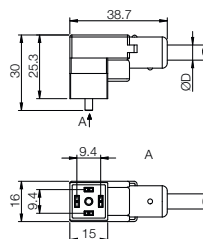
Connector diagram
and wiring



Cable outlet		0°/180°		0°/180°
Supply voltage AC U_s		24 V AC		24 V AC
Supply voltage DC U_s		24 V DC		24 V DC
Cable		Molded		Molded/molded
Current rating		4.0 A		4.0 A
Suppressor		Suppressor diode		Suppressor diode
No. of wires × conductor cross-section		3×0.5 mm ²		3×0.5 mm ²
Degree of protection as per IEC 60529		IP 67		IP 67/IP 68
Ambient temperature T_a	PUR	-25...+90 °C/-25...+80 °C		-25...+90 °C/-25...+80 °C
static/moving	PVC	-25...+105 °C/-25...+105 °C		
LED		1× (PNP), yellow		1× (PNP), yellow

Cable material	Color	Length	Ordering code
			Part number
PUR	Black	0.3 m	BCC04RY BCC VC44-M413-3E-664-PX0350-003
PUR	Black	0.6 m	BCC04RZ BCC VC44-M413-3E-664-PX0350-006
PUR	Black	1 m	BCC04T0 BCC VC44-M413-3E-664-PX0350-010
PUR	Black	1.5 m	BCC04T1 BCC VC44-M413-3E-664-PX0350-015
PUR	Black	2 m	BCC04RF BCC VC44-0000-10-053-PX0350-020
PUR	Black	3 m	BCC04T3 BCC VC44-M413-3E-664-PX0350-030
PUR	Black	5 m	BCC04RH BCC VC44-0000-10-053-PX0350-050
PUR	Black	10 m	BCC04RJ BCC VC44-0000-10-053-PX0350-100
PVC	Gray	2 m	BCC04RK BCC VC44-0000-10-053-VX8350-020
PVC	Gray	5 m	BCC04RL BCC VC44-0000-10-053-VX8350-050
PVC	Gray	10 m	BCC04RM BCC VC44-0000-10-053-VX8350-100

Other cable materials, colors and lengths
on request.

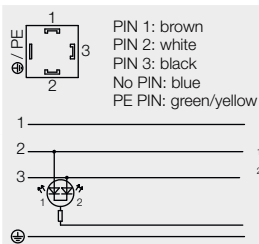
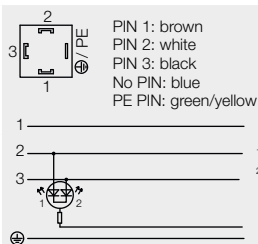


Connectors

Pressure switch, 4-pin



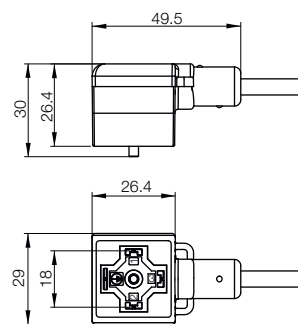
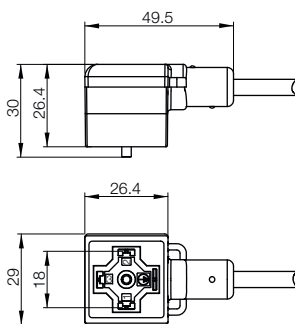
Connector diagram and wiring

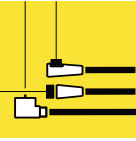


Cable outlet	0°	180°
Supply voltage DC U _s	24 V DC	24 V DC
Cable	Molded	Molded
Current rating	4.0 A	4.0 A
Suppressor	No	No
No. of wires × conductor cross-section	5×0.5 mm ²	5×0.5 mm ²
Degree of protection as per IEC 60529	IP 67	IP 67
Ambient temperature T _a static/moving	-30...+90 °C/-5...+80 °C	-30...+90 °C/-5...+80 °C
LED	2× (PNP), green, yellow	2× (PNP), green, yellow

Cable material	Color	Length	Ordering code
			Part number
PUR	Black	2 m	BCC071A BCC PA04-0000-10-070-PX0550-020
PUR	Black	5 m	BCC071C BCC PA04-0000-10-070-PX0550-050
PUR	Black	10 m	BCC071E BCC PA04-0000-10-070-PX0550-100
			BCC071F BCC PA24-0000-10-070-PX0550-020
			BCC071H BCC PA24-0000-10-070-PX0550-050
			BCC071J BCC PA24-0000-10-070-PX0550-100

Other cable materials, colors, and lengths on request.





Connectors

Style A
DIN

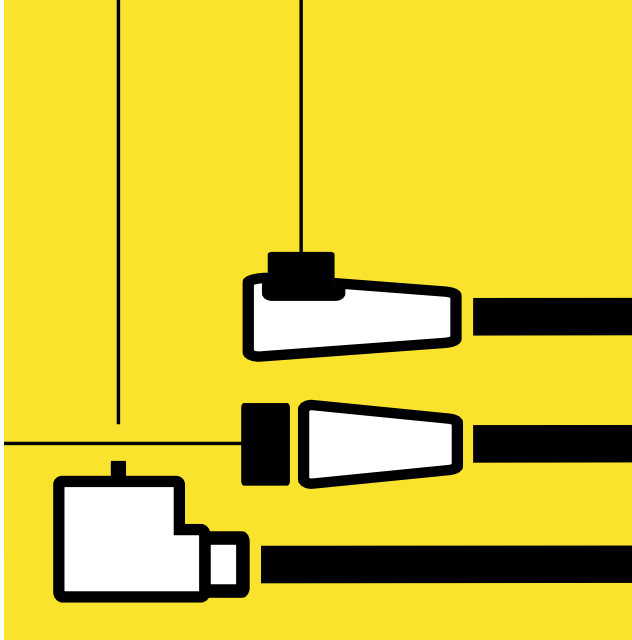
Style B
DIN

Style B
Industry

Style C
DIN

Style C Industry

**Connectors
for Pressure
Switch**

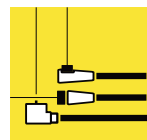


Connectors and Valve Connectors



Fieldbus Connectors and Cables

Profibus	
Connectors and Cables	168
Connectors, User-fabricated	170
Adapters	172
Terminating Resistor	174
Flange Plug and Socket	175
Profinet	
Connection Cables	176
Connectors, User-fabricated	178
Pass-thrus	180
CC-Link	
Connectors and Cables	182
Connectors, User-fabricated	184
T Splitters	185
Terminating Resistor	185
DeviceNet and CAN Bus	
Connectors and Cables	186
Connectors, User-fabricated	190
T Splitter, Tee	192
Terminating Resistor	193
Ethernet/IP	
Connection Cables	194
Connectors, User-fabricated	198
Pass-thrus	200





Connector diagram
and wiring

Supply voltage U_B
No. of wires $\times$ conductor cross-section
Degree of protection as per IEC 60529
Ambient temperature T_a

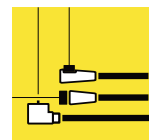
Cable material	Color	Length	
PUR	Violet	0.6 m	
PUR	Violet	1 m	
PUR	Violet	2 m	
PUR	Violet	5 m	
PUR	Violet	10 m	
PUR	Violet	15 m	
PUR	Violet	20 m	

Other cable lengths on request.



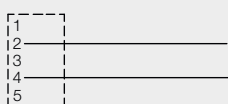
Profibus

M12 connectors and cables, 5-pin



Fieldbus
Connectors

Profibus
Connectors and
Cables
Connectors
User-fabricated
Adapters
Terminating
resistor
Flange plug and
socket
Profinet
CC-Link
DeviceNet and
CAN Bus
Ethernet/IP



Shield on cap nut



Shield on cap nut



Shield on cap nut

300 V

2x0.64 mm²

IP 67

-20...+70 °C

300 V

2x0.64 mm²

IP 67

-20...+70 °C

300 V

2x0.64 mm²

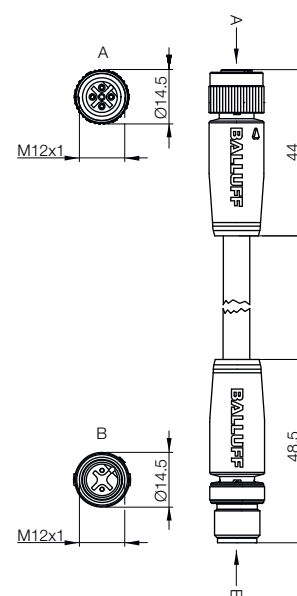
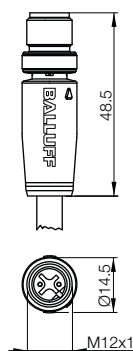
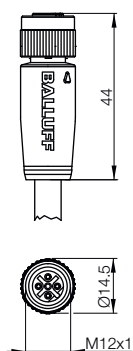
IP 67

-20...+70 °C

Ordering code

Part number

		BCC0A12
		BCC M415-M412-3B-329-PS72N1-006
		BCC0A13
		BCC M415-M412-3B-329-PS72N1-010
BCC070Y	BCC0A0Y	BCC0A14
BCC M415-0000-1B-031-PS72N1-020	BCC M412-0000-2B-031-PS72N1-020	BCC M415-M412-3B-329-PS72N1-020
BCC070Z	BCC0A0Z	BCC0A15
BCC M415-0000-1B-031-PS72N1-050	BCC M412-0000-2B-031-PS72N1-050	BCC M415-M412-3B-329-PS72N1-050
BCC0710	BCC0A10	BCC0A16
BCC M415-0000-1B-031-PS72N1-100	BCC M412-0000-2B-031-PS72N1-100	BCC M415-M412-3B-329-PS72N1-100
BCC0A0K		BCC0A17
BCC M415-0000-1B-031-PS72N1-150		BCC M415-M412-3B-329-PS72N1-150
BCC0A0L		BCC0A18
BCC M415-0000-1B-031-PS72N1-200		BCC M415-M412-3B-329-PS72N1-200

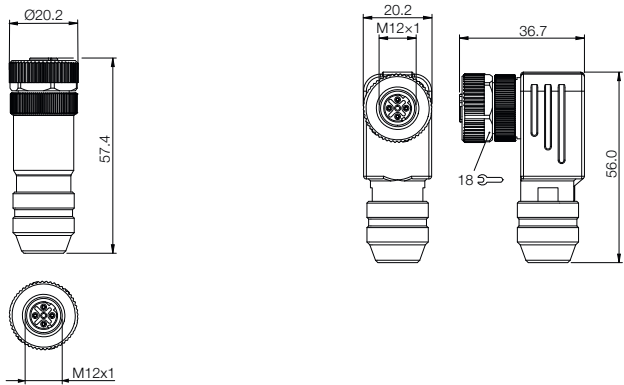


Profibus
M12 connector, user-fabricated
5-pin

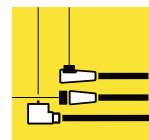


Connector diagram and wiring			
Supply voltage U_B	10...30 V DC	10...30 V DC	
No. of wires × conductor cross-section	5× max. 0.75 mm ²	5× max. 0.75 mm ²	
Cable diameter	Max. 8.0 mm	Max. 8.0 mm	
Connection	Screw terminal	Screw terminal	
Degree of protection as per IEC 60529	IP 67	IP 67	
Ambient temperature T_a	−25...+85 °C	−25...+85 °C	
Housing material	CuZn	CuZn	
Shielded design	Yes	Yes	

Version	Ordering code		
	Part number		
B-coded	BCC0715	BCC0717	
5-pin	BCC M475-0000-1B-000-01X575-000	BCC M485-0000-1B-000-01X575-000	



Profibus M12 connector, user-fabricated 5-pin



Fieldbus
Connectors

Profibus
Connectors and
Cables
Connectors
User-fabricated
Adapters
Terminating
resistor
Flange plug and
socket
Profinet
CC-Link
DeviceNet and
CAN Bus
Ethernet/IP



10...30 V DC
5× max. 0.75 mm²
Max. 8.0 mm
Screw terminal
IP 67
-25...+85 °C
CuZn
Yes



10...30 V DC
5× max. 0.75 mm²
Max. 8.0 mm
Screw terminal
IP 67
-25...+85 °C
CuZn
Yes

Ordering code

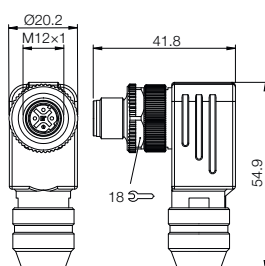
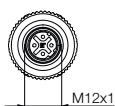
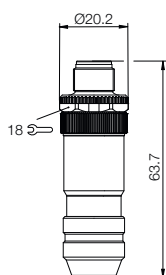
Part number

BCC0714

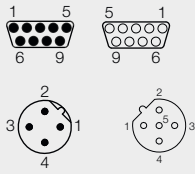
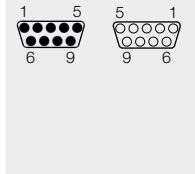
BCC M475-0000-2B-000-01X575-000

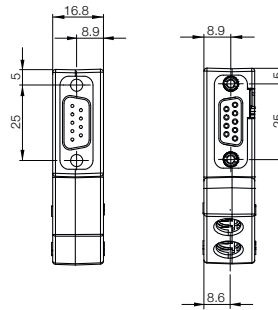
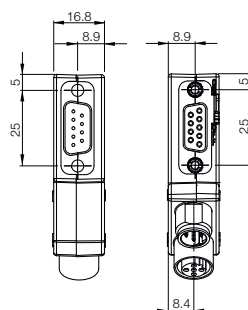
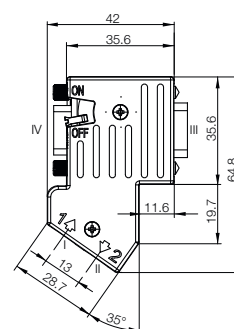
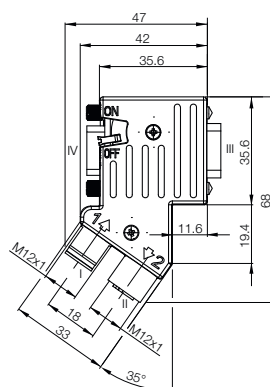
BCC0716

BCC M485-0000-2B-000-01X575-000



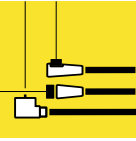


Connector diagram and wiring			
Connector type	Sub D/M12	Male Sub D / female Sub D	
Supply voltage U_B	30 V	30 V	
Degree of protection as per IEC 60529	IP 67	IP 30	
Ambient temperature T_a	-20...+70 °C	-20...+70 °C	
Cable outlets	angled	angled	
Ordering code			
Part number			
	BCC0C0Y	BCC0C10	
	BCC D259-M414-M415-U0029-000-C011	BCC D279-0000-E0-000-65X4N1-000-C011	



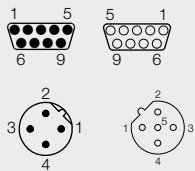
Profibus

Adapters with switchable terminating resistor



Fieldbus
Connectors

Profibus
Connectors and
Cables
Connectors
User-fabricated
Adapters
Terminating
resistor
Flange plug and
socket
Profinet
CC-Link
DeviceNet and
CAN Bus
Ethernet/IP



Sub D/M12
30 V
IP 67
-20...+70 °C
straight



Male Sub D / female Sub D
30 V
IP 30
-20...+70 °C
straight

Ordering code

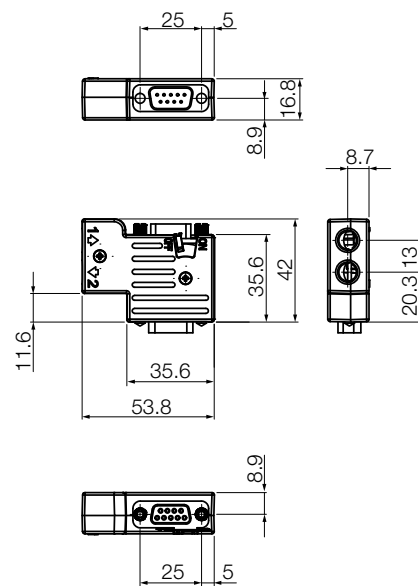
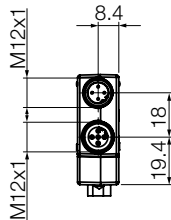
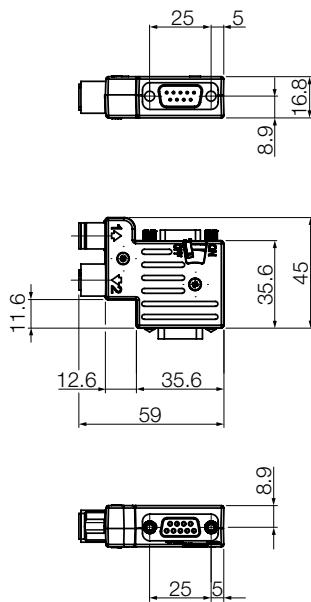
Part number

BCC0C0Z

BCC D269-M414-M415-U0029-000-C011

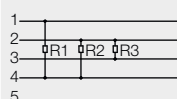
BCC0C11

BCC D289-0000-E0-000-65X4N1-000-C011



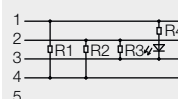


Connector diagram
and wiring

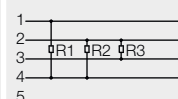


Version
Supply voltage U_B
Degree of protection as per IEC 60529
Ambient temperature T_a
Housing material

B-coded
10...30 V DC
IP 67
-40...+85 °C
Plastic



B-coded
10...30 V DC
IP 67
-40...+85 °C
Plastic



B-coded
10...30 V DC
IP 67
-40...+85 °C
Plastic

Ordering code

Part number

BCC0718

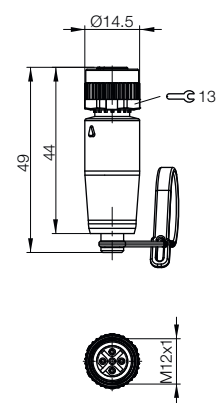
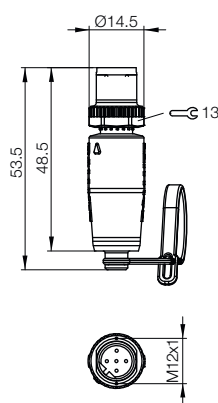
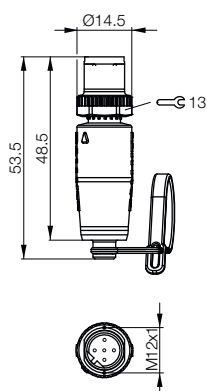
BCC M415-0000-2B-R01

BCC0719

BCC M415-0000-2B-R02

BCC0C6E

BCC M415-0000-1B-R01



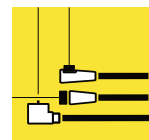
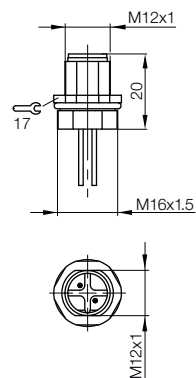
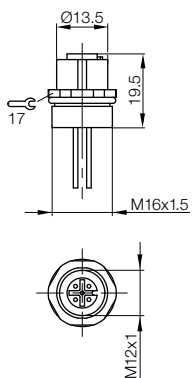
Profibus Flange plug and socket



Connector diagram and wiring	 1 _____ 2 _____ 3 _____ 4 _____ 5 _____	 1 _____ 2 _____ 3 _____ 4 _____ 5 _____
Supply voltage U_B	125 V	125 V
No. of wires × conductor cross-section	2×0.25 mm ²	2×0.25 mm ²
Degree of protection as per IEC 60529	IP 68	IP 68
Ambient temperature T_a	-25...+85 °C	-25...+85 °C

Cable length	Ordering code	
	Part number	
0.2 m	BCC0E3Z	BCC0E40
	BCC M455-0000-1B-RM080-002	BCC M452-0000-2B-RM080-002

Other cable lengths on request.



Fieldbus
Connectors

Profibus
Connectors and
Cables
Connectors
User-fabricated
Adapters
**Terminating
resistor**
**Flange plug and
socket**
Profinet
CC-Link
DeviceNet and
CAN Bus
Ethernet/IP

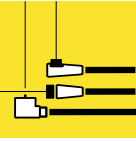
Connector diagram
and wiring

Type
 Supply voltage U_B
 Number of conductors $\times$ conductor cross-section
 Degree of protection as per IEC 60529
 Ambient temperature T_a

Cable material	Color	Length	
PUR shielded	Green	0.6 m	
PUR shielded	Green	2 m	
PUR shielded	Green	5 m	
PUR shielded	Green	10 m	
PUR shielded	Green	15 m	
PUR shielded	Green	20 m	
PUR shielded	Green	30 m	



Profinet M12 connection cables, 4-pin, D-coded and RJ45



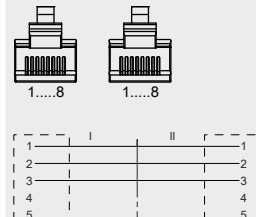
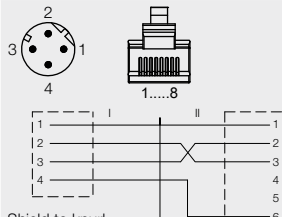
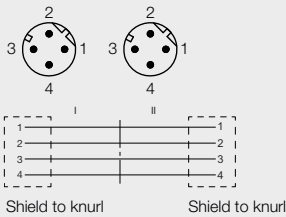
Fieldbus
Connectors

Profibus
Profinet

Connection
Cables

Connectors
User-fabricated
Pass-thrus

CC-Link
DeviceNet and
CAN Bus
Ethernet/IP



M12 male straight/M12 male straight
60 V AC/DC
4×22 AWG
IP 68
-20...+60 °C

M12 male straight/RJ45 male straight
60 V AC/DC
4×22 AWG
IP 68/IP 20
-20...+60 °C

RJ45 male straight/RJ45 male straight
60 V AC/DC
4×22 AWG
IP 20
-20...+60 °C

Ordering code

Part number

BCC04K0

BCC M414-M414-6D-331-PS54T2-006

BCC04K1

BCC M414-M414-6D-331-PS54T2-020

BCC04K2

BCC M414-M414-6D-331-PS54T2-050

BCC04K3

BCC M414-M414-6D-331-PS54T2-100

BCC04ZH

BCC M414-M414-6D-331-PS54T2-150

BCC04K4

BCC M414-M414-6D-331-PS54T2-200

BCC04K5

BCC M414-M414-6D-331-PS54T2-300

BCC04K6

BCC M414-E834-8G-668-PS54T2-006

BCC04K7

BCC M414-E834-8G-668-PS54T2-020

BCC04K8

BCC M414-E834-8G-668-PS54T2-050

BCC04K9

BCC M414-E834-8G-668-PS54T2-100

BCC04ZJ

BCC M414-E834-8G-668-PS54T2-150

BCC04KA

BCC M414-E834-8G-668-PS54T2-200

BCC04KC

BCC M414-E834-8G-668-PS54T2-300

BCC04KE

BCC E834-E834-90-334-PS54T2-006

BCC04KF

BCC E834-E834-90-334-PS54T2-020

BCC04KH

BCC E834-E834-90-334-PS54T2-050

BCC04KJ

BCC E834-E834-90-334-PS54T2-100

BCC04ZK

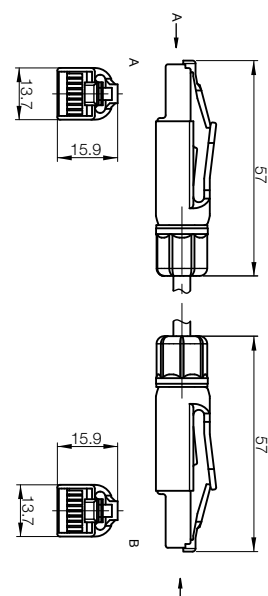
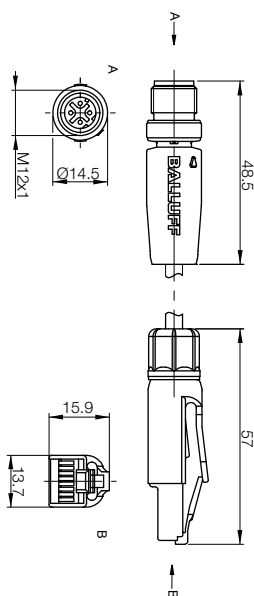
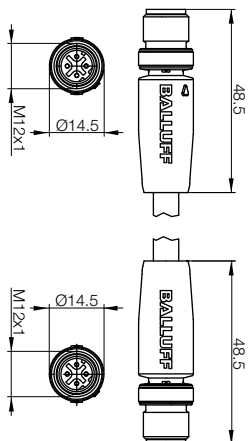
BCC E834-E834-90-334-PS54T2-150

BCC04KK

BCC E834-E834-90-334-PS54T2-200

BCC04KL

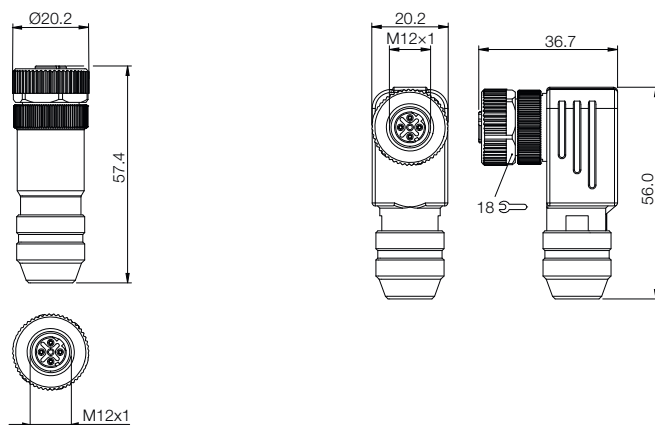
BCC E834-E834-90-334-PS54T2-300



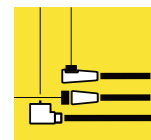


Connector diagram and wiring			
Version	4-pin, D-coded	4-pin, D-coded	
Supply voltage U_B	60 V AC/DC	60 V AC/DC	
Number of connections	4	4	
No. of wires $\times$ conductor cross-section	4 $\times$ 0.75 mm ²	4 $\times$ 0.75 mm ²	
Cable diameter	Max. 8 mm	Max. 8 mm	
Connection	Cage clamp	Screw plug	
Degree of protection as per IEC 60529	IP 67	IP 67	
Ambient temperature T_a	-25...+85 °C	-25...+85 °C	
Housing material	CuZn	CuZn	
Shielded design	Yes	Yes	

	Ordering code		
	Part number		
	BCC03Y1	BCC03Y2	
	BCC M474-0000-1D-000-51X475-000	BCC M484-0000-1D-000-51X475-000	



Profinet M12 connector, user-fabricated 4-pin



Fieldbus
Connectors

Profibus
Profinet
Connecting
Cables
Connectors
User-fabricated
Pass-thrus
CC-Link
DeviceNet and
CAN Bus
Ethernet/IP



4-pin, D-coded
60 V AC/DC
4
4x0.75 mm²
Max. 8 mm
Cage clamp
IP 67
-25...+85 °C
CuZn
Yes

4-pin, D-coded
60 V AC/DC
4
4x0.75 mm²
Max. 8 mm
Screw plug
IP 67
-25...+85 °C
CuZn
Yes

No coding
60 V AC/DC
4
244x max. AWG 22
Max. 9 mm
Insulation displacement connector technology
IP 20
-40...+70 °C
Yes

Ordering code

Part number

BCC03WZ

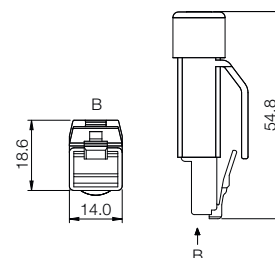
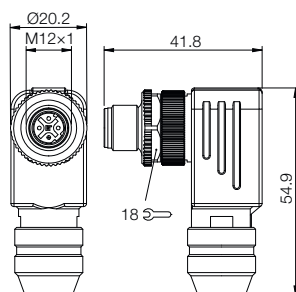
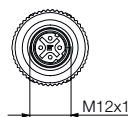
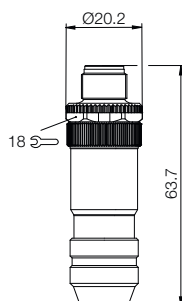
BCC M474-0000-2D-000-51X475-000

BCC03Y0

BCC M484-0000-2D-000-51X475-000

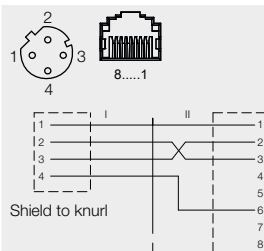
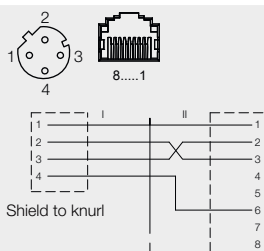
BCC06FH

BCC E834-0000-20-000-53X4T2-000





Connector diagram
and wiring



Type	M12 female straight/RJ45 straight, pass-thru
Coding	D-coded/no coding
Supply voltage U_B	60 V AC/DC
Degree of protection	IP 20
Ambient temperature T_a	-25...+85 °C
Mounting thread	M16

Type	M12 female straight/RJ45 right angle, pass-thru
Coding	D-coded/no coding
Supply voltage U_B	60 V AC/DC
Degree of protection	IP 20
Ambient temperature T_a	-25...+85 °C
Mounting thread	M16

Ordering code

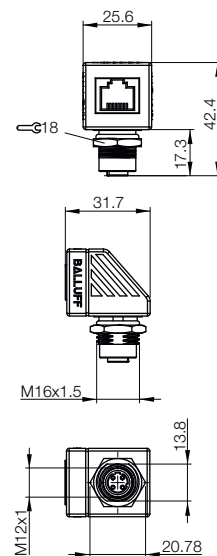
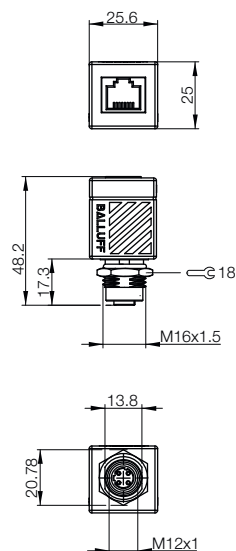
Part number

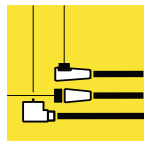
BCC085F

BCC M414-E814-BG-RM013-000

BCC085H

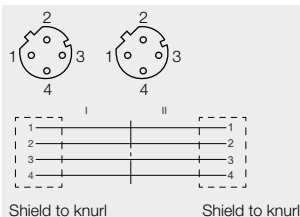
BCC M424-E814-BG-RM013-000





Fieldbus
Connectors

Profibus
Profinet
Connecting
Cables
Connectors
User-fabricated
Pass-thrus
CC-Link
DeviceNet and
CAN Bus
Ethernet/IP



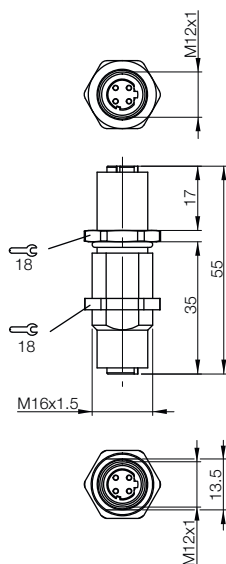
M12 female straight/M12 female straight,
pass-thru
D-coded
60 V AC/DC
IP 67
-25...+80 °C
M16

Ordering code

Part number

BCC06YP

BCC M454-M454-5D-RM002-000





Connector diagram
and wiring

Supply voltage U_B
No. of wires $\times$ conductor cross-section
Degree of protection as per IEC 60529
Ambient temperature T_a

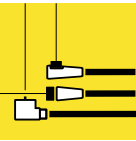
Cable material	Color	Length	
PVC	Red	0.6 m	
PVC	Red	2 m	
PVC	Red	5 m	
PVC	Red	10 m	
PVC	Red	15 m	

Other cable materials, colors
and lengths on request.



CC-Link

M12 connectors and cables, 4-pin



Fieldbus
Connectors

Profibus
Profinet

CC-Link
Connectors and Cables
Connectors
User-fabricated

T splitter
Terminating resistor
DeviceNet and
CAN Bus
Ethernet/IP



PIN 1: shield
PIN 2: white
PIN 3: yellow
PIN 4: blue



PIN 1: shield
PIN 2: white
PIN 3: yellow
PIN 4: blue



PIN 1: shield
PIN 2: white
PIN 3: yellow
PIN 4: blue



250 V

3×1×AWG20

IP 67

-25...+70 °C

250 V

3×1×AWG20

IP 67

-25...+70 °C

250 V

3×1×AWG20

IP 67

-25...+70 °C

Ordering code

Part number

BCC06Y1

BCC M415-0000-1A-068-VS24N7-020

BCC06Y2

BCC M415-0000-1A-068-VS24N7-050

BCC06Y3

BCC M415-0000-1A-068-VS24N7-100

BCC084R

BCC M414-0000-2A-068-VS24N7-020

BCC084T

BCC M414-0000-2A-068-VS24N7-050

BCC084U

BCC M414-0000-2A-068-VS24N7-100

BCC06WU

BCC M415-M414-3A-337-VS24N7-006

BCC06WW

BCC M415-M414-3A-337-VS24N7-020

BCC06WY

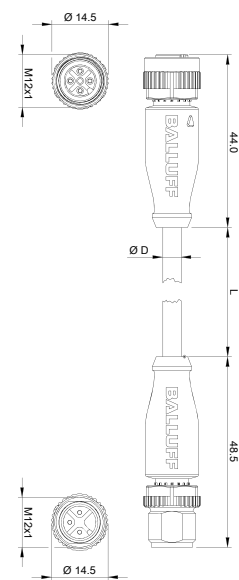
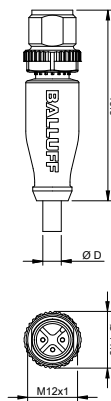
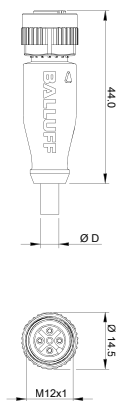
BCC M415-M414-3A-337-VS24N7-050

BCC06WZ

BCC M415-M414-3A-337-VS24N7-100

BCC06Y0

BCC M415-M414-3A-337-VS24N7-150



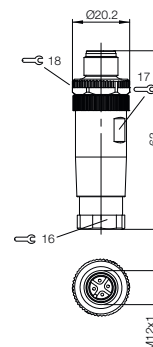
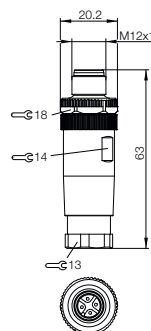
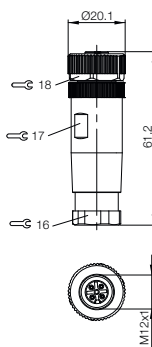
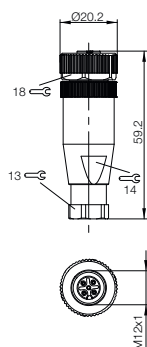
CC-Link
M12 connectors, user-fabricated
4-pin

M12

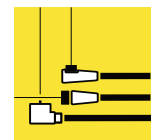


Connector diagram				
Supply voltage AC U_s	250 V AC	250 V AC	250 V AC	250 V AC
Supply voltage DC U_s	250 V DC	250 V DC	250 V DC	250 V DC
Cable	user-fabricated	user-fabricated	user-fabricated	user-fabricated
No. of wires × conductor cross-section	4×0.14...0.75 mm ²	4×0.14...0.50 mm ²	4×0.14...0.75 mm ²	4×0.14...0.50 mm ²
Connection	Screw terminal	Spring clamp terminal	Screw terminal	Spring clamp terminal
Degree of protection as per IEC 60529	IP 67	IP 67	IP 67	IP 67
Ambient temperature T_a	-40...+85 °C	-25...+85 °C	-40...+85 °C	-25...+85 °C

Cable diameter	Ordering code			
	Part number			
Ø 6...8 mm	BCC06F6 BCC M435-0000-1A-000-51X475-000	BCC06Y6 BCC M435-0000-1A-000-55X450-000	BCC06F7 BCC M434-0000-2A-000-51X475-000	BCC06Y5 BCC M434-0000-2A-000-55X450-000



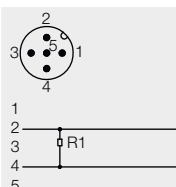
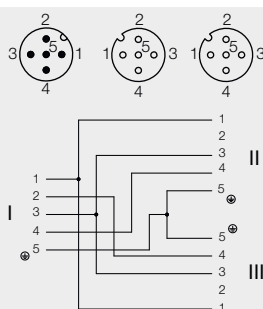
CC-Link T splitter, terminating resistor



Fieldbus
Connectors

Profibus
Profinet
CC-Link
Connectors and
Cables
Connectors
User-fabricated
T splitter
Terminating
resistor
DeviceNet and
CAN Bus
Ethernet/IP

Connector diagram
and wiring



Description
Use
Supply voltage U_s
Rated operating current I_e
Degree of protection as per IEC 60529
Ambient temperature T_a
Housing material

T splitter
2× M12 female to 1× M12 male
125 V
4 A
IP 67
−25...+80 °C
PA 6.6 + GF

M12 terminating resistor
10...30 V DC
IP 67
−40...+85 °C
Plastic

Ordering code

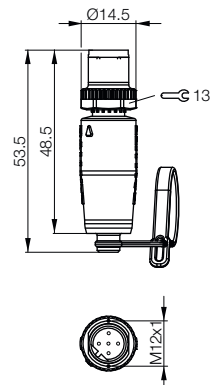
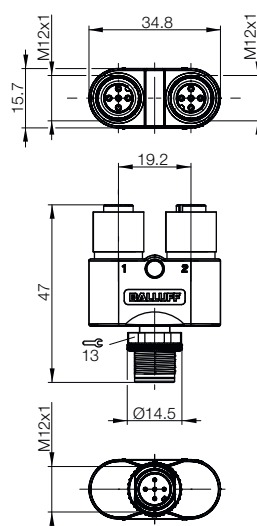
Part number

BCC089P

BCC M415-M415-M415-U0003-000

BCC06Y4

BCC M415-0000-2A-R03



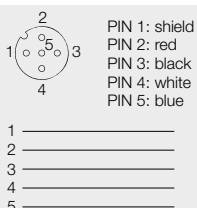


Connector diagram and wiring	
Supply voltage U_B	
No. of wires $\times$ conductor cross-section	
Degree of protection as per IEC 60529	
Ambient temperature T_a	

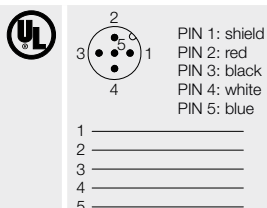
Cable material	Color	Length	
PUR	Violet	0.6 m	
PUR	Violet	2 m	
PUR	Violet	5 m	
PUR	Violet	10 m	
PUR	Violet	15 m	
PVC	Gray	0.6 m	
PVC	Gray	2 m	
PVC	Gray	5 m	
PVC	Gray	10 m	
PVC	Gray	15 m	

DeviceNet and CAN Bus

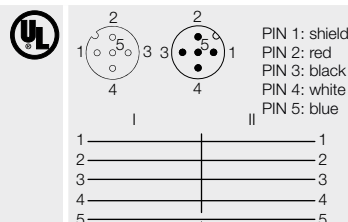
M12 connectors and cables, 5-pin, thin



30 V
2×24 AWG + 2×22 AWG
IP 68
-20...+80 °C



30 V
2×24 AWG + 2×22 AWG
IP 68
-20...+80 °C



30 V
2×24 AWG + 2×22 AWG
IP 68
-20...+80 °C

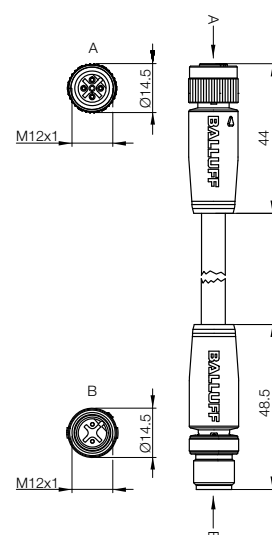
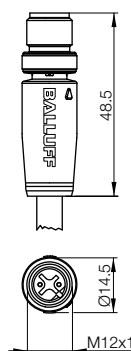
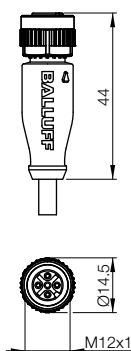
Fieldbus
Connectors

Profibus
Profinet
CC-Link
DeviceNet and
CAN Bus
**Connectors
and Cables**
Connectors
User-fabricated
T splitter, tee
Terminating
resistor
Ethernet/IP

Ordering code

Part number

		BCC09M8 BCC M415-M415-3A-344-PS75N6-006
BCC09MJ BCC M415-0000-1A-067-PS75N6-020	BCC09MM BCC M415-0000-2A-067-PS75N6-020	BCC09MA BCC M415-M415-3A-344-PS75N6-020
BCC09MK BCC M415-0000-1A-067-PS75N6-050	BCC09MN BCC M415-0000-2A-067-PS75N6-050	BCC09MC BCC M415-M415-3A-344-PS75N6-050
BCC09ML BCC M415-0000-1A-067-PS75N6-100	BCC09MP BCC M415-0000-2A-067-PS75N6-100	BCC09ME BCC M415-M415-3A-344-PS75N6-100
		BCC09MF BCC M415-M415-3A-344-PS75N6-150
		BCC0E03 BCC M415-M415-3A-330-VS85N6-006
BCC0CZW BCC M415-0000-1A-030-VS85N6-020	BCC0E00 BCC M415-0000-2A-030-VS85N6-020	BCC0E04 BCC M415-M415-3A-330-VS85N6-020
BCC0CZY BCC M415-0000-1A-030-VS85N6-050	BCC0E01 BCC M415-0000-2A-030-VS85N6-050	BCC0E05 BCC M415-M415-3A-330-VS85N6-050
BCC0CZZ BCC M415-0000-1A-030-VS85N6-100	BCC0E02 BCC M415-0000-2A-030-VS85N6-100	BCC0E06 BCC M415-M415-3A-330-VS85N6-100
		BCC0E07 BCC M415-M415-3A-330-VS85N6-150



DeviceNet and CAN Bus

7/8" connector, 5-pin, thin

7/8"



Connector diagram
and wiring



PIN 1: shield
PIN 2: red
PIN 3: black
PIN 4: white
PIN 5: blue



1 _____
2 _____
3 _____
4 _____
5 _____

Supply voltage U_b

30 V

No. of wires $\times$ conductor cross-section

2 $\times$ 24 AWG + 2 $\times$ 22 AWG

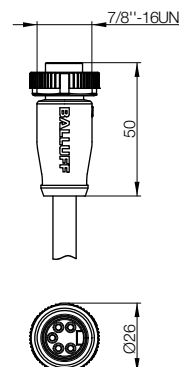
Degree of protection as per IEC 60529

IP 68

Ambient temperature T_a

-20...+80 °C

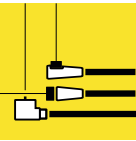
Cable material	Color	Length	Ordering code	
			Part number	
PUR	Violet	0.6 m		
PUR	Violet	2 m	BCC0AYR	
			BCC A315-0000-10-067-PS75N6-020	
PUR	Violet	5 m	BCC0AYP	
			BCC A315-0000-10-067-PS75N6-050	
PUR	Violet	10 m	BCC0AYN	
			BCC A315-0000-10-067-PS75N6-100	
PUR	Violet	15 m		
PVC	Gray	0.6 m		
PVC	Gray	2 m	BCC09UY	
			BCC A315-0000-10-030-VS85N6-020	
PVC	Gray	5 m	BCC09W0	
			BCC A315-0000-10-030-VS85N6-050	
PVC	Gray	10 m	BCC09W3	
			BCC A315-0000-10-030-VS85N6-100	
PVC	Gray	15 m		



Transfer rate	Cable thick	thin
125 kbs baud rate	500 m	100 m
250 kbs baud rate	250 m	100 m
500 kbs baud rate	100 m	100 m

DeviceNet and CAN Bus

7/8" connector and cable, 5-pin, thin



Fieldbus
Connectors

Profibus
Profinet
CC-Link
DeviceNet and
CAN Bus
**Connectors
and Cables**
Connectors
User-fabricated
T splitter, tee
Terminating
resistor
Ethernet/IP



PIN 1: shield
PIN 2: red
PIN 3: black
PIN 4: white
PIN 5: blue



1 _____
2 _____
3 _____
4 _____
5 _____

30 V
2×24 AWG + 2×22 AWG
IP 68
-20...+80 °C

PIN 1: shield
PIN 2: red
PIN 3: black
PIN 4: white
PIN 5: blue



I II
1 _____ 1
2 _____ 2
3 _____ 3
4 _____ 4
5 _____ 5

30 V
2×24 AWG + 2×22 AWG
IP 68
-20...+80 °C

Ordering code

Part number

BCC0AYJ

BCC A315-A315-30-344-PS75N6-006

BCC0AYM

BCC A315-0000-20-067-PS75N6-020

BCC0AYF

BCC A315-A315-30-344-PS75N6-020

BCC0AYL

BCC A315-0000-20-067-PS75N6-050

BCC0AYE

BCC A315-A315-30-344-PS75N6-050

BCC0AYK

BCC A315-0000-20-067-PS75N6-100

BCC0AYC

BCC A315-A315-30-344-PS75N6-100

BCC0AYA

BCC A315-A315-30-344-PS75N6-150

BCC09YA

BCC A315-A315-30-330-VS85N6-006

BCC09W8

BCC A315-0000-20-030-VS85N6-020

BCC09YE

BCC A315-A315-30-330-VS85N6-020

BCC09WA

BCC A315-0000-20-030-VS85N6-050

BCC09YJ

BCC A315-A315-30-330-VS85N6-050

BCC09WF

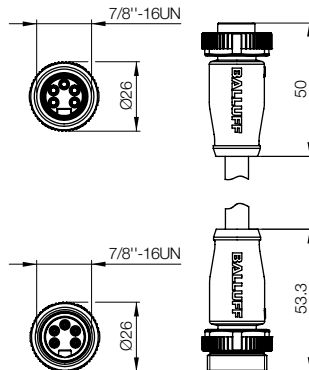
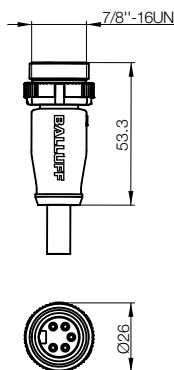
BCC A315-0000-20-030-VS85N6-100

BCC09YP

BCC A315-A315-30-330-VS85N6-100

BCC09YT

BCC A315-A315-30-330-VS85N6-150



DeviceNet and CAN Bus

M12 connector, user-fabricated

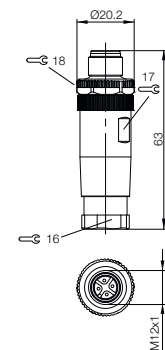
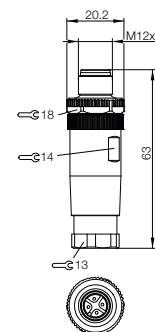
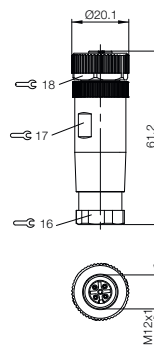
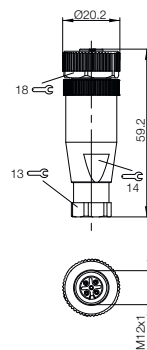
4-pin

M12



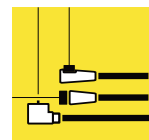
Connector diagram				
Supply voltage AC U _s	250 V AC	250 V AC	250 V AC	250 V AC
Supply voltage DC U _s	250 V DC	250 V DC	250 V DC	250 V DC
Cable	user-fabricated	user-fabricated	user-fabricated	user-fabricated
No. of wires × conductor cross-section	4×0.14...0.75 mm ²	4×0.14...0.50 mm ²	4×0.14...0.75 mm ²	4×0.14...0.50 mm ²
Connection	Screw terminal	Spring clamp terminal	Screw terminal	Spring clamp terminal
Degree of protection as per IEC 60529	IP 67	IP 67	IP 67	IP 67
Ambient temperature T _a	−40...+85 °C	−25...+85 °C	−40...+85 °C	−25...+85 °C

Cable diameter	Ordering code			
	Part number			
Ø 6...8 mm	BCC06F6 BCC M435-0000-1A-000-51X475-000	BCC06Y6 BCC M435-0000-1A-000-55X450-000	BCC06F7 BCC M434-0000-2A-000-51X475-000	BCC06Y5 BCC M434-0000-2A-000-55X450-000



7/8"

DeviceNet and CAN Bus 7/8" female, 7/8" male, user-fabricated 5-pin



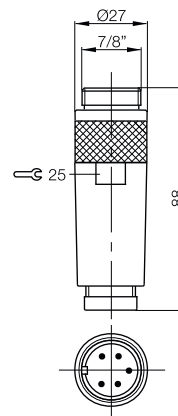
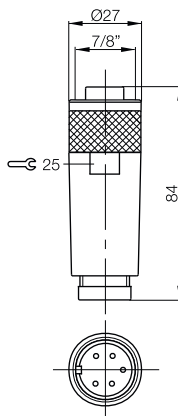
Fieldbus
Connectors

Profibus
Profinet
CC-Link
DeviceNet and
CAN Bus
Connectors and
Cables
Connectors
User-fabricated
T splitter, tee
Terminating
resistor
Ethernet/IP

Connector diagram and wiring		
Supply voltage AC U_s	300 V AC	300 V AC
Supply voltage DC U_s	300 V DC	300 V DC
No. of wires × conductor cross-section	5 × max. 1.5 mm ²	5 × max. 1.5 mm ²
Connection		Screw terminal
Degree of protection as per IEC 60529	IP 67	IP 67
Ambient temperature T_a	-25...+80 °C	-25...+80 °C

Cable material	Color	Ordering code	
Cable diameter		Part number	
PUR	Black	BCC070E	BCC070J
Ø 6...8 mm		BCC A335-0000-10-000-51X5A5-000	BCC A335-0000-20-000-51X5A5-000
PUR	Black	BCC070F	BCC070K
Ø 8...10 mm		BCC A335-0000-10-000-61X5A5-000	BCC A335-0000-20-000-61X5A5-000
PUR	Black	BCC070H	BCC070L
Ø 10...12 mm		BCC A335-0000-10-000-71X5A5-000	BCC A335-0000-20-000-71X5A5-000

Other cable diameters on request.

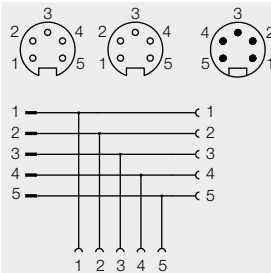
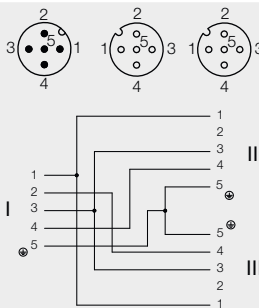


DeviceNet and CAN Bus

T splitter, tee



Connector diagram
and wiring



Description

Use

Supply voltage U_s

Rated operating current I_o

Degree of protection as per IEC 60529

Ambient temperature T_a

Housing material

T splitter

2× M12 female to 1× M12 male

125 V

4 A

IP 67

−25...+80 °C

PA 6.6 + GF

7/8" power distributor

Standard, 5-pin

300 V AC

IP 67

−40...+90 °C

Plastic

Ordering code

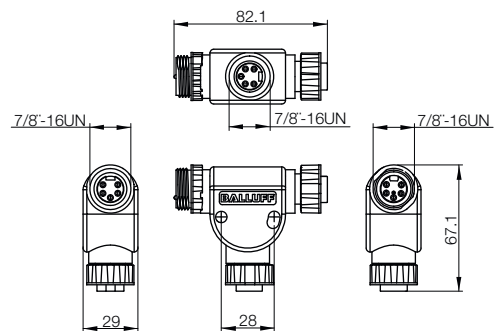
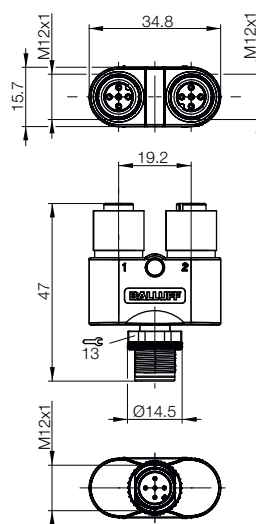
Part number

BCC089P

BCC M415-M415-M415-U0003-000

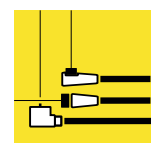
BCC0AA7

BCC A315-A315-A315-T0023-000



DeviceNet and CAN Bus

Terminating resistor, 5-pin

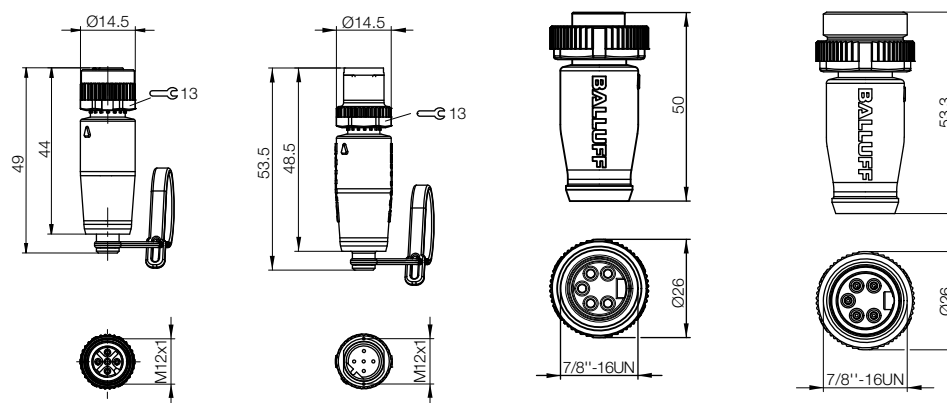


Fieldbus
Connectors

Profibus
Profinet
CC-Link
DeviceNet and
CAN Bus
Connectors and
Cables
Connectors
User-fabricated
T splitter, tee
**Terminating
resistor**
Ethernet/IP

Connector diagram and wiring				
Supply voltage U_B	10...30 V DC	50 V	50 V	50 V
Ambient temperature T_a	-40...+85 °C	-40...+85 °C	-25...+80 °C	-25...+80 °C
Degree of protection as per IEC 60529	IP 68	IP 68	IP 68	IP 68
Housing material	Plastic	Plastic	Plastic	Plastic

Version	Ordering code			
	Part number			
No LED	BCC0A08	BCC09MR	BCC0A0A	BCC0A09
	BCC M415-0000-1A-R04	BCC M415-0000-2A-R04	BCC A315-0000-1A-R04	BCC A315-0000-2A-R04



Connector diagram
and wiring

Supply voltage U_B
Number of conductors $\times$ conductor cross-section
Degree of protection as per IEC 60529
Ambient temperature T_a

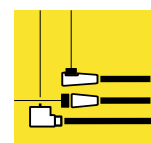
Cable material	Color	Length	
TPE shielded	blue-green	0.6 m	
TPE shielded	blue-green	2 m	
TPE shielded	blue-green	5 m	
TPE shielded	blue-green	10 m	
TPE shielded	blue-green	15 m	

Other cable materials, colors
and lengths on request.



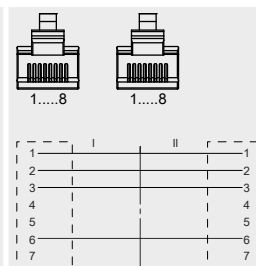
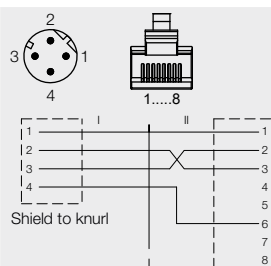
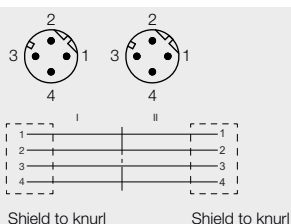
Ethernet/IP

M12 and RJ45 connection cables, shielded



Fieldbus
Connectors

Profibus
Profinet
CC-Link
DeviceNet and
CAN Bus
Ethernet/IP
**Connection
Cables**
Connectors
User-fabricated
Pass-thrus



250 V AC/DC
2×2×24 AWG
IP 67
-25...+75 °C

60 V AC/DC
2×2×24 AWG
IP 67/IP 20
-25...+70 °C

60 V AC/DC
2×2×24 AWG
IP 20/IP 20
-25...+70 °C

Ordering code

Part number

BCC09NL

BCC M414-M414-6D-338-ES64N9-006

BCC09NN

BCC M414-M414-6D-338-ES64N9-020

BCC09NP

BCC M414-M414-6D-338-ES64N9-050

BCC09NR

BCC M414-M414-6D-338-ES64N9-100

BCC09NT

BCC M414-M414-6D-338-ES64N9-150

BCC0CZA

BCC M414-E834-8G-672-ES64N9-006

BCC0CZC

BCC M414-E834-8G-672-ES64N9-020

BCC0CZE

BCC M414-E834-8G-672-ES64N9-050

BCC0CZF

BCC M414-E834-8G-672-ES64N9-100

BCC0CZH

BCC M414-E834-8G-672-ES64N9-150

BCC0CZJ

BCC E834-E834-90-339-ES64N9-006

BCC0CZK

BCC E834-E834-90-339-ES64N9-020

BCC0CZL

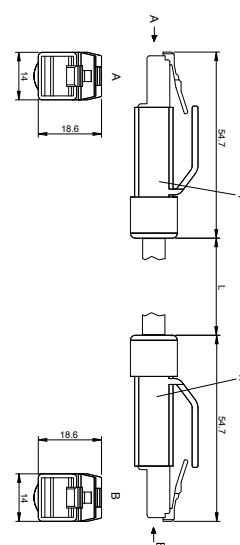
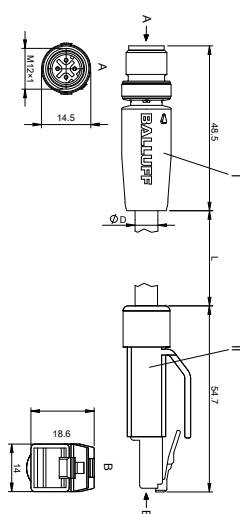
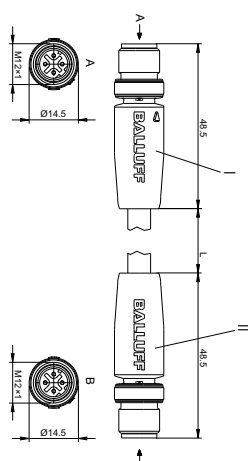
BCC E834-E834-90-339-ES64N9-050

BCC0CZM

BCC E834-E834-90-339-ES64N9-100

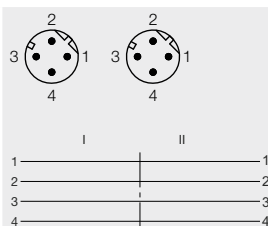
BCC0CZN

BCC E834-E834-90-339-ES64N9-150





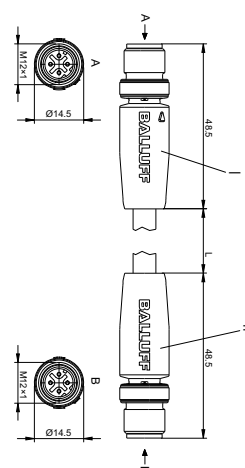
Connector diagram
and wiring



Supply voltage U_B	60 V AC/DC
Number of conductors $\times$ conductor cross-section	2 $\times$ 2 $\times$ 24 AWG
Degree of protection as per IEC 60529	IP 67
Ambient temperature T_a	-40...+75 °C

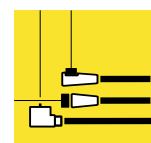
Cable material	Color	Length	Ordering code	Part number
TPE unshielded	blue-green	0.6 m	BCC0E08	
TPE unshielded	blue-green	2 m	BCC0CLZ	
TPE unshielded	blue-green	5 m	BCC0CM1	
TPE unshielded	blue-green	10 m	BCC0CM3	
TPE unshielded	blue-green	15 m	BCC0E09	
			BCC M414-M414-6D-366-EX64N9-006	
			BCC M414-M414-6D-366-EX64N9-020	
			BCC M414-M414-6D-366-EX64N9-050	
			BCC M414-M414-6D-366-EX64N9-100	
			BCC M414-M414-6D-366-EX64N9-150	

Other cable materials, colors and lengths on request.



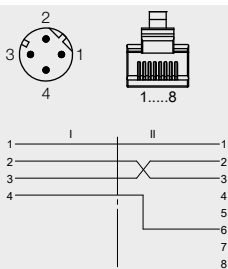
Ethernet/IP

M12 and RJ45 connection cables, unshielded

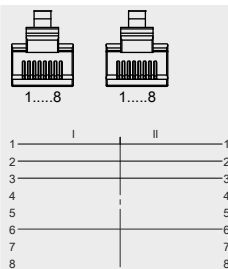


Fieldbus
Connectors

Profibus
Profinet
CC-Link
DeviceNet and
CAN Bus
Ethernet/IP
**Connection
Cables**
Connectors
User-fabricated
Pass-thrus



60 V AC/DC
2×2×24 AWG
IP 67/IP 20
-40...+70 °C



60 V AC/DC
2×2×24 AWG
IP 20/IP 20
-40...+70 °C

Ordering code

Part number

BCC0E0A

BCC M414-E834-8G-695-EX64N9-006

BCC0E0C

BCC M414-E834-8G-695-EX64N9-020

BCC0CNP

BCC M414-E834-8G-695-EX64N9-050

BCC0CNR

BCC M414-E834-8G-695-EX64N9-100

BCC0CNT

BCC M414-E834-8G-695-EX64N9-150

BCC0CZP

BCC E834-E834-90-367-EX64N9-006

BCC0CZR

BCC E834-E834-90-367-EX64N9-020

BCC0CZT

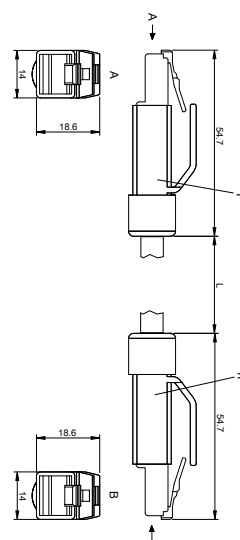
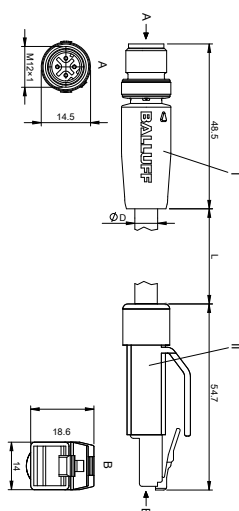
BCC E834-E834-90-367-EX64N9-050

BCC0CZU

BCC E834-E834-90-367-EX64N9-100

BCC0CNU

BCC E834-E834-90-367-EX64N9-150

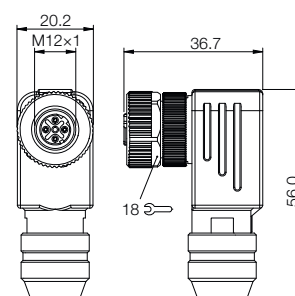
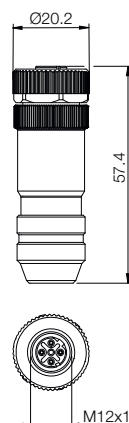


Ethernet/IP
M12 connector, user-fabricated
4-pin

M12



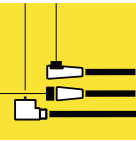
Connector diagram and wiring			
Version	4-pin, D-coded	4-pin, D-coded	
Supply voltage U_B	60 V AC/DC	60 V AC/DC	
Number of connections	4	4	
No. of wires × conductor cross-section	4×0.75 mm ²	4×0.75 mm ²	
Cable diameter	Max. 8 mm	Max. 8 mm	
Connection	Cage clamp	Screw plug	
Degree of protection as per IEC 60529	IP 67	IP 67	
Ambient temperature T_a	−25...+85 °C	−25...+85 °C	
Housing material	CuZn	CuZn	
Shielded design	Yes	Yes	
Ordering code			
	Part number		
	BCC03Y1	BCC03Y2	
	BCC M474-0000-1D-000-51X475-000	BCC M484-0000-1D-000-51X475-000	



Ethernet/IP

M12 connectors, user-fabricated

4-pin



Fieldbus Connectors

Profibus
Profinet
CC-Link
DeviceNet and
CAN Bus
Ethernet/IP
Connecting
Cables
Connectors
User-fabricated
Pass-thrus



4-pin, D-coded
60 V AC/DC
4
4x0.75 mm²
Max. 8 mm
Cage clamp
IP 67
-25...+85 °C
CuZn
Yes

4-pin, D-coded
60 V AC/DC
4
4x0.75 mm²
Max. 8 mm
Screw plug
IP 67
-25...+85 °C
CuZn
Yes

No coding
60 V AC/DC
4
244x max. AWG 22
Max. 9 mm
Insulation displacement connector technology
IP 20
-40...+70 °C
Yes

Ordering code

Part number

BCC03WZ

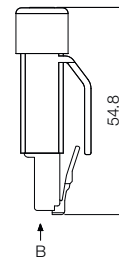
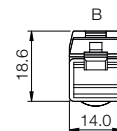
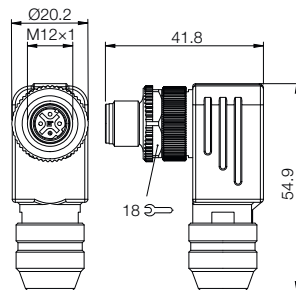
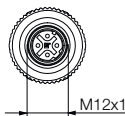
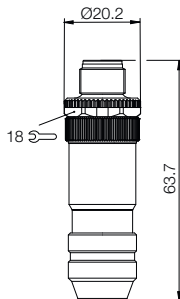
BCC M474-0000-2D-000-51X475-000

BCC03Y0

BCC M484-0000-2D-000-51X475-000

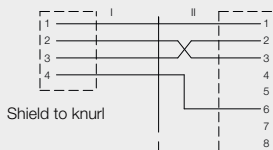
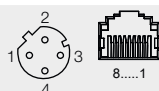
BCC06FH

BCC E834-0000-20-000-53X4T2-000

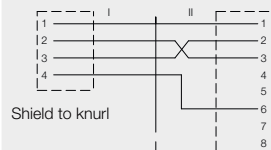
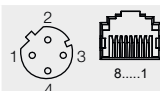




Connector diagram
and wiring



Shield to knurl



Shield to knurl

Type	M12 female straight/RJ45 straight, pass-thru	M12 female straight/RJ45 right angle, pass-thru
Coding	D-coded/no coding	D-coded/no coding
Supply voltage U_B	60 V AC/DC	60 V AC/DC
Degree of protection	IP 20	IP 20
Ambient temperature T_a	-25...+85 °C	-25...+85 °C
Mounting thread	M16	M16

Ordering code

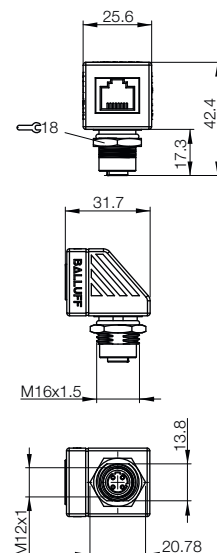
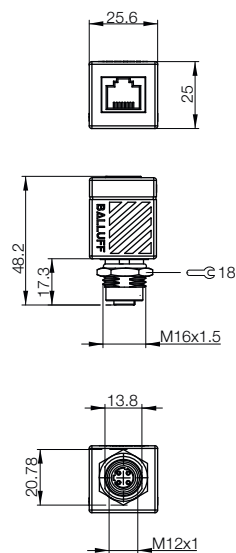
Part number

BCC085F

BCC M414-E814-BG-RM013-000

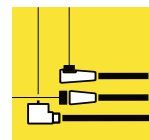
BCC085H

BCC M424-E814-BG-RM013-000



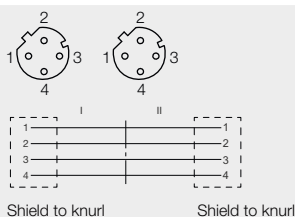
Ethernet/IP

Pass-thrus



Fieldbus
Connectors

Profibus
Profinet
CC-Link
DeviceNet and
CAN Bus
Ethernet/IP
Connecting
Cables
Connectors
User-fabricated
Pass-thrus



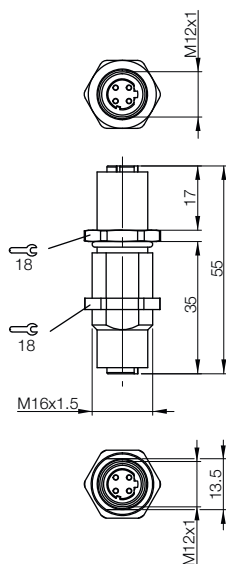
M12 female straight/M12 female straight,
pass-thru
D-coded
60 V AC/DC
IP 67
-25...+80 °C
M16

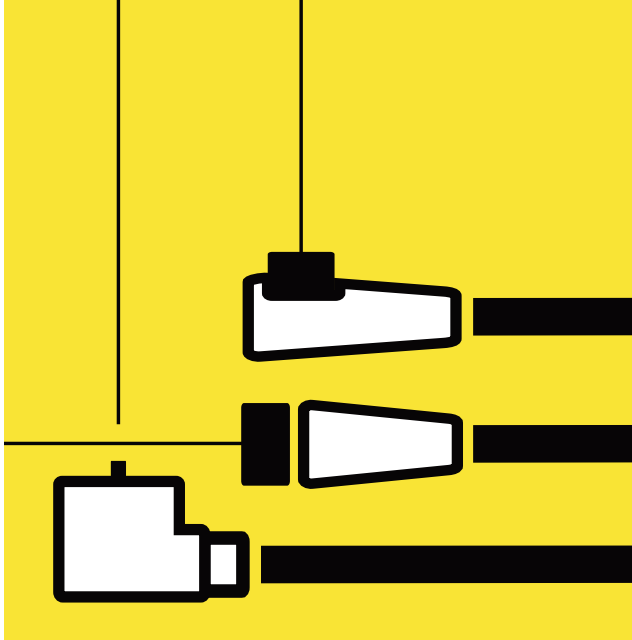
Ordering code

Part number

BCC06YP

BCC M454-M454-5D-RM002-000





Connectors and Valve Connectors

Accessories for Connectors
and Valve Connectors

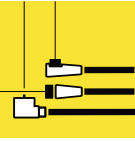




Accessories for Connectors and Valve Connectors

Contents

Tools	204
Screw Plugs	205
Integrated Tamper Protection	206
Label	206
Cable Clamp	206
Protective Cover	207
Anti-sabotage Protection, Coupling	207
Protective Hose/Jacket/Sleeve	208



Accessories for Connectors and Valve Connectors

Tools



Description	Torque wrench
Use	For large quantities or torque adjustments

Thread	Tightening torque	Ordering code
M8	0.4 Nm	Part number BAM00ZL BAM TO-CC-001-M3-0,4/8,0
M12	0.6 Nm	BAM00ZM BAM TO-CC-001-M4-0,6/12,0
7/8"	1.5 Nm	BAM00ZN BAM TO-CC-001-A3-1,5/24,0

Assembly wrench
User-fabricated M23 connectors are easy to assemble due to their size. After the components are assembled, the top and bottom section must be secured to one another to guarantee the high degree of protection.



Description	Assembly wrench
Use	for 12 and 19-pin M23 connectors

	Ordering code
	Part number BAM01TY BAM TO-CC-002-M6



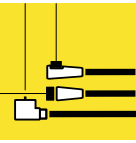
Description	Crimping tongs
Use	for RJ45

	Ordering code
	Part number FHW0003 11023834



Accessories for Connectors and Valve Connectors

Screw Plugs



Accessories for Connectors and Valve Connectors

Tools

Screw Plugs

Integrated tamper protection

Label

Cable Clamp

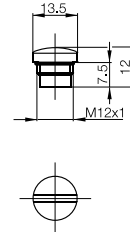
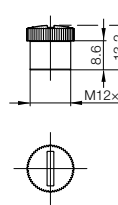
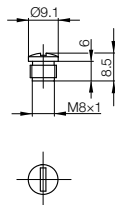
Protective Cover

Anti-sabotage Protection,

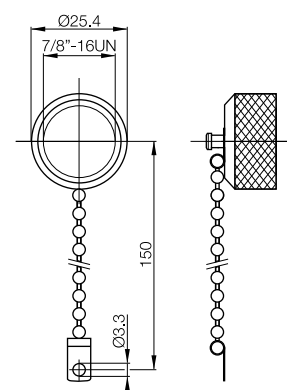
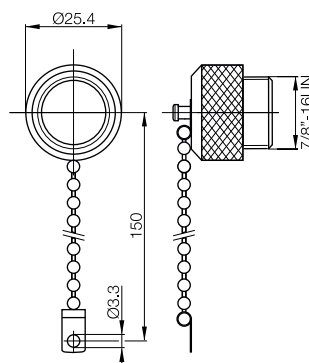
Coupling

Protective Hose/Jacket/Sleeve

			
Description	M8 locking screw	Screw plug M12	Screw plug M12
Use	IP 65 screw plug for unused ports	IP 65 screw plug for unused ports	for connector type M12x1
Ambient temperature T _a	-20...+80 °C	-20...+80 °C	
Housing material	Plastic	Plastic	Brass
Ordering code			
	Part number		
	BAM01C1	BAM01C2	BAM0114
	BAM CS-XA-001-M8-C	BAM CS-XA-002-M12-A	BKS-12-CS-01



Description	Screw plug 7/8"	Screw plug 7/8"
Use	Cover for the power ports	Cover for the power ports
Ambient temperature T _a	-20...+80 °C	-20...+80 °C
Housing material	Nickel-plated brass	Nickel-plated brass
Ordering code		
	Part number	
	BAM012T	BAM012U
	BKS-7/8-CS-00-A	BKS-7/8-CS-00-I



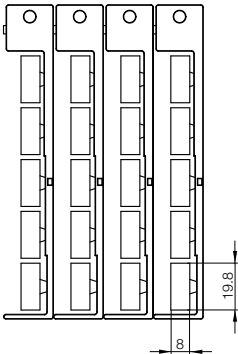
Accessories for Connectors and Valve Connectors

Integrated tamper protection, label, cable clamp



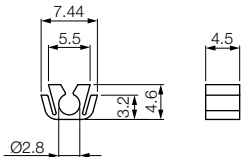
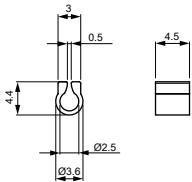
Description	Integrated tamper protection	Marking sleeve	Label set
Use	with 4 openings	For labeling connectors	Labeling the ports for modules BNI PBS..., BNI PNT..., BNI DNT..., BNI EIP..., BNI CCL...
Housing material		PVC	Plastic

Ordering code			
Part number			
BAM01J0			BAM01AT
BAM FK-NI-PBS-01-C			BNI ACC-L01-000
Cable diameter		BAM023F	
2...4 mm		BAM IA-CC-002-01	
Cable diameter		BAM023H	
4...7 mm		BAM IA-CC-002-02	
Cable diameter		BAM023J	
6...10 mm		BAM IA-CC-002-03	



Description	Cable clamp Ø 2.5 mm	Cable clamp Ø 2.8 mm
Use	for C-slot	for T-slot
Size	2.5 ±0.1 mm	2.8 ±0.1 mm
Housing material	PUR	PUR

Ordering code		
Part number		
BAM01EC		BAM01EA
BAM CC-XA-025-C03-P		BAM CC-XA-028-T05-P



Accessories for Connectors and Valve Connectors

Protective cover, anti-sabotage protection, coupling



Accessories for
Connectors and
Valve Connectors

Tools

Screw Plugs

Integrated tamper protection

Label

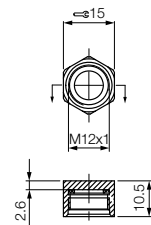
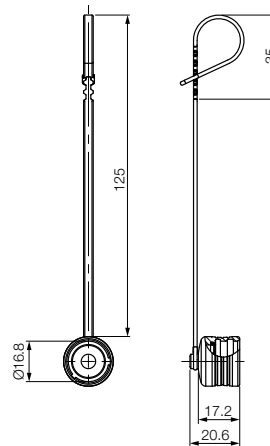
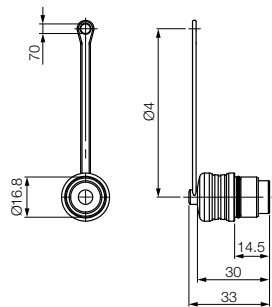
Cable Clamp

Protective Cover

Anti-sabotage Protection, Coupling

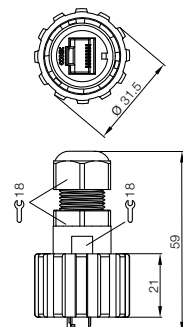
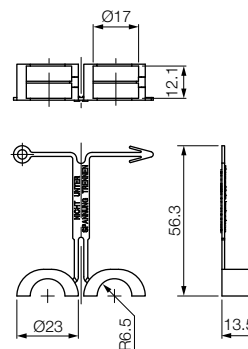
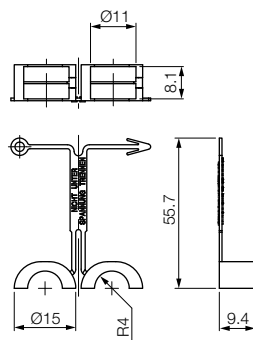
Protective Hose/Jacket/Sleeve

Description	Protective cover	Protective cover	Protective cover
Version	Push-Pull protective cap	Push-Pull protective cap	
Use	for series BCC H47_-	for series BCC H43_-	for connector type M12×1
Housing material	Stainless steel	Stainless steel	Brass
	Ordering code		
	Part number		
	BAM020N	BAM020M	BAM01YN
	BAM CS-CC-010-H4-A	BAM CS-CC-009-H4-A	BAM CS-XA-008-M12-4



Description	Anti-sabotage protection	Anti-sabotage protection	RJ45 coupling
Use	for molded connectors M8	for molded connectors M12	for Ethernet TCP/IP
Housing material	PA	PA	

Ordering code			
Part number			
	BAM01Z5	BAM01Z4	BCC09N2
	BAM FK-CC-005-M08-A	BAM FK-CC-005-M12-A	BCC E878-0000-Z1-41X8T4



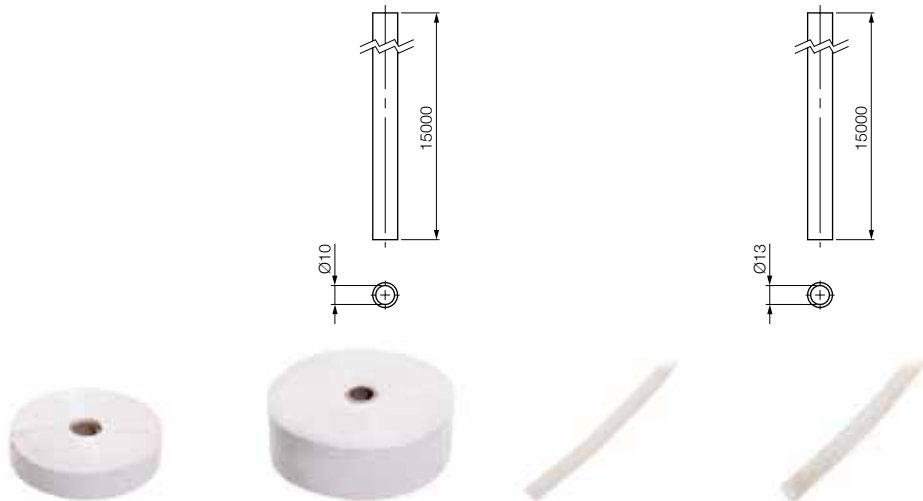
Accessories for Connectors and Valve Connectors

Protective hose/jacket/sleeve



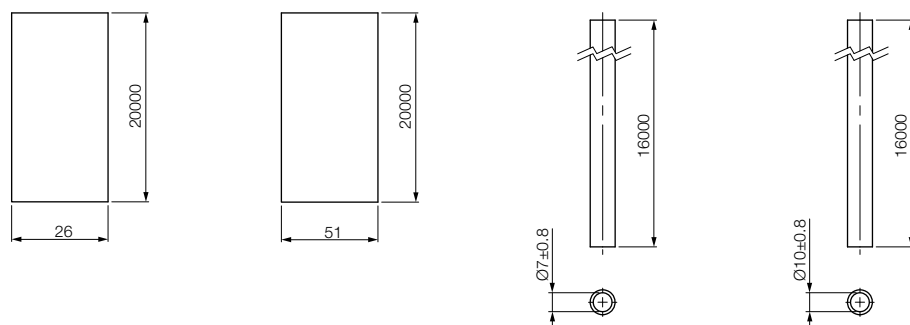
Description	Protective hose/jacket/sleeve	Protective hose/jacket/sleeve	
Use	for cable guard	for cable guard	
Inside diameter	10 mm	13 mm	
Length	15 m	15 m	
Ambient temperature T _a	−40...+250 °C	−40...+250 °C	
Housing material	Silicone rubber	Silicone rubber	

Ordering code			
Part number			
BAM022Z	BAM0230		
BAM PT-XA-002-100-2-R15	BAM PT-XA-002-130-2-R15		



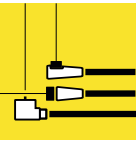
Description	Protective strip	Protective strip	Protective hose/ jacket	Protective hose/ jacket	
Use	for cable guard	for cable guard	for cable guard	for cable guard	
Inside diameter			7 ±0.8 mm	10 ±0.8 mm	
Length	20 m	20 m	16 m	16 m	
Ambient temperature T _a	−40...+180 °C	−40...+180 °C	−40...+200 °C	−40...+200 °C	
Housing material	Silicone 60 white	Silicone 60 white	Silicone 60 translucent	Silicone 60 translucent	

Ordering code					
Part number					
BAM021E	BAM021F	BAM0212	BAM0213		
BAM PT-XA-005-260-T-R20	BAM PT-XA-005-510-T-R20	BAM PT-XA-004-070-T-R16	BAM PT-XA-004-100-T-R16		



Accessories for Connectors and Valve Connectors

Protective hose/jacket/sleeve



Accessories for
Connectors and
Valve Connectors

Tools

Screw Plugs

Integrated tamper
protection

Label

Cable Clamp

Protective Cover

Anti-sabotage

Protection,

Coupling

**Protective Hose/
Jacket/Sleeve**



Protective hose/jacket/ sleeve

for cable guard

19 mm

15 m

-40...+250 °C

Silicone rubber



Protective hose/jacket/ sleeve

for cable guard

38 mm

15 m

-40...+250 °C

Silicone rubber



Protective hose/jacket/ sleeve

for cable guard

50 mm

15 m

-40...+250 °C

Silicone rubber

Ordering code

Part number

BAM0231

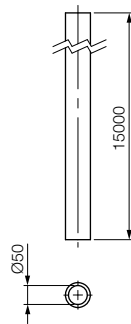
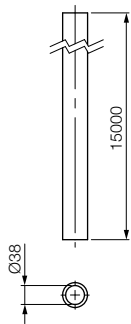
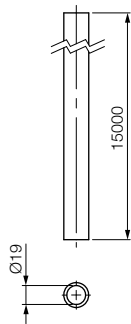
BAM PT-XA-002-190-2-R15

BAM0232

BAM PT-XA-002-380-2-R15

BAM0233

BAM PT-XA-002-500-2-R15



Protective hose/ jacket

for cable guard

13 ±0.8 mm

16 m

-40...+200 °C

Silicone 60 translucent

Protective hose/ jacket

for cable guard

16 ±0.8 mm

16 m

-40...+200 °C

Silicone 60 translucent

Protective hose/ jacket

for cable guard

19 ±0.8 mm

16 m

-40...+200 °C

Silicone 60 translucent

Protective hose/ jacket

for cable guard

50 ±0.8 mm

16 m

-40...+200 °C

Silicone 60 translucent

Ordering code

Part number

BAM0214

BAM PT-XA-004-130-T-R16

BAM0215

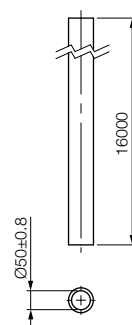
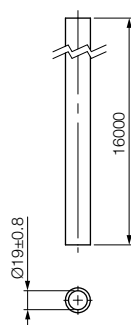
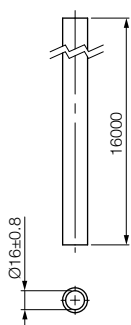
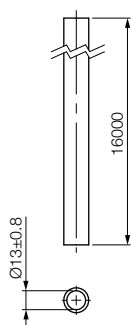
BAM PT-XA-004-160-T-R16

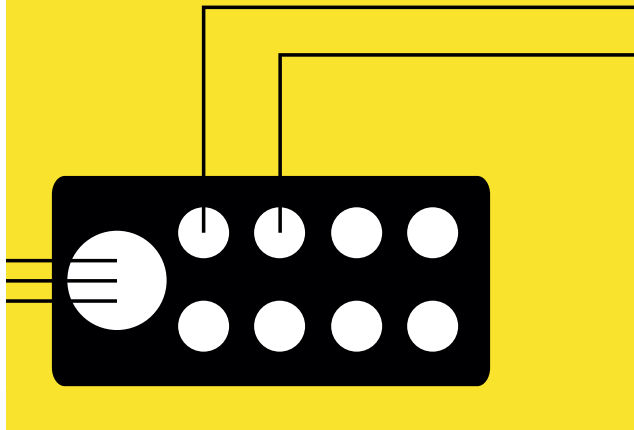
BAM0216

BAM PT-XA-004-190-T-R16

BAM0217

BAM PT-XA-004-500-T-R16

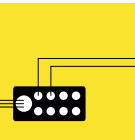




Passive Splitters



Product Topology		212
Passive Splitters		
M8	3-pin, 4-pin	213
M12	4-pin, 5-pin	216
Passive Interface Splitters		
M12	4-pin	220
M12	5-pin	222



Passive splitters

Balluff Passive Interface BPI units connect sensors and actuators to the controller. They are especially ideal for harsh conditions and are highly recommended for situations where coolants and lubricants are used. Metal screw inserts ensure optimum media resistance. Fully potted housing provides a higher degree of protection as well as better shock and vibration resistance characteristics. Through excellent design, Balluff Passive Interface BPI units can be integrated into all systems and machines. Metal screw inserts also ensure improved fit of the connectors. The BPI can be flexibly mounted on all standard profiles and base plates and the mounting holes are centrally positioned. Additional mounting holes allow you to mount the BPI on its side. Flexible mounting is supported by the highly visible LED. The full line of Balluff products includes all styles.

Balluff Passive Interface BPI — extremely versatile, even under demanding conditions

- Outstanding design
- Fully potted housing
- High shock and vibration ratings
- Metal screw inserts
- Flexible mounting options

Passive Splitters

Product Topology

Passive splitters

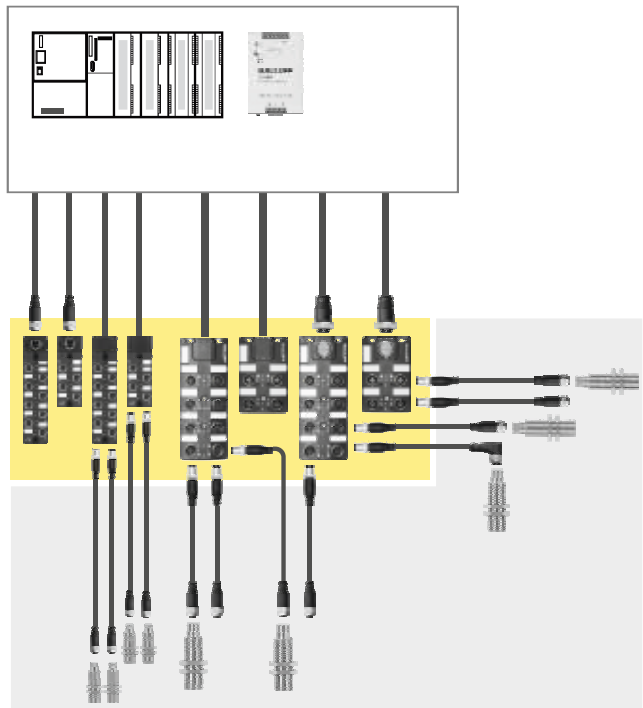
Lightweight and compact M8 and M12 plastic splitter boxes are used wherever space is limited or moving machine members are present. The plastic splitters come either complete or in modular form.

Features

- Customized, versatile and light, usable as M8 or M12 splitters
- Quick assembly and disassembly for transport
- Potential isolation using jumpers

Typical applications for the plastic version

- Assembly and handling machines
- Packaging technology
- Specialty machine construction



Assembly time

Conventional splitter boxes or wiring directly in the control cabinet



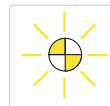
Use of passive splitter boxes



Machines, systems and connectivity components are divided into transportable sections and dismantled prior to delivery.

During commissioning, installation times are normally reduced by 60%.

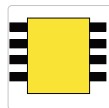
Info/Feedback



LEDs indicate the status of the system.

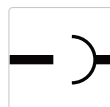
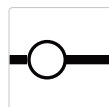
Fewer qualified employees are required.

Dimension



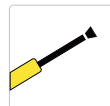
Usually smaller sizes.

Connection technology



The plug-in solution provides clear advantages.

Complexity



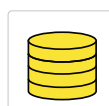
Connectors, sensors and other actuators are easy to replace.

Downtimes are reduced.

Service personnel



Fewer qualified employees are required to maintain the machine.



You can significantly reduce your installation and maintenance costs with Balluff splitters.

Passive Splitters

M8, 3-pin, with M12 plug connection, LED



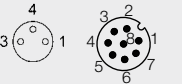
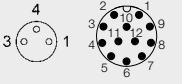
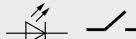
Passive splitters

Product Topology

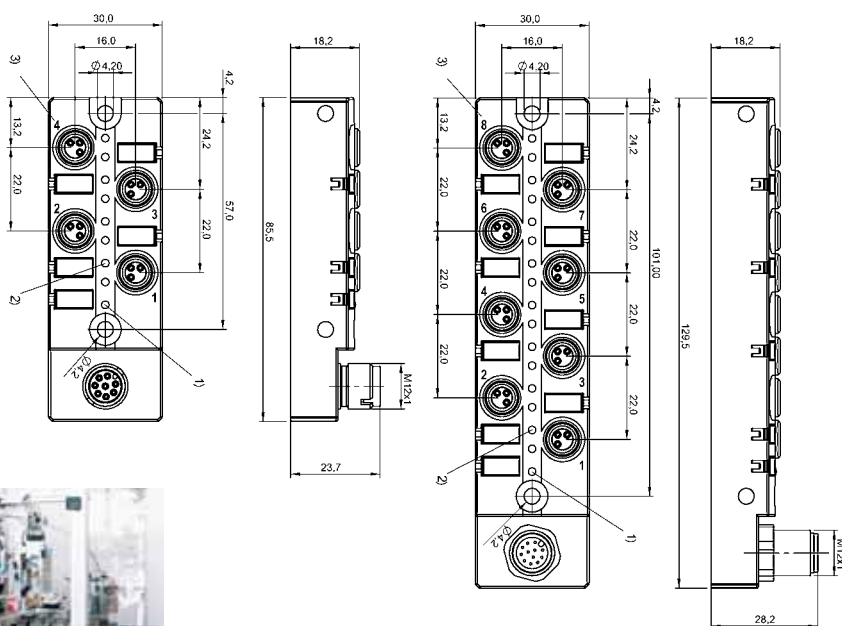
Passive splitters

Passive
splitters
M12

Passive interface
splitters M12

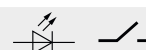
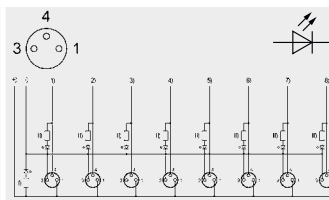
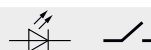
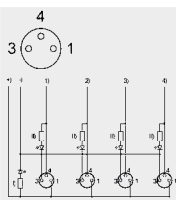
View of female/ male side	 	 
Version	4-way	8-way
Rated operating voltage U_e	24 V DC	24 V DC
Supply voltage U_b	10...30 V DC	10...30 V DC
Power-on indicator (LED)	1x (PNP), green	1x (PNP), green
Indicator switching function (LED)	4x (PNP), yellow	8x (PNP), yellow
Sensor connection	3-pin female, M8x1	3-pin female, M8x1
Controller connection	8-pin connector, M12x1	12-pin connector, M12x1
Number of sockets	4	8
Current load capacity	2 A	2 A
Total current	6 A	6 A
Housing material	PBT, GF	PBT, GF
Degree of protection as per IEC 60529	IP 67 (when screwed into place)	IP 67 (when screwed into place)
Ambient temperature T_a	-5...+60 °C	-5...+60 °C
Use	Normally open (NO) 	Normally open (NO) 

	Ordering code	
	Part number	
	BPI003P	BPI003T
	BPI 4M303P-2K-00-SM48T	BPI 8M303P-2K-00-SM4CT





View of female/
male side



Version

4-way

8-way

Rated operating voltage U_e

24 V DC

24 V DC

Supply voltage U_B

10...30 V DC

10...30 V DC

Power-on indicator (LED)

1× (PNP), green

1× (PNP), green

Indicator switching function (LED)

4× (PNP), yellow

8× (PNP), yellow

Sensor connection

3-pin female, M8×1

3-pin female, M8×1

Controller connection

Permanently connected cable

Permanently connected cable

Number of sockets

4

8

Current load capacity

2 A

2 A

Total current

6 A

6 A

Housing material

PBT, GF

PBT, GF

Degree of protection as per IEC 60529

IP 67 (when screwed into place)

IP 67 (when screwed into place)

Ambient temperature T_a

-5...+60 °C

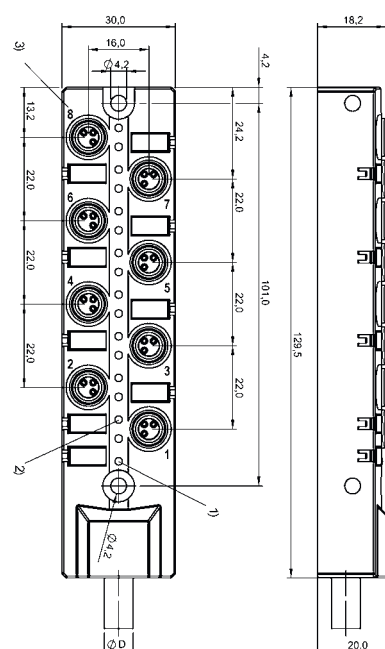
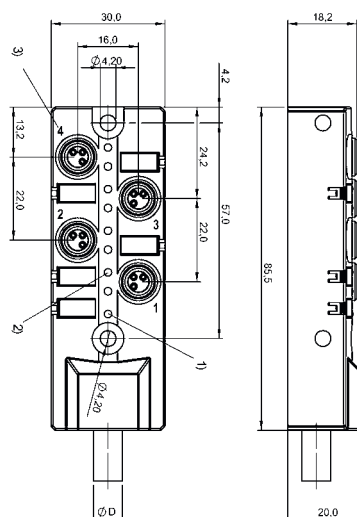
-5...+60 °C

Use

Normally open (NO) —

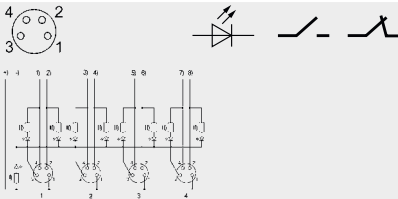
Normally open (NO) —

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	3 m	BPI002N	BPI0030
			BPI 4M303P-2K-00-KPX60-030	BPI 8M303P-2K-00-KPXA0-030
PUR	Black	5 m	BPI002P	BPI0031
			BPI 4M303P-2K-00-KPX60-050	BPI 8M303P-2K-00-KPXA0-050
PUR	Black	10 m	BPI002R	BPI0032
			BPI 4M303P-2K-00-KPX60-100	BPI 8M303P-2K-00-KPXA0-100
PUR	Black	15 m	BPI002T	BPI0033
			BPI 4M303P-2K-00-KPX60-150	BPI 8M303P-2K-00-KPXA0-150

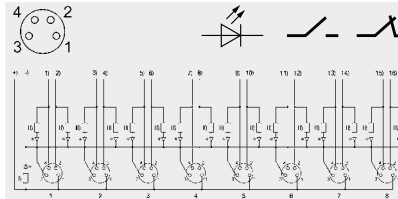


Passive Splitters

M8, 4-pin with cable



4-way
 24 V DC
 10...30 V DC
 1× (PNP), green
 8× (PNP), yellow
 4-pin female, M8×1
 Permanently connected cable
 4
 2 A
 6 A
 PBT, GF
 IP 67 (when screwed into place)
 -5...+60 °C
 Complementary (NO/NC) /

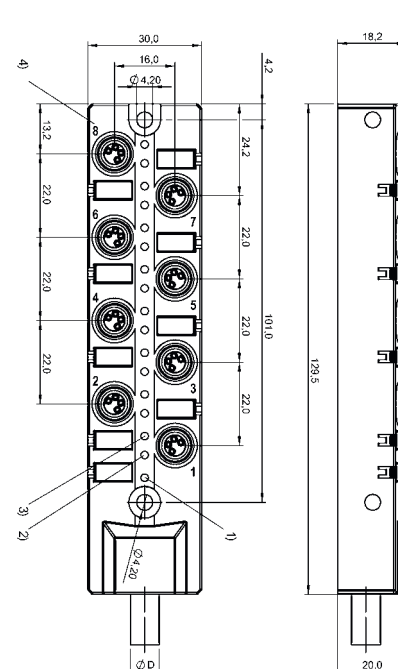
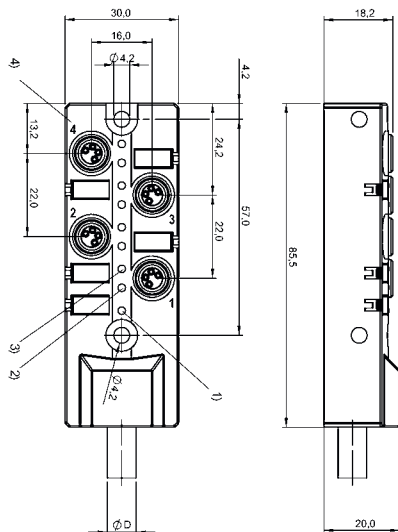


8-way
 24 V DC
 10...30 V DC
 1× (PNP), green
 16× (PNP), yellow
 4-pin female, M8×1
 Permanently connected cable
 8
 2 A
 6 A
 PBT, GF
 IP 67 (when screwed into place)
 -5...+60 °C
 Complementary (NO/NC) /

Ordering code

Part number

BPI0038 BPI 4M304P-2K-00-KPXA0-030	BPI003K BPI 8M304P-2K-00-KPXK0-030	
BPI0039 BPI 4M304P-2K-00-KPXA0-050	BPI003L BPI 8M304P-2K-00-KPXK0-050	
BPI003A BPI 4M304P-2K-00-KPXA0-100	BPI003M BPI 8M304P-2K-00-KPXK0-100	
BPI003C BPI 4M304P-2K-00-KPXA0-150	BPI003N BPI 8M304P-2K-00-KPXK0-150	



Passive splitters

Product
Topology

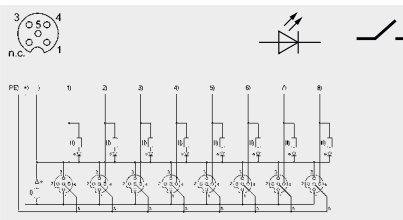
Passive
splitters
M8

Passive
splitters
M12

Passive interface
splitters M12

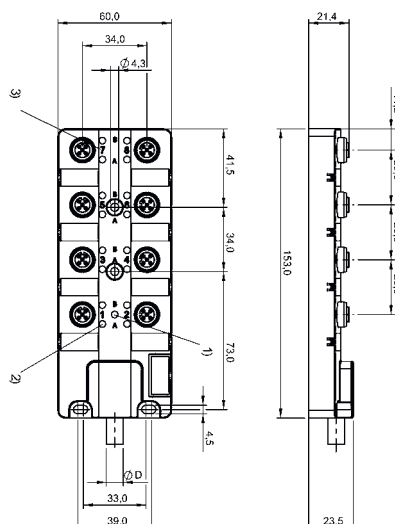


View of female/male side



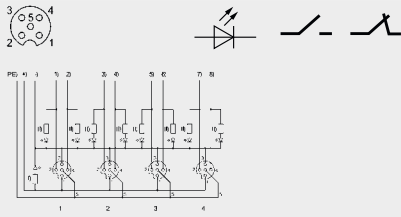
Version	8-way
Rated operating voltage U_e	24 V DC
Supply voltage U_B	10...30 V DC
Power-on indicator (LED)	1× (PNP), green
Indicator switching function (LED)	8× (PNP), yellow
Sensor connection	4-pin female, M12×1
Controller connection	Permanently connected cable
Number of sockets	8
Current load capacity	2 A
Total current	6 A
Housing material	PBT, GF
Degree of protection as per IEC 60529	IP 67 (when screwed into place)
Ambient temperature T_a	-5...+60 °C
Use	Normally open (NO)

Cable material	Color	Length	Ordering code	
			Part number	
PUR	Black	3 m	BPI0059 BPI 8M4A4P-2K-00-KPXB0-030	
PUR	Black	5 m	BPI005A BPI 8M4A4P-2K-00-KPXB0-050	
PUR	Black	10 m	BPI005C BPI 8M4A4P-2K-00-KPXB0-100	
PUR	Black	15 m	BPI005E BPI 8M4A4P-2K-00-KPXB0-150	

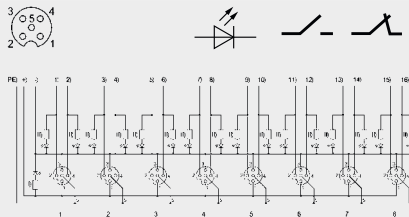


Passive Splitters

M12, 5-pin with cable



4-way
 24 V DC
 10...30 V DC
 1× (PNP), green
 8× (PNP), yellow
 5-pin female, M12×1
 Permanently connected cable
 4
 2 A
 6 A
 PBT, GF
 IP 67 (when screwed into place)
 -5...+60 °C
 Complementary (NO/NC) $\swarrow$ - / $\searrow$



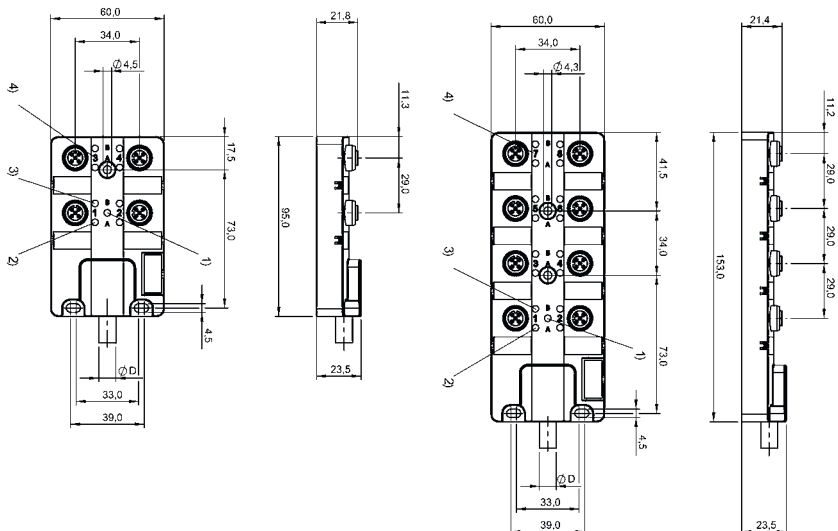
8-way
 24 V DC
 10...30 V DC
 1× (PNP), green
 16× (PNP), yellow
 5-pin female, M12×1
 Permanently connected cable
 8
 2 A
 6 A
 PBT, GF
 IP 67 (when screwed into place)
 -5...+60 °C
 Complementary (NO/NC) $\swarrow$ - / $\searrow$

Passive splitters
 Product
 Topology
 Passive
 splitters
 M8
**Passive
 splitters
 M12**
 Passive interface
 splitters M12

Ordering code

Part number

BPI0049 BPI 4M4A5P-2K-00-KPXB0-030	BPI004R BPI 8M4A5P-2K-00-KPXL0-030
BPI004A BPI 4M4A5P-2K-00-KPXB0-050	BPI004T BPI 8M4A5P-2K-00-KPXL0-050
BPI004C BPI 4M4A5P-2K-00-KPXB0-100	BPI004U BPI 8M4A5P-2K-00-KPXL0-100
BPI004E BPI 4M4A5P-2K-00-KPXB0-150	BPI004W BPI 8M4A5P-2K-00-KPXL0-150



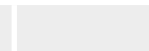
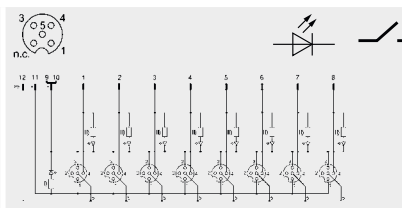
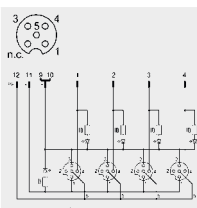
Passive Splitters

M12, 4-pin, with M23 plug connection

M12



View of female/male side



Version

4-way

8-way

Rated operating voltage U_e

24 V DC

24 V DC

Supply voltage U_B

10...30 V DC

10...30 V DC

Power-on indicator (LED)

1× (PNP), green

1× (PNP), green

Indicator switching function (LED)

4× (PNP), yellow

8× (PNP), yellow

Sensor connection

4-pin female, M12×1

4-pin female, M12×1

Controller connection

12-pin connector, M23

12-pin connector, M23

Number of sockets

4

8

Current load capacity

2 A

2 A

Total current

6 A

6 A

Housing material

PBT, GF

PBT, GF

Degree of protection as per IEC 60529

IP 67 (when screwed into place)

IP 67 (when screwed into place)

Ambient temperature T_a

-5...+60 °C

-5...+60 °C

Use

Normally open (NO) —

Normally open (NO) —

Ordering code

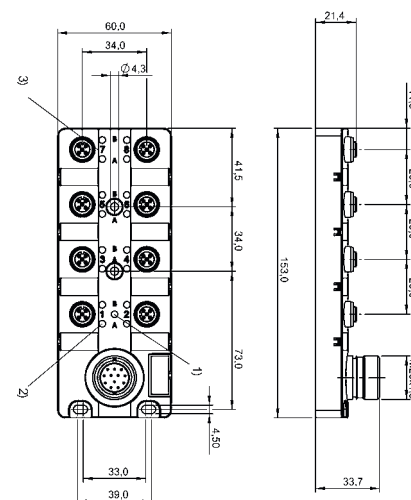
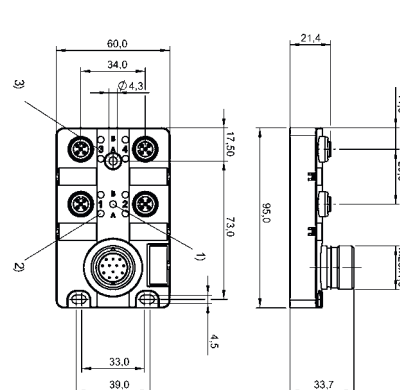
Part number

BPI004Y

BPI 4M4A4P-2K-00-SM6CT

BPI0050

BPI 8M4A4P-2K-00-SM6CT



Passive Splitters

M12, 5-pin, with M23 plug connection



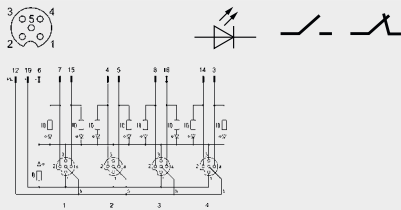
Passive splitters

Product
Topology

Passive
splitters
M8

Passive
splitters
M12

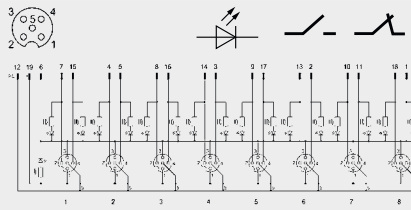
Passive interface
splitters M12



4-way

24 V DC
10...30 V DC
1× (PNP), green
8× (PNP), yellow
5-pin female, M12×1
12-pin connector, M23

4
2 A
6 A
PBT, GF
IP 67 (when screwed into place)
-5...+60 °C
Complementary (NO/NC) $\swarrow$ - / $\searrow$



8-way

24 V DC
10...30 V DC
1× (PNP), green
16× (PNP), yellow
5-pin female, M12×1
12-pin connector, M23

8
2 A
6 A
PBT, GF
IP 67 (when screwed into place)
-5...+60 °C
Complementary (NO/NC) $\swarrow$ - / $\searrow$

Ordering code

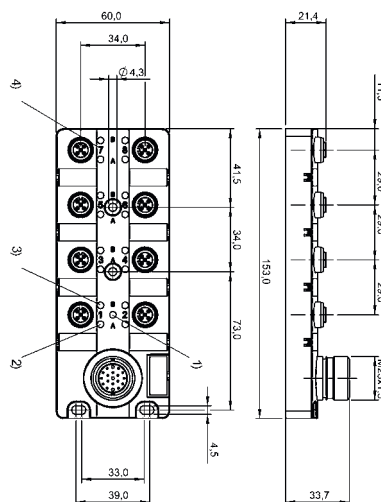
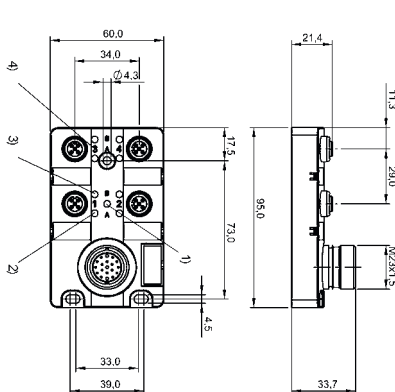
Part number

BPI004Z

BPI 4M4A5P-2K-00-SM6LT

BPI0051

BPI 8M4A5P-2K-00-SM6LT



Passive Splitters

M12, 4-pin, with cap and cable

M12

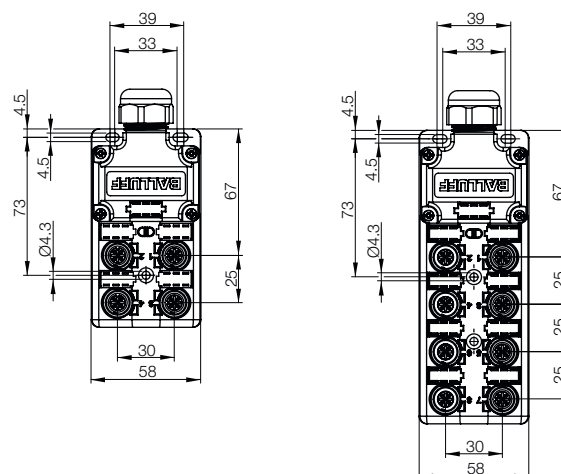
Passive splitters

The passive interface BPI connects sensors and actuators to the controller. It is especially ideal for harsh conditions and highly recommended for situations where coolants and lubricants are used. Fully potted housing provides a higher degree of protection as well as better shock and vibration resistance characteristics. Through excellent design, the passive interface BPI can be integrated in all systems and machines. The BPI can be flexibly mounted on all standard profiles and base plates and the mounting holes are centrally positioned. Flexible mounting is supported by very highly visible LEDs, thus setting up and adjusting your machines is much easier.



Version	4-way, M12	8-way, M12
Rated operating voltage U_o	24 V DC	24 V DC
Supply voltage U_B	10...30 V DC	10...30 V DC
Power-on indicator (LED)	1× (PNP), green	1× (PNP), green
Indicator switching function (LED)	4× (PNP), yellow	8× (PNP), yellow
Sensor connection	4-pin female, M12×1	4-pin female, M12×1
Controller connection	Cap connection without cable	Cap connection without cable
Number of sockets	4	8
Current load capacity	2 A	2 A
Total current	6 A	6 A
Housing material	PBT, GF	PBT, GF
Degree of protection as per IEC 60529	IP 67 (when screwed into place)	IP 67 (when screwed into place)
Ambient temperature T_a	-25...+80 °C	-25...+80 °C
Use	Normally open (NO) —/—	Normally open (NO) —/—

Cable material	Color	Length	Ordering code
			Part number
			BPI007L
			BPI 4M4A4P-2K-00-TPS9
PUR	Black	3 m	
PUR	Black	5 m	
PUR	Black	10 m	
PUR	Black	15 m	

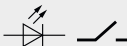
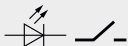


Passive Splitters

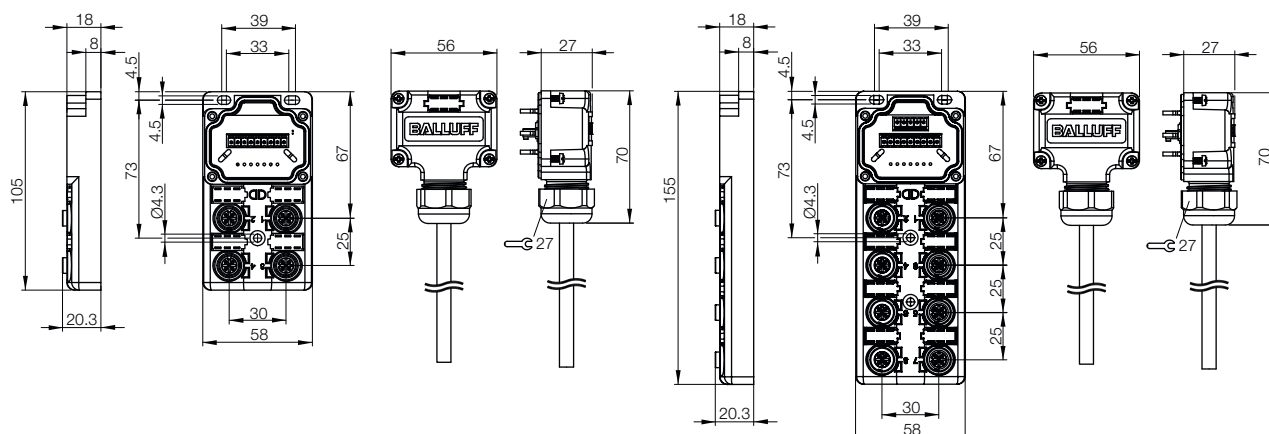
M12, 4-pin, with cap and cable



Passive splitters
Product
Topology
Passive
Splitters
M8
Passive
Splitters
M12
Passive Inter-
face
Splitters M12

4-way, base	4-way, cap with cable	8-way, base	8-way, cap with cable
			
24 V DC		24 V DC	
10...30 V DC		10...30 V DC	
1× (PNP), green		1× (PNP), green	
4× (PNP), yellow		8× (PNP), yellow	
4-pin female, M12×1		4-pin female, M12×1	
Cap connection with/without cable	Cap connection with cable	Cap connection with/without cable	Cap connection with cable
4		8	
2 A		2 A	
6 A		6 A	
PBT, GF		PBT, GF	
IP 67 (when screwed into place)		IP 67 (when screwed into place)	
-25...+80 °C		-25...+80 °C	
Normally open (NO) —/—	for 4-way base, 4-pin	Normally open (NO) —/—	for 8-way base, 4-pin

Ordering code			
Part number			
BPI007A		BPI007E	
BPI 4M4A4P-2K-00-TP09		BPI 8M4A4P-2K-00-TP0E	
	BPI007Z		BPI0083
	BPI T009-K-00-KPX70-030		BPI T00E-K-00-KPXB0-030
	BPI0080		BPI0084
	BPI T009-K-00-KPX70-050		BPI T00E-K-00-KPXB0-050
	BPI0081		BPI0085
	BPI T009-K-00-KPX70-100		BPI T00E-K-00-KPXB0-100
	BPI0082		BPI0086
	BPI T009-K-00-KPX70-150		BPI T00E-K-00-KPXB0-150



Passive Splitters

M12, 5-pin, with cap and cable

M12

Areas of application

Passive splitter boxes are ideal for use in decentralized assembly and handling machine installations, packaging technology or special purpose machine manufacturing.

