

BCC connectors and cables
... for faster and simpler connectivity



more added value





With over 50 years of sensors experience, Balluff is a worldwide leading sensor specialist with our own line of connectivity products for every area of factory automation. With headquarters in Germany and 54 representatives and subsidiaries, Balluff is expertly represented on every continent in the world.

Balluff stands for comprehensive systems from a single source, continuous innovation, the most modern technology, highest quality and greatest reliability. And even more: for distinctive customer orientation, custom tailored solutions, fast worldwide service and outstanding applications assistance. In short: for reliable, expert partnership.

Whether electronic and mechanical sensors, rotary and linear transducers, identification systems or optimized connectivity solutions for high-performance automation, Balluff masters not only the entire technological variety with all the operating principles, but also offers innovative technology and the most modern electronics – tested down to the last detail in the company's own accredited testing laboratory and manufactured according to DIN ISO 9001 (EN 29001). Balluff technology can be used anywhere in the world, since it meets even regional quality standards. And Balluff technology is available internationally. So there is always a Balluff expert near you.

Balluff products increase throughput, quality and productivity day in and day out. They create the prerequisites for meeting the demands of the global market when it comes to greater performance and cost reduction. Including in the most demanding areas. No matter how stringent your requirements may be, Balluff provides solutions at the latest state of the art.

Fully exploit the potential of high quality. And profit from easy, quick setup with connectors and cables: the best possible connection for high efficiency.



more added value

- High protection rating: IP 67 guaranteed
- High shock and vibration ratings
- Easy, quick connection



Faster, simpler connection
Clearly visible markings on the grip for ease of orientation. The special BCC tool allows you to screw on the connector or set the tightening torque on the hex.

Highly visible LEDs
The LEDs are clearly visible from various directions, even under difficult lighting conditions.



Principles 4

M8 connectors	3-pin	male	8
	4-pin	male	10
	3-pin	female	9
	4-pin	female	11
Cables M8 ↔ M8	3-pin	female/male	12
	4-pin	female/male	14
Cables M8 ↔ M12	3-pin	female/male	16
	4-pin	female/male	18
M12 connectors	3-pin	male	20
	4-pin	male	26
	3-pin	female	22
	4-pin	female	28
Cables M12 ↔ M8	3-pin	female/male	32
	4-pin	female/male	36
Cables M12 ↔ M12	3-pin	female/male	38
	4-pin	female/male	40

	Materials	Use and characteristics
Metals	CuZn Brass	Standard housing material with surface protection.
	Stainless steel	Excellent corrosion resistance and strength. <u>Quality 1.4034, 1.4104</u> : Standard material. <u>Quality 1.4305, 1.4301</u> : Standard material for foods industry. <u>Quality 1.4401, 1.4404, 1.4571</u> : For foods industry with higher requirements for chemical resistance at elevated temperatures.
Plastics	PUR Polyurethane	Elastic, abrasion-resistant, impact-resistant. Good resistance to oils, greases, solvents (used for gaskets and cable jackets).
	PUR Cable material	Drag chain compatible, flame resistance per IEC 332-2, halogen-free per IEC 60754-1, cable construction per UL-AWM Style 21198.
	PVC Polyvinylchloride	Good mechanical strength and chemical resistance (cable).
	FPK (Viton)	Seal material with high thermal and chemical resistance
Other	TPE Thermoplastic elastomers	A thermoplastic mixture that combines the best properties of PVC and rubber insulation. Resistant to oils, chemicals, acids, solvents and weld splatter.
Insulation class	II 	EN 60947-5-2/IEC 60947-5-2
Enclosure rating	IP 60...67	EN 60529/IEC 60529
	IP 68 per BWN Pr. 20	Balluff Factory Standard (BWN): Continuous temperature 48 h at 60 °C, 8 temperature cycles per EN 60068-2-14/IEC 60068-2-14 between the reference temperatures according to data sheet, 1 h in water, insulation test, 24 h in water, insulation test, 8 temperature cycles per EN 60068-2-14/IEC 60068-2-14 between the reference temperatures according to data sheet, 7 days in water, insulation test.
	IP 68 per BWN Pr. 27	Balluff Factory Standard (BWN): Testing products for use in the foods industry.
	IP 69K	DIN 40050 Part 9 Protection against ingress of water at high pressure and steam cleaning.

Quality Management System
in accordance with
DIN EN ISO 9001:2000

Balluff Companies	
Balluff GmbH	Germany
Balluff Elektronika Kft	Hungary
Nihon Balluff Com. Ltd.	Japan
Balluff U.K. Ltd.	Great Britain
Balluff Automation s.r.l.	Italy
Balluff Inc.	USA
Gebhard Balluff Vetriebsgmbh	Austria
Balluff CZ	Czech Republic
Hy-Tech AG	Switzerland
Balluff Sensortechnik AG	Switzerland
Balluff Controles Elétricos Ltda.	Brazil

Environmental
Management System
per DIN EN ISO 14001:2005

Balluff Companies	
Balluff GmbH	Germany
Balluff Elektronika Kft	Hungary

Testing Laboratory

The Balluff testing laboratory works in accordance with ISO/IEC 17025 and is accredited by the DATech for Testing of Electromagnetic Compatibility (EMC).

Balluff products
meet the EU Directives

Products requiring marking are subjected to a conformity evaluation process according to the EU Directive and the product is marked with the CE Marking. Balluff products fall under the following EU Directives:

2004/108/EC	EMC Directive
2006/95/EC	Low-Voltage Directive applies to AC and AC/DC sensors
94/9/EC	ATEX Directive applies to products having the Ex marking

Approvals

... are granted by national 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 Marking by the Chinese CQC.

Balluff is a member of
ALPHA

ALPHA, an association for testing and certification of low-voltage devices, promotes the individual responsibility of the manufacturer of such devices by means of uniform test procedures according to current standards and thereby supports the attainment of high product quality. ALPHA also grants nationally recognized product certificates when certain prerequisites are met. Through ALPHA's membership in LOVAG (Low Voltage Agreement Group), its certificates are also recognized in other European countries.



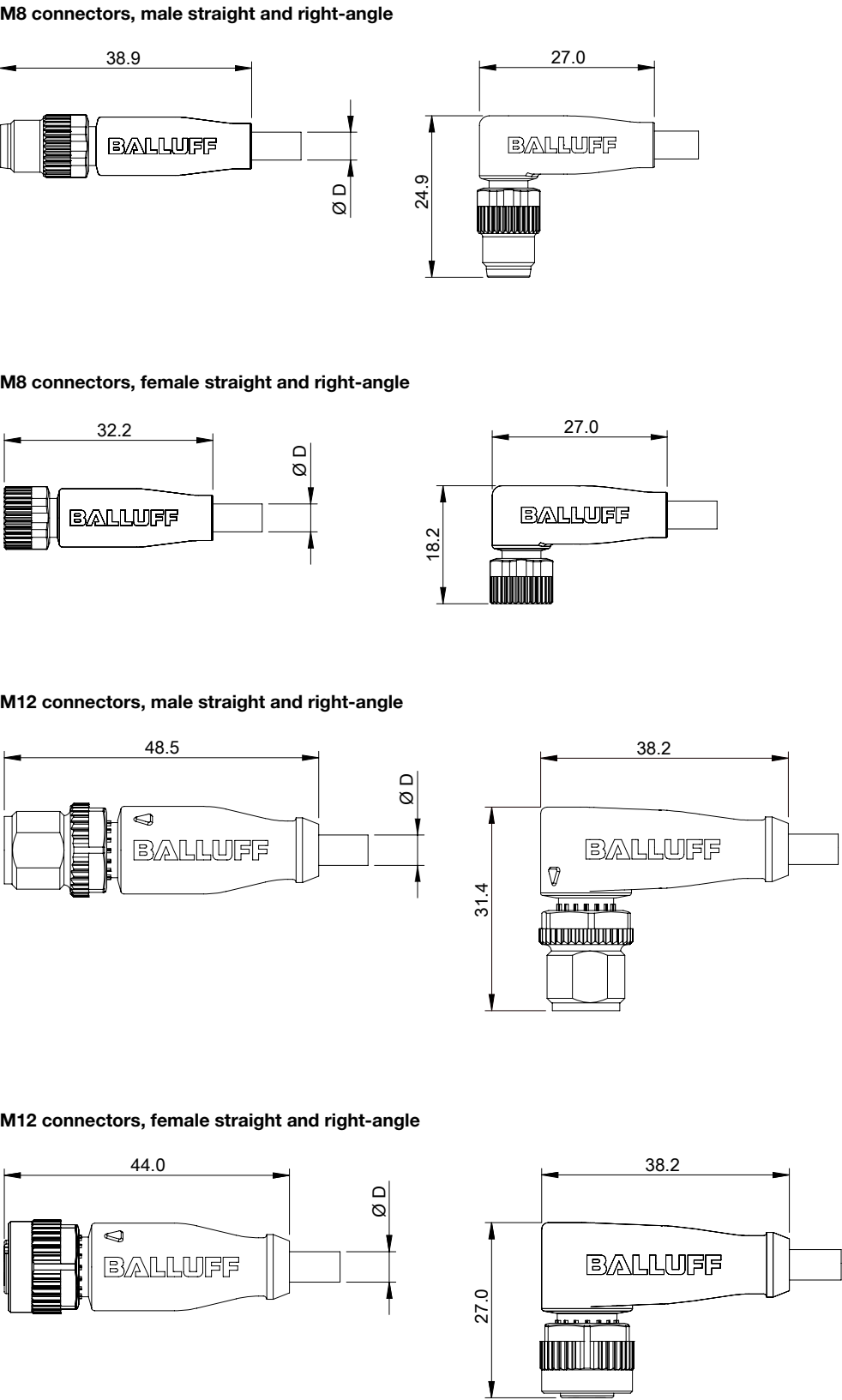
Connectors and Cables

Cable Types, Tightening Torque, Wire Colors

Cable types	PUR cable, PUR jacketed		
	No. of conductors × cross-section (mm²)	Outside diameter typ. (mm)	
	3×0.34	4.3...5.1	
	3×0.50	4.5...4.7	
	4×0.34	4.7...5.5	
	PVC cable, PVC jacketed		
	No. of conductors × cross-section (mm²)	Outside diameter typ. (mm)	
	3×0.34	4.9...5.0	
	3×0.50	4.7...5.0	
	4×0.34	4.8...5.0	
Least bending radius		tensioned	untensioned
	PUR	10×D	5×D
	PVC	15×D	8×D
	PUR shielded	10×D	5×D
	PVC shielded	15×D	8×D
Bending cycles and drag chain compatibility for PUR materials	> 10×D	> 2 mil.	
	Vertical travel permitted	at 5 m/sec² 2 m	
	Horizontal travel permitted	at 5 m/sec² 5 m	
Tightening torques	Permissible tightening torque for connectors		
	M8	0.4 Nm	
	M12	0.6 Nm	
	7/8"	1.5 Nm	
Wire colors	BN	brown	
	BK	black	
	BU	blue	
	WH	white	

Connectors and Cables

Dimensions



Connectors

M8-male straight and right-angle,
3-pin, no LED



Connector diagram and wiring

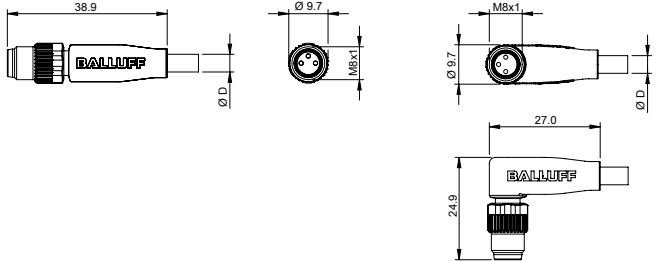


Operating voltage max. AC U _B	60 V AC
Operating voltage max. DC U _B	60 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 67
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -5 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded
Version	Normally open —/—
LED	

Operating voltage max. AC U _B	60 V AC
Operating voltage max. DC U _B	60 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 67
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -5 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded
Version	Normally open —/—
LED	

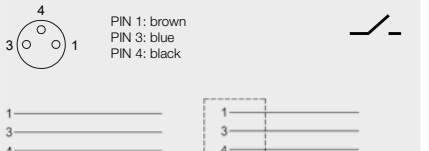
Cable material	Color	Length	Ordering code
PUR	black	2 m	BCC02M2 BCC M313-0000-20-001-PX0334-020
PUR	black	5 m	BCC02M3 BCC M313-0000-20-001-PX0334-050
PUR	black	10 m	BCC02M4 BCC M313-0000-20-001-PX0334-100
PUR shielded	black	2 m	
PUR shielded	black	5 m	
PUR shielded	black	10 m	
PVC	gray	2 m	BCC02NL BCC M313-0000-20-001-VX8334-020
PVC	gray	5 m	BCC02NM BCC M313-0000-20-001-VX8334-050
PVC	gray	10 m	BCC02NN BCC M313-0000-20-001-VX8334-100
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 on request.



