

BALLUFF

sensors worldwide

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.



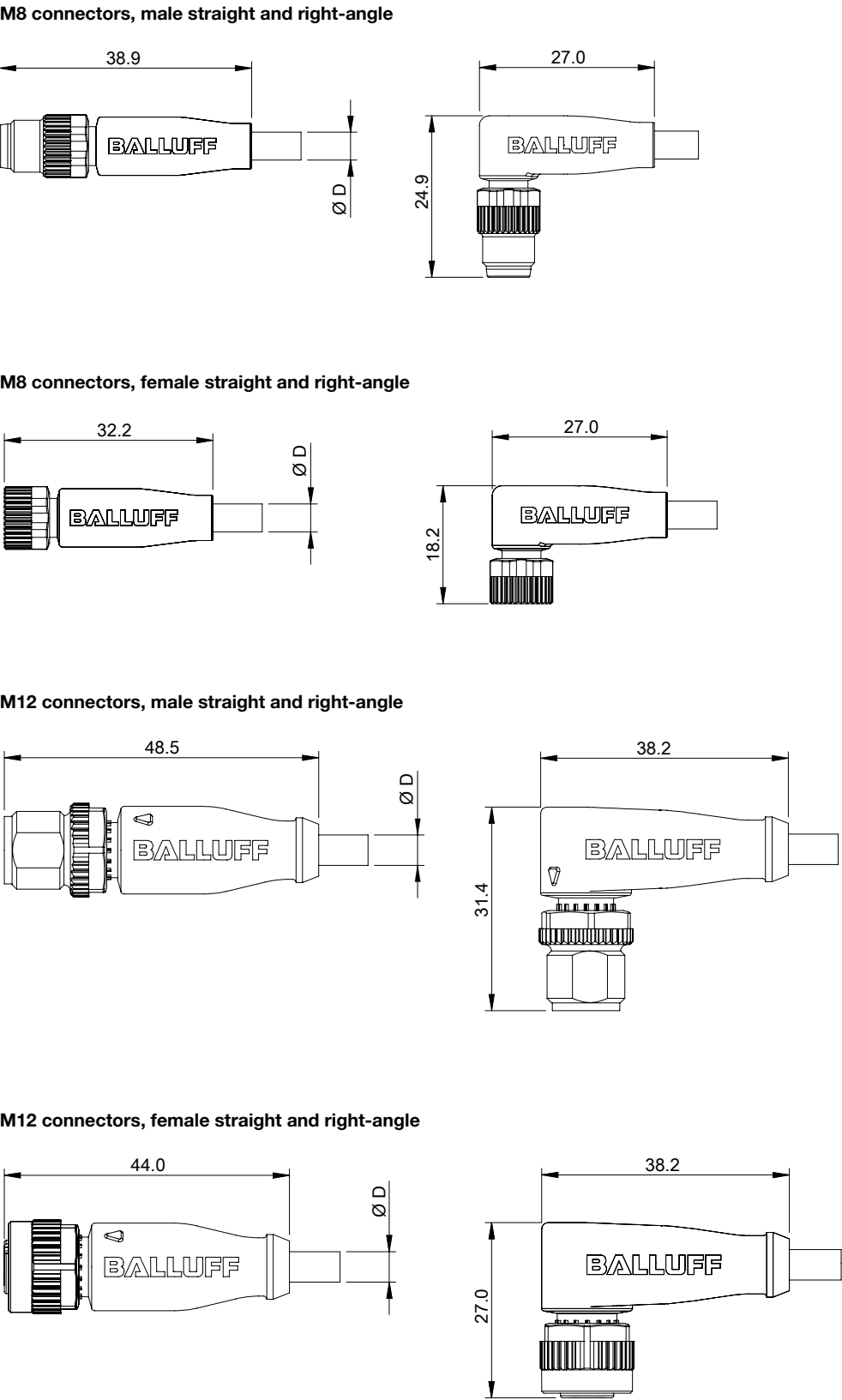
Connectors and Cables

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

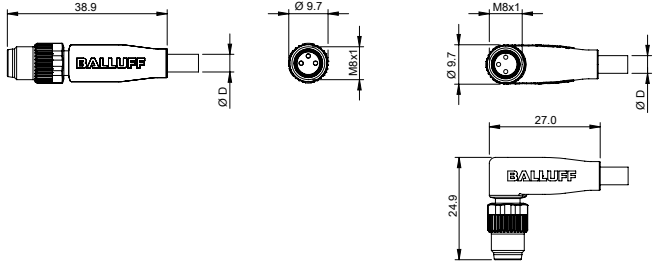


Operating voltage max. AC U _B	60 V AC
Operating voltage max. DC U _B	60 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 67
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -5 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded
Version	Normally open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

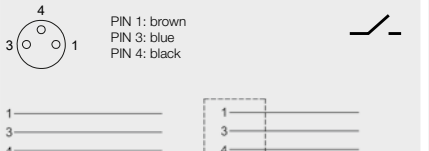
Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions on request.



Please visit www.balluff.com for more details

Connectors

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

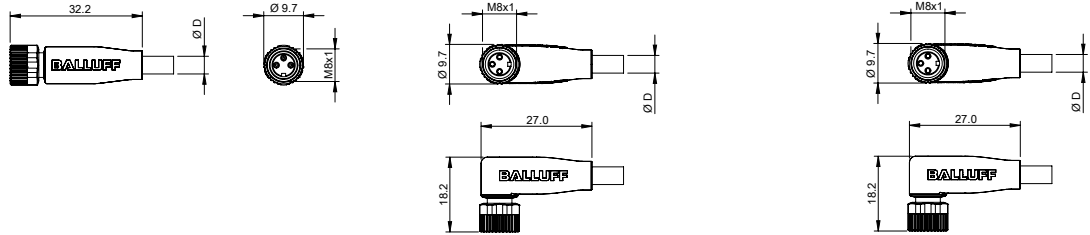


Operating voltage max. AC U _B	60 V AC
Operating voltage max. DC U _B	60 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 67
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version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

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	



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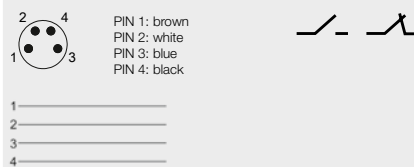
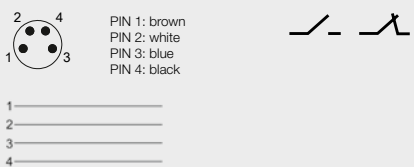
M8

Connectors

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



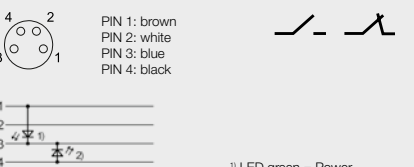
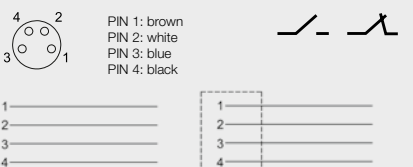
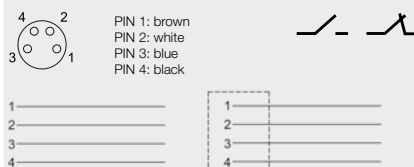
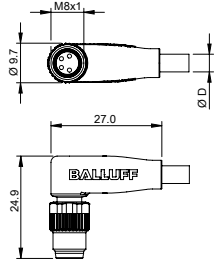
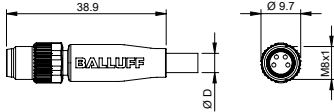
Connector diagram and wiring



