

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.



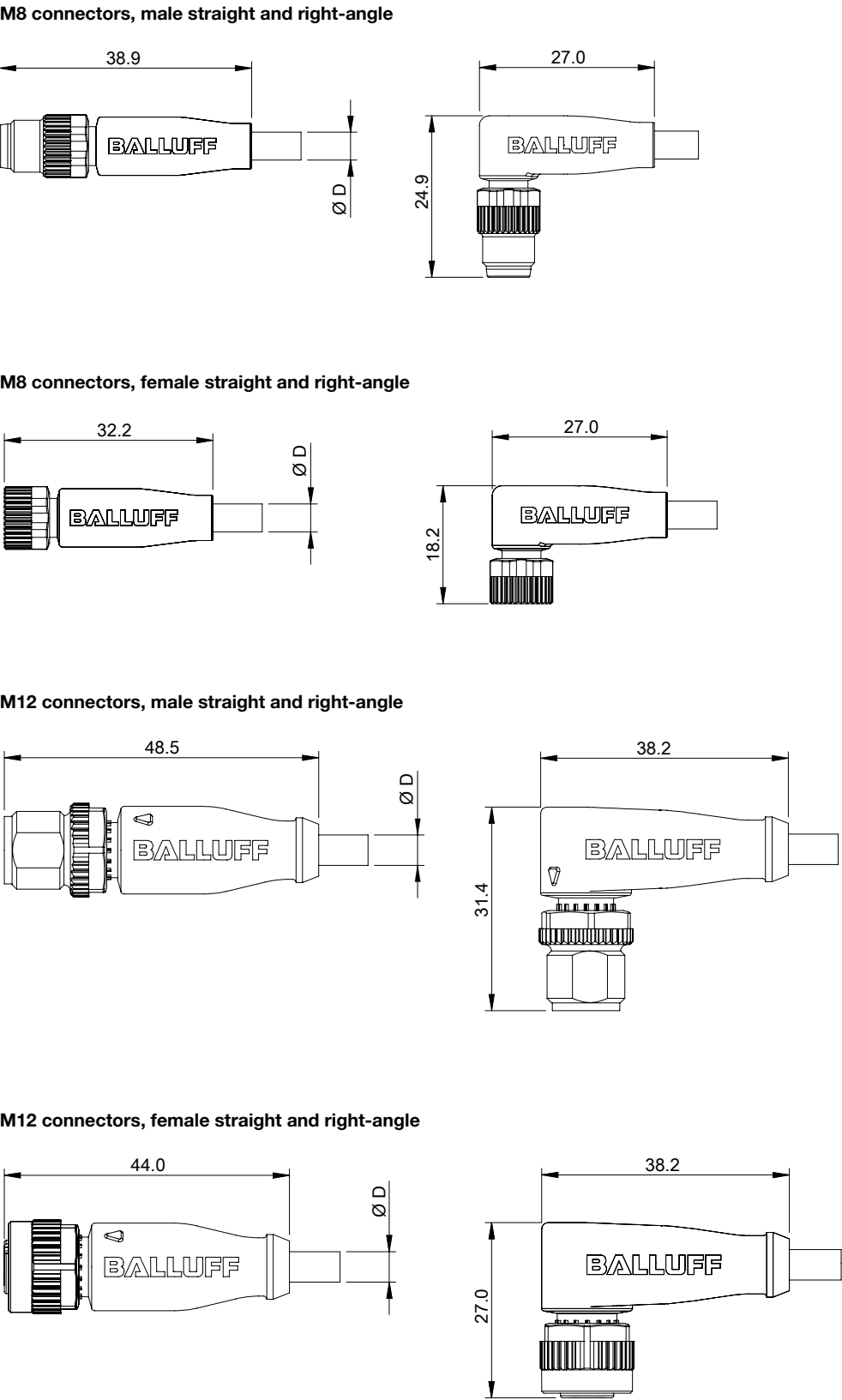
Connectors and Cables

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	

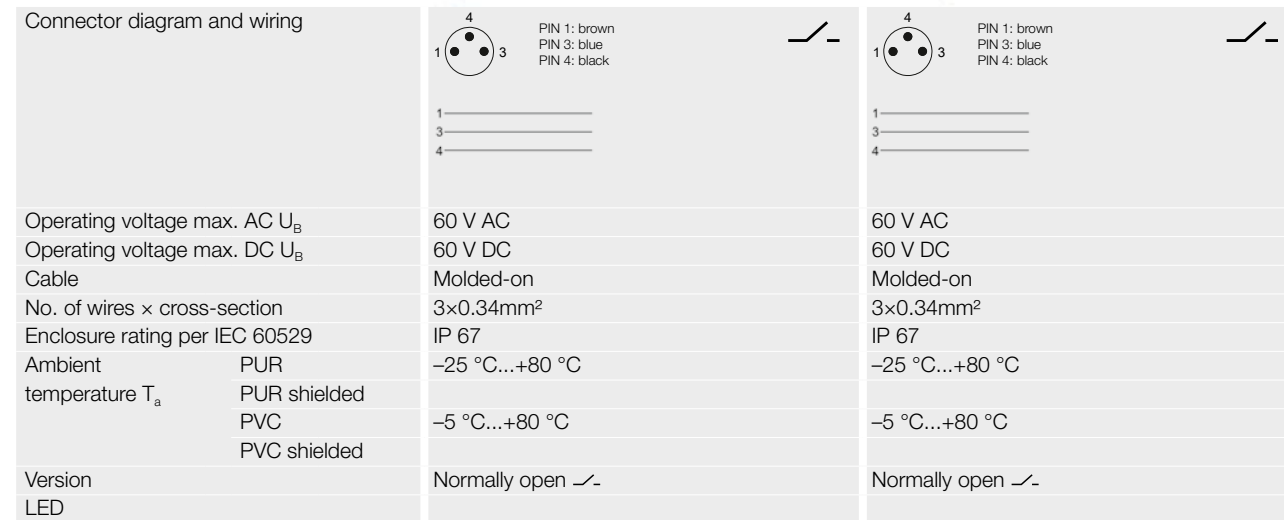
Connectors and Cables

Dimensions



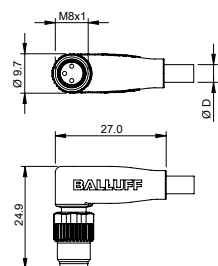
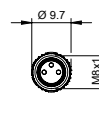
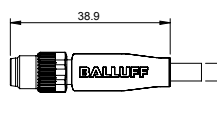
M8-male straight and right-angle,
3-pin, no LED