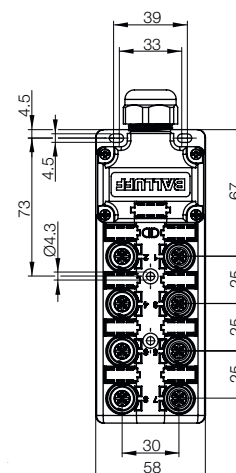
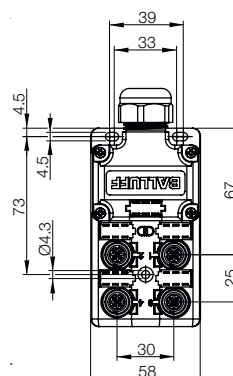
Balluff Passive Interface BPI – extremely versatile even under demanding conditions

- Outstanding design
- Fully potted housing
- High shock and vibration ratings
- Flexible mounting options
- High visibility of LEDs
- Large terminal compartment
- Modular design
- Quick to mount/detach for transportation



Version	4-way, M12	8-way, M12
Rated operating voltage U_e	24 V DC	24 V DC
Supply voltage U_B	10...30 V DC	10...30 V DC
Power-on indicator (LED)	1× (PNP), green	1× (PNP), green
Indicator switching function (LED)	4× (PNP), yellow	8× (PNP), yellow
Sensor connection	5-pin female, M12×1	5-pin female, M12×1
Controller connection	Cap connection without cable	Cap connection without cable
Number of sockets	4	8
Current load capacity	2 A	2 A
Total current	6 A	6 A
Housing material	PBT, GF	PBT, GF
Degree of protection as per IEC 60529	IP 67 (when screwed into place)	IP 67 (when screwed into place)
Ambient temperature T_a	-25...+80 °C	-25...+80 °C
Use	Complementary (NO/NC)  	Complementary (NO/NC)  

Cable material	Color	Length	Ordering code
			Part number
			BPI007K
			BPI 4M4A5P-2K-00-TPSG
			BPI007H
			BPI 8M4A5P-2K-00-TPSN
PUR	Black	3 m	
PUR	Black	5 m	
PUR	Black	10 m	
PUR	Black	15 m	



Passive Splitters

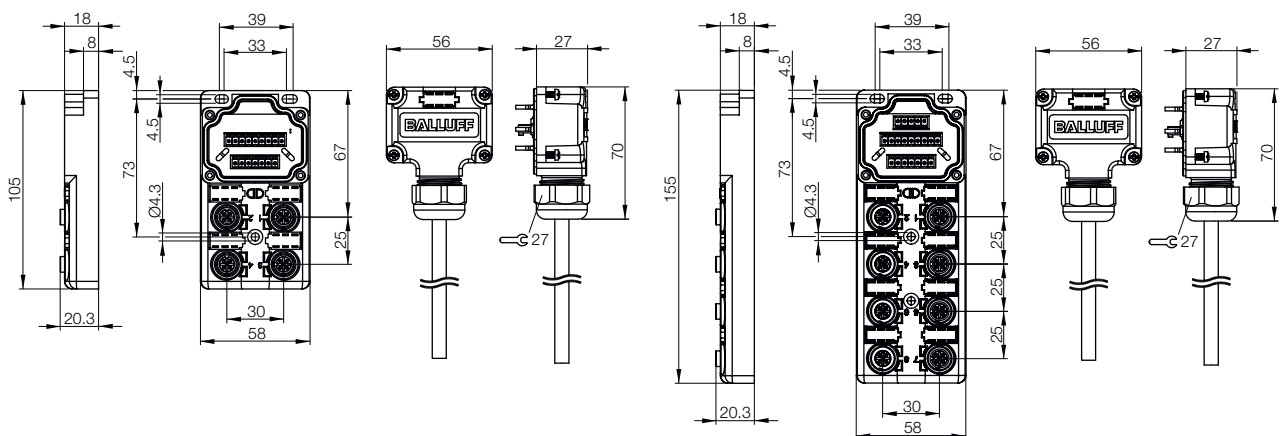
M12, 5-pin, with cap and cable

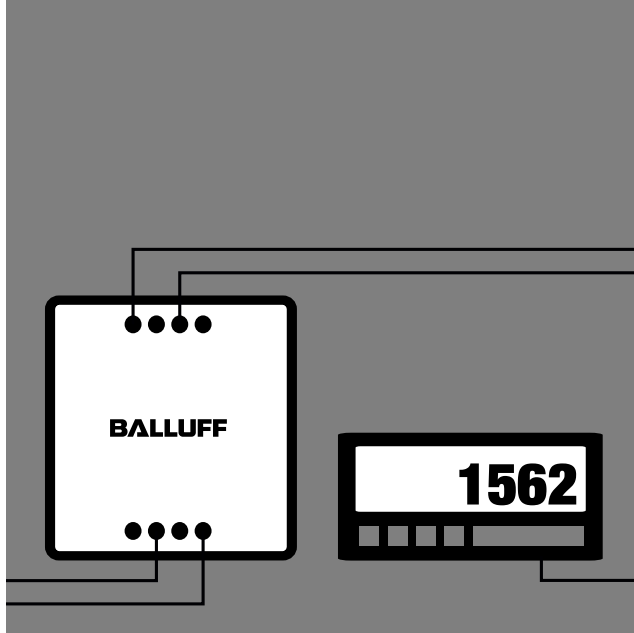


Passive splitters
Product
Topology
Passive
Splitters
M8
Passive
Splitters
M12
Passive Inter-
face
Splitters M12

4-way, base		4-way, cap with cable	8-way, base		8-way, cap with cable
24 V DC 10...30 V DC 1× (PNP), green 4× (PNP), yellow 5-pin female, M12×1 Cap connection with/without cable 4 2 A 6 A PBT, GF IP 67 (when screwed into place) -25...+80 °C Complementary (NO/NC)		Cap connection with cable for 4-way base, 5-pin	24 V DC 10...30 V DC 1× (PNP), green 8× (PNP), yellow 5-pin female, M12×1 Cap connection with/without cable 8 2 A 6 A PBT, GF IP 67 (when screwed into place) -25...+80 °C Complementary (NO/NC)		Cap connection with cable for 8-way base, 5-pin

Ordering code			
Part number			
BPI007C BPI 4M4A5P-2K-00-TP0G		BPI007F BPI 8M4A5P-2K-00-TP0N	
	BPI007M BPI T00G-K-00-KPXB0-030		BPI007T BPI T00N-K-00-KPXL0-030
	BPI007N BPI T00G-K-00-KPXB0-050		BPI007U BPI T00N-K-00-KPXL0-050
	BPI007P BPI T00G-K-00-KPXB0-100		BPI007W BPI T00N-K-00-KPXL0-100
	BPI007R BPI T00G-K-00-KPXB0-150		BPI007Y BPI T00N-K-00-KPXL0-150





Electrical Devices

Electrical devices

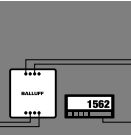
A wide selection of accessories, such as pulse extender, digital display and testers for all applications and the areas of inspection, testing, function and monitoring.



Electrical Devices

Contents

Power Supplies	
Intelligent Power Supplies	230
Single-phase Power Supplies	236
Three-phase Power Supplies	244
Technical Data	247
Pulse Extender	250
Function Diagnostics Unit	252
Analog Switching Amplifiers	254
Sensor Tester, Testing and Setting Device	256
Signal Adapters	258
Digital Display	261



Power Supplies

Reliable performance for high requirements

Industrial automation is becoming ever more demanding and the complexity of its tasks is constantly increasing. Efficient operation of equipment and machines demands reliable power supplies more than ever. Balluff power supplies are the powerful solution for interference-free system operation.

Take advantage of the special benefits of Balluff power supplies

- Full product line – choose just what you need
- Short-circuit and overload protection in industrial environments
- High availability of all devices
- Unlimited, precise power for increased demands
- Long service life for reliable operation
- Worldwide approvals for use anywhere

Every industrial automation system needs a reliable, clean and controlled source of power without spikes. Only then can these systems deliver the expected performance. With the Balluff power supplies you get what you expect and more. They ensure reliable power even under demanding conditions. They fall in line with the long Balluff tradition of reliable and high-quality performance products for industrial automation.

■ Ultra-reliable power supplies

for protecting sensitive control electronics

■ Protection against unforeseen events

Integrated overload and overvoltage protection

■ Wide selection of models

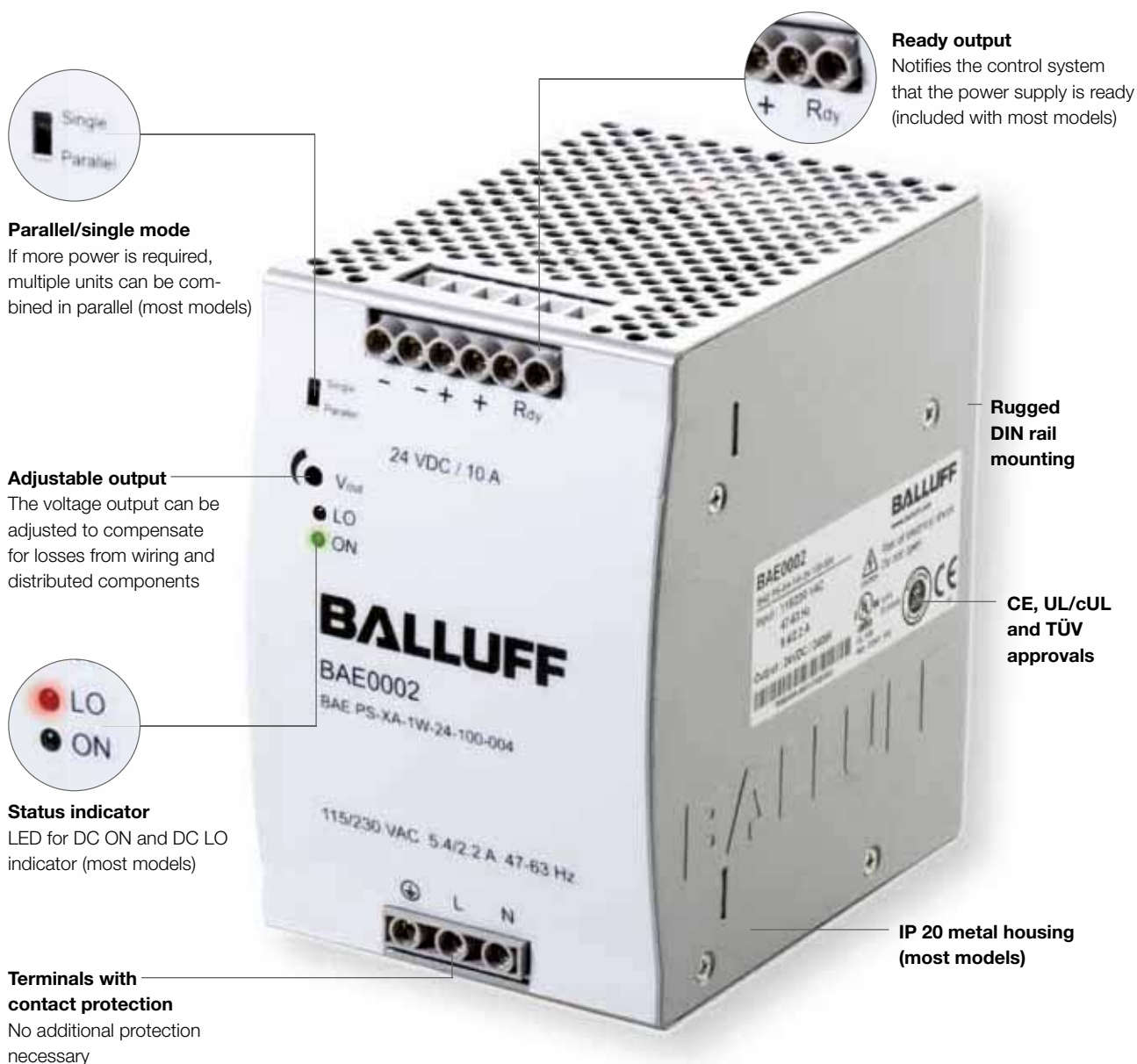
Whether stand-alone or an individual combination of various models, these solutions are perfect for your requirements

■ Clean, precise power supply for particularly demanding systems

Load regulation $\pm 1\%$ for all models, ripple and noise under 50 mV for most models

■ Long service life for less system downtime

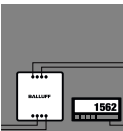
MTBF (Mean Time Between Failure) up to 800,000 hours/ 91 years



Power Supplies Overview

Version	Output voltage	Output power														Input voltage	Features		Product information		Page				
		0.75 A/18 W	1.25 A/30 W	1.5 A/18 W	2.5 A/30 W	2.5 A/60 W	2.5 A/120 W	3.8 A/91.20 W	5 A/60 W	5 A/120 W	5 A/240 W	8 A/192 W	10 A/120 W	10 A/240 W	10 A/480 W		20 A/480 W	40 A/960 W	Housing material	Parallel mode		Ready output	Ordering code	Part number	
Standard IP 20	12 V			■														Single-phase ¹	Plastic		■	BAE0036	BAE PS-XA-1W-12-015-001	236	
					■													Single-phase ¹	Plastic		■	BAE0039	BAE PS-XA-1W-12-025-002	237	
									■									Single-phase ¹	Metal		■	BAE003E	BAE PS-XA-1W-12-050-002	239	
													■					Single-phase ²	Metal		■	BAE003H	BAE PS-XA-1W-12-100-003	241	
	24 V	■																Single-phase ¹	Plastic			■	BAE0001	BAE PS-XA-1W-24-007-001	236
			■															Single-phase ¹	Plastic			■	BAE0004	BAE PS-XA-1W-24-012-002	237
						■												Single-phase ¹	Plastic			■	BAE0005	BAE PS-XA-1W-24-025-002	238
								■										Single-phase ²	Metal		■	■	BAE003J	BAE PS-XA-1W-24-038-003	240
										■								Single-phase ²	Metal		■	■	BAE0006	BAE PS-XA-1W-24-050-003	241
														■				Single-phase ²	Metal		■	■	BAE0002	BAE PS-XA-1W-24-100-004	242
																■		Single-phase ²	Metal		■	■	BAE0003	BAE PS-XA-1W-24-200-005	243
											■							3-phase ³	Metal			■	BAE0007	BAE PS-XA-3Y-24-050-009	244
															■			3-phase ³	Metal			■	BAE0008	BAE PS-XA-3Y-24-100-006	245
																	■	3-phase ³	Metal		■	■	BAE0009	BAE PS-XA-3Y-24-200-007	245
																	■	3-phase ³	Metal		■	■	BAE003R	BAE PS-XA-3Y-24-400-010	246
	48 V						■											Single-phase ²	Plastic		■	■	BAE003K	BAE PS-XA-1W-48-025-003	240
												■						Single-phase ²	Metal		■	■	BAE003L	BAE PS-XA-1W-48-050-004	242
															■			Single-phase ²	Metal		■	■	BAE003M	BAE PS-XA-1W-48-100-005	243
	Intelligent devices IP 20	24 V								■								Single-phase ¹	Metal			■	BAE00EK	BAE PS-XA-1W-24-050-013	231
													■				Single-phase ¹	Metal			■	BAE00EU	BAE PS-XA-1W-24-100-014	231	
Intelligent devices IP 67	24 V							■									Single-phase ¹	Metal				BAE00EN	BAE PS-XA-1W-24-038-601	232	
									■								Single-phase ¹	Metal				BAE00EP	BAE PS-XA-1W-24-038-602	232	
										■							Single-phase ¹	Metal				BAE00ER	BAE PS-XA-1W-24-038-603	233	
									■								Single-phase ¹	Metal				BAE00FW	BAE PS-XA-1W-24-038-607	233	
												■					Single-phase ¹	Metal				BAE00ET	BAE PS-XA-1W-24-080-604	233	
													■				Single-phase ¹	Metal				BAE00FL	BAE PS-XA-1W-24-080-605	234	
														■			Single-phase ¹	Metal				BAE00FY	BAE PS-XA-1W-24-080-606	234	

¹ = 100...240 V AC
² = 115/230 V AC (auto-select)
³ = 340...575 V AC



Power supplies
Intelligent
Power Supplies
Single-phase
power supplies
Three-phase
power supplies
Technical Data
Pulse extender
Function diag-
nostics unit
Analog
Switching
Device
Sensor tester,
testing and set-
ting device
Signal adapters
Digital Display

Power Supplies

Reliable performance for the high requirements in industrial automation

Intelligent power supply units –

For outstanding system availability

If you want to operate your systems and machines with maximum efficiency, the power supply you use must be reliable. Intelligent power supply units from Balluff guarantee a high degree of reliability. They provide a complete picture of their environment wherever they are installed, allowing you to monitor the environment continuously.

LEDs for easy monitoring

- Load level
- Stress level
- Lifetime

LEDs indicate the load level and stress level so the operator knows immediately when the unit is operating at maximum performance. LEDs also show the service life of the devices, simplifying maintenance and operation. The user can also see when a device has to be replaced. This is how Balluff power supply units contribute to increased system availability.

The benefits to you

- Continuous monitoring of machines and systems
 - Reliable power supply units guarantee efficient operation
 - Optimized use of devices and a longer service life
 - Maintenance planning
- Devices only replaced when necessary

Versions

Intelligent power supply units from Balluff are available in two versions

IP 20 (with screw terminal)

- With a wide input voltage range from 90...264 V AC
- Designed for versatile use in industrial automation
- Also satisfies all wind turbine requirements

IP 67 (with connector)

- Can be used directly in harsh environments
- Fully potted housing
- High shock and vibration ratings

Power for controllers and networks

Specially developed for controller units, Balluff power supplies can be perfectly integrated into your control package.

The PS series of ultra-reliable power supply units is available in a wide range of 12, 24, and 48 V DC models with single or 3-phase input. With a bandwidth of 18 W to 960 W, they truly leave nothing to be desired. For even greater power, multiple power supplies are interconnected (parallel switching mode).

Do you need a different voltage? Please contact us.



Trouble-free installation

Reliable power has never been so simple to install. It starts with the convenient DIN rail mounting using the integrated Balluff high-performance mounting system. The screw terminals are aligned to enable the integration of an AC input from below and a DC output from above. Connections with contact protection render additional safety equipment superfluous.



Power Supplies

Reliable performance for the high requirements of industrial automation

Load level:



Load level

■ Reversible in short term

Load level indicates the current load on the device. The display indicates the load without any delay.

Heartbeat:



Stress level

■ Reversible in medium term

Stress level indicates the physical and thermal loads. Changing the load has an effect on device wear.

Wear indicator:

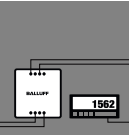


Lifetime

■ Irreversible in long term

Lifetime shows the remaining service life of the device, based on the total of all loads.

All indicators are multi-colored—
● green,
● yellow,
● or red—and show the status of the device.



Power supplies
 Intelligent Power Supplies
 Single-phase power supplies
 Three-phase power supplies
 Technical Data
 Pulse extender
 Function diagnostics unit
 Analog Switching Device
 Sensor tester, testing and setting device
 Signal adapters
 Digital Display



Power Supplies

Intelligent devices for the high requirements of industrial automation

Intelligent power supplies from Balluff

The installation of decentralized power supply units without switch cabinets with the IP 67 degree of protection is becoming more popular in industrial automation. Although local power supply units are already available, they are generally difficult to access once installed. And to further complicate matters, monitoring the operating status is practically impossible. As a result, operators rely on preventive maintenance concepts to guarantee maximum possible availability. This procedure is reliable, but also expensive, because devices are frequently replaced during the maintenance cycle well before the end of their service life, as there is no alternative system available.

For the first time, intelligent, energy-saving power supply units from Balluff promise to remedy this situation. Their condition is represented using visible indicators.

This novel concept allows detection of the condition of the device at a glance. Since it tracks dynamic loads, it can be operated continuously even under high load conditions. This makes typical reserves of 30 to 50% superfluous.

The intelligence supports continuous high utilization of the devices. Their operational status is displayed visually via:

- Load level
- Stress level
- Lifetime

The indicators provide an easy way for the operator to quickly ascertain the status.

General key information about the IP 20 and IP 67 power supply units

- High 92% efficiency
- Minimal heat loss and generation
- Increasing efficiency of the systems
- 3-stage status indication
- Power boost (150% for 4 sec.)
- Extremely compact
- More efficient utilization of the power supply units
- Planned reserves are not wasted
- Prevention of failures caused by continuous overload
- Scheduled maintenance and repairs no longer necessary
- Higher productivity
- PSU replaced only at the end of its service life
- Service life of 15 years (at 80% load and 40 °C), MTBF > 800,000 h
- Enclosed housing guarantees high degree of resistance to vibration and shock loads
- With IP 20, also with floating alarm contacts

Ideal areas of application for these intelligent power supply units include decentralized installations in the automobile industry, machine construction, wind turbines, etc.



IP 20



IP 67

Power Supplies

Intelligent devices

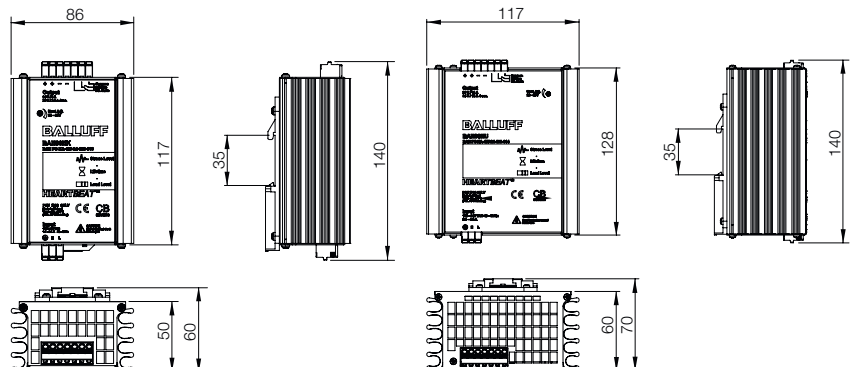
5 A, 10 A



Output current	5 A	10 A
Output power	120 W	240 W
Output voltage	24 V DC (SELV)	24 V DC (SELV)
Input voltage	100...240 V AC	100...240 V AC
	Single phase	single-phase
Ordering code	BAE00EK	BAE00EU
Part number	BAE PS-XA-1W-24-050-013	BAE PS-XA-1W-24-100-014
Input voltage range	90...264 V AC/135...340 V DC	90...264 V AC/135...340 V DC
Inrush current	1.14 at 230 V AC / 2.1 A at 110 V AC	2.11 at 230 V AC/4.4 A at 110 V AC
Frequency range	48...62 Hz	48...62 Hz
Input fuse	6.3 A/250 V AC internal	6.3 A/250 V AC internal
Voltage adjustment range	22...28 V DC	22...28 V DC
Temperature coefficient max.	±0.03%/°C	0.03%/°C
Holdup time	> 150 ms at 230 V AC/> 25 ms at 115 V AC	> 120 ms at 230 V AC/> 15 ms at 115 V AC
Status indicator	Stress level, lifetime, load level	Stress level, lifetime, load level
Power boost	150% for 4 s	150% for 4 s
Efficiency	High efficiency, typically > 89%	High efficiency, typically > 91%
Response	Forward characteristic	Forward characteristic
Ambient temperature	-25...+70 °C	-25...+70 °C
Storage temperature	-40...+80 °C	-40...+80 °C
Mounting	DIN rail mounting	DIN rail mounting
Parallel mode	Yes (with external diodes)	Yes (with external diodes)
Degree of protection as per IEC 60529	IP 20	IP 20
Derating	-2.5%/ °C above +60 °C	-2.5%/ °C above +60 °C
Cooling	Free convection	Free convection
Housing material	Metal, semi-potted	Metal, semi-potted
Service life (at 80% load and 40 °C)	15 years	15 years
Warranty	2 years	2 years
Weight	0.80 kg	1.15 kg
Approvals	CE	CE
Wiring diagram		

Power supplies
Intelligent
Power Supplies
Single-phase
power supplies
Three-phase
power supplies
Technical Data
Pulse extender
Function diag-
nostics unit
Analog
Switching
Device
Sensor tester,
testing and set-
ting device
Signal adapters
Digital Display

*SELV = Safety Extra Low Voltage



Power Supplies

Intelligent devices

3.8 A

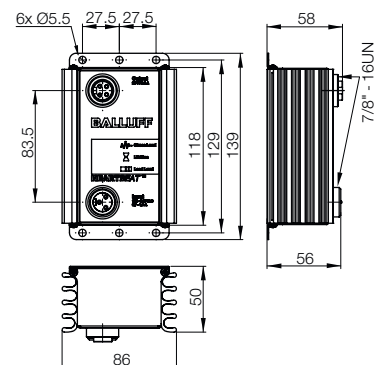
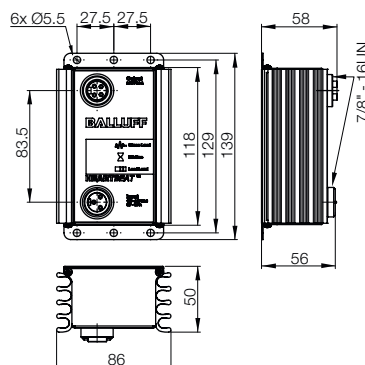


Output current	3.8 A	3.8 A	
Output power	91.2 W	91.2 W	
Output voltage	24 V DC (SELV)	24 V DC (PELV)	
Input voltage	100...240 V AC	100...240 V AC	
	Single phase	single-phase	
Ordering code	BAE00EN	BAE00EP	
Part number	BAE PS-XA-1W-24-038-601	BAE PS-XA-1W-24-038-602	
Input voltage range	90...264 V AC/135...340 V DC	90...264 V AC/135...340 V DC	
Inrush current	< 30 A	< 30 A	
Frequency range	48...62 Hz	48...62 Hz	
Input fuse	6.3 A/250 V AC internal	6.3 A/250 V AC internal	
Voltage adjustment range	24 V DC fixed adjustment	24 V DC fixed adjustment	
Temperature coefficient max.	±0.03%/°C	±0.03%/°C	
Holdup time	> 200 ms at 230 V AC/> 40 ms at 115 V AC	> 200 ms at 230 V AC/> 40 ms at 115 V AC	
Status indicator	Stress level, lifetime, load level	Stress level, lifetime, load level	
Power boost	150% for 4 s	150% for 4 s	
Efficiency	High efficiency, typically > 88%	High efficiency, typically > 88%	
Input	3-pin (male)	3-pin (male)	
Output	4-pin (female)	4-pin (female) e.g. for DeviceNet, Ethernet/IP modules	
Response	Forward characteristic	Forward characteristic	
Ambient temperature	-25...+70 °C	-25...+70 °C	
Storage temperature	-40...+80 °C	-40...+80 °C	
Mounting	Panel, wall, and field mounting	Panel, wall, and field mounting	
Degree of protection as per IEC 60529	IP 67	IP 67	
Derating	-2.5%/ °C above +60 °C	-2.5%/ °C above +60 °C	
Cooling	Free convection	Free convection	
Housing material	Metal, fully potted	Metal, fully potted	
Service life (at 80% load and 40 °C)	15 years	15 years	
Warranty	2 years	2 years	
Weight	1 kg	1 kg	
Approvals	CE	CE	
Wiring diagram			

*SELV = Safety Extra Low Voltage

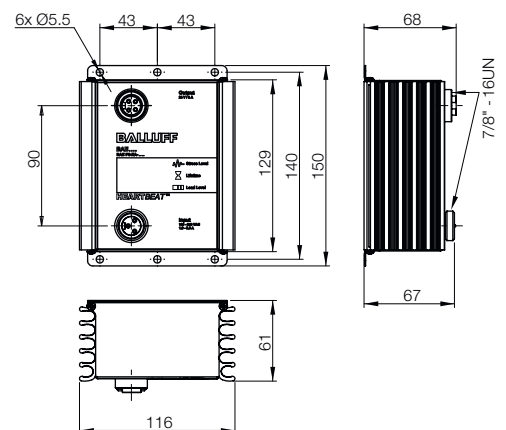
Appropriate cables	Length	Ordering code
Input 3-pin	2 m	BCC0AH2
Output 4-pin	2 m	BCC06HL
Output 5-pin	2 m	BCC06HC

Tee	Ordering code
3-pin	BCC0AA5
4-pin	BCC0AA6
5-pin	BCC0AA7





A diagram showing a white wall plug with four pins (two top, two bottom) connected by lines to a black digital display. The display shows the number 1562 in white. Below the number are four small squares and a horizontal bar.



Power Supplies

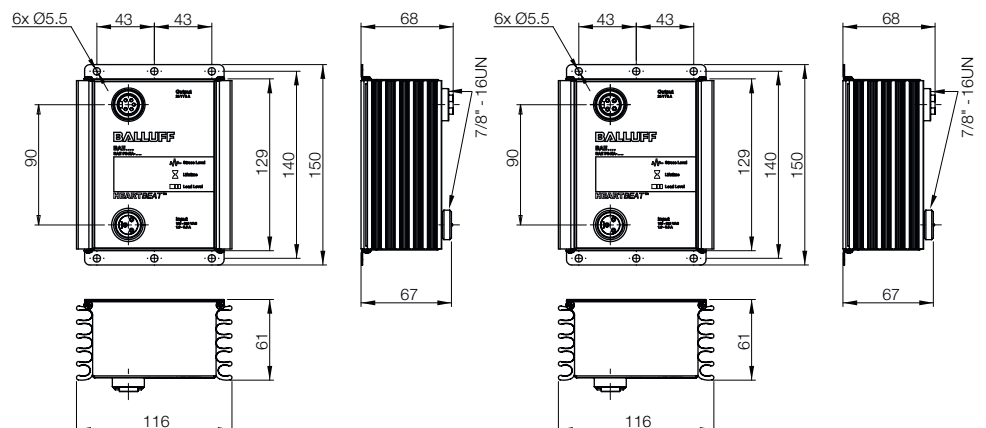
Intelligent devices

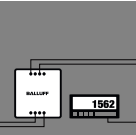
8 A



Output current	8 A	8 A
Output power	192 W	192 W
Output voltage	24 V DC (SELV)	24 V DC (PELV)
Input voltage	100...240 V AC	100...240 V AC
	Single phase	single-phase
Ordering code	BAE00FL	BAE00FY
Part number	BAE PS-XA-1W-24-080-605	BAE PS-XA-1W-24-080-606
Input voltage range	90...264 V AC/135...340 V AC	90...264 V AC/135...340 V AC
Inrush current	< 20 A	< 20 A
Frequency range	48...62 Hz	48...62 Hz
Input fuse	6.3 A/250 V AC internal	6.3 A/250 V AC internal
Voltage adjustment range	24 V DC fixed adjustment	24 V DC fixed adjustment
Temperature coefficient max.	±0.03%/°C	±0.03%/°C
Holdup time	> 150 ms at 230 V AC/> 20 ms at 115 V AC	> 150 ms at 230 V AC/> 20 ms at 115 V AC
Status indicator	Stress level, lifetime, load level	Stress level, lifetime, load level
Power boost	150% for 4 s	150% for 4 s
Efficiency	High efficiency, typically > 90%	High efficiency, typically > 90%
Input	3-pin (male)	3-pin (male)
Output	5-pin (female) e.g. for Profibus, Profinet, CC-Link modules	4-pin (female) e.g. for DeviceNet, Ethernet/IP modules
Response	Forward characteristic	Forward characteristic
Ambient temperature	-25...+70 °C	-25...+70 °C
Storage temperature	-40...+80 °C	-40...+80 °C
Mounting	Panel, wall, and field mounting	Panel, wall, and field mounting
Degree of protection as per IEC 60529	IP 67	IP 67
Derating	-2.5%/ °C above +60 °C	-2.5%/ °C above +60 °C
Cooling	Free convection	Free convection
Housing material	Metal, fully potted	Metal, fully potted
Service life (at 80% load and 40 °C)	15 years	15 years
Warranty	2 years	2 years
Weight	1.65 kg	1.65 kg
Approvals	CE	CE
Wiring diagram		

*SELV = Safety Extra Low Voltage





Power supplies

**Intelligent
Power Supplies**

Single-phase
power supplies

Three-phase
power supplies

Technical Data

Pulse extender

Function diag-
nostics unit

Analog
Switching
Device

Sensor tester,
testing and set-
ting device

Signal adapters

Digital Display

Power Supplies

Single-phase input voltage

0.75 A, 1.5 A

Plastic



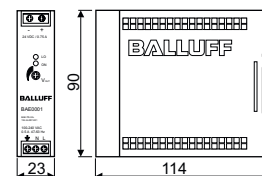
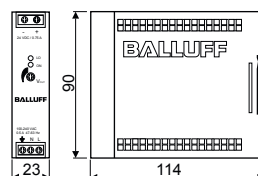
Class 2



Class 2

Output current	0.75 A	1.5 A																	
Output power	18 W	18 W																	
Output voltage	24 V DC (SELV)	12 V DC (SELV)																	
Input voltage	100...240 V AC	100...240 V AC																	
Ordering code	BAE0001	BAE0036																	
Part number	BAE PS-XA-1W-24-007-001	BAE PS-XA-1W-12-015-001																	
Input voltage range	90...264 V AC/120...375 V DC	90...264 V AC/120...375 V DC																	
Inrush current	115 V AC < 10 A/230 V AC < 18 A	115 V AC < 10 A/230 V AC < 18 A																	
Frequency range	47...63 Hz	47...63 Hz																	
Input fuse	T2 A/250 V AC internal	T2 A/250 V AC internal																	
Voltage adjustment range	22.5...28.5 V DC	11...14 V DC																	
Temperature coefficient max.	±0.03%/°C	±0.03%/°C																	
Ripple and noise	50 mV	50 mV																	
Holdup time	115 V AC > 20 ms/230 V AC > 30 ms	115 V AC > 20 ms/230 V AC > 30 ms																	
Status indicator DC ON	Green LED	Green LED																	
Status indicator DC LOW	Red LED	Red LED																	
Efficiency	77 %	77 %																	
Response	Hiccup mode	Hiccup mode																	
Switching frequency	> 100 kHz	> 100 kHz																	
Input/output isolation voltage	3000 V AC	3000 V AC																	
Insulation resistance	100 MΩ	100 MΩ																	
Switch-on delay	< 1 s	< 1 s																	
Ambient temperature	-20...+70 °C	-20...+70 °C																	
Derating	-2.5%/°C of +61 °C	-2.5%/°C of +61 °C																	
Parallel mode	Yes (with external diodes)	Yes (with external diodes)																	
Degree of protection as per IEC 60529	IP 20	IP 20																	
Ready output	No	No																	
Cooling	Free convection	Free convection																	
Housing material	Plastic	Plastic																	
Weight	0.15 kg	0.15 kg																	
Approvals	CE, UL/cUL, TÜV	CE, UL/cUL, TÜV																	
Wiring diagram	<table><tr><td>L, N</td><td>Input terminals</td></tr><tr><td>PE</td><td>PE connection</td></tr><tr><td>Vo -</td><td>Output terminal -</td></tr><tr><td>Vo +</td><td>Output terminal +</td></tr></table>	L, N	Input terminals	PE	PE connection	Vo -	Output terminal -	Vo +	Output terminal +	<table><tr><td>L, N</td><td>Input terminals</td></tr><tr><td>PE</td><td>PE connection</td></tr><tr><td>Vo -</td><td>Output terminal -</td></tr><tr><td>Vo +</td><td>Output terminal +</td></tr></table>	L, N	Input terminals	PE	PE connection	Vo -	Output terminal -	Vo +	Output terminal +	
L, N	Input terminals																		
PE	PE connection																		
Vo -	Output terminal -																		
Vo +	Output terminal +																		
L, N	Input terminals																		
PE	PE connection																		
Vo -	Output terminal -																		
Vo +	Output terminal +																		

*SELV = Safety Extra Low Voltage



Power Supplies

Single-phase input voltage

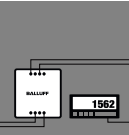
1.25 A, 2.5 A



Class 2



Class 2



Power supplies
Intelligent
Power Supplies
**Single-phase
power supplies**
Three-phase
power supplies
Technical Data
Pulse extender
Function diag-
nostics unit
Analog
Switching
Device
Sensor tester,
testing and set-
ting device
Signal adapters
Digital Display

1.25 A

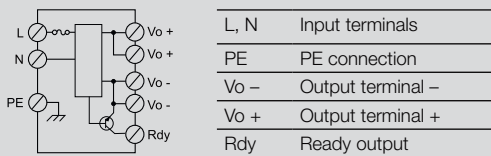
30 W
24 V DC (SELV)
100...240 V AC

BAE0004

BAE PS-XA-1W-24-012-002

85...264 V AC/90...375 V DC
115 V AC < 20 A/230 V AC < 40 A
47...63 Hz
T2 A/250 V AC internal
22.5...28.5 V DC
±0.03%/°C
50 mV
115 V AC > 20 ms/230 V AC > 30 ms
Green LED

86 %
Forward characteristic
> 80 kHz
3000 V AC
100 MΩ
< 1 s
-40...+70 °C
-2.5%/°C of +61 °C
Yes (with external diodes)
IP 20
DC OK output
Free convection
Plastic
0.29 kg
CE, UL/cUL, TÜV



2.5 A

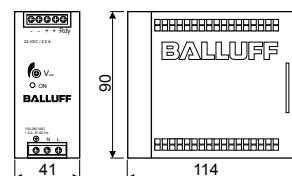
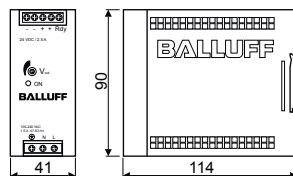
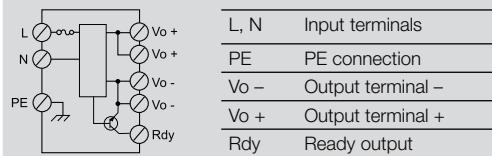
30 W
12 V DC (SELV)
100...240 V AC

BAE0039

BAE PS-XA-1W-12-025-002

85...264 V AC/90...375 V DC
115 V AC < 20 A/230 V AC < 40 A
47...63 Hz
T2 A/250 V AC internal
11...14 V DC
±0.03%/°C
50 mV
115 V AC > 20 ms/230 V AC > 30 ms
Green LED

84 %
Forward characteristic
> 80 kHz
3000 V AC
100 MΩ
< 1 s
-40...+70 °C
-2.5%/°C of +61 °C
Yes (with external diodes)
IP 20
DC OK output
Free convection
Plastic
0.29 kg
CE, UL/cUL, TÜV



Power Supplies

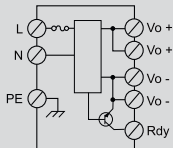
Single-phase input voltage

2.5 A

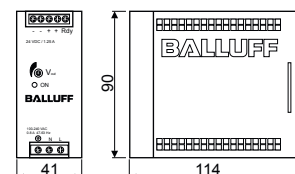
Plastic



Class 2

Output current	2.5 A											
Output power	60 W											
Output voltage	24 V DC (SELV)											
Input voltage	100...240 V AC											
Ordering code	BAE0005											
Part number	BAE PS-XA-1W-24-025-002											
Input voltage range	85...264 V AC/90...375 V DC											
Inrush current	115 V AC < 30 A/230 V AC < 60 A											
Frequency range	47...63 Hz											
Input fuse	T2 A/250 V AC internal											
Voltage adjustment range	22.5...28.5 V DC											
Temperature coefficient max.	±0.03%/°C											
Ripple and noise	50 mV											
Holdup time	115 V AC > 20 ms/230 V AC > 30 ms											
Status indicator DC ON	Green LED											
Status indicator DC LOW												
Efficiency	89 %											
Response	Forward characteristic											
Switching frequency	> 55 kHz											
Input/output isolation voltage	3000 V AC											
Insulation resistance	100 MΩ											
Switch-on delay	< 1 s											
Ambient temperature	−40...+70 °C											
Derating	−2.5%/°C of +61 °C											
Parallel mode	Yes (with external diodes)											
Degree of protection as per IEC 60529	IP 20											
Ready output	DC OK output											
Cooling	Free convection											
Housing material	Plastic											
Weight	0.36 kg											
Approvals	CE, UL/cUL, TÜV											
Wiring diagram	 <table><tr><td>L, N</td><td>Input terminals</td></tr><tr><td>PE</td><td>PE connection</td></tr><tr><td>Vo −</td><td>Output terminal −</td></tr><tr><td>Vo +</td><td>Output terminal +</td></tr><tr><td>Rdy</td><td>Ready output</td></tr></table>	L, N	Input terminals	PE	PE connection	Vo −	Output terminal −	Vo +	Output terminal +	Rdy	Ready output	
L, N	Input terminals											
PE	PE connection											
Vo −	Output terminal −											
Vo +	Output terminal +											
Rdy	Ready output											

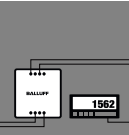
*SELV = Safety Extra Low Voltage



Power Supplies

Single-phase input voltage

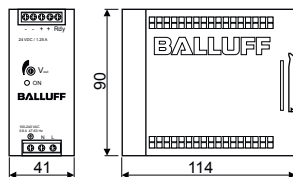
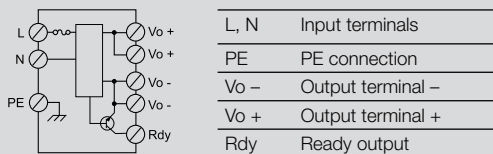
5 A



Power supplies
Intelligent
Power Supplies
**Single-phase
power supplies**
Three-phase
power supplies
Technical Data
Pulse extender
Function diag-
nostics unit
Analog
Switching
Device
Sensor tester,
testing and set-
ting device
Signal adapters
Digital Display

5 A
60 W
12 V DC (SELV)
100...240 V AC
BAE003E
BAE PS-XA-1W-12-050-002
85...264 V AC/90...375 V DC
115 V AC < 30 A/230 V AC < 60 A
47...63 Hz
T2 A/250 V AC internal
11...14 V DC
±0.03%/°C
50 mV
115 V AC > 20 ms/230 V AC > 30 ms
Green LED

86 %
Forward characteristic
> 55 kHz
3000 V AC
100 MΩ
< 1 s
-40...+70 °C
-2.5%/°C of +61 °C
Yes (with external diodes)
IP 20
DC OK output
Free convection
Plastic
0.36 kg
CE, UL/cUL, TÜV



Power Supplies

Single-phase input voltage

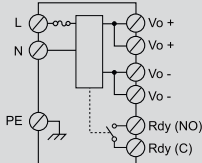
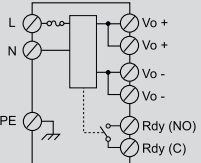
2.5 A, 3.8 A

Metal

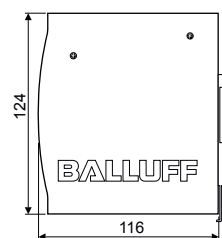
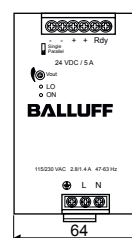
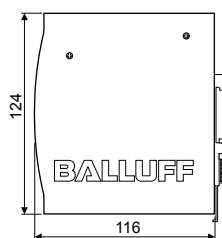


Class 2



Output current	3.8 A	2.5 A																					
Output power	91.20 W	120 W																					
Output voltage	24 V DC (SELV)	48 V DC (SELV)																					
Input voltage	115/230 V AC (Auto-Select)	115/230 V AC (Auto-Select)																					
Ordering code	BAE003J	BAE003K																					
Part number	BAE PS-XA-1W-24-038-003	BAE PS-XA-1W-48-025-003																					
Input voltage range	90...132 V AC; 180...264 V AC/210...375 V DC	90...132 V AC; 180...264 V AC/210...375 V DC																					
Inrush current	115 V AC < 24 A/230 V AC < 48 A	115 V AC < 24 A/230 V AC < 48 A																					
Frequency range	47...63 Hz	47...63 Hz																					
Input fuse	T3.15 A/250 V AC internal	T3.15 A/250 V AC internal																					
Voltage adjustment range	22.5...24.5 V DC	47...55 V DC																					
Temperature coefficient max.	±0.03%/°C	±0.03%/°C																					
Ripple and noise	50 mV	50 mV																					
Holdup time	115 V AC > 25 ms/230 V AC > 30 ms	115 V AC > 25 ms/230 V AC > 30 ms																					
Status indicator DC ON	Green LED	Green LED																					
Status indicator DC LOW	Red LED	Red LED																					
Efficiency	86 %	87 %																					
Response	Forward characteristic	Forward characteristic																					
Switching frequency	> 55 kHz (typically)	> 55 kHz (typically)																					
Input/output isolation voltage	3000 V AC	3000 V AC																					
Insulation resistance	100 MΩ	100 MΩ																					
Switch-on delay	< 1 s	< 1 s																					
Ambient temperature	−35...+70 °C	−35...+70 °C																					
Derating	−2.5%/°C of +61 °C	−2.5%/°C of +61 °C																					
Parallel mode	No	Yes																					
Degree of protection as per IEC 60529	IP 20	IP 20																					
Ready output	DC OK output relay	DC OK output relay																					
Cooling	Free convection	Free convection																					
Housing material	Metal	Metal																					
Weight	0.92 kg	0.92 kg																					
Approvals	CE, UL/cUL, TÜV, ODVA	CE, UL/cUL, TÜV																					
Wiring diagram	 <table><tr><td>L, N</td><td>Input terminals</td></tr><tr><td>PE</td><td>PE connection</td></tr><tr><td>Vo −</td><td>Output terminal −</td></tr><tr><td>Vo +</td><td>Output terminal +</td></tr><tr><td>Rdy</td><td>Ready output</td></tr></table>	L, N	Input terminals	PE	PE connection	Vo −	Output terminal −	Vo +	Output terminal +	Rdy	Ready output	 <table><tr><td>L, N</td><td>Input terminals</td></tr><tr><td>PE</td><td>PE connection</td></tr><tr><td>Vo −</td><td>Output terminal −</td></tr><tr><td>Vo +</td><td>Output terminal +</td></tr><tr><td>Rdy</td><td>Ready output</td></tr></table>	L, N	Input terminals	PE	PE connection	Vo −	Output terminal −	Vo +	Output terminal +	Rdy	Ready output	
L, N	Input terminals																						
PE	PE connection																						
Vo −	Output terminal −																						
Vo +	Output terminal +																						
Rdy	Ready output																						
L, N	Input terminals																						
PE	PE connection																						
Vo −	Output terminal −																						
Vo +	Output terminal +																						
Rdy	Ready output																						

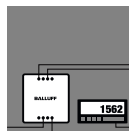
*SELV = Safety Extra Low Voltage



Power Supplies

Single-phase input voltage

5 A, 10 A



Power supplies
Intelligent
Power Supplies
**Single-phase
power supplies**
Three-phase
power supplies
Technical Data
Pulse extender
Function diag-
nostics unit
Analog
Switching
Device
Sensor tester,
testing and set-
ting device
Signal adapters
Digital Display

5 A

120 W
24 V DC (SELV)
115/230 V AC (Auto-Select)

BAE0006

BAE PS-XA-1W-24-050-003

90...132 V AC; 180...264 V AC/210...375 V DC

115 V AC < 24 A/230 V AC < 48 A

47...63 Hz

T3.15 A/250 V AC internal

22.5...28.5 V DC

±0.03%/°C

50 mV

115 V AC > 25 ms/230 V AC > 30 ms

Green LED

Red LED

86 %

Forward characteristic

> 55 kHz (typically)

3000 V AC

100 MΩ

< 1 s

-35...+70 °C

-2.5%/°C of +61 °C

Yes

IP 20

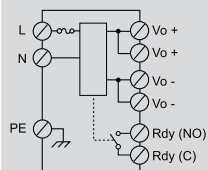
DC OK output relay

Free convection

Metal

0.92 kg

CE, UL/cUL, TÜV



L, N	Input terminals
PE	PE connection
Vo -	Output terminal -
Vo +	Output terminal +
Rdy	Ready output

10 A

120 W
12 V DC (SELV)
115/230 V AC (Auto-Select)

BAE003H

BAE PS-XA-1W-12-100-003

90...132 V AC; 180...264 V AC/210...375 V DC

115 V AC < 24 A/230 V AC < 48 A

47...63 Hz

T3.15 A/250 V AC internal

11...14 V DC

±0.03%/°C

50 mV

115 V AC > 25 ms/230 V AC > 30 ms

Green LED

Red LED

84 %

Forward characteristic

> 55 kHz (typically)

3000 V AC

100 MΩ

< 1 s

-35...+70 °C

-2.5%/°C of +61 °C

Yes

IP 20

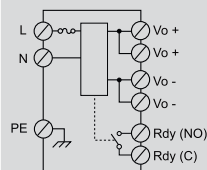
DC OK output relay

Free convection

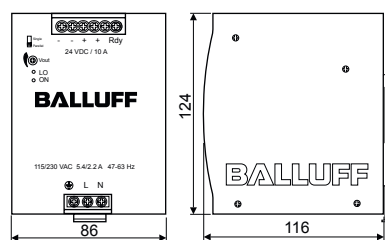
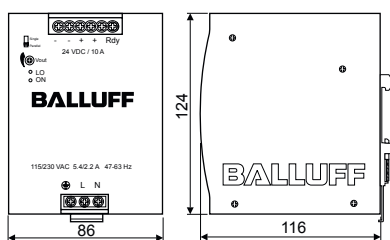
Metal

0.92 kg

CE, UL/cUL, TÜV



L, N	Input terminals
PE	PE connection
Vo -	Output terminal -
Vo +	Output terminal +
Rdy	Ready output



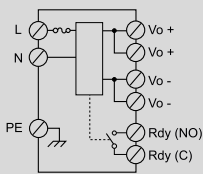
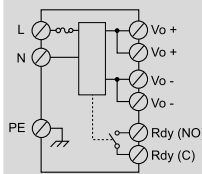
Power Supplies

Single-phase input voltage

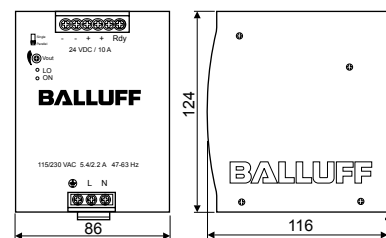
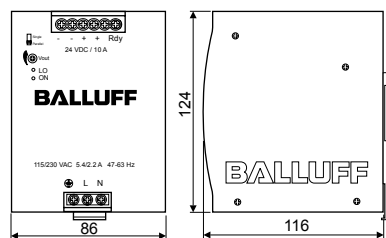
5 A, 10 A

Metal



Output current	5 A	10 A																					
Output power	240 W	240 W																					
Output voltage	48 V DC (SELV)	24 V DC (SELV)																					
Input voltage	115/230 V AC (Auto-Select)	115/230 V AC (Auto-Select)																					
Ordering code	BAE003L	BAE0002																					
Part number	BAE PS-XA-1W-48-050-004	BAE PS-XA-1W-24-100-004																					
Input voltage range	90...132 V AC; 180...264 V AC/210...375 V DC	90...132 V AC; 180...264 V AC/210...375 V DC																					
Inrush current	115 V AC < 30 A/230 V AC < 60 A	115 V AC < 30 A/230 V AC < 60 A																					
Frequency range	47...63 Hz	47...63 Hz																					
Input fuse	T6.3 A/250 V AC internal	T6.3 A/250 V AC internal																					
Voltage adjustment range	47...55 V DC	22.5...28.5 V DC																					
Temperature coefficient max.	±0.03%/°C	±0.03%/°C																					
Ripple and noise	100 mV	100 mV																					
Holdup time	115 V AC > 25 ms/230 V AC > 30 ms	115 V AC > 25 ms/230 V AC > 30 ms																					
Status indicator DC ON	Green LED	Green LED																					
Status indicator DC LOW	Red LED	Red LED																					
Efficiency	90 %	89 %																					
Response	Forward characteristic	Forward characteristic																					
Switching frequency	> 40 kHz (typically)	> 40 kHz (typically)																					
Input/output isolation voltage	3000 V AC	3000 V AC																					
Insulation resistance	100 MΩ	100 MΩ																					
Switch-on delay	< 1 s	< 1 s																					
Ambient temperature	−40...+70 °C	−40...+70 °C																					
Derating	−2.5%/°C of +61 °C	−2.5%/°C of +61 °C																					
Parallel mode	Yes	Yes																					
Degree of protection as per IEC 60529	IP 20	IP 20																					
Ready output	DC OK output relay	DC OK output relay																					
Cooling	Free convection	Free convection																					
Housing material	Metal	Metal																					
Weight	1.0 kg	1.0 kg																					
Approvals	CE, UL/cUL, TÜV	CE, UL/cUL, TÜV																					
Wiring diagram	 <table><tr><td>L, N</td><td>Input terminals</td></tr><tr><td>PE</td><td>PE connection</td></tr><tr><td>Vo −</td><td>Output terminal −</td></tr><tr><td>Vo +</td><td>Output terminal +</td></tr><tr><td>Rdy</td><td>Ready output</td></tr></table>	L, N	Input terminals	PE	PE connection	Vo −	Output terminal −	Vo +	Output terminal +	Rdy	Ready output	 <table><tr><td>L, N</td><td>Input terminals</td></tr><tr><td>PE</td><td>PE connection</td></tr><tr><td>Vo −</td><td>Output terminal −</td></tr><tr><td>Vo +</td><td>Output terminal +</td></tr><tr><td>Rdy</td><td>Ready output</td></tr></table>	L, N	Input terminals	PE	PE connection	Vo −	Output terminal −	Vo +	Output terminal +	Rdy	Ready output	
L, N	Input terminals																						
PE	PE connection																						
Vo −	Output terminal −																						
Vo +	Output terminal +																						
Rdy	Ready output																						
L, N	Input terminals																						
PE	PE connection																						
Vo −	Output terminal −																						
Vo +	Output terminal +																						
Rdy	Ready output																						

*SELV = Safety Extra Low Voltage



Power Supplies

Single-phase input voltage

10 A, 20 A



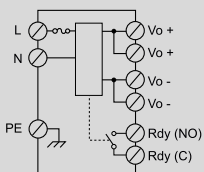
10 A

480 W
48 V DC (SELV)
115/230 V AC (Auto-Select)

BAE003M

BAE PS-XA-1W-48-100-005

90...264 V AC/120...370 V DC
115 V AC < 25 A/230 V AC < 50 A
47...63 Hz
T10 A/250 V AC internal
47...55 V DC
±0.03%/°C
100 mV
115 V AC > 25 ms/230 V AC > 30 ms
Green LED
Red LED
90 %
Forward characteristic
> 65 kHz (typically)
3000 V AC
100 MΩ
< 1 s
-40...+70 °C
-2.5%/°C of +56 °C
Yes
IP 20
DC OK output relay
Free convection
Metal
1.92 kg
CE, UL/cUL, TÜV



L, N	Input terminals
PE	PE connection
Vo -	Output terminal -
Vo +	Output terminal +
Rdy	Ready output

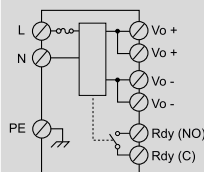
20 A

480 W
24 V DC (SELV)
115/230 V AC (Auto-Select)

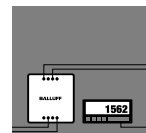
BAE0003

BAE PS-XA-1W-24-200-005

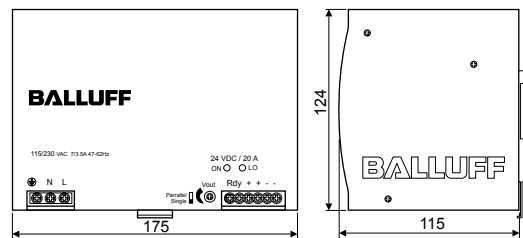
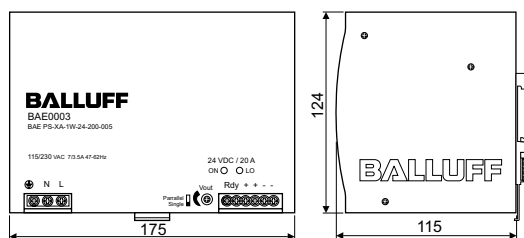
90...264 V AC/120...370 V DC
115 V AC < 25 A/230 V AC < 50 A
47...63 Hz
T10 A/250 V AC internal
22.5...28.5 V DC
±0.03%/°C
100 mV
115 V AC > 25 ms/230 V AC > 30 ms
Green LED
Red LED
89 %
Forward characteristic
> 65 kHz (typically)
3000 V AC
100 MΩ
< 1 s
-40...+70 °C
-2.5%/°C of +56 °C
Yes
IP 20
DC OK output relay
Free convection
Metal
1.92 kg
CE, UL/cUL, TÜV



L, N	Input terminals
PE	PE connection
Vo -	Output terminal -
Vo +	Output terminal +
Rdy	Ready output



Power supplies
Intelligent
Power Supplies
**Single-phase
power supplies**
Three-phase
power supplies
Technical Data
Pulse extender
Function diag-
nostics unit
Analog
Switching
Device
Sensor tester,
testing and set-
ting device
Signal adapters
Digital Display



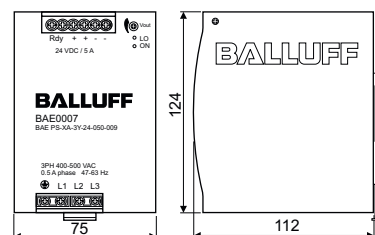
Power Supplies
3-phase input voltage
5 A

Metal



Output current	5 A											
Output power	120 W											
Output voltage	24 V DC (SELV)											
Input voltage	3× 400...500 V AC											
Ordering code	BAE0007											
Part number	BAE PS-XA-3Y-24-050-009											
Input voltage range	340...575 V AC/480...820 V DC											
Inrush current	< 10 A											
Frequency range	47...63 Hz											
Input fuse	2 A/600 V AC internal/phase											
Voltage adjustment range	22.5...28.5 V DC											
Temperature coefficient max.	±0.03%/°C											
Ripple and noise	100 mV											
Holdup time	> 20 ms											
Status indicator DC ON	Green LED											
Status indicator DC LOW	Red LED											
Efficiency	89 %											
Response	Hiccup mode											
Switching frequency	> 65 kHz (typically)											
Input/output isolation voltage	3000 V AC											
Insulation resistance	100 MΩ											
Switch-on delay	< 1 s											
Ambient temperature	−40...+70 °C											
Derating	−2.5%/°C of +61 °C											
Parallel mode	Yes (with external diodes)											
Degree of protection as per IEC 60529	IP 20											
Ready output	DC OK output relay											
Cooling	Free convection											
Housing material	Metal											
Weight	0.8 kg											
Approvals	CE, UL/cUL, TÜV											
Wiring diagram	<table><tr><td>L</td><td>Input terminals</td></tr><tr><td>PE</td><td>PE connection</td></tr><tr><td>Vo −</td><td>Output terminal −</td></tr><tr><td>Vo +</td><td>Output terminal +</td></tr><tr><td>Rdy</td><td>Ready output</td></tr></table>	L	Input terminals	PE	PE connection	Vo −	Output terminal −	Vo +	Output terminal +	Rdy	Ready output	
L	Input terminals											
PE	PE connection											
Vo −	Output terminal −											
Vo +	Output terminal +											
Rdy	Ready output											

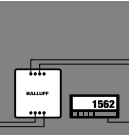
*SELV = Safety Extra Low Voltage



Power Supplies

3-phase input voltage

10 A, 20 A



Power supplies
Intelligent
Power Supplies
Single-phase
power supplies
**Three-phase
power supplies**
Technical Data
Pulse extender
Function diag-
nostics unit
Analog
Switching
Device
Sensor tester,
testing and set-
ting device
Signal adapters
Digital Display

10 A

240 W
24 V DC (SELV)
3× 400...500 V AC

BAE0008

BAE PS-XA-3Y-24-100-006

340...575 V AC/480...820 V DC

< 20 A

47...63 Hz

T2 A/600 V AC internal/phase

22.5...28.5 V DC

±0.03%/°C

100 mV

> 20 ms

Green LED

Red LED

90 %

Hiccup mode

> 30 kHz (typically)

3000 V AC

100 MΩ

< 1 s

-40...+70 °C

-2.5%/°C of +61 °C

Yes

IP 20

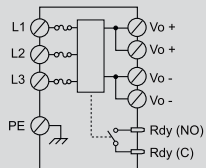
DC OK output relay

Free convection

Metal

1.1 kg

CE, UL/cUL, TÜV



L	Input terminals
PE	PE connection
Vo -	Output terminal -
Vo +	Output terminal +
Rdy	Ready output

20 A

480 W
24 V DC (SELV)
3× 400...500 V AC

BAE0009

BAE PS-XA-3Y-24-200-007

340...575 V AC/480...820 V DC

< 20 A

47...63 Hz

3.15 A/500 V AC internal/phase

22.5...28.5 V DC

±0.03%/°C

100 mV

> 20 ms

Green LED

Red LED

90 %

Forward characteristic (C), restart after 30 s (D),

Shutoff within 3 s, (C)/(D) togglable

> 75 kHz (typically)

3000 V AC

100 MΩ

< 1 s

-30...+70 °C

-2.5%/°C of +61 °C

Yes

IP 20

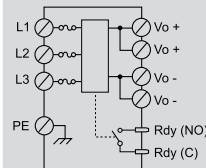
DC OK output relay

Free convection

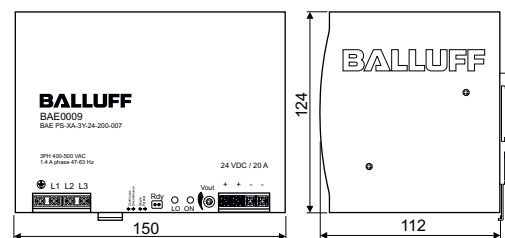
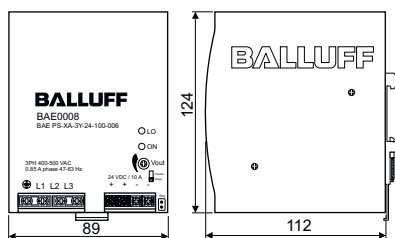
Metal

1.75 kg

CE, UL/cUL, TÜV



L	Input terminals
PE	PE connection
Vo -	Output terminal -
Vo +	Output terminal +
Rdy	Ready output



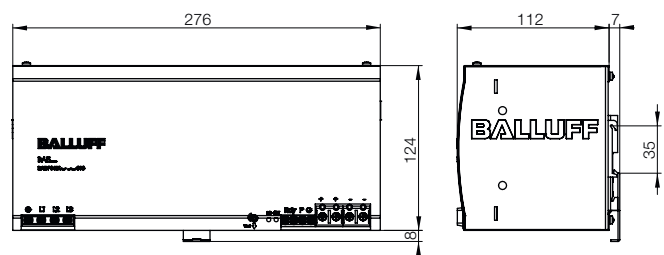
Power Supplies
3-phase input voltage
40 A

Metal



Output current	40 A
Output power	960 W
Output voltage	24 V DC (SELV)
Input voltage	3× 400...500 V AC
Ordering code	BAE003R
Part number	BAE PS-XA-3Y-24-400-010
Input voltage range	340...575 V AC/480...820 V DC
Inrush current	< 30 A
Frequency range	47...63 Hz
Input fuse	T5 A/500 V AC internal/phase
Voltage adjustment range	22.5...28.5 V DC
Temperature coefficient max.	±0.03%/°C
Ripple and noise	80 mV
Holdup time	> 15 ms
Status indicator DC ON	Green LED
Status indicator DC LOW	Red LED
Efficiency	92 %
Response	Hiccup mode
Switching frequency	> 50 kHz (typically)
Input/output isolation voltage	3000 V AC
Insulation resistance	100 MΩ
Switch-on delay	< 1 s
Ambient temperature	-40...+70 °C
Derating	-3.5%/°C above +61 °C
Parallel mode	Yes
Degree of protection as per IEC 60529	IP 20
Ready output	No
Cooling	Free convection
Housing material	Metal
Weight	3.2 kg
Approvals	CE, UL/cUL, TÜV
Wiring diagram	

*SELV = Safety Extra Low Voltage

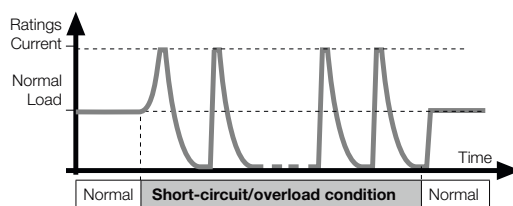


Power Supplies

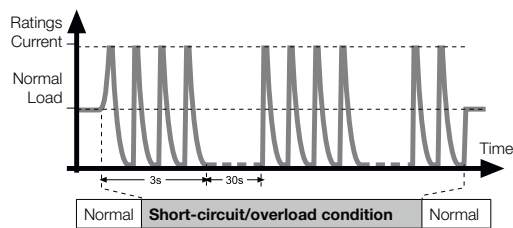
Technical Data

Output short circuit protection

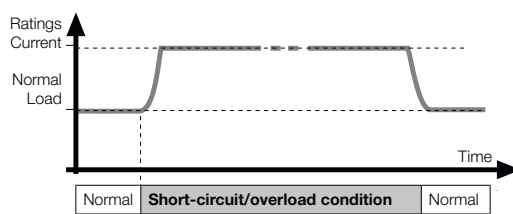
Hiccup mode overload protection*



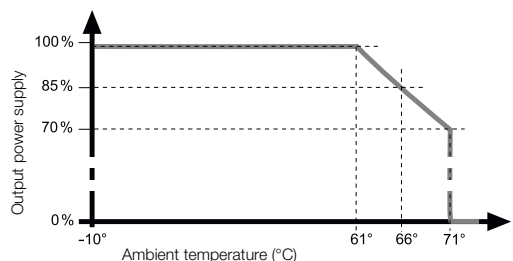
Hiccup mode with turn-off overload protection*



Current limiter and forward characteristic*



Temperature under-load



LED definition

DC ON	DC LO	Possible situation
○ off	○ off	AC power supply off, internal fuse burned out, short circuit
○ on	○ off	Normal operation
○ off	○ on	Output voltage < 19.2 V
○ on	● on	Power supply failure
Green	Red	

Approvals and standards



UL/cUL
UL 508 listed/UL 60950-1, UL 1310 Class 2

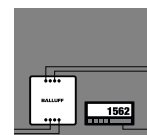


TÜV
EN 60950-1



CE
EN 61000-6-3, EN 55022 Class B, EN 61000-3-2,
EN 61000-3-3, EN 61000-6-2, EN 55024
EN 61000-4-2, EN 61000-4-3, EN 61000-4-4
EN 61000-4-5, EN 61000-4-6, EN 61000-4-8,
EN 61000-4-11

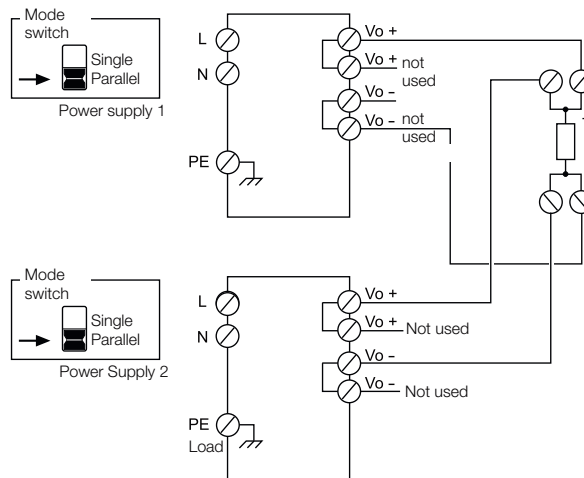
*Note: Diagrams are for illustration only. They do not reflect the actual waveforms.



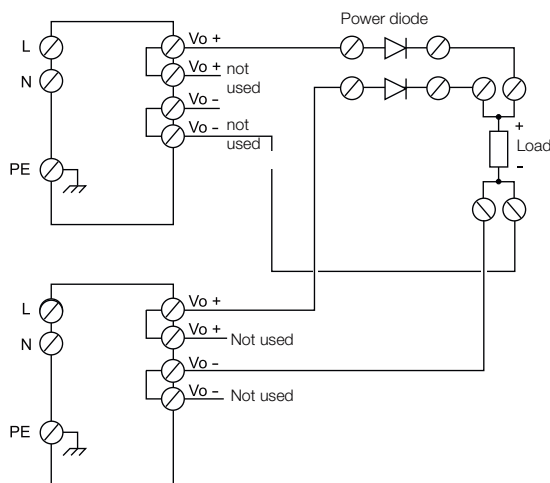
Power supplies
Intelligent
Power Supplies
Single-phase
power supplies
**Three-phase
power supplies**
Technical Data
Pulse extender
Function diag-
nostics unit
Analog
Switching
Device
Sensor tester,
testing and set-
ting device
Signal adapters
Digital Display

Parallel mode**

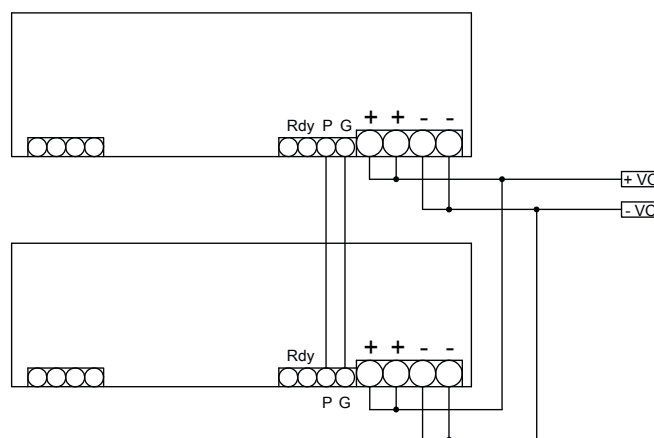
BAE0002, BAE0003 BAE0006,
BAE0008, BAE0009



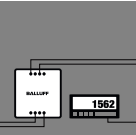
For all without parallel switching mode



BAE003R



**Note: When wiring power supplies in parallel, the cable lengths should be the same for all DC connections on the load.



Power Supplies

Intelligent

Power Supplies

Single-phase

Power Supplies

Three-phase

Power Supplies

Technical Data

Pulse Extender

Function Diag-

nostics Unit

Analog

Switching

Device

Sensor Tester,

Testing and Set-

ting Device

Signal Adapters

Digital Display

Detecting fast motion

Rapid motions on machines mean that the sensors are only actuated for a short time. Therefore, the sensor pulse can be too short to guarantee a secure evaluation. Due to its cycle time, the controller does not detect the output signal, with the consequence that important information in the controller sequence is lost. This can mean danger to your machine!

The solution is the Balluff pulse extender **BES 516-IV 2**. For controlling this device, the rising or falling edge of the sensor output signal is sufficient to generate a pulse that your controller can recognize. The length is adjustable from 2 ms to 1 sec. Small and space-saving, the device can be snapped onto a rail in a control cabinet in accordance with EN 50022-35.

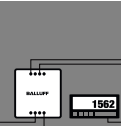


Electrical Devices

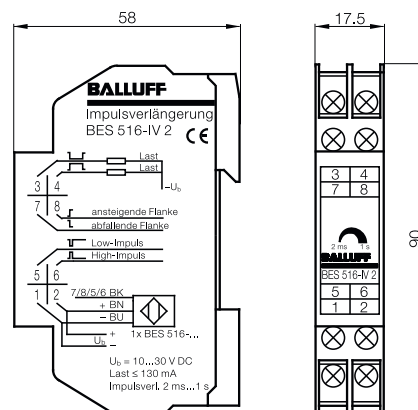
Pulse extender



Description	Pulse extender	
Use	Ensures secure output signals from inductive, capacitive or photoelectric sensors to the control system	
Ordering code	BAE0073	
Part number	BES 516-IV 2	
Output (display by LEDs)	Positive switching (PNP), complementary	
Adjustable pulse extender	2 ms...1 s	
Set value	200 ms (+50 ms)	
Input 7/8	Referenced to the respective edge of the input signal	
Input 5/6	Referenced to the pulse end of the input signal	
Reproducibility	< 10 %	
Input	1 PNP or 1 NPN - NO or NC	
Min. input pulse length	1.5 ms	
Supply voltage U_B	10...30 V DC (input voltage = output voltage)	
Residual ripple	$\leq 15\%$	
No-load current	Approx. 20 mA	
Output current	≤ 130 mA	
Permissible load capacitance	$\leq 0.5 \mu\text{F}/24 \text{ V}$	
Ambient temperature T_a	0...60 °C	
Housing attachment	DIN rail EN 50022-35	
Max. conductor cross-section	2x2.5 mm ²	
Polarity reversal protected	Yes	
Short-circuit protected	Yes	
Degree of protection as per IEC 60529	Housing IP 40/terminals IP 20	
Output	3	Low-pulse, extended
	4	High-pulse, extended
	7	Falling edge
	8	Rising edge
	5	Low pulse
	6	High pulse
Input	1	- U_S
	2	+ U_S
Falling edge	Output signal is triggered by rising edge	
Rising edge	Output signal is triggered by rising edge	
Low pulse	PNP-NC/NPN-NO short damped	
	PNP-NO/NPN-NC short undamped	
	PNP-NC/NPN-NO short damped	
High pulse	PNP-NO/NPN-NC short undamped	



Power Supplies
Pulse Extender
 Function Diag-
 nostics Unit
 Analog
 Switching
 Device
 Sensor Tester,
 Testing and Set-
 ting Device
 Signal Adapters
 Digital Display

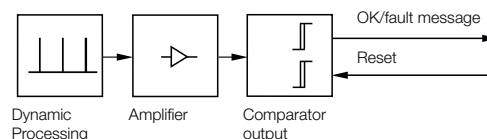


The **BES 113-FD-1** function diagnostics unit monitors a proximity switch with dynamic function diagnostics and its connection cable. A logic circuit polls the sensor signals for the presence of test pulses and also monitors for proper function of the device. For the machine control system, it emits a high level signal on the "Status/Output" message output when there is no fault and a low signal when faults are present. LEDs indicate the switching status of the sensor.

Faults that occur are stored by the device. They must be reset using a reset function (Low signal on 5).

If the BES 113-FD-1 is used as a single unit, terminals VI (3 and 4) must be bridged together.

Function principle

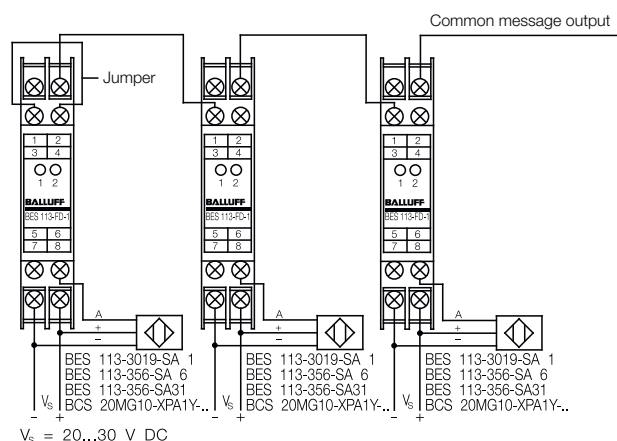


Cascading

When cascading several BES 113-FD-1 (series connection), the output (2) must be connected to the input (3) of the downstream device. The jumper between VI is not needed except for the first device. When there is a malfunction, the message appears on the last device.

The defective sensor is indicated by the first weakly illuminated LED in the cascade.

Small and space-saving, the BES 113-FD-1 can be mounted in a DIN rail per DIN EN 50022-35.

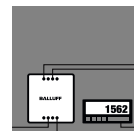


Electrical Devices

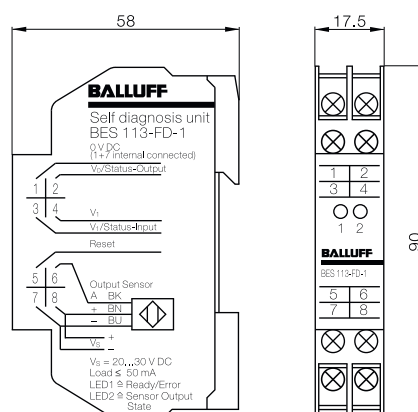
Function diagnostics unit



Description	Function diagnostics unit with electronic output	
Use	Monitoring the dynamic function diagnostics and connection cable for function diagnostics sensors BES 113-356-SA 6-..., BES 113-3019-SA 1-...	
Ordering code	BAE006W	
Part number	BES 113-FD-1	
Supply voltage U_s	20...30 V DC	
No-load current	Approx. 20 mA	
Output voltage U_o (referenced to 0 V)	Low	0...(0.1× U_s) when the sensor or diagnostics unit has a defect (fault)
	High	(0.5× U_s)... U_s when functioning properly
Output current max.	50 mA	
Ambient temperature T_a	0...+60 °C	
LED 1 green	"Ready/Error" – when functioning properly, the LED is on bright. When there is a fault, the LED illuminates dimly.	
LED 2 yellow	"Sensor Output State" indicates the switching status of the sensor.	
Degree of protection as per IEC 60529	Housing IP 40, terminals IP 20	
Housing attachment	Rail mount in accordance with DIN EN 50022-35	
Max. conductor cross-section	2×2.5 mm ²	



Power Supplies
Pulse Extender
Function Diagnostics Unit
Analog Switching Device
Sensor Tester, Testing and Setting Device
Signal Adapters
Digital Display



Analog switching amplifier for direct installation

This switching device enables you to easily perform onsite programming of sensors that have an analog output signal, such as the BOD family, with three switching thresholds.

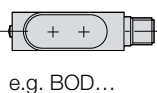
The sensor connected to the switching amplifier is simply moved to the desired switching distance from the target. Then connecting the control line to the (+) side of the supply voltage enables a "Teach-in" mode; in other words, the set distance is assigned to the signal level present and these values are stored in the evaluation unit. This procedure is supported with LEDs. During operation, these LEDs are available as switching state indicators.

For sensors with a temperature output, the analog temperature signal is made available in unchanged form on the device output.



Connection example

Analog sensors



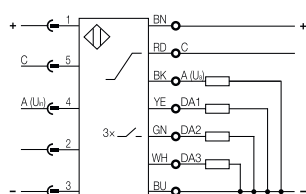
e.g. BOD...

Analog switching amplifier

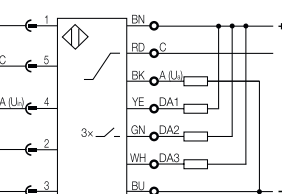
BES 516-615-PS-1-PU-05

Wiring diagrams

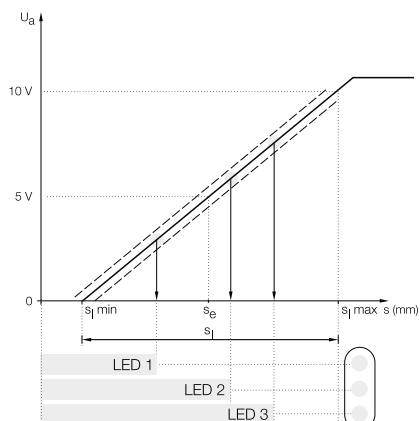
PNP analog and PNP normally open



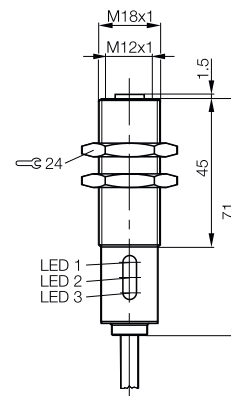
PNP analog and NPN normally open



Approach curve



Description		M18x1
Use		For analog sensors
PNP analog and PNP NO	Ordering code	BAE0070
	Part number	BES 516-615-PS-1-PU-05
PNP analog and NPN NO	Ordering code	BAE006Z
	Part number	BES 516-615-NS-1-PU-05
Rated operating voltage U_e		15...30 V DC
Supply voltage U_B		15...30 V DC
Residual ripple		≤ 15 % of U_e
Rated insulation voltage U_i		75 V DC
Rated operating current I_e per output		100 mA
No-load supply current I_0 max.		≤ 20 mA
Residual current I_r		≤ 10 μ A
Polarity reversal protected		Only against $\pm$ -reversal
Short-circuit protected		Yes
Ambient temperature T_a		-10...+70 °C
Switching frequency f		2 kHz
Utilization category		DC 13
Function indicator for each output		Yes
Analog input		
Input voltage U_{in}		0...10 V (brought out to output A)
Input impedance		4.2 k Ω
Switching outputs		
Freely programmable switching outputs		3
Hysteresis H		500 mV
Temperature drift		≤ 2 % of U_{in} max.
Degree of protection as per IEC 60529		IP 67
Housing material		CuZn coated
Connection	Input	M12 connector, 5-pin
	Output	5 m PUR cable, 7x0.25 mm ²



Electrical Devices

Analog switching amplifier for control cabinet installation

Analog switching amplifier for control cabinet installation

The analog switching amplifier is operated with 24 V and provides the supply voltage for analog sensors such as the Balluff BOD. The device is driven directly by the current signals (2) or voltage signals (4).

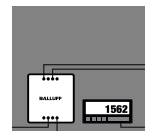
From this signal, separate push-pull final stages (PNP/NPN) are used to create three switching points (A1...A3) which can be set independently using the potentiometer (on the front side). The respective switching status is indicated by LEDs. The operating direction (rising/falling) can be set using DIP switches inside the unit. This circuit allows width-adjustable "ranges" to be defined (cascading).

The voltage signal (4) proportional to the current can be used to drive additional analog switching amplifiers (expansion for additional switching points).

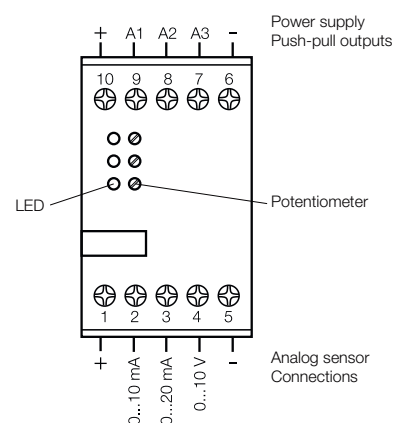
The signal inputs on the analog switching amplifier are protected against polarity reversal and the push-pull output stages against short circuit (internal fuses).



Description	Analog switching amplifier for analog current and voltage signals
Use	Switching point configuration on analog sensors, e.g. BOD, BAW
Ordering code	BAE006Y
Part number	BES 516-611-A-1
Supply voltage U_B	24 V DC $\pm 10\%$
Residual ripple	$\leq 10\%$
Input circuit	
Current input, terminal 2/3	0...10 mA / 0...20 mA
Input impedance	308 Ω / 154 Ω
Voltage input terminal 4	0...10 V
Input impedance	13 k Ω
Setting range	3...100 %
Hysteresis (referenced to set value)	3 %
Output current circuit	
Voltage drop PNP transistor	≤ 3.5 V
Voltage drop NPN-transistor	≤ 2.5 V
Operating current per push-pull stage	≤ 200 mA
Housing material	PC (glass fiber reinforced)
Housing dimensions	74x45x120 mm
Connection type	Screw terminals
max. conductor cross-section	Up to 2.5 mm ²
Housing attachment	Snap mount on DIN rail
Ambient temperature T_a	0...+50 °C
Degree of protection as per IEC 60529	Terminals IP 20, housing IP 40



Power Supplies
Pulse Extender
Function Diagnostics Unit
Analog Switching Device
Sensor Tester, Testing and Setting Device
Signal Adapters
Digital Display



Tester BES 516-7

The sensor tester BES 516-7, in the Balluff design, is flat, handy, and visually appealing. The testing device is a simple manual testing device for PNP/NPN, normally open and normally closed sensors.

Benefits

- Integrated steel measuring plate for testing sensors
- Automatic shut-off after 30 s of non-use
- Power provided by a 9V battery
- Visual and acoustic signal

Caution!

Tester is not suitable for 2-wire Desina sensors.

Testing and setting device BES 516-4

With this programming device, the following testing and setting functions can be carried out on the sensors:

- Programming the switching distance of analog sensors.
- Sensors with teachable switching points can also be programmed.
- Testing 3-wire sensors.
- Testing 2-wire sensors.



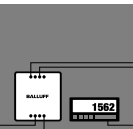
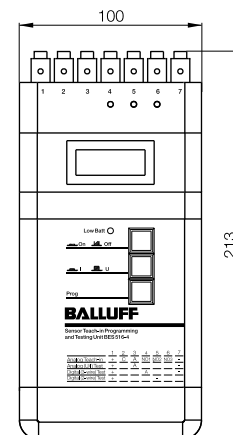
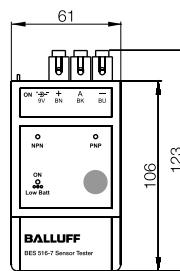
Electrical Devices

Sensor tester, testing and setting device



Description	Sensor tester	Testing and setting device
Use	For DC PNP/NPN 3-wire sensors	For DC PNP/NPN 2/3-wire sensors and analog sensors
Ordering code	BAE002C	BAE0029
Part number	BES 516-7	BES 516-4
Output voltage	18 V DC	18 V DC
LED indicators	1 operating indicator	3 function indicators, 1 operating indicator
Battery type	1 × 9 V battery	2 × 9 V batteries
Sensor connection	3 spring-loaded terminals	7 spring-loaded terminals
Degree of protection as per IEC 60529	IP 40	IP 40
Housing material	Plastic	Plastic

Acoustic and visual signal,
built-in steel target



Power Supplies
Pulse Extender
Function Diag-
nostics Unit
Analog
Switching
Device
Sensor Tester,
Testing and Set-
ting Device
Signal Adapters
Digital Display

Electrical Devices

Signal Adapters

With the signal adapters, various additional functions on the sensors can be adjusted quickly. For example, these can be used to change the output signals or counting and time functions without any additional installation. The signal adapter is simply plugged in between the standard M12 connections from the sensor and connection cable and adjusted via a control line.

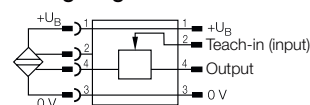
Signal adapters can also be used as switching amplifiers and can be combined with each other.



Version	Functionality	Device	Setting
NC/NO inverter	Pulse or interval counter: The BOS S-C counts output pulses or intervals from a sensor and sends an output pulse when a pre-defined number is reached. The count range is from 1...65535 and can be freely set. It also includes an output inverter function (NO/NC).	BOS S-C...	Interval counter 1
Flip-Flop			Interval counter 2
Divider (1 pulse per rotation)			Pulse counter n
Count parts (Count down)			Pulse counter n
Switching amplifier up to 400 mA			Pulse counter 1
Release delay	Timer for switch-on and switch-off delay: With the BOS S-T you can set a turn-on or release delay from 1 ms to 65 sec. A release delay of 100 ms is set in the factory.	BOS S-T...	Release delay n
Pick-up delay			Switch-on delay n
PNP/NPN conversion	PNP/NPN converter: The BOS S-F converts a connected PNP signal into an NPN signal. In addition, the NO/NC output function can be toggled.	BOS S-F...	Factory settings
PNP/NPN conversion and NO/NC toggle			Teach NO/NC
Downtime monitoring	Frequency monitoring: The BOS S-M is a freely configurable module for frequency monitoring. It is "active" when the set frequency is undershot by 5%.	BOS S-M...	
Speed monitor			
Backlog detection			

Function	
PNP	Ordering code
	Part number
NPN	Ordering code
	Part number
Supply voltage U_B	
Rated operating current I_o	
No-load supply current I_o max.	
Polarity reversal protected	
Short-circuit protected	
Input impedance	
On/off delay	
Max. input frequency	
Input	
Output	
Smallest preset number	
Largest preset number	
Shortest settable time	
Longest settable time	
Monitoring frequency range	
Function indicator	
Ambient temperature T_a	
Degree of protection as per IEC 60529	
Protection class	
Housing material	
Connection type - input	
Connection type - output	
Weight	

Wiring diagram



Use

All of the listed signal adapters can be used with sensors with switching output and M12 plug connection. The sensors can be connected independent of function principle (ultrasonic, inductive, photoelectric or capacitive). Depending on which sensor is used, either a signal adapter with PNP or with NPN input is used.

Signal adapter selection guide

BOS S-...01: PNP input (for sensors with PNP output)

BOS S-...02: NPN input (for sensors with NPN output)

Connector with 2 m PUR cable
Ordering code: BCC032F



For information on other cable lengths and cable materials, refer to the Chapter "Plug Connectors and Valve Connectors" or visit us online at www.balluff.com.

Electrical Devices

Signal Adapters

BOS S-C



BOS S-T



BOS S-F



BOS S-M



Programmable pulse or interval counter, switching inverter

BAE002E

BOS S-C01

BAE002F

BOS S-C02

10...30 V DC

< 400 mA

≤ 10 mA

Yes

Yes

> 10 kΩ

0.1 ms

10 kHz

PNP

NPN

PNP

NPN

1

65535

Red LED

0...+60 °C

IP 67



PBT/PA 6.6

M12 female 4-pin

M12 connector, 4-pin

15 g

Programmable timer for switch-on and switch-off delay

BAE002M

BOS S-T01

BAE002N

BOS S-T02

10...30 V DC

< 400 mA

≤ 10 mA

Yes

Yes

> 10 kΩ

0.1 ms

10 kHz

PNP

NPN

PNP

NPN

1 ms

65535 ms

Red LED

0...+60 °C

IP 67



PBT/PA 6.6

M12 female 4-pin

M12 connector, 4-pin

15 g

NPN/PNP converter, configurable NO/NC toggle

BAE002H

BOS S-F01

BAE002J

BOS S-F02

10...30 V DC

< 400 mA

≤ 10 mA

Yes

Yes

> 10 kΩ

0.1 ms

10 kHz

PNP

NPN

NPN

PNP

Red LED

0...+60 °C

IP 67



PBT/PA 6.6

M12 female 4-pin

M12 connector, 4-pin

15 g

Programmable frequency monitoring

BAE002K

BOS S-M01

BAE002L

BOS S-M02

10...30 V DC

< 400 mA

≤ 10 mA

Yes

Yes

> 10 kΩ

0.1 ms

10 kHz

PNP

NPN

PNP

NPN

0.015 Hz...1 kHz

Red LED

0...+60 °C

IP 67

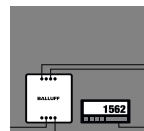


PBT/PA 6.6

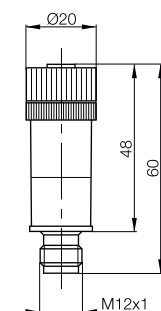
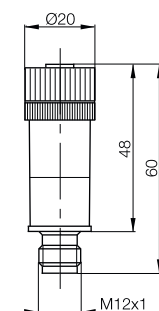
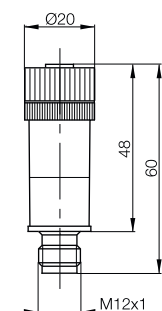
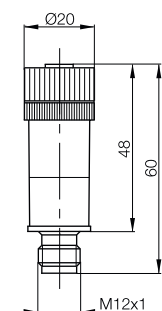
M12 female 4-pin

M12 connector, 4-pin

15 g



Power Supplies
Pulse Extender
Function Diagnostics Unit
Analog Switching Device
Sensor Tester, Testing and Setting Device
Signal Adapters
Digital Display



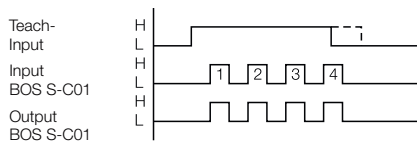
Electrical Devices

Setting function of signal adapters

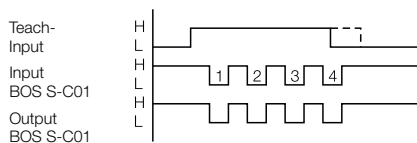
Signal adapter BOS S-C

Programmable pulse or interval counter

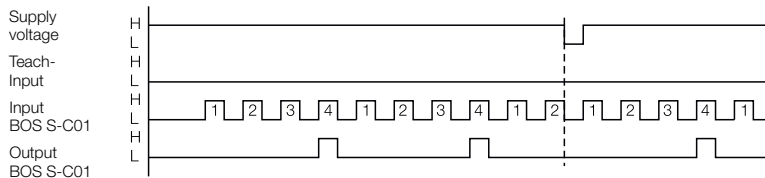
Pulse counter teaching



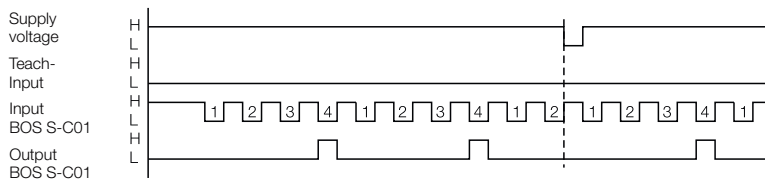
Interval counter teaching



Use as a pulse counter



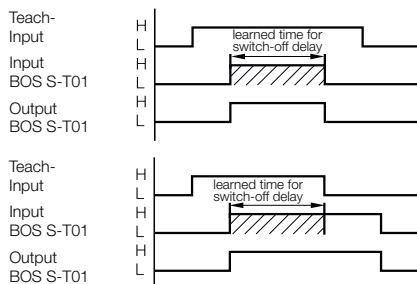
Use as an interval counter



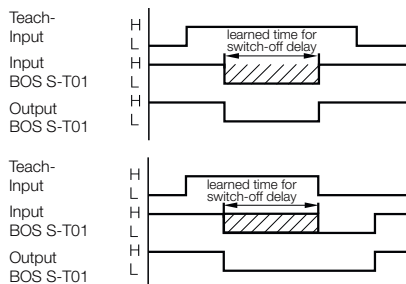
Signal adapter BOS S-T

Programmable timer for switch-on or switch-off delay

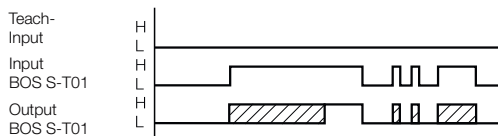
Teaching a switch-on delay



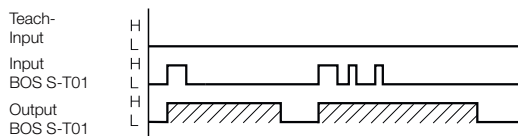
Teaching a switch-off delay



Operation with switch-on delay



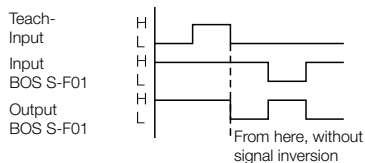
Use with switch-off delay



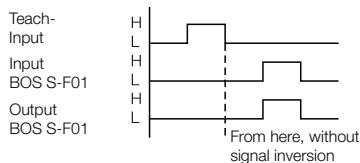
Signal adapter BOS S-F

NPN-/PNP converter, configurable NO/NC toggle

Signal inversion teaching



Teaching without signal inversion



H = input or output active; L = input or output inactive

Electrical Devices

Digital display

Digital display for analog input signals

The digital measured value display of Type **BDD-UM 3023** is a universal measuring instrument for recording analog measurement variables.

- Voltage 0...10 V DC
- Current 0...20 mA/4...20 mA



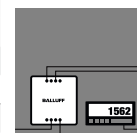
Standard hardware

- 4 function keys on the front panel

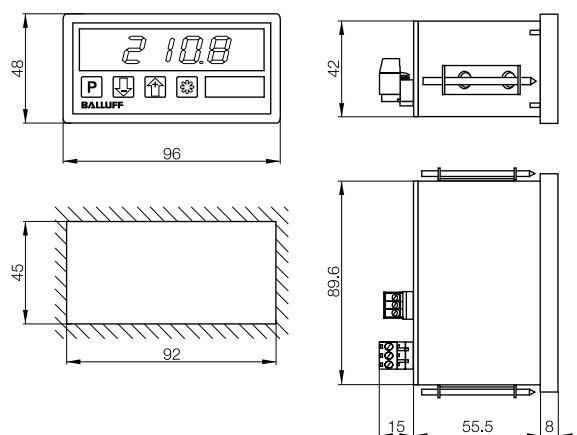
Standard software with the following functions

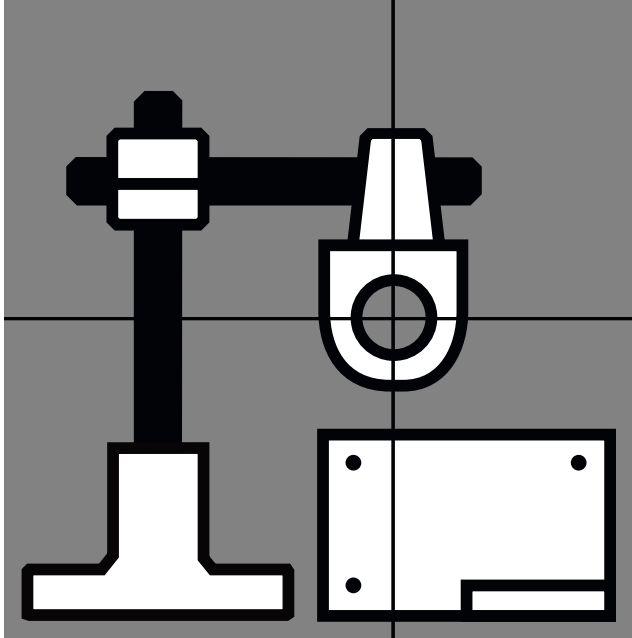
- Scaling
- Tare
- Decimal point
- Display test

Description	Digital Display
Use	For analog input signals BOD, BTL, BAW
Ordering code	BAE006K
Part number	BDD-UM 3023
A/D converter resolution	12 bits
Measuring ranges	
Voltage	0...10 V, $\pm 0.05\%$, ± 1 digit
Input impedance	$\geq 50\text{ k}\Omega$
Current	0/4...20 mA, $\pm 0.05\%$, ± 1 digit
Input impedance	10 Ω
Sampling rate	5 measurements/s
Indicator	4-digit, 14 mm, red, programmable decimal point, leading zero suppression, minus symbol for negative values
Operation, keypad	Front keypad with short-stroke keys
Rated operating voltage	24 V, $\pm 20\%$ DC (isolated)
Current consumption	Max. 65 mA
Housing	
Dimensions	96×48×63.5 mm
Installation depth	$\leq 72\text{ mm}$ (incl. screw terminals)
Degree of protection of housing front	IP 54
Degree of protection of terminals	IP 20
Ambient temperature T_a	0...+60 °C
Storage temperature	-20...+70 °C
Relative humidity	$\leq 80\%$, non-condensing
Contamination class	2
Protection class	□
Weight	Approx. 200 g



Power Supplies
Pulse Extender
Function Diagnostics Unit
Analog Switching Device
Sensor Tester, Testing and Setting Device
Signal Adapters
Digital Display





Mounting System

Mounting System

Designed for industrial automation

Sensors must be positioned inside plants, machines or conveyor systems, usually during the setup process. Modular elements from the Balluff mounting system provide valuable assistance here. The flexible Balluff mounting system can be mounted on base plates and all standard profiles. Virtually any required solid angle can be accommodated using the versatile range of accessories.

Balluff accessories in use

- For adapting sensors to a specific application
- For simplifying work during installation and alignment
- For protecting the sensors
- As an interface to the controller

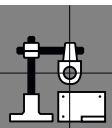


Plastic Mounting System

Base Holder	264
Articulated Base Holder	265
Sensor Holders	265
Reflector Mounts	266
Cross-connectors	266

Metal Mounting System

Base Holders	267
Cross-connectors	267
Clamping cylinders	267
Sensor Holders	270
Adjustment Units	273
Reflector Mounts	274
Adapter Ring	282
Air Blow	283
Mounting Rods	284
Mounting Kit	285



Mounting System

Base holder

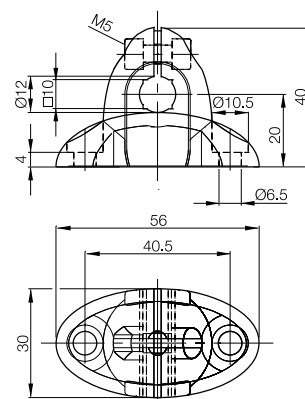
Whether sensors are used in machine tools, assembly and handling, in packaging or specialty machines - one thing is certain: to work properly they must be precisely positioned. The Balluff Mounting System makes this fast and easy.

The high-quality sensors you get from Balluff come with high-quality mounting accessories. For optimum positioning of the sensors in equipment and machines.

The Balluff mounting system can be used on base plates or on all commonly available extruded profiles and for cylindrical or cubical sensors. The flexible accessories kits allow you to cover almost every solid angle, and even offer supplementary accessories such as sensor holders and reflector mounts.



Description	Base holder	
Version	For 1 mounting rod Ø 12 mm or 10x10 mm	
Use	For mounting on base plates or profiles	
Ordering code	BAM002J	
Part number	BMS CU-P-D12-A040-00	
Material	POM	

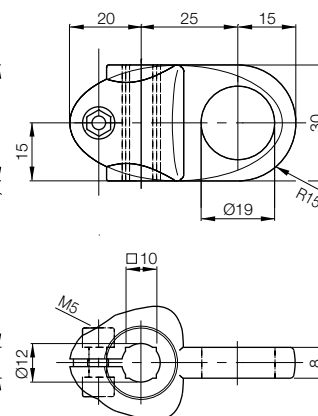


Mounting rods Ø 12 mm,
anodized aluminum or stainless steel
See page 284.





Plastic
Base Holder
Articulated Base
Holders
Sensor Holder
Reflector Mount
Cross-connector
Metal

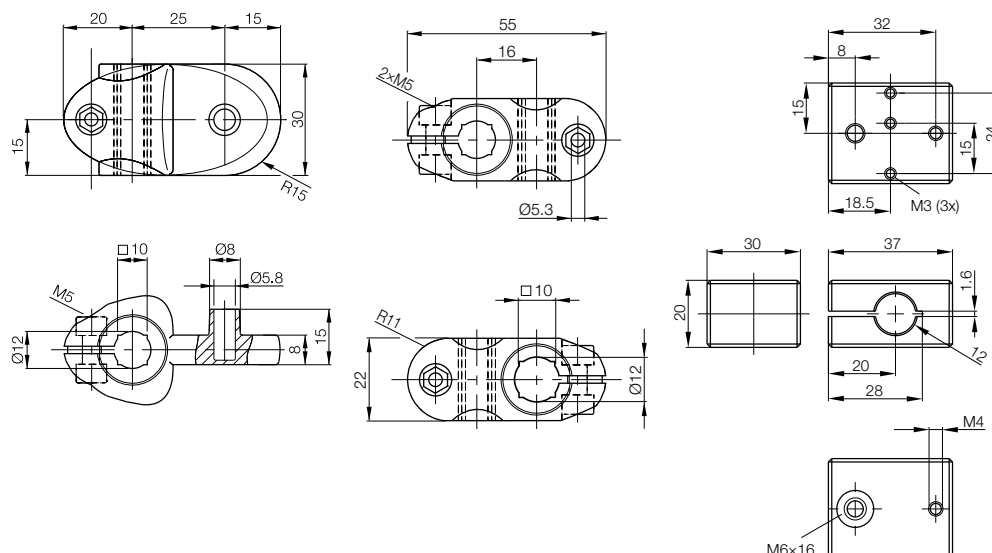


Mounting System

Reflector mount, cross-connectors



Description	Reflector mount	Cross-connector	Cross-connector	
Version	For 1 mounting rod Ø 12 mm or 10x10 mm	For 2 mounting rods Ø 12 mm	For 1 mounting rod Ø 12 mm	
Use	For reflectors Ø 20 mm (glue attachment) and BOS R-14, Ø 51 mm (plug-in)	Connecting element for 2 mounting rods Ø 12 mm or 10x10 mm	For through-beam fork sensors BGL and photoelectric sensors BOS 2K and BOS 6K, BUS R06	
Ordering code	BAM002L	BAM002M	BAM01CW	
Part number	BMS CR-P-D12-AU-00	BMS CC-P-D12-A-00	BMS CS-M-D12-BX08-07	
Material	POM	POM	Anodized aluminum	



Mounting rods Ø 12 mm,
anodized aluminum or stainless steel
See page 284.

NEW

Mounting System

Cross-connectors, base holders



Cross-connector

For 2 mounting rods
Ø 12 mm
Connecting element for
2 mounting rods Ø 12 mm

BAM002Z

BMS CC-M-D12-B-00
Anodized aluminum

Sensor holder

For 1 mounting rod
Ø 12 mm
For holding all sensor and reflec-
tor mounts

BAM024T

BMS CS-M-D12-BZ
GD-Zn/chrome-plated

Joint

For 2 mounting rods
Ø 12 mm
Adjustable connecting piece for
Ø 12 mm mounting rods

BAM024R

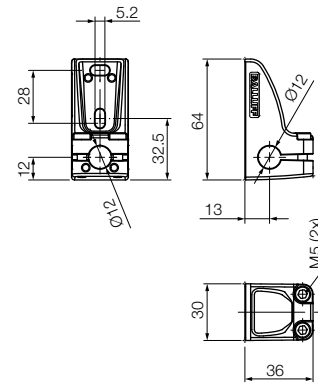
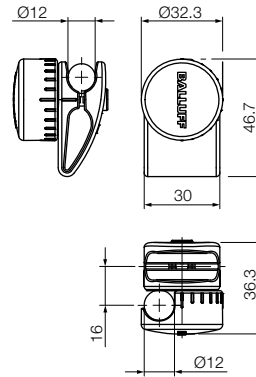
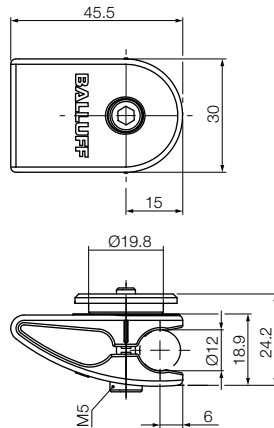
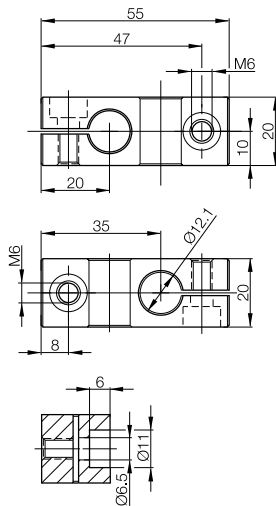
BMS CCJ-M-D12-B-01
GD-Zn/chrome-plated

Base holder

For 1 mounting rod Ø 12 mm
(vertical or horizontal)
For mounting on base
plates or profiles

BAM024P

BMS CU-M-D12-B028-00
GD-Zn/chrome-plated



Mounting
System

Plastic
Base Holder
Articulated Base
Holders
Sensor Holder
Reflector Mount
Cross-connector
Metal
Cross-connector
Base Holder
Clamping Cylinder
Sensor Holder
Adjustment
Units
Reflector Mount
Adapter Ring
Air Blow
Mounting Rods
Mounting Kit



Mounting System

Base holder

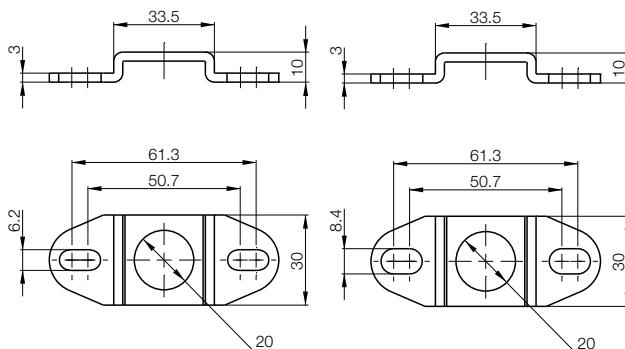


Stainless Steel



Stainless Steel

Description	Base holder	Base holder		
Version	For clamping cylinders	For clamping cylinders		
Use	For mounting on base plates or profiles with M6	For mounting on base plates or profiles with M8		
Ordering code	BAM01CH	BAM0044		
Part number	BMS CU-M-D12-I060-02	BMS CU-M-D12-I060-01		
Material	Stainless steel	Stainless steel		



Mounting rods Ø 12 mm,
anodized aluminum or stainless steel
See page 284.



Mounting System

Base holders, clamping cylinders



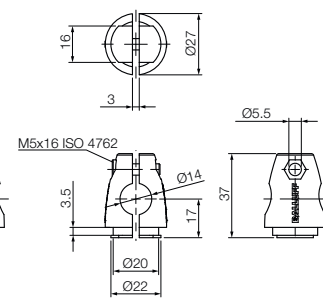
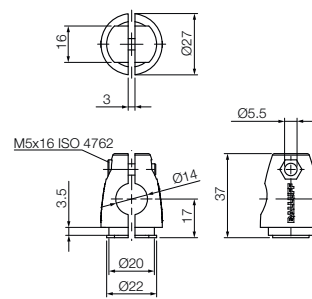
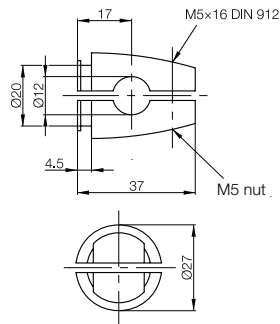
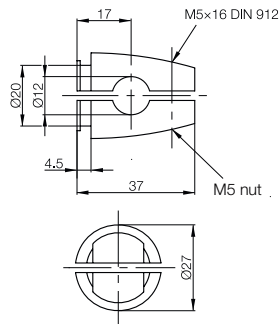
Stainless Steel



Stainless Steel



Clamping cylinder For 1 mounting rod Ø 12 mm For holding all sensor and reflector mounts	Clamping cylinder For 1 mounting rod Ø 12 mm For holding all sensor and reflector mounts	Base holder For clamping cylinders For holding adapter plates For holding sensor holders For holding rods with Ø 14 mm	Base holder For clamping cylinders For holding adapter plates For holding sensor holders For holding rods with Ø 14 mm
BAM003Y	BAM0031	BAM01Z8	BAM01Z7
BMS CS-M-D12-IZ-01	BMS CS-M-D12-IZ	BMS CS-M-D14-IZ-01	BMS CS-M-D14-IZ
Stainless steel	GD-Zn	Stainless steel	GD-Zn



Mounting System

Plastic
Metal
Cross-connector
Base Holder
Clamping Cylinder
Sensor Holder
Adjustment Units
Reflector Mount
Adapter Ring
Air Blow
Mounting Rods
Mounting Kit

Mounting System

Sensor holder



Stainless Steel

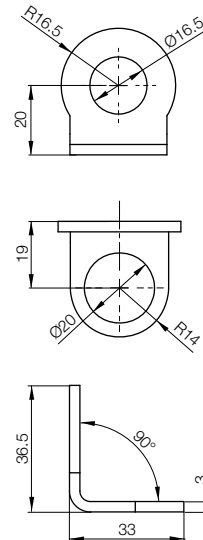
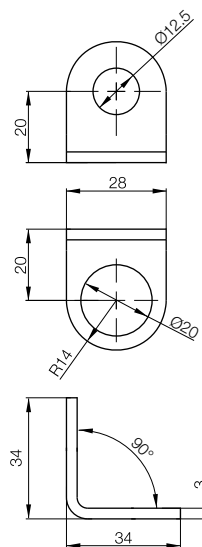
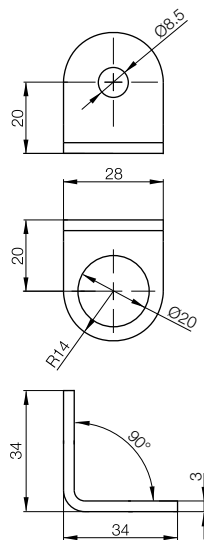


Stainless Steel



Stainless Steel

Description	M8 sensor holder	M12 sensor holder	M16 sensor holder	
Version	For clamping cylinders	For clamping cylinders	For clamping cylinders	
Use	For sensors and clamps M8	For sensors and clamps M12	For sensors and clamps M16	
Ordering code	BAM0036	BAM0037	BAM003K	
Part number	BMS CS-M-D12-ID08-01	BMS CS-M-D12-ID12-01	BMS CS-M-D12-ID16-01	
Material	Stainless steel	Stainless steel	Stainless steel	



Mounting rods Ø 12 mm,
anodized aluminum or stainless steel
See page 284.



Mounting System

Sensor holder



Stainless Steel



Stainless Steel



Stainless Steel

M18 sensor holder

For clamping cylinders
For sensors and
clamps M18

BAM0032

BMS CS-M-D12-ID18-01

Stainless steel

M24 sensor holder

For clamping cylinders
For sensors and
clamps M24

BAM003L

BMS CS-M-D12-ID24-01

Stainless steel

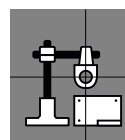
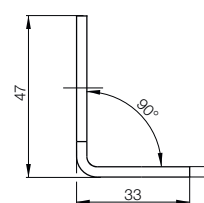
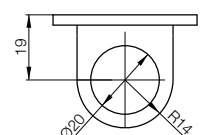
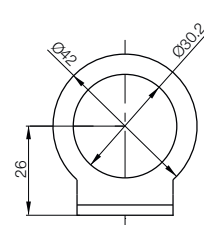
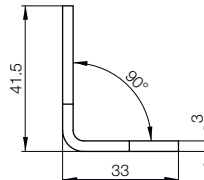
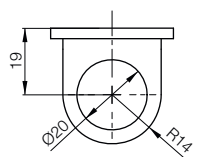
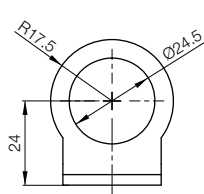
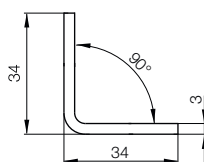
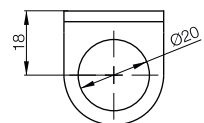
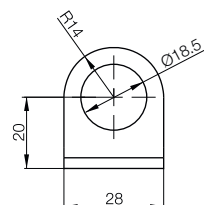
M30 sensor holder

For clamping cylinders
For M30 sensors and
clamps

BAM0033

BMS CS-M-D12-ID30-01

Stainless steel



Mounting
System

Plastic
Metal

Cross-connector
Base Holder
Clamping Cylinder
Sensor Holder
Adjustment
Units
Reflector Mount
Adapter Ring
Air Blow
Mounting Rods
Mounting Kit

Mounting System

Sensor holder



Stainless Steel

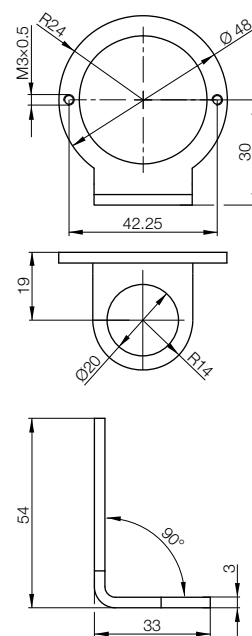
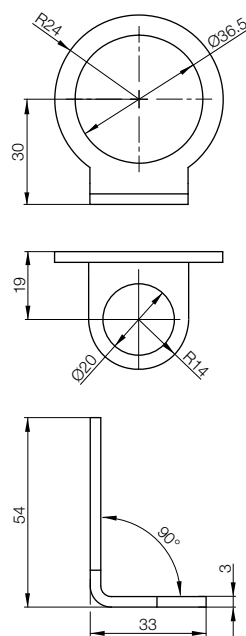
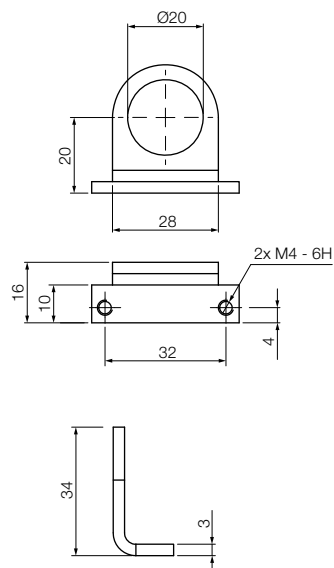


Stainless Steel



Stainless Steel

Description	Ø 20 mm sensor holder	M36 sensor holder	Ø 50 mm sensor holder	
Version	For clamping cylinders	For clamping cylinders	For clamping cylinders	
Use	For sensors BCS Q40...	For M36 sensors and clamps	For capacitive sensors Ø 50 mm (disk designs)	
Ordering code	BAM01UL	BAM003M	BAM01J2	
Part number	BMS CS-M-D12-IX14-01	BMS CS-M-D12-ID36-01	BMS CS-M-D12-IX09-01	
Material	Stainless steel (V4A)	Stainless steel	Stainless steel	



Mounting rods Ø 12 mm,
anodized aluminum or stainless steel
See page 284.



Mounting System

Adjustment units



Stainless
Steel



Stainless
Steel

M12 adjustment unit

For clamping cylinders
For aligning laser sensors M12

BAM003E

BMS AD-M-002-D12/D12

Stainless steel

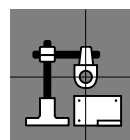
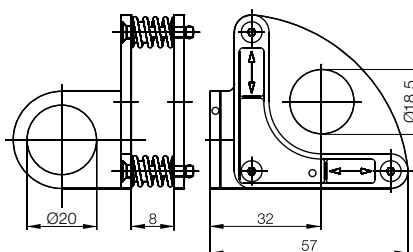
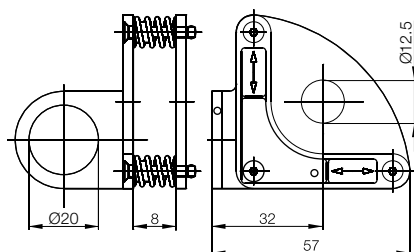
M18 adjustment unit

For clamping cylinders
For aligning laser sensors M18

BAM0038

BMS AD-M-002-D12/D18

Stainless steel



Mounting
System

Plastic

Metal

Cross-connector

Base Holder

Clamping Cylinder

Sensor Holder

Adjustment
Units

Reflector Mount

Adapter Ring

Air Blow

Mounting Rods

Mounting Kit

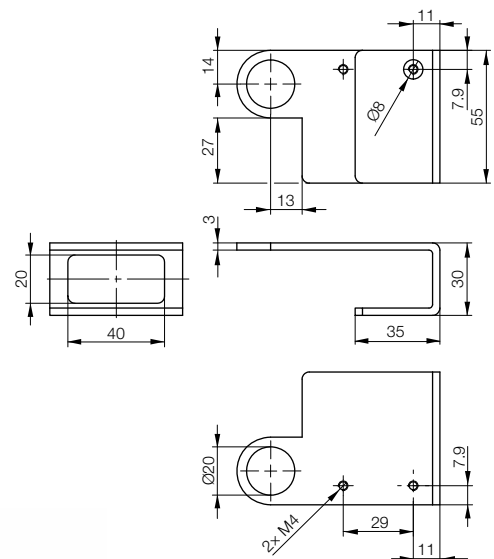
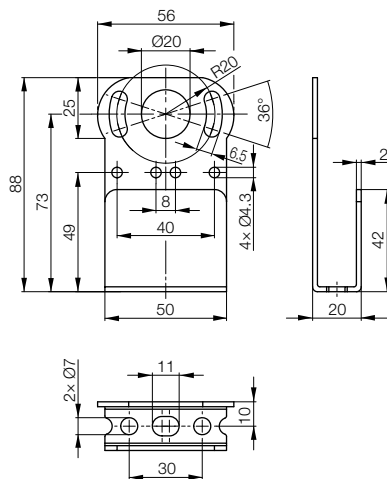


Mounting System

Sensor holders, reflector mounts

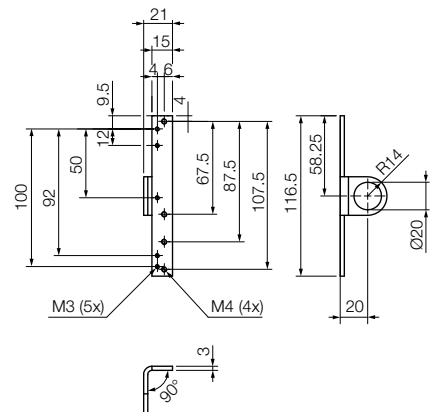
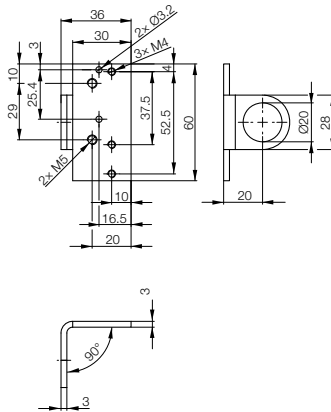


Description	Sensor holder	Sensor holder	
Version	For clamping cylinders	For clamping cylinders	
Use	For photoelectric sensors BOS 21M	For photoelectric sensors BOS 23K and BOS 26K	
Ordering code	BAM0043	BAM01AW	
Part number	BMS CS-M-D12-B21K-04	BMS CS-M-D12-B23K-05	
Material	Stainless steel	Stainless steel	



Mounting rods Ø 12 mm,
anodized aluminum or stainless steel
See page 284.