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	PVC -5 °C...+80 °C
	PVC shielded	
Version	Complementary (NO/NC) / - / -	Complementary (NO/NC) / - / -
LED		

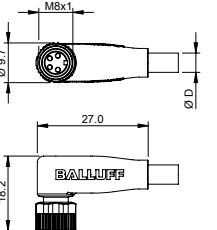
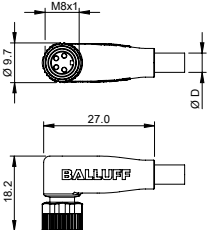
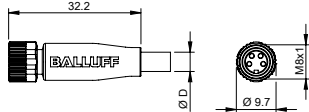
Cable material	Color	Length	Ordering code
PUR	black	2 m	BCC02MU BCC M314-0000-20-003-PX0434-020
PUR	black	5 m	BCC02MW BCC M314-0000-20-003-PX0434-050
PUR	black	10 m	BCC02MY BCC M314-0000-20-003-PX0434-100
PUR shielded	black	2 m	
PUR shielded	black	5 m	
PUR shielded	black	10 m	
PVC	gray	2 m	BCC02PC BCC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

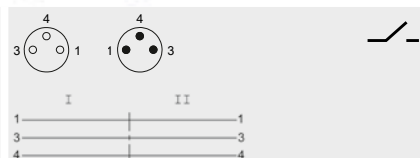
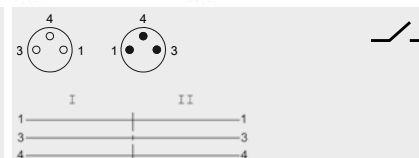


Operating voltage max. AC U _B	30 V AC	30 V AC	30 V AC
Operating voltage max. DC U _B	30 V DC	30 V DC	30 V DC
Cable	Molded-on	Molded-on	Molded-on
No. of wires × cross-section	4×0.34mm ²	4×0.34mm ²	4×0.34mm ²
Enclosure rating per IEC 60529	IP 67	IP 67	IP 67
Ambient temperature T _a	-25 °C...+80 °C	-25 °C...+80 °C	-25 °C...+80 °C
	-25 °C...+80 °C	-25 °C...+80 °C	-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

Ordering code	Ordering code	Ordering code
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
BCC02N5 BCC M314-0000-10-014-PS0434-020	BCC02NH BCC M324-0000-10-014-PS0434-020	
BCC02N6 BCC M314-0000-10-014-PS0434-050	BCC02NJ BCC M324-0000-10-014-PS0434-050	
BCC02N7 BCC M314-0000-10-014-PS0434-100	BCC02NK BCC M324-0000-10-014-PS0434-100	
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
BCC02PP BCC M314-0000-10-014-VS8434-020	BCC02R2 BCC M324-0000-10-014-VS8434-020	
BCC02PR BCC M314-0000-10-014-VS8434-050	BCC02R3 BCC M324-0000-10-014-VS8434-050	
BCC02PT BCC M314-0000-10-014-VS8434-100	BCC02R4 BCC M324-0000-10-014-VS8434-100	



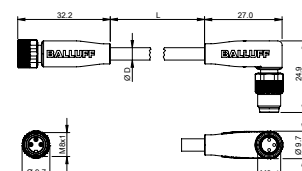
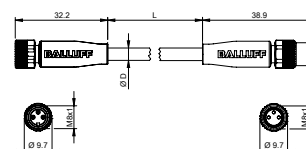
M8-female straight ↔ M8-male straight
or right-angle, 3-pin, no LED



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 PUR shielded PVC PVC shielded	–25 °C...+80 °C –5 °C...+80 °C
Version	Normally open 	Normally open 
LED		

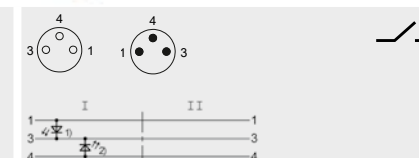
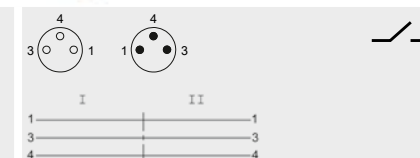
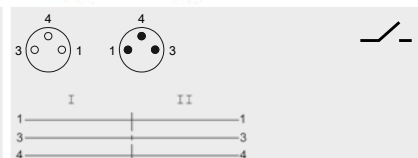
Cable material	Color	Length	Ordering code	
			Part number	
PUR	black	0.3 m	BCC02R5 BCC M313-M313-30-300-PX0334-003	BCC02RE BCC M313-M323-30-300-PX0334-003
PUR	black	0.6 m	BCC02R6 BCC M313-M313-30-300-PX0334-006	BCC02RF BCC M313-M323-30-300-PX0334-006
PUR	black	1 m	BCC02R7 BCC M313-M313-30-300-PX0334-010	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.



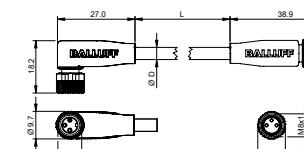
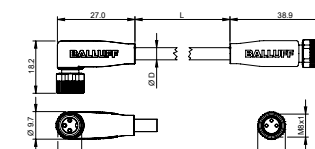
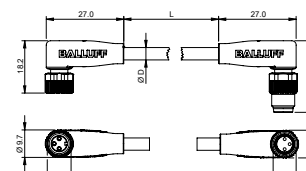
Please visit www.balluff.com for more details

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



60 V AC	60 V AC	LED yellow – Switching only
60 V DC	60 V DC	30 V DC
Molded-on	Molded-on	Molded-on
3×0.34mm ²	3×0.34mm ²	3×0.34mm ²
IP 67	IP 67	IP 67
–25 °C...+80 °C	–25 °C...+80 °C	–25 °C...+80 °C
–5 °C...+80 °C	–5 °C...+80 °C	–5 °C...+80 °C
Normally open 	Normally open 	PNP-Normally open 
		green/yellow