Connectors

M8-female straight and right-angle,
3-pin, with and without LED

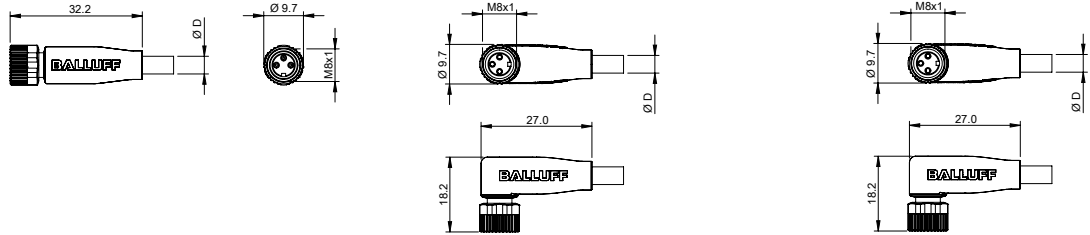


Operating voltage max. AC U _B	60 V AC
Operating voltage max. DC U _B	60 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 67
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version	Normally open —/—
LED	

Operating voltage max. AC U _B	60 V AC
Operating voltage max. DC U _B	60 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 67
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version	Normally open —/—
LED	

Operating voltage max. AC U _B	30 V DC
Operating voltage max. DC U _B	30 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 67
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -5 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded
Version	PNP-Normally open —/— green/yellow
LED	

Ordering code	Ordering code	Ordering code
Part number	Part number	Part number
BCC02M8 BCC M313-0000-10-001-PX0334-020	BCC02ML BCC M323-0000-10-001-PX0334-020	BCC02MH BCC M323-0000-10-004-PX0334-020
BCC02M9 BCC M313-0000-10-001-PX0334-050	BCC02MM BCC M323-0000-10-001-PX0334-050	BCC02MJ BCC M323-0000-10-004-PX0334-050
BCC02MA BCC M313-0000-10-001-PX0334-100	BCC02MN BCC M323-0000-10-001-PX0334-100	BCC02MK BCC M323-0000-10-004-PX0334-100
BCC02MC BCC M313-0000-10-036-PS0334-020	BCC02MP BCC M323-0000-10-036-PS0334-020	
BCC02ME BCC M313-0000-10-036-PS0334-050	BCC02MR BCC M323-0000-10-036-PS0334-050	
BCC02MF BCC M313-0000-10-036-PS0334-100	BCC02MT BCC M323-0000-10-036-PS0334-100	
BCC02NU BCC M313-0000-10-001-VX8334-020	BCC02P5 BCC M323-0000-10-001-VX8334-020	BCC02P2 BCC M323-0000-10-004-VX8334-020
BCC02NW BCC M313-0000-10-001-VX8334-050	BCC02P6 BCC M323-0000-10-001-VX8334-050	BCC02P3 BCC M323-0000-10-004-VX8334-050
BCC02NY BCC M313-0000-10-001-VX8334-100	BCC02P7 BCC M323-0000-10-001-VX8334-100	BCC02P4 BCC M323-0000-10-004-VX8334-100
BCC02NZ BCC M313-0000-10-036-VS8334-020	BCC02P8 BCC M323-0000-10-036-VS8334-020	
BCC02P0 BCC M313-0000-10-036-VS8334-050	BCC02P9 BCC M323-0000-10-036-VS8334-050	
BCC02P1 BCC M313-0000-10-036-VS8334-100	BCC02PA BCC M323-0000-10-036-VS8334-100	



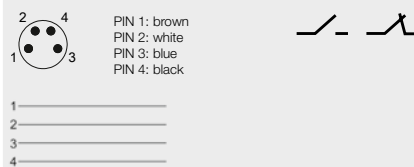
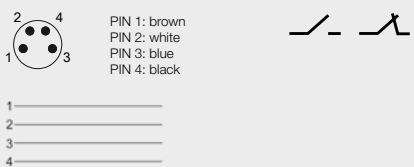
M8

Connectors

M8-male straight and right-angle, 4-pin, no LED



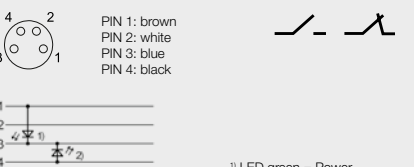
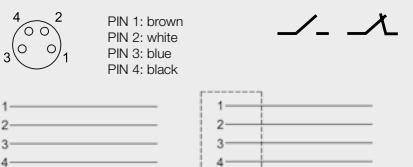
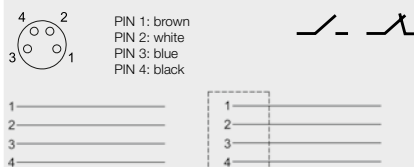
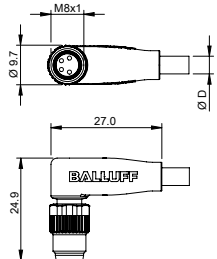
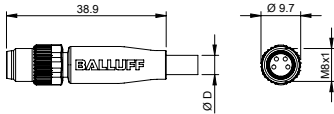
Connector diagram and wiring



Operating voltage max. AC U _B	30 V AC	30 V AC
Operating voltage max. DC U _B	30 V DC	30 V DC
Cable	Molded-on	Molded-on
No. of wires × cross-section	4×0.34mm ²	4×0.34mm ²
Enclosure rating per IEC 60529	IP 67	IP 67
Ambient temperature T _a	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C
	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C
	PVC -5 °C...+80 °C	PVC -5 °C...+80 °C
Version	Complementary (NO/NC) / - / -	Complementary (NO/NC) / - / -
LED		

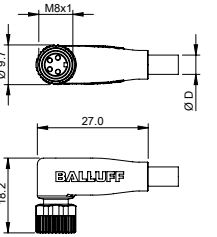
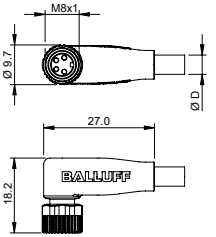
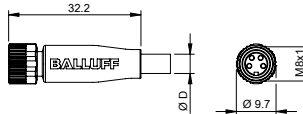
Cable material	Color	Length	Ordering code
PUR	black	2 m	BCC02MU BCC M314-0000-20-003-PX0434-020
PUR	black	5 m	BCC02MW BCC M314-0000-20-003-PX0434-050
PUR	black	10 m	BCC02MY BCC M314-0000-20-003-PX0434-100
PUR shielded	black	2 m	
PUR shielded	black	5 m	
PUR shielded	black	10 m	
PVC	gray	2 m	BCC02PC BCC M314-0000-20-003-VX8434-020
PVC	gray	5 m	BCC02PE BCC M314-0000-20-003-VX8434-050
PVC	gray	10 m	BCC02PF BCC M314-0000-20-003-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 on request.

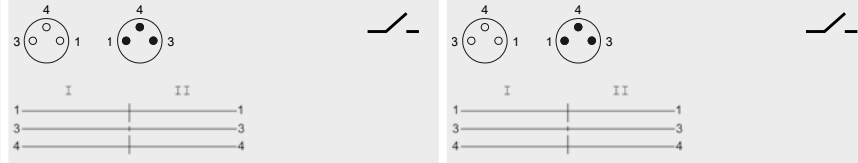


Operating voltage max. AC U _B	30 V AC	30 V AC	30 V DC
Operating voltage max. DC U _B	30 V DC	30 V DC	30 V DC
Cable	Molded-on	Molded-on	Molded-on
No. of wires × cross-section	4×0.34mm ²	4×0.34mm ²	4×0.34mm ²
Enclosure rating per IEC 60529	IP 67	IP 67	IP 67
Ambient temperature T _a	-25 °C...+80 °C	-25 °C...+80 °C	-25 °C...+80 °C
	-25 °C...+80 °C	-25 °C...+80 °C	-25 °C...+80 °C
	-5 °C...+80 °C	-5 °C...+80 °C	-5 °C...+80 °C
	-5 °C...+80 °C	-5 °C...+80 °C	-5 °C...+80 °C
Version	Complementary (NO/NC) / - / -	Complementary (NO/NC) / - / -	PNP-complementary (NO/NC) / - / -
LED			green/yellow

Cable material	Color	Length	Ordering code
PUR	black	2 m	BCC02N2 BCC M314-0000-10-003-PX0434-020
PUR	black	5 m	BCC02N3 BCC M314-0000-10-003-PX0434-050
PUR	black	10 m	BCC02N4 BCC M314-0000-10-003-PX0434-100
PUR shielded	black	2 m	BCC02N5 BCC M314-0000-10-014-PS0434-020
PUR shielded	black	5 m	BCC02N6 BCC M314-0000-10-014-PS0434-050
PUR shielded	black	10 m	BCC02N7 BCC M314-0000-10-014-PS0434-100
PVC	gray	2 m	BCC02PL BCC M314-0000-10-003-VX8434-020
PVC	gray	5 m	BCC02PM BCC M314-0000-10-003-VX8434-050
PVC	gray	10 m	BCC02PN BCC M314-0000-10-003-VX8434-100
PVC shielded	gray	2 m	BCC02PP BCC M314-0000-10-014-VS8434-020
PVC shielded	gray	5 m	BCC02PR BCC M314-0000-10-014-VS8434-050
PVC shielded	gray	10 m	BCC02PT BCC M314-0000-10-014-VS8434-100



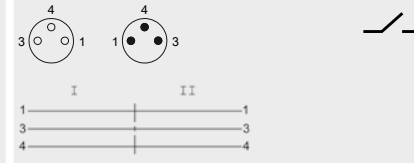
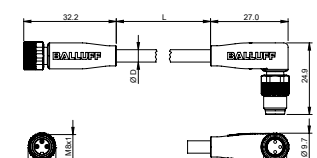
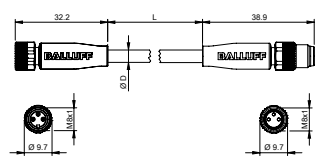
M8-female straight ↔ M8-male straight
or right-angle, 3-pin, no LED



Operating voltage max. AC U _B	60 V AC	60 V AC
Operating voltage max. DC U _B	60 V DC	60 V DC
Cable	Molded-on	Molded-on
No. of wires × cross-section	3×0.34mm ²	3×0.34mm ²
Enclosure rating per IEC 60529	IP 67	IP 67
Ambient temperature T _a	PUR	–25 °C...+80 °C
	PUR shielded	
	PVC	–5 °C...+80 °C
	PVC shielded	
Version	Normally open 	Normally open 
LED		

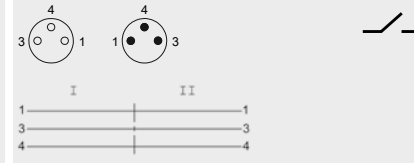
Cable material	Color	Length	Ordering code	
			Part number	
PUR	black	0.3 m	BCC02R5 BCC M313-M313-30-300-PX0334-003	BCC02RE BCC M313-M323-30-300-PX0334-003
PUR	black	0.6 m	BCC02R6 BCC M313-M313-30-300-PX0334-006	BCC02RF BCC M313-M323-30-300-PX0334-006
PUR	black	1 m	BCC02R7 BCC M313-M313-30-300-PX0334-010	BCC02RH BCC M313-M323-30-300-PX0334-010
PUR	black	1.5 m	BCC02R8 BCC M313-M313-30-300-PX0334-015	BCC02RJ BCC M313-M323-30-300-PX0334-015
PUR	black	2 m	BCC02R9 BCC M313-M313-30-300-PX0334-020	BCC02RK BCC M313-M323-30-300-PX0334-020
PUR	black	3 m	BCC02RA BCC M313-M313-30-300-PX0334-030	BCC02RL BCC M313-M323-30-300-PX0334-030
PUR	black	5 m	BCC02RC BCC M313-M313-30-300-PX0334-050	BCC02RM BCC M313-M323-30-300-PX0334-050
PVC	gray	0.3 m	BCC02UR BCC M313-M313-30-300-VX8334-003	BCC02W1 BCC M313-M323-30-300-VX8334-003
PVC	gray	0.6 m	BCC02UT BCC M313-M313-30-300-VX8334-006	BCC02W2 BCC M313-M323-30-300-VX8334-006
PVC	gray	1 m	BCC02UU BCC M313-M313-30-300-VX8334-010	BCC02W3 BCC M313-M323-30-300-VX8334-010
PVC	gray	1.5 m	BCC02UW BCC M313-M313-30-300-VX8334-015	BCC02W4 BCC M313-M323-30-300-VX8334-015
PVC	gray	2 m	BCC02UY BCC M313-M313-30-300-VX8334-020	BCC02W5 BCC M313-M323-30-300-VX8334-020
PVC	gray	3 m	BCC02UZ BCC M313-M313-30-300-VX8334-030	BCC02W6 BCC M313-M323-30-300-VX8334-030
PVC	gray	5 m	BCC02W0 BCC M313-M313-30-300-VX8334-050	BCC02W7 BCC M313-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 on request.