- Plastic
- Metal
- Cross-connector
- Base Holder
- Clamping Cylinder
- Sensor Holder**
- Adjustment Units
- Reflector Mount**
- Adapter Ring
- Air Blow
- Mounting Rods
- Mounting Kit

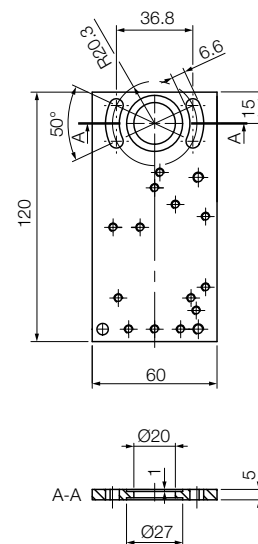
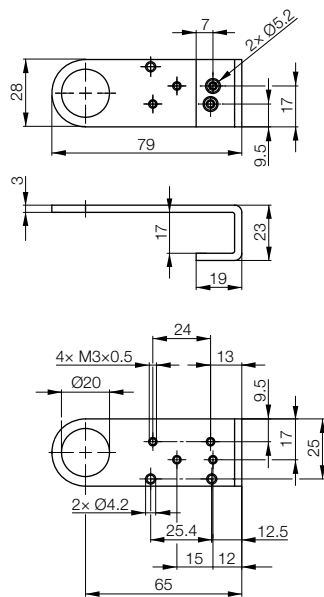


Mounting System

Sensor holder



Description	Sensor holder	Sensor holder	
Version	For clamping cylinders	For base holders or clamping cylinders	
Use	For photoelectric sensors BOS 2K, 5K, 6K and BUS R06	For BOS 23K, BOS 25K, BOS26K For BOS 50K, BOS 63M, BOS 66M For BOS R-22, BOS R-34, BOS R-36 For BOS R-44, BOS R-46 for reflector BOS R-9 For sensors of the series BOS 21M	
Ordering code	BAM0040	BAM003C	
Part number	BMS CS-M-D12-BX06-03	BMS CS-M-D12-BX05-02	
Material	Stainless steel	Anodized aluminum	

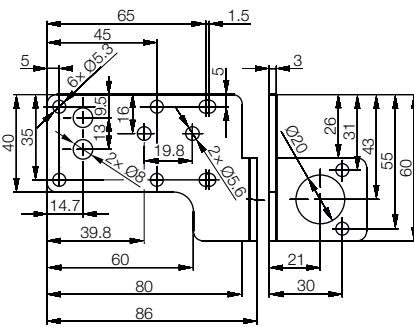


Mounting rods $\varnothing 12$ mm,
anodized aluminum or stainless steel
See page 284.





- Plastic
- Metal
- Cross-connector
- Base Holder
- Clamping Cylinder
- Sensor Holder**
- Adjustment Units
- Reflector Mount
- Adapter Ring
- Air Blow
- Mounting Rods
- Mounting Kit



Mounting System

Reflector mount

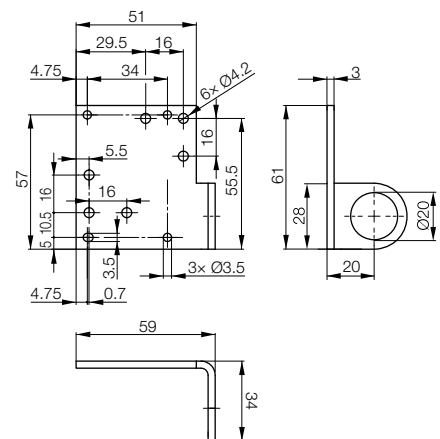
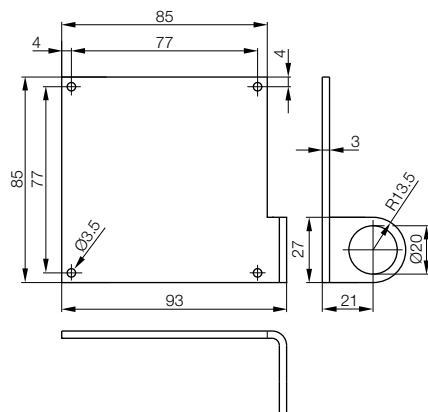


Stainless Steel



Stainless Steel

Description	Reflector mount	Reflector mount	
Version	For clamping cylinders	For clamping cylinders	
Use	For BOS R-11 reflectors	For reflectors BOS R-9 and BOS 25K, 26K	
Ordering code	BAM0035	BAM0042	
Part number	BMS CR-M-D12-IS-03	BMS CR-M-D12-IS-04	
Material	Stainless steel	Stainless steel	

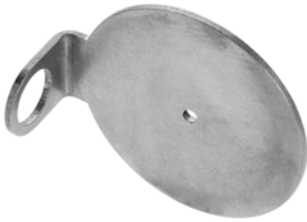


Mounting rods $\varnothing$ 12 mm,
anodized aluminum or stainless steel
See page 284.



Mounting System

Reflector mount



Stainless Steel



Stainless Steel



Stainless Steel

Reflector mount

For clamping cylinders
For BOS R-1 reflectors

BAM003N

BMS CR-M-D12-IU-05

Stainless steel

Reflector mount

For clamping cylinders
For BOS R-1, R-2, R-3 reflectors

BAM0034

BMS CR-M-D12-IU-02

Stainless steel

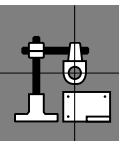
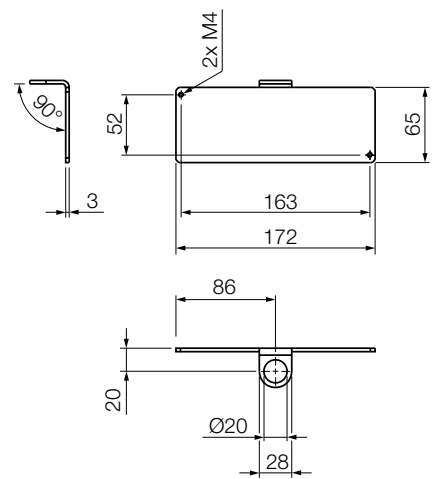
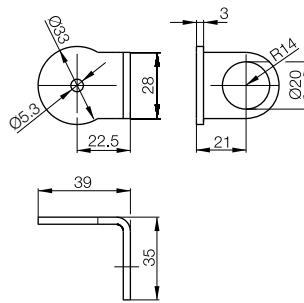
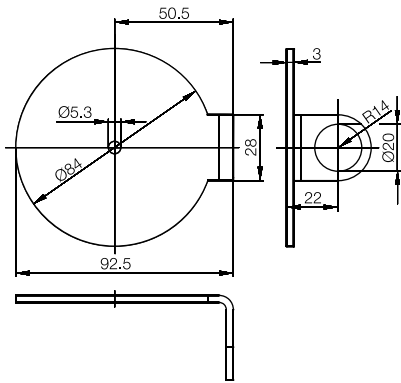
Holder for BVS housing

For clamping cylinders
For installing BAM PC-VS-008-1

BAM01TK

BMS CS-M-D12-IX13-01

Stainless steel



Mounting System

Plastic
Metal
Cross-connector
Base Holder
Clamping Cylinder
Sensor Holder
Adjustment Units
Reflector Mount
Adapter Ring
Air Blow
Mounting Rods
Mounting Kit

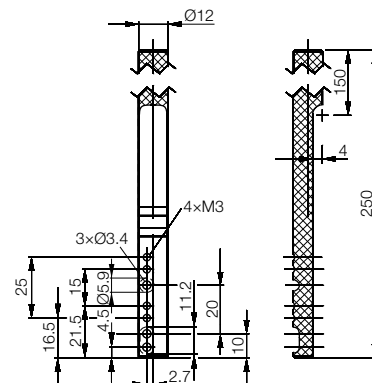
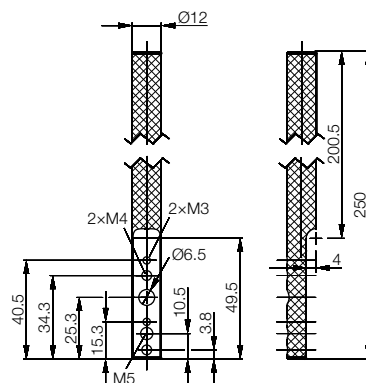


Mounting System

Reflector mounts, sensor holders



Description	Reflector mount	Sensor holder	
Version	For base holders	For base holders	
Use	For BOS R-1, R-9, R-14, R-22 and R-26 reflectors	For photoelectric sensors BOS 2K, 5K, 6K, Q08, inductive sensors BES Q08 and ultrasonic sensors BUS R06	
Ordering code	BAM003A	BAM0039	
Part number	BMS BS-M-D12-0250-01	BMS BS-M-D12-0250-02	
Material	Anodized aluminum	Anodized aluminum	



Mounting System

Sensor holder



Sensor holder

For base holders with/without cross-connectors
For through-beam fork sensors
BGL 5A, 10A, 20A, 30A, 50A

BAM003F

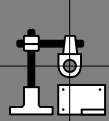
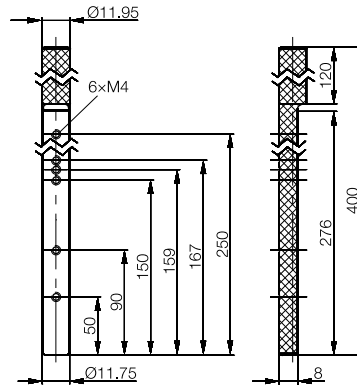
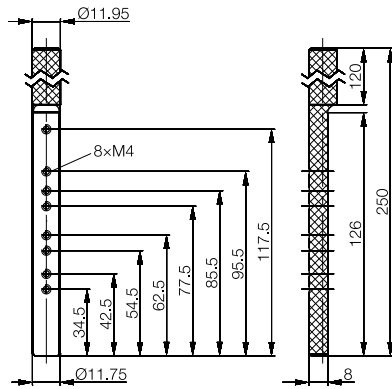
BMS BS-M-D12-0250-03
Anodized aluminum

Sensor holder

For base holders with/without cross-connectors
For BGL 80A, 120A, 180A, 220A through-beam fork sensors

BAM003H

BMS BS-M-D12-0400-04
Anodized aluminum



Mounting System

Plastic
Metal
Cross-connector
Base Holder
Clamping Cylinder
Sensor Holder
Adjustment Units
Reflector Mount
Adapter Ring
Air Blow
Mounting Rods
Mounting Kit

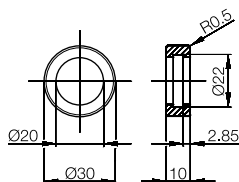


Mounting System

Adapter ring



Description	Adapter ring		
Version	For 2× BMS CS-M-D12-IZ clamping cylinders		
Use	As connecting element for 2× clamping cylinders		
Ordering code	BAM003J		
Part number	BMS AD-M-003-D12/IZ		
Material	Anodized aluminum		



Mounting rods Ø 12 mm,
anodized aluminum or stainless steel
See page 284.



Mounting System

Air blow



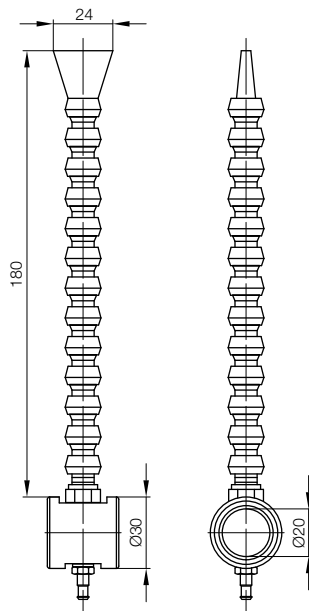
Air Blow

For clamping cylinders
For blowing clear sensors and
reflectors (minimum pressure 8 bar)

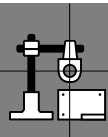
BAM0041

BMS CZ-M-D12-I-001

Anodized aluminum



Connection for
compressed air hose Ø 4 mm



Mounting
System

Plastic
Metal
Cross-connector
Base Holder
Clamping Cylinder
Sensor Holder
Adjustment
Units
Reflector Mount
Adapter Ring
Air Blow
Mounting Rods
Mounting Kit

Mounting System

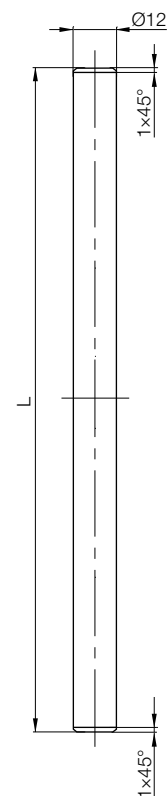
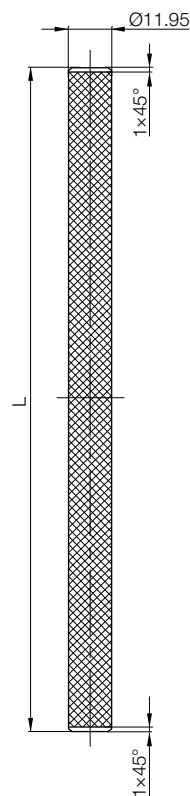
Mounting rods



Stainless Steel

Description		Mounting rod Ø 12 mm	Mounting rod Ø 12 mm
Version		Knurled, can be cut to required size	Smooth, can be cut to required size
Length 100 mm	Ordering code	BAM021Y	
	Part number	BMS RS-M-D12-0100-00	
Length 150 mm	Ordering code	BAM002R	BAM0045
	Part number	BMS RS-M-D12-0150-00	BMS RS-S-D12-0150-00
Length 200 mm	Ordering code	BAM021T	
	Part number	BMS RS-M-D12-0200-00	
Length 250 mm	Ordering code	BAM002T	
	Part number	BMS RS-M-D12-0250-00	
Length 300 mm	Ordering code	BAM021W	BAM0046
	Part number	BMS RS-M-D12-0300-00	BMS RS-S-D12-0300-00
Length 750 mm	Ordering code	BAM021U	
	Part number	BMS RS-M-D12-0750-00	
Length 1000 mm	Ordering code	BAM002U	
	Part number	BMS RS-M-D12-1000-00	
Material		Anodized aluminum	Stainless steel

The mounting rods are knurled full-length.
This prevents any position change.



Mounting System

Mounting kit

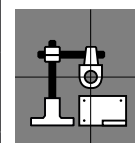
When installing sensors on machines and systems, fast solutions are often required for positioning the sensors. Installers need finished, compatible solutions for service work.

For such work, Balluff offers the BMS Kit-V1. From the base holder to rods and cross-connectors to the most commonly needed sensor holders, everything you need for establishing a secure sensor position is included in the mounting kit. Once parts have been used, an order form is included for simple reordering.

The tough aluminum case with additional, variable compartments is designed for tough industrial use.

Ordering code	BAM003W
Part number	BMS KIT-V1

Item	Case contents Quantity	Description	Ordering code Part number
1. 	20	Base holder	BAM024P BMS CU-M-D12-B028-00
2. 	10	Cross-connector	BAM002Z BMS CC-M-D12-B-00
3. 	20	Sensor holder	BAM024T BMS CS-M-D12-BZ
4. 	5	M8 sensor holder	BAM0036 BMS CS-M-D12-ID08-01
5. 	10	M12 sensor holder	BAM0037 BMS CS-M-D12-ID12-01
6. 	10	M16 sensor holder	BAM003K BMS CS-M-D12-ID16-01
7. 	10	M18 sensor holder	BAM0032 BMS CS-M-D12-ID18-01
8. 	10	M24 sensor holder	BAM003L BMS CS-M-D12-ID24-01
9. 	5	M30 sensor holder	BAM0033 BMS CS-M-D12-ID30-01
10. 	5	Joint	BAM024R BMS CCJ-M-D12-B-01
11. 	5	Sensor holder for BOS 21M, 25K, 26K	BAM003C BMS CS-M-D12-BX01-01
12. 	5	Reflector mount for BOS R-9	BAM0042 BMS CR-M-D12-IS-04
13. 	5	Reflector mounts for BOS R-1, R-9, R-14, R-22, R-26	BAM003A BMS BS-M-D12-0250-01
14. 	5	Reflector BOS R-9	BAM00WL BOS R-9
15. 	10	Mounting rod 150 mm	BAM002R BMS RS-M-D12-0150-00
16. 	10	Mounting rod 250 mm	BAM002T BMS RS-M-D12-0250-00
17. 		Empty case	BAM003T BMS Case-01

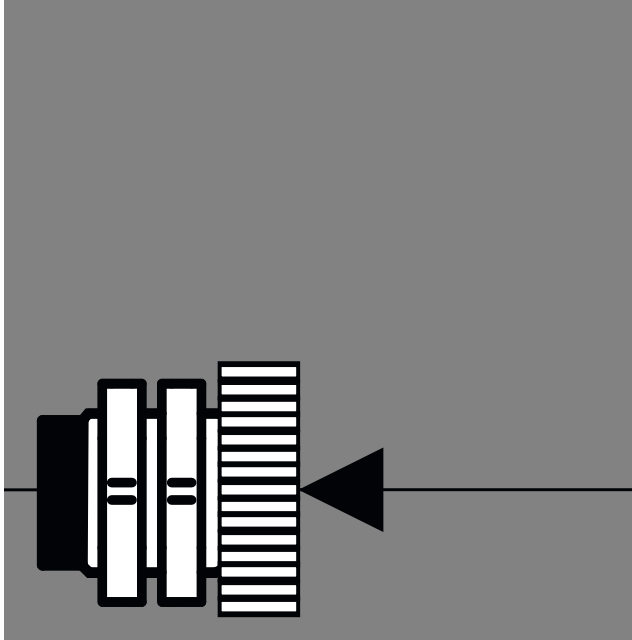


Mounting System

Plastic
Metal

Cross-connector
Base Holder
Clamping Cylinder
Sensor Holder
Adjustment Units
Reflector Mount
Adapter Ring
Air Blow
Mounting Rods
Mounting Kit

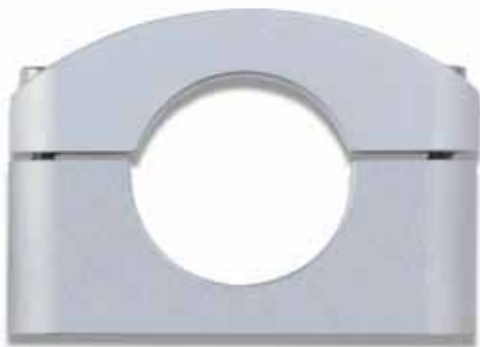




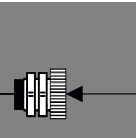
Fasteners

Fasteners

Sensors for individual solutions are enhanced by customized accessories. Balluff mounting elements ensure exact positioning even under difficult conditions.



Fasteners	
Selection Guide for Clamps	288
Clamps	290
Clamps for Air-tight Installation in Containers	296
Protective End Caps	297
Fixing Nuts	298
Mounting Cuffs	300
Mounting Clamps	302
Mounting Clamps, Reducing Sleeves, Mounting Cuffs	307
Mounting Brackets	308
Mounting Clamps for Row Mounting	310



Selection guide for clamps



Description	Clamping holders		
Version	Metal/plastic clamping holder	Metal/plastic clamping holder	
Installation type sensor	Flush	Flush	
Operating temperature	60 °C	60 °C/400 °C	
Use	■ GlobalProx ■ Standard ■ All sensors with single switching distance	■ GlobalProx ■ Standard ■ All sensors with single switching distance	



Sensor series	Switching distance	Size	Housing material			
GlobalProx	Single	M12	CuZn		■	■
		M18	CuZn		■	■
		M30	CuZn		■	■
	Double	M12	CuZn		■	■
		M18	CuZn		■	■
		M30	CuZn		■	■
Standard	Single	M5	Stainless steel			■
		M8	Stainless steel			■
		M12	Stainless steel		■	■
		M18	CuZn		■	■
		M30	CuZn		■	■
	Double	M5	Stainless steel			■
		M8	Stainless steel			■
		M12	CuZn		■	■
		M18	CuZn		■	■
Proxinox	Single	M12	Stainless steel		■	■
		M12	Stainless steel		■	■
		M18	Stainless steel		■	■
		M18	Stainless steel		■	■
		M30	Stainless steel		■	■
		M30	Stainless steel		■	■
	Double	M12	Stainless steel		■	■
		M18	Stainless steel			
		M18	Stainless steel			
TripleProx	Triple	M12	CuZn			
		M18	CuZn		■	■
		M30	CuZn		■	■
SteelFace	Double	M12	Stainless steel			
		M18	Stainless steel			

Preselection: Depending on the application, the switching distance can be reduced or increased. It is recommended that the switching behavior be checked with an application test.



Fasteners

Clamping holders

An old problem in installing proximity switches has now been solved. Balluff **clamps with positive stop** ensure the exact and correct position of the sensors.

Sensors can be quickly and easily changed even in difficult to access locations, and retain their position without readjustment thanks to a positive stop.

Benefits

- Short downtimes
- Quickly replaced
- Once set, always in the right position
- No readjustment
- Easy installation and changing of proximity switches thanks to the positive stop
- Easy to attach the sensor using a compression screw

Note regarding clamps with positive stop made of metal

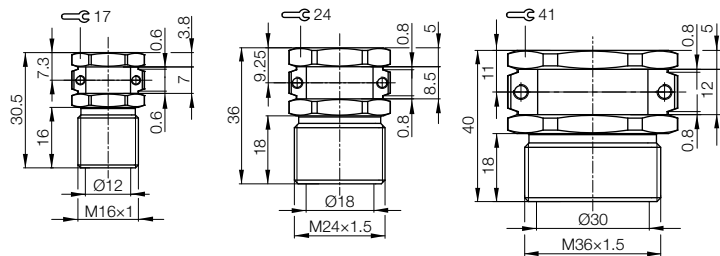
The switching distance of the sensors can be reduced by using clamps with positive stops. Take note when using this clamping system.

Clamping holders without positive stop can be used for nearly all inductive, capacitive or photoelectric sensors.

Selection guide, see page 288.

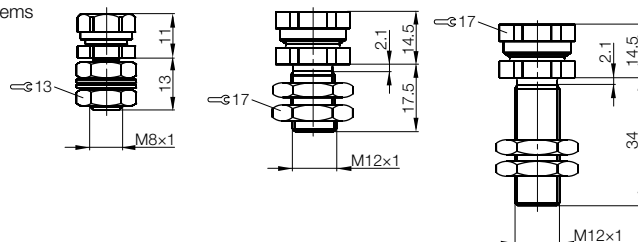


Description		Clamp w/out positive stop	Clamp w/out positive stop	Clamp w/out positive stop	
Use		For sensors Ø 12 mm and M12	For sensors Ø 18 mm and M18	For sensors Ø 30 mm and M30	
Nickel-plated brass	Ordering code	BAM00E4	BAM00FZ	BAM00J8	
	Part number	BES 12,0-KH-4	BES 18,0-KH-4	BES 30,0-KH-4	
Stainless steel	Ordering code				
	Part number				



Description		Clamp with positive stop	Clamp with positive stop	Clamp with positive stop	
Use		For sensors Ø 5 mm and M5 with thread length ≥ 30 mm	For sensors Ø 8 mm and M8 with thread length ≥ 30 mm	For sensors Ø 8 mm and M8 with thread length ≥ 48.5 mm	
Nickel-plated brass	Ordering code	BAM0099	BAM00AH	BAM00AE	
	Part number	BES 05,0-KH-2S	BES 08,0-KH-2S	BES 08,0-KH-2L	
Stainless steel	Ordering code		BAM00AR		
	Part number		BES 08,0-KH-6S		
PTFE coated*	Ordering code		BAM00AK	BAM00AF	
	Part number		BES 08,0-KH-2S/W	BES 08,0-KH-2L/W	

*Teflon coated variants for welding systems

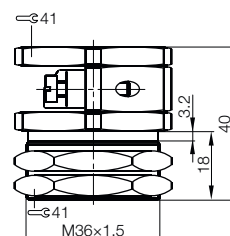
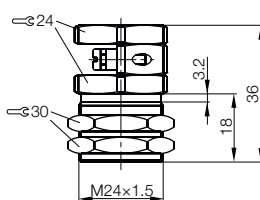
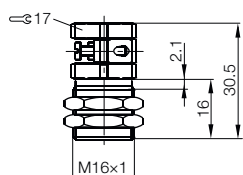
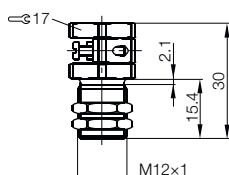


Fasteners

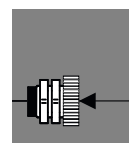
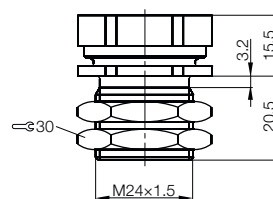
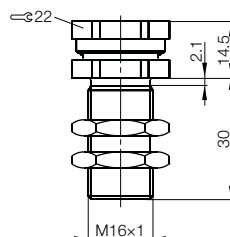
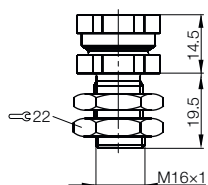
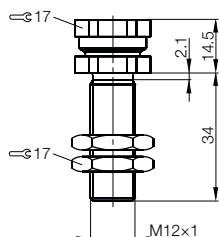
Clamping holders



Clamp with positive stop	Clamp with positive stop	Clamp with positive stop	Clamp with positive stop
For sensors Ø 8 mm and M8	For sensors Ø 12 mm and M12	For sensors Ø 18 mm and M18	For sensors Ø 30 mm and M30
BAM00AM	BAM00E5	BAM00H0	BAM00J9
BES 08,0-KH-4-F	BES 12,0-KH-4-F	BES 18,0-KH-4-F	BES 30,0-KH-4-F
BAM00AU			
BES 08,0-KH-7-F			



Clamp with positive stop	Clamp with positive stop	Clamp with positive stop	Clamp with positive stop
For sensors Ø 8 mm and M8 with thread length ≥ 30 mm	For sensors Ø 12 mm and M12 with thread length ≥ 30 mm	For sensors Ø 12 mm and M12 with thread length ≥ 40 mm	For sensors Ø 18 mm and M18 with thread length ≥ 30 mm
BAM00AN	BAM00E0	BAM00CY	BAM00FT
BES 08,0-KH-6L	BES 12,0-KH-2S	BES 12,0-KH-2L	BES 18,0-KH-2S
BAM00AP	BAM00E1	BAM00CZ	BAM00FW
BES 08,0-KH-6L/W	BES 12,0-KH-2S/W	BES 12,0-KH-2L/W	BES 18,0-KH-2S/W



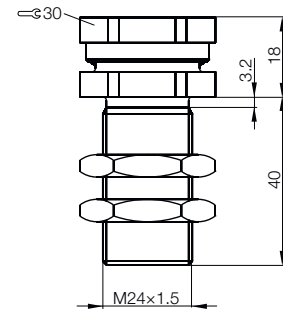
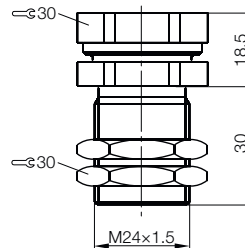
Fasteners
Selection guide
for clamps
**Clamping
Holders**
Protective End
Caps
Fixing Nuts
Mounting Cuffs
Mounting Clamps
Reducing Sleeve
Mounting
Brackets
Mounting Clamps
for Row Mounting

Fasteners

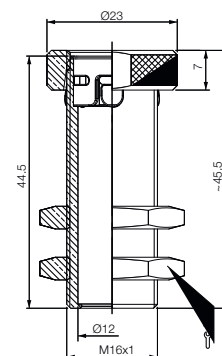
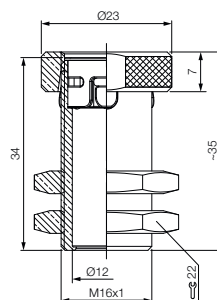
Clamping holders



Description		Clamp with positive stop	Clamp with positive stop	
Version		For sensors Ø 18 mm and M18 with thread length ≥ 48 mm	For sensors Ø 18 mm and M18 with thread length ≥ 50 mm	
Nickel-plated brass	Ordering code	BAM00FR	BAM00FN	
	Part number	BES 18,0-KH-2M	BES 18,0-KH-2L	
PTFE coated (weld-immune)	Ordering code		BAM00FP	
	Part number		BES 18,0-KH-2L/W	



Description		Clamping holders Flush with positive stop	Clamping holders Flush with positive stop	
Version		For sensors Ø 12 mm and M12 With thread length 34 mm	For sensors Ø 12 mm and M12 With thread length 44.5 mm	
Nickel-plated brass	Ordering code			
	Part number			
PTFE coated (weld-immune)	Ordering code	BAM0247	BAM0248	
	Part number	BAM MC-XA-023-D12,0-2-FM/W	BAM MC-XA-023-D12,0-2-FXL/W	



Fasteners

Clamping holders



Clamp with positive stop

For sensors
Ø 30 mm and **M30**
 with thread length ≥ 30 mm

BAM00J6

BES 30,0-KH-2S

BAM00J7

BES 30,0-KH-2S/W

Clamp with positive stop

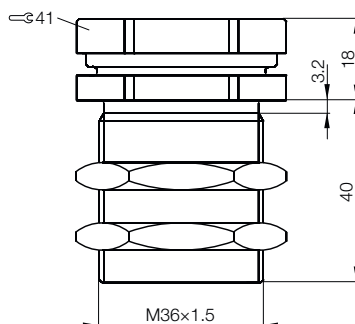
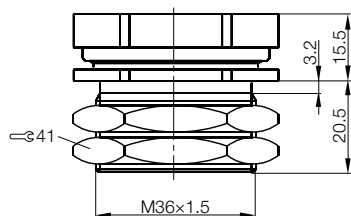
For sensors
Ø 30 mm and **M30**
 with thread length ≥ 50 mm

BAM00J4

BES 30,0-KH-2L

BAM00J5

BES 30,0-KH-2L/W



Fasteners
 Selection guide
 for clamps

**Clamping
 Holders**

Protective End
 Caps

Fixing Nuts

Mounting Cuffs

Mounting Clamps

Reducing Sleeve

Mounting
 Brackets

Mounting Clamps
 for Row Mounting



Clamping holders Non-flush with positive stop

For sensors
Ø 12 mm and **M12**
 With thread length 44.5 mm

BAM024F

BAM MC-XA-024-D12,0-2-FXL/W

Clamping holders Non-flush with positive stop

For sensors
Ø 12 mm and **M12**
 With thread length 34 mm

BAM024E

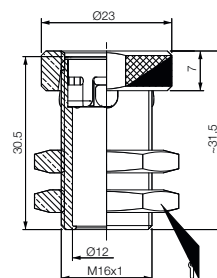
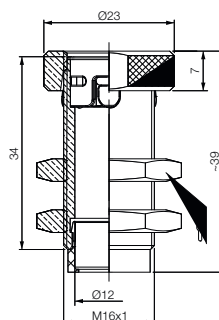
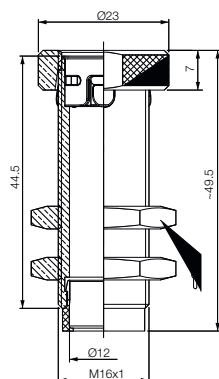
BAM MC-XA-024-D12,0-2-FM/W

Clamping holders Flush with positive stop

For sensors
Ø 12 mm and **M12**
 with thread length ≥ 30.5 mm

BAM0246

BAM MC-XA-023-D12,0-2-FS

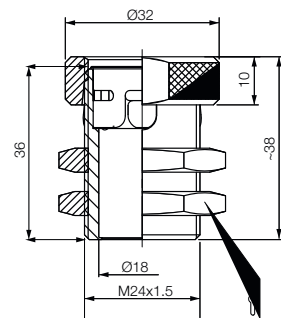
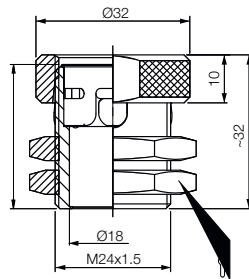


Fasteners

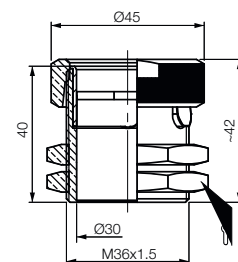
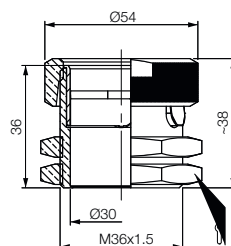
Clamping holders



Description	Clamping holders Flush with positive stop		Clamping holders Flush with positive stop	
Version	For sensors Ø 18 mm and M18 With thread length 30 mm		For sensors Ø 18 mm and M18 With thread length 36 mm	
Nickel-plated brass	Ordering code		BAM022K	
	Part number		BAM MC-XA-023-D18,0-2-FS	
PTFE coated (weld-immune)	Ordering code	BAM022F		
	Part number	BAM MC-XA-023-D18,0-2-FXS/W		



Description	Clamping holders Flush with positive stop		Clamping holders Flush with positive stop	
Version	For sensors Ø 30 mm and M30 With thread length 36 mm		For sensors Ø 30 mm and M30 With thread length 40 mm	
PTFE coated (weld-immune)	Ordering code	BAM0249	BAM024H	
	Part number	BAM MC-XA-023-D30,0-2-FS/W	BAM MC-XA-023-D30,0-2-FM/W	



Fasteners

Clamping holders



Clamping holders Non-flush with positive stop

For sensors
Ø 18 mm and **M18**
With thread length 46 mm

BAM022M

BAM MC-XA-024-D18,0-2-FM/W

Clamping holders Flush with positive stop

For sensors
Ø 18 mm and **M18**
With thread length 48.5 mm

BAM022L

BAM MC-XA-023-D18,0-2-FL

Clamping holders Flush with positive stop

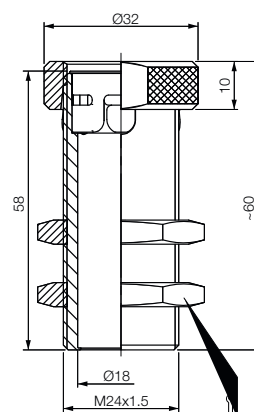
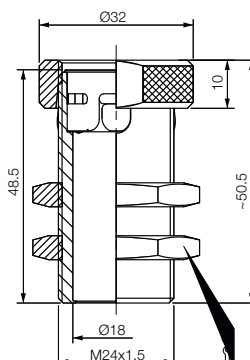
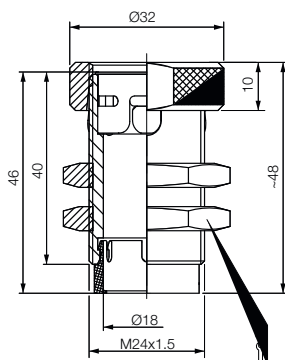
For sensors
Ø 18 mm and **M18**
With thread length 58 mm

BAM022H

BAM MC-XA-023-D18,0-2-FXL

BAM022J

BAM MC-XA-023-D18,0-2-FXL/W



Clamping holders Flush with positive stop

For sensors
Ø 30 mm and **M30**
With thread length 58 mm

BAM024C

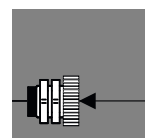
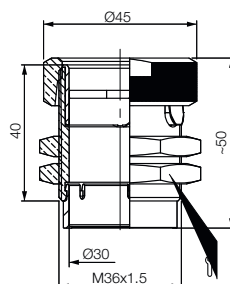
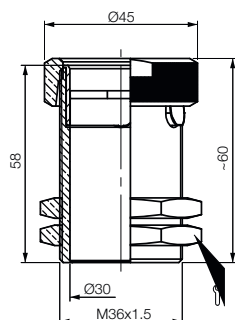
BAM MC-XA-023-D30,0-2-FXL/W

Clamping holders Non-flush with positive stop

For sensors
Ø 30 mm and **M30**
With thread length 40 mm

BAM024A

BAM MC-XA-024-D30,0-2-FM/W



Fasteners
Selection guide
for clamps
**Clamping
Holders**
Protective End
Caps
Fixing Nuts
Mounting Cuffs
Mounting Clamps
Reducing Sleeve
Mounting
Brackets
Mounting Clamps
for Row Mounting

Clamps for air-tight installation in containers

Advantages of positive stop:

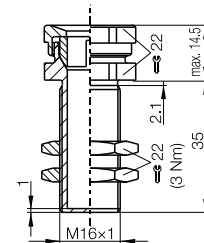
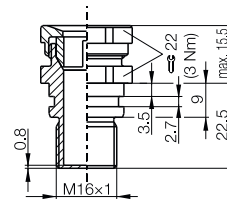
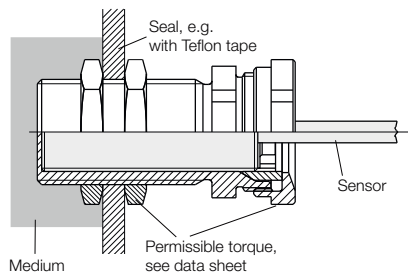
- Once set, always in the right position
- No readjustment
- Short downtimes



Description	Clamp with positive stop	Clamp with positive stop
Use	For M12 sensors for air-tight installation	For M12 sensors for air-tight installation
Ordering code	BAM00E8	BAM00E3
Part number	BES 12,0-KH-5F	BES 12,0-KH-3X
Pressure-resistant	6 bar	6 bar
Material	PBT fiberglass reinforced	PBT fiberglass reinforced

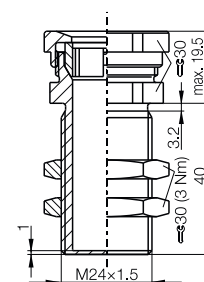
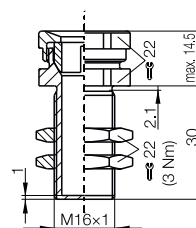
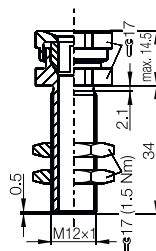
Installation example using clamping holder BES ...-KH-3L

Particularly well suited for detecting liquid media



Description	Clamp with positive stop	Clamp with positive stop	Clamp with positive stop
Use	For M8 sensors for air-tight installation	For M12 sensors for air-tight installation	For M18 sensors for air-tight installation
Ordering code	BAM00AL	BAM00E2	BAM00FY
Part number	BES 08,0-KH-3L	BES 12,0-KH-3L	BES 18,0-KH-3L
Pressure-resistant	6 bar	6 bar	6 bar
Material	PBT fiberglass reinforced	PBT fiberglass reinforced	PBT fiberglass reinforced

For all sensors with simple switching distance and appropriate diameter. The switching distance of the sensors may be reduced by the clamps when using for air-tight installation.

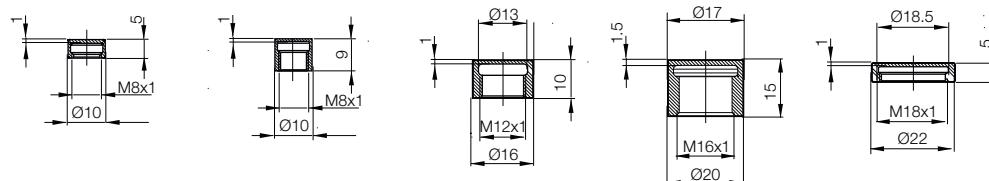


Fasteners

Protective end caps



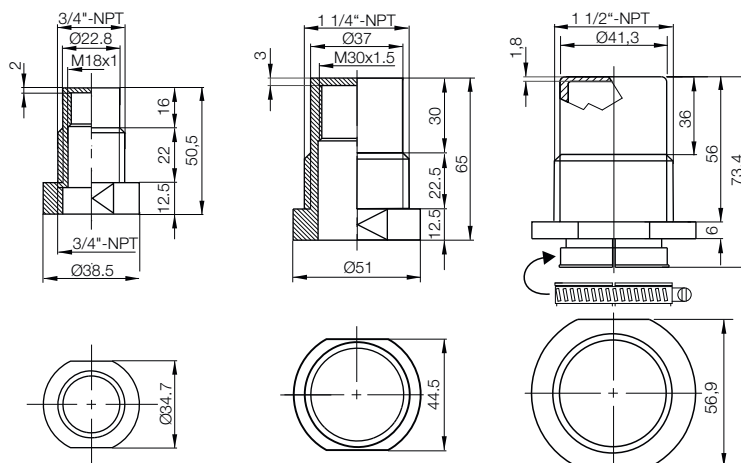
Description	Protective end cap	Protective end cap	Protective end cap	Protective end cap	Protective end cap
Use	For M8 sensors	For M8 sensors	For M12 sensors	For M16 sensors	For M18 sensors
Ordering code	BAM009Z	BAM00A0	BAM00C2	BAM00EP	BAM00EZ
Part number	BES 08-SM-1	BES 08-SM-1F	BES 12-SM-2	BES 16-SM-2	BES 18-SM-1
Reduction of the rated switching distance	1 mm	1 mm	1 mm	1.5 mm	1 mm
Material	PTFE	PTFE	POM	PTFE	PTFE



Fasteners
Selection guide for clamps
Clamping Holders
Protective End Caps
Fixing Nuts
Mounting Cuffs
Mounting Clamps
Reducing Sleeve
Mounting Brackets
Mounting Clamps for Row Mounting

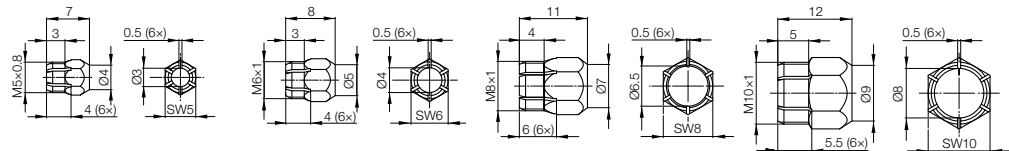
Description	Protective end cap	Protective end cap	Protective end cap	
Use	For M18 sensors	For M30 sensors	For M30 sensors	
Ordering code	BAM00F1	BAM00HL	BAM00HM	
Part number	BES 18-SM-3	BES 30-SM-3	BES 30-SM-5	
Reduction of the rated switching distance	2 mm	2 mm	2 mm	
Pressure-resistant	14 bar	14 bar	14 bar	
Material	PTFE	PTFE	PTFE	

Protective end caps for installing in containers for level measurement





Description	Fixing nut	Fixing nut	Fixing nut	Fixing nut
Use	For sensors and fiber optics $\varnothing$ 3 mm with mounting thread M5x0.8	For sensors and fiber optics $\varnothing$ 4 mm with mounting thread M6x1	For sensors $\varnothing$ 6.5 mm with mounting thread M8x1	For sensors $\varnothing$ 8 mm with mounting thread M10x1
Ordering code	BAM000T	BAM000U	BAM000W	BAM000Y
Part number	BAM MC-XA-002-D03,0-2	BAM MC-XA-002-D04,0-2	BAM MC-XA-002-D06,5-2	BAM MC-XA-002-D08,0-2
WAF	5	6	8	10
Material	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass



Small sensors or fiber optics are used in compact systems. In some situations, they are the only option. Tight spaces under demanding conditions often make positioning of the miniature sensors difficult. The mounting clamps demonstrate their diversity by holding a range of different sensors and fiber optics. They are extremely stable, variable and flexible. With just a few work steps, sensors and fiber optics can be mounted on housings or base plates.

- Mounting clamps for smooth sensors and fiber optics:
 $\varnothing$ 3 mm, $\varnothing$ 4 mm, $\varnothing$ 6.5 mm, $\varnothing$ 8 mm
- Simple and economical mounting
- Minimal wall thickness for internal threaded bore: 2 mm



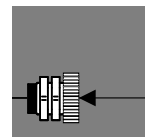


Description	BMF Hex Key	Hex key set 0.7-2.0
Version	Folding Allen key set, with additional blades, 8-piece	
Use	Tool set for all BMF sensors and BMF mounting brackets as well as for sensors having a potentiometer, e.g. BOS, BCS, BUS, etc.	Tool set for BMF sensors and BMF mounting brackets
Material No.	139868	123264
Material	Blade: chrome vanadium steel, fully hardened, galvanically treated. Grip: ergonomic, fiberglass reinforced housing, 55 mm long.	

		
		mm
0.7		
0.9		
1.3		
1.5		
2.0		
2.5		
		3.0
	PH00	



0.71
0.89
1.27
1.5
2.0



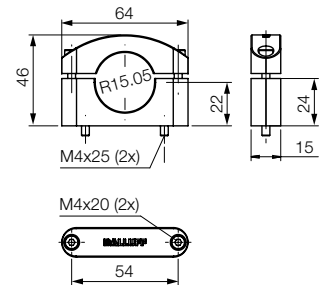
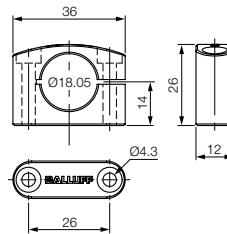
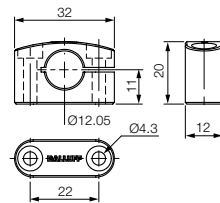
Fasteners
Selection guide for clamps
Clamping Holders
Protective End Caps
Fixing Nuts
Mounting Cuffs
Mounting Clamps
Reducing Sleeve
Mounting Brackets
Mounting Clamps for Row Mounting

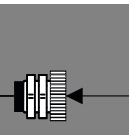
Fasteners

Mounting cuffs



Description	Mounting cuff	Mounting cuff	Mounting cuff
Use	For sensors Ø 12 mm and M12	For sensors Ø 18 mm and M18	For sensors Ø 30 mm, M30 and pressure sensors
Ordering code	BAM0218	BAM0219	BAM01U0
Part number	BAM MC-XA-027-D12,0-1	BAM MC-XA-027-D18,0-1	BAM MC-XA-017-D30,0-1
Material	Anodized aluminum	Anodized aluminum	Anodized aluminum





- Fasteners
- Selection guide for clamps
- Clamping Holders
- Protective End Caps
- Fixing Nuts
- Mounting Cuffs**
- Mounting Clamps
- Reducing Sleeve
- Mounting Brackets
- Mounting Clamps for Row Mounting



- Fasteners
- Selection guide for clamps
- Clamping Holders
- Protective End Caps
- Fixing Nuts
- Mounting Cuffs**
- Mounting Clamps
- Reducing Sleeve
- Mounting Brackets
- Mounting Clamps for Row Mounting



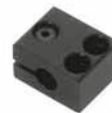
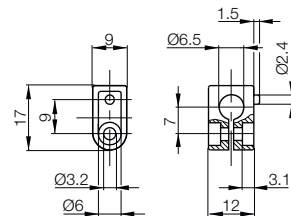
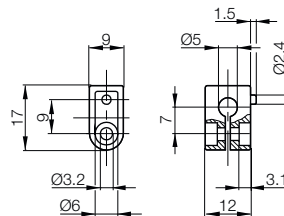
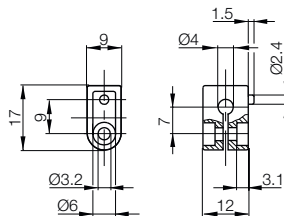
- Fasteners
- Selection guide for clamps
- Clamping Holders
- Protective End Caps
- Fixing Nuts
- Mounting Cuffs**
- Mounting Clamps
- Reducing Sleeve
- Mounting Brackets
- Mounting Clamps for Row Mounting

Fasteners

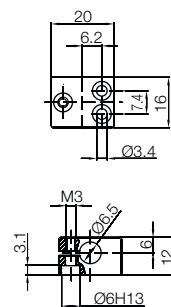
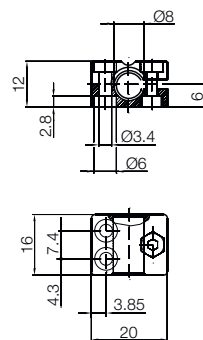
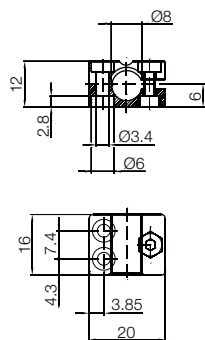
Mounting clamps



Description	Mounting clamp w/out positive stop	Mounting clamp w/out positive stop	Mounting clamp w/out positive stop	
Use	For sensors and fiber optics $\varnothing 4$ mm	For sensors $\varnothing 5$ mm and M5	For sensors $\varnothing 6.5$ mm	
Ordering code	BAM0094	BAM0097	BAM009C	
Part number	BES 04,0-KB-1	BES 05,0-KB-1	BES 06,5-KB-1	
Material	PA 6	PA 6	PA 6	



Description	Mounting clamp w/out positive stop	Mounting clamp with positive stop	Mounting clamp w/out positive stop	
Use	For sensors $\varnothing 8$ mm and M8	For sensors $\varnothing 8$ mm and M8	For sensors $\varnothing 6.5$ mm	
Ordering code	BAM00A5	BAM00A6	BAM009F	
Part number	BES 08,0-KB-3	BES 08,0-KB-3-F	BES 06,5-KB-7	
Material	PA 6	PA 6	Anodized aluminum	



Note: For all sensors with appropriate diameter. Mounting clamps can be used in nearly all inductive, capacitive, photoelectric and ultrasonic sensors. These mounting clamps made of PA 6 are ideal for on-location installation of sensors in the vertical or horizontal direction in the materials handling industry.

Fasteners

Mounting clamps



**Mounting clamp
w/out positive stop**
For sensors and
fiber optics Ø 3 mm

BAM0092

BES 03,0-KB-3

PA 6



**Mounting clamp
w/out positive stop**
For sensors and
fiber optics Ø 4 mm

BAM0095

BES 04,0-KB-3

PA 6



**Mounting clamp
w/out positive stop**
For sensors Ø 5 mm and M5

BAM0098

BES 05,0-KB-3

PA 6

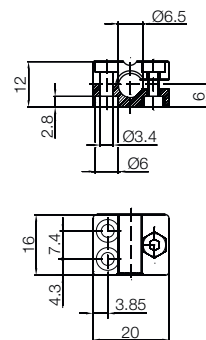
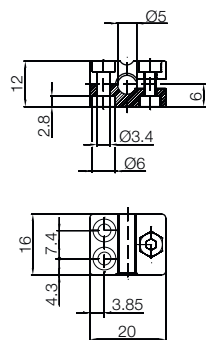
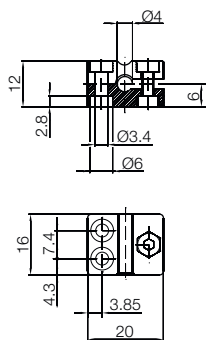
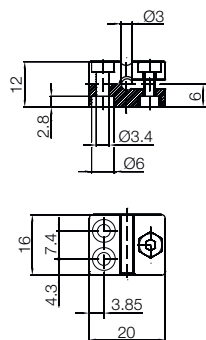


**Mounting clamp
w/out positive stop**
For sensors Ø 6.5 mm

BAM009E

BES 06,5-KB-3

PA 6



**Mounting clamp
w/out positive stop**
For sensors Ø 8 mm and M8

BAM00AA

BES 08,0-KB-7

Anodized aluminum



Stackable
Row mounting

**Mounting clamp
w/out positive stop**
For sensors Ø 12 mm and M12

BAM00C7

BES 12,0-KB-2

PA 6



Stackable
Row mounting

**Mounting clamp
with positive stop**
For sensors Ø 12 mm and M12

BAM00C8

BES 12,0-KB-2-F

PA 6



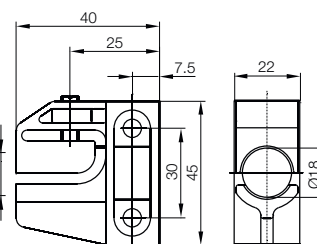
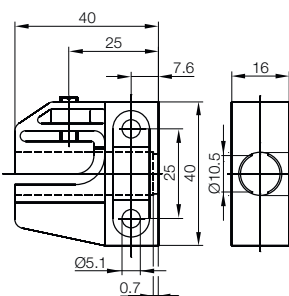
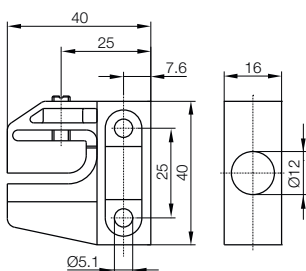
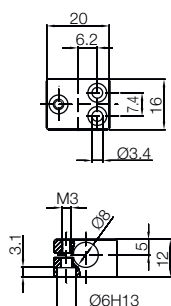
Stackable
Row mounting

**Mounting clamp
w/out positive stop**
For sensors Ø 18 mm and M18

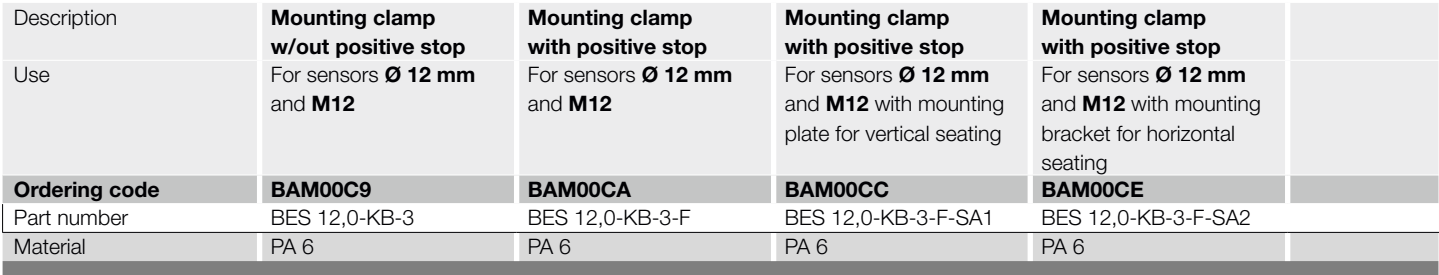
BAM00F6

BES 18,0-KB-2

PA 6



Fasteners
Selection guide
for clamps
Clamping Holders
Protective End
Caps
Fixing Nuts
Mounting Cuffs
**Mounting
Clamps**
Reducing Sleeve
Mounting
Brackets
Mounting Clamps
for Row Mounting



Mounting clamps with positive stop made of aluminum: The switching distance of the sensors may be reduced by mounting clamps with positive stop. Take note when using this clamping system.

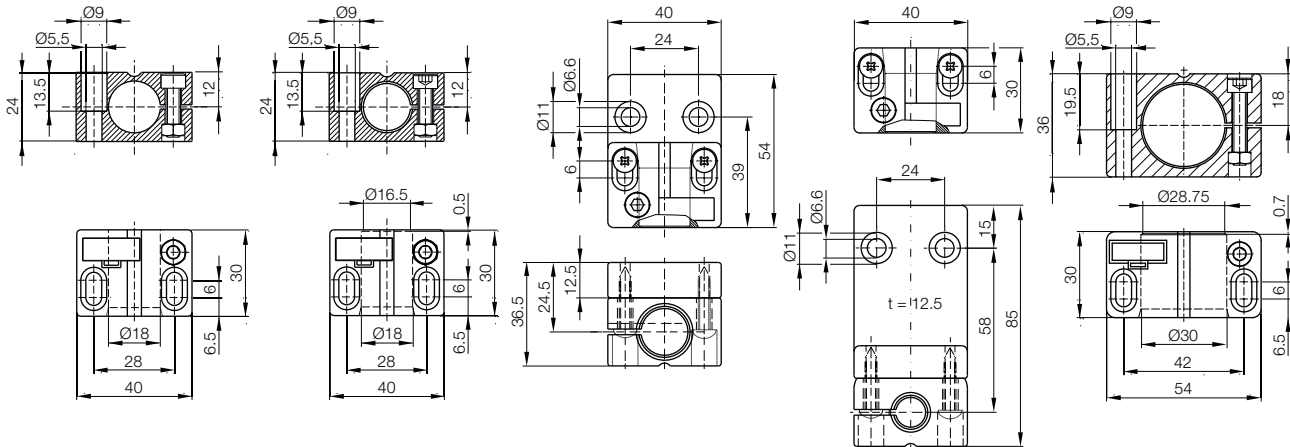
304 | **BALLUFF**

Fasteners

Mounting clamps



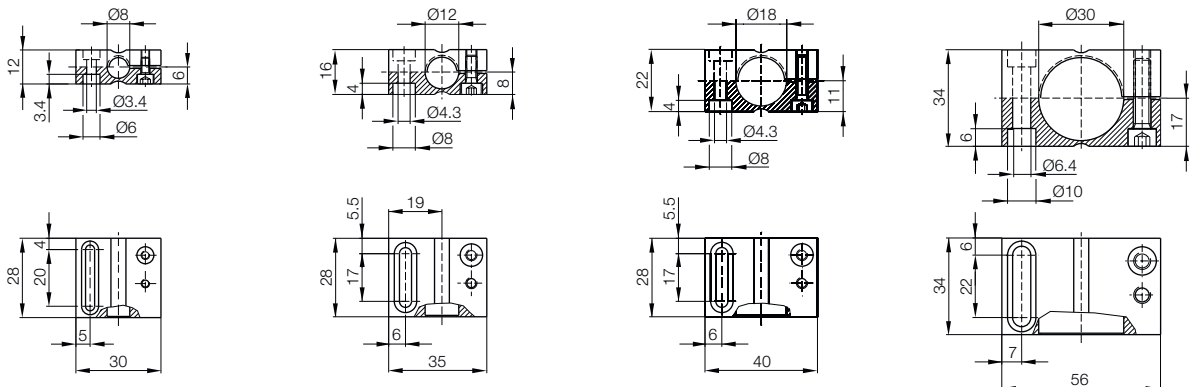
Mounting clamp w/out positive stop For sensors $\varnothing$ 18 mm and M18	Mounting clamp with positive stop For sensors $\varnothing$ 18 mm and M18	Mounting clamp with positive stop For sensors $\varnothing$ 18 mm and M18 with mounting plate for vertical seating	Mounting clamp with positive stop For sensors $\varnothing$ 18 mm and M18 with mounting bracket for horizontal seating	Mounting clamp with positive stop For sensors $\varnothing$ 30 mm and M30
BAM00F7	BAM00F8	BAM00F9	BAM00FA	BAM00HU
BES 18,0-KB-3	BES 18,0-KB-3-F	BES 18,0-KB-3-F-SA1	BES 18,0-KB-3-F-SA2	BES 30,0-KB-3-F
PA 6	PA 6	PA 6	PA 6	PA 6



Fasteners
Selection guide for clamps
Clamping Holders
Protective End Caps
Fixing Nuts
Mounting Cuffs
Mounting Clamps
Reducing Sleeve
Mounting Brackets
Mounting Clamps for Row Mounting



Mounting clamp with positive stop For M8 and $\varnothing$ 8 mm sensors	Mounting clamp with positive stop For M12 sensors	Mounting clamp with positive stop For M18 sensors	Mounting clamp with positive stop For M30 sensors
BAM00A7	BAM00CF	BAM00FC	BAM00HW
BES 08,0-KB-4-F	BES 12,0-KB-4-F	BES 18,0-KB-4-F	BES 30,0-KB-4-F
Anodized aluminum	Anodized aluminum	Anodized aluminum	Anodized aluminum

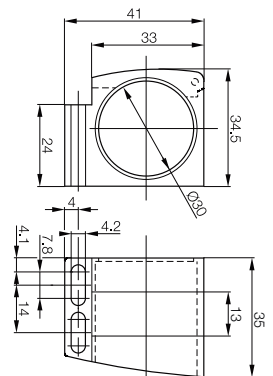
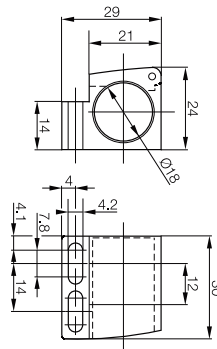
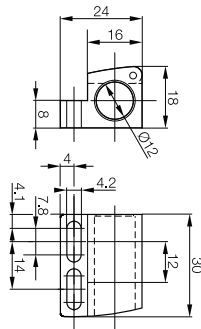
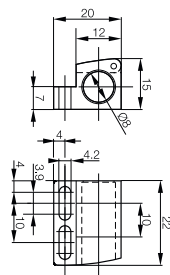


Fasteners

Mounting clamps



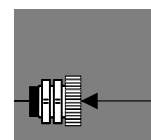
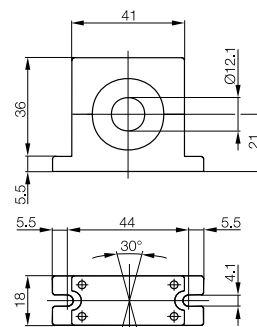
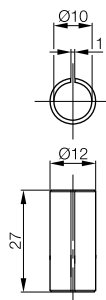
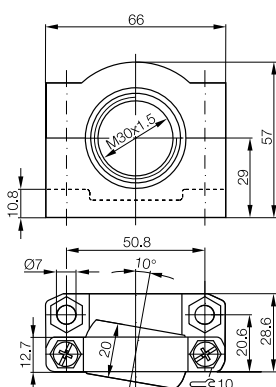
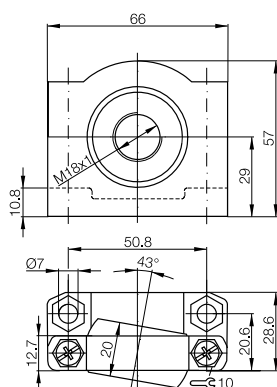
Description	Mounting clamp with positive stop	Mounting clamp with positive stop	Mounting clamp with positive stop	Mounting clamp with positive stop	
Use	For sensors $\varnothing$ 8 mm or M8	For sensors $\varnothing$ 12 mm or M12	For sensors $\varnothing$ 18 mm or M18	For sensors $\varnothing$ 30 mm or M30	
Ordering code	BAM00A8	BAM00CH	BAM00FE	BAM00HY	
Part number	BES 08,0-KB-5-F	BES 12,0-KB-5-F	BES 18,0-KB-5-F	BES 30,0-KB-5-F	
Material	PC	PC	PC	PC	



Note: For all sensors with appropriate diameter. Mounting clamps can be used in nearly all inductive, capacitive, photoelectric and ultrasonic sensors. These mounting clamps made of PC are ideal for on-location installation of sensors in the vertical or horizontal direction in the materials handling industry.



Mounting clamp with ball joint for cylindrical sensors with M18 external thread	Mounting clamp With ball joint for cylindrical sensors with M30 external thread	Reducing sleeve for reducing from 12 mm to 10 mm For sensors Ø 10 mm for installation in mounting clamps and clamps Ø 12 mm	Mounting cuff for cylindrical sensors with M12 external thread
BAM00T3	BAM00TN	BAM002H	BAM01KM
BOS 18,0-KB-1	BOS 30,0-KB-1	BMS AD-P-001-12/10	BOS 12,0-KB-1
		PC	



Fasteners

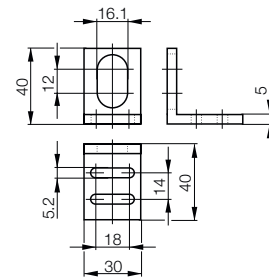
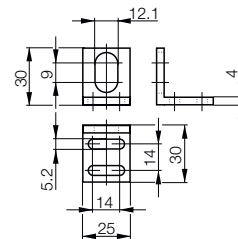
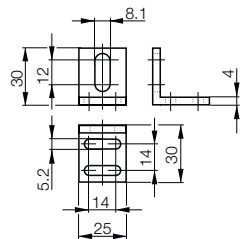
- Selection guide for clamps
- Clamping Holders
- Protective End Caps
- Fixing Nuts
- Mounting Cuffs**
- Mounting Clamps**
- Reducing Sleeve**
- Mounting Brackets
- Mounting Clamps for Row Mounting

Fasteners

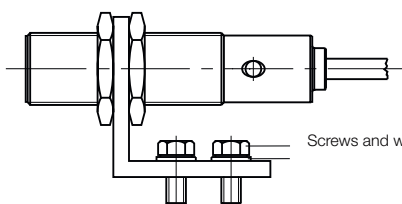
Mounting brackets



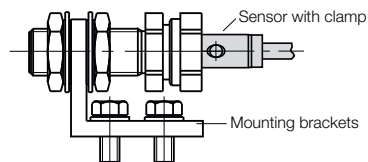
Description	Mounting brackets	Mounting brackets	Mounting brackets	
Use	For sensors and clamps M8	For sensors and clamps M12	For sensors and clamps M16	
Ordering code	BAM009U	BAM00C0	BAM00EN	
Part number	BES 08,0-HW-1	BES 12,0-HW-1	BES 16,0-HW-1	
Material	Anodized aluminum	Anodized aluminum	Anodized aluminum	



These aluminum mounting brackets provide a way of easily and quickly attaching sensors to the machine. For cylindrical sensors, we recommend the additional use of clamps (see information beginning on page 288).



Screws and washers are not included.

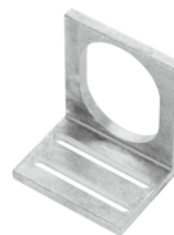


Sensor with clamp

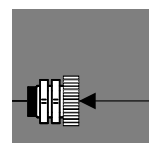
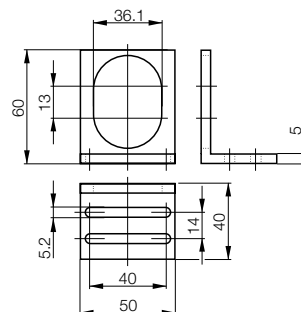
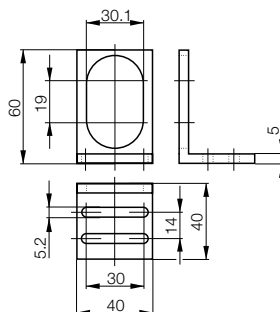
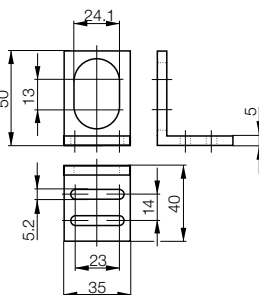
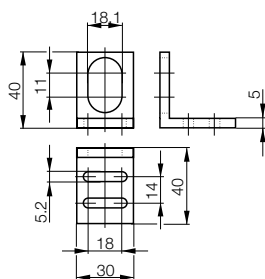
Mounting brackets

Fasteners

Mounting brackets



Mounting brackets	Mounting brackets	Mounting brackets	Mounting brackets
For M18 sensors	For sensors and clamps M24	For M30 sensors	For sensors and clamps M36
BAM00EY	BAM00HA	BAM00HH	BAM00JK
BES 18,0-HW-1	BES 24,0-HW-1	BES 30,0-HW-1	BES 36,0-HW-1
Anodized aluminum	Anodized aluminum	Anodized aluminum	Anodized aluminum



Fasteners

Selection guide
for clamps
Clamping Holders
Protective End
Caps
Fixing Nuts
Mounting Cuffs
Mounting Clamps
Reducing Sleeve
**Mounting
Brackets**
Mounting Clamps
for Row Mounting



Stainless
Steel

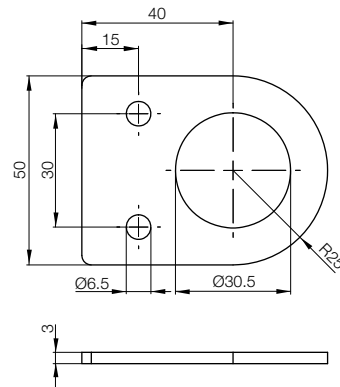
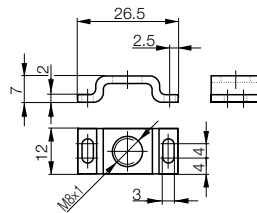
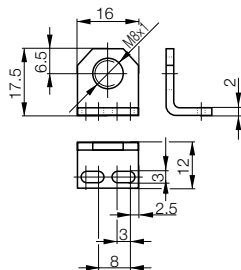


Stainless
Steel



Stainless
Steel

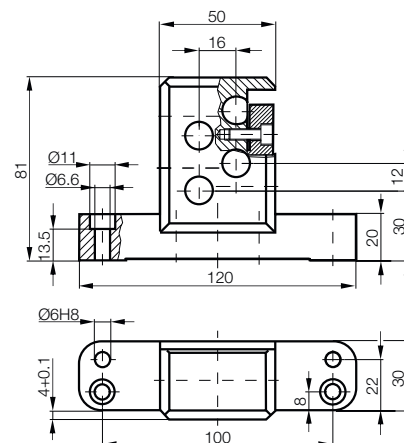
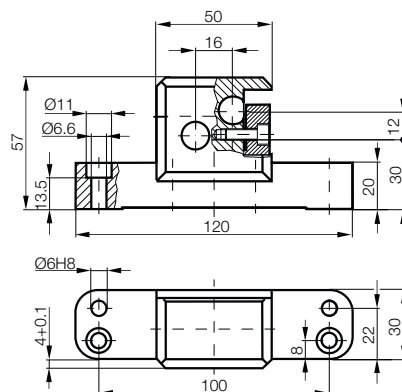
Description	Mounting brackets	Mounting brackets	Sensor holder
Use	For M8×1 sensors	For M8×1 sensors	For M30 sensors
Ordering code	BAM009W	BAM009Y	BAM01E0
Part number	BES 08-HW-4	BES 08-HW-5	BAM MB-XA-004-M30-5
Material	Stainless steel	Stainless steel	Stainless steel



Mounting clamps for row mounting



Description	Clamp for M12 sensors	Clamp for M12 sensors	
Use	Flush-mounted with 12 mm spacing, for cam tray with 12 mm spacing	Flush-mounted with 12 mm spacing, for cam tray with 12 mm spacing	
Ordering code	BAM00CK	BAM00CL	
Part number	BES 12-KB-602-02/12	BES 12-KB-602-04/12	
Switching points	2	4	
Clamping	M5 screw, galvanized, DIN 912	M5 screw, galvanized, DIN 912	
Ambient temperature	-25...+70 °C	-25...+70 °C	
Material	Mounting plate Al	Mounting plate Al	
	Mounting clamp and fastening bracket EP (fiberglass reinforced)	Mounting clamp and fastening bracket EP (fiberglass reinforced)	



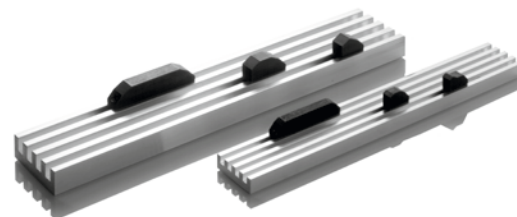
These mounting clamps allow you to arrange switch inserts in a pattern to be used in conjunction with Balluff cam trays as switching indicators for controllers.

The configuration corresponds to the switching points of our inductive multiple position switches. The flange is constructed so that the entire mounting clamp is interchangeable with our multiple position switches in housing design 602 as per DIN 43697.

- Mounting clamp with positive stop for inductive sensors
- Accepts standard M12 sensors
- Use of connector-type sensors is recommended for ease of installation
- Mounting clamp made of fiberglass reinforced epoxy, making it resistant to most coolants and lubricants



For **cams and cam trays**, please request our catalog "Object Detection – Mechanical and Inductive Multiple and Single Position Switches".



Fasteners

Mounting clamps for row mounting



Clamp for M12 sensors

Flush-mounted with 12 mm spacing,
for cam tray with 12 mm spacing

BAM00CM

BES 12-KB-602-06/12

6

M5 screw, galvanized, DIN 912

-25...+70 °C

Al

EP (fiberglass reinforced)

Clamp for M12 sensors

Flush-mounted with 16 mm spacing,
for cam tray with 16 mm spacing

BAM00CN

BES 12-KB-602-06/16

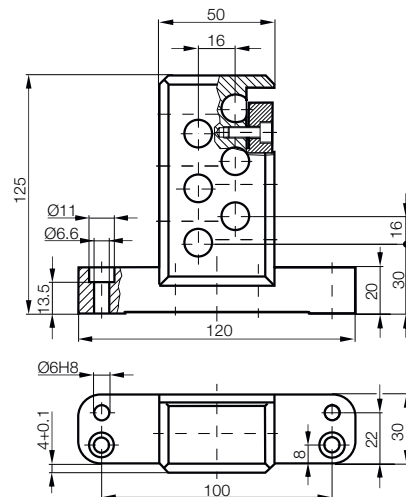
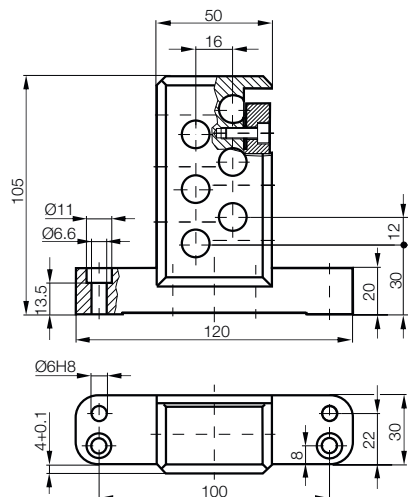
6

M5 screw, galvanized, DIN 912

-25...+70 °C

Al

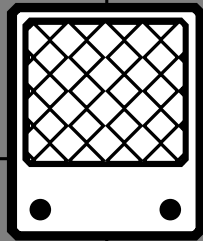
EP (fiberglass reinforced)



Fasteners

Selection guide
for clamps
Clamping Holders
Protective End
Caps
Fixing Nuts
Mounting Cuffs
Mounting Clamps
Reducing Sleeve
Mounting
Brackets
**Mounting
Clamps
for Row Mount-
ing**

BOS
BUS
BES
BIS
BSP
BVS



Product-
specific
Accessories



Product-specific Accessories

Contents

Photoelectric Sensors

Plastic Fiber Optics, Product Overview
 Plastic Fiber Optics, Through-beam
 Plastic Fiber Optics, Sensor
 Plastic Fiber Optics, True Color Sensor
 Plastic Fiber Optics, User-fabricated
 Adapter, Holder, Optics, Cutting Tool
 Lenses, Deflection Head, Metal Corrugated Tube
 Glass Fiber Optics, Product Overview
 Glass Fiber Optics, Through-beam
 Glass Fiber Optics, Sensor

Reflectors

Round
 Rectangular
 For Special Applications
 For Laser Retroreflective Sensors
 Reflective Foils

Sensors

Aperture Diaphragms
 Slit Diaphragms
 Weld Protection
 Air Shields
 Lenses, Intermediate Ring
 Protective End Caps
 Deflection Heads
 Diagonal Mirrors, Deflector

Fasteners

Mounting Brackets
 Sensor Holders
 Holder System
 Clamps, Adapter Plate, Cover Bracket

Positive Stops and Contact Protector

314 Positive Stop, Mounting Cuff for Positive Stop 368
 316 Contact Protectors 370
 324 Tube Switch 372

Ultrasonic Sensors

332 Sound Deflection Angle 376
 333 Focussing Attachments 378
 334 Programming Device 379

Uni/Unicompact Sensors

Mounting Plate 380
 Mounting Aids 381
 340 Holder System 382
 341 Weld Protection, Safety Guard 383

Industrial RFID Systems

346 Protective Cover, Mounting Bracket 384
 Mounting Plate and Set 385
 Antenna Holder 386
 348 Mounting Brackets, Shield 387
 349 Mounting Set 388
 351 Connection Cable, Handle 389

Position and Distance Measurement

353 Sensor Guide 390

Protective End Caps and Nuts

Protective End Caps 392
 Spacers 393
 358 Nuts 394
 364 Sealing Nut 394

Pressure Sensors

Adapters 396

Vision Sensors

Mounting Brackets 398
 3D Holder System 401
 Locking Device, Display Housing 402
 Protective Housing 403

BOS
 BUS
 BES
 BIS
 BSP
 BVS





Fiber optics are generally available in a diffuse sensor or through-beam design.

The diffuse sensors have an integrated emitter and receiver fiber at the optical head; the through-beam sensors use two separate optical fibers.

It is easy to see why optical fibers are so commonly used: The variety of end configurations, with straight or angled light exit, flexible optical head or coaxial fiber arrangement, the various fiber diameters and the ability to trim them to the desired length.

Another plus

For complete flexibility, there are also fiber optics for user assembly; the length of the duplex cable can be trimmed as needed and can be combined with various end fittings as desired.

Applications

- Small parts detection
- For tight mounting conditions
- Inspecting parts features
- Counting (e.g. counting drops)
- Precise parts positioning
- Handling and assembly technology
- Robotics

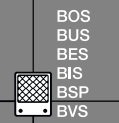


Photoelectric Sensors

Plastic fiber optics

Product overview

Type		Optical head	Light exit		Fiber arrangement			Core diameter				Features			Page
			straight	90°	Standard	Coaxial	Light grids	1.5 mm	1.0 mm	0.5 mm	0.25 mm	Bendable optical tip	Extended temperature range	Highly flexible	
Ordering code Part number															
Through-beam fiber optics															
BFO005M	BFO D22-LA-KB-EAK-10-02	M4												316	
BFO005T	BFO D22-LAH-KB-EAK-10-02	M4												316	
BFO005W	BFO D22-LAT-KB-EAK-10-02	M4												316	
BFO005U	BFO D22-LAP-KB-EAK-15-02	M4												317	
BFO0002	BFO D22-LA-TB-EAK-10-02	M4												317	
BFO005N	BFO D22-LA-NB-PZK-10-02	M4												317	
BFO00AW	BFO D22-LAH-BK-EAK-10-02	M4												317	
BFO005R	BFO D22-LA-RB-EAK-10-02	M3												318	
BFO000C	BFO N22-LA-FB-EAK-05-01	M2												318	
BFO00AY	BFO D22-LAT-YB-EAK-10-0,5	Ø3												318	
BFO005P	BFO D22-LA-QB-PAK-05-02	Ø3												319	
BFO0057	BFO D13-LA-WB-EAK-05-02	Ø3												319	
BFO0051	BFO D10-LA-CB-EAK-05-02	Ø2												319	
BFO0056	BFO D13-LA-QB-EAK-05-02	Ø2												319	
BFO00AP	BFO D22-LA-GD-EAK-52-02	10×10												320	
BFO005H	BFO D22-LA-AD-EAK-52-02	20×10												320	
BFO005K	BFO D22-LA-BD-EAK-52-02	15×15												320	
BFO0067	BFO D25-LA-CD-EAK-110-02	19×25												321	
BFO00C5	BFO D25-LA-ED-EAK-250-0,5	19×38												321	
BFO0068	BFO D25-LA-ED-EAK-250-02	19×38												321	
BFB00C8	BFO D25 LA-HD-EAK-465-02	23×55												321	
BFO0058	BFO D13-LG-05-EAK-30-02	15×41												322	
BFO0059	BFO D13-LG-10-EAK-30-02	20×32												322	
BFO000E	BFO D22-LAH-ZB-EAK-10-02	5×4												322	
BFO00C6	BFO D10-LAH-CK-EAK-05-02	11×6												323	
BFO00C7	BFO D10-LAH-DK-EAK-05-02	13×7												323	
Diffuse sensor fiber optics															
BFO0061	BFO D22-XA-LB-EAK-20-02	M6												324	
BFO0063	BFO D22-XAH-LB-EAK-20-02	M6												324	
BFO0065	BFO D22-XAT-LB-EAK-20-02	M6												324	
BFO0064	BFO D22-XAP-LB-EAK-30-02	M6												325	
BFO0066	BFO D22-XB-LB-EAK-15-02	M6												325	
BFO0007	BFO D22-XBF-LB-EAK-15-02	M6												325	
BFO0004	BFO D22-XA-SB-EAK-20-02	M6												325	
BFO0003	BFO D22-XA-DB-EAK-20-01	M6												325	
BFO0005	BFO D22-XA-UB-EAK-20-02	M4												326	
BFO0006	BFO D22-XB-UB-EAK-15-02	M4												326	
BFO0055	BFO D10-XAH-KB-EAK-10-02	M4												326	
BFO005C	BFO D13-XB-KB-EAK-10-02	M4												327	
BFO0053	BFO D10-XA-HB-EAK-10-02	M4												327	
BFO0054	BFO D10-XA-RB-EAK-10-02	M3												327	
BFO005E	BFO D13-XB-RB-EAK-10-02	M3												327	
BFO00C3	BFO D10-XA-VB-EAK-10-02	M3												327	
BFO0052	BFO D10-XA-GB-EAK-10-02	M3												328	
BFO005A	BFO D13-XA-JB-EAK-20-02	Ø3												328	
BFO0062	BFO D22-XA-MB-PAK-10-02	Ø3												328	
BFO00CA	BFO D22-XA-EK-PAK-10-02	Ø3												329	
BFO00AT	BFO D13-XB-AB-EAK-10-01	Ø2.5												329	
BFO00AR	BFO D13-XV-AK-EAK-50-02	13×20												329	
BFO005Z	BFO D22-XA-CD-EAK-110-02	19×25												329	
BFO0060	BFO D22-XA-ED-EAK-250-02	19×38												329	



Product-specific accessories

Photoelectric Sensors

Plastic fiber optics

Adapter, Holder, Optics, Cutting Tool, Lenses, Deflection Head, Metal Corrugated Tube

Glass Fiber Optics

Reflectors

Sensors

Fasteners

Positive Stops and Contact Protector

Ultrasonic Sensors

Uni/Unicompact Sensors

Industrial RFID Systems

Position and Distance Measurement

Protective End Caps and Nuts

Pressure Sensors

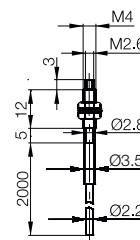
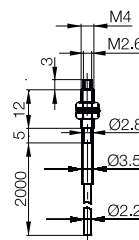
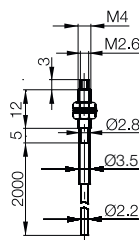
Vision Sensors



Optical head		M4 thread	M4 thread	M4 thread	
Features		Standard	Highly flexible	Temperature rated	
Straight light exit	Ordering code	BFO005M	BFO005T	BFO005W	
	Part number	BFO D22-LA-KB-EAK-10-02	BFO D22-LAH-KB-EAK-10-02	BFO D22-LAT-KB-EAK-10-02	
90° light exit	Ordering code				
	Part number				
Sheathing Ø		2.2 mm	2.2 mm	2.2 mm	
Core Ø		1 mm	1 mm	1 mm	
Fiber length		2 m	2 m	2 m	
Fiber bending radius		≥ 25 mm	≥ 2 mm	≥ 25 mm	
Head bending radius					
Temperature range		-55...+70 °C	-40...+70 °C	-55...+105 °C	
Range	with BFB 75K-001	500 mm	300 mm	600 mm	
	with BFB 75K-002*	500 mm	300 mm	600 mm	
	with BFB 73K	500 mm	300 mm	500 mm	
	with BFB 6K	220 mm	200 mm	230 mm	
	with BFB 18KF	120 mm	90 mm	120 mm	

Packaging unit: 2

*Max. range in standard mode



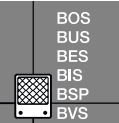
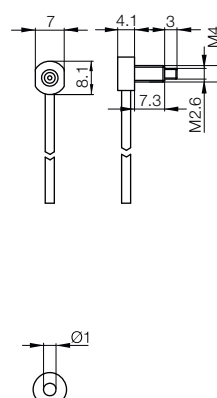
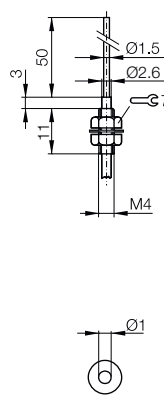
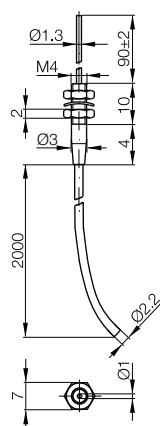
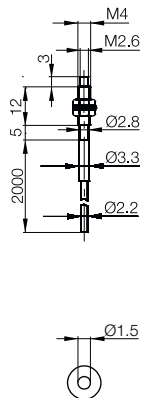
Photoelectric Sensors

Plastic fiber optics

Through-beam



M4 thread Long range BFO005U	M4 thread Bendable optical tip BFO0002	M4 thread Bendable optical tip BFO005N	M4 thread Highly flexible BFO00AW	
BFO D22-LAP-KB-EAK-15-02	BFO D22-LA-TB-EAK-10-02	BFO D22-LA-NB-PZK-10-02	BFO D22-LAH-BK-EAK-10-02	
2.2 mm	2.2 mm	2.2 mm	2.2 mm	
1.5 mm	1 mm	1 mm	1 mm	
2 m	2 m	2 m	2 m	
≥ 40 mm	≥ 25 mm	≥ 25 mm	≥ 2 mm	
-55...+70 °C	-30...+60 °C	-55...+70 °C	-40...+70 °C	
800 mm	450 mm	500 mm	250 mm	
800 mm	450 mm	500 mm	250 mm	
800 mm	400 mm	500 mm	250 mm	
500 mm	200 mm	250 mm	170 mm	
250 mm	110 mm	120 mm	80 mm	



Product-specific accessories

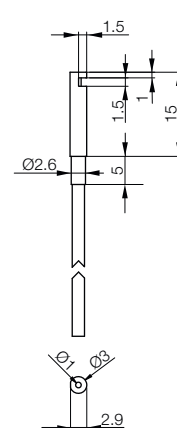
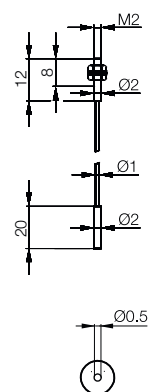
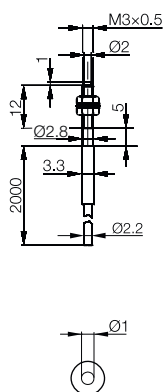
Photoelectric Sensors
Plastic fiber optics
 Adapter, Holder, Optics, Cutting Tool, Lenses, Deflection Head, Metal Corrugated Tube
 Glass Fiber Optics
 Reflectors
 Sensors
 Fasteners
 Positive Stops and Contact Protector
 Ultrasonic Sensors
 Uni/Unicompact Sensors
 Industrial RFID Systems
 Position and Distance Measurement
 Protective End Caps and Nuts
 Pressure Sensors
 Vision Sensors



Optical head		M3 thread	M2 thread	Ø 3	
Features		Standard	Precision	Temperature rated	
Straight light exit	Ordering code	BFO005R	BFO000C		
	Part number	BFO D22-LA-RB-EAK-10-02	BFO N22-LA-FB-EAK-05-01		
90° light exit	Ordering code			BFO00AY	
	Part number			BFO D22-LAT-YB-EAK-10-0,5	
Sheathing Ø		2.2 mm	1 mm	2.2 mm	
Core Ø		1 mm	0.5 mm	1 mm	
Fiber length		2 m	2 m	0.5 m	
Fiber bending radius		≥ 25 mm	≥ 10 mm	≥ 25 mm	
Temperature range		-55...+70 °C	-30...+60 °C	-55...+70 °C	
Range	with BFB 75K-001	500 mm	140 mm	600 mm	
	with BFB 75K-002*	500 mm	140 mm	600 mm	
	with BFB 73K	450 mm	130 mm	500 mm	
	with BFB 6K	220 mm	50 mm	230 mm	
	with BFB 18KF	100 mm	20 mm	120 mm	

Packaging unit: 2

*Max. range in standard mode



Photoelectric Sensors

Plastic fiber optics

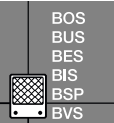
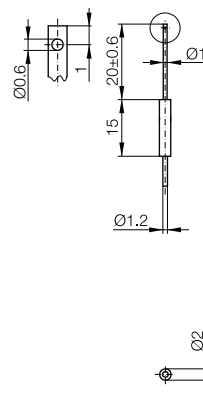
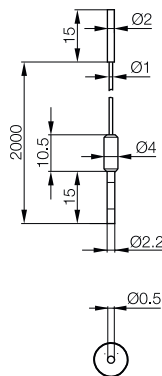
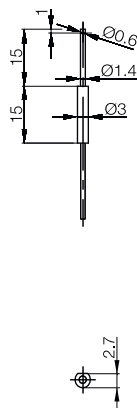
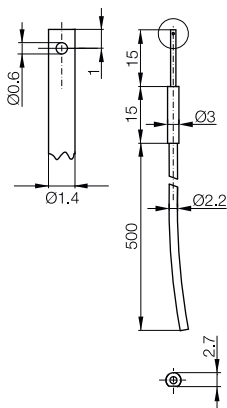
Through-beam



	Ø 3 Light exit on side	Ø 3 Standard	Ø 2 Precision BFO0051	Ø 2 Light exit on side	
--	---------------------------	-----------------	-----------------------------	---------------------------	--

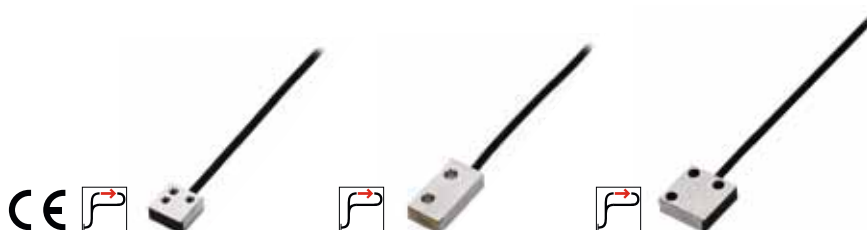
BFO D10-LA-CB-EAK-05-02

	BFO005P BFO D22-LA-QB-PAK-05-02	BFO0057 BFO D13-LA-WB-EAK-05-02		BFO0056 BFO D13-LA-QB-EAK-05-02	
	2.2 mm	1.3 mm	1 mm	1.3 mm	
	1 mm	1 mm	0.5 mm	0.5 mm	
	2 m	2 m	2 m	2 m	
	≥ 25 mm	≥ 25 mm	≤ 15 m	≥ 15 mm	
	-40...+70 °C	-40...+70 °C	-55...+70 °C	-35...+65 °C	
	120 mm	75 mm	130 mm	110 mm	
	120 mm	75 mm	130 mm	110 mm	
	115 mm	70 mm	120 mm	105 mm	
	65 mm	-	-	-	
	35 mm	20 mm	-	25 mm	



Product-specific accessories

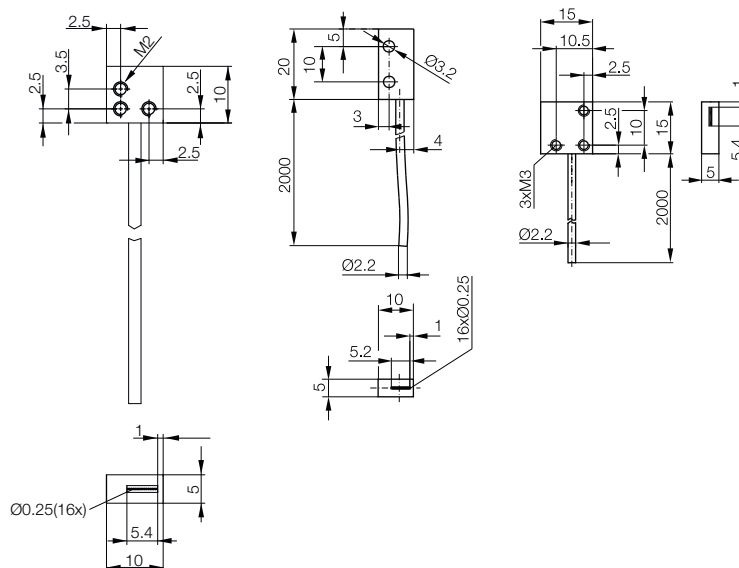
Photoelectric Sensors
Plastic fiber optics
 Adapter, Holder, Optics, Cutting Tool, Lenses, Deflection Head, Metal Corrugated Tube
 Glass Fiber Optics
 Reflectors
 Sensors
 Fasteners
 Positive Stops and Contact Protector
 Ultrasonic Sensors
 Uni/Unicompact Sensors
 Industrial RFID Systems
 Position and Distance Measurement
 Protective End Caps and Nuts
 Pressure Sensors
 Vision Sensors

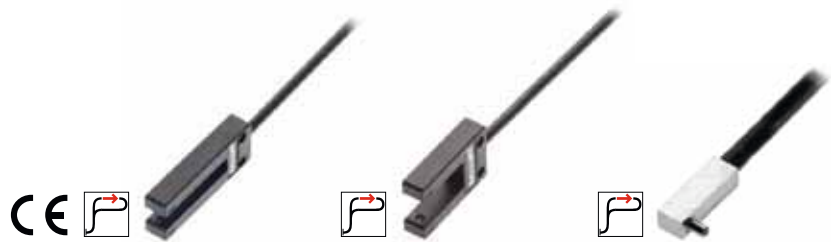


Optical head		10×10 mm	20×10 mm	15×15 mm	
Features		Light grids	Light grids	Light grids	
Straight light exit	Ordering code	BFO00AP	BFO005H		
	Part number	BFO D22-LA-GD-EAK-52-02	BFO D22-LA-AD-EAK-52-02		
90° light exit	Ordering code			BFO005K	
	Part number			BFO D22-LA-BD-EAK-52-02	
Sheathing Ø		2.2 mm	2.2 mm	2.2 mm	
Core Ø		16×0.25 mm	16×0.25 mm	16×0.25 mm	
Fiber length		2 m	2 m	2 m	
Fiber bending radius		≥ 25 mm	≥ 25 mm	≥ 25 mm	
Temperature range		–55...+70 °C	–35...+65 °C	–55...+70 °C	
Range	with BFB 75K-001	600 mm	450 mm	400 mm	
	with BFB 75K-002*	600 mm	450 mm	400 mm	
	with BFB 73K	600 mm	400 mm	350 mm	
	with BFB 6K	350 mm	220 mm	180 mm	
	with BFB 18KF	230 mm	130 mm	110 mm	

Packaging unit: 2

*Max. range in standard mode

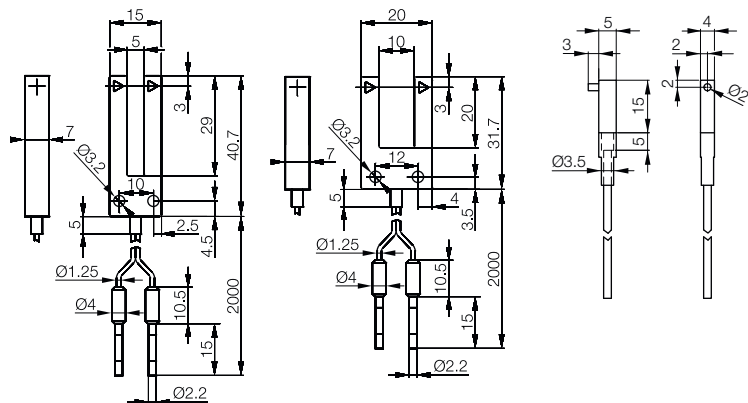


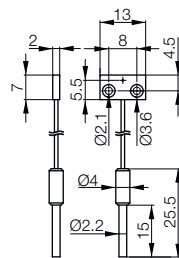
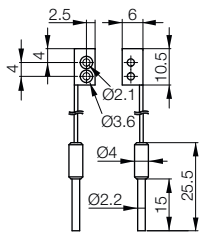


Optical head		15×41 mm	20×32 mm	5×4 mm	
Features		Fork	Fork	Highly flexible	
90° light exit	Ordering code	BFO0058	BFO0059	BFO000E	
	Part number	BFO D13-LG-05-EAK-30-02	BFO D13-LG-10-EAK-30-02	BFO D22-LAH-ZB-EAK-10-02	
Sheathing Ø		2×1.25 mm	2×1.25 mm	2.2 mm	
Core Ø		2×0.25 mm	2×0.25 mm	1 mm	
Fiber length		2 m	2 m	2 m	
Fiber bending radius		≥ 10 mm	≥ 10 mm	≥ 2 mm	
Temperature range		-55...+70 °C	-55...+70 °C	-55...+70 °C	
Range	with BFB 75K-001	5 mm	10 mm	300 mm	
	with BFB 75K-002*	5 mm	10 mm	300 mm	
	with BFB 73K	5 mm	10 mm	300 mm	
	with BFB 6K	5 mm	10 mm	200 mm	
	with BFB 18KF	5 mm	10 mm	90 mm	

Packaging unit: 2

*Max. range in standard mode





Plastic fiber optics

Adapter, Holder,
Optics, Cutting
Tool, Lenses,
Deflection Head,
Metal Corrugated
Tube

Reflectors

Sensors

Fasteners

Positive Stops

and Contact Protector

Ultrasonie

Ultrasonic Sensors

Uni/Unicompact

Sensors

Industrial RFID Systems

Decision and

Position and Distance

Measurement

Protective End Caps and Nuts

Pressure

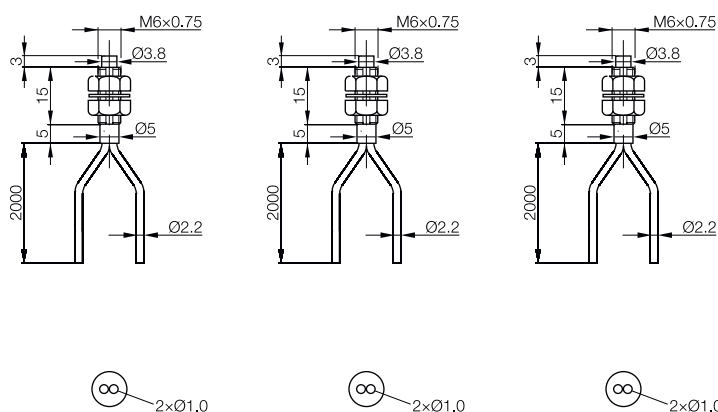
Sensors

Vision Sensors



Optical head		M6 thread	M6 thread	M6 thread	
Features		Standard	Highly flexible	Temperature rated	
Straight light exit	Ordering code	BFO0061	BFO0063	BFO0065	
	Part number	BFO D22-XA-LB-EAK-20-02	BFO D22-XAH-LB-EAK-20-02	BFO D22-XAT-LB-EAK-20-02	
Sheathing Ø		2×2.2 mm	2×2.2 mm	2×2.2 mm	
Core Ø		2×1 mm	2×1 mm	2×1 mm	
Fiber bending radius		≥ 25 mm	≥ 2 mm	≥ 25 mm	
Head bending radius					
Temperature range		-55...+70 °C	-40...+70 °C	-55...+115 °C	
Range	with BFB 75K-001	150 mm	120 mm	130 mm	
	with BFB 75K-002*	150 mm	120 mm	130 mm	
	with BFB 73K	150 mm	120 mm	130 mm	
	with BFB 6K	100 mm	70 mm	90 mm	
	with BFB 18KF	50 mm	30 mm	50 mm	

*Max. range in standard mode



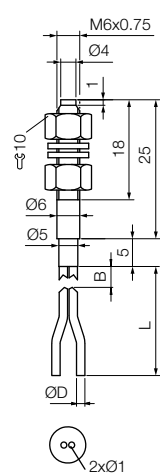
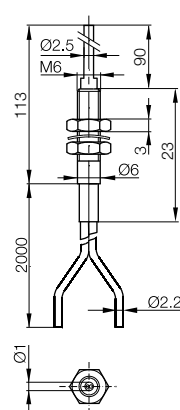
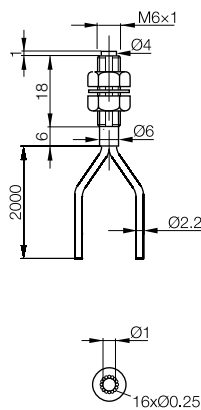
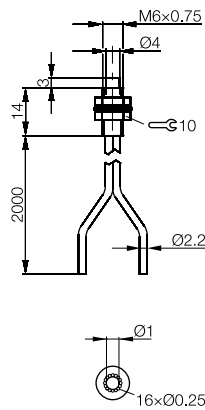
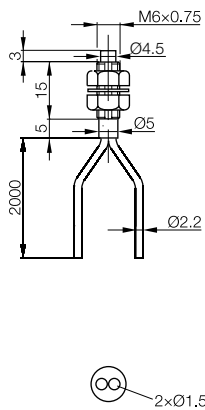
Photoelectric Sensors

Plastic fiber optics

Sensors



M6 thread Long range BFO0064	M6 thread Coaxial BFO0066	M6 thread Coaxial, flexible BFO0007	M6 thread Bendable optical tip BFO0004	M6 thread Standard BFO0003
BFO D22-XAP-LB-EAK-30-02	BFO D22-XB-LB-EAK-15-02	BFO D22-XBF-LB-EAK-15-02	BFO D22-XA-SB-EAK-20-02	BFO D22-XA-DB-EAK-20-01
2x2.2 mm	2x2.2 mm	2x2.2 mm	2x2.2 mm	2x2.2 mm
2x1.5 mm	1x1 mm/16x0.25 mm	1x1 mm/16x0.25 mm	2x1 mm	2x1 mm
≥ 40 mm	≥ 25 mm	≥ 5 mm	≥ 25 mm	≥ 25 mm
≥ 15 mm				
-55...+70 °C	-55...+70 °C	-40...+60 °C	-35...+65 °C	-40...+60 °C
180 mm	120 mm	110 mm	130 mm	150 mm
180 mm	120 mm	110 mm	130 mm	150 mm
180 mm	120 mm	120 mm	130 mm	150 mm
130 mm	80 mm	70 mm	90 mm	100 mm
100 mm	50 mm	30 mm	40 mm	50 mm



BOS
BUS
BES
BIS
BSP
BVS

Product-specific accessories

Photoelectric Sensors

Plastic fiber optics

Adapter, Holder, Optics, Cutting Tool, Lenses, Deflection Head, Metal Corrugated Tube

Glass Fiber Optics

Reflectors

Sensors

Fasteners

Positive Stops and Contact Protector

Ultrasonic Sensors

Uni/Unicompact Sensors

Industrial RFID Systems

Position and Distance Measurement

Protective End Caps and Nuts

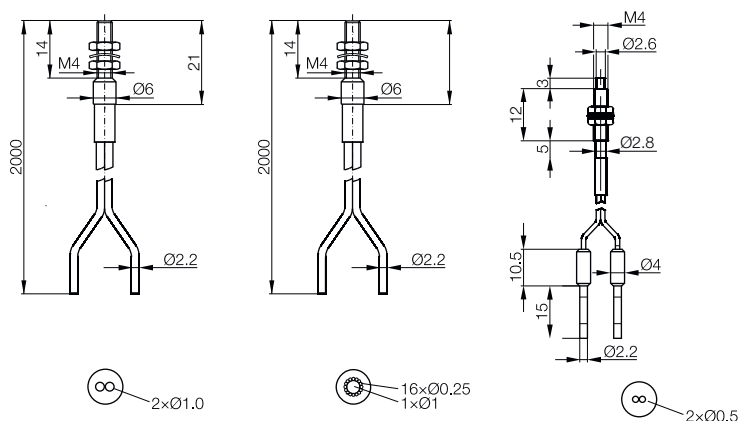
Pressure Sensors

Vision Sensors



Optical head		M4 thread	M4 thread	M4 thread	
Features		Standard	Coaxial	Highly flexible	
Straight light exit	Ordering code	BFO0005	BFO0006	BFO0055	
	Part number	BFO D22-XA-UB-EAK-20-02	BFO D22-XB-UB-EAK-15-02	BFO D10-XAH-KB-EAK-10-02	
Sheathing Ø		2×2.2 mm	2×2.2 mm	2×1 mm	
Core Ø		2×1 mm	1×1 mm/16×0.25 mm	2×0.5 mm	
Fiber bending radius		≥ 25 mm	≥ 25 mm	≥ 1 mm	
Head bending radius					
Temperature range		-35...+65 °C	-40...+60 °C	-40...+70 °C	
Range	with BFB 75K-001	120 mm	130 mm	40 mm	
	with BFB 75K-002*	120 mm	130 mm	40 mm	
	with BFB 73K	120 mm	130 mm	30 mm	
	with BFB 6K	80 mm	90 mm	-	
	with BFB 18KF	40 mm	50 mm	10 mm	

*Max. range in standard mode



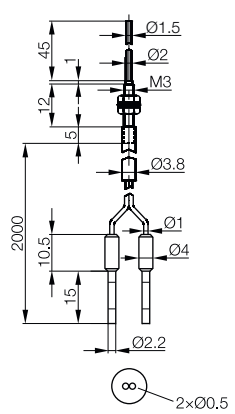
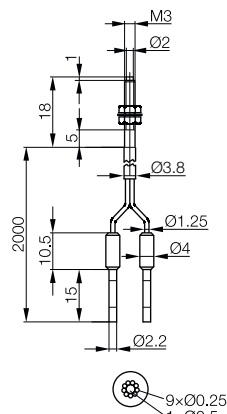
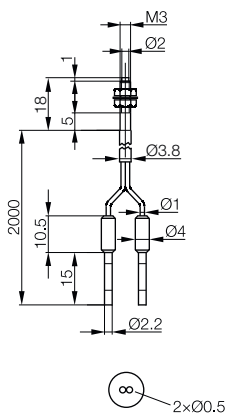
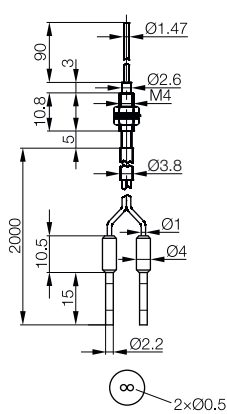
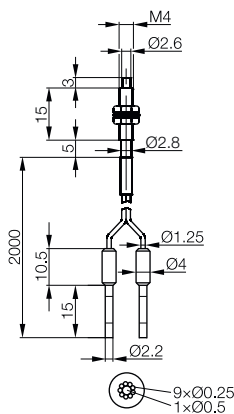
Photoelectric Sensors

Plastic fiber optics

Sensors



M4 thread Coaxial BFO005C	M4 thread Bendable optical tip BFO0053	M3 thread Standard BFO0054	M3 thread Coaxial BFO005E	M3 thread Bendable optical tip BFO00C3
BFO D13-XB-KB-EAK-10-02	BFO D10-XA-HB-EAK-10-02	BFO D10-XA-RB-EAK-10-02	BFO D13-XB-RB-EAK-10-02	BFO D10-XA-VB-EAK-10-02
2×1.25 mm	2×1 mm	2×1 mm	2×1.25 mm	2×1 mm
1×0.5 mm/9×0.25 mm	2×0.5 mm	2×0.5 mm	1×0.5 mm/9×0.25 mm	2×0.5 mm
≥ 15 mm	≥ 15 mm	≥ 15 mm	≥ 15 mm	≥ 15 mm
≥ 10 mm	≥ 10 mm	≥ 10 mm	≥ 10 mm	≥ 10 mm
-55...+70 °C	-55...+70 °C	-55...+70 °C	-40...+60 °C	-55...+70 °C
60 mm	50 mm	50 mm	60 mm	50 mm
60 mm	50 mm	50 mm	60 mm	50 mm
60 mm	40 mm	40 mm	-	40 mm
-	-	-	-	-
20 mm	10 mm	10 mm	20 mm	10 mm



BOS
BUS
BES
BIS
BSP
BVS

Product-specific
accessories

Photoelectric
Sensors

**Plastic fiber
optics**

Adapter, Holder,
Optics, Cutting
Tool, Lenses,
Deflection Head,
Metal Corrugated
Tube

Glass Fiber Optics

Reflectors

Sensors

Fasteners

Positive Stops
and Contact
Protector

Ultrasonic
Sensors

Uni/Unicomact
Sensors

Industrial RFID
Systems

Position and
Distance
Measurement

Protective End
Caps and Nuts

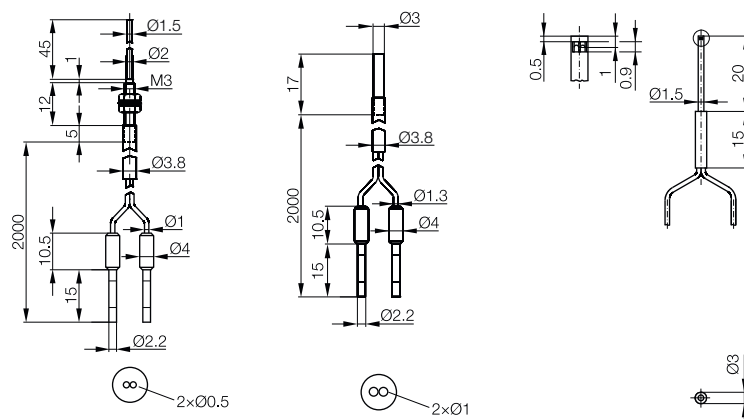
Pressure
Sensors

Vision Sensors



Optical head		M3 thread	Ø 3 mm	Ø 3 mm	
Features		Standard	Standard	Standard	
Straight light exit	Ordering code	BFO0052	BFO005A		
	Part number	BFO D10-XA-GB-EAK-10-02	BFO D13-XA-JB-EAK-20-02		
90° light exit	Ordering code			BFO0062	
	Part number			BFO D22-XA-MB-PAK-10-02	
Sheathing Ø		2×1 mm	2×1.3 mm	2×1 mm	
Core Ø		2×0.5 mm	2×1 mm	2×0.5 mm	
Fiber bending radius		≥ 15 mm	≥ 25 mm	≥ 25 mm	
Head bending radius		≥ 10 mm			
Temperature range		–55...+70 °C	–55...+70 °C	–40...+70 °C	
Range	with BFB 75K-001	50 mm	130 mm	35 mm	
	with BFB 75K-002*	50 mm	130 mm	35 mm	
	with BFB 73K	40 mm	130 mm	25 mm	
	with BFB 6K	–	–	–	
	with BFB 18KF	10 mm	50 mm	–	

*Max. range in standard mode



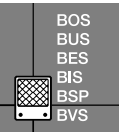
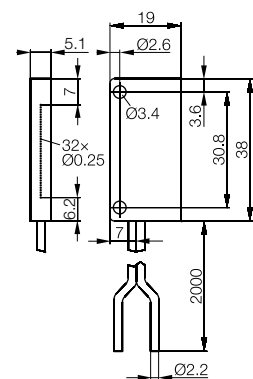
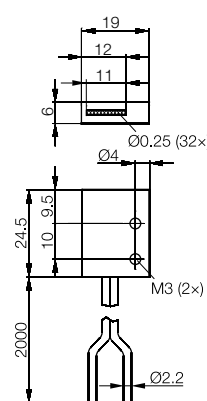
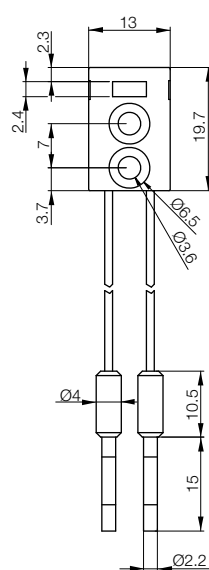
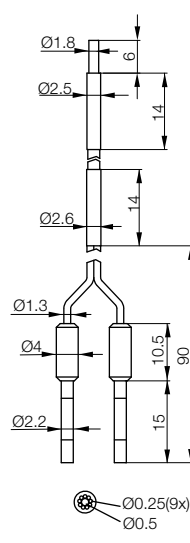
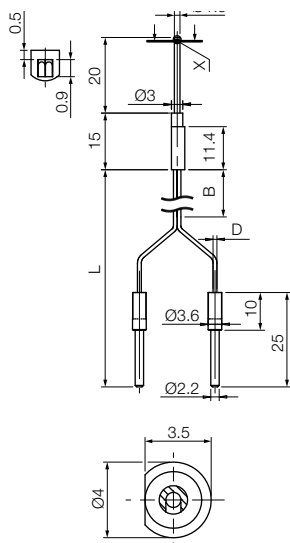
Photoelectric Sensors

Plastic fiber optics

Sensors



	Ø 3 mm Standard	Ø 2.5 mm Coaxial BFO00AT	13x20 mm Standard	19x25 mm Light grids BFO005Z	19x38 mm Light grids
		BFO D13-XB-AB-EAK-10-01		BFO D22-XA-CD-EAK-110-02	
	BFO00CA		BFO00AR		BFO0060
	BFO D22-XA-EK-PAK-10-02		BFO D13-XV-AK-EAK-50-02		BFO D22-XA-ED-EAK-250-02
	1 mm	2x1.3 mm	2x1.3 mm	2.2 mm	2.2 mm
	2x0.5 mm	1x0.5 mm/9x0.25 mm	2x1 mm	32x0.25 mm	32x0.25 mm
	≥ 25 mm	≥ 15 mm	≥ 25 mm	≥ 25 mm	≥ 25 mm
	-40...+70 °C	-55...+70 °C	-55...+70 °C	-55...+70 °C	-55...+70 °C
	35 mm	50 mm	1...6 mm	100 mm	90 mm
	35 mm	50 mm	1...6 mm	100 mm	90 mm
	35 mm	40 mm	1...6 mm	100 mm	90 mm
	25 mm	-	-	70 mm	60 mm
	-	10 mm	-	40 mm	30 mm



Product-specific accessories

Photoelectric Sensors
Plastic fiber optics
 Adapter, Holder, Optics, Cutting Tool, Lenses, Deflection Head, Metal Corrugated Tube
 Glass Fiber Optics
 Reflectors
 Sensors
 Fasteners
 Positive Stops and Contact Protector
 Ultrasonic Sensors
 Uni/Unicompact Sensors
 Industrial RFID Systems
 Position and Distance Measurement
 Protective End Caps and Nuts
 Pressure Sensors
 Vision Sensors

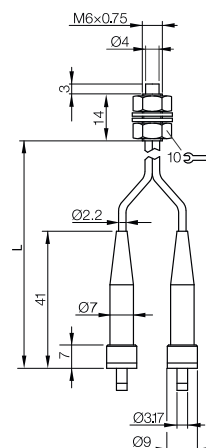
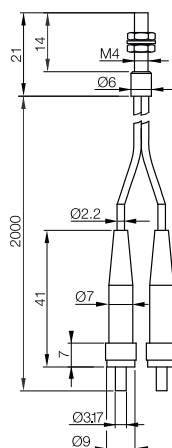
Photoelectric Sensors

Plastic fiber optics

True color sensor



Description		Optical fiber M4 with SMA connector	Optical fiber M6 with SMA connector
Use		For BFS000L True Color sensor	For BFS000L True Color sensor
Length 1 m	Ordering code		BFO00FP
	Part number		BFO D22-XB-LB-EAK-15-SA1-01
Length 2 m	Ordering code	BFO00C9	BFO00C4
	Part number	BFO D22-XB-UB-EAK-15-SA1-02	BFO D22-XB-LB-EAK-15-SA1-02
Length 5 m	Ordering code		BFO00FN
	Part number		BFO D22-XB-LB-EAK-15-SA1-05
Range/sensing distance with corresponding fiber optic cable		80 mm	80 mm
Packaging unit		1 pc.	1 pc.



Plastic Fiber Optics

Photoelectric Sensors Plastic fiber optics user-fabricated

Individual solutions with user-fabricated plastic fiber optics

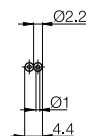
If you are not content with "off-the-shelf" solutions, we have a better suggestion.

Optical fibers can be user-cut to the desired length from a 20 m roll. This way you only use as much plastic optical fiber as you actually need. Considerable savings, especially if multiple sensors are used. For simple applications you may not need an end piece. A simple clamp will suffice. Or for convenience and flexibility, select from among the available end pieces. The plastic optical fiber is simply crimped into the end piece. Tedious gluing is eliminated. The end piece can be removed at any time.



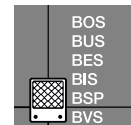
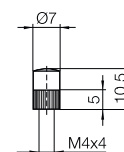
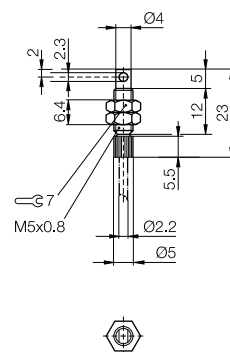
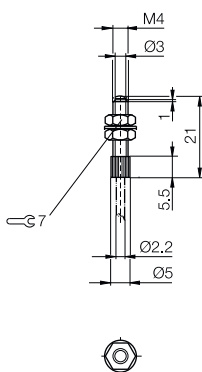
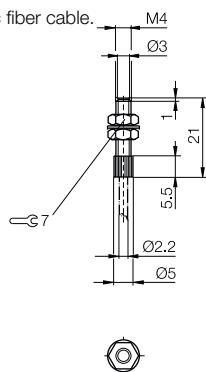
Size	2.2x4.4 mm duplex wire
Through-beam sensor range with L = 2 m	150 mm
Cable length	20 m
Ordering code	BFO005Y
Part number	BFO D22-LD-EAK-10-20
Sheathing Ø	2x1 mm
Core Ø	2.2 mm
Ambient temperature T _a	-40...+85 °C
Tension on optical fiber and connection parts at 20 °C	6 N

Cutting tool BFO CT is included.