Ordering code		
Part number		
BCC02T6	BCC02RZ	BCC02RN
BCC M323-M323-30-300-PX0334-003	BCC M323-M313-30-300-PX0334-003	BCC M323-M313-30-602-PX0334-003
BCC02T7	BCC02T0	BCC02RP
BCC M323-M323-30-300-PX0334-006	BCC M323-M313-30-300-PX0334-006	BCC M323-M313-30-602-PX0334-006
BCC02T8	BCC02T1	BCC02RR
BCC M323-M323-30-300-PX0334-010	BCC M323-M313-30-300-PX0334-010	BCC M323-M313-30-602-PX0334-010
BCC02T9	BCC02T2	BCC02RT
BCC M323-M323-30-300-PX0334-015	BCC M323-M313-30-300-PX0334-015	BCC M323-M313-30-602-PX0334-015
BCC02TA	BCC02T3	BCC02RU
BCC M323-M323-30-300-PX0334-020	BCC M323-M313-30-300-PX0334-020	BCC M323-M313-30-602-PX0334-020
BCC02TC	BCC02T4	BCC02RW
BCC M323-M323-30-300-PX0334-030	BCC M323-M313-30-300-PX0334-030	BCC M323-M313-30-602-PX0334-030
BCC02TE	BCC02T5	BCC02RY
BCC M323-M323-30-300-PX0334-050	BCC M323-M313-30-300-PX0334-050	BCC M323-M313-30-602-PX0334-050
BCC02WT	BCC02WJ	BCC02W8
BCC M323-M323-30-300-VX8334-003	BCC M323-M313-30-300-VX8334-003	BCC M323-M313-30-602-VX8334-003
BCC02WU	BCC02WK	BCC02W9
BCC M323-M323-30-300-VX8334-006	BCC M323-M313-30-300-VX8334-006	BCC M323-M313-30-602-VX8334-006
BCC02WW	BCC02WL	BCC02WA
BCC M323-M323-30-300-VX8334-010	BCC M323-M313-30-300-VX8334-010	BCC M323-M313-30-602-VX8334-010
BCC02WY	BCC02WM	BCC02WC
BCC M323-M323-30-300-VX8334-015	BCC M323-M313-30-300-VX8334-015	BCC M323-M313-30-602-VX8334-015
BCC02WZ	BCC02WN	BCC02WE
BCC M323-M323-30-300-VX8334-020	BCC M323-M313-30-300-VX8334-020	BCC M323-M313-30-602-VX8334-020
BCC02Y0	BCC02WP	BCC02WF
BCC M323-M323-30-300-VX8334-030	BCC M323-M313-30-300-VX8334-030	BCC M323-M313-30-602-VX8334-030
BCC02Y1	BCC02WR	BCC02WH
BCC M323-M323-30-300-VX8334-050	BCC M323-M313-30-300-VX8334-050	BCC M323-M313-30-602-VX8334-050



www.balluff.com

M8 $\leftrightarrow$ M8



Connection cable

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

M8 ↔ M8

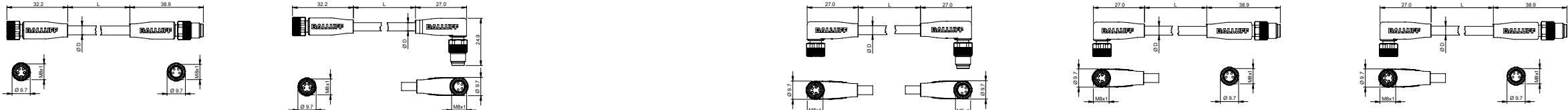
Connection cable

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

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



Connection cable

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

M8 ↔ M12

Connection cable

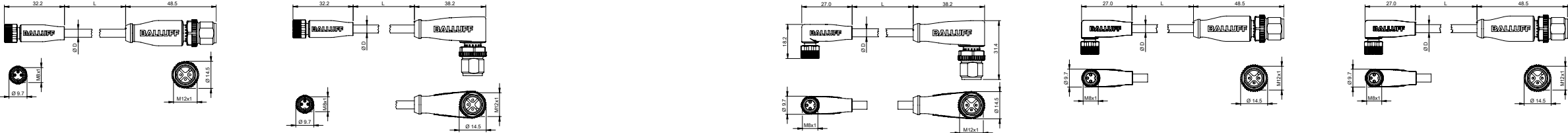
M8-female right-angle ↔ M12-male straight or right-angle, 3-pin, with and without LED

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.



Connection cable

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

M8 ↔ M12

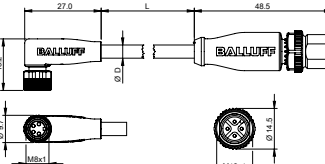
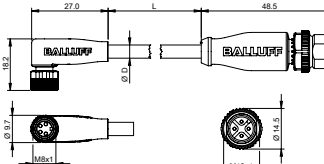
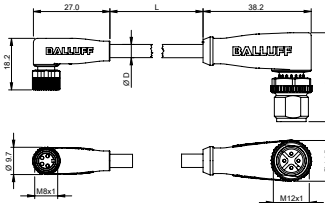
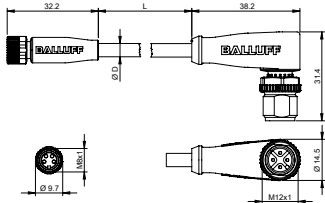
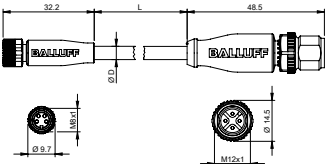
Connection cable

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

Cable material	Color	Length	Ordering code	Ordering code	Ordering code	Ordering code	Ordering code
PUR	black	0.3 m	BCC03JP	BCC03K0	BCC03KH	BCC03K7	BCC03KR
PUR	black	0.6 m	BCC03JR	BCC03K1	BCC03KJ	BCC03K8	BCC03KT
PUR	black	1 m	BCC03JT	BCC03K2	BCC03KK	BCC03K9	BCC03KU
PUR	black	1.5 m	BCC03JU	BCC03K3	BCC03KL	BCC03KA	BCC03KW
PUR	black	2 m	BCC03JW	BCC03K4	BCC03KM	BCC03KC	BCC03KY
PUR	black	3 m	BCC03JY	BCC03K5	BCC03KN	BCC03KE	BCC03KZ
PUR	black	5 m	BCC03JZ	BCC03K6	BCC03KP	BCC03KF	BCC03L0
PVC	gray	0.3 m	BCC03L1	BCC03L8	BCC03LT	BCC03LJ	BCC03M2
PVC	gray	0.6 m	BCC03L2	BCC03L9	BCC03LU	BCC03LK	BCC03M3
PVC	gray	1 m	BCC03L3	BCC03LA	BCC03LW	BCC03LL	BCC03M4
PVC	gray	1.5 m	BCC03L4	BCC03LC	BCC03LY	BCC03LM	BCC03M5
PVC	gray	2 m	BCC03L5	BCC03LE	BCC03LZ	BCC03LN	BCC03M6
PVC	gray	3 m	BCC03L6	BCC03LF	BCC03M0	BCC03LP	BCC03M7
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.



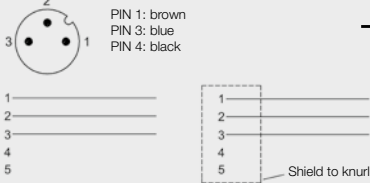
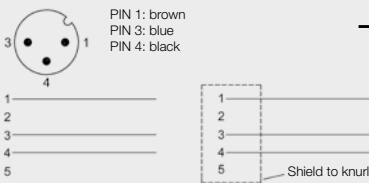
M12

Connectors

M12-male straight,
3-pin, no LED



Connector diagram and wiring



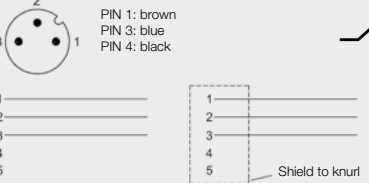
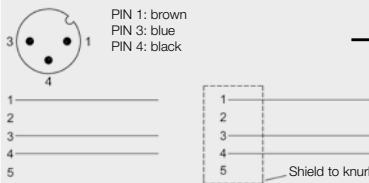
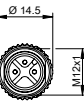
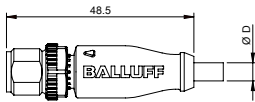
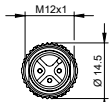
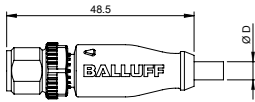
Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version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