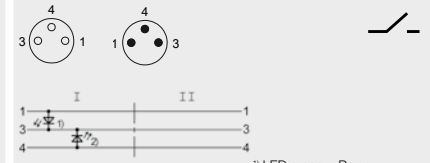
60 V AC
60 V DC
Molded-on
3×0.34mm²
IP 67
-25 °C...+80 °C
-5 °C...+80 °C
Normally open 

Ordering code
Part number
BCC02T6
BCC M323-M323-30-300-PX0334-003
BCC02T7
BCC M323-M323-30-300-PX0334-006
BCC02T8
BCC M323-M323-30-300-PX0334-010
BCC02T9
BCC M323-M323-30-300-PX0334-015
BCC02TA
BCC M323-M323-30-300-PX0334-020
BCC02TC
BCC M323-M323-30-300-PX0334-030
BCC02TE
BCC M323-M323-30-300-PX0334-050
BCC02WT
BCC M323-M323-30-300-VX8334-003
BCC02WU
BCC M323-M323-30-300-VX8334-006
BCC02WW
BCC M323-M323-30-300-VX8334-010
BCC02WY
BCC M323-M323-30-300-VX8334-015
BCC02WZ
BCC M323-M323-30-300-VX8334-020
BCC02Y0
BCC M323-M323-30-300-VX8334-030
BCC02Y1
BCC M323-M323-30-300-VX8334-050



60 V AC
60 V DC
Molded-on
3×0.34mm²
IP 67
-25 °C...+80 °C
-5 °C...+80 °C
Normally open 

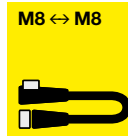
BCC02RZ
BCC M323-M313-30-300-PX0334-003
BCC02T0
BCC M323-M313-30-300-PX0334-006
BCC02T1
BCC M323-M313-30-300-PX0334-010
BCC02T2
BCC M323-M313-30-300-PX0334-015
BCC02T3
BCC M323-M313-30-300-PX0334-020
BCC02T4
BCC M323-M313-30-300-PX0334-030
BCC02T5
BCC M323-M313-30-300-PX0334-050
BCC02WJ
BCC M323-M313-30-300-VX8334-003
BCC02WK
BCC M323-M313-30-300-VX8334-006
BCC02WL
BCC M323-M313-30-300-VX8334-010
BCC02WM
BCC M323-M313-30-300-VX8334-015
BCC02WN
BCC M323-M313-30-300-VX8334-020
BCC02WP
BCC M323-M313-30-300-VX8334-030
BCC02WR
BCC M323-M313-30-300-VX8334-050



30 V DC
Molded-on
3x0.34mm²
IP 67
-25 °C...+80 °C

-5 °C...+80 °C

PNP-Normally open 
green/yellow



Connection cable

M8-female straight ↔ M8-male straight
or right-angle, 4-pin, no LED

M8 ↔ M8

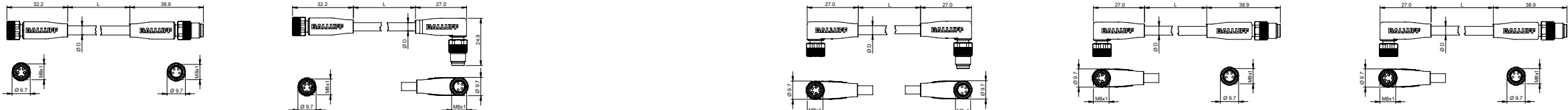
Connection cable

M8-female right-angle ↔ M8-male straight
or right-angle, 4-pin, with and without LED

Connector diagram and wiring					
Operating voltage max. AC U _B	30 V AC	30 V AC	30 V AC	30 V AC	30 V AC
Operating voltage max. DC U _B	30 V DC	30 V DC	30 V DC	30 V DC	30 V DC
Cable	Molded-on	Molded-on	Molded-on	Molded-on	Molded-on
No. of wires × cross-section	4×0.34mm ²	4×0.34mm ²	4×0.34mm ²	4×0.34mm ²	4×0.34mm ²
Enclosure rating per IEC 60529	IP 67	IP 67	IP 67	IP 67	IP 67
Ambient temperature T _a	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C
	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C	PVC shielded -5 °C...+80 °C	PVC shielded -5 °C...+80 °C	PVC shielded -5 °C...+80 °C	PVC shielded -5 °C...+80 °C
Version	Complementary (NO/NC) /	Complementary (NO/NC) /	Complementary (NO/NC) /	Complementary (NO/NC) /	PNP-complementary (NO/NC) /
LED					green/yellow

Cable material	Color	Length	Ordering code	Ordering code	Ordering code	Ordering code	Ordering code
			Part number	Part number	Part number	Part number	Part number
PUR	black	0.3 m	BCC02TF	BCC02TP	BCC02UH	BCC02U7	BCC02U0
			BCC M314-M314-30-304-PX0434-003	BCC M314-M324-30-304-PX0434-003	BCC M324-M324-30-304-PX0434-003	BCC M324-M314-30-304-PX0434-003	BCC M324-M314-30-606-PX0434-003
PUR	black	0.6 m	BCC02TH	BCC02TR	BCC02UJ	BCC02U8	BCC02U1
			BCC M314-M314-30-304-PX0434-006	BCC M314-M324-30-304-PX0434-006	BCC M324-M324-30-304-PX0434-006	BCC M324-M314-30-304-PX0434-006	BCC M324-M314-30-606-PX0434-006
PUR	black	1 m	BCC02TJ	BCC02TT	BCC02UK	BCC02U9	BCC02U2
			BCC M314-M314-30-304-PX0434-010	BCC M314-M324-30-304-PX0434-010	BCC M324-M324-30-304-PX0434-010	BCC M324-M314-30-304-PX0434-010	BCC M324-M314-30-606-PX0434-010
PUR	black	1.5 m	BCC02TK	BCC02TU	BCC02UL	BCC02UA	BCC02U3
			BCC M314-M314-30-304-PX0434-015	BCC M314-M324-30-304-PX0434-015	BCC M324-M324-30-304-PX0434-015	BCC M324-M314-30-304-PX0434-015	BCC M324-M314-30-606-PX0434-015
PUR	black	2 m	BCC02TL	BCC02TW	BCC02UM	BCC02UC	BCC02U4
			BCC M314-M314-30-304-PX0434-020	BCC M314-M324-30-304-PX0434-020	BCC M324-M324-30-304-PX0434-020	BCC M324-M314-30-304-PX0434-020	BCC M324-M314-30-606-PX0434-020
PUR	black	3 m	BCC02TM	BCC02TY	BCC02UN	BCC02UE	BCC02U5
			BCC M314-M314-30-304-PX0434-030	BCC M314-M324-30-304-PX0434-030	BCC M324-M324-30-304-PX0434-030	BCC M324-M314-30-304-PX0434-030	BCC M324-M314-30-606-PX0434-030
PUR	black	5 m	BCC02TN	BCC02TZ	BCC02UP	BCC02UF	BCC02U6
			BCC M314-M314-30-304-PX0434-050	BCC M314-M324-30-304-PX0434-050	BCC M324-M324-30-304-PX0434-050	BCC M324-M314-30-304-PX0434-050	BCC M324-M314-30-606-PX0434-050
PVC	gray	0.3 m	BCC02Y2	BCC02Y9	BCC02Z3	BCC02YU	BCC02YK
			BCC M314-M314-30-304-VX8434-003	BCC M314-M324-30-304-VX8434-003	BCC M324-M324-30-304-VX8434-003	BCC M324-M314-30-304-VX8434-003	BCC M324-M314-30-606-VX8434-003
PVC	gray	0.6 m	BCC02Y3	BCC02YA	BCC02Z4	BCC02YW	BCC02YL
			BCC M314-M314-30-304-VX8434-006	BCC M314-M324-30-304-VX8434-006	BCC M324-M324-30-304-VX8434-006	BCC M324-M314-30-304-VX8434-006	BCC M324-M314-30-606-VX8434-006
PVC	gray	1 m	BCC02Y4	BCC02YC	BCC02Z5	BCC02YY	BCC02YM
			BCC M314-M314-30-304-VX8434-010	BCC M314-M324-30-304-VX8434-010	BCC M324-M324-30-304-VX8434-010	BCC M324-M314-30-304-VX8434-010	BCC M324-M314-30-606-VX8434-010
PVC	gray	1.5 m	BCC02Y5	BCC02YE	BCC02Z6	BCC02YZ	BCC02YN
			BCC M314-M314-30-304-VX8434-015	BCC M314-M324-30-304-VX8434-015	BCC M324-M324-30-304-VX8434-015	BCC M324-M314-30-304-VX8434-015	BCC M324-M314-30-606-VX8434-015
PVC	gray	2 m	BCC02Y6	BCC02YF	BCC02Z7	BCC02Z0	BCC02YP
			BCC M314-M314-30-304-VX8434-020	BCC M314-M324-30-304-VX8434-020	BCC M324-M324-30-304-VX8434-020	BCC M324-M314-30-304-VX8434-020	BCC M324-M314-30-606-VX8434-020
PVC	gray	3 m	BCC02Y7	BCC02YH	BCC02Z8	BCC02Z1	BCC02YR
			BCC M314-M314-30-304-VX8434-030	BCC M314-M324-30-304-VX8434-030	BCC M324-M324-30-304-VX8434-030	BCC M324-M314-30-304-VX8434-030	BCC M324-M314-30-606-VX8434-030
PVC	gray	5 m	BCC02Y8	BCC02YJ	BCC02Z9	BCC02Z2	BCC02YT
			BCC M314-M314-30-304-VX8434-050	BCC M314-M324-30-304-VX8434-050	BCC M324-M324-30-304-VX8434-050	BCC M324-M314-30-304-VX8434-050	BCC M324-M314-30-606-VX8434-050

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



Connection cable

M8-female straight ↔ M12-male straight
or right-angle, 3-pin, no LED

M8 ↔ M12

Connection cable

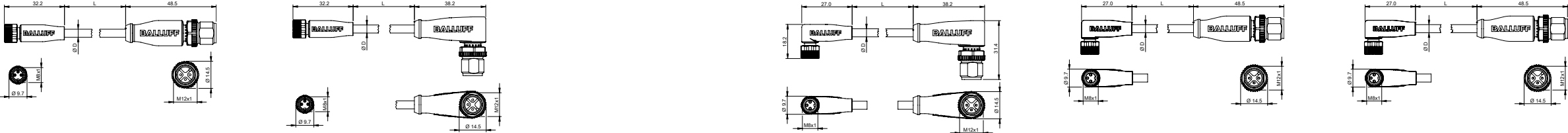
M8-female right-angle ↔ M12-male straight
or right-angle, 3-pin, with and without LED

Connector diagram and wiring

Operating voltage max. AC U _B	60 V AC	60 V AC	60 V AC	60 V AC	60 V AC
Operating voltage max. DC U _B	60 V DC	60 V DC	60 V DC	60 V DC	30 V DC
Cable	Molded-on	Molded-on	Molded-on	Molded-on	Molded-on
No. of wires × cross-section	3×0.34mm ²	3×0.34mm ²	3×0.34mm ²	3×0.34mm ²	3×0.34mm ²
Enclosure rating per IEC 60529	IP 67	IP 67	IP 67	IP 67	IP 67
Ambient temperature T _a	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C
	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C	PVC shielded -5 °C...+80 °C	PVC shielded -5 °C...+80 °C	PVC shielded -5 °C...+80 °C	PVC shielded -5 °C...+80 °C
Version	Normally open	Normally open	Normally open	Normally open	PNP-Normally open
LED	—	—	—	—	green/yellow

Cable material	Color	Length	Ordering code	Ordering code	Ordering code	Ordering code	Ordering code
PUR	black	0.3 m	BCC03F4	BCC03FC	BCC03FY	BCC03FM	BCC03H5
PUR	black	0.6 m	BCC03F5	BCC03FE	BCC03FZ	BCC03FN	BCC03H6
PUR	black	1 m	BCC03F6	BCC03FF	BCC03H0	BCC03FP	BCC03H7
PUR	black	1.5 m	BCC03F7	BCC03FH	BCC03H1	BCC03FR	BCC03H8
PUR	black	2 m	BCC03F8	BCC03FJ	BCC03H2	BCC03FT	BCC03H9
PUR	black	3 m	BCC03F9	BCC03FK	BCC03H3	BCC03FU	BCC03HA
PUR	black	5 m	BCC03FA	BCC03FL	BCC03H4	BCC03FW	BCC03HC
PVC	gray	0.3 m	BCC03HE	BCC03HN	BCC03J6	BCC03HZ	BCC03JF
PVC	gray	0.6 m	BCC03HF	BCC03HP	BCC03J7	BCC03J0	BCC03JH
PVC	gray	1 m	BCC03HH	BCC03HR	BCC03J8	BCC03J1	BCC03JJ
PVC	gray	1.5 m	BCC03HJ	BCC03HT	BCC03J9	BCC03J2	BCC03JK
PVC	gray	2 m	BCC03HK	BCC03HU	BCC03JA	BCC03J3	BCC03JL
PVC	gray	3 m	BCC03HL	BCC03HW	BCC03JC	BCC03J4	BCC03JM
PVC	gray	5 m	BCC03HM	BCC03HY	BCC03JE	BCC03J5	BCC03JN

