

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.



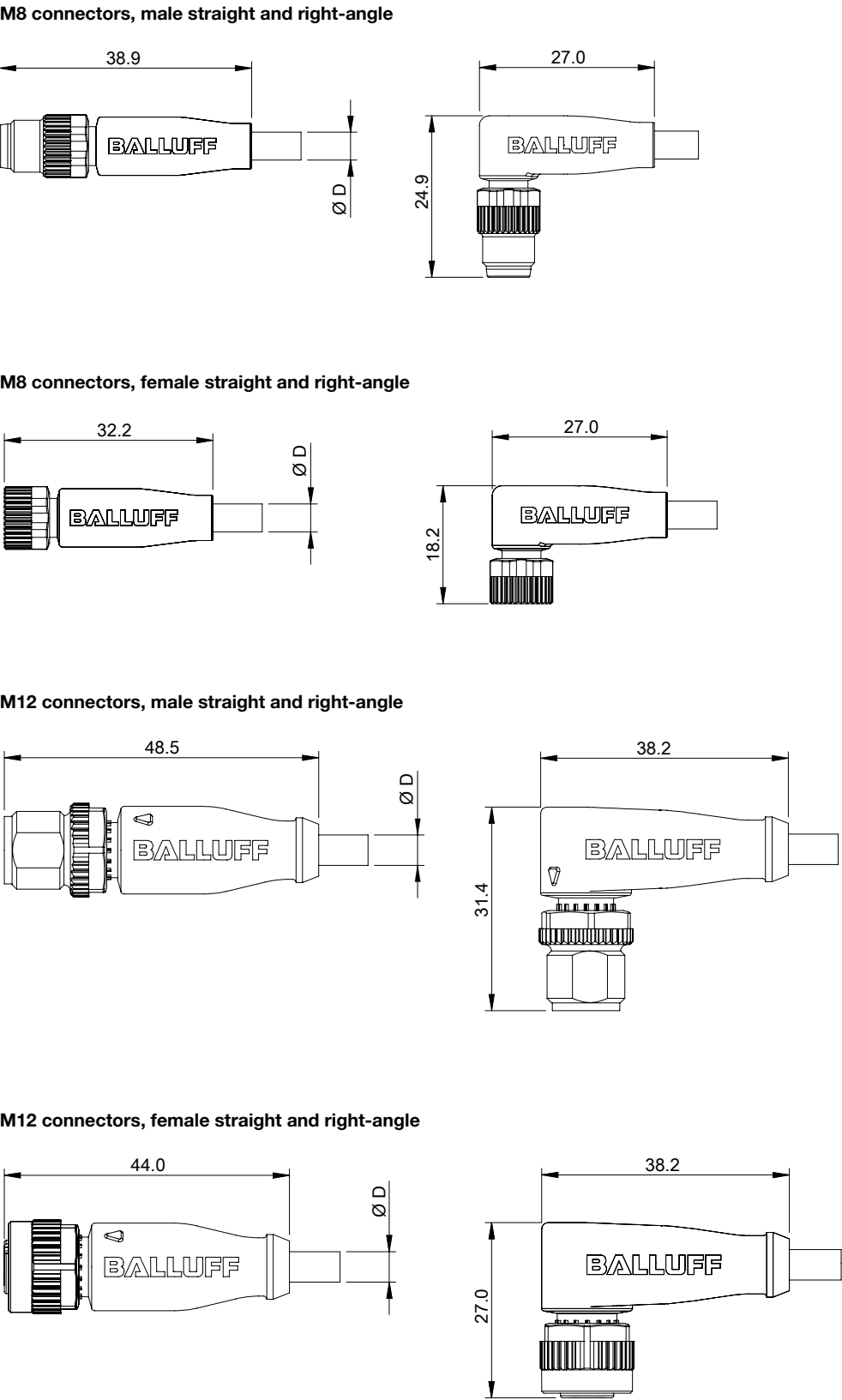
Connectors and Cables

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

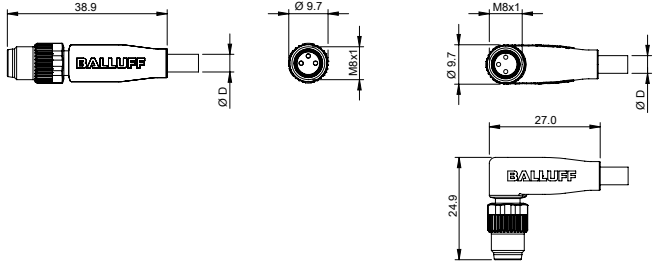


Operating voltage max. AC U _B	60 V AC
Operating voltage max. DC U _B	60 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 67
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -5 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded
Version	Normally open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

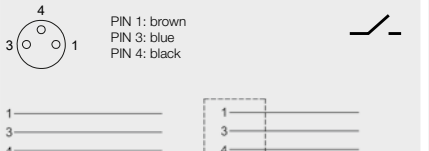
Cable material	Color	Length	Ordering code
PUR	black	2 m	BCC02M2 BCC M313-0000-20-001-PX0334-020
PUR	black	5 m	BCC02M3 BCC M313-0000-20-001-PX0334-050
PUR	black	10 m	BCC02M4 BCC M313-0000-20-001-PX0334-100
PUR shielded	black	2 m	
PUR shielded	black	5 m	
PUR shielded	black	10 m	
PVC	gray	2 m	BCC02NL BCC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

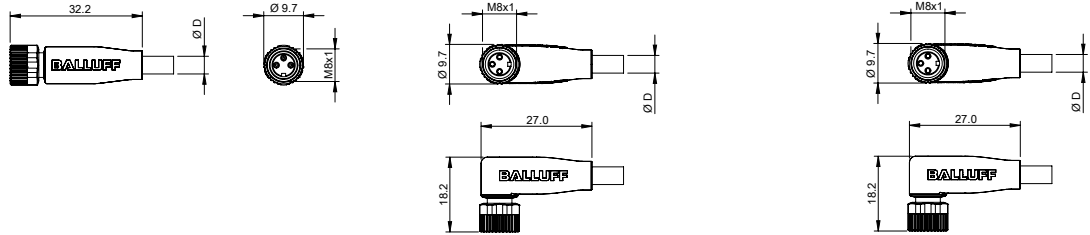


Operating voltage max. AC U _B	60 V AC
Operating voltage max. DC U _B	60 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 67
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version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



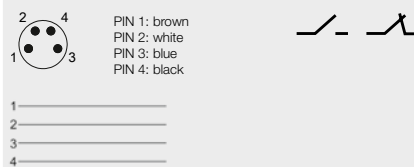
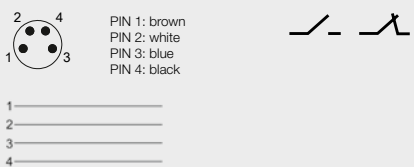
M8

Connectors

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



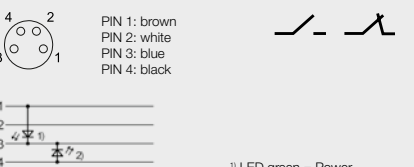
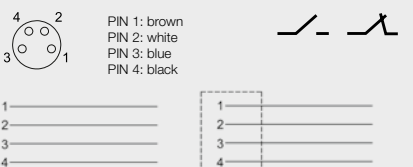
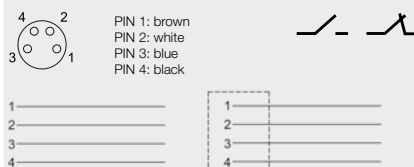
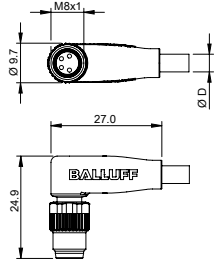
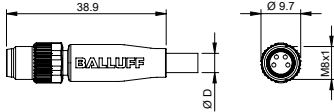
Connector diagram and wiring