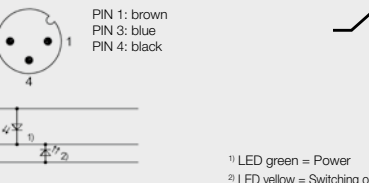
Cable material	Color	Length	Ordering code
PUR	black	2 m	BCC022A BCC M413-0000-2A-001-PX0334-020
PUR	black	5 m	BCC022C BCC M413-0000-2A-001-PX0334-050
PUR	black	10 m	BCC022E BCC M413-0000-2A-001-PX0334-100
PUR shielded	black	2 m	BCC022K BCC M413-0000-2A-036-PS0334-020
PUR shielded	black	5 m	BCC022L BCC M413-0000-2A-036-PS0334-050
PUR shielded	black	10 m	BCC022M BCC M413-0000-2A-036-PS0334-100
PVC	gray	2 m	BCC0334 BCC M413-0000-2A-001-VX8334-020
PVC	gray	5 m	BCC0335 BCC M413-0000-2A-001-VX8334-050
PVC	gray	10 m	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 on request.



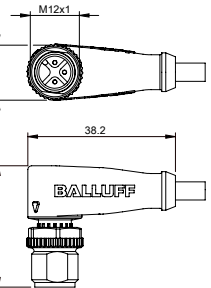
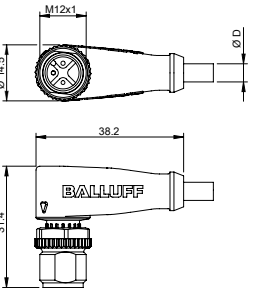
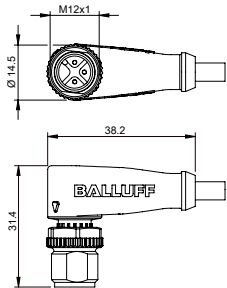
Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version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



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

Ordering code	Ordering code	Ordering code
BCC022Y BCC M423-0000-2A-001-PX0334-020	BCC0301 BCC M423-0000-2A-002-PX0334-020	BCC022T BCC M423-0000-2A-004-PX0334-020
BCC022Z BCC M423-0000-2A-001-PX0334-050	BCC0302 BCC M423-0000-2A-002-PX0334-050	BCC022U BCC M423-0000-2A-004-PX0334-050
BCC0300 BCC M423-0000-2A-001-PX0334-100	BCC0303 BCC M423-0000-2A-002-PX0334-100	BCC022W BCC M423-0000-2A-004-PX0334-100
BCC0304 BCC M423-0000-2A-036-PS0334-020	BCC0307 BCC M423-0000-2A-037-PS0334-020	
BCC0305 BCC M423-0000-2A-036-PS0334-050	BCC0308 BCC M423-0000-2A-037-PS0334-050	
BCC0306 BCC M423-0000-2A-036-PS0334-100	BCC0309 BCC M423-0000-2A-037-PS0334-100	
BCC033N BCC M423-0000-2A-001-VX8334-020	BCC033T BCC M423-0000-2A-002-VX8334-020	BCC033K BCC M423-0000-2A-004-VX8334-020
BCC033P BCC M423-0000-2A-001-VX8334-050	BCC033U BCC M423-0000-2A-002-VX8334-050	BCC033L BCC M423-0000-2A-004-VX8334-050
BCC033R BCC M423-0000-2A-001-VX8334-100	BCC033W BCC M423-0000-2A-002-VX8334-100	BCC033M BCC M423-0000-2A-004-VX8334-100
BCC033Y BCC M423-0000-2A-036-VS8334-020	BCC0341 BCC M423-0000-2A-037-VS8334-020	
BCC033Z BCC M423-0000-2A-036-VS8334-050	BCC0342 BCC M423-0000-2A-037-VS8334-050	
BCC0340 BCC M423-0000-2A-036-VS8334-100	BCC0343 BCC M423-0000-2A-037-VS8334-100	

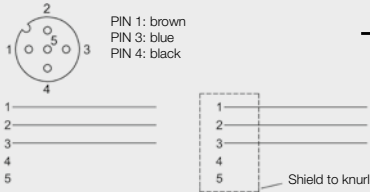
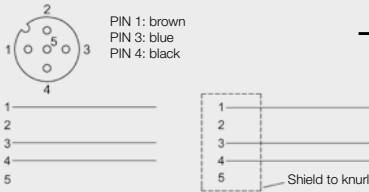


Connectors

M12-female straight, 3-pin, no LED



Connector diagram and wiring



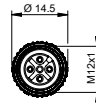
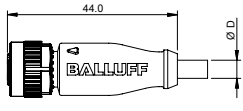
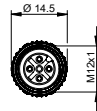
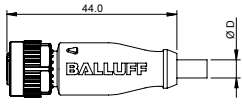
Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version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

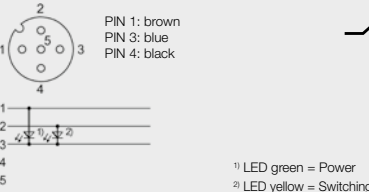
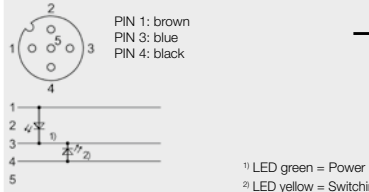
Cable material	Color	Length	Ordering code
			Part number
PUR	black	2 m	BCC030K
			BCC M415-0000-1A-001-PX0334-020
PUR	black	5 m	BCC030L
			BCC M415-0000-1A-001-PX0334-050
PUR	black	10 m	BCC030M
			BCC M415-0000-1A-001-PX0334-100
PUR shielded	black	2 m	BCC030T
			BCC M415-0000-1A-036-PS0334-020
PUR shielded	black	5 m	BCC030U
			BCC M415-0000-1A-036-PS0334-050
PUR shielded	black	10 m	BCC030W
			BCC M415-0000-1A-036-PS0334-100
PVC	gray	2 m	BCC034A
			BCC M415-0000-1A-001-VX8334-020
PVC	gray	5 m	BCC034C
			BCC M415-0000-1A-001-VX8334-050
PVC	gray	10 m	BCC034E
			BCC M415-0000-1A-001-VX8334-100
PVC shielded	gray	2 m	BCC034K
			BCC M415-0000-1A-036-VS8334-020
PVC shielded	gray	5 m	BCC034L
			BCC M415-0000-1A-036-VS8334-050
PVC shielded	gray	10 m	BCC034M
			BCC M415-0000-1A-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.