M8



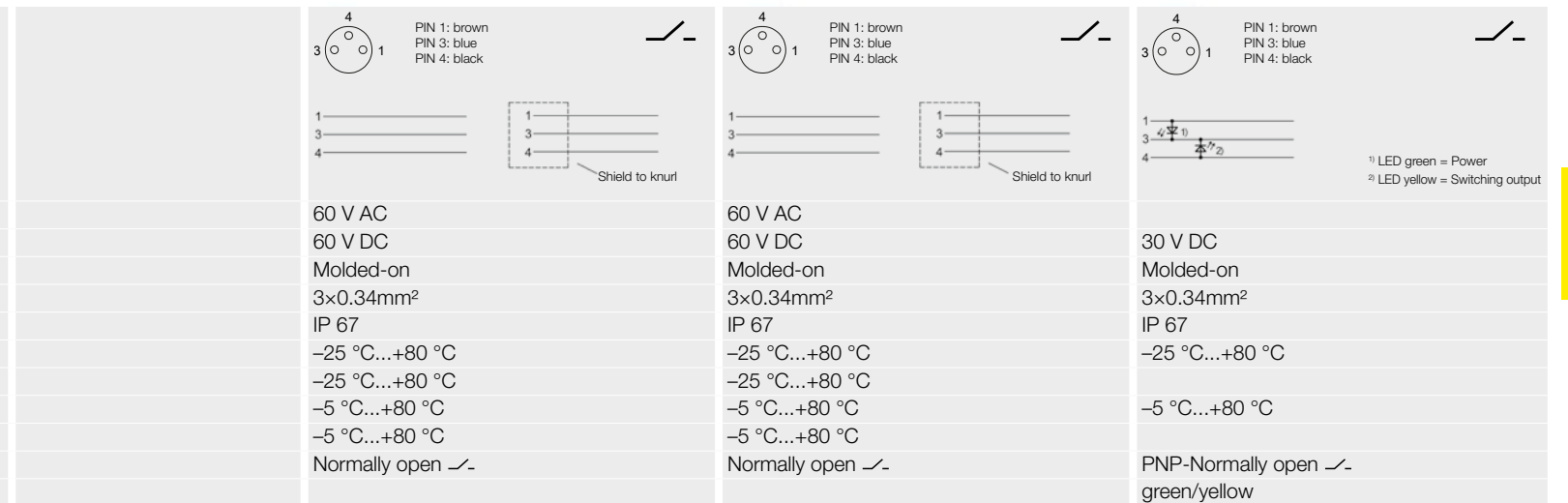
Cable material	Color	Length	Ordering code	
			Part number	
PUR	black	2 m	BCC02M2	BCC02M5
			BCC M313-0000-20-001-PX0334-020	BCC M323-0000-20-001-PX0334-020
PUR	black	5 m	BCC02M3	BCC02M6
			BCC M313-0000-20-001-PX0334-050	BCC M323-0000-20-001-PX0334-050
PUR	black	10 m	BCC02M4	BCC02M7
			BCC M313-0000-20-001-PX0334-100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

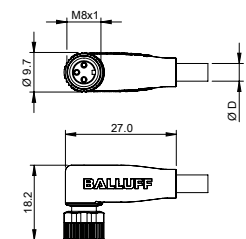
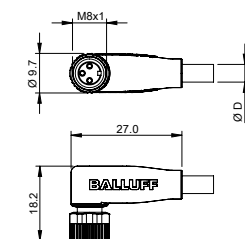
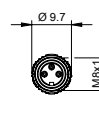
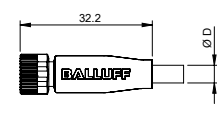


Please visit www.balluff.com for more details

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



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



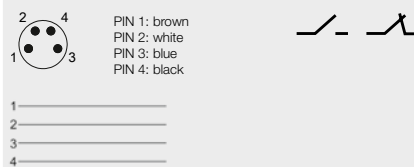
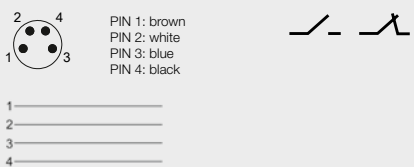
■ www.balluff.com

Connectors

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



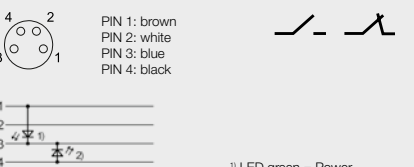
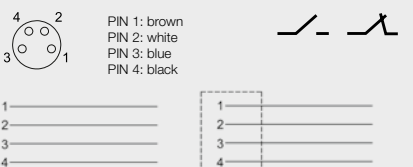
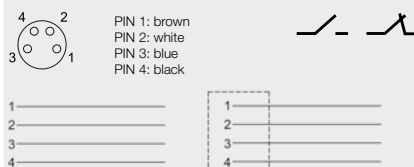
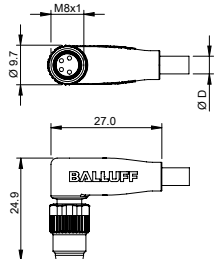
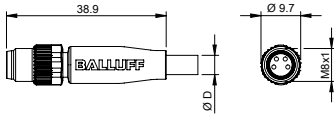
Connector diagram and wiring



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		

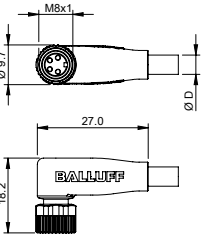
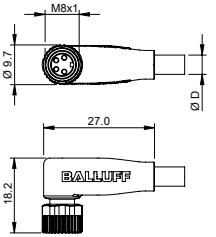
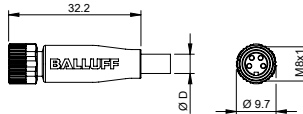
Cable material	Color	Length	Ordering code
PUR	black	2 m	BCC02MU BCC M314-0000-20-003-PX0434-020
PUR	black	5 m	BCC02MW BCC M314-0000-20-003-PX0434-050
PUR	black	10 m	BCC02MY BCC M314-0000-20-003-PX0434-100
PUR shielded	black	2 m	
PUR shielded	black	5 m	
PUR shielded	black	10 m	
PVC	gray	2 m	BCC02PC BCC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

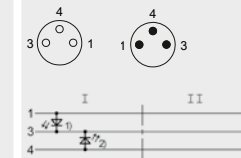
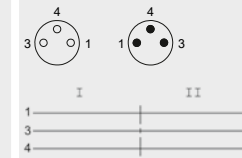
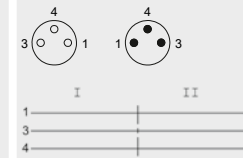
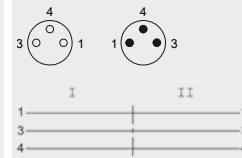
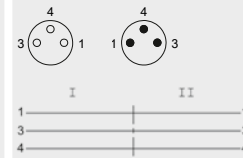
Ordering code	Ordering code	Ordering code
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BCC02N3 BCC M314-0000-10-003-PX0434-050	BCC02NE BCC M324-0000-10-003-PX0434-050	BCC02N9 BCC M324-0000-10-008-PX0434-050
BCC02N4 BCC M314-0000-10-003-PX0434-100	BCC02NF BCC M324-0000-10-003-PX0434-100	BCC02NA 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 ↔ M8

Connection cable

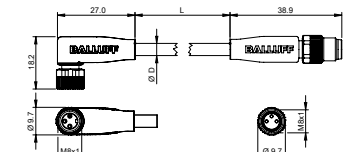
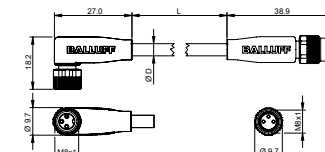
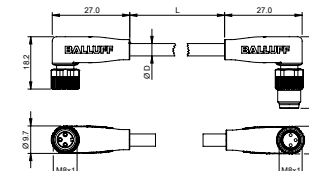
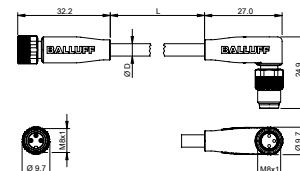
M8 $\leftrightarrow$ M8



1) LED green = Power
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	

Technical drawing of a two-part assembly. The top view shows two cylindrical parts joined at a central interface. The left part has a length of 32.2 and the right part has a length of 38.9. The total length is labeled as L. The diameter of the central interface is labeled as Ø D. The bottom view shows two circular cross-sections. The left cross-section has a diameter of Ø 9.7 and a central hole with a diameter of Ø 4. The right cross-section has a diameter of Ø 9.7 and a central hole with a diameter of Ø 4. The distance from the outer edge to the center of the hole is labeled as 4.5.