Size	M4	M4	Ø 4 mm/M5	Ø 7 mm
Features	End piece without lens	End piece with lens	90° end piece	Adapter lens
Used with	BFO D22-LD-EAK-10-...	BFO D22-LD-EAK-10-...	BFO D22-LD-EAK-10-...	BFO D22-LD-BC-10
Range	150 mm	450 mm	150 mm	1500 mm
Ordering code	BFO005J	BFO005L	BFO005F	BAM00NW
Part number	BFO D22-LA-BC-10	BFO D22-LA-CC-30	BFO D22-LA-AC-20	BFO 04-PK-1
Material	Plastic (fibers)	Glass	Glass	Glass
Optical surface	Plastic (fibers)	Glass	Glass	Glass
Threaded tube	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Packaging unit	1 pc.	1 pc.	1 pc.	1 pc.

Range when used with 2 m plastic fiber cable.



Product-specific accessories

Photoelectric Sensors

Plastic fiber optics

Adapter, Holder, Optics, Cutting Tool, Lenses, Deflection Head, Metal Corrugated Tube

Glass Fiber Optics

Reflectors

Sensors

Fasteners

Positive Stops and Contact Protector

Ultrasonic Sensors

Uni/Unicompact Sensors

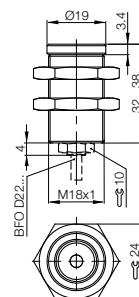
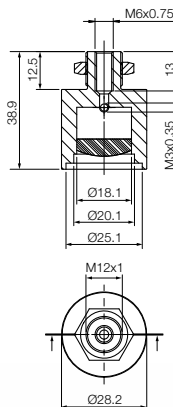
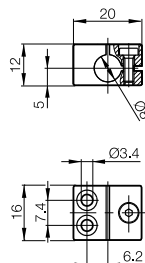
Industrial RFID Systems

Position and Distance Measurement

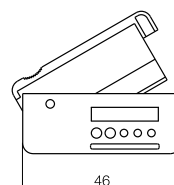
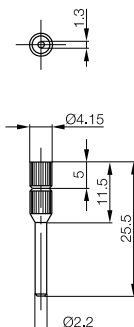
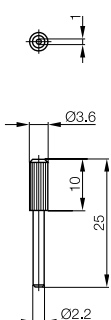
Protective End Caps and Nuts

Pressure Sensors

Vision Sensors



Adapters
For plastic fiber optics
Ø 1.3 mm for connecting
to fiber-optic base units

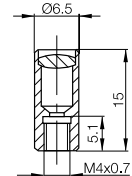
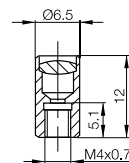
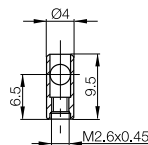
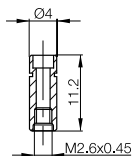


Photoelectric Sensors

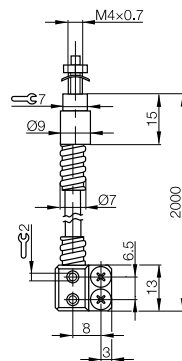
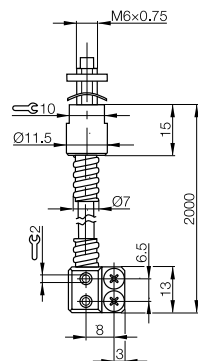
Lenses, deflection head, metal corrugated tube



Description	Adapter lens	90° deflection head	Focusing lens	Focusing lens
Use	for through-beam optical fibers M2.6×0.45	for through-beam optical fibers M2.6×0.45	For coaxial diffuse sensor optical fibers M4×0.7	For coaxial diffuse sensor optical fibers M4×0.7
Ordering code	BAM00NN	BAM00NP	BAM00NR	BAM00NT
Part number	BFO 02-PK-1	BFO 02-UK-1	BFO 04-FL-1	BFO 04-FL-2
Range/sensing distance with corresponding fiber optic cable	×10	×0.7	19 mm±2 mm	7 mm±2 mm
Packaging unit	2 pcs.	2 pcs.	1 pc.	1 pc.



Description	Metal corrugated tube (stainless steel)	Metal corrugated tube (stainless steel)		
Use	For optical fiber M6×0.75	For optical fiber M4×0.7		
Ordering code	BAM00NY	BAM00NU		
Part number	BFO 06-FS-1	BFO 04-FS-1		
Packaging unit	1 pc.	1 pc.		



BOS
BUS
BES
BIS
BSP
BVS

Product-specific accessories

Photoelectric Sensors
Plastic fiber optics
Adapter, Holder, Optics, Cutting Tool, Lenses, Deflection Head, Metal Corrugated Tube
Glass Fiber Optics
Reflectors
Sensors
Fasteners
Positive Stops and Contact Protector
Ultrasonic Sensors
Uni/Unicompact Sensors
Industrial RFID Systems
Position and Distance Measurement
Protective End Caps and Nuts
Pressure Sensors
Vision Sensors

The glass fiber optics in the BFO 18 series are designed for the cylindrical sensors in the BOS 18M series and are used wherever a high level of function reserve or chemical resistance is required. Likewise, temperatures over 200 °C pose no problem.

Various straight or right-angle versions are available with a polyurethane jacket, corrugated metal tube or silicon protective jacket.

UZG type

- Polyurethane jacket
- Strain relief
- Glass optical fiber bundle
- Flexible
- Excellent chemical resistance
- Does not become brittle from oils and cooling emulsions
- Temperature resistance -20...+85 °C

MZG type

- Corrugated metal armor
- Strain relief
- Glass optical fiber bundle
- Resistant to high temperatures -20...+170 °C (up to +250 °C for a fixed installation)
- Flexible
- Crush-resistant
- Resistant to hot swarf

SMG type

- Silicon protection jacket
- Corrugated metal armor with glass optical fiber bundle strain relief
- Extended temperature range -40...+150 °C
- Highly flexible
- Crush-resistant



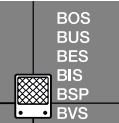
Photoelectric Sensors

Glass fiber optics (BFO 18)

Product overview

Type

Max. sensing distance	Version		Light exit		Automotive approval	Page
For BOS 18M- ...-1PF-...	Through- beam	Sensors	straight	Angled		
400 mm	■		■			336
400 mm	■		■			336
400 mm	■		■			336
400 mm	■		■			336
400 mm	■			■		336
400 mm	■			■		336
400 mm	■			■		336
400 mm	■			■		336
700 mm	■		■			337
700 mm	■		■			337
700 mm	■		■			337
700 mm	■		■			337
700 mm	■		■			337
700 mm	■		■			337
700 mm	■		■			337
700 mm	■			■		337
700 mm	■			■		337
700 mm	■			■		337
700 mm	■			■		337
700 mm	■			■		337
700 mm	■			■		337
2000 mm	■		■		■	337
2000 mm	■		■		■	337
2000 mm	■		■		■	337
2000 mm	■		■		■	337
2000 mm	■			■	■	337
2000 mm	■			■	■	337
50 mm		■	■			338
50 mm		■	■			338
50 mm		■		■		338
50 mm		■		■		338
50 mm		■		■		338
100 mm		■	■			339
100 mm		■	■			339
100 mm		■	■			339
100 mm		■	■			339
100 mm		■	■			339
100 mm		■	■			339
100 mm		■		■		339
100 mm		■		■		339
100 mm		■		■		339
100 mm		■		■		339
100 mm		■		■		339
200 mm		■	■		■	339
200 mm		■	■		■	339
200 mm		■	■		■	339
200 mm		■		■	■	339
200 mm		■		■	■	339
200 mm		■		■	■	339



Product-specific accessories

Photoelectric Sensors

Plastic fiber optics

Adapter, Holder, Optics, Cutting Tool, Lenses, Deflection Head, Metal Corrugated Tube

Glass Fiber Optics

Reflectors

Sensors

Fasteners

Positive Stops and Contact Protector

Ultrasonic Sensors

Uni/Unicompact Sensors

Industrial RFID Systems

Position and Distance Measurement

Protective End Caps and Nuts

Pressure Sensors

Vision Sensors

Photoelectric Sensors

Glass fiber optics (BFO 18)

Through-beam

Glass Fiber Optics



Through-beam sensor with	BOS 18M-...-PD-...	Range	100 mm	100 mm	
	BOS 18M-...-1PF-...	Range	400 mm	400 mm	
	BOS 30M-...	Range			
UZG type		Ordering code			
0.5 m		Part number			
UZG type		Ordering code			
1 m		Part number			
MZG type		Ordering code	BFO001Z	BFO001P	
0.5 m		Part number	BFO 18A-LGG-MZG-10-0,5	BFO 18A-LFF-MZG-10-0,5	
MZG type		Ordering code			
0.75 m		Part number			
MZG type		Ordering code	BFO0020	BFO001R	
1 m		Part number	BFO 18A-LGG-MZG-10-1	BFO 18A-LFF-MZG-10-1	
SMG type		Ordering code	BFO0023	BFO001U	
0.5 m		Part number	BFO 18A-LGG-SMG-10-0,5	BFO 18A-LFF-SMG-10-0,5	
SMG type		Ordering code	BFO0024	BFO001W	
1 m		Part number	BFO 18A-LGG-SMG-10-1	BFO 18A-LFF-SMG-10-1	
Glass optical fiber bundle diameter		1 mm		1 mm	
Max. tension on optical fibers and connection parts		80 N		80 N	
Min. bending radius		60 mm		60 mm	
Can be used with	BOS 18M-PA-1PD...	Yes		Yes	
	BOS 18M-PU-1PD-SA1.../-SA4.../-SA5...	yes (remove adapter disk)		yes (remove adapter disk)	
	BOS 18M-GU-1PF...	yes (remove adapter disk)		yes (remove adapter disk)	
	BOS 18M-PA-1PF...	Yes		Yes	
	BOS 30M-... (use BFO 30-A1 adapter)	No		No	

Additional lengths available (in 0.5 m increments)! Contact us for more information.

Please append the desired length L of the fiber optics cable to the ordering code.

Adjustments from 0.5 m to max. 2 m possible.

Example:

BFO 18...-30-**0.5** for **0.5 m** fiber length

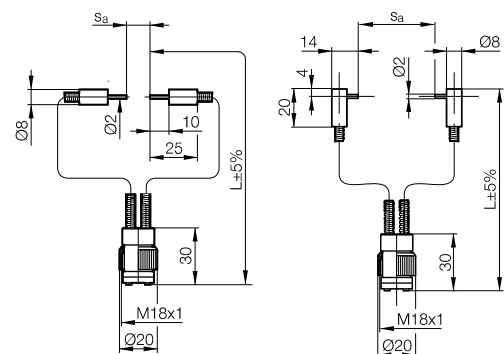
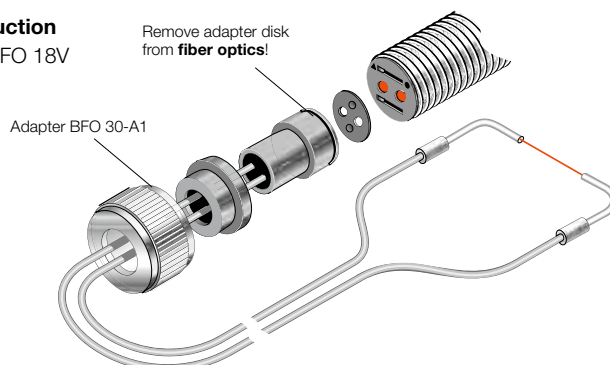
BFO 18...-30-**2** for **2 m** fiber length

Caution!

With a fiber optic through-beam sensor, the base unit's normally open signal switches to a normally closed signal!

Mounting instruction

BOS 30M with BFO 18V



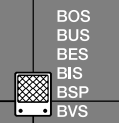
Photoelectric Sensors

Glass fiber optics (BFO 18)

Through-beam



	200 mm 700 mm	200 mm 700 mm	200 mm 700 mm	200 mm 2000 mm	200 mm 2000 mm
	BFO000M		BFO001F		
	BFO 18A-LAA-UZG-20-0,5		BFO 18A-LEE-UZG-20-0,5		
	BFO000N	BFO000Z	BFO001H		
	BFO 18A-LAA-UZG-20-1	BFO 18A-LCC-UZG-20-1	BFO 18A-LEE-UZG-20-1		
	BFO000F		BFO0013	BFO003Y	
	BFO 18A-LAA-MZG-20-0,5		BFO 18A-LEE-MZG-20-0,5	BFO 18V-LCC-MZG-23-0,5	
				BFO003Z	BFO0047
				BFO 18V-LCC-MZG-23-0,75	BFO 18V-LDD-MZG-23-0,75
	BFO000H		BFO0014		
	BFO 18A-LAA-MZG-20-1		BFO 18A-LEE-MZG-20-1		
		BFO000U	BFO0019	BFO0042	BFO004C
		BFO 18A-LCC-SMG-20-0,5	BFO 18A-LEE-SMG-20-0,5	BFO 18V-LCC-SMG-23-0,5	BFO 18V-LDD-SMG-23-0,5
		BFO000W	BFO001A		BFO004F
		BFO 18A-LCC-SMG-10-1	BFO 18A-LEE-SMG-20-1		BFO 18V-LDD-SMG-23-1
	2 mm	2 mm	2 mm	2 mm	2 mm
	80 N	80 N	80 N	80 N	80 N
	60 mm	60 mm	60 mm	60 mm	60 mm
	Yes	Yes	Yes	No	No
	yes (remove adapter disk)	yes (remove adapter disk)	yes (remove adapter disk)	yes (remove adapter disk)	yes (remove adapter disk)
	yes (remove adapter disk)	yes (remove adapter disk)	yes (remove adapter disk)	No	No
	Yes	Yes	Yes	No	No
	No	No	No	yes (remove adapter disk)	yes (remove adapter disk)

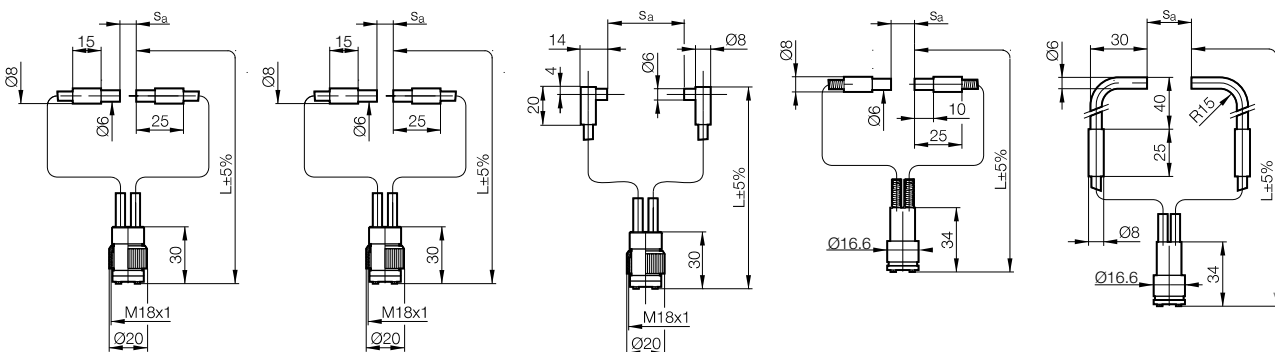


Product-specific Accessories

Photoelectric Sensors
Plastic fiber optics
Adapter, Holder, Optics, Cutting Tool, Lenses, Deflection Head, Metal Corrugated Tube

Glass Fiber Optics

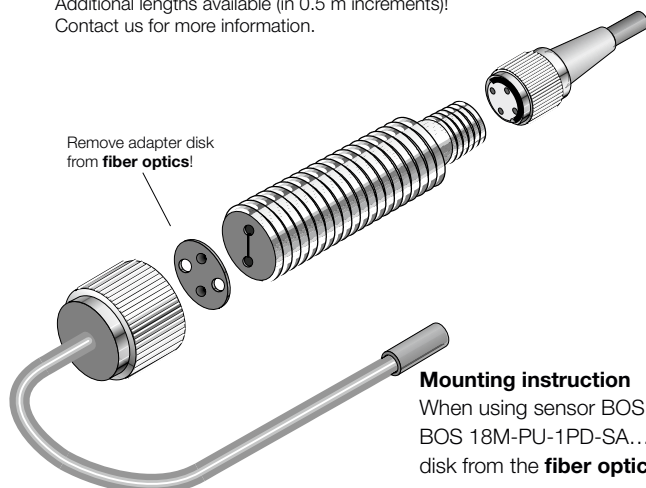
Reflectors
Sensors
Fasteners
Positive Stops and Contact Protector
Ultrasonic Sensors
Uni/Unicompact Sensors
Industrial RFID Systems
Position and Distance Measurement
Protective End Caps and Nuts
Pressure Sensors
Vision Sensors





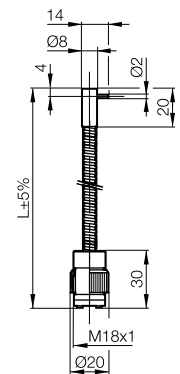
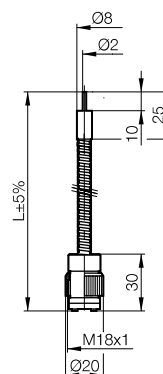
Diffuse sensor with	BOS 18M-...-PD-.../BOS 18M-...-1PF-... BOS 30M-...	10 mm/50 mm	10 mm/50 mm	
Retroreflective sensor with	BOS 18M-...-PD-.../BOS 18M-...-1PF-... BOS 30M-...	300 mm/1000 mm	300 mm/1000 mm	
UZG type	Ordering code			
0.5 m	Part number			
UZG type	Ordering code			
1 m	Part number			
MZG type	Ordering code	BFO003R	BFO003H	
0.5 m	Part number	BFO 18A-XAG-MZG-15-0,5	BFO 18A-XAF-MZG-15-0,5	
MZG type	Ordering code	BFO003T	BFO003J	
1 m	Part number	BFO 18A-XAG-MZG-15-1	BFO 18A-XAF-MZG-15-1	
SMG type	Ordering code		BFO003M	
0.5 m	Part number		BFO 18A-XAF-SMG-15-0,5	
SMG type	Ordering code		BFO003N	
1 m	Part number		BFO 18A-XAF-SMG-15-1	
Glass optical fiber bundle diameter		1.5 mm	1.5 mm	
Max. tension on optical fibers and connection parts		80 N	80 N	
Min. bending radius		60 mm	60 mm	
Can be used with	BOS 18M-PA-1PD...	Yes	Yes	
	BOS 18M-PU-1PD-SA1.../-SA4.../-SA5...	yes (remove adapter disk)	yes (remove adapter disk)	
	BOS 18M-GU-1PF-...	yes (remove adapter disk)	yes (remove adapter disk)	
	BOS 18M-PA-1PF-...	Yes	Yes	
	BOS 30M-...	No	No	
Sensing distance with	BOS 18M-PA-1PD...	10 mm	10 mm	
	BOS 18M-PU-1PD-SA1.../-SA4.../-SA5...	10 mm	10 mm	
	BOS 18M-...-1PF-...	50 mm	50 mm	
	BOS 30M-...			
Range with	BOS 18M-PA-1PD...	300 mm	300 mm	
	BOS 18M-PU-1PD-SA1.../-SA4.../-SA5...	300 mm	300 mm	
	BOS 18M-...-1PF-...	1000 mm	1000 mm	
	BOS 30M-...			

Additional lengths available (in 0.5 m increments)!
Contact us for more information.



Mounting instruction

When using sensor BOS18M-GU-1PF-S4-Y or BOS 18M-PU-1PD-SA..., please remove the adapter disk from the **fiber optics**.



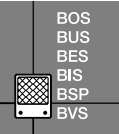
Photoelectric Sensors

Glass fiber optics (BFO 18)

Sensors



	20 mm/100 mm	20 mm/100 mm	20 mm/100 mm	20 mm 200 mm 500 mm 2000 mm	20 mm 200 mm 500 mm 2000 mm
	500 mm/1000 mm	500 mm/1000 mm	500 mm/1000 mm		
	BFO002M		BFO003C		
	BFO 18A-XAA-UZG-30-0,5		BFO 18A-XAE-UZG-30-0,5		
	BFO002N		BFO003E		
	BFO 18A-XAA-UZG-30-1		BFO 18A-XAE-UZG-30-1		
	BFO0026		BFO0031	BFO004M	BFO004U
	BFO 18A-XAA-MZG-30-0,5		BFO 18A-XAE-MZG-30-0,5	BFO 18V-XAC-MZG-30-0,5	BFO 18V-XAD-MZG-30-0,5
	BFO0027		BFO0032		
	BFO 18A-XAA-MZG-30-1		BFO 18A-XAE-MZG-30-1		
	BFO002F	BFO002U	BFO0037	BFO004P	BFO004Y
	BFO 18A-XAA-SMG-30-0,5	BFO 18A-XAC-SMG-30-0,5	BFO 18A-XAE-SMG-30-0,5	BFO 18V-XAC-SMG-30-0,5	BFO 18V-XAD-SMG-30-0,5
	BFO002H	BFO002W	BFO0038	BFO004R	BFO004Z
	BFO 18A-XAA-SMG-30-1	BFO 18A-XAC-SMG-30-1	BFO 18A-XAE-SMG-30-1	BFO 18V-XAC-SMG-30-1	BFO 18V-XAD-SMG-30-1
	3 mm	3 mm	3 mm	3 mm	3 mm
	80 N	80 N	80 N	80 N	80 N
	60 mm	60 mm	60 mm	60 mm	60 mm
	Yes	Yes	Yes	No	No
	yes (remove adapter disk)	yes (remove adapter disk)	yes (remove adapter disk)	yes (remove adapter disk)	yes (remove adapter disk)
	yes (remove adapter disk)	yes (remove adapter disk)	yes (remove adapter disk)	No	No
	Yes	Yes	Yes	No	No
	No	No	No	Yes (remove adapter disk)	Yes (remove adapter disk)
	20 mm	20 mm	20 mm	20 mm	20 mm
	20 mm	20 mm	20 mm	20 mm	20 mm
	100 mm	100 mm	100 mm		
	500 mm	500 mm	500 mm	200 mm	200 mm
	500 mm	500 mm	500 mm	500 mm	500 mm
	1000 mm	1000 mm	1000 mm		
				2000 mm	2000 mm



Product-specific Accessories

Photoelectric Sensors

Plastic fiber optics

Adapter, Holder, Optics, Cutting Tool, Lenses, Deflection Head, Metal Corrugated Tube

Glass Fiber Optics

Reflectors

Sensors

Fasteners

Positive Stops and Contact Protector

Ultrasonic Sensors

Uni/Unicompact Sensors

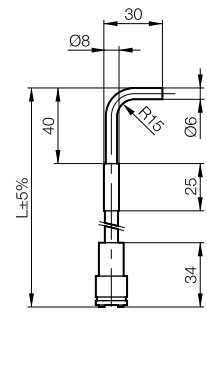
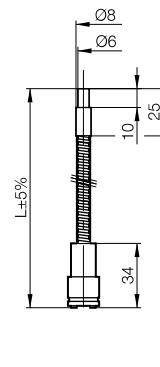
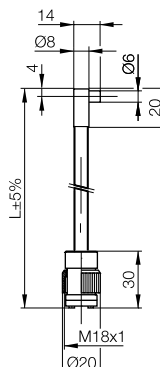
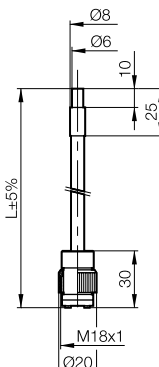
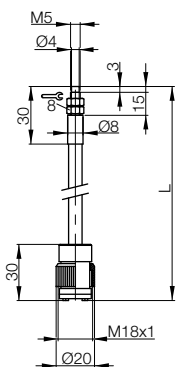
Industrial RFID Systems

Position and Distance Measurement

Protective End Caps and Nuts

Pressure Sensors

Vision Sensors



Sensing distances referenced to a 90% reflective Kodak gray card.
Diffuse sensor with glass fiber optics as a retroreflective light sensor:
Ranges are referenced to BOS R-1 reflector.

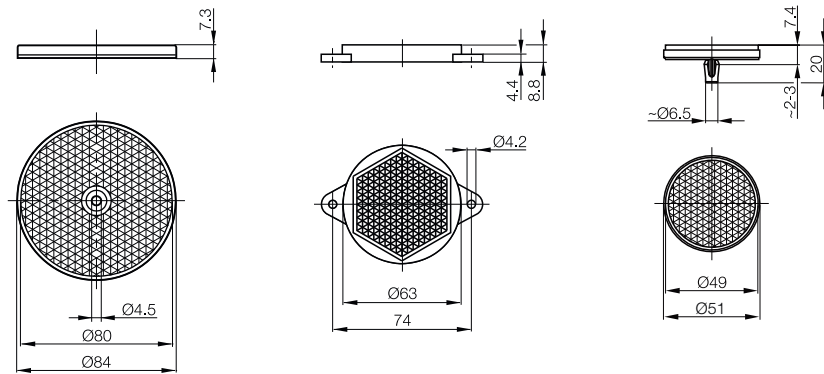
When being used as a retroreflective sensor, twice the switching distance must be used as the object dead zone.

Photoelectric Sensors

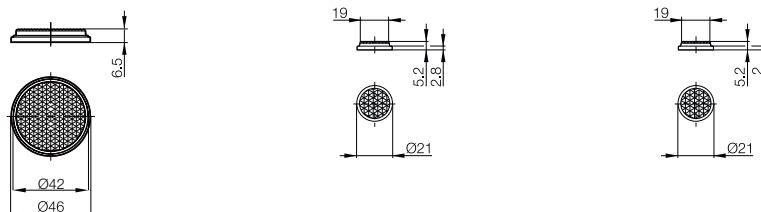
Round reflectors



Size	Reflector Ø 84 mm	Reflector Ø 62 mm	Reflector Ø 51 mm
Mounting	M4 screw	Two M4 screws	Rivet with mounting tabs
Ordering code	BAM00UK	BAM0126	BAM00UP
Part number	BOS R-1	BOS R-10	BOS R-14
Material	PMMA/ABS	PMMA/ABS	PC
Triple size	4 mm	4 mm	4 mm
Mounting accessories	BOS 21-AD-1		
Special features			Chemical resistant
Temperature range	-20...+60 °C	-20...+60 °C	0...+100 °C



Size	Reflector Ø 46 mm	Reflector Ø 21 mm	Reflector Ø 21 mm
Mounting	Glue	Glue	Glue
Ordering code	BAM00UW	BAM00W4	BAM00UR
Part number	BOS R-2	BOS R-3	BOS R-15
Material	PMMA/ABS	PMMA/ABS	PC
Triple size	2.5 mm	2 mm	2 mm
Special features			Chemical resistant
Temperature range	-20...+60 °C	-20...+60 °C	-20...+99 °C

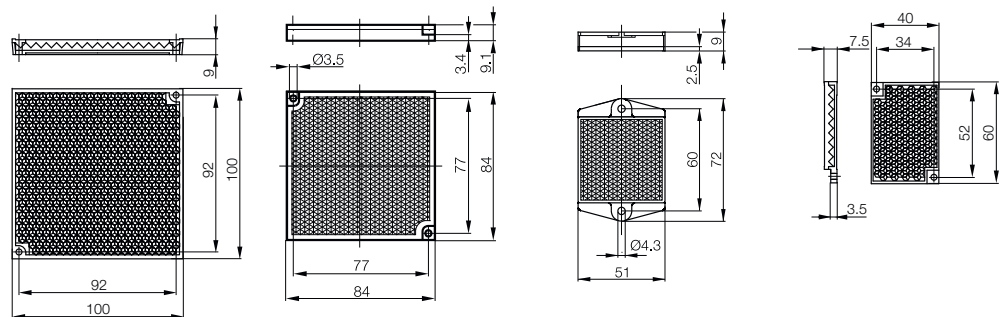


Photoelectric Sensors

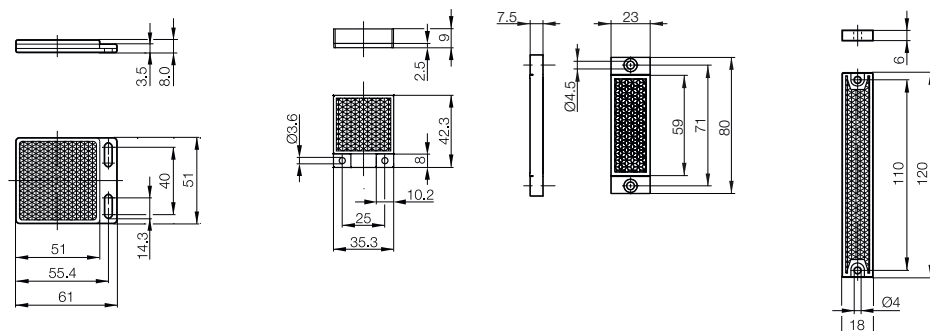
Rectangular reflectors



Size	Reflector 100×100 mm	Reflector 84×84 mm	Reflector 51×72 mm	Reflector 60×40 mm
Mounting	Two M3 screws	Two M3 screws	Two M4 screws	Two M3 screws
Ordering code	BAM01JN	BAM00UL	BAM00UZ	BAM01JP
Part number	BOS R-47	BOS R-11	BOS R-25	BOS R-46
Material	PMMA/ABS	PMMA/ABS	PMMA	PMMA/ABS
Triple size	4 mm	4 mm	4 mm	4 mm
Temperature range	-20...+60 °C	-20...+60 °C	0...+50 °C	-20...+60 °C



Size	Reflector 51×61 mm	Reflector 35×42 mm	Reflector 23×80 mm	Reflector 18×120 mm
Mounting	Two M4 screws	Two M3 screws	Two M4 screws	Two M4 screws
Ordering code	BAM00WL	BAM00W0	BAM01LA	BAM00WA
Part number	BOS R-9	BOS R-26	BOS R-48	BOS R-5
Material	PMMA/ABS	PMMA	PMMA/ABS	PMMA/ABS
Triple size	4 mm	4 mm	4 mm	4 mm
Mounting accessories		BOS 5-HW-5		
Temperature range	-20...+60 °C	0...+50 °C	-20...+60 °C	-20...+60 °C



BOS
BUS
BES
BIS
BSP
BVS

Product-specific
Accessories

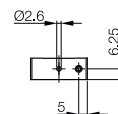
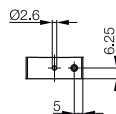
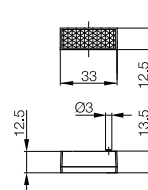
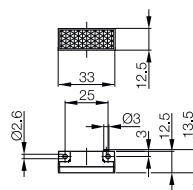
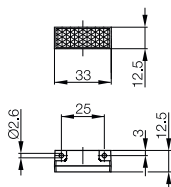
Photoelectric
Sensors
Reflectors
Round
Rectangular
For Special
Applications
For Laser Retro-
reflective Sensors
Reflective Foils
Sensors
Fasteners
Positive Stops
and Contact
Protector
Ultrasonic
Sensors
Uni/Unicompact
Sensors
Industrial RFID
Systems
Position and
Distance
Measurement
Protective End
Caps and Nuts
Pressure
Sensors
Vision Sensors

Photoelectric Sensors

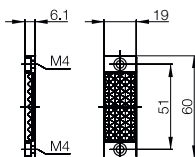
Rectangular reflectors



Size	Reflector 33×12 mm	Reflector 33×12 mm	Reflector 33×12 mm
Mounting	Side screws	Rear and side screws	Rear screws
Ordering code	BAM00W3	BAM00W1	BAM00W2
Part number	BOS R-29	BOS R-27	BOS R-28
Material	PMMA	PMMA	PMMA
Triple size	2.3 mm	2.3 mm	2.3 mm
Mounting accessories	BOS 5-HW-1/2	BOS 5-HW-1/2	
Temperature range	0...+50 °C	0...+50 °C	0...+50 °C



Size	Reflector 18×60 mm		
Mounting	Two M4 screws		
Ordering code	BAM00W7		
Part number	BOS R-33		
Material	PMMA/ABS		
Triple size	4 mm		
Temperature range	-20...+60 °C		

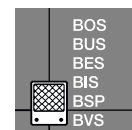
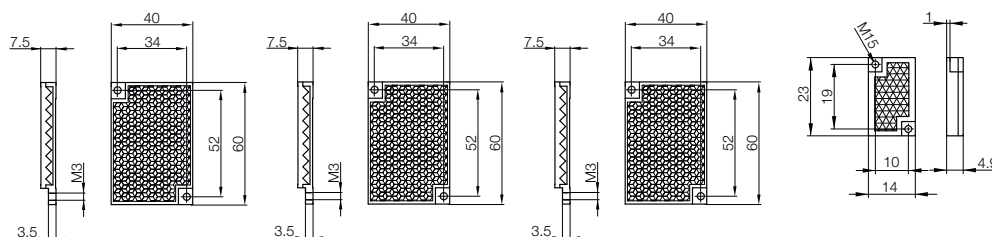


Photoelectric Sensors

Reflectors for special applications



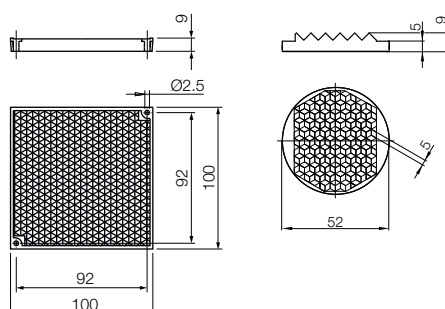
Size	Reflector 60×40 mm	Reflector 60×40 mm	Reflector 60×40 mm	Reflector 14×23 mm
Mounting	Two M3 screws	Two M3 screws	Two M3 screws	Two M1.5 screws
Ordering code	BAM00W8	BAM01CM	BAM01HE	BAM01NH
Part number	BOS R-34	BOS R-36	BOS R-44	BOS R-49
Material	Hot thermoplastic	PMMA/ABS	Solidchem	Hot thermoplastic
Triple size	4 mm	4 mm	4 mm	0.9 mm
Special features	Heat-resistant	Anti-fogging	Chemical-resistant	Heat-resistant; For laser applications
Temperature range	−20...+150 °C	−20...+60 °C	−20...+140 °C	−20...+110 °C



Product-specific
Accessories

Photoelectric
Sensors
Reflectors
Round
Rectangular
For Special
Applications
For Laser Retro-
flective Sensors
Reflective Foils
Sensors
Fasteners
Positive Stops
and Contact
Protector
Ultrasonic
Sensors
Uni/Unicompact
Sensors
Industrial RFID
Systems
Position and
Distance
Measurement
Protective End
Caps and Nuts
Pressure
Sensors
Vision Sensors

Size	Cubic corner 100×100 mm	Reflector Ø 52 mm		
Mounting	Screw M3	Clamps		
Ordering code	BAM01CN	BAM01H6		
Part number	BOS R-37	BOS R-31		
Material	PC	Borosilicate		
Triple size	4 mm	4 mm		
Special features		Glass reflector		
Temperature range	−20...+100 °C	−20...+500 °C		

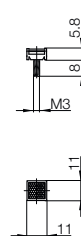
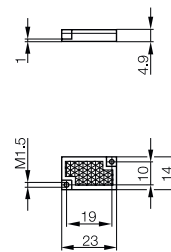
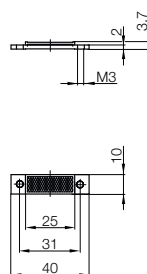
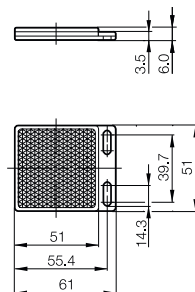


Photoelectric Sensors

Reflectors for laser retroreflective sensors



Size	Reflector 51×62 mm	Reflector 40×10 mm	Reflector 14×23 mm	Reflector 11×11 mm	
Mounting	Two M4 screws	Two M3 screws	Two M1.5 screws	M3 screw	
Ordering code	BAM00UY	BAM01H9	BAM00UM	BAM01H8	
Part number	BOS R-22	BOS R-41	BOS R-12	BOS R-39	
Material	PMMA/ABS	PMMA/ABS	PMMA/ABS	PMMA/ABS	
Triple size	1.2 mm	1.2 mm	0.9 mm	0.9 mm	
Mounting accessories	BOS 5-HW-6				
Temperature range	-20...+60 °C	-20...+60 °C	-20...+60 °C	-20...+60 °C	

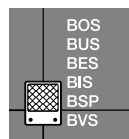
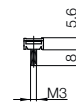
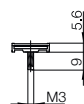
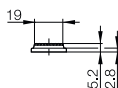
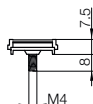
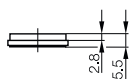


Photoelectric Sensors

Reflectors for laser retroreflective sensors



Reflector Ø 25 mm	Reflector Ø 25 mm	Reflector Ø 21 mm	Reflector Ø 19 mm	Reflector Ø 10 mm
Glue	M4 screw	Glue	M3 screw	M3 screw
BAM00UN	BAM01HC	BAM00UT	BAM01HA	BAM01H7
BOS R-13	BOS R-43	BOS R-16	BOS R-42	BOS R-38
PMMA/ABS	PMMA/ABS	PMMA/ABS	PMMA/ABS	PMMA/ABS
1.2 mm	1.2 mm	1.2 mm	0.9 mm	0.9 mm
-20...+60 °C	-20...+60 °C	-20...+60 °C	-20...+60 °C	-20...+60 °C



Product-specific
Accessories

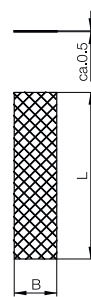
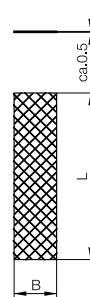
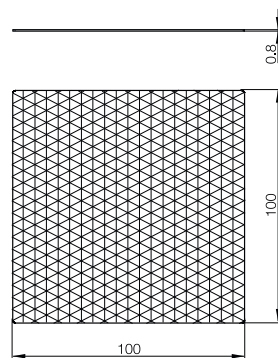
Photoelectric
Sensors
Reflectors
Round
Rectangular
For Special Ap-
plications
**For Laser
Retroreflective
Sensors**
Reflective Foils
Sensors
Fasteners
Positive Stops
and Contact
Protector
Ultrasonic
Sensors
Uni/Unicomact
Sensors
Industrial RFID
Systems
Position and
Distance
Measurement
Protective End
Caps and Nuts
Pressure
Sensors
Vision Sensors

Photoelectric Sensors

Reflective foils



Description	Reflective foils (standard)	Reflective foils (standard)	Reflective foils (standard) (not for polarized light)	
Mounting	Self-adhesive	Self-adhesive	Self-adhesive	
50 mm × 45 m	Ordering code		BAM00WE	
	Part number		BOS R-6-45	
50 mm × 22 m	Ordering code	BAM00WH		
	Part number	BOS R-7-22		
25 mm × 22 m	Ordering code	BAM00WK		
	Part number	BOS R-8-22		
50 mm × 25 cm	Ordering code	BAM00WF	BAM00WC	
	Part number	BOS R-7-0,25	BOS R-6-0,25	
25 mm × 25 cm	Ordering code	BAM00WJ		
	Part number	BOS R-8-0,25		
300 × 200 mm	Ordering code			
	Part number			
200 × 200 mm	Ordering code		BAM00W9	
	Part number		BOS R-35	
100 × 100 mm	Ordering code	BAM01JM		
	Part number	BOS R-50		
90 × 50 mm	Ordering code	BAM00W6		
	Part number	BOS R-32-0,40		
100 × 50 mm	Ordering code			
	Part number			
40 × 35 mm	Ordering code			
	Part number			
Material	PMMA	PMMA	PMMA	
Special features			Not for polarized light	
Temperature range	-20...+60 °C	-20...+60 °C	-20...+60 °C	

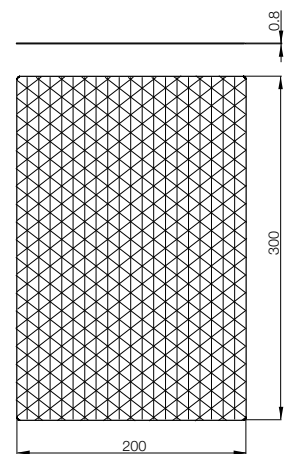
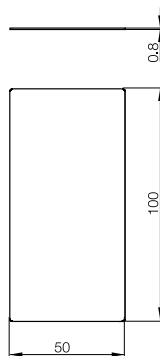




BOS
BUS
BES
BIS
BSP
BVS

- Photoelectric Sensors
- Reflectors
 - Round
 - Rectangular
 - For Special Applications
 - For Laser Retro-reflective Sensors

- Sensors
- Fasteners
- Positive Stops and Contact Protector
- Ultrasonic Sensors
- Uni/Unicomact Sensors
- Industrial RFID Systems
- Position and Distance Measurement
- Protective End Caps and Nuts
- Pressure Sensors
- Vision Sensors



Photoelectric Sensors

Aperture diaphragms

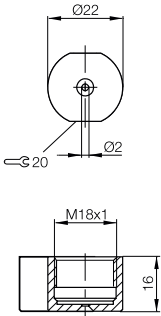
The round and slit apertures restrict the beam diameter. This allows you to detect small parts over a large range. The emitter and receiver of the photoelectric sensor must be exactly aligned with each other.

Benefits

- Small parts detection, i.e. 1 mm drill, aperture on emitter only
- Photoelectric sensors may be mounted close to one another
- Highly reflective parts right next to the photoelectric sensor's light beam do not interfere



Description	Round aperture		
Use	For BLE/BLS 18		
Ordering code	BAM00R6		
Part number	BOS 18-BL-1		
	Aperture on emitter	Aperture on receiver	Range
	o		8 mm
		o	8 mm
	o	o	2 mm

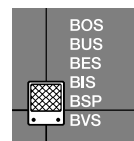
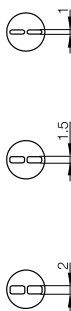
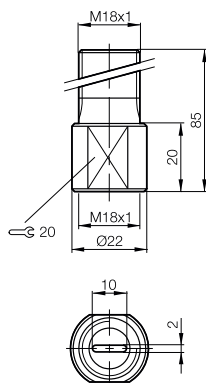


Photoelectric Sensors

Slit apertures



Double slit aperture			Slit aperture			
For BLE/BLS 18			For BLE/BLS 12M			
BAM00R7			BAM00PW			
BOS 18-BL-2			BOS 12-BL-1			
Aperture on emitter	Aperture on receiver	Range	Slit width	Range	Object size	
		3 mm	1 mm	0.5 mm	> 1 mm	
		2 mm	1.5 mm	1 mm	> 1.5 mm	
		2 mm	2 mm	2 mm	> 2 mm	



Product-specific Accessories

- Photoelectric Sensors
- Reflectors
- Sensors
- Round Apertures
- Slit Apertures
- Weld Protection
- Air Shield
- Lenses, Intermediate Ring
- Protective End Caps
- Deflection Heads
- Diagonal Mirrors, Deflector
- Fasteners
- Positive Stops and Contact Protector
- Ultrasonic Sensors
- Uni/Unicompact Sensors
- Industrial RFID Systems
- Position and Distance Measurement
- Protective End Caps and Nuts
- Pressure Sensors
- Vision Sensors

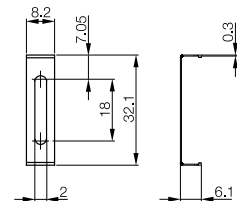
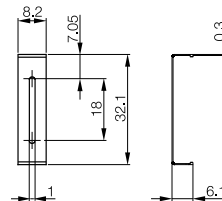
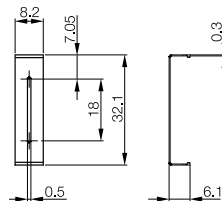
Photoelectric Sensors

Slit apertures

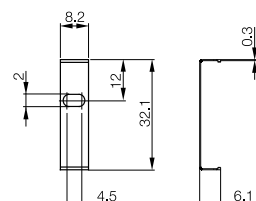
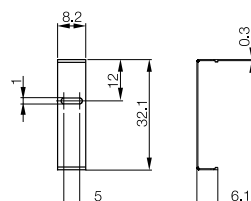
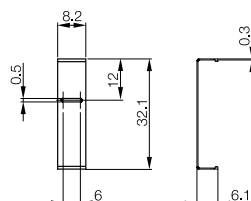


Description	Vertical slit aperture	Vertical slit aperture	Vertical slit aperture
Use	For BOS 5K through-beam sensors	For BOS 5K through-beam sensors	For BOS 5K through-beam sensors
Ordering code	BAM00TU	BAM00TW	BAM00TY
Part number	BOS 5-BL-1	BOS 5-BL-2	BOS 5-BL-3
Aperture size	0.5 mm vertical	1 mm vertical	2 mm vertical
Range*	1.0 (2.5 m)	1.5 (3.5 m)	3.5 (6 m)
Min. object*	0.5 (7 mm)	1.0 (7 mm)	2.0 (7 mm)
Packaging unit	2 pcs.	2 pcs.	2 pcs.

*Values in brackets apply to slit apertures on one side



Description	Horizontal slit aperture	Horizontal slit aperture	Horizontal slit aperture
Use	For BOS 5K through-beam sensors	For BOS 5K through-beam sensors	For BOS 5K through-beam sensors
Ordering code	BAM00TZ	BAM00U0	BAM00U1
Part number	BOS 5-BL-4	BOS 5-BL-5	BOS 5-BL-6
Aperture size	0.5 mm horizontal	1 mm horizontal	2 mm horizontal
Range	0.7 (2 m)	1.5 (3 m)	3.0 (5.5 m)
Min. object	0.4 (7 mm)	0.7 (7 mm)	1.5 (7 mm)
Packaging unit	2 pcs.	2 pcs.	2 pcs.

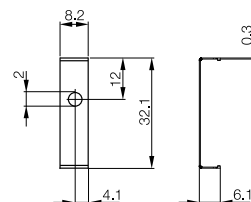
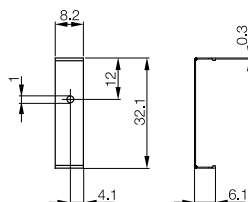
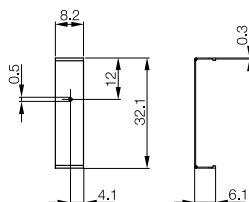


Photoelectric Sensors

Aperture diaphragms, weld protection



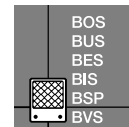
Description	Round aperture		Round aperture
Use	For BOS 5K through-beam sensors		For BOS 5K through-beam sensors
Ordering code	BAM00U2		BAM00U3
Part number	BOS 5-BL-7		BOS 5-BL-8
Aperture size	0.5 mm Ø		1 mm Ø
Range	0.08 (0.8 m)		0.3 (1.5 m)
Min. object	0.3 (5 mm)		0.6 (5 mm)
Packaging unit	2 pcs.		2 pcs.



Sensor not included in the standard scope of delivery!



Sensor not included in the standard scope of delivery!



Product-specific Accessories

Photoelectric Sensors
Reflectors
Sensors

Aperture Diaphragms

Slit apertures

Weld protection

Air shield

Lenses, Intermediate Ring

Protective End Caps

Deflection Heads

Diagonal Mirrors, Deflector

Fasteners

Positive Stops and Contact Protector

Ultrasonic Sensors

Uni/Unicomact Sensors

Industrial RFID Systems

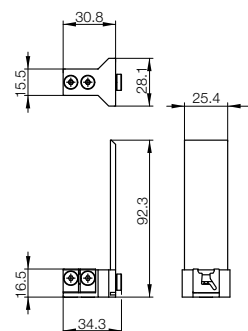
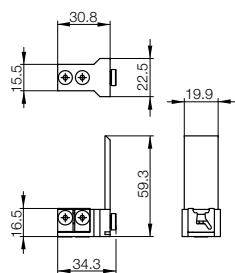
Position and Distance Measurement

Protective End Caps and Nuts

Pressure Sensors

Vision Sensors

Description	Weld protection		Weld protection
Use	For BOS 23K		For BOS 50K
Ordering code	BAM01L8		BAM01U6
Part number	BAM PC-XO-006-23K-1		BAM PC-XO-006-50K-1



Spare glass panes for weld protection BAM01L8 and BAM01U6

Ordering code	BAM01YL	BAM01YM
Part number	BAM PC-XO-006-23K-G/RK	BAM PC-XO-006-50K-G/RK

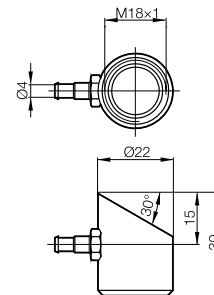
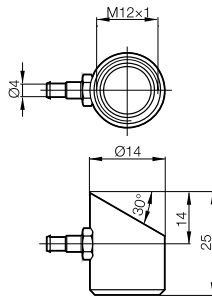
Photoelectric Sensors

Air shield



Description		Air shield	Air shield
Use		For BOS 12 and tube with 4 mm inner diameter	For BOS 18 and tube with 4 mm inner diameter
Focal length/focus			
Ordering code		BAM00PY	BAM00R9
Part number		BOS 12-LT-1	BOS 18-LT-1
Material	Lens	Glass	Glass
	Mount	Al	Al

The air shield with a compressed air source prevents premature contamination of the optics.



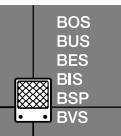
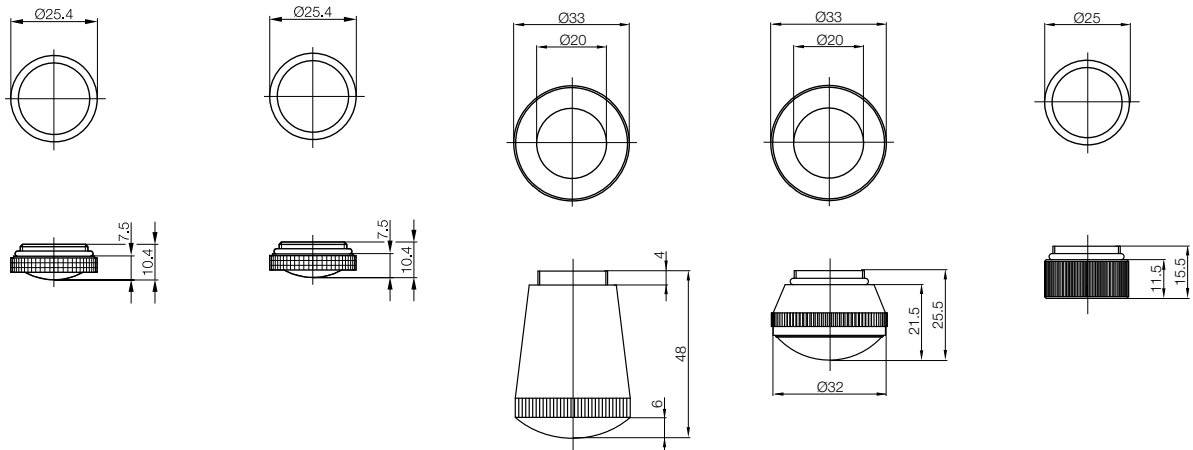
Description		Air Blow
Version		For clamping cylinders
Use		For blowing clear sensors and reflectors (minimum pressure 8 bar)
Ordering code		BAM0041
Part number		BMS CZ-M-D12-I-001
Material		Anodized aluminum

Photoelectric Sensors

Lenses, intermediate ring



Lens	Lens	Lens	Lens	Intermediate ring
For BKT 67 for increasing the sensing range (light spot 2×7 mm)	For BKT 67 standard lenses (light spot 1.5×4 mm)	For BKT 67 for increasing the sensing range (light spot 2×8 mm)	For BKT 67 for increasing the sensing range (light spot 2.5×11 mm)	Intermediate ring with lens for increased resolution for BKT 67 in combination with M-PK-2. It is screwed in between the sensor and the 9 mm lens.
18 mm	9 mm	28 mm	50 mm	
BAM0120	BAM0121	BAM0122	BAM00P3	BAM00P2
BKT M-PK-1	BKT M-PK-2	BKT M-PK-3	BKT M-PK-5	BKT M-PK-4
Glass	Glass	Glass	Glass	Glass
Al	Al	Al	Al	Al



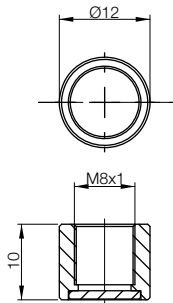
Product-specific accessories

- Photoelectric Sensors
- Reflectors
- Sensors
- Aperture Diaphragms
- Slit apertures
- Weld protection
- Air shield**
- Lenses, Intermediate Ring**
- Protective End Caps
- Deflection Heads
- Diagonal Mirrors, Deflector
- Fasteners
- Positive Stops and Contact Protector
- Ultrasonic Sensors
- Uni/Unicompact Sensors
- Industrial RFID Systems
- Position and Distance Measurement
- Protective End Caps and Nuts
- Pressure Sensors
- Vision Sensors

Photoelectric Sensors Protective end caps



Description		M8 protective end cap	M12 protective end cap	
Use		For BOS 08	For BOS 12	
Ordering code		BAM01Y5	BAM01Y6	
Part number		BAM PC-X0-005-08M-4	BOS PC-X0-005-12M-4	
Material	Mount	Stainless steel	Stainless steel	
	Disk	Glass	Glass	



The protective end cap is made with tempered glass and can be used with all M12 photoelectric sensors.

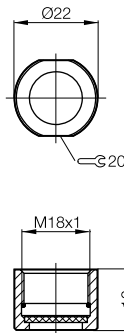
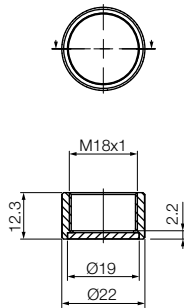
The protective glass is used to protect the optics from mechanical or thermal damage, such as weld spatter.

Photoelectric Sensors

Protective end caps



M18 protective end cap	Protective end cap	
For BOS 18 with flat front surface	for BOS 18	
BAM01NC	BAM00RL	
BAM PC-XO-005-18M-4	BOS 18-SM-1	
Stainless steel	POM	
Glass	Glass	



The protective end cap can be used in combination with all BOS 18M and BOS 18K sensors. It protects the sensor optics from external effects, such as welding spatter. For increased protection, the BOS 18-SM-2 is made of metal, providing even better protection for the sensor optics. The heat-protecting glass closes off flush with the front surface of the Protective end cap. This prevents dust deposits from forming, which can impact the range.

A ring between the sensor and protective glass makes sure the system is sealed.

The protective end cap is made with tempered glass and can be used with all photoelectric sensors M18. The protective glass is used to protect the optics from mechanical or thermal damage, such as weld spatter.

BOS
BUS
BES
BIS
BSP
BVS

Product-specific accessories

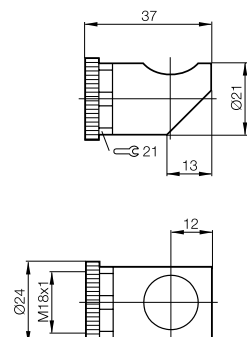
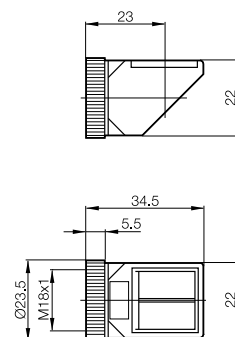
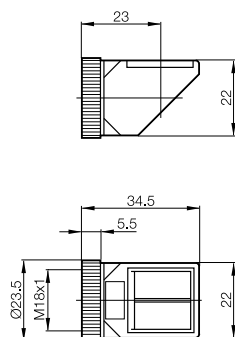
Photoelectric Sensors
Reflectors
Sensors
Aperture Diaphragms
Slit apertures
Weld protection
Air shield
Lenses, Intermediate Ring
Protective End Caps
Deflection Heads
Diagonal Mirrors, Deflector
Fasteners
Positive Stops and Contact Protector
Ultrasonic Sensors
Uni/Unicomact Sensors
Industrial RFID Systems
Position and Distance Measurement
Protective End Caps and Nuts
Pressure Sensors
Vision Sensors

Photoelectric Sensors

Deflection heads



Description	90° deflection head	90° deflection head	90° deflection head
Use	For diffuse, retroreflective and through-beam sensors BOS 18 (except laser)	For diffuse, retroreflective and through-beam sensors BOS 18 (except laser)	For diffuse, retroreflective and through-beam sensors BOS 18
Ordering code	BAM00RP	BAM00RT	BAM00RR
Part number	BOS 18-UK-1	BOS 18-UK-2	BOS 18-UK-10

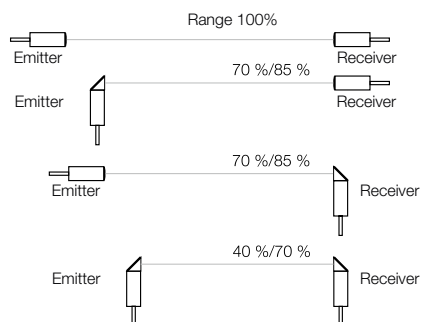


	BOS 18-UK-1	BOS 18-UK-2	BOS 18-UK-10
Diffuse sensor			
BOS 18...-XA-...100 mm	RF = 45 %		RF = 50 %
BOS 18...-XB-...200 mm	RF = 25 %		RF = 50 %
BOS 18...-PB-...200 mm	RF = 25 %		RF = 50 %
BOS 18...-XD-...400 mm		RF = 25 %	RF = 30 %
BOS 18...-PD-...400 mm		RF = 25 %	RF = 30 %
Retroreflective sensor			
BOS 18...-RB-...2 m		RF = 20 %	RF = 20 %
BOS 18...-RD-...4 m		RF = 20 %	RF = 20 %
Through-beam sensor			
BLE 18...-P-...16 m		RF = 15 %	RF = 30 %
BLS 18...-XX-...16 m		RF = 15 %	RF = 30 %

Deflection heads, suitable combinations

All BOS 18 photoelectric sensors can be equipped with a 90° deflection head.

The table shows the appropriate deflection head for each switch type and indicates the corresponding reduction factor (RF) to apply to the range. With a through-beam sensor, the emitter and the receiver can be equipped with a 90° deflection head. Each deflection head reduces the range by approx. 15% ... 50%.



Photoelectric Sensors

Diagonal mirrors, deflector



Diagonal Mirror

For diffuse and through-beam sensors BOS 12

BAM00R0

BOS 12-WS-1

Diagonal Mirror

For laser through-beam sensors BOS 12

BAM00R1

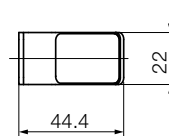
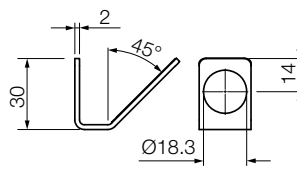
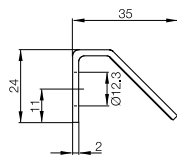
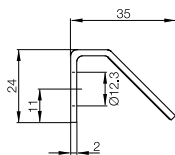
BOS 12-WS-2

Deflector

For Series 18M
For Series 18K

BAM00RU

BOS 18-WS-1



When using the diagonal mirror, the sensing range is reduced by 30% for the M12 diffuse and M12 through-beam sensors. Not suitable for retroreflective sensors.

BOS
BUS
BES
BIS
BSP
BVS

Product-specific
Accessories

Photoelectric
Sensors
Reflectors
Sensors
Aperture Dia-
phragms
Slit apertures
Weld protection
Air shield
Lenses, Interme-
diate Ring
Protective End
Caps
Deflection Heads
**Diagonal Mir-
rors, Deflector**
Fasteners
Positive Stops
and Contact
Protector
Ultrasonic
Sensors
Uni/Unicompact
Sensors
Industrial RFID
Systems
Position and
Distance
Measurement
Protective End
Caps and Nuts
Pressure
Sensors
Vision Sensors

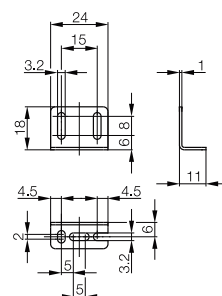
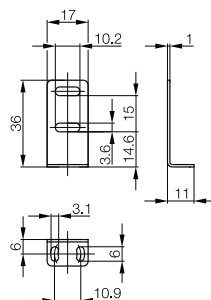
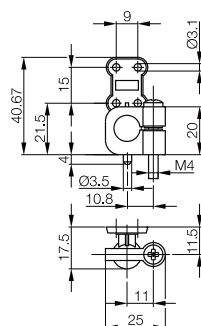
Photoelectric Sensors

Mounting brackets

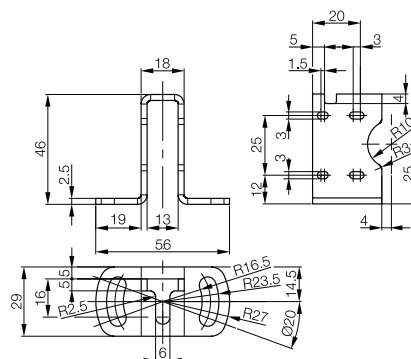
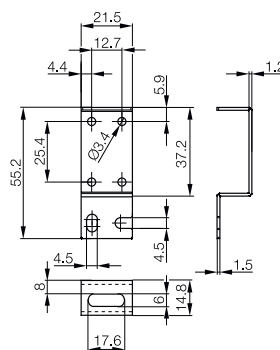
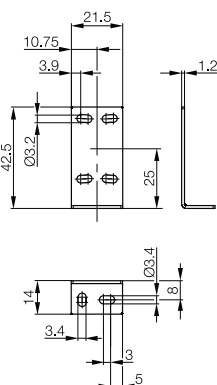
BOS 2, BOS 5



Description	Mounting brackets	Mounting brackets	Mounting brackets
Use	For BOS 2K	For BOS 2K	For BOS 2K
Ordering code	BAM00T4	BAM00T6	BAM00T5
Part number	BOS 2-HW-1	BOS 2-HW-2	BOS 2-HW-3



Description	Mounting brackets	Mounting brackets	Mounting brackets
Use	for BOS 5K	for BOS 5K	for BOS 5K
Ordering code	BAM00U5	BAM00U6	BAM00U7
Part number	BOS 5-HW-1	BOS 5-HW-2	BOS 5-HW-3



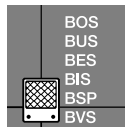
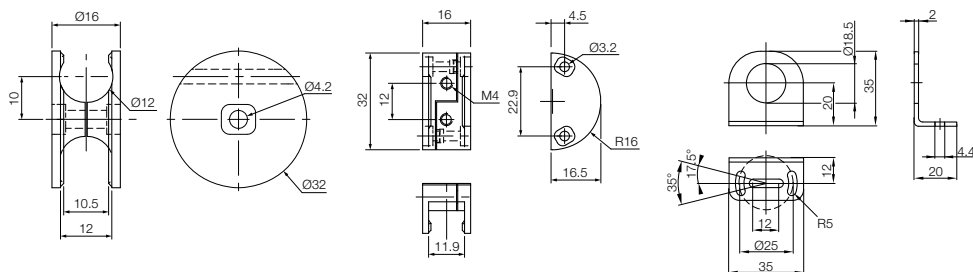
Photoelectric Sensors

Mounting brackets

BOS 6, BOS 18



Description	Mounting brackets	Mounting brackets	Mounting brackets
Use	For Series 6K For M12 rods	for BOS 6K	for BOS 18
Ordering code	BAM022C	BAM022A	BAM00RY
Part number	BAM CS-M-D12-S6K-00	BAM MC-XO-030-6K-4	BOS 18,0-HW-1
Material	Stainless steel	Stainless steel	



Product-specific
Accessories

Photoelectric
Sensors
Reflectors
Sensors
Fasteners

**Mounting
Brackets**

Sensor holder
Holder System
Clamps, Adapter
Plate, Cover
Bracket

Positive Stops
and Contact
Protector

Ultrasonic
Sensors
Uni/Unicompact
Sensors

Industrial RFID
Systems

Position and
Distance
Measurement

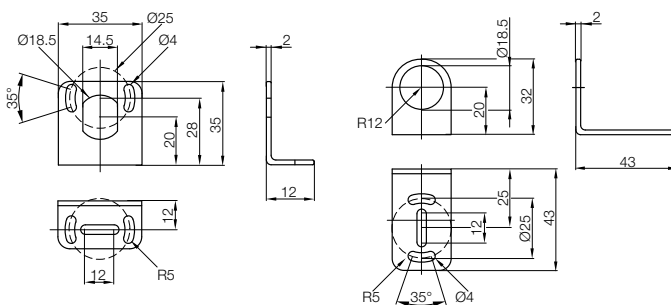
Protective End
Caps and Nuts

Pressure
Sensors

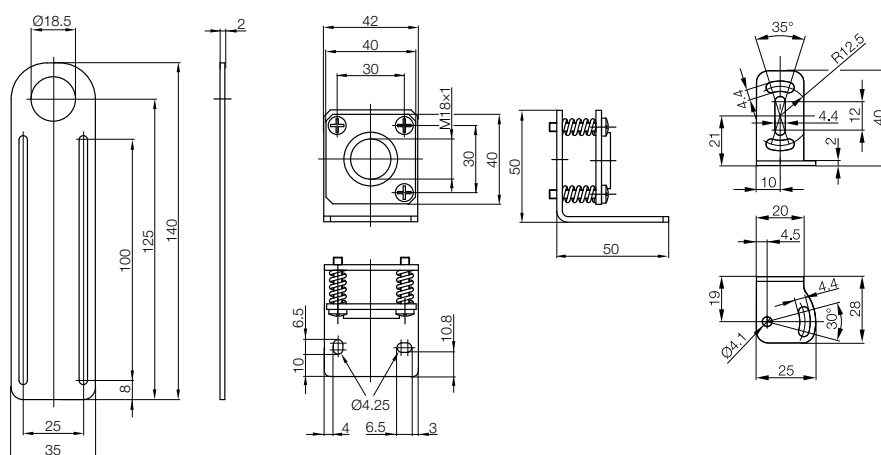
Vision Sensors



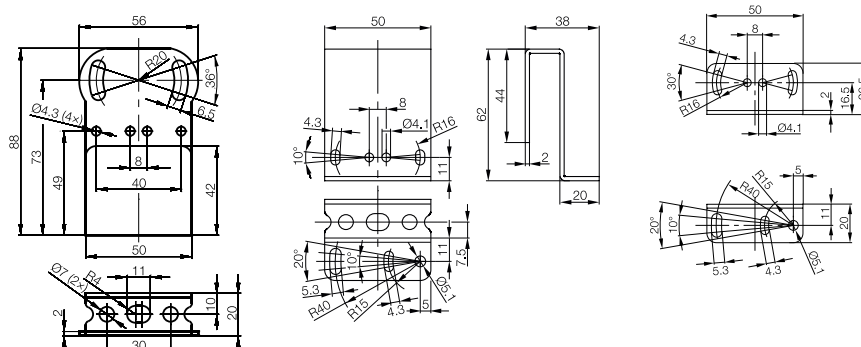
Description	Mounting brackets	Mounting brackets	
Use	For BOS 18F/BOS 18KW	for BOS 18	
Ordering code	BAM00RZ	BAM00T0	
Part number	BOS 18,0-HW-2	BOS 18,0-HW-3	



BOS 18, BOS 21



© 2006 The Authors
Journal compilation © 2006 Blackwell Publishing Ltd



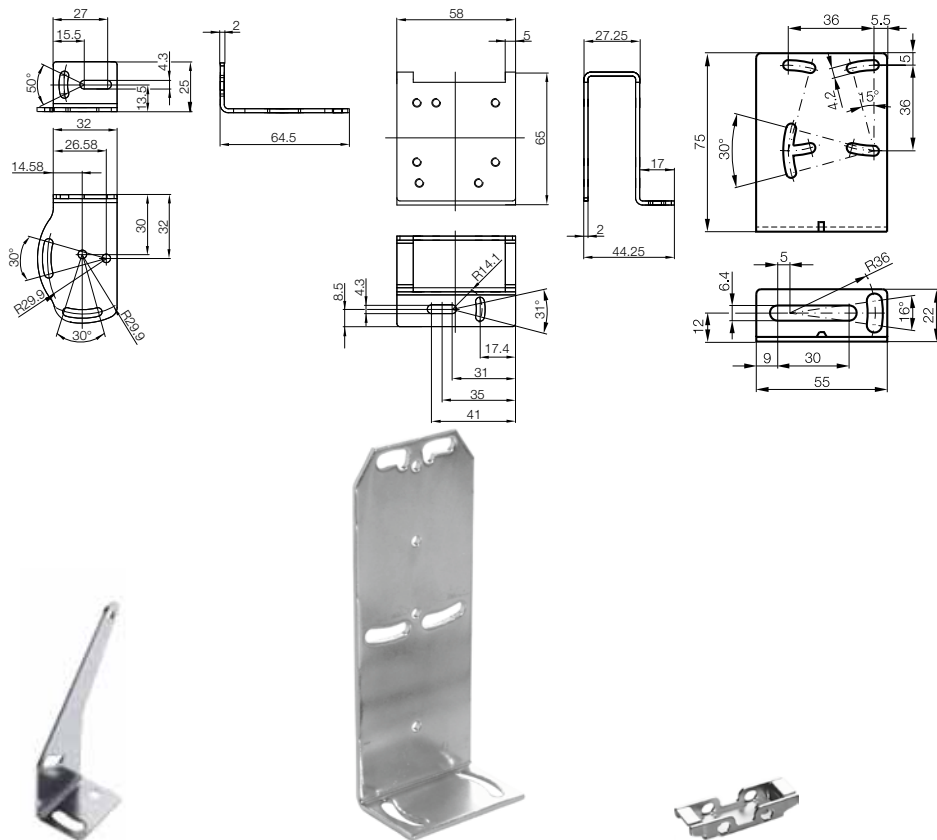
Photoelectric Sensors

Mounting brackets

BOS 23, BOS 36, BOS 65, BOS 66, BOS 74



Description	Mounting brackets	Mounting brackets	Mounting brackets
Use	For BOS 23	For BOS 23K	For BOS 36K
Ordering code	BAM01FM	BAM01FK	BAM0124
Part number	BAM MB-X0-007-B05-4	BAM MB-X0-006-B05-4	BOS 36-HW-1
Material	Stainless steel	Stainless steel	Steel galvanized

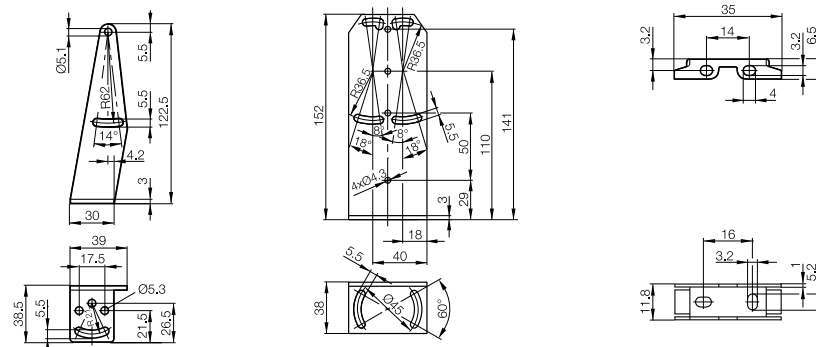


BOS
BUS
BES
BIS
BSP
BVS

Product-specific accessories

Photoelectric Sensors
Reflectors
Sensors
Fasteners
Mounting Brackets
Sensor holder
Holder System
Clamps, Adapter
Plate, Cover
Bracket
Positive Stops and Contact
Protector
Ultrasonic Sensors
Uni/Unicompact Sensors
Industrial RFID Systems
Position and Distance
Measurement
Protective End Caps and Nuts
Pressure Sensors
Vision Sensors

Description	Mounting brackets	Mounting brackets	Mounting brackets
Use	For BOS 65K	For BOD 66M	For BOS 74K
Ordering code	BAM0125	BAM00P9	BAM00UJ
Part number	BOS 65-HW-1	BOD 66-HW-1	BOS 74-HW-1
Material	Stainless steel	Stainless steel	



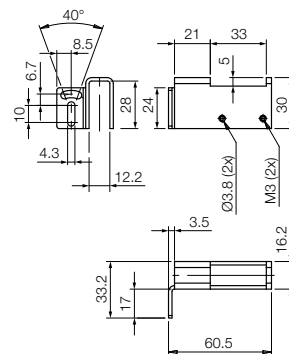
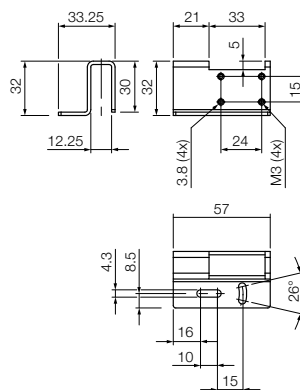
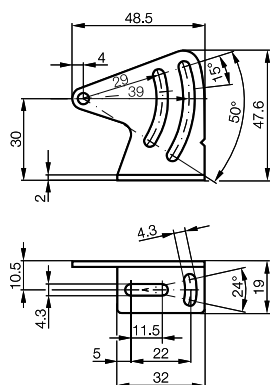
Photoelectric Sensors

Mounting brackets

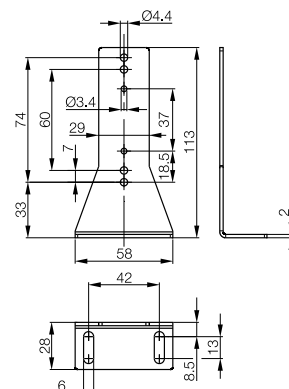
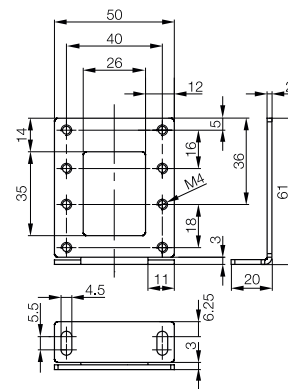
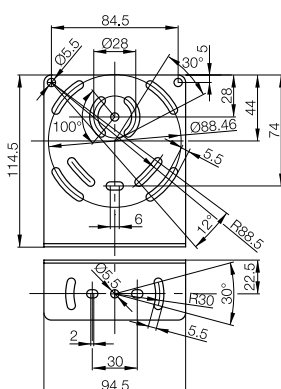
BOS Mix



Description	Mounting brackets	Mounting brackets	Mounting brackets
Use	For BOS 25K, BOS 26K, BOS 21M	For BOS 23K, BOS 25K, BOS 26K, BOS R06	For BOS 25K, BOS 26K, BOS 50K, BOS R06
Ordering code	BAM00TK	BAM0225	BAM0226
Part number	BOS 26-HW-1	BAM MB-XO-014-B10-4-RRR	BAM MB-XO-014-B10-4-BRR
Material		Stainless steel	Stainless steel

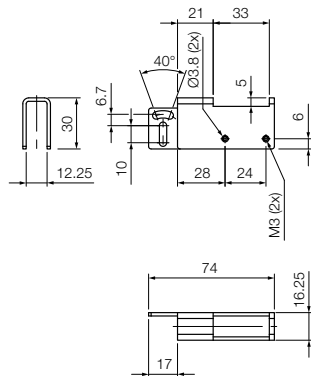


Description	Mounting brackets	Mounting brackets	Mounting brackets
Use	For BOS 63M, BOS 63M	For reflectors BOS R-9 and BOS R-22	For reflectors BOS R-10 and BOS R-25
Ordering code	BAM00P6	BAM00UA	BAM00U8
Part number	BOS 63-HW-1	BOS 5-HW-6	BOS 5-HW-4
Material	Stainless steel		

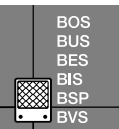
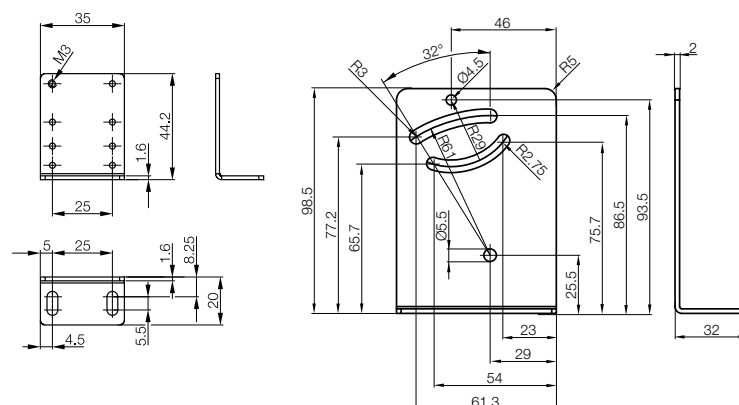




Description	Mounting brackets	Mounting brackets	Mounting brackets
Use	For BOS 23K, BOS 25K, BOS 26K, BUS R06	For BOS 23K, BOS 25K, BOS 26K, BUS R06	For BOS 6K and BOS 21M
Ordering code	BAM0227	BAM0228	BAM00UH
Part number	BAM MB-XO-014-B10-4-BLS	BAM MB-XO-014-B10-4-RLS	BOS 6-HW-1
Material	Stainless steel	Stainless steel	Stainless steel



Description	Mounting brackets	Mounting brackets	
Use	For BOS 50K/23K	For BOS R-26 reflectors	
Ordering code	BAM01E8	BAM00U9	
Part number	BAM MB-X0-005-B04-4	BOS 5-HW-5	
Material	Stainless steel		



Product-specific Accessories

- Photoelectric Sensors
- Reflectors
- Sensors
- Fasteners

**Mounting
Brackets**
Sensor Holder
Holder System
Clamps, Adapter
Plate, Cover
Bracket

Positive Stops and Contact Protector

Ultrasonic Sensors

Uni/Unicompact Sensors

Industrial RFID Systems

Position and Distance

Measurement
Protective End

Caps and Nuts Pressure

Vision Sensors

Photoelectric Sensors

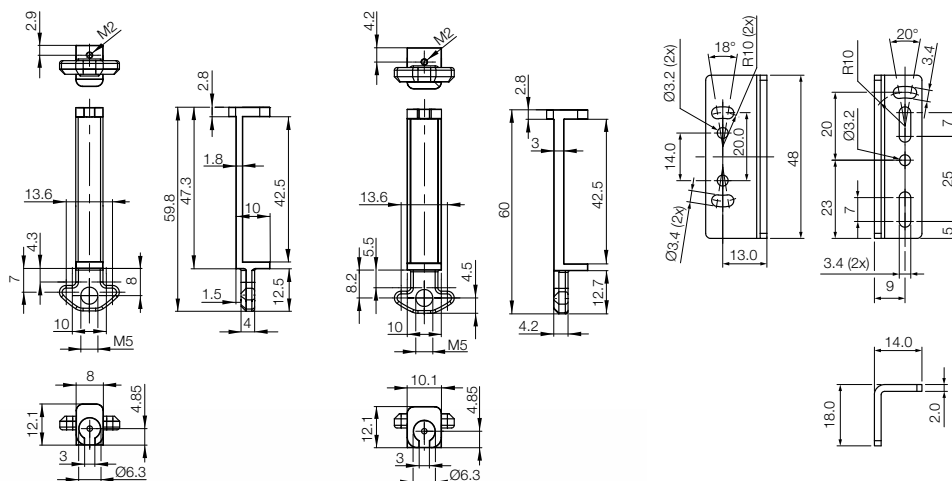
Sensor holder for Q08, mounting bracket



Description	8x8 mm sensor holder	8x8 mm sensor holder	Mounting brackets
Use	For sensors BOS and BES Q08 in ITEM profiles with 8 mm groove	For sensors BOS and BES Q08 in Bosch profiles with 10 mm groove	For BOS Q08M-...
Ordering code	BAM00NJ	BAM01AU	BAM01YW
Part number	BES Q08-KH-2	BES Q08-KH-3	BAM MB-XA-013-Q08-4
Material	CuBe 2	CuBe 2	Stainless steel

Sensor installation could hardly be easier.

Just lay the sensor in the holder and screw it in securely. Afterward, the sensor can be inserted directly from above into the profile groove – in whatever position you would like. The holder accepts all inductive and optical 8x8 cable sensors. These sensors are mainly used in handling and conveyor technology.



Your added bonus

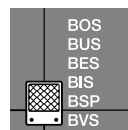
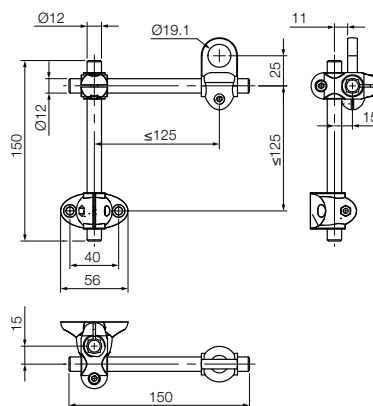
A patented mounting concept ensures flush installation in aluminum profiles.

Photoelectric Sensors

Holder system



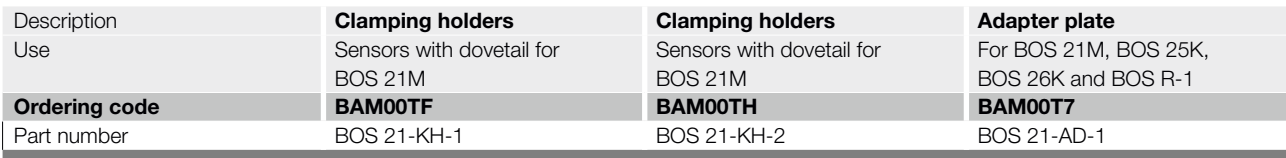
Description	Starter set – plastic	
Use	For flexible mounting; for all cylindrical sensors with M18 external thread. May be combined with other Balluff accessories.	
Ordering code	SET011L	
Part number	BAV BP-PH-00064-01	



Product-specific
Accessories

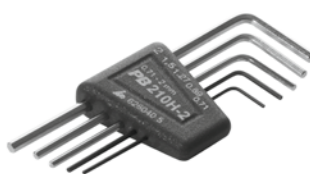
Photoelectric
Sensors
Reflectors
Sensors
Fasteners
Mounting
Brackets
Sensor holder
Holder System
Clamps, Adapter
Plate, Cover
Bracket
Positive Stops
and Contact
Protector
Ultrasonic
Sensors
Uni/Unicompact
Sensors
Industrial RFID
Systems
Position and
Distance
Measurement
Protective End
Caps and Nuts
Pressure
Sensors
Vision Sensors

The mounting rods are knurled full-length.
This prevents any position change.



Photoelectric Sensors

Tools



Description	BMF Hex Key	Hex key set 0.7-2.0
Version	Folding Allen key set, with additional blades, 8-piece	
Use	Tool set for all BMF sensors and BMF mounting brackets as well as for sensors having a potentiometer, e.g. BOS, BCS, BUS, etc.	Tool set for BMF sensors and BMF mounting brackets
Material No.	139868	123264
Material	Blade: chrome vanadium steel, fully hardened, galvanically treated. Grip: ergonomic, fiberglass reinforced housing, 55 mm long.	

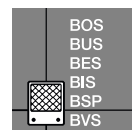
		
		mm
0.7		
0.9		
1.3		
1.5		
2.0		
2.5		
		3.0
	PH00	



0.71
0.89
1.27
1.5
2.0

Application

Practical folding holder for Allen keys to prevent them from getting lost. Especially good for turning very small screws, e.g. tightening down or precise setting of sensors. Tough housing with release button for easily selecting the right blade. Eyelet with matching carabiner hook. Self-service packaging for Euro hole display.



Product-specific Accessories

Photoelectric Sensors
Reflectors
Sensors
Fasteners
Mounting Brackets
Sensor holder
Holder System
Clamps, Adapter Plate, Cover Bracket
Positive Stops and Contact Protector
Ultrasonic Sensors
Uni/Unicompact Sensors
Industrial RFID Systems
Position and Distance Measurement
Protective End Caps and Nuts
Pressure Sensors
Vision Sensors

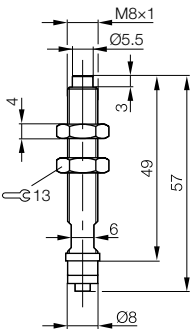
Positive Stops and Contact Protector

Positive stop

Positive stops for sensors with diameters of 4 mm or 8 mm
 A positive stop that is combined with the corresponding mounting cuff can be added to inductive sensors with housing Ø 4 mm or Ø 8 mm.



Description	Positive stop	
Use	For inductive sensors for mechanical protection	
Ordering code	BAM009L	
Part number	BES 08-FA-49	
Ordering code		
Part number		
Temperature resistance	-25...+100 °C	
Spring force	3 N	
Impact force F _{max.} (N)	100	
Spring deflection	2 mm	
Permissible torque	15 Nm	
Material	Stainless steel	

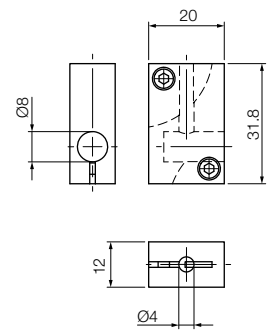
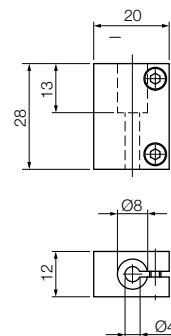
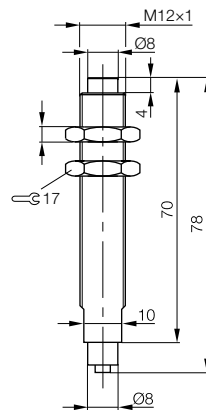
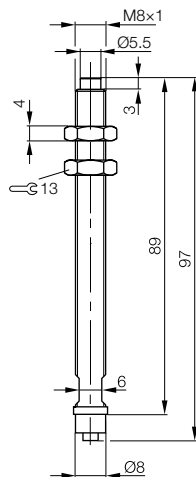


Positive Stops and Contact Protector

Positive stop, mounting cuff for positive stop



	Positive stop	Positive stop	Mounting cuff - straight for positive stop	Mounting cuff - angled for positive stop
	For inductive sensors for mechanical protection	For inductive sensors for mechanical protection	For sensors with Ø 4 mm or Ø 8 mm	For sensors with Ø 4 mm or Ø 8 mm
	BAM009M	BAM00AZ	BAM009N	BAM009P
	BES 08-FA-89	BES 12-FA-70	BES 08-FA-BS-4,0-G	BES 08-FA-BS-4,0-W
			BAM009R	BAM009T
			BES 08-FA-BS-8,0-G	BES 08-FA-BS-8,0-W
	-25...+100 °C	-25...+100 °C	-25...+100 °C	-25...+100 °C
	3 N	4 N		
	100	100		
	2 mm	32 mm		
	15 Nm	25 Nm	15 Nm	15 Nm
	Stainless steel	Stainless steel	Anodized Al	Anodized Al



BOS
BUS
BES
BIS
BSP
BVS

Product-specific
Accessories

Photoelectric
Sensors
Reflectors
Sensors
Fasteners
Positive Stops
and Contact
Protector
Positive stop
Mounting Cuff
for Positive Stop
Contact protector
Tube switch
Ultrasonic
Sensors
Uni/Unicompact
Sensors
Industrial RFID
Systems
Position and
Distance
Measurement
Protective End
Caps and Nuts
Pressure
Sensors
Vision Sensors

Positive Stops and Contact Protector

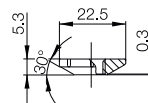
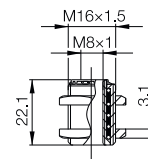
Contact protector

Contact protector for sensors

The contact protector absorbs contacts with displacement of up to 15 mm without the sensor being damaged. The object is incident against an attached protective cap and then pushes the sensor back. Damage to the sensor or coil is thereby prevented.



Description	Contact protector	
Use	For M8 sensors for mechanical protection	
Ordering code	BAM015U	
Part number	BESA-08-CM	
WAF	22	
Ambient temperature	–45...+85 °C	
Material	Anodized Al, POM	

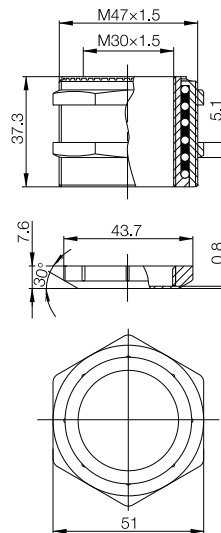
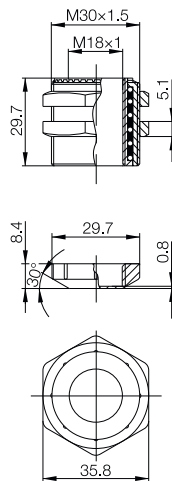
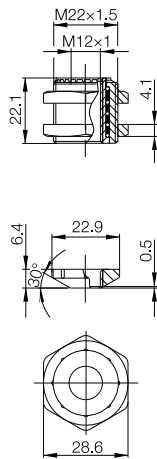


Positive Stops and Contact Protector

Contact protector



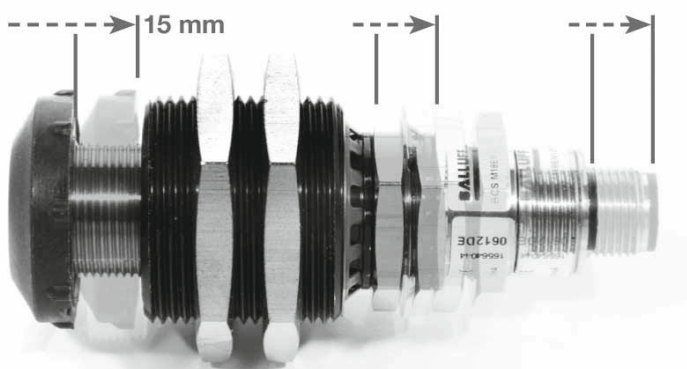
Contact protector	Contact protector	Contact protector	
For M12 sensors for mechanical protection	For M18 sensors for mechanical protection	For M30 sensors for mechanical protection	
BAM015W	BAM015Y	BAM015Z	
BESA-12-CM	BESA-18-CM	BESA-30-CM	
29	35	51	
-45...+85 °C	-45...+85 °C	-45...+85 °C	
Anodized Al, POM	Anodized Al, POM	Anodized Al, POM	



BOS
BUS
BES
BIS
BSP
BVS

Product-specific
Accessories

Photoelectric
Sensors
Reflectors
Sensors
Fasteners
Positive Stops
and Contact
Protector
Positive stop
Mounting Cuff for
Positive Stop
**Contact
protector**
Tube switch
Ultrasonic
Sensors
Uni/Unicompact
Sensors
Industrial RFID
Systems
Position and
Distance
Measurement
Protective End
Caps and Nuts
Pressure
Sensors
Vision Sensors



Positive Stops and Contact Protector

Tube switch

- Mechanical actuation – non-contact switching
- Protects the sensor from mechanical damage
- Plug and safe

Rapid application – high reliability

The set includes a pre-assembled tube switch, which means you only need to bring the sensor into operation. The tube switch also combines the advantages offered by mechanical and inductive switches.

Manufactured from stainless steel, it is extremely robust and very reliable, even under difficult conditions.

Note:

Positive stops are intended for purely axial actuation and always have to be actuated until impact.

Description	
Use	
Ordering code	
Part number	
Spring force F (N)	
Impact force F _{max.} (N)	
Switching operations min. (with F _{max.})	
Housing material	



Positive Stops and Contact Protector

Tube switch



Tube switch

For sensors $\varnothing 4$ mm for mechanical protection

BAM01C0

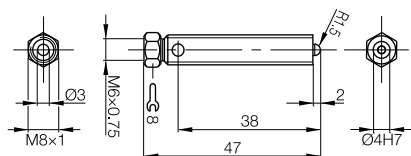
BAM FS-XE-002-D4-4

3

400

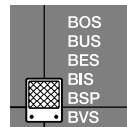
500000

Stainless steel



BAM FS-XE-002-D4-4 can be used with the following sensors:

Part number	PNP	NPN	Connection type
BES G04ED-PSC15B-S26G	■		Connectors
BES 516-3007-G-E4-C-S4-00,2	■		0.2 m PUR cable with connector
BES 516-3017-G-E4-C-S4-00,2	■		0.2 m PUR cable with connector
BES 516-3007-G-E4-C-S49-00,3	■		0.2 m/0.3 m PUR cable with connector
BES 516-3017-G-E4-C-S49-00,3	■		0.2 m PUR cable with connector
BES 516-3007-G-E4-C-S26-00,2	■		0.2 m PUR cable with connector
BES 516-3007-G-E4-C-PU-02	■		0.2 m PUR cable
BES 516-3017-G-E4-C-PU-02	■		0.2 m PUR cable
BES 516-3008-G-E4-C-S49-0,02		■	0.2 m/0.3 m PUR cable with connector
BES 516-3008-G-E4-C-PU-02		■	0.2 m PUR cable
BES 516-3018-G-E4-C-PU-02		■	0.2 m PUR cable



Product-specific
Accessories

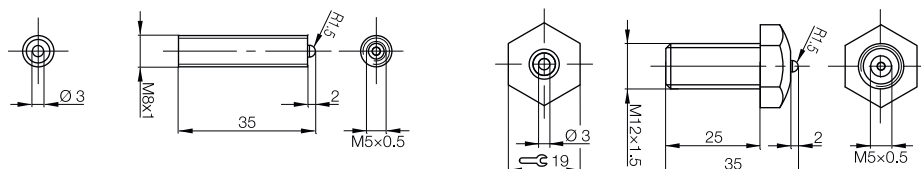
Photoelectric
Sensors
Reflectors
Sensors
Fasteners
Positive Stops
and Contact
Protector
Positive stop
Mounting Cuff for
Positive Stop
Contact protector
Tube switch
Ultrasonic
Sensors
Uni/Unicompact
Sensors
Industrial RFID
Systems
Position and
Distance
Measurement
Protective End
Caps and Nuts
Pressure
Sensors
Vision Sensors

Positive Stops and Contact Protector

Tube switch



Description	Tube switch	Tube switch	
Use	For M5 sensors for mechanical protection	For M5 sensors for mechanical protection	
Ordering code	BAM01AZ	BAM019Y	
Part number	BAM FS-XE-001-M5-4	BAM FS-XE-003-M5-4	
Spring force F (N)	3	3	
Impact force F_{max} (N)	400	400	
Switching operations min. (with F_{max})	500000	500000	
Housing material	Stainless steel	Stainless steel	



BAM FS-XE-003-M5-4 and BAM FS-XE-001-M5-4
can be used with the following sensors:

Part number	PNP	NPN	Connection type
BES 516-3005-G-E5-C-S49	■		Connectors
BES 516-3022-G-E5-C-S49	■		Connectors
BES M05ED-PSC15B-S26G	■		Connectors
BES 516-3005-G-E4-C-S4-00,2	■		0.2 m PUR cable with connector
BES 516-3005-G-E4-C-S49-00,3	■		0.3 m PUR cable with connector
BES 516-3022-G-E4-C-S49-00,3	■		0.3 m PUR cable with connector
BES 516-3005-G-E4-C-S26-00,3	■		0.3 m PUR cable with connector
BES 516-3005-G-E4-C-PU-02	■		2 m PUR cable
BES 516-3022-G-E4-C-PU-02	■		2 m PUR cable
BES 516-3006-G-E5-C-S49		■	Connectors
BES 516-3023-G-E5-C-S49		■	Connectors
BES 516-3006-G-E4-C-PU-02		■	2 m PUR cable
BES 516-3023-G-E4-C-PU-02		■	2 m PUR cable

Positive Stops and Contact Protector

Tube switch



Tube switch

For **M8** sensors for mechanical protection

BAM019W

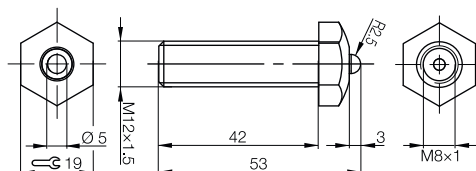
BAM FS-XE-004-M8-4

4

400

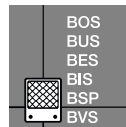
500000

Stainless steel



BAM FS-XE-004-M8-4 can be used with the following sensors:

Part number	PNP	NPN	Connection type
BES 516-324-E3-C-S4-00,3	■		0.3 m PUR cable with connector
BES 516-324-E3-C-S49-00,3	■		0.3 m PUR cable with connector
BES 516-324-EO-C-02	■		2 m PVC cable
BES 516-324-EO-C-S49-00,2	■		0.2 m PUR cable with connector
BES 516-324-S49-C	■		Connectors
BES 516-324-SA33	■		Connectors
BES 516-377-E3-C-S4-PU-00,3	■		0.3 m PUR cable with connector
BES 516-377-EO-C-02	■		2 m PVC cable
BES 516-377-EO-C-S49-00,2	■		0.2 m PUR cable with connector
BES 516-377-S49-C	■		Connectors
BES G08EG-PSC15B-BV02	■		2 m PVC cable
BES M08EF-POC15B-BP02	■		2 m PUR cable
BES M08EF-PSC15B-BP02	■		2 m PUR cable
BES M08EH-POC15B-S04G	■		Connectors
BES M08EH-PSC15B-S04G	■		Connectors
BES M08MH1-POC15B-S04G	■		Connectors
BES M08MH1-PSC15B-S04G	■		Connectors
BES M08MI-POC15B-BV02	■		2 m PVC cable
BES M08MI-PSC15B-BV02	■		2 m PVC cable
BES M08MI-PSC15B-S49G	■		Connectors
BES M08MH1-NSC15B-S04G		■	Connectors
BES M08MH1-NOC15B-S04G		■	Connectors
BES M08MI-NSC15B-S49G		■	Connectors
BES M08EH-NSC15B-S04G		■	Connectors
BES M08EH-NOC15B-S04G		■	Connectors
BES 516-343-S49-C		■	Connectors
BES 516-378-S49-C		■	Connectors
BES M08MI-NSC15B-BV02		■	2 m PVC cable
BES 516-343-EO-C-02		■	2 m PVC cable
BES 516-378-EO-C-02		■	2 m PVC cable



Product-specific
Accessories

Photoelectric
Sensors

Reflectors

Sensors

Fasteners

Positive Stops

and Contact

Protector

Positive stop

Mounting Cuff for

Positive Stop

Contact protector

Tube switch

Ultrasonic

Sensors

Uni/Unicompact

Sensors

Industrial RFID

Systems

Position and

Distance

Measurement

Protective End

Caps and Nuts

Pressure

Sensors

Vision Sensors

Ultrasonic Sensors

Sound deflection angle

Description	
Use	
Ordering code	
Part number	
Material	



Ultrasonic Sensors

Sound deflection angle



Sound deflection angle

For BUS M18

BAM01EP

BAM BD-US-001-D20-4

Stainless steel

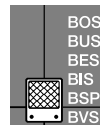
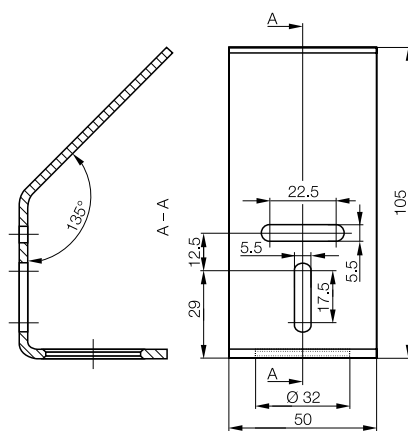
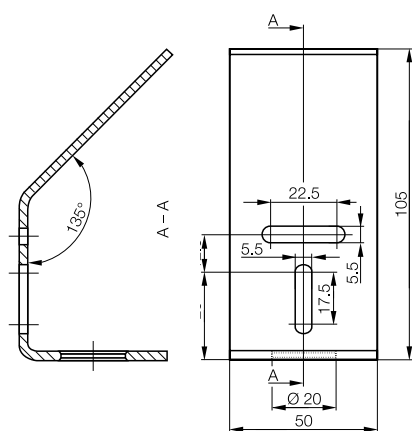
Sound deflection angle

For BUS M30

BAM01ER

BAM BD-US-001-D32-4

Stainless steel



Product-specific Accessories

Photoelectric Sensors

Reflectors

Sensors

Fasteners

Positive Stops and Contact

Protector

Ultrasonic Sensors

Sound Deflection Bracket

Focusing Attachments

Programming Device

Uni/Unicompact Sensors

Industrial RFID Systems

Position and Distance Measurement

Protective End Caps and Nuts

Pressure Sensors

Vision Sensors

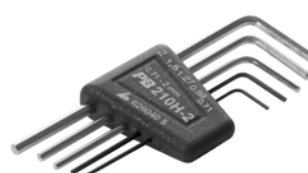
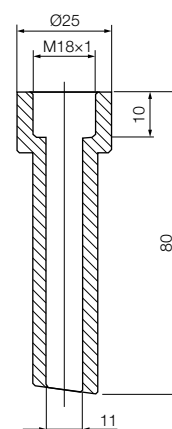
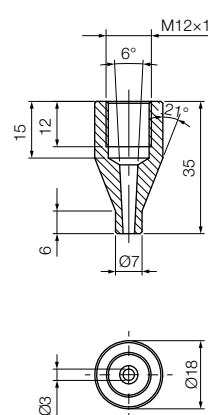
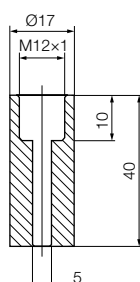


Ultrasonic Sensors

Focusing attachments, tool



Description	Focusing attachments M12 → 5 mm	Focusing attachments M12 → 7 mm	Focusing attachments M18 → 11 mm
Ordering code	BAM01ET	BAM01JR	BAM01HJ
Part number	BAM AP-US-001-M12-O	BAM AP-US-003-M12-O	BAM AP-US-002-M18-O
Material	POM	POM	POM



Description	BMF Hex Key	Hex key set 0.7-2.0
Version	Folding Allen key set, with additional blades, 8-piece	
Use	Tool set for all BMF sensors and BMF mounting brackets as well as for sensors having a potentiometer, e.g. BOS, BCS, BUS, etc.	Tool set for BMF sensors and BMF mounting brackets
Material No.	139868	123264
Material	Blade: chrome vanadium steel, fully hardened, galvanically treated. Grip: ergonomic, fiberglass reinforced housing, 55 mm long.	

0.7		
0.9		
1.3		
1.5		
2.0		
2.5		
		3.0
	PH00	

Application

Practical folding holder for Allen keys to prevent them from getting lost. Especially good for turning very small screws, e.g. tightening down or precise setting of sensors. Tough housing with release button for easily selecting the right blade. Eyelet with matching carabiner hook. Self-service packaging for Euro hole display.

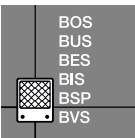
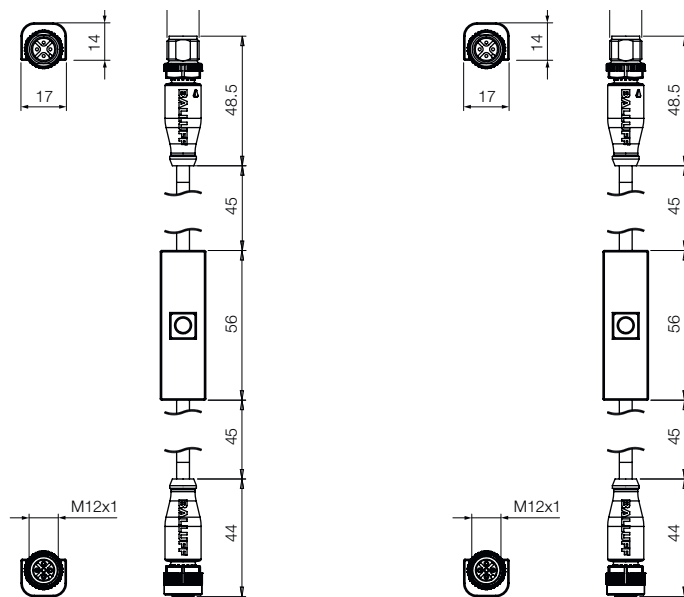
0.71
0.89
1.27
1.5
2.0

Ultrasonic Sensors

Programming device



Description	Teach adapter	Teach adapter
Use	For BUS M12E0-...-020-S04G	For BUS Q80K0-...-600-S92K
Ordering code	BAE00E5	BAE00E6
Part number	BAE PD-US-004-S04	BAE PD-US-004-S92
Teach-in	PIN2 to 0 V	PIN5 to 0 V



Product-specific
Accessories

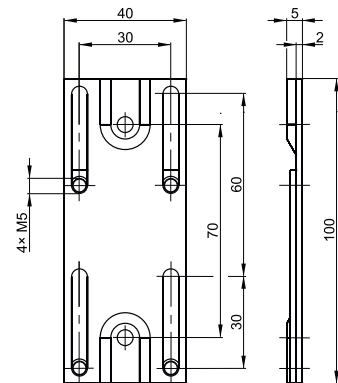
Photoelectric
Sensors
Reflectors
Sensors
Fasteners
Positive Stops
and Contact
Protector
Ultrasonic
Sensors
Sound Deflection
Bracket
**Focusing
Attachments
Programming
Device**
Uni/Unicompat
Sensors
Industrial RFID
Systems
Position and
Distance
Measurement
Protective End
Caps and Nuts
Pressure
Sensors
Vision Sensors

Uni/Unicompact Sensors

Mounting plate



Description	Mounting plate – Unisensor and Unicompact
Use	For Unisensor and Unicompact sensors (40×40 mm)
Ordering code	BAMU1TM
Part number	Mounting plate B 4 - 2057
Material	Anodized aluminum



Wired Unisensors attached to this mounting plate can be displaced up to 30 mm. Loosening the sensor mounting screws (M5×25; included in scope of delivery) allows the sensor to be easily repositioned to the desired location. Tighten screws!



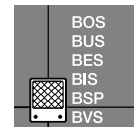
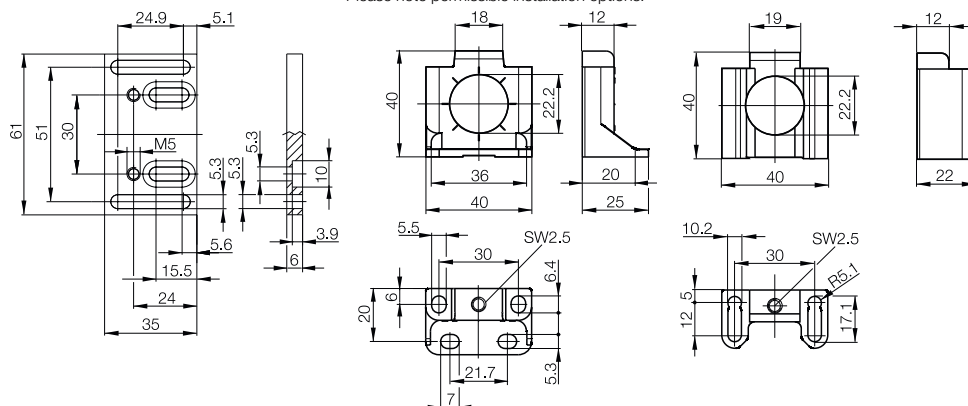
Unicompact Sensors

Mounting aids



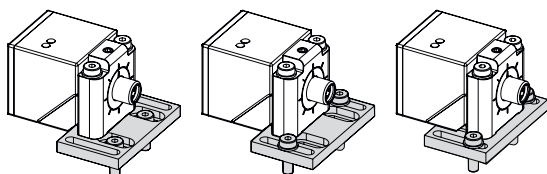
Description	Unicompact mounting bracket	Unicompact mounting base	Unicompact mounting base
Use	For Unicompact sensors BES Q40KFU-... (40x40 mm)	For Unicompact sensors BES Q40KFU-... (40x40 mm)	For Unicompact sensors BES Q40KFU-... (40x40 mm)
Ordering code	BAM00JW	BAM00JY	BAM00JZ
Part number	BES Q40-HW-1	BES Q40-HW-2	BES Q40-HW-3
Material	Anodized aluminum	GD-Zn	Anodized aluminum

Please note permissible installation options!



Product-specific
Accessories

3 different mounting options



Photoelectric
Sensors
Reflectors
Sensors
Fasteners
Positive Stops
and Contact
Protector
Ultrasonic
Sensors
Uni/Unicompact
Sensors
Mounting plate
Mounting Aids
Holder System
Weld Protection,
Protective Cover
Industrial RFID
Systems
Position and
Distance
Measurement
Protective End
Caps and Nuts
Pressure
Sensors
Vision Sensors

Unicomact Sensors

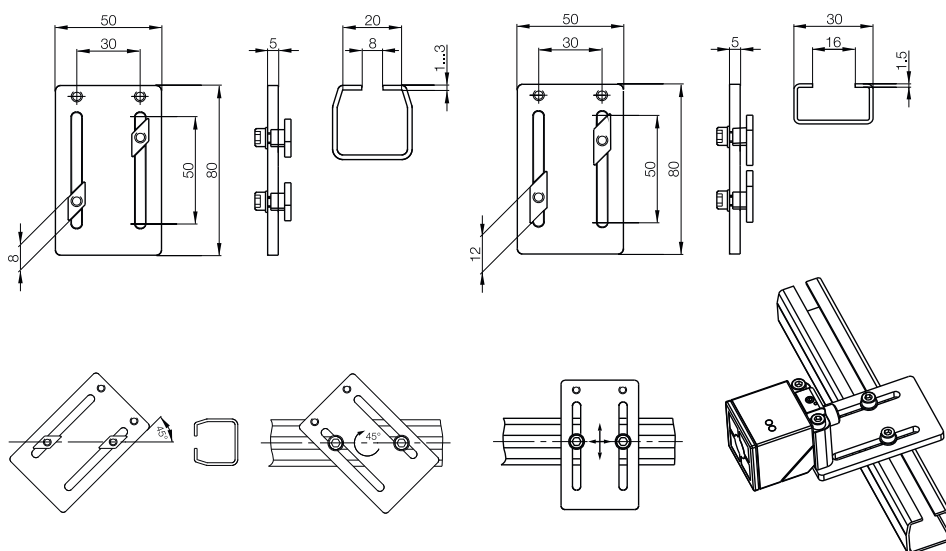
Holder system



Description	Unicomact holder system	Unicomact holder system
Use	Unicomact sensors for fastening to profile rails (groove width: 8 mm)	Unicomact sensors for fastening to profile rails (groove width: 16 mm)
Ordering code	BAM00JU	BAM00JT
Part number	BES HS-01-P1-C8/Q40	BES HS-01-P1-C16/Q40
Material	Anodized aluminum, brass	Anodized aluminum, brass

The mounting set consists of:

- 1 mounting plate
- 2 slot nuts
- 2 socket head cap screws M5×10 DIN 912
- 2 washers Ø 5.3, DIN 533
- 2 socket head cap screws M5×40, ISO 4762

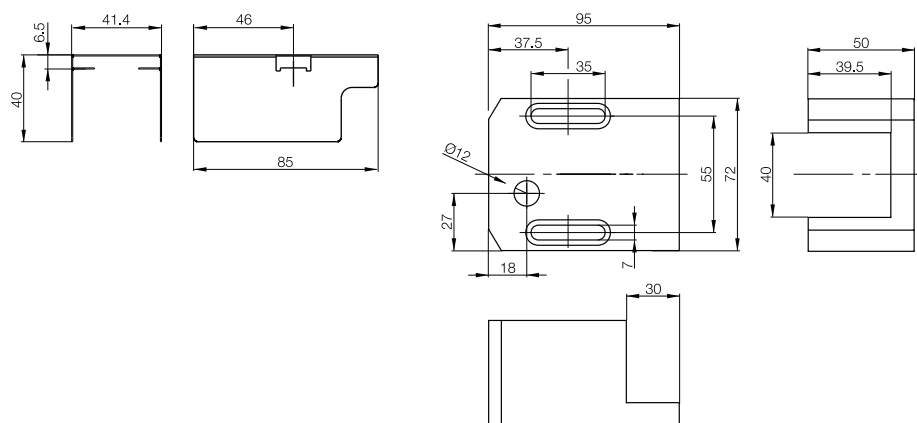


Unicompact Sensors

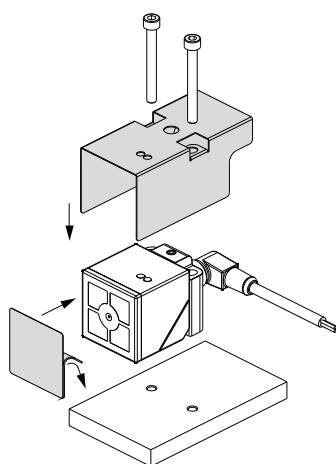
Weld protection, protective cover



Description	Weld protection - Unicompact	Protective cover - Unicompact
Use	For magnetic field immune Unicompact sensors BES Q40KFU-... (40x40 mm)	For Unicompact sensors BES Q40KFU-... (40x40 mm)
Ordering code	BAM00K0	BAM00K1
Part number	BES Q40-SH-1	BES Q40-SH-2
Material	Anodized aluminum	PA 6



The weld protection consists of a protective cover and a self-adhering PTFE film for protecting the sensing surface. If the sensor head is replaced, the welding protection must not be removed.



BOS
BUS
BES
BIS
BSP
BVS

Product-specific
Accessories

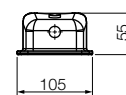
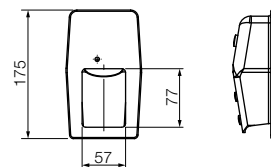
Photoelectric
Sensors
Reflectors
Sensors
Fasteners
Positive Stops
and Contact
Protector
Ultrasonic
Sensors
Uni/Unicompact
Sensors
Mounting plate
Mounting Aids
Holder System
**Weld Protection,
Protective Cover**
Industrial RFID
Systems
Position and
Distance
Measurement
Protective End
Caps and Nuts
Pressure
Sensors
Vision Sensors

Industrial RFID Systems

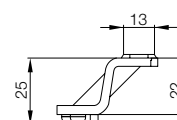
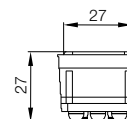
Protective cover, mounting bracket



Description	Protective cover	
Use	For BIS C-870, BIS L-870, BIS M-870	
Ordering code	BAM021R	
Part number	BAM PC-XA-016-001-A	
Material	Cordura, black	



Description	Mounting brackets	
Use	For data carrier BIS U-102	
Ordering code	BAM01YK	
Part number	BIS Z-HW-005	



Included for mounting are:

- 2 Mounting brackets
- 4 socket head cap screws
- 4 Nuts

Industrial RFID Systems

Mounting plate, mounting set



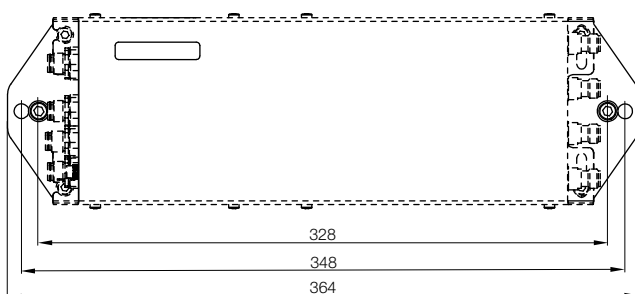
Mounting plate

For processor units BIS U

BAM01KN

BIS Z-HW-004

Anodized aluminum



For mounting on profile rail,
steel screw connection.