Connectors

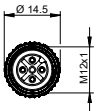
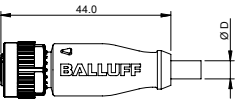
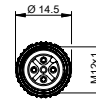
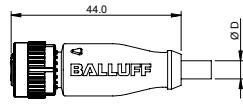
M12-female straight, 3-pin, with LED



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	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	-25 °C...+80 °C
	-5 °C...+80 °C
Version	PNP-Normally open
LED	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	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	-25 °C...+80 °C
	-5 °C...+80 °C
Version	PNP Normally closed
LED	green/yellow

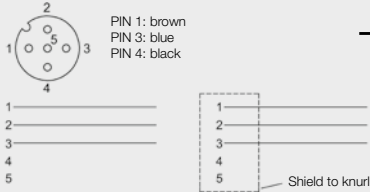
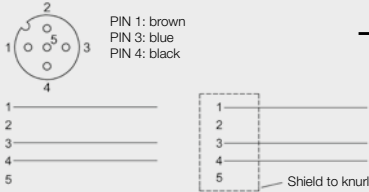
Ordering code	Ordering code
Part number	Part number
BCC030A	BCC030F
BCC M415-0000-1A-004-PX0334-020	BCC M415-0000-1A-005-PX0334-020
BCC030C	BCC030H
BCC M415-0000-1A-004-PX0334-050	BCC M415-0000-1A-005-PX0334-050
BCC030E	BCC030J
BCC M415-0000-1A-004-PX0334-100	BCC M415-0000-1A-005-PX0334-100
BCC0344	BCC0347
BCC M415-0000-1A-004-VX8334-020	BCC M415-0000-1A-005-VX8334-020
BCC0345	BCC0348
BCC M415-0000-1A-004-VX8334-050	BCC M415-0000-1A-005-VX8334-050
BCC0346	BCC0349
BCC M415-0000-1A-004-VX8334-100	BCC M415-0000-1A-005-VX8334-100



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



Connector diagram and wiring



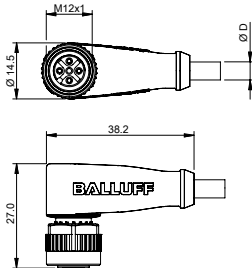
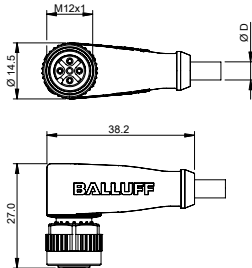
Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version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

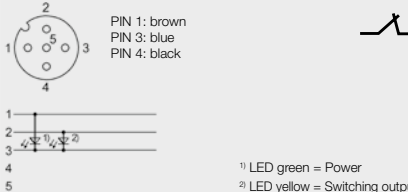
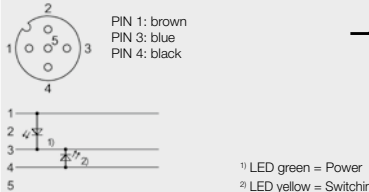
Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version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

Cable material	Color	Length	Ordering code
PUR	black	2 m	BCC0317
PUR	black	5 m	BCC0318
PUR	black	10 m	BCC0319
PUR shielded	black	2 m	BCC031F
PUR shielded	black	5 m	BCC031H
PUR shielded	black	10 m	BCC031J
PVC	gray	2 m	BCC0351
PVC	gray	5 m	BCC0352
PVC	gray	10 m	BCC0353
PVC shielded	gray	2 m	BCC0357
PVC shielded	gray	5 m	BCC0358
PVC shielded	gray	10 m	BCC0359

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



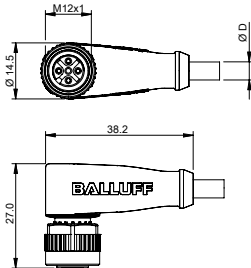
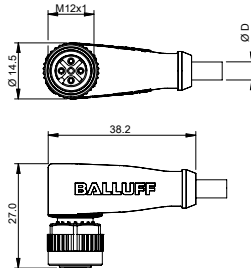
Connectors
M12-female right-angle,
3-pin, with LED



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	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	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 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
Part number
BCC0311
BCC M425-0000-1A-004-PX0334-020
BCC0312
BCC M425-0000-1A-004-PX0334-050
BCC0313
BCC M425-0000-1A-004-PX0334-100
BCC034T
BCC M425-0000-1A-004-VX8334-020
BCC034U
BCC M425-0000-1A-004-VX8334-050
BCC034W
BCC M425-0000-1A-004-VX8334-100

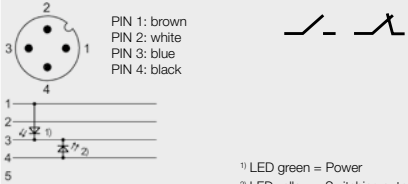
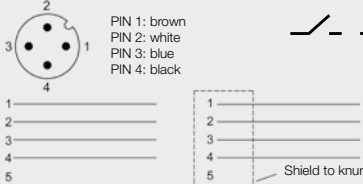
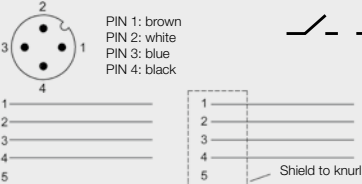


Connectors

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



Connector diagram and wiring



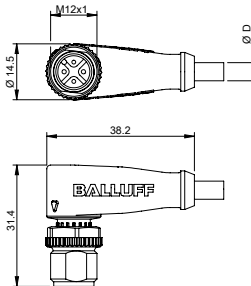
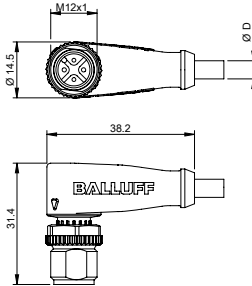
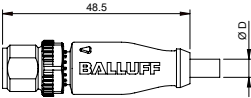
Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version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

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

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.

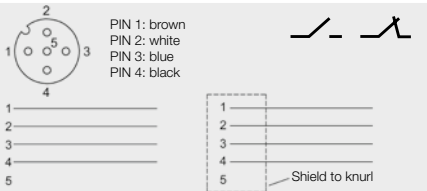
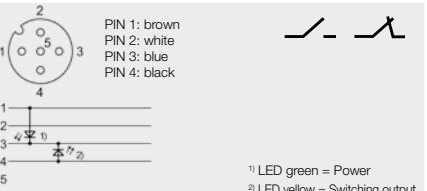


Connectors

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

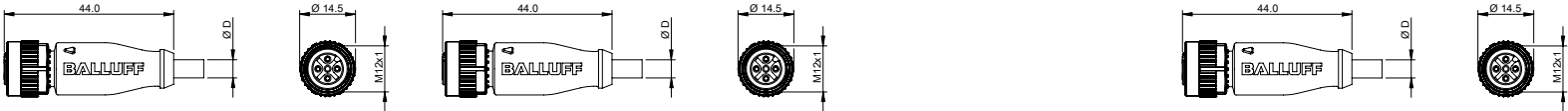
Connectors

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	Molded-on	Molded-on
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		
	PVC shielded -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.