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		

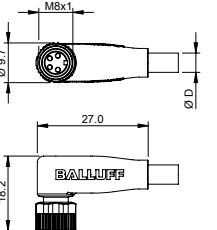
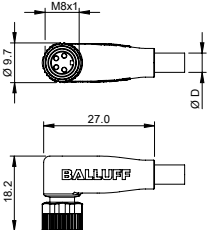
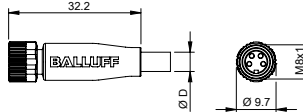
Cable material	Color	Length	Ordering code
PUR	black	2 m	BCC02MU BCC M314-0000-20-003-PX0434-020
PUR	black	5 m	BCC02MW BCC M314-0000-20-003-PX0434-050
PUR	black	10 m	BCC02MY BCC M314-0000-20-003-PX0434-100
PUR shielded	black	2 m	
PUR shielded	black	5 m	
PUR shielded	black	10 m	
PVC	gray	2 m	BCC02PC BCC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

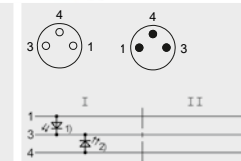
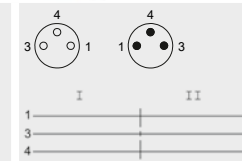
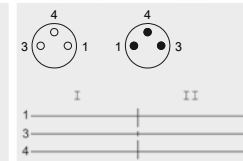
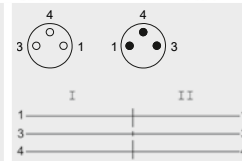
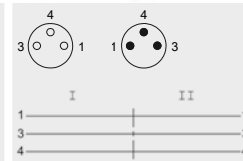
Cable material	Color	Length	Ordering code
PUR	black	2 m	BCC02N2 BCC M314-0000-10-003-PX0434-020
PUR	black	5 m	BCC02N3 BCC M314-0000-10-003-PX0434-050
PUR	black	10 m	BCC02N4 BCC M314-0000-10-003-PX0434-100
PUR shielded	black	2 m	BCC02N5 BCC M314-0000-10-014-PS0434-020
PUR shielded	black	5 m	BCC02N6 BCC 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 ↔ M8

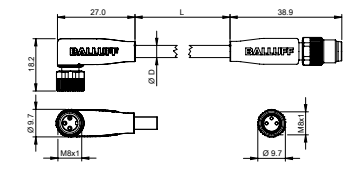
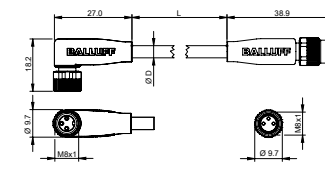
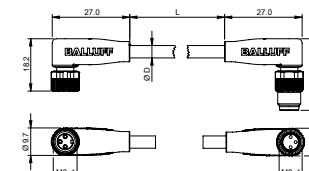
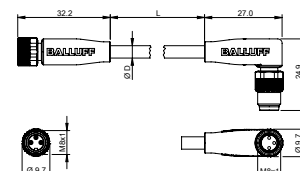
Connection cable

M8 $\leftrightarrow$ M8

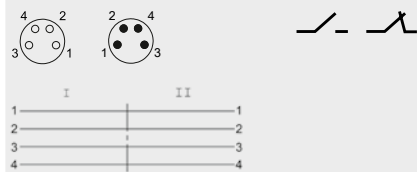


2) LED yellow = Switching output

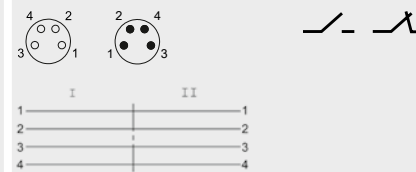
Cable material	Color	Length	Ordering code			Ordering code		
			Part number			Part number		
PUR	black	0.3 m	BCC02R5 BCC M313-M313-30-300-PX0334-003	BCC02RE BCC M313-M323-30-300-PX0334-003		BCC02T6 BCC M323-M323-30-300-PX0334-003	BCC02RZ BCC M323-M313-30-300-PX0334-003	BCC02RN BCC M323-M313-30-602-PX0334-003
PUR	black	0.6 m	BCC02R6 BCC M313-M313-30-300-PX0334-006	BCC02RF BCC M313-M323-30-300-PX0334-006		BCC02T7 BCC M323-M323-30-300-PX0334-006	BCC02T0 BCC M323-M313-30-300-PX0334-006	BCC02RP BCC M323-M313-30-602-PX0334-006
PUR	black	1 m	BCC02R7 BCC M313-M313-30-300-PX0334-010	BCC02RH BCC M313-M323-30-300-PX0334-010		BCC02T8 BCC M323-M323-30-300-PX0334-010	BCC02T1 BCC M323-M313-30-300-PX0334-010	BCC02RR BCC M323-M313-30-602-PX0334-010
PUR	black	1.5 m	BCC02R8 BCC M313-M313-30-300-PX0334-015	BCC02RJ BCC M313-M323-30-300-PX0334-015		BCC02T9 BCC M323-M323-30-300-PX0334-015	BCC02T2 BCC M323-M313-30-300-PX0334-015	BCC02RT BCC M323-M313-30-602-PX0334-015
PUR	black	2 m	BCC02R9 BCC M313-M313-30-300-PX0334-020	BCC02RK BCC M313-M323-30-300-PX0334-020		BCC02TA BCC M323-M323-30-300-PX0334-020	BCC02T3 BCC M323-M313-30-300-PX0334-020	BCC02RU BCC M323-M313-30-602-PX0334-020
PUR	black	3 m	BCC02RA BCC M313-M313-30-300-PX0334-030	BCC02RL BCC M313-M323-30-300-PX0334-030		BCC02TC BCC M323-M323-30-300-PX0334-030	BCC02T4 BCC M323-M313-30-300-PX0334-030	BCC02RW BCC M323-M313-30-602-PX0334-030
PUR	black	5 m	BCC02RC BCC M313-M313-30-300-PX0334-050	BCC02RM BCC M313-M323-30-300-PX0334-050		BCC02TE BCC M323-M323-30-300-PX0334-050	BCC02T5 BCC M323-M313-30-300-PX0334-050	BCC02RY BCC M323-M313-30-602-PX0334-050
PVC	gray	0.3 m	BCC02UR BCC M313-M313-30-300-VX8334-003	BCC02W1 BCC M313-M323-30-300-VX8334-003		BCC02WT BCC M323-M323-30-300-VX8334-003	BCC02WJ BCC M323-M313-30-300-VX8334-003	BCC02W8 BCC M323-M313-30-602-VX8334-003
PVC	gray	0.6 m	BCC02UT BCC M313-M313-30-300-VX8334-006	BCC02W2 BCC M313-M323-30-300-VX8334-006		BCC02WU BCC M323-M323-30-300-VX8334-006	BCC02WK BCC M323-M313-30-300-VX8334-006	BCC02W9 BCC M323-M313-30-602-VX8334-006
PVC	gray	1 m	BCC02UU BCC M313-M313-30-300-VX8334-010	BCC02W3 BCC M313-M323-30-300-VX8334-010		BCC02WW BCC M323-M323-30-300-VX8334-010	BCC02WL BCC M323-M313-30-300-VX8334-010	BCC02WA BCC M323-M313-30-602-VX8334-010
PVC	gray	1.5 m	BCC02UW BCC M313-M313-30-300-VX8334-015	BCC02W4 BCC M313-M323-30-300-VX8334-015		BCC02WY BCC M323-M323-30-300-VX8334-015	BCC02WM BCC M323-M313-30-300-VX8334-015	BCC02WC BCC M323-M313-30-602-VX8334-015
PVC	gray	2 m	BCC02UY BCC M313-M313-30-300-VX8334-020	BCC02W5 BCC M313-M323-30-300-VX8334-020		BCC02WZ BCC M323-M323-30-300-VX8334-020	BCC02WN BCC M323-M313-30-300-VX8334-020	BCC02WE BCC M323-M313-30-602-VX8334-020
PVC	gray	3 m	BCC02UZ BCC M313-M313-30-300-VX8334-030	BCC02W6 BCC M313-M323-30-300-VX8334-030		BCC02Y0 BCC M323-M323-30-300-VX8334-030	BCC02WP BCC M323-M313-30-300-VX8334-030	BCC02WF BCC M323-M313-30-602-VX8334-030
PVC	gray	5 m	BCC02W0 BCC M313-M313-30-300-VX8334-050	BCC02W7 BCC M313-M323-30-300-VX8334-050		BCC02Y1 BCC M323-M323-30-300-VX8334-050	BCC02WR BCC M323-M313-30-300-VX8334-050	BCC02WH BCC M323-M313-30-602-VX8334-050