Included for mounting are:

- 2 BIS Z-HW-004 retaining plates
- 4 hexagon socket head cap screws M5×10 DIN 912, A2, 8.8
- 2 hexagon socket head cap screws M6×12 DIN 912, A2, 8.8
- 4 washers 5 DIN 125, A2
- 2 washers 6 DIN 125, A2

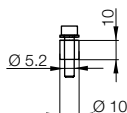


Mounting set

For data carrier BIS U-100

BAM01LW

BIS Z-SP-003



The mounting set consists of:

- 2 plastic distance rollers
- 2 hexagon socket head cap screws, ISO4762-M 5X22-8,8-A2B
- 2 washers D 125-A 5,3-ST-A2P

BOS
BUS
BES
BIS
BSP
BVS

Product-specific
Accessories

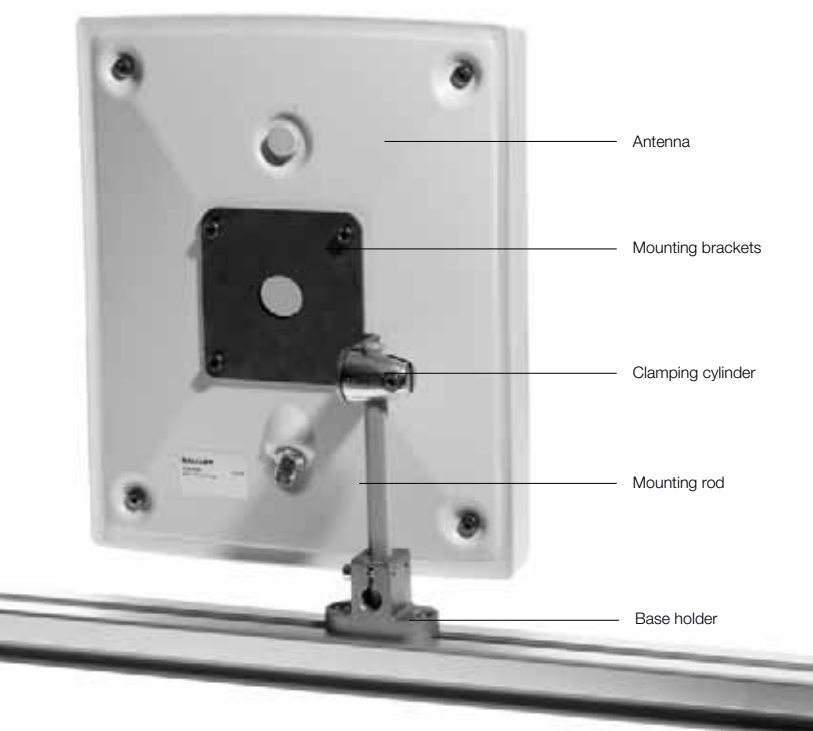
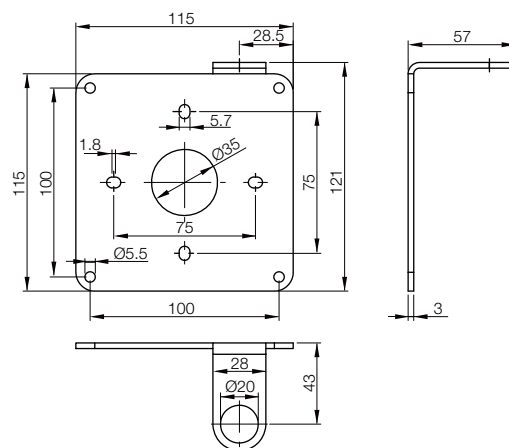
Photoelectric
Sensors
Reflectors
Sensors
Fasteners
Positive Stops
and Contact
Protector
Ultrasonic
Sensors
Uni/Unicomact
Sensors
Industrial RFID
Systems
Protective
Cover
Mounting
brackets
Mounting plate
Mounting Set
Antenna holder
Mounting
Brackets, Shield
Mounting Set
Connection Cable,
Handle
Position and
Distance
Measurement
Protective End
Caps and Nuts
Pressure
Sensors
Vision Sensors

Industrial RFID Systems

Antenna holder



Description	Antenna holder	
Use	For BIS U-301... and BIS U-302...	
Ordering code	BAM01JK	
Part number	BIS Z-HW-003	
Material	Stainless steel	

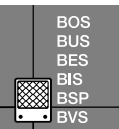
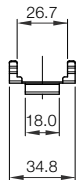
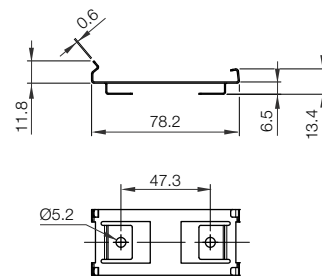
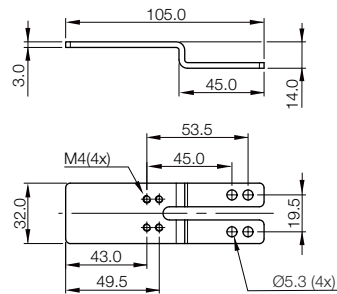


Industrial RFID Systems

Mounting brackets, shield



Description	Mounting brackets	Mounting brackets
Use	For mounting read/write heads on BOSCH pallet conveyor system TS1 and TS2	For BIS VM read/write head (included for BIS VM-3_ _)
Ordering code	BAM01MY	BAM01Y3
Part number	BAM MB-XA-010-B07-4	BAM MC-XA-018-B04-4
Material	Stainless steel	Stainless steel

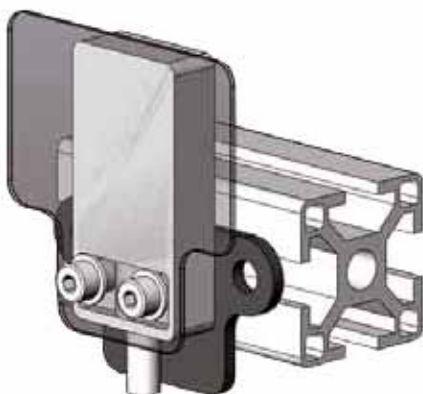
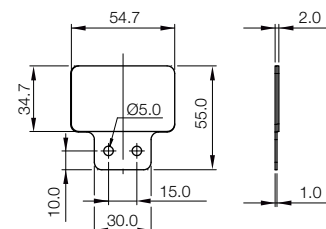
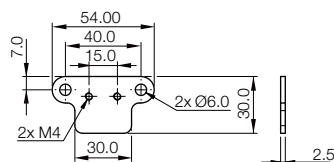


Product-specific Accessories

Photoelectric Sensors
Reflectors
Sensors
Fasteners
Positive Stops and Contact Protector
Ultrasonic Sensors
Uni/Unicompact Sensors
Industrial RFID Systems
Protective Cover
Mounting brackets
Mounting plate
Mounting Set
Antenna holder
Mounting Brackets, Shield
Mounting Set
Connection Cable, Handle
Position and Distance Measurement
Protective End Caps and Nuts
Pressure Sensors
Vision sensors



Description	Mounting brackets	Protective cover
Use	For mounting read/write heads on FlexLink Puck conveyor system	For mounting read/write heads on FlexLink Puck conveyor system for BIS004Y
Ordering code	BAM01UH	BAM01Y8
Part number	BAM MB-XA-012-B09-4	BAM PC-AM-010-4
Material	Stainless steel	Stainless steel



Industrial RFID Systems

Mounting set

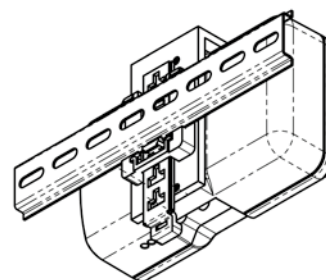
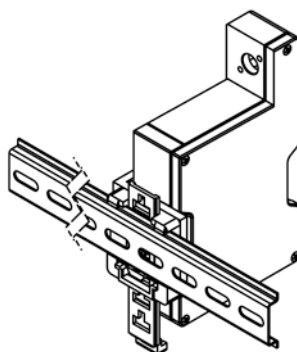


Description	Mounting set for mounting rails
Use	For processor units BIS C/L/M/S-600_
Ordering code	BAM012L
Part number	BIS Z-HW-001
Material	Anodized aluminum and PA 6

For easy adjustment and attachment to profile rails

The following are added to the mounting set BIS Z-HW-001:

- 1 Mounting brackets
- 1 mounting rail holder
- 4 hexagon socket head cap screws, corresponding to DIN 912 (M4×16)
- 2 slotted socket head cap screws, corresponding to DIN 84 (M3×8)



Industrial RFID Systems

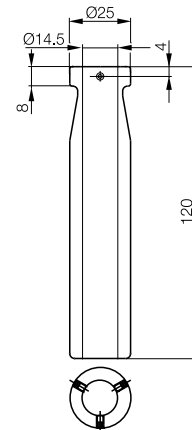
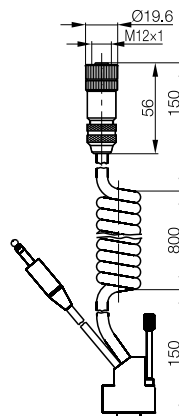
Connection cable, handle



Description	Connection cables	Handle
Use	Connection cable for BIS M-4__ systems with coupling for BIS C-703-A power supply and RS232 interface	For read/write head BIS C-300-__
Ordering code	BCC00T2	BAM012A
Part number	BIS Z-AK-001-PU1-03	BIS C-300-HG1
Degree of protection as per IEC 60529	IP 40 (only when screwed together)	
Ambient temperature T _a	0...+70 °C	0...+70 °C
Storage temperature		-20...+85 °C
Material		POM

Power supply

Ordering code	BAE0049
Part number	BIS C-703-A



Description	Ergonomic handle	
Use	For read/write heads or read/write heads with integrated processor unit	
For M18	Ordering code	BAM012J
	Part number	BIS Z-HG-002
For M30	Ordering code	BAM012K
	Part number	BIS Z-HG-003

BOS
BUS
BES
BIS
BSP
BVS

Product-specific
Accessories

Photoelectric
Sensors
Reflectors
Sensors
Fasteners
Positive Stops
and Contact
Protector
Ultrasonic
Sensors
Uni/Unicompact
Sensors
Industrial RFID
Systems
Protective
Cover
Mounting
brackets
Mounting plate
Mounting set
Antenna holder
Mounting
Brackets, Shield
Mounting Set
**Connection
Cable, Handle**
Position and
Distance
Measurement
Protective End
Caps and Nuts
Pressure
Sensors
Vision Sensors

Position and Distance Measurement

Sensor guide, mounting aid, cover strip

The sensor guide consists of an aluminum rail that retains the magnetic tape and a carriage with runners that guides the sensor head accurately. A standard joint rod is used for the mechanical connection.

Features

- Customized lengths
- Easily attached by directly screwing on or using mounting elements
- Rails can be mounted side by side and elements disassembled
- Connection of drag chains possible
- Flat design, minimal space requirements
- Low costs
- Runners need no lubrication, thus no maintenance costs
- Minimum stock-keeping, since the universal concept works for various sensor heads
- Mounting aid for easy installation of the magnetic tape

You may cover the magnetic tape with a stainless steel cover strip to protect it from damage caused by swarf or chemicals. Note that the permissible air gap between the sensor head and tape is reduced by the thickness of the cover strip with adhesive film (0.15 mm).

- The cover strip and magnetic tape can be ordered together in appropriate lengths.
- Cover strip by the roll can be ordered in 4 defined lengths.

Sensor guide

Ordering code

Part number

Features



Accessories

Joint rod
for BML-C01, BML-C02
e.g. **BAM000P** (100 mm)

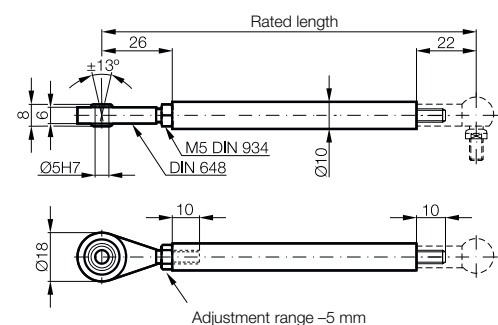
Ordering code

Part number

BTL2-GS10-___-A

Use

For connecting the sliding carriage to the machine



Position and Distance Measurement

Sensor guide, mounting aid, cover strip



Guide rail
for sliding carriage BML-C01, BML-C02
e.g. **BAM01N4** (3 m)
BML-R01-M_ _ _

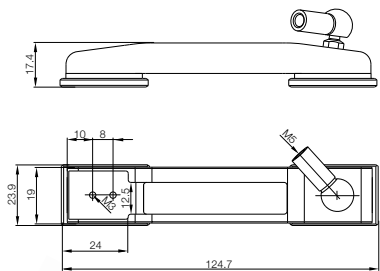
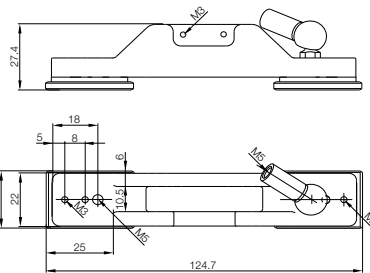
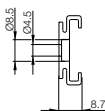
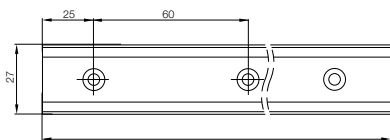
Sliding carriage
for sensors BML-S2B, BML-S2E, BML-S1C
BAM01MF
BML-C01

Sliding carriage
for sensors BML-S1F
BAM01MH
BML-C02

- Anodized aluminum
- Mounting holes
- Lateral groove for alternate mounting using brackets
- stackable
- Maintenance-free dry operation
- Lubricant-free
- Suitable for all linear tapes

- Aluminum
- Fully mounted with runners
- Connection for joint rod
- Connection for drag chains
- Maintenance-free dry operation
- Lubricant-free

- Aluminum
- Fully mounted with runners
- Connection for joint rod
- Connection for drag chains
- Maintenance-free dry operation
- Lubricant-free



BOS
BUS
BES
BIS
BSP
BVS

Product-specific
Accessories

Photoelectric
Sensors
Reflectors
Sensors
Fasteners
Positive Stops
and Contact
Protector
Ultrasonic
Sensors
Uni/Unicompact
Sensors
Industrial RFID
Systems
Position and
Distance
Measurement
**Sensor Guide,
Mounting Aid,
Cover Strip**
Protective End
Caps and Nuts
Pressure
Sensors
Vision Sensors



Mounting aid

Brackets (2 pieces)
for BML-R01

Cover strip from the roll
for BML-M02, BML-M03

BAM01L9

BAM01JL

e.g. **BML001K** (10 m)

BML-Z0010

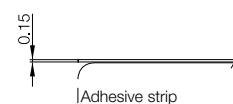
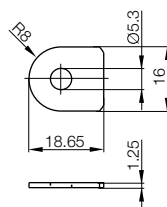
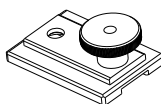
BML-Z0008

BML-A013-T_ _ _ _

Installing the magnetic tape on BML-R01

For lateral mounting of the rail and at transition points

0500	1000	2400	4800
5 m	10 m	24 m	48 m



Protective End Caps and Nuts

Protective end caps

These protective end caps are screwed onto sensors. They are made of POM and are used when there is increased mechanical stress.

The protective end caps are also used to protect the sensing surface from weld spatter. They can also be used at high temperatures and are particularly resistant against chemical influences.

Material	POM	PTFE
Ambient temperature T _a	-20...+90 °C	-20...+100 °C

Please note!

The rated switching distance of the sensors is reduced by the wall thickness of the cap when the protective end cap is installed.

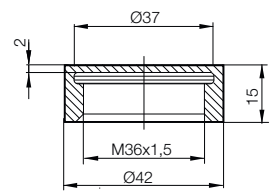
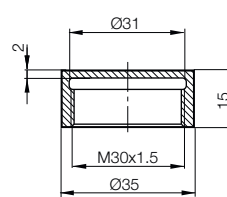
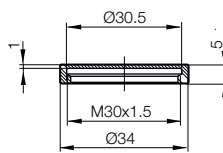
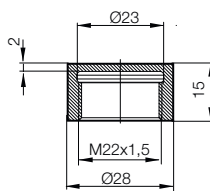
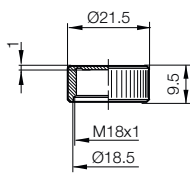
Description	
Use	
Ordering code	
Part number	
Reduction of the rated switching distance	
Material	

Description	
Use	
Ordering code	
Part number	
Material	

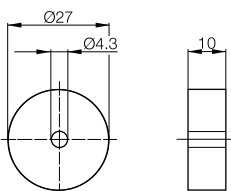
Protective End Caps and Nuts

Protective end caps, spacer

				
Protective end cap For M18 sensors	Protective end cap For M22 sensors	Protective end cap For M30 sensors	Protective end cap For M30 sensors	Protective end cap For M36 sensors
BAM00F0	BAM00H8	BAM00HJ	BAM00HK	BAM00JL
BES 18-SM-2	BES 22-SM-2	BES 30-SM-1	BES 30-SM-2	BES 36-SM-2
1 mm	2 mm	1 mm	2 mm	2 mm
POM	PTFE	POM	POM	POM



Spacer For data carriers when mounting on metal
BAM018M
BIS Z-SP-001
POM



BOS
 BUS
 BES
 BIS
 BSP
 BVS

Product-specific
Accessories

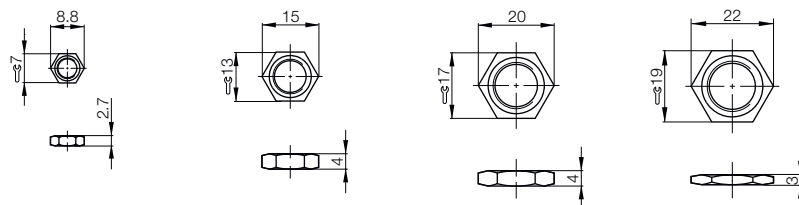
Photoelectric
Sensors
 Reflectors
 Sensors
 Fasteners
 Positive Stops
and Contact
Protector
 Ultrasonic
Sensors
 Uni/Unicompact
Sensors
 Industrial RFID
Systems
 Position and
Distance
Measurement
 Protective End
Caps and Nuts
**Protective end
caps**
Spacer
 Nuts
 Sealing nuts
 Pressure
Sensors
 Vision Sensors

Protective End Caps and Nuts

Nuts, sealing nuts



Description		M5×1 nut	M8×1 nut	M12×1 nut	M16×1 nut	
Steel galvanized	Ordering code		BAM01WR			
	Part number		BAM MC-XA-021-M8-3			
Nickel-plated brass	Ordering code			BAM01W3	BAM01W6	
	Part number			BAM MC-XA-021-M12-2	BAM MC-XA-021-M16-2	
Plastic	Ordering code					
	Part number					
Stainless steel	Ordering code	BAM01WF		BAM01WH		
	Part number	BAM MC-XA-021-M5-4		BAM MC-XA-021-M12-4		

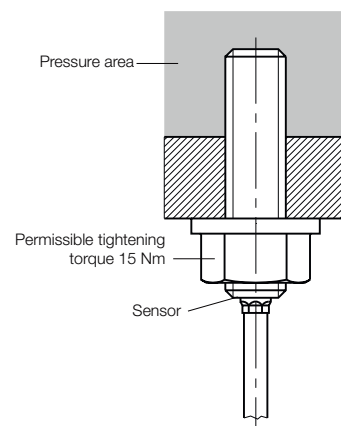
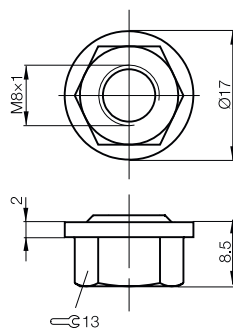


Description	Sealing nuts
Use	For pressure-resistant M8 sensors up to max. 100 bar
Ordering code	BAM009K
Part number	BES 08-DM-1
Material	Steel, PA

This is used to seal pressure-resistant sensors.

Please note!

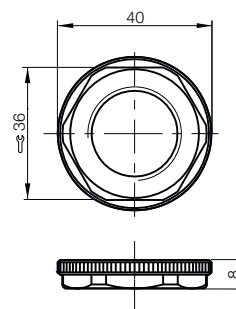
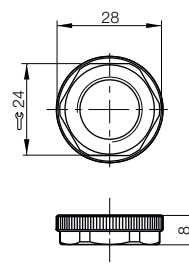
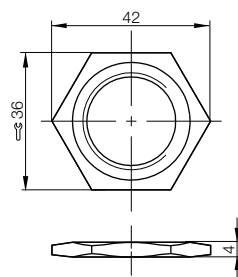
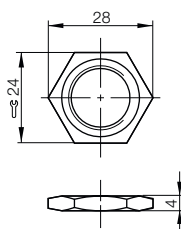
Can be removed and tightened again up to five times.



Protective End Caps and Nuts

Nuts

			
M18×1 nut	M30×1.5 nut	M18×1 nut	M30×1.5 nut
BAM01W4 BAM MC-XA-021-M18-2	BAM01W5 BAM MC-XA-021-M30-2		
		BAM01WL BAM MC-XA-021-M18-A	BAM01WM BAM MC-XA-021-M30-A
BAM01WJ BAM MC-XA-021-M18-4	BAM01WK BAM MC-XA-021-M30-4		



Galvanized toothed lock washer for M5 sensors: **Ordering code 710256**
 Galvanized toothed lock washer for M8 sensors: **Ordering code 500558**
 Galvanized toothed lock washer for M12 sensors: **Ordering code 500552**
 Galvanized toothed lock washer for M18 sensors: **Ordering code 117684**

BOS
BUS
BES
BIS
BSP
BVS

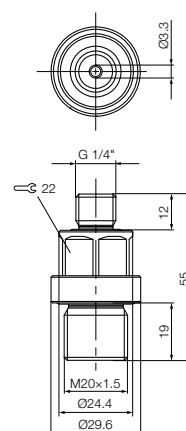
Product-specific
Accessories

Photoelectric
Sensors
Reflectors
Sensors
Fasteners
Positive Stops
and Contact
Protector
Ultrasonic
Sensors
Uni/Unicompact
Sensors
Industrial RFID
Systems
Position and
Distance
Measurement
Protective End
Caps and Nuts
Protective end
caps
Spacer
Nuts
Sealing nuts
Pressure
Sensors
Vision Sensors

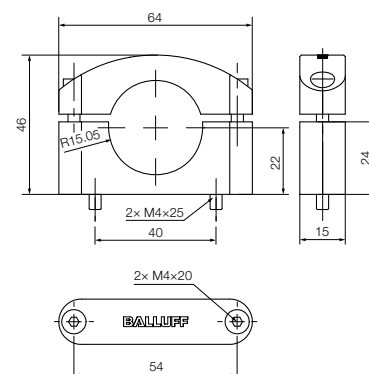
Pressure Sensors Adapters



Description	Adapter pressure sensors	
Use	BSP ...-E... with G1/4"	
Process connection	M20x1.5	
Ordering code	BAM0209	
Part number	BAM AD-SP-008-1G4/M20X1,5-4	
Material	Stainless steel	



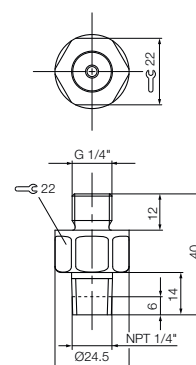
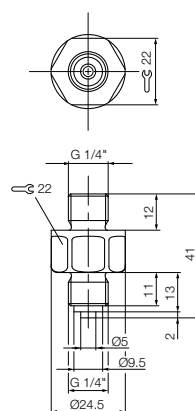
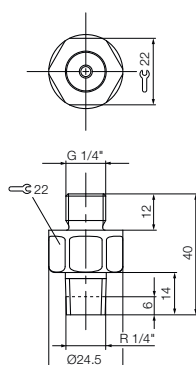
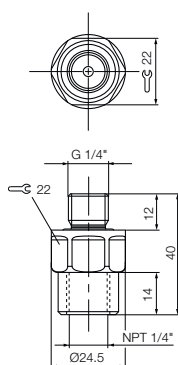
Description	Mounting cuff	
Use	For sensors Ø 30 mm, M30 and pressure sensors	
Ordering code	BAM01U0	
Part number	BAM MC-XA-017-D30,0-1	
Material	Anodized aluminum	



Pressure Sensors Adapters



Adapter AD-XA	Adapter AD-XA	Adapter AD-XA	Adapter AD-XA
BSP ...-E... with G1/4"	BSP ...-E... with G1/4"	BSP ...-E... with G1/4"	BSP ...-E... with G1/4"
1/4" NPT	R 1/4"	G 1/4"	NPT 1/4"
BAM01TR	BAM01RP	BAM01KR	BAM01KT
BAM AD-SP-011-1G4/1N4-4	BAM AD-SP-008-1G4/1R4-4	BAM AD-SP-008-1G4/1G4-4-EN837	BAM AD-SP-008-1G4/1N4-4
Stainless steel	Stainless steel	Stainless steel	Stainless steel



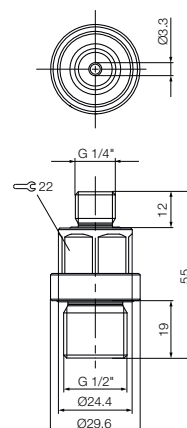
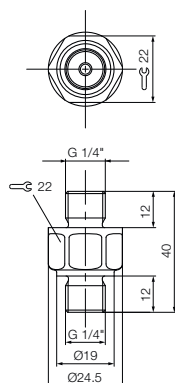
BOS
BUS
BES
BIS
BSP
BVS

Product-specific
Accessories

Photoelectric
Sensors
Reflectors
Sensors
Fasteners
Positive Stops
and Contact
Protector
Ultrasonic
Sensors
Uni/Unicompact
Sensors
Industrial RFID
Systems
Position and
Distance
Measurement
Protective End
Caps and Nuts
Pressure
Sensors
Adapters
Vision Sensors



Description	Adapter AD-XA	Adapter AD-XA	
Use	BSP ...-E... with G1/4"	BSP ...-E... with G1/4"	
Process connection	G 1/4"	G 1/2"	
Ordering code	BAM01KP	BAM01UJ	
Part number	BAM AD-SP-008-1G4/1G4-4	BAM AD-SP-008-1G4/1G2-4	
Material	Stainless steel	Stainless steel	





Description	
Version	
Use	
Ordering code	
Part number	
Material	

Mounting is part of optimal integration of the BVS vision sensor. The variety of different mounting options allows you to integrate your BVS ideally into your equipment. Balluff accessories are perfectly matched to our sensors.

With flexible Balluff accessories, you can position the BVS quickly without elaborate preparatory work or time-consuming planning, even if space is limited. Through optimum adaptation, you save material and time.



Vision Sensors

Mounting brackets



Mounting brackets

For clamping cylinder or
for mounting on base plate
For BVS vision sensor

BAM00WN

BVS Z-MB-01

Stainless steel

Mounting brackets

For clamping cylinder or
for mounting on base plate
For BVS vision sensor and
BAE ring lights

BAM01AC

BAM MB-XA-003-B03-1

Anodized aluminum

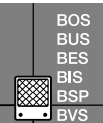
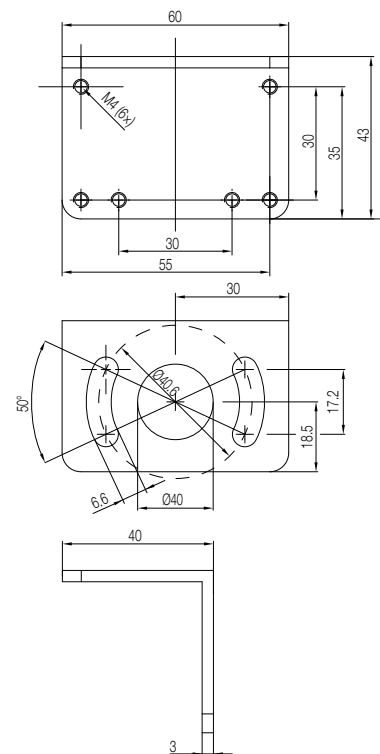
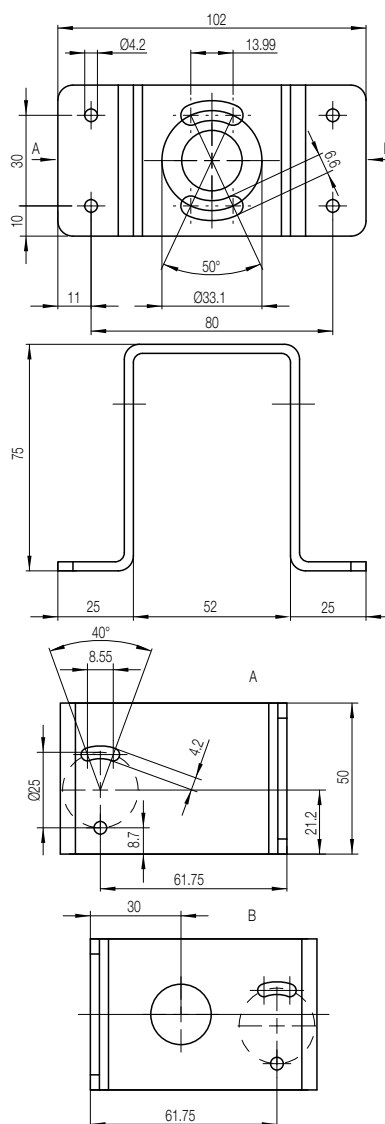
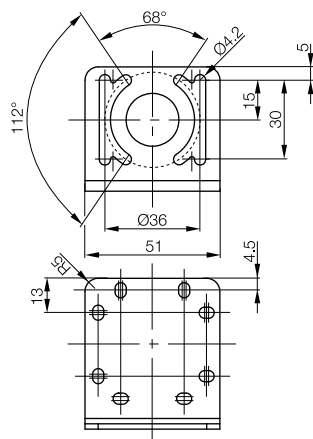
Mounting brackets

For clamping cylinder or
for mounting on base plate
For strip and
background lights BAE

BAM01AE

BAM MB-XA-002-B02-1

Anodized aluminum



Product-specific Accessories

- Photoelectric Sensors
- Reflectors
- Sensors
- Fasteners
- Positive Stops and Contact Protector
- Ultrasonic Sensors
- Uni/Unicompact Sensors
- Industrial RFID Systems
- Position and Distance Measurement
- Protective End Caps and Nuts
- Pressure Sensors
- Vision Sensors
- Mounting brackets**
- 3D holder system
- Locking Device, Display Housing
- Protective Housing

3D sensor holder with quick-change plate

The Balluff 3D sensor holder with quick-change plate for industrial image processing is a novelty on the market. Originally conceived for vision sensors, this multitasking solution can also hold other sensors of similar size. This only requires replacing the sensor-specific change plate. The first holders are already being used successfully in the automotive industry.

Every desired solid angle can be configured, allowing the sensor to be aligned precisely. The position even remains intact if the sensor has to be replaced. That helps minimize downtimes. Simply removing the sensor with the quick-change plate from the holder is enough. An optionally used safety screw provides protection from tampering as needed. Without the correct tool, the sensor cannot be removed.

The industry-ready holder made of anodized aluminum is particularly easy and practical to operate. It fits on almost all common installation profiles and can be fastened directly to a machine frame, a worktop or a pallet with 3 holes. In addition, it offers you substantial design freedom, since the base, plate and holder are installed separately. The holder and change plate can be ordered separately.

Special Properties:

- Quick selection
- Exact alignment
- Stable, robust holder systems
- Ease of handling

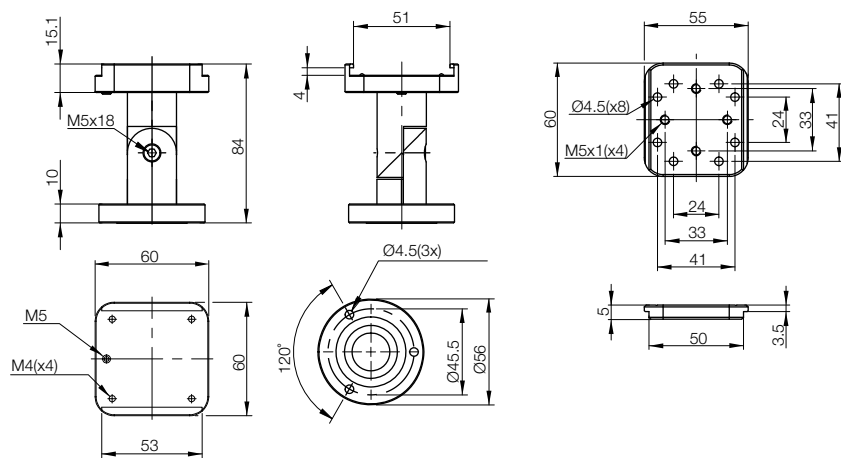


Vision Sensors

3D holder system



Description	3D holder system	3D holder system
Version	Holder for quick-change plate	Quick-change plate
Ordering code	BAM01YT	BAM01YP
Part number	BMS CUJ-M-S25-D045-00	BMS CS-M-S25-DX15-00
Material	Anodized aluminum	Anodized aluminum



Product-specific
Accessories

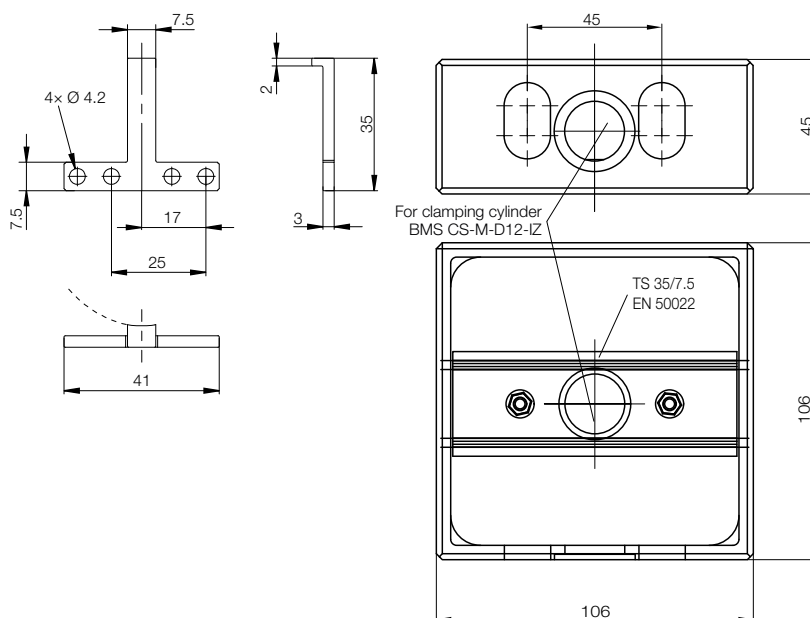
Photoelectric
Sensors
Reflectors
Sensors
Fasteners
Positive Stops
and Contact
Protector
Ultrasonic
Sensors
Uni/Unicompat
Sensors
Industrial RFID
Systems
Position and
Distance
Measurement
Protective End
Caps and Nuts
Pressure
Sensors
Vision Sensors
Mounting
brackets
**3D holder
system**
Locking Device,
Display Housing
Protective
Housing

Vision Sensors

Locking device, display housing



Description	Locking device for Vision Sensor focus ring	Display housing for BVS monitor
Use	For locking the set focus	For mounting with clamping cylinders and mounting systems BMS
Ordering code	BAM0206	BAM01A8
Part number	BAM FK-VS-002-03-1	BAM PC-AE-002-1
Material	Anodized aluminum	Anodized aluminum



Focus ring lock BAM FK-VS-002-03-1

The set focus is firmly locked and can no longer be adjusted. Errors caused by unintentional adjustment of the focus are therefore prevented. If the focus needs to be adjusted, the lock can be quickly unscrewed.

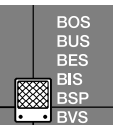
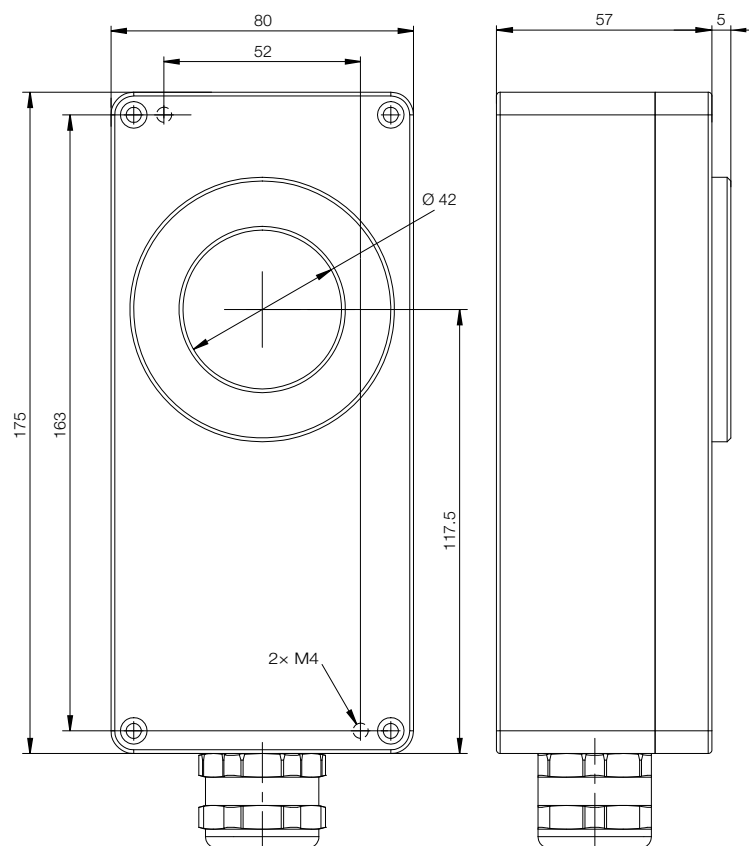
Optional IP 67+ housing for Vision Sensors BVS

An optional housing for splash water areas and other problematic environments is available for all sensors in the Vision Sensor family. Thanks to the IP 67+ degree of protection, this also provides reliable protection for long-term use in harsh environments. With a few simple hand movements, the sensor is easily integrated in the robust housing and then mounted on a machine or system. All functions are fully available as usual.

- Rugged housing
- IP 67+ degree of protection
- Flexible handling
- Easy mounting and fastening
- Full range of sensor functions
- Inexpensive acquisition



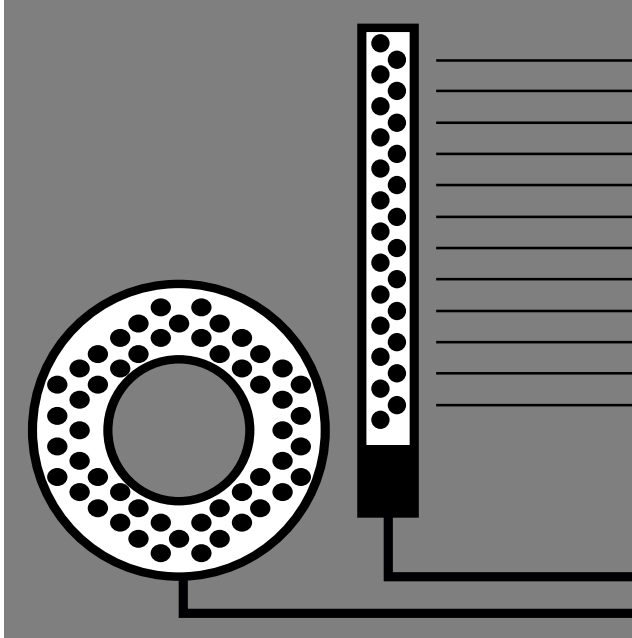
Description	Protective housing for Vision Sensors BVS
Use	For long-term operation in harsh environments
Ordering code	BAM01RR
Part number	BAM PC-VS-008-1
Dimensions	175×80×62 mm
Installation	M4 screws (163×52 mm)
Connection	Screwed cable gland M25×1.5 (1× dia. 5 mm, 1× dia. 6 mm)
Degree of protection as per IEC 60529	IP 67
Housing material	Cast aluminum, painted
Optical surface	Anti-reflective glass



Product-specific Accessories

- Photoelectric Sensors
- Reflectors
- Sensors
- Fasteners
- Positive Stops and Contact Protector
- Ultrasonic Sensors
- Uni/Unicompact Sensors
- Industrial RFID Systems
- Position and Distance Measurement
- Protective End Caps and Nuts
- Pressure Sensors
- Vision Sensors
- Mounting brackets
- 3D holder system
- Locking Device, Display Housing
- Protective Housing





Lights

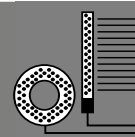
Lights

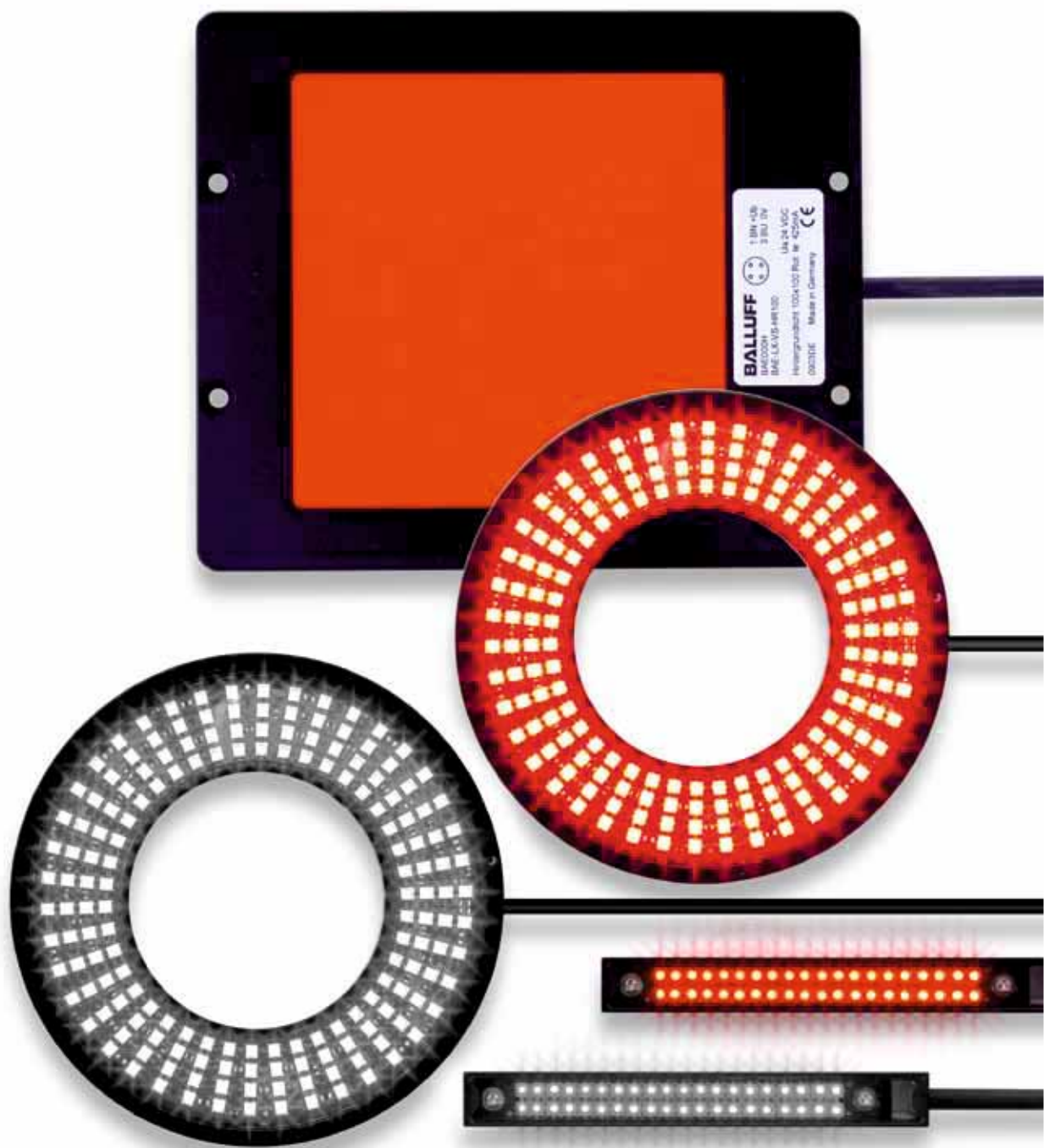
Lights used in an industrial environment depend on maximum reliability, outstanding quality and a good price/performance ratio. Balluff offers different versions of light to suit your needs. Select the best solution for your task and profit from our mature technology.



Lights

Product Overview	406
Background Lights	408
Ring Lights	412
Strip Lights	414
Spotlights	417
Coaxial Lights	418
Dark Field Light	420
Line Lasers	421





Background lights

- Simple monitoring of dimensions and shapes
- Independent of material and surface type
- Various light field sizes available



Ring lights

- Compatible mounting bracket for sensor and light
- Shadow-free illumination with very high brightness
- For inspections with a large working distance



Strip lights

- Homogeneous, targeted light
- Generate shadows to check features
- Available with red, infrared and white light

Product overview

Image processing always depends on the right lighting. Balluff provides a broad range of additional lighting. Only optimal lighting can provide an optimum solution for your application.

The benefits to you

Highest quality

Our wide range of lights is subject to strict quality standards. The lights are protected against damage, for example, from voltage pulses on the connection cable or static discharges (ESD). EMC tests performed by an accredited testing laboratory have proven this.

Eye safety in accordance with IEC 62471

Strong visual radiation, such as from LEDs, can impair your vision. Therefore our lights are tested by an independent, certified test center according to the latest applicable standard (IEC 62471). All of our lights come under the "Exempt group" or "Risk group 1" and are therefore considered extremely safe. By comparison: the sun falls into risk group 3.

Fast and easy mounting

All lights are quick, easy and economical to mount and align with the Balluff Mounting System BMS.

Long service life

We only install extremely luminous LEDs of the highest quality in our lights. Our extremely luminous ring and strip lights are equipped with an excess temperature deactivation mechanism to extend the useful life of an LED.

Simple startup

You only need a conventional 24 V power supply to connect our lights. Expensive control units are not required. Our background lights and dark field lights need only to be connected to a 24 V DC power supply. Ring and strip lights are triggered directly by the Vision Sensor or a PLC.

Boost function

Ring lights and linear lights have a boost function with 30% higher light intensity, which reduces the influence of ambient light. Overall process reliability is increased as a result.

Frequently asked questions:

What should the distance between the light and the component be?

The intensity of illumination on an object decreases quadratically with the working distance. Therefore objects that are farther away appear darker than closer objects. A bright object should be inspected, for example, once at a distance of 10 cm and once at 100 cm. The brightness of the object at 10 cm is 100 times greater than at a distance of 100 cm. Select the optimum distance between the light source, sensor and target object. In order to prevent saturation, make sure that the brightness of the light source is correct.

How should reflective components be illuminated?

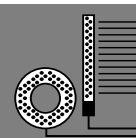
When inspecting highly reflective surfaces, the sensor must be mounted with extreme care. If necessary, attach an external light to a suitable bracket in order to maximize the contrast between the object to be detected and the background.

How can the illumination of the part to be inspected be kept constant?

Avoid fluctuations in brightness due to ambient light, sunlight or other external light sources. These fluctuations are the most frequent cause of errors in image processing and are often difficult to identify. Errors can be limited by decreasing the exposure time of the sensor. External lighting may be required in addition to the light inside the sensor. Alternative solutions include covers or any kind of physical screen that specifically controls the light within the inspection area.

How should the field of view be illuminated?

The entire image area should be illuminated as evenly as possible. Avoid extremely bright points or dark areas. The component features you wish to inspect should, however, contrast as much as possible and show up clearly on the background. If you want to check for the presence of a certain feature, you can illuminate the component so that a clear shadow is cast upon the function to be identified. The Vision Sensor can then detect the feature.



Lights
Product overview
Background lights
Ring lights
Strip lights
Spotlights
Coaxial Lights
Dark field light
Line Lasers



Spotlights

- Pinpoint lighting
- Achieve greater inspection distances
- Available with red light and infrared



Coaxial Lights

- Very homogeneous illumination
- For highly reflective surfaces
- For inspection of labels and dot-peen codes



Dark field light

- Inspection of scratches and dents in surfaces
- Independent of material and surface type
- Various light field sizes available



Line Lasers

- Bright, zoomable line laser up to 2000 mm
- For height detection of parts with triangulation
- For checking completeness of parts

Lights

Background lights

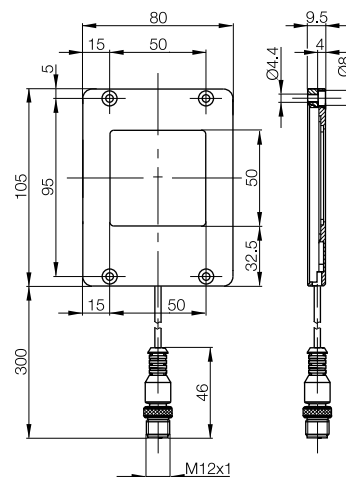
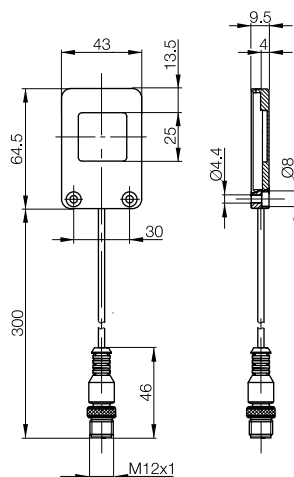


Series	BAE LX-VS	BAE LX-VS	
Version	Background light	Background light	
Light type	Red light	Red light	
Ordering code	BAE000E	BAE000F	
Part number	BAE LX-VS-HR025	BAE LX-VS-HR050	
Supply voltage U_b	24 V DC	24 V DC	
Operating current	150 mA	250 mA	
Trigger		Yes	
Light field size	25×25 mm	50×50 mm	
Emitter, light type	LED, red light	LED, red light	
Wavelength	617 nm	617 nm	
Dimension	64.5×43×9.5 mm	105×80×9.5 mm	
Mounting	M4 screws	M4 screws	
Connection	M12 male, 4-pin	M12 male, 4-pin	
Housing material	Anodized aluminum	Anodized aluminum	
Optical surface	Glass	Glass	
Weight	66 g	155 g	
Degree of protection as per IEC 60529	IP 54	IP 54	
Eye safety acc. to IEC 62471	Exempt group	Exempt group	
Polarity reversal/short-circuit protected	Yes/Yes	Yes/Yes	
Ambient temperature T_a	-10...+55 °C	-10...+55 °C	
Storage temperature	-25...+75 °C	-25...+75 °C	

Lighting accessories: See the section for connectors and product-specific accessories (for direct mounting or compatible with Balluff mounting system BMS).



Background lighting: For the transmitted light method, the background lighting is positioned behind the object you wish to detect. The Vision Sensor only detects the outline of the object based on this position and allows you to monitor part dimensions or shapes extremely easily. Ambient light also presents no problems. Changes in the surface (markings, color, etc.) can be suppressed almost completely and have no influence on the test result. Our background lights are particularly bright and versatile. You can also use them as subtle incident lights to illuminate highly reflective components. Due to the extremely flat design, they are ideal for use in applications with limited space.

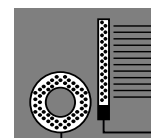
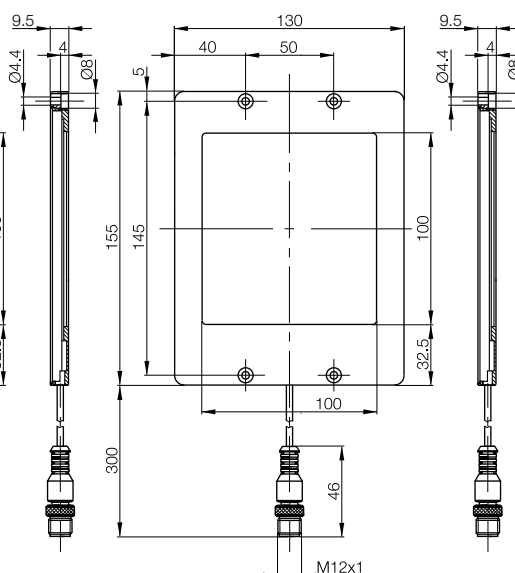
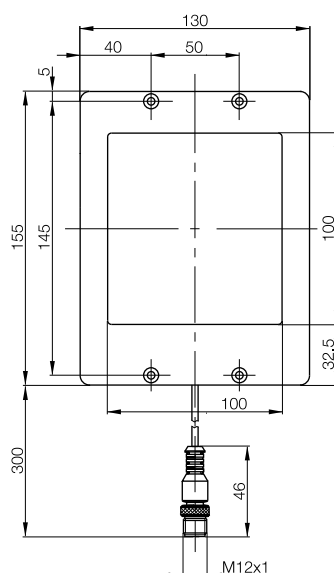
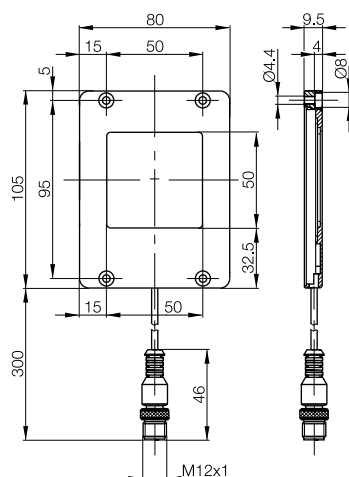


Lights

Background lights



BAE LX-VS Background light Infrared BAE00KR	BAE LX-VS Background light Red light BAE000H	BAE LX-VS Background light Infrared BAE00FR
BAE LX-VS-HI050	BAE LX-VS-HR100	BAE LX-VS-HI100
24 V DC	24 V DC	24 V DC
350 mA	400 mA	625 mA
Yes	Yes	Yes
50x50 mm	100x100 mm	100x100 mm
LED, infrared	LED, red light	LED, infrared
875 Nm	617 nm	875 Nm
105x80x9.5 mm	155x130x9.5 mm	155x130x9.5 mm
M4 screws	M4 screws	M4 screws
M12 male, 4-pin	M12 male, 4-pin	M12 male, 4-pin
Anodized aluminum	Anodized aluminum	Anodized aluminum
Glass	Glass	Glass
155 g	345 g	345 g
IP 54	IP 54	IP 54
Risk group 1	Exempt group	Risk group 1
Yes/Yes	Yes/Yes	Yes/Yes
-10...+55 °C	-10...+55 °C	-10...+55 °C
-25...+75 °C	-25...+75 °C	-25...+75 °C



Lights
Product overview
Background lights
Ring Lights
Strip Lights
Spotlights
Coaxial Lights
Dark field light
Line Lasers

Lights

Background lights

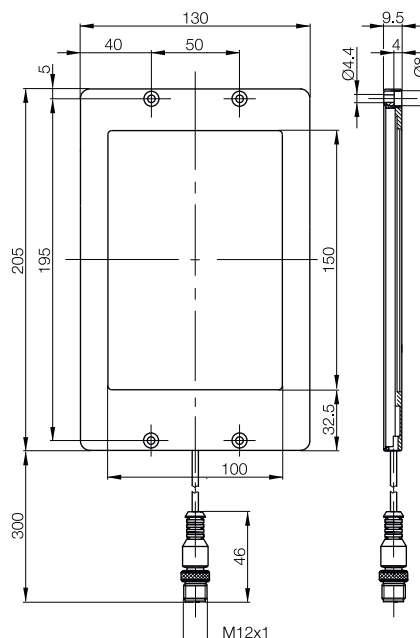


Series	BAE LX-VS	BAE LX-VS	
Version	Background light	Background light	
Light type	Red light	Infrared	
Ordering code	BAE00C5	BAE00KP	
Part number	BAE LX-VS-HR150	BAE LX-VS-HI150	
Supply voltage U_B	24 V DC	24 V DC	
Operating current	500 mA	800 mA	
Trigger	Yes	Yes	
Light field size	150×100 mm	150×100 mm	
Emitter, light type	LED, red light	LED, infrared	
Wavelength	617 nm	875 Nm	
Dimension	205×130×9.5 mm	205×130×9.5 mm	
Mounting	M4 screws	M4 screws	
Connection	M12 male, 4-pin	M12 male, 4-pin	
Housing material	Anodized aluminum	Anodized aluminum	
Optical surface	Glass	Glass	
Weight	435 g	435 g	
Degree of protection as per IEC 60529	IP 54	IP 54	
Eye safety acc. to IEC 62471	Exempt group	Risk group 1	
Polarity reversal/short-circuit protected	Yes/Yes	Yes/Yes	
Ambient temperature T_a	-10...+55 °C	-10...+55 °C	
Storage temperature	-25...+75 °C	-25...+75 °C	

Lighting accessories: See the section for connectors and product-specific accessories (for direct mounting or compatible with Balluff mounting system BMS).



Background lighting: For the transmitted light method, the background lighting is positioned behind the object you wish to detect. The Vision Sensor only detects the outline of the object based on this position and allows you to monitor part dimensions or shapes extremely easily. Ambient light also presents no problems. Changes in the surface (markings, color, etc.) can be suppressed almost completely and have no influence on the test result. Our background lights are particularly bright and versatile. You can also use them as subtle incident lights to illuminate highly reflective components. Due to the extremely flat design, they are ideal for use in applications with limited space.



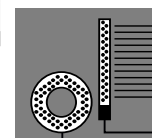
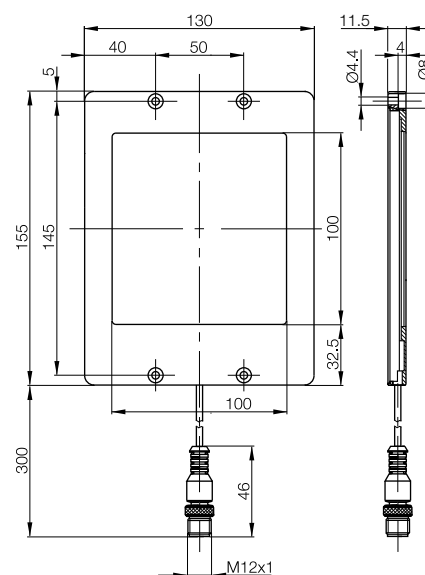
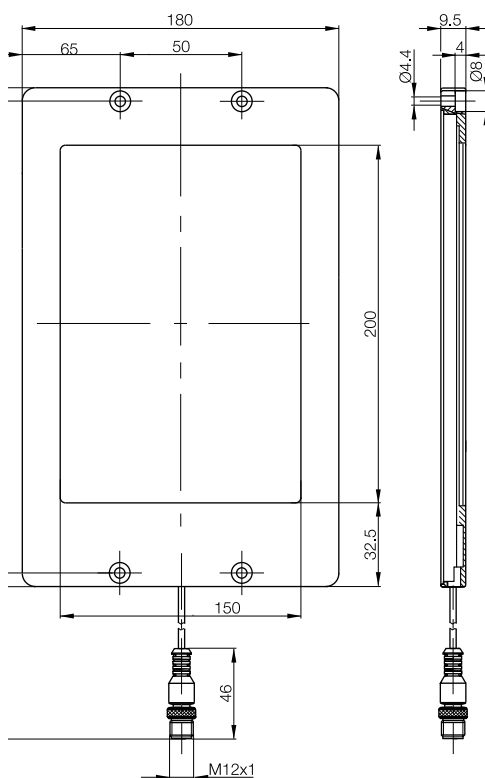
Lights

Background lights



IP69K

BAE LX-VS Background light	BAE LX-VS Background light	BAE LX-VS Background light IP 69K
Red light	Infrared	Red light
BAE00JC	BAE00JE	BAE00JF
BAE LX-VS-HR200	BAE LX-VS-HI200	BAE LX-VS-HR100-E
24 V DC	24 V DC	24 V DC
800 mA	625 mA	400 mA
Yes	Yes	Yes
200×150 mm	200×150 mm	100×100 mm
LED, red light	LED, infrared	LED, red light
617 nm	875 Nm	617 nm
255×180×9.5 mm	255×180×9.5 mm	155×130×11.5 mm
M4 screws	M4 screws	M4 screws
M12 male, 4-pin	M12 male, 4-pin	M12 male, 4-pin
Anodized aluminum	Anodized aluminum	Stainless steel
Glass	Glass	Glass
730 g	730 g	350 g
IP 54	IP 54	IP 69K
Exempt group	Risk group 1	Exempt group
Yes/Yes	Yes/Yes	Yes/Yes
-10...+55 °C	-10...+55 °C	-10...+55 °C
-25...+75 °C	-25...+75 °C	-25...+75 °C



Lights
Product overview
Background lights
Ring Lights
Strip Lights
Spotlights
Coaxial Lights
Dark field light
Line Lasers

Lights

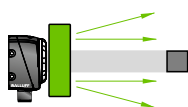
Ring lights



SlimLine

Series		BAE LX-VS	BAE LX-VS
Version		Standard ring light	SlimLight ring light
Light type		Red light	Red light
Ordering code		BAE000J	BAE00FP
Part number		BAE LX-VS-RR100	BAE LX-VS-RR100-S
Supply voltage U_B		24 V DC	24 V DC
Operating current	Normal	800 mA	600 mA
	Boost	1300 mA	
Trigger		Yes	Yes
Operating mode	Normal	Yes	Yes
	Boost	Yes	
Light field size		Ø 100/60 mm	Ø 100/60 mm
Emitter, light type		LED, red light	LED, red light
Wavelength		617 nm	617 nm
Dimension		Ø 116×20.5 mm	Ø 116×20.5 mm
Mounting		M4 screws	M4 screws
Connection		M12 male, 4-pin	M12 male, 4-pin
Housing material		Anodized aluminum	Anodized aluminum
Optical surface		Glass	Glass
Weight		360 g	345 g
Degree of protection as per IEC 60529		IP 65	IP 54
Eye safety acc. to IEC 62471	Normal	Exempt group	Exempt group
	Boost	Exempt group	
Polarity reversal/short-circuit protected		Yes/Yes	Yes/Yes
Ambient temperature T_a		-10...+55 °C	-10...+55 °C
Storage temperature		-25...+75 °C	-25...+75 °C

Lighting accessories: See the section for connectors and product-specific accessories (for direct mounting or compatible with Balluff mounting system BMS).



Ring lights are used as additional incident lights. The design of the light and powerful integral LEDs ensure virtually shadow free illumination with a high degree of intensity. Ring lights are particularly suited to applications where the distance between the BVS and the detected object is greater than 300 mm. Due to the high intensity of the light generated, these lights can also be used to suppress influences from changing ambient light. The ring light can be fitted and aligned together with the Vision Sensor using our mounting bracket specially adapted to the Balluff Mounting System. As an accessory, we offer a diffuser attachment that prevents strong reflections, for example, on shiny components.

The **diffuser attachment** ensures even light without disturbing reflections in applications with reflective surfaces. The diffuser is made of high-quality glass and can be installed directly on the light.

Description	Diffuser attachment
Use	For ring lights
Ordering code	BAM01A7
Part number	BAM OF-VS-001-D-RX100

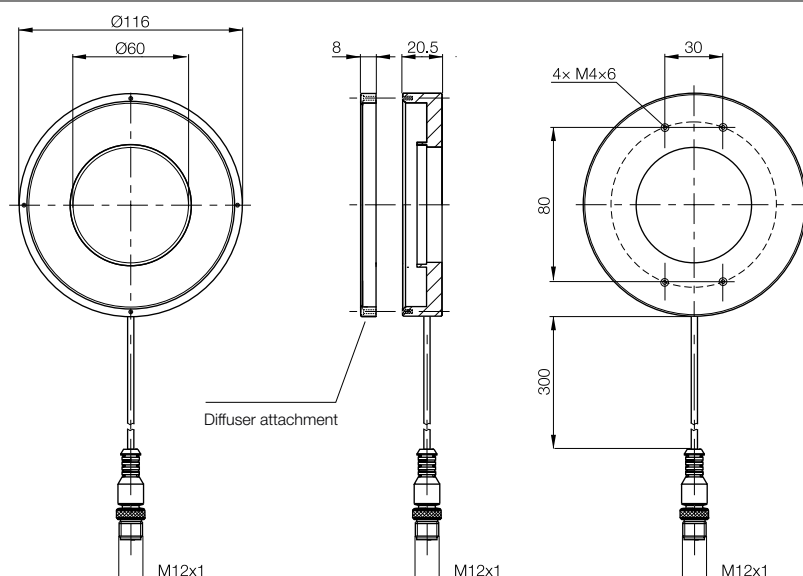
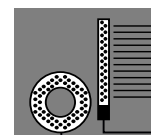


Lights

Ring lights



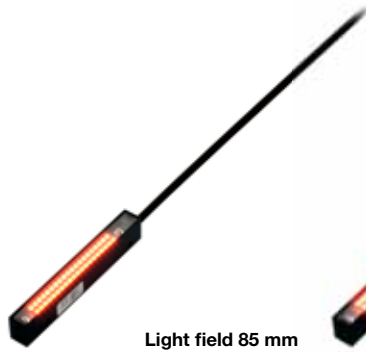
BAE LX-VS Standard ring light Infrared BAE000K	BAE LX-VS SlimLight ring light Infrared BAE00FN	BAE LX-VS Standard ring light White light BAE00AN	BAE LX-VS SlimLight ring light White light BAE00FM
BAE LX-VS-RI100	BAE LX-VS-RI100-S	BAE LX-VS-RW100	BAE LX-VS-RW100-S
24 V DC	24 V DC	24 V DC	24 V DC
600 mA	500 mA	700 mA	450 mA
1300 mA		1200 mA	
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes		Yes	
Ø 100/60 mm	Ø 100/60 mm	Ø 100/60 mm	Ø 100/60 mm
LED, infrared	LED, infrared	LED, white light	LED, white light
875 Nm	875 Nm		
Ø 116×20.5 mm	Ø 116×20.5 mm	Ø 116×20.5 mm	Ø 116×20.5 mm
M4 screws	M4 screws	M4 screws	M4 screws
M12 male, 4-pin	M12 male, 4-pin	M12 male, 4-pin	M12 male, 4-pin
Anodized aluminum	Anodized aluminum	Anodized aluminum	Anodized aluminum
Glass	Glass	Glass	Glass
360 g	345 g	360 g	345 g
IP 65	IP 54	IP 65	IP 54
Risk group 1	Risk group 1	Exempt group	Exempt group
Risk group 1		Exempt group	
Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
-10...+55 °C	-10...+55 °C	-10...+55 °C	-10...+55 °C
-25...+75 °C	-25...+75 °C	-25...+75 °C	-25...+75 °C



Lights
Product overview
Background lights
Ring Lights
Strip Lights
Spotlights
Coaxial Lights
Dark field light
Line Lasers

Lights

Strip lights



Light field 85 mm



Light field 170 mm

Series		BAE LX-VS	BAE LX-VS
Version		Strip light	Strip light
Light type		Red light	Red light
Ordering code		BAE00AP	BAE00AZ
Part number		BAE LX-VS-LR085	BAE LX-VS-LR170
Supply voltage U_B		24 V DC	24 V DC
Operating current	Normal	200 mA	375 mA
	Boost	375 mA	750 mA
Trigger		Yes	Yes
Operating mode	Normal	Yes	Yes
	Boost	Yes	Yes
Light field size		10×71 mm	10×170 mm
Emitter, light type		LED, red light	LED, red light
Wavelength		617 nm	617 nm
Dimension		113.5×13×18 mm	197.5×13×18 mm
Mounting		M4 screws	M4 screws
Connection		M12 male, 4-pin	M12 male, 4-pin
Housing material		Anodized aluminum	Anodized aluminum
Optical surface		Glass	Glass
Weight		80 g	110 g
Degree of protection as per IEC 60529		IP 54	IP 54
Eye safety acc. to IEC 62471	Normal	Exempt group	Exempt group
	Boost	Exempt group	Exempt group
Polarity reversal/short-circuit protected		Yes/Yes	Yes/Yes
Ambient temperature T_a		-10...+55 °C	-10...+55 °C
Storage temperature		-25...+75 °C	-25...+75 °C

Lighting accessories: See the section for connectors and product-specific accessories (for direct mounting or compatible with Balluff mounting system BMS).



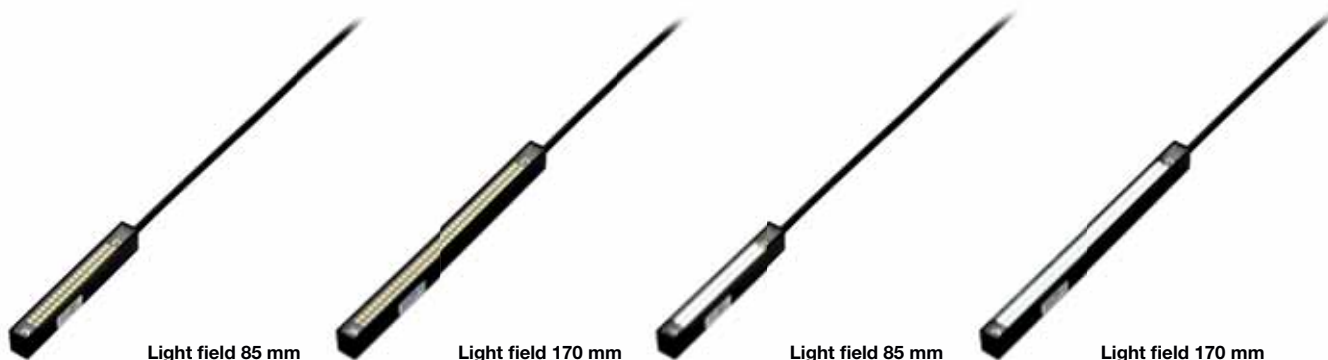
Strip lights generate uniform, directed light, that brightens the image area directly. If used to illuminate from the side, diffuse reflections and shadows can be produced. The diffuse reflection generates more uniform illumination without shiny areas. The shadows generated allow you to check the presence or absence of features on the object more easily.



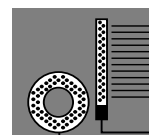
The strip lights can illuminate rectangular areas right up to the corners. Shadows can also be generated in grooves and along edges and then used for evaluation purposes.

Lights

Strip lights



BAE LX-VS Strip light Infrared BAE00AT	BAE LX-VS Strip light Infrared BAE00AY	BAE LX-VS Strip light White light BAE00AR	BAE LX-VS Strip light White light BAE00AW
BAE LX-VS-LI085	BAE LX-VS-LI170	BAE LX-VS-LW085	BAE LX-VS-LW170
24 V DC	24 V DC	24 V DC	24 V DC
200 mA	375 mA	200 mA	300 mA
375 mA	750 mA	375 mA	500 mA
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
10×71 mm	10×170 mm	10×71 mm	10×170 mm
LED, infrared	LED, infrared	LED, white light	LED, white light
875 Nm	875 Nm		
113.5×13×18 mm	197.5×13×18 mm	113.5×13×18 mm	197.5×13×18 mm
M4 screws	M4 screws	M4 screws	M4 screws
M12 male, 4-pin	M12 male, 4-pin	M12 male, 4-pin	M12 male, 4-pin
Anodized aluminum	Anodized aluminum	Anodized aluminum	Anodized aluminum
Glass	Glass	Glass	Glass
80 g	110 g	80 g	110 g
IP 54	IP 54	IP 54	IP 54
Exempt group	Exempt group	Exempt group	Exempt group
Risk group 1	Risk group 1	Exempt group	Exempt group
Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
-10...+55 °C	-10...+55 °C	-10...+55 °C	-10...+55 °C
-25...+75 °C	-25...+75 °C	-25...+75 °C	-25...+75 °C



Lights

Product overview

Background lights

Ring Lights

Strip Lights

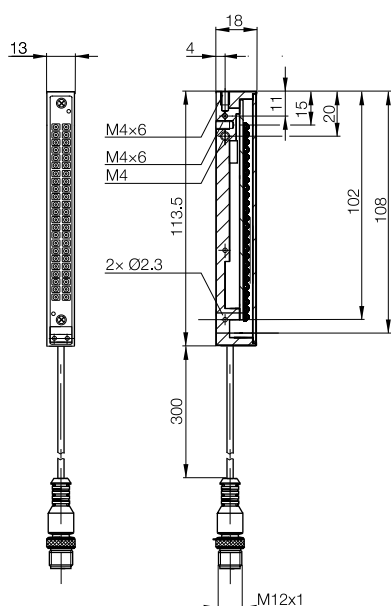
Spotlights

Coaxial Lights

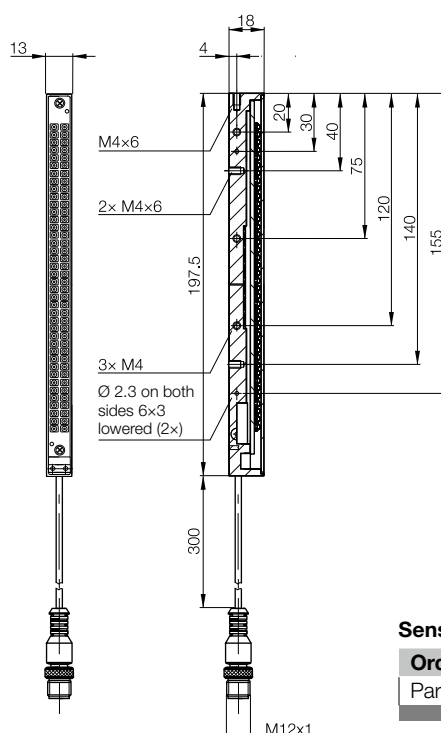
Dark field light

Line Lasers

85 mm



170 mm



Sensor holder for linear lights

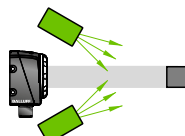
Ordering code	BAM01F2
Part number	BMS CS-M-D12-BX11-09

For more information, see page 275

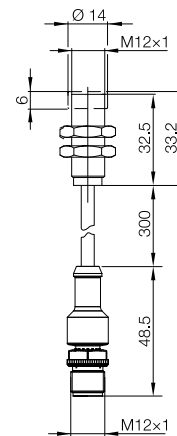


Series	BAE LX-VS	
Version	Spotlight	
Light type	Red light	
Ordering code	BAE00KF	
Part number	BAE LX-VS-SR012	
Supply voltage U_B	24 V DC	
Operating current	70 mA	
Trigger		
Light field size	Ø 12 mm	
Emitter, light type	LED, red light	
Wavelength	617 nm	
Dimension	M12×32.5 mm	
Mounting	M12×1 nut	
Connection	M12 male, 4-pin	
Housing material	Stainless steel	
Weight	45 g	
Degree of protection as per IEC 60529	IP 67	
Eye safety acc. to IEC 62471	Exempt group	
Polarity reversal/short-circuit protected	Yes/Yes	
Ambient temperature T_a	-10...+50 °C	
Storage temperature	-10...+60 °C	

Lighting accessories: See the section for connectors and product-specific accessories (for direct mounting or compatible with Balluff mounting system BMS).

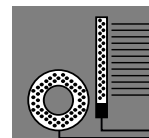
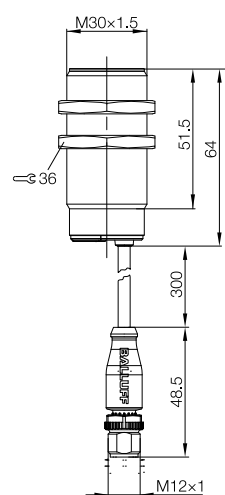
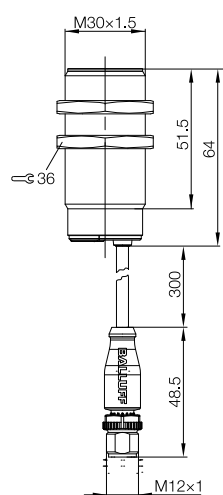
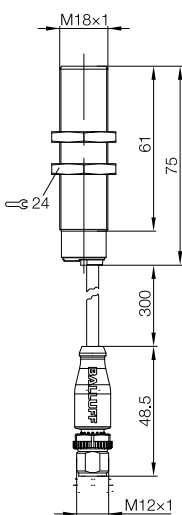
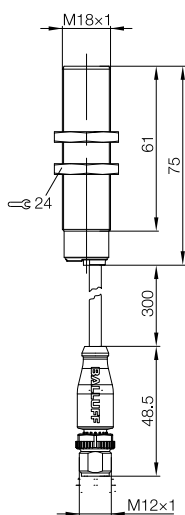


Spotlight: A spotlight is perfect for the precision illumination of specific areas. Greater inspection distances can be implemented if a spotlight is used. Unlike ring lights, spotlights can be attached in any position. You can swivel the light to the area requiring illumination.





BAE LX-VS Spotlight Red light BAE00H0	BAE LX-VS Spotlight Infrared BAE00H1	BAE LX-VS Spotlight Red light BAE00FT	BAE LX-VS Spotlight Infrared BAE00H2
BAE LX-VS-SR018	BAE LX-VS-SI018	BAE LX-VS-SR030	BAE LX-VS-SI030
24 V DC	24 V DC	24 V DC	24 V DC
85 mA	85 mA	120 mA	115 mA
Yes	Yes	Yes	Yes
Ø 18 mm	Ø 18 mm	Ø 30 mm	Ø 30 mm
LED, red light	LED, infrared	LED, red light	LED, infrared
617 nm	850 nm	617 nm	850 nm
M18×72 mm	M18×72 mm	M30×62 mm	M30×62 mm
M18×1 nut	M18×1 nut	M30×1.5 nut	M30×1.5 nut
M12 male, 4-pin	M12 male, 4-pin	M12 male, 4-pin	M12 male, 4-pin
Stainless steel	Stainless steel	Stainless steel	Stainless steel
75 g	75 g	90 g	90 g
IP 67	IP 67	IP 67	IP 67
Exempt group	Risk group 1	Exempt group	Risk group 1
Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes
0...+50 °C	0...+50 °C	0...+50 °C	0...+50 °C
-10...+60 °C	-10...+60 °C	-10...+60 °C	-10...+60 °C



Lights

Product

overview

Background lights

Ring Lights

Strip Lights

Spotlights

Coaxial Lights

Dark field light

Line Lasers

Lights

Coaxial lights

Coaxial lighting is the optimal solution for illuminating highly reflective surfaces. Therefore, coaxial lighting is well suited for transmitted light inspections of colored materials and for inspections of printed or dirty surfaces and for dot-peen codes. They are low-maintenance, industrially sound and thus can be integrated with low effort.

- Long service life
- Uniform lighting
- High standard of quality
- Energy-saving LED technology

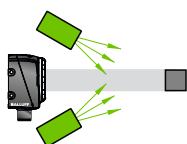


Lights Coaxial lights

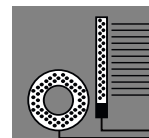
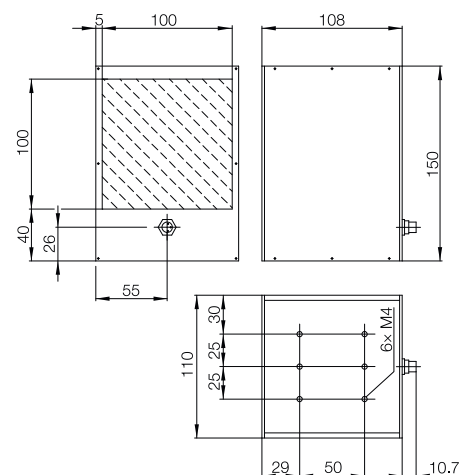
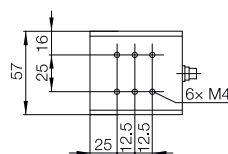
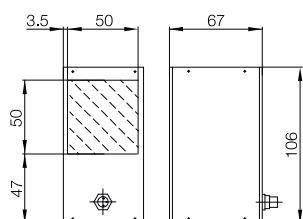


Series	BAE LX-VS	BAE LX-VS
Version	Coaxial lighting	Coaxial lighting
Light type	Red light	Red light
Ordering code	BAE00J9	BAE00JA
Part number	BAE LX-VS-OR50	BAE LX-VS-OR100
Supply voltage U_B	24 V DC	24 V DC
Operating current	218 mA	600 mA
Light field size	50×50 mm	100×100 mm
Emitter, light type	LED, red light	LED, red light
Wavelength	630 nm	630 nm
Dimension	106×67×57 mm	150×108×110 mm
Mounting	M4 screws	M4 screws
Connection	M8 connector, 2-pin	M8 connector, 2-pin
Housing material	Anodized aluminum	Anodized aluminum
Optical surface	Glass	Glass
Weight	450 g	1500 g
Degree of protection as per IEC 60529	IP 54	IP 54
Eye safety acc. to IEC 62471	Exempt group	Exempt group
Polarity reversal/short-circuit protected	Yes/Yes	Yes/Yes
Ambient temperature T_a	-10...+55 °C	-10...+55 °C
Storage temperature	-25...+75 °C	-25...+75 °C

Lighting accessories: See the section for connectors and product-specific accessories (for direct mounting or compatible with Baluff mounting system BMS).



Coaxial lighting is used if the industrial image processing system requires diffuse light, for example, to illuminate highly reflective surfaces uniformly and prevent reflections.



Lights

Product overview

Background lights

Ring Lights

Strip Lights

Spotlights

Coaxial Lights

Dark field light

Line Lasers

Lights

Dark field light



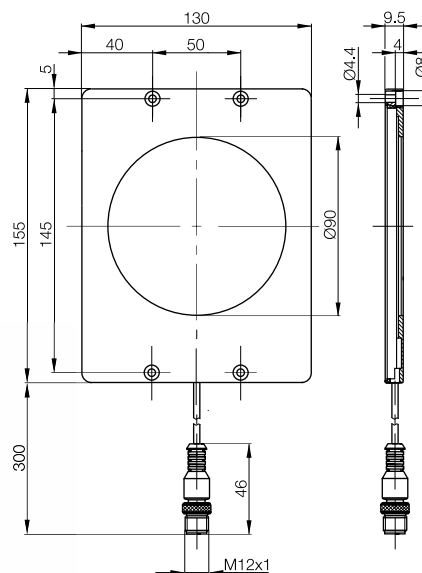
Series	BAE LX-VS
Version	Dark field light
Light type	Red light
Ordering code	BAE00AM
Part number	BAE LX-VS-DR090
Supply voltage U_B	24 V DC
Operating current	425 mA
Trigger	Yes
Light field size	Ø 90 mm
Emitter, light type	LED, red light
Wavelength	617 nm
Dimension	105×80×9.5 mm
Mounting	M4 screws
Connection	M12 male, 4-pin
Housing material	Anodized aluminum
Optical surface	PMMA
Weight	250 g
Degree of protection as per IEC 60529	IP 54
Eye safety acc. to IEC 62471	Exempt group
Polarity reversal/short-circuit protected	Yes/Yes
Ambient temperature T_a	-10...+55 °C
Storage temperature	-25...+75 °C

Lighting accessories: See the section for connectors and product-specific accessories (for direct mounting or compatible with Balluff mounting system BMS).



Dark field lighting: With dark field lighting you can illuminate scratches, dents and impurities on surfaces extremely well.

The dark field light must be attached to the detection object at a distance of 10...20 mm so that the surfaces on the component can be inspected. If the diameter of the dark field is insufficient, two or more linear lights can also be installed to implement this type of illumination.



The dark field light allows you to illuminate surfaces to clearly reveal indentations and scratches. This ensures quick and reliable surface inspections.

Lights Line Lasers



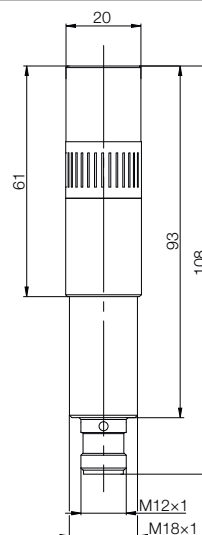
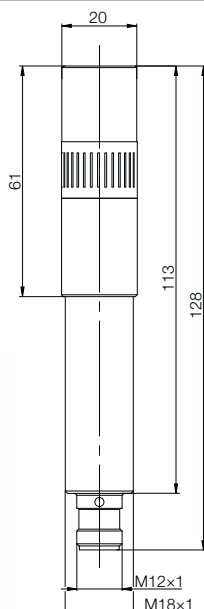
Series	BAE LX-XO	
Version	Line Lasers	
Light type	Red light	
Ordering code	BAE00KE	BAE00KZ
Part number	BAE LX-XO-PL018-L1-S4	BAE LX-XO-PL018-L2-S4
Supply voltage U_B	5...30 V DC	5...30 V DC
Operating current	30 mA	30 mA
Trigger	Yes	Yes
Line width/line length	100 mm distance 500 mm distance 1000 mm distance 2000 mm distance	73 µm/82 mm 170 µm/420 mm 320 µm/840 mm 677 µm/1650 mm
Emitter, light type	Laser, red light	Laser, red light
Wavelength	640 nm	635 nm
Dimension	Ø 20×128 mm	Ø 20×108 mm
Connection	M12 male, 4-pin	M12 male, 4-pin
Housing material	Brass coated, anodized aluminum	Brass coated, anodized aluminum
Optical surface	Glass	Glass
Weight	66 g	56 g
Degree of protection as per IEC 60529	IP 67	IP 67
Laser class per IEC 60825-1	2M	1M
Polarity reversal/short-circuit protected	Yes/Yes	Yes/Yes
Ambient temperature T_a	-10...+50 °C	-10...+50 °C
Storage temperature	-10...+80 °C	-10...+80 °C

Lighting accessories: See the section for connectors and product-specific accessories (for direct mounting or compatible with Balluff mounting system BMS).



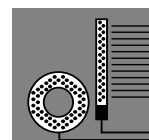
Caution

Do not view laser radiation directly with optical instruments (magnifiers, microscopes, etc.). Laser class 1M and 2M (DIN EN 60825-1: 2008)



Exceptional uniformity, focusable and high standard of quality

Line lasers are used in industrial image processing and for aligning and positioning workpieces or accessories. The combination of laser lighting and image processing provides interesting options for automating visual quality control. They are used in many ways for detecting and measuring defects, presence, diameters, edges, gaps, steps, etc. Our line lasers with uniform power distribution can be precisely and securely adjusted without a tool and using a lock. The line position stays unchanged.



Lights

Product overview

Background lights

Ring lights

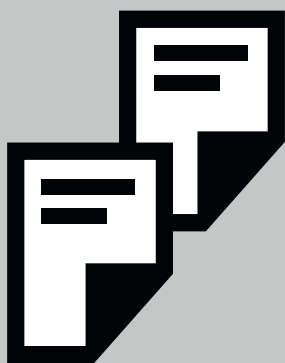
Strip lights

Spotlights

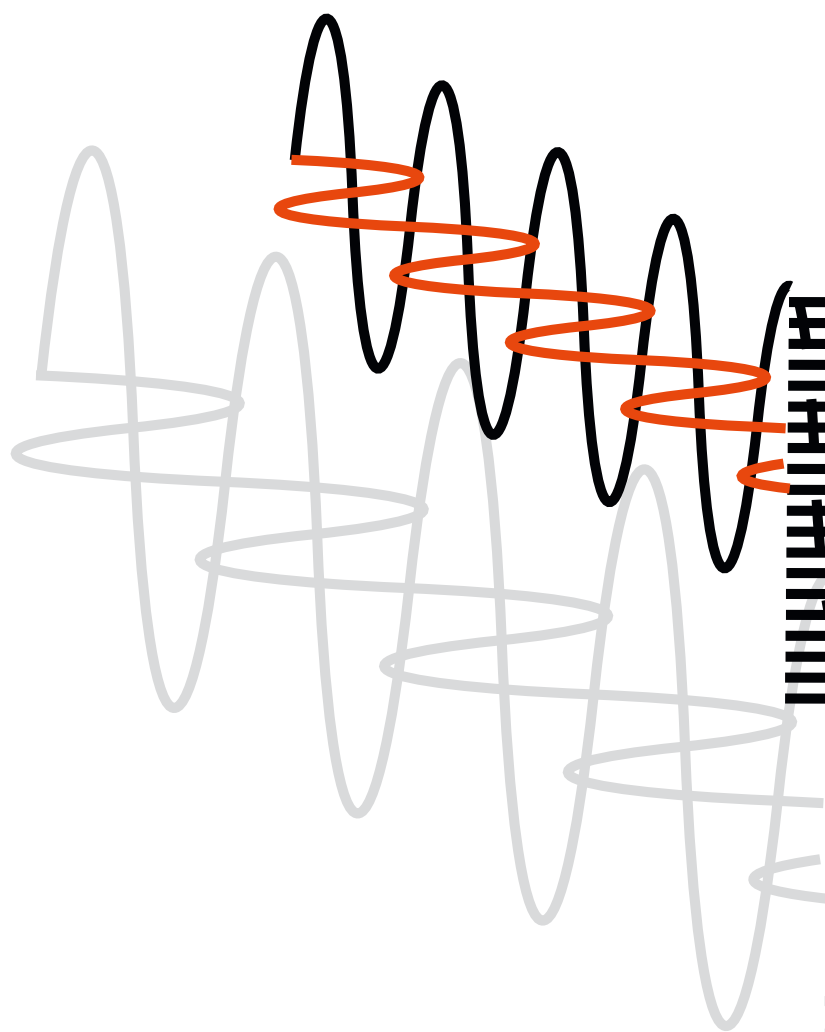
Coaxial Lights

Dark field light

Line Lasers



Basic Information and Definitions



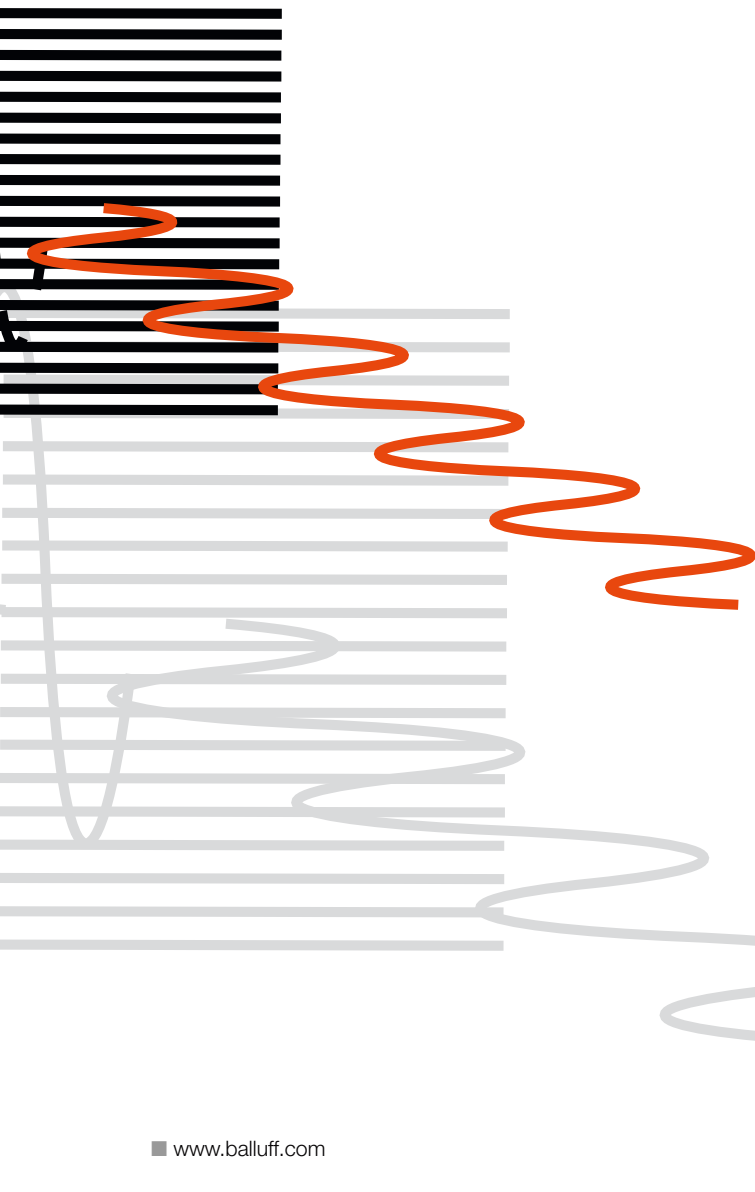


Basic Information and Definitions

Contents

General basic information

Quality	424
Electrical Properties	425
Mechanical Properties	428
Photoelectric Sensors	430



Quality and the environment

Quality management system as per DIN EN ISO 9001:2008

Balluff companies

Balluff GmbH	Germany
Balluff SIE Sensorik GmbH	Germany
Balluff Controles Eléctricos Ltda.	Brazil
Balluff Sensors (Chengdu) Co., Ltd.	China
Balluff Ltd.	Great Britain
Balluff Automation S.R.L.	Italy
Balluff Canada Inc.	Canada
Balluff de México S.A. de C.V.	Mexico
Balluff GmbH	Austria
Balluff Sp. z o.o.	Poland
Balluff Hy-Tech AG	Switzerland
Balluff Sensortechnik AG	Switzerland
Balluff S.L.	Spain
Balluff CZ, s.r.o	Czech Republic
Balluff Elektronika Kft.	Hungary
Balluff Inc.	USA



Environmental management system as per DIN EN ISO 14001:2009

Balluff companies

Balluff GmbH	Germany
Balluff Sensors (Chengdu) Co., Ltd.	China
Balluff Elektronika Kft	Hungary

Testing laboratory

The Balluff testing laboratory operates in accordance with ISO/IEC 17025 and is accredited by DAkkS for testing electromagnetic compatibility (EMC).



Balluff products comply with EU directives

Products that require labeling are subject to a conformity evaluation process according to the EU directive and the product is labeled with the CE marking.
Balluff products fall under the following EU directive:



2004/108/EC	EMC directive
2006/95/EC	Low Voltage Directive valid for products with supply voltage ≥ 75 V DC/ ≥ 50 V AC
94/9/EC	ATEX-directive valid for products with Ex-label



Product approvals

Product approvals are awarded by domestic and international institutions. Their symbols affirm that our products meet the specifications of these institutions.

"US Safety System" and "Canadian Standards Association" under the auspices of Underwriters Laboratories Inc. (cUL).

CCC-Code by the Chinese CQC.



Basic Information and Definitions

Electric properties

Cable properties

Cable types

PUR cable

No. of wires × conductor cross-section	Outside diameter typical
2×0.08 mm ²	3...4 mm
2×0.14 mm ²	3...4.1 mm
2×0.34 mm ²	4...5.5 mm
3×0.06 mm ²	2...2.5 mm
3×0.09 mm ²	2.5...3 mm
3×0.14 mm ²	2.5...3.5 mm
3×0.25 mm ²	3.5...4.5 mm
3×0.34 mm ²	4...5.5 mm
3×0.75 mm ²	6.5...7 mm
4×0.14 mm ²	3...4 mm
4×0.25 mm ²	4...5.5 mm
4×0.34 mm ²	4...5.5 mm
5×0.34 mm ²	4.5...6 mm
8×0.25 mm ²	6...8 mm
12×0.25 mm ²	6...8 mm

PVC cable

No. of wires × conductor cross-section	Outside diameter typical
2×0.14 mm ²	2.5...3.5 mm
2×0.34 mm ²	4.5...5.5 mm
3×0.14 mm ²	2.7...4.5 mm
3×0.25 mm ²	4...5 mm
3×0.34 mm ²	4.5...5.5 mm
4×0.25 mm ²	4.5...5.5 mm
4×0.34 mm ²	4.5...5.5 mm
5×0.34 mm ²	4.7...6 mm
8×0.25 mm ²	5...7 mm
12×0.25 mm ²	6...8 mm

Cable properties PUR

Flame resistance acc. to IEC 332-2

Halogen-free acc. to IEC 60754-1

Drag chain-compatible

Smallest bending radius

	tensioned	untensioned
PUR	4×D	5×D
PVC	15×D	8×D

Bending cycles and drag chain compatibility for PUR and PVC materials

Bending cycles	> 10×D	> 2 mil.
Drag chain compatibility	Vertical travel permitted Horizontal travel permitted	at 5m/sec ² 2 m at 5m/sec ² 5 m

Tightening torques

Permissible tightening torque for connectors	
M8	0.4 Nm
M12	0.6 Nm
7/8"	1.5 Nm

Wire colors

Coding as per
DIN IEC 60757

BN	brown
BK	Black
BU	Blue
WH	white

Approvals

Cable design PUR
in accordance with UL-AWM Style 21 198
Temperature range +80 °C
Cable design PVC
in accordance with UL-AWM Style 2517
Temperature range +80 °C



General Basic
Information

Quality

Electric
properties

Mechanical
properties

Power supplies

Photoelectric
sensors

Basic Information and Definitions

Electric properties

Standards

Sensors	Low-voltage switchgear and controlgear	EN 60947-5-2/IEC 60947-5-2
	NAMUR-sensors	EN 60947-5-6/IEC 60947-5-6
Protection class	II □	EN 60947-5-2/IEC 60947-5-2
Degree of protection	IP 60...67	EN 60529/IEC 60529
	IP 68 per BWN Pr. 20	Balluff factory standard (BWN): Temperature storage 48 h at 60 °C, 8 temperature cycles according to EN 60068-2-14/IEC 60068-2-14 between the benchmark temperatures according to the data sheet, 1 h storage in water, insulation test, 24 h storage in water, insulation test, 8 temperature cycles according to EN 60068-2-14 IEC 60068-2-14 between the benchmark temperatures according to the data sheet, 7 days storage in water, insulation test.
	IP 68 according to BWN Pr. 27	Balluff Factory Standard (BWN): Testing products for use in the foods industry.
	IP 69K	DIN 40050 part 9: Protection against entry of water under high pressure- or steam jet cleaning.
EMC (Electromagnetic Compatibility)	Interference emissions, radio interference voltage and radio interference emissions from electrical equipment	EN 55011
	Interference immunity against discharge of static electricity (ESD)	EN 61000-4-2/IEC 61000-4-2
	Immunity against high-frequency electromagnetic fields (RFI)	EN 61000-4-3/IEC 61000-4-3
	Immunity to fast transients (bursts)	EN 61000-4-4/IEC 61000-4-4
	Immunity against conducted interference induced by high-frequency fields	EN 61000-4-6/IEC 61000-4-6
	Immunity to voltage dips and short interruptions	EN 61000-4-11/IEC 61000-4-11
	Surge-voltage stability	EN 60947-5-2/IEC 60947-5-2
Environmental simulation	Vibration, sinusoidal	EN 60068-2-6/IEC 60068-2-6
	Shock	EN 60068-2-27/IEC 60068-2-27
	Continuous shock	EN 60068-2-29/IEC 60068-2-29
EX area	Electrical equipment for explosive atmospheres, general requirements.	EN 50014
	Succeeded by:	EN 60079-0
	Electrical equipment for gas explosive atmospheres, general requirements.	
	Electrical apparatus for explosive areas – intrinsic safety "i".	EN 50020
For conformity, see product marking.		

Basic Information and Definitions

Electric properties

Mounting torques

The following torques are to be followed so that the sensors are not mechanically destroyed during installation, as long as no other information is indicated on the data sheet or the sensor packaging.

Size	Material	Tightening torque
M5×0.5	Stainless steel	3 Nm
M8 × 1	Stainless steel	15 Nm
M12×1	Stainless steel	40 Nm
M18×1	PBT	1 Nm
M18×1	Stainless steel	60 Nm
M30×1.5	PBT	3 Nm
M30×1.5	Stainless steel	90 Nm

Size	Plastic nut	Brass nut	Stainless steel nut
M5			1 Nm
M8		6 Nm	10 Nm
M12	1 Nm	15 Nm	20 Nm
M18	2 Nm	30 Nm	40 Nm
M30	6 Nm	70 Nm	80 Nm

Housing tolerances for cylindrical sensors without threading

Diameter	Tolerance
Ø 3 mm	−0.1
Ø 4 mm	−0.1
Ø 6.5 mm	−0.15
Ø 8 mm	−0.15

Degree of protection

The degrees of protection are given according to IEC 60529. Code letters IP (International Protection) designate protection against shock hazard, ingress of solid foreign bodies, and water, for electrical equipment.

IP 69K

Protection against ingress of water at high pressure and steam cleaning per DIN 40050 Part 9.

First digit:

- 2 Protection against penetration of solid bodies larger than 12 mm, shielding from fingers and objects
- 4 Protection against penetration of solid bodies larger than 1 mm, shielding from tools and wires
- 5 Protection against harmful dust deposits, complete contact protection
- 6 Protection against penetration of dust, complete contact protection

Second digit:

- 0 No special protection
- 4 Protection against water spraying from all directions against the piece of equipment concerned
- 5 Protection against a water jet from a nozzle directed towards the piece of equipment concerned from any direction
- 7 Protection against water, when the piece of equipment concerned (housing) is immersed in water under specified pressure and time conditions
- 8 Protection against water during continuous submersion



General Basic Information
Quality
Electric properties
Mechanical properties
Power supplies
Photoelectric sensors

Basic Information and Definitions

Mechanical properties

Materials

Material	Use and characteristics
Plastics	
ABS Acrylnitrile-Butadiene-Styrene	Impact-resistant, stiff, limited chemical resistance. Some types flame-retardant. Housing material.
AES/CP Acrylnitrile-Ethylene-Propylene-Styrene	Impact-resistant, stiff, limited chemical resistance. Housing material.
EP Epoxy resin	Duromer, molded plastic material, highest mechanical strength and temperature resistance. Very good dimensional stability. Cannot be melted.
Epoxy resin - hollow glass spheres	Hollow glass spheres can be treated with epoxy resins. They are used for manufacturing converters with low density and high pressure rating.
FEP Tetrafluoroethylene-perfluorpropylene	High temperature resistance up to 180 °C, insulation material for cable.
LCP Liquid Crystalline Polymer	High mechanical strength and temperature resistance. Very good chemical resistance. Inherently non-flammable.
PA Polyamide	High impact resistance, good chemical resistance.
PA 6, PA 66, PA mod., PA 12 Polyamide	Good mechanical strength. Temperature resistance. PA 12 approved for food industry applications.
PA transp. Transparent polyamide	Transparent, hard, inflexible. Good chemical resistance.
PBT Polybutylene terephthalate	High mechanical strength and temperature resistance. Some types flame-retardant. Good chemical resistance. Good oil resistance.
PC Polycarbonate	Clear, hard, elastic and impact resistant. Good temperature resistance. Limited chemical resistance.
PEEK Polyetheretherketone	Thermoplastic. Very high strength and temperature resistance. Good chemical resistance. Can be sterilized, good resistance to ionizing radiation.
PEI Polyetherimide	High mechanical strength and good temperature resistance. Good chemical resistance even with many solvents. Transparent with amber-yellow inherent color (not pigmented).
PET Polyethylene terephthalate	High resistance to breakage, good dimensional stability. Frequently used in the food industry.
PMMA Polymethylmethacrylate	Clear, transparent, hard, scratch-resistant, UV-resistant, mainly for optical applications.
POM Polyoxymethylene	High impact resistance, good mechanical strength. Good chemical resistance.

Basic Information and Definitions

Mechanical properties

Material	Use and characteristics
Plastics	
PP Polypropylene	Very good electrical properties. Impact resistant, tough, mechanically resilient. Very low water uptake. Good to very good chemical resistance.
PPE Polyphenylene ether	Tough, inflexible, high mechanical strength over a wide temperature range. Good chemical resistance. Good hot water resistance.
PSU Polysulfone	High temperature resistance, high impact resistance, good chemical resistance, FDA approved (food grade).
PTFE Polytetrafluoroethylene	Best temperature and chemical resistance, FDA approved (food grade).
PUR Polyurethane	Elastic, abrasion-resistant, impact-resistant. Good resistance to oils, greases, solvents (used for gaskets and cable jackets).
PVC Polyvinyl chloride	Good mechanical strength and chemical resistance (cable).
PVDF Polyvinylidene fluoride	Thermoplastic. High mechanical strength and temperature resistance. Good chemical resistance (similar to PTFE).
Metal	
Al Wrought aluminum alloy	Standard-aluminum for machined cutting. Can be anodized. Material for housings and mounting components.
CuZn Brass	Standard-housing material with surface protection.
Stainless steel	Excellent corrosion resistance and strength. Quality 1.4034, 1.4104: Standard-material; quality 1.4305, 1.4301 : Standard-material for the food industry; quality 1.4401, 1.4404, 1.4571 : With increased requirements on chemical resistance at elevated temperatures for the food industry.
GD-Al die-cast-aluminum	Low specific gravity. Good strength and resistance. Some types can be anodized.
GD-Zn die-cast-zinc	Good resistance and strength. Usually with protective surface coating.
Other	
Glass	Good chemical resistance and strength. Used primarily in optical applications (lenses, cover lenses).
Ceramic	Very good strength and chemical resistance. Electrically insulating. Excellent temperature resistance.



General Basic
Information
Quality
Electric properties
**Mechanical
properties**
Power supplies
Photoelectric
sensors

Basic Information and Definitions

Photoelectric sensors

Fiber optics



Optical conductors are made of glass or plastic with a diameter of as little as 50 µm and bunched in bundles of several hundred individual fibers to form so-called fiber optics. The fiber ends are ground and polished to meet the quality criteria of the optical industry.

The individual fibers are coated with a very thin layer of lubricant. This reduces friction against the outer jacket and between the fibers, so that broken fibers are prevented even when the cable is continuously flexed. The transmission properties are guaranteed over a longer period of time.

The ends of the bundles are potted with the connection sleeve and the jacket. Balluff fiber optics thus have an IP 67 degree of protection rating (IP 65 for metal jacket). Moisture and aggressive media cannot hurt either the fibers or the slide coating, so the optical properties remain unaffected.

This design distributes axial pull forces evenly over all the fibers, and protects the individual fibers from excessive pull loads.

Polyurethane jacket

- Temperature T = +85 °C
- Excellent chemical resistance
- Flexible
- No embrittlement from oils and cooling emulsions.

Corrugated metal tube, silicon jacketed

- Temperature T = +150 °C
- Highly flexible
- Crush-resistant
- Can be sterilized.

Metal jacket

- Temperature T = +150 °C
- Resistant to hot swarf
- Flexible
- Crush-resistant

Focusing

To achieve a smaller light spot, the light beam from the emitter is focused using lenses. Focusing and the resulting light spot allow the switches to better detect small parts and details. Focusing is often used with diffuse sensors with background suppression, as well as with retroreflective sensors.

Ambient light

The ambient light is the portion of light that is received by the receiver, but does not originate at the associated emitter.

Basic Information and Definitions

Photoelectric sensors

Luminescence

To locate invisible marks on objects, so-called luminescent materials (contained in special chalks, inks, paints etc.) are used which can only be made visible under ultraviolet (UV) light. The fluorescent materials convert the invisible UV light (short wavelength, here 380 nm) into visible light (between blue 450 nm and dark red 780 nm). This effect is called photoluminescence. The visible light can then be detected as usual by the receiver component of the sensor.

Lasers, laser class

The purpose of laser protection classes is to protect persons from laser radiation by specifying limit values. Based on this, the lasers used are classified according to a scale reflecting the degree of hazard. The calculations and associated limit values relevant for the classification are described in the standard EN 60825-1:2001-11. The grouping is based on a combination of output power and wavelength, taking into account emission duration, number of pulses and angle extension.

Balluff sensors work in the following laser protection classes:

Class 1 (M1): Not dangerous, no protective measures.

Class 2 (M2): Low output, lid-closing reflex sufficient for protection. With devices of protection class 2, the eye closes on its own due to the lid closing reflex before it has been open to the beam for too long. Laser warning signs on the device and possibly also on the machine in which a laser is being used are sufficient. Additional protective measures are not required. When using devices of protection classes 1 and 2, no laser safety officer is necessary in the company.

Light as a sensor medium

Light is used as a sensor medium in many areas of technology and daily life.

Used in controllers- and regulation equipment as a sensor medium. Generally a change in the light intensity in an optical beam (between emitter and receiver) caused by a target object is evaluated. Depending on the properties of this object and the characteristics of the optical beam, the light beam is either interrupted or reflected, or even scattered.

Predominantly clocked infrared light-LEDs are used as emitters and phototransistors are used as receivers. The output signal is for the most part independent of the ambient light conditions, since visible light can be easily filtered out.

With critical detection procedures, diffuse sensors and -beams can be used with red light-LEDs, because the light beam and the detection point can be measured visually and can be adjusted more easily.

For the various usage conditions, Balluff offers three sensor variants: diffuse sensors, retroreflective light sensors, and one-way photoelectric sensors.



General Basic
Information
Quality
Electric properties
Mechanical
properties
Power supplies
**Photoelectric
sensors**

Basic Information and Definitions

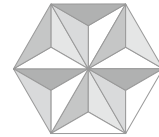
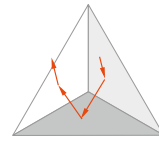
Photoelectric sensors

Reflectors

(Optically active triple mirrors)

The two-dimensional principle of retroreflection described above can be carried over to a spatial system with three mirrors which are oriented at right angles to each other (one corner of a cube standing on its point). A light beam entering this system is totally reflected by all three surfaces and exits parallel to the incident beam. Triple mirrors are called **optically active**, because they also turn the polarization level of the reflected light beam by 90°. This property first enables a secure recognition of reflective detection objects, together with a **polarizing filter** with retroreflective light sensors.

Each six triple mirrors are to be arranged into a hexagon and arranged in a honeycomb next to each other. Their orientation with respect to the light beam is then totally unproblematic. These are generally made of plastics with high optical density, injected as sheets or pressed into flexible tape.

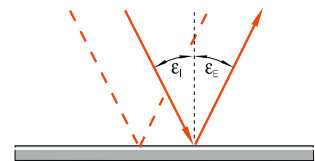


Reflection

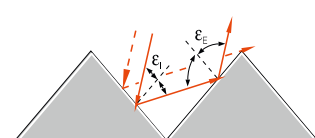
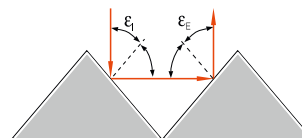
What is it?

Light beams extend to a straight line in free space. Upon striking an object, they are reflected. Depending on the surface properties of the object, one of three types of reflection occurs: total reflection, retroreflection, and diffuse reflection.

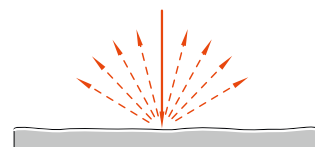
The total reflection reaches a highly reflective (mirroring) surface. The angle of incidence of a light beam is thereby the same as the angle of reflection ($\epsilon_i = \epsilon_r$). The reflection losses are in the ideal case negligible.



The retroreflection is caused by two mirrors aligned vertically to each other. A light beam is again projected back through double reflection in the same direction. The angle of incidence can thus be altered in a relatively wide range.



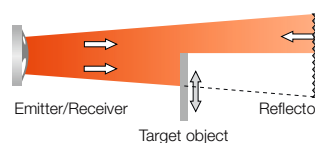
Diffuse reflection occurs on an uneven and rough surface. It can be illustrated through a wide variety of poorly reflective and differently aligned miniature mirrors. Incidental light is widely "scattered" from such a surface. The reflection losses are higher the darker and more matte finished the surface is. Diffuse sensors, for example, detect diffuse reflecting light from target objects.



Retroreflective sensor

With retroreflective light sensors, the emitter and the receiver are in a single housing. A reflector on the opposite side of the beam bounces the emitter's light back to the receiver.

A target object interrupts the reflected light beam and causes a change in the output signal. With reflective interfaces, it is advisable that the light reflected from the object is to be blanked out with a polarizing filter in front of the receiver optics, in order to prevent possible error signals.