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



Please visit www.balluff.com for more details

M8 ↔ M12



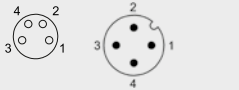
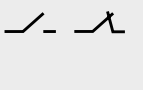
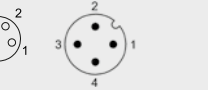
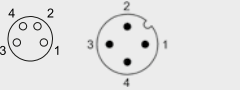
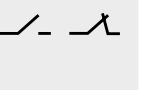
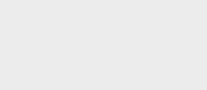
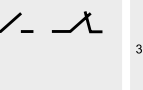
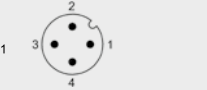
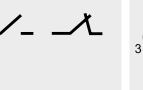
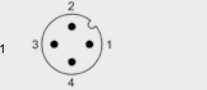
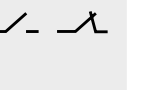
Connection cable

M8-female straight ↔ M12-male straight
or right-angle, 4-pin, no LED

M8 ↔ M12

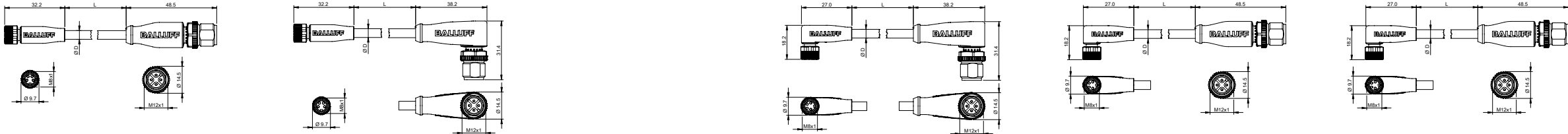
Connection cable

M8-female right-angle ↔ M12-male straight
or right-angle, 4-pin, with and without LED

Connector diagram and wiring		  	  	  	  	  
Operating voltage max. AC U _B	30 V AC	30 V AC	30 V AC	30 V AC	30 V AC	30 V AC
Operating voltage max. DC U _B	30 V DC	30 V DC	30 V DC	30 V DC	30 V DC	30 V DC
Cable	Molded-on	Molded-on	Molded-on	Molded-on	Molded-on	Molded-on
No. of wires × cross-section	4×0.34mm ²	4×0.34mm ²	4×0.34mm ²	4×0.34mm ²	4×0.34mm ²	4×0.34mm ²
Enclosure rating per IEC 60529	IP 67	IP 67	IP 67	IP 67	IP 67	IP 67
Ambient temperature T _a	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C
	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C
	PVC -5 °C...+80 °C	PVC -5 °C...+80 °C	PVC -5 °C...+80 °C	PVC -5 °C...+80 °C	PVC -5 °C...+80 °C	PVC -5 °C...+80 °C
Version	Complementary (NO/NC) /- / -/	Complementary (NO/NC) /- / -/	Complementary (NO/NC) /- / -/	Complementary (NO/NC) /- / -/	Complementary (NO/NC) /- / -/	PNP-complementary (NO/NC) /- / -/
LED						green/yellow

Cable material	Color	Length	Ordering code	Ordering code	Ordering code	Ordering code	Ordering code
			Part number	Part number	Part number	Part number	Part number
PUR	black	0.3 m	BCC03JP	BCC03K0	BCC03KH	BCC03K7	BCC03KR
			BCC M314-M414-3E-304-PX0434-003	BCC M314-M424-3E-304-PX0434-003	BCC M324-M424-3E-304-PX0434-003	BCC M324-M414-3E-304-PX0434-003	BCC M324-M414-3E-606-PX0434-003
PUR	black	0.6 m	BCC03JR	BCC03K1	BCC03KJ	BCC03K8	BCC03KT
			BCC M314-M414-3E-304-PX0434-006	BCC M314-M424-3E-304-PX0434-006	BCC M324-M424-3E-304-PX0434-006	BCC M324-M414-3E-304-PX0434-006	BCC M324-M414-3E-606-PX0434-006
PUR	black	1 m	BCC03JT	BCC03K2	BCC03KK	BCC03K9	BCC03KU
			BCC M314-M414-3E-304-PX0434-010	BCC M314-M424-3E-304-PX0434-010	BCC M324-M424-3E-304-PX0434-010	BCC M324-M414-3E-304-PX0434-010	BCC M324-M414-3E-606-PX0434-010
PUR	black	1.5 m	BCC03JU	BCC03K3	BCC03KL	BCC03KA	BCC03KW
			BCC M314-M414-3E-304-PX0434-015	BCC M314-M424-3E-304-PX0434-015	BCC M324-M424-3E-304-PX0434-015	BCC M324-M414-3E-304-PX0434-015	BCC M324-M414-3E-606-PX0434-015
PUR	black	2 m	BCC03JW	BCC03K4	BCC03KM	BCC03KC	BCC03KY
			BCC M314-M414-3E-304-PX0434-020	BCC M314-M424-3E-304-PX0434-020	BCC M324-M424-3E-304-PX0434-020	BCC M324-M414-3E-304-PX0434-020	BCC M324-M414-3E-606-PX0434-020
PUR	black	3 m	BCC03JY	BCC03K5	BCC03KN	BCC03KE	BCC03KZ
			BCC M314-M414-3E-304-PX0434-030	BCC M314-M424-3E-304-PX0434-030	BCC M324-M424-3E-304-PX0434-030	BCC M324-M414-3E-304-PX0434-030	BCC M324-M414-3E-606-PX0434-030
PUR	black	5 m	BCC03JZ	BCC03K6	BCC03KP	BCC03KF	BCC03L0
			BCC M314-M414-3E-304-PX0434-050	BCC M314-M424-3E-304-PX0434-050	BCC M324-M424-3E-304-PX0434-050	BCC M324-M414-3E-304-PX0434-050	BCC M324-M414-3E-606-PX0434-050
PVC	gray	0.3 m	BCC03L1	BCC03L8	BCC03LT	BCC03LJ	BCC03M2
			BCC M314-M414-3E-304-VX8434-003	BCC M314-M424-3E-304-VX8434-003	BCC M324-M424-3E-304-VX8434-003	BCC M324-M414-3E-304-VX8434-003	BCC M324-M414-3E-606-VX8434-003
PVC	gray	0.6 m	BCC03L2	BCC03L9	BCC03LU	BCC03LK	BCC03M3
			BCC M314-M414-3E-304-VX8434-006	BCC M314-M424-3E-304-VX8434-006	BCC M324-M424-3E-304-VX8434-006	BCC M324-M414-3E-304-VX8434-006	BCC M324-M414-3E-606-VX8434-006
PVC	gray	1 m	BCC03L3	BCC03LA	BCC03LW	BCC03LL	BCC03M4
			BCC M314-M414-3E-304-VX8434-010	BCC M314-M424-3E-304-VX8434-010	BCC M324-M424-3E-304-VX8434-010	BCC M324-M414-3E-304-VX8434-010	BCC M324-M414-3E-606-VX8434-010
PVC	gray	1.5 m	BCC03L4	BCC03LC	BCC03LY	BCC03LM	BCC03M5
			BCC M314-M414-3E-304-VX8434-015	BCC M314-M424-3E-304-VX8434-015	BCC M324-M424-3E-304-VX8434-015	BCC M324-M414-3E-304-VX8434-015	BCC M324-M414-3E-606-VX8434-015
PVC	gray	2 m	BCC03L5	BCC03LE	BCC03LZ	BCC03LN	BCC03M6
			BCC M314-M414-3E-304-VX8434-020	BCC M314-M424-3E-304-VX8434-020	BCC M324-M424-3E-304-VX8434-020	BCC M324-M414-3E-304-VX8434-020	BCC M324-M414-3E-606-VX8434-020
PVC	gray	3 m	BCC03L6	BCC03LF	BCC03M0	BCC03LP	BCC03M7
			BCC M314-M414-3E-304-VX8434-030	BCC M314-M424-3E-304-VX8434-030	BCC M324-M424-3E-304-VX8434-030	BCC M324-M414-3E-304-VX8434-030	BCC M324-M414-3E-606-VX8434-030
PVC	gray	5 m	BCC03L7	BCC03LH	BCC03M1	BCC03LR	BCC03M8
			BCC M314-M414-3E-304-VX8434-050	BCC M314-M424-3E-304-VX8434-050	BCC M324-M424-3E-304-VX8434-050	BCC M324-M414-3E-304-VX8434-050	BCC M324-M414-3E-606-VX8434-050

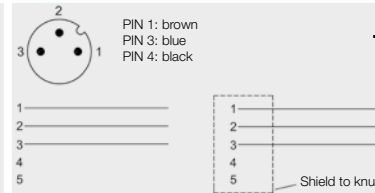
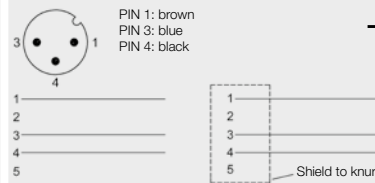
Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions on request.



Please visit www.balluff.com for more details

M12-male straight,
3-pin, no LED

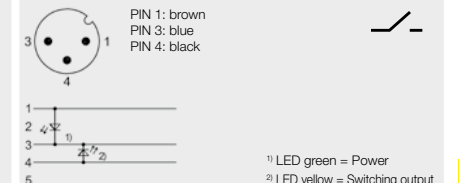
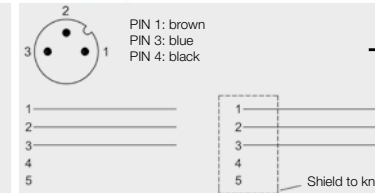
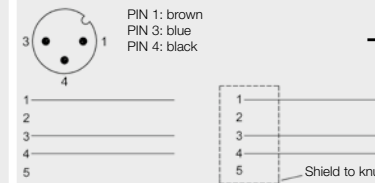
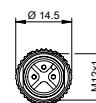
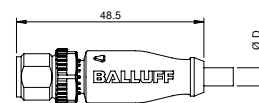
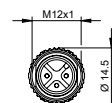
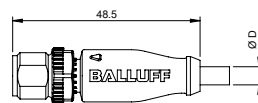
M12



Operating voltage max. AC U _B		250 V AC	250 V AC
Operating voltage max. DC U _B		250 V DC	250 V DC
Cable		Molded-on	Molded-on
No. of wires × cross-section		3×0.34mm ²	3×0.34mm ²
Enclosure rating per IEC 60529		IP 68	IP 68
Ambient temperature T _a	PUR	−25 °C...+80 °C	−25 °C...+80 °C
	PUR shielded	−25 °C...+80 °C	−25 °C...+80 °C
	PVC	−5 °C...+80 °C	−5 °C...+80 °C
	PVC shielded	−5 °C...+80 °C	−5 °C...+80 °C
Version		Normally open 	Normally closed 
LED			