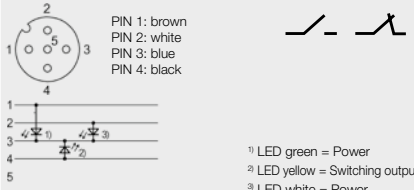
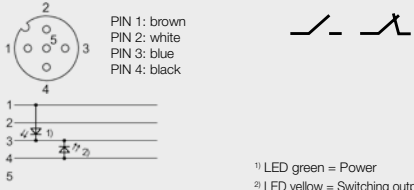
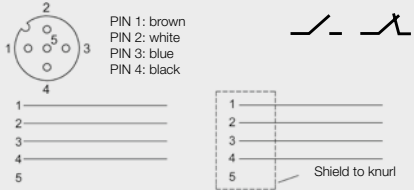


Connectors

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	

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	

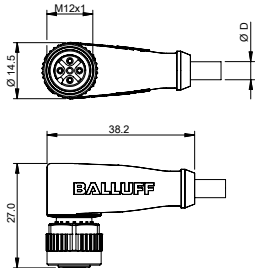
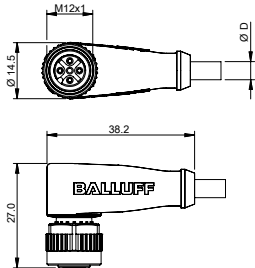
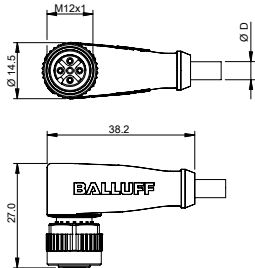
Operating voltage max. AC U _B	30 V DC
Operating voltage max. DC U _B	30 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version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

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/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

Cable material	Color	Length	Ordering code
PUR	black	2 m	BCC032N
PUR	black	5 m	BCC032P
PUR	black	10 m	BCC032R
PUR shielded	black	2 m	
PUR shielded	black	5 m	
PUR shielded	black	10 m	
PVC	gray	2 m	BCC036F
PVC	gray	5 m	BCC036H
PVC	gray	10 m	BCC036J
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

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



Connection cable

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

M12 ↔ M8

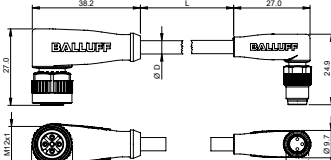
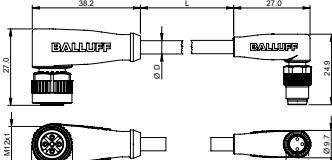
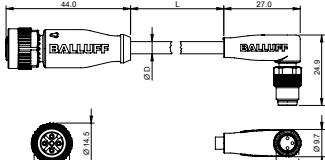
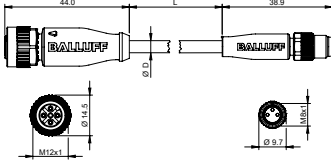
Connection cable

M12-female right-angle ↔ M8-male 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	PVC shielded	PVC shielded	PVC shielded	PVC shielded
Version	Normally open	Normally open	Normally open	Normally open	PNP-Normally open
LED	—	—	—	—	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
PUR	black	0.3 m	BCC03MK	BCC M415-M323-3F-300-PX0334-003
PUR	black	0.6 m	BCC03ML	BCC M415-M323-3F-300-PX0334-006
PUR	black	1 m	BCC03MM	BCC M415-M323-3F-300-PX0334-010
PUR	black	1.5 m	BCC03MN	BCC M415-M323-3F-300-PX0334-015
PUR	black	2 m	BCC03MP	BCC M415-M323-3F-300-PX0334-020
PUR	black	3 m	BCC03MR	BCC M415-M323-3F-300-PX0334-030
PUR	black	5 m	BCC03MT	BCC M415-M323-3F-300-PX0334-050
PVC	gray	0.3 m	BCC03P4	BCC M415-M323-3F-300-VX8334-003
PVC	gray	0.6 m	BCC03P5	BCC M415-M323-3F-300-VX8334-006
PVC	gray	1 m	BCC03P6	BCC M415-M323-3F-300-VX8334-010
PVC	gray	1.5 m	BCC03P7	BCC M415-M323-3F-300-VX8334-015
PVC	gray	2 m	BCC03P8	BCC M415-M323-3F-300-VX8334-020
PVC	gray	3 m	BCC03P9	BCC M415-M323-3F-300-VX8334-030
PVC	gray	5 m	BCC03PA	BCC M415-M323-3F-300-VX8334-050
PUR	black	0.3 m	BCC03N3	BCC M425-M323-3F-300-PX0334-003
PUR	black	0.6 m	BCC03N4	BCC M425-M323-3F-300-PX0334-006
PUR	black	1 m	BCC03N5	BCC M425-M323-3F-300-PX0334-010
PUR	black	1.5 m	BCC03N6	BCC M425-M323-3F-300-PX0334-015
PUR	black	2 m	BCC03N7	BCC M425-M323-3F-300-PX0334-020
PUR	black	3 m	BCC03N8	BCC M425-M323-3F-300-PX0334-030
PUR	black	5 m	BCC03N9	BCC M425-M323-3F-300-PX0334-050
PVC	gray	0.3 m	BCC03PM	BCC M425-M323-3F-300-VX8334-003
PVC	gray	0.6 m	BCC03PN	BCC M425-M323-3F-300-VX8334-006
PVC	gray	1 m	BCC03PP	BCC M425-M323-3F-300-VX8334-010
PVC	gray	1.5 m	BCC03PR	BCC M425-M323-3F-300-VX8334-015
PVC	gray	2 m	BCC03PT	BCC M425-M323-3F-300-VX8334-020
PVC	gray	3 m	BCC03PU	BCC M425-M323-3F-300-VX8334-030
PVC	gray	5 m	BCC03PW	BCC M425-M323-3F-300-VX8334-050
PUR	black	0.3 m	BCC03NL	BCC M425-M323-3F-602-PX0334-003
PUR	black	0.6 m	BCC03NM	BCC M425-M323-3F-602-PX0334-006
PUR	black	1 m	BCC03NN	BCC M425-M323-3F-602-PX0334-010
PUR	black	1.5 m	BCC03NP	BCC M425-M323-3F-602-PX0334-015
PUR	black	2 m	BCC03NR	BCC M425-M323-3F-602-PX0334-020
PUR	black	3 m	BCC03NT	BCC M425-M323-3F-602-PX0334-030
PUR	black	5 m	BCC03NU	BCC M425-M323-3F-602-PX0334-050
PVC	gray	0.3 m	BCC03R5	BCC M425-M323-3F-602-VX8334-003
PVC	gray	0.6 m	BCC03R6	BCC M425-M323-3F-602-VX8334-006
PVC	gray	1 m	BCC03R7	BCC M425-M323-3F-602-VX8334-010
PVC	gray	1.5 m	BCC03R8	BCC M425-M323-3F-602-VX8334-015
PVC	gray	2 m	BCC03R9	BCC M425-M323-3F-602-VX8334-020
PVC	gray	3 m	BCC03RA	BCC M425-M323-3F-602-VX8334-030
PVC	gray	5 m	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 on request.