General Basic
Information
Quality
Electric properties
Mechanical
properties
Power supplies
**Photoelectric
sensors**

Alphanumeric Index

Sorted by part number

Part number	Ordering code	Page	Part number	Ordering code	Page
BAE			BAM		
BAE LX-VS-DR090	BAE00AM	420	BAM AD-SP-008-1G4/1G2-4	BAM01UJ	397
BAE LX-VS-HI050	BAE00KR	409	BAM AD-SP-008-1G4/1G4-4	BAM01KP	397
BAE LX-VS-HI100	BAE00FR	409	BAM AD-SP-008-1G4/1G4-4-EN837	BAM01KR	397
BAE LX-VS-HI150	BAE00KP	410	BAM AD-SP-008-1G4/1N4-4	BAM01KT	397
BAE LX-VS-HI200	BAE00JE	411	BAM AD-SP-008-1G4/1R4-4	BAM01RP	397
BAE LX-VS-HR025	BAE000E	408	BAM AD-SP-008-1G4/M20X1,5-4	BAM0209	396
BAE LX-VS-HR050	BAE000F	408	BAM AD-SP-011-1G4/1N4-4	BAM01TR	397
BAE LX-VS-HR100	BAE000H	409	BAM AP-US-001-M12-0	BAM01ET	378
BAE LX-VS-HR100-E	BAE00JF	411	BAM AP-US-002-M18-0	BAM01HJ	378
BAE LX-VS-HR150	BAE00C5	410	BAM AP-US-003-M12-0	BAM01JR	378
BAE LX-VS-HR200	BAE00JC	411	BAM BD-US-001-D20-4	BAM01EP	377
BAE LX-VS-LI085	BAE00AT	415	BAM BD-US-001-D32-4	BAM01ER	377
BAE LX-VS-LI170	BAE00AY	415	BAM CC-XA-025-C03-P	BAM01EC	206
BAE LX-VS-LR085	BAE00AP	414	BAM CC-XA-028-T05-P	BAM01EA	206
BAE LX-VS-LR170	BAE00AZ	414	BAM CS-CC-009-H4-A	BAM020M	207
BAE LX-VS-LW085	BAE00AR	415	BAM CS-CC-010-H4-A	BAM020N	207
BAE LX-VS-LW170	BAE00AW	415	BAM CS-M-D12-S6K-00	BAM022C	359
BAE LX-VS-OR100	BAE00JA	419	BAM CS-XA-001-M8-C	BAM01C1	205
BAE LX-VS-OR50	BAE00J9	419	BAM CS-XA-002-M12-A	BAM01C2	205
BAE LX-VS-RI100	BAE000K	413	BAM CS-XA-008-M12-4	BAM01YN	207
BAE LX-VS-RI100-S	BAE00FN	413	BAM FK-CC-005-M08-A	BAM01Z5	207
BAE LX-VS-RR100	BAE000J	412	BAM FK-CC-005-M12-A	BAM01Z4	207
BAE LX-VS-RR100-S	BAE00FP	412	BAM FK-NI-PBS-01-C	BAM01JO	206
BAE LX-VS-RW100	BAE00AN	413	BAM FK-VS-002-03-1	BAM0206	402
BAE LX-VS-RW100-S	BAE00FM	413	BAM FS-XE-001-M5-4	BAM01AZ	374
BAE LX-VS-SI018	BAE00H1	417	BAM FS-XE-002-D4-4	BAM01C0	373
BAE LX-VS-SI030	BAE00H2	417	BAM FS-XE-003-M5-4	BAM019Y	374
BAE LX-VS-SR012	BAE00KF	416	BAM FS-XE-004-M8-4	BAM019W	375
BAE LX-VS-SR018	BAE00H0	417	BAM IA-CC-002-01	BAM023F	206
BAE LX-VS-SR030	BAE00FT	417	BAM IA-CC-002-02	BAM023H	206
BAE LX-XO-PL018-L1-S4	BAE00KE	421	BAM IA-CC-002-03	BAM023J	206
BAE LX-XO-PL018-L2-S4	BAE00KZ	421	BAM LS-FO-002-F	BAM01U2	332
BAE PD-US-004-S04	BAE00E5	379	BAM LS-FO-003-M6-L	BAM020P	332
BAE PD-US-004-S92	BAE00E6	379	BAM MB-X0-005-B04-4	BAM01E8	363
BAE-PS-XA-1W-12-015-001	BAE0036	236	BAM MB-X0-006-B05-4	BAM01FK	361
BAE-PS-XA-1W-12-025-002	BAE0039	237	BAM MB-X0-007-B05-4	BAM01FM	361
BAE-PS-XA-1W-12-050-002	BAE003E	239	BAM MB-XA-002-B02-1	BAM01AE	399
BAE-PS-XA-1W-12-100-003	BAE003H	241	BAM MB-XA-003-B03-1	BAM01AC	399
BAE-PS-XA-1W-24-007-001	BAE0001	236	BAM MB-XA-004-M30-5	BAM01E0	309
BAE-PS-XA-1W-24-012-002	BAE0004	237	BAM MB-XA-010-B07-4	BAM01MY	387
BAE-PS-XA-1W-24-025-002	BAE0005	238	BAM MB-XA-012-B09-4	BAM01UH	387
BAE-PS-XA-1W-24-038-003	BAE003J	240	BAM MB-XA-013-Q08-4	BAM01YW	364
BAE-PS-XA-1W-24-038-601	BAE00EN	232	BAM MB-X0-014-B10-4-BLS	BAM0227	363
BAE-PS-XA-1W-24-038-602	BAE00EP	232	BAM MB-X0-014-B10-4-BRR	BAM0226	362
BAE-PS-XA-1W-24-038-603	BAE00ER	233	BAM MB-X0-014-B10-4-RLS	BAM0228	363
BAE-PS-XA-1W-24-038-607	BAE00FW	233	BAM MB-X0-014-B10-4-RRR	BAM0225	362
BAE-PS-XA-1W-24-050-003	BAE0006	241	BAM MC-XA-002-D03,0-2	BAM000T	298
BAE-PS-XA-1W-24-050-013	BAE00EK	231	BAM MC-XA-002-D04,0-2	BAM000U	298
BAE-PS-XA-1W-24-080-604	BAE00ET	233	BAM MC-XA-002-D06,5-2	BAM000W	298
BAE-PS-XA-1W-24-080-605	BAE00FL	234	BAM MC-XA-002-D08,0-2	BAM000Y	298
BAE-PS-XA-1W-24-080-606	BAE00FY	234	BAM MC-XA-017-D30,0-1	BAM01U0	300, 396
BAE-PS-XA-1W-24-100-004	BAE0002	242	BAM MC-XA-018-B04-4	BAM01Y3	387
BAE-PS-XA-1W-24-100-014	BAE00EU	231	BAM MC-XA-021-M12-2	BAM01W3	394
BAE-PS-XA-1W-24-200-005	BAE0003	243	BAM MC-XA-021-M12-4	BAM01WH	394
BAE-PS-XA-1W-48-025-003	BAE003K	240	BAM MC-XA-021-M16-2	BAM01W6	394
BAE-PS-XA-1W-48-050-004	BAE003L	242	BAM MC-XA-021-M18-2	BAM01W4	395
BAE-PS-XA-1W-48-100-005	BAE003M	243	BAM MC-XA-021-M18-4	BAM01WJ	395
BAE-PS-XA-3Y-24-050-009	BAE0007	244	BAM MC-XA-021-M18-A	BAM01WL	395
BAE-PS-XA-3Y-24-100-006	BAE0008	245	BAM MC-XA-021-M30-2	BAM01W5	395
BAE-PS-XA-3Y-24-200-007	BAE0009	245	BAM MC-XA-021-M30-4	BAM01WK	395
BAE-PS-XA-3Y-24-400-010	BAE003R	246	BAM MC-XA-021-M30-A	BAM01WM	395

Alphanumeric Index

Sorted by part number

Part number	Ordering code	Page
BAM MC-XA-021-M5-4	BAM01WF	394
BAM MC-XA-021-M8-3	BAM01WR	394
BAM MC-XA-023-D12,0-2-FM/W	BAM0247	293
BAM MC-XA-023-D12,0-2-FS	BAM0246	293
BAM MC-XA-023-D12,0-2-FXL/W	BAM0248	293
BAM MC-XA-023-D18,0-2-FL	BAM022L	295
BAM MC-XA-023-D18,0-2-FS	BAM022K	294
BAM MC-XA-023-D18,0-2-FXL	BAM022H	295
BAM MC-XA-023-D18,0-2-FXL/W	BAM022J	295
BAM MC-XA-023-D18,0-2-FXS/W	BAM022F	294
BAM MC-XA-023-D30,0-2-FM/W	BAM024H	294
BAM MC-XA-023-D30,0-2-FS/W	BAM0249	294
BAM MC-XA-023-D30,0-2-FXL/W	BAM024C	295
BAM MC-XA-024-D12,0-2-FM/W	BAM024E	293
BAM MC-XA-024-D12,0-2-FXL/W	BAM024F	293
BAM MC-XA-024-D18,0-2-FM/W	BAM022M	295
BAM MC-XA-024-D30,0-2-FM/W	BAM024A	295
BAM MC-XA-027-D12,0-1	BAM0218	300
BAM MC-XA-027-D18,0-1	BAM0219	300
BAM MC-XO-030-6K-4	BAM022A	359
BAM OF-VS-001-D-RX100	BAM01A7	412
BAM PC-AE-002-1	BAM01A8	402
BAM PC-AM-010-4	BAM01Y8	387
BAM PC-VS-008-1	BAM01RR	403
BAM PC-XO-005-08M-4	BAM01Y5	354
BAM PC-XA-016-001-A	BAM021R	384
BAM PC-XO-005-18M-4	BAM01NC	355
BAM PC-XO-006-23K-1	BAM01L8	351
BAM PC-XO-006-23K-G/RK	BAM01YL	351
BAM PC-XO-006-50K-1	BAM01U6	351
BAM PC-XO-006-50K-G/RK	BAM01YM	351
BAM PT-XA-002-100-2-R15	BAM022Z	208
BAM PT-XA-002-130-2-R15	BAM0230	208
BAM PT-XA-002-190-2-R15	BAM0231	209
BAM PT-XA-002-380-2-R15	BAM0232	209
BAM PT-XA-002-500-2-R15	BAM0233	209
BAM PT-XA-004-070-T-R16	BAM0212	208
BAM PT-XA-004-100-T-R16	BAM0213	208
BAM PT-XA-004-130-T-R16	BAM0214	209
BAM PT-XA-004-160-T-R16	BAM0215	209
BAM PT-XA-004-190-T-R16	BAM0216	209
BAM PT-XA-004-500-T-R16	BAM0217	209
BAM PT-XA-005-260-T-R20	BAM021E	208
BAM PT-XA-005-510-T-R20	BAM021F	208
BAM R-40	BAM01CF	347
BAM TO-CC-001-A3-1,5/24,0	BAM00ZN	204
BAM TO-CC-001-M3-0,4/8,0	BAM00ZL	204
BAM TO-CC-001-M4-0,6/12,0	BAM00ZM	204
BAM TO-CC-002-M6	BAM01TY	204

BAV

BAV BP-PH-00064-01	SET011L	365
--------------------	----------------	-----

BCC

BCC A313-0000-10-097-PX03A5-020	BCC0AHZ	104
BCC A313-0000-10-097-PX03A5-050	BCC0AJ0	104
BCC A313-0000-10-097-PX03A5-100	BCC0AJ1	104
BCC A313-A313-30-365-PX03A5-006	BCC0AR6	108
BCC A313-A313-30-365-PX03A5-020	BCC0ARH	108
BCC A313-A313-30-365-PX03A5-050	BCC0ARJ	108
BCC A313-A313-30-365-PX03A5-100	BCC0ARK	108
BCC A313-A313-30-365-PX03A5-150	BCC0ARL	108
BCC A313-A313-A313-T0021-000	BCC0AA5	114

BCC A314-0000-10-003-PX04A5-020	BCC06HU	105
BCC A314-0000-10-003-PX04A5-050	BCC06HW	105
BCC A314-0000-10-003-PX04A5-100	BCC06HY	105
BCC A314-000-20-003-PX04A5-020	BCC06HL	106
BCC A314-000-20-003-PX04A5-050	BCC06HM	106
BCC A314-000-20-003-PX04A5-100	BCC06HN	106
BCC A314-A314-30-304-PX04A5-006	BCC06J2	109
BCC A314-A314-30-304-PX04A5-020	BCC06J3	109
BCC A314-A314-30-304-PX04A5-050	BCC06J4	109
BCC A314-A314-30-304-PX04A5-100	BCC06J5	109
BCC A314-A314-30-304-PX04A5-150	BCC06J6	109
BCC A314-A314-A314-T0022-000	BCC0AA6	114
BCC A314-A324-30-304-PX04A5-006	BCC06J7	109
BCC A314-A324-30-304-PX04A5-020	BCC06J8	109
BCC A314-A324-30-304-PX04A5-050	BCC06J9	109
BCC A314-A324-30-304-PX04A5-100	BCC06JA	109
BCC A314-A324-30-304-PX04A5-150	BCC06JC	109
BCC A315-0000-10-030-VS85N6-020	BCC09UY	188
BCC A315-0000-10-030-VS85N6-050	BCC09W0	188
BCC A315-0000-10-030-VS85N6-100	BCC09W3	188
BCC A315-0000-10-063-PX05A5-020	BCC06HC	107
BCC A315-0000-10-063-PX05A5-050	BCC06HE	107
BCC A315-0000-10-063-PX05A5-100	BCC06HF	107
BCC A315-0000-10-067-PS75N6-020	BCC0AYR	188
BCC A315-0000-10-067-PS75N6-050	BCC0AYP	188
BCC A315-0000-10-067-PS75N6-100	BCC0AYN	188
BCC A315-0000-1A-R04	BCC0A0A	193
BCC A315-0000-20-030-VS85N6-020	BCC09W8	189
BCC A315-0000-20-030-VS85N6-050	BCC09WA	189
BCC A315-0000-20-030-VS85N6-100	BCC09WF	189
BCC A315-0000-20-063-PX05A5-020	BCC0886	107
BCC A315-0000-20-063-PX05A5-050	BCC0887	107
BCC A315-0000-20-063-PX05A5-100	BCC0888	107
BCC A315-0000-20-067-PS75N6-020	BCC0AYM	189
BCC A315-0000-20-067-PS75N6-050	BCC0AYL	189
BCC A315-0000-20-067-PS75N6-100	BCC0AYK	189
BCC A315-0000-2A-R04	BCC0A09	193
BCC A315-A315-30-330-VS85N6-006	BCC09YA	189
BCC A315-A315-30-330-VS85N6-020	BCC09YE	189
BCC A315-A315-30-330-VS85N6-050	BCC09YJ	189
BCC A315-A315-30-330-VS85N6-100	BCC09YP	189
BCC A315-A315-30-330-VS85N6-150	BCC09YT	189
BCC A315-A315-30-335-PX05A5-006	BCC06FM	110
BCC A315-A315-30-335-PX05A5-020	BCC06FN	110
BCC A315-A315-30-335-PX05A5-050	BCC06FP	110
BCC A315-A315-30-335-PX05A5-100	BCC06FR	110
BCC A315-A315-30-335-PX05A5-150	BCC06FT	110
BCC A315-A315-30-344-PS75N6-006	BCC0AYJ	189
BCC A315-A315-30-344-PS75N6-020	BCC0AYF	189
BCC A315-A315-30-344-PS75N6-050	BCC0AYE	189
BCC A315-A315-30-344-PS75N6-100	BCC0AYC	189
BCC A315-A315-30-344-PS75N6-150	BCC0AYA	189
BCC A315-A315-A315-T0023-000	BCC0AA7	115, 192
BCC A315-A325-30-335-PX05A5-006	BCC06FU	111
BCC A315-A325-30-335-PX05A5-020	BCC06FW	111
BCC A315-A325-30-335-PX05A5-050	BCC06FY	111
BCC A315-A325-30-335-PX05A5-100	BCC06FZ	111
BCC A315-A325-30-335-PX05A5-150	BCC06H0	111
BCC A323-0000-10-097-PX03A5-020	BCC0AJ2	105
BCC A323-0000-10-097-PX03A5-050	BCC0AJ3	105
BCC A323-0000-10-097-PX03A5-100	BCC0AJ4	105
BCC A323-A313-30-365-PX03A5-006	BCC0C3H	108
BCC A323-A313-30-365-PX03A5-020	BCC0C3J	108

Alphanumeric Index

Sorted by part number

Part number	Ordering code	Page
BCC A323-A313-30-365-PX03A5-050	BCC0C3K	108
BCC A323-A313-30-365-PX03A5-100	BCC0C3L	108
BCC A323-A313-30-365-PX03A5-150	BCC0C3M	108
BCC A324-0000-10-003-PX04A5-020	BCC06HZ	105
BCC A324-0000-10-003-PX04A5-050	BCC06JO	105
BCC A324-0000-10-003-PX04A5-100	BCC06J1	105
BCC A324-0000-20-003-PX04A5-020	BCC06HP	106
BCC A324-0000-20-003-PX04A5-050	BCC06HR	106
BCC A324-0000-20-003-PX04A5-100	BCC06HT	106
BCC A324-A314-30-304-PX04A5-006	BCC06JE	109
BCC A324-A314-30-304-PX04A5-020	BCC06JF	109
BCC A324-A314-30-304-PX04A5-050	BCC06JH	109
BCC A324-A314-30-304-PX04A5-100	BCC06JJ	109
BCC A324-A314-30-304-PX04A5-150	BCC06JK	109
BCC A324-A324-30-304-PX04A5-006	BCC06JL	110
BCC A324-A324-30-304-PX04A5-020	BCC06JM	110
BCC A324-A324-30-304-PX04A5-050	BCC06JN	110
BCC A324-A324-30-304-PX04A5-100	BCC06JP	110
BCC A324-A324-30-304-PX04A5-150	BCC06JR	110
BCC A325-0000-10-063-PX05A5-020	BCC06HH	107
BCC A325-0000-10-063-PX05A5-050	BCC06HJ	107
BCC A325-0000-10-063-PX05A5-100	BCC06HK	107
BCC A325-0000-20-063-PX05A5-020	BCC0889	107
BCC A325-0000-20-063-PX05A5-050	BCC088A	107
BCC A325-0000-20-063-PX05A5-100	BCC088C	107
BCC A325-A315-30-335-PX05A5-006	BCC06H1	111
BCC A325-A315-30-335-PX05A5-020	BCC06H2	111
BCC A325-A315-30-335-PX05A5-050	BCC06H3	111
BCC A325-A315-30-335-PX05A5-100	BCC06H4	111
BCC A325-A315-30-335-PX05A5-150	BCC06H5	111
BCC A325-A325-30-335-PX05A5-006	BCC06H6	111
BCC A325-A325-30-335-PX05A5-020	BCC06H7	111
BCC A325-A325-30-335-PX05A5-050	BCC06H8	111
BCC A325-A325-30-335-PX05A5-100	BCC06H9	111
BCC A325-A325-30-335-PX05A5-150	BCC06HA	111
BCC A333-0000-10-000-61X3A5-000	BCC0AT9	112
BCC A333-0000-10-000-71X3A5-000	BCC0ATA	112
BCC A333-0000-20-000-61X3A5-000	BCC0ATC	112
BCC A333-0000-20-000-71X3A5-000	BCC0ATE	112
BCC A334-0000-10-000-51X4A5-000	BCC0706	113
BCC A334-0000-10-000-61X4A5-000	BCC0707	113
BCC A334-0000-10-000-71X4A5-000	BCC0708	113
BCC A334-0000-20-000-51X4A5-000	BCC0709	113
BCC A334-0000-20-000-61X4A5-000	BCC070A	113
BCC A334-0000-20-000-71X4A5-000	BCC070C	113
BCC A335-0000-10-000-51X5A5-000	BCC070E	113, 191
BCC A335-0000-10-000-61X5A5-000	BCC070F	113, 191
BCC A335-0000-10-000-71X5A5-000	BCC070H	113, 191
BCC A335-0000-20-000-51X5A5-000	BCC070J	113, 191
BCC A335-0000-20-000-61X5A5-000	BCC070K	113, 191
BCC A335-0000-20-000-71X5A5-000	BCC070L	113, 191
BCC B314-B314-30-304-MW8434-003	BCC0EJT	152
BCC B314-B314-30-304-MW8434-006	BCC0EJU	152
BCC B314-B314-30-304-MW8434-010	BCC0EJW	152
BCC B314-B314-30-304-MW8434-015	BCC0EJY	152
BCC B314-B314-30-304-MW8434-020	BCC0EJZ	152
BCC B314-B324-30-304-MW8434-003	BCC0EK5	152
BCC B314-B324-30-304-MW8434-006	BCC0EK6	152
BCC B314-B324-30-304-MW8434-010	BCC0EK7	152
BCC B314-B324-30-304-MW8434-015	BCC0EK8	152
BCC B314-B324-30-304-MW8434-020	BCC0EK9	152
BCC B324-B314-30-304-MW8434-003	BCC0EK0	153
BCC B324-B314-30-304-MW8434-006	BCC0EK1	153

Part number	Ordering code	Page
BCC B324-B314-30-304-MW8434-010	BCC0EK2	153
BCC B324-B314-30-304-MW8434-015	BCC0EK3	153
BCC B324-B314-30-304-MW8434-020	BCC0EK4	153
BCC B324-B324-30-304-MW8434-003	BCC0EJL	153
BCC B324-B324-30-304-MW8434-006	BCC0EJM	153
BCC B324-B324-30-304-MW8434-010	BCC0EJN	153
BCC B324-B324-30-304-MW8434-015	BCC0EJP	153
BCC B324-B324-30-304-MW8434-020	BCC0EJR	153
BCC D259-M414-M415-U0029-000-C011	BCC0C0Y	172
BCC D269-M414-M415-U0029-000-C011	BCC0C0Z	173
BCC D279-0000-E0-000-65X4N1-000-C011	BCC0C10	172
BCC D289-0000-E0-000-65X4N1-000-C011	BCC0C11	173
BCC E834-0000-20-000-53X4T2-000	BCC06FH	179, 199
BCC E834-E834-90-334-PS54T2-006	BCC04KE	177
BCC E834-E834-90-334-PS54T2-020	BCC04KF	177
BCC E834-E834-90-334-PS54T2-050	BCC04KH	177
BCC E834-E834-90-334-PS54T2-100	BCC04KJ	177
BCC E834-E834-90-334-PS54T2-150	BCC04ZK	177
BCC E834-E834-90-334-PS54T2-200	BCC04KK	177
BCC E834-E834-90-334-PS54T2-300	BCC04KL	177
BCC E834-E834-90-339-ES64N9-006	BCC0CZJ	195
BCC E834-E834-90-339-ES64N9-020	BCC0CZK	195
BCC E834-E834-90-339-ES64N9-050	BCC0CZL	195
BCC E834-E834-90-339-ES64N9-100	BCC0CZM	195
BCC E834-E834-90-339-ES64N9-150	BCC0CZN	195
BCC E834-E834-90-367-EX64N9-006	BCC0CZP	197
BCC E834-E834-90-367-EX64N9-020	BCC0CZR	197
BCC E834-E834-90-367-EX64N9-050	BCC0CZT	197
BCC E834-E834-90-367-EX64N9-100	BCC0CZU	197
BCC E834-E834-90-367-EX64N9-150	BCC0CNU	197
BCC E878-0000-Z1-41X8T4	BCC09N2	207
BCC M313-0000-10-001-PH0334-050	BCC0836	118
BCC M313-0000-10-001-PW0334-050	BCC0AJK	125
BCC M313-0000-10-001-PW0334-100	BCC0CAP	125
BCC M313-0000-10-001-PW3334-050	BCC0C3A	131
BCC M313-0000-10-001-PX0334-020	BCC02M8	26
BCC M313-0000-10-001-PX0334-050	BCC02M9	26
BCC M313-0000-10-001-PX0334-100	BCC02MA	26
BCC M313-0000-10-001-VX8334-020	BCC02NU	26
BCC M313-0000-10-001-VX8334-050	BCC02NW	26
BCC M313-0000-10-001-VX8334-100	BCC02NY	26
BCC M313-0000-10-004-PX0334-020	BCC0AW9	27
BCC M313-0000-10-004-PX0334-050	BCC0AWA	27
BCC M313-0000-10-004-PX0334-100	BCC0AWC	27
BCC M313-0000-10-004-VX8334-020	BCC0C06	27
BCC M313-0000-10-004-VX8334-050	BCC0AY0	27
BCC M313-0000-10-004-VX8334-100	BCC0C07	27
BCC M313-0000-20-001-PX0334-020	BCC02M2	28
BCC M313-0000-20-001-PX0334-050	BCC02M3	28
BCC M313-0000-20-001-PX0334-100	BCC02M4	28
BCC M313-0000-20-001-VX8334-020	BCC02NL	28
BCC M313-0000-20-001-VX8334-050	BCC02NM	28
BCC M313-0000-20-001-VX8334-100	BCC02NN	28
BCC M313-M313-30-300-PX0334-003	BCC02R5	32
BCC M313-M313-30-300-PX0334-006	BCC02R6	32
BCC M313-M313-30-300-PX0334-010	BCC02R7	32
BCC M313-M313-30-300-PX0334-015	BCC02R8	32
BCC M313-M313-30-300-PX0334-020	BCC02R9	32
BCC M313-M313-30-300-PX0334-030	BCC02RA	32
BCC M313-M313-30-300-PX0334-050	BCC02RC	32
BCC M313-M313-30-300-VX8334-003	BCC02UR	32
BCC M313-M313-30-300-VX8334-006	BCC02UT	32
BCC M313-M313-30-300-VX8334-010	BCC02UU	32

Alphanumeric Index

Sorted by part number

Part number	Ordering code	Page	Part number	Ordering code	Page
BCC M313-M313-30-300-VX8334-015	BCC02UW	32	BCC M314-0000-20-003-PX0434-050	BCC02MW	30
BCC M313-M313-30-300-VX8334-020	BCC02UY	32	BCC M314-0000-20-003-PX0434-100	BCC02MY	30
BCC M313-M313-30-300-VX8334-030	BCC02UZ	32	BCC M314-0000-20-003-VX8434-020	BCC02PC	30
BCC M313-M313-30-300-VX8334-050	BCC02W0	32	BCC M314-0000-20-003-VX8434-050	BCC02PE	30
BCC M313-M313-30-602-PX0334-003	BCC0AZA	32	BCC M314-0000-20-003-VX8434-100	BCC02PF	30
BCC M313-M313-30-602-PX0334-006	BCC0AZC	32	BCC M314-M313-30-300-PX0334-003	BCC0CAH	34
BCC M313-M313-30-602-PX0334-010	BCC0AZE	32	BCC M314-M313-30-300-PX0334-006	BCC0AUL	34
BCC M313-M313-30-602-PX0334-015	BCC0AZF	32	BCC M314-M313-30-300-PX0334-010	BCC0A77	34
BCC M313-M313-30-602-PX0334-020	BCC0AZH	32	BCC M314-M313-30-300-PX0334-020	BCC0A78	34
BCC M313-M313-30-602-PX0334-030	BCC0AZJ	32	BCC M314-M313-30-300-PX0334-030	BCC0C6A	34
BCC M313-M313-30-602-PX0334-050	BCC0AZK	32	BCC M314-M313-30-300-PX0334-050	BCC0C6C	34
BCC M313-M313-M313-U2017-003	BCC0A07	48	BCC M314-M313-M313-U2024-003	BCC0AFL	48
BCC M313-M323-30-300-PX0334-003	BCC02RE	33	BCC M314-M313-M313-U2024-010	BCC0AFM	48
BCC M313-M323-30-300-PX0334-006	BCC02RF	33	BCC M314-M314-30-304-PX0434-003	BCC02TF	35
BCC M313-M323-30-300-PX0334-010	BCC02RH	33	BCC M314-M314-30-304-PX0434-006	BCC02TH	35
BCC M313-M323-30-300-PX0334-015	BCC02RJ	33	BCC M314-M314-30-304-PX0434-010	BCC02TJ	35
BCC M313-M323-30-300-PX0334-020	BCC02RK	33	BCC M314-M314-30-304-PX0434-015	BCC02TK	35
BCC M313-M323-30-300-PX0334-030	BCC02RL	33	BCC M314-M314-30-304-PX0434-020	BCC02TL	35
BCC M313-M323-30-300-PX0334-050	BCC02RM	33	BCC M314-M314-30-304-PX0434-030	BCC02TM	35
BCC M313-M323-30-300-VX8334-003	BCC02W1	33	BCC M314-M314-30-304-PX0434-050	BCC02TN	35
BCC M313-M323-30-300-VX8334-006	BCC02W2	33	BCC M314-M314-30-304-VX8434-003	BCC02Y2	35
BCC M313-M323-30-300-VX8334-010	BCC02W3	33	BCC M314-M314-30-304-VX8434-006	BCC02Y3	35
BCC M313-M323-30-300-VX8334-015	BCC02W4	33	BCC M314-M314-30-304-VX8434-010	BCC02Y4	35
BCC M313-M323-30-300-VX8334-020	BCC02W5	33	BCC M314-M314-30-304-VX8434-015	BCC02Y5	35
BCC M313-M323-30-300-VX8334-030	BCC02W6	33	BCC M314-M314-30-304-VX8434-020	BCC02Y6	35
BCC M313-M323-30-300-VX8334-050	BCC02W7	33	BCC M314-M314-30-304-VX8434-030	BCC02Y7	35
BCC M313-M413-3E-300-PX0334-003	BCC03F4	38	BCC M314-M314-30-304-VX8434-050	BCC02Y8	35
BCC M313-M413-3E-300-PX0334-006	BCC03F5	38	BCC M314-M324-30-304-PX0434-003	BCC02TP	35
BCC M313-M413-3E-300-PX0334-010	BCC03F6	38	BCC M314-M324-30-304-PX0434-006	BCC02TR	35
BCC M313-M413-3E-300-PX0334-015	BCC03F7	38	BCC M314-M324-30-304-PX0434-010	BCC02TT	35
BCC M313-M413-3E-300-PX0334-020	BCC03F8	38	BCC M314-M324-30-304-PX0434-015	BCC02TU	35
BCC M313-M413-3E-300-PX0334-030	BCC03F9	38	BCC M314-M324-30-304-PX0434-020	BCC02TW	35
BCC M313-M413-3E-300-PX0334-050	BCC03FA	38	BCC M314-M324-30-304-PX0434-030	BCC02TY	35
BCC M313-M413-3E-300-VX8334-003	BCC03HE	38	BCC M314-M324-30-304-PX0434-050	BCC02TZ	35
BCC M313-M413-3E-300-VX8334-006	BCC03HF	38	BCC M314-M324-30-304-VX8434-003	BCC02Y9	35
BCC M313-M413-3E-300-VX8334-010	BCC03HH	38	BCC M314-M324-30-304-VX8434-006	BCC02YA	35
BCC M313-M413-3E-300-VX8334-015	BCC03HJ	38	BCC M314-M324-30-304-VX8434-010	BCC02YC	35
BCC M313-M413-3E-300-VX8334-020	BCC03HK	38	BCC M314-M324-30-304-VX8434-015	BCC02YE	35
BCC M313-M413-3E-300-VX8334-030	BCC03HL	38	BCC M314-M324-30-304-VX8434-020	BCC02YF	35
BCC M313-M413-3E-300-VX8334-050	BCC03HM	38	BCC M314-M324-30-304-VX8434-030	BCC02YH	35
BCC M313-M423-3E-300-PX0334-003	BCC03FC	38	BCC M314-M324-30-304-VX8434-050	BCC02YJ	35
BCC M313-M423-3E-300-PX0334-006	BCC03FE	38	BCC M314-M414-3E-304-PX0434-003	BCC03JP	40
BCC M313-M423-3E-300-PX0334-010	BCC03FF	38	BCC M314-M414-3E-304-PX0434-006	BCC03JR	40
BCC M313-M423-3E-300-PX0334-015	BCC03FH	38	BCC M314-M414-3E-304-PX0434-010	BCC03JT	40
BCC M313-M423-3E-300-PX0334-020	BCC03FJ	38	BCC M314-M414-3E-304-PX0434-015	BCC03JU	40
BCC M313-M423-3E-300-PX0334-030	BCC03FK	38	BCC M314-M414-3E-304-PX0434-020	BCC03JW	40
BCC M313-M423-3E-300-PX0334-050	BCC03FL	38	BCC M314-M414-3E-304-PX0434-030	BCC03JY	40
BCC M313-M423-3E-300-VX8334-003	BCC03HN	38	BCC M314-M414-3E-304-PX0434-050	BCC03JZ	40
BCC M313-M423-3E-300-VX8334-006	BCC03HP	38	BCC M314-M414-3E-304-VX8434-003	BCC03L1	40
BCC M313-M423-3E-300-VX8334-010	BCC03HR	38	BCC M314-M414-3E-304-VX8434-006	BCC03L2	40
BCC M313-M423-3E-300-VX8334-015	BCC03HT	38	BCC M314-M414-3E-304-VX8434-010	BCC03L3	40
BCC M313-M423-3E-300-VX8334-020	BCC03HU	38	BCC M314-M414-3E-304-VX8434-015	BCC03L4	40
BCC M313-M423-3E-300-VX8334-030	BCC03HW	38	BCC M314-M414-3E-304-VX8434-020	BCC03L5	40
BCC M313-M423-3E-300-VX8334-050	BCC03HY	38	BCC M314-M414-3E-304-VX8434-030	BCC03L6	40
BCC M314-0000-10-003-PW0434-050	BCC0AJM	125	BCC M314-M414-3E-304-VX8434-050	BCC03L7	40
BCC M314-0000-10-003-PW3434-050	BCC0C21	131	BCC M314-M424-3E-304-PX0434-003	BCC03K0	40
BCC M314-0000-10-003-PX0434-020	BCC02N2	29	BCC M314-M424-3E-304-PX0434-006	BCC03K1	40
BCC M314-0000-10-003-PX0434-050	BCC02N3	29	BCC M314-M424-3E-304-PX0434-010	BCC03K2	40
BCC M314-0000-10-003-PX0434-100	BCC02N4	29	BCC M314-M424-3E-304-PX0434-015	BCC03K3	40
BCC M314-0000-10-003-VX8434-020	BCC02PL	29	BCC M314-M424-3E-304-PX0434-020	BCC03K4	40
BCC M314-0000-10-003-VX8434-050	BCC02PM	29	BCC M314-M424-3E-304-PX0434-030	BCC03K5	40
BCC M314-0000-10-003-VX8434-100	BCC02PN	29	BCC M314-M424-3E-304-PX0434-050	BCC03K6	40
BCC M314-0000-20-003-PX0434-020	BCC02MU	30	BCC M314-M424-3E-304-VX8434-003	BCC03L8	40

Alphanumeric Index

Sorted by part number

Part number	Ordering code	Page	Part number	Ordering code	Page
BCC M314-M424-3E-304-VX8434-006	BCC03L9	40	BCC M323-M323-30-300-VX8334-010	BCC02WW	34
BCC M314-M424-3E-304-VX8434-010	BCC03LA	40	BCC M323-M323-30-300-VX8334-015	BCC02WY	34
BCC M314-M424-3E-304-VX8434-015	BCC03LC	40	BCC M323-M323-30-300-VX8334-020	BCC02WZ	34
BCC M314-M424-3E-304-VX8434-020	BCC03LE	40	BCC M323-M323-30-300-VX8334-030	BCC02Y0	34
BCC M314-M424-3E-304-VX8434-030	BCC03LF	40	BCC M323-M323-30-300-VX8334-050	BCC02Y1	34
BCC M314-M424-3E-304-VX8434-050	BCC03LH	40	BCC M323-M413-3E-300-PX0334-003	BCC03FM	39
BCC M323-0000-10-001-PW0334-050	BCC0AJR	125	BCC M323-M413-3E-300-PX0334-006	BCC03FN	39
BCC M323-0000-10-001-PW3334-050	BCC0C24	131	BCC M323-M413-3E-300-PX0334-010	BCC03FP	39
BCC M323-0000-10-001-PX0334-020	BCC02ML	27	BCC M323-M413-3E-300-PX0334-015	BCC03FR	39
BCC M323-0000-10-001-PX0334-050	BCC02MM	27	BCC M323-M413-3E-300-PX0334-020	BCC03FT	39
BCC M323-0000-10-001-PX0334-100	BCC02MN	27	BCC M323-M413-3E-300-PX0334-030	BCC03FU	39
BCC M323-0000-10-001-VX8334-020	BCC02P5	27	BCC M323-M413-3E-300-PX0334-050	BCC03FW	39
BCC M323-0000-10-001-VX8334-050	BCC02P6	27	BCC M323-M413-3E-300-VX8334-003	BCC03HZ	39
BCC M323-0000-10-001-VX8334-100	BCC02P7	27	BCC M323-M413-3E-300-VX8334-006	BCC03J0	39
BCC M323-0000-10-004-PX0334-020	BCC02MH	27	BCC M323-M413-3E-300-VX8334-010	BCC03J1	39
BCC M323-0000-10-004-PX0334-050	BCC02MJ	27	BCC M323-M413-3E-300-VX8334-015	BCC03J2	39
BCC M323-0000-10-004-PX0334-100	BCC02MK	27	BCC M323-M413-3E-300-VX8334-020	BCC03J3	39
BCC M323-0000-10-004-VX8334-020	BCC02P2	27	BCC M323-M413-3E-300-VX8334-030	BCC03J4	39
BCC M323-0000-10-004-VX8334-050	BCC02P3	27	BCC M323-M413-3E-300-VX8334-050	BCC03J5	39
BCC M323-0000-10-004-VX8334-100	BCC02P4	27	BCC M323-M413-3E-602-PX0334-003	BCC03H5	39
BCC M323-0000-20-001-PX0334-020	BCC02M5	28	BCC M323-M413-3E-602-PX0334-006	BCC03H6	39
BCC M323-0000-20-001-PX0334-050	BCC02M6	28	BCC M323-M413-3E-602-PX0334-010	BCC03H7	39
BCC M323-0000-20-001-PX0334-100	BCC02M7	28	BCC M323-M413-3E-602-PX0334-015	BCC03H8	39
BCC M323-0000-20-001-VX8334-020	BCC02NP	28	BCC M323-M413-3E-602-PX0334-020	BCC03H9	39
BCC M323-0000-20-001-VX8334-050	BCC02NR	28	BCC M323-M413-3E-602-PX0334-030	BCC03HA	39
BCC M323-0000-20-001-VX8334-100	BCC02NT	28	BCC M323-M413-3E-602-PX0334-050	BCC03HC	39
BCC M323-M313-30-300-PX0334-003	BCC02RZ	33	BCC M323-M413-3E-602-VX8334-003	BCC03JF	39
BCC M323-M313-30-300-PX0334-006	BCC02T0	33	BCC M323-M413-3E-602-VX8334-006	BCC03JH	39
BCC M323-M313-30-300-PX0334-010	BCC02T1	33	BCC M323-M413-3E-602-VX8334-010	BCC03JJ	39
BCC M323-M313-30-300-PX0334-015	BCC02T2	33	BCC M323-M413-3E-602-VX8334-015	BCC03JK	39
BCC M323-M313-30-300-PX0334-020	BCC02T3	33	BCC M323-M413-3E-602-VX8334-020	BCC03JL	39
BCC M323-M313-30-300-PX0334-030	BCC02T4	33	BCC M323-M413-3E-602-VX8334-030	BCC03JM	39
BCC M323-M313-30-300-PX0334-050	BCC02T5	33	BCC M323-M413-3E-602-VX8334-050	BCC03JN	39
BCC M323-M313-30-300-VX8334-003	BCC02WJ	33	BCC M323-M423-3E-300-PX0334-003	BCC03FY	39
BCC M323-M313-30-300-VX8334-006	BCC02WK	33	BCC M323-M423-3E-300-PX0334-006	BCC03FZ	39
BCC M323-M313-30-300-VX8334-010	BCC02WL	33	BCC M323-M423-3E-300-PX0334-010	BCC03H0	39
BCC M323-M313-30-300-VX8334-015	BCC02WM	33	BCC M323-M423-3E-300-PX0334-015	BCC03H1	39
BCC M323-M313-30-300-VX8334-020	BCC02WN	33	BCC M323-M423-3E-300-PX0334-020	BCC03H2	39
BCC M323-M313-30-300-VX8334-030	BCC02WP	33	BCC M323-M423-3E-300-PX0334-030	BCC03H3	39
BCC M323-M313-30-300-VX8334-050	BCC02WR	33	BCC M323-M423-3E-300-PX0334-050	BCC03H4	39
BCC M323-M313-30-602-PX0334-003	BCC02RN	33	BCC M323-M423-3E-300-VX8334-003	BCC03J6	39
BCC M323-M313-30-602-PX0334-006	BCC02RP	33	BCC M323-M423-3E-300-VX8334-006	BCC03J7	39
BCC M323-M313-30-602-PX0334-010	BCC02RR	33	BCC M323-M423-3E-300-VX8334-010	BCC03J8	39
BCC M323-M313-30-602-PX0334-015	BCC02RT	33	BCC M323-M423-3E-300-VX8334-015	BCC03J9	39
BCC M323-M313-30-602-PX0334-020	BCC02RU	33	BCC M323-M423-3E-300-VX8334-020	BCC03JA	39
BCC M323-M313-30-602-PX0334-030	BCC02RW	33	BCC M323-M423-3E-300-VX8334-030	BCC03JC	39
BCC M323-M313-30-602-PX0334-050	BCC02RY	33	BCC M323-M423-3E-300-VX8334-050	BCC03JE	39
BCC M323-M313-30-602-VX8334-003	BCC02W8	33	BCC M324-0000-10-003-PW0434-050	BCC0AJW	125
BCC M323-M313-30-602-VX8334-006	BCC02W9	33	BCC M324-0000-10-003-PW3434-050	BCC0C20	131
BCC M323-M313-30-602-VX8334-010	BCC02WA	33	BCC M324-0000-10-003-PX0434-020	BCC02NC	29
BCC M323-M313-30-602-VX8334-015	BCC02WC	33	BCC M324-0000-10-003-PX0434-050	BCC02NE	29
BCC M323-M313-30-602-VX8334-020	BCC02WE	33	BCC M324-0000-10-003-PX0434-100	BCC02NF	29
BCC M323-M313-30-602-VX8334-030	BCC02WF	33	BCC M324-0000-10-003-VX8434-020	BCC02PZ	29
BCC M323-M313-30-602-VX8334-050	BCC02WH	33	BCC M324-0000-10-003-VX8434-050	BCC02R0	29
BCC M323-M323-30-300-PX0334-003	BCC02T6	34	BCC M324-0000-10-003-VX8434-100	BCC02R1	29
BCC M323-M323-30-300-PX0334-006	BCC02T7	34	BCC M324-0000-10-008-PX0434-020	BCC02N8	29
BCC M323-M323-30-300-PX0334-010	BCC02T8	34	BCC M324-0000-10-008-PX0434-050	BCC02N9	29
BCC M323-M323-30-300-PX0334-015	BCC02T9	34	BCC M324-0000-10-008-PX0434-100	BCC02NA	29
BCC M323-M323-30-300-PX0334-020	BCC02TA	34	BCC M324-0000-10-008-VX8434-020	BCC02PU	29
BCC M323-M323-30-300-PX0334-030	BCC02TC	34	BCC M324-0000-10-008-VX8434-050	BCC02PW	29
BCC M323-M323-30-300-PX0334-050	BCC02TE	34	BCC M324-0000-10-008-VX8434-100	BCC02PY	29
BCC M323-M323-30-300-VX8334-003	BCC02WT	34	BCC M324-0000-20-003-PX0434-020	BCC02MZ	30
BCC M323-M323-30-300-VX8334-006	BCC02WU	34	BCC M324-0000-20-003-PX0434-050	BCC02N0	30

Alphanumeric Index

Sorted by part number

Part number	Ordering code	Page	Part number	Ordering code	Page
BCC M324-0000-20-003-PX0434-100	BCC02N1	30	BCC M324-M414-3E-606-PX0434-015	BCC03KW	41
BCC M324-0000-20-003-VX8434-020	BCC02PH	30	BCC M324-M414-3E-606-PX0434-020	BCC03KY	41
BCC M324-0000-20-003-VX8434-050	BCC02PJ	30	BCC M324-M414-3E-606-PX0434-030	BCC03KZ	41
BCC M324-0000-20-003-VX8434-100	BCC02PK	30	BCC M324-M414-3E-606-PX0434-050	BCC03L0	41
BCC M324-M314-30-304-PX0434-003	BCC02U7	35	BCC M324-M414-3E-606-VX8434-003	BCC03M2	41
BCC M324-M314-30-304-PX0434-006	BCC02U8	35	BCC M324-M414-3E-606-VX8434-006	BCC03M3	41
BCC M324-M314-30-304-PX0434-010	BCC02U9	35	BCC M324-M414-3E-606-VX8434-010	BCC03M4	41
BCC M324-M314-30-304-PX0434-015	BCC02UA	35	BCC M324-M414-3E-606-VX8434-015	BCC03M5	41
BCC M324-M314-30-304-PX0434-020	BCC02UC	35	BCC M324-M414-3E-606-VX8434-020	BCC03M6	41
BCC M324-M314-30-304-PX0434-030	BCC02UE	35	BCC M324-M414-3E-606-VX8434-030	BCC03M7	41
BCC M324-M314-30-304-PX0434-050	BCC02UF	35	BCC M324-M414-3E-606-VX8434-050	BCC03M8	41
BCC M324-M314-30-304-VX8434-003	BCC02YU	35	BCC M324-M424-3E-304-PX0434-003	BCC03KH	41
BCC M324-M314-30-304-VX8434-006	BCC02YW	35	BCC M324-M424-3E-304-PX0434-006	BCC03KJ	41
BCC M324-M314-30-304-VX8434-010	BCC02YY	35	BCC M324-M424-3E-304-PX0434-010	BCC03KK	41
BCC M324-M314-30-304-VX8434-015	BCC02YZ	35	BCC M324-M424-3E-304-PX0434-015	BCC03KL	41
BCC M324-M314-30-304-VX8434-020	BCC02Z0	35	BCC M324-M424-3E-304-PX0434-020	BCC03KM	41
BCC M324-M314-30-304-VX8434-030	BCC02Z1	35	BCC M324-M424-3E-304-PX0434-030	BCC03KN	41
BCC M324-M314-30-304-VX8434-050	BCC02Z2	35	BCC M324-M424-3E-304-PX0434-050	BCC03KP	41
BCC M324-M314-30-606-PX0434-003	BCC02U0	36	BCC M324-M424-3E-304-VX8434-003	BCC03LT	41
BCC M324-M314-30-606-PX0434-006	BCC02U1	36	BCC M324-M424-3E-304-VX8434-006	BCC03LU	41
BCC M324-M314-30-606-PX0434-010	BCC02U2	36	BCC M324-M424-3E-304-VX8434-010	BCC03LW	41
BCC M324-M314-30-606-PX0434-015	BCC02U3	36	BCC M324-M424-3E-304-VX8434-015	BCC03LY	41
BCC M324-M314-30-606-PX0434-020	BCC02U4	36	BCC M324-M424-3E-304-VX8434-020	BCC03LZ	41
BCC M324-M314-30-606-PX0434-030	BCC02U5	36	BCC M324-M424-3E-304-VX8434-030	BCC03M0	41
BCC M324-M314-30-606-PX0434-050	BCC02U6	36	BCC M324-M424-3E-304-VX8434-050	BCC03M1	41
BCC M324-M314-30-606-VX8434-003	BCC02YK	36	BCC M333-0000-10-000-22X334-000	BCC09EU	43
BCC M324-M314-30-606-VX8434-006	BCC02YL	36	BCC M333-0000-10-000-31X350-000	BCC06Z1	42
BCC M324-M314-30-606-VX8434-010	BCC02YM	36	BCC M333-0000-10-000-34X325-000	BCC06YW	42
BCC M324-M314-30-606-VX8434-015	BCC02YN	36	BCC M333-0000-20-000-22X334-000	BCC09EW	44
BCC M324-M314-30-606-VX8434-020	BCC02YP	36	BCC M333-0000-20-000-31X350-000-C027	BCC0E7N	43
BCC M324-M314-30-606-VX8434-030	BCC02YR	36	BCC M333-0000-20-000-34X325-000	BCC06YZ	43
BCC M324-M314-30-606-VX8434-050	BCC02YT	36	BCC M334-0000-10-000-22X434-000	BCC09EY	45
BCC M324-M324-30-304-PX0434-003	BCC02UH	36	BCC M334-0000-20-000-22X434-000	BCC09EZ	45
BCC M324-M324-30-304-PX0434-006	BCC02UJ	36	BCC M343-0000-10-000-34X325-000	BCC06YY	43
BCC M324-M324-30-304-PX0434-010	BCC02UK	36	BCC M343-0000-20-000-34X325-000	BCC06Z0	44
BCC M324-M324-30-304-PX0434-015	BCC02UL	36	BCC M353-0000-10-RM049-005	BCC0E4Y	46
BCC M324-M324-30-304-PX0434-020	BCC02UM	36	BCC M353-0000-10-RM049-020	BCC0E4Z	46
BCC M324-M324-30-304-PX0434-030	BCC02UN	36	BCC M353-0000-20-RM049-005	BCC0E50	46
BCC M324-M324-30-304-PX0434-050	BCC02UP	36	BCC M353-0000-20-RM049-020	BCC0E51	46
BCC M324-M324-30-304-VX8434-003	BCC02Z3	36	BCC M354-0000-10-RM050-005	BCC0E35	47
BCC M324-M324-30-304-VX8434-006	BCC02Z4	36	BCC M354-0000-10-RM050-020	BCC0E38	47
BCC M324-M324-30-304-VX8434-010	BCC02Z5	36	BCC M354-0000-20-RM050-005	BCC0E2Z	47
BCC M324-M324-30-304-VX8434-015	BCC02Z6	36	BCC M354-0000-20-RM050-020	BCC0E32	47
BCC M324-M324-30-304-VX8434-020	BCC02Z7	36	BCC M412-0000-2B-031-PS72N1-020	BCC0A0Y	169
BCC M324-M324-30-304-VX8434-030	BCC02Z8	36	BCC M412-0000-2B-031-PS72N1-050	BCC0A0Z	169
BCC M324-M324-30-304-VX8434-050	BCC02Z9	36	BCC M412-0000-2B-031-PS72N1-100	BCC0A10	169
BCC M324-M414-3E-304-PX0434-003	BCC03K7	41	BCC M413-0000-2A-001-PX0334-020	BCC02ZA	52
BCC M324-M414-3E-304-PX0434-006	BCC03K8	41	BCC M413-0000-2A-001-PX0334-050	BCC02ZC	52
BCC M324-M414-3E-304-PX0434-010	BCC03K9	41	BCC M413-0000-2A-001-PX0334-100	BCC02ZE	52
BCC M324-M414-3E-304-PX0434-015	BCC03KA	41	BCC M413-0000-2A-001-VX8334-020	BCC0334	52
BCC M324-M414-3E-304-PX0434-020	BCC03KC	41	BCC M413-0000-2A-001-VX8334-050	BCC0335	52
BCC M324-M414-3E-304-PX0434-030	BCC03KE	41	BCC M413-0000-2A-001-VX8334-100	BCC0336	52
BCC M324-M414-3E-304-PX0434-050	BCC03KF	41	BCC M413-0000-2A-002-PX0334-020	BCC02ZF	55
BCC M324-M414-3E-304-VX8434-003	BCC03LJ	41	BCC M413-0000-2A-002-PX0334-050	BCC02ZH	55
BCC M324-M414-3E-304-VX8434-006	BCC03LK	41	BCC M413-0000-2A-002-PX0334-100	BCC02ZJ	55
BCC M324-M414-3E-304-VX8434-010	BCC03LL	41	BCC M413-0000-2A-002-VX8334-020	BCC0337	55
BCC M324-M414-3E-304-VX8434-015	BCC03LM	41	BCC M413-0000-2A-002-VX8334-050	BCC0338	55
BCC M324-M414-3E-304-VX8434-020	BCC03LN	41	BCC M413-0000-2A-002-VX8334-100	BCC0339	55
BCC M324-M414-3E-304-VX8434-030	BCC03LP	41	BCC M413-0000-2A-036-PS0334-020	BCC02ZK	52
BCC M324-M414-3E-304-VX8434-050	BCC03LR	41	BCC M413-0000-2A-036-PS0334-050	BCC02ZL	52
BCC M324-M414-3E-606-PX0434-003	BCC03KR	41	BCC M413-0000-2A-036-PS0334-100	BCC02ZM	52
BCC M324-M414-3E-606-PX0434-006	BCC03KT	41	BCC M413-0000-2A-036-VS8334-020	BCC033A	52
BCC M324-M414-3E-606-PX0434-010	BCC03KU	41	BCC M413-0000-2A-036-VS8334-050	BCC033C	52

Alphanumeric Index

Sorted by part number

Part number	Ordering code	Page	Part number	Ordering code	Page
BCC M413-0000-2A-036-VS8334-100	BCC033E	52	BCC M414-M415-M415-U2027-010	BCC0AK3	129
BCC M413-0000-2A-037-PS0334-020	BCC022N	55	BCC M414-M415-M415-U2027-020	BCC0C27	129
BCC M413-0000-2A-037-PS0334-050	BCC022P	55	BCC M414-M415-M415-U2028-003	BCC0AUA	98
BCC M413-0000-2A-037-PS0334-100	BCC022R	55	BCC M414-M415-M415-U2028-006	BCC0AUC	98
BCC M413-0000-2A-037-VS8334-020	BCC033F	55	BCC M414-M415-M415-U2028-010	BCC0AUE	98
BCC M413-0000-2A-037-VS8334-050	BCC033H	55	BCC M414-M415-M415-U2028-020	BCC0AUF	98
BCC M413-0000-2A-037-VS8334-100	BCC033J	55	BCC M414-M415-M415-U2028-030	BCC0AUH	98
BCC M414-0000-2A-003-PX0434-020	BCC031N	59	BCC M414-M415-M415-U2032-003	BCC0C7A	136
BCC M414-0000-2A-003-PX0434-050	BCC031P	59	BCC M414-M415-M415-U2032-006	BCC0C7C	136
BCC M414-0000-2A-003-PX0434-100	BCC031R	59	BCC M414-M415-M415-U2032-010	BCC0C7E	136
BCC M414-0000-2A-003-VX8434-020	BCC035F	59	BCC M414-M425-M425-U2034-003	BCC0C9U	98
BCC M414-0000-2A-003-VX8434-050	BCC035H	59	BCC M414-M425-M425-U2034-006	BCC0C9T	98
BCC M414-0000-2A-003-VX8434-100	BCC035J	59	BCC M414-M425-M425-U2034-010	BCC0C9R	98
BCC M414-0000-2A-014-PS0434-020	BCC031T	59	BCC M414-M425-M425-U2034-020	BCC0C9P	98
BCC M414-0000-2A-014-PS0434-050	BCC031U	59	BCC M414-M425-M425-U2034-030	BCC0C9N	98
BCC M414-0000-2A-014-PS0434-100	BCC031W	59	BCC M414-M425-M425-U2035-003	BCC0CA2	136
BCC M414-0000-2A-014-VS8434-020	BCC035K	59	BCC M414-M425-M425-U2035-006	BCC0CA3	136
BCC M414-0000-2A-014-VS8434-050	BCC035L	59	BCC M414-M425-M425-U2035-010	BCC0CA4	136
BCC M414-0000-2A-014-VS8434-100	BCC035M	59	BCC M414-M425-M425-U2035-020	BCC0CA5	136
BCC M414-0000-2A-068-VS24N7-020	BCC084R	183	BCC M414-M425-M425-U2035-030	BCC0CA6	136
BCC M414-0000-2A-068-VS24N7-050	BCC084T	183	BCC M415-0000-1A-001-PH0334-020	BCC082W	119
BCC M414-0000-2A-068-VS24N7-100	BCC084U	183	BCC M415-0000-1A-001-PH0334-050	BCC082Y	119
BCC M414-E814-BG-RM013-000	BCC085F	180, 200	BCC M415-0000-1A-001-PH0334-100	BCC082Z	119
BCC M414-E834-8G-668-PS54T2-006	BCC04K6	177	BCC M415-0000-1A-001-PX0334-020	BCC030K	51
BCC M414-E834-8G-668-PS54T2-020	BCC04K7	177	BCC M415-0000-1A-001-PX0334-050	BCC030L	51
BCC M414-E834-8G-668-PS54T2-050	BCC04K8	177	BCC M415-0000-1A-001-PX0334-100	BCC030M	51
BCC M414-E834-8G-668-PS54T2-100	BCC04K9	177	BCC M415-0000-1A-001-VX8334-020	BCC034A	51
BCC M414-E834-8G-668-PS54T2-150	BCC04ZJ	177	BCC M415-0000-1A-001-VX8334-050	BCC034C	51
BCC M414-E834-8G-668-PS54T2-200	BCC04KA	177	BCC M415-0000-1A-001-VX8334-100	BCC034E	51
BCC M414-E834-8G-668-PS54T2-300	BCC04KC	177	BCC M415-0000-1A-002-PX0334-020	BCC030N	53
BCC M414-E834-8G-672-ES64N9-006	BCC0CZA	195	BCC M415-0000-1A-002-PX0334-050	BCC030P	53
BCC M414-E834-8G-672-ES64N9-020	BCC0CZC	195	BCC M415-0000-1A-002-PX0334-100	BCC030R	53
BCC M414-E834-8G-672-ES64N9-050	BCC0CZE	195	BCC M415-0000-1A-002-VX8334-020	BCC034F	53
BCC M414-E834-8G-672-ES64N9-100	BCC0CZF	195	BCC M415-0000-1A-002-VX8334-050	BCC034H	53
BCC M414-E834-8G-672-ES64N9-150	BCC0CZH	195	BCC M415-0000-1A-002-VX8334-100	BCC034J	53
BCC M414-E834-8G-695-EX64N9-006	BCC0EOA	197	BCC M415-0000-1A-003-PH0434-020	BCC0AA9	119
BCC M414-E834-8G-695-EX64N9-020	BCC0EOC	197	BCC M415-0000-1A-003-PH0434-050	BCC0AAA	119
BCC M414-E834-8G-695-EX64N9-050	BCC0CNP	197	BCC M415-0000-1A-003-PH0434-100	BCC0AAC	119
BCC M414-E834-8G-695-EX64N9-100	BCC0CNR	197	BCC M415-0000-1A-003-PW0434-020	BCC0AK4	127
BCC M414-E834-8G-695-EX64N9-150	BCC0CNT	197	BCC M415-0000-1A-003-PW0434-050	BCC0AK5	127
BCC M414-M313-M313-U2026-006	BCC0AFW	98	BCC M415-0000-1A-003-PW0434-100	BCC0AK6	127
BCC M414-M313-M313-U2026-010	BCC0AFY	98	BCC M415-0000-1A-003-PW3434-020	BCC09J6	132
BCC M414-M313-M313-U2026-020	BCC0AFZ	98	BCC M415-0000-1A-003-PW3434-050	BCC0C23	132
BCC M414-M313-M313-U2026-030	BCC0AH0	98	BCC M415-0000-1A-003-PW3434-100	BCC0C7W	132
BCC M414-M414-6D-331-PS54T2-006	BCC04K0	177	BCC M415-0000-1A-003-PX0434-020	BCC032F	56
BCC M414-M414-6D-331-PS54T2-020	BCC04K1	177	BCC M415-0000-1A-003-PX0434-050	BCC032H	56
BCC M414-M414-6D-331-PS54T2-050	BCC04K2	177	BCC M415-0000-1A-003-PX0434-100	BCC032J	56
BCC M414-M414-6D-331-PS54T2-100	BCC04K3	177	BCC M415-0000-1A-003-VX8434-020	BCC0367	56
BCC M414-M414-6D-331-PS54T2-150	BCC04ZH	177	BCC M415-0000-1A-003-VX8434-050	BCC0368	56
BCC M414-M414-6D-331-PS54T2-200	BCC04K4	177	BCC M415-0000-1A-003-VX8434-100	BCC0369	56
BCC M414-M414-6D-331-PS54T2-300	BCC04K5	177	BCC M415-0000-1A-004-PX0334-020	BCC030A	51
BCC M414-M414-6D-338-ES64N9-006	BCC09NL	195	BCC M415-0000-1A-004-PX0334-050	BCC030C	51
BCC M414-M414-6D-338-ES64N9-020	BCC09NN	195	BCC M415-0000-1A-004-PX0334-100	BCC030E	51
BCC M414-M414-6D-338-ES64N9-050	BCC09NP	195	BCC M415-0000-1A-004-VX8334-020	BCC0344	51
BCC M414-M414-6D-338-ES64N9-100	BCC09NR	195	BCC M415-0000-1A-004-VX8334-050	BCC0345	51
BCC M414-M414-6D-338-ES64N9-150	BCC09NT	195	BCC M415-0000-1A-004-VX8334-100	BCC0346	51
BCC M414-M414-6D-366-EX64N9-006	BCC0EO8	196	BCC M415-0000-1A-005-PX0334-020	BCC030F	53
BCC M414-M414-6D-366-EX64N9-020	BCC0CLZ	196	BCC M415-0000-1A-005-PX0334-050	BCC030H	53
BCC M414-M414-6D-366-EX64N9-050	BCC0CM1	196	BCC M415-0000-1A-005-PX0334-100	BCC030J	53
BCC M414-M414-6D-366-EX64N9-100	BCC0CM3	196	BCC M415-0000-1A-005-VX8334-020	BCC0347	53
BCC M414-M414-6D-366-EX64N9-150	BCC0EO9	196	BCC M415-0000-1A-005-VX8334-050	BCC0348	53
BCC M414-M415-M415-U2027-003	BCC0AK1	129	BCC M415-0000-1A-005-VX8334-100	BCC0349	53
BCC M414-M415-M415-U2027-006	BCC0AK2	129	BCC M415-0000-1A-008-PX0434-020	BCC0327	56

Alphanumeric Index

Sorted by part number

Part number	Ordering code	Page	Part number	Ordering code	Page
BCC M415-0000-1A-008-PX0434-050	BCC0328	56	BCC M415-0000-2A-030-VS85N6-020	BCC0E00	187
BCC M415-0000-1A-008-PX0434-100	BCC0329	56	BCC M415-0000-2A-030-VS85N6-050	BCC0E01	187
BCC M415-0000-1A-008-VX8434-020	BCC0361	56	BCC M415-0000-2A-030-VS85N6-100	BCC0E02	187
BCC M415-0000-1A-008-VX8434-050	BCC0362	56	BCC M415-0000-2A-034-PX0534-020	BCC08JE	61
BCC M415-0000-1A-008-VX8434-100	BCC0363	56	BCC M415-0000-2A-034-PX0534-050	BCC08JC	61
BCC M415-0000-1A-010-PX0434-020	BCC032A	57	BCC M415-0000-2A-034-PX0534-100	BCC08JA	61
BCC M415-0000-1A-010-PX0434-050	BCC032C	57	BCC M415-0000-2A-067-PS75N6-020	BCC09MM	187
BCC M415-0000-1A-010-PX0434-100	BCC032E	57	BCC M415-0000-2A-067-PS75N6-050	BCC09MN	187
BCC M415-0000-1A-010-VX8434-020	BCC0364	57	BCC M415-0000-2A-067-PS75N6-100	BCC09MP	187
BCC M415-0000-1A-010-VX8434-050	BCC0365	57	BCC M415-0000-2A-R03	BCC06Y4	185
BCC M415-0000-1A-010-VX8434-100	BCC0366	57	BCC M415-0000-2A-R04	BCC09MR	193
BCC M415-0000-1A-014-PS0434-020	BCC032K	56	BCC M415-0000-2B-R01	BCC0718	174
BCC M415-0000-1A-014-PS0434-050	BCC032L	56	BCC M415-0000-2B-R02	BCC0719	174
BCC M415-0000-1A-014-PS0434-100	BCC032M	56	BCC M415-M313-3F-300-PX0334-003	BCC03M9	68
BCC M415-0000-1A-014-VS8434-020	BCC036A	56	BCC M415-M313-3F-300-PX0334-006	BCC03MA	68
BCC M415-0000-1A-014-VS8434-050	BCC036C	56	BCC M415-M313-3F-300-PX0334-010	BCC03MC	68
BCC M415-0000-1A-014-VS8434-100	BCC036E	56	BCC M415-M313-3F-300-PX0334-015	BCC03ME	68
BCC M415-0000-1A-017-PX0534-020	BCC08FE	60	BCC M415-M313-3F-300-PX0334-020	BCC03MF	68
BCC M415-0000-1A-017-PX0534-050	BCC098C	60	BCC M415-M313-3F-300-PX0334-030	BCC03MH	68
BCC M415-0000-1A-017-PX0534-100	BCC0860	60	BCC M415-M313-3F-300-PX0334-050	BCC03MJ	68
BCC M415-0000-1A-017-VX8534-050	BCC0AT5	60	BCC M415-M313-3F-300-VX8334-003	BCC03NW	68
BCC M415-0000-1A-017-VX8534-100	BCC0AN9	60	BCC M415-M313-3F-300-VX8334-006	BCC03NY	68
BCC M415-0000-1A-030-VS85N6-020	BCC0CZW	187	BCC M415-M313-3F-300-VX8334-010	BCC03NZ	68
BCC M415-0000-1A-030-VS85N6-050	BCC0CZY	187	BCC M415-M313-3F-300-VX8334-015	BCC03P0	68
BCC M415-0000-1A-030-VS85N6-100	BCC0CZZ	187	BCC M415-M313-3F-300-VX8334-020	BCC03P1	68
BCC M415-0000-1A-034-PW3534-015	BCC087F	133	BCC M415-M313-3F-300-VX8334-030	BCC03P2	68
BCC M415-0000-1A-034-PW3534-050	BCC087H	133	BCC M415-M313-3F-300-VX8334-050	BCC03P3	68
BCC M415-0000-1A-034-PW3534-075	BCC087J	133	BCC M415-M313-3F-602-PX0334-003	BCC0506	68
BCC M415-0000-1A-034-PW3534-100	BCC087K	133	BCC M415-M313-3F-602-PX0334-006	BCC0507	68
BCC M415-0000-1A-034-PX0534-020	BCC09H4	60	BCC M415-M313-3F-602-PX0334-010	BCC0508	68
BCC M415-0000-1A-034-PX0534-050	BCC09H5	60	BCC M415-M313-3F-602-PX0334-015	BCC0509	68
BCC M415-0000-1A-034-PX0534-100	BCC09H6	60	BCC M415-M313-3F-602-PX0334-020	BCC050A	68
BCC M415-0000-1A-036-PS0334-020	BCC030T	51	BCC M415-M313-3F-602-PX0334-030	BCC050C	68
BCC M415-0000-1A-036-PS0334-050	BCC030U	51	BCC M415-M313-3F-602-PX0334-050	BCC050E	68
BCC M415-0000-1A-036-PS0334-100	BCC030W	51	BCC M415-M313-M313-U0014-000	BCC09JC	99
BCC M415-0000-1A-036-VS8334-020	BCC034K	51	BCC M415-M314-3F-304-PX0434-003	BCC03RE	71
BCC M415-0000-1A-036-VS8334-050	BCC034L	51	BCC M415-M314-3F-304-PX0434-006	BCC03RF	71
BCC M415-0000-1A-036-VS8334-100	BCC034M	51	BCC M415-M314-3F-304-PX0434-010	BCC03RH	71
BCC M415-0000-1A-037-PS0334-020	BCC030Y	53	BCC M415-M314-3F-304-PX0434-015	BCC03RJ	71
BCC M415-0000-1A-037-PS0334-050	BCC030Z	53	BCC M415-M314-3F-304-PX0434-020	BCC03RK	71
BCC M415-0000-1A-037-PS0334-100	BCC0310	53	BCC M415-M314-3F-304-PX0434-030	BCC03RL	71
BCC M415-0000-1A-037-VS8334-020	BCC034N	53	BCC M415-M314-3F-304-PX0434-050	BCC03RM	71
BCC M415-0000-1A-037-VS8334-050	BCC034P	53	BCC M415-M314-3F-304-VX8434-003	BCC03TP	71
BCC M415-0000-1A-037-VS8334-100	BCC034R	53	BCC M415-M314-3F-304-VX8434-006	BCC03TR	71
BCC M415-0000-1A-067-PS75N6-020	BCC09MJ	187	BCC M415-M314-3F-304-VX8434-010	BCC03TT	71
BCC M415-0000-1A-067-PS75N6-050	BCC09MK	187	BCC M415-M314-3F-304-VX8434-015	BCC03TU	71
BCC M415-0000-1A-067-PS75N6-100	BCC09ML	187	BCC M415-M314-3F-304-VX8434-020	BCC03TW	71
BCC M415-0000-1A-068-VS24N7-020	BCC06Y1	183	BCC M415-M314-3F-304-VX8434-030	BCC03TY	71
BCC M415-0000-1A-068-VS24N7-050	BCC06Y2	183	BCC M415-M314-3F-304-VX8434-050	BCC03TZ	71
BCC M415-0000-1A-068-VS24N7-100	BCC06Y3	183	BCC M415-M323-3F-300-PX0334-003	BCC03MK	69
BCC M415-0000-1A-R04	BCC0A08	193	BCC M415-M323-3F-300-PX0334-006	BCC03ML	69
BCC M415-0000-1B-031-PS72N1-020	BCC070Y	169	BCC M415-M323-3F-300-PX0334-010	BCC03MM	69
BCC M415-0000-1B-031-PS72N1-050	BCC070Z	169	BCC M415-M323-3F-300-PX0334-015	BCC03MN	69
BCC M415-0000-1B-031-PS72N1-100	BCC0710	169	BCC M415-M323-3F-300-PX0334-020	BCC03MP	69
BCC M415-0000-1B-031-PS72N1-150	BCC0A0K	169	BCC M415-M323-3F-300-PX0334-030	BCC03MR	69
BCC M415-0000-1B-031-PS72N1-200	BCC0A0L	169	BCC M415-M323-3F-300-PX0334-050	BCC03MT	69
BCC M415-0000-1B-R01	BCC0C6E	174	BCC M415-M323-3F-300-VX8334-003	BCC03P4	69
BCC M415-0000-2A-017-PX0534-020	BCC0C76	61	BCC M415-M323-3F-300-VX8334-006	BCC03P5	69
BCC M415-0000-2A-017-PX0534-050	BCC0C77	61	BCC M415-M323-3F-300-VX8334-010	BCC03P6	69
BCC M415-0000-2A-017-PX0534-100	BCC0C78	61	BCC M415-M323-3F-300-VX8334-015	BCC03P7	69
BCC M415-0000-2A-017-VX8534-020	BCC0AU3	61	BCC M415-M323-3F-300-VX8334-020	BCC03P8	69
BCC M415-0000-2A-017-VX8534-050	BCC0AT6	61	BCC M415-M323-3F-300-VX8334-030	BCC03P9	69
BCC M415-0000-2A-017-VX8534-100	BCC0AUK	61	BCC M415-M323-3F-300-VX8334-050	BCC03PA	69

Alphanumeric Index

Sorted by part number

Part number	Ordering code	Page
BCC M415-M324-3F-304-PX0434-003	BCC03RN	71
BCC M415-M324-3F-304-PX0434-006	BCC03RP	71
BCC M415-M324-3F-304-PX0434-010	BCC03RR	71
BCC M415-M324-3F-304-PX0434-015	BCC03RT	71
BCC M415-M324-3F-304-PX0434-020	BCC03RU	71
BCC M415-M324-3F-304-PX0434-030	BCC03RW	71
BCC M415-M324-3F-304-PX0434-050	BCC03RY	71
BCC M415-M324-3F-304-VX8434-003	BCC03U0	71
BCC M415-M324-3F-304-VX8434-006	BCC03U1	71
BCC M415-M324-3F-304-VX8434-010	BCC03U2	71
BCC M415-M324-3F-304-VX8434-015	BCC03U3	71
BCC M415-M324-3F-304-VX8434-020	BCC03U4	71
BCC M415-M324-3F-304-VX8434-030	BCC03U5	71
BCC M415-M324-3F-304-VX8434-050	BCC03U6	71
BCC M415-M412-3B-329-PS72N1-006	BCC0A12	169
BCC M415-M412-3B-329-PS72N1-010	BCC0A13	169
BCC M415-M412-3B-329-PS72N1-020	BCC0A14	169
BCC M415-M412-3B-329-PS72N1-050	BCC0A15	169
BCC M415-M412-3B-329-PS72N1-100	BCC0A16	169
BCC M415-M412-3B-329-PS72N1-150	BCC0A17	169
BCC M415-M412-3B-329-PS72N1-200	BCC0A18	169
BCC M415-M413-3A-300-PX0334-003	BCC036Y	74
BCC M415-M413-3A-300-PX0334-006	BCC036Z	74
BCC M415-M413-3A-300-PX0334-010	BCC0370	74
BCC M415-M413-3A-300-PX0334-015	BCC0371	74
BCC M415-M413-3A-300-PX0334-020	BCC0372	74
BCC M415-M413-3A-300-PX0334-030	BCC0373	74
BCC M415-M413-3A-300-PX0334-050	BCC0374	74
BCC M415-M413-3A-300-VX8334-003	BCC0386	74
BCC M415-M413-3A-300-VX8334-006	BCC0387	74
BCC M415-M413-3A-300-VX8334-010	BCC0388	74
BCC M415-M413-3A-300-VX8334-015	BCC0389	74
BCC M415-M413-3A-300-VX8334-020	BCC038A	74
BCC M415-M413-3A-300-VX8334-030	BCC038C	74
BCC M415-M413-3A-300-VX8334-050	BCC038E	74
BCC M415-M414-3A-304-PW0434-003	BCC0AP1	128
BCC M415-M414-3A-304-PW0434-006	BCC0AP2	128
BCC M415-M414-3A-304-PW0434-010	BCC0AP3	128
BCC M415-M414-3A-304-PW0434-015	BCC0AP4	128
BCC M415-M414-3A-304-PW0434-020	BCC0AP5	128
BCC M415-M414-3A-304-PW0434-050	BCC0AP7	128
BCC M415-M414-3A-304-PX0434-003	BCC039H	76
BCC M415-M414-3A-304-PX0434-006	BCC039J	76
BCC M415-M414-3A-304-PX0434-010	BCC039K	76
BCC M415-M414-3A-304-PX0434-015	BCC039L	76
BCC M415-M414-3A-304-PX0434-020	BCC039M	76
BCC M415-M414-3A-304-PX0434-030	BCC039N	76
BCC M415-M414-3A-304-PX0434-050	BCC039P	76
BCC M415-M414-3A-304-VX8434-003	BCC03C9	76
BCC M415-M414-3A-304-VX8434-006	BCC03CA	76
BCC M415-M414-3A-304-VX8434-010	BCC03CC	76
BCC M415-M414-3A-304-VX8434-015	BCC03CE	76
BCC M415-M414-3A-304-VX8434-020	BCC03CF	76
BCC M415-M414-3A-304-VX8434-030	BCC03CH	76
BCC M415-M414-3A-304-VX8434-050	BCC03CJ	76
BCC M415-M414-3A-337-VS24N7-006	BCC06WU	183
BCC M415-M414-3A-337-VS24N7-020	BCC06WW	183
BCC M415-M414-3A-337-VS24N7-050	BCC06WY	183
BCC M415-M414-3A-337-VS24N7-100	BCC06WZ	183
BCC M415-M414-3A-337-VS24N7-150	BCC06Y0	183
BCC M415-M414-3A-606-PX0434-003	BCC03A1	76
BCC M415-M414-3A-606-PX0434-006	BCC03A2	76
BCC M415-M414-3A-606-PX0434-010	BCC03A3	76

Part number	Ordering code	Page
BCC M415-M414-3A-606-PX0434-015	BCC03A4	76
BCC M415-M414-3A-606-PX0434-020	BCC03A5	76
BCC M415-M414-3A-606-PX0434-030	BCC03A6	76
BCC M415-M414-3A-606-PX0434-050	BCC03A7	76
BCC M415-M414-3A-606-VX8434-003	BCC03CU	76
BCC M415-M414-3A-606-VX8434-006	BCC03CW	76
BCC M415-M414-3A-606-VX8434-010	BCC03CY	76
BCC M415-M414-3A-606-VX8434-015	BCC03CZ	76
BCC M415-M414-3A-606-VX8434-020	BCC03E0	76
BCC M415-M414-3A-606-VX8434-030	BCC03E1	76
BCC M415-M414-3A-606-VX8434-050	BCC03E2	76
BCC M415-M415-3A-312-PX0534-003	BCC09FL	80
BCC M415-M415-3A-312-PX0534-006	BCC09FM	80
BCC M415-M415-3A-312-PX0534-010	BCC09FN	80
BCC M415-M415-3A-312-PX0534-015	BCC09FP	80
BCC M415-M415-3A-312-PX0534-020	BCC09FR	80
BCC M415-M415-3A-312-PX0534-030	BCC09FT	80
BCC M415-M415-3A-312-PX0534-050	BCC09FU	80
BCC M415-M415-3A-313-PW0534-006	BCC0AJJ	129
BCC M415-M415-3A-313-PW0534-010	BCC0AK7	129
BCC M415-M415-3A-313-PW0534-015	BCC0C0M	129
BCC M415-M415-3A-313-PW0534-020	BCC0AK8	129
BCC M415-M415-3A-313-PW0534-030	BCC0AK9	129
BCC M415-M415-3A-313-PW0534-050	BCC0AKA	129
BCC M415-M415-3A-313-PW3534-006	BCC087R	135
BCC M415-M415-3A-313-PW3534-010	BCC087T	135
BCC M415-M415-3A-313-PW3534-015	BCC087U	135
BCC M415-M415-3A-313-PW3534-020	BCC087W	135
BCC M415-M415-3A-313-PW3534-030	BCC09M2	135
BCC M415-M415-3A-313-PW3534-050	BCC09M1	135
BCC M415-M415-3A-313-PX0534-003	BCC09FW	80
BCC M415-M415-3A-313-PX0534-006	BCC09FY	80
BCC M415-M415-3A-313-PX0534-010	BCC09FZ	80
BCC M415-M415-3A-313-PX0534-015	BCC09H0	80
BCC M415-M415-3A-313-PX0534-020	BCC09H1	80
BCC M415-M415-3A-313-PX0534-030	BCC09H2	80
BCC M415-M415-3A-313-PX0534-050	BCC09H3	80
BCC M415-M415-3A-313-PX0534-100	BCC0AJC	80
BCC M415-M415-3A-330-VS85N6-006	BCC0E03	187
BCC M415-M415-3A-330-VS85N6-020	BCC0E04	187
BCC M415-M415-3A-330-VS85N6-050	BCC0E05	187
BCC M415-M415-3A-330-VS85N6-100	BCC0E06	187
BCC M415-M415-3A-330-VS85N6-150	BCC0E07	187
BCC M415-M415-3A-344-PS75N6-006	BCC09M8	187
BCC M415-M415-3A-344-PS75N6-020	BCC09MA	187
BCC M415-M415-3A-344-PS75N6-050	BCC09MC	187
BCC M415-M415-3A-344-PS75N6-100	BCC09ME	187
BCC M415-M415-3A-344-PS75N6-150	BCC09MF	187
BCC M415-M415-M415-U0003-000	BCC089P	99, 185, 192
BCC M415-M415-M415-U0016-000	BCC09MU	99
BCC M415-M423-3A-300-PX0334-003	BCC0375	74
BCC M415-M423-3A-300-PX0334-006	BCC0376	74
BCC M415-M423-3A-300-PX0334-010	BCC0377	74
BCC M415-M423-3A-300-PX0334-015	BCC0378	74
BCC M415-M423-3A-300-PX0334-020	BCC0379	74
BCC M415-M423-3A-300-PX0334-030	BCC037A	74
BCC M415-M423-3A-300-PX0334-050	BCC037C	74
BCC M415-M423-3A-300-VX8334-003	BCC038F	74
BCC M415-M423-3A-300-VX8334-006	BCC038H	74
BCC M415-M423-3A-300-VX8334-010	BCC038J	74
BCC M415-M423-3A-300-VX8334-015	BCC038K	74
BCC M415-M423-3A-300-VX8334-020	BCC038L	74
BCC M415-M423-3A-300-VX8334-030	BCC038M	74

Alphanumeric Index

Sorted by part number

Part number	Ordering code	Page	Part number	Ordering code	Page
BCC M415-M423-3A-300-VX8334-050	BCC038N	74	BCC M423-0000-2A-001-VX8334-020	BCC033N	53
BCC M415-M424-3A-304-PX0434-003	BCC039R	77	BCC M423-0000-2A-001-VX8334-050	BCC033P	53
BCC M415-M424-3A-304-PX0434-006	BCC039T	77	BCC M423-0000-2A-001-VX8334-100	BCC033R	53
BCC M415-M424-3A-304-PX0434-010	BCC039U	77	BCC M423-0000-2A-002-PX0334-020	BCC0301	55
BCC M415-M424-3A-304-PX0434-015	BCC039W	77	BCC M423-0000-2A-002-PX0334-050	BCC0302	55
BCC M415-M424-3A-304-PX0434-020	BCC039Y	77	BCC M423-0000-2A-002-PX0334-100	BCC0303	55
BCC M415-M424-3A-304-PX0434-030	BCC039Z	77	BCC M423-0000-2A-002-VX8334-020	BCC033T	55
BCC M415-M424-3A-304-PX0434-050	BCC0390	77	BCC M423-0000-2A-002-VX8334-050	BCC033U	55
BCC M415-M424-3A-304-VX8434-003	BCC03CK	77	BCC M423-0000-2A-002-VX8334-100	BCC033W	55
BCC M415-M424-3A-304-VX8434-006	BCC03CL	77	BCC M423-0000-2A-036-PS0334-020	BCC0304	53
BCC M415-M424-3A-304-VX8434-010	BCC03CM	77	BCC M423-0000-2A-036-PS0334-050	BCC0305	53
BCC M415-M424-3A-304-VX8434-015	BCC03CN	77	BCC M423-0000-2A-036-PS0334-100	BCC0306	53
BCC M415-M424-3A-304-VX8434-020	BCC03CP	77	BCC M423-0000-2A-036-VS8334-020	BCC033Y	53
BCC M415-M424-3A-304-VX8434-030	BCC03CR	77	BCC M423-0000-2A-036-VS8334-050	BCC033Z	53
BCC M415-M424-3A-304-VX8434-050	BCC03CT	77	BCC M423-0000-2A-036-VS8334-100	BCC0340	53
BCC M418-0000-1A-044-PX0825-020	BCC06K1	62	BCC M423-0000-2A-037-PS0334-020	BCC0307	55
BCC M418-0000-1A-044-PX0825-050	BCC06K2	62	BCC M423-0000-2A-037-PS0334-050	BCC0308	55
BCC M418-0000-1A-044-PX0825-100	BCC06K3	62	BCC M423-0000-2A-037-PS0334-100	BCC0309	55
BCC M418-0000-1A-045-PX0825-020	BCC09HC	63	BCC M423-0000-2A-037-VS8334-020	BCC0341	55
BCC M418-0000-1A-045-PX0825-050	BCC09HE	63	BCC M423-0000-2A-037-VS8334-050	BCC0342	55
BCC M418-0000-1A-045-PX0825-100	BCC09HF	63	BCC M423-0000-2A-037-VS8334-100	BCC0343	55
BCC M418-0000-1A-046-PS0825-020	BCC0994	62	BCC M424-0000-2A-003-PX0434-020	BCC0321	59
BCC M418-0000-1A-046-PS0825-050	BCC0995	62	BCC M424-0000-2A-003-PX0434-050	BCC0322	59
BCC M418-0000-1A-046-PS0825-100	BCC0996	62	BCC M424-0000-2A-003-PX0434-100	BCC0323	59
BCC M418-0000-1A-069-PX0825-020	BCC09J3	62	BCC M424-0000-2A-003-VS0434-020	BCC035Y	59
BCC M418-0000-1A-069-PX0825-050	BCC09J4	62	BCC M424-0000-2A-003-VS0434-050	BCC035Z	59
BCC M418-0000-1A-069-PX0825-100	BCC085Z	62	BCC M424-0000-2A-003-VS0434-100	BCC0360	59
BCC M418-0000-2A-044-PX0825-020	BCC06JT	65	BCC M424-0000-2A-003-VX0434-020	BCC04ZU	59
BCC M418-0000-2A-044-PX0825-050	BCC06JU	65	BCC M424-0000-2A-003-VX0434-050	BCC04ZW	59
BCC M418-0000-2A-044-PX0825-100	BCC06JW	65	BCC M424-0000-2A-003-VX0434-100	BCC035W	59
BCC M418-0000-2A-044-VX8825-020	BCC06K7	65	BCC M424-0000-2A-014-PS0434-020	BCC0324	59
BCC M418-0000-2A-044-VX8825-050	BCC06K8	65	BCC M424-0000-2A-014-PS0434-050	BCC0325	59
BCC M418-0000-2A-044-VX8825-100	BCC06K9	65	BCC M424-0000-2A-014-PS0434-100	BCC0326	59
BCC M418-M418-3A-342-PX0825-003	BCC0AC0	84	BCC M424-E814-BG-RM013-000	BCC085H	180, 200
BCC M418-M418-3A-342-PX0825-006	BCC0AAZ	84	BCC M425-0000-1A-001-PH0334-020	BCC0832	119
BCC M418-M418-3A-342-PX0825-010	BCC0AC1	84	BCC M425-0000-1A-001-PH0334-050	BCC0833	119
BCC M418-M418-3A-342-PX0825-015	BCC0AC2	84	BCC M425-0000-1A-001-PH0334-100	BCC0AA8	119
BCC M418-M418-3A-342-PX0825-020	BCC0AC3	84	BCC M425-0000-1A-001-PW3334-020	BCC086T	132
BCC M418-M418-3A-342-PX0825-030	BCC0AC4	84	BCC M425-0000-1A-001-PW3334-050	BCC086U	132
BCC M418-M418-3A-342-PX0825-050	BCC0AC5	84	BCC M425-0000-1A-001-PW3334-100	BCC086W	132
BCC M418-M41C-3A-674-PX0825-006	BCC088J	84	BCC M425-0000-1A-001-PX0334-020	BCC0317	51
BCC M418-M41C-3A-674-PX0825-010	BCC088K	84	BCC M425-0000-1A-001-PX0334-050	BCC0318	51
BCC M418-M41C-3A-674-PX0825-020	BCC088L	84	BCC M425-0000-1A-001-PX0334-100	BCC0319	51
BCC M41C-0000-1A-049-PX0C25-020	BCC06UK	66	BCC M425-0000-1A-001-VX8334-020	BCC0351	51
BCC M41C-0000-1A-049-PX0C25-050	BCC06UL	66	BCC M425-0000-1A-001-VX8334-050	BCC0352	51
BCC M41C-0000-1A-049-PX0C25-100	BCC06UM	66	BCC M425-0000-1A-001-VX8334-100	BCC0353	51
BCC M41C-0000-1A-049-VX8C25-020	BCC06UP	66	BCC M425-0000-1A-002-PX0334-020	BCC031A	54
BCC M41C-0000-1A-049-VX8C25-050	BCC06UR	66	BCC M425-0000-1A-002-PX0334-050	BCC031C	54
BCC M41C-0000-1A-049-VX8C25-100	BCC06UT	66	BCC M425-0000-1A-002-PX0334-100	BCC031E	54
BCC M41C-0000-2A-049-PX0C25-020	BCC06UU	67	BCC M425-0000-1A-002-VX8334-020	BCC0354	54
BCC M41C-0000-2A-049-PX0C25-050	BCC06UW	67	BCC M425-0000-1A-002-VX8334-050	BCC0355	54
BCC M41C-0000-2A-049-PX0C25-100	BCC06UY	67	BCC M425-0000-1A-002-VX8334-100	BCC0356	54
BCC M41C-0000-2A-049-VX8C25-020	BCC06UZ	67	BCC M425-0000-1A-003-PH0434-020	BCC0AAE	119
BCC M41C-0000-2A-049-VX8C25-050	BCC06W0	67	BCC M425-0000-1A-003-PH0434-050	BCC0AAF	119
BCC M41C-0000-2A-049-VX8C25-100	BCC06W1	67	BCC M425-0000-1A-003-PH0434-100	BCC0AAH	119
BCC M41C-M41C-3A-325-PX0C25-003	BCC0AY4	85	BCC M425-0000-1A-003-PW0434-050	BCC0AKE	127
BCC M41C-M41C-3A-325-PX0C25-006	BCC088E	85	BCC M425-0000-1A-003-PW0434-100	BCC0AKF	127
BCC M41C-M41C-3A-325-PX0C25-010	BCC088F	85	BCC M425-0000-1A-003-PW3434-050	BCC0C22	133
BCC M41C-M41C-3A-325-PX0C25-020	BCC088H	85	BCC M425-0000-1A-003-PX0434-020	BCC032Y	57
BCC M41C-M41C-3A-325-PX0C25-100	BCC0E9J	85	BCC M425-0000-1A-003-PX0434-050	BCC032Z	57
BCC M423-0000-2A-001-PX0334-020	BCC02ZY	53	BCC M425-0000-1A-003-PX0434-100	BCC0330	57
BCC M423-0000-2A-001-PX0334-050	BCC02ZZ	53	BCC M425-0000-1A-003-VX8434-020	BCC036N	57
BCC M423-0000-2A-001-PX0334-100	BCC0300	53	BCC M425-0000-1A-003-VX8434-050	BCC036P	57

Alphanumeric Index

Sorted by part number

Part number	Ordering code	Page
BCC M425-0000-1A-003-VX8434-100	BCC036R	57
BCC M425-0000-1A-004-PW3334-020	BCC09J8	132
BCC M425-0000-1A-004-PW3334-030	BCC08MZ	132
BCC M425-0000-1A-004-PW3334-100	BCC08LE	132
BCC M425-0000-1A-004-PX0334-020	BCC0311	52
BCC M425-0000-1A-004-PX0334-050	BCC0312	52
BCC M425-0000-1A-004-PX0334-100	BCC0313	52
BCC M425-0000-1A-004-VX8334-020	BCC034T	52
BCC M425-0000-1A-004-VX8334-050	BCC034U	52
BCC M425-0000-1A-004-VX8334-100	BCC034W	52
BCC M425-0000-1A-005-PX0334-020	BCC0314	54
BCC M425-0000-1A-005-PX0334-050	BCC0315	54
BCC M425-0000-1A-005-PX0334-100	BCC0316	54
BCC M425-0000-1A-005-VX8334-020	BCC034Y	54
BCC M425-0000-1A-005-VX8334-050	BCC034Z	54
BCC M425-0000-1A-005-VX8334-100	BCC0350	54
BCC M425-0000-1A-008-PX0434-020	BCC032N	58
BCC M425-0000-1A-008-PX0434-050	BCC032P	58
BCC M425-0000-1A-008-PX0434-100	BCC032R	58
BCC M425-0000-1A-008-VX8434-020	BCC036F	58
BCC M425-0000-1A-008-VX8434-050	BCC036H	58
BCC M425-0000-1A-008-VX8434-100	BCC036J	58
BCC M425-0000-1A-010-PX0434-020	BCC032T	58
BCC M425-0000-1A-010-PX0434-050	BCC032U	58
BCC M425-0000-1A-010-PX0434-100	BCC032W	58
BCC M425-0000-1A-010-VX8434-020	BCC036K	58
BCC M425-0000-1A-010-VX8434-050	BCC036L	58
BCC M425-0000-1A-010-VX8434-100	BCC036M	58
BCC M425-0000-1A-014-PS0434-020	BCC0331	57
BCC M425-0000-1A-014-PS0434-050	BCC0332	57
BCC M425-0000-1A-014-PS0434-100	BCC0333	57
BCC M425-0000-1A-014-VS8434-020	BCC036T	57
BCC M425-0000-1A-014-VS8434-050	BCC036U	57
BCC M425-0000-1A-014-VS8434-100	BCC036W	57
BCC M425-0000-1A-017-PX0534-020	BCC09H7	60
BCC M425-0000-1A-017-PX0534-050	BCC08FC	60
BCC M425-0000-1A-017-PX0534-100	BCC08FA	60
BCC M425-0000-1A-034-PX0534-020	BCC08F9	60
BCC M425-0000-1A-034-PX0534-050	BCC08F8	60
BCC M425-0000-1A-034-PX0534-100	BCC08F7	60
BCC M425-0000-1A-036-PS0334-020	BCC031F	51
BCC M425-0000-1A-036-PS0334-050	BCC031H	51
BCC M425-0000-1A-036-PS0334-100	BCC031J	51
BCC M425-0000-1A-036-VS8334-020	BCC0357	51
BCC M425-0000-1A-036-VS8334-050	BCC0358	51
BCC M425-0000-1A-036-VS8334-100	BCC0359	51
BCC M425-0000-1A-037-PS0334-020	BCC031K	54
BCC M425-0000-1A-037-PS0334-050	BCC031L	54
BCC M425-0000-1A-037-PS0334-100	BCC031M	54
BCC M425-0000-1A-037-VS8334-020	BCC035A	54
BCC M425-0000-1A-037-VS8334-050	BCC035C	54
BCC M425-0000-1A-037-VS8334-100	BCC035E	54
BCC M425-0000-1A-039-PX0534-020	BCC08F6	61
BCC M425-0000-1A-039-PX0534-050	BCC08F5	61
BCC M425-0000-1A-039-PX0534-100	BCC08F4	61
BCC M425-0000-1A-040-PW3534-015	BCC087L	133
BCC M425-0000-1A-040-PW3534-050	BCC087M	133
BCC M425-0000-1A-040-PW3534-075	BCC087N	133
BCC M425-0000-1A-040-PW3534-100	BCC087P	133
BCC M425-0000-1A-040-PX0534-020	BCC08HP	61
BCC M425-0000-1A-040-PX0534-050	BCC08HR	61
BCC M425-0000-1A-040-PX0534-100	BCC08HT	61
BCC M425-0000-1A-099-PW3434-020	BCC0C3Z	133

Part number	Ordering code	Page
BCC M425-0000-1A-099-PW3434-050	BCC0C41	133
BCC M425-0000-1A-099-PW3434-100	BCC0C42	133
BCC M425-0000-1A-100-PW3534-020	BCC0C7U	134
BCC M425-0000-1A-100-PW3534-050	BCC0C7T	134
BCC M425-0000-1A-100-PW3534-100	BCC0C7R	134
BCC M425-M313-3F-300-PX0334-003	BCC03MU	69
BCC M425-M313-3F-300-PX0334-006	BCC03MW	69
BCC M425-M313-3F-300-PX0334-010	BCC03MY	69
BCC M425-M313-3F-300-PX0334-015	BCC03MZ	69
BCC M425-M313-3F-300-PX0334-020	BCC03NO	69
BCC M425-M313-3F-300-PX0334-030	BCC03N1	69
BCC M425-M313-3F-300-PX0334-050	BCC03N2	69
BCC M425-M313-3F-300-VX8334-003	BCC03PC	69
BCC M425-M313-3F-300-VX8334-006	BCC03PE	69
BCC M425-M313-3F-300-VX8334-010	BCC03PF	69
BCC M425-M313-3F-300-VX8334-015	BCC03PH	69
BCC M425-M313-3F-300-VX8334-020	BCC03PJ	69
BCC M425-M313-3F-300-VX8334-030	BCC03PK	69
BCC M425-M313-3F-300-VX8334-050	BCC03PL	69
BCC M425-M313-3F-602-PX0334-003	BCC03NA	69
BCC M425-M313-3F-602-PX0334-006	BCC03NC	69
BCC M425-M313-3F-602-PX0334-010	BCC03NE	69
BCC M425-M313-3F-602-PX0334-015	BCC03NF	69
BCC M425-M313-3F-602-PX0334-020	BCC03NH	69
BCC M425-M313-3F-602-PX0334-030	BCC03NJ	69
BCC M425-M313-3F-602-PX0334-050	BCC03NK	69
BCC M425-M313-3F-602-VX8334-003	BCC03PY	69
BCC M425-M313-3F-602-VX8334-006	BCC03PZ	69
BCC M425-M313-3F-602-VX8334-010	BCC03R0	69
BCC M425-M313-3F-602-VX8334-015	BCC03R1	69
BCC M425-M313-3F-602-VX8334-020	BCC03R2	69
BCC M425-M313-3F-602-VX8334-030	BCC03R3	69
BCC M425-M313-3F-602-VX8334-050	BCC03R4	69
BCC M425-M314-3F-304-PX0434-003	BCC03RZ	71
BCC M425-M314-3F-304-PX0434-006	BCC03T0	71
BCC M425-M314-3F-304-PX0434-010	BCC03T1	71
BCC M425-M314-3F-304-PX0434-015	BCC03T2	71
BCC M425-M314-3F-304-PX0434-020	BCC03T3	71
BCC M425-M314-3F-304-PX0434-030	BCC03T4	71
BCC M425-M314-3F-304-PX0434-050	BCC03T5	71
BCC M425-M314-3F-304-VX8434-003	BCC03U7	71
BCC M425-M314-3F-304-VX8434-006	BCC03U8	71
BCC M425-M314-3F-304-VX8434-010	BCC03U9	71
BCC M425-M314-3F-304-VX8434-015	BCC03UA	71
BCC M425-M314-3F-304-VX8434-020	BCC03UC	71
BCC M425-M314-3F-304-VX8434-030	BCC03UE	71
BCC M425-M314-3F-304-VX8434-050	BCC03UF	71
BCC M425-M314-3F-606-PX0434-003	BCC03TF	72
BCC M425-M314-3F-606-PX0434-006	BCC03TH	72
BCC M425-M314-3F-606-PX0434-010	BCC03TJ	72
BCC M425-M314-3F-606-PX0434-015	BCC03TK	72
BCC M425-M314-3F-606-PX0434-020	BCC03TL	72
BCC M425-M314-3F-606-PX0434-030	BCC03TM	72
BCC M425-M314-3F-606-PX0434-050	BCC03TN	72
BCC M425-M314-3F-606-VX8434-003	BCC03UR	72
BCC M425-M314-3F-606-VX8434-006	BCC03UT	72
BCC M425-M314-3F-606-VX8434-010	BCC03UU	72
BCC M425-M314-3F-606-VX8434-015	BCC03UW	72
BCC M425-M314-3F-606-VX8434-020	BCC03UY	72
BCC M425-M314-3F-606-VX8434-030	BCC03UZ	72
BCC M425-M314-3F-606-VX8434-050	BCC03W0	72
BCC M425-M323-3F-300-PX0334-003	BCC03N3	70
BCC M425-M323-3F-300-PX0334-006	BCC03N4	70

Alphanumeric Index

Sorted by part number

Part number	Ordering code	Page	Part number	Ordering code	Page
BCC M425-M323-3F-300-PX0334-010	BCC03N5	70	BCC M425-M413-3A-602-VX8334-010	BCC0399	75
BCC M425-M323-3F-300-PX0334-015	BCC03N6	70	BCC M425-M413-3A-602-VX8334-015	BCC039A	75
BCC M425-M323-3F-300-PX0334-020	BCC03N7	70	BCC M425-M413-3A-602-VX8334-020	BCC039C	75
BCC M425-M323-3F-300-PX0334-030	BCC03N8	70	BCC M425-M413-3A-602-VX8334-030	BCC039E	75
BCC M425-M323-3F-300-PX0334-050	BCC03N9	70	BCC M425-M413-3A-602-VX8334-050	BCC039F	75
BCC M425-M323-3F-300-VX8334-003	BCC03PM	70	BCC M425-M414-3A-304-PW0434-003	BCC0ANP	128
BCC M425-M323-3F-300-VX8334-006	BCC03PN	70	BCC M425-M414-3A-304-PW0434-006	BCC0ANR	128
BCC M425-M323-3F-300-VX8334-010	BCC03PP	70	BCC M425-M414-3A-304-PW0434-010	BCC0ANT	128
BCC M425-M323-3F-300-VX8334-015	BCC03PR	70	BCC M425-M414-3A-304-PW0434-015	BCC0ANU	128
BCC M425-M323-3F-300-VX8334-020	BCC03PT	70	BCC M425-M414-3A-304-PW0434-020	BCC0ANW	128
BCC M425-M323-3F-300-VX8334-030	BCC03PU	70	BCC M425-M414-3A-304-PW0434-050	BCC0ANZ	128
BCC M425-M323-3F-602-VX8334-050	BCC03PW	70	BCC M425-M414-3A-304-PX0434-003	BCC03A8	77
BCC M425-M323-3F-602-PX0334-003	BCC03NL	70	BCC M425-M414-3A-304-PX0434-006	BCC03A9	77
BCC M425-M323-3F-602-PX0334-006	BCC03NM	70	BCC M425-M414-3A-304-PX0434-010	BCC03AA	77
BCC M425-M323-3F-602-PX0334-010	BCC03NN	70	BCC M425-M414-3A-304-PX0434-015	BCC03AC	77
BCC M425-M323-3F-602-PX0334-015	BCC03NP	70	BCC M425-M414-3A-304-PX0434-020	BCC03AE	77
BCC M425-M323-3F-602-PX0334-020	BCC03NR	70	BCC M425-M414-3A-304-PX0434-030	BCC03AF	77
BCC M425-M323-3F-602-PX0334-030	BCC03NT	70	BCC M425-M414-3A-304-PX0434-050	BCC03AH	77
BCC M425-M323-3F-602-PX0334-050	BCC03NU	70	BCC M425-M414-3A-304-VX8434-003	BCC03E3	77
BCC M425-M323-3F-602-VX8334-003	BCC03R5	70	BCC M425-M414-3A-304-VX8434-006	BCC03E4	77
BCC M425-M323-3F-602-VX8334-006	BCC03R6	70	BCC M425-M414-3A-304-VX8434-010	BCC03E5	77
BCC M425-M323-3F-602-VX8334-010	BCC03R7	70	BCC M425-M414-3A-304-VX8434-015	BCC03E6	77
BCC M425-M323-3F-602-VX8334-015	BCC03R8	70	BCC M425-M414-3A-304-VX8434-020	BCC03E7	77
BCC M425-M323-3F-602-VX8334-020	BCC03R9	70	BCC M425-M414-3A-304-VX8434-030	BCC03E8	77
BCC M425-M323-3F-602-VX8334-030	BCC03RA	70	BCC M425-M414-3A-304-VX8434-050	BCC03E9	77
BCC M425-M323-3F-602-VX8334-050	BCC03RC	70	BCC M425-M414-3A-606-PX0434-003	BCC03AT	77
BCC M425-M324-3F-304-PX0434-003	BCC03T6	72	BCC M425-M414-3A-606-PX0434-006	BCC03AU	77
BCC M425-M324-3F-304-PX0434-006	BCC03T7	72	BCC M425-M414-3A-606-PX0434-010	BCC03AW	77
BCC M425-M324-3F-304-PX0434-010	BCC03T8	72	BCC M425-M414-3A-606-PX0434-015	BCC03AY	77
BCC M425-M324-3F-304-PX0434-015	BCC03T9	72	BCC M425-M414-3A-606-PX0434-020	BCC03AZ	77
BCC M425-M324-3F-304-PX0434-020	BCC03TA	72	BCC M425-M414-3A-606-PX0434-030	BCC03C0	77
BCC M425-M324-3F-304-PX0434-030	BCC03TC	72	BCC M425-M414-3A-606-PX0434-050	BCC03C1	77
BCC M425-M324-3F-304-PX0434-050	BCC03TE	72	BCC M425-M414-3A-606-VX8434-003	BCC03EL	77
BCC M425-M324-3F-304-VX8434-003	BCC03UH	72	BCC M425-M414-3A-606-VX8434-006	BCC03EM	77
BCC M425-M324-3F-304-VX8434-006	BCC03UJ	72	BCC M425-M414-3A-606-VX8434-010	BCC03EN	77
BCC M425-M324-3F-304-VX8434-010	BCC03UK	72	BCC M425-M414-3A-606-VX8434-015	BCC03EP	77
BCC M425-M324-3F-304-VX8434-015	BCC03UL	72	BCC M425-M414-3A-606-VX8434-020	BCC03ER	77
BCC M425-M324-3F-304-VX8434-020	BCC03UM	72	BCC M425-M414-3A-606-VX8434-030	BCC03ET	77
BCC M425-M324-3F-304-VX8434-030	BCC03UN	72	BCC M425-M414-3A-606-VX8434-050	BCC03EU	77
BCC M425-M324-3F-304-VX8434-050	BCC03UP	72	BCC M425-M414-3A-650-PW0434-003	BCC0ANE	128
BCC M425-M413-3A-300-PX0334-003	BCC037E	75	BCC M425-M414-3A-650-PW0434-006	BCC0ANF	128
BCC M425-M413-3A-300-PX0334-006	BCC037F	75	BCC M425-M414-3A-650-PW0434-010	BCC0ANH	128
BCC M425-M413-3A-300-PX0334-010	BCC037H	75	BCC M425-M414-3A-650-PW0434-015	BCC0ANJ	128
BCC M425-M413-3A-300-PX0334-015	BCC037J	75	BCC M425-M414-3A-650-PW0434-020	BCC0ANK	128
BCC M425-M413-3A-300-PX0334-020	BCC037K	75	BCC M425-M414-3A-650-PW0434-050	BCC0ANM	128
BCC M425-M413-3A-300-PX0334-030	BCC037L	75	BCC M425-M414-3A-650-PX0434-003	BCC03C2	78
BCC M425-M413-3A-300-PX0334-050	BCC037M	75	BCC M425-M414-3A-650-PX0434-006	BCC03C3	78
BCC M425-M413-3A-300-VX8334-003	BCC038P	75	BCC M425-M414-3A-650-PX0434-010	BCC03C4	78
BCC M425-M413-3A-300-VX8334-006	BCC038R	75	BCC M425-M414-3A-650-PX0434-015	BCC03C5	78
BCC M425-M413-3A-300-VX8334-010	BCC038T	75	BCC M425-M414-3A-650-PX0434-020	BCC03C6	78
BCC M425-M413-3A-300-VX8334-015	BCC038U	75	BCC M425-M414-3A-650-PX0434-030	BCC03C7	78
BCC M425-M413-3A-300-VX8334-020	BCC038W	75	BCC M425-M414-3A-650-PX0434-050	BCC03C8	78
BCC M425-M413-3A-300-VX8334-030	BCC038Y	75	BCC M425-M414-3A-650-VX8434-003	BCC03EW	78
BCC M425-M413-3A-300-VX8334-050	BCC038Z	75	BCC M425-M414-3A-650-VX8434-006	BCC03Y4	78
BCC M425-M413-3A-602-PX0334-003	BCC037Z	75	BCC M425-M414-3A-650-VX8434-010	BCC03EZ	78
BCC M425-M413-3A-602-PX0334-006	BCC0380	75	BCC M425-M414-3A-650-VX8434-015	BCC03F0	78
BCC M425-M413-3A-602-PX0334-010	BCC0381	75	BCC M425-M414-3A-650-VX8434-020	BCC03F1	78
BCC M425-M413-3A-602-PX0334-015	BCC0382	75	BCC M425-M414-3A-650-VX8434-030	BCC03F2	78
BCC M425-M413-3A-602-PX0334-020	BCC0383	75	BCC M425-M414-3A-650-VX8434-050	BCC03F3	78
BCC M425-M413-3A-602-PX0334-030	BCC0384	75	BCC M425-M414-3A-691-PW3434-003	BCC0C4K	135
BCC M425-M413-3A-602-PX0334-050	BCC0385	75	BCC M425-M414-3A-691-PW3434-006	BCC0C52	135
BCC M425-M413-3A-602-VX8334-003	BCC0397	75	BCC M425-M414-3A-691-PW3434-010	BCC0C4L	135
BCC M425-M413-3A-602-VX8334-006	BCC0398	75	BCC M425-M414-3A-691-PW3434-015	BCC0C4M	135

Alphanumeric Index

Sorted by part number

Part number	Ordering code	Page
BCC M425-M414-3A-691-PW3434-020	BCC0C4N	135
BCC M425-M414-3A-691-PW3434-030	BCC0C4P	135
BCC M425-M414-3A-691-PW3434-050	BCC0C4R	135
BCC M425-M415-3A-312-PX0534-003	BCC08H8	81
BCC M425-M415-3A-312-PX0534-006	BCC08H9	81
BCC M425-M415-3A-312-PX0534-010	BCC08HA	81
BCC M425-M415-3A-312-PX0534-015	BCC08HC	81
BCC M425-M415-3A-312-PX0534-020	BCC08HE	81
BCC M425-M415-3A-312-PX0534-030	BCC08HF	81
BCC M425-M415-3A-312-PX0534-050	BCC08HH	81
BCC M425-M415-3A-313-PW0534-006	BCC0AKH	129
BCC M425-M415-3A-313-PW0534-010	BCC0AKJ	129
BCC M425-M415-3A-313-PW0534-020	BCC0AKK	129
BCC M425-M415-3A-313-PW0534-030	BCC0AKL	129
BCC M425-M415-3A-313-PW0534-050	BCC0AKM	129
BCC M425-M415-3A-313-PX0534-003	BCC08H0	81
BCC M425-M415-3A-313-PX0534-006	BCC08H1	81
BCC M425-M415-3A-313-PX0534-010	BCC08H2	81
BCC M425-M415-3A-313-PX0534-015	BCC08H3	81
BCC M425-M415-3A-313-PX0534-020	BCC08H4	81
BCC M425-M415-3A-313-PX0534-030	BCC08H5	81
BCC M425-M415-3A-313-PX0534-050	BCC08H6	81
BCC M425-M415-3A-660-PX0534-003	BCC09FA	81
BCC M425-M415-3A-660-PX0534-006	BCC09FC	81
BCC M425-M415-3A-660-PX0534-010	BCC09FE	81
BCC M425-M415-3A-660-PX0534-015	BCC09FH	81
BCC M425-M415-3A-660-PX0534-020	BCC09FF	81
BCC M425-M415-3A-660-PX0534-030	BCC09FJ	81
BCC M425-M415-3A-660-PX0534-050	BCC09FK	81
BCC M425-M415-3A-661-PW0534-006	BCC0C0N	129
BCC M425-M415-3A-661-PW0534-010	BCC0C0P	129
BCC M425-M415-3A-661-PW0534-015	BCC0C0R	129
BCC M425-M415-3A-661-PW0534-020	BCC0C0T	129
BCC M425-M415-3A-661-PW0534-030	BCC0C0U	129
BCC M425-M415-3A-661-PW0534-050	BCC0C0W	129
BCC M425-M415-3A-661-PX0534-003	BCC09F9	82
BCC M425-M415-3A-661-PX0534-006	BCC09F8	82
BCC M425-M415-3A-661-PX0534-010	BCC09F7	82
BCC M425-M415-3A-661-PX0534-015	BCC09F3	82
BCC M425-M415-3A-661-PX0534-020	BCC09F4	82
BCC M425-M415-3A-661-PX0534-030	BCC09F5	82
BCC M425-M415-3A-661-PX0534-050	BCC09F6	82
BCC M425-M415-3A-692-PW3534-003	BCC0C4T	135
BCC M425-M415-3A-692-PW3534-006	BCC0C4U	135
BCC M425-M415-3A-692-PW3534-010	BCC0C4W	135
BCC M425-M415-3A-692-PW3534-015	BCC0C4Y	135
BCC M425-M415-3A-692-PW3534-020	BCC0C4Z	135
BCC M425-M415-3A-692-PW3534-030	BCC0C50	135
BCC M425-M415-3A-692-PW3534-050	BCC0C51	135
BCC M425-M415-3A-692-PX0534-003	BCC0C4J	82
BCC M425-M415-3A-692-PX0534-006	BCC0C4H	82
BCC M425-M415-3A-692-PX0534-010	BCC0C4F	82
BCC M425-M415-3A-692-PX0534-015	BCC0C4E	82
BCC M425-M415-3A-692-PX0534-020	BCC0C4C	82
BCC M425-M415-3A-692-PX0534-030	BCC0C4A	82
BCC M425-M415-3A-692-PX0534-050	BCC0C49	82
BCC M425-M424-3A-304-PX0434-003	BCC03AJ	78
BCC M425-M424-3A-304-PX0434-006	BCC03AK	78
BCC M425-M424-3A-304-PX0434-010	BCC03AL	78
BCC M425-M424-3A-304-PX0434-015	BCC03AM	78
BCC M425-M424-3A-304-PX0434-020	BCC03AN	78
BCC M425-M424-3A-304-PX0434-030	BCC03AP	78
BCC M425-M424-3A-304-PX0434-050	BCC03AR	78

Part number	Ordering code	Page
BCC M425-M424-3A-304-VX8434-003	BCC03EA	78
BCC M425-M424-3A-304-VX8434-006	BCC03EC	78
BCC M425-M424-3A-304-VX8434-010	BCC03EE	78
BCC M425-M424-3A-304-VX8434-015	BCC03EF	78
BCC M425-M424-3A-304-VX8434-020	BCC03EH	78
BCC M425-M424-3A-304-VX8434-030	BCC03EJ	78
BCC M425-M424-3A-304-VX8434-050	BCC03EK	78
BCC M425-M425-3A-660-PX0534-003	BCC08FF	83
BCC M425-M425-3A-660-PX0534-006	BCC08FH	83
BCC M425-M425-3A-660-PX0534-010	BCC08FJ	83
BCC M425-M425-3A-660-PX0534-015	BCC08FK	83
BCC M425-M425-3A-660-PX0534-020	BCC08FL	83
BCC M425-M425-3A-660-PX0534-030	BCC08FM	83
BCC M425-M425-3A-660-PX0534-050	BCC08FN	83
BCC M425-M425-3A-661-PX0534-003	BCC08FP	83
BCC M425-M425-3A-661-PX0534-006	BCC08FR	83
BCC M425-M425-3A-661-PX0534-010	BCC08FT	83
BCC M425-M425-3A-661-PX0534-015	BCC08FU	83
BCC M425-M425-3A-661-PX0534-020	BCC08FW	83
BCC M425-M425-3A-661-PX0534-030	BCC08FY	83
BCC M425-M425-3A-661-PX0534-050	BCC08FZ	83
BCC M428-0000-1A-044-PX0825-020	BCC06K4	63
BCC M428-0000-1A-044-PX0825-050	BCC06K5	63
BCC M428-0000-1A-044-PX0825-100	BCC06K6	63
BCC M428-0000-1A-045-PX0825-020	BCC09H8	64
BCC M428-0000-1A-045-PX0825-050	BCC09H9	64
BCC M428-0000-1A-045-PX0825-100	BCC09HA	64
BCC M428-0000-1A-046-PS0825-020	BCC0997	63
BCC M428-0000-1A-046-PS0825-050	BCC0998	63
BCC M428-0000-1A-046-PS0825-100	BCC0999	63
BCC M428-0000-2A-044-PX0825-020	BCC06JY	65
BCC M428-0000-2A-044-PX0825-050	BCC06JZ	65
BCC M428-0000-2A-044-PX0825-100	BCC06K0	65
BCC M428-0000-2A-044-VX0825-020	BCC06KA	65
BCC M428-0000-2A-044-VX0825-050	BCC06KC	65
BCC M428-0000-2A-044-VX0825-100	BCC06KE	65
BCC M42C-0000-1A-049-PX0C25-050	BCC0942	66
BCC M42C-0000-1A-049-PX0C25-100	BCC0943	66
BCC M42C-0000-2A-049-PX0C25-020	BCC0941	67
BCC M42C-0000-2A-049-PX0C25-050	BCC09M5	67
BCC M42C-0000-2A-049-PX0C25-100	BCC09M4	67
BCC M434-0000-2A-000-41X475-000	BCC06M4	88
BCC M434-0000-2A-000-43X434-000	BCC08C0	88
BCC M434-0000-2A-000-51X475-000	BCC06F7	88, 184, 190
BCC M434-0000-2A-000-55X450-000	BCC06Y5	88, 184, 190
BCC M435-0000-1A-000-41X475-000	BCC06Z9	86
BCC M435-0000-1A-000-43X434-000	BCC06ZY	87
BCC M435-0000-1A-000-51X475-000	BCC06F6	86, 184, 190
BCC M435-0000-1A-000-51X575-000	BCC06W9	90
BCC M435-0000-1A-000-55X450-000	BCC06Y6	86, 184, 190
BCC M435-0000-1A-000-A1X575-000	BCC09JP	92
BCC M435-0000-2A-000-41X575-000	BCC06YA	90
BCC M435-0000-2A-000-51X575-000	BCC06EY	90
BCC M435-0000-2A-000-A1X575-000	BCC09JW	92
BCC M435-000-1A-000-41X575-000	BCC06ZF	90
BCC M444-0000-2A-000-41X475-000	BCC06ZC	89
BCC M444-0000-2A-000-51X475-000	BCC06ZE	89
BCC M445-0000-1A-000-41X475-000	BCC06ZA	87
BCC M445-0000-1A-000-51X475-000	BCC06Y8	87
BCC M445-0000-1A-000-51X575-000	BCC06ZJ	90
BCC M445-0000-2A-000-51X575-000	BCC06ZL	91
BCC M445-000-1A-000-41X575-000	BCC06ZH	90
BCC M445-000-2A-000-41X575-000	BCC06ZK	91

Alphanumeric Index

Sorted by part number

Part number	Ordering code	Page	Part number	Ordering code	Page
BCC M452-0000-2B-RM080-002	BCC0E40	175	BCC S425-0000-1A-003-VX8434-100	BCC06MF	122
BCC M454-0000-2A-RM020-005	BCC099A	94	BCC S425-0000-1A-003-VX8434-150	BCC06MH	122
BCC M454-0000-2A-RM020-020	BCC0E53	94	BCC S425-0000-1A-003-VX8434-200	BCC06MJ	122
BCC M454-M454-5D-RM002-000	BCC06YP	181, 201	BCC S425-0000-1A-003-VX8434-250	BCC06MK	122
BCC M455-0000-1A-RM014-005	BCC09JZ	95	BCC S425-0000-1A-003-VX8434-300	BCC06ML	122
BCC M455-0000-1A-RM014-020	BCC0E54	95	BCC S425-0000-1A-003-VX8434-350	BCC06MM	122
BCC M455-0000-1A-RM020-005	BCC099C	94	BCC S425-0000-1A-004-PX0334-020	BCC08CM	121
BCC M455-0000-1A-RM020-020	BCC0CAE	94	BCC S425-0000-1A-004-PX0334-030	BCC08CN	121
BCC M455-0000-1B-RM080-002	BCC0E3Z	175	BCC S425-0000-1A-004-PX0334-050	BCC08CP	121
BCC M455-0000-2A-RM014-005	BCC09K0	95	BCC S425-0000-1A-004-PX0334-100	BCC08CR	121
BCC M455-0000-2A-RM014-020	BCC0E5F	95	BCC S425-0000-1A-004-PX0334-150	BCC06UE	121
BCC M458-0000-1B-000-01X575-005	BCC0E55	96	BCC S425-0000-1A-004-PX0334-200	BCC06UF	121
BCC M458-0000-1A-RM015-020	BCC0E56	96	BCC S425-0000-1A-004-PX0334-250	BCC06UH	121
BCC M458-0000-2A-RM015-005	BCC0E57	96	BCC S425-0000-1A-004-PX0334-400	BCC06UJ	121
BCC M458-0000-2A-RM015-020	BCC0E58	96	BCC S425-0000-1A-004-VX8334-050	BCC0A2L	121
BCC M45C-0000-1A-RM081-005	BCC0E59	97	BCC S425-0000-1A-004-VX8334-100	BCC0A2M	121
BCC M45C-0000-1A-RM081-020	BCC0E5A	97	BCC S425-0000-1A-004-VX8334-150	BCC06U9	121
BCC M45C-0000-2A-RM081-005	BCC0E5C	97	BCC S425-0000-1A-004-VX8334-200	BCC06UA	121
BCC M45C-0000-2A-RM081-020	BCC0E5E	97	BCC S425-0000-1A-004-VX8334-250	BCC06UC	121
BCC M474-0000-1D-000-51X475-000	BCC03Y1	178, 198	BCC S425-0000-1A-008-PX0434-050	BCC08CU	122
BCC M474-0000-2D-000-51X475-000	BCC03WZ	179, 199	BCC S425-0000-1A-008-PX0434-100	BCC0A2K	122
BCC M475-0000-1B-000-01X575-000	BCC0715	170	BCC S425-0000-1A-008-VX0434-050	BCC0CTE	122
BCC M475-0000-2B-000-01X575-000	BCC0714	171	BCC S425-0000-1A-008-VX0434-100	BCC0CTC	122
BCC M478-0000-1A-000-43X834-000	BCC04MC	91	BCC S425-0000-1A-008-VX0434-150	BCC0CTA	122
BCC M484-0000-1D-000-51X475-000	BCC03Y2	178, 198	BCC S425-0000-1A-008-VX0434-200	BCC0CT9	122
BCC M484-0000-2D-000-51X475-000	BCC03Y0	179, 199	BCC S425-0000-1A-008-VX0434-250	BCC0CT8	122
BCC M485-0000-1B-000-01X575-000	BCC0717	170	BCC S445-0000-1A-000-51X475-000-C024	BCC0CAA	93
BCC M485-0000-2B-000-01X575-000	BCC0716	171	BCC VA04-0000-10-053-PX0350-020	BCC04W0	156
BCC M488-0000-1A-000-43X834-000	BCC04ME	91	BCC VA04-0000-10-053-PX0350-050	BCC04W1	156
BCC M61C-0000-10-065-PX0BP4-020	BCC06KN	100	BCC VA04-0000-10-053-PX0350-100	BCC04W2	156
BCC M61C-0000-10-065-PX0BP4-050	BCC06KP	100	BCC VA04-0000-10-053-VX8350-020	BCC04W3	156
BCC M61C-0000-10-065-PX0BP4-100	BCC06KR	100	BCC VA04-0000-10-053-VX8350-050	BCC04W4	156
BCC M61C-M41C-3E-675-PX0C25-006	BCC088M	102	BCC VA04-0000-10-053-VX8350-100	BCC04W5	156
BCC M61C-M41C-3E-675-PX0C25-010	BCC088N	102	BCC VA04-0000-10-054-PX0350-020	BCC04W6	156
BCC M61C-M41C-3E-675-PX0C25-020	BCC088P	102	BCC VA04-0000-10-054-PX0350-050	BCC04W7	156
BCC M61L-0000-10-022-PX0LP4-020	BCC06KY	101	BCC VA04-0000-10-054-PX0350-100	BCC04W8	156
BCC M61L-0000-10-022-PX0LP4-050	BCC06KZ	101	BCC VA04-0000-10-054-VX8350-020	BCC04W9	156
BCC M61L-0000-10-022-PX0LP4-100	BCC06L0	101	BCC VA04-0000-10-054-VX8350-050	BCC04WA	156
BCC M62C-0000-10-065-PX0BP4-020	BCC06KT	101	BCC VA04-0000-10-054-VX8350-100	BCC04WC	156
BCC M62C-0000-10-065-PX0BP4-050	BCC06KU	101	BCC VA04-M413-3E-664-PX0350-003	BCC04WF	157
BCC M62C-0000-10-065-PX0BP4-100	BCC06KW	101	BCC VA04-M413-3E-664-PX0350-006	BCC04WH	157
BCC M62C-M41C-3E-675-PX0C25-006	BCC088R	102	BCC VA04-M413-3E-664-PX0350-010	BCC0502	157
BCC M62C-M41C-3E-675-PX0C25-010	BCC088T	102	BCC VA04-M413-3E-664-PX0350-015	BCC04WJ	157
BCC M62C-M41C-3E-675-PX0C25-020	BCC088U	102	BCC VA04-M413-3E-664-PX0350-020	BCC04WK	157
BCC M62L-0000-10-022-PX0LP4-020	BCC06L1	101	BCC VA04-M413-3E-664-PX0350-030	BCC04WL	157
BCC M62L-0000-10-022-PX0LP4-050	BCC06L2	101	BCC VA04-M413-3E-664-PX0350-050	BCC04WM	157
BCC M62L-0000-10-022-PX0LP4-100	BCC06L3	101	BCC VB03-0000-10-055-PX0350-020	BCC03YC	158
BCC PA04-0000-10-070-PX0550-020	BCC071A	164	BCC VB03-0000-10-055-PX0350-050	BCC03YE	158
BCC PA04-0000-10-070-PX0550-050	BCC071C	164	BCC VB03-0000-10-055-PX0350-100	BCC03YF	158
BCC PA04-0000-10-070-PX0550-100	BCC071E	164	BCC VB03-0000-10-055-VX8350-020	BCC03ZZ	158
BCC PA24-0000-10-070-PX0550-020	BCC071F	164	BCC VB03-0000-10-055-VX8350-050	BCC0400	158
BCC PA24-0000-10-070-PX0550-050	BCC071H	164	BCC VB03-0000-10-055-VX8350-100	BCC0401	158
BCC PA24-0000-10-070-PX0550-100	BCC071J	164	BCC VB03-M413-3E-666-PX0350-003	BCC064E	159
BCC S323-0000-10-004-PX0334-020	BCC08CZ	121	BCC VB03-M413-3E-666-PX0350-006	BCC064F	159
BCC S323-0000-10-004-PX0334-030	BCC0A2F	121	BCC VB03-M413-3E-666-PX0350-010	BCC064H	159
BCC S323-0000-10-004-PX0334-050	BCC08E0	121	BCC VB03-M413-3E-666-PX0350-015	BCC064J	159
BCC S323-0000-10-004-PX0334-100	BCC0A2H	121	BCC VB03-M413-3E-666-PX0350-020	BCC064K	159
BCC S415-0000-1A-003-VX8434-100	BCC06M7	121	BCC VB03-M413-3E-666-PX0350-030	BCC064L	159
BCC S415-0000-1A-003-VX8434-150	BCC06M8	121	BCC VB03-M413-3E-666-PX0350-050	BCC064M	159
BCC S415-0000-1A-003-VX8434-200	BCC06M9	121	BCC VB23-0000-10-055-PX0350-020	BCC03YH	158
BCC S415-0000-1A-003-VX8434-250	BCC06MA	121	BCC VB23-0000-10-055-PX0350-050	BCC03YJ	158
BCC S415-0000-1A-003-VX8434-300	BCC06MC	121	BCC VB23-0000-10-055-PX0350-100	BCC03YK	158
BCC S415-0000-1A-003-VX8434-350	BCC06ME	121	BCC VB23-0000-10-055-VX8350-020	BCC0402	158