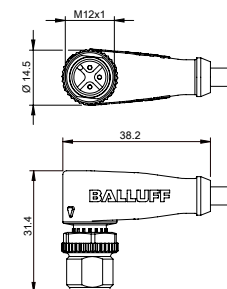
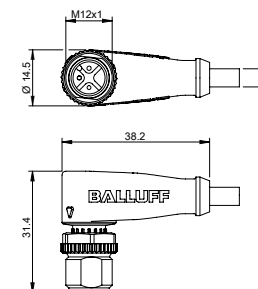
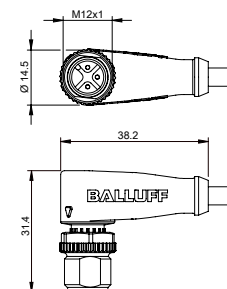
Cable material	Color	Length	Ordering code	
			Part number	
PUR	black	2 m	BCC022A BCC M413-0000-2A-001-PX0334-020	BCC022F BCC M413-0000-2A-002-PX0334-020
PUR	black	5 m	BCC022C BCC M413-0000-2A-001-PX0334-050	BCC022H BCC M413-0000-2A-002-PX0334-050
PUR	black	10 m	BCC022E BCC M413-0000-2A-001-PX0334-100	BCC022J BCC M413-0000-2A-002-PX0334-100
PUR shielded	black	2 m	BCC022K BCC M413-0000-2A-036-PS0334-020	BCC022N BCC M413-0000-2A-037-PS0334-020
PUR shielded	black	5 m	BCC022L BCC M413-0000-2A-036-PS0334-050	BCC022P BCC M413-0000-2A-037-PS0334-050
PUR shielded	black	10 m	BCC022M BCC M413-0000-2A-036-PS0334-100	BCC022R BCC M413-0000-2A-037-PS0334-100
PVC	gray	2 m	BCC0334 BCC M413-0000-2A-001-VX8334-020	BCC0337 BCC M413-0000-2A-002-VX8334-020
PVC	gray	5 m	BCC0335 BCC M413-0000-2A-001-VX8334-050	BCC0338 BCC M413-0000-2A-002-VX8334-050
PVC	gray	10 m	BCC0336 BCC M413-0000-2A-001-VX8334-100	BCC0339 BCC M413-0000-2A-002-VX8334-100
PVC shielded	gray	2 m	BCC033A BCC M413-0000-2A-036-VS8334-020	BCC033F BCC M413-0000-2A-037-VS8334-020
PVC shielded	gray	5 m	BCC033C BCC M413-0000-2A-036-VS8334-050	BCC033H BCC M413-0000-2A-037-VS8334-050
PVC shielded	gray	10 m	BCC033E BCC M413-0000-2A-036-VS8334-100	BCC033J BCC M413-0000-2A-037-VS8334-100

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



Operating voltage max. AC U _B	250 V AC	250 V AC		250 V AC	250 V AC	
Operating voltage max. DC U _B	250 V DC	250 V DC		250 V DC	250 V DC	30 V DC
Cable	Molded-on	Molded-on		Molded-on	Molded-on	Molded-on
No. of wires × cross-section	3×0.34mm ²	3×0.34mm ²		3×0.34mm ²	3×0.34mm ²	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68	IP 68		IP 68	IP 68	IP 68
Ambient temperature T _a	PUR	–25 °C...+80 °C		–25 °C...+80 °C	–25 °C...+80 °C	–25 °C...+80 °C
	PUR shielded	–25 °C...+80 °C		–25 °C...+80 °C	–25 °C...+80 °C	
	PVC	–5 °C...+80 °C		–5 °C...+80 °C	–5 °C...+80 °C	–5 °C...+80 °C
	PVC shielded	–5 °C...+80 °C		–5 °C...+80 °C	–5 °C...+80 °C	
Version	Normally open 	Normally closed 		Normally open 	Normally closed 	PNP-Normally open 
LED						green/yellow

Cable material	Color	Length	Ordering code			Ordering code		
			Part number			Part number		
PUR	black	2 m	BCC02ZA BCC M413-0000-2A-001-PX0334-020	BCC02ZF BCC M413-0000-2A-002-PX0334-020		BCC02ZY BCC M423-0000-2A-001-PX0334-020	BCC0301 BCC M423-0000-2A-002-PX0334-020	BCC02ZT BCC M423-0000-2A-004-PX0334-020
PUR	black	5 m	BCC02ZC BCC M413-0000-2A-001-PX0334-050	BCC02ZH BCC M413-0000-2A-002-PX0334-050		BCC02ZZ BCC M423-0000-2A-001-PX0334-050	BCC0302 BCC M423-0000-2A-002-PX0334-050	BCC02ZU BCC M423-0000-2A-004-PX0334-050
PUR	black	10 m	BCC02ZE BCC M413-0000-2A-001-PX0334-100	BCC02ZJ BCC M413-0000-2A-002-PX0334-100		BCC0300 BCC M423-0000-2A-001-PX0334-100	BCC0303 BCC M423-0000-2A-002-PX0334-100	BCC02ZW BCC M423-0000-2A-004-PX0334-100
PUR shielded	black	2 m	BCC02ZK BCC M413-0000-2A-036-PS0334-020	BCC02ZN BCC M413-0000-2A-037-PS0334-020		BCC0304 BCC M423-0000-2A-036-PS0334-020	BCC0307 BCC M423-0000-2A-037-PS0334-020	
PUR shielded	black	5 m	BCC02ZL BCC M413-0000-2A-036-PS0334-050	BCC02ZP BCC M413-0000-2A-037-PS0334-050		BCC0305 BCC M423-0000-2A-036-PS0334-050	BCC0308 BCC M423-0000-2A-037-PS0334-050	
PUR shielded	black	10 m	BCC02ZM BCC M413-0000-2A-036-PS0334-100	BCC02ZR BCC M413-0000-2A-037-PS0334-100		BCC0306 BCC M423-0000-2A-036-PS0334-100	BCC0309 BCC M423-0000-2A-037-PS0334-100	
PVC	gray	2 m	BCC0334 BCC M413-0000-2A-001-VX8334-020	BCC0337 BCC M413-0000-2A-002-VX8334-020		BCC033N BCC M423-0000-2A-001-VX8334-020	BCC033T BCC M423-0000-2A-002-VX8334-020	BCC033K BCC M423-0000-2A-004-VX8334-020
PVC	gray	5 m	BCC0335 BCC M413-0000-2A-001-VX8334-050	BCC0338 BCC M413-0000-2A-002-VX8334-050		BCC033P BCC M423-0000-2A-001-VX8334-050	BCC033U BCC M423-0000-2A-002-VX8334-050	BCC033L BCC M423-0000-2A-004-VX8334-050
PVC	gray	10 m	BCC0336 BCC M413-0000-2A-001-VX8334-100	BCC0339 BCC M413-0000-2A-002-VX8334-100		BCC033R BCC M423-0000-2A-001-VX8334-100	BCC033W BCC M423-0000-2A-002-VX8334-100	BCC033M BCC M423-0000-2A-004-VX8334-100
PVC shielded	gray	2 m	BCC033A BCC M413-0000-2A-036-VS8334-020	BCC033F BCC M413-0000-2A-037-VS8334-020		BCC033Y BCC M423-0000-2A-036-VS8334-020	BCC0341 BCC M423-0000-2A-037-VS8334-020	
PVC shielded	gray	5 m	BCC033C BCC M413-0000-2A-036-VS8334-050	BCC033H BCC M413-0000-2A-037-VS8334-050		BCC033Z BCC M423-0000-2A-036-VS8334-050	BCC0342 BCC M423-0000-2A-037-VS8334-050	
PVC shielded	gray	10 m	BCC033E BCC M413-0000-2A-036-VS8334-100	BCC033J BCC M413-0000-2A-037-VS8334-100		BCC0340 BCC M423-0000-2A-036-VS8334-100	BCC0343 BCC M423-0000-2A-037-VS8334-100	

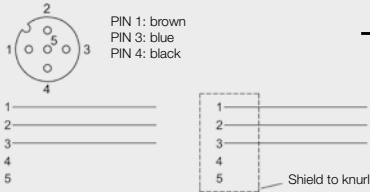
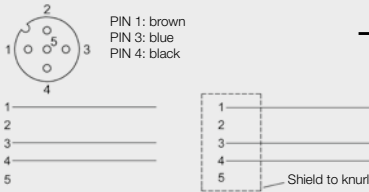


Connectors

M12-female straight, 3-pin, no LED



Connector diagram and wiring



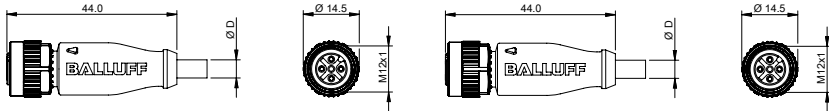
Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version	Normally open
LED	

Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version	Normally open
LED	

Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version	Normally closed
LED	

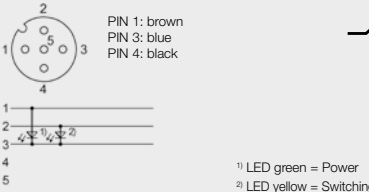
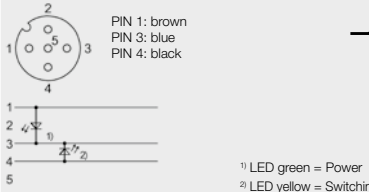
Cable material	Color	Length	Ordering code
PUR	black	2 m	BCC030K
PUR	black	5 m	BCC030L
PUR	black	10 m	BCC030M
PUR shielded	black	2 m	BCC030T
PUR shielded	black	5 m	BCC030U
PUR shielded	black	10 m	BCC030W
PVC	gray	2 m	BCC034A
PVC	gray	5 m	BCC034C
PVC	gray	10 m	BCC034E
PVC shielded	gray	2 m	BCC034K
PVC shielded	gray	5 m	BCC034L
PVC shielded	gray	10 m	BCC034M

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



Connectors

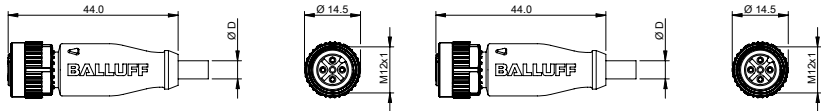
M12-female straight, 3-pin, with LED



Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version	PNP-Normally open
LED	green/yellow

Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version	PNP Normally closed
LED	green/yellow

Ordering code
BCC030A
BCC030C
BCC030E
BCC0344
BCC0345
BCC0346

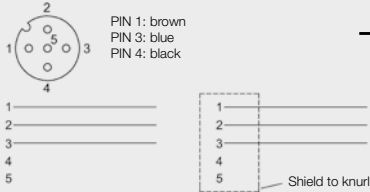
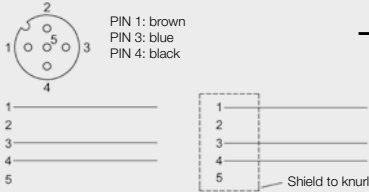


Connectors

M12-female right-angle,
3-pin, no LED



Connector diagram and wiring



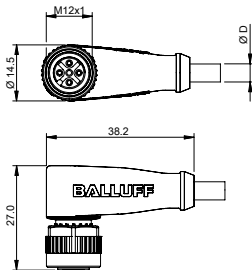
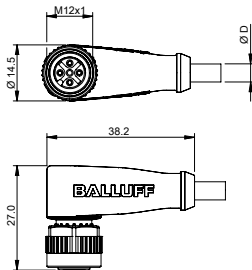
Operating voltage max. AC U_B
Operating voltage max. DC U_B
Cable
No. of wires $\times$ cross-section
Enclosure rating per IEC 60529
Ambient temperature T_a
PUR
PUR shielded
PVC
PVC shielded
Version
LED

250 V AC
250 V DC
Molded-on
3 $\times$ 0.34mm²
IP 68
-25 °C...+80 °C
-25 °C...+80 °C
-5 °C...+80 °C
-5 °C...+80 °C
Normally open

250 V AC
250 V DC
Molded-on
3 $\times$ 0.34mm²
IP 68
-25 °C...+80 °C
-25 °C...+80 °C
-5 °C...+80 °C
-5 °C...+80 °C
Normally closed

Cable material	Color	Length	Ordering code
PUR	black	2 m	BCC0317 BCC M425-0000-1A-001-PX0334-020
PUR	black	5 m	BCC0318 BCC M425-0000-1A-001-PX0334-050
PUR	black	10 m	BCC0319 BCC M425-0000-1A-001-PX0334-100
PUR shielded	black	2 m	BCC031F BCC M425-0000-1A-036-PS0334-020
PUR shielded	black	5 m	BCC031H BCC M425-0000-1A-036-PS0334-050
PUR shielded	black	10 m	BCC031J BCC M425-0000-1A-036-PS0334-100
PVC	gray	2 m	BCC0351 BCC M425-0000-1A-001-VX8334-020
PVC	gray	5 m	BCC0352 BCC M425-0000-1A-001-VX8334-050
PVC	gray	10 m	BCC0353 BCC M425-0000-1A-001-VX8334-100
PVC shielded	gray	2 m	BCC0357 BCC M425-0000-1A-036-VS8334-020
PVC shielded	gray	5 m	BCC0358 BCC M425-0000-1A-036-VS8334-050
PVC shielded	gray	10 m	BCC0359 BCC M425-0000-1A-036-VS8334-100

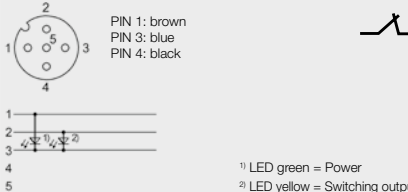
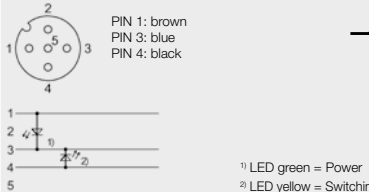
Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions on request.