Connection cable

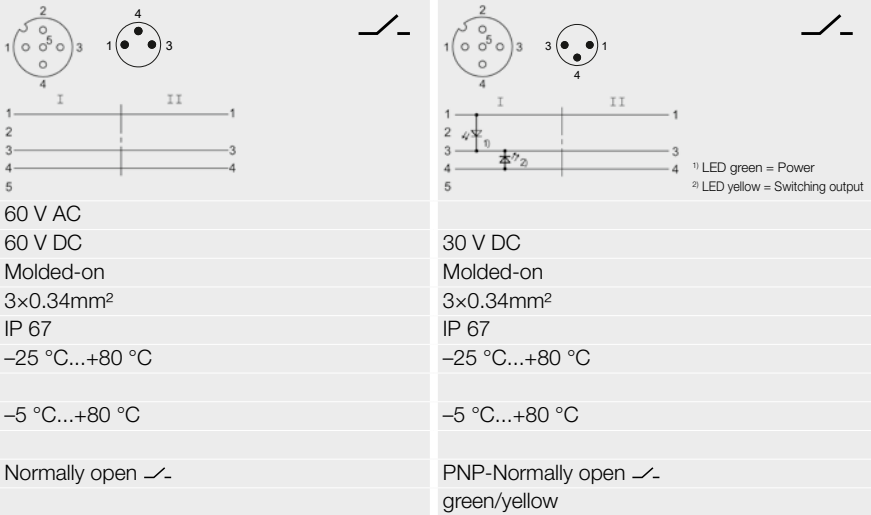
M12-female right-angle ↔ M8-male straight, 3-pin, with and without LED

M12 ↔ M8

Connection cable

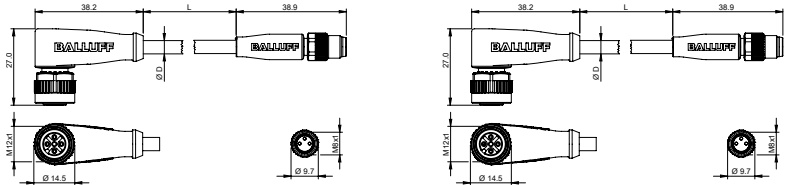


Connector diagram and wiring



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

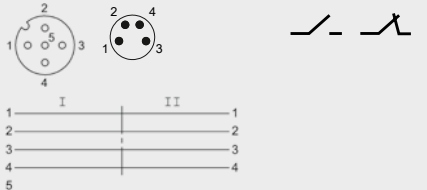
M12-female straight ↔ M8-male straight or right-angle, 4-pin, no LED

M12 ↔ M8

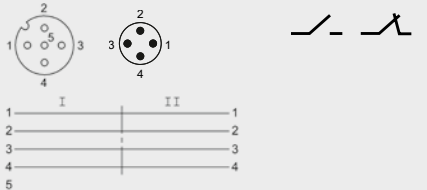
Connection cable

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

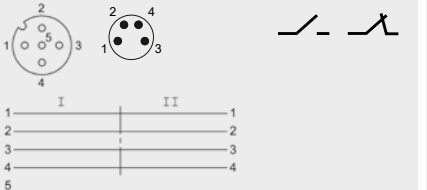
Connector diagram and wiring



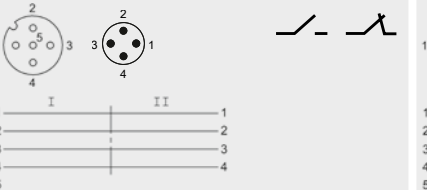
Operating voltage max. AC U _B	30 V AC
Operating voltage max. DC U _B	30 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 67
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -5 °C...+80 °C
	PVC -5 °C...+80 °C
Version	Complementary (NO/NC) / - /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



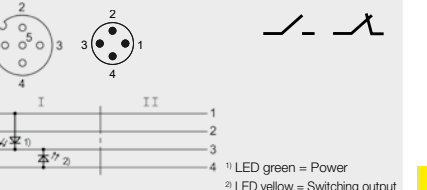
Operating voltage max. AC U _B	30 V AC
Operating voltage max. DC U _B	30 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 67
Ambient temperature T _a	-25 °C...+80 °C
	-5 °C...+80 °C
Version	Complementary (NO/NC) / - / -
LED	



Operating voltage max. AC U _B	30 V AC
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 67
Ambient temperature T _a	-25 °C...+80 °C
	-5 °C...+80 °C
Version	Complementary (NO/NC) / - / -
LED	



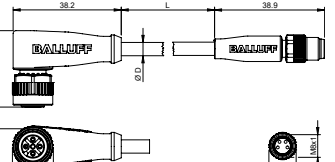
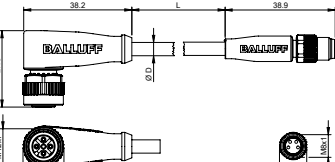
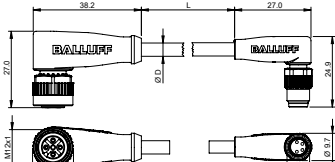
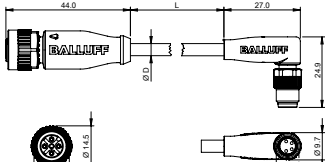
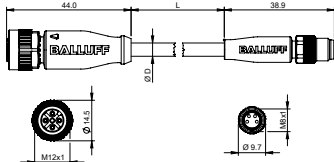
Operating voltage max. AC U _B	30 V AC
Operating voltage max. DC U _B	30 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 67
Ambient temperature T _a	-25 °C...+80 °C
	-5 °C...+80 °C
Version	Complementary (NO/NC) / - / -
LED	



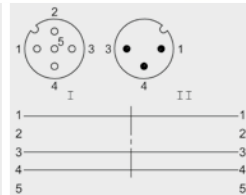
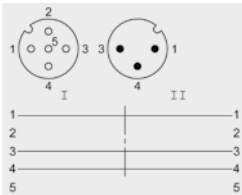
Operating voltage max. AC U _B	30 V AC
Operating voltage max. DC U _B	30 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 67
Ambient temperature T _a	-25 °C...+80 °C
	-5 °C...+80 °C
Version	PNP-complementary (NO/NC) / - / -
LED	green/yellow

Cable material	Color	Length	Ordering code	Ordering code	Ordering code	Ordering code	Ordering code
PUR	black	0.3 m	BCC03RE	BCC03RN	BCC03T6	BCC03RZ	BCC03TF
PUR	black	0.6 m	BCC03RF	BCC03RP	BCC03T7	BCC03T0	BCC03TH
PUR	black	1 m	BCC03RH	BCC03RR	BCC03T8	BCC03T1	BCC03TJ
PUR	black	1.5 m	BCC03RJ	BCC03RT	BCC03T9	BCC03T2	BCC03TK
PUR	black	2 m	BCC03RK	BCC03RU	BCC03TA	BCC03T3	BCC03TL
PUR	black	3 m	BCC03RL	BCC03RW	BCC03TC	BCC03T4	BCC03TM
PUR	black	5 m	BCC03RM	BCC03RY	BCC03TE	BCC03T5	BCC03TN
PVC	gray	0.3 m	BCC03TP	BCC03U0	BCC03UH	BCC03U7	BCC03UR
PVC	gray	0.6 m	BCC03TR	BCC03U1	BCC03UJ	BCC03U8	BCC03UT
PVC	gray	1 m	BCC03TT	BCC03U2	BCC03UK	BCC03U9	BCC03UU
PVC	gray	1.5 m	BCC03TU	BCC03U3	BCC03UL	BCC03UA	BCC03UW
PVC	gray	2 m	BCC03TW	BCC03U4	BCC03UM	BCC03UC	BCC03UY
PVC	gray	3 m	BCC03TY	BCC03U5	BCC03UN	BCC03UE	BCC03UZ
PVC	gray	5 m	BCC03TZ	BCC03U6	BCC03UP	BCC03UF	BCC03W0

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



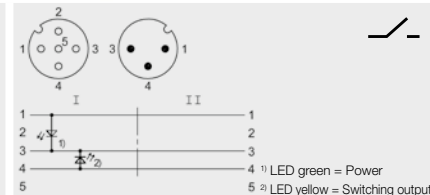
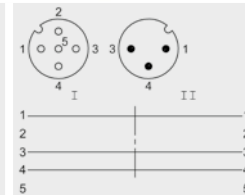
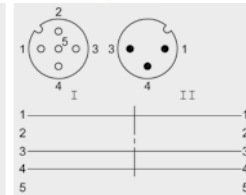
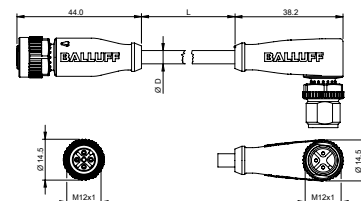
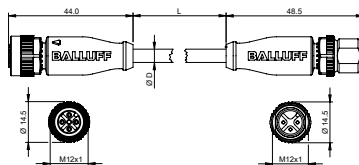
M12-female straight ↔ M12-male straight
or right-angle, 3-pin, no LED



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
	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	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 on request.



