# Series CMS





AVENTICS<sup>™</sup> Series CMS



# Optional fieldbus connection with I/O function (CMS), B-design

- B-design

- Bus coupler with driver

- Fieldbus protocol PROFIBUS DP CANopen DeviceNet EtherNET/IP PROFINET IO



Version Ambient temperature min./max. Operational voltage electronics Electronics voltage tolerance Operating voltage, actuators Protection class I/O module extension max. Weight Bus coupler with driver 0 ... 50 °C 24 V DC -15% / +20% 24 V DC IP65 6 See table below The delivered product may vary from that in the illustration.

#### Technical data

Part No.	Fieldbus protocol	Port
		1
R412003484	PROFIBUS DP	Plug (male), M12, 5-pin, B-coded
R412008516	PROFIBUS DP	Plug (male), M12, 5-pin, B-coded
R412005747	CANopen	Plug (male), M12, 5-pin, A-coded
R412008518	CANopen	Plug (male), M12, 5-pin, A-coded
R412004346	DeviceNet	Plug (male), M12, 5-pin, A-coded
R412008517	DeviceNet	Plug (male), M12, 5-pin, A-coded
R412012755	EtherNET/IP	-
R412014581	PROFINET IO	Socket (female), M12x1, 4-pin, D-coded
R412014583	PROFINET IO	Socket (female), M12x1, 4-pin, D-coded

Part No.	Port	power supply		
	2			
R412003484	Socket (female), M12, 5-pin, B-coded	Plug (male), M12, 4-pin, A-coded		
R412008516	Socket (female), M12, 5-pin, B-coded	Plug (male), M12, 4-pin, A-coded		
R412005747	Socket (female), M12, 5-pin, A-coded	Plug (male), M12, 4-pin, A-coded		
R412008518	Socket (female), M12, 5-pin, A-coded	Plug (male), M12, 4-pin, A-coded		
R412004346	Socket (female), M12, 5-pin, A-coded	Plug (male), M12, 4-pin, A-coded		
R412008517	Socket (female), M12, 5-pin, A-coded	Plug (male), M12, 4-pin, A-coded		
R412012755	Socket (female), M12, 5-pin, D-coded	Plug (male), M12, 4-pin, A-coded		
R412014581	Socket (female), M12x1, 4-pin, D-coded	Plug (male), M12x1, 4-pin, A-coded		
R412014583	Socket (female), M12x1, 4-pin, D-coded	Plug (male), 7/8"-16UNF, 5-pin		

Part No.	Number of outputs for valve coils	Port
		Valve system
R412003484	24	Socket, 2.0 mm strip, 2x13-pin
R412008516	32	Socket, 2.0 mm strip, 3x13-pin

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Part No.	Number of outputs for valve coils	Port
		Valve system
R412005747	24	Socket, 2.0 mm strip, 2x13-pin
R412008518	32	Socket, 2.0 mm strip, 3x13-pin
R412004346	24	Socket, 2.0 mm strip, 2x13-pin
R412008517	32	Socket, 2.0 mm strip, 3x13-pin
R412012755	32	Socket, 2.0 mm strip, 3x13-pin
R412014581	32	-
R412014583	32	-

Part No.	Power consumption electronics	Max. power consumption per coil	Weight	Fig.	
R412003484	0.12 A	0.063 mA	0.84 kg	Fig. 1	1)
R412008516	0.12 A	0.063 mA	0.84 kg	Fig. 1	1)
R412005747	0.12 A	0.063 mA	1 kg	Fig. 1	1)
R412008518	0.12 A	0.063 mA	1 kg	Fig. 1	1)
R412004346	0.12 A	0.063 mA	1 kg	Fig. 1	1)
R412008517	0.12 A	0.063 mA	1 kg	Fig. 1	1)
R412012755	0.12 A	0.063 mA	1 kg	Fig. 2	2)
R412014581	0.1 A	0.1 mA	0.91 kg	Fig. 1	1)
R412014583	0.1 A	0.1 mA	0.91 kg	Fig. 3	1)

Scope of delivery incl. 2 tie rod extensions and seal, The following operating instructions can be found in the Media Center for:↔PROFIBUS DP: R499050016↔CANopen: R412005742↔DeviceNet: R499050019↔EtherNET/IP: R412012728

1) Connection with two valve voltage circuits.

2) Connection with two valve voltage circuits., Only star topology

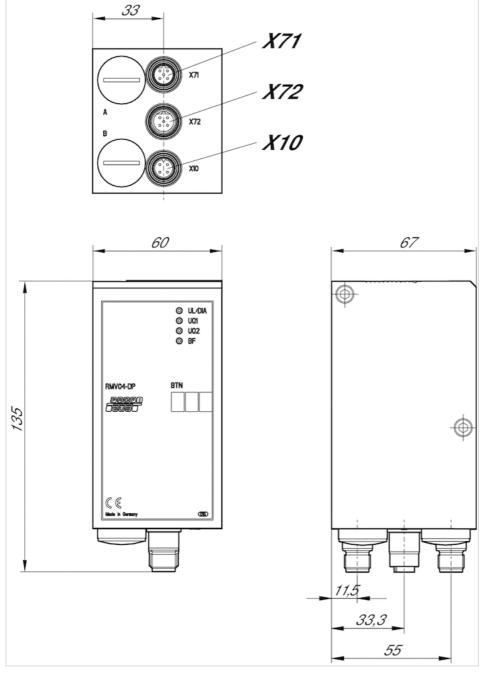
### Technical information

Caution: A reduced temperature range in accordance with the operating instructions may need to be considered in ATEX applications. You will find assignment schemes for the product in the operating instructions, or contact the nearest AVENTICS sales office.

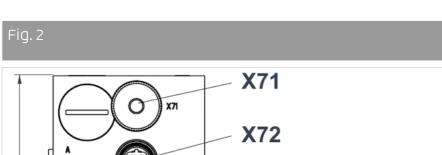
Material	
Housing	Die-cast aluminum

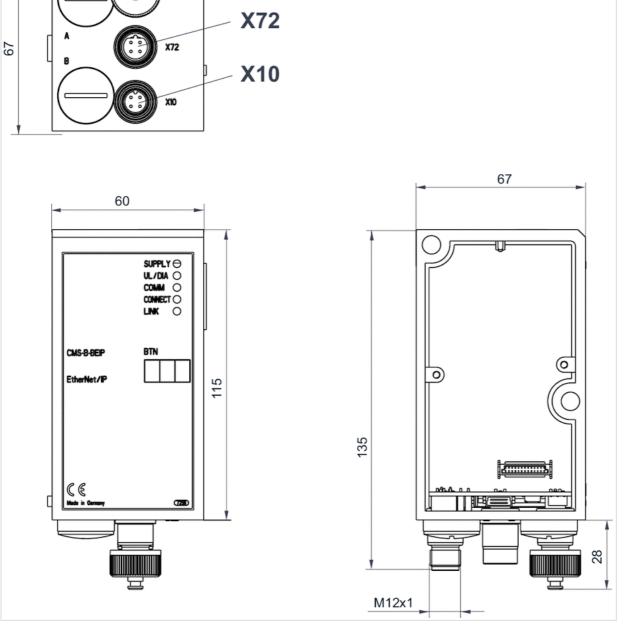


#### Fig. 1



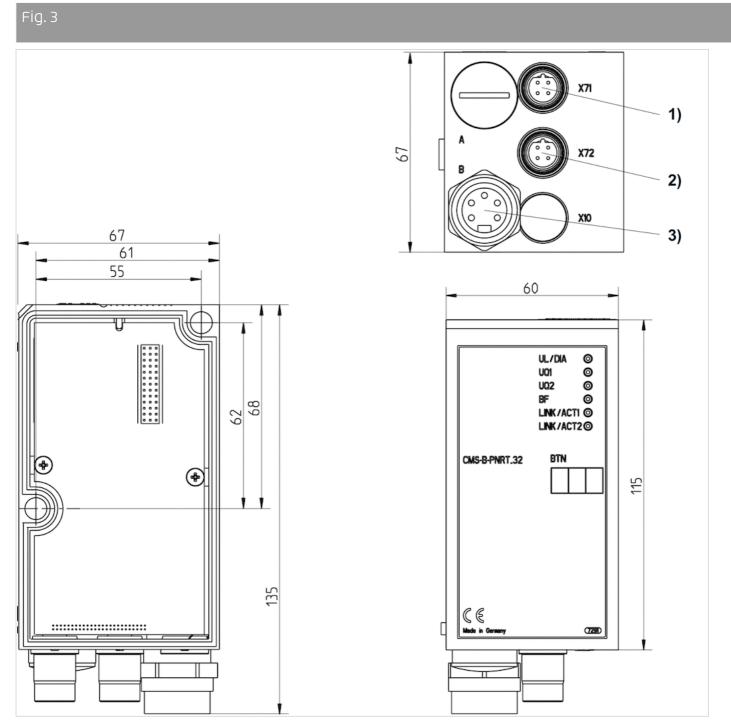
X71, (Bus IN), M12x1 X72, (Bus OUT), M12x1 X10, (Power), M12x1 Page 5 | AVENTICS





X71 = optional interface X72 = Bus X10 = Power EMERSON.





1) Bus IN 2) Bus OUT 3) Power supply

## Series CMS

- M8x1, M12x1
- B-design
- I/O module, active



#### Ambient temperature min./max. Operational voltage electronics Protection class Weight

Version

I/O module, active 0 ... 50 °C 24 V DC IP65 0.47 kg The delivered product may vary from that in the illustration.

#### Technical data

Part No.	I/O module version	I/O connection	I/O connection Number	Fig.
R412003489	Digital inputs	Socket (female), M8, 3-pin	8	Fig. 1
R412000871	Digital inputs	Socket (female), M12, 5-pin, A-coded	4	Fig. 2

Scope of delivery incl. 2 tie rod extensions and seal, Manual: PROFIBUS DP - R499050016, DeviceNet - R499050019, Interbus - R412005743, CANopen - R412005742

#### Technical information

Max. 6 input or 6 output modules may be used.

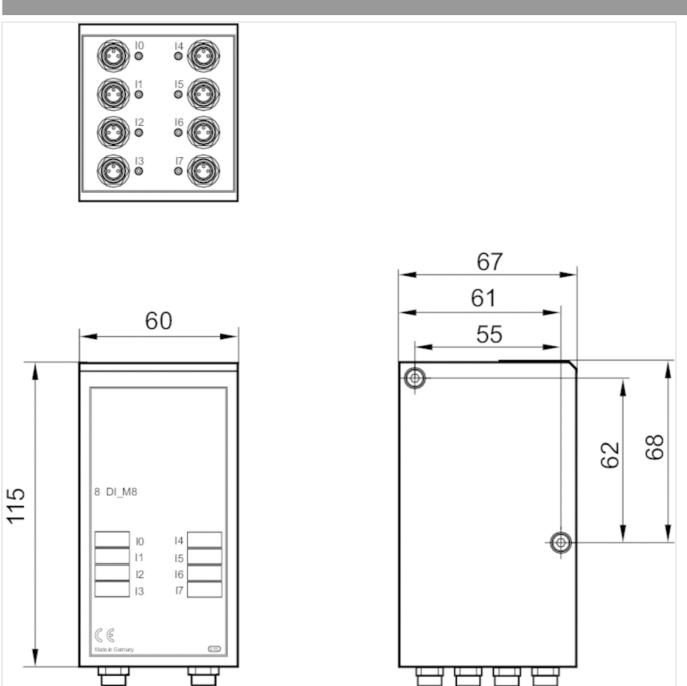
You will find assignment schemes for the product in the operating instructions, or contact the nearest AVENTICS sales office.

Material	
Housing	Die-cast aluminum



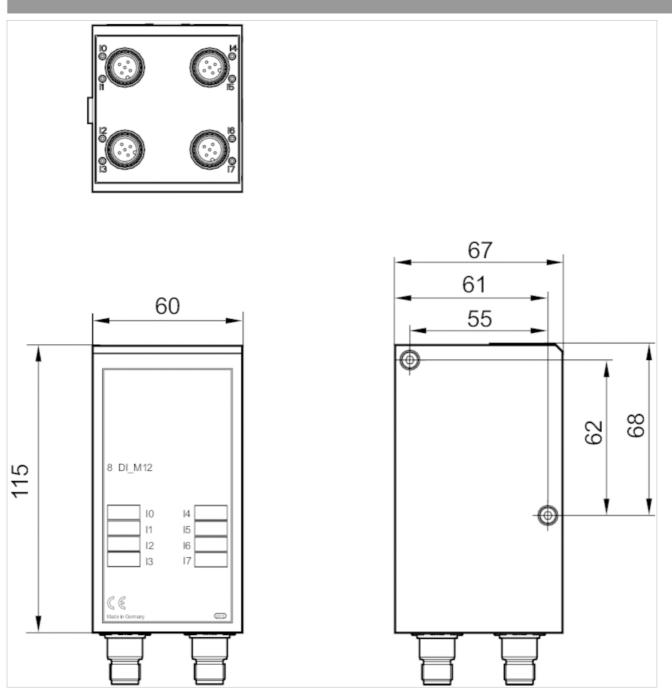


#### Fig. 1



#### Fig. 2







# End plate left

- For CMS bus coupler, B-design, For DDL driver with I/O function, For link structure AS-i, B-design with I/O function



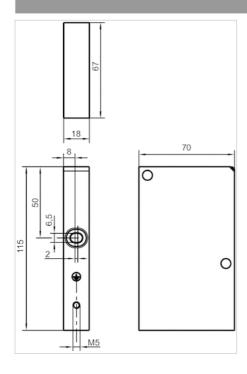
### Technical data

Part No.	Туре
R412003490	End plate left

Includes screws and seals.

#### Dimensions

#### Dimensions





- Plug M8x1 3-pin A-coded angled 90°
- open cable ends
- with cable
- suitable for dynamic laying
- unshielded



-25 80 °C
48 V AC/DC
IP68
0.25 mm <sup>2</sup>
See table below

1 🗕	——BN
3 🗕	—— BU
4 -	—— BK
Ĺi	

### Technical data

Part No.	Max. current	Number of wires	Bending radius min.	Cable-Ø	Cable length	Weight
R412021678	4 A	3	41 mm	4.1 mm	2 m	0.06 kg
R412021679	4 A	3	41 mm	4.1 mm	5 m	0.121 kg
R412021680	4 A	3	41 mm	4.1 mm	10 m	0.224 kg

suitable for dynamic laying

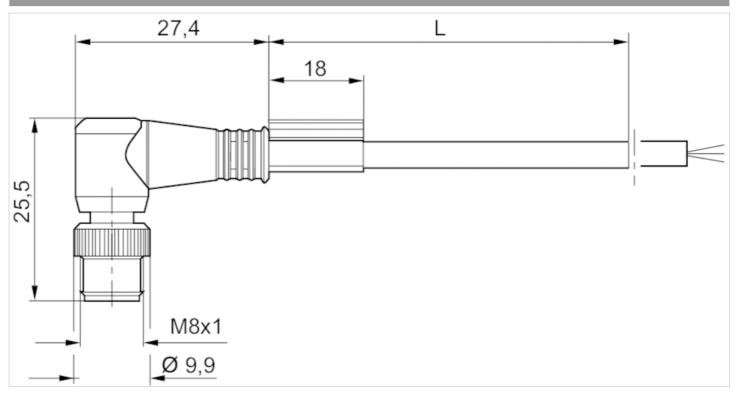
#### Technical information

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

Material	
Housing	Polyurethane
Cable sheath	Polyurethane



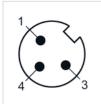
#### Dimensions



L = length

### Pin assignments

Plug pin assignment



(1) BN=brown(3) BU=blue

(4) BK=black



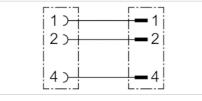
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# Round plug connector, Series CON-RD

- Socket M8x1 3-pin A-coded straight 180°
- Plug M8x1 3-pin A-coded angled 90°
- with cable
- suitable for dynamic laying
- unshielded



Ambient temperature min./max.	-25 80 °C
Operational	48 V AC/DC
voltage	
Protection class	IP68
Wire cross-section	0.25 mm <sup>2</sup>
Weight	See table below



#### Technical data

Part No.	Max. current	Number of wires	Bending radius min.	Cable-Ø	Cable length	Weight
R412021681	4 A	3	41 mm	4.1 mm	1 m	0.045 kg
R412021682	4 A	3	41 mm	4.1 mm	2 m	0.064 kg
R412021683	4 A	3	41 mm	4.1 mm	5 m	0.131 kg

suitable for dynamic laying

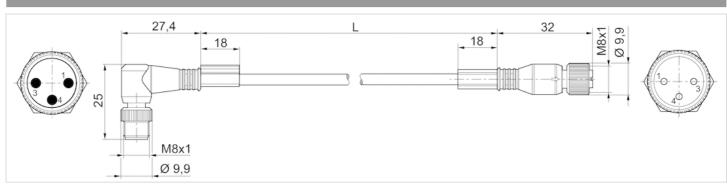
#### Technical information

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

Material	
Housing	Polyurethane
Cable sheath	Polyurethane



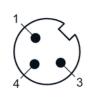
#### Dimensions



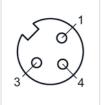
L = length

Pin assignments

Plug pin assignment



Pin assignment, socket





- Plug, M8x1, 3-pin, A-coded, angled, 90°

- unshielded



Connection type
Ambient temperature min./max.
Operational
voltage
Protection class
Weight

Screws		
-25 85 °C		
48 V AC/DC		

IP67

0.01 kg

The delivered product may vary from that in the illustration.



#### Technical data

Part No.	Max. current	Contact assignment	suitable cable-Ø min./max
R412021677	4 A	3	3.5 / 6 mm

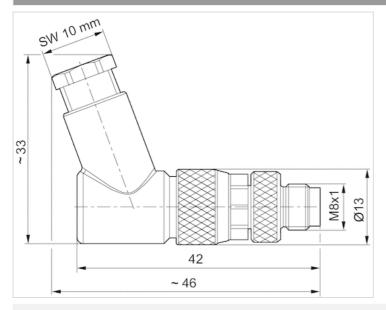
### Technical information

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

Material	
Housing	Polyamide

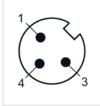


#### Dimensions



### Pin assignments

Plug pin assignment



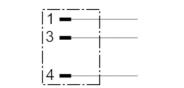


- Plug, M8x1, 3-pin, A-coded, straight, 180°

- unshielded



Connection type	Screws
Ambient temperature min./max.	-40 85 °C
Operational	48 V AC/DC
voltage	
Protection class	IP67
Weight	0.01 kg



#### Technical data

Part No.	Max. current	Contact assignment	suitable cable-Ø min./max
R412021676	4 A	3	3.5 / 5 mm

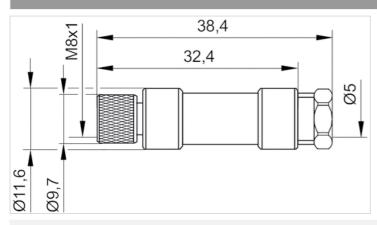
### Technical information

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

Material	
Housing	Polyamide

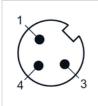


#### Dimensions



#### Pin assignments

#### Plug pin assignment

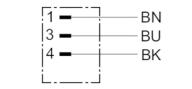




- Plug M8x1 3-pin A-coded straight 180°
- open cable ends
- with cable
- unshielded



Ambient temperature min./max.	-25 80 °C
Operational	30 V AC/DC
voltage	
Protection class	IP67
Wire cross-section	0.25 mm <sup>2</sup>
Weight	See table below



#### Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Weight
8946203602	3 A	3	4.5 mm	3 m	0.06 kg
8946203612	3 A	3	4.5 mm	5 m	0.143 kg
8946203622	3 A	3	4.5 mm	10 m	0.281 kg

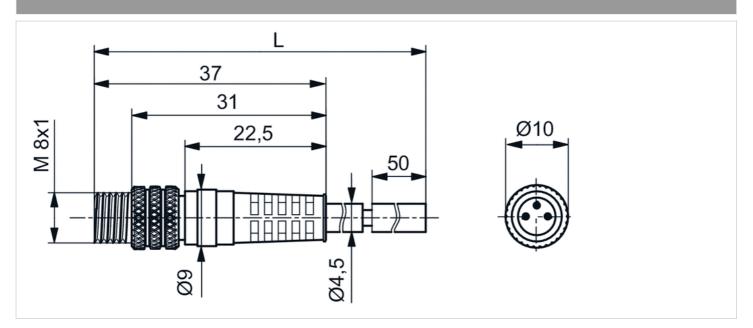
#### Technical information

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

Material	
Housing	Polyurethane
Cable sheath	Polyvinyl chloride



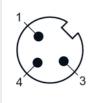
#### Dimensions



#### L = length

#### Pin assignments

Plug pin assignment



(1) BN=brown

- (3) BU=blue
- (4) BK=black

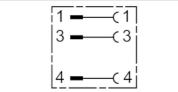


# Adapter, Series CON-AP

- Socket, M12x1, 3-pin, A-coded, straight, 180°
- Plug, M8x1, 3-pin, A-coded, straight, 180°
- unshielded



Ambient temperature min./max.	-25 85 °C
Operational	48 V AC/DC
voltage	
Protection class	IP67
Weight	0.013 kg



#### Technical data

Part No.	Max. current	Contact assignment
R412021684	4 A	3

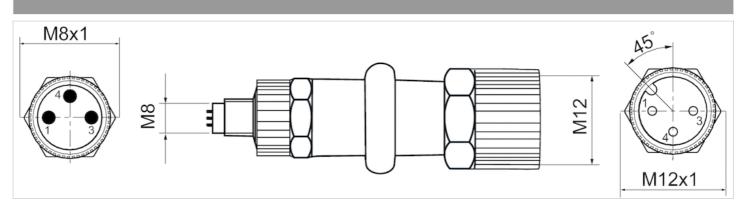
#### Technical information

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

Material	
Housing	Polyurethane

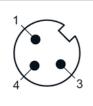


Dimensions

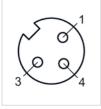


### Pin assignments

Plug pin assignment



Pin assignment, socket

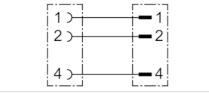




- Socket M8x1 3-pin A-coded straight 180°
- Plug A-coded straight 180°
- with cable
- unshielded



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

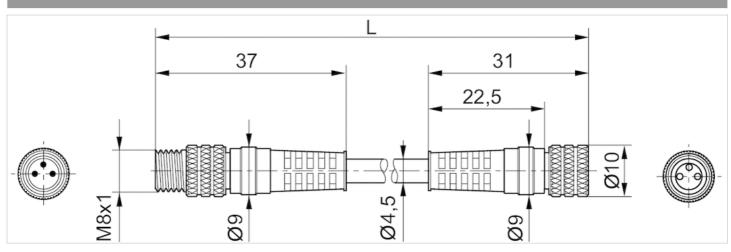
Material

Cable sheath

Polyvinyl chloride



#### Dimensions



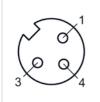
L = length

### Pin assignments

Plug pin assignment



Pin assignment, socket



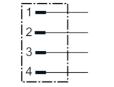


# Data final plug, Series CON-RD

- Plug, M12x1, 4-pin, B-coded, straight, 180°
- for PROFIBUS DP



Ambient temperature min./max.	-25 80 °C
Protection class	IP67
Weight	0.013 kg



#### Technical data

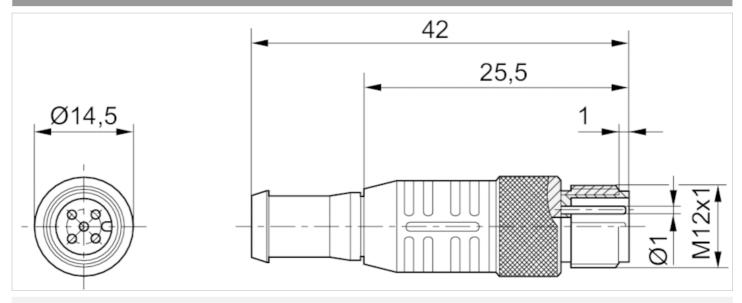
	Part No.	
	8941054064	
Technical information		

The specified protection class is only valid in assembled and tested state. PROFIBUS DP bus termination plug

Material	
Housing	Thermoplastic elastomer

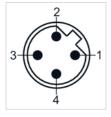


#### Dimensions



### Pin assignments

Plug pin assignment



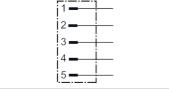


# Data final plug, Series CON-RD

- Plug, M12x1, 5-pin, A-coded, straight, 180°
- for CANopen, DeviceNet



Ambient temperature min./max.	0 60 °C
Protection class	IP67
Weight	0.011 kg



#### Technical data

Part No.
8941054264
Technical information
The specified protection class is only valid in assembled and tested state.

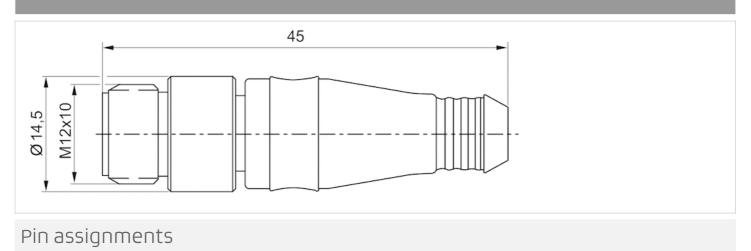
Material	
Housing	Thermoplastic elastomer

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### Dimensions

#### Dimensions



Plug pin assignment

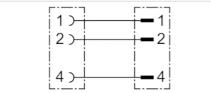




- Socket M8x1 3-pin A-coded straight 180°
- Plug M12x1 3-pin A-coded straight 180°
- with cable
- unshielded



Protection class Weight IP68 0.073 kg The delivered product may vary from that in the illustration.



#### Technical data

Part No.	Number of wires	Cable length
8946203462	3	2 m

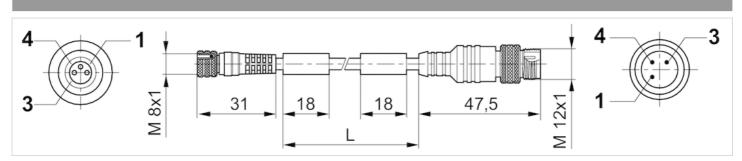
#### Technical information

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

Material	
Cable sheath	Polyvinyl chloride



#### Dimensions



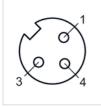
L = length

#### Pin assignments

Plug pin assignment



Pin assignment, socket



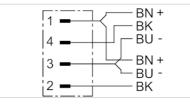


# Y-Plug connector, series CON-RD

- Plug M12x1 4-pin A-coded straight 180°
- 2 x open cable ends 3-pin
- 3-pin
- with cable
- unshielded



Ambient temperature min./max.	-40 80 °C
Operational voltage	48 V AC/DC
Protection class	IP67
Wire cross-section	0.34 mm <sup>2</sup>
Mounting screw tightening torque	0.8 Nm
Weight	0.122 kg



#### Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length
R412021688	4 A	4	4.3 mm	2 m

with self-clinching screw

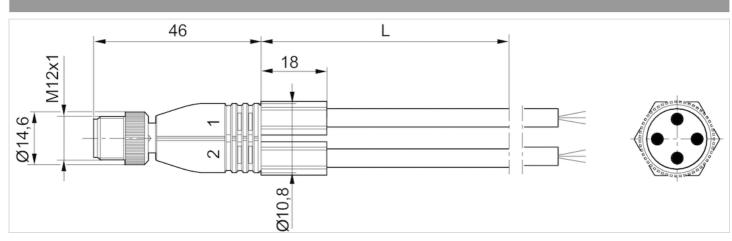
#### Technical information

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

Material	
Housing	Polyurethane
Cable sheath	Polyurethane



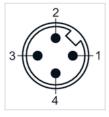
#### Dimensions



L = length

#### Pin assignments

#### Plug pin assignment



Line 1: (1) BN = brown, (3) BU =blue, (4) BK = black Line 2: (1) BN = brown, (3) BU =blue, (2) BK = black



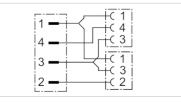
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# Y-Plug connector, series CON-RD

- Plug M12x1 4-pin A-coded straight 180°
- Socket M8x1 3-pin A-coded straight 180°
- with cable
- unshielded



Ambient temperature min./max.	-25 80 °C
Operational	48 V AC/DC
voltage	
Protection class	IP67
Wire cross-section	0.25 mm <sup>2</sup>
Mounting screw tightening torque	0.8 Nm
Weight	See table below



#### Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Weight
R412021685	4 A	3	4.1 mm	0.6 m	0.064 kg
R412021687	4 A	3	4.1 mm	3 m	0.167 kg

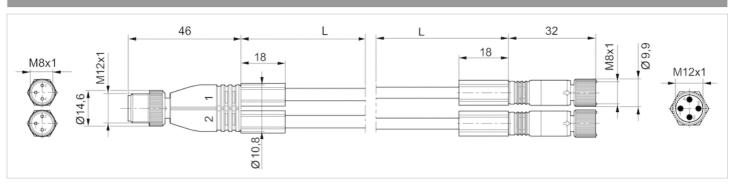
#### Technical information

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

Material	
Housing	Polyurethane
Cable sheath	Polyurethane



#### Dimensions



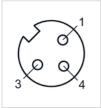
L = length

### Pin assignments

Plug pin assignment



Pin assignment, socket





- Plug M12x1 5-pin A-coded straight 180°
- open cable ends 5-pin
- with cable
- unshielded



Protection class Weight IP68 See table below The delivered product may vary from that in the illustration.

	1	BN (1)
	2 -	WH (2)
	3 -	BU (3)
	4 🗕 🕴	BK (4)
ļ	5 -	GN/YE (5)

#### Technical data

Part No.	Number of wires	Cable length	Weight
8946203432	5	2 m	0.102 kg
8946203442	5	5 m	0.238 kg

with self-clinching screw

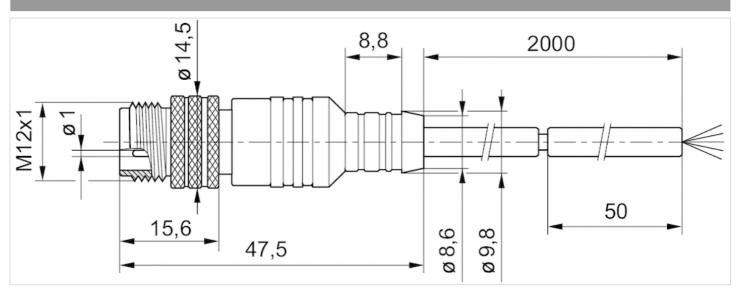
#### Technical information

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

Material	
Cable sheath	Polyvinyl chloride



#### Dimensions



L = length

### Pin assignments

#### Plug pin assignment



(1) BN=brown

- (2) WH=white
- (3) BU=blue
- (4) BK=black
- (5) GRN-Y=green-yellow



**AVENTICS** 

## Round plug connector, Series CON-RD

- Plug M12x1 5-pin A-coded angled 90°
- open cable ends 5-pin
- with cable
- suitable for dynamic laying
- unshielded



Ambient temperature min./max.	
Operational	
voltage	
Protection class	
Wire cross-section	
Mounting screw tightening torque	
Weight	

See table below 48 V AC/DC

IP68
0.34 mm²
0.8 Nm
See table below

1 -	BN (1)
2 —	
3 🗕	BU (3)
4 🗕	BK (4)
5 🗕	—— GR (5)

#### Technical data

Part No.	Ambient temperature min./max.	Max. current	Number of wires	Bending radius min.	Cable-Ø	Cable length
R412021691	-40 85 °C	4 A	5	50 mm	5 mm	2 m
R412021692	-40 85 °C	4 A	5	50 mm	5 mm	5 m
R412021693	-25 85 °C	4 A	5	50 mm	5 mm	10 m
			•			
	Part No.			Weight		

r art no.	weight
R412021691	0.093 kg
R412021692	0.2 kg
R412021693	0.381 kg

suitable for dynamic laying

#### Technical information

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