Please visit www.balluff.com for more details

Connectors

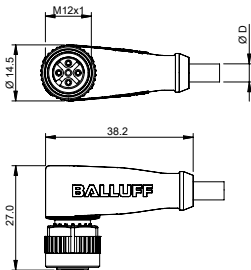
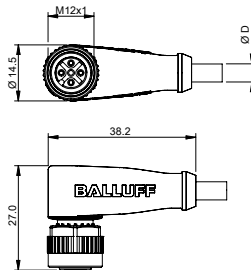
M12-female right-angle,
3-pin, with LED



30 V DC
Molded-on
3 $\times$ 0.34mm²
IP 68
-25 °C...+80 °C
-5 °C...+80 °C
PNP-Normally open
green/yellow

30 V DC
Molded-on
3 $\times$ 0.34mm²
IP 68
-25 °C...+80 °C
-5 °C...+80 °C
PNP Normally closed
green/yellow

Ordering code	Ordering code
BCC0311 BCC M425-0000-1A-004-PX0334-020	BCC0314 BCC M425-0000-1A-005-PX0334-020
BCC0312 BCC M425-0000-1A-004-PX0334-050	BCC0315 BCC M425-0000-1A-005-PX0334-050
BCC0313 BCC M425-0000-1A-004-PX0334-100	BCC0316 BCC M425-0000-1A-005-PX0334-100
BCC034T BCC M425-0000-1A-004-VX8334-020	BCC034Y BCC M425-0000-1A-005-VX8334-020
BCC034U BCC M425-0000-1A-004-VX8334-050	BCC034Z BCC M425-0000-1A-005-VX8334-050
BCC034W BCC M425-0000-1A-004-VX8334-100	BCC0350 BCC M425-0000-1A-005-VX8334-100



www.balluff.com

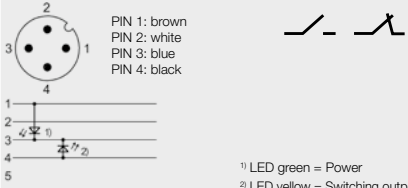
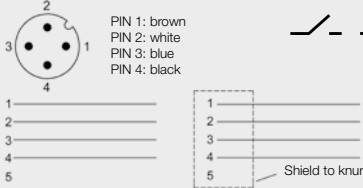
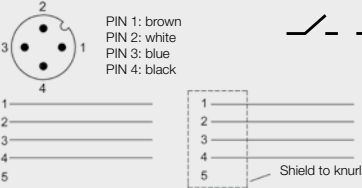


Connectors

M12-male straight or right-angle,
4-pin, no LED



Connector diagram and wiring



Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version	Complementary (NO/NC) /- / -/
LED	

Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version	Complementary (NO/NC) /- / -/
LED	

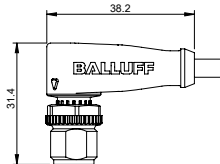
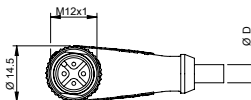
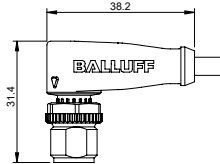
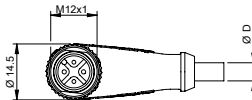
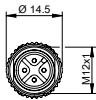
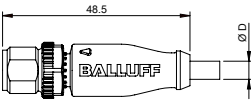
Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version	Complementary (NO/NC) /- / -/
LED	

Operating voltage max. AC U _B	30 V DC
Operating voltage max. DC U _B	30 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version	PNP-complementary (NO/NC) /- / -/
LED	green/yellow

Cable material	Color	Length	Ordering code
			Part number
PUR	black	2 m	BCC031N
			BCC M414-0000-2A-003-PX0434-020
PUR	black	5 m	BCC031P
			BCC M414-0000-2A-003-PX0434-050
PUR	black	10 m	BCC031R
			BCC M414-0000-2A-003-PX0434-100
PUR shielded	black	2 m	BCC031T
			BCC M414-0000-2A-014-PS0434-020
PUR shielded	black	5 m	BCC031U
			BCC M414-0000-2A-014-PS0434-050
PUR shielded	black	10 m	BCC031W
			BCC M414-0000-2A-014-PS0434-100
PVC	gray	2 m	BCC035F
			BCC M414-0000-2A-003-VX8434-020
PVC	gray	5 m	BCC035H
			BCC M414-0000-2A-003-VX8434-050
PVC	gray	10 m	BCC035J
			BCC M414-0000-2A-003-VX8434-100
PVC shielded	gray	2 m	BCC035K
			BCC M414-0000-2A-014-VS8434-020
PVC shielded	gray	5 m	BCC035L
			BCC M414-0000-2A-014-VS8434-050
PVC shielded	gray	10 m	BCC035M
			BCC M414-0000-2A-014-VS8434-100

Ordering code
Part number
BCC031Y
BCC M424-0000-2A-008-PX0434-020
BCC031Z
BCC M424-0000-2A-008-PX0434-050
BCC0320
BCC M424-0000-2A-008-PX0434-100
BCC035N
BCC M424-0000-2A-008-VX8434-020
BCC035P
BCC M424-0000-2A-008-VX8434-050
BCC035R
BCC M424-0000-2A-008-VX8434-100

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

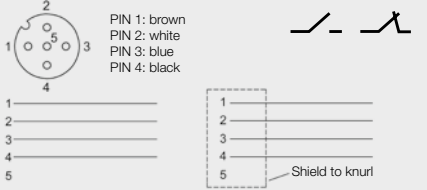
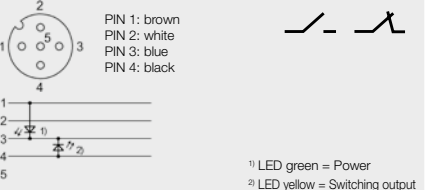
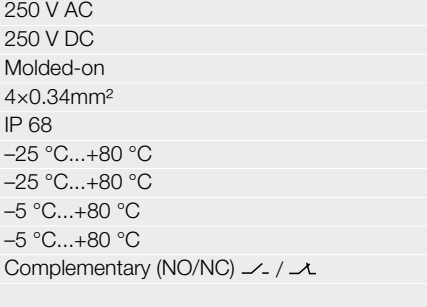
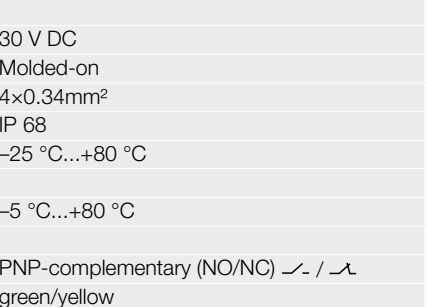
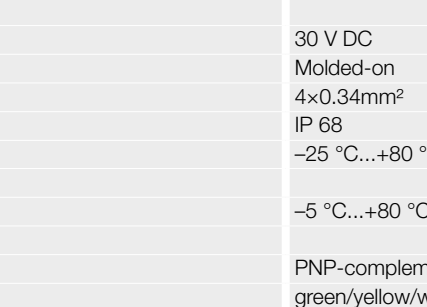


Connectors

M12-female straight, 4-pin, with and without LED

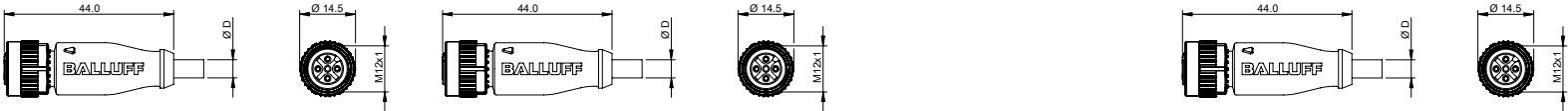
Connectors

M12-female straight, 4-pin, with LED

Connector diagram and wiring			
			
Operating voltage max. AC U _B	250 V AC	30 V DC	30 V DC
Operating voltage max. DC U _B	250 V DC	30 V DC	30 V DC
Cable	Molded-on	Molded-on	Molded-on
No. of wires × cross-section	4×0.34mm ²	4×0.34mm ²	4×0.34mm ²
Enclosure rating per IEC 60529	IP 68	IP 68	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C	-25 °C...+80 °C	-25 °C...+80 °C
	PUR shielded -25 °C...+80 °C	-5 °C...+80 °C	-5 °C...+80 °C
	PVC -5 °C...+80 °C	-5 °C...+80 °C	-5 °C...+80 °C
	PVC shielded -5 °C...+80 °C	-5 °C...+80 °C	-5 °C...+80 °C
Version	Complementary (NO/NC)  / 	PNP-complementary (NO/NC)  / 	PNP-complementary (NO/NC)  / 
LED		green/yellow	green/yellow/white

Cable material	Color	Length	Ordering code	Ordering code	Ordering code
			Part number		Part number
PUR	black	2 m	BCC032F	BCC0327	BCC032A
			BCC M415-0000-1A-003-PX0434-020	BCC M415-0000-1A-008-PX0434-020	BCC M415-0000-1A-010-PX0434-020
PUR	black	5 m	BCC032H	BCC0328	BCC032C
			BCC M415-0000-1A-003-PX0434-050	BCC M415-0000-1A-008-PX0434-050	BCC M415-0000-1A-010-PX0434-050
PUR	black	10 m	BCC032J	BCC0329	BCC032E
			BCC M415-0000-1A-003-PX0434-100	BCC M415-0000-1A-008-PX0434-100	BCC M415-0000-1A-010-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	BCC0361	BCC0364
			BCC M415-0000-1A-003-VX8434-020	BCC M415-0000-1A-008-VX8434-020	BCC M415-0000-1A-010-VX8434-020
PVC	gray	5 m	BCC0368	BCC0362	BCC0365
			BCC M415-0000-1A-003-VX8434-050	BCC M415-0000-1A-008-VX8434-050	BCC M415-0000-1A-010-VX8434-050
PVC	gray	10 m	BCC0369	BCC0363	BCC0366
			BCC M415-0000-1A-003-VX8434-100	BCC M415-0000-1A-008-VX8434-100	BCC M415-0000-1A-010-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 on request.

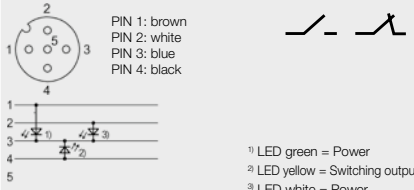
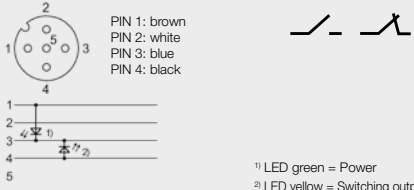
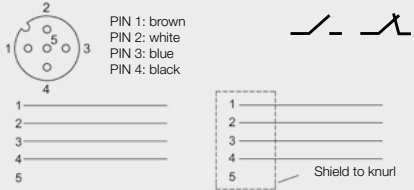


Connectors

M12-female right-angle,
4-pin, with and without LED



Connector diagram and wiring



Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version	Complementary (NO/NC) /- / -/
LED	

250 V AC
250 V DC
Molded-on
4×0.34mm ²
IP 68
-25 °C...+80 °C
-25 °C...+80 °C
-5 °C...+80 °C
-5 °C...+80 °C

30 V DC
Molded-on
4×0.34mm ²
IP 68
-25 °C...+80 °C
-5 °C...+80 °C

30 V DC
Molded-on
4×0.34mm ²
IP 68
-25 °C...+80 °C
-5 °C...+80 °C

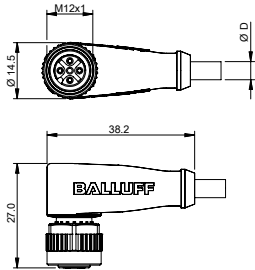
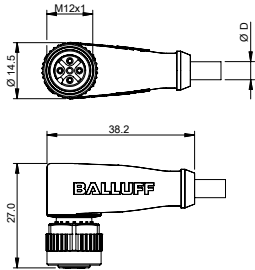
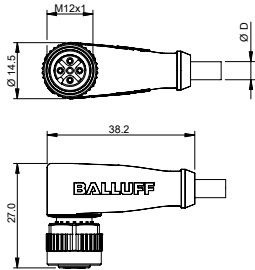
PNP-complementary (NO/NC) /- / -/ green/yellow

PNP-complementary (NO/NC) /- / -/ green/yellow/white

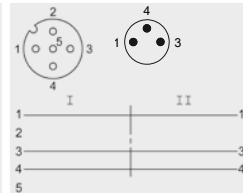
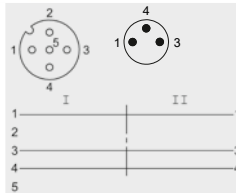
Cable material	Color	Length	Ordering code
PUR	black	2 m	BCC032Y
PUR	black	5 m	BCC032Z
PUR	black	10 m	BCC0330
PUR shielded	black	2 m	BCC0331
PUR shielded	black	5 m	BCC0332
PUR shielded	black	10 m	BCC0333
PVC	gray	2 m	BCC036N
PVC	gray	5 m	BCC036P
PVC	gray	10 m	BCC036R
PVC shielded	gray	2 m	BCC036T
PVC shielded	gray	5 m	BCC036U
PVC shielded	gray	10 m	BCC036W