Connection cable

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

M8 ↔ M12

Connection cable

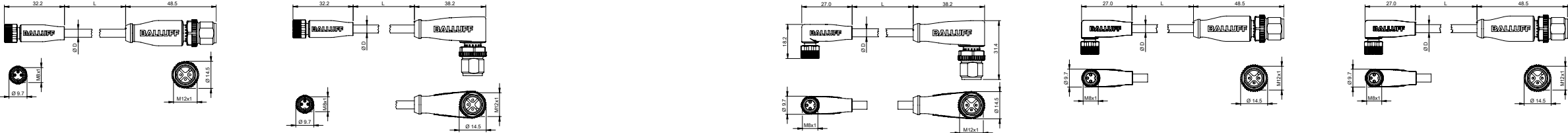
M8-female right-angle ↔ M12-male straight
or right-angle, 3-pin, with and without LED

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 BCC M313-M413-3E-300-PX0334-003	BCC03FC BCC M313-M423-3E-300-PX0334-003	BCC03FY BCC M323-M423-3E-300-PX0334-003	BCC03FM BCC M323-M413-3E-300-PX0334-003	BCC03H5 BCC M323-M413-3E-602-PX0334-003
PUR	black	0.6 m	BCC03F5 BCC M313-M413-3E-300-PX0334-006	BCC03FE BCC M313-M423-3E-300-PX0334-006	BCC03FZ BCC M323-M423-3E-300-PX0334-006	BCC03FN BCC M323-M413-3E-300-PX0334-006	BCC03H6 BCC M323-M413-3E-602-PX0334-006
PUR	black	1 m	BCC03F6 BCC M313-M413-3E-300-PX0334-010	BCC03FF BCC M313-M423-3E-300-PX0334-010	BCC03H0 BCC M323-M423-3E-300-PX0334-010	BCC03FP BCC M323-M413-3E-300-PX0334-010	BCC03H7 BCC M323-M413-3E-602-PX0334-010
PUR	black	1.5 m	BCC03F7 BCC M313-M413-3E-300-PX0334-015	BCC03FH BCC M313-M423-3E-300-PX0334-015	BCC03H1 BCC M323-M423-3E-300-PX0334-015	BCC03FR BCC M323-M413-3E-300-PX0334-015	BCC03H8 BCC M323-M413-3E-602-PX0334-015
PUR	black	2 m	BCC03F8 BCC M313-M413-3E-300-PX0334-020	BCC03FJ BCC M313-M423-3E-300-PX0334-020	BCC03H2 BCC M323-M423-3E-300-PX0334-020	BCC03FT BCC M323-M413-3E-300-PX0334-020	BCC03H9 BCC M323-M413-3E-602-PX0334-020
PUR	black	3 m	BCC03F9 BCC M313-M413-3E-300-PX0334-030	BCC03FK BCC M313-M423-3E-300-PX0334-030	BCC03H3 BCC M323-M423-3E-300-PX0334-030	BCC03FU BCC M323-M413-3E-300-PX0334-030	BCC03HA BCC M323-M413-3E-602-PX0334-030
PUR	black	5 m	BCC03FA BCC M313-M413-3E-300-PX0334-050	BCC03FL BCC M313-M423-3E-300-PX0334-050	BCC03H4 BCC M323-M423-3E-300-PX0334-050	BCC03FW BCC M323-M413-3E-300-PX0334-050	BCC03HC BCC M323-M413-3E-602-PX0334-050
PVC	gray	0.3 m	BCC03HE BCC M313-M413-3E-300-VX8334-003	BCC03HN BCC M313-M423-3E-300-VX8334-003	BCC03J6 BCC M323-M423-3E-300-VX8334-003	BCC03HZ BCC M323-M413-3E-300-VX8334-003	BCC03JF BCC M323-M413-3E-602-VX8334-003
PVC	gray	0.6 m	BCC03HF BCC M313-M413-3E-300-VX8334-006	BCC03HP BCC M313-M423-3E-300-VX8334-006	BCC03J7 BCC M323-M423-3E-300-VX8334-006	BCC03J0 BCC M323-M413-3E-300-VX8334-006	BCC03JH BCC M323-M413-3E-602-VX8334-006
PVC	gray	1 m	BCC03HH BCC M313-M413-3E-300-VX8334-010	BCC03HR BCC M313-M423-3E-300-VX8334-010	BCC03J8 BCC M323-M423-3E-300-VX8334-010	BCC03J1 BCC M323-M413-3E-300-VX8334-010	BCC03JJ BCC M323-M413-3E-602-VX8334-010
PVC	gray	1.5 m	BCC03HJ BCC M313-M413-3E-300-VX8334-015	BCC03HT BCC M313-M423-3E-300-VX8334-015	BCC03J9 BCC M323-M423-3E-300-VX8334-015	BCC03J2 BCC M323-M413-3E-300-VX8334-015	BCC03JK BCC M323-M413-3E-602-VX8334-015
PVC	gray	2 m	BCC03HK BCC M313-M413-3E-300-VX8334-020	BCC03HU BCC M313-M423-3E-300-VX8334-020	BCC03JA BCC M323-M423-3E-300-VX8334-020	BCC03J3 BCC M323-M413-3E-300-VX8334-020	BCC03JL BCC M323-M413-3E-602-VX8334-020
PVC	gray	3 m	BCC03HL BCC M313-M413-3E-300-VX8334-030	BCC03HW BCC M313-M423-3E-300-VX8334-030	BCC03JC BCC M323-M423-3E-300-VX8334-030	BCC03J4 BCC M323-M413-3E-300-VX8334-030	BCC03JM BCC M323-M413-3E-602-VX8334-030
PVC	gray	5 m	BCC03HM BCC M313-M413-3E-300-VX8334-050	BCC03HY BCC M313-M423-3E-300-VX8334-050	BCC03JE BCC M323-M423-3E-300-VX8334-050	BCC03J5 BCC M323-M413-3E-300-VX8334-050	BCC03JN BCC M323-M413-3E-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.