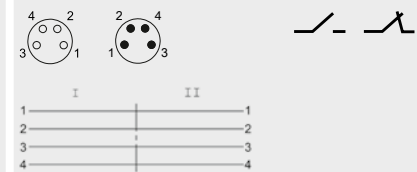
M8-female straight ↔ M8-male straight
or right-angle, 4-pin, no LED



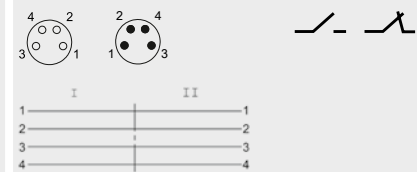
Operating voltage max. AC U _B	30 V AC
Operating voltage max. DC U _B	30 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 67
Ambient temperature T _a	PUR PUR shielded PVC PVC shielded
	−25 °C...+80 °C −5 °C...+80 °C
Version	Complementary (NO/NC)  / 
LED	



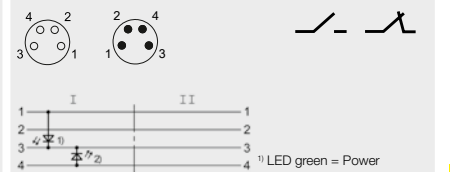
30 V AC
30 V DC
Molded-on
4×0.34mm²
IP 67
-25 °C...+80 °C
-5 °C...+80 °C
Complementary (NO/NC)  / 



30 V AC
30 V DC
Molded-on
4×0.34mm ²
IP 67
-25 °C...+80 °C
-5 °C...+80 °C
Complementary (NO/NC)  / 



30 V AC
30 V DC
Molded-on
4x0.34mm²
IP 67
-25 °C...+80 °C
-5 °C...+80 °C
Complementary (NO/NC)  / 

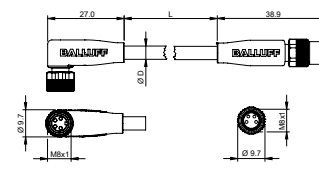
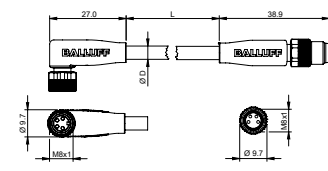
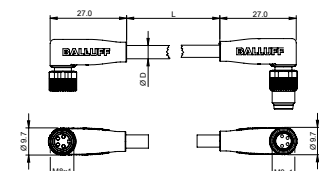
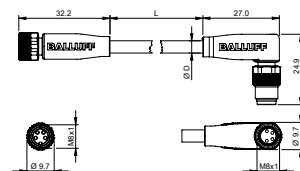


30 V DC
Molded-on
4x0.34mm²
IP 67
-25 °C...+80 °C
-5 °C...+80 °C
PNP-complementary (NO/NC)  / 
green/yellow

Cable material	Color	Length	Ordering code			Ordering code		
			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	BCC02U0 BCC M324-M314-30-606-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	BCC02U1 BCC M324-M314-30-606-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	BCC02U2 BCC M324-M314-30-606-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	BCC02U3 BCC M324-M314-30-606-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	BCC02U4 BCC M324-M314-30-606-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	BCC02U5 BCC M324-M314-30-606-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	BCC02U6 BCC M324-M314-30-606-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	BCC02YK BCC M324-M314-30-606-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	BCC02YL BCC M324-M314-30-606-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	BCC02YM BCC M324-M314-30-606-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	BCC02YN BCC M324-M314-30-606-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	BCC02YP BCC M324-M314-30-606-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	BCC02YR BCC M324-M314-30-606-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	BCC02YT BCC M324-M314-30-606-VX8434-050

The technical drawing illustrates the shaft assembly with the following details:

- Main View:** A horizontal shaft with a central section labeled 'L'. The left end has a dimension of 32.2, and the right end has a dimension of 38.9.
- Cross-Section A-A:** Located at the left end, it shows a circular profile with a diameter of $\varnothing 9.7$ and a height of 10.1.
- Cross-Section B-B:** Located at the right end, it shows a similar circular profile with a diameter of $\varnothing 9.7$ and a height of 10.1.
- Shaft Diameter:** Indicated as $\varnothing D$ in the center of the shaft.



Connection cable

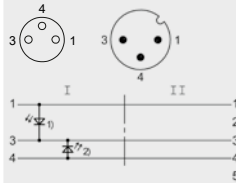
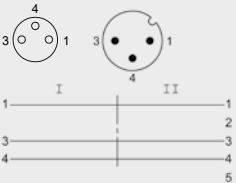
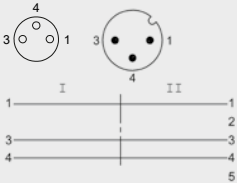
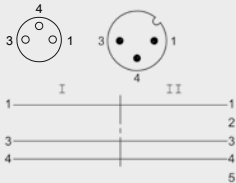
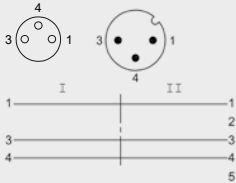
M8-female straight ↔ M12-male straight or right-angle, 3-pin, no LED

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
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
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
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
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
Version	Normally open
LED	—

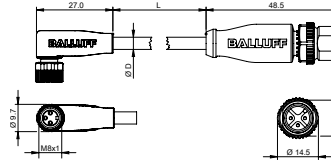
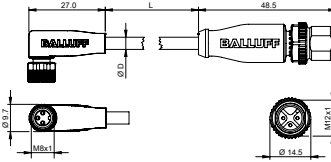
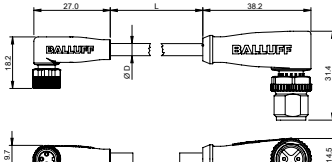
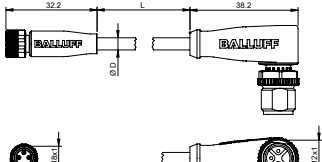
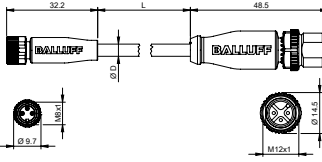
Operating voltage max. AC U _B	60 V AC
Operating voltage max. DC U _B	60 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 67
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -5 °C...+80 °C
	PVC -5 °C...+80 °C
Version	Normally open
LED	—