Ordering code
BCC032N
BCC032P
BCC032R
BCC036F
BCC036H
BCC036J
BCC036K
BCC036L
BCC036M

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



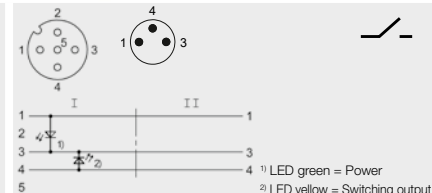
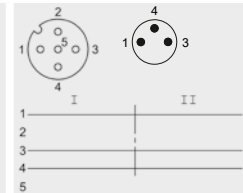
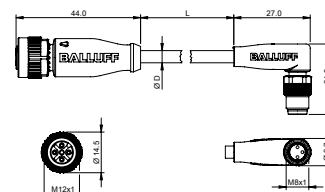
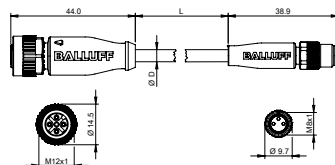
M12-female straight ↔ M8-male straight,
3-pin, or right-angle, no LED



Operating voltage max. AC U _B	60 V AC	60 V AC
Operating voltage max. DC U _B	60 V DC	60 V DC
Cable	Molded-on	Molded-on
No. of wires × cross-section	3×0.34mm ²	3×0.34mm ²
Enclosure rating per IEC 60529	IP 67	IP 67
Ambient temperature T _a	PUR	–25 °C...+80 °C
	PUR shielded	
	PVC	–5 °C...+80 °C
	PVC shielded	–5 °C...+80 °C
Version	Normally open 	Normally open 
LED		

Cable material	Color	Length	Ordering code				
			Part number				
PUR	black	0.3 m	BCC03M9	BCC03MK		BCC03N3	BCC03NL
			BCC M415-M313-3F-300-PX0334-003	BCC M415-M323-3F-300-PX0334-003		BCC M425-M323-3F-300-PX0334-003	BCC M425-M323-3F-602-PX0334-003
PUR	black	0.6 m	BCC03MA	BCC03ML		BCC03N4	BCC03NM
			BCC M415-M313-3F-300-PX0334-006	BCC M415-M323-3F-300-PX0334-006		BCC M425-M323-3F-300-PX0334-006	BCC M425-M323-3F-602-PX0334-006
PUR	black	1 m	BCC03MC	BCC03MM		BCC03N5	BCC03NN
			BCC M415-M313-3F-300-PX0334-010	BCC M415-M323-3F-300-PX0334-010		BCC M425-M323-3F-300-PX0334-010	BCC M425-M323-3F-602-PX0334-010
PUR	black	1.5 m	BCC03ME	BCC03MN		BCC03N6	BCC03NP
			BCC M415-M313-3F-300-PX0334-015	BCC M415-M323-3F-300-PX0334-015		BCC M425-M323-3F-300-PX0334-015	BCC M425-M323-3F-602-PX0334-015
PUR	black	2 m	BCC03MF	BCC03MP		BCC03N7	BCC03NR
			BCC M415-M313-3F-300-PX0334-020	BCC M415-M323-3F-300-PX0334-020		BCC M425-M323-3F-300-PX0334-020	BCC M425-M323-3F-602-PX0334-020
PUR	black	3 m	BCC03MH	BCC03MR		BCC03N8	BCC03NT
			BCC M415-M313-3F-300-PX0334-030	BCC M415-M323-3F-300-PX0334-030		BCC M425-M323-3F-300-PX0334-030	BCC M425-M323-3F-602-PX0334-030
PUR	black	5 m	BCC03MJ	BCC03MT		BCC03N9	BCC03NU
			BCC M415-M313-3F-300-PX0334-050	BCC M415-M323-3F-300-PX0334-050		BCC M425-M323-3F-300-PX0334-050	BCC M425-M323-3F-602-PX0334-050
PVC	gray	0.3 m	BCC03NW	BCC03P4		BCC03PM	BCC03R5
			BCC M415-M313-3F-300-VX8334-003	BCC M415-M323-3F-300-VX8334-003		BCC M425-M323-3F-300-VX8334-003	BCC M425-M323-3F-602-VX8334-003
PVC	gray	0.6 m	BCC03NY	BCC03P5		BCC03PN	BCC03R6
			BCC M415-M313-3F-300-VX8334-006	BCC M415-M323-3F-300-VX8334-006		BCC M425-M323-3F-300-VX8334-006	BCC M425-M323-3F-602-VX8334-006
PVC	gray	1 m	BCC03NZ	BCC03P6		BCC03PP	BCC03R7
			BCC M415-M313-3F-300-VX8334-010	BCC M415-M323-3F-300-VX8334-010		BCC M425-M323-3F-300-VX8334-010	BCC M425-M323-3F-602-VX8334-010
PVC	gray	1.5 m	BCC03P0	BCC03P7		BCC03PR	BCC03R8
			BCC M415-M313-3F-300-VX8334-015	BCC M415-M323-3F-300-VX8334-015		BCC M425-M323-3F-300-VX8334-015	BCC M425-M323-3F-602-VX8334-015
PVC	gray	2 m	BCC03P1	BCC03P8		BCC03PT	BCC03R9
			BCC M415-M313-3F-300-VX8334-020	BCC M415-M323-3F-300-VX8334-020		BCC M425-M323-3F-300-VX8334-020	BCC M425-M323-3F-602-VX8334-020
PVC	gray	3 m	BCC03P2	BCC03P9		BCC03PU	BCC03RA
			BCC M415-M313-3F-300-VX8334-030	BCC M415-M323-3F-300-VX8334-030		BCC M425-M323-3F-300-VX8334-030	BCC M425-M323-3F-602-VX8334-030
PVC	gray	5 m	BCC03P3	BCC03PA		BCC03PW	BCC03RC
			BCC M415-M313-3F-300-VX8334-050	BCC M415-M323-3F-300-VX8334-050		BCC M425-M323-3F-300-VX8334-050	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 on request.



60 V AC	
60 V DC	30 V DC
Molded-on	Molded-on
3x0.34mm ²	3x0.34mm ²
IP 67	IP 67
-25 °C...+80 °C	-25 °C...+80 °C
-5 °C...+80 °C	-5 °C...+80 °C
Normally open 	PNP-Normally open 
	green/yellow



Connection cable

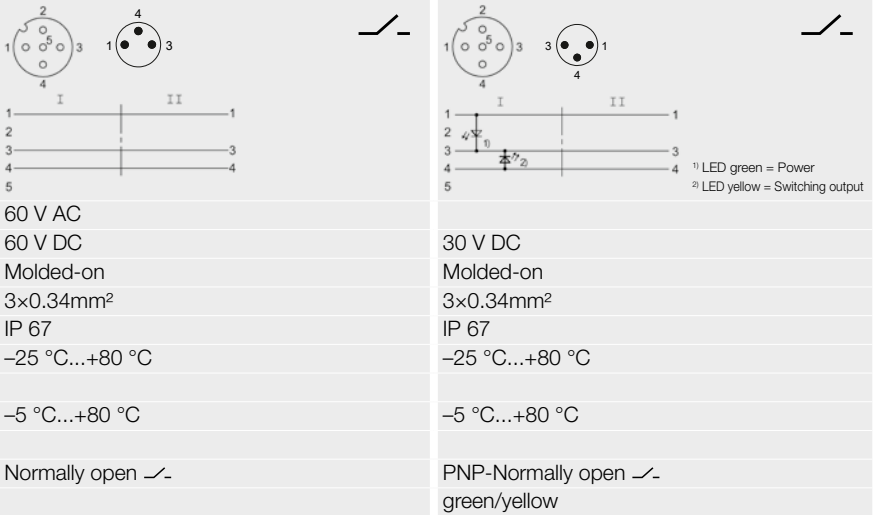
M12-female right-angle ↔ M8-male straight, 3-pin, with and without LED

M12 ↔ M8

Connection cable

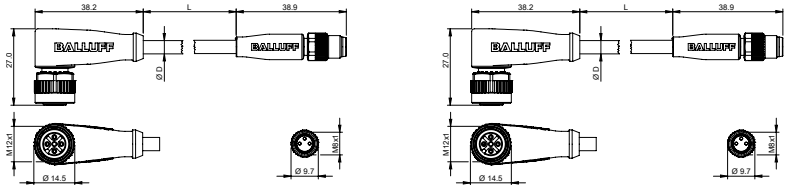


Connector diagram and wiring



Cable material	Color	Length	Ordering code	
			Part number	
PUR	black	0.3 m	BCC03MU	BCC03NA
			BCC M425-M313-3F-300-PX0334-003	BCC M425-M313-3F-602-PX0334-003
PUR	black	0.6 m	BCC03MW	BCC03NC
			BCC M425-M313-3F-300-PX0334-006	BCC M425-M313-3F-602-PX0334-006
PUR	black	1 m	BCC03MY	BCC03NE
			BCC M425-M313-3F-300-PX0334-010	BCC M425-M313-3F-602-PX0334-010
PUR	black	1.5 m	BCC03MZ	BCC03NF
			BCC M425-M313-3F-300-PX0334-015	BCC M425-M313-3F-602-PX0334-015
PUR	black	2 m	BCC03N0	BCC03NH
			BCC M425-M313-3F-300-PX0334-020	BCC M425-M313-3F-602-PX0334-020
PUR	black	3 m	BCC03N1	BCC03NJ
			BCC M425-M313-3F-300-PX0334-030	BCC M425-M313-3F-602-PX0334-030
PUR	black	5 m	BCC03N2	BCC03NK
			BCC M425-M313-3F-300-PX0334-050	BCC M425-M313-3F-602-PX0334-050
PVC	gray	0.3 m	BCC03PC	BCC03PY
			BCC M425-M313-3F-300-VX8334-003	BCC M425-M313-3F-602-VX8334-003
PVC	gray	0.6 m	BCC03PE	BCC03PZ
			BCC M425-M313-3F-300-VX8334-006	BCC M425-M313-3F-602-VX8334-006
PVC	gray	1 m	BCC03PF	BCC03R0
			BCC M425-M313-3F-300-VX8334-010	BCC M425-M313-3F-602-VX8334-010
PVC	gray	1.5 m	BCC03PH	BCC03R1
			BCC M425-M313-3F-300-VX8334-015	BCC M425-M313-3F-602-VX8334-015
PVC	gray	2 m	BCC03PJ	BCC03R2
			BCC M425-M313-3F-300-VX8334-020	BCC M425-M313-3F-602-VX8334-020
PVC	gray	3 m	BCC03PK	BCC03R3
			BCC M425-M313-3F-300-VX8334-030	BCC M425-M313-3F-602-VX8334-030
PVC	gray	5 m	BCC03PL	BCC03R4
			BCC M425-M313-3F-300-VX8334-050	BCC M425-M313-3F-602-VX8334-050

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



M12 ↔ M8



Connection cable
M12-female straight ↔ M12-male straight
or right-angle, 3-pin, no LED

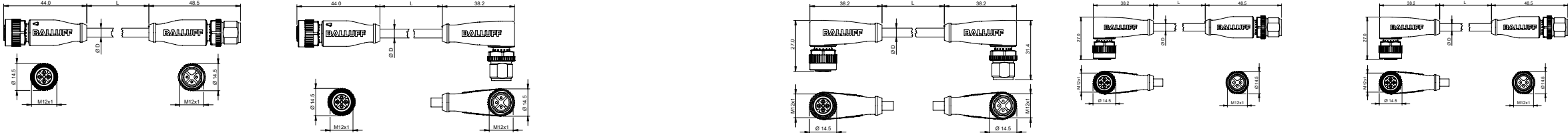
M12 ↔ M12

Connection cable
M12-female right-angle ↔ M12-male straight
or right-angle, 3-pin, with and without LED

Connector diagram and wiring							
Operating voltage max. AC U _B	250 V AC	250 V AC	250 V AC	250 V AC	250 V AC	250 V AC	30 V DC
Operating voltage max. DC U _B	250 V DC	250 V DC	250 V DC	250 V DC	250 V DC	250 V DC	Molded-on
Cable	Molded-on	Molded-on	Molded-on	Molded-on	Molded-on	Molded-on	3x0.34mm ²
No. of wires × cross-section	3x0.34mm ²	3x0.34mm ²	3x0.34mm ²	3x0.34mm ²	3x0.34mm ²	3x0.34mm ²	IP 68
Enclosure rating per IEC 60529	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	-25 °C...+80 °C
Ambient temperature T _a	PUR	PUR	PUR	PUR	PUR	PUR	-5 °C...+80 °C
	PUR shielded	PUR shielded	PUR shielded	PUR shielded	PUR shielded	PUR shielded	Normally open ✓-
	PVC	PVC	PVC	PVC	PVC	PVC	Normally open ✓-
	PVC shielded	PVC shielded	PVC shielded	PVC shielded	PVC shielded	PVC shielded	Normally open ✓-
Version	Normally open ✓-	Normally open ✓-	Normally open ✓-	Normally open ✓-	Normally open ✓-	Normally open ✓-	PNP-Normally open ✓-
LED							green/yellow