250 V AC	250 V AC	
250 V DC	250 V DC	30 V DC
Molded-on	Molded-on	Molded-on
3×0.34mm ²	3×0.34mm ²	3×0.34mm ²
IP 68	IP 68	IP 68
-25 °C...+80 °C	-25 °C...+80 °C	-25 °C...+80 °C
-5 °C...+80 °C	-5 °C...+80 °C	-5 °C...+80 °C
Normally open 	Normally open 	PNP-Normally open  green/yellow



Connection cable

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

M12 ↔ M12

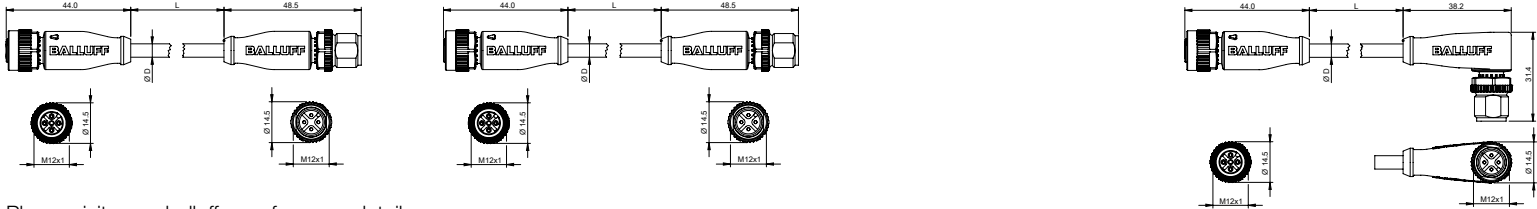
Connection cable

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	-25 °C...+80 °C		-25 °C...+80 °C
	PUR shielded -5 °C...+80 °C	-5 °C...+80 °C		-5 °C...+80 °C
	PVC shielded			
Version	Complementary (NO/NC) /- / -/	Complementary (NO/NC) /- / -/		Complementary (NO/NC) /- / -/
LED		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
				BCC039R BCC M415-M424-3A-304-PX0434-003
				BCC039T BCC M415-M424-3A-304-PX0434-006
				BCC039U BCC M415-M424-3A-304-PX0434-010
				BCC039W BCC M415-M424-3A-304-PX0434-015
				BCC039Y BCC M415-M424-3A-304-PX0434-020
				BCC039Z BCC M415-M424-3A-304-PX0434-030
				BCC03A0 BCC M415-M424-3A-304-PX0434-050
				BCC03CK BCC M415-M424-3A-304-VX8434-003
				BCC03CL BCC M415-M424-3A-304-VX8434-006
				BCC03CM BCC M415-M424-3A-304-VX8434-010
				BCC03CN BCC M415-M424-3A-304-VX8434-015
				BCC03CP BCC M415-M424-3A-304-VX8434-020
				BCC03CR BCC M415-M424-3A-304-VX8434-030
				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

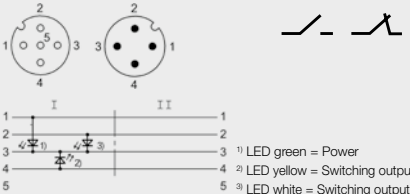
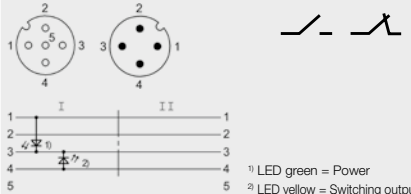
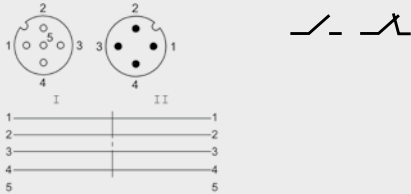
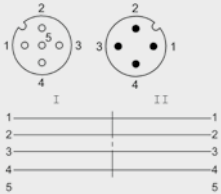
M12 ↔ M12

Connection cable

M12-female right-angle ↔ M12-male straight, 4-pin, with 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 PUR shielded PVC PVC shielded
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	-25 °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	-25 °C...+80 °C
Version	Complementary (NO/NC) / - / -
LED	

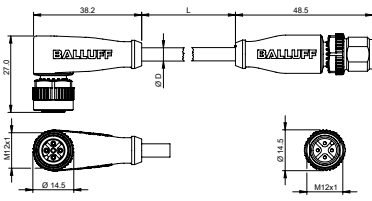
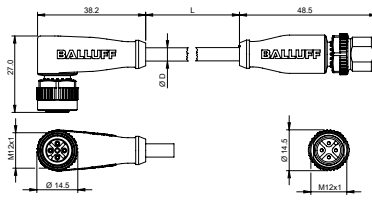
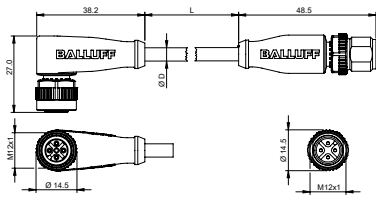
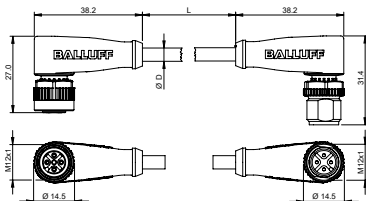
Operating voltage max. AC U _B	30 V DC
Operating voltage max. DC U _B	30 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	-25 °C...+80 °C
Version	PNP-complementary (NO/NC) / - / -
LED	green/yellow

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

Cable material	Color	Length	Ordering code
PUR	black	0.3 m	BCC03AJ
PUR	black	0.6 m	BCC03AK
PUR	black	1 m	BCC03AL
PUR	black	1.5 m	BCC03AM
PUR	black	2 m	BCC03AN
PUR	black	3 m	BCC03AP
PUR	black	5 m	BCC03AR
PVC	gray	0.3 m	BCC03EA
PVC	gray	0.6 m	BCC03EC
PVC	gray	1 m	BCC03EE
PVC	gray	1.5 m	BCC03EF
PVC	gray	2 m	BCC03EH
PVC	gray	3 m	BCC03EJ
PVC	gray	5 m	BCC03EK

Ordering code	Part number
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.

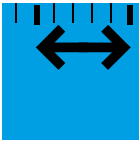


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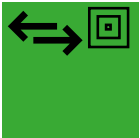
sensors worldwide



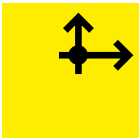
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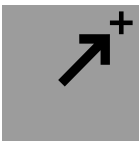
Linear Position Sensing



Industrial Identification



Industrial Networking and Connectivity



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