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
Version	PNP-Normally open
LED	green/yellow

Cable material	Color	Length	Ordering code
PUR	black	0.3 m	BCC03F4 BCC M313-M413-3E-300-PX0334-003
PUR	black	0.6 m	BCC03F5 BCC M313-M413-3E-300-PX0334-006
PUR	black	1 m	BCC03F6 BCC M313-M413-3E-300-PX0334-010
PUR	black	1.5 m	BCC03F7 BCC M313-M413-3E-300-PX0334-015
PUR	black	2 m	BCC03F8 BCC M313-M413-3E-300-PX0334-020
PUR	black	3 m	BCC03F9 BCC M313-M413-3E-300-PX0334-030
PUR	black	5 m	BCC03FA BCC M313-M413-3E-300-PX0334-050
PVC	gray	0.3 m	BCC03HE BCC M313-M413-3E-300-VX8334-003
PVC	gray	0.6 m	BCC03HF BCC M313-M413-3E-300-VX8334-006
PVC	gray	1 m	BCC03HH BCC M313-M413-3E-300-VX8334-010
PVC	gray	1.5 m	BCC03HJ BCC M313-M413-3E-300-VX8334-015
PVC	gray	2 m	BCC03HK BCC M313-M413-3E-300-VX8334-020
PVC	gray	3 m	BCC03HL BCC M313-M413-3E-300-VX8334-030
PVC	gray	5 m	BCC03HM BCC M313-M413-3E-300-VX8334-050

Ordering code	Part number
BCC03FY	BCC M323-M423-3E-300-PX0334-003
BCC03FZ	BCC M323-M423-3E-300-PX0334-006
BCC03H0	BCC M323-M423-3E-300-PX0334-010
BCC03H1	BCC M323-M423-3E-300-PX0334-015
BCC03H2	BCC M323-M423-3E-300-PX0334-020
BCC03H3	BCC M323-M423-3E-300-PX0334-030
BCC03H4	BCC M323-M423-3E-300-PX0334-050
BCC03J6	BCC M323-M423-3E-300-VX8334-003
BCC03J7	BCC M323-M423-3E-300-VX8334-006
BCC03J8	BCC M323-M423-3E-300-VX8334-010
BCC03J9	BCC M323-M423-3E-300-VX8334-015
BCC03JA	BCC M323-M423-3E-300-VX8334-020
BCC03JC	BCC M323-M423-3E-300-VX8334-030
BCC03JE	BCC M323-M423-3E-300-VX8334-050

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



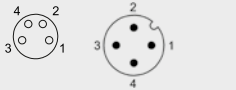
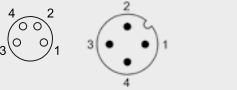
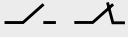
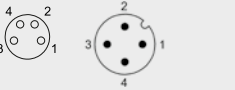
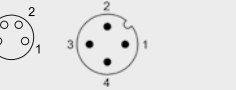
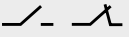
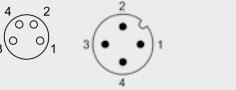
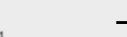
Connection cable

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

M8 ↔ M12

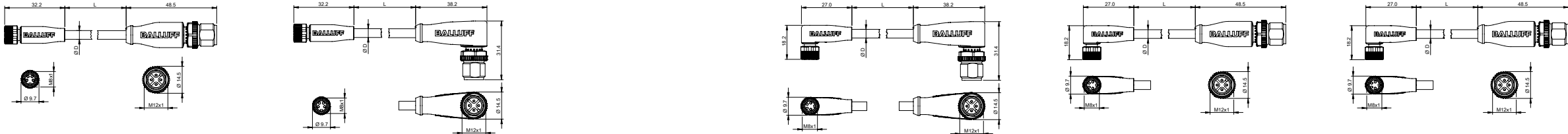
Connection cable

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	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
Cable	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
Enclosure rating per IEC 60529	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 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
Version	Complementary (NO/NC)  	Complementary (NO/NC)  	Complementary (NO/NC)  	Complementary (NO/NC)  
LED				PNP-complementary (NO/NC)   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

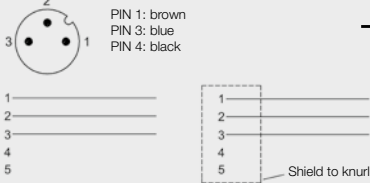
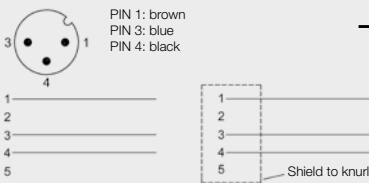
M12

Connectors

M12-male straight,
3-pin, no LED



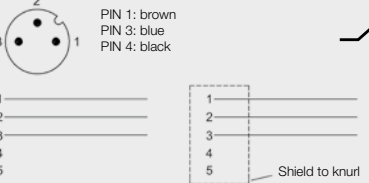
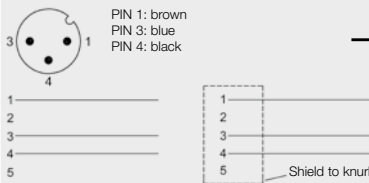
Connector diagram and wiring



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	

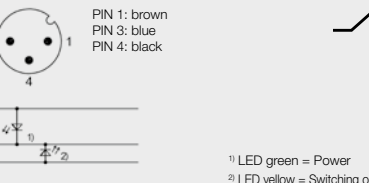
Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version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



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	

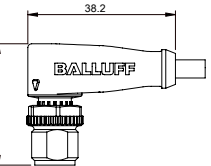
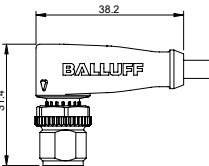
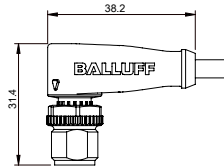
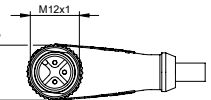
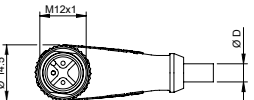
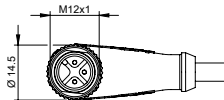
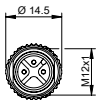
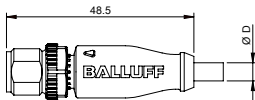
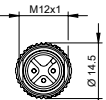
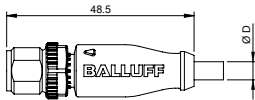


Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version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

Cable material	Color	Length	Ordering code
PUR	black	2 m	BCC022A
PUR	black	5 m	BCC022C
PUR	black	10 m	BCC022E
PUR shielded	black	2 m	BCC022K
PUR shielded	black	5 m	BCC022L
PUR shielded	black	10 m	BCC022M
PVC	gray	2 m	BCC0334
PVC	gray	5 m	BCC0335
PVC	gray	10 m	BCC0336
PVC shielded	gray	2 m	BCC033A
PVC shielded	gray	5 m	BCC033C
PVC shielded	gray	10 m	BCC033E

Ordering code	Part number
BCC022F	BCC M413-0000-2A-001-PX0334-020
BCC022H	BCC M413-0000-2A-002-PX0334-050
BCC022J	BCC M413-0000-2A-001-PX0334-100
BCC022N	BCC M413-0000-2A-036-PS0334-020
BCC022P	BCC M413-0000-2A-036-PS0334-050
BCC022R	BCC M413-0000-2A-036-PS0334-100
BCC0337	BCC M413-0000-2A-001-VX8334-020
BCC0338	BCC M413-0000-2A-002-VX8334-050
BCC0339	BCC M413-0000-2A-002-VX8334-100
BCC033F	BCC M413-0000-2A-037-VS8334-020
BCC033H	BCC M413-0000-2A-037-VS8334-050
BCC033J	BCC M413-0000-2A-037-VS8334-100

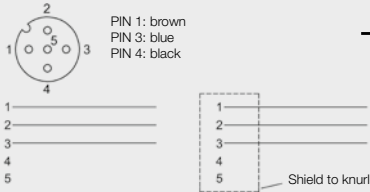
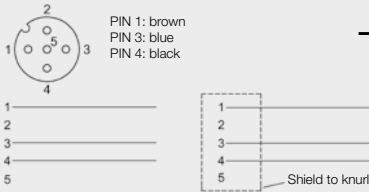
Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions on request.