Please visit www.balluff.com for more details

M8 ↔ M12



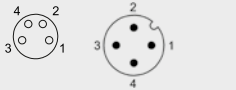
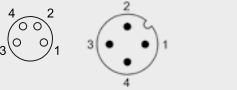
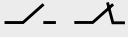
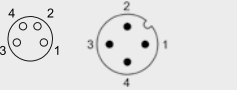
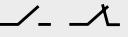
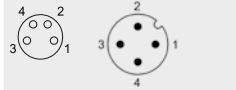
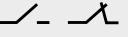
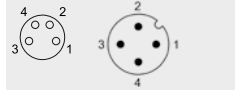
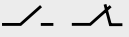
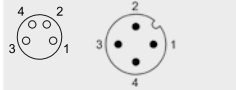
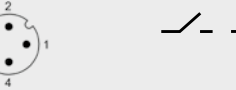
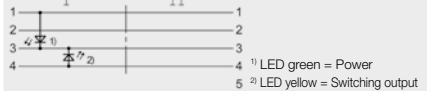
Connection cable

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

M8 ↔ M12

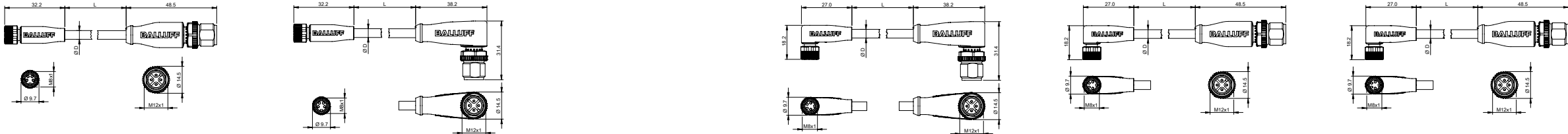
Connection cable

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

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

Cable material	Color	Length	Ordering code	Ordering code	Ordering code	Ordering code	Ordering code
Part number				Part number			
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

M8 ↔ M12



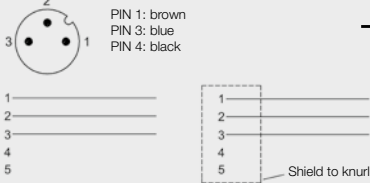
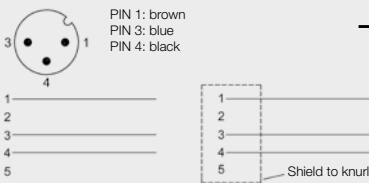
M12

Connectors

M12-male straight,
3-pin, no LED



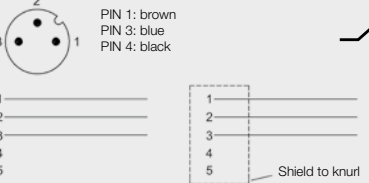
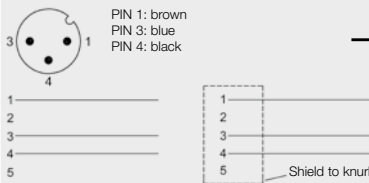
Connector diagram and wiring



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	

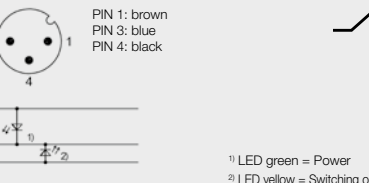
Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version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

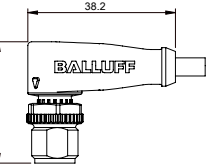
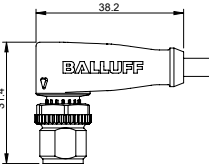
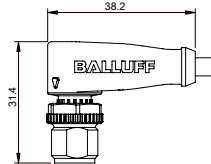
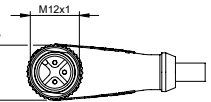
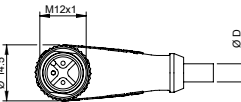
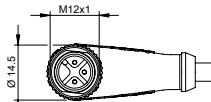
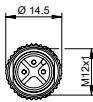
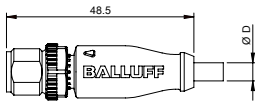
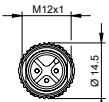
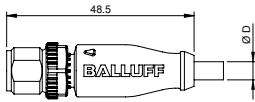
Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version	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	BCC02ZA
PUR	black	5 m	BCC02ZC
PUR	black	10 m	BCC02ZE
PUR shielded	black	2 m	BCC02ZK
PUR shielded	black	5 m	BCC02ZL
PUR shielded	black	10 m	BCC02ZM
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

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

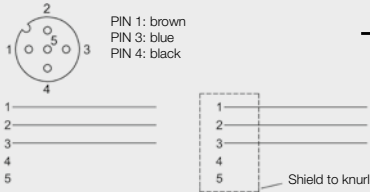
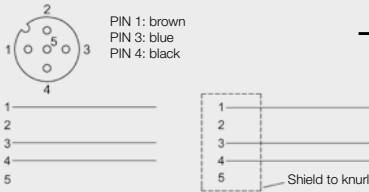
M12-male right-angle,
3-pin, with and without LED

Connectors

M12-female straight, 3-pin, no LED



Connector diagram and wiring



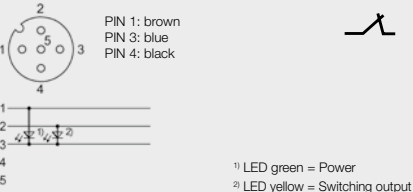
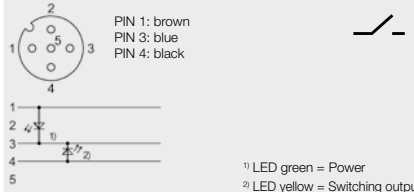
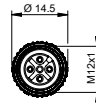
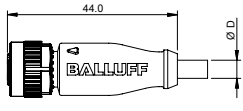
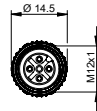
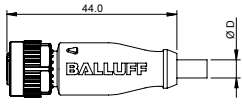
Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80 °C
Version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

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

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

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

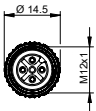
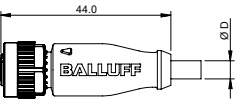
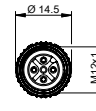
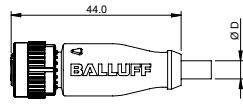
Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions on request.



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

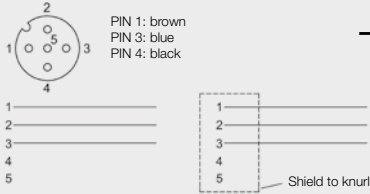
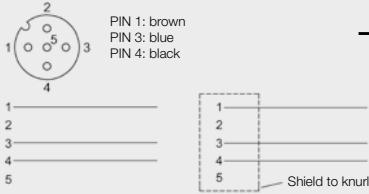
Ordering code
BCC030A
BCC030C
BCC030E
BCC0344
BCC0345
BCC0346



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



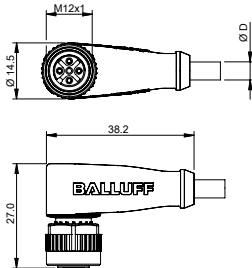
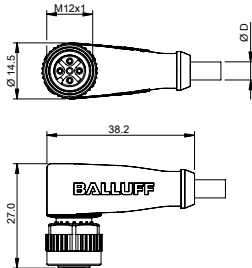
Connector diagram and wiring



