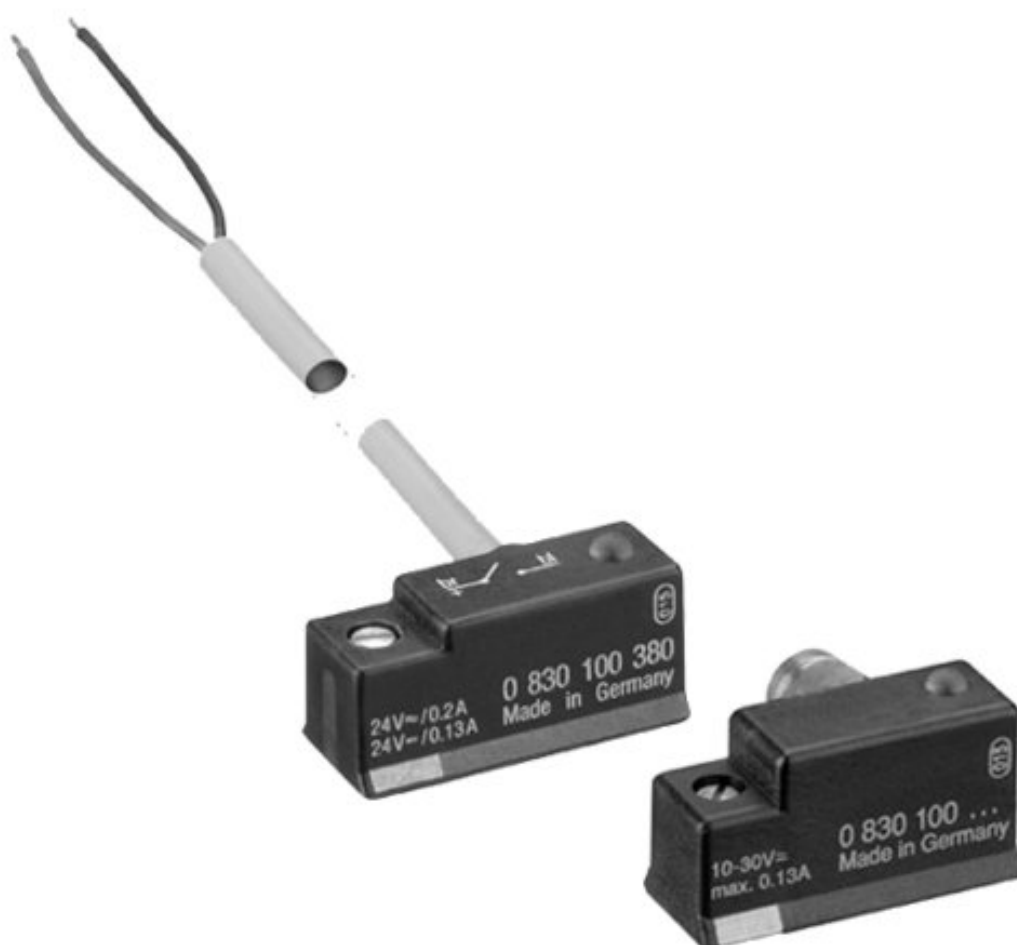


Sensors, Series ST9



AVENTICS™ Sensors, Series ST9



Sensor, Series ST9

- 9 mm groove
- Plug, M8, 3-pin
- Reed electronic PNP
- Direct mounting for series KHZ



Ambient temperature min./max.	See table below
Protection class	IP67, IP65
Switching point precision	±0,1 mT
Nominal current, actuated state	7 mA
Quiescent current (without load)	3 mA
Min./max. DC operating voltage	See table below
Min./max. AC operating voltage	See table below
LED status display	See table below
Vibration resistance	60 g (50 ... 2000 Hz)
Shock resistance	100 g / 11 ms

Technical data

Part No.		for	Type of contact	Min./max. DC operating voltage
0830100486		KHZ	Reed	10 ... 30 V DC
0830100487		KHZ	electronic PNP	12 ... 36 V DC

Part No.	Min./max. AC operating voltage	Voltage drop U at I _{max}
0830100486	10 ... 30 V AC	I*Rs
0830100487	-	≤ 2,0 V

Part No.	DC switching current, max.	AC switching current, max.
0830100486	0.13 A	0.2 A
0830100487	0.2 A	-

Part No.	Ambient temperature min./max.	Switching capacity	Protective resistor for reed
0830100486	-20 ... 80 °C	3 W / 5 VA	27 Ω
0830100487	-10 ... 70 °C	-	-

Part No.	Max. switching frequency	Operating current, not switched	LED status display
0830100486	-	-	Yellow
0830100487	2000 Hz	3 mA	Yellow Yellow

Part No.	Version
0830100486	Protected against polarity reversal
0830100487	Protected against polarity reversal short circuit resistant

Technical information

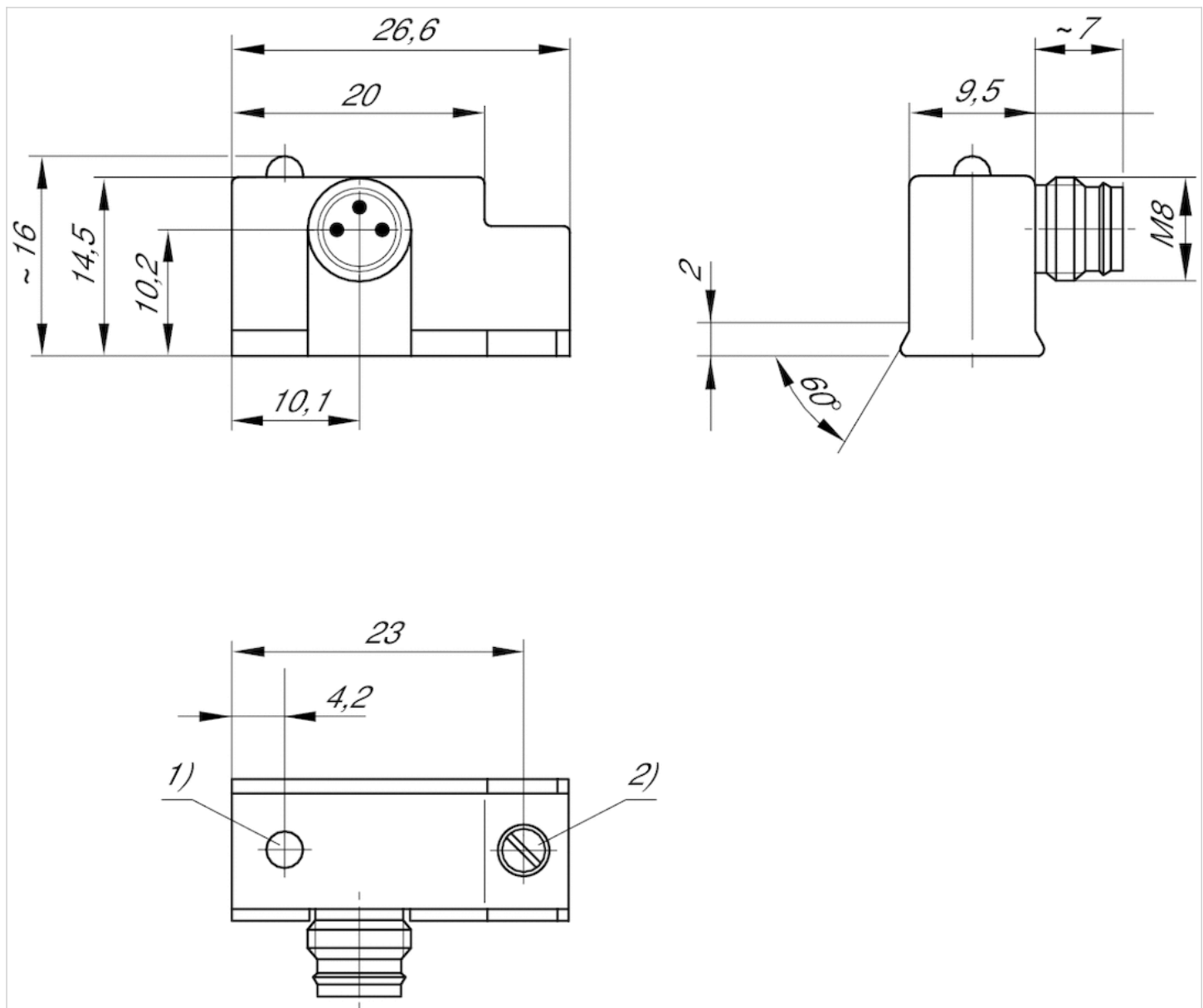
If reed sensors are used, we recommend using a short-circuit protective device (SCPD).

Technical information

Material	
Housing	Polyamide

Dimensions

Dimensions



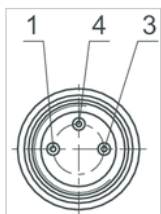
1) LED

2) Clamping screw

M8: combination plug can be combined with valve plug connectors Ø6.5 mm and M8.

Pin assignments

Pin assignments





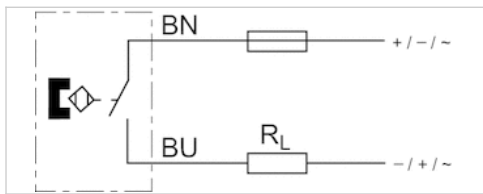
Pin	1	3	4
Allocation	(+)	(-)	(OUT)

Sensor, Series ST9

- 9 mm groove
- Snap Ø8, 2-pin
- Reed
- Direct mounting for series KHZ



Ambient temperature min./max.	-20 ... 80 °C
Protection class	IP67, IP65
Switching point precision	±0,1 mT
Nominal current, actuated state	7 mA
Min./max. DC operating voltage	24 V DC
Min./max. AC operating voltage	24 V AC
LED status display	Yellow
Vibration resistance	60 g (50 ... 2000 Hz)
Shock resistance	100 g / 11 ms
Weight	0.01 kg



Technical data

Part No.	for	Type of contact	Voltage drop U at I _{max}	DC switching current, max.
0830100460	KHZ	Reed	2,1 V + I*Rs	0.13 A

Part No.	AC switching current, max.	Protective resistor for reed
0830100460	0.2 A	1,3 Ω

Part No.	Version
0830100460	Protected against polarity reversal

Technical information

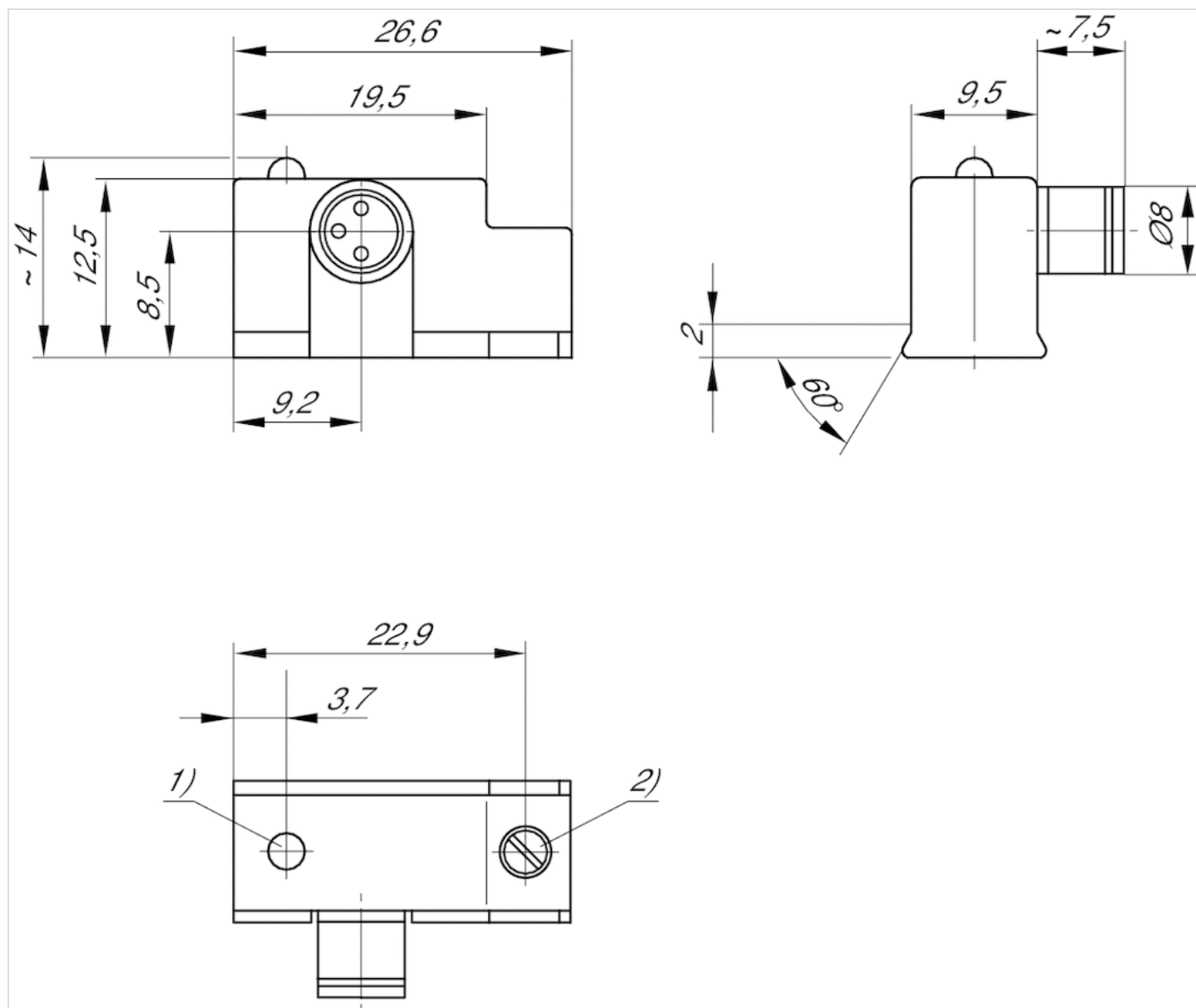
If reed sensors are used, we recommend using a short-circuit protective device (SCPD).

Technical information

Material	
Housing	Polyamide

Dimensions

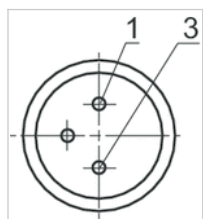
Dimensions



- 1) LED
2) Clamping screw

Pin assignments

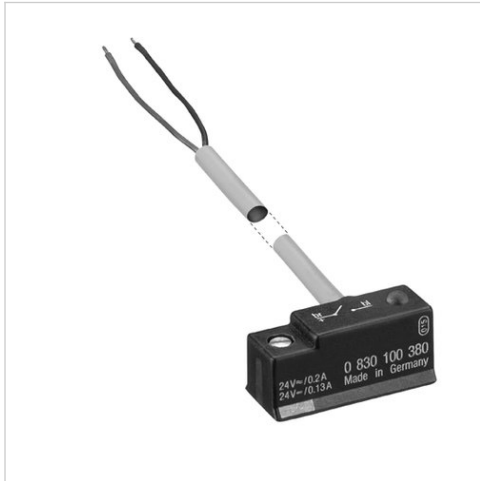
Pin assignments



Pin	1	3	
Allocation	(+)	(-)	EN 60947-5-2:1998

Sensor, Series ST9

- 9 mm groove
- with cable
- without wire end ferrule, tin-plated, 2-pin without wire end ferrule, tin-plated, 3-pin
- With stretched impulse
- With stretched impulse
- Reed electronic PNP
- Direct mounting for series KHZ



Ambient temperature min./max.	See table below
Protection class	IP67, IP65
Switching point precision	±0,1 mT
Nominal current, actuated state	7 mA
Quiescent current (without load)	3 mA
Min./max. DC operating voltage	See table below
Min./max. AC operating voltage	See table below
LED status display	See table below
Vibration resistance	60 g (50 ... 2000 Hz)
Shock resistance	100 g / 11 ms
Cable length L	3 5 m

Technical data

Part No.		for	Type of contact	Cable sheath	Cable length L
0830100320		KHZ	Reed	Polyvinyl chloride	3 m
0830100380		KHZ	Reed	Polyvinyl chloride	3 m
0830100381		KHZ	Reed	Polyvinyl chloride	5 m
0830100382		KHZ	Reed	Polyurethane	3 m
0830100383		KHZ	Reed	Polyurethane	5 m
0830100390		KHZ	Reed	Polyurethane	3 m
0830100396		KHZ	Reed	Polyurethane	5 m
0830100385		KHZ	electronic PNP	Polyvinyl chloride	3 m
0830100386		KHZ	electronic PNP	Polyvinyl chloride	5 m
0830100387		KHZ	electronic PNP	Polyurethane	3 m

Part No.	Min./max. DC operating voltage	Min./max. AC operating voltage
0830100320	0 ... 24 V DC	0 ... 24 V AC
0830100380	12 ... 24 V DC	12 ... 24 V AC
0830100381	12 ... 24 V DC	12 ... 24 V AC
0830100382	12 ... 24 V DC	12 ... 24 V AC
0830100383	12 ... 24 V DC	12 ... 24 V AC
0830100390	12 ... 24 V DC	12 ... 24 V AC
0830100396	12 ... 24 V DC	12 ... 24 V AC
0830100385	12 ... 36 V DC	-
0830100386	12 ... 36 V DC	-
0830100387	12 ... 36 V DC	-

Part No.	Voltage drop U at I _{max}	DC switching current, max.
0830100320	I*Rs	0.13 A
0830100380	2,1 V + I*Rs	0.13 A
0830100381	2,1 V + I*Rs	0.13 A
0830100382	2,1 V + I*Rs	0.13 A
0830100383	2,1 V + I*Rs	0.13 A
0830100390	I*Rs	0.13 A
0830100396	I*Rs	0.13 A
0830100385	≤ 2,0 V	0.2 A
0830100386	≤ 2,0 V	0.2 A
0830100387	≤ 2,0 V	0.2 A

Part No.	AC switching current, max.	Ambient temperature min./max.	Switching capacity
0830100320	0.2 A	-20 ... 80 °C	3 W / 5 VA
0830100380	0.2 A	-20 ... 80 °C	3 W / 5 VA
0830100381	0.2 A	-20 ... 80 °C	3 W / 5 VA
0830100382	0.2 A	-20 ... 80 °C	3 W / 5 VA
0830100383	0.2 A	-20 ... 80 °C	3 W / 5 VA

Part No.	AC switching current, max.	Ambient temperature min./max.	Switching capacity
0830100390	0.2 A	-20 ... 80 °C	3 W / 5 VA
0830100396	0.2 A	-20 ... 80 °C	3 W / 5 VA
0830100385	-	-10 ... 70 °C	-
0830100386	-	-10 ... 70 °C	-
0830100387	-	-10 ... 70 °C	-

Part No.	Protective resistor for reed	Max. switching frequency
0830100320	1,3 Ω	-
0830100380	1,3 Ω	-
0830100381	1,3 Ω	-
0830100382	1,3 Ω	-
0830100383	1,3 Ω	-
0830100390	1,3 Ω	-
0830100396	1,3 Ω	-
0830100385	-	2000 Hz
0830100386	-	2000 Hz
0830100387	-	2000 Hz

Part No.	Operating current, not switched	Operating current, switched	LED status display
0830100320	-	-	-
0830100380	-	-	Yellow
0830100381	-	-	Yellow
0830100382	-	-	Yellow
0830100383	-	-	Yellow
0830100390	-	-	Yellow
0830100396	-	-	Yellow
0830100385	3 mA	7 mA	Yellow
0830100386	3 mA	7 mA	Yellow
0830100387	3 mA	7 mA	Yellow

Part No.	Version
0830100320	Protected against polarity reversal
0830100380	Protected against polarity reversal
0830100381	Protected against polarity reversal
0830100382	Protected against polarity reversal
0830100383	Protected against polarity reversal
0830100390	Protected against polarity reversal
0830100396	Protected against polarity reversal
0830100385	short circuit resistant Protected against polarity reversal
0830100386	short circuit resistant Protected against polarity reversal
0830100387	short circuit resistant Protected against polarity reversal

Part No.	Switch signal	
0830100320	-	1)
0830100380	-	1)
0830100381	-	1)
0830100382	-	1)
0830100383	-	1)
0830100390	-	2)
0830100396	-	2)
0830100385	With stretched impulse	2)
0830100386	With stretched impulse	2)
0830100387	With stretched impulse	2)

1) without wire end ferrule, tin-plated, 2-pin

2) without wire end ferrule, tin-plated, 3-pin

Technical information

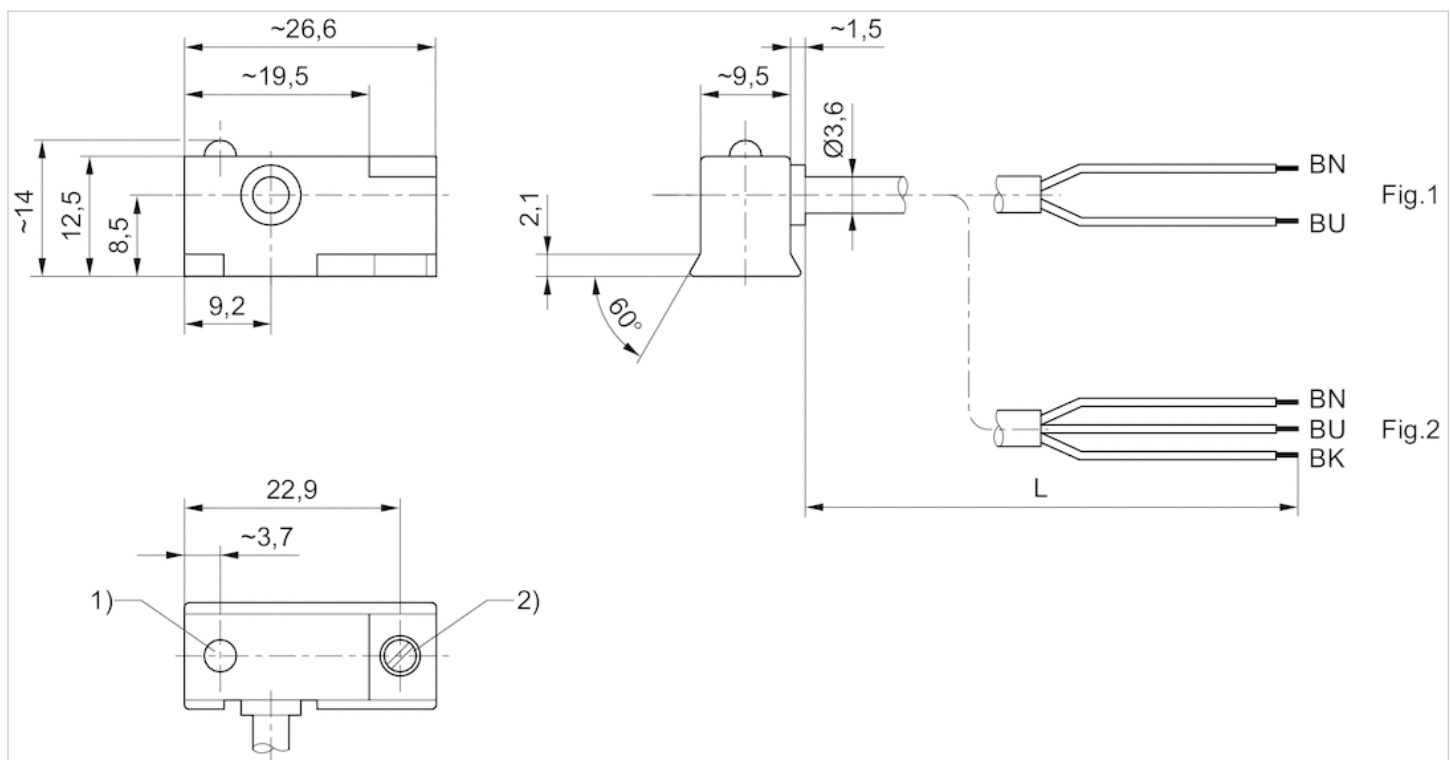
If reed sensors are used, we recommend using a short-circuit protective device (SCPD).

Technical information

Material	
Housing	epoxy resin
Cable sheath	Polyvinyl chloride Polyurethane

Dimensions

Dimensions



1) LED

2) Clamping screw

L = cable length

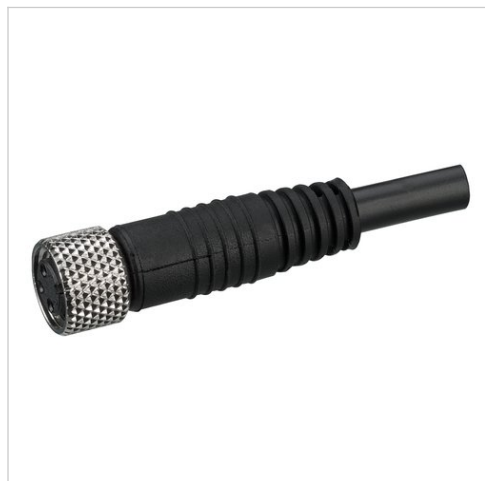
BN = brown

BK = black

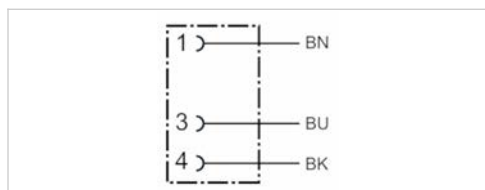
BU = blue

Round plug connector, Series CON-RD

- Socket M8x1 3-pin A-coded straight 180°
- open cable ends
- with cable
- UL (Underwriters Laboratories)
- unshielded



Ambient temperature min./max.	-25 ... 85 °C
Operational voltage	48 V AC/DC
Protection class	IP67
Wire cross-section	0.24 mm ²
Weight	See table below



Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Certification	Weight
1834484166	4 A	3	4.5 mm	3 m	UL (Underwriters Laboratories)	0.087 kg
1834484168	4 A	3	4.5 mm	5 m	UL (Underwriters Laboratories)	0.141 kg
1834484247	4 A	3	4.5 mm	10 m	UL (Underwriters Laboratories)	0.277 kg

Technical information

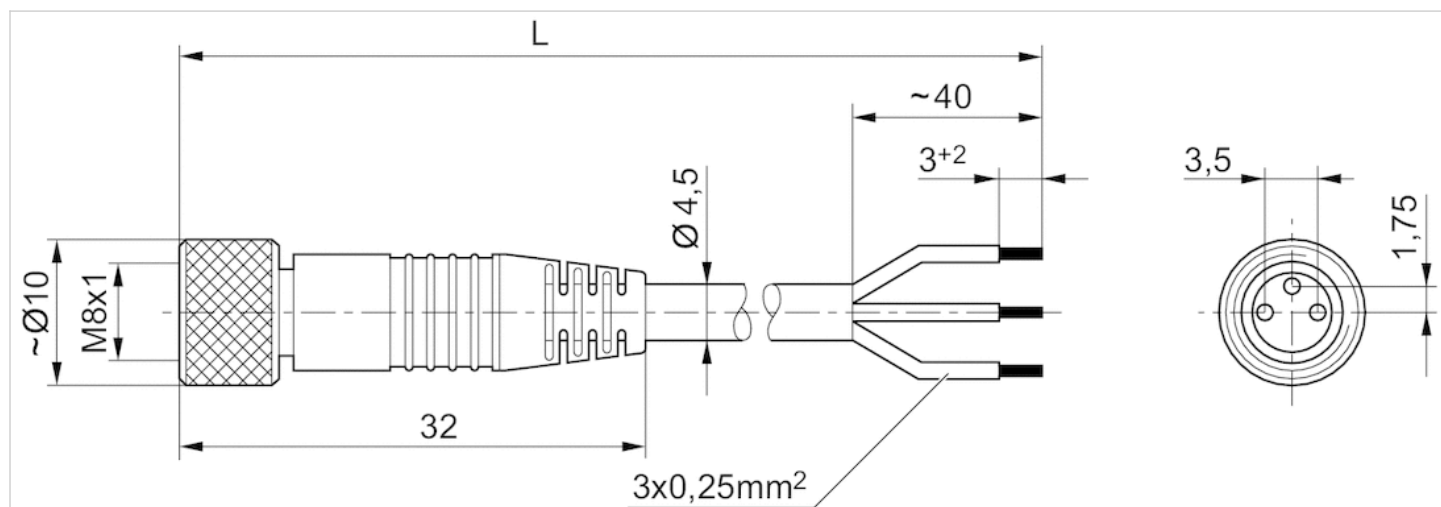
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

Dimensions

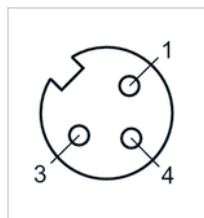
Dimensions



L = length

Pin assignments

Pin assignment, socket



- (1) BN=brown
- (3) BU=blue
- (4) BK=black

Round plug connector, Series CON-RD

- Socket M8x1 3-pin A-coded straight 180°
- Plug A-coded straight 180°
- with cable
- unshielded

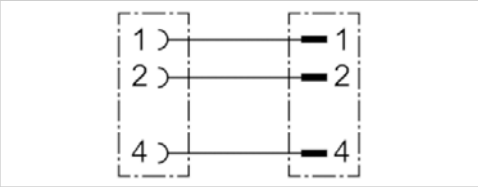


Protection class

Weight

IP68

See table below



Technical data

Part No.	Number of wires	Cable-Ø	Cable length	Weight
8946203702	3	4.5 mm	1 m	0.038 kg
8946203712	3	4.5 mm	2 m	0.067 kg
8946203722	3	4.5 mm	5 m	0.148 kg

Technical information

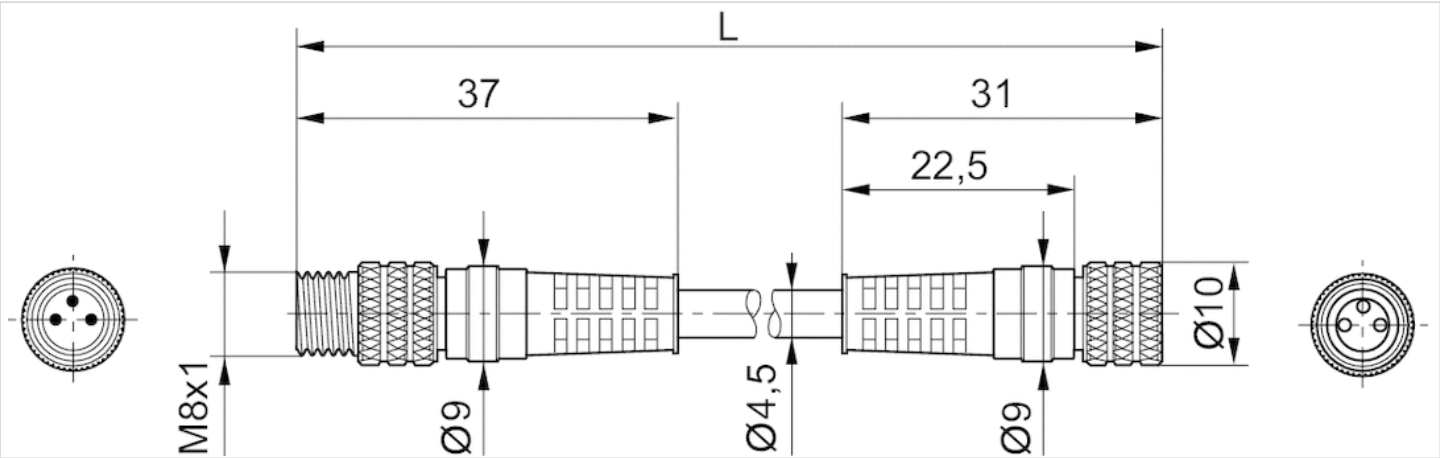
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Cable sheath	Polyvinyl chloride

Dimensions

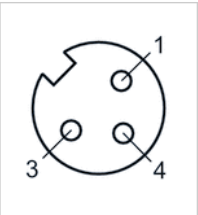
Dimensions



L = length

Pin assignments

Pin assignment, socket



Plug pin assignment

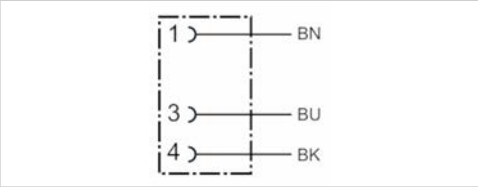


Round plug connector, Series CON-RD

- Socket M8x1 3-pin A-coded angled 90°
- open cable ends
- with cable
- unshielded



Ambient temperature min./max.	-40 ... 85 °C
Operational voltage	48 V AC/DC
Protection class	IP67
Wire cross-section	0.24 mm²
Weight	See table below



Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Weight
1834484167	4 A	3	4.5 mm	3 m	0.087 kg
1834484169	4 A	3	4.5 mm	5 m	0.139 kg
1834484248	4 A	3	4.5 mm	10 m	0.279 kg

Technical information

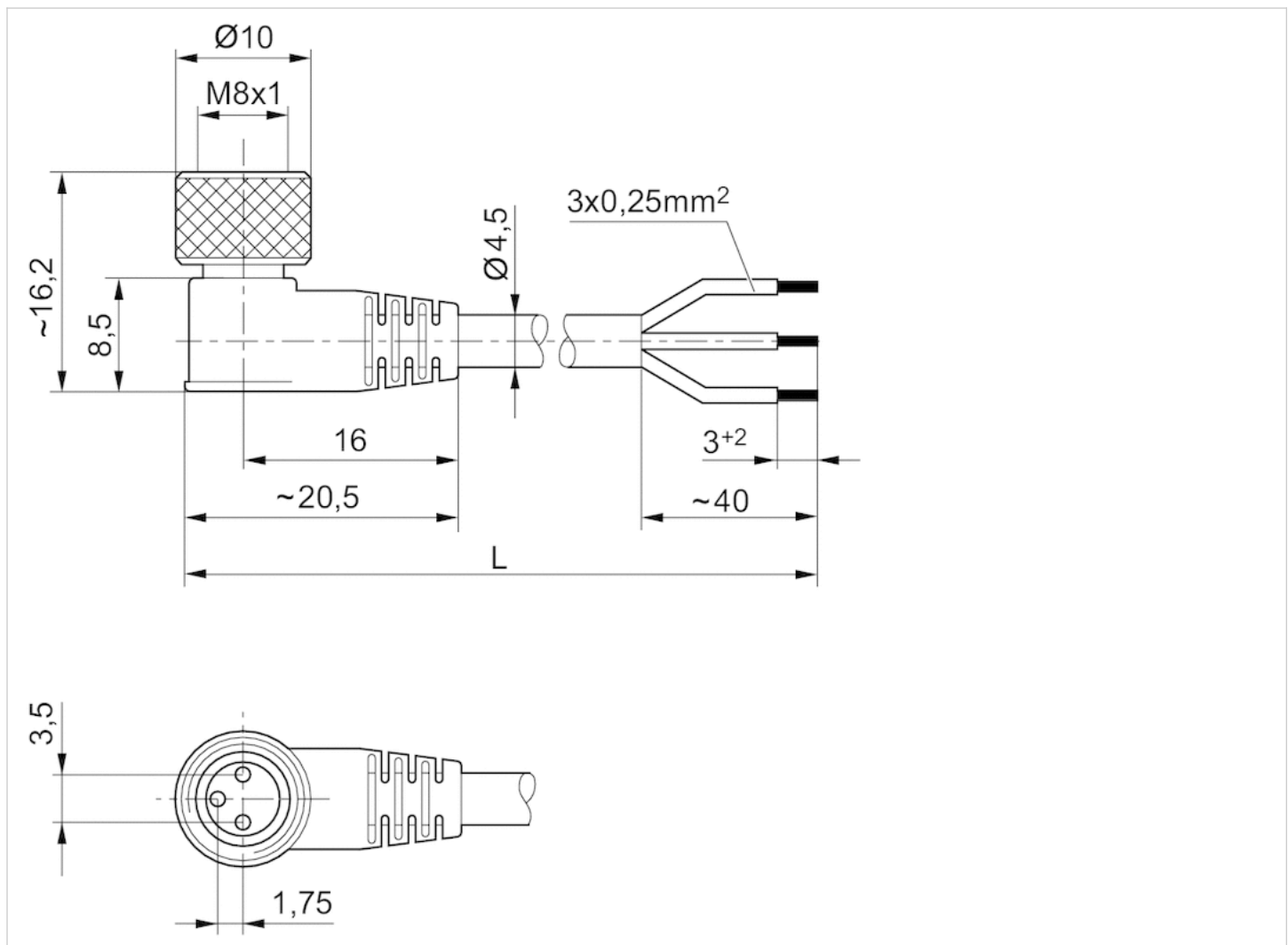
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

Dimensions

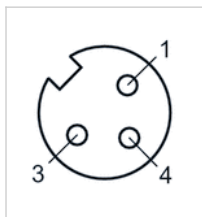
Dimensions



L = length

Pin assignments

Pin assignment, socket



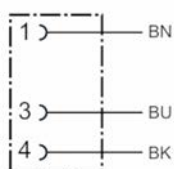
- (1) BN=brown
- (3) BU=blue
- (4) BK=black

Round plug connector, Series CON-RD

- open cable ends
- with cable
- unshielded



Ambient temperature min./max.	-25 ... 70 °C
Operational voltage	48 V AC/DC
Protection class	IP65
Wire cross-section	0.25 mm ²
Weight	See table below



Technical data

Part No.	Electrical connection	Max. current	Number of wires	Cable-Ø	Cable length
	1				
1834484083	Socket Snap Ø8 3-pin straight 180°	4 A	3	4.5 mm	5 m
1834484085	Socket Snap Ø8 3-pin angled 90°	4 A	3	4.5 mm	5 m
1834484199	Socket Snap Ø8 3-pin angled 90°	4 A	3	4.5 mm	10 m

Part No.	Certification	Weight	Fig.
1834484083	-	0.137 kg	Fig. 1
1834484085	UL (Underwriters Laboratories)	0.138 kg	Fig. 2
1834484199	-	0.274 kg	Fig. 2

Technical information

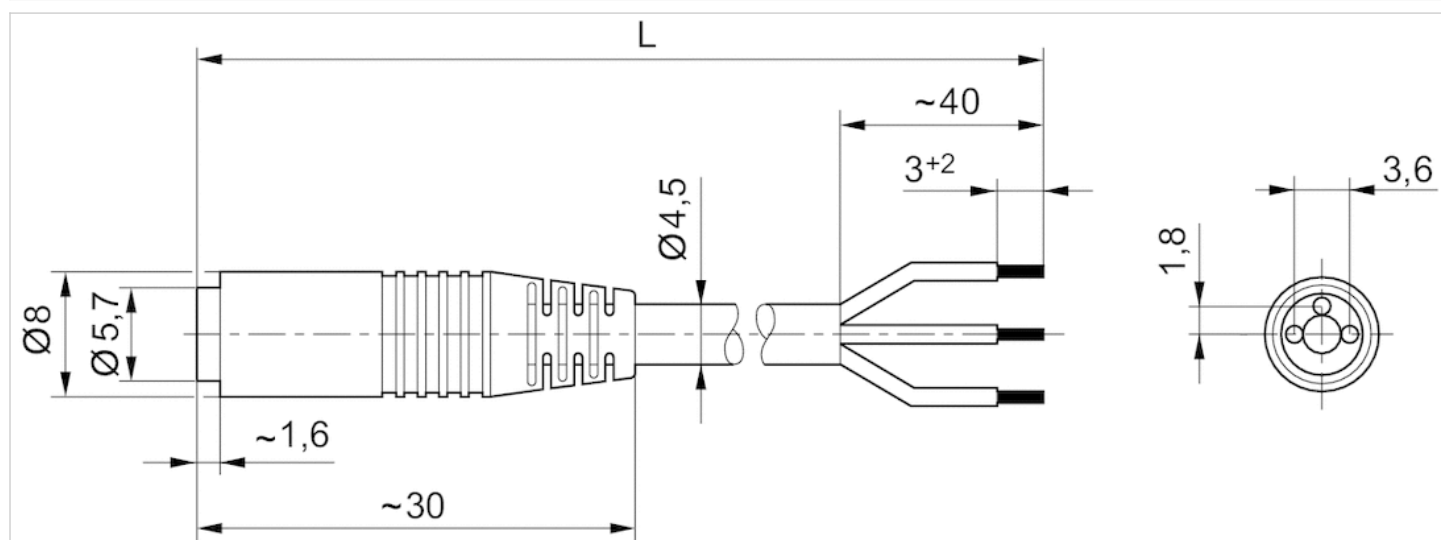
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

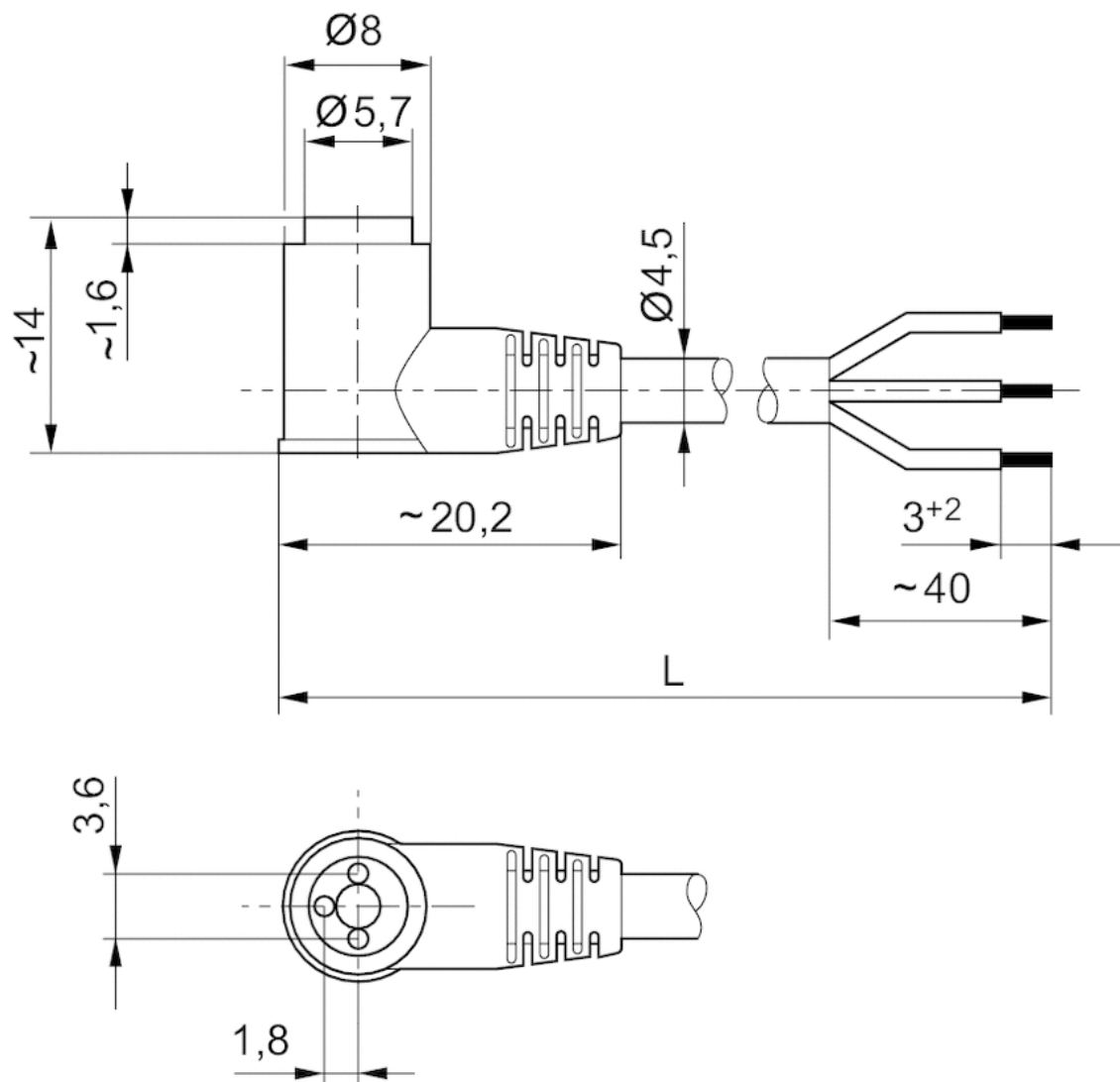
Dimensions

Fig. 1



L = length

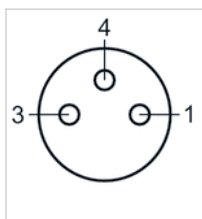
Fig. 2



L = length

Pin assignments

Pin assignment, socket



- (1) BN=brown
- (3) BU=blue
- (4) BK=black

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