Connectors
M12-female straight,
3-pin, no LED



Connector diagram and wiring



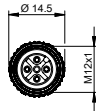
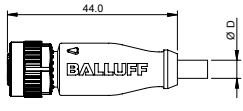
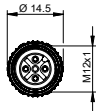
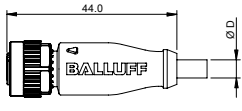
Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version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

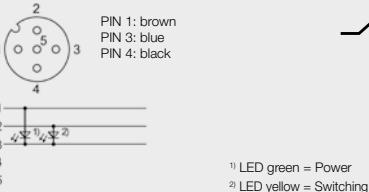
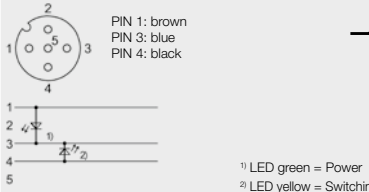
Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version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



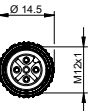
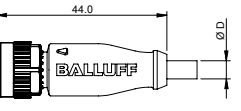
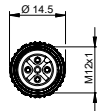
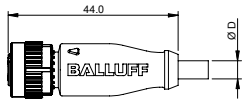
Connectors
M12-female straight,
3-pin, with LED



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

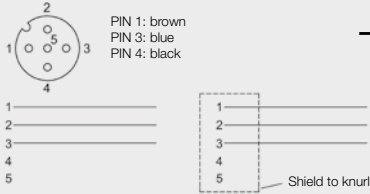
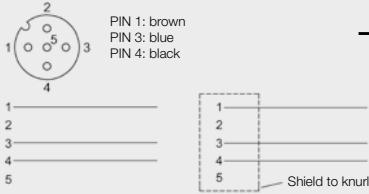
Cable material	Color	Length	Ordering code
			Part number
PUR	black	2 m	BCC030K
			BCC M415-0000-1A-001-PX0334-020
PUR	black	5 m	BCC030L
			BCC M415-0000-1A-001-PX0334-050
PUR	black	10 m	BCC030M
			BCC M415-0000-1A-001-PX0334-100
PUR shielded	black	2 m	BCC030T
			BCC M415-0000-1A-036-PS0334-020
PUR shielded	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



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



Connector diagram and wiring



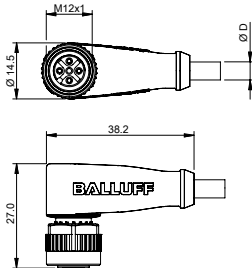
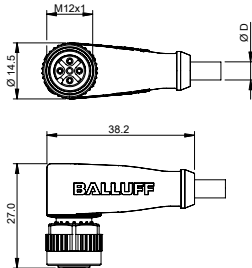
Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version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

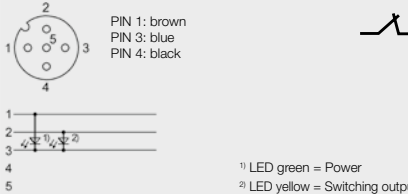
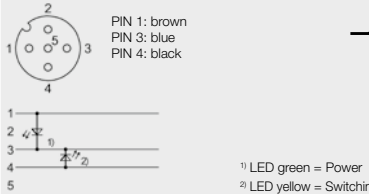
Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version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



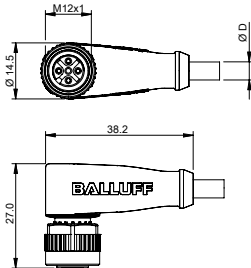
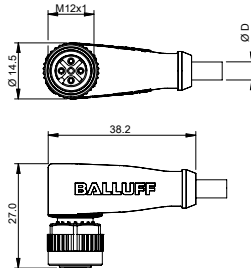
Connectors
M12-female right-angle,
3-pin, with LED



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

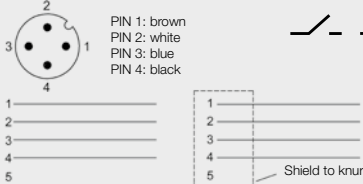
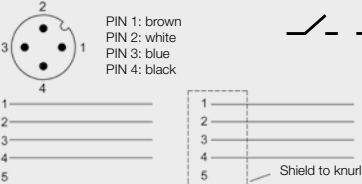


Connectors

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



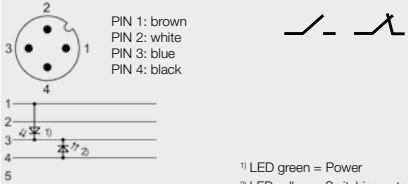
Connector diagram and wiring



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	

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	

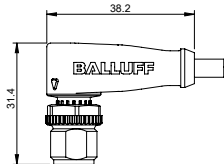
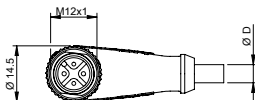
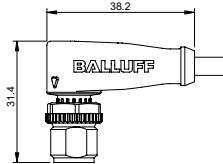
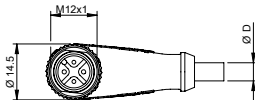
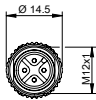
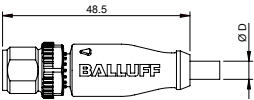


Operating voltage max. AC U _B	30 V DC
Operating voltage max. DC U _B	30 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	-25 °C...+80 °C
	-5 °C...+80 °C
Version	PNP-complementary (NO/NC) ✓- / ✓
LED	green/yellow

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
BCC0321
BCC M424-0000-2A-003-PX0434-020
BCC0322
BCC M424-0000-2A-003-PX0434-050
BCC0323
BCC M424-0000-2A-003-PX0434-100
BCC0324
BCC M424-0000-2A-014-PS0434-020
BCC0325
BCC M424-0000-2A-014-PS0434-050
BCC0326
BCC M424-0000-2A-014-PS0434-100
BCC035T
BCC M424-0000-2A-003-VX8434-020
BCC035U
BCC M424-0000-2A-003-VX8434-050
BCC035W
BCC M424-0000-2A-003-VX8434-100
BCC035Y
BCC M424-0000-2A-014-VS8434-020
BCC035Z
BCC M424-0000-2A-014-VS8434-050
BCC0360
BCC M424-0000-2A-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-male right-angle,
4-pin, with LED

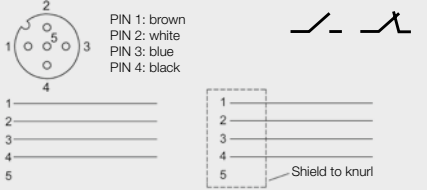
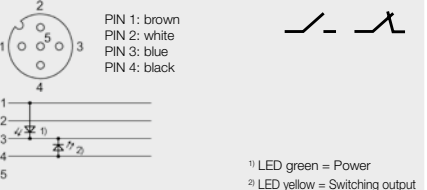
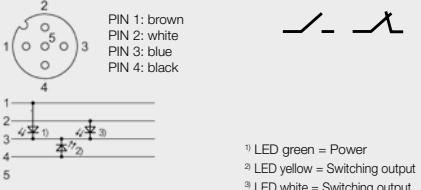


Connectors

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

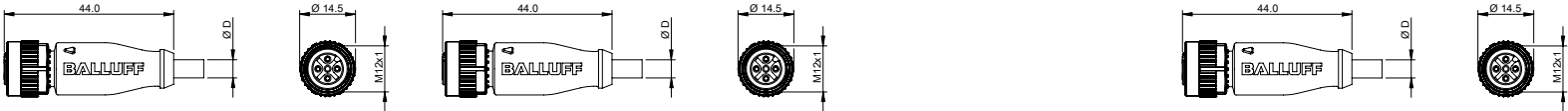
Connectors

M12-female straight, 4-pin, with LED

Connector diagram and wiring				
Operating voltage max. AC U _B		250 V AC		
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		
	PVC	−5 °C...+80 °C	−5 °C...+80 °C	−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
			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.