Operating voltage max. AC U _B	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	Normally closed

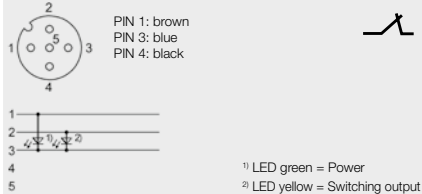
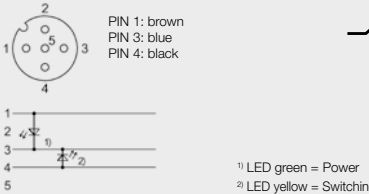
Cable material	Color	Length	Ordering code
			Part number
PUR	black	2 m	BCC0317
			BCC M425-0000-1A-001-PX0334-020
PUR	black	5 m	BCC0318
			BCC M425-0000-1A-001-PX0334-050
PUR	black	10 m	BCC0319
			BCC M425-0000-1A-001-PX0334-100
PUR shielded	black	2 m	BCC031F
			BCC M425-0000-1A-036-PS0334-020
PUR shielded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

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



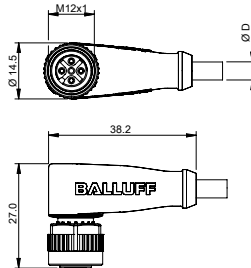
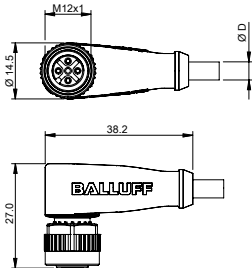
Please visit www.balluff.com for more details

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



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
			Part number
PUR	black	2 m	BCC0311
			BCC M425-0000-1A-004-PX0334-020
PUR	black	5 m	BCC0312
			BCC M425-0000-1A-004-PX0334-050
PUR	black	10 m	BCC0313
			BCC M425-0000-1A-004-PX0334-100
PUR shielded	black	2 m	BCC031K
			BCC M425-0000-1A-037-PS0334-020
PUR shielded	black	5 m	BCC031L
			BCC M425-0000-1A-037-PS0334-050
PUR shielded	black	10 m	BCC031M
			BCC M425-0000-1A-037-PS0334-100
PVC	gray	2 m	BCC0354
			BCC M425-0000-1A-002-VX8334-020
PVC	gray	5 m	BCC0355
			BCC M425-0000-1A-002-VX8334-050
PVC	gray	10 m	BCC0356
			BCC M425-0000-1A-002-VX8334-100
PVC shielded	gray	2 m	BCC035A
			BCC M425-0000-1A-037-VS8334-020
PVC shielded	gray	5 m	BCC035C
			BCC M425-0000-1A-037-VS8334-050
PVC shielded	gray	10 m	BCC035E
			BCC M425-0000-1A-037-VS8334-100



www.balluff.com

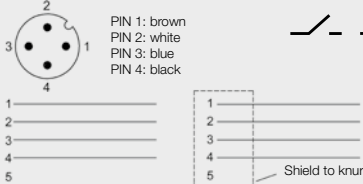
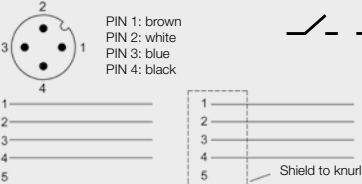


Connectors

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



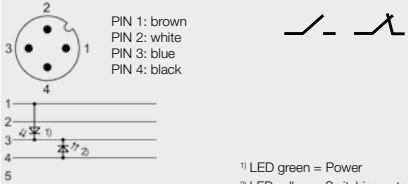
Connector diagram and wiring



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

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

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

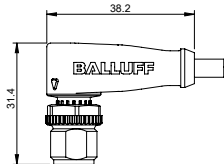
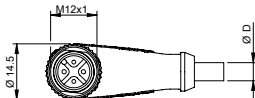
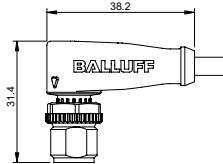
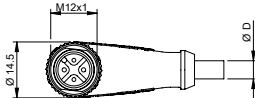
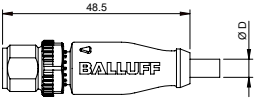


Operating voltage max. AC U _B	30 V DC
Operating voltage max. DC U _B	30 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	-25 °C...+80 °C
	-5 °C...+80 °C
Version	PNP-complementary (NO/NC) ✓- / ✓
LED	green/yellow

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.

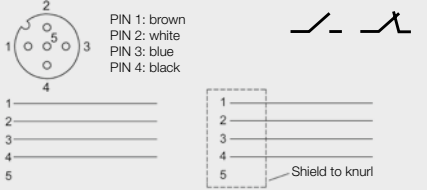
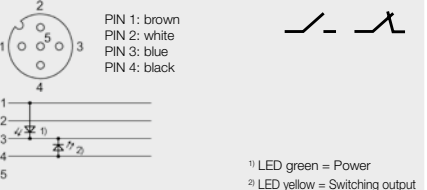
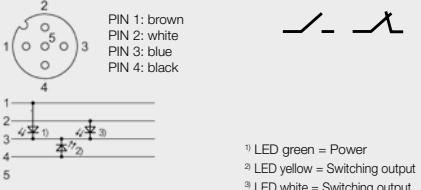


Connectors

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

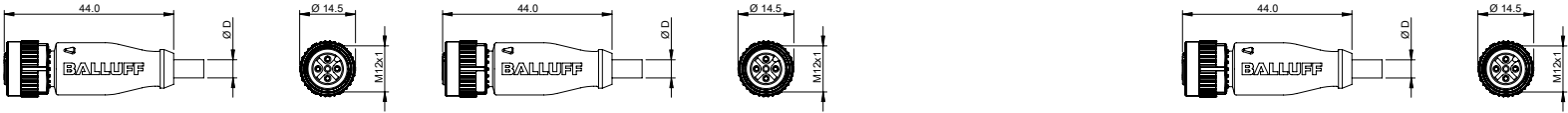
Connectors

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.

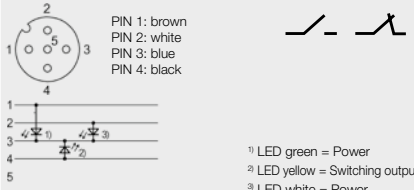
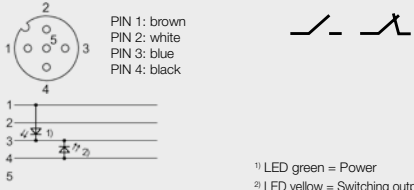
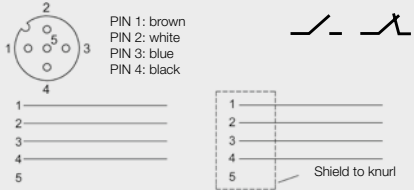