Cable material	Color	Length	Ordering code	Ordering code	Ordering code	Ordering code	Ordering code
PUR	black	0.3 m	BCC036Y	BCC0375	BCC037N	BCC037E	BCC037Z
PUR	black	0.6 m	BCC036Z	BCC0376	BCC037P	BCC037F	BCC0380
PUR	black	1 m	BCC0370	BCC0377	BCC037R	BCC037H	BCC0381
PUR	black	1.5 m	BCC0371	BCC0378	BCC037T	BCC037J	BCC0382
PUR	black	2 m	BCC0372	BCC0379	BCC037U	BCC037K	BCC0383
PUR	black	3 m	BCC0373	BCC037A	BCC037W	BCC037L	BCC0384
PUR	black	5 m	BCC0374	BCC037C	BCC037Y	BCC037M	BCC0385
PVC	gray	0.3 m	BCC0386	BCC038F	BCC0390	BCC038P	BCC0397
PVC	gray	0.6 m	BCC0387	BCC038H	BCC0391	BCC038R	BCC0398
PVC	gray	1 m	BCC0388	BCC038J	BCC0392	BCC038T	BCC0399
PVC	gray	1.5 m	BCC0389	BCC038K	BCC0393	BCC038U	BCC039A
PVC	gray	2 m	BCC038A	BCC038L	BCC0394	BCC038W	BCC039C
PVC	gray	3 m	BCC038C	BCC038M	BCC0395	BCC038Y	BCC039E
PVC	gray	5 m	BCC038E	BCC038N	BCC0396	BCC038Z	BCC039F

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



Connection cable

M12-female straight ↔ M12-male straight, 4-pin, with and without LED

M12 ↔ M12

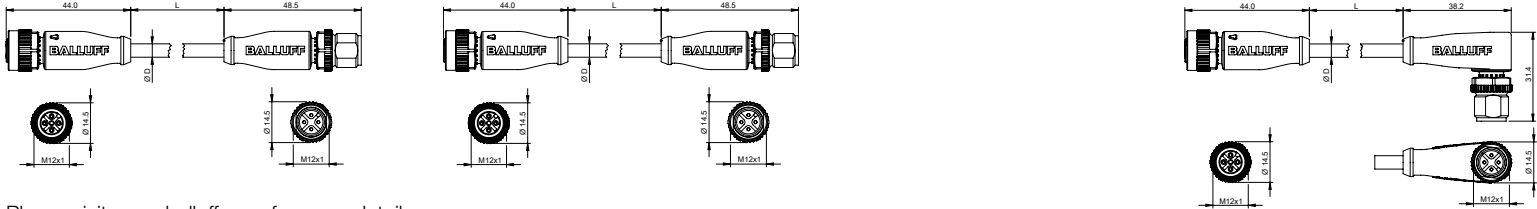
Connection cable

M12-female straight ↔ M12-male right-angle, 4-pin, no LED

Connector diagram and wiring				
Operating voltage max. AC U _B	250 V AC	30 V DC		250 V AC
Operating voltage max. DC U _B	250 V DC			250 V DC
Cable	Molded-on	Molded-on		Molded-on
No. of wires × cross-section	4×0.34mm ²	4×0.34mm ²		4×0.34mm ²
Enclosure rating per IEC 60529	IP 68	IP 68		IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C PUR shielded PVC -5 °C...+80 °C PVC shielded	-25 °C...+80 °C -5 °C...+80 °C		-25 °C...+80 °C -5 °C...+80 °C
Version LED	Complementary (NO/NC) /	Complementary (NO/NC) / green/yellow		Complementary (NO/NC) /

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	BCC039R BCC M415-M424-3A-304-PX0434-003
PUR	black	0.6 m	BCC039J BCC M415-M414-3A-304-PX0434-006	BCC03A2 BCC M415-M414-3A-606-PX0434-006	BCC039T BCC M415-M424-3A-304-PX0434-006
PUR	black	1 m	BCC039K BCC M415-M414-3A-304-PX0434-010	BCC03A3 BCC M415-M414-3A-606-PX0434-010	BCC039U BCC M415-M424-3A-304-PX0434-010
PUR	black	1.5 m	BCC039L BCC M415-M414-3A-304-PX0434-015	BCC03A4 BCC M415-M414-3A-606-PX0434-015	BCC039W BCC M415-M424-3A-304-PX0434-015
PUR	black	2 m	BCC039M BCC M415-M414-3A-304-PX0434-020	BCC03A5 BCC M415-M414-3A-606-PX0434-020	BCC039Y BCC M415-M424-3A-304-PX0434-020
PUR	black	3 m	BCC039N BCC M415-M414-3A-304-PX0434-030	BCC03A6 BCC M415-M414-3A-606-PX0434-030	BCC039Z BCC M415-M424-3A-304-PX0434-030
PUR	black	5 m	BCC039P BCC M415-M414-3A-304-PX0434-050	BCC03A7 BCC M415-M414-3A-606-PX0434-050	BCC03A0 BCC M415-M424-3A-304-PX0434-050
PVC	gray	0.3 m	BCC03C9 BCC M415-M414-3A-304-VX8434-003	BCC03CU BCC M415-M414-3A-606-VX8434-003	BCC03CK BCC M415-M424-3A-304-VX8434-003
PVC	gray	0.6 m	BCC03CA BCC M415-M414-3A-304-VX8434-006	BCC03CW BCC M415-M414-3A-606-VX8434-006	BCC03CL BCC M415-M424-3A-304-VX8434-006
PVC	gray	1 m	BCC03CC BCC M415-M414-3A-304-VX8434-010	BCC03CY BCC M415-M414-3A-606-VX8434-010	BCC03CM BCC M415-M424-3A-304-VX8434-010
PVC	gray	1.5 m	BCC03CE BCC M415-M414-3A-304-VX8434-015	BCC03CZ BCC M415-M414-3A-606-VX8434-015	BCC03CN BCC M415-M424-3A-304-VX8434-015
PVC	gray	2 m	BCC03CF BCC M415-M414-3A-304-VX8434-020	BCC03E0 BCC M415-M414-3A-606-VX8434-020	BCC03CP BCC M415-M424-3A-304-VX8434-020
PVC	gray	3 m	BCC03CH BCC M415-M414-3A-304-VX8434-030	BCC03E1 BCC M415-M414-3A-606-VX8434-030	BCC03CR BCC M415-M424-3A-304-VX8434-030
PVC	gray	5 m	BCC03CJ BCC M415-M414-3A-304-VX8434-050	BCC03E2 BCC M415-M414-3A-606-VX8434-050	BCC03CT BCC M415-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 on request.

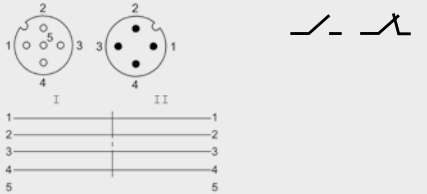
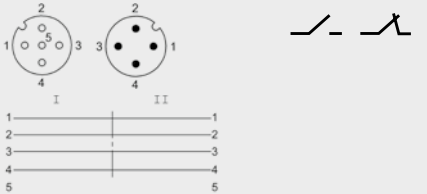


Connection cable

M12-female right-angle ↔ M12-male straight or right-angle, 4-pin, no LED



Connector diagram and wiring



Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C PUR shielded PVC -5 °C...+80 °C PVC shielded
Version LED	Complementary (NO/NC) / - / /

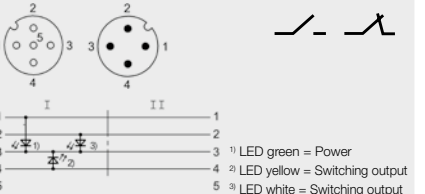
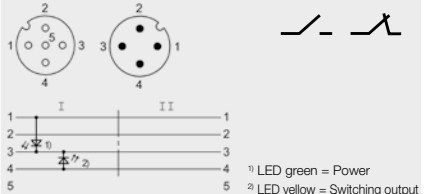
Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C PUR shielded PVC -5 °C...+80 °C PVC shielded
Version LED	Complementary (NO/NC) / - / /

Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C PUR shielded PVC -5 °C...+80 °C PVC shielded
Version LED	Complementary (NO/NC) / - / /



Connection cable

M12-female right-angle ↔ M12-male straight, 4-pin, with LED



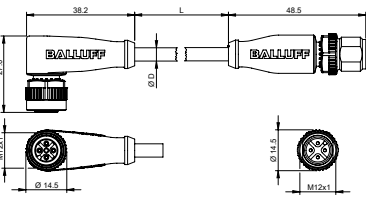
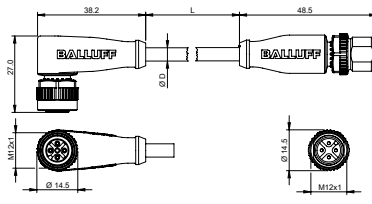
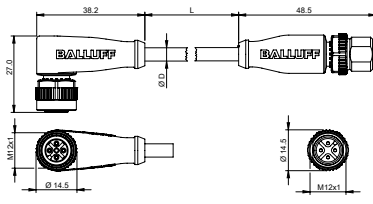
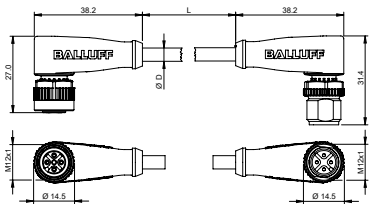
Operating voltage max. AC U _B	30 V DC
Operating voltage max. DC U _B	30 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	-25 °C...+80 °C -5 °C...+80 °C
Version LED	PNP-complementary (NO/NC) / - / / green/yellow

Operating voltage max. AC U _B	30 V DC
Operating voltage max. DC U _B	30 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	-25 °C...+80 °C -5 °C...+80 °C
Version LED	PNP-complementary (NO/NC) / - / / green/yellow/white

Cable material	Color	Length	Ordering code
PUR	black	0.3 m	BCC03AJ BCC M425-M424-3A-304-PX0434-003
PUR	black	0.6 m	BCC03AK BCC M425-M424-3A-304-PX0434-006
PUR	black	1 m	BCC03AL BCC M425-M424-3A-304-PX0434-010
PUR	black	1.5 m	BCC03AM BCC M425-M424-3A-304-PX0434-015
PUR	black	2 m	BCC03AN BCC M425-M424-3A-304-PX0434-020
PUR	black	3 m	BCC03AP BCC M425-M424-3A-304-PX0434-030
PUR	black	5 m	BCC03AR BCC M425-M424-3A-304-PX0434-050
PVC	gray	0.3 m	BCC03EA BCC M425-M424-3A-304-VX8434-003
PVC	gray	0.6 m	BCC03EC BCC M425-M424-3A-304-VX8434-006
PVC	gray	1 m	BCC03EE BCC M425-M424-3A-304-VX8434-010
PVC	gray	1.5 m	BCC03EF BCC M425-M424-3A-304-VX8434-015
PVC	gray	2 m	BCC03EH BCC M425-M424-3A-304-VX8434-020
PVC	gray	3 m	BCC03EJ BCC M425-M424-3A-304-VX8434-030
PVC	gray	5 m	BCC03EK BCC M425-M424-3A-304-VX8434-050

Ordering code
BCC03A8 BCC M425-M414-3A-304-PX0434-003
BCC03A9 BCC M425-M414-3A-304-PX0434-006
BCC03AA BCC M425-M414-3A-304-PX0434-010
BCC03AC BCC M425-M414-3A-304-PX0434-015
BCC03AE BCC M425-M414-3A-304-PX0434-020
BCC03AF BCC M425-M414-3A-304-PX0434-030
BCC03AH BCC M425-M414-3A-304-PX0434-050
BCC03E3 BCC M425-M414-3A-304-VX8434-003
BCC03E4 BCC M425-M414-3A-304-VX8434-006
BCC03E5 BCC M425-M414-3A-304-VX8434-010
BCC03E6 BCC M425-M414-3A-304-VX8434-015
BCC03E7 BCC M425-M414-3A-304-VX8434-020
BCC03E8 BCC M425-M414-3A-304-VX8434-030
BCC03E9 BCC M425-M414-3A-304-VX8434-050

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

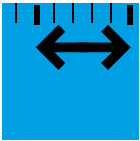


BALLUFF

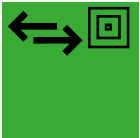
sensors worldwide



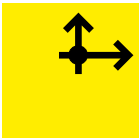
Object Detection



Linear Position Sensing



Industrial Identification



Industrial Networking and Connectivity



Mechanical Accessories

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**