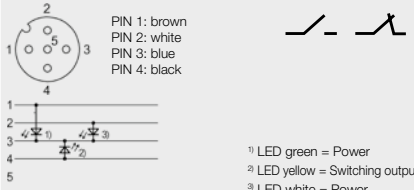
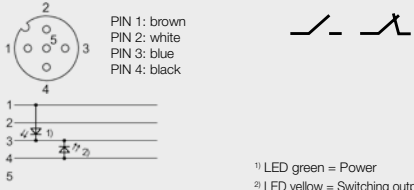
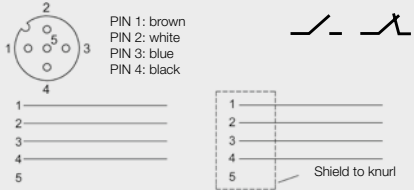


Connectors

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	

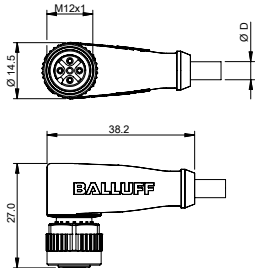
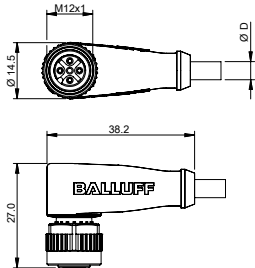
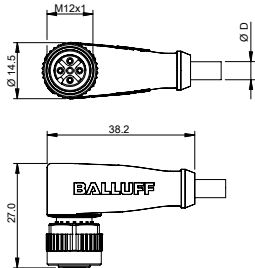
Operating voltage max. AC U _B	30 V DC
Operating voltage max. DC U _B	30 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version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

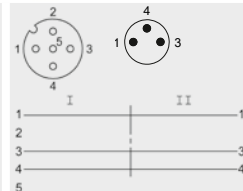
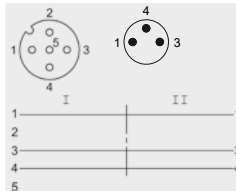


Connectors

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



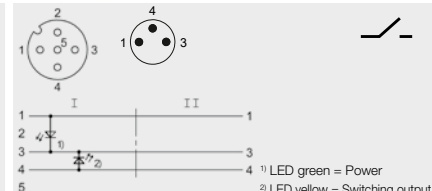
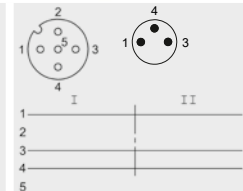
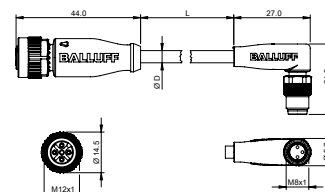
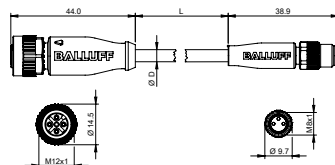
M12-female straight ↔ M8-male straight,
3-pin, or right-angle, no LED



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
3×0.34mm ²	3×0.34mm ²
IP 67	IP 67
-25 °C...+80 °C	-25 °C...+80 °C
-5 °C...+80 °C	-5 °C...+80 °C
Normally open $\swarrow$ -	PNP-Normally open $\swarrow$ - green/yellow



Connection cable

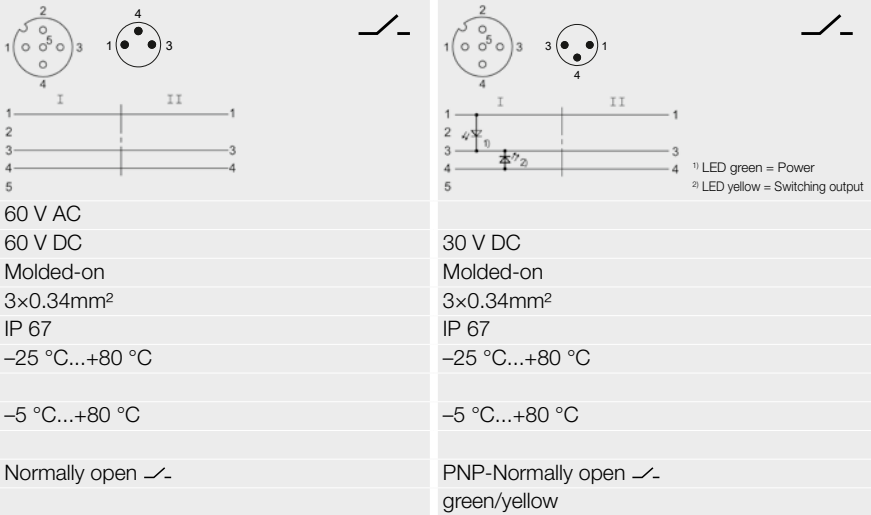
M12-female right-angle ↔ M8-male straight, 3-pin, with and without LED

M12 ↔ M8

Connection cable

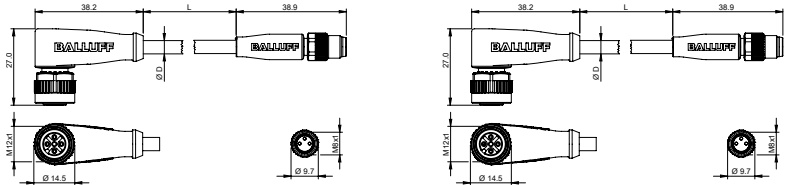


Connector diagram and wiring



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

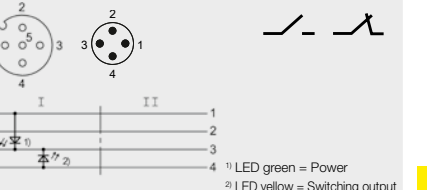
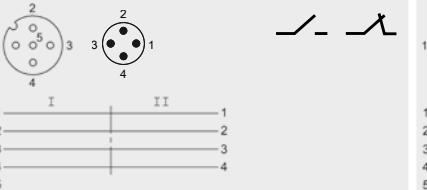
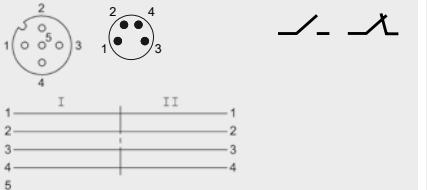
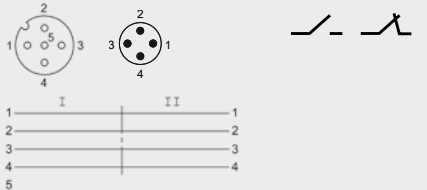
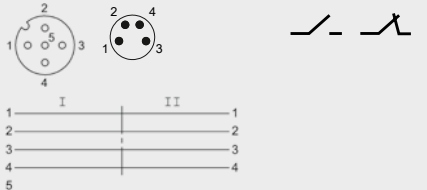
M12-female straight ↔ M8-male straight or right-angle, 4-pin, no LED