Connectors

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	

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

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

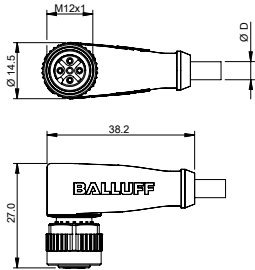
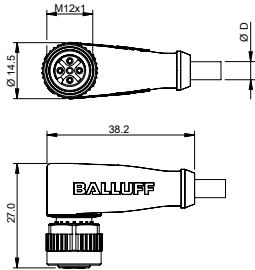
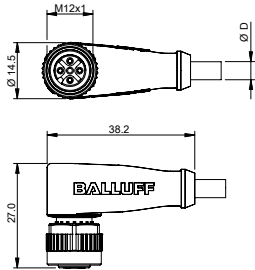
30 V DC
Molded-on
4×0.34mm ²
IP 68
-25 °C...+80 °C
-5 °C...+80 °C

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

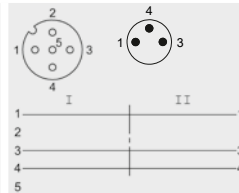
PNP-complementary (NO/NC) /- / -/ green/yellow/white

Cable material	Color	Length	Ordering code	Ordering code	Ordering code
			Part number		Part number
PUR	black	2 m	BCC032Y	BCC032N	BCC032T
			BCC M425-0000-1A-003-PX0434-020	BCC M425-0000-1A-008-PX0434-020	BCC M425-0000-1A-010-PX0434-020
PUR	black	5 m	BCC032Z	BCC032P	BCC032U
			BCC M425-0000-1A-003-PX0434-050	BCC M425-0000-1A-008-PX0434-050	BCC M425-0000-1A-010-PX0434-050
PUR	black	10 m	BCC0330	BCC032R	BCC032W
			BCC M425-0000-1A-003-PX0434-100	BCC M425-0000-1A-008-PX0434-100	BCC M425-0000-1A-010-PX0434-100
PUR shielded	black	2 m	BCC0331		
			BCC M425-0000-1A-014-PS0434-020		
PUR shielded	black	5 m	BCC0332		
			BCC M425-0000-1A-014-PS0434-050		
PUR shielded	black	10 m	BCC0333		
			BCC M425-0000-1A-014-PS0434-100		
PVC	gray	2 m	BCC036N	BCC036F	BCC036K
			BCC M425-0000-1A-003-VX8434-020	BCC M425-0000-1A-008-VX8434-020	BCC M425-0000-1A-010-VX8434-020
PVC	gray	5 m	BCC036P	BCC036H	BCC036L
			BCC M425-0000-1A-003-VX8434-050	BCC M425-0000-1A-008-VX8434-050	BCC M425-0000-1A-010-VX8434-050
PVC	gray	10 m	BCC036R	BCC036J	BCC036M
			BCC M425-0000-1A-003-VX8434-100	BCC M425-0000-1A-008-VX8434-100	BCC M425-0000-1A-010-VX8434-100
PVC shielded	gray	2 m	BCC036T		
			BCC M425-0000-1A-014-VS8434-020		
PVC shielded	gray	5 m	BCC036U		
			BCC M425-0000-1A-014-VS8434-050		
PVC shielded	gray	10 m	BCC036W		
			BCC M425-0000-1A-014-VS8434-100		

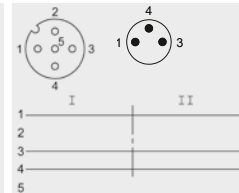
Other cable materials, colors and lengths on request.
Connectors without LED are suitable for PNP and NPN switching functions.
NPN versions on request.



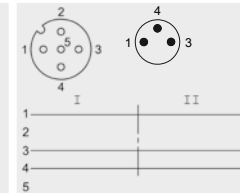
M12-female straight ↔ M8-male straight,
3-pin, or right-angle, no LED



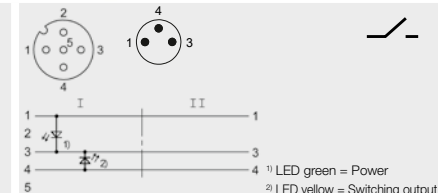
Operating voltage max. AC U _B	60 V AC
Operating voltage max. DC U _B	60 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm ²
Enclosure rating per IEC 60529	IP 67
Ambient temperature T _a	PUR PUR shielded PVC PVC shielded
	-25 °C...+80 °C -5 °C...+80 °C
Version	Normally open 
LED	



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

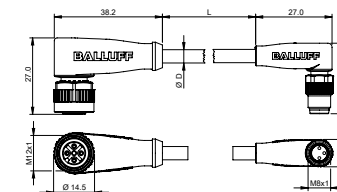
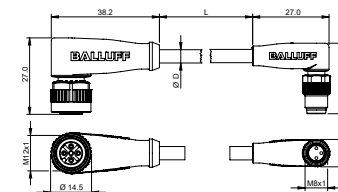
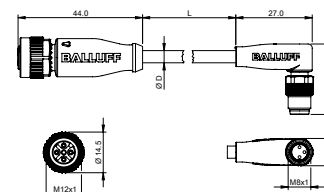


60 V AC
60 V DC
Molded-on
3×0.34mm ²
IP 67
-25 °C...+80 °C
-5 °C...+80 °C
Normally open $\swarrow$ -



30 V DC
Molded-on
3×0.34mm²
IP 67
-25 °C...+80 °C
-5 °C...+80 °C
PNP-Normally open $\swarrow$ -
green/yellow

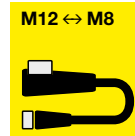
Cable material	Color	Length	Ordering code				
			Part number				
PUR	black	0.3 m	BCC03M9 BCC M415-M313-3F-300-PX0334-003	BCC03MK BCC M415-M323-3F-300-PX0334-003		BCC03N3 BCC M425-M323-3F-300-PX0334-003	BCC03NL BCC M425-M323-3F-602-PX0334-003
PUR	black	0.6 m	BCC03MA BCC M415-M313-3F-300-PX0334-006	BCC03ML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



M18 / M8



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



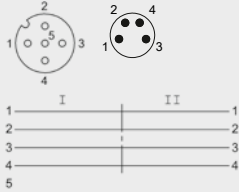
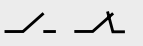
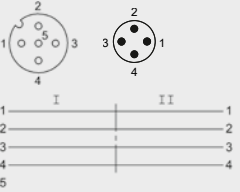
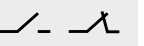
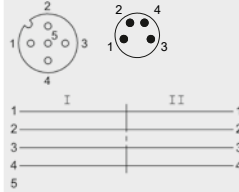
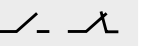
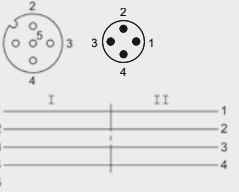
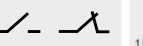
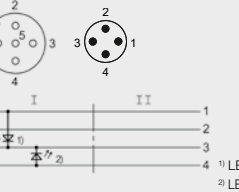
Connection cable

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

M12 ↔ M8

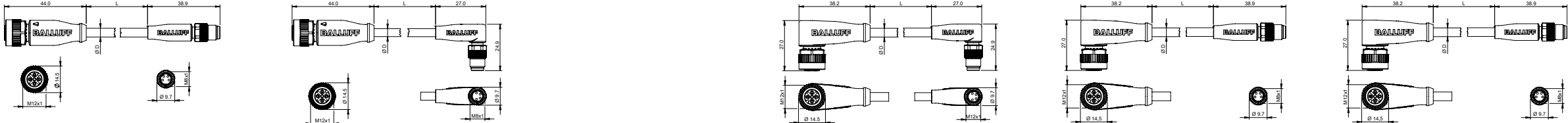
Connection cable

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		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		-25 °C...+80 °C		-25 °C...+80 °C		-25 °C...+80 °C		-25 °C...+80 °C	
	PUR shielded										
	PVC	-5 °C...+80 °C		-5 °C...+80 °C		-5 °C...+80 °C		-5 °C...+80 °C		-5 °C...+80 °C	
	PVC shielded										
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	BCC03RE	BCC M415-M314-3F-304-PX0434-003	BCC03RN	BCC M415-M324-3F-304-PX0434-003	BCC03T6	BCC M425-M324-3F-304-PX0434-003	BCC03RZ	BCC M425-M314-3F-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	BCC03T0	BCC M425-M314-3F-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	BCC03T1	BCC M425-M314-3F-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	BCC03T2	BCC M425-M314-3F-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	BCC03T3	BCC M425-M314-3F-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	BCC03T4	BCC M425-M314-3F-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	BCC03T5	BCC M425-M314-3F-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	BCC03U7	BCC M425-M314-3F-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	BCC03U8	BCC M425-M314-3F-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	BCC03U9	BCC M425-M314-3F-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	BCC03UA	BCC M425-M314-3F-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	BCC03UC	BCC M425-M314-3F-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	BCC03UE	BCC M425-M314-3F-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	BCC03UF	BCC M425-M314-3F-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.



Please visit www.balluff.com for more details

M12 ↔ M8



Connection cable

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

M12 ↔ M12

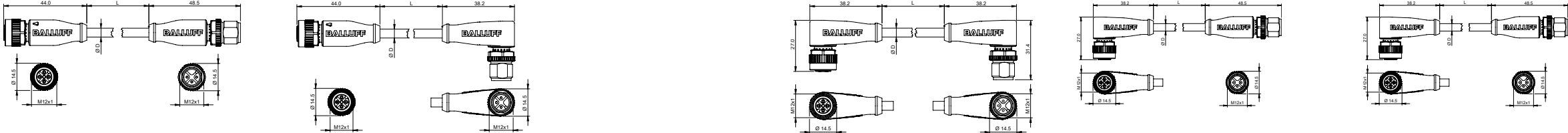
Connection cable

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

Connector diagram and wiring									
Operating voltage max. AC U _B	250 V AC	250 V AC	250 V AC	250 V AC	250 V AC	250 V AC	250 V AC	250 V AC	250 V AC
Operating voltage max. DC U _B	250 V DC	250 V DC	250 V DC	250 V DC	250 V DC	250 V DC	250 V DC	250 V DC	250 V DC
Cable	Molded-on	Molded-on	Molded-on	Molded-on	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	3×0.34mm ²	3×0.34mm ²	3×0.34mm ²	3×0.34mm ²
Enclosure rating per IEC 60529	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C	PUR -25 °C...+80 °C
	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C	PUR shielded -5 °C...+80 °C
Version	Normally open	Normally open	Normally open	Normally open	Normally open	Normally open	Normally open	Normally open	Normally open
LED	Normally open	Normally open	Normally open	Normally open	Normally open	Normally open	Normally open	Normally open	Normally open

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

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

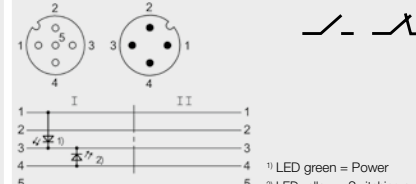


Please visit www.balluff.com for more details

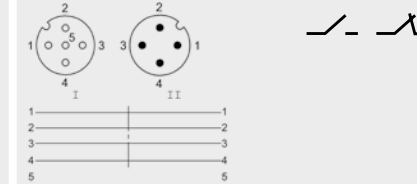
M12 ↔ M12



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



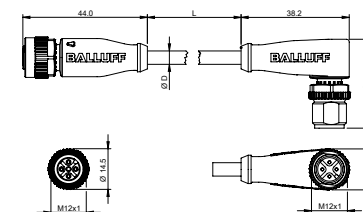
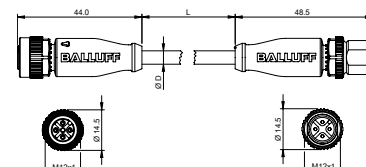
Operating voltage max. AC U _B	250 V AC	
Operating voltage max. DC U _B	250 V DC	30 V DC
Cable	Molded-on	Molded-on
No. of wires × cross-section	4×0.34mm ²	4×0.34mm ²
Enclosure rating per IEC 60529	IP 68	IP 68
Ambient temperature T _a	PUR PUR shielded PVC PVC shielded	–25 °C...+80 °C –25 °C...+80 °C –5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



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

Cable material	Color	Length	Ordering code			
			Part number			
PUR	black	0.3 m	BCC039H BCC M415-M414-3A-304-PX0434-003	BCC03A1 BCC M415-M414-3A-606-PX0434-003		BCC039R BCC M415-M424-3A-304-PX0434-003
PUR	black	0.6 m	BCC039J BCC M415-M414-3A-304-PX0434-006	BCC03A2 BCC M415-M414-3A-606-PX0434-006		BCC039T BCC M415-M424-3A-304-PX0434-006
PUR	black	1 m	BCC039K BCC M415-M414-3A-304-PX0434-010	BCC03A3 BCC M415-M414-3A-606-PX0434-010		BCC039U BCC M415-M424-3A-304-PX0434-010
PUR	black	1.5 m	BCC039L BCC M415-M414-3A-304-PX0434-015	BCC03A4 BCC M415-M414-3A-606-PX0434-015		BCC039W BCC M415-M424-3A-304-PX0434-015
PUR	black	2 m	BCC039M BCC M415-M414-3A-304-PX0434-020	BCC03A5 BCC M415-M414-3A-606-PX0434-020		BCC039Y BCC M415-M424-3A-304-PX0434-020
PUR	black	3 m	BCC039N BCC M415-M414-3A-304-PX0434-030	BCC03A6 BCC M415-M414-3A-606-PX0434-030		BCC039Z BCC M415-M424-3A-304-PX0434-030
PUR	black	5 m	BCC039P BCC M415-M414-3A-304-PX0434-050	BCC03A7 BCC M415-M414-3A-606-PX0434-050		BCC03A0 BCC M415-M424-3A-304-PX0434-050
PVC	gray	0.3 m	BCC03C9 BCC M415-M414-3A-304-VX8434-003	BCC03CU BCC M415-M414-3A-606-VX8434-003		BCC03CK BCC M415-M424-3A-304-VX8434-003
PVC	gray	0.6 m	BCC03CA BCC M415-M414-3A-304-VX8434-006	BCC03CW BCC M415-M414-3A-606-VX8434-006		BCC03CL BCC M415-M424-3A-304-VX8434-006
PVC	gray	1 m	BCC03CC BCC M415-M414-3A-304-VX8434-010	BCC03CY BCC M415-M414-3A-606-VX8434-010		BCC03CM BCC M415-M424-3A-304-VX8434-010
PVC	gray	1.5 m	BCC03CE BCC M415-M414-3A-304-VX8434-015	BCC03CZ BCC M415-M414-3A-606-VX8434-015		BCC03CN BCC M415-M424-3A-304-VX8434-015
PVC	gray	2 m	BCC03CF BCC M415-M414-3A-304-VX8434-020	BCC03E0 BCC M415-M414-3A-606-VX8434-020		BCC03CP BCC M415-M424-3A-304-VX8434-020
PVC	gray	3 m	BCC03CH BCC M415-M414-3A-304-VX8434-030	BCC03E1 BCC M415-M414-3A-606-VX8434-030		BCC03CR BCC M415-M424-3A-304-VX8434-030
PVC	gray	5 m	BCC03CJ BCC M415-M414-3A-304-VX8434-050	BCC03E2 BCC M415-M414-3A-606-VX8434-050		BCC03CT BCC M415-M424-3A-304-VX8434-050

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

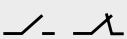
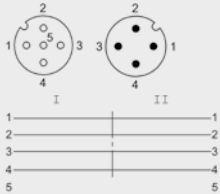
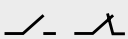
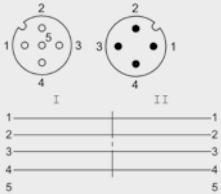


Connection cable

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



Connector diagram and wiring



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

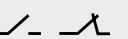
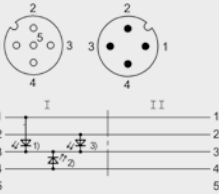
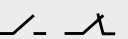
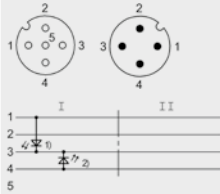
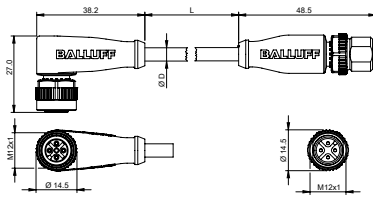
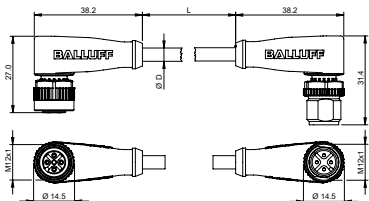
Operating voltage max. AC U _B	250 V AC
Operating voltage max. DC U _B	250 V DC
Cable	Molded-on
No. of wires × cross-section	4×0.34mm ²
Enclosure rating per IEC 60529	IP 68
Ambient temperature T _a	PUR -25 °C...+80 °C
	PUR shielded -5 °C...+80 °C
	PVC -5 °C...+80 °C
Version	Complementary (NO/NC) / -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

Cable material	Color	Length	Ordering code
PUR	black	0.3 m	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

Part number	Ordering code
BCC M425-M424-3A-304-PX0434-003	BCC03A8
BCC M425-M424-3A-304-PX0434-006	BCC03A9
BCC M425-M424-3A-304-PX0434-010	BCC03AA
BCC M425-M424-3A-304-PX0434-015	BCC03AC
BCC M425-M424-3A-304-PX0434-020	BCC03AE
BCC M425-M424-3A-304-PX0434-030	BCC03AF
BCC M425-M424-3A-304-PX0434-050	BCC03AH
BCC M425-M424-3A-304-VX8434-003	BCC03E3
BCC M425-M424-3A-304-VX8434-006	BCC03E4
BCC M425-M424-3A-304-VX8434-010	BCC03E5
BCC M425-M424-3A-304-VX8434-015	BCC03E6
BCC M425-M424-3A-304-VX8434-020	BCC03E7
BCC M425-M424-3A-304-VX8434-030	BCC03E8
BCC M425-M424-3A-304-VX8434-050	BCC03E9

Part number	Ordering code
BCC M425-M414-3A-304-PX0434-003	BCC03AT
BCC M425-M414-3A-304-PX0434-006	BCC03AU
BCC M425-M414-3A-304-PX0434-010	BCC03AW
BCC M425-M414-3A-304-PX0434-015	BCC03AY
BCC M425-M414-3A-304-PX0434-020	BCC03AZ
BCC M425-M414-3A-304-PX0434-030	BCC03C0
BCC M425-M414-3A-606-PX0434-050	BCC03C1
BCC M425-M414-3A-606-VX8434-003	BCC03EL
BCC M425-M414-3A-606-VX8434-006	BCC03EM
BCC M425-M414-3A-606-VX8434-010	BCC03EN
BCC M425-M414-3A-606-VX8434-015	BCC03EP
BCC M425-M414-3A-606-VX8434-020	BCC03ER
BCC M425-M414-3A-606-VX8434-030	BCC03ET
BCC M425-M414-3A-606-VX8434-050	BCC03EU

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 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

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/white

Part number	Ordering code
BCC M425-M414-3A-606-PX0434-003	BCC03C2
BCC M425-M414-3A-606-PX0434-006	BCC03C3
BCC M425-M414-3A-606-PX0434-010	BCC03C4
BCC M425-M414-3A-606-PX0434-015	BCC03C5
BCC M425-M414-3A-606-PX0434-020	BCC03C6
BCC M425-M414-3A-606-PX0434-030	BCC03C7
BCC M425-M414-3A-606-PX0434-050	BCC03C8
BCC M425-M414-3A-606-VX8434-003	BCC03EW
BCC M425-M414-3A-606-VX8434-006	BCC03Y4
BCC M425-M414-3A-606-VX8434-010	BCC03EZ
BCC M425-M414-3A-606-VX8434-015	BCC03F0
BCC M425-M414-3A-606-VX8434-020	BCC03F1
BCC M425-M414-3A-606-VX8434-030	BCC03F2
BCC M425-M414-3A-606-VX8434-050	BCC03F3

Part number	Ordering code
BCC M425-M414-3A-650-PX0434-003	BCC03C9
BCC M425-M414-3A-650-PX0434-006	BCC03CA
BCC M425-M414-3A-650-PX0434-010	BCC03CB
BCC M425-M414-3A-650-PX0434-015	BCC03CC
BCC M425-M414-3A-650-PX0434-020	BCC03CD
BCC M425-M414-3A-650-PX0434-030	BCC03CE
BCC M425-M414-3A-650-PX0434-050	BCC03CF
BCC M425-M414-3A-650-VX8434-003	BCC03EW
BCC M425-M414-3A-650-VX8434-006	BCC03Y4
BCC M425-M414-3A-650-VX8434-010	BCC03EZ
BCC M425-M414-3A-650-VX8434-015	BCC03F0
BCC M425-M414-3A-650-VX8434-020	BCC03F1
BCC M425-M414-3A-650-VX8434-030	BCC03F2
BCC M425-M414-3A-650-VX8434-050	BCC03F3

M12 ↔ M12

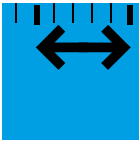


BALLUFF

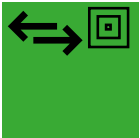
sensors worldwide



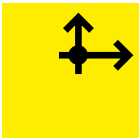
Object Detection



Linear Position Sensing



Industrial Identification



Industrial Networking and Connectivity



Mechanical Accessories

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