

**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

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

	Materials	Use and characteristics
<b>Metals</b>	<b>CuZn</b> Brass	Standard housing material with surface protection.
	<b>Stainless steel</b>	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.
<b>Plastics</b>	<b>PUR</b> Polyurethane	Elastic, abrasion-resistant, impact-resistant. Good resistance to oils, greases, solvents (used for gaskets and cable jackets).
	<b>PUR</b> Cable material	Drag chain compatible, flame resistance per IEC 332-2, halogen-free per IEC 60754-1, cable construction per UL-AWM Style 21198.
	<b>PVC</b> Polyvinylchloride	Good mechanical strength and chemical resistance (cable).
	<b>FPK</b> (Viton)	Seal material with high thermal and chemical resistance
<b>Other</b>	<b>TPE</b> Thermoplastic elastomers	A thermoplastic mixture that combines the best properties of PVC and rubber insulation. Resistant to oils, chemicals, acids, solvents and weld splatter.
<b>Insulation class</b>	II □	EN 60947-5-2/IEC 60947-5-2
<b>Enclosure rating</b>	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 Eléctricos 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 (mm <sup>2</sup> )	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 (mm <sup>2</sup> )	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/sec <sup>2</sup> 2 m
Horizontal travel permitted	at 5 m/sec <sup>2</sup> 5 m

#### Tightening torques

Permissible tightening torque for connectors	
M8	0.4 Nm
M12	0.6 Nm
7/8"	1.5 Nm

#### Wire colors

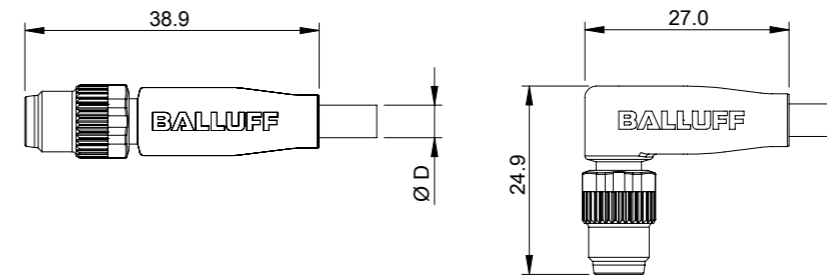
Coding per  
DIN IEC 60757

BN	brown
BK	black
BU	blue
WH	white

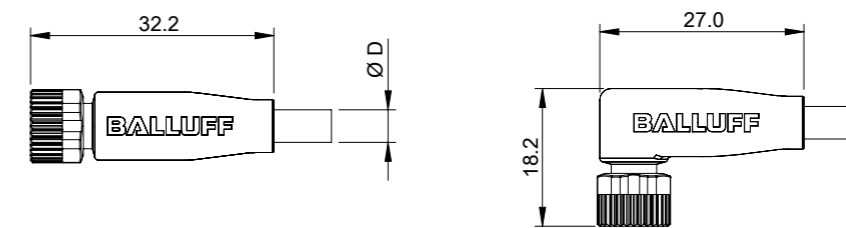
## Connectors and Cables

### Dimensions

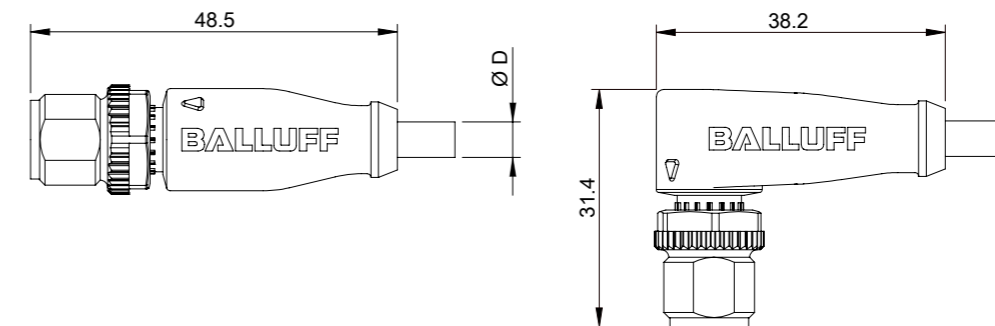
#### M8 connectors, male straight and right-angle



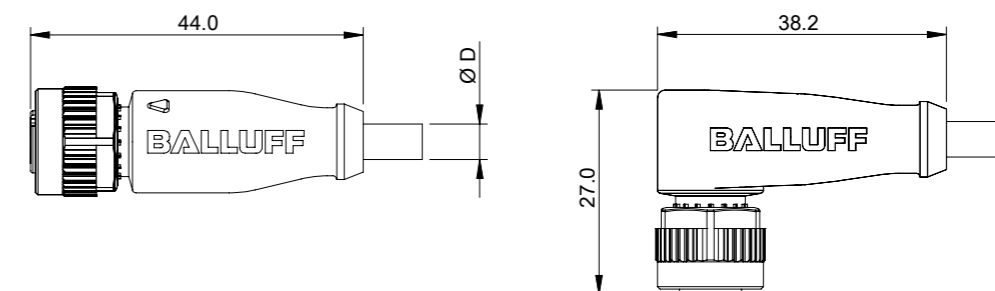
#### M8 connectors, female straight and right-angle



#### M12 connectors, male straight and right-angle



#### M12 connectors, female straight and right-angle



# M8

## Connectors

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



Connector diagram and wiring		
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 x cross-section	3x0.34mm <sup>2</sup>	3x0.34mm <sup>2</sup>
Enclosure rating per IEC 60529	IP 67	IP 67
Ambient temperature $T_a$	PUR -25 °C...+80 °C PUR shielded -5 °C...+80 °C PVC -5 °C...+80 °C PVC shielded -5 °C...+80 °C	-25 °C...+80 °C -5 °C...+80 °C
Version LED	Normally open	Normally open

## Connectors

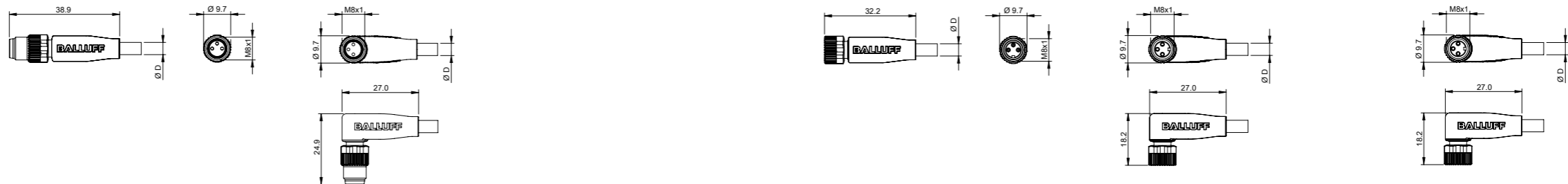
M8-female straight and right-angle, 3-pin, with and without LED



Connector diagram and wiring			
Operating voltage max. AC $U_B$	60 V AC	60 V AC	30 V DC
Operating voltage max. DC $U_B$	60 V DC	60 V DC	60 V DC
Cable	Molded-on	Molded-on	Molded-on
No. of wires x cross-section	3x0.34mm <sup>2</sup>	3x0.34mm <sup>2</sup>	3x0.34mm <sup>2</sup>
Enclosure rating per IEC 60529	IP 67	IP 67	IP 67
Ambient temperature $T_a$	PUR -25 °C...+80 °C PUR shielded -5 °C...+80 °C PVC -5 °C...+80 °C PVC shielded -5 °C...+80 °C	-25 °C...+80 °C -5 °C...+80 °C	-25 °C...+80 °C -5 °C...+80 °C
Version LED	Normally open	Normally open	PNP-Normally open 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	2 m	<b>BCC02M2</b> BCC M313-0000-20-001-PX0334-020	<b>BCC02M5</b> BCC M323-0000-20-001-PX0334-020	<b>BCC02M8</b> BCC M313-0000-10-001-PX0334-020	<b>BCC02ML</b> BCC M323-0000-10-001-PX0334-020	<b>BCC02MH</b> BCC M323-0000-10-004-PX0334-020
PUR	black	5 m	<b>BCC02M3</b> BCC M313-0000-20-001-PX0334-050	<b>BCC02M6</b> BCC M323-0000-20-001-PX0334-050	<b>BCC02M9</b> BCC M313-0000-10-001-PX0334-050	<b>BCC02MM</b> BCC M323-0000-10-001-PX0334-050	<b>BCC02MJ</b> BCC M323-0000-10-004-PX0334-050
PUR	black	10 m	<b>BCC02M4</b> BCC M313-0000-20-001-PX0334-100	<b>BCC02M7</b> BCC M323-0000-20-001-PX0334-100	<b>BCC02MA</b> BCC M313-0000-10-001-PX0334-100	<b>BCC02MN</b> BCC M323-0000-10-001-PX0334-100	<b>BCC02MK</b> BCC M323-0000-10-004-PX0334-100
PUR shielded	black	2 m			<b>BCC02MC</b> BCC M313-0000-10-036-PS0334-020	<b>BCC02MP</b> BCC M323-0000-10-036-PS0334-020	
PUR shielded	black	5 m			<b>BCC02ME</b> BCC M313-0000-10-036-PS0334-050	<b>BCC02MR</b> BCC M323-0000-10-036-PS0334-050	
PUR shielded	black	10 m			<b>BCC02MF</b> BCC M313-0000-10-036-PS0334-100	<b>BCC02MT</b> BCC M323-0000-10-036-PS0334-100	
PVC	gray	2 m	<b>BCC02NL</b> BCC M313-0000-20-001-VX8334-020	<b>BCC02NP</b> BCC M323-0000-20-001-VX8334-020	<b>BCC02NU</b> BCC M313-0000-10-001-VX8334-020	<b>BCC02P5</b> BCC M323-0000-10-001-VX8334-020	<b>BCC02P2</b> BCC M323-0000-10-004-VX8334-020
PVC	gray	5 m	<b>BCC02NM</b> BCC M313-0000-20-001-VX8334-050	<b>BCC02NR</b> BCC M323-0000-20-001-VX8334-050	<b>BCC02NW</b> BCC M313-0000-10-001-VX8334-050	<b>BCC02P6</b> BCC M323-0000-10-001-VX8334-050	<b>BCC02P3</b> BCC M323-0000-10-004-VX8334-050
PVC	gray	10 m	<b>BCC02NN</b> BCC M313-0000-20-001-VX8334-100	<b>BCC02NT</b> BCC M323-0000-20-001-VX8334-100	<b>BCC02NY</b> BCC M313-0000-10-001-VX8334-100	<b>BCC02P7</b> BCC M323-0000-10-001-VX8334-100	<b>BCC02P4</b> BCC M323-0000-10-004-VX8334-100
PVC shielded	gray	2 m			<b>BCC02NZ</b> BCC M313-0000-10-036-VS8334-020	<b>BCC02P8</b> BCC M323-0000-10-036-VS8334-020	
PVC shielded	gray	5 m			<b>BCC02P0</b> BCC M313-0000-10-036-VS8334-050	<b>BCC02P9</b> BCC M323-0000-10-036-VS8334-050	
PVC shielded	gray	10 m			<b>BCC02P1</b> BCC M313-0000-10-036-VS8334-100	<b>BCC02PA</b> BCC M323-0000-10-036-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.



# M8

## Connectors

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



Connector diagram and wiring	<p>PIN 1: brown PIN 2: white PIN 3: blue PIN 4: black</p>	<p>PIN 1: brown PIN 2: white PIN 3: blue PIN 4: black</p>
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 x cross-section	4x0.34mm <sup>2</sup>	4x0.34mm <sup>2</sup>
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	-25 °C...+80 °C -5 °C...+80 °C
Version LED	Complementary (NO/NC)  /	Complementary (NO/NC)  /

## Connectors

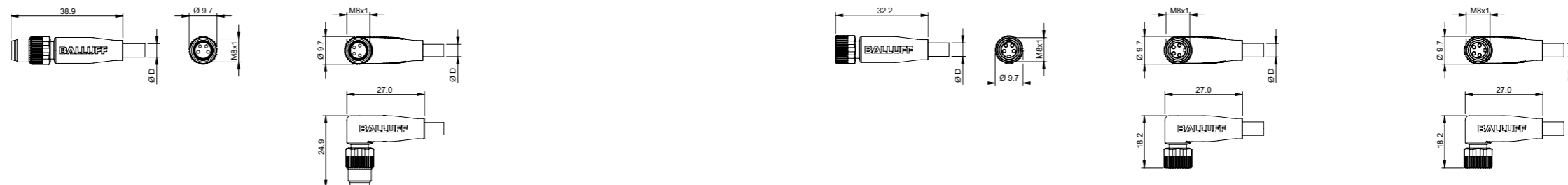
M8-female straight and right-angle, 4-pin, with and without LED