Alphanumeric Index

Sorted by part number

Part number	Ordering code	Page
BCC VB23-0000-10-055-VX8350-050	BCC0403	158
BCC VB23-0000-10-055-VX8350-100	BCC0404	158
BCC VB23-M413-3E-666-PX0350-003	BCC064N	159
BCC VB23-M413-3E-666-PX0350-006	BCC064P	159
BCC VB23-M413-3E-666-PX0350-010	BCC064R	159
BCC VB23-M413-3E-666-PX0350-015	BCC064T	159
BCC VB23-M413-3E-666-PX0350-020	BCC064U	159
BCC VB23-M413-3E-666-PX0350-030	BCC064W	159
BCC VB23-M413-3E-666-PX0350-050	BCC064Y	159
BCC VB43-0000-10-055-PX0350-020	BCC03YL	160
BCC VB43-0000-10-055-PX0350-050	BCC03YM	160
BCC VB43-0000-10-055-PX0350-100	BCC03YN	160
BCC VB43-0000-10-055-VX8350-020	BCC0405	160
BCC VB43-0000-10-055-VX8350-050	BCC0406	160
BCC VB43-0000-10-055-VX8350-100	BCC0407	160
BCC VB43-M413-3E-666-PX0350-003	BCC064Z	161
BCC VB43-M413-3E-666-PX0350-006	BCC0650	161
BCC VB43-M413-3E-666-PX0350-010	BCC0651	161
BCC VB43-M413-3E-666-PX0350-015	BCC0652	161
BCC VB43-M413-3E-666-PX0350-020	BCC0653	161
BCC VB43-M413-3E-666-PX0350-030	BCC0654	161
BCC VB43-M413-3E-666-PX0350-050	BCC0655	161
BCC VB63-0000-10-055-PX0350-020	BCC03YP	160
BCC VB63-0000-10-055-PX0350-050	BCC03YR	160
BCC VB63-0000-10-055-PX0350-100	BCC03YT	160
BCC VB63-0000-10-055-VX8350-020	BCC0408	160
BCC VB63-0000-10-055-VX8350-050	BCC0409	160
BCC VB63-0000-10-055-VX8350-100	BCC040A	160
BCC VB63-M413-3E-666-PX0350-003	BCC0656	161
BCC VB63-M413-3E-666-PX0350-006	BCC0657	161
BCC VB63-M413-3E-666-PX0350-010	BCC0658	161
BCC VB63-M413-3E-666-PX0350-015	BCC0659	161
BCC VB63-M413-3E-666-PX0350-020	BCC065A	161
BCC VB63-M413-3E-666-PX0350-030	BCC065C	161
BCC VB63-M413-3E-666-PX0350-050	BCC065E	161
BCC VC04-0000-10-053-PX0350-020	BCC04MZ	162
BCC VC04-0000-10-053-PX0350-050	BCC04N0	162
BCC VC04-0000-10-053-PX0350-100	BCC04N1	162
BCC VC04-0000-10-053-VX8350-020	BCC04N2	162
BCC VC04-0000-10-053-VX8350-050	BCC04N3	162
BCC VC04-0000-10-053-VX8350-100	BCC04N4	162
BCC VC04-M413-3E-664-PX0350-003	BCC04NC	162
BCC VC04-M413-3E-664-PX0350-006	BCC04NE	162
BCC VC04-M413-3E-664-PX0350-010	BCC04NF	162
BCC VC04-M413-3E-664-PX0350-015	BCC04NH	162
BCC VC04-M413-3E-664-PX0350-020	BCC04NJ	162
BCC VC04-M413-3E-664-PX0350-030	BCC04NK	162
BCC VC04-M413-3E-664-PX0350-050	BCC04NL	162
BCC VC44-0000-10-053-PX0350-020	BCC04RF	163
BCC VC44-0000-10-053-PX0350-050	BCC04RH	163
BCC VC44-0000-10-053-PX0350-100	BCC04RJ	163
BCC VC44-0000-10-053-VX8350-020	BCC04RK	163
BCC VC44-0000-10-053-VX8350-050	BCC04RL	163
BCC VC44-0000-10-053-VX8350-100	BCC04RM	163
BCC VC44-M413-3E-664-PX0350-003	BCC04RY	163
BCC VC44-M413-3E-664-PX0350-006	BCC04RZ	163
BCC VC44-M413-3E-664-PX0350-010	BCC04T0	163
BCC VC44-M413-3E-664-PX0350-015	BCC04T1	163
BCC VC44-M413-3E-664-PX0350-020	BCC04T2	163
BCC VC44-M413-3E-664-PX0350-030	BCC04T3	163
BCC VC44-M413-3E-664-PX0350-050	BCC04T4	163
BCC W313-W413-3E-300-BW8334-003	BCC0EHY	144
BCC W313-W413-3E-300-BW8334-006	BCC0EHZ	144

Part number	Ordering code	Page
BCC W313-W413-3E-300-BW8334-010	BCC0EJ0	144
BCC W313-W413-3E-300-FW9334-003	BCC0EJ1	148
BCC W313-W413-3E-300-FW9334-006	BCC0EJ2	148
BCC W313-W413-3E-300-FW9334-010	BCC0EJ3	148
BCC W313-W413-3E-300-SW0334-003	BCC0EMH	140
BCC W313-W413-3E-300-SW0334-006	BCC0EMJ	140
BCC W313-W413-3E-300-SW0334-010	BCC0EMK	140
BCC W313-W413-3E-300-TW0334-003	BCC0EHT	146
BCC W313-W413-3E-300-TW0334-006	BCC0EHU	146
BCC W313-W413-3E-300-TW0334-010	BCC0EHW	146
BCC W314-W313-W313-U2050-003	BCC0EW7	142
BCC W314-W313-W313-U2050-006	BCC0EW8	142
BCC W314-W314-30-304-SW0434-003	BCC0EH7	140
BCC W314-W314-30-304-SW0434-006	BCC0EH8	140
BCC W314-W314-30-304-SW0434-010	BCC0EH9	140
BCC W314-W314-30-304-SW0434-015	BCC0EHA	140
BCC W314-W314-30-304-SW0434-020	BCC0EHC	140
BCC W314-W314-30-304-SW0434-030	BCC0EHE	140
BCC W314-W314-30-304-SW0434-050	BCC0EHF	140
BCC W314-W323-W323-U2050-003	BCC0EW9	142
BCC W314-W323-W323-U2050-006	BCC0EWA	142
BCC W314-W414-3E-304-SW0434-003	BCC0EHO	141
BCC W314-W414-3E-304-SW0434-006	BCC0EH1	141
BCC W314-W414-3E-304-SW0434-010	BCC0EH2	141
BCC W314-W414-3E-304-SW0434-015	BCC0EH3	141
BCC W314-W414-3E-304-SW0434-020	BCC0EH4	141
BCC W314-W414-3E-304-SW0434-030	BCC0EH5	141
BCC W314-W414-3E-304-SW0434-050	BCC0EH6	141
BCC W414-W313-W313-U2049-003	BCC0EW3	143
BCC W414-W313-W313-U2049-006	BCC0EW4	143
BCC W414-W323-W323-U2049-003	BCC0EW5	143
BCC W414-W323-W323-U2049-006	BCC0EW6	143
BCC W414-W415-W415-U2044-003	BCC0EHH	145
BCC W414-W415-W415-U2044-006	BCC0EHJ	145
BCC W414-W415-W415-U2045-003	BCC0EL3	149
BCC W414-W415-W415-U2045-006	BCC0EL4	149
BCC W414-W415-W415-U2046-003	BCC0EHM	143
BCC W414-W415-W415-U2046-006	BCC0EHN	143
BCC W414-W415-W415-U2048-003	BCC0EFF	147
BCC W414-W415-W415-U2048-006	BCC0EFH	147
BCC W414-W425-W425-U2044-003	BCC0EHK	145
BCC W414-W425-W425-U2044-006	BCC0EHL	145
BCC W414-W425-W425-U2045-003	BCC0EL5	149
BCC W414-W425-W425-U2045-006	BCC0EL6	149
BCC W414-W425-W425-U2046-003	BCC0EHP	143
BCC W414-W425-W425-U2046-006	BCC0EHR	143
BCC W414-W425-W425-U2048-003	BCC0EFJ	147
BCC W414-W425-W425-U2048-006	BCC0EFK	147
BCC W415-0000-1A-003-SW0434-020	BCC0EFY	139
BCC W415-0000-1A-003-SW0434-030	BCC0EUY	139
BCC W415-0000-1A-003-SW0434-050	BCC0EUZ	139
BCC W415-W414-3A-304-BW8434-003	BCC0EJA	144
BCC W415-W414-3A-304-BW8434-006	BCC0EJC	144
BCC W415-W414-3A-304-BW8434-010	BCC0EJE	144
BCC W415-W414-3A-304-BW8434-015	BCC0EJF	144
BCC W415-W414-3A-304-BW8434-020	BCC0EJH	144
BCC W415-W414-3A-304-BW8434-050	BCC0EJJ	144
BCC W415-W414-3A-304-FW9434-003	BCC0ELM	148
BCC W415-W414-3A-304-FW9434-006	BCC0ELN	148
BCC W415-W414-3A-304-FW9434-010	BCC0ELP	148
BCC W415-W414-3A-304-FW9434-015	BCC0ELR	148
BCC W415-W414-3A-304-FW9434-020	BCC0ELT	148
BCC W415-W414-3A-304-FW9434-050	BCC0ELU	148

Alphanumeric Index

Sorted by part number

Part number	Ordering code	Page
BCC W415-W414-3A-304-MW8434-003	BCC0EKP	150
BCC W415-W414-3A-304-MW8434-006	BCC0EKR	150
BCC W415-W414-3A-304-MW8434-010	BCC0EKT	150
BCC W415-W414-3A-304-MW8434-015	BCC0EKU	150
BCC W415-W414-3A-304-MW8434-020	BCC0EKW	150
BCC W415-W414-3A-304-SW0434-003	BCC0ELW	141
BCC W415-W414-3A-304-SW0434-006	BCC0ELY	141
BCC W415-W414-3A-304-SW0434-010	BCC0ELZ	141
BCC W415-W414-3A-304-SW0434-015	BCC0EM0	141
BCC W415-W414-3A-304-SW0434-020	BCC0EM1	141
BCC W415-W414-3A-304-SW0434-030	BCC0EUU	141
BCC W415-W414-3A-304-SW0434-050	BCC0EUW	141
BCC W415-W414-3A-304-TW0434-003	BCC0EJ4	146
BCC W415-W414-3A-304-TW0434-006	BCC0EJ5	146
BCC W415-W414-3A-304-TW0434-010	BCC0EJ6	146
BCC W415-W414-3A-304-TW0434-015	BCC0EJ7	146
BCC W415-W414-3A-304-TW0434-020	BCC0EJ8	146
BCC W415-W414-3A-304-TW0434-050	BCC0EJ9	146
BCC W415-W424-3A-304-MW8434-003	BCC0EKA	150
BCC W415-W424-3A-304-MW8434-006	BCC0EKC	150
BCC W415-W424-3A-304-MW8434-010	BCC0EKE	150
BCC W415-W424-3A-304-MW8434-015	BCC0EKF	150
BCC W415-W424-3A-304-MW8434-020	BCC0EKH	150
BCC W425-0000-1A-003-SW0434-020	BCC0EFZ	139
BCC W425-0000-1A-003-SW0434-030	BCC0EW0	139
BCC W425-0000-1A-003-SW0434-050	BCC0EW1	139
BCC W425-W414-3A-304-BW8434-003	BCC0EM8	145
BCC W425-W414-3A-304-BW8434-006	BCC0EM9	145
BCC W425-W414-3A-304-BW8434-010	BCC0EMA	145
BCC W425-W414-3A-304-BW8434-015	BCC0EMC	145
BCC W425-W414-3A-304-BW8434-020	BCC0EME	145
BCC W425-W414-3A-304-BW8434-050	BCC0EMF	145
BCC W425-W414-3A-304-FW9434-003	BCC0EL7	149
BCC W425-W414-3A-304-FW9434-006	BCC0EL8	149
BCC W425-W414-3A-304-FW9434-010	BCC0EL9	149
BCC W425-W414-3A-304-FW9434-015	BCC0ELA	149
BCC W425-W414-3A-304-FW9434-020	BCC0ELC	149
BCC W425-W414-3A-304-FW9434-050	BCC0ELE	149
BCC W425-W414-3A-304-MW8434-003	BCC0EKY	151
BCC W425-W414-3A-304-MW8434-006	BCC0EKZ	151
BCC W425-W414-3A-304-MW8434-010	BCC0ELO	151
BCC W425-W414-3A-304-MW8434-015	BCC0EL1	151
BCC W425-W414-3A-304-MW8434-020	BCC0EL2	151
BCC W425-W414-3A-304-SW0434-003	BCC0EU7	141
BCC W425-W414-3A-304-SW0434-006	BCC0EU8	141
BCC W425-W414-3A-304-SW0434-010	BCC0EU9	141
BCC W425-W414-3A-304-SW0434-015	BCC0EUA	141
BCC W425-W414-3A-304-SW0434-020	BCC0EUC	141
BCC W425-W414-3A-304-TW0434-003	BCC0EM2	147
BCC W425-W414-3A-304-TW0434-006	BCC0EM3	147
BCC W425-W414-3A-304-TW0434-010	BCC0EM4	147
BCC W425-W414-3A-304-TW0434-015	BCC0EM5	147
BCC W425-W414-3A-304-TW0434-020	BCC0EM6	147
BCC W425-W414-3A-304-TW0434-050	BCC0EM7	147
BCC W425-W424-3A-304-MW8434-003	BCC0EKJ	151
BCC W425-W424-3A-304-MW8434-006	BCC0EKK	151
BCC W425-W424-3A-304-MW8434-010	BCC0EKL	151
BCC W425-W424-3A-304-MW8434-015	BCC0EKM	151
BCC W425-W424-3A-304-MW8434-020	BCC0EKN	151

BDD		
BDD-UM 3023	BAE006K	261

Part number	Ordering code	Page
BES		
BES 03,0-KB-3	BAM0092	303
BES 04,0-KB-1	BAM0094	302
BES 04,0-KB-3	BAM0095	303
BES 05,0-KB-1	BAM0097	302
BES 05,0-KB-3	BAM0098	303
BES 05,0-KH-2S	BAM0099	290
BES 06,5-BS-1	BAM009A	301
BES 06,5-KB-1	BAM009C	302
BES 06,5-KB-3	BAM009E	303
BES 06,5-KB-7	BAM009F	302
BES 08,0-BS-1	BAM00A2	301
BES 08,0-HW-1	BAM009U	308
BES 08,0-KB-3	BAM00A5	302
BES 08,0-KB-3-F	BAM00A6	302
BES 08,0-KB-4-F	BAM00A7	305
BES 08,0-KB-5-F	BAM00A8	306
BES 08,0-KB-7	BAM00AA	303
BES 08,0-KH-2L	BAM00AE	290
BES 08,0-KH-2L/W	BAM00AF	290
BES 08,0-KH-2S	BAM00AH	290
BES 08,0-KH-2S/W	BAM00AK	290
BES 08,0-KH-3L	BAM00AL	296
BES 08,0-KH-4-F	BAM00AM	291
BES 08,0-KH-6L	BAM00AN	291
BES 08,0-KH-6L/W	BAM00AP	291
BES 08,0-KH-6S	BAM00AR	290
BES 08,0-KH-7-F	BAM00AU	291
BES 08-DM-1	BAM009K	394
BES 08-FA-49	BAM009L	368
BES 08-FA-89	BAM009M	369
BES 08-FA-BS-4,0-G	BAM009N	369
BES 08-FA-BS-4,0-W	BAM009P	369
BES 08-FA-BS-8,0-G	BAM009R	369
BES 08-FA-BS-8,0-W	BAM009T	369
BES 08-HW-4	BAM009W	309
BES 08-HW-5	BAM009Y	309
BES 08-SM-1	BAM009Z	297
BES 08-SM-1F	BAM00A0	297
BES 113-FD-1	BAE006W	253
BES 12,0-BS-1	BAM00C4	301
BES 12,0-HW-1	BAM00C0	308
BES 12,0-KB-2	BAM00C7	303
BES 12,0-KB-2-F	BAM00C8	303
BES 12,0-KB-3	BAM00C9	304
BES 12,0-KB-3-F	BAM00CA	304
BES 12,0-KB-3-F-SA1	BAM00CC	304
BES 12,0-KB-3-F-SA2	BAM00CE	304
BES 12,0-KB-4-F	BAM00CF	305
BES 12,0-KB-5-F	BAM00CH	306
BES 12,0-KH-2L	BAM00CY	291
BES 12,0-KH-2L/W	BAM00CZ	291
BES 12,0-KH-2S	BAM00E0	291
BES 12,0-KH-2S/W	BAM00E1	291
BES 12,0-KH-3L	BAM00E2	296
BES 12,0-KH-3X	BAM00E3	296
BES 12,0-KH-4	BAM00E4	290
BES 12,0-KH-4-F	BAM00E5	291
BES 12,0-KH-5F	BAM00E8	296
BES 12-FA-70	BAM00AZ	369
BES 12-KB-602-02/12	BAM00CK	310
BES 12-KB-602-04/12	BAM00CL	310
BES 12-KB-602-06/12	BAM00CM	311

Alphanumeric Index

Sorted by part number

Part number	Ordering code	Page
BES 12-KB-602-06/16	BAM00CN	311
BES 12-SM-2	BAM00C2	297
BES 14,5-BS-1	BAM00EM	301
BES 16,0-BS-1	BAM00ET	301
BES 16,0-HW-1	BAM00EN	308
BES 16-SM-2	BAM00EP	297
BES 18,0-BS-1	BAM00F2	301
BES 18,0-HW-1	BAM00EY	309
BES 18,0-KB-2	BAM00F6	303
BES 18,0-KB-3	BAM00F7	305
BES 18,0-KB-3-F	BAM00F8	305
BES 18,0-KB-3-F-SA1	BAM00F9	305
BES 18,0-KB-3-F-SA2	BAM00FA	305
BES 18,0-KB-4-F	BAM00FC	305
BES 18,0-KB-5-F	BAM00FE	306
BES 18,0-KH-2L	BAM00FN	292
BES 18,0-KH-2L/W	BAM00FP	292
BES 18,0-KH-2M	BAM00FR	292
BES 18,0-KH-2S	BAM00FT	291
BES 18,0-KH-2S/W	BAM00FW	291
BES 18,0-KH-3L	BAM00FY	296
BES 18,0-KH-4	BAM00FZ	290
BES 18,0-KH-4-F	BAM00H0	291
BES 18-SM-1	BAM00EZ	297
BES 18-SM-2	BAM00F0	393
BES 18-SM-3	BAM00F1	297
BES 20,0-BS-1	BAM00H7	301
BES 22,0-BS-1	BAM00H9	301
BES 22-SM-2	BAM00H8	393
BES 24,0-HW-1	BAM00HA	309
BES 30,0-BS-1	BAM00HN	301
BES 30,0-HW-1	BAM00HH	309
BES 30,0-KB-3-F	BAM00HU	305
BES 30,0-KB-4-F	BAM00HW	305
BES 30,0-KB-5-F	BAM00HY	306
BES 30,0-KH-2L	BAM00J4	292
BES 30,0-KH-2L/W	BAM00J5	292
BES 30,0-KH-2S	BAM00J6	292
BES 30,0-KH-2S/W	BAM00J7	292
BES 30,0-KH-4	BAM00J8	290
BES 30,0-KH-4-F	BAM00J9	291
BES 30-SM-1	BAM00HJ	393
BES 30-SM-2	BAM00HK	393
BES 30-SM-3	BAM00HL	297
BES 30-SM-5	BAM00HM	297
BES 36,0-BS-1	BAM00JN	301
BES 36,0-HW-1	BAM00JK	309
BES 36-SM-2	BAM00JL	393
BES 516-4	BAE0029	257
BES 516-611-A-1	BAE006Y	255
BES 516-615-NS-1-PU-05	BAE006Z	254
BES 516-615-PS-1-PU-05	BAE0070	254
BES 516-7	BAE002C	257
BES 516-IV 2	BAE0073	251
BES HS-01-P1-C16/Q40	BAM00JT	382
BES HS-01-P1-C8/Q40	BAM00JU	382
BES Q08-KH-2	BAM00NJ	364
BES Q08-KH-3	BAM01AU	364
BES Q40-HW-1	BAM00JW	381
BES Q40-HW-2	BAM00JY	381
BES Q40-HW-3	BAM00JZ	381
BES Q40-SH-1	BAM00K0	383
BES Q40-SH-2	BAM00K1	383

Part number	Ordering code	Page
BESA-08-CM	BAM015U	370
BESA-12-CM	BAM015W	371
BESA-18-CM	BAM015Y	371
BESA-30-CM	BAM015Z	371
BFO		
BFO 02-PK-1	BAM00NN	333
BFO 02-UK-1	BAM00NP	333
BFO 04-FL-1	BAM00NR	333
BFO 04-FL-2	BAM00NT	333
BFO 04-FS-1	BAM00NU	333
BFO 04-PK-1	BAM00NW	331
BFO 06-FS-1	BAM00NY	333
BFO 08,0-KB-1	BAM00PO	332
BFO 18A-LAA-MZG-20-0,5	BF0000F	337
BFO 18A-LAA-MZG-20-1	BF0000H	337
BFO 18A-LAA-UZG-20-0,5	BF0000M	337
BFO 18A-LAA-UZG-20-1	BF0000N	337
BFO 18A-LCC-SMG-10-1	BF0000W	337
BFO 18A-LCC-SMG-20-0,5	BF0000U	337
BFO 18A-LCC-UZG-20-1	BF0000Z	337
BFO 18A-LEE-MZG-20-0,5	BF00013	337
BFO 18A-LEE-MZG-20-1	BF00014	337
BFO 18A-LEE-SMG-20-0,5	BF00019	337
BFO 18A-LEE-SMG-20-1	BF0001A	337
BFO 18A-LEE-UZG-20-0,5	BF0001F	337
BFO 18A-LEE-UZG-20-1	BF0001H	337
BFO 18A-LFF-MZG-10-0,5	BF0001P	336
BFO 18A-LFF-MZG-10-1	BF0001R	336
BFO 18A-LFF-SMG-10-0,5	BF0001U	336
BFO 18A-LFF-SMG-10-1	BF0001W	336
BFO 18A-LGG-MZG-10-0,5	BF0001Z	336
BFO 18A-LGG-MZG-10-1	BF00020	336
BFO 18A-LGG-SMG-10-0,5	BF00023	336
BFO 18A-LGG-SMG-10-1	BF00024	336
BFO 18A-XAA-MZG-30-0,5	BF00026	339
BFO 18A-XAA-MZG-30-1	BF00027	339
BFO 18A-XAA-SMG-30-0,5	BF0002F	339
BFO 18A-XAA-SMG-30-1	BF0002H	339
BFO 18A-XAA-UZG-30-0,5	BF0002M	339
BFO 18A-XAA-UZG-30-1	BF0002N	339
BFO 18A-XAC-SMG-30-0,5	BF0002U	339
BFO 18A-XAC-SMG-30-1	BF0002W	339
BFO 18A-XAE-MZG-30-0,5	BF00031	339
BFO 18A-XAE-MZG-30-1	BF00032	339
BFO 18A-XAE-SMG-30-0,5	BF00037	339
BFO 18A-XAE-SMG-30-1	BF00038	339
BFO 18A-XAE-UZG-30-0,5	BF0003C	339
BFO 18A-XAE-UZG-30-1	BF0003E	339
BFO 18A-XAF-MZG-15-0,5	BF0003H	338
BFO 18A-XAF-MZG-15-1	BF0003J	338
BFO 18A-XAF-SMG-15-0,5	BF0003M	338
BFO 18A-XAF-SMG-15-1	BF0003N	338
BFO 18A-XAG-MZG-15-0,5	BF0003R	338
BFO 18A-XAG-MZG-15-1	BF0003T	338
BFO 18V-LCC-MZG-23-0,5	BF0003Y	337
BFO 18V-LCC-MZG-23-0,75	BF0003Z	337
BFO 18V-LCC-SMG-23-0,5	BF00042	337
BFO 18V-LDD-SMG-23-0,5	BF0004C	337
BFO 18V-LDD-MZG-23-0,75	BF00047	337
BFO 18V-LDD-SMG-23-1	BF0004F	337
BFO 18V-XAC-MZG-30-0,5	BF0004M	339
BFO 18V-XAC-SMG-30-0,5	BF0004P	339

Alphanumeric Index

Sorted by part number

Part number	Ordering code	Page
BFO 18V-XAC-SMG-30-1	BF0004R	339
BFO 18V-XAD-MZG-30-0,5	BF0004U	339
BFO 18V-XAD-SMG-30-0,5	BF0004Y	339
BFO 18V-XAD-SMG-30-1	BF0004Z	339
BFO 30-A1	BAM00NM	332
BFO CT	BAM000E	332
BFO D10-LA-CB-EAK-05-02	BF00051	319
BFO D10-LA-DC-10	BAM000J	332
BFO D10-LAH-CK-EAK-05-02	BF000C6	323
BFO D10-LAH-DK-EAK-05-02	BF000C7	323
BFO D10-XA-GB-EAK-10-02	BF00052	328
BFO D10-XA-HB-EAK-10-02	BF00053	327
BFO D10-XAH-KB-EAK-10-02	BF00055	326
BFO D10-XA-RB-EAK-10-02	BF00054	327
BFO D10-XA-VB-EAK-10-02	BF000C3	327
BFO D13-LA-EC-10	BAM00P1	332
BFO D13-LA-QB-EAK-05-02	BF00056	319
BFO D13-LA-WB-EAK-05-02	BF00057	319
BFO D13-LG-05-EAK-30-02	BF00058	322
BFO D13-LG-10-EAK-30-02	BF00059	322
BFO D13-XA-JB-EAK-20-02	BF0005A	328
BFO D13-XB-AB-EAK-10-01	BF000AT	329
BFO D13-XB-KB-EAK-10-02	BF0005C	327
BFO D13-XB-RB-EAK-10-02	BF0005E	327
BFO D13-XV-AK-EAK-50-02	BF000AR	329
BFO D22-LA-AC-20	BF0005F	331
BFO D22-LA-AD-EAK-52-02	BF0005H	320
BFO D22-LA-BC-10	BF0005J	331
BFO D22-LA-BD-EAK-52-02	BF0005K	320
BFO D22-LA-CC-30	BF0005L	331
BFO D22-LA-GD-EAK-52-02	BF000AP	320
BFO D22-LAH-BK-EAK-10-02	BF000AW	317
BFO D22-LAH-KB-EAK-10-02	BF0005T	316
BFO D22-LAH-ZB-EAK-10-02	BF0000E	322
BFO D22-LA-KB-EAK-10-02	BF0005M	316
BFO D22-LA-NB-PZK-10-02	BF0005N	317
BFO D22-LAP-KB-EAK-15-02	BF0005U	317
BFO D22-LA-QB-PAK-05-02	BF0005P	319
BFO D22-LA-RB-EAK-10-02	BF0005R	318
BFO D22-LA-TB-EAK-10-02	BF00002	317
BFO D22-LAT-KB-EAK-10-02	BF0005W	316
BFO D22-LAT-YB-EAK-10-0,5	BF000AY	318
BFO D22-LD-EAK-10-20	BF0005Y	331
BFO D22-XA-CD-EAK-110-02	BF0005Z	329
BFO D22-XA-DB-EAK-20-01	BF00003	325
BFO D22-XA-ED-EAK-250-02	BF00060	329
BFO D22-XA-EK-PAK-10-02	BF000CA	329
BFO D22-XAH-LB-EAK-20-02	BF00063	324
BFO D22-XA-LB-EAK-20-02	BF00061	324
BFO D22-XA-MB-PAK-10-02	BF00062	328
BFO D22-XAP-LB-EAK-30-02	BF00064	325
BFO D22-XA-SB-EAK-20-02	BF00004	325
BFO D22-XAT-LB-EAK-20-02	BF00065	324
BFO D22-XA-UB-EAK-20-02	BF00005	326
BFO D22-XBF-LB-EAK-15-02	BF00007	325
BFO D22-XB-LB-EAK-15-02	BF00066	325
BFO D22-XB-LB-EAK-15-SA1-01	BF000FP	330
BFO D22-XB-LB-EAK-15-SA1-02	BF000C4	330
BFO D22-XB-LB-EAK-15-SA1-05	BF000FN	330
BFO D22-XB-UB-EAK-15-02	BF00006	326
BFO D22-XB-UB-EAK-15-SA1-02	BF000C9	330
BFO D25 LA-HD-EAK-465-02	BFB00C8	321
BFO D25-LA-CD-EAK-110-02	BF00067	321

Part number	Ordering code	Page
BFO D25-LA-ED-EAK-250-0,5	BF000C5	321
BFO D25-LA-ED-EAK-250-02	BF00068	321
BFO N22-LA-FB-EAK-05-01	BF0000C	318

BIS

BIS C-300-HG	BAM012A	389
BIS C-703-A	BAE0049	389
BIS Z-AK-001-PU1-03	BCC00T2	389
BIS Z-HG-002	BAM012J	389
BIS Z-HG-003	BAM012K	389
BIS Z-HW-001	BAM012L	388
BIS Z-HW-003	BAM01JK	386
BIS Z-HW-004	BAM01KN	385
BIS Z-HW-005	BAM01YK	384
BIS Z-SP-001	BAM018M	393
BIS Z-SP-003	BAM01LW	385

BKS

BKS-12-CS-01	BAM0114	205
BKS-7/8-CS-00-A	BAM012T	205
BKS-7/8-CS-00-I	BAM012U	205
BKS-B 25-1/GS49-PU-00,3	BCC00HF	24
BKS-B 25-1/GS49-PU-00,6	BCC00HH	24
BKS-B 25-1/GS49-PU-01	BCC00HJ	24
BKS-B 25-1-PU-03	BCC00HE	22
BKS-B 25-3-PU-03	BCC00HK	23
BKS-B 25-3-PU-05	BCC00HL	23
BKS-B 26-1/GS49-PU-01	BCC00HN	24
BKS-B 26-1-PU-03	BCC00HM	23
BKS-B 26-3-PU-03	BCC00HP	23
BKS-B 26-3-PU-05	BCC00HR	23
BKS-S 76-RT04	BCC02H6	87
BKS-S 77-RT04	BCC02H7	89
BKS-S107-RT14	BCC02H8	87
BKS-S109-RT14	BCC02H9	89
BKS-S111-RT13	BCC02HC	42
BKS-S113-RT13	BCC02HE	44
BKS-S144-00	BCC0158	86
BKS-S216-RT14	BCC02HF	45
BKS-S218-RT14	BCC02HH	45

BKT

BKT M-PK-1	BAM0120	353
BKT M-PK-2	BAM0121	353
BKT M-PK-3	BAM0122	353
BKT M-PK-4	BAM00P2	353
BKT M-PK-5	BAM00P3	353

BML

BML-A013-T_ _ _ _	BML001K	391
BML-C01	BAM01MF	391
BML-C02	BAM01MH	391
BML-R01-M_ _ _	BAM01N4	391
BML-Z0008	BAM01JL	391
BML-Z0010	BAM01L9	391

BMS

BMS AD-M-002-D12/D12	BAM003E	273
BMS AD-M-002-D12/D18	BAM0038	273
BMS AD-M-003-D12/I2	BAM003J	282
BMS AD-P-001-12/10	BAM002H	307
BMS BS-M-D12-0250-01	BAM003A	280
BMS BS-M-D12-0250-02	BAM0039	280

Alphanumeric Index

Sorted by part number

Part number	Ordering code	Page
BMS BS-M-D12-0250-03	BAM003F	281
BMS BS-M-D12-0400-04	BAM003H	281
BMS CCJ-M-D12-B-01	BAM024R	267
BMS CC-M-D12-B-00	BAM002Z	267
BMS CC-P-D12-A-00	BAM002M	266
BMS CR-M-D12-IS-03	BAM0035	278
BMS CR-M-D12-IS-04	BAM0042	278
BMS CR-M-D12-IU-02	BAM0034	279
BMS CR-M-D12-IU-05	BAM003N	279
BMS CR-P-D12-AU-00	BAM002L	266
BMS CS-M-D12-B23K-04	BAM0043	274
BMS CS-M-D12-B23K-05	BAM01AW	274
BMS CS-M-D12-BX05-02	BAM003C	276
BMS CS-M-D12-BX06-03	BAM0040	276
BMS CS-M-D12-BX07-06	BAM01AY	275
BMS CS-M-D12-BX08-07	BAM01CW	266
BMS CS-M-D12-BX10-08	BAM01F3	275
BMS CS-M-D12-BX11-09	BAM01F2	275, 415
BMS CS-M-D12-BZ	BAM024T	267
BMS CS-M-D12-ID08-01	BAM0036	270
BMS CS-M-D12-ID12-01	BAM0037	270
BMS CS-M-D12-ID16-01	BAM003K	270
BMS CS-M-D12-ID18-01	BAM0032	271
BMS CS-M-D12-ID24-01	BAM003L	271
BMS CS-M-D12-ID30-01	BAM0033	271
BMS CS-M-D12-ID36-01	BAM003M	272
BMS CS-M-D12-IQ40-02	BAM003P	277
BMS CS-M-D12-IQ40-03	BAM003R	277
BMS CS-M-D12-IX09-01	BAM01J2	272
BMS CS-M-D12-IX13-0	BAM01TK	279
BMS CS-M-D12-IX14-01	BAM01UL	272
BMS CS-M-D12-IZ	BAM0031	269
BMS CS-M-D12-IZ-01	BAM003Y	269
BMS CS-M-D14-IZ	BAM01Z7	269
BMS CS-M-D14-IZ-01	BAM01Z8	269
BMS CS-M-S25-DX15-00	BAM01YP	401
BMS CS-P-D12-AD08-00	BAM002K	265
BMS CS-P-D12-AD12-00	BAM002N	265
BMS CS-P-D12-AD18-00	BAM002P	265
BMS CUJ-M-S25-D045-00	BAM01YT	401
BMS CUJ-P-D12-R040-00	BAM002Y	265
BMS CU-M-D12-B028-00	BAM024P	267
BMS CU-M-D12-I060-01	BAM0044	268
BMS CU-M-D12-I060-02	BAM01CH	268
BMS CU-P-D12-A040-00	BAM002J	264
BMS CZ-M-B-001	BAM003Z	366
BMS CZ-M-D12-I-001	BAM0041	283, 352
BMS KIT-V1	BAM003W	285
BMS RS-M-D12-0100-00	BAM021Y	284
BMS RS-M-D12-0150-00	BAM002R	284
BMS RS-M-D12-0200-00	BAM021T	284
BMS RS-M-D12-0250-00	BAM002T	284
BMS RS-M-D12-0300-00	BAM021W	284
BMS RS-M-D12-0750-00	BAM021U	284
BMS RS-M-D12-1000-00	BAM002U	284
BMS RS-S-D12-0150-00	BAM0045	284
BMS RS-S-D12-0300-00	BAM0046	284
BNI		
BNI ACC-L01-000	BAM01AT	206
BOD		
BOD 66-HW-1	BAM00P9	361

Part number	Ordering code	Page
BOS		
BOS 12,0-KB-1	BAM01KM	307
BOS 12-BL-1	BAM00PW	349
BOS 12-LT-1	BAM00PY	352
BOS 12-WS-1	BAM00R0	357
BOS 12-WS-2	BAM00R1	357
BOS 18,0-HW-1	BAM00RY	359
BOS 18,0-HW-2	BAM00RZ	359
BOS 18,0-HW-3	BAM00T0	359
BOS 18,0-HW-4	BAM00T1	360
BOS 18,0-HW-6	BAM00T2	360
BOS 18,0-KB-1	BAM00T3	307
BOS 18-BL-1	BAM00R6	348
BOS 18-BL-2	BAM00R7	349
BOS 18-LT-1	BAM00R9	352
BOS 18-SM-1	BAM00RL	355
BOS 18-UK-1	BAM00RP	356
BOS 18-UK-10	BAM00RR	356
BOS 18-UK-2	BAM00RT	356
BOS 18-WS-1	BAM00RU	357
BOS 21-AD-1	BAM00T7	366
BOS 21-HW-1	BAM00T9	360
BOS 21-HW-2	BAM00TA	360
BOS 21-HW-3	BAM00TC	360
BOS 21-HW-4	BAM00TE	360
BOS 21-KH-1	BAM00TF	366
BOS 21-KH-2	BAM00TH	366
BOS 26-HW-1	BAM00TK	362
BOS 2-HW-1	BAM00T4	358
BOS 2-HW-2	BAM00T6	358
BOS 2-HW-3	BAM00T5	358
BOS 30,0-KB-1	BAM00TN	307
BOS 36-HW-1	BAM0124	361
BOS 5-BL-1	BAM00TU	350
BOS 5-BL-2	BAM00TW	350
BOS 5-BL-3	BAM00TY	350
BOS 5-BL-4	BAM00TZ	350
BOS 5-BL-5	BAM00U0	350
BOS 5-BL-6	BAM00U1	350
BOS 5-BL-7	BAM00U2	351
BOS 5-BL-8	BAM00U3	351
BOS 5-BL-9	BAM00U4	351
BOS 5-HW-1	BAM00U5	358
BOS 5-HW-2	BAM00U6	358
BOS 5-HW-3	BAM00U7	358
BOS 5-HW-4	BAM00U8	362
BOS 5-HW-5	BAM00U9	363
BOS 5-HW-6	BAM00UA	362
BOS 63-HW-1	BAM00P6	362
BOS 65-HW-1	BAM0125	361
BOS 6-HW-1	BAM00UH	363
BOS 74-HW-1	BAM00UJ	361
BOS PC-X0-005-12M-4	BAM01Y6	354
BOS R-1	BAM00UK	340
BOS R-10	BAM0126	340
BOS R-11	BAM00UL	341
BOS R-12	BAM00UM	344
BOS R-13	BAM00UN	345
BOS R-14	BAM00UP	340
BOS R-15	BAM00UR	340
BOS R-16	BAM00UT	345
BOS R-2	BAM00UW	340
BOS R-22	BAM00UY	344

Alphanumeric Index

Sorted by part number

Part number	Ordering code	Page	Part number	Ordering code	Page
BOS R-25	BAM00UZ	341	BPI 8M303P-2K-00-KPXA0-030	BPI0030	214
BOS R-26	BAM00W0	341	BPI 8M303P-2K-00-KPXA0-050	BPI0031	214
BOS R-27	BAM00W1	342	BPI 8M303P-2K-00-KPXA0-100	BPI0032	214
BOS R-28	BAM00W2	342	BPI 8M303P-2K-00-KPXA0-150	BPI0033	214
BOS R-29	BAM00W3	342	BPI 8M303P-2K-00-SM4CT	BPI003T	213
BOS R-3	BAM00W4	340	BPI 8M304P-2K-00-KPXB0-030	BPI003K	215
BOS R-30 (standard)	BAM00W5	347	BPI 8M304P-2K-00-KPXB0-050	BPI003L	215
BOS R-31	BAM01H6	343	BPI 8M304P-2K-00-KPXB0-100	BPI003M	215
BOS R-32-0,40	BAM00W6	346	BPI 8M304P-2K-00-KPXB0-150	BPI003N	215
BOS R-33	BAM00W7	342	BPI 8M4A4P-2K-00-KPXB0-030	BPI0059	216
BOS R-34	BAM00W8	343	BPI 8M4A4P-2K-00-KPXB0-050	BPI005A	216
BOS R-35	BAM00W9	346	BPI 8M4A4P-2K-00-KPXB0-100	BPI005C	216
BOS R-36	BAM01CM	343	BPI 8M4A4P-2K-00-KPXB0-150	BPI005E	216
BOS R-37	BAM01CN	343	BPI 8M4A4P-2K-00-SM6CT	BPI0050	218
BOS R-38	BAM01H7	345	BPI 8M4A4P-2K-00-TP0E	BPI007E	221
BOS R-39	BAM01H8	344	BPI 8M4A4P-2K-00-TPSE	BPI007J	220
BOS R-41	BAM01H9	344	BPI 8M4A5P-2K-00-KPXL0-030	BPI004R	217
BOS R-42	BAM01HA	345	BPI 8M4A5P-2K-00-KPXL0-050	BPI004T	217
BOS R-43	BAM01HC	345	BPI 8M4A5P-2K-00-KPXL0-100	BPI004U	217
BOS R-44	BAM01HE	343	BPI 8M4A5P-2K-00-KPXL0-150	BPI004W	217
BOS R-45	BAM01HF	347	BPI 8M4A5P-2K-00-SM6LT	BPI0051	219
BOS R-46	BAM01JP	341	BPI 8M4A5P-2K-00-TP0N	BPI007F	223
BOS R-47	BAM01JN	341	BPI 8M4A5P-2K-00-TPSN	BPI007H	222
BOS R-48	BAM01LA	341	BPI T009-K-00-KPX70-030	BPI007Z	221
BOS R-49	BAM01NH	343	BPI T009-K-00-KPX70-050	BPI0080	221
BOS R-5	BAM00WA	341	BPI T009-K-00-KPX70-100	BPI0081	221
BOS R-50	BAM01JM	346	BPI T009-K-00-KPX70-150	BPI0082	221
BOS R-6-0,25	BAM00WC	346	BPI T00E-K-00-KPXB0-030	BPI0083	221
BOS R-6-45	BAM00WE	346	BPI T00E-K-00-KPXB0-050	BPI0084	221
BOS R-7-0,25	BAM00WF	346	BPI T00E-K-00-KPXB0-100	BPI0085	221
BOS R-7-22	BAM00WH	346	BPI T00E-K-00-KPXB0-150	BPI0086	221
BOS R-8-0,25	BAM00WJ	346	BPI T00G-K-00-KPXB0-030	BPI007M	223
BOS R-8-22	BAM00WK	346	BPI T00G-K-00-KPXB0-050	BPI007N	223
BOS R-9	BAM00WL	341	BPI T00G-K-00-KPXB0-100	BPI007P	223
BOS S-C01	BAE002E	259	BPI T00G-K-00-KPXB0-150	BPI007R	223
BOS S-C02	BAE002F	259	BPI T00N-K-00-KPXL0-030	BPI007T	223
BOS S-F01	BAE002H	259	BPI T00N-K-00-KPXL0-050	BPI007U	223
BOS S-F02	BAE002J	259	BPI T00N-K-00-KPXL0-100	BPI007W	223
BOS S-M01	BAE002K	259	BPI T00N-K-00-KPXL0-150	BPI007Y	223
BOS S-M02	BAE002L	259			
BOS S-T01	BAE002M	259			
BOS S-T02	BAE002N	259			

BPI

BPI 4M303P-2K-00-KPX60-030	BPI002N	214
BPI 4M303P-2K-00-KPX60-050	BPI002P	214
BPI 4M303P-2K-00-KPX60-100	BPI002R	214
BPI 4M303P-2K-00-KPX60-150	BPI002T	214
BPI 4M303P-2K-00-SM4	BPI003P	213
BPI 4M304P-2K-00-KPXA0-030	BPI0038	215
BPI 4M304P-2K-00-KPXA0-050	BPI0039	215
BPI 4M304P-2K-00-KPXA0-100	BPI003A	215
BPI 4M304P-2K-00-KPXA0-150	BPI003C	215
BPI 4M4A4P-2K-00-SM6CT	BPI004Y	218
BPI 4M4A4P-2K-00-TP09	BPI007A	221
BPI 4M4A4P-2K-00-TPS9	BPI007L	220
BPI 4M4A5P-2K-00-KPXB0-030	BPI0049	217
BPI 4M4A5P-2K-00-KPXB0-050	BPI004A	217
BPI 4M4A5P-2K-00-KPXB0-100	BPI004C	217
BPI 4M4A5P-2K-00-KPXB0-150	BPI004E	217
BPI 4M4A5P-2K-00-SM6LT	BPI004Z	219
BPI 4M4A5P-2K-00-TP0G	BPI007C	223
BPI 4M4A5P-2K-00-TPSG	BPI007K	222

BTL

BTL2-GS10-_-_-_-A	BAM000P	390
-------------------	---------	-----

BVS

BVS Z-MB-01	BAM00WN	399
-------------	---------	-----

Sonstiges

11023834	FHW0003	204
BAV BP-PH-00064-01	SET011L	365

Alphanumeric Index

Sorted by ordering code

Ordering code	Part number	Page
BAE		
BAE0001	BAE-PS-XA-1W-24-007-001	236
BAE0002	BAE-PS-XA-1W-24-100-004	242
BAE0003	BAE-PS-XA-1W-24-200-005	243
BAE0004	BAE-PS-XA-1W-24-012-002	237
BAE0005	BAE-PS-XA-1W-24-025-002	238
BAE0006	BAE-PS-XA-1W-24-050-003	241
BAE0007	BAE-PS-XA-3Y-24-050-009	244
BAE0008	BAE-PS-XA-3Y-24-100-006	245
BAE0009	BAE-PS-XA-3Y-24-200-007	245
BAE000E	BAE LX-VS-HR025	408
BAE000F	BAE LX-VS-HR050	408
BAE000H	BAE LX-VS-HR100	409
BAE000J	BAE LX-VS-RR100	412
BAE000K	BAE LX-VS-RI100	413
BAE0029	BES 516-4	257
BAE002C	BES 516-7	257
BAE002E	BOS S-C01	259
BAE002F	BOS S-C02	259
BAE002H	BOS S-F01	259
BAE002J	BOS S-F02	259
BAE002K	BOS S-M01	259
BAE002L	BOS S-M02	259
BAE002M	BOS S-T01	259
BAE002N	BOS S-T02	259
BAE0036	BAE-PS-XA-1W-12-015-001	236
BAE0039	BAE-PS-XA-1W-12-025-002	237
BAE003E	BAE-PS-XA-1W-12-050-002	239
BAE003H	BAE-PS-XA-1W-12-100-003	241
BAE003J	BAE-PS-XA-1W-24-038-003	240
BAE003K	BAE-PS-XA-1W-48-025-003	240
BAE003L	BAE-PS-XA-1W-48-050-004	242
BAE003M	BAE-PS-XA-1W-48-100-005	243
BAE003R	BAE-PS-XA-3Y-24-400-010	246
BAE0049	BIS C-703-A	389
BAE006K	BDD-UM 3023	261
BAE006W	BES 113-FD-1	253
BAE006Y	BES 516-611-A-1	255
BAE006Z	BES 516-615-NS-1-PU-05	254
BAE0070	BES 516-615-PS-1-PU-05	254
BAE0073	BES 516-IV 2	251
BAE00AM	BAE LX-VS-DR090	420
BAE00AN	BAE LX-VS-RW100	413
BAE00AP	BAE LX-VS-LR085	414
BAE00AR	BAE LX-VS-LW085	415
BAE00AT	BAE LX-VS-LI085	415
BAE00AW	BAE LX-VS-LW170	415
BAE00AY	BAE LX-VS-LI170	415
BAE00AZ	BAE LX-VS-LR170	414
BAE00C5	BAE LX-VS-HR150	410
BAE00E5	BAE PD-US-004-S04	379
BAE00E6	BAE PD-US-004-S92	379
BAE00EK	BAE-PS-XA-1W-24-050-013	231
BAE00EN	BAE-PS-XA-1W-24-038-601	232
BAE00EP	BAE-PS-XA-1W-24-038-602	232
BAE00ER	BAE-PS-XA-1W-24-038-603	233
BAE00ET	BAE-PS-XA-1W-24-080-604	233
BAE00EU	BAE-PS-XA-1W-24-100-014	231
BAE00FL	BAE-PS-XA-1W-24-080-605	234
BAE00FM	BAE LX-VS-RW100-S	413
BAE00FN	BAE LX-VS-RI100-S	413
BAE00FP	BAE LX-VS-RR100-S	412

Ordering code	Part number	Page
BAE00FR	BAE LX-VS-HI100	409
BAE00FT	BAE LX-VS-SR030	417
BAE00FW	BAE-PS-XA-1W-24-038-607	233
BAE00FY	BAE-PS-XA-1W-24-080-606	234
BAE00H0	BAE LX-VS-SR018	417
BAE00H1	BAE LX-VS-SI018	417
BAE00H2	BAE LX-VS-SI030	417
BAE00J9	BAE LX-VS-OR50	419
BAE00JA	BAE LX-VS-OR100	419
BAE00JC	BAE LX-VS-HR200	411
BAE00JE	BAE LX-VS-HI200	411
BAE00JF	BAE LX-VS-HR100-E	411
BAE00KE	BAE LX-XO-PL018-L1-S4	421
BAE00KF	BAE LX-VS-SR012	416
BAE00KP	BAE LX-VS-HI150	410
BAE00KR	BAE LX-VS-HI050	409
BAE00KZ	BAE LX-XO-PL018-L2-S4	421

BAM		
BAM000E	BFO CT	332
BAM000J	BFO D10-LA-DC-10	332
BAM000P	BTL2-GS10-__-_-A	390
BAM000T	BAM MC-XA-002-D03,0-2	298
BAM000U	BAM MC-XA-002-D04,0-2	298
BAM000W	BAM MC-XA-002-D06,5-2	298
BAM000Y	BAM MC-XA-002-D08,0-2	298
BAM002H	BMS AD-P-001-12/10	307
BAM002J	BMS CU-P-D12-A040-00	264
BAM002K	BMS CS-P-D12-AD08-00	265
BAM002L	BMS CR-P-D12-AU-00	266
BAM002M	BMS CC-P-D12-A-00	266
BAM002N	BMS CS-P-D12-AD12-00	265
BAM002P	BMS CS-P-D12-AD18-00	265
BAM002R	BMS RS-M-D12-0150-00	284
BAM002T	BMS RS-M-D12-0250-00	284
BAM002U	BMS RS-M-D12-1000-00	284
BAM002Y	BMS CUJ-P-D12-R040-00	265
BAM002Z	BMS CC-M-D12-B-00	267
BAM0031	BMS CS-M-D12-IZ	269
BAM0032	BMS CS-M-D12-ID18-01	271
BAM0033	BMS CS-M-D12-ID30-01	271
BAM0034	BMS CR-M-D12-IU-02	279
BAM0035	BMS CR-M-D12-IS-03	278
BAM0036	BMS CS-M-D12-ID08-01	270
BAM0037	BMS CS-M-D12-ID12-01	270
BAM0038	BMS AD-M-002-D12/D18	273
BAM0039	BMS BS-M-D12-0250-02	280
BAM003A	BMS BS-M-D12-0250-01	280
BAM003C	BMS CS-M-D12-BX05-02	276
BAM003E	BMS AD-M-002-D12/D12	273
BAM003F	BMS BS-M-D12-0250-03	281
BAM003H	BMS BS-M-D12-0400-04	281
BAM003J	BMS AD-M-003-D12/IZ	282
BAM003K	BMS CS-M-D12-ID16-01	270
BAM003L	BMS CS-M-D12-ID24-01	271
BAM003M	BMS CS-M-D12-ID36-01	272
BAM003N	BMS CR-M-D12-IU-05	279
BAM003P	BMS CS-M-D12-IQ40-02	277
BAM003R	BMS CS-M-D12-IQ40-03	277
BAM003W	BMS KIT-V1	285
BAM003Y	BMS CS-M-D12-IZ-01	269
BAM003Z	BMS CZ-M-B-001	366
BAM0040	BMS CS-M-D12-BX06-03	276

Alphanumeric Index

Sorted by ordering code

Ordering code	Part number	Page
BAM0041	BMS CZ-M-D12-I-001	283, 352
BAM0042	BMS CR-M-D12-IS-04	278
BAM0043	BMS CS-M-D12-B21K-04	274
BAM0044	BMS CU-M-D12-I060-01	268
BAM0045	BMS RS-S-D12-0150-00	284
BAM0046	BMS RS-S-D12-0300-00	284
BAM0092	BES 03,0-KB-3	303
BAM0094	BES 04,0-KB-1	302
BAM0095	BES 04,0-KB-3	303
BAM0097	BES 05,0-KB-1	302
BAM0098	BES 05,0-KB-3	303
BAM0099	BES 05,0-KH-2S	290
BAM009A	BES 06,5-BS-1	301
BAM009C	BES 06,5-KB-1	302
BAM009E	BES 06,5-KB-3	303
BAM009F	BES 06,5-KB-7	302
BAM009K	BES 08-DM-1	394
BAM009L	BES 08-FA-49	368
BAM009M	BES 08-FA-89	369
BAM009N	BES 08-FA-BS-4,0-G	369
BAM009P	BES 08-FA-BS-4,0-W	369
BAM009R	BES 08-FA-BS-8,0-G	369
BAM009T	BES 08-FA-BS-8,0-W	369
BAM009U	BES 08,0-HW-1	308
BAM009W	BES 08-HW-4	309
BAM009Y	BES 08-HW-5	309
BAM009Z	BES 08-SM-1	297
BAM00A0	BES 08-SM-1F	297
BAM00A2	BES 08,0-BS-1	301
BAM00A5	BES 08,0-KB-3	302
BAM00A6	BES 08,0-KB-3-F	302
BAM00A7	BES 08,0-KB-4-F	305
BAM00A8	BES 08,0-KB-5-F	306
BAM00AA	BES 08,0-KB-7	303
BAM00AE	BES 08,0-KH-2L	290
BAM00AF	BES 08,0-KH-2L/W	290
BAM00AH	BES 08,0-KH-2S	290
BAM00AK	BES 08,0-KH-2S/W	290
BAM00AL	BES 08,0-KH-3L	296
BAM00AM	BES 08,0-KH-4-F	291
BAM00AN	BES 08,0-KH-6L	291
BAM00AP	BES 08,0-KH-6L/W	291
BAM00AR	BES 08,0-KH-6S	290
BAM00AU	BES 08,0-KH-7-F	291
BAM00AZ	BES 12-FA-70	369
BAM00C0	BES 12,0-HW-1	308
BAM00C2	BES 12-SM-2	297
BAM00C4	BES 12,0-BS-1	301
BAM00C7	BES 12,0-KB-2	303
BAM00C8	BES 12,0-KB-2-F	303
BAM00C9	BES 12,0-KB-3	304
BAM00CA	BES 12,0-KB-3-F	304
BAM00CC	BES 12,0-KB-3-F-SA1	304
BAM00CE	BES 12,0-KB-3-F-SA2	304
BAM00CF	BES 12,0-KB-4-F	305
BAM00CH	BES 12,0-KB-5-F	306
BAM00CK	BES 12-KB-602-02/12	310
BAM00CL	BES 12-KB-602-04/12	310
BAM00CM	BES 12-KB-602-06/12	311
BAM00CN	BES 12-KB-602-06/16	311
BAM00CY	BES 12,0-KH-2L	291
BAM00CZ	BES 12,0-KH-2L/W	291
BAM00E0	BES 12,0-KH-2S	291

Ordering code	Part number	Page
BAM00E1	BES 12,0-KH-2S/W	291
BAM00E2	BES 12,0-KH-3L	296
BAM00E3	BES 12,0-KH-3X	296
BAM00E4	BES 12,0-KH-4	290
BAM00E5	BES 12,0-KH-4-F	291
BAM00E8	BES 12,0-KH-5F	296
BAM00EM	BES 14,5-BS-1	301
BAM00EN	BES 16,0-HW-1	308
BAM00EP	BES 16-SM-2	297
BAM00ET	BES 16,0-BS-1	301
BAM00EY	BES 18,0-HW-1	309
BAM00EZ	BES 18-SM-1	297
BAM00F0	BES 18-SM-2	393
BAM00F1	BES 18-SM-3	297
BAM00F2	BES 18,0-BS-1	301
BAM00F6	BES 18,0-KB-2	303
BAM00F7	BES 18,0-KB-3	305
BAM00F8	BES 18,0-KB-3-F	305
BAM00F9	BES 18,0-KB-3-F-SA1	305
BAM00FA	BES 18,0-KB-3-F-SA2	305
BAM00FC	BES 18,0-KB-4-F	305
BAM00FE	BES 18,0-KB-5-F	306
BAM00FN	BES 18,0-KH-2L	292
BAM00FP	BES 18,0-KH-2L/W	292
BAM00FR	BES 18,0-KH-2M	292
BAM00FT	BES 18,0-KH-2S	291
BAM00FW	BES 18,0-KH-2S/W	291
BAM00FY	BES 18,0-KH-3L	296
BAM00FZ	BES 18,0-KH-4	290
BAM00H0	BES 18,0-KH-4-F	291
BAM00H7	BES 20,0-BS-1	301
BAM00H8	BES 22-SM-2	393
BAM00H9	BES 22,0-BS-1	301
BAM00HA	BES 24,0-HW-1	309
BAM00HH	BES 30,0-HW-1	309
BAM00HJ	BES 30-SM-1	393
BAM00HK	BES 30-SM-2	393
BAM00HL	BES 30-SM-3	297
BAM00HM	BES 30-SM-5	297
BAM00HN	BES 30,0-BS-1	301
BAM00HU	BES 30,0-KB-3-F	305
BAM00HW	BES 30,0-KB-4-F	305
BAM00HY	BES 30,0-KB-5-F	306
BAM00J4	BES 30,0-KH-2L	292
BAM00J5	BES 30,0-KH-2L/W	292
BAM00J6	BES 30,0-KH-2S	292
BAM00J7	BES 30,0-KH-2S/W	292
BAM00J8	BES 30,0-KH-4	290
BAM00J9	BES 30,0-KH-4-F	291
BAM00JK	BES 36,0-HW-1	309
BAM00JL	BES 36-SM-2	393
BAM00JN	BES 36,0-BS-1	301
BAM00JT	BES HS-01-P1-C16/Q40	382
BAM00JU	BES HS-01-P1-C8/Q40	382
BAM00JW	BES Q40-HW-1	381
BAM00JY	BES Q40-HW-2	381
BAM00JZ	BES Q40-HW-3	381
BAM00K0	BES Q40-SH-1	383
BAM00K1	BES Q40-SH-2	383
BAM00NJ	BES Q08-KH-2	364
BAM00NM	BFO 30-A1	332
BAM00NN	BFO 02-PK-1	333
BAM00NP	BFO 02-UK-1	333

Alphanumeric Index

Sorted by ordering code

Ordering code	Part number	Page
BAM00NR	BFO 04-FL-1	333
BAM00NT	BFO 04-FL-2	333
BAM00NU	BFO 04-FS-1	333
BAM00NW	BFO 04-PK-1	331
BAM00NY	BFO 06-FS-1	333
BAM00P0	BFO 08,0-KB-1	332
BAM00P1	BFO D13-LA-EC-10	332
BAM00P2	BKT M-PK-4	353
BAM00P3	BKT M-PK-5	353
BAM00P6	BOS 63-HW-1	362
BAM00P9	BOD 66-HW-1	361
BAM00PW	BOS 12-BL-1	349
BAM00PY	BOS 12-LT-1	352
BAM00R0	BOS 12-WS-1	357
BAM00R1	BOS 12-WS-2	357
BAM00R6	BOS 18-BL-1	348
BAM00R7	BOS 18-BL-2	349
BAM00R9	BOS 18-LT-1	352
BAM00RL	BOS 18-SM-1	355
BAM00RP	BOS 18-UK-1	356
BAM00RR	BOS 18-UK-10	356
BAM00RT	BOS 18-UK-2	356
BAM00RU	BOS 18-WS-1	357
BAM00RY	BOS 18,0-HW-1	359
BAM00RZ	BOS 18,0-HW-2	359
BAM00T0	BOS 18,0-HW-3	359
BAM00T1	BOS 18,0-HW-4	360
BAM00T2	BOS 18,0-HW-6	360
BAM00T3	BOS 18,0-KB-1	307
BAM00T4	BOS 2-HW-1	358
BAM00T5	BOS 2-HW-3	358
BAM00T6	BOS 2-HW-2	358
BAM00T7	BOS 21-AD-1	366
BAM00T9	BOS 21-HW-1	360
BAM00TA	BOS 21-HW-2	360
BAM00TC	BOS 21-HW-3	360
BAM00TE	BOS 21-HW-4	360
BAM00TF	BOS 21-KH-1	366
BAM00TH	BOS 21-KH-2	366
BAM00TK	BOS 26-HW-1	362
BAM00TN	BOS 30,0-KB-1	307
BAM00TU	BOS 5-BL-1	350
BAM00TW	BOS 5-BL-2	350
BAM00TY	BOS 5-BL-3	350
BAM00TZ	BOS 5-BL-4	350
BAM00U0	BOS 5-BL-5	350
BAM00U1	BOS 5-BL-6	350
BAM00U2	BOS 5-BL-7	351
BAM00U3	BOS 5-BL-8	351
BAM00U4	BOS 5-BL-9	351
BAM00U5	BOS 5-HW-1	358
BAM00U6	BOS 5-HW-2	358
BAM00U7	BOS 5-HW-3	358
BAM00U8	BOS 5-HW-4	362
BAM00U9	BOS 5-HW-5	363
BAM00UA	BOS 5-HW-6	362
BAM00UH	BOS 6-HW-1	363
BAM00UJ	BOS 74-HW-1	361
BAM00UK	BOS R-1	340
BAM00UL	BOS R-11	341
BAM00UM	BOS R-12	344
BAM00UN	BOS R-13	345
BAM00UP	BOS R-14	340

Ordering code	Part number	Page
BAM00UR	BOS R-15	340
BAM00UT	BOS R-16	345
BAM00UW	BOS R-2	340
BAM00UY	BOS R-22	344
BAM00UZ	BOS R-25	341
BAM00W0	BOS R-26	341
BAM00W1	BOS R-27	342
BAM00W2	BOS R-28	342
BAM00W3	BOS R-29	342
BAM00W4	BOS R-3	340
BAM00W5	BOS R-30 (standard)	347
BAM00W6	BOS R-32-0,40	346
BAM00W7	BOS R-33	342
BAM00W8	BOS R-34	343
BAM00W9	BOS R-35	346
BAM00WA	BOS R-5	341
BAM00WC	BOS R-6-0,25	346
BAM00WE	BOS R-6-45	346
BAM00WF	BOS R-7-0,25	346
BAM00WH	BOS R-7-22	346
BAM00WJ	BOS R-8-0,25	346
BAM00WK	BOS R-8-22	346
BAM00WL	BOS R-9	341
BAM00WN	BVS Z-MB-01	399
BAM00ZL	BAM TO-CC-001-M3-0,4/8,0	204
BAM00ZM	BAM TO-CC-001-M4-0,6/12,0	204
BAM00ZN	BAM TO-CC-001-A3-1,5/24,0	204
BAM0114	BKS-12-CS-01	205
BAM0120	BKT M-PK-1	353
BAM0121	BKT M-PK-2	353
BAM0122	BKT M-PK-3	353
BAM0124	BOS 36-HW-1	361
BAM0125	BOS 65-HW-1	361
BAM0126	BOS R-10	340
BAM012A	BIS C-300-HG	389
BAM012J	BIS Z-HG-002	389
BAM012K	BIS Z-HG-003	389
BAM012L	BIS Z-HW-001	388
BAM012T	BKS-7/8-CS-00-A	205
BAM012U	BKS-7/8-CS-00-I	205
BAM015U	BESA-08-CM	370
BAM015W	BESA-12-CM	371
BAM015Y	BESA-18-CM	371
BAM015Z	BESA-30-CM	371
BAM018M	BIS Z-SP-001	393
BAM019W	BAM FS-XE-004-M8-4	375
BAM019Y	BAM FS-XE-003-M5-4	374
BAM01A7	BAM OF-VS-001-D-RX100	412
BAM01A8	BAM PC-AE-002-1	402
BAM01AC	BAM MB-XA-003-B03-1	399
BAM01AE	BAM MB-XA-002-B02-1	399
BAM01AT	BNI ACC-L01-000	206
BAM01AU	BES Q08-KH-3	364
BAM01AW	BMS CS-M-D12-B23K-05	274
BAM01AY	BMS CS-M-D12-BX07-06	275
BAM01AZ	BAM FS-XE-001-M5-4	374
BAM01C0	BAM FS-XE-002-D4-4	373
BAM01C1	BAM CS-XA-001-M8-C	205
BAM01C2	BAM CS-XA-002-M12-A	205
BAM01CF	BAM R-40	347
BAM01CH	BMS CU-M-D12-I060-02	268
BAM01CM	BOS R-36	343
BAM01CN	BOS R-37	343

Alphanumeric Index

Sorted by ordering code

Ordering code	Part number	Page
BAM01CW	BMS CS-M-D12-BX08-07	266
BAM01E0	BAM MB-XA-004-M30-5	309
BAM01E8	BAM MB-X0-005-B04-4	363
BAM01EA	BAM CC-XA-028-T05-P	206
BAM01EC	BAM CC-XA-025-C03-P	206
BAM01EP	BAM BD-US-001-D20-4	377
BAM01ER	BAM BD-US-001-D32-4	377
BAM01ET	BAM AP-US-001-M12-0	378
BAM01F2	BMS CS-M-D12-BX11-09	275, 415
BAM01F3	BMS CS-M-D12-BX10-08	275
BAM01FK	BAM MB-X0-006-B05-4	361
BAM01FM	BAM MB-X0-007-B05-4	361
BAM01H6	BOS R-31	343
BAM01H7	BOS R-38	345
BAM01H8	BOS R-39	344
BAM01H9	BOS R-41	344
BAM01HA	BOS R-42	345
BAM01HC	BOS R-43	345
BAM01HE	BOS R-44	343
BAM01HF	BOS R-45	347
BAM01HJ	BAM AP-US-002-M18-0	378
BAM01J0	BAM FK-NI-PBS-01-C	206
BAM01J2	BMS CS-M-D12-IX09-01	272
BAM01JK	BIS Z-HW-003	386
BAM01JL	BML-Z0008	391
BAM01JM	BOS R-50	346
BAM01JN	BOS R-47	341
BAM01JP	BOS R-46	341
BAM01JR	BAM AP-US-003-M12-0	378
BAM01KM	BOS 12,0-KB-1	307
BAM01KN	BIS Z-HW-004	385
BAM01KP	BAM AD-SP-008-1G4/1G4-4	397
BAM01KR	BAM AD-SP-008-1G4/1G4-4-EN837	397
BAM01KT	BAM AD-SP-008-1G4/1N4-4	397
BAM01L8	BAM PC-X0-006-23K-1	351
BAM01L9	BML-Z0010	391
BAM01LA	BOS R-48	341
BAM01LW	BIS Z-SP-003	385
BAM01MF	BML-C01	391
BAM01MH	BML-C02	391
BAM01MY	BAM MB-XA-010-B07-4	387
BAM01NC	BAM PC-X0-005-18M-4	355
BAM01NH	BOS R-49	343
BAM01RP	BAM AD-SP-008-1G4/1R4-4	397
BAM01RR	BAM PC-VS-008-1	403
BAM01TK	BMS CS-M-D12-IX13-0	279
BAM01TR	BAM AD-SP-011-1G4/1N4-4	397
BAM01TY	BAM TO-CC-002-M6	204
BAM01U0	BAM MC-XA-017-D30,0-1	300, 396
BAM01U2	BAM LS-FO-002-F	332
BAM01U6	BAM PC-X0-006-50K-1	351
BAM01UH	BAM MB-XA-012-B09-4	387
BAM01UJ	BAM AD-SP-008-1G4/1G2-4	397
BAM01UL	BMS CS-M-D12-IX14-01	272
BAM01W3	BAM MC-XA-021-M12-2	394
BAM01W4	BAM MC-XA-021-M18-2	395
BAM01W5	BAM MC-XA-021-M30-2	395
BAM01W6	BAM MC-XA-021-M16-2	394
BAM01WF	BAM MC-XA-021-M5-4	394
BAM01WH	BAM MC-XA-021-M12-4	394
BAM01WJ	BAM MC-XA-021-M18-4	395
BAM01WK	BAM MC-XA-021-M30-4	395
BAM01WL	BAM MC-XA-021-M18-A	395

Ordering code	Part number	Page
BAM01WM	BAM MC-XA-021-M30-A	395
BAM01WR	BAM MC-XA-021-M8-3	394
BAM01Y3	BAM MC-XA-018-B04-4	387
BAM01Y5	BAM PC-X0-005-08M-4	354
BAM01Y6	BOS PC-X0-005-12M-4	354
BAM01Y8	BAM PC-AM-010-4	387
BAM01YK	BIS Z-HW-005	384
BAM01YL	BAM PC-X0-006-23K-G/RK	351
BAM01YM	BAM PC-X0-006-50K-G/RK	351
BAM01YN	BAM CS-XA-008-M12-4	207
BAM01YP	BMS CS-M-S25-DX15-00	401
BAM01YT	BMS CUJ-M-S25-D045-00	401
BAM01YW	BAM MB-XA-013-Q08-4	364
BAM01Z4	BAM FK-CC-005-M12-A	207
BAM01Z5	BAM FK-CC-005-M08-A	207
BAM01Z7	BMS CS-M-D14-IZ	269
BAM01Z8	BMS CS-M-D14-IZ-01	269
BAM0206	BAM FK-VS-002-03-1	402
BAM0209	BAM AD-SP-008-1G4/M20X1,5-4	396
BAM020M	BAM CS-CC-009-H4-A	207
BAM020N	BAM CS-CC-010-H4-A	207
BAM020P	BAM LS-FO-003-M6-L	332
BAM0212	BAM PT-XA-004-070-T-R16	208
BAM0213	BAM PT-XA-004-100-T-R16	208
BAM0214	BAM PT-XA-004-130-T-R16	209
BAM0215	BAM PT-XA-004-160-T-R16	209
BAM0216	BAM PT-XA-004-190-T-R16	209
BAM0217	BAM PT-XA-004-500-T-R16	209
BAM0218	BAM MC-XA-027-D12,0-1	300
BAM0219	BAM MC-XA-027-D18,0-1	300
BAM021E	BAM PT-XA-005-260-T-R20	208
BAM021F	BAM PT-XA-005-510-T-R20	208
BAM021R	BAM PC-XA-016-001-A	384
BAM021T	BMS RS-M-D12-0200-00	284
BAM021U	BMS RS-M-D12-0750-00	284
BAM021W	BMS RS-M-D12-0300-00	284
BAM021Y	BMS RS-M-D12-0100-00	284
BAM0225	BAM MB-X0-014-B10-4-RRR	362
BAM0226	BAM MB-X0-014-B10-4-BRR	362
BAM0227	BAM MB-X0-014-B10-4-BLS	363
BAM0228	BAM MB-X0-014-B10-4-RLS	363
BAM022A	BAM MC-X0-030-6K-4	359
BAM022C	BAM CS-M-D12-S6K-00	359
BAM022F	BAM MC-XA-023-D18,0-2-FXS/W	294
BAM022H	BAM MC-XA-023-D18,0-2-FXL	295
BAM022J	BAM MC-XA-023-D18,0-2-FXL/W	295
BAM022K	BAM MC-XA-023-D18,0-2-FS	294
BAM022L	BAM MC-XA-023-D18,0-2-FL	295
BAM022M	BAM MC-XA-024-D18,0-2-FM/W	295
BAM022Z	BAM PT-XA-002-100-2-R15	208
BAM0230	BAM PT-XA-002-130-2-R15	208
BAM0231	BAM PT-XA-002-190-2-R15	209
BAM0232	BAM PT-XA-002-380-2-R15	209
BAM0233	BAM PT-XA-002-500-2-R15	209
BAM023F	BAM IA-CC-002-01	206
BAM023H	BAM IA-CC-002-02	206
BAM023J	BAM IA-CC-002-03	206
BAM0246	BAM MC-XA-023-D12,0-2-FS	293
BAM0247	BAM MC-XA-023-D12,0-2-FM/W	293
BAM0248	BAM MC-XA-023-D12,0-2-FXL/W	293
BAM0249	BAM MC-XA-023-D30,0-2-FS/W	294
BAM024A	BAM MC-XA-024-D30,0-2-FM/W	295
BAM024C	BAM MC-XA-023-D30,0-2-FXL/W	295

Alphanumeric Index

Sorted by ordering code

Ordering code	Part number	Page
BAM024E	BAM MC-XA-024-D12,0-2-FM/W	293
BAM024F	BAM MC-XA-024-D12,0-2-FXL/W	293
BAM024H	BAM MC-XA-023-D30,0-2-FM/W	294
BAM024P	BMS CU-M-D12-B028-00	267
BAM024R	BMS CCJ-M-D12-B-01	267
BAM024T	BMS CS-M-D12-BZ	267
BAM01N4	BML-R01-M_ _ _	391
BAMU1TM	Mounting plate B 4 - 2057	380

BCC		
BCC00HE	BKS-B 25-1-PU-03	22
BCC00HF	BKS-B 25-1/GS49-PU-00,3	24
BCC00HH	BKS-B 25-1/GS49-PU-00,6	24
BCC00HJ	BKS-B 25-1/GS49-PU-01	24
BCC00HK	BKS-B 25-3-PU-03	23
BCC00HL	BKS-B 25-3-PU-05	23
BCC00HM	BKS-B 26-1-PU-03	23
BCC00HN	BKS-B 26-1/GS49-PU-01	24
BCC00HP	BKS-B 26-3-PU-03	23
BCC00HR	BKS-B 26-3-PU-05	23
BCC00T2	BIS Z-AK-001-PU1-03	389
BCC0158	BKS-S144-00	86
BCC02H6	BKS-S 76-RT04	87
BCC02H7	BKS-S 77-RT04	89
BCC02H8	BKS-S107-RT14	87
BCC02H9	BKS-S109-RT14	89
BCC02HC	BKS-S111-RT13	42
BCC02HE	BKS-S113-RT13	44
BCC02HF	BKS-S216-RT14	45
BCC02HH	BKS-S218-RT14	45
BCC02M2	BCC M313-0000-20-001-PX0334-020	28
BCC02M3	BCC M313-0000-20-001-PX0334-050	28
BCC02M4	BCC M313-0000-20-001-PX0334-100	28
BCC02M5	BCC M323-0000-20-001-PX0334-020	28
BCC02M6	BCC M323-0000-20-001-PX0334-050	28
BCC02M7	BCC M323-0000-20-001-PX0334-100	28
BCC02M8	BCC M313-0000-10-001-PX0334-020	26
BCC02M9	BCC M313-0000-10-001-PX0334-050	26
BCC02MA	BCC M313-0000-10-001-PX0334-100	26
BCC02MH	BCC M323-0000-10-004-PX0334-020	27
BCC02MJ	BCC M323-0000-10-004-PX0334-050	27
BCC02MK	BCC M323-0000-10-004-PX0334-100	27
BCC02ML	BCC M323-0000-10-001-PX0334-020	27
BCC02MM	BCC M323-0000-10-001-PX0334-050	27
BCC02MN	BCC M323-0000-10-001-PX0334-100	27
BCC02MU	BCC M314-0000-20-003-PX0434-020	30
BCC02MW	BCC M314-0000-20-003-PX0434-050	30
BCC02MY	BCC M314-0000-20-003-PX0434-100	30
BCC02MZ	BCC M324-0000-20-003-PX0434-020	30
BCC02N0	BCC M324-0000-20-003-PX0434-050	30
BCC02N1	BCC M324-0000-20-003-PX0434-100	30
BCC02N2	BCC M314-0000-10-003-PX0434-020	29
BCC02N3	BCC M314-0000-10-003-PX0434-050	29
BCC02N4	BCC M314-0000-10-003-PX0434-100	29
BCC02N8	BCC M324-0000-10-008-PX0434-020	29
BCC02N9	BCC M324-0000-10-008-PX0434-050	29
BCC02NA	BCC M324-0000-10-008-PX0434-100	29
BCC02NC	BCC M324-0000-10-003-PX0434-020	29
BCC02NE	BCC M324-0000-10-003-PX0434-050	29
BCC02NF	BCC M324-0000-10-003-PX0434-100	29
BCC02NL	BCC M313-0000-20-001-VX8334-020	28
BCC02NM	BCC M313-0000-20-001-VX8334-050	28
BCC02NN	BCC M313-0000-20-001-VX8334-100	28

BCC02NP	BCC M323-0000-20-001-VX8334-020	28
BCC02NR	BCC M323-0000-20-001-VX8334-050	28
BCC02NT	BCC M323-0000-20-001-VX8334-100	28
BCC02NU	BCC M313-0000-10-001-VX8334-020	26
BCC02NW	BCC M313-0000-10-001-VX8334-050	26
BCC02NY	BCC M313-0000-10-001-VX8334-100	26
BCC02P2	BCC M323-0000-10-004-VX8334-020	27
BCC02P3	BCC M323-0000-10-004-VX8334-050	27
BCC02P4	BCC M323-0000-10-004-VX8334-100	27
BCC02P5	BCC M323-0000-10-001-VX8334-020	27
BCC02P6	BCC M323-0000-10-001-VX8334-050	27
BCC02P7	BCC M323-0000-10-001-VX8334-100	27
BCC02PC	BCC M314-0000-20-003-VX8434-020	30
BCC02PE	BCC M314-0000-20-003-VX8434-050	30
BCC02PF	BCC M314-0000-20-003-VX8434-100	30
BCC02PH	BCC M324-0000-20-003-VX8434-020	30
BCC02PJ	BCC M324-0000-20-003-VX8434-050	30
BCC02PK	BCC M324-0000-20-003-VX8434-100	30
BCC02PL	BCC M314-0000-10-003-VX8434-020	29
BCC02PM	BCC M314-0000-10-003-VX8434-050	29
BCC02PN	BCC M314-0000-10-003-VX8434-100	29
BCC02PU	BCC M324-0000-10-008-VX8434-020	29
BCC02PW	BCC M324-0000-10-008-VX8434-050	29
BCC02PY	BCC M324-0000-10-008-VX8434-100	29
BCC02PZ	BCC M324-0000-10-003-VX8434-020	29
BCC02R0	BCC M324-0000-10-003-VX8434-050	29
BCC02R1	BCC M324-0000-10-003-VX8434-100	29
BCC02R5	BCC M313-M313-30-300-PX0334-003	32
BCC02R6	BCC M313-M313-30-300-PX0334-006	32
BCC02R7	BCC M313-M313-30-300-PX0334-010	32
BCC02R8	BCC M313-M313-30-300-PX0334-015	32
BCC02R9	BCC M313-M313-30-300-PX0334-020	32
BCC02RA	BCC M313-M313-30-300-PX0334-030	32
BCC02RC	BCC M313-M313-30-300-PX0334-050	32
BCC02RE	BCC M313-M323-30-300-PX0334-003	33
BCC02RF	BCC M313-M323-30-300-PX0334-006	33
BCC02RH	BCC M313-M323-30-300-PX0334-010	33
BCC02RJ	BCC M313-M323-30-300-PX0334-015	33
BCC02RK	BCC M313-M323-30-300-PX0334-020	33
BCC02RL	BCC M313-M323-30-300-PX0334-030	33
BCC02RM	BCC M313-M323-30-300-PX0334-050	33
BCC02RN	BCC M323-M313-30-602-PX0334-003	33
BCC02RP	BCC M323-M313-30-602-PX0334-006	33
BCC02RR	BCC M323-M313-30-602-PX0334-010	33
BCC02RT	BCC M323-M313-30-602-PX0334-015	33
BCC02RU	BCC M323-M313-30-602-PX0334-020	33
BCC02RW	BCC M323-M313-30-602-PX0334-030	33
BCC02RY	BCC M323-M313-30-602-PX0334-050	33
BCC02RZ	BCC M323-M313-30-300-PX0334-003	33
BCC02T0	BCC M323-M313-30-300-PX0334-006	33
BCC02T1	BCC M323-M313-30-300-PX0334-010	33
BCC02T2	BCC M323-M313-30-300-PX0334-015	33
BCC02T3	BCC M323-M313-30-300-PX0334-020	33
BCC02T4	BCC M323-M313-30-300-PX0334-030	33
BCC02T5	BCC M323-M313-30-300-PX0334-050	33
BCC02T6	BCC M323-M323-30-300-PX0334-003	34
BCC02T7	BCC M323-M323-30-300-PX0334-006	34
BCC02T8	BCC M323-M323-30-300-PX0334-010	34
BCC02T9	BCC M323-M323-30-300-PX0334-015	34
BCC02TA	BCC M323-M323-30-300-PX0334-020	34
BCC02TC	BCC M323-M323-30-300-PX0334-030	34
BCC02TE	BCC M323-M323-30-300-PX0334-050	34
BCC02TF	BCC M314-M314-30-304-PX0434-003	35

Alphanumeric Index

Sorted by ordering code

Ordering code	Part number	Page
BCC02TH	BCC M314-M314-30-304-PX0434-006	35
BCC02TJ	BCC M314-M314-30-304-PX0434-010	35
BCC02TK	BCC M314-M314-30-304-PX0434-015	35
BCC02TL	BCC M314-M314-30-304-PX0434-020	35
BCC02TM	BCC M314-M314-30-304-PX0434-030	35
BCC02TN	BCC M314-M314-30-304-PX0434-050	35
BCC02TP	BCC M314-M324-30-304-PX0434-003	35
BCC02TR	BCC M314-M324-30-304-PX0434-006	35
BCC02TT	BCC M314-M324-30-304-PX0434-010	35
BCC02TU	BCC M314-M324-30-304-PX0434-015	35
BCC02TW	BCC M314-M324-30-304-PX0434-020	35
BCC02TY	BCC M314-M324-30-304-PX0434-030	35
BCC02TZ	BCC M314-M324-30-304-PX0434-050	35
BCC02U0	BCC M324-M314-30-606-PX0434-003	36
BCC02U1	BCC M324-M314-30-606-PX0434-006	36
BCC02U2	BCC M324-M314-30-606-PX0434-010	36
BCC02U3	BCC M324-M314-30-606-PX0434-015	36
BCC02U4	BCC M324-M314-30-606-PX0434-020	36
BCC02U5	BCC M324-M314-30-606-PX0434-030	36
BCC02U6	BCC M324-M314-30-606-PX0434-050	36
BCC02U7	BCC M324-M314-30-304-PX0434-003	35
BCC02U8	BCC M324-M314-30-304-PX0434-006	35
BCC02U9	BCC M324-M314-30-304-PX0434-010	35
BCC02UA	BCC M324-M314-30-304-PX0434-015	35
BCC02UC	BCC M324-M314-30-304-PX0434-020	35
BCC02UE	BCC M324-M314-30-304-PX0434-030	35
BCC02UF	BCC M324-M314-30-304-PX0434-050	35
BCC02UH	BCC M324-M324-30-304-PX0434-003	36
BCC02UJ	BCC M324-M324-30-304-PX0434-006	36
BCC02UK	BCC M324-M324-30-304-PX0434-010	36
BCC02UL	BCC M324-M324-30-304-PX0434-015	36
BCC02UM	BCC M324-M324-30-304-PX0434-020	36
BCC02UN	BCC M324-M324-30-304-PX0434-030	36
BCC02UP	BCC M324-M324-30-304-PX0434-050	36
BCC02UR	BCC M313-M313-30-300-VX8334-003	32
BCC02UT	BCC M313-M313-30-300-VX8334-006	32
BCC02UU	BCC M313-M313-30-300-VX8334-010	32
BCC02UW	BCC M313-M313-30-300-VX8334-015	32
BCC02UY	BCC M313-M313-30-300-VX8334-020	32
BCC02UZ	BCC M313-M313-30-300-VX8334-030	32
BCC02W0	BCC M313-M313-30-300-VX8334-050	32
BCC02W1	BCC M313-M323-30-300-VX8334-003	33
BCC02W2	BCC M313-M323-30-300-VX8334-006	33
BCC02W3	BCC M313-M323-30-300-VX8334-010	33
BCC02W4	BCC M313-M323-30-300-VX8334-015	33
BCC02W5	BCC M313-M323-30-300-VX8334-020	33
BCC02W6	BCC M313-M323-30-300-VX8334-030	33
BCC02W7	BCC M313-M323-30-300-VX8334-050	33
BCC02W8	BCC M323-M313-30-602-VX8334-003	33
BCC02W9	BCC M323-M313-30-602-VX8334-006	33
BCC02WA	BCC M323-M313-30-602-VX8334-010	33
BCC02WC	BCC M323-M313-30-602-VX8334-015	33
BCC02WE	BCC M323-M313-30-602-VX8334-020	33
BCC02WF	BCC M323-M313-30-602-VX8334-030	33
BCC02WH	BCC M323-M313-30-602-VX8334-050	33
BCC02WJ	BCC M323-M313-30-300-VX8334-003	33
BCC02WK	BCC M323-M313-30-300-VX8334-006	33
BCC02WL	BCC M323-M313-30-300-VX8334-010	33
BCC02WM	BCC M323-M313-30-300-VX8334-015	33
BCC02WN	BCC M323-M313-30-300-VX8334-020	33
BCC02WP	BCC M323-M313-30-300-VX8334-030	33
BCC02WR	BCC M323-M313-30-300-VX8334-050	33
BCC02WT	BCC M323-M323-30-300-VX8334-003	34

Ordering code	Part number	Page
BCC02WU	BCC M323-M323-30-300-VX8334-006	34
BCC02WW	BCC M323-M323-30-300-VX8334-010	34
BCC02WY	BCC M323-M323-30-300-VX8334-015	34
BCC02WZ	BCC M323-M323-30-300-VX8334-020	34
BCC02Y0	BCC M323-M323-30-300-VX8334-030	34
BCC02Y1	BCC M323-M323-30-300-VX8334-050	34
BCC02Y2	BCC M314-M314-30-304-VX8434-003	35
BCC02Y3	BCC M314-M314-30-304-VX8434-006	35
BCC02Y4	BCC M314-M314-30-304-VX8434-010	35
BCC02Y5	BCC M314-M314-30-304-VX8434-015	35
BCC02Y6	BCC M314-M314-30-304-VX8434-020	35
BCC02Y7	BCC M314-M314-30-304-VX8434-030	35
BCC02Y8	BCC M314-M314-30-304-VX8434-050	35
BCC02Y9	BCC M314-M324-30-304-VX8434-003	35
BCC02YA	BCC M314-M324-30-304-VX8434-006	35
BCC02YC	BCC M314-M324-30-304-VX8434-010	35
BCC02YE	BCC M314-M324-30-304-VX8434-015	35
BCC02YF	BCC M314-M324-30-304-VX8434-020	35
BCC02YH	BCC M314-M324-30-304-VX8434-030	35
BCC02YJ	BCC M314-M324-30-304-VX8434-050	35
BCC02YK	BCC M324-M314-30-606-VX8434-003	36
BCC02YL	BCC M324-M314-30-606-VX8434-006	36
BCC02YM	BCC M324-M314-30-606-VX8434-010	36
BCC02YN	BCC M324-M314-30-606-VX8434-015	36
BCC02YP	BCC M324-M314-30-606-VX8434-020	36
BCC02YR	BCC M324-M314-30-606-VX8434-030	36
BCC02YT	BCC M324-M314-30-606-VX8434-050	36
BCC02YU	BCC M324-M314-30-304-VX8434-003	35
BCC02YW	BCC M324-M314-30-304-VX8434-006	35
BCC02YY	BCC M324-M314-30-304-VX8434-010	35
BCC02YZ	BCC M324-M314-30-304-VX8434-015	35
BCC02Z0	BCC M324-M314-30-304-VX8434-020	35
BCC02Z1	BCC M324-M314-30-304-VX8434-030	35
BCC02Z2	BCC M324-M314-30-304-VX8434-050	35
BCC02Z3	BCC M324-M324-30-304-VX8434-003	36
BCC02Z4	BCC M324-M324-30-304-VX8434-006	36
BCC02Z5	BCC M324-M324-30-304-VX8434-010	36
BCC02Z6	BCC M324-M324-30-304-VX8434-015	36
BCC02Z7	BCC M324-M324-30-304-VX8434-020	36
BCC02Z8	BCC M324-M324-30-304-VX8434-030	36
BCC02Z9	BCC M324-M324-30-304-VX8434-050	36
BCC02ZC	BCC M413-0000-2A-001-PX0334-050	52
BCC02ZE	BCC M413-0000-2A-001-PX0334-100	52
BCC02ZF	BCC M413-0000-2A-002-PX0334-020	55
BCC02ZH	BCC M413-0000-2A-002-PX0334-050	55
BCC02ZJ	BCC M413-0000-2A-002-PX0334-100	55
BCC02ZK	BCC M413-0000-2A-036-PS0334-020	52
BCC02ZL	BCC M413-0000-2A-036-PS0334-050	52
BCC02ZM	BCC M413-0000-2A-036-PS0334-100	52
BCC02ZN	BCC M413-0000-2A-037-PS0334-020	55
BCC02ZP	BCC M413-0000-2A-037-PS0334-050	55
BCC02ZR	BCC M413-0000-2A-037-PS0334-100	55
BCC02ZY	BCC M423-0000-2A-001-PX0334-020	53
BCC02ZZ	BCC M423-0000-2A-001-PX0334-050	53
BCC0300	BCC M423-0000-2A-001-PX0334-100	53
BCC0301	BCC M423-0000-2A-002-PX0334-020	55
BCC0302	BCC M423-0000-2A-002-PX0334-050	55
BCC0303	BCC M423-0000-2A-002-PX0334-100	55
BCC0304	BCC M423-0000-2A-036-PS0334-020	53
BCC0305	BCC M423-0000-2A-036-PS0334-050	53
BCC0306	BCC M423-0000-2A-036-PS0334-100	53
BCC0307	BCC M423-0000-2A-037-PS0334-020	55
BCC0308	BCC M423-0000-2A-037-PS0334-050	55

Alphanumeric Index

Sorted by ordering code

Ordering code	Part number	Page
BCC0309	BCC M423-0000-2A-037-PS0334-100	55
BCC030A	BCC M415-0000-1A-004-PX0334-020	51
BCC030C	BCC M415-0000-1A-004-PX0334-050	51
BCC030E	BCC M415-0000-1A-004-PX0334-100	51
BCC030F	BCC M415-0000-1A-005-PX0334-020	53
BCC030H	BCC M415-0000-1A-005-PX0334-050	53
BCC030J	BCC M415-0000-1A-005-PX0334-100	53
BCC030K	BCC M415-0000-1A-001-PX0334-020	51
BCC030L	BCC M415-0000-1A-001-PX0334-050	51
BCC030M	BCC M415-0000-1A-001-PX0334-100	51
BCC030N	BCC M415-0000-1A-002-PX0334-020	53
BCC030P	BCC M415-0000-1A-002-PX0334-050	53
BCC030R	BCC M415-0000-1A-002-PX0334-100	53
BCC030T	BCC M415-0000-1A-036-PS0334-020	51
BCC030U	BCC M415-0000-1A-036-PS0334-050	51
BCC030W	BCC M415-0000-1A-036-PS0334-100	51
BCC030Y	BCC M415-0000-1A-037-PS0334-020	53
BCC030Z	BCC M415-0000-1A-037-PS0334-050	53
BCC0310	BCC M415-0000-1A-037-PS0334-100	53
BCC0311	BCC M425-0000-1A-004-PX0334-020	52
BCC0312	BCC M425-0000-1A-004-PX0334-050	52
BCC0313	BCC M425-0000-1A-004-PX0334-100	52
BCC0314	BCC M425-0000-1A-005-PX0334-020	54
BCC0315	BCC M425-0000-1A-005-PX0334-050	54
BCC0316	BCC M425-0000-1A-005-PX0334-100	54
BCC0317	BCC M425-0000-1A-001-PX0334-020	51
BCC0318	BCC M425-0000-1A-001-PX0334-050	51
BCC0319	BCC M425-0000-1A-001-PX0334-100	51
BCC031A	BCC M425-0000-1A-002-PX0334-020	54
BCC031C	BCC M425-0000-1A-002-PX0334-050	54
BCC031E	BCC M425-0000-1A-002-PX0334-100	54
BCC031F	BCC M425-0000-1A-036-PS0334-020	51
BCC031H	BCC M425-0000-1A-036-PS0334-050	51
BCC031J	BCC M425-0000-1A-036-PS0334-100	51
BCC031K	BCC M425-0000-1A-037-PS0334-020	54
BCC031L	BCC M425-0000-1A-037-PS0334-050	54
BCC031M	BCC M425-0000-1A-037-PS0334-100	54
BCC031N	BCC M414-0000-2A-003-PX0434-020	59
BCC031P	BCC M414-0000-2A-003-PX0434-050	59
BCC031R	BCC M414-0000-2A-003-PX0434-100	59
BCC031T	BCC M414-0000-2A-014-PS0434-020	59
BCC031U	BCC M414-0000-2A-014-PS0434-050	59
BCC031W	BCC M414-0000-2A-014-PS0434-100	59
BCC0321	BCC M424-0000-2A-003-PX0434-020	59
BCC0322	BCC M424-0000-2A-003-PX0434-050	59
BCC0323	BCC M424-0000-2A-003-PX0434-100	59
BCC0324	BCC M424-0000-2A-014-PS0434-020	59
BCC0325	BCC M424-0000-2A-014-PS0434-050	59
BCC0326	BCC M424-0000-2A-014-PS0434-100	59
BCC0327	BCC M415-0000-1A-008-PX0434-020	56
BCC0328	BCC M415-0000-1A-008-PX0434-050	56
BCC0329	BCC M415-0000-1A-008-PX0434-100	56
BCC032A	BCC M415-0000-1A-010-PX0434-020	57
BCC032C	BCC M415-0000-1A-010-PX0434-050	57
BCC032E	BCC M415-0000-1A-010-PX0434-100	57
BCC032F	BCC M415-0000-1A-003-PX0434-020	56
BCC032H	BCC M415-0000-1A-003-PX0434-050	56
BCC032J	BCC M415-0000-1A-003-PX0434-100	56
BCC032K	BCC M415-0000-1A-014-PS0434-020	56
BCC032L	BCC M415-0000-1A-014-PS0434-050	56
BCC032M	BCC M415-0000-1A-014-PS0434-100	56
BCC032N	BCC M425-0000-1A-008-PX0434-020	58
BCC032P	BCC M425-0000-1A-008-PX0434-050	58

Ordering code	Part number	Page
BCC032R	BCC M425-0000-1A-008-PX0434-100	58
BCC032T	BCC M425-0000-1A-010-PX0434-020	58
BCC032U	BCC M425-0000-1A-010-PX0434-050	58
BCC032W	BCC M425-0000-1A-010-PX0434-100	58
BCC032Y	BCC M425-0000-1A-003-PX0434-020	57
BCC032Z	BCC M425-0000-1A-003-PX0434-050	57
BCC0330	BCC M425-0000-1A-003-PX0434-100	57
BCC0331	BCC M425-0000-1A-014-PS0434-020	57
BCC0332	BCC M425-0000-1A-014-PS0434-050	57
BCC0333	BCC M425-0000-1A-014-PS0434-100	57
BCC0334	BCC M413-0000-2A-001-VX8334-020	52
BCC0335	BCC M413-0000-2A-001-VX8334-050	52
BCC0336	BCC M413-0000-2A-001-VX8334-100	52
BCC0337	BCC M413-0000-2A-002-VX8334-020	55
BCC0338	BCC M413-0000-2A-002-VX8334-050	55
BCC0339	BCC M413-0000-2A-002-VX8334-100	55
BCC033A	BCC M413-0000-2A-036-VS8334-020	52
BCC033C	BCC M413-0000-2A-036-VS8334-050	52
BCC033E	BCC M413-0000-2A-036-VS8334-100	52
BCC033F	BCC M413-0000-2A-037-VS8334-020	55
BCC033H	BCC M413-0000-2A-037-VS8334-050	55
BCC033J	BCC M413-0000-2A-037-VS8334-100	55
BCC033N	BCC M423-0000-2A-001-VX8334-020	53
BCC033P	BCC M423-0000-2A-001-VX8334-050	53
BCC033R	BCC M423-0000-2A-001-VX8334-100	53
BCC033T	BCC M423-0000-2A-002-VX8334-020	55
BCC033U	BCC M423-0000-2A-002-VX8334-050	55
BCC033W	BCC M423-0000-2A-002-VX8334-100	55
BCC033Y	BCC M423-0000-2A-036-VS8334-020	53
BCC033Z	BCC M423-0000-2A-036-VS8334-050	53
BCC0340	BCC M423-0000-2A-036-VS8334-100	53
BCC0341	BCC M423-0000-2A-037-VS8334-020	55
BCC0342	BCC M423-0000-2A-037-VS8334-050	55
BCC0343	BCC M423-0000-2A-037-VS8334-100	55
BCC0344	BCC M415-0000-1A-004-VX8334-020	51
BCC0345	BCC M415-0000-1A-004-VX8334-050	51
BCC0346	BCC M415-0000-1A-004-VX8334-100	51
BCC0347	BCC M415-0000-1A-005-VX8334-020	53
BCC0348	BCC M415-0000-1A-005-VX8334-050	53
BCC0349	BCC M415-0000-1A-005-VX8334-100	53
BCC034A	BCC M415-0000-1A-001-VX8334-020	51
BCC034C	BCC M415-0000-1A-001-VX8334-050	51
BCC034E	BCC M415-0000-1A-001-VX8334-100	51
BCC034F	BCC M415-0000-1A-002-VX8334-020	53
BCC034H	BCC M415-0000-1A-002-VX8334-050	53
BCC034J	BCC M415-0000-1A-002-VX8334-100	53
BCC034K	BCC M415-0000-1A-036-VS8334-020	51
BCC034L	BCC M415-0000-1A-036-VS8334-050	51
BCC034M	BCC M415-0000-1A-036-VS8334-100	51
BCC034N	BCC M415-0000-1A-037-VS8334-020	53
BCC034P	BCC M415-0000-1A-037-VS8334-050	53
BCC034R	BCC M415-0000-1A-037-VS8334-100	53
BCC034T	BCC M425-0000-1A-004-VX8334-020	52
BCC034U	BCC M425-0000-1A-004-VX8334-050	52
BCC034W	BCC M425-0000-1A-004-VX8334-100	52
BCC022A	BCC M413-0000-2A-001-PX0334-020	52
BCC034Y	BCC M425-0000-1A-005-VX8334-020	54
BCC034Z	BCC M425-0000-1A-005-VX8334-050	54
BCC0350	BCC M425-0000-1A-005-VX8334-100	54
BCC0351	BCC M425-0000-1A-001-VX8334-020	51
BCC0352	BCC M425-0000-1A-001-VX8334-050	51
BCC0353	BCC M425-0000-1A-001-VX8334-100	51
BCC0354	BCC M425-0000-1A-002-VX8334-020	54

Alphanumeric Index

Sorted by ordering code

Ordering code	Part number	Page
BCC0355	BCC M425-0000-1A-002-VX8334-050	54
BCC0356	BCC M425-0000-1A-002-VX8334-100	54
BCC0357	BCC M425-0000-1A-036-VS8334-020	51
BCC0358	BCC M425-0000-1A-036-VS8334-050	51
BCC0359	BCC M425-0000-1A-036-VS8334-100	51
BCC035A	BCC M425-0000-1A-037-VS8334-020	54
BCC035C	BCC M425-0000-1A-037-VS8334-050	54
BCC035E	BCC M425-0000-1A-037-VS8334-100	54
BCC035F	BCC M414-0000-2A-003-VX8434-020	59
BCC035H	BCC M414-0000-2A-003-VX8434-050	59
BCC035J	BCC M414-0000-2A-003-VX8434-100	59
BCC035K	BCC M414-0000-2A-014-VS8434-020	59
BCC035L	BCC M414-0000-2A-014-VS8434-050	59
BCC035M	BCC M414-0000-2A-014-VS8434-100	59
BCC035W	BCC M424-0000-2A-003-VX0434-100	59
BCC035Y	BCC M424-0000-2A-003-VS0434-020	59
BCC035Z	BCC M424-0000-2A-003-VS0434-050	59
BCC0360	BCC M424-0000-2A-003-VS0434-100	59
BCC0361	BCC M415-0000-1A-008-VX8434-020	56
BCC0362	BCC M415-0000-1A-008-VX8434-050	56
BCC0363	BCC M415-0000-1A-008-VX8434-100	56
BCC0364	BCC M415-0000-1A-010-VX8434-020	57
BCC0365	BCC M415-0000-1A-010-VX8434-050	57
BCC0366	BCC M415-0000-1A-010-VX8434-100	57
BCC0367	BCC M415-0000-1A-003-VX8434-020	56
BCC0368	BCC M415-0000-1A-003-VX8434-050	56
BCC0369	BCC M415-0000-1A-003-VX8434-100	56
BCC036A	BCC M415-0000-1A-014-VS8434-020	56
BCC036C	BCC M415-0000-1A-014-VS8434-050	56
BCC036E	BCC M415-0000-1A-014-VS8434-100	56
BCC036F	BCC M425-0000-1A-008-VX8434-020	58
BCC036H	BCC M425-0000-1A-008-VX8434-050	58
BCC036J	BCC M425-0000-1A-008-VX8434-100	58
BCC036K	BCC M425-0000-1A-010-VX8434-020	58
BCC036L	BCC M425-0000-1A-010-VX8434-050	58
BCC036M	BCC M425-0000-1A-010-VX8434-100	58
BCC036N	BCC M425-0000-1A-003-VX8434-020	57
BCC036P	BCC M425-0000-1A-003-VX8434-050	57
BCC036R	BCC M425-0000-1A-003-VX8434-100	57
BCC036T	BCC M425-0000-1A-014-VS8434-020	57
BCC036U	BCC M425-0000-1A-014-VS8434-050	57
BCC036W	BCC M425-0000-1A-014-VS8434-100	57
BCC036Y	BCC M415-M413-3A-300-PX0334-003	74
BCC036Z	BCC M415-M413-3A-300-PX0334-006	74
BCC0370	BCC M415-M413-3A-300-PX0334-010	74
BCC0371	BCC M415-M413-3A-300-PX0334-015	74
BCC0372	BCC M415-M413-3A-300-PX0334-020	74
BCC0373	BCC M415-M413-3A-300-PX0334-030	74
BCC0374	BCC M415-M413-3A-300-PX0334-050	74
BCC0375	BCC M415-M423-3A-300-PX0334-003	74
BCC0376	BCC M415-M423-3A-300-PX0334-006	74
BCC0377	BCC M415-M423-3A-300-PX0334-010	74
BCC0378	BCC M415-M423-3A-300-PX0334-015	74
BCC0379	BCC M415-M423-3A-300-PX0334-020	74
BCC037A	BCC M415-M423-3A-300-PX0334-030	74
BCC037C	BCC M415-M423-3A-300-PX0334-050	74
BCC037E	BCC M425-M413-3A-300-PX0334-003	75
BCC037F	BCC M425-M413-3A-300-PX0334-006	75
BCC037H	BCC M425-M413-3A-300-PX0334-010	75
BCC037J	BCC M425-M413-3A-300-PX0334-015	75
BCC037K	BCC M425-M413-3A-300-PX0334-020	75
BCC037L	BCC M425-M413-3A-300-PX0334-030	75
BCC037M	BCC M425-M413-3A-300-PX0334-050	75

Ordering code	Part number	Page
BCC037Z	BCC M425-M413-3A-602-PX0334-003	75
BCC0380	BCC M425-M413-3A-602-PX0334-006	75
BCC0381	BCC M425-M413-3A-602-PX0334-010	75
BCC0382	BCC M425-M413-3A-602-PX0334-015	75
BCC0383	BCC M425-M413-3A-602-PX0334-020	75
BCC0384	BCC M425-M413-3A-602-PX0334-030	75
BCC0385	BCC M425-M413-3A-602-PX0334-050	75
BCC0386	BCC M415-M413-3A-300-VX8334-003	74
BCC0387	BCC M415-M413-3A-300-VX8334-006	74
BCC0388	BCC M415-M413-3A-300-VX8334-010	74
BCC0389	BCC M415-M413-3A-300-VX8334-015	74
BCC038A	BCC M415-M413-3A-300-VX8334-020	74
BCC038C	BCC M415-M413-3A-300-VX8334-030	74
BCC038E	BCC M415-M413-3A-300-VX8334-050	74
BCC038F	BCC M415-M423-3A-300-VX8334-003	74
BCC038H	BCC M415-M423-3A-300-VX8334-006	74
BCC038J	BCC M415-M423-3A-300-VX8334-010	74
BCC038K	BCC M415-M423-3A-300-VX8334-015	74
BCC038L	BCC M415-M423-3A-300-VX8334-020	74
BCC038M	BCC M415-M423-3A-300-VX8334-030	74
BCC038N	BCC M415-M423-3A-300-VX8334-050	74
BCC038P	BCC M425-M413-3A-300-VX8334-003	75
BCC038R	BCC M425-M413-3A-300-VX8334-006	75
BCC038T	BCC M425-M413-3A-300-VX8334-010	75
BCC038U	BCC M425-M413-3A-300-VX8334-015	75
BCC038W	BCC M425-M413-3A-300-VX8334-020	75
BCC038Y	BCC M425-M413-3A-300-VX8334-030	75
BCC038Z	BCC M425-M413-3A-300-VX8334-050	75
BCC0390	BCC M415-M424-3A-304-PX0434-050	77
BCC0397	BCC M425-M413-3A-602-VX8334-003	75
BCC0398	BCC M425-M413-3A-602-VX8334-006	75
BCC0399	BCC M425-M413-3A-602-VX8334-010	75
BCC039A	BCC M425-M413-3A-602-VX8334-015	75
BCC039C	BCC M425-M413-3A-602-VX8334-020	75
BCC039E	BCC M425-M413-3A-602-VX8334-030	75
BCC039F	BCC M425-M413-3A-602-VX8334-050	75
BCC039H	BCC M415-M414-3A-304-PX0434-003	76
BCC039J	BCC M415-M414-3A-304-PX0434-006	76
BCC039K	BCC M415-M414-3A-304-PX0434-010	76
BCC039L	BCC M415-M414-3A-304-PX0434-015	76
BCC039M	BCC M415-M414-3A-304-PX0434-020	76
BCC039N	BCC M415-M414-3A-304-PX0434-030	76
BCC039P	BCC M415-M414-3A-304-PX0434-050	76
BCC039R	BCC M415-M424-3A-304-PX0434-003	77
BCC039T	BCC M415-M424-3A-304-PX0434-006	77
BCC039U	BCC M415-M424-3A-304-PX0434-010	77
BCC039W	BCC M415-M424-3A-304-PX0434-015	77
BCC039Y	BCC M415-M424-3A-304-PX0434-020	77
BCC039Z	BCC M415-M424-3A-304-PX0434-030	77
BCC03A1	BCC M415-M414-3A-606-PX0434-003	76
BCC03A2	BCC M415-M414-3A-606-PX0434-006	76
BCC03A3	BCC M415-M414-3A-606-PX0434-010	76
BCC03A4	BCC M415-M414-3A-606-PX0434-015	76
BCC03A5	BCC M415-M414-3A-606-PX0434-020	76
BCC03A6	BCC M415-M414-3A-606-PX0434-030	76
BCC03A7	BCC M415-M414-3A-606-PX0434-050	76
BCC03A8	BCC M425-M414-3A-304-PX0434-003	77
BCC03A9	BCC M425-M414-3A-304-PX0434-006	77
BCC03AA	BCC M425-M414-3A-304-PX0434-010	77
BCC03AC	BCC M425-M414-3A-304-PX0434-015	77
BCC03AE	BCC M425-M414-3A-304-PX0434-020	77
BCC03AF	BCC M425-M414-3A-304-PX0434-030	77
BCC03AH	BCC M425-M414-3A-304-PX0434-050	77

Alphanumeric Index

Sorted by ordering code

Ordering code	Part number	Page
BCC03AJ	BCC M425-M424-3A-304-PX0434-003	78
BCC03AK	BCC M425-M424-3A-304-PX0434-006	78
BCC03AL	BCC M425-M424-3A-304-PX0434-010	78
BCC03AM	BCC M425-M424-3A-304-PX0434-015	78
BCC03AN	BCC M425-M424-3A-304-PX0434-020	78
BCC03AP	BCC M425-M424-3A-304-PX0434-030	78
BCC03AR	BCC M425-M424-3A-304-PX0434-050	78
BCC03AT	BCC M425-M414-3A-606-PX0434-003	77
BCC03AU	BCC M425-M414-3A-606-PX0434-006	77
BCC03AW	BCC M425-M414-3A-606-PX0434-010	77
BCC03AY	BCC M425-M414-3A-606-PX0434-015	77
BCC03AZ	BCC M425-M414-3A-606-PX0434-020	77
BCC03C0	BCC M425-M414-3A-606-PX0434-030	77
BCC03C1	BCC M425-M414-3A-606-PX0434-050	77
BCC03C2	BCC M425-M414-3A-650-PX0434-003	78
BCC03C3	BCC M425-M414-3A-650-PX0434-006	78
BCC03C4	BCC M425-M414-3A-650-PX0434-010	78
BCC03C5	BCC M425-M414-3A-650-PX0434-015	78
BCC03C6	BCC M425-M414-3A-650-PX0434-020	78
BCC03C7	BCC M425-M414-3A-650-PX0434-030	78
BCC03C8	BCC M425-M414-3A-650-PX0434-050	78
BCC03C9	BCC M415-M414-3A-304-VX8434-003	76
BCC03CA	BCC M415-M414-3A-304-VX8434-006	76
BCC03CC	BCC M415-M414-3A-304-VX8434-010	76
BCC03CE	BCC M415-M414-3A-304-VX8434-015	76
BCC03CF	BCC M415-M414-3A-304-VX8434-020	76
BCC03CH	BCC M415-M414-3A-304-VX8434-030	76
BCC03CJ	BCC M415-M414-3A-304-VX8434-050	76
BCC03CK	BCC M415-M424-3A-304-VX8434-003	77
BCC03CL	BCC M415-M424-3A-304-VX8434-006	77
BCC03CM	BCC M415-M424-3A-304-VX8434-010	77
BCC03CN	BCC M415-M424-3A-304-VX8434-015	77
BCC03CP	BCC M415-M424-3A-304-VX8434-020	77
BCC03CR	BCC M415-M424-3A-304-VX8434-030	77
BCC03CT	BCC M415-M424-3A-304-VX8434-050	77
BCC03CU	BCC M415-M414-3A-606-VX8434-003	76
BCC03CW	BCC M415-M414-3A-606-VX8434-006	76
BCC03CY	BCC M415-M414-3A-606-VX8434-010	76
BCC03CZ	BCC M415-M414-3A-606-VX8434-015	76
BCC03E0	BCC M415-M414-3A-606-VX8434-020	76
BCC03E1	BCC M415-M414-3A-606-VX8434-030	76
BCC03E2	BCC M415-M414-3A-606-VX8434-050	76
BCC03E3	BCC M425-M414-3A-304-VX8434-003	77
BCC03E4	BCC M425-M414-3A-304-VX8434-006	77
BCC03E5	BCC M425-M414-3A-304-VX8434-010	77
BCC03E6	BCC M425-M414-3A-304-VX8434-015	77
BCC03E7	BCC M425-M414-3A-304-VX8434-020	77
BCC03E8	BCC M425-M414-3A-304-VX8434-030	77
BCC03E9	BCC M425-M414-3A-304-VX8434-050	77
BCC03EA	BCC M425-M424-3A-304-VX8434-003	78
BCC03EC	BCC M425-M424-3A-304-VX8434-006	78
BCC03EE	BCC M425-M424-3A-304-VX8434-010	78
BCC03EF	BCC M425-M424-3A-304-VX8434-015	78
BCC03EH	BCC M425-M424-3A-304-VX8434-020	78
BCC03EJ	BCC M425-M424-3A-304-VX8434-030	78
BCC03EK	BCC M425-M424-3A-304-VX8434-050	78
BCC03EL	BCC M425-M414-3A-606-VX8434-003	77
BCC03EM	BCC M425-M414-3A-606-VX8434-006	77
BCC03EN	BCC M425-M414-3A-606-VX8434-010	77
BCC03EP	BCC M425-M414-3A-606-VX8434-015	77
BCC03ER	BCC M425-M414-3A-606-VX8434-020	77
BCC03ET	BCC M425-M414-3A-606-VX8434-030	77
BCC03EU	BCC M425-M414-3A-606-VX8434-050	77

Ordering code	Part number	Page
BCC03EW	BCC M425-M414-3A-650-VX8434-003	78
BCC03EZ	BCC M425-M414-3A-650-VX8434-010	78
BCC03F0	BCC M425-M414-3A-650-VX8434-015	78
BCC03F1	BCC M425-M414-3A-650-VX8434-020	78
BCC03F2	BCC M425-M414-3A-650-VX8434-030	78
BCC03F3	BCC M425-M414-3A-650-VX8434-050	78
BCC03F4	BCC M313-M413-3E-300-PX0334-003	38
BCC03F5	BCC M313-M413-3E-300-PX0334-006	38
BCC03F6	BCC M313-M413-3E-300-PX0334-010	38
BCC03F7	BCC M313-M413-3E-300-PX0334-015	38
BCC03F8	BCC M313-M413-3E-300-PX0334-020	38
BCC03F9	BCC M313-M413-3E-300-PX0334-030	38
BCC03FA	BCC M313-M413-3E-300-PX0334-050	38
BCC03FC	BCC M313-M423-3E-300-PX0334-003	38
BCC03FE	BCC M313-M423-3E-300-PX0334-006	38
BCC03FF	BCC M313-M423-3E-300-PX0334-010	38
BCC03FH	BCC M313-M423-3E-300-PX0334-015	38
BCC03FJ	BCC M313-M423-3E-300-PX0334-020	38
BCC03FK	BCC M313-M423-3E-300-PX0334-030	38
BCC03FL	BCC M313-M423-3E-300-PX0334-050	38
BCC03FM	BCC M323-M413-3E-300-PX0334-003	39
BCC03FN	BCC M323-M413-3E-300-PX0334-006	39
BCC03FP	BCC M323-M413-3E-300-PX0334-010	39
BCC03FR	BCC M323-M413-3E-300-PX0334-015	39
BCC03FT	BCC M323-M413-3E-300-PX0334-020	39
BCC03FU	BCC M323-M413-3E-300-PX0334-030	39
BCC03FW	BCC M323-M413-3E-300-PX0334-050	39
BCC03FY	BCC M323-M423-3E-300-PX0334-003	39
BCC03FZ	BCC M323-M423-3E-300-PX0334-006	39
BCC03H0	BCC M323-M423-3E-300-PX0334-010	39
BCC03H1	BCC M323-M423-3E-300-PX0334-015	39
BCC03H2	BCC M323-M423-3E-300-PX0334-020	39
BCC03H3	BCC M323-M423-3E-300-PX0334-030	39
BCC03H4	BCC M323-M423-3E-300-PX0334-050	39
BCC03H5	BCC M323-M413-3E-602-PX0334-003	39
BCC03H6	BCC M323-M413-3E-602-PX0334-006	39
BCC03H7	BCC M323-M413-3E-602-PX0334-010	39
BCC03H8	BCC M323-M413-3E-602-PX0334-015	39
BCC03H9	BCC M323-M413-3E-602-PX0334-020	39
BCC03HA	BCC M323-M413-3E-602-PX0334-030	39
BCC03HC	BCC M323-M413-3E-602-PX0334-050	39
BCC03HE	BCC M313-M413-3E-300-VX8334-003	38
BCC03HF	BCC M313-M413-3E-300-VX8334-006	38
BCC03HH	BCC M313-M413-3E-300-VX8334-010	38
BCC03HJ	BCC M313-M413-3E-300-VX8334-015	38
BCC03HK	BCC M313-M413-3E-300-VX8334-020	38
BCC03HL	BCC M313-M413-3E-300-VX8334-030	38
BCC03HM	BCC M313-M413-3E-300-VX8334-050	38
BCC03HN	BCC M313-M423-3E-300-VX8334-003	38
BCC03HP	BCC M313-M423-3E-300-VX8334-006	38
BCC03HR	BCC M313-M423-3E-300-VX8334-010	38
BCC03HT	BCC M313-M423-3E-300-VX8334-015	38
BCC03HU	BCC M313-M423-3E-300-VX8334-020	38
BCC03HW	BCC M313-M423-3E-300-VX8334-030	38
BCC03HY	BCC M313-M423-3E-300-VX8334-050	38
BCC03HZ	BCC M323-M413-3E-300-VX8334-003	39
BCC03J0	BCC M323-M413-3E-300-VX8334-006	39
BCC03J1	BCC M323-M413-3E-300-VX8334-010	39
BCC03J2	BCC M323-M413-3E-300-VX8334-015	39
BCC03J3	BCC M323-M413-3E-300-VX8334-020	39
BCC03J4	BCC M323-M413-3E-300-VX8334-030	39
BCC03J5	BCC M323-M413-3E-300-VX8334-050	39
BCC03J6	BCC M323-M423-3E-300-VX8334-003	39