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

30 V AC
30 V DC
Molded-on
4×0.34mm²
IP 67
-25 °C...+80 °C
-5 °C...+80 °C
Complementary (NO/NC) /- / -\

30 V AC
30 V DC
Molded-on
4×0.34mm²
IP 67
-25 °C...+80 °C
-5 °C...+80 °C
Complementary (NO/NC) /- / -\

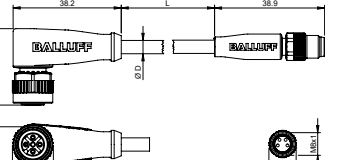
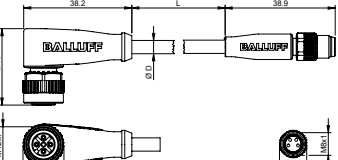
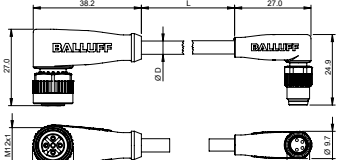
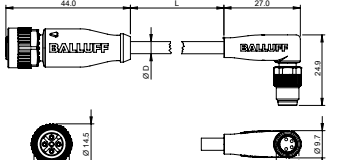
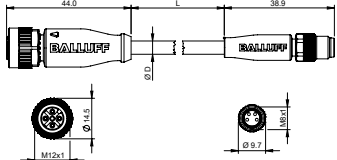
30 V AC
30 V DC
Molded-on
4×0.34mm²
IP 67
-25 °C...+80 °C
-5 °C...+80 °C
Complementary (NO/NC) /- / -\

30 V AC
30 V DC
Molded-on
4×0.34mm²
IP 67
-25 °C...+80 °C
-5 °C...+80 °C
Complementary (NO/NC) /- / -\

30 V DC
Molded-on
4×0.34mm²
IP 67
-25 °C...+80 °C
-5 °C...+80 °C
PNP-complementary (NO/NC) /- / -\ green/yellow

Cable material	Color	Length	Ordering code	Part number	Ordering code	Part number	Ordering code	Part number
PUR	black	0.3 m	BCC03RE	BCC M415-M314-3F-304-PX0434-003	BCC03RN	BCC M415-M324-3F-304-PX0434-003	BCC03T6	BCC M425-M324-3F-304-PX0434-003
PUR	black	0.6 m	BCC03RF	BCC M415-M314-3F-304-PX0434-006	BCC03RP	BCC M415-M324-3F-304-PX0434-006	BCC03T7	BCC M425-M324-3F-304-PX0434-006
PUR	black	1 m	BCC03RH	BCC M415-M314-3F-304-PX0434-010	BCC03RR	BCC M415-M324-3F-304-PX0434-010	BCC03T8	BCC M425-M324-3F-304-PX0434-010
PUR	black	1.5 m	BCC03RJ	BCC M415-M314-3F-304-PX0434-015	BCC03RT	BCC M415-M324-3F-304-PX0434-015	BCC03T9	BCC M425-M324-3F-304-PX0434-015
PUR	black	2 m	BCC03RK	BCC M415-M314-3F-304-PX0434-020	BCC03RU	BCC M415-M324-3F-304-PX0434-020	BCC03TA	BCC M425-M324-3F-304-PX0434-020
PUR	black	3 m	BCC03RL	BCC M415-M314-3F-304-PX0434-030	BCC03RW	BCC M415-M324-3F-304-PX0434-030	BCC03TC	BCC M425-M324-3F-304-PX0434-030
PUR	black	5 m	BCC03RM	BCC M415-M314-3F-304-PX0434-050	BCC03RY	BCC M415-M324-3F-304-PX0434-050	BCC03TE	BCC M425-M324-3F-304-PX0434-050
PVC	gray	0.3 m	BCC03TP	BCC M415-M314-3F-304-VX8434-003	BCC03U0	BCC M415-M324-3F-304-VX8434-003	BCC03UH	BCC M425-M324-3F-304-VX8434-003
PVC	gray	0.6 m	BCC03TR	BCC M415-M314-3F-304-VX8434-006	BCC03U1	BCC M415-M324-3F-304-VX8434-006	BCC03UJ	BCC M425-M324-3F-304-VX8434-006
PVC	gray	1 m	BCC03TT	BCC M415-M314-3F-304-VX8434-010	BCC03U2	BCC M415-M324-3F-304-VX8434-010	BCC03UK	BCC M425-M324-3F-304-VX8434-010
PVC	gray	1.5 m	BCC03TU	BCC M415-M314-3F-304-VX8434-015	BCC03U3	BCC M415-M324-3F-304-VX8434-015	BCC03UL	BCC M425-M324-3F-304-VX8434-015
PVC	gray	2 m	BCC03TW	BCC M415-M314-3F-304-VX8434-020	BCC03U4	BCC M415-M324-3F-304-VX8434-020	BCC03UM	BCC M425-M324-3F-304-VX8434-020
PVC	gray	3 m	BCC03TY	BCC M415-M314-3F-304-VX8434-030	BCC03U5	BCC M415-M324-3F-304-VX8434-030	BCC03UN	BCC M425-M324-3F-304-VX8434-030
PVC	gray	5 m	BCC03TZ	BCC M415-M314-3F-304-VX8434-050	BCC03U6	BCC M415-M324-3F-304-VX8434-050	BCC03UP	BCC M425-M324-3F-304-VX8434-050
							BCC03RZ	BCC M425-M314-3F-304-PX0434-003
							BCC03T0	BCC M425-M314-3F-304-PX0434-006
							BCC03T1	BCC M425-M314-3F-304-PX0434-010
							BCC03T2	BCC M425-M314-3F-304-PX0434-015
							BCC03T3	BCC M425-M314-3F-304-PX0434-020
							BCC03T4	BCC M425-M314-3F-304-PX0434-030
							BCC03T5	BCC M425-M314-3F-304-PX0434-050
							BCC03U7	BCC M425-M314-3F-304-VX8434-003
							BCC03U8	BCC M425-M314-3F-304-VX8434-006
							BCC03U9	BCC M425-M314-3F-304-VX8434-010
							BCC03UA	BCC M425-M314-3F-304-VX8434-015
							BCC03UC	BCC M425-M314-3F-304-VX8434-020
							BCC03UE	BCC M425-M314-3F-304-VX8434-030
							BCC03UF	BCC M425-M314-3F-304-VX8434-050
							BCC03TH	BCC M425-M314-3F-606-PX0434-006
							BCC03TJ	BCC M425-M314-3F-606-PX0434-010
							BCC03TK	BCC M425-M314-3F-606-PX0434-015
							BCC03TL	BCC M425-M314-3F-606-PX0434-020
							BCC03TM	BCC M425-M314-3F-606-PX0434-030
							BCC03TN	BCC M425-M314-3F-606-PX0434-050
							BCC03UR	BCC M425-M314-3F-606-VX8434-003
							BCC03UT	BCC M425-M314-3F-606-VX8434-006
							BCC03UU	BCC M425-M314-3F-606-VX8434-010
							BCC03UW	BCC M425-M314-3F-606-VX8434-015
							BCC03UY	BCC M425-M314-3F-606-VX8434-020
							BCC03UZ	BCC M425-M314-3F-606-VX8434-030
							BCC03W0	BCC M425-M314-3F-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
M12-female straight ↔ M12-male straight
or right-angle, 3-pin, no LED

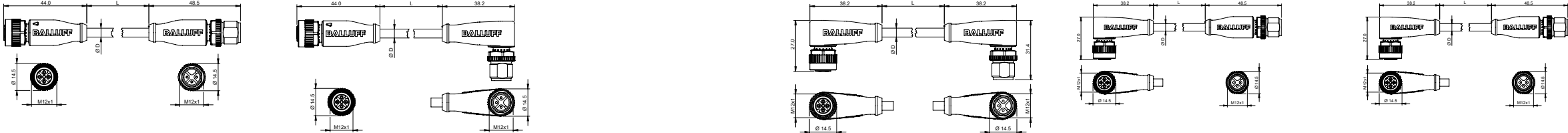
M12 ↔ M12

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	PNP-Normally open ✓-
	PVC	PVC	PVC	PVC	PVC	PVC	green/yellow
	PVC shielded	PVC shielded	PVC shielded	PVC shielded	PVC shielded	PVC shielded	
Version	Normally open ✓-	Normally open ✓-	Normally open ✓-	Normally open ✓-	Normally open ✓-	Normally open ✓-	
LED							

Cable material	Color	Length	Ordering code	Part number
PUR	black	0.3 m	BCC036Y	BCC0375
PUR	black	0.6 m	BCC036Z	BCC0376
PUR	black	1 m	BCC0370	BCC0377
PUR	black	1.5 m	BCC0371	BCC0378
PUR	black	2 m	BCC0372	BCC0379
PUR	black	3 m	BCC0373	BCC037A
PUR	black	5 m	BCC0374	BCC037C
PVC	gray	0.3 m	BCC0386	BCC038F
PVC	gray	0.6 m	BCC0387	BCC038H
PVC	gray	1 m	BCC0388	BCC038J
PVC	gray	1.5 m	BCC0389	BCC038K
PVC	gray	2 m	BCC038A	BCC038L
PVC	gray	3 m	BCC038C	BCC038M
PVC	gray	5 m	BCC038E	BCC038N

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

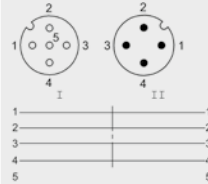
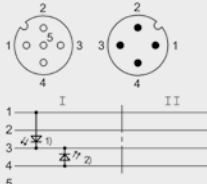
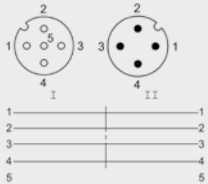
M12 ↔ M12

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

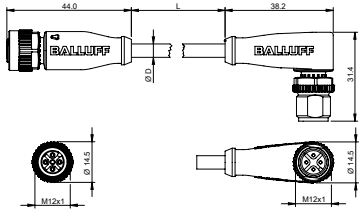
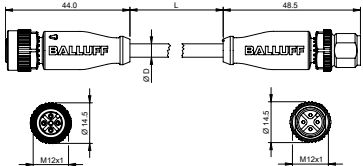
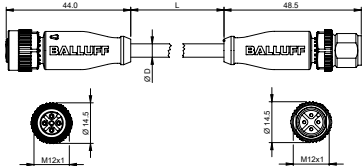
Operating voltage max. AC U _B	30 V DC
Operating voltage max. DC U _B	30 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -5 °C...+80 °C
	PVC -5 °C...+80 °C
Version	Complementary (NO/NC) /- / -/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

Cable material	Color	Length	Ordering code
PUR	black	0.3 m	BCC039H
PUR	black	0.6 m	BCC039J
PUR	black	1 m	BCC039K
PUR	black	1.5 m	BCC039L
PUR	black	2 m	BCC039M
PUR	black	3 m	BCC039N
PUR	black	5 m	BCC039P
PVC	gray	0.3 m	BCC03C9
PVC	gray	0.6 m	BCC03CA
PVC	gray	1 m	BCC03CC
PVC	gray	1.5 m	BCC03CE
PVC	gray	2 m	BCC03CF
PVC	gray	3 m	BCC03CH
PVC	gray	5 m	BCC03CJ

BCC03A1	BCC039R
BCC03A2	BCC039T
BCC03A3	BCC039U
BCC03A4	BCC039W
BCC03A5	BCC039Y
BCC03A6	BCC039Z
BCC03A7	BCC03A0
BCC03CU	BCC03CK
BCC03CW	BCC03CL
BCC03CY	BCC03CM
BCC03CZ	BCC03CN
BCC03E0	BCC03CP
BCC03E1	BCC03CR
BCC03E2	BCC03CT

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

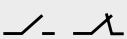
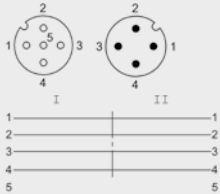
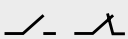
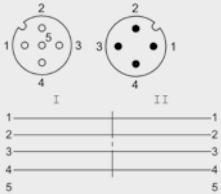


Connection cable

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



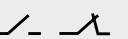
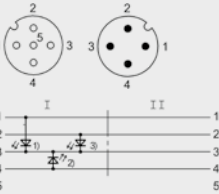
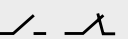
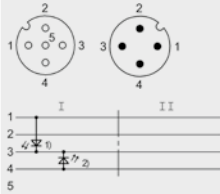
Connector diagram and wiring



Operating voltage max. AC U_B
Operating voltage max. DC U_B
Cable
No. of wires × 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
4×0.34mm²
IP 68
-25 °C...+80 °C
-5 °C...+80 °C
Complementary (NO/NC) / - / -

250 V AC
250 V DC
Molded-on
4×0.34mm²
IP 68
-25 °C...+80 °C
-5 °C...+80 °C
Complementary (NO/NC) / - / -



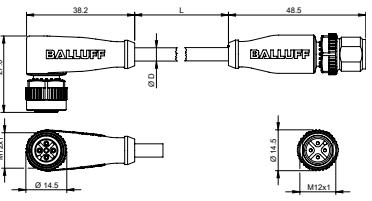
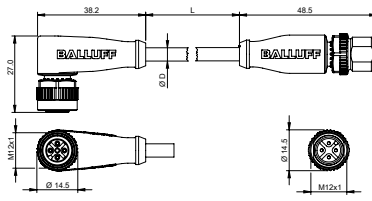
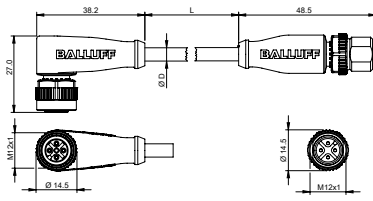
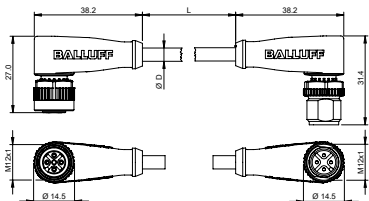
30 V DC
Molded-on
4×0.34mm²
IP 68
-25 °C...+80 °C
-5 °C...+80 °C
PNP-complementary (NO/NC) / - / -
green/yellow

30 V DC
Molded-on
4×0.34mm²
IP 68
-25 °C...+80 °C
-5 °C...+80 °C
PNP-complementary (NO/NC) / - / -
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.

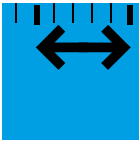


BALLUFF

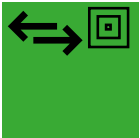
sensors worldwide



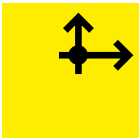
Object Detection



Linear Position Sensing



Industrial Identification



Industrial Networking and Connectivity



Mechanical Accessories

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