Connector diagram and wiring	<p>PIN 1: brown PIN 2: white PIN 3: blue PIN 4: black</p>	<p>PIN 1: brown PIN 2: white PIN 3: blue PIN 4: black</p>
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 x cross-section	4x0.34mm <sup>2</sup>	4x0.34mm <sup>2</sup>
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	-25 °C...+80 °C -5 °C...+80 °C
Version LED	Complementary (NO/NC)  /	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	2 m	<b>BCC02MU</b> BCC M314-0000-20-003-PX0434-020	<b>BCC02MZ</b> BCC M324-0000-20-003-PX0434-020	<b>BCC02N2</b> BCC M314-0000-10-003-PX0434-020	<b>BCC02NC</b> BCC M324-0000-10-003-PX0434-020	<b>BCC02N8</b> BCC M324-0000-10-008-PX0434-020
PUR	black	5 m	<b>BCC02MW</b> BCC M314-0000-20-003-PX0434-050	<b>BCC02N0</b> BCC M324-0000-20-003-PX0434-050	<b>BCC02N3</b> BCC M314-0000-10-003-PX0434-050	<b>BCC02NE</b> BCC M324-0000-10-003-PX0434-050	<b>BCC02N9</b> BCC M324-0000-10-008-PX0434-050
PUR	black	10 m	<b>BCC02MY</b> BCC M314-0000-20-003-PX0434-100	<b>BCC02N1</b> BCC M324-0000-20-003-PX0434-100	<b>BCC02N4</b> BCC M314-0000-10-003-PX0434-100	<b>BCC02NF</b> BCC M324-0000-10-003-PX0434-100	<b>BCC02NA</b> BCC M324-0000-10-008-PX0434-100
PUR shielded	black	2 m			<b>BCC02N5</b> BCC M314-0000-10-014-PS0434-020	<b>BCC02NH</b> BCC M324-0000-10-014-PS0434-020	
PUR shielded	black	5 m			<b>BCC02N6</b> BCC M314-0000-10-014-PS0434-050	<b>BCC02NJ</b> BCC M324-0000-10-014-PS0434-050	
PUR shielded	black	10 m			<b>BCC02N7</b> BCC M314-0000-10-014-PS0434-100	<b>BCC02NK</b> BCC M324-0000-10-014-PS0434-100	
PVC	gray	2 m	<b>BCC02PC</b> BCC M314-0000-20-003-VX8434-020	<b>BCC02PH</b> BCC M324-0000-20-003-VX8434-020	<b>BCC02PL</b> BCC M314-0000-10-003-VX8434-020	<b>BCC02PZ</b> BCC M324-0000-10-003-VX8434-020	<b>BCC02PU</b> BCC M324-0000-10-008-VX8434-020
PVC	gray	5 m	<b>BCC02PE</b> BCC M314-0000-20-003-VX8434-050	<b>BCC02PJ</b> BCC M324-0000-20-003-VX8434-050	<b>BCC02PM</b> BCC M314-0000-10-003-VX8434-050	<b>BCC02R0</b> BCC M324-0000-10-003-VX8434-050	<b>BCC02PW</b> BCC M324-0000-10-008-VX8434-050
PVC	gray	10 m	<b>BCC02PF</b> BCC M314-0000-20-003-VX8434-100	<b>BCC02PK</b> BCC M324-0000-20-003-VX8434-100	<b>BCC02PN</b> BCC M314-0000-10-003-VX8434-100	<b>BCC02R1</b> BCC M324-0000-10-003-VX8434-100	<b>BCC02PY</b> BCC M324-0000-10-008-VX8434-100
PVC shielded	gray	2 m			<b>BCC02PP</b> BCC M314-0000-10-014-VS8434-020	<b>BCC02R2</b> BCC M324-0000-10-014-VS8434-020	
PVC shielded	gray	5 m			<b>BCC02PR</b> BCC M314-0000-10-014-VS8434-050	<b>BCC02R3</b> BCC M324-0000-10-014-VS8434-050	
PVC shielded	gray	10 m			<b>BCC02PT</b> BCC M314-0000-10-014-VS8434-100	<b>BCC02R4</b> BCC M324-0000-10-014-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.



### Connection cable

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

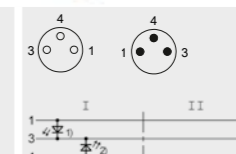
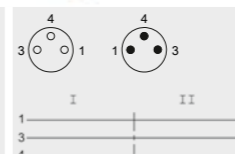
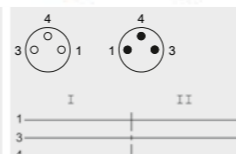
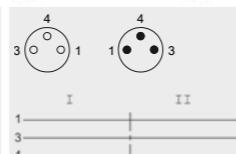
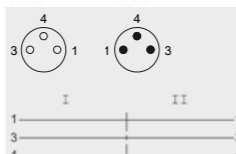
## M8 ↔ M8

### Connection cable

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



Connector diagram and wiring



<sup>1</sup> LED green = Power  
<sup>2</sup> LED yellow = Switching output

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

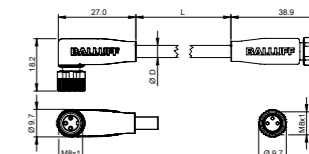
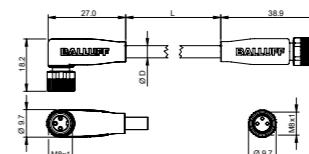
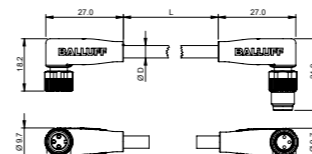
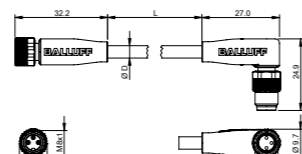
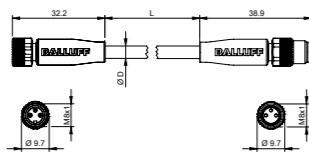
Operating voltage max. AC U <sub>B</sub>	60 V AC
Operating voltage max. DC U <sub>B</sub>	60 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm <sup>2</sup>
Enclosure rating per IEC 60529	IP 67
Ambient temperature T <sub>a</sub>	PUR -25 °C...+80 °C
	PUR shielded -5 °C...+80 °C
	PVC -5 °C...+80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

Operating voltage max. AC U <sub>B</sub>	60 V AC
Operating voltage max. DC U <sub>B</sub>	60 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm <sup>2</sup>
Enclosure rating per IEC 60529	IP 67
Ambient temperature T <sub>a</sub>	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 <sub>B</sub>	30 V DC
Operating voltage max. DC U <sub>B</sub>	30 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm <sup>2</sup>
Enclosure rating per IEC 60529	IP 67
Ambient temperature T <sub>a</sub>	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	Ordering code	Ordering code	Ordering code	Ordering code
			Part number	Part number	Part number	Part number	Part number
PUR	black	0.3 m	<b>BCC02R5</b> BCC M313-M313-30-300-PX0334-003	<b>BCC02RE</b> BCC M313-M323-30-300-PX0334-003	<b>BCC02T6</b> BCC M323-M323-30-300-PX0334-003	<b>BCC02RZ</b> BCC M323-M313-30-300-PX0334-003	<b>BCC02RN</b> BCC M323-M313-30-602-PX0334-003
PUR	black	0.6 m	<b>BCC02R6</b> BCC M313-M313-30-300-PX0334-006	<b>BCC02RF</b> BCC M313-M323-30-300-PX0334-006	<b>BCC02T7</b> BCC M323-M323-30-300-PX0334-006	<b>BCC02T0</b> BCC M323-M313-30-300-PX0334-006	<b>BCC02RP</b> BCC M323-M313-30-602-PX0334-006
PUR	black	1 m	<b>BCC02R7</b> BCC M313-M313-30-300-PX0334-010	<b>BCC02RH</b> BCC M313-M323-30-300-PX0334-010	<b>BCC02T8</b> BCC M323-M323-30-300-PX0334-010	<b>BCC02T1</b> BCC M323-M313-30-300-PX0334-010	<b>BCC02RR</b> BCC M323-M313-30-602-PX0334-010
PUR	black	1.5 m	<b>BCC02R8</b> BCC M313-M313-30-300-PX0334-015	<b>BCC02RJ</b> BCC M313-M323-30-300-PX0334-015	<b>BCC02T9</b> BCC M323-M323-30-300-PX0334-015	<b>BCC02T2</b> BCC M323-M313-30-300-PX0334-015	<b>BCC02RT</b> BCC M323-M313-30-602-PX0334-015
PUR	black	2 m	<b>BCC02R9</b> BCC M313-M313-30-300-PX0334-020	<b>BCC02RK</b> BCC M313-M323-30-300-PX0334-020	<b>BCC02TA</b> BCC M323-M323-30-300-PX0334-020	<b>BCC02T3</b> BCC M323-M313-30-300-PX0334-020	<b>BCC02RU</b> BCC M323-M313-30-602-PX0334-020
PUR	black	3 m	<b>BCC02RA</b> BCC M313-M313-30-300-PX0334-030	<b>BCC02RL</b> BCC M313-M323-30-300-PX0334-030	<b>BCC02TC</b> BCC M323-M323-30-300-PX0334-030	<b>BCC02T4</b> BCC M323-M313-30-300-PX0334-030	<b>BCC02RW</b> BCC M323-M313-30-602-PX0334-030
PUR	black	5 m	<b>BCC02RC</b> BCC M313-M313-30-300-PX0334-050	<b>BCC02RM</b> BCC M313-M323-30-300-PX0334-050	<b>BCC02TE</b> BCC M323-M323-30-300-PX0334-050	<b>BCC02T5</b> BCC M323-M313-30-300-PX0334-050	<b>BCC02RY</b> BCC M323-M313-30-602-PX0334-050
PVC	gray	0.3 m	<b>BCC02UR</b> BCC M313-M313-30-300-VX8334-003	<b>BCC02W1</b> BCC M313-M323-30-300-VX8334-003	<b>BCC02WT</b> BCC M323-M323-30-300-VX8334-003	<b>BCC02WJ</b> BCC M323-M313-30-300-VX8334-003	<b>BCC02W8</b> BCC M323-M313-30-602-VX8334-003
PVC	gray	0.6 m	<b>BCC02UT</b> BCC M313-M313-30-300-VX8334-006	<b>BCC02W2</b> BCC M313-M323-30-300-VX8334-006	<b>BCC02WU</b> BCC M323-M323-30-300-VX8334-006	<b>BCC02WK</b> BCC M323-M313-30-300-VX8334-006	<b>BCC02W9</b> BCC M323-M313-30-602-VX8334-006
PVC	gray	1 m	<b>BCC02UU</b> BCC M313-M313-30-300-VX8334-010	<b>BCC02W3</b> BCC M313-M323-30-300-VX8334-010	<b>BCC02WW</b> BCC M323-M323-30-300-VX8334-010	<b>BCC02WL</b> BCC M323-M313-30-300-VX8334-010	<b>BCC02WA</b> BCC M323-M313-30-602-VX8334-010
PVC	gray	1.5 m	<b>BCC02UW</b> BCC M313-M313-30-300-VX8334-015	<b>BCC02W4</b> BCC M313-M323-30-300-VX8334-015	<b>BCC02WY</b> BCC M323-M323-30-300-VX8334-015	<b>BCC02WM</b> BCC M323-M313-30-300-VX8334-015	<b>BCC02WC</b> BCC M323-M313-30-602-VX8334-015
PVC	gray	2 m	<b>BCC02UY</b> BCC M313-M313-30-300-VX8334-020	<b>BCC02W5</b> BCC M313-M323-30-300-VX8334-020	<b>BCC02WZ</b> BCC M323-M323-30-300-VX8334-020	<b>BCC02WN</b> BCC M323-M313-30-300-VX8334-020	<b>BCC02WE</b> BCC M323-M313-30-602-VX8334-020
PVC	gray	3 m	<b>BCC02UZ</b> BCC M313-M313-30-300-VX8334-030	<b>BCC02W6</b> BCC M313-M323-30-300-VX8334-030	<b>BCC02Y0</b> BCC M323-M323-30-300-VX8334-030	<b>BCC02WP</b> BCC M323-M313-30-300-VX8334-030	<b>BCC02WF</b> BCC M323-M313-30-602-VX8334-030
PVC	gray	5 m	<b>BCC02W0</b> BCC M313-M313-30-300-VX8334-050	<b>BCC02W7</b> BCC M313-M323-30-300-VX8334-050	<b>BCC02Y1</b> BCC M323-M323-30-300-VX8334-050	<b>BCC02WR</b> BCC M323-M313-30-300-VX8334-050	<b>BCC02WH</b> BCC M323-M313-30-602-VX8334-050

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



## Connection cable

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

# M8 ↔ M8

## Connection cable

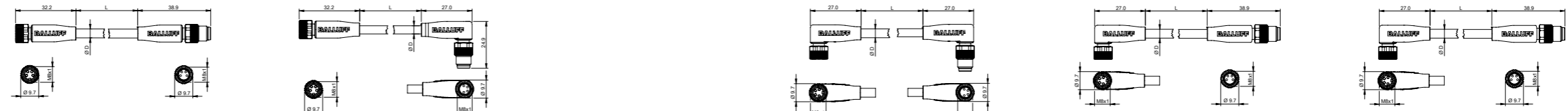
M8-female right-angle ↔ M8-male straight or right-angle, 4-pin, with and without LED



Connector diagram and wiring	Diagram 1	Diagram 2	Diagram 3	Diagram 4	Diagram 5	Diagram 6
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 <sup>2</sup>	4×0.34mm <sup>2</sup>	4×0.34mm <sup>2</sup>	4×0.34mm <sup>2</sup>	4×0.34mm <sup>2</sup>	4×0.34mm <sup>2</sup>
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
Version LED	PVC -5 °C...+80 °C	PVC -5 °C...+80 °C	PVC -5 °C...+80 °C	PVC -5 °C...+80 °C	PVC -5 °C...+80 °C	PVC -5 °C...+80 °C
	Complementary (NO/NC) $\swarrow$ / $\searrow$	Complementary (NO/NC) $\swarrow$ / $\searrow$	Complementary (NO/NC) $\swarrow$ / $\searrow$	Complementary (NO/NC) $\swarrow$ / $\searrow$	Complementary (NO/NC) $\swarrow$ / $\searrow$	PNP-complementary (NO/NC) $\swarrow$ / $\searrow$ 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	<b>BCC02TF</b> BCC M314-M314-30-304-PX0434-003	<b>BCC02TP</b> BCC M314-M324-30-304-PX0434-003	<b>BCC02UH</b> BCC M324-M324-30-304-PX0434-003	<b>BCC02U7</b> BCC M324-M314-30-304-PX0434-003	<b>BCC02U0</b> BCC M324-M314-30-606-PX0434-003
PUR	black	0.6 m	<b>BCC02TH</b> BCC M314-M314-30-304-PX0434-006	<b>BCC02TR</b> BCC M314-M324-30-304-PX0434-006	<b>BCC02UJ</b> BCC M324-M324-30-304-PX0434-006	<b>BCC02U8</b> BCC M324-M314-30-304-PX0434-006	<b>BCC02U1</b> BCC M324-M314-30-606-PX0434-006
PUR	black	1 m	<b>BCC02TJ</b> BCC M314-M314-30-304-PX0434-010	<b>BCC02TT</b> BCC M314-M324-30-304-PX0434-010	<b>BCC02UK</b> BCC M324-M324-30-304-PX0434-010	<b>BCC02U9</b> BCC M324-M314-30-304-PX0434-010	<b>BCC02U2</b> BCC M324-M314-30-606-PX0434-010
PUR	black	1.5 m	<b>BCC02TK</b> BCC M314-M314-30-304-PX0434-015	<b>BCC02TU</b> BCC M314-M324-30-304-PX0434-015	<b>BCC02UL</b> BCC M324-M324-30-304-PX0434-015	<b>BCC02UA</b> BCC M324-M314-30-304-PX0434-015	<b>BCC02U3</b> BCC M324-M314-30-606-PX0434-015
PUR	black	2 m	<b>BCC02TL</b> BCC M314-M314-30-304-PX0434-020	<b>BCC02TW</b> BCC M314-M324-30-304-PX0434-020	<b>BCC02UM</b> BCC M324-M324-30-304-PX0434-020	<b>BCC02UC</b> BCC M324-M314-30-304-PX0434-020	<b>BCC02U4</b> BCC M324-M314-30-606-PX0434-020
PUR	black	3 m	<b>BCC02TM</b> BCC M314-M314-30-304-PX0434-030	<b>BCC02TY</b> BCC M314-M324-30-304-PX0434-030	<b>BCC02UN</b> BCC M324-M324-30-304-PX0434-030	<b>BCC02UE</b> BCC M324-M314-30-304-PX0434-030	<b>BCC02U5</b> BCC M324-M314-30-606-PX0434-030
PUR	black	5 m	<b>BCC02TN</b> BCC M314-M314-30-304-PX0434-050	<b>BCC02TZ</b> BCC M314-M324-30-304-PX0434-050	<b>BCC02UP</b> BCC M324-M324-30-304-PX0434-050	<b>BCC02UF</b> BCC M324-M314-30-304-PX0434-050	<b>BCC02U6</b> BCC M324-M314-30-606-PX0434-050
PVC	gray	0.3 m	<b>BCC02Y2</b> BCC M314-M314-30-304-VX8434-003	<b>BCC02Y9</b> BCC M314-M324-30-304-VX8434-003	<b>BCC02Z3</b> BCC M324-M324-30-304-VX8434-003	<b>BCC02YU</b> BCC M324-M314-30-304-VX8434-003	<b>BCC02YK</b> BCC M324-M314-30-606-VX8434-003
PVC	gray	0.6 m	<b>BCC02Y3</b> BCC M314-M314-30-304-VX8434-006	<b>BCC02YA</b> BCC M314-M324-30-304-VX8434-006	<b>BCC02Z4</b> BCC M324-M324-30-304-VX8434-006	<b>BCC02YW</b> BCC M324-M314-30-304-VX8434-006	<b>BCC02YL</b> BCC M324-M314-30-606-VX8434-006
PVC	gray	1 m	<b>BCC02Y4</b> BCC M314-M314-30-304-VX8434-010	<b>BCC02YC</b> BCC M314-M324-30-304-VX8434-010	<b>BCC02Z5</b> BCC M324-M324-30-304-VX8434-010	<b>BCC02YY</b> BCC M324-M314-30-304-VX8434-010	<b>BCC02YM</b> BCC M324-M314-30-606-VX8434-010
PVC	gray	1.5 m	<b>BCC02Y5</b> BCC M314-M314-30-304-VX8434-015	<b>BCC02YE</b> BCC M314-M324-30-304-VX8434-015	<b>BCC02Z6</b> BCC M324-M324-30-304-VX8434-015	<b>BCC02YZ</b> BCC M324-M314-30-304-VX8434-015	<b>BCC02YN</b> BCC M324-M314-30-606-VX8434-015
PVC	gray	2 m	<b>BCC02Y6</b> BCC M314-M314-30-304-VX8434-020	<b>BCC02YF</b> BCC M314-M324-30-304-VX8434-020	<b>BCC02Z7</b> BCC M324-M324-30-304-VX8434-020	<b>BCC02Z0</b> BCC M324-M314-30-304-VX8434-020	<b>BCC02YP</b> BCC M324-M314-30-606-VX8434-020
PVC	gray	3 m	<b>BCC02Y7</b> BCC M314-M314-30-304-VX8434-030	<b>BCC02YH</b> BCC M314-M324-30-304-VX8434-030	<b>BCC02Z8</b> BCC M324-M324-30-304-VX8434-030	<b>BCC02Z1</b> BCC M324-M314-30-304-VX8434-030	<b>BCC02YR</b> BCC M324-M314-30-606-VX8434-030
PVC	gray	5 m	<b>BCC02Y8</b> BCC M314-M314-30-304-VX8434-050	<b>BCC02YJ</b> BCC M314-M324-30-304-VX8434-050	<b>BCC02Z9</b> BCC M324-M324-30-304-VX8434-050	<b>BCC02Z2</b> BCC M324-M314-30-304-VX8434-050	<b>BCC02YT</b> BCC M324-M314-30-606-VX8434-050

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





### Connection cable

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

## M8 ↔ M12

### Connection cable

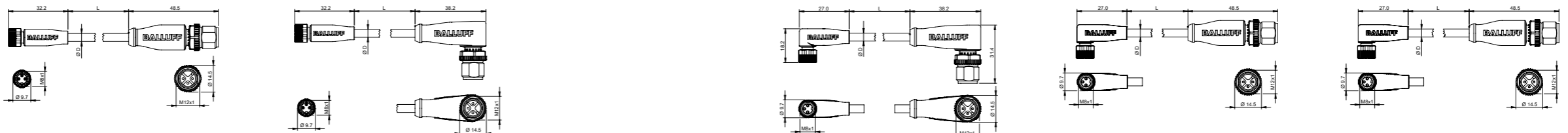
M8-female right-angle ↔ M12-male straight or right-angle, 3-pin, with and without LED



Connector diagram and wiring					
Operating voltage max. AC U <sub>B</sub>	60 V AC	60 V AC	60 V AC	60 V AC	60 V AC
Operating voltage max. DC U <sub>B</sub>	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 <sup>2</sup>	3×0.34mm <sup>2</sup>	3×0.34mm <sup>2</sup>	3×0.34mm <sup>2</sup>	3×0.34mm <sup>2</sup>
Enclosure rating per IEC 60529	IP 67	IP 67	IP 67	IP 67	IP 67
Ambient temperature T <sub>a</sub>	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
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
			Part number	Part number	Part number	Part number	Part number
PUR	black	0.3 m	<b>BCC03F4</b> BCC M313-M413-3E-300-PX0334-003	<b>BCC03FC</b> BCC M313-M423-3E-300-PX0334-003	<b>BCC03FY</b> BCC M323-M423-3E-300-PX0334-003	<b>BCC03FM</b> BCC M323-M413-3E-300-PX0334-003	<b>BCC03H5</b> BCC M323-M413-3E-602-PX0334-003
PUR	black	0.6 m	<b>BCC03F5</b> BCC M313-M413-3E-300-PX0334-006	<b>BCC03FE</b> BCC M313-M423-3E-300-PX0334-006	<b>BCC03FZ</b> BCC M323-M423-3E-300-PX0334-006	<b>BCC03FN</b> BCC M323-M413-3E-300-PX0334-006	<b>BCC03H6</b> BCC M323-M413-3E-602-PX0334-006
PUR	black	1 m	<b>BCC03F6</b> BCC M313-M413-3E-300-PX0334-010	<b>BCC03FF</b> BCC M313-M423-3E-300-PX0334-010	<b>BCC03H0</b> BCC M323-M423-3E-300-PX0334-010	<b>BCC03FP</b> BCC M323-M413-3E-300-PX0334-010	<b>BCC03H7</b> BCC M323-M413-3E-602-PX0334-010
PUR	black	1.5 m	<b>BCC03F7</b> BCC M313-M413-3E-300-PX0334-015	<b>BCC03FH</b> BCC M313-M423-3E-300-PX0334-015	<b>BCC03H1</b> BCC M323-M423-3E-300-PX0334-015	<b>BCC03FR</b> BCC M323-M413-3E-300-PX0334-015	<b>BCC03H8</b> BCC M323-M413-3E-602-PX0334-015
PUR	black	2 m	<b>BCC03F8</b> BCC M313-M413-3E-300-PX0334-020	<b>BCC03FJ</b> BCC M313-M423-3E-300-PX0334-020	<b>BCC03H2</b> BCC M323-M423-3E-300-PX0334-020	<b>BCC03FT</b> BCC M323-M413-3E-300-PX0334-020	<b>BCC03H9</b> BCC M323-M413-3E-602-PX0334-020
PUR	black	3 m	<b>BCC03F9</b> BCC M313-M413-3E-300-PX0334-030	<b>BCC03FK</b> BCC M313-M423-3E-300-PX0334-030	<b>BCC03H3</b> BCC M323-M423-3E-300-PX0334-030	<b>BCC03FU</b> BCC M323-M413-3E-300-PX0334-030	<b>BCC03HA</b> BCC M323-M413-3E-602-PX0334-030
PUR	black	5 m	<b>BCC03FA</b> BCC M313-M413-3E-300-PX0334-050	<b>BCC03FL</b> BCC M313-M423-3E-300-PX0334-050	<b>BCC03H4</b> BCC M323-M423-3E-300-PX0334-050	<b>BCC03FW</b> BCC M323-M413-3E-300-PX0334-050	<b>BCC03HC</b> BCC M323-M413-3E-602-PX0334-050
PVC	gray	0.3 m	<b>BCC03HE</b> BCC M313-M413-3E-300-VX8334-003	<b>BCC03HN</b> BCC M313-M423-3E-300-VX8334-003	<b>BCC03J6</b> BCC M323-M423-3E-300-VX8334-003	<b>BCC03HZ</b> BCC M323-M413-3E-300-VX8334-003	<b>BCC03JF</b> BCC M323-M413-3E-602-VX8334-003
PVC	gray	0.6 m	<b>BCC03HF</b> BCC M313-M413-3E-300-VX8334-006	<b>BCC03HP</b> BCC M313-M423-3E-300-VX8334-006	<b>BCC03J7</b> BCC M323-M423-3E-300-VX8334-006	<b>BCC03J0</b> BCC M323-M413-3E-300-VX8334-006	<b>BCC03JH</b> BCC M323-M413-3E-602-VX8334-006
PVC	gray	1 m	<b>BCC03HH</b> BCC M313-M413-3E-300-VX8334-010	<b>BCC03HR</b> BCC M313-M423-3E-300-VX8334-010	<b>BCC03J8</b> BCC M323-M423-3E-300-VX8334-010	<b>BCC03J1</b> BCC M323-M413-3E-300-VX8334-010	<b>BCC03JJ</b> BCC M323-M413-3E-602-VX8334-010
PVC	gray	1.5 m	<b>BCC03HJ</b> BCC M313-M413-3E-300-VX8334-015	<b>BCC03HT</b> BCC M313-M423-3E-300-VX8334-015	<b>BCC03J9</b> BCC M323-M423-3E-300-VX8334-015	<b>BCC03J2</b> BCC M323-M413-3E-300-VX8334-015	<b>BCC03JK</b> BCC M323-M413-3E-602-VX8334-015
PVC	gray	2 m	<b>BCC03HK</b> BCC M313-M413-3E-300-VX8334-020	<b>BCC03HU</b> BCC M313-M423-3E-300-VX8334-020	<b>BCC03JA</b> BCC M323-M423-3E-300-VX8334-020	<b>BCC03J3</b> BCC M323-M413-3E-300-VX8334-020	<b>BCC03JL</b> BCC M323-M413-3E-602-VX8334-020
PVC	gray	3 m	<b>BCC03HL</b> BCC M313-M413-3E-300-VX8334-030	<b>BCC03HW</b> BCC M313-M423-3E-300-VX8334-030	<b>BCC03JC</b> BCC M323-M423-3E-300-VX8334-030	<b>BCC03J4</b> BCC M323-M413-3E-300-VX8334-030	<b>BCC03JM</b> BCC M323-M413-3E-602-VX8334-030
PVC	gray	5 m	<b>BCC03HM</b> BCC M313-M413-3E-300-VX8334-050	<b>BCC03HY</b> BCC M313-M423-3E-300-VX8334-050	<b>BCC03JE</b> BCC M323-M423-3E-300-VX8334-050	<b>BCC03J5</b> BCC M323-M413-3E-300-VX8334-050	<b>BCC03JN</b> 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](http://www.balluff.com) for more details

### Connection cable

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

## M8 ↔ M12

### Connection cable

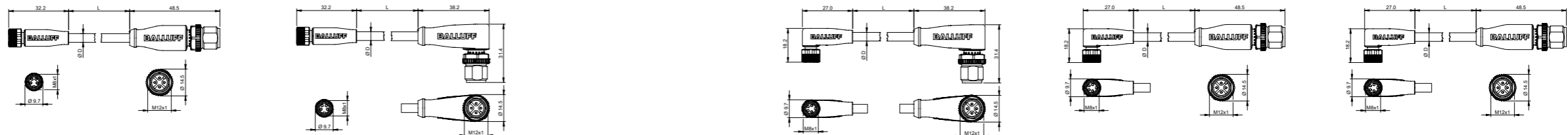
M8-female right-angle ↔ M12-male straight or right-angle, 4-pin, with and without LED



Connector diagram and wiring	Diagram 1	Diagram 2	Diagram 3	Diagram 4	Diagram 5
Operating voltage max. AC U <sub>B</sub>	30 V AC	30 V AC	30 V AC	30 V AC	30 V AC
Operating voltage max. DC U <sub>B</sub>	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 <sup>2</sup>	4×0.34mm <sup>2</sup>	4×0.34mm <sup>2</sup>	4×0.34mm <sup>2</sup>	4×0.34mm <sup>2</sup>
Enclosure rating per IEC 60529	IP 67	IP 67	IP 67	IP 67	IP 67
Ambient temperature T <sub>a</sub>	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 -5 °C...+80 °C	PVC -5 °C...+80 °C	PVC -5 °C...+80 °C	PVC -5 °C...+80 °C	PVC -5 °C...+80 °C
Version	Complementary (NO/NC) ✓- / -✓	Complementary (NO/NC) ✓- / -✓	Complementary (NO/NC) ✓- / -✓	Complementary (NO/NC) ✓- / -✓	Complementary (NO/NC) ✓- / -✓
LED					PNP-complementary (NO/NC) ✓- / -✓ 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	<b>BCC03JP</b> BCC M314-M414-3E-304-PX0434-003	<b>BCC03K0</b> BCC M314-M424-3E-304-PX0434-003	<b>BCC03KH</b> BCC M324-M424-3E-304-PX0434-003	<b>BCC03K7</b> BCC M324-M414-3E-304-PX0434-003
PUR	black	0.6 m	<b>BCC03JR</b> BCC M314-M414-3E-304-PX0434-006	<b>BCC03K1</b> BCC M314-M424-3E-304-PX0434-006	<b>BCC03KJ</b> BCC M324-M424-3E-304-PX0434-006	<b>BCC03K8</b> BCC M324-M414-3E-304-PX0434-006
PUR	black	1 m	<b>BCC03JT</b> BCC M314-M414-3E-304-PX0434-010	<b>BCC03K2</b> BCC M314-M424-3E-304-PX0434-010	<b>BCC03KK</b> BCC M324-M424-3E-304-PX0434-010	<b>BCC03K9</b> BCC M324-M414-3E-304-PX0434-010
PUR	black	1.5 m	<b>BCC03JU</b> BCC M314-M414-3E-304-PX0434-015	<b>BCC03K3</b> BCC M314-M424-3E-304-PX0434-015	<b>BCC03KL</b> BCC M324-M424-3E-304-PX0434-015	<b>BCC03KA</b> BCC M324-M414-3E-304-PX0434-015
PUR	black	2 m	<b>BCC03JW</b> BCC M314-M414-3E-304-PX0434-020	<b>BCC03K4</b> BCC M314-M424-3E-304-PX0434-020	<b>BCC03KM</b> BCC M324-M424-3E-304-PX0434-020	<b>BCC03KC</b> BCC M324-M414-3E-304-PX0434-020
PUR	black	3 m	<b>BCC03JY</b> BCC M314-M414-3E-304-PX0434-030	<b>BCC03K5</b> BCC M314-M424-3E-304-PX0434-030	<b>BCC03KN</b> BCC M324-M424-3E-304-PX0434-030	<b>BCC03KE</b> BCC M324-M414-3E-304-PX0434-030
PUR	black	5 m	<b>BCC03JZ</b> BCC M314-M414-3E-304-PX0434-050	<b>BCC03K6</b> BCC M314-M424-3E-304-PX0434-050	<b>BCC03KP</b> BCC M324-M424-3E-304-PX0434-050	<b>BCC03KF</b> BCC M324-M414-3E-304-PX0434-050
PVC	gray	0.3 m	<b>BCC03L1</b> BCC M314-M414-3E-304-VX8434-003	<b>BCC03L8</b> BCC M314-M424-3E-304-VX8434-003	<b>BCC03LT</b> BCC M324-M424-3E-304-VX8434-003	<b>BCC03LJ</b> BCC M324-M414-3E-304-VX8434-003
PVC	gray	0.6 m	<b>BCC03L2</b> BCC M314-M414-3E-304-VX8434-006	<b>BCC03L9</b> BCC M314-M424-3E-304-VX8434-006	<b>BCC03LU</b> BCC M324-M424-3E-304-VX8434-006	<b>BCC03LK</b> BCC M324-M414-3E-304-VX8434-006
PVC	gray	1 m	<b>BCC03L3</b> BCC M314-M414-3E-304-VX8434-010	<b>BCC03LA</b> BCC M314-M424-3E-304-VX8434-010	<b>BCC03LW</b> BCC M324-M424-3E-304-VX8434-010	<b>BCC03LL</b> BCC M324-M414-3E-304-VX8434-010
PVC	gray	1.5 m	<b>BCC03L4</b> BCC M314-M414-3E-304-VX8434-015	<b>BCC03LC</b> BCC M314-M424-3E-304-VX8434-015	<b>BCC03LY</b> BCC M324-M424-3E-304-VX8434-015	<b>BCC03LM</b> BCC M324-M414-3E-304-VX8434-015
PVC	gray	2 m	<b>BCC03L5</b> BCC M314-M414-3E-304-VX8434-020	<b>BCC03LE</b> BCC M314-M424-3E-304-VX8434-020	<b>BCC03LZ</b> BCC M324-M424-3E-304-VX8434-020	<b>BCC03LN</b> BCC M324-M414-3E-304-VX8434-020
PVC	gray	3 m	<b>BCC03L6</b> BCC M314-M414-3E-304-VX8434-030	<b>BCC03LF</b> BCC M314-M424-3E-304-VX8434-030	<b>BCC03M0</b> BCC M324-M424-3E-304-VX8434-030	<b>BCC03LP</b> BCC M324-M414-3E-304-VX8434-030
PVC	gray	5 m	<b>BCC03L7</b> BCC M314-M414-3E-304-VX8434-050	<b>BCC03LH</b> BCC M314-M424-3E-304-VX8434-050	<b>BCC03M1</b> BCC M324-M424-3E-304-VX8434-050	<b>BCC03LR</b> BCC M324-M414-3E-304-VX8434-050

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



Please visit [www.balluff.com](http://www.balluff.com) for more details

# Connectors

## M12-male straight, 3-pin, no LED

# M12

# Connectors

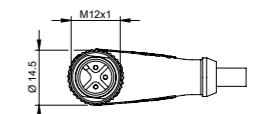
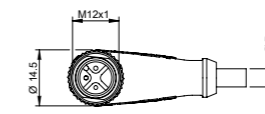
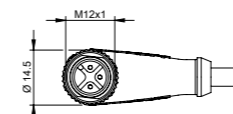
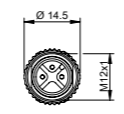
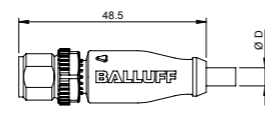
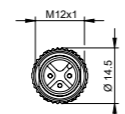
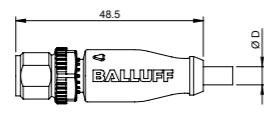
## M12-male right-angle, 3-pin, with and without LED



Connector diagram and wiring					
Operating voltage max. AC U <sub>B</sub>	250 V AC	250 V AC	250 V AC	250 V AC	250 V AC
Operating voltage max. DC U <sub>B</sub>	250 V DC	250 V DC	250 V DC	250 V DC	30 V DC
Cable	Molded-on	Molded-on	Molded-on	Molded-on	Molded-on
No. of wires x cross-section	3x0.34mm <sup>2</sup>	3x0.34mm <sup>2</sup>	3x0.34mm <sup>2</sup>	3x0.34mm <sup>2</sup>	3x0.34mm <sup>2</sup>
Enclosure rating per IEC 60529	IP 68	IP 68	IP 68	IP 68	IP 68
Ambient temperature T <sub>a</sub>	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 -25 °C...+80 °C	PUR shielded -25 °C...+80 °C	PUR shielded -25 °C...+80 °C	PUR shielded -25 °C...+80 °C	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C	PVC -5 °C...+80 °C	PVC -5 °C...+80 °C	PVC -5 °C...+80 °C	PVC -5 °C...+80 °C
	PVC 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 closed	Normally open	Normally closed	PNP-Normally open
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	2 m	<b>BCC02ZA</b> BCC M413-0000-2A-001-PX0334-020	<b>BCC02ZF</b> BCC M413-0000-2A-002-PX0334-020	<b>BCC02ZY</b> BCC M423-0000-2A-001-PX0334-020	<b>BCC0301</b> BCC M423-0000-2A-002-PX0334-020
PUR	black	5 m	<b>BCC02ZC</b> BCC M413-0000-2A-001-PX0334-050	<b>BCC02ZH</b> BCC M413-0000-2A-002-PX0334-050	<b>BCC02ZZ</b> BCC M423-0000-2A-001-PX0334-050	<b>BCC0302</b> BCC M423-0000-2A-002-PX0334-050
PUR	black	10 m	<b>BCC02ZE</b> BCC M413-0000-2A-001-PX0334-100	<b>BCC02ZJ</b> BCC M413-0000-2A-002-PX0334-100	<b>BCC0300</b> BCC M423-0000-2A-001-PX0334-100	<b>BCC0303</b> BCC M423-0000-2A-002-PX0334-100
PUR shielded	black	2 m	<b>BCC02ZK</b> BCC M413-0000-2A-036-PS0334-020	<b>BCC02ZN</b> BCC M413-0000-2A-037-PS0334-020	<b>BCC0304</b> BCC M423-0000-2A-036-PS0334-020	<b>BCC0307</b> BCC M423-0000-2A-037-PS0334-020
PUR shielded	black	5 m	<b>BCC02ZL</b> BCC M413-0000-2A-036-PS0334-050	<b>BCC02ZP</b> BCC M413-0000-2A-037-PS0334-050	<b>BCC0305</b> BCC M423-0000-2A-036-PS0334-050	<b>BCC0308</b> BCC M423-0000-2A-037-PS0334-050
PUR shielded	black	10 m	<b>BCC02ZM</b> BCC M413-0000-2A-036-PS0334-100	<b>BCC02ZR</b> BCC M413-0000-2A-037-PS0334-100	<b>BCC0306</b> BCC M423-0000-2A-036-PS0334-100	<b>BCC0309</b> BCC M423-0000-2A-037-PS0334-100
PVC	gray	2 m	<b>BCC0334</b> BCC M413-0000-2A-001-VX8334-020	<b>BCC0337</b> BCC M413-0000-2A-002-VX8334-020	<b>BCC033N</b> BCC M423-0000-2A-001-VX8334-020	<b>BCC033T</b> BCC M423-0000-2A-002-VX8334-020
PVC	gray	5 m	<b>BCC0335</b> BCC M413-0000-2A-001-VX8334-050	<b>BCC0338</b> BCC M413-0000-2A-002-VX8334-050	<b>BCC033P</b> BCC M423-0000-2A-001-VX8334-050	<b>BCC033U</b> BCC M423-0000-2A-002-VX8334-050
PVC	gray	10 m	<b>BCC0336</b> BCC M413-0000-2A-001-VX8334-100	<b>BCC0339</b> BCC M413-0000-2A-002-VX8334-100	<b>BCC033R</b> BCC M423-0000-2A-001-VX8334-100	<b>BCC033W</b> BCC M423-0000-2A-002-VX8334-100
PVC shielded	gray	2 m	<b>BCC033A</b> BCC M413-0000-2A-036-VS8334-020	<b>BCC033F</b> BCC M413-0000-2A-037-VS8334-020	<b>BCC033Y</b> BCC M423-0000-2A-036-VS8334-020	<b>BCC0341</b> BCC M423-0000-2A-037-VS8334-020
PVC shielded	gray	5 m	<b>BCC033C</b> BCC M413-0000-2A-036-VS8334-050	<b>BCC033H</b> BCC M413-0000-2A-037-VS8334-050	<b>BCC033Z</b> BCC M423-0000-2A-036-VS8334-050	<b>BCC0342</b> BCC M423-0000-2A-037-VS8334-050
PVC shielded	gray	10 m	<b>BCC033E</b> BCC M413-0000-2A-036-VS8334-100	<b>BCC033J</b> BCC M413-0000-2A-037-VS8334-100	<b>BCC0340</b> BCC M423-0000-2A-036-VS8334-100	<b>BCC0343</b> BCC M423-0000-2A-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

# M12

## Connectors

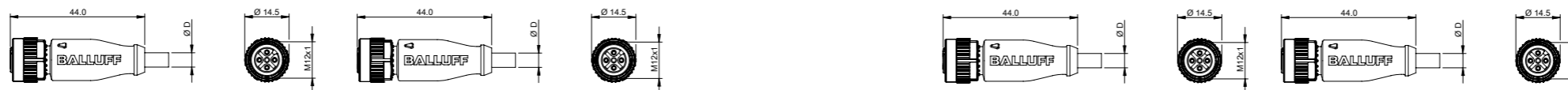
### M12-female straight, 3-pin, with LED



Connector diagram and wiring				
Operating voltage max. AC $U_B$	250 V AC	250 V AC	30 V DC	30 V DC
Operating voltage max. DC $U_B$	250 V DC	250 V DC	Molded-on	Molded-on
Cable	Molded-on	Molded-on	Molded-on	Molded-on
No. of wires × cross-section	3×0.34mm <sup>2</sup>	3×0.34mm <sup>2</sup>	3×0.34mm <sup>2</sup>	3×0.34mm <sup>2</sup>
Enclosure rating per IEC 60529	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 shielded -25 °C...+80 °C	PUR shielded -25 °C...+80 °C	PUR shielded -25 °C...+80 °C	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C	PVC -5 °C...+80 °C	PVC -5 °C...+80 °C	PVC -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 closed	PNP-Normally open	PNP Normally closed
LED			green/yellow	green/yellow

Cable material	Color	Length	Ordering code	Ordering code	Ordering code	Ordering code
			Part number	Part number	Part number	Part number
PUR	black	2 m	<b>BCC030K</b> BCC M415-0000-1A-001-PX0334-020	<b>BCC030N</b> BCC M415-0000-1A-002-PX0334-020	<b>BCC030A</b> BCC M415-0000-1A-004-PX0334-020	<b>BCC030F</b> BCC M415-0000-1A-005-PX0334-020
PUR	black	5 m	<b>BCC030L</b> BCC M415-0000-1A-001-PX0334-050	<b>BCC030P</b> BCC M415-0000-1A-002-PX0334-050	<b>BCC030C</b> BCC M415-0000-1A-004-PX0334-050	<b>BCC030H</b> BCC M415-0000-1A-005-PX0334-050
PUR	black	10 m	<b>BCC030M</b> BCC M415-0000-1A-001-PX0334-100	<b>BCC030R</b> BCC M415-0000-1A-002-PX0334-100	<b>BCC030E</b> BCC M415-0000-1A-004-PX0334-100	<b>BCC030J</b> BCC M415-0000-1A-005-PX0334-100
PUR shielded	black	2 m	<b>BCC030T</b> BCC M415-0000-1A-036-PS0334-020	<b>BCC030Y</b> BCC M415-0000-1A-037-PS0334-020		
PUR shielded	black	5 m	<b>BCC030U</b> BCC M415-0000-1A-036-PS0334-050	<b>BCC030Z</b> BCC M415-0000-1A-037-PS0334-050		
PUR shielded	black	10 m	<b>BCC030W</b> BCC M415-0000-1A-036-PS0334-100	<b>BCC0310</b> BCC M415-0000-1A-037-PS0334-100		
PVC	gray	2 m	<b>BCC034A</b> BCC M415-0000-1A-001-VX8334-020	<b>BCC034F</b> BCC M415-0000-1A-002-VX8334-020	<b>BCC0344</b> BCC M415-0000-1A-004-VX8334-020	<b>BCC0347</b> BCC M415-0000-1A-005-VX8334-020
PVC	gray	5 m	<b>BCC034C</b> BCC M415-0000-1A-001-VX8334-050	<b>BCC034H</b> BCC M415-0000-1A-002-VX8334-050	<b>BCC0345</b> BCC M415-0000-1A-004-VX8334-050	<b>BCC0348</b> BCC M415-0000-1A-005-VX8334-050
PVC	gray	10 m	<b>BCC034E</b> BCC M415-0000-1A-001-VX8334-100	<b>BCC034J</b> BCC M415-0000-1A-002-VX8334-100	<b>BCC0346</b> BCC M415-0000-1A-004-VX8334-100	<b>BCC0349</b> BCC M415-0000-1A-005-VX8334-100
PVC shielded	gray	2 m	<b>BCC034K</b> BCC M415-0000-1A-036-VS8334-020	<b>BCC034N</b> BCC M415-0000-1A-037-VS8334-020		
PVC shielded	gray	5 m	<b>BCC034L</b> BCC M415-0000-1A-036-VS8334-050	<b>BCC034P</b> BCC M415-0000-1A-037-VS8334-050		
PVC shielded	gray	10 m	<b>BCC034M</b> BCC M415-0000-1A-036-VS8334-100	<b>BCC034R</b> BCC M415-0000-1A-037-VS8334-100		

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

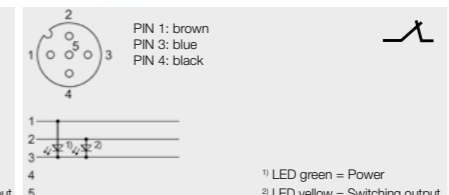
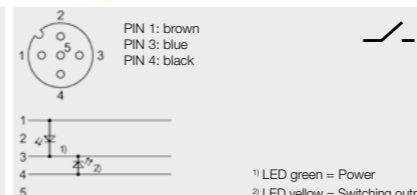
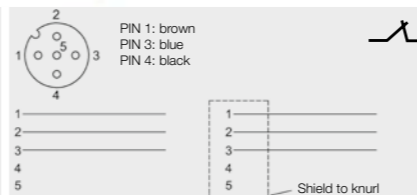
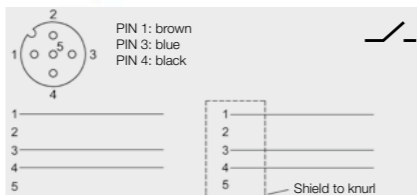


## Connectors

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 <sup>2</sup>
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	

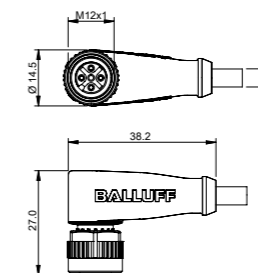
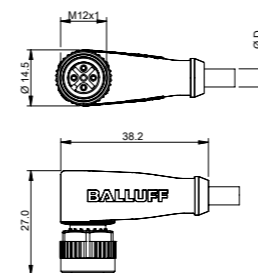
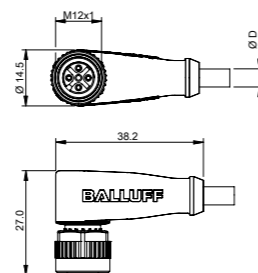
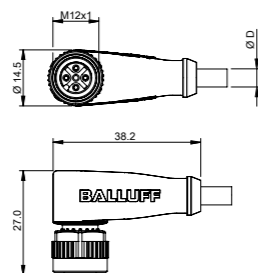
Operating voltage max. AC $U_B$	250 V AC
Operating voltage max. DC $U_B$	250 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm <sup>2</sup>
Enclosure rating per IEC 60529	IP 68
Ambient temperature $T_a$	PUR -25 °C...+80 °C
	PUR shielded -25 °C...+80 °C
	PVC -5 °C...+80 °C
	PVC shielded -5 °C...+80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

Operating voltage max. AC $U_B$	30 V DC
Operating voltage max. DC $U_B$	30 V DC
Cable	Molded-on
No. of wires × cross-section	3×0.34mm <sup>2</sup>
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 <sup>2</sup>
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

Cable material	Color	Length	Ordering code	Ordering code	Ordering code	Ordering code
			Part number	Part number	Part number	Part number
PUR	black	2 m	<b>BCC0317</b> BCC M425-0000-1A-001-PX0334-020	<b>BCC031A</b> BCC M425-0000-1A-002-PX0334-020	<b>BCC0311</b> BCC M425-0000-1A-004-PX0334-020	<b>BCC0314</b> BCC M425-0000-1A-005-PX0334-020
PUR	black	5 m	<b>BCC0318</b> BCC M425-0000-1A-001-PX0334-050	<b>BCC031C</b> BCC M425-0000-1A-002-PX0334-050	<b>BCC0312</b> BCC M425-0000-1A-004-PX0334-050	<b>BCC0315</b> BCC M425-0000-1A-005-PX0334-050
PUR	black	10 m	<b>BCC0319</b> BCC M425-0000-1A-001-PX0334-100	<b>BCC031E</b> BCC M425-0000-1A-002-PX0334-100	<b>BCC0313</b> BCC M425-0000-1A-004-PX0334-100	<b>BCC0316</b> BCC M425-0000-1A-005-PX0334-100
PUR shielded	black	2 m	<b>BCC031F</b> BCC M425-0000-1A-036-PS0334-020	<b>BCC031K</b> BCC M425-0000-1A-037-PS0334-020		
PUR shielded	black	5 m	<b>BCC031H</b> BCC M425-0000-1A-036-PS0334-050	<b>BCC031L</b> BCC M425-0000-1A-037-PS0334-050		
PUR shielded	black	10 m	<b>BCC031J</b> BCC M425-0000-1A-036-PS0334-100	<b>BCC031M</b> BCC M425-0000-1A-037-PS0334-100		
PVC	gray	2 m	<b>BCC0351</b> BCC M425-0000-1A-001-VX8334-020	<b>BCC0354</b> BCC M425-0000-1A-002-VX8334-020	<b>BCC034T</b> BCC M425-0000-1A-004-VX8334-020	<b>BCC034Y</b> BCC M425-0000-1A-005-VX8334-020
PVC	gray	5 m	<b>BCC0352</b> BCC M425-0000-1A-001-VX8334-050	<b>BCC0355</b> BCC M425-0000-1A-002-VX8334-050	<b>BCC034U</b> BCC M425-0000-1A-004-VX8334-050	<b>BCC034Z</b> BCC M425-0000-1A-005-VX8334-050
PVC	gray	10 m	<b>BCC0353</b> BCC M425-0000-1A-001-VX8334-100	<b>BCC0356</b> BCC M425-0000-1A-002-VX8334-100	<b>BCC034W</b> BCC M425-0000-1A-004-VX8334-100	<b>BCC0350</b> BCC M425-0000-1A-005-VX8334-100
PVC shielded	gray	2 m	<b>BCC0357</b> BCC M425-0000-1A-036-VS8334-020	<b>BCC035A</b> BCC M425-0000-1A-037-VS8334-020		
PVC shielded	gray	5 m	<b>BCC0358</b> BCC M425-0000-1A-036-VS8334-050	<b>BCC035C</b> BCC M425-0000-1A-037-VS8334-050		
PVC shielded	gray	10 m	<b>BCC0359</b> BCC M425-0000-1A-036-VS8334-100	<b>BCC035E</b> BCC M425-0000-1A-037-VS8334-100		

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



## Connectors

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

# M12

## Connectors

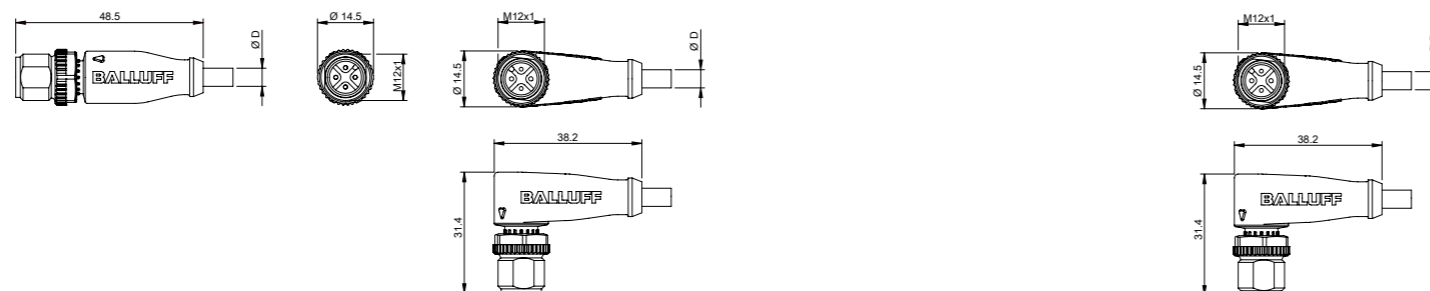
M12-male right-angle,  
4-pin, with LED



Connector diagram and wiring			
Operating voltage max. AC $U_B$	250 V AC	250 V AC	30 V DC
Operating voltage max. DC $U_B$	250 V DC	250 V DC	30 V DC
Cable	Molded-on	Molded-on	Molded-on
No. of wires × cross-section	4×0.34mm <sup>2</sup>	4×0.34mm <sup>2</sup>	4×0.34mm <sup>2</sup>
Enclosure rating per IEC 60529	IP 68	IP 68	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	-25 °C...+80 °C -25 °C...+80 °C -5 °C...+80 °C -5 °C...+80 °C	-25 °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	Ordering code	Ordering code
			Part number	Part number	Part number
PUR	black	2 m	<b>BCC031N</b> BCC M414-0000-2A-003-PX0434-020	<b>BCC0321</b> BCC M424-0000-2A-003-PX0434-020	<b>BCC031Y</b> BCC M424-0000-2A-008-PX0434-020
PUR	black	5 m	<b>BCC031P</b> BCC M414-0000-2A-003-PX0434-050	<b>BCC0322</b> BCC M424-0000-2A-003-PX0434-050	<b>BCC031Z</b> BCC M424-0000-2A-008-PX0434-050
PUR	black	10 m	<b>BCC031R</b> BCC M414-0000-2A-003-PX0434-100	<b>BCC0323</b> BCC M424-0000-2A-003-PX0434-100	<b>BCC0320</b> BCC M424-0000-2A-008-PX0434-100
PUR shielded	black	2 m	<b>BCC031T</b> BCC M414-0000-2A-014-PS0434-020	<b>BCC0324</b> BCC M424-0000-2A-014-PS0434-020	
PUR shielded	black	5 m	<b>BCC031U</b> BCC M414-0000-2A-014-PS0434-050	<b>BCC0325</b> BCC M424-0000-2A-014-PS0434-050	
PUR shielded	black	10 m	<b>BCC031W</b> BCC M414-0000-2A-014-PS0434-100	<b>BCC0326</b> BCC M424-0000-2A-014-PS0434-100	
PVC	gray	2 m	<b>BCC035F</b> BCC M414-0000-2A-003-VX8434-020	<b>BCC035T</b> BCC M424-0000-2A-003-VX8434-020	<b>BCC035N</b> BCC M424-0000-2A-008-VX8434-020
PVC	gray	5 m	<b>BCC035H</b> BCC M414-0000-2A-003-VX8434-050	<b>BCC035U</b> BCC M424-0000-2A-003-VX8434-050	<b>BCC035P</b> BCC M424-0000-2A-008-VX8434-050
PVC	gray	10 m	<b>BCC035J</b> BCC M414-0000-2A-003-VX8434-100	<b>BCC035W</b> BCC M424-0000-2A-003-VX8434-100	<b>BCC035R</b> BCC M424-0000-2A-008-VX8434-100
PVC shielded	gray	2 m	<b>BCC035K</b> BCC M414-0000-2A-014-VS8434-020	<b>BCC035Y</b> BCC M424-0000-2A-014-VS8434-020	
PVC shielded	gray	5 m	<b>BCC035L</b> BCC M414-0000-2A-014-VS8434-050	<b>BCC035Z</b> BCC M424-0000-2A-014-VS8434-050	
PVC shielded	gray	10 m	<b>BCC035M</b> BCC M414-0000-2A-014-VS8434-100	<b>BCC0360</b> 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

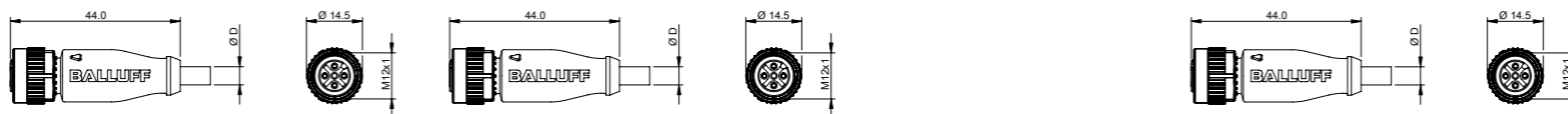
M12-female straight, 4-pin, with LED



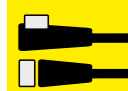
Connector diagram and wiring			
Operating voltage max. AC $U_B$	250 V AC	30 V DC	30 V DC
Operating voltage max. DC $U_B$	250 V DC		
Cable	Molded-on	Molded-on	Molded-on
No. of wires × cross-section	4×0.34mm <sup>2</sup>	4×0.34mm <sup>2</sup>	4×0.34mm <sup>2</sup>
Enclosure rating per IEC 60529	IP 68	IP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

Cable material	Color	Length	Ordering code	Ordering code	Ordering code
			Part number	Part number	Part number
PUR	black	2 m	<b>BCC032F</b> BCC M415-0000-1A-003-PX0434-020	<b>BCC0327</b> BCC M415-0000-1A-008-PX0434-020	<b>BCC032A</b> BCC M415-0000-1A-010-PX0434-020
PUR	black	5 m	<b>BCC032H</b> BCC M415-0000-1A-003-PX0434-050	<b>BCC0328</b> BCC M415-0000-1A-008-PX0434-050	<b>BCC032C</b> BCC M415-0000-1A-010-PX0434-050
PUR	black	10 m	<b>BCC032J</b> BCC M415-0000-1A-003-PX0434-100	<b>BCC0329</b> BCC M415-0000-1A-008-PX0434-100	<b>BCC032E</b> BCC M415-0000-1A-010-PX0434-100
PUR shielded	black	2 m	<b>BCC032K</b> BCC M415-0000-1A-014-PS0434-020		
PUR shielded	black	5 m	<b>BCC032L</b> BCC M415-0000-1A-014-PS0434-050		
PUR shielded	black	10 m	<b>BCC032M</b> BCC M415-0000-1A-014-PS0434-100		
PVC	gray	2 m	<b>BCC0367</b> BCC M415-0000-1A-003-VX8434-020	<b>BCC0361</b> BCC M415-0000-1A-008-VX8434-020	<b>BCC0364</b> BCC M415-0000-1A-010-VX8434-020
PVC	gray	5 m	<b>BCC0368</b> BCC M415-0000-1A-003-VX8434-050	<b>BCC0362</b> BCC M415-0000-1A-008-VX8434-050	<b>BCC0365</b> BCC M415-0000-1A-010-VX8434-050
PVC	gray	10 m	<b>BCC0369</b> BCC M415-0000-1A-003-VX8434-100	<b>BCC0363</b> BCC M415-0000-1A-008-VX8434-100	<b>BCC0366</b> BCC M415-0000-1A-010-VX8434-100
PVC shielded	gray	2 m	<b>BCC036A</b> BCC M415-0000-1A-014-VS8434-020		
PVC shielded	gray	5 m	<b>BCC036C</b> BCC M415-0000-1A-014-VS8434-050		
PVC shielded	gray	10 m	<b>BCC036E</b> 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.



M12



## Connectors

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

# M12

## Connectors

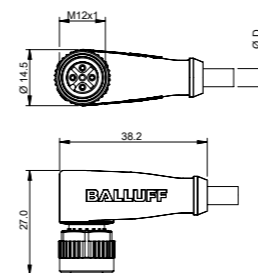
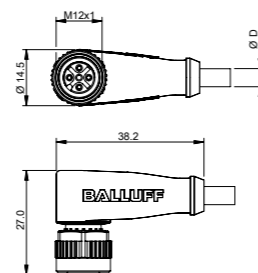
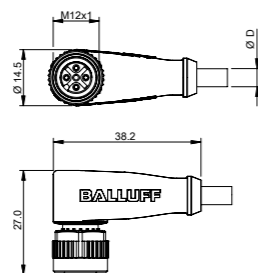
M12-female right-angle, 4-pin, with LED



Connector diagram and wiring	<p>PIN 1: brown PIN 2: white PIN 3: blue PIN 4: black</p>	<p>PIN 1: brown PIN 2: white PIN 3: blue PIN 4: black</p>	<p>PIN 1: brown PIN 2: white PIN 3: blue PIN 4: black</p>
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 <sup>2</sup>	4×0.34mm <sup>2</sup>	4×0.34mm <sup>2</sup>
Enclosure rating per IEC 60529	IP 68	IP 68	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	-25 °C...+80 °C -5 °C...+80 °C	-25 °C...+80 °C -5 °C...+80 °C
Version LED	Complementary (NO/NC)	PNP-complementary (NO/NC)	PNP-complementary (NO/NC) green/yellow/white

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





### Connection cable

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

## M12 ↔ M8

### Connection cable

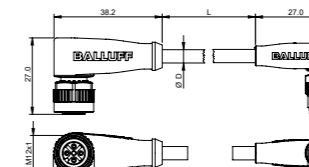
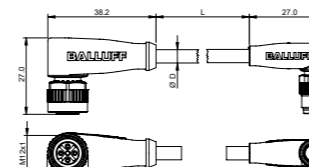
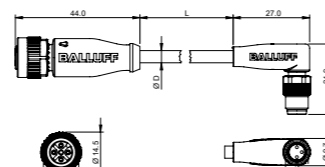
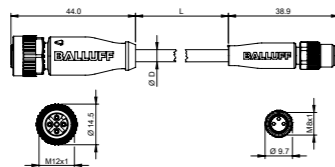
M12-female right-angle ↔ M8-male right-angle,  
3-pin, with and without LED



Connector diagram and wiring	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Operating voltage max. AC U <sub>B</sub>	60 V AC	60 V AC	60 V AC	60 V AC
Operating voltage max. DC U <sub>B</sub>	60 V DC	60 V DC	60 V DC	30 V DC
Cable	Molded-on	Molded-on	Molded-on	Molded-on
No. of wires × cross-section	3×0.34mm <sup>2</sup>	3×0.34mm <sup>2</sup>	3×0.34mm <sup>2</sup>	3×0.34mm <sup>2</sup>
Enclosure rating per IEC 60529	IP 67	IP 67	IP 67	IP 67
Ambient temperature T <sub>a</sub>	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	Normally open	Normally open	PNP-Normally open
LED				green/yellow

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

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





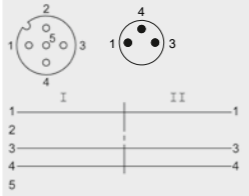
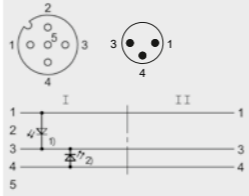


## Connection cable

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

# M12 ↔ M8

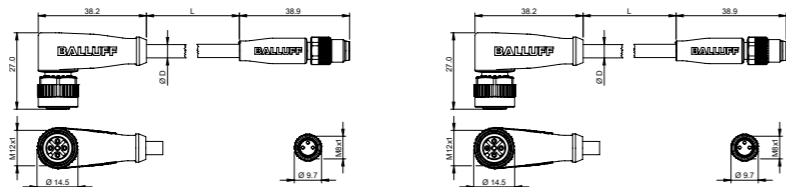
## Connection cable



Connector diagram and wiring	Normally open 	PNP-Normally open 
		
Operating voltage max. AC U <sub>B</sub>	60 V AC	30 V DC
Operating voltage max. DC U <sub>B</sub>	60 V DC	30 V DC
Cable	Molded-on	Molded-on
No. of wires × cross-section	3×0.34mm <sup>2</sup>	3×0.34mm <sup>2</sup>
Enclosure rating per IEC 60529	IP 67	IP 67
Ambient temperature T <sub>a</sub>	-25 °C...+80 °C	-25 °C...+80 °C
	PUR shielded	-5 °C...+80 °C
	PVC shielded	-5 °C...+80 °C
Version LED	Normally open 	PNP-Normally open  green/yellow

Cable material	Color	Length	Ordering code	Part number
PUR	black	0.3 m	<b>BCC03MU</b>	<b>BCC03NA</b>
PUR	black	0.6 m	<b>BCC03MW</b>	<b>BCC03NC</b>
PUR	black	1 m	<b>BCC03MY</b>	<b>BCC03NE</b>
PUR	black	1.5 m	<b>BCC03MZ</b>	<b>BCC03NF</b>
PUR	black	2 m	<b>BCC03N0</b>	<b>BCC03NH</b>
PUR	black	3 m	<b>BCC03N1</b>	<b>BCC03NJ</b>
PUR	black	5 m	<b>BCC03N2</b>	<b>BCC03NK</b>
PVC	gray	0.3 m	<b>BCC03PC</b>	<b>BCC03PY</b>
PVC	gray	0.6 m	<b>BCC03PE</b>	<b>BCC03PZ</b>
PVC	gray	1 m	<b>BCC03PF</b>	<b>BCC03R0</b>
PVC	gray	1.5 m	<b>BCC03PH</b>	<b>BCC03R1</b>
PVC	gray	2 m	<b>BCC03PJ</b>	<b>BCC03R2</b>
PVC	gray	3 m	<b>BCC03PK</b>	<b>BCC03R3</b>
PVC	gray	5 m	<b>BCC03PL</b>	<b>BCC03R4</b>

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](http://www.balluff.com) for more details



M12 ↔ M8



### Connection cable

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

## M12 ↔ M8

### Connection cable

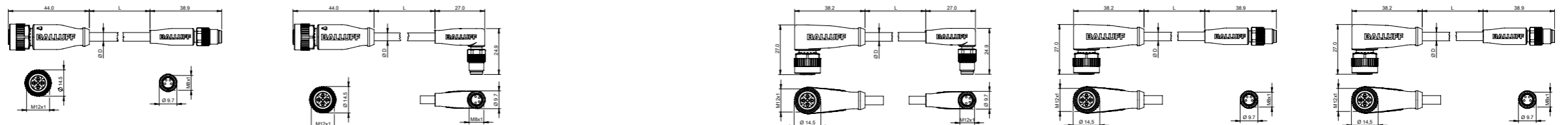
M12-female right-angle ↔ M8-male straight or right-angle, 4-pin, with and without LED



Connector diagram and wiring	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Operating voltage max. AC U <sub>B</sub>	30 V AC	30 V AC	30 V AC	30 V AC	30 V AC	30 V AC	30 V DC
Operating voltage max. DC U <sub>B</sub>	30 V DC	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	Molded-on
No. of wires × cross-section	4×0.34mm <sup>2</sup>	4×0.34mm <sup>2</sup>	4×0.34mm <sup>2</sup>	4×0.34mm <sup>2</sup>	4×0.34mm <sup>2</sup>	4×0.34mm <sup>2</sup>	4×0.34mm <sup>2</sup>
Enclosure rating per IEC 60529	IP 67	IP 67	IP 67	IP 67	IP 67	IP 67	IP 67
Ambient temperature T <sub>a</sub>	PUR -25 °C...+80 °C	PUR shielded -5 °C...+80 °C	PUR -25 °C...+80 °C	PUR shielded -5 °C...+80 °C	PUR -25 °C...+80 °C	PUR shielded -5 °C...+80 °C	PUR -25 °C...+80 °C
Version LED	Complementary (NO/NC) ✓ / ✗	Complementary (NO/NC) ✓ / ✗	Complementary (NO/NC) ✓ / ✗	Complementary (NO/NC) ✓ / ✗	Complementary (NO/NC) ✓ / ✗	Complementary (NO/NC) ✓ / ✗	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	<b>BCC03RE</b> BCC M415-M314-3F-304-PX0434-003	<b>BCC03RN</b> BCC M415-M324-3F-304-PX0434-003	<b>BCC03T6</b> BCC M425-M324-3F-304-PX0434-003	<b>BCC03RZ</b> BCC M425-M314-3F-304-PX0434-003	<b>BCC03TF</b> BCC M425-M314-3F-606-PX0434-003
PUR	black	0.6 m	<b>BCC03RF</b> BCC M415-M314-3F-304-PX0434-006	<b>BCC03RP</b> BCC M415-M324-3F-304-PX0434-006	<b>BCC03T7</b> BCC M425-M324-3F-304-PX0434-006	<b>BCC03T0</b> BCC M425-M314-3F-304-PX0434-006	<b>BCC03TH</b> BCC M425-M314-3F-606-PX0434-006
PUR	black	1 m	<b>BCC03RH</b> BCC M415-M314-3F-304-PX0434-010	<b>BCC03RR</b> BCC M415-M324-3F-304-PX0434-010	<b>BCC03T8</b> BCC M425-M324-3F-304-PX0434-010	<b>BCC03T1</b> BCC M425-M314-3F-304-PX0434-010	<b>BCC03TJ</b> BCC M425-M314-3F-606-PX0434-010
PUR	black	1.5 m	<b>BCC03RJ</b> BCC M415-M314-3F-304-PX0434-015	<b>BCC03RT</b> BCC M415-M324-3F-304-PX0434-015	<b>BCC03T9</b> BCC M425-M324-3F-304-PX0434-015	<b>BCC03T2</b> BCC M425-M314-3F-304-PX0434-015	<b>BCC03TK</b> BCC M425-M314-3F-606-PX0434-015
PUR	black	2 m	<b>BCC03RK</b> BCC M415-M314-3F-304-PX0434-020	<b>BCC03RU</b> BCC M415-M324-3F-304-PX0434-020	<b>BCC03TA</b> BCC M425-M324-3F-304-PX0434-020	<b>BCC03T3</b> BCC M425-M314-3F-304-PX0434-020	<b>BCC03TL</b> BCC M425-M314-3F-606-PX0434-020
PUR	black	3 m	<b>BCC03RL</b> BCC M415-M314-3F-304-PX0434-030	<b>BCC03RW</b> BCC M415-M324-3F-304-PX0434-030	<b>BCC03TC</b> BCC M425-M324-3F-304-PX0434-030	<b>BCC03T4</b> BCC M425-M314-3F-304-PX0434-030	<b>BCC03TM</b> BCC M425-M314-3F-606-PX0434-030
PUR	black	5 m	<b>BCC03RM</b> BCC M415-M314-3F-304-PX0434-050	<b>BCC03RY</b> BCC M415-M324-3F-304-PX0434-050	<b>BCC03TE</b> BCC M425-M324-3F-304-PX0434-050	<b>BCC03T5</b> BCC M425-M314-3F-304-PX0434-050	<b>BCC03TN</b> BCC M425-M314-3F-606-PX0434-050
PVC	gray	0.3 m	<b>BCC03TP</b> BCC M415-M314-3F-304-VX8434-003	<b>BCC03U0</b> BCC M415-M324-3F-304-VX8434-003	<b>BCC03UH</b> BCC M425-M324-3F-304-VX8434-003	<b>BCC03U7</b> BCC M425-M314-3F-304-VX8434-003	<b>BCC03UR</b> BCC M425-M314-3F-606-VX8434-003
PVC	gray	0.6 m	<b>BCC03TR</b> BCC M415-M314-3F-304-VX8434-006	<b>BCC03U1</b> BCC M415-M324-3F-304-VX8434-006	<b>BCC03UJ</b> BCC M425-M324-3F-304-VX8434-006	<b>BCC03U8</b> BCC M425-M314-3F-304-VX8434-006	<b>BCC03UT</b> BCC M425-M314-3F-606-VX8434-006
PVC	gray	1 m	<b>BCC03TT</b> BCC M415-M314-3F-304-VX8434-010	<b>BCC03U2</b> BCC M415-M324-3F-304-VX8434-010	<b>BCC03UK</b> BCC M425-M324-3F-304-VX8434-010	<b>BCC03U9</b> BCC M425-M314-3F-304-VX8434-010	<b>BCC03UU</b> BCC M425-M314-3F-606-VX8434-010
PVC	gray	1.5 m	<b>BCC03TU</b> BCC M415-M314-3F-304-VX8434-015	<b>BCC03U3</b> BCC M415-M324-3F-304-VX8434-015	<b>BCC03UL</b> BCC M425-M324-3F-304-VX8434-015	<b>BCC03UA</b> BCC M425-M314-3F-304-VX8434-015	<b>BCC03UW</b> BCC M425-M314-3F-606-VX8434-015
PVC	gray	2 m	<b>BCC03TW</b> BCC M415-M314-3F-304-VX8434-020	<b>BCC03U4</b> BCC M415-M324-3F-304-VX8434-020	<b>BCC03UM</b> BCC M425-M324-3F-304-VX8434-020	<b>BCC03UC</b> BCC M425-M314-3F-304-VX8434-020	<b>BCC03UY</b> BCC M425-M314-3F-606-VX8434-020
PVC	gray	3 m	<b>BCC03TY</b> BCC M415-M314-3F-304-VX8434-030	<b>BCC03U5</b> BCC M415-M324-3F-304-VX8434-030	<b>BCC03UN</b> BCC M425-M324-3F-304-VX8434-030	<b>BCC03UE</b> BCC M425-M314-3F-304-VX8434-030	<b>BCC03UZ</b> BCC M425-M314-3F-606-VX8434-030
PVC	gray	5 m	<b>BCC03TZ</b> BCC M415-M314-3F-304-VX8434-050	<b>BCC03U6</b> BCC M415-M324-3F-304-VX8434-050	<b>BCC03UP</b> BCC M425-M324-3F-304-VX8434-050	<b>BCC03UF</b> BCC M425-M314-3F-304-VX8434-050	<b>BCC03W0</b> 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

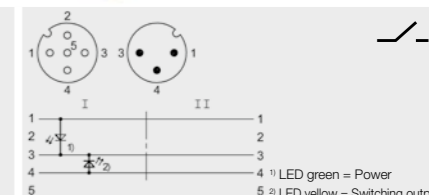
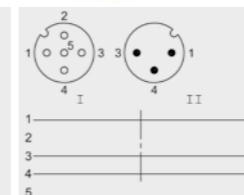
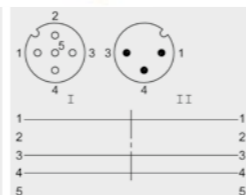
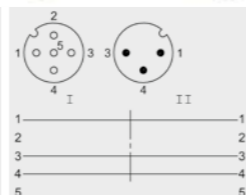
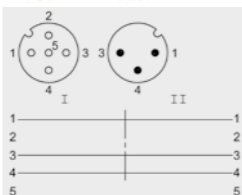
## M12 ↔ M12

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

250 V AC  
 250 V DC  
 Molded-on  
 3×0.34mm<sup>2</sup>  
 IP 68  
 PUR  
 PUR shielded  
 PVC  
 PVC shielded  
 Normally open  $\swarrow$ -

250 V AC  
 250 V DC  
 Molded-on  
 3×0.34mm<sup>2</sup>  
 IP 68  
 PUR  
 PUR shielded  
 PVC  
 PVC shielded  
 Normally open  $\swarrow$ -

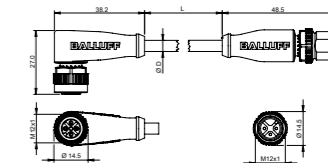
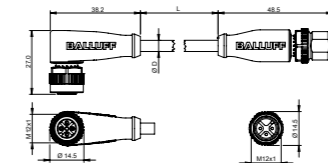
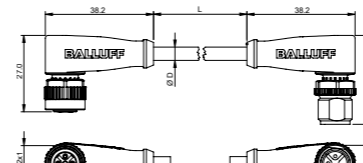
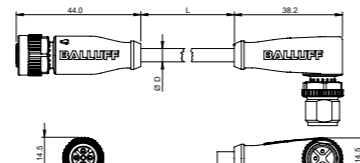
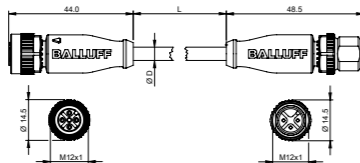
250 V AC  
 250 V DC  
 Molded-on  
 3×0.34mm<sup>2</sup>  
 IP 68  
 PUR  
 PUR shielded  
 PVC  
 PVC shielded  
 Normally open  $\swarrow$ -

250 V AC  
 250 V DC  
 Molded-on  
 3×0.34mm<sup>2</sup>  
 IP 68  
 PUR  
 PUR shielded  
 PVC  
 PVC shielded  
 Normally open  $\swarrow$ -

30 V DC  
 Molded-on  
 3×0.34mm<sup>2</sup>  
 IP 68  
 PUR  
 PUR shielded  
 PVC  
 PVC shielded  
 PNP-Normally open  $\swarrow$ -  
 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	<b>BCC036Y</b> BCC M415-M413-3A-300-PX0334-003	<b>BCC0375</b> BCC M415-M423-3A-300-PX0334-003	<b>BCC037N</b> BCC M425-M423-3A-300-PX0334-003	<b>BCC037E</b> BCC M425-M413-3A-300-PX0334-003	<b>BCC037Z</b> BCC M425-M413-3A-602-PX0334-003
PUR	black	0.6 m	<b>BCC036Z</b> BCC M415-M413-3A-300-PX0334-006	<b>BCC0376</b> BCC M415-M423-3A-300-PX0334-006	<b>BCC037P</b> BCC M425-M423-3A-300-PX0334-006	<b>BCC037F</b> BCC M425-M413-3A-300-PX0334-006	<b>BCC0380</b> BCC M425-M413-3A-602-PX0334-006
PUR	black	1 m	<b>BCC0370</b> BCC M415-M413-3A-300-PX0334-010	<b>BCC0377</b> BCC M415-M423-3A-300-PX0334-010	<b>BCC037R</b> BCC M425-M423-3A-300-PX0334-010	<b>BCC037H</b> BCC M425-M413-3A-300-PX0334-010	<b>BCC0381</b> BCC M425-M413-3A-602-PX0334-010
PUR	black	1.5 m	<b>BCC0371</b> BCC M415-M413-3A-300-PX0334-015	<b>BCC0378</b> BCC M415-M423-3A-300-PX0334-015	<b>BCC037T</b> BCC M425-M423-3A-300-PX0334-015	<b>BCC037J</b> BCC M425-M413-3A-300-PX0334-015	<b>BCC0382</b> BCC M425-M413-3A-602-PX0334-015
PUR	black	2 m	<b>BCC0372</b> BCC M415-M413-3A-300-PX0334-020	<b>BCC0379</b> BCC M415-M423-3A-300-PX0334-020	<b>BCC037U</b> BCC M425-M423-3A-300-PX0334-020	<b>BCC037K</b> BCC M425-M413-3A-300-PX0334-020	<b>BCC0383</b> BCC M425-M413-3A-602-PX0334-020
PUR	black	3 m	<b>BCC0373</b> BCC M415-M413-3A-300-PX0334-030	<b>BCC037A</b> BCC M415-M423-3A-300-PX0334-030	<b>BCC037W</b> BCC M425-M423-3A-300-PX0334-030	<b>BCC037L</b> BCC M425-M413-3A-300-PX0334-030	<b>BCC0384</b> BCC M425-M413-3A-602-PX0334-030
PUR	black	5 m	<b>BCC0374</b> BCC M415-M413-3A-300-PX0334-050	<b>BCC037C</b> BCC M415-M423-3A-300-PX0334-050	<b>BCC037Y</b> BCC M425-M423-3A-300-PX0334-050	<b>BCC037M</b> BCC M425-M413-3A-300-PX0334-050	<b>BCC0385</b> BCC M425-M413-3A-602-PX0334-050
PVC	gray	0.3 m	<b>BCC0386</b> BCC M415-M413-3A-300-VX8334-003	<b>BCC038F</b> BCC M415-M423-3A-300-VX8334-003	<b>BCC0390</b> BCC M425-M423-3A-300-VX8334-003	<b>BCC038P</b> BCC M425-M413-3A-300-VX8334-003	<b>BCC0397</b> BCC M425-M413-3A-602-VX8334-003
PVC	gray	0.6 m	<b>BCC0387</b> BCC M415-M413-3A-300-VX8334-006	<b>BCC038H</b> BCC M415-M423-3A-300-VX8334-006	<b>BCC0391</b> BCC M425-M423-3A-300-VX8334-006	<b>BCC038R</b> BCC M425-M413-3A-300-VX8334-006	<b>BCC0398</b> BCC M425-M413-3A-602-VX8334-006
PVC	gray	1 m	<b>BCC0388</b> BCC M415-M413-3A-300-VX8334-010	<b>BCC038J</b> BCC M415-M423-3A-300-VX8334-010	<b>BCC0392</b> BCC M425-M423-3A-300-VX8334-010	<b>BCC038T</b> BCC M425-M413-3A-300-VX8334-010	<b>BCC0399</b> BCC M425-M413-3A-602-VX8334-010
PVC	gray	1.5 m	<b>BCC0389</b> BCC M415-M413-3A-300-VX8334-015	<b>BCC038K</b> BCC M415-M423-3A-300-VX8334-015	<b>BCC0393</b> BCC M425-M423-3A-300-VX8334-015	<b>BCC038U</b> BCC M425-M413-3A-300-VX8334-015	<b>BCC039A</b> BCC M425-M413-3A-602-VX8334-015
PVC	gray	2 m	<b>BCC038A</b> BCC M415-M413-3A-300-VX8334-020	<b>BCC038L</b> BCC M415-M423-3A-300-VX8334-020	<b>BCC0394</b> BCC M425-M423-3A-300-VX8334-020	<b>BCC038W</b> BCC M425-M413-3A-300-VX8334-020	<b>BCC039C</b> BCC M425-M413-3A-602-VX8334-020
PVC	gray	3 m	<b>BCC038C</b> BCC M415-M413-3A-300-VX8334-030	<b>BCC038M</b> BCC M415-M423-3A-300-VX8334-030	<b>BCC0395</b> BCC M425-M423-3A-300-VX8334-030	<b>BCC038Y</b> BCC M425-M413-3A-300-VX8334-030	<b>BCC039E</b> BCC M425-M413-3A-602-VX8334-030
PVC	gray	5 m	<b>BCC038E</b> BCC M415-M413-3A-300-VX8334-050	<b>BCC038N</b> BCC M415-M423-3A-300-VX8334-050	<b>BCC0396</b> BCC M425-M423-3A-300-VX8334-050	<b>BCC038Z</b> BCC M425-M413-3A-300-VX8334-050	<b>BCC039F</b> BCC M425-M413-3A-602-VX8334-050

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



## Connection cable

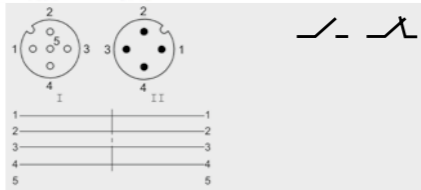
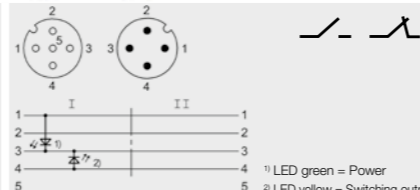
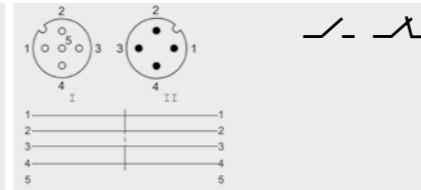



M12-female straight ↔ M12-male straight, 4-pin, with and without LED

# M12 ↔ M12

## Connection cable

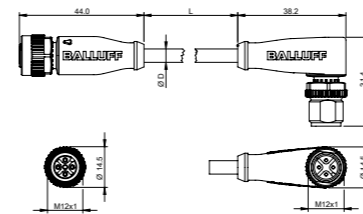
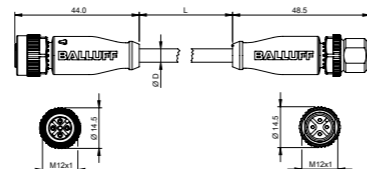
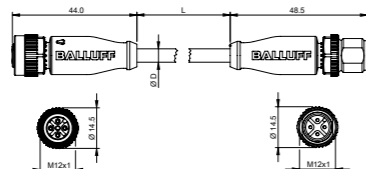
M12-female straight ↔ M12-male right-angle, 4-pin, no LED



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

Cable material	Color	Length	Ordering code	Part number
PUR	black	0.3 m	<b>BCC039H</b>	<b>BCC03A1</b>
PUR	black	0.6 m	<b>BCC039J</b>	<b>BCC03A2</b>
PUR	black	1 m	<b>BCC039K</b>	<b>BCC03A3</b>
PUR	black	1.5 m	<b>BCC039L</b>	<b>BCC03A4</b>
PUR	black	2 m	<b>BCC039M</b>	<b>BCC03A5</b>
PUR	black	3 m	<b>BCC039N</b>	<b>BCC03A6</b>
PUR	black	5 m	<b>BCC039P</b>	<b>BCC03A7</b>
PVC	gray	0.3 m	<b>BCC03C9</b>	<b>BCC03CU</b>
PVC	gray	0.6 m	<b>BCC03CA</b>	<b>BCC03CW</b>
PVC	gray	1 m	<b>BCC03CC</b>	<b>BCC03CY</b>
PVC	gray	1.5 m	<b>BCC03CE</b>	<b>BCC03CZ</b>
PVC	gray	2 m	<b>BCC03CF</b>	<b>BCC03E0</b>
PVC	gray	3 m	<b>BCC03CH</b>	<b>BCC03E1</b>
PVC	gray	5 m	<b>BCC03CJ</b>	<b>BCC03E2</b>
				<b>BCC039R</b>
				<b>BCC039T</b>
				<b>BCC039U</b>
				<b>BCC039W</b>
				<b>BCC039Y</b>
				<b>BCC039Z</b>
				<b>BCC03A0</b>
				<b>BCC03CK</b>
				<b>BCC03CL</b>
				<b>BCC03CM</b>
				<b>BCC03CN</b>
				<b>BCC03CP</b>
				<b>BCC03CR</b>
				<b>BCC03CT</b>

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



### Connection cable

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

## M12 ↔ M12

### Connection cable

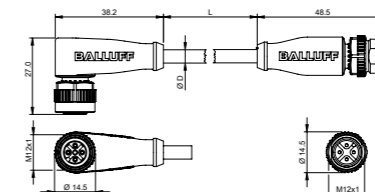
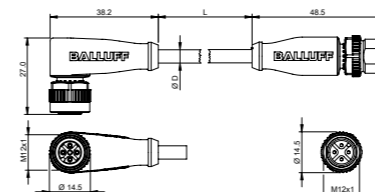
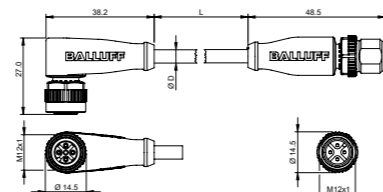
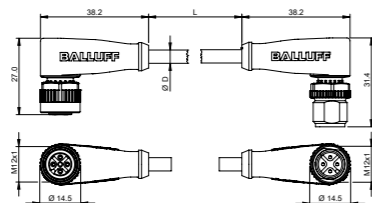
M12-female right-angle ↔ M12-male straight, 4-pin, with LED



Connector diagram and wiring	Diagram I	Diagram II	Diagram I	Diagram II	Diagram I	Diagram II	Diagram I	Diagram II
Operating voltage max. AC U <sub>B</sub>	250 V AC	250 V AC	250 V AC	250 V AC	30 V DC	30 V DC	30 V DC	30 V DC
Operating voltage max. DC U <sub>B</sub>	250 V DC	250 V DC	250 V DC	250 V DC	Molded-on	Molded-on	Molded-on	Molded-on
Cable	Molded-on	Molded-on	Molded-on	Molded-on	4x0.34mm <sup>2</sup>	4x0.34mm <sup>2</sup>	4x0.34mm <sup>2</sup>	4x0.34mm <sup>2</sup>
No. of wires × cross-section	4x0.34mm <sup>2</sup>	4x0.34mm <sup>2</sup>	4x0.34mm <sup>2</sup>	4x0.34mm <sup>2</sup>	IP 68	IP 68	IP 68	IP 68
Enclosure rating per IEC 60529	IP 68	IP 68	IP 68	IP 68	-25 °C...+80 °C	-25 °C...+80 °C	-25 °C...+80 °C	-25 °C...+80 °C
Ambient temperature T <sub>a</sub>	PUR	PUR	PUR	PUR	PUR shielded	PUR shielded	PUR shielded	PUR shielded
	PVC	PVC	PVC	PVC	PVC shielded	PVC shielded	PVC shielded	PVC shielded
Version	Complementary (NO/NC) / - / - / -	Complementary (NO/NC) / - / - / -	Complementary (NO/NC) / - / - / -	Complementary (NO/NC) / - / - / -	PNP-complementary (NO/NC) / - / - / -	PNP-complementary (NO/NC) / - / - / -	PNP-complementary (NO/NC) / - / - / -	PNP-complementary (NO/NC) / - / - / -
LED					green/yellow	green/yellow	green/yellow/white	green/yellow/white

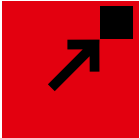
Cable material	Color	Length	Ordering code	Ordering code	Ordering code	Ordering code
			Part number	Part number	Part number	Part number
PUR	black	0.3 m	<b>BCC03AJ</b> BCC M425-M424-3A-304-PX0434-003	<b>BCC03A8</b> BCC M425-M414-3A-304-PX0434-003	<b>BCC03AT</b> BCC M425-M414-3A-606-PX0434-003	<b>BCC03C2</b> BCC M425-M414-3A-650-PX0434-003
PUR	black	0.6 m	<b>BCC03AK</b> BCC M425-M424-3A-304-PX0434-006	<b>BCC03A9</b> BCC M425-M414-3A-304-PX0434-006	<b>BCC03AU</b> BCC M425-M414-3A-606-PX0434-006	<b>BCC03C3</b> BCC M425-M414-3A-650-PX0434-006
PUR	black	1 m	<b>BCC03AL</b> BCC M425-M424-3A-304-PX0434-010	<b>BCC03AA</b> BCC M425-M414-3A-304-PX0434-010	<b>BCC03AW</b> BCC M425-M414-3A-606-PX0434-010	<b>BCC03C4</b> BCC M425-M414-3A-650-PX0434-010
PUR	black	1.5 m	<b>BCC03AM</b> BCC M425-M424-3A-304-PX0434-015	<b>BCC03AC</b> BCC M425-M414-3A-304-PX0434-015	<b>BCC03AY</b> BCC M425-M414-3A-606-PX0434-015	<b>BCC03C5</b> BCC M425-M414-3A-650-PX0434-015
PUR	black	2 m	<b>BCC03AN</b> BCC M425-M424-3A-304-PX0434-020	<b>BCC03AE</b> BCC M425-M414-3A-304-PX0434-020	<b>BCC03AZ</b> BCC M425-M414-3A-606-PX0434-020	<b>BCC03C6</b> BCC M425-M414-3A-650-PX0434-020
PUR	black	3 m	<b>BCC03AP</b> BCC M425-M424-3A-304-PX0434-030	<b>BCC03AF</b> BCC M425-M414-3A-304-PX0434-030	<b>BCC03C0</b> BCC M425-M414-3A-606-PX0434-030	<b>BCC03C7</b> BCC M425-M414-3A-650-PX0434-030
PUR	black	5 m	<b>BCC03AR</b> BCC M425-M424-3A-304-PX0434-050	<b>BCC03AH</b> BCC M425-M414-3A-304-PX0434-050	<b>BCC03C1</b> BCC M425-M414-3A-606-PX0434-050	<b>BCC03C8</b> BCC M425-M414-3A-650-PX0434-050
PVC	gray	0.3 m	<b>BCC03EA</b> BCC M425-M424-3A-304-VX8434-003	<b>BCC03E3</b> BCC M425-M414-3A-304-VX8434-003	<b>BCC03EL</b> BCC M425-M414-3A-606-VX8434-003	<b>BCC03EW</b> BCC M425-M414-3A-650-VX8434-003
PVC	gray	0.6 m	<b>BCC03EC</b> BCC M425-M424-3A-304-VX8434-006	<b>BCC03E4</b> BCC M425-M414-3A-304-VX8434-006	<b>BCC03EM</b> BCC M425-M414-3A-606-VX8434-006	<b>BCC03Y4</b> BCC M425-M414-3A-650-VX8434-006
PVC	gray	1 m	<b>BCC03EE</b> BCC M425-M424-3A-304-VX8434-010	<b>BCC03E5</b> BCC M425-M414-3A-304-VX8434-010	<b>BCC03EN</b> BCC M425-M414-3A-606-VX8434-010	<b>BCC03EZ</b> BCC M425-M414-3A-650-VX8434-010
PVC	gray	1.5 m	<b>BCC03EF</b> BCC M425-M424-3A-304-VX8434-015	<b>BCC03E6</b> BCC M425-M414-3A-304-VX8434-015	<b>BCC03EP</b> BCC M425-M414-3A-606-VX8434-015	<b>BCC03F0</b> BCC M425-M414-3A-650-VX8434-015
PVC	gray	2 m	<b>BCC03EH</b> BCC M425-M424-3A-304-VX8434-020	<b>BCC03E7</b> BCC M425-M414-3A-304-VX8434-020	<b>BCC03ER</b> BCC M425-M414-3A-606-VX8434-020	<b>BCC03F1</b> BCC M425-M414-3A-650-VX8434-020
PVC	gray	3 m	<b>BCC03EJ</b> BCC M425-M424-3A-304-VX8434-030	<b>BCC03E8</b> BCC M425-M414-3A-304-VX8434-030	<b>BCC03ET</b> BCC M425-M414-3A-606-VX8434-030	<b>BCC03F2</b> BCC M425-M414-3A-650-VX8434-030
PVC	gray	5 m	<b>BCC03EK</b> BCC M425-M424-3A-304-VX8434-050	<b>BCC03E9</b> BCC M425-M414-3A-304-VX8434-050	<b>BCC03EU</b> BCC M425-M414-3A-606-VX8434-050	<b>BCC03F3</b> BCC M425-M414-3A-650-VX8434-050

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

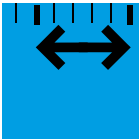


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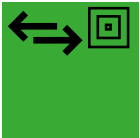
sensors worldwide



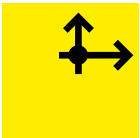
**Object Detection**



**Linear Position Sensing**



**Industrial Identification**



**Industrial Networking and Connectivity**



**Mechanical Accessories**



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