Alphanumeric Index

Sorted by ordering code

Ordering code	Part number	Page
BCC03J7	BCC M323-M423-3E-300-VX8334-006	39
BCC03J8	BCC M323-M423-3E-300-VX8334-010	39
BCC03J9	BCC M323-M423-3E-300-VX8334-015	39
BCC03JA	BCC M323-M423-3E-300-VX8334-020	39
BCC03JC	BCC M323-M423-3E-300-VX8334-030	39
BCC03JE	BCC M323-M423-3E-300-VX8334-050	39
BCC03JF	BCC M323-M413-3E-602-VX8334-003	39
BCC03JH	BCC M323-M413-3E-602-VX8334-006	39
BCC03JJ	BCC M323-M413-3E-602-VX8334-010	39
BCC03JK	BCC M323-M413-3E-602-VX8334-015	39
BCC03JL	BCC M323-M413-3E-602-VX8334-020	39
BCC03JM	BCC M323-M413-3E-602-VX8334-030	39
BCC03JN	BCC M323-M413-3E-602-VX8334-050	39
BCC03JP	BCC M314-M414-3E-304-PX0434-003	40
BCC03JR	BCC M314-M414-3E-304-PX0434-006	40
BCC03JT	BCC M314-M414-3E-304-PX0434-010	40
BCC03JU	BCC M314-M414-3E-304-PX0434-015	40
BCC03JW	BCC M314-M414-3E-304-PX0434-020	40
BCC03JY	BCC M314-M414-3E-304-PX0434-030	40
BCC03JZ	BCC M314-M414-3E-304-PX0434-050	40
BCC03K0	BCC M314-M424-3E-304-PX0434-003	40
BCC03K1	BCC M314-M424-3E-304-PX0434-006	40
BCC03K2	BCC M314-M424-3E-304-PX0434-010	40
BCC03K3	BCC M314-M424-3E-304-PX0434-015	40
BCC03K4	BCC M314-M424-3E-304-PX0434-020	40
BCC03K5	BCC M314-M424-3E-304-PX0434-030	40
BCC03K6	BCC M314-M424-3E-304-PX0434-050	40
BCC03K7	BCC M324-M414-3E-304-PX0434-003	41
BCC03K8	BCC M324-M414-3E-304-PX0434-006	41
BCC03K9	BCC M324-M414-3E-304-PX0434-010	41
BCC03KA	BCC M324-M414-3E-304-PX0434-015	41
BCC03KC	BCC M324-M414-3E-304-PX0434-020	41
BCC03KE	BCC M324-M414-3E-304-PX0434-030	41
BCC03KF	BCC M324-M414-3E-304-PX0434-050	41
BCC03KH	BCC M324-M424-3E-304-PX0434-003	41
BCC03KJ	BCC M324-M424-3E-304-PX0434-006	41
BCC03KK	BCC M324-M424-3E-304-PX0434-010	41
BCC03KL	BCC M324-M424-3E-304-PX0434-015	41
BCC03KM	BCC M324-M424-3E-304-PX0434-020	41
BCC03KN	BCC M324-M424-3E-304-PX0434-030	41
BCC03KP	BCC M324-M424-3E-304-PX0434-050	41
BCC03KR	BCC M324-M414-3E-606-PX0434-003	41
BCC03KT	BCC M324-M414-3E-606-PX0434-006	41
BCC03KU	BCC M324-M414-3E-606-PX0434-010	41
BCC03KW	BCC M324-M414-3E-606-PX0434-015	41
BCC03KY	BCC M324-M414-3E-606-PX0434-020	41
BCC03KZ	BCC M324-M414-3E-606-PX0434-030	41
BCC03L0	BCC M324-M414-3E-606-PX0434-050	41
BCC03L1	BCC M314-M414-3E-304-VX8434-003	40
BCC03L2	BCC M314-M414-3E-304-VX8434-006	40
BCC03L3	BCC M314-M414-3E-304-VX8434-010	40
BCC03L4	BCC M314-M414-3E-304-VX8434-015	40
BCC03L5	BCC M314-M414-3E-304-VX8434-020	40
BCC03L6	BCC M314-M414-3E-304-VX8434-030	40
BCC03L7	BCC M314-M414-3E-304-VX8434-050	40
BCC03L8	BCC M314-M424-3E-304-VX8434-003	40
BCC03L9	BCC M314-M424-3E-304-VX8434-006	40
BCC03LA	BCC M314-M424-3E-304-VX8434-010	40
BCC03LC	BCC M314-M424-3E-304-VX8434-015	40
BCC03LE	BCC M314-M424-3E-304-VX8434-020	40
BCC03LF	BCC M314-M424-3E-304-VX8434-030	40
BCC03LH	BCC M314-M424-3E-304-VX8434-050	40
BCC03LJ	BCC M324-M414-3E-304-VX8434-003	41

Ordering code	Part number	Page
BCC03LK	BCC M324-M414-3E-304-VX8434-006	41
BCC03LL	BCC M324-M414-3E-304-VX8434-010	41
BCC03LM	BCC M324-M414-3E-304-VX8434-015	41
BCC03LN	BCC M324-M414-3E-304-VX8434-020	41
BCC03LP	BCC M324-M414-3E-304-VX8434-030	41
BCC03LR	BCC M324-M414-3E-304-VX8434-050	41
BCC03LT	BCC M324-M424-3E-304-VX8434-003	41
BCC03LU	BCC M324-M424-3E-304-VX8434-006	41
BCC03LW	BCC M324-M424-3E-304-VX8434-010	41
BCC03LY	BCC M324-M424-3E-304-VX8434-015	41
BCC03LZ	BCC M324-M424-3E-304-VX8434-020	41
BCC03M0	BCC M324-M424-3E-304-VX8434-030	41
BCC03M1	BCC M324-M424-3E-304-VX8434-050	41
BCC03M2	BCC M324-M414-3E-606-VX8434-003	41
BCC03M3	BCC M324-M414-3E-606-VX8434-006	41
BCC03M4	BCC M324-M414-3E-606-VX8434-010	41
BCC03M5	BCC M324-M414-3E-606-VX8434-015	41
BCC03M6	BCC M324-M414-3E-606-VX8434-020	41
BCC03M7	BCC M324-M414-3E-606-VX8434-030	41
BCC03M8	BCC M324-M414-3E-606-VX8434-050	41
BCC03M9	BCC M415-M313-3F-300-PX0334-003	68
BCC03MA	BCC M415-M313-3F-300-PX0334-006	68
BCC03MC	BCC M415-M313-3F-300-PX0334-010	68
BCC03ME	BCC M415-M313-3F-300-PX0334-015	68
BCC03MF	BCC M415-M313-3F-300-PX0334-020	68
BCC03MH	BCC M415-M313-3F-300-PX0334-030	68
BCC03MJ	BCC M415-M313-3F-300-PX0334-050	68
BCC03MK	BCC M415-M323-3F-300-PX0334-003	69
BCC03ML	BCC M415-M323-3F-300-PX0334-006	69
BCC03MM	BCC M415-M323-3F-300-PX0334-010	69
BCC03MN	BCC M415-M323-3F-300-PX0334-015	69
BCC03MP	BCC M415-M323-3F-300-PX0334-020	69
BCC03MR	BCC M415-M323-3F-300-PX0334-030	69
BCC03MT	BCC M415-M323-3F-300-PX0334-050	69
BCC03MU	BCC M425-M313-3F-300-PX0334-003	69
BCC03MW	BCC M425-M313-3F-300-PX0334-006	69
BCC03MY	BCC M425-M313-3F-300-PX0334-010	69
BCC03MZ	BCC M425-M313-3F-300-PX0334-015	69
BCC03N0	BCC M425-M313-3F-300-PX0334-020	69
BCC03N1	BCC M425-M313-3F-300-PX0334-030	69
BCC03N2	BCC M425-M313-3F-300-PX0334-050	69
BCC03N3	BCC M425-M323-3F-300-PX0334-003	70
BCC03N4	BCC M425-M323-3F-300-PX0334-006	70
BCC03N5	BCC M425-M323-3F-300-PX0334-010	70
BCC03N6	BCC M425-M323-3F-300-PX0334-015	70
BCC03N7	BCC M425-M323-3F-300-PX0334-020	70
BCC03N8	BCC M425-M323-3F-300-PX0334-030	70
BCC03N9	BCC M425-M323-3F-300-PX0334-050	70
BCC03NA	BCC M425-M313-3F-602-PX0334-003	69
BCC03NC	BCC M425-M313-3F-602-PX0334-006	69
BCC03NE	BCC M425-M313-3F-602-PX0334-010	69
BCC03NF	BCC M425-M313-3F-602-PX0334-015	69
BCC03NH	BCC M425-M313-3F-602-PX0334-020	69
BCC03NJ	BCC M425-M313-3F-602-PX0334-030	69
BCC03NK	BCC M425-M313-3F-602-PX0334-050	69
BCC03NL	BCC M425-M323-3F-602-PX0334-003	70
BCC03NM	BCC M425-M323-3F-602-PX0334-006	70
BCC03NN	BCC M425-M323-3F-602-PX0334-010	70
BCC03NP	BCC M425-M323-3F-602-PX0334-015	70
BCC03NR	BCC M425-M323-3F-602-PX0334-020	70
BCC03NT	BCC M425-M323-3F-602-PX0334-030	70
BCC03NU	BCC M425-M323-3F-602-PX0334-050	70
BCC03NW	BCC M415-M313-3F-300-VX8334-003	68

Alphanumeric Index

Sorted by ordering code

Ordering code	Part number	Page
BCC03NY	BCC M415-M313-3F-300-VX8334-006	68
BCC03NZ	BCC M415-M313-3F-300-VX8334-010	68
BCC03P0	BCC M415-M313-3F-300-VX8334-015	68
BCC03P1	BCC M415-M313-3F-300-VX8334-020	68
BCC03P2	BCC M415-M313-3F-300-VX8334-030	68
BCC03P3	BCC M415-M313-3F-300-VX8334-050	68
BCC03P4	BCC M415-M323-3F-300-VX8334-003	69
BCC03P5	BCC M415-M323-3F-300-VX8334-006	69
BCC03P6	BCC M415-M323-3F-300-VX8334-010	69
BCC03P7	BCC M415-M323-3F-300-VX8334-015	69
BCC03P8	BCC M415-M323-3F-300-VX8334-020	69
BCC03P9	BCC M415-M323-3F-300-VX8334-030	69
BCC03PA	BCC M415-M323-3F-300-VX8334-050	69
BCC03PC	BCC M425-M313-3F-300-VX8334-003	69
BCC03PE	BCC M425-M313-3F-300-VX8334-006	69
BCC03PF	BCC M425-M313-3F-300-VX8334-010	69
BCC03PH	BCC M425-M313-3F-300-VX8334-015	69
BCC03PJ	BCC M425-M313-3F-300-VX8334-020	69
BCC03PK	BCC M425-M313-3F-300-VX8334-030	69
BCC03PL	BCC M425-M313-3F-300-VX8334-050	69
BCC03PM	BCC M425-M323-3F-300-VX8334-003	70
BCC03PN	BCC M425-M323-3F-300-VX8334-006	70
BCC03PP	BCC M425-M323-3F-300-VX8334-010	70
BCC03PR	BCC M425-M323-3F-300-VX8334-015	70
BCC03PT	BCC M425-M323-3F-300-VX8334-020	70
BCC03PU	BCC M425-M323-3F-300-VX8334-030	70
BCC03PW	BCC M425-M323-3F-300-VX8334-050	70
BCC03PY	BCC M425-M313-3F-602-VX8334-003	69
BCC03PZ	BCC M425-M313-3F-602-VX8334-006	69
BCC03R0	BCC M425-M313-3F-602-VX8334-010	69
BCC03R1	BCC M425-M313-3F-602-VX8334-015	69
BCC03R2	BCC M425-M313-3F-602-VX8334-020	69
BCC03R3	BCC M425-M313-3F-602-VX8334-030	69
BCC03R4	BCC M425-M313-3F-602-VX8334-050	69
BCC03R5	BCC M425-M323-3F-602-VX8334-003	70
BCC03R6	BCC M425-M323-3F-602-VX8334-006	70
BCC03R7	BCC M425-M323-3F-602-VX8334-010	70
BCC03R8	BCC M425-M323-3F-602-VX8334-015	70
BCC03R9	BCC M425-M323-3F-602-VX8334-020	70
BCC03RA	BCC M425-M323-3F-602-VX8334-030	70
BCC03RC	BCC M425-M323-3F-602-VX8334-050	70
BCC03RE	BCC M415-M314-3F-304-PX0434-003	71
BCC03RF	BCC M415-M314-3F-304-PX0434-006	71
BCC03RH	BCC M415-M314-3F-304-PX0434-010	71
BCC03RJ	BCC M415-M314-3F-304-PX0434-015	71
BCC03RK	BCC M415-M314-3F-304-PX0434-020	71
BCC03RL	BCC M415-M314-3F-304-PX0434-030	71
BCC03RM	BCC M415-M314-3F-304-PX0434-050	71
BCC03RN	BCC M415-M324-3F-304-PX0434-003	71
BCC03RP	BCC M415-M324-3F-304-PX0434-006	71
BCC03RR	BCC M415-M324-3F-304-PX0434-010	71
BCC03RT	BCC M415-M324-3F-304-PX0434-015	71
BCC03RU	BCC M415-M324-3F-304-PX0434-020	71
BCC03RW	BCC M415-M324-3F-304-PX0434-030	71
BCC03RY	BCC M415-M324-3F-304-PX0434-050	71
BCC03RZ	BCC M425-M314-3F-304-PX0434-003	71
BCC03T0	BCC M425-M314-3F-304-PX0434-006	71
BCC03T1	BCC M425-M314-3F-304-PX0434-010	71
BCC03T2	BCC M425-M314-3F-304-PX0434-015	71
BCC03T3	BCC M425-M314-3F-304-PX0434-020	71
BCC03T4	BCC M425-M314-3F-304-PX0434-030	71
BCC03T5	BCC M425-M314-3F-304-PX0434-050	71
BCC03T6	BCC M425-M324-3F-304-PX0434-003	72

Ordering code	Part number	Page
BCC03T7	BCC M425-M324-3F-304-PX0434-006	72
BCC03T8	BCC M425-M324-3F-304-PX0434-010	72
BCC03T9	BCC M425-M324-3F-304-PX0434-015	72
BCC03TA	BCC M425-M324-3F-304-PX0434-020	72
BCC03TC	BCC M425-M324-3F-304-PX0434-030	72
BCC03TE	BCC M425-M324-3F-304-PX0434-050	72
BCC03TF	BCC M425-M314-3F-606-PX0434-003	72
BCC03TH	BCC M425-M314-3F-606-PX0434-006	72
BCC03TJ	BCC M425-M314-3F-606-PX0434-010	72
BCC03TK	BCC M425-M314-3F-606-PX0434-015	72
BCC03TL	BCC M425-M314-3F-606-PX0434-020	72
BCC03TM	BCC M425-M314-3F-606-PX0434-030	72
BCC03TN	BCC M425-M314-3F-606-PX0434-050	72
BCC03TP	BCC M415-M314-3F-304-VX8434-003	71
BCC03TR	BCC M415-M314-3F-304-VX8434-006	71
BCC03TT	BCC M415-M314-3F-304-VX8434-010	71
BCC03TU	BCC M415-M314-3F-304-VX8434-015	71
BCC03TW	BCC M415-M314-3F-304-VX8434-020	71
BCC03TY	BCC M415-M314-3F-304-VX8434-030	71
BCC03TZ	BCC M415-M314-3F-304-VX8434-050	71
BCC03U0	BCC M415-M324-3F-304-VX8434-003	71
BCC03U1	BCC M415-M324-3F-304-VX8434-006	71
BCC03U2	BCC M415-M324-3F-304-VX8434-010	71
BCC03U3	BCC M415-M324-3F-304-VX8434-015	71
BCC03U4	BCC M415-M324-3F-304-VX8434-020	71
BCC03U5	BCC M415-M324-3F-304-VX8434-030	71
BCC03U6	BCC M415-M324-3F-304-VX8434-050	71
BCC03U7	BCC M425-M314-3F-304-VX8434-003	71
BCC03U8	BCC M425-M314-3F-304-VX8434-006	71
BCC03U9	BCC M425-M314-3F-304-VX8434-010	71
BCC03UA	BCC M425-M314-3F-304-VX8434-015	71
BCC03UC	BCC M425-M314-3F-304-VX8434-020	71
BCC03UE	BCC M425-M314-3F-304-VX8434-030	71
BCC03UF	BCC M425-M314-3F-304-VX8434-050	71
BCC03UH	BCC M425-M324-3F-304-VX8434-003	72
BCC03UJ	BCC M425-M324-3F-304-VX8434-006	72
BCC03UK	BCC M425-M324-3F-304-VX8434-010	72
BCC03UL	BCC M425-M324-3F-304-VX8434-015	72
BCC03UM	BCC M425-M324-3F-304-VX8434-020	72
BCC03UN	BCC M425-M324-3F-304-VX8434-030	72
BCC03UP	BCC M425-M324-3F-304-VX8434-050	72
BCC03UR	BCC M425-M314-3F-606-VX8434-003	72
BCC03UT	BCC M425-M314-3F-606-VX8434-006	72
BCC03UU	BCC M425-M314-3F-606-VX8434-010	72
BCC03UW	BCC M425-M314-3F-606-VX8434-015	72
BCC03UY	BCC M425-M314-3F-606-VX8434-020	72
BCC03UZ	BCC M425-M314-3F-606-VX8434-030	72
BCC03W0	BCC M425-M314-3F-606-VX8434-050	72
BCC03WZ	BCC M474-0000-2D-000-51X475-000	179, 199
BCC03Y0	BCC M484-0000-2D-000-51X475-000	179, 199
BCC03Y1	BCC M474-0000-1D-000-51X475-000	178, 198
BCC03Y2	BCC M484-0000-1D-000-51X475-000	178, 198
BCC03Y4	BCC M425-M414-3A-650-VX8434-006	78
BCC03YC	BCC VB03-0000-10-055-PX0350-020	158
BCC03YE	BCC VB03-0000-10-055-PX0350-050	158
BCC03YF	BCC VB03-0000-10-055-PX0350-100	158
BCC03YH	BCC VB23-0000-10-055-PX0350-020	158
BCC03YJ	BCC VB23-0000-10-055-PX0350-050	158
BCC03YK	BCC VB23-0000-10-055-PX0350-100	158
BCC03YL	BCC VB43-0000-10-055-PX0350-020	160
BCC03YM	BCC VB43-0000-10-055-PX0350-050	160
BCC03YN	BCC VB43-0000-10-055-PX0350-100	160
BCC03YP	BCC VB63-0000-10-055-PX0350-020	160

Alphanumeric Index

Sorted by ordering code

Ordering code	Part number	Page
BCC03YR	BCC VB63-0000-10-055-PX0350-050	160
BCC03YT	BCC VB63-0000-10-055-PX0350-100	160
BCC03ZZ	BCC VB03-0000-10-055-VX8350-020	158
BCC0400	BCC VB03-0000-10-055-VX8350-050	158
BCC0401	BCC VB03-0000-10-055-VX8350-100	158
BCC0402	BCC VB23-0000-10-055-VX8350-020	158
BCC0403	BCC VB23-0000-10-055-VX8350-050	158
BCC0404	BCC VB23-0000-10-055-VX8350-100	158
BCC0405	BCC VB43-0000-10-055-VX8350-020	160
BCC0406	BCC VB43-0000-10-055-VX8350-050	160
BCC0407	BCC VB43-0000-10-055-VX8350-100	160
BCC0408	BCC VB63-0000-10-055-VX8350-020	160
BCC0409	BCC VB63-0000-10-055-VX8350-050	160
BCC040A	BCC VB63-0000-10-055-VX8350-100	160
BCC04K0	BCC M414-M414-6D-331-PS54T2-006	177
BCC04K1	BCC M414-M414-6D-331-PS54T2-020	177
BCC04K2	BCC M414-M414-6D-331-PS54T2-050	177
BCC04K3	BCC M414-M414-6D-331-PS54T2-100	177
BCC04K4	BCC M414-M414-6D-331-PS54T2-200	177
BCC04K5	BCC M414-M414-6D-331-PS54T2-300	177
BCC04K6	BCC M414-E834-8G-668-PS54T2-006	177
BCC04K7	BCC M414-E834-8G-668-PS54T2-020	177
BCC04K8	BCC M414-E834-8G-668-PS54T2-050	177
BCC04K9	BCC M414-E834-8G-668-PS54T2-100	177
BCC04KA	BCC M414-E834-8G-668-PS54T2-200	177
BCC04KC	BCC M414-E834-8G-668-PS54T2-300	177
BCC04KE	BCC E834-E834-90-334-PS54T2-006	177
BCC04KF	BCC E834-E834-90-334-PS54T2-020	177
BCC04KH	BCC E834-E834-90-334-PS54T2-050	177
BCC04KJ	BCC E834-E834-90-334-PS54T2-100	177
BCC04KK	BCC E834-E834-90-334-PS54T2-200	177
BCC04KL	BCC E834-E834-90-334-PS54T2-300	177
BCC04MC	BCC M478-0000-1A-000-43X834-000	91
BCC04ME	BCC M488-0000-1A-000-43X834-000	91
BCC04MZ	BCC VC04-0000-10-053-PX0350-020	162
BCC04N0	BCC VC04-0000-10-053-PX0350-050	162
BCC04N1	BCC VC04-0000-10-053-PX0350-100	162
BCC04N2	BCC VC04-0000-10-053-VX8350-020	162
BCC04N3	BCC VC04-0000-10-053-VX8350-050	162
BCC04N4	BCC VC04-0000-10-053-VX8350-100	162
BCC04NC	BCC VC04-M413-3E-664-PX0350-003	162
BCC04NE	BCC VC04-M413-3E-664-PX0350-006	162
BCC04NF	BCC VC04-M413-3E-664-PX0350-010	162
BCC04NH	BCC VC04-M413-3E-664-PX0350-015	162
BCC04NJ	BCC VC04-M413-3E-664-PX0350-020	162
BCC04NK	BCC VC04-M413-3E-664-PX0350-030	162
BCC04NL	BCC VC04-M413-3E-664-PX0350-050	162
BCC04RF	BCC VC44-0000-10-053-PX0350-020	163
BCC04RH	BCC VC44-0000-10-053-PX0350-050	163
BCC04RJ	BCC VC44-0000-10-053-PX0350-100	163
BCC04RK	BCC VC44-0000-10-053-VX8350-020	163
BCC04RL	BCC VC44-0000-10-053-VX8350-050	163
BCC04RM	BCC VC44-0000-10-053-VX8350-100	163
BCC04RY	BCC VC44-M413-3E-664-PX0350-003	163
BCC04RZ	BCC VC44-M413-3E-664-PX0350-006	163
BCC04T0	BCC VC44-M413-3E-664-PX0350-010	163
BCC04T1	BCC VC44-M413-3E-664-PX0350-015	163
BCC04T2	BCC VC44-M413-3E-664-PX0350-020	163
BCC04T3	BCC VC44-M413-3E-664-PX0350-030	163
BCC04T4	BCC VC44-M413-3E-664-PX0350-050	163
BCC04W0	BCC VA04-0000-10-053-PX0350-020	156
BCC04W1	BCC VA04-0000-10-053-PX0350-050	156
BCC04W2	BCC VA04-0000-10-053-PX0350-100	156

Ordering code	Part number	Page
BCC04W3	BCC VA04-0000-10-053-VX8350-020	156
BCC04W4	BCC VA04-0000-10-053-VX8350-050	156
BCC04W5	BCC VA04-0000-10-053-VX8350-100	156
BCC04W6	BCC VA04-0000-10-054-PX0350-020	156
BCC04W7	BCC VA04-0000-10-054-PX0350-050	156
BCC04W8	BCC VA04-0000-10-054-PX0350-100	156
BCC04W9	BCC VA04-0000-10-054-VX8350-020	156
BCC04WA	BCC VA04-0000-10-054-VX8350-050	156
BCC04WC	BCC VA04-0000-10-054-VX8350-100	156
BCC04WF	BCC VA04-M413-3E-664-PX0350-003	157
BCC04WH	BCC VA04-M413-3E-664-PX0350-006	157
BCC04WJ	BCC VA04-M413-3E-664-PX0350-015	157
BCC04WK	BCC VA04-M413-3E-664-PX0350-020	157
BCC04WL	BCC VA04-M413-3E-664-PX0350-030	157
BCC04WM	BCC VA04-M413-3E-664-PX0350-050	157
BCC04ZH	BCC M414-M414-6D-331-PS54T2-150	177
BCC04ZJ	BCC M414-E834-8G-668-PS54T2-150	177
BCC04ZK	BCC E834-E834-90-334-PS54T2-150	177
BCC04ZU	BCC M424-0000-2A-003-VX0434-020	59
BCC04ZW	BCC M424-0000-2A-003-VX0434-050	59
BCC0502	BCC VA04-M413-3E-664-PX0350-010	157
BCC0506	BCC M415-M313-3F-602-PX0334-003	68
BCC0507	BCC M415-M313-3F-602-PX0334-006	68
BCC0508	BCC M415-M313-3F-602-PX0334-010	68
BCC0509	BCC M415-M313-3F-602-PX0334-015	68
BCC050A	BCC M415-M313-3F-602-PX0334-020	68
BCC050C	BCC M415-M313-3F-602-PX0334-030	68
BCC050E	BCC M415-M313-3F-602-PX0334-050	68
BCC064E	BCC VB03-M413-3E-666-PX0350-003	159
BCC064F	BCC VB03-M413-3E-666-PX0350-006	159
BCC064H	BCC VB03-M413-3E-666-PX0350-010	159
BCC064J	BCC VB03-M413-3E-666-PX0350-015	159
BCC064K	BCC VB03-M413-3E-666-PX0350-020	159
BCC064L	BCC VB03-M413-3E-666-PX0350-030	159
BCC064M	BCC VB03-M413-3E-666-PX0350-050	159
BCC064N	BCC VB23-M413-3E-666-PX0350-003	159
BCC064P	BCC VB23-M413-3E-666-PX0350-006	159
BCC064R	BCC VB23-M413-3E-666-PX0350-010	159
BCC064T	BCC VB23-M413-3E-666-PX0350-015	159
BCC064U	BCC VB23-M413-3E-666-PX0350-020	159
BCC064W	BCC VB23-M413-3E-666-PX0350-030	159
BCC064Y	BCC VB23-M413-3E-666-PX0350-050	159
BCC064Z	BCC VB43-M413-3E-666-PX0350-003	161
BCC0650	BCC VB43-M413-3E-666-PX0350-006	161
BCC0651	BCC VB43-M413-3E-666-PX0350-010	161
BCC0652	BCC VB43-M413-3E-666-PX0350-015	161
BCC0653	BCC VB43-M413-3E-666-PX0350-020	161
BCC0654	BCC VB43-M413-3E-666-PX0350-030	161
BCC0655	BCC VB43-M413-3E-666-PX0350-050	161
BCC0656	BCC VB63-M413-3E-666-PX0350-003	161
BCC0657	BCC VB63-M413-3E-666-PX0350-006	161
BCC0658	BCC VB63-M413-3E-666-PX0350-010	161
BCC0659	BCC VB63-M413-3E-666-PX0350-015	161
BCC065A	BCC VB63-M413-3E-666-PX0350-020	161
BCC065C	BCC VB63-M413-3E-666-PX0350-030	161
BCC065E	BCC VB63-M413-3E-666-PX0350-050	161
BCC06EY	BCC M435-0000-2A-000-51X575-000	90
BCC06F6	BCC M435-0000-1A-000-51X475-000	86, 184, 190
BCC06F7	BCC M434-0000-2A-000-51X475-000	88, 184, 190
BCC06FH	BCC E834-0000-20-000-53X472-000	179, 199
BCC06FM	BCC A315-A315-30-335-PX05A5-006	110
BCC06FN	BCC A315-A315-30-335-PX05A5-020	110
BCC06FP	BCC A315-A315-30-335-PX05A5-050	110

Alphanumeric Index

Sorted by ordering code

Ordering code	Part number	Page
BCC06FR	BCC A315-A315-30-335-PX05A5-100	110
BCC06FT	BCC A315-A315-30-335-PX05A5-150	110
BCC06FU	BCC A315-A325-30-335-PX05A5-006	111
BCC06FW	BCC A315-A325-30-335-PX05A5-020	111
BCC06FY	BCC A315-A325-30-335-PX05A5-050	111
BCC06FZ	BCC A315-A325-30-335-PX05A5-100	111
BCC06H0	BCC A315-A325-30-335-PX05A5-150	111
BCC06H1	BCC A325-A315-30-335-PX05A5-006	111
BCC06H2	BCC A325-A315-30-335-PX05A5-020	111
BCC06H3	BCC A325-A315-30-335-PX05A5-050	111
BCC06H4	BCC A325-A315-30-335-PX05A5-100	111
BCC06H5	BCC A325-A315-30-335-PX05A5-150	111
BCC06H6	BCC A325-A325-30-335-PX05A5-006	111
BCC06H7	BCC A325-A325-30-335-PX05A5-020	111
BCC06H8	BCC A325-A325-30-335-PX05A5-050	111
BCC06H9	BCC A325-A325-30-335-PX05A5-100	111
BCC06HA	BCC A325-A325-30-335-PX05A5-150	111
BCC06HC	BCC A315-0000-10-063-PX05A5-020	107
BCC06HE	BCC A315-0000-10-063-PX05A5-050	107
BCC06HF	BCC A315-0000-10-063-PX05A5-100	107
BCC06HH	BCC A325-0000-10-063-PX05A5-020	107
BCC06HJ	BCC A325-0000-10-063-PX05A5-050	107
BCC06HK	BCC A325-0000-10-063-PX05A5-100	107
BCC06HL	BCC A314-000-20-003-PX04A5-020	106
BCC06HM	BCC A314-000-20-003-PX04A5-050	106
BCC06HN	BCC A314-000-20-003-PX04A5-100	106
BCC06HP	BCC A324-0000-20-003-PX04A5-020	106
BCC06HR	BCC A324-0000-20-003-PX04A5-050	106
BCC06HT	BCC A324-0000-20-003-PX04A5-100	106
BCC06HU	BCC A314-0000-10-003-PX04A5-020	105
BCC06HW	BCC A314-0000-10-003-PX04A5-050	105
BCC06HY	BCC A314-0000-10-003-PX04A5-100	105
BCC06HZ	BCC A324-0000-10-003-PX04A5-020	105
BCC06J0	BCC A324-0000-10-003-PX04A5-050	105
BCC06J1	BCC A324-0000-10-003-PX04A5-100	105
BCC06J2	BCC A314-A314-30-304-PX04A5-006	109
BCC06J3	BCC A314-A314-30-304-PX04A5-020	109
BCC06J4	BCC A314-A314-30-304-PX04A5-050	109
BCC06J5	BCC A314-A314-30-304-PX04A5-100	109
BCC06J6	BCC A314-A314-30-304-PX04A5-150	109
BCC06J7	BCC A314-A324-30-304-PX04A5-006	109
BCC06J8	BCC A314-A324-30-304-PX04A5-020	109
BCC06J9	BCC A314-A324-30-304-PX04A5-050	109
BCC06JA	BCC A314-A324-30-304-PX04A5-100	109
BCC06JC	BCC A314-A324-30-304-PX04A5-150	109
BCC06JE	BCC A324-A314-30-304-PX04A5-006	109
BCC06JF	BCC A324-A314-30-304-PX04A5-020	109
BCC06JH	BCC A324-A314-30-304-PX04A5-050	109
BCC06JJ	BCC A324-A314-30-304-PX04A5-100	109
BCC06JK	BCC A324-A314-30-304-PX04A5-150	109
BCC06JL	BCC A324-A324-30-304-PX04A5-006	110
BCC06JM	BCC A324-A324-30-304-PX04A5-020	110
BCC06JN	BCC A324-A324-30-304-PX04A5-050	110
BCC06JP	BCC A324-A324-30-304-PX04A5-100	110
BCC06JR	BCC A324-A324-30-304-PX04A5-150	110
BCC06JT	BCC M418-0000-2A-044-PX0825-020	65
BCC06JU	BCC M418-0000-2A-044-PX0825-050	65
BCC06JW	BCC M418-0000-2A-044-PX0825-100	65
BCC06JY	BCC M428-0000-2A-044-PX0825-020	65
BCC06JZ	BCC M428-0000-2A-044-PX0825-050	65
BCC06K0	BCC M428-0000-2A-044-PX0825-100	65
BCC06K1	BCC M418-0000-1A-044-PX0825-020	62
BCC06K2	BCC M418-0000-1A-044-PX0825-050	62

Ordering code	Part number	Page
BCC06K3	BCC M418-0000-1A-044-PX0825-100	62
BCC06K4	BCC M428-0000-1A-044-PX0825-020	63
BCC06K5	BCC M428-0000-1A-044-PX0825-050	63
BCC06K6	BCC M428-0000-1A-044-PX0825-100	63
BCC06K7	BCC M418-0000-2A-044-VX8825-020	65
BCC06K8	BCC M418-0000-2A-044-VX8825-050	65
BCC06K9	BCC M418-0000-2A-044-VX8825-100	65
BCC06KA	BCC M428-0000-2A-044-VX0825-020	65
BCC06KC	BCC M428-0000-2A-044-VX0825-050	65
BCC06KE	BCC M428-0000-2A-044-VX0825-100	65
BCC06KN	BCC M61C-0000-10-065-PX0BP4-020	100
BCC06KP	BCC M61C-0000-10-065-PX0BP4-050	100
BCC06KR	BCC M61C-0000-10-065-PX0BP4-100	100
BCC06KT	BCC M62C-0000-10-065-PX0BP4-020	101
BCC06KU	BCC M62C-0000-10-065-PX0BP4-050	101
BCC06KW	BCC M62C-0000-10-065-PX0BP4-100	101
BCC06KY	BCC M61L-0000-10-022-PX0LP4-020	101
BCC06KZ	BCC M61L-0000-10-022-PX0LP4-050	101
BCC06L0	BCC M61L-0000-10-022-PX0LP4-100	101
BCC06L1	BCC M62L-0000-10-022-PX0LP4-020	101
BCC06L2	BCC M62L-0000-10-022-PX0LP4-050	101
BCC06L3	BCC M62L-0000-10-022-PX0LP4-100	101
BCC06M4	BCC M434-0000-2A-000-41X475-000	88
BCC06M7	BCC S415-0000-1A-003-VX8434-100	121
BCC06M8	BCC S415-0000-1A-003-VX8434-150	121
BCC06M9	BCC S415-0000-1A-003-VX8434-200	121
BCC06MA	BCC S415-0000-1A-003-VX8434-250	121
BCC06MC	BCC S415-0000-1A-003-VX8434-300	121
BCC06ME	BCC S415-0000-1A-003-VX8434-350	121
BCC06MF	BCC S425-0000-1A-003-VX8434-100	122
BCC06MH	BCC S425-0000-1A-003-VX8434-150	122
BCC06MJ	BCC S425-0000-1A-003-VX8434-200	122
BCC06MK	BCC S425-0000-1A-003-VX8434-250	122
BCC06ML	BCC S425-0000-1A-003-VX8434-300	122
BCC06MM	BCC S425-0000-1A-003-VX8434-350	122
BCC06U9	BCC S425-0000-1A-004-VX8334-150	121
BCC06UA	BCC S425-0000-1A-004-VX8334-200	121
BCC06UC	BCC S425-0000-1A-004-VX8334-250	121
BCC06UE	BCC S425-0000-1A-004-PX0334-150	121
BCC06UF	BCC S425-0000-1A-004-PX0334-200	121
BCC06UH	BCC S425-0000-1A-004-PX0334-250	121
BCC06UJ	BCC S425-0000-1A-004-PX0334-400	121
BCC06UK	BCC M41C-0000-1A-049-PX0C25-020	66
BCC06UL	BCC M41C-0000-1A-049-PX0C25-050	66
BCC06UM	BCC M41C-0000-1A-049-PX0C25-100	66
BCC06UP	BCC M41C-0000-1A-049-VX8C25-020	66
BCC06UR	BCC M41C-0000-1A-049-VX8C25-050	66
BCC06UT	BCC M41C-0000-1A-049-VX8C25-100	66
BCC06UU	BCC M41C-0000-2A-049-PX0C25-020	67
BCC06UW	BCC M41C-0000-2A-049-PX0C25-050	67
BCC06UY	BCC M41C-0000-2A-049-PX0C25-100	67
BCC06UZ	BCC M41C-0000-2A-049-VX8C25-020	67
BCC06W0	BCC M41C-0000-2A-049-VX8C25-050	67
BCC06W1	BCC M41C-0000-2A-049-VX8C25-100	67
BCC06W9	BCC M435-0000-1A-000-51X575-000	90
BCC06WU	BCC M415-M414-3A-337-VS24N7-006	183
BCC06WW	BCC M415-M414-3A-337-VS24N7-020	183
BCC06WY	BCC M415-M414-3A-337-VS24N7-050	183
BCC06WZ	BCC M415-M414-3A-337-VS24N7-100	183
BCC06Y0	BCC M415-M414-3A-337-VS24N7-150	183
BCC06Y1	BCC M415-0000-1A-068-VS24N7-020	183
BCC06Y2	BCC M415-0000-1A-068-VS24N7-050	183
BCC06Y3	BCC M415-0000-1A-068-VS24N7-100	183

Alphanumeric Index

Sorted by ordering code

Ordering code	Part number	Page
BCC06Y4	BCC M415-0000-2A-R03	185
BCC06Y5	BCC M434-0000-2A-000-55X450-000	88, 184, 190
BCC06Y6	BCC M435-0000-1A-000-55X450-000	86, 184, 190
BCC06Y8	BCC M445-0000-1A-000-51X475-000	87
BCC06YA	BCC M435-0000-2A-000-41X575-000	90
BCC06YP	BCC M454-M454-5D-RM002-000	181, 201
BCC06YW	BCC M333-0000-10-000-34X325-000	42
BCC06YY	BCC M343-0000-10-000-34X325-000	43
BCC06YZ	BCC M333-0000-20-000-34X325-000	43
BCC06Z0	BCC M343-0000-20-000-34X325-000	44
BCC06Z1	BCC M333-0000-10-000-31X350-000	42
BCC06Z9	BCC M435-0000-1A-000-41X475-000	86
BCC06ZA	BCC M445-0000-1A-000-41X475-000	87
BCC06ZC	BCC M444-0000-2A-000-41X475-000	89
BCC06ZE	BCC M444-0000-2A-000-51X475-000	89
BCC06ZF	BCC M435-000-1A-000-41X575-000	90
BCC06ZH	BCC M445-000-1A-000-41X575-000	90
BCC06ZJ	BCC M445-0000-1A-000-51X575-000	90
BCC06ZK	BCC M445-000-2A-000-41X575-000	91
BCC06ZL	BCC M445-0000-2A-000-51X575-000	91
BCC06ZY	BCC M435-0000-1A-000-43X434-000	87
BCC0706	BCC A334-0000-10-000-51X4A5-000	113
BCC0707	BCC A334-0000-10-000-61X4A5-000	113
BCC0708	BCC A334-0000-10-000-71X4A5-000	113
BCC0709	BCC A334-0000-20-000-51X4A5-000	113
BCC070A	BCC A334-0000-20-000-61X4A5-000	113
BCC070C	BCC A334-0000-20-000-71X4A5-000	113
BCC070E	BCC A335-0000-10-000-51X5A5-000	113, 191
BCC070F	BCC A335-0000-10-000-61X5A5-000	113, 191
BCC070H	BCC A335-0000-10-000-71X5A5-000	113, 191
BCC070J	BCC A335-0000-20-000-51X5A5-000	113, 191
BCC070K	BCC A335-0000-20-000-61X5A5-000	113, 191
BCC070L	BCC A335-0000-20-000-71X5A5-000	113, 191
BCC070Y	BCC M415-0000-1B-031-PS72N1-020	169
BCC070Z	BCC M415-0000-1B-031-PS72N1-050	169
BCC0710	BCC M415-0000-1B-031-PS72N1-100	169
BCC0714	BCC M475-0000-2B-000-01X575-000	171
BCC0715	BCC M475-0000-1B-000-01X575-000	170
BCC0716	BCC M485-0000-2B-000-01X575-000	171
BCC0717	BCC M485-0000-1B-000-01X575-000	170
BCC0718	BCC M415-0000-2B-R01	174
BCC0719	BCC M415-0000-2B-R02	174
BCC071A	BCC PA04-0000-10-070-PX0550-020	164
BCC071C	BCC PA04-0000-10-070-PX0550-050	164
BCC071E	BCC PA04-0000-10-070-PX0550-100	164
BCC071F	BCC PA24-0000-10-070-PX0550-020	164
BCC071H	BCC PA24-0000-10-070-PX0550-050	164
BCC071J	BCC PA24-0000-10-070-PX0550-100	164
BCC082W	BCC M415-0000-1A-001-PH0334-020	119
BCC082Y	BCC M415-0000-1A-001-PH0334-050	119
BCC082Z	BCC M415-0000-1A-001-PH0334-100	119
BCC0832	BCC M425-0000-1A-001-PH0334-020	119
BCC0833	BCC M425-0000-1A-001-PH0334-050	119
BCC0836	BCC M313-0000-10-001-PH0334-050	118
BCC084R	BCC M414-0000-2A-068-VS24N7-020	183
BCC084T	BCC M414-0000-2A-068-VS24N7-050	183
BCC084U	BCC M414-0000-2A-068-VS24N7-100	183
BCC085F	BCC M414-E814-BG-RM013-000	180, 200
BCC085H	BCC M424-E814-BG-RM013-000	180, 200
BCC085Z	BCC M418-0000-1A-069-PX0825-100	62
BCC0860	BCC M415-0000-1A-017-PX0534-100	60
BCC086T	BCC M425-0000-1A-001-PW3334-020	132
BCC086U	BCC M425-0000-1A-001-PW3334-050	132

Ordering code	Part number	Page
BCC086W	BCC M425-0000-1A-001-PW3334-100	132
BCC087F	BCC M415-0000-1A-034-PW3534-015	133
BCC087H	BCC M415-0000-1A-034-PW3534-050	133
BCC087J	BCC M415-0000-1A-034-PW3534-075	133
BCC087K	BCC M415-0000-1A-034-PW3534-100	133
BCC087L	BCC M425-0000-1A-040-PW3534-015	133
BCC087M	BCC M425-0000-1A-040-PW3534-050	133
BCC087N	BCC M425-0000-1A-040-PW3534-075	133
BCC087P	BCC M425-0000-1A-040-PW3534-100	133
BCC087R	BCC M415-M415-3A-313-PW3534-006	135
BCC087T	BCC M415-M415-3A-313-PW3534-010	135
BCC087U	BCC M415-M415-3A-313-PW3534-015	135
BCC087W	BCC M415-M415-3A-313-PW3534-020	135
BCC0886	BCC A315-0000-20-063-PX05A5-020	107
BCC0887	BCC A315-0000-20-063-PX05A5-050	107
BCC0888	BCC A315-0000-20-063-PX05A5-100	107
BCC0889	BCC A325-0000-20-063-PX05A5-020	107
BCC088A	BCC A325-0000-20-063-PX05A5-050	107
BCC088C	BCC A325-0000-20-063-PX05A5-100	107
BCC088E	BCC M41C-M41C-3A-325-PX0C25-006	85
BCC088F	BCC M41C-M41C-3A-325-PX0C25-010	85
BCC088H	BCC M41C-M41C-3A-325-PX0C25-020	85
BCC088J	BCC M418-M41C-3A-674-PX0825-006	84
BCC088K	BCC M418-M41C-3A-674-PX0825-010	84
BCC088L	BCC M418-M41C-3A-674-PX0825-020	84
BCC088M	BCC M61C-M41C-3E-675-PX0C25-006	102
BCC088N	BCC M61C-M41C-3E-675-PX0C25-010	102
BCC088P	BCC M61C-M41C-3E-675-PX0C25-020	102
BCC088R	BCC M62C-M41C-3E-675-PX0C25-006	102
BCC088T	BCC M62C-M41C-3E-675-PX0C25-010	102
BCC088U	BCC M62C-M41C-3E-675-PX0C25-020	102
BCC089P	BCC M415-M415-M415-U0003-000	99, 185, 192
BCC08C0	BCC M434-0000-2A-000-43X434-000	88
BCC08CM	BCC S425-0000-1A-004-PX0334-020	121
BCC08CN	BCC S425-0000-1A-004-PX0334-030	121
BCC08CP	BCC S425-0000-1A-004-PX0334-050	121
BCC08CR	BCC S425-0000-1A-004-PX0334-100	121
BCC08CU	BCC S425-0000-1A-008-PX0434-050	122
BCC08CZ	BCC S323-0000-10-004-PX0334-020	121
BCC08E0	BCC S323-0000-10-004-PX0334-050	121
BCC08F4	BCC M425-0000-1A-039-PX0534-100	61
BCC08F5	BCC M425-0000-1A-039-PX0534-050	61
BCC08F6	BCC M425-0000-1A-039-PX0534-020	61
BCC08F7	BCC M425-0000-1A-034-PX0534-100	60
BCC08F8	BCC M425-0000-1A-034-PX0534-050	60
BCC08F9	BCC M425-0000-1A-034-PX0534-020	60
BCC08FA	BCC M425-0000-1A-017-PX0534-100	60
BCC08FC	BCC M425-0000-1A-017-PX0534-050	60
BCC08FE	BCC M415-0000-1A-017-PX0534-020	60
BCC08FF	BCC M425-M425-3A-660-PX0534-003	83
BCC08FH	BCC M425-M425-3A-660-PX0534-006	83
BCC08FJ	BCC M425-M425-3A-660-PX0534-010	83
BCC08FK	BCC M425-M425-3A-660-PX0534-015	83
BCC08FL	BCC M425-M425-3A-660-PX0534-020	83
BCC08FM	BCC M425-M425-3A-660-PX0534-030	83
BCC08FN	BCC M425-M425-3A-660-PX0534-050	83
BCC08FP	BCC M425-M425-3A-661-PX0534-003	83
BCC08FR	BCC M425-M425-3A-661-PX0534-006	83
BCC08FT	BCC M425-M425-3A-661-PX0534-010	83
BCC08FU	BCC M425-M425-3A-661-PX0534-015	83
BCC08FW	BCC M425-M425-3A-661-PX0534-020	83
BCC08FY	BCC M425-M425-3A-661-PX0534-030	83
BCC08FZ	BCC M425-M425-3A-661-PX0534-050	83

Alphanumeric Index

Sorted by ordering code

Ordering code	Part number	Page
BCC08H0	BCC M425-M415-3A-313-PX0534-003	81
BCC08H1	BCC M425-M415-3A-313-PX0534-006	81
BCC08H2	BCC M425-M415-3A-313-PX0534-010	81
BCC08H3	BCC M425-M415-3A-313-PX0534-015	81
BCC08H4	BCC M425-M415-3A-313-PX0534-020	81
BCC08H5	BCC M425-M415-3A-313-PX0534-030	81
BCC08H6	BCC M425-M415-3A-313-PX0534-050	81
BCC08H8	BCC M425-M415-3A-312-PX0534-003	81
BCC08H9	BCC M425-M415-3A-312-PX0534-006	81
BCC08HA	BCC M425-M415-3A-312-PX0534-010	81
BCC08HC	BCC M425-M415-3A-312-PX0534-015	81
BCC08HE	BCC M425-M415-3A-312-PX0534-020	81
BCC08HF	BCC M425-M415-3A-312-PX0534-030	81
BCC08HH	BCC M425-M415-3A-312-PX0534-050	81
BCC08HP	BCC M425-0000-1A-040-PX0534-020	61
BCC08HR	BCC M425-0000-1A-040-PX0534-050	61
BCC08HT	BCC M425-0000-1A-040-PX0534-100	61
BCC08JC	BCC M415-0000-2A-034-PX0534-050	61
BCC08JE	BCC M415-0000-2A-034-PX0534-020	61
BCC08LE	BCC M425-0000-1A-004-PW3334-100	132
BCC08MZ	BCC M425-0000-1A-004-PW3334-030	132
BCC0941	BCC M42C-0000-2A-049-PX0C25-020	67
BCC0942	BCC M42C-0000-1A-049-PX0C25-050	66
BCC0943	BCC M42C-0000-1A-049-PX0C25-100	66
BCC098C	BCC M415-0000-1A-017-PX0534-050	60
BCC0994	BCC M418-0000-1A-046-PS0825-020	62
BCC0995	BCC M418-0000-1A-046-PS0825-050	62
BCC0996	BCC M418-0000-1A-046-PS0825-100	62
BCC0997	BCC M428-0000-1A-046-PS0825-020	63
BCC0998	BCC M428-0000-1A-046-PS0825-050	63
BCC0999	BCC M428-0000-1A-046-PS0825-100	63
BCC099A	BCC M454-0000-2A-RM020-005	94
BCC099C	BCC M455-0000-1A-RM020-005	94
BCC09EU	BCC M333-0000-10-000-22X334-000	43
BCC09EW	BCC M333-0000-20-000-22X334-000	44
BCC09EY	BCC M334-0000-10-000-22X434-000	45
BCC09EZ	BCC M334-0000-20-000-22X434-000	45
BCC09F3	BCC M425-M415-3A-661-PX0534-015	82
BCC09F4	BCC M425-M415-3A-661-PX0534-020	82
BCC09F5	BCC M425-M415-3A-661-PX0534-030	82
BCC09F6	BCC M425-M415-3A-661-PX0534-050	82
BCC09F7	BCC M425-M415-3A-661-PX0534-010	82
BCC09F8	BCC M425-M415-3A-661-PX0534-006	82
BCC09F9	BCC M425-M415-3A-661-PX0534-003	82
BCC09FA	BCC M425-M415-3A-660-PX0534-003	81
BCC09FC	BCC M425-M415-3A-660-PX0534-006	81
BCC09FE	BCC M425-M415-3A-660-PX0534-010	81
BCC09FF	BCC M425-M415-3A-660-PX0534-020	81
BCC09FH	BCC M425-M415-3A-660-PX0534-015	81
BCC09FJ	BCC M425-M415-3A-660-PX0534-030	81
BCC09FK	BCC M425-M415-3A-660-PX0534-050	81
BCC09FL	BCC M415-M415-3A-312-PX0534-003	80
BCC09FM	BCC M415-M415-3A-312-PX0534-006	80
BCC09FN	BCC M415-M415-3A-312-PX0534-010	80
BCC09FP	BCC M415-M415-3A-312-PX0534-015	80
BCC09FR	BCC M415-M415-3A-312-PX0534-020	80
BCC09FT	BCC M415-M415-3A-312-PX0534-030	80
BCC09FU	BCC M415-M415-3A-312-PX0534-050	80
BCC09FW	BCC M415-M415-3A-313-PX0534-003	80
BCC09FY	BCC M415-M415-3A-313-PX0534-006	80
BCC09FZ	BCC M415-M415-3A-313-PX0534-010	80
BCC09H0	BCC M415-M415-3A-313-PX0534-015	80
BCC09H1	BCC M415-M415-3A-313-PX0534-020	80

Ordering code	Part number	Page
BCC09H2	BCC M415-M415-3A-313-PX0534-030	80
BCC09H3	BCC M415-M415-3A-313-PX0534-050	80
BCC09H4	BCC M415-0000-1A-034-PX0534-020	60
BCC09H5	BCC M415-0000-1A-034-PX0534-050	60
BCC09H6	BCC M415-0000-1A-034-PX0534-100	60
BCC09H7	BCC M425-0000-1A-017-PX0534-020	60
BCC09H8	BCC M428-0000-1A-045-PX0825-020	64
BCC09H9	BCC M428-0000-1A-045-PX0825-050	64
BCC09HA	BCC M428-0000-1A-045-PX0825-100	64
BCC09HC	BCC M418-0000-1A-045-PX0825-020	63
BCC09HE	BCC M418-0000-1A-045-PX0825-050	63
BCC09HF	BCC M418-0000-1A-045-PX0825-100	63
BCC09J3	BCC M418-0000-1A-069-PX0825-020	62
BCC09J4	BCC M418-0000-1A-069-PX0825-050	62
BCC09J6	BCC M415-0000-1A-003-PW3434-020	132
BCC09J8	BCC M425-0000-1A-004-PW3334-020	132
BCC09JC	BCC M415-M313-M313-U0014-000	99
BCC09JP	BCC M435-0000-1A-000-A1X575-000	92
BCC09JW	BCC M435-0000-2A-000-A1X575-000	92
BCC09JZ	BCC M455-0000-1A-RM014-005	95
BCC09K0	BCC M455-0000-2A-RM014-005	95
BCC09M1	BCC M415-M415-3A-313-PW3534-050	135
BCC09M2	BCC M415-M415-3A-313-PW3534-030	135
BCC09M4	BCC M42C-0000-2A-049-PX0C25-100	67
BCC09M5	BCC M42C-0000-2A-049-PX0C25-050	67
BCC09M8	BCC M415-M415-3A-344-PS75N6-006	187
BCC09MA	BCC M415-M415-3A-344-PS75N6-020	187
BCC09MC	BCC M415-M415-3A-344-PS75N6-050	187
BCC09ME	BCC M415-M415-3A-344-PS75N6-100	187
BCC09MF	BCC M415-M415-3A-344-PS75N6-150	187
BCC09MJ	BCC M415-0000-1A-067-PS75N6-020	187
BCC09MK	BCC M415-0000-1A-067-PS75N6-050	187
BCC09ML	BCC M415-0000-1A-067-PS75N6-100	187
BCC09MM	BCC M415-0000-2A-067-PS75N6-020	187
BCC09MN	BCC M415-0000-2A-067-PS75N6-050	187
BCC09MP	BCC M415-0000-2A-067-PS75N6-100	187
BCC09MR	BCC M415-0000-2A-R04	193
BCC09MU	BCC M415-M415-M415-U0016-000	99
BCC09N2	BCC E878-0000-Z1-41X8T4	207
BCC09NL	BCC M414-M414-6D-338-ES64N9-006	195
BCC09NN	BCC M414-M414-6D-338-ES64N9-020	195
BCC09NP	BCC M414-M414-6D-338-ES64N9-050	195
BCC09NR	BCC M414-M414-6D-338-ES64N9-100	195
BCC09NT	BCC M414-M414-6D-338-ES64N9-150	195
BCC09UY	BCC A315-0000-10-030-VS85N6-020	188
BCC09W0	BCC A315-0000-10-030-VS85N6-050	188
BCC09W3	BCC A315-0000-10-030-VS85N6-100	188
BCC09W8	BCC A315-0000-20-030-VS85N6-020	189
BCC09WA	BCC A315-0000-20-030-VS85N6-050	189
BCC09WF	BCC A315-0000-20-030-VS85N6-100	189
BCC09YA	BCC A315-A315-30-330-VS85N6-006	189
BCC09YE	BCC A315-A315-30-330-VS85N6-020	189
BCC09YJ	BCC A315-A315-30-330-VS85N6-050	189
BCC09YP	BCC A315-A315-30-330-VS85N6-100	189
BCC09YT	BCC A315-A315-30-330-VS85N6-150	189
BCC0A07	BCC M313-M313-M313-U2017-003	48
BCC0A08	BCC M415-0000-1A-R04	193
BCC0A09	BCC A315-0000-2A-R04	193
BCC0A0A	BCC A315-0000-1A-R04	193
BCC0A0K	BCC M415-0000-1B-031-PS72N1-150	169
BCC0A0L	BCC M415-0000-1B-031-PS72N1-200	169
BCC0A0Y	BCC M412-0000-2B-031-PS72N1-020	169
BCC0A0Z	BCC M412-0000-2B-031-PS72N1-050	169

Alphanumeric Index

Sorted by ordering code

Ordering code	Part number	Page
BCC0A10	BCC M412-0000-2B-031-PS72N1-100	169
BCC0A12	BCC M415-M412-3B-329-PS72N1-006	169
BCC0A13	BCC M415-M412-3B-329-PS72N1-010	169
BCC0A14	BCC M415-M412-3B-329-PS72N1-020	169
BCC0A15	BCC M415-M412-3B-329-PS72N1-050	169
BCC0A16	BCC M415-M412-3B-329-PS72N1-100	169
BCC0A17	BCC M415-M412-3B-329-PS72N1-150	169
BCC0A18	BCC M415-M412-3B-329-PS72N1-200	169
BCC0A2F	BCC S323-0000-10-004-PX0334-030	121
BCC0A2H	BCC S323-0000-10-004-PX0334-100	121
BCC0A2K	BCC S425-0000-1A-008-PX0434-100	122
BCC0A2L	BCC S425-0000-1A-004-VX8334-050	121
BCC0A2M	BCC S425-0000-1A-004-VX8334-100	121
BCC0A77	BCC M314-M313-30-300-PX0334-010	34
BCC0A78	BCC M314-M313-30-300-PX0334-020	34
BCC0AA5	BCC A313-A313-A313-T0021-000	114
BCC0AA6	BCC A314-A314-A314-T0022-000	114
BCC0AA7	BCC A315-A315-A315-T0023-000	115, 192
BCC0AA8	BCC M425-0000-1A-001-PH0334-100	119
BCC0AA9	BCC M415-0000-1A-003-PH0434-020	119
BCC0AAA	BCC M415-0000-1A-003-PH0434-050	119
BCC0AAC	BCC M415-0000-1A-003-PH0434-100	119
BCC0AAE	BCC M425-0000-1A-003-PH0434-020	119
BCC0AAF	BCC M425-0000-1A-003-PH0434-050	119
BCC0AAH	BCC M425-0000-1A-003-PH0434-100	119
BCC0AAZ	BCC M418-M418-3A-342-PX0825-006	84
BCC0AC0	BCC M418-M418-3A-342-PX0825-003	84
BCC0AC1	BCC M418-M418-3A-342-PX0825-010	84
BCC0AC2	BCC M418-M418-3A-342-PX0825-015	84
BCC0AC3	BCC M418-M418-3A-342-PX0825-020	84
BCC0AC4	BCC M418-M418-3A-342-PX0825-030	84
BCC0AC5	BCC M418-M418-3A-342-PX0825-050	84
BCC0AFL	BCC M314-M313-M313-U2024-003	48
BCC0AFM	BCC M314-M313-M313-U2024-010	48
BCC0AFW	BCC M414-M313-M313-U2026-006	98
BCC0AFY	BCC M414-M313-M313-U2026-010	98
BCC0AFZ	BCC M414-M313-M313-U2026-020	98
BCC0AH0	BCC M414-M313-M313-U2026-030	98
BCC0AHZ	BCC A313-0000-10-097-PX03A5-020	104
BCC0AJ0	BCC A313-0000-10-097-PX03A5-050	104
BCC0AJ1	BCC A313-0000-10-097-PX03A5-100	104
BCC0AJ2	BCC A323-0000-10-097-PX03A5-020	105
BCC0AJ3	BCC A323-0000-10-097-PX03A5-050	105
BCC0AJ4	BCC A323-0000-10-097-PX03A5-100	105
BCC0AJC	BCC M415-M415-3A-313-PX0534-100	80
BCC0AJJ	BCC M415-M415-3A-313-PW0534-006	129
BCC0AJK	BCC M313-0000-10-001-PW0334-050	125
BCC0AJM	BCC M314-0000-10-003-PW0434-050	125
BCC0AJR	BCC M323-0000-10-001-PW0334-050	125
BCC0AJW	BCC M324-0000-10-003-PW0434-050	125
BCC0AK1	BCC M414-M415-M415-U2027-003	129
BCC0AK2	BCC M414-M415-M415-U2027-006	129
BCC0AK3	BCC M414-M415-M415-U2027-010	129
BCC0AK4	BCC M415-0000-1A-003-PW0434-020	127
BCC0AK5	BCC M415-0000-1A-003-PW0434-050	127
BCC0AK6	BCC M415-0000-1A-003-PW0434-100	127
BCC0AK7	BCC M415-M415-3A-313-PW0534-010	129
BCC0AK8	BCC M415-M415-3A-313-PW0534-020	129
BCC0AK9	BCC M415-M415-3A-313-PW0534-030	129
BCC0AKA	BCC M415-M415-3A-313-PW0534-050	129
BCC0AKE	BCC M425-0000-1A-003-PW0434-050	127
BCC0AKF	BCC M425-0000-1A-003-PW0434-100	127
BCC0AKH	BCC M425-M415-3A-313-PW0534-006	129

Ordering code	Part number	Page
BCC0AKJ	BCC M425-M415-3A-313-PW0534-010	129
BCC0AKK	BCC M425-M415-3A-313-PW0534-020	129
BCC0AKL	BCC M425-M415-3A-313-PW0534-030	129
BCC0AKM	BCC M425-M415-3A-313-PW0534-050	129
BCC0AN9	BCC M415-0000-1A-017-VX8534-100	60
BCC0ANE	BCC M425-M414-3A-650-PW0434-003	128
BCC0ANF	BCC M425-M414-3A-650-PW0434-006	128
BCC0ANH	BCC M425-M414-3A-650-PW0434-010	128
BCC0ANJ	BCC M425-M414-3A-650-PW0434-015	128
BCC0ANK	BCC M425-M414-3A-650-PW0434-020	128
BCC0ANM	BCC M425-M414-3A-650-PW0434-050	128
BCC0ANP	BCC M425-M414-3A-304-PW0434-003	128
BCC0ANR	BCC M425-M414-3A-304-PW0434-006	128
BCC0ANT	BCC M425-M414-3A-304-PW0434-010	128
BCC0ANU	BCC M425-M414-3A-304-PW0434-015	128
BCC0ANW	BCC M425-M414-3A-304-PW0434-020	128
BCC0ANZ	BCC M425-M414-3A-304-PW0434-050	128
BCC0AP1	BCC M415-M414-3A-304-PW0434-003	128
BCC0AP2	BCC M415-M414-3A-304-PW0434-006	128
BCC0AP3	BCC M415-M414-3A-304-PW0434-010	128
BCC0AP4	BCC M415-M414-3A-304-PW0434-015	128
BCC0AP5	BCC M415-M414-3A-304-PW0434-020	128
BCC0AP7	BCC M415-M414-3A-304-PW0434-050	128
BCC0AR6	BCC A313-A313-30-365-PX03A5-006	108
BCC0ARH	BCC A313-A313-30-365-PX03A5-020	108
BCC0ARJ	BCC A313-A313-30-365-PX03A5-050	108
BCC0ARK	BCC A313-A313-30-365-PX03A5-100	108
BCC0ARL	BCC A313-A313-30-365-PX03A5-150	108
BCC0AT5	BCC M415-0000-1A-017-VX8534-050	60
BCC0AT6	BCC M415-0000-2A-017-VX8534-050	61
BCC0AT9	BCC A333-0000-10-000-61X3A5-000	112
BCC0ATA	BCC A333-0000-10-000-71X3A5-000	112
BCC0ATC	BCC A333-0000-20-000-61X3A5-000	112
BCC0ATE	BCC A333-0000-20-000-71X3A5-000	112
BCC0AU3	BCC M415-0000-2A-017-VX8534-020	61
BCC0AUA	BCC M414-M415-M415-U2028-003	98
BCC0AUC	BCC M414-M415-M415-U2028-006	98
BCC0AUE	BCC M414-M415-M415-U2028-010	98
BCC0AUF	BCC M414-M415-M415-U2028-020	98
BCC0AUH	BCC M414-M415-M415-U2028-030	98
BCC0AUK	BCC M415-0000-2A-017-VX8534-100	61
BCC0AUL	BCC M314-M313-30-300-PX0334-006	34
BCC0AW9	BCC M313-0000-10-004-PX0334-020	27
BCC0AWA	BCC M313-0000-10-004-PX0334-050	27
BCC0AWC	BCC M313-0000-10-004-PX0334-100	27
BCC0AY0	BCC M313-0000-10-004-VX8334-050	27
BCC0AY4	BCC M41C-M41C-3A-325-PX0C25-003	85
BCC0AYA	BCC A315-A315-30-344-PS75N6-150	189
BCC0AYC	BCC A315-A315-30-344-PS75N6-100	189
BCC0AYE	BCC A315-A315-30-344-PS75N6-050	189
BCC0AYF	BCC A315-A315-30-344-PS75N6-020	189
BCC0AYJ	BCC A315-A315-30-344-PS75N6-006	189
BCC0AYK	BCC A315-0000-20-067-PS75N6-100	189
BCC0AYL	BCC A315-0000-20-067-PS75N6-050	189
BCC0AYM	BCC A315-0000-20-067-PS75N6-020	189
BCC0AYN	BCC A315-0000-10-067-PS75N6-100	188
BCC0AYP	BCC A315-0000-10-067-PS75N6-050	188
BCC0AYR	BCC A315-0000-10-067-PS75N6-020	188
BCC0AZA	BCC M313-M313-30-602-PX0334-003	32
BCC0AZC	BCC M313-M313-30-602-PX0334-006	32
BCC0AZE	BCC M313-M313-30-602-PX0334-010	32
BCC0AZF	BCC M313-M313-30-602-PX0334-015	32
BCC0AZH	BCC M313-M313-30-602-PX0334-020	32

Alphanumeric Index

Sorted by ordering code

Ordering code	Part number	Page
BCC0AZJ	BCC M313-M313-30-602-PX0334-030	32
BCC0AZK	BCC M313-M313-30-602-PX0334-050	32
BCC0C06	BCC M313-0000-10-004-VX8334-020	27
BCC0C07	BCC M313-0000-10-004-VX8334-100	27
BCC0C0M	BCC M415-M415-3A-313-PW0534-015	129
BCC0C0N	BCC M425-M415-3A-661-PW0534-006	129
BCC0C0P	BCC M425-M415-3A-661-PW0534-010	129
BCC0C0R	BCC M425-M415-3A-661-PW0534-015	129
BCC0C0T	BCC M425-M415-3A-661-PW0534-020	129
BCC0C0U	BCC M425-M415-3A-661-PW0534-030	129
BCC0C0W	BCC M425-M415-3A-661-PW0534-050	129
BCC0C0Y	BCC D259-M414-M415-U0029-000-C011	172
BCC0C0Z	BCC D269-M414-M415-U0029-000-C011	173
BCC0C10	BCC D279-0000-E0-000-65X4N1-000-C011	172
BCC0C11	BCC D289-0000-E0-000-65X4N1-000-C011	173
BCC0C20	BCC M324-0000-10-003-PW3434-050	131
BCC0C21	BCC M314-0000-10-003-PW3434-050	131
BCC0C22	BCC M425-0000-1A-003-PW3434-050	133
BCC0C23	BCC M415-0000-1A-003-PW3434-050	132
BCC0C24	BCC M323-0000-10-001-PW3334-050	131
BCC0C27	BCC M414-M415-M415-U2027-020	129
BCC0C3A	BCC M313-0000-10-001-PW3334-050	131
BCC0C3H	BCC A323-A313-30-365-PX03A5-006	108
BCC0C3J	BCC A323-A313-30-365-PX03A5-020	108
BCC0C3K	BCC A323-A313-30-365-PX03A5-050	108
BCC0C3L	BCC A323-A313-30-365-PX03A5-100	108
BCC0C3M	BCC A323-A313-30-365-PX03A5-150	108
BCC0C3Z	BCC M425-0000-1A-099-PW3434-020	133
BCC0C41	BCC M425-0000-1A-099-PW3434-050	133
BCC0C42	BCC M425-0000-1A-099-PW3434-100	133
BCC0C49	BCC M425-M415-3A-692-PX0534-050	82
BCC0C4A	BCC M425-M415-3A-692-PX0534-030	82
BCC0C4C	BCC M425-M415-3A-692-PX0534-020	82
BCC0C4E	BCC M425-M415-3A-692-PX0534-015	82
BCC0C4F	BCC M425-M415-3A-692-PX0534-010	82
BCC0C4H	BCC M425-M415-3A-692-PX0534-006	82
BCC0C4J	BCC M425-M415-3A-692-PX0534-003	82
BCC0C4K	BCC M425-M414-3A-691-PW3434-003	135
BCC0C4L	BCC M425-M414-3A-691-PW3434-010	135
BCC0C4M	BCC M425-M414-3A-691-PW3434-015	135
BCC0C4N	BCC M425-M414-3A-691-PW3434-020	135
BCC0C4P	BCC M425-M414-3A-691-PW3434-030	135
BCC0C4R	BCC M425-M414-3A-691-PW3434-050	135
BCC0C4T	BCC M425-M415-3A-692-PW3534-003	135
BCC0C4U	BCC M425-M415-3A-692-PW3534-006	135
BCC0C4W	BCC M425-M415-3A-692-PW3534-010	135
BCC0C4Y	BCC M425-M415-3A-692-PW3534-015	135
BCC0C4Z	BCC M425-M415-3A-692-PW3534-020	135
BCC0C50	BCC M425-M415-3A-692-PW3534-030	135
BCC0C51	BCC M425-M415-3A-692-PW3534-050	135
BCC0C52	BCC M425-M414-3A-691-PW3434-006	135
BCC0C6A	BCC M314-M313-30-300-PX0334-030	34
BCC0C6C	BCC M314-M313-30-300-PX0334-050	34
BCC0C6E	BCC M415-0000-1B-R01	174
BCC0C76	BCC M415-0000-2A-017-PX0534-020	61
BCC0C77	BCC M415-0000-2A-017-PX0534-050	61
BCC0C78	BCC M415-0000-2A-017-PX0534-100	61
BCC0C7A	BCC M414-M415-M415-U2032-003	136
BCC0C7C	BCC M414-M415-M415-U2032-006	136
BCC0C7E	BCC M414-M415-M415-U2032-010	136
BCC0C7T	BCC M425-0000-1A-100-PW3534-050	134
BCC0C7U	BCC M425-0000-1A-100-PW3534-020	134
BCC0C7R	BCC M425-0000-1A-100-PW3534-100	134

Ordering code	Part number	Page
BCC0C7W	BCC M415-0000-1A-003-PW3434-100	132
BCC0C9N	BCC M414-M425-M425-U2034-030	98
BCC0C9P	BCC M414-M425-M425-U2034-020	98
BCC0C9R	BCC M414-M425-M425-U2034-010	98
BCC0C9T	BCC M414-M425-M425-U2034-006	98
BCC0C9U	BCC M414-M425-M425-U2034-003	98
BCC0CA2	BCC M414-M425-M425-U2035-003	136
BCC0CA3	BCC M414-M425-M425-U2035-006	136
BCC0CA4	BCC M414-M425-M425-U2035-010	136
BCC0CA5	BCC M414-M425-M425-U2035-020	136
BCC0CA6	BCC M414-M425-M425-U2035-030	136
BCC0CAA	BCC S445-0000-1A-000-51X475-000-C024	93
BCC0CAE	BCC M455-0000-1A-RM020-020	94
BCC0CAH	BCC M314-M313-30-300-PX0334-003	34
BCC0CAP	BCC M313-0000-10-001-PW0334-100	125
BCC0CLZ	BCC M414-M414-6D-366-EX64N9-020	196
BCC0CM1	BCC M414-M414-6D-366-EX64N9-050	196
BCC0CM3	BCC M414-M414-6D-366-EX64N9-100	196
BCC0CNP	BCC M414-E834-8G-695-EX64N9-050	197
BCC0CNR	BCC M414-E834-8G-695-EX64N9-100	197
BCC0CNT	BCC M414-E834-8G-695-EX64N9-150	197
BCC0CNU	BCC E834-E834-90-367-EX64N9-150	197
BCC0CT8	BCC S425-0000-1A-008-VX0434-250	122
BCC0CT9	BCC S425-0000-1A-008-VX0434-200	122
BCC0CTA	BCC S425-0000-1A-008-VX0434-150	122
BCC0CTC	BCC S425-0000-1A-008-VX0434-100	122
BCC0CTE	BCC S425-0000-1A-008-VX0434-050	122
BCC0CZA	BCC M414-E834-8G-672-ES64N9-006	195
BCC0CZC	BCC M414-E834-8G-672-ES64N9-020	195
BCC0CZE	BCC M414-E834-8G-672-ES64N9-050	195
BCC0CZF	BCC M414-E834-8G-672-ES64N9-100	195
BCC0CZH	BCC M414-E834-8G-672-ES64N9-150	195
BCC0CZJ	BCC E834-E834-90-339-ES64N9-006	195
BCC0CZK	BCC E834-E834-90-339-ES64N9-020	195
BCC0CZL	BCC E834-E834-90-339-ES64N9-050	195
BCC0CZM	BCC E834-E834-90-339-ES64N9-100	195
BCC0CZN	BCC E834-E834-90-339-ES64N9-150	195
BCC0CZP	BCC E834-E834-90-367-EX64N9-006	197
BCC0CZR	BCC E834-E834-90-367-EX64N9-020	197
BCC0CZT	BCC E834-E834-90-367-EX64N9-050	197
BCC0CZU	BCC E834-E834-90-367-EX64N9-100	197
BCC0CZW	BCC M415-0000-1A-030-VS85N6-020	187
BCC0CZY	BCC M415-0000-1A-030-VS85N6-050	187
BCC0CZZ	BCC M415-0000-1A-030-VS85N6-100	187
BCC0E00	BCC M415-0000-2A-030-VS85N6-020	187
BCC0E01	BCC M415-0000-2A-030-VS85N6-050	187
BCC0E02	BCC M415-0000-2A-030-VS85N6-100	187
BCC0E03	BCC M415-M415-3A-330-VS85N6-006	187
BCC0E04	BCC M415-M415-3A-330-VS85N6-020	187
BCC0E05	BCC M415-M415-3A-330-VS85N6-050	187
BCC0E06	BCC M415-M415-3A-330-VS85N6-100	187
BCC0E07	BCC M415-M415-3A-330-VS85N6-150	187
BCC0E08	BCC M414-M414-6D-366-EX64N9-006	196
BCC0E09	BCC M414-M414-6D-366-EX64N9-150	196
BCC0E0A	BCC M414-E834-8G-695-EX64N9-006	197
BCC0E0C	BCC M414-E834-8G-695-EX64N9-020	197
BCC0E2Z	BCC M354-0000-20-RM050-005	47
BCC0E32	BCC M354-0000-20-RM050-020	47
BCC0E35	BCC M354-0000-10-RM050-005	47
BCC0E38	BCC M354-0000-10-RM050-020	47
BCC0E3Z	BCC M455-0000-1B-RM080-002	175
BCC0E40	BCC M452-0000-2B-RM080-002	175
BCC0E4Y	BCC M353-0000-10-RM049-005	46

Alphanumeric Index

Sorted by ordering code

Ordering code	Part number	Page
BCC0E4Z	BCC M353-0000-10-RM049-020	46
BCC0E50	BCC M353-0000-20-RM049-005	46
BCC0E51	BCC M353-0000-20-RM049-020	46
BCC0E53	BCC M454-0000-2A-RM020-020	94
BCC0E54	BCC M455-0000-1A-RM014-020	95
BCC0E55	BCC M458-0000-1A-RM015-005	96
BCC0E56	BCC M458-0000-1A-RM015-020	96
BCC0E57	BCC M458-0000-2A-RM015-005	96
BCC0E58	BCC M458-0000-2A-RM015-020	96
BCC0E59	BCC M45C-0000-1A-RM081-005	97
BCC0E5A	BCC M45C-0000-1A-RM081-020	97
BCC0E5C	BCC M45C-0000-2A-RM081-005	97
BCC0E5E	BCC M45C-0000-2A-RM081-020	97
BCC0E5F	BCC M455-0000-2A-RM014-020	95
BCC0E7N	BCC M333-0000-20-000-31X350-000-C027	43
BCC0E9J	BCC M41C-M41C-3A-325-PX0C25-100	85
BCC0EFF	BCC W414-W415-W415-U2048-003	147
BCC0EFH	BCC W414-W415-W415-U2048-006	147
BCC0EFJ	BCC W414-W425-W425-U2048-003	147
BCC0EFK	BCC W414-W425-W425-U2048-006	147
BCC0EFY	BCC W415-0000-1A-003-SW0434-020	139
BCC0EFZ	BCC W425-0000-1A-003-SW0434-020	139
BCC0EH0	BCC W314-W414-3E-304-SW0434-003	141
BCC0EH1	BCC W314-W414-3E-304-SW0434-006	141
BCC0EH2	BCC W314-W414-3E-304-SW0434-010	141
BCC0EH3	BCC W314-W414-3E-304-SW0434-015	141
BCC0EH4	BCC W314-W414-3E-304-SW0434-020	141
BCC0EH5	BCC W314-W414-3E-304-SW0434-030	141
BCC0EH6	BCC W314-W414-3E-304-SW0434-050	141
BCC0EH7	BCC W314-W314-30-304-SW0434-003	140
BCC0EH8	BCC W314-W314-30-304-SW0434-006	140
BCC0EH9	BCC W314-W314-30-304-SW0434-010	140
BCC0EHA	BCC W314-W314-30-304-SW0434-015	140
BCC0EHC	BCC W314-W314-30-304-SW0434-020	140
BCC0EHE	BCC W314-W314-30-304-SW0434-030	140
BCC0EHF	BCC W314-W314-30-304-SW0434-050	140
BCC0EHH	BCC W414-W415-W415-U2044-003	145
BCC0EHJ	BCC W414-W415-W415-U2044-006	145
BCC0EHK	BCC W414-W425-W425-U2044-003	145
BCC0EHL	BCC W414-W425-W425-U2044-006	145
BCC0EHM	BCC W414-W415-W415-U2046-003	143
BCC0EHN	BCC W414-W415-W415-U2046-006	143
BCC0EHP	BCC W414-W425-W425-U2046-003	143
BCC0EHR	BCC W414-W425-W425-U2046-006	143
BCC0EHT	BCC W313-W413-3E-300-TW0334-003	146
BCC0EHU	BCC W313-W413-3E-300-TW0334-006	146
BCC0EHW	BCC W313-W413-3E-300-TW0334-010	146
BCC0EHY	BCC W313-W413-3E-300-BW8334-003	144
BCC0EHZ	BCC W313-W413-3E-300-BW8334-006	144
BCC0EJ0	BCC W313-W413-3E-300-BW8334-010	144
BCC0EJ1	BCC W313-W413-3E-300-FW9334-003	148
BCC0EJ2	BCC W313-W413-3E-300-FW9334-006	148
BCC0EJ3	BCC W313-W413-3E-300-FW9334-010	148
BCC0EJ4	BCC W415-W414-3A-304-TW0434-003	146
BCC0EJ5	BCC W415-W414-3A-304-TW0434-006	146
BCC0EJ6	BCC W415-W414-3A-304-TW0434-010	146
BCC0EJ7	BCC W415-W414-3A-304-TW0434-015	146
BCC0EJ8	BCC W415-W414-3A-304-TW0434-020	146
BCC0EJ9	BCC W415-W414-3A-304-TW0434-050	146
BCC0EJA	BCC W415-W414-3A-304-BW8434-003	144
BCC0EJC	BCC W415-W414-3A-304-BW8434-006	144
BCC0EJE	BCC W415-W414-3A-304-BW8434-010	144
BCC0EJF	BCC W415-W414-3A-304-BW8434-015	144

Ordering code	Part number	Page
BCC0EJH	BCC W415-W414-3A-304-BW8434-020	144
BCC0EJJ	BCC W415-W414-3A-304-BW8434-050	144
BCC0EJL	BCC B324-B324-30-304-MW8434-003	153
BCC0EJM	BCC B324-B324-30-304-MW8434-006	153
BCC0EJN	BCC B324-B324-30-304-MW8434-010	153
BCC0EJP	BCC B324-B324-30-304-MW8434-015	153
BCC0EJR	BCC B324-B324-30-304-MW8434-020	153
BCC0EJT	BCC B314-B314-30-304-MW8434-003	152
BCC0EJU	BCC B314-B314-30-304-MW8434-006	152
BCC0EJW	BCC B314-B314-30-304-MW8434-010	152
BCC0EJY	BCC B314-B314-30-304-MW8434-015	152
BCC0EJZ	BCC B314-B314-30-304-MW8434-020	152
BCC0EK0	BCC B324-B314-30-304-MW8434-003	153
BCC0EK1	BCC B324-B314-30-304-MW8434-006	153
BCC0EK2	BCC B324-B314-30-304-MW8434-010	153
BCC0EK3	BCC B324-B314-30-304-MW8434-015	153
BCC0EK4	BCC B324-B314-30-304-MW8434-020	153
BCC0EK5	BCC B314-B324-30-304-MW8434-003	152
BCC0EK6	BCC B314-B324-30-304-MW8434-006	152
BCC0EK7	BCC B314-B324-30-304-MW8434-010	152
BCC0EK8	BCC B314-B324-30-304-MW8434-015	152
BCC0EK9	BCC B314-B324-30-304-MW8434-020	152
BCC0EKA	BCC W415-W424-3A-304-MW8434-003	150
BCC0EKC	BCC W415-W424-3A-304-MW8434-006	150
BCC0EKE	BCC W415-W424-3A-304-MW8434-010	150
BCC0EKF	BCC W415-W424-3A-304-MW8434-015	150
BCC0EKH	BCC W415-W424-3A-304-MW8434-020	150
BCC0EKJ	BCC W425-W424-3A-304-MW8434-003	151
BCC0EKK	BCC W425-W424-3A-304-MW8434-006	151
BCC0EKL	BCC W425-W424-3A-304-MW8434-010	151
BCC0EKM	BCC W425-W424-3A-304-MW8434-015	151
BCC0EKN	BCC W425-W424-3A-304-MW8434-020	151
BCC0EKP	BCC W415-W414-3A-304-MW8434-003	150
BCC0EKR	BCC W415-W414-3A-304-MW8434-006	150
BCC0EKT	BCC W415-W414-3A-304-MW8434-010	150
BCC0EKU	BCC W415-W414-3A-304-MW8434-015	150
BCC0EKW	BCC W415-W414-3A-304-MW8434-020	150
BCC0EKY	BCC W425-W414-3A-304-MW8434-003	151
BCC0EKZ	BCC W425-W414-3A-304-MW8434-006	151
BCC0EL0	BCC W425-W414-3A-304-MW8434-010	151
BCC0EL1	BCC W425-W414-3A-304-MW8434-015	151
BCC0EL2	BCC W425-W414-3A-304-MW8434-020	151
BCC0EL3	BCC W414-W415-W415-U2045-003	149
BCC0EL4	BCC W414-W415-W415-U2045-006	149
BCC0EL5	BCC W414-W425-W425-U2045-003	149
BCC0EL6	BCC W414-W425-W425-U2045-006	149
BCC0EL7	BCC W425-W414-3A-304-FW9434-003	149
BCC0EL8	BCC W425-W414-3A-304-FW9434-006	149
BCC0EL9	BCC W425-W414-3A-304-FW9434-010	149
BCC0ELA	BCC W425-W414-3A-304-FW9434-015	149
BCC0ELC	BCC W425-W414-3A-304-FW9434-020	149
BCC0ELE	BCC W425-W414-3A-304-FW9434-050	149
BCC0ELM	BCC W415-W414-3A-304-FW9434-003	148
BCC0ELN	BCC W415-W414-3A-304-FW9434-006	148
BCC0ELP	BCC W415-W414-3A-304-FW9434-010	148
BCC0ELR	BCC W415-W414-3A-304-FW9434-015	148
BCC0ELT	BCC W415-W414-3A-304-FW9434-020	148
BCC0ELU	BCC W415-W414-3A-304-FW9434-050	148
BCC0ELW	BCC W415-W414-3A-304-SW0434-003	141
BCC0ELY	BCC W415-W414-3A-304-SW0434-006	141
BCC0ELZ	BCC W415-W414-3A-304-SW0434-010	141
BCC0EM0	BCC W415-W414-3A-304-SW0434-015	141
BCC0EM1	BCC W415-W414-3A-304-SW0434-020	141

Alphanumeric index

Sorted by ordering code

Ordering code	Part number	Page
BCC0EM2	BCC W425-W414-3A-304-TW0434-003	147
BCC0EM3	BCC W425-W414-3A-304-TW0434-006	147
BCC0EM4	BCC W425-W414-3A-304-TW0434-010	147
BCC0EM5	BCC W425-W414-3A-304-TW0434-015	147
BCC0EM6	BCC W425-W414-3A-304-TW0434-020	147
BCC0EM7	BCC W425-W414-3A-304-TW0434-050	147
BCC0EM8	BCC W425-W414-3A-304-BW8434-003	145
BCC0EM9	BCC W425-W414-3A-304-BW8434-006	145
BCC0EMA	BCC W425-W414-3A-304-BW8434-010	145
BCC0EMC	BCC W425-W414-3A-304-BW8434-015	145
BCC0EME	BCC W425-W414-3A-304-BW8434-020	145
BCC0EMF	BCC W425-W414-3A-304-BW8434-050	145
BCC0EMH	BCC W313-W413-3E-300-SW0334-003	140
BCC0EMJ	BCC W313-W413-3E-300-SW0334-006	140
BCC0EMK	BCC W313-W413-3E-300-SW0334-010	140
BCC0EU7	BCC W425-W414-3A-304-SW0434-003	141
BCC0EU8	BCC W425-W414-3A-304-SW0434-006	141
BCC0EU9	BCC W425-W414-3A-304-SW0434-010	141
BCC0EUA	BCC W425-W414-3A-304-SW0434-015	141
BCC0EUC	BCC W425-W414-3A-304-SW0434-020	141
BCC0EUU	BCC W415-W414-3A-304-SW0434-030	141
BCC0EUW	BCC W415-W414-3A-304-SW0434-050	141
BCC0EUY	BCC W415-0000-1A-003-SW0434-030	139
BCC0EUZ	BCC W415-0000-1A-003-SW0434-050	139
BCC0EW0	BCC W425-0000-1A-003-SW0434-030	139
BCC0EW1	BCC W425-0000-1A-003-SW0434-050	139
BCC0EW3	BCC W414-W313-W313-U2049-003	143
BCC0EW4	BCC W414-W313-W313-U2049-006	143
BCC0EW5	BCC W414-W323-W323-U2049-003	143
BCC0EW6	BCC W414-W323-W323-U2049-006	143
BCC0EW7	BCC W314-W313-W313-U2050-003	142
BCC0EW8	BCC W314-W313-W313-U2050-006	142
BCC0EW9	BCC W314-W323-W323-U2050-003	142
BCC0EWA	BCC W314-W323-W323-U2050-006	142
BCC08JA	BCC M415-0000-2A-034-PX0534-100	61

BFO		
BFB00C8	BFO D25 LA-HD-EAK-465-02	321
BF00002	BFO D22-LA-TB-EAK-10-02	317
BF00003	BFO D22-XA-DB-EAK-20-01	325
BF00004	BFO D22-XA-SB-EAK-20-02	325
BF00005	BFO D22-XA-UB-EAK-20-02	326
BF00006	BFO D22-XB-UB-EAK-15-02	326
BF00007	BFO D22-XBF-LB-EAK-15-02	325
BF0000C	BFO N22-LA-FB-EAK-05-01	318
BF0000E	BFO D22-LAH-ZB-EAK-10-02	322
BF0000F	BFO 18A-LAA-MZG-20-0,5	337
BF0000H	BFO 18A-LAA-MZG-20-1	337
BF0000M	BFO 18A-LAA-UZG-20-0,5	337
BF0000N	BFO 18A-LAA-UZG-20-1	337
BF0000U	BFO 18A-LCC-SMG-20-0,5	337
BF0000W	BFO 18A-LCC-SMG-10-1	337
BF0000Z	BFO 18A-LCC-UZG-20-1	337
BF00013	BFO 18A-LEE-MZG-20-0,5	337
BF00014	BFO 18A-LEE-MZG-20-1	337
BF00019	BFO 18A-LEE-SMG-20-0,5	337
BF0001A	BFO 18A-LEE-SMG-20-1	337
BF0001F	BFO 18A-LEE-UZG-20-0,5	337
BF0001H	BFO 18A-LEE-UZG-20-1	337
BF0001P	BFO 18A-LFF-MZG-10-0,5	336
BF0001R	BFO 18A-LFF-MZG-10-1	336
BF0001U	BFO 18A-LFF-SMG-10-0,5	336
BF0001W	BFO 18A-LFF-SMG-10-1	336

BFO		
BF0001Z	BFO 18A-LGG-MZG-10-0,5	336
BF00020	BFO 18A-LGG-MZG-10-1	336
BF00023	BFO 18A-LGG-SMG-10-0,5	336
BF00024	BFO 18A-LGG-SMG-10-1	336
BF00026	BFO 18A-XAA-MZG-30-0,5	339
BF00027	BFO 18A-XAA-MZG-30-1	339
BF0002F	BFO 18A-XAA-SMG-30-0,5	339
BF0002H	BFO 18A-XAA-SMG-30-1	339
BF0002M	BFO 18A-XAA-UZG-30-0,5	339
BF0002N	BFO 18A-XAA-UZG-30-1	339
BF0002U	BFO 18A-XAC-SMG-30-0,5	339
BF0002W	BFO 18A-XAC-SMG-30-1	339
BF00031	BFO 18A-XAE-MZG-30-0,5	339
BF00032	BFO 18A-XAE-MZG-30-1	339
BF00037	BFO 18A-XAE-SMG-30-0,5	339
BF00038	BFO 18A-XAE-SMG-30-1	339
BF0003C	BFO 18A-XAE-UZG-30-0,5	339
BF0003E	BFO 18A-XAE-UZG-30-1	339
BF0003H	BFO 18A-XAF-MZG-15-0,5	338
BF0003J	BFO 18A-XAF-MZG-15-1	338
BF0003M	BFO 18A-XAF-SMG-15-0,5	338
BF0003N	BFO 18A-XAF-SMG-15-1	338
BF0003R	BFO 18A-XAG-MZG-15-0,5	338
BF0003T	BFO 18A-XAG-MZG-15-1	338
BF0003Y	BFO 18V-LCC-MZG-23-0,5	337
BF0003Z	BFO 18V-LCC-MZG-23-0,75	337
BF00042	BFO 18V-LCC-SMG-23-0,5	337
BF00047	BFO 18V-LDD-MZG-23-0,75	337
BF0004C	BFO 18V-LDD-SMG-23-0,5	337
BF0004F	BFO 18V-LDD-SMG-23-1	337
BF0004M	BFO 18V-XAC-MZG-30-0,5	339
BF0004P	BFO 18V-XAC-SMG-30-0,5	339
BF0004R	BFO 18V-XAC-SMG-30-1	339
BF0004U	BFO 18V-XAD-MZG-30-0,5	339
BF0004Y	BFO 18V-XAD-SMG-30-0,5	339
BF0004Z	BFO 18V-XAD-SMG-30-1	339
BF00051	BFO D10-LA-CB-EAK-05-02	319
BF00052	BFO D10-XA-GB-EAK-10-02	328
BF00053	BFO D10-XA-HB-EAK-10-02	327
BF00054	BFO D10-XA-RB-EAK-10-02	327
BF00055	BFO D10-XAH-KB-EAK-10-02	326
BF00056	BFO D13-LA-QB-EAK-05-02	319
BF00057	BFO D13-LA-WB-EAK-05-02	319
BF00058	BFO D13-LG-05-EAK-30-02	322
BF00059	BFO D13-LG-10-EAK-30-02	322
BF0005A	BFO D13-XA-JB-EAK-20-02	328
BF0005C	BFO D13-XB-KB-EAK-10-02	327
BF0005E	BFO D13-XB-RB-EAK-10-02	327
BF0005F	BFO D22-LA-AC-20	331
BF0005H	BFO D22-LA-AD-EAK-52-02	320
BF0005J	BFO D22-LA-BC-10	331
BF0005K	BFO D22-LA-BD-EAK-52-02	320
BF0005L	BFO D22-LA-CC-30	331
BF0005M	BFO D22-LA-KB-EAK-10-02	316
BF0005N	BFO D22-LA-NB-PZK-10-02	317
BF0005P	BFO D22-LA-QB-PAK-05-02	319
BF0005R	BFO D22-LA-RB-EAK-10-02	318
BF0005T	BFO D22-LAH-KB-EAK-10-02	316
BF0005U	BFO D22-LAP-KB-EAK-15-02	317
BF0005W	BFO D22-LAT-KB-EAK-10-02	316
BF0005Y	BFO D22-LD-EAK-10-20	331
BF0005Z	BFO D22-XA-CD-EAK-110-02	329
BF00060	BFO D22-XA-ED-EAK-250-02	329

Alphanumeric Index

Sorted by ordering code

Ordering code	Part number	Page
BF00061	BFO D22-XA-LB-EAK-20-02	324
BF00062	BFO D22-XA-MB-PAK-10-02	328
BF00063	BFO D22-XAH-LB-EAK-20-02	324
BF00064	BFO D22-XAP-LB-EAK-30-02	325
BF00065	BFO D22-XAT-LB-EAK-20-02	324
BF00066	BFO D22-XB-LB-EAK-15-02	325
BF00067	BFO D25-LA-CD-EAK-110-02	321
BF00068	BFO D25-LA-ED-EAK-250-02	321
BF000AP	BFO D22-LA-GD-EAK-52-02	320
BF000AR	BFO D13-XV-AK-EAK-50-02	329
BF000AT	BFO D13-XB-AB-EAK-10-01	329
BF000AW	BFO D22-LAH-BK-EAK-10-02	317
BF000AY	BFO D22-LAT-YB-EAK-10-0,5	318
BF000C3	BFO D10-XA-VB-EAK-10-02	327
BF000C4	BFO D22-XB-LB-EAK-15-SA1-02	330
BF000C5	BFO D25-LA-ED-EAK-250-0,5	321
BF000C6	BFO D10-LAH-CK-EAK-05-02	323
BF000C7	BFO D10-LAH-DK-EAK-05-02	323
BF000C9	BFO D22-XB-UB-EAK-15-SA1-02	330
BF000CA	BFO D22-XA-EK-PAK-10-02	329
BF000FN	BFO D22-XB-LB-EAK-15-SA1-05	330
BF000FP	BFO D22-XB-LB-EAK-15-SA1-01	330

BML		
BML001K	BML-A013-T_ _ _ _	391

BPI		
BPI002N	BPI 4M303P-2K-00-KPX60-030	214
BPI002P	BPI 4M303P-2K-00-KPX60-050	214
BPI002R	BPI 4M303P-2K-00-KPX60-100	214
BPI002T	BPI 4M303P-2K-00-KPX60-150	214
BPI0030	BPI 8M303P-2K-00-KPXA0-030	214
BPI0031	BPI 8M303P-2K-00-KPXA0-050	214
BPI0032	BPI 8M303P-2K-00-KPXA0-100	214
BPI0033	BPI 8M303P-2K-00-KPXA0-150	214
BPI0038	BPI 4M304P-2K-00-KPXA0-030	215
BPI0039	BPI 4M304P-2K-00-KPXA0-050	215
BPI003A	BPI 4M304P-2K-00-KPXA0-100	215
BPI003C	BPI 4M304P-2K-00-KPXA0-150	215
BPI003K	BPI 8M304P-2K-00-KPXK0-030	215
BPI003L	BPI 8M304P-2K-00-KPXK0-050	215
BPI003M	BPI 8M304P-2K-00-KPXK0-100	215
BPI003N	BPI 8M304P-2K-00-KPXK0-150	215
BPI003P	BPI 4M303P-2K-00-SM4	213
BPI003T	BPI 8M303P-2K-00-SM4CT	213
BPI0049	BPI 4M4A5P-2K-00-KPXB0-030	217
BPI004A	BPI 4M4A5P-2K-00-KPXB0-050	217
BPI004C	BPI 4M4A5P-2K-00-KPXB0-100	217
BPI004E	BPI 4M4A5P-2K-00-KPXB0-150	217
BPI004R	BPI 8M4A5P-2K-00-KPXL0-030	217
BPI004T	BPI 8M4A5P-2K-00-KPXL0-050	217
BPI004U	BPI 8M4A5P-2K-00-KPXL0-100	217
BPI004W	BPI 8M4A5P-2K-00-KPXL0-150	217
BPI004Y	BPI 4M4A4P-2K-00-SM6CT	218
BPI004Z	BPI 4M4A5P-2K-00-SM6LT	219
BPI0050	BPI 8M4A4P-2K-00-SM6CT	218
BPI0051	BPI 8M4A5P-2K-00-SM6LT	219
BPI0059	BPI 8M4A4P-2K-00-KPXB0-030	216
BPI005A	BPI 8M4A4P-2K-00-KPXB0-050	216
BPI005C	BPI 8M4A4P-2K-00-KPXB0-100	216
BPI005E	BPI 8M4A4P-2K-00-KPXB0-150	216
BPI007A	BPI 4M4A4P-2K-00-TP09	221
BPI007C	BPI 4M4A5P-2K-00-TP0G	223

Ordering code	Part number	Page
BPI007E	BPI 8M4A4P-2K-00-TP0E	221
BPI007F	BPI 8M4A5P-2K-00-TP0N	223
BPI007H	BPI 8M4A5P-2K-00-TPSN	222
BPI007J	BPI 8M4A4P-2K-00-TPSE	220
BPI007K	BPI 4M4A5P-2K-00-TPSG	222
BPI007L	BPI 4M4A4P-2K-00-TPS9	220
BPI007M	BPI T00G-K-00-KPXB0-030	223
BPI007N	BPI T00G-K-00-KPXB0-050	223
BPI007P	BPI T00G-K-00-KPXB0-100	223
BPI007R	BPI T00G-K-00-KPXB0-150	223
BPI007T	BPI T00N-K-00-KPXL0-030	223
BPI007U	BPI T00N-K-00-KPXL0-050	223
BPI007W	BPI T00N-K-00-KPXL0-100	223
BPI007Y	BPI T00N-K-00-KPXL0-150	223
BPI007Z	BPI T009-K-00-KPX70-030	221
BPI0080	BPI T009-K-00-KPX70-050	221
BPI0081	BPI T009-K-00-KPX70-100	221
BPI0082	BPI T009-K-00-KPX70-150	221
BPI0083	BPI T00E-K-00-KPXB0-030	221
BPI0084	BPI T00E-K-00-KPXB0-050	221
BPI0085	BPI T00E-K-00-KPXB0-100	221
BPI0086	BPI T00E-K-00-KPXB0-150	221

Sonstiges		
FHW0003	11023834	204
SET011L	BAV BP-PH-00064-01	365

Worldwide Sales

Headquarters

Germany

Balluff GmbH
Schurwaldstrasse 9
73765 Neuhausen a.d.F.
Phone +49 7158 173-0
Fax +49 7158 5010
balluff@balluff.de

Subsidiaries and Representatives

Argentina

Balluff Argentina S.R.L.
Echeverría 1050, 1st UF 2
1604 Florida Oeste,
Buenos Aires
Phone +54 11 4730-4544
Fax +54 11 4730-3908

Australia

Balluff Pty. Ltd.
12 Burton Court
Bayswater VIC 3153
Phone +61 397 204100
Fax +61 397 382677
sales@balluff.com.au

Austria

Balluff GmbH
Industriestraße B16
2345 Brunn am Gebirge
Phone +43 2236 32521-0
Fax +43 2236 32521-46
sensor@balluff.at

Bahrain

Multiline Technical Co.,
United Arab Emirates

Belarus

Automaticacentre OOO
Nezavisimosti Av. 185,
Block 19, Office 3
220125 Minsk
Phone +375 17 2838940
Fax +375 17 2181798
info@automatica.by

Belgium

Balluff bvba
Researchpark Haasrode 1820
Interleuvenlaan 62,
3001 Leuven
Phone +32 16 397800
Fax +32 16 397809
info.be@balluff.be

Brazil

Balluff Controles
Elétricos Ltda.
Rua Francisco Foga, 25
Distrito Industrial
CEP 13280.000
Vinhedo – Sao Paulo
Phone +55 19 38769999
Fax +55 19 38769990
balluff@balluff.com.br

Bulgaria

Belopitov AG
41, Nedelcho Bonchev St.
1528 Sofia
Phone +359 2 9609875
Fax +359 2 9609896
bps@bps.bg

Canada

Balluff Canada Inc.
2840 Argentia Road, Unit 2
Mississauga, Ontario L5N 8G4
Phone +1 905 816-1494
Toll-free 1-8 00-927-9654
Fax +1 905 816-1411
balluff.canada@balluff.ca

Chile

Microtec S/A
Salar Ascotan, Parque Enea Pud 1281
Santiago
Phone + 56 2 25954661
soledadrozaz@micro.cl

China

Balluff (Shanghai) Trading Co., Ltd.
8F, Building A, Yunding International
Commercial Plaza,
No. 800 Chengshan Rd,
Pudong, Shanghai, 200125
Phone +86 21 5089 9970
Fax +86 21 5089 9975
info@balluff.com.cn

Columbia

Micro Pneumatic S.A.
Calle 19, No. 70-63
Zona Industrial, Bogotá
Phone +57 1 4050016
hescobar@micro.com.co

Croatia

HSTEC d.d.
Zagrebicka 100
23000 Zadar
Phone +385 23 205-405
Fax +385 23 205-406
info@hstec.hr

Czech Republic

Balluff CZ, s.r.o
Pelušková 1400
198 00 Praha 9 – Kyje
Phone +420 281 000 666
Fax +420 281 940066
obchod@balluff.cz

Denmark

Balluff ApS
Åbogade 15
8200 Århus N
Phone +45 70 234929
Fax +45 70 234930
info.dk@balluff.dk

Ecuador

Camey S.A.
Vasco de Contreras y
Mañosca N35-251
Quito, Pichincha 170521
Phone +593 2 2455698
Fax +593 2 2456510
jose.sampedro@elsystec.com.ec

Egypt

EGEC
24 St., 302 Taksym El Kodah-smouha,
First Floor, Department 1
Alexandria
Phone +20 3 4299771
Fax +20 3 4261773
info@egecgroup.com

Finland

Murri Oy
Koukkukatu 1
15700 Lahti
Phone +358 3 8824000
Fax +358 3 8824040
myynti@murri.fi

France

Balluff SAS
5 rue des Vieilles Vignes
Bâtiment A
CS 90406 Croissy Beaubourg
77435 Marne la Vallée Cedex 02
Phone +33 1 64111990
Fax +33 1 64111991
info.fr@balluff.fr

Greece

S. NAZOS S.A.
10 KLM Thessalonikis-Kilkis
P.O. Box 57008
Thessaloniki
Phone +30 2310 462120
Fax +30 2310 474079
parasxos@nazos.gr

Hong Kong

Sensortech Company
No. 43, 18th Street
Hong Lok Yuen,
Tai Po, NT
Phone +852 26510188
Fax +852 26510388
sensortech@netvigator.com

Hungary

Balluff Elektronika Kft.
Pápai út. 55.
8200 Veszprém
Phone +36 88 421808
Fax +36 88 423439
saleshu@balluff.hu

Iceland

Smith & Norland
Nóatúni 4
105 Reykjavík
Phone +354 520 3000
Fax +354 520 3011
olar@smnor.is

India

Balluff India
405 Raikar Chambers
Deonar Village Road,
Govandi, Mumbai 400088
Phone +91 22 25568097
Fax +91 22 25560871
balluff@balluff.co.in

Indonesia

PT. GUNADAYA SOLUTECH
Industrial Electrical Products
Ruko Golden Boulevard, Block G, No. 18
BSD City, Serpong
15322 Banten
Phone +62 21 53160995
Fax +62 21 53160994
info@gunadaya.com

Ireland

Balluff Ireland Ltd.
Block B, The Crescent Building
Northwood, Santry
Dublin 9
Phone +353 1 8934188
Fax +44 161 2824701

Israel

Ancitech Ltd.
19, Hamashbir St.
Industrial Zone Holon
58853 Holon
Phone +972 3 5568351
Fax +972 3 5569278
tuvia@ancitech.com

Italy

Balluff Automation S.R.L.
Via Morandi 4
10095 Grugliasco, Torino
Phone +39 11 3150711
Fax +39 11 3170140
info.italy@balluff.it

Japan

Balluff Co., Ltd.
Aqua Hakusan Bldg. 9F
1-13-7 Hakusan, Bunkyo-ku,
Tokyo 113-0001
Phone +81 3 3830-0520
Fax +81 3 3830-0519
info.jp@balluff.jp

Kazakhstan

elcos electric control systems
2A, Molodezhnyi Str. 3D
Block O., Offices 318-319
050061 Almaty
Phone +7 727 3340536
Fax +7 727 3340539
info@elcos.kz

Kuwait

Multiline Technical Co.,
United Arab Emirates

Latvia and Estonia

SIA Interautomatika
Brīvības g. 410
1024 Rīga
Phone +371 67522010
Fax +371 67522007
info@interautomatika.lv

Lithuania

UAB Interautomatika
Kęstučio 47
08127 Vilnius
Phone +370 5 2607810
Fax +370 5 2411464
andrius@interautomatika.lt

Malaysia

Profacto Solution & Service Sdn. Bhd.
No.30A, Jalan Anggerik Mokara G31/G,
Kota Kemuning, 40460 Shah Alam, Selangor
Phone +60 3 51 21 85 28
Fax +60 3 51 21 85 27
ckkyong@streamyx.com

Team Automation Systems (M) Sdn. Bhd.
2A, Jalan MP17, Taman Merdeka Permai,
Batu Berendam, 75250 Melaka
Phone +60 6 3366223
Fax +60 6 3368223
sales@teamtas.com.my

Team Automation Systems (M) Sdn. Bhd.
No. 94-B, Jalan Raja Uda
12300 Butterworth, Penang
Phone +60 4 3102888
Fax +60 4 3102889
sales-pg@teamtas.com.my

Mexico

Balluff de México S.A. de C.V.
Anillo Vial II Fray Junipero Serra No. 4416
Colonia La Vista Residencial, CP 76232
Delegación Epigmenio González
Querétaro, Qro.
Phone +52 442 2124882
Fax +52 442 2140536
balluff.mexico@balluff.com

Marocco

TAK
Ilot 24B, Lot 24A-2
Tanger Free Zone
9000 Tanger
Phone +212 06 61464946
Fax +212 05 39393269
o.zerhouani@tak.ma

Netherlands

Balluff B.V.
Europalaan 6a
5232 BC 's-Hertogenbosch
Phone +31 73 6579702
Fax +31 73 6579786
info.nl@balluff.nl

New Zealand

Balluff Pty. Ltd.,
Australia

Norway

Primatec as
Lillesandsveien 44
4877 Grimstad
Phone +47 37 258700
Fax +47 37 258710
post@primatec.no

Oman

Multiline Technical Co.,
United Arab Emirates

Philippines

Technorand Sales Corporation
122 McArthur Highway
Malabon, Metro Manila
Phone +632 7245006
Fax +632 7245010
technorand@gmail.com

Poland

Balluff Sp. z o.o.
Ul. Muchoborska 16
54-424 Wrocław
Phone +48 71 3384929
Fax +48 71 3384930
balluff@balluff.pl

Portugal

LA2P Lda.
Rua Teófilo Braga, 156 A
Escrit. F – Edifício S. Domingos
Cabeco Do Mouro
2785-122 S. Domingos De Rana
Phone +351 21 4447070
Fax +351 21 4447075
la2p@la2p.pt

Qatar

Multiline Technical Co.,
United Arab Emirates

Romania

Balluff Automation SRL
Strada Industriilor Nr. 56.,
Bloc 1, Etaj 1
032901 Bucuresti Sector 3
Phone +40 374 926252
Fax +40 374 097 423
office@balluff.com.ro

Russia

Balluff OOO
M. Kaluzhskaja Street 15
Building 17, Office 500
119071 Moscow
Phone +7 495 78071-94
Fax +7 495 78071-97
balluff@balluff.ru

Saudi Arabia

Multiline Technical Co.,
United Arab Emirates

Serbia

ENEL d.o.o.
Ul. Vasilja Pavlovica 10
14000 Valjevo
Phone +381 14 291161
Fax +381 14 244641
enelvaljevo@gmail.com

Singapore

Balluff Asia Pte. Ltd.
18 Sin Ming Lane
#06-41 Midview City,
Singapore 573960
Phone +65 62524384
Fax +65 62529060
balluff@balluff.com.sg

Slovakia

Balluff Slovakia s.r.o.
Blagoevova 9
85104 Bratislava
Phone +421 2 67200062
Fax +421 2 67200060
info@balluff.sk

Slowenia

Senzorji SB d.o.o.,
Proizvodnja,
trgovina in storitve d.o.o.
Livadna ulica 1
2204 Miklavž na Dravskem polju
Phone +386 2 6290300
Fax +386 2 6290302
senzorji.sb@siol.net

South Africa

PAL Distributors CC
291A Pine Avenue, Ferndale
Randburg, Gauteng
Phone +27 11 7814381
Fax +27 11 7818166
pal@polka.co.za

South Korea

Mahani Electric Co. Ltd.
792-7 Yeoksam-Dong
Gangnam-Gu, Seoul
Post code: 135-080
Phone +82 2 21943300
Fax +82 2 21943397
yskim@hanmec.co.kr

Spain

Balluff S.L. (Sociedad Unipersonal)
Edificio Forum SCV
Planta 5º, Oficina 4º
Carretera Sant Cugat a Rubí
Km01, 40-50
08190 Sant Cugat del Vallés
Barcelona
Phone +34 93 5441313
Fax +34 93 5441312
info.es@balluff.es

Sweden

Balluff AB
Gamlestadsvägen 2, B19
41502 Göteborg
Phone +46 31 3408630
Fax +46 31 3409431
info.se@balluff.se

Switzerland

Balluff Sensortechnik AG
Riedstrasse 6
8953 Dietikon
Phone +41 43 3223240
Fax +41 43 3223241
sensortechnik@balluff.ch

Taiwan

Canaan Electric Corp.
6F-5, No. 63 Sec. 2
Chang An East Road
10455 Taipei
Phone +886 22 5082331
Fax +886 22 5084744
sales@canaan-elec.com.tw

Thailand

Compomax Co. Ltd.
16 Soi Ekamai 4,
Sukhumvit 63 Rd.
Prakanongnua, Vadhana,
Bangkok 10110
Phone +66 2 7269595
Fax +66 2 7269800
info@compomax.co.th

Turkey

Balluff Sensor Otomasyon
Sanayi Ve Ticaret Ltd. Sti.
Perpa Ticaret Is Merkezi
A Blok, Kat 1-2-3
No: 0013-0014
34381 Okmeydani/Istanbul
Phone +90 212 3200411
Fax +90 212 3200416
balluff@balluff.com.tr

Ukraine

Micronlogistik Ltd.
Ul. Promyischlennaya Street 37
65031 Odessa
Phone +380 48 7781278
Fax +380 48 2358760
info@balluff-ua.com

United Arab Emirates

Multiline Technical Co.
TCA, behind ADCB Bank
46530 Abu Dhabi
Phone +971 2 6430733
Fax +971 2 6430778
asif@multilinetech.com

United Kingdom

Balluff Ltd.
20 Cheshire Business Park
Cheshire Avenue
Lostock Gralam
Northwich, CW9 7UA
Phone +44 161 282-4700
Fax +44 161 282-4701
sales@balluff.co.uk

USA

Balluff Inc.
8125 Holton Drive
Florence, KY 41042-0937
Phone +1 859 727-2200,
Toll-free 1-800-543-8390
Fax +1 859 727-4823
balluff@balluff.com

Venezuela

Micro Tecnologia Neumatica, C.A
Av. Henry Ford C.C.
Boulevard Industrial Local AC-2
Valencia Carabobo
Phone +58 241 8641534
Fax +58 241 8641732
iraida.marrero@micro.com.ve

Vietnam

Anh Nghi Son Service Trading Co., Ltd.
D3 KDC Mieu Noi Dinh Tien Hoang St.,
W3, Binh Thanh Dist.,
Ho Chi Minh City
Phone +84 8 35170401
Fax +84 8 35170403
ans.vina@gmail.com





Services

Customized. According to your specifications. In the best quality.

Balluff stands for highly efficient sensor technology, compact connection technology and an extensive range of accessories. We offer comprehensive services to support you, with customized solutions and individualized advice. We do this completely according to your specifications.

You receive our support over the entire life cycle of our products: Including the design and planning of your projects, testing and setup on site, and training and support. For an optimal implementation and significant planning security. This enables quick startup and an early start to production. This leads to maximum productivity and more cost-effectiveness. Learn about your options.



You can find more information in our Services brochure or send us an e-mail: tsm.de@balluff.com

Application advice through our TecSupport

Individualized expertise for your technical requirements

Real-world examples:

- Selection of the correct identification procedure for an assembly line
- IO-Link concept as a cost-effective alternative to conventional wiring
- System consulting for radio frequency identification (RFID): identification of large steel pipes in adverse environments
- Recognizing multiple containers on a pallet in goods receiving

Commissioning

Order expert knowledge. And benefit from a quick start of production.

Real-world examples:

- Setting up an optical checkpoint with the vision sensor BVS
- Consulting and support during the programming of RFID systems BIS
- Installation and commissioning of a color detection application with the BFS color sensor

Fully customized products

Specific versions according to your requirements: from pre-assembly to engineering services

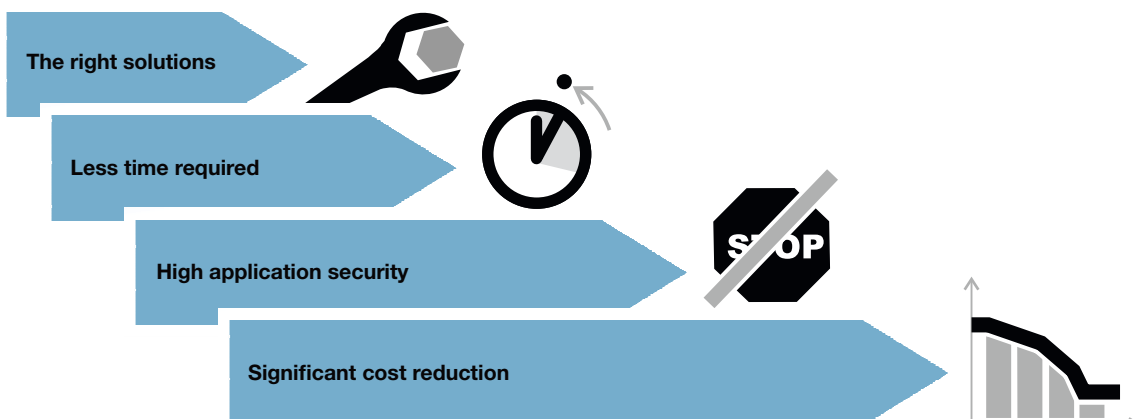
Real-world examples:

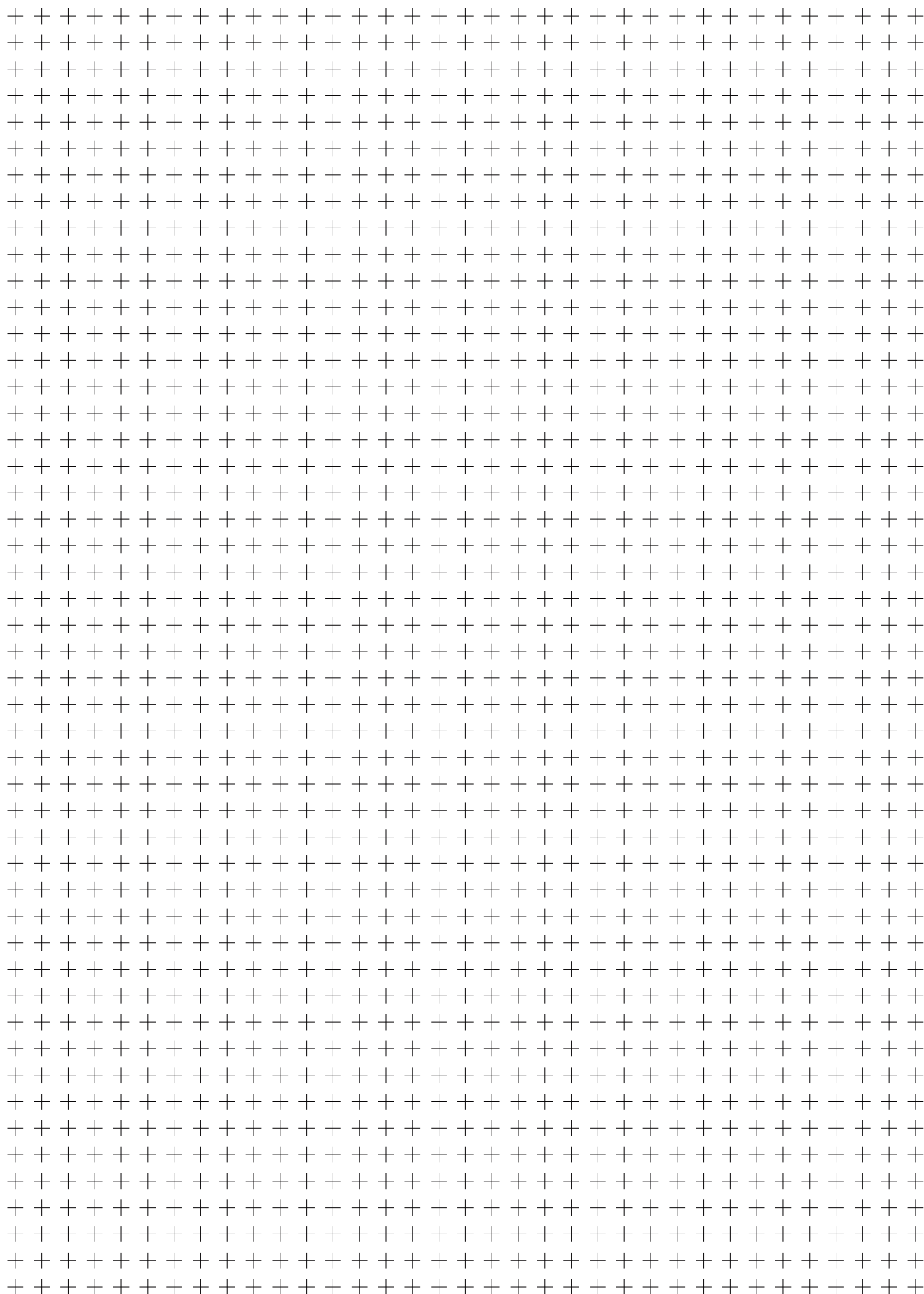
- Extending the housing of a BHS high-pressure resistant inductive sensor
- Extra threads for the housing cover of a BTL micropulse transducer
- Customer-specific holder for an RFID data carrier
- Adaptation of the characteristics for BAW analog sensors

Training

Make use of well-founded manufacturer knowledge. And benefit from application security.

- **Professional sensor use:** Select operating principles, install sensors professionally and ensure the reliable operation of your application.
- **Position and distance measurement:** This is how you make precise and wear-free measurements.
- **RFID:** The right data at the right time at the right place.
- **Vision sensor:** Using an image processing sensor, ensure manufacturing quality in three steps.
- **Vision sensor identification:** Reliably identify data matrix codes with an image-processing sensor.
- **Industrial networking with IO-Link:** Manage signals intelligently and cost-effectively.





SENSOR SOLUTIONS AND SYSTEMS

For All Areas of the Automation Industry

As a global player, we stand for comprehensive system expertise, continuous innovation and the greatest reliability. Balluff is technological variety in the highest quality and first-class individual service. Our 2600 employees are working to ensure this worldwide.



Systems and Service | Industrial Networking and Connectivity | Industrial Identification |
Object Detection | Linear Position Sensing and Measurement | Condition Monitoring and Fluid Sensors | Accessories

Phone +49 7158 173-0

www.balluff.com



Systems and Service



Industrial Networking and Connectivity



Industrial Identification



Object Detection



Linear Position Sensing and Measurement



Condition Monitoring and Fluid Sensors



Accessories

Headquarters

Balluff GmbH
Schurwaldstrasse 9
73765 Neuhausen a.d.F.
Germany
Phone +49 7158 173-0
Fax +49 7158 5010
balluff@balluff.de



www.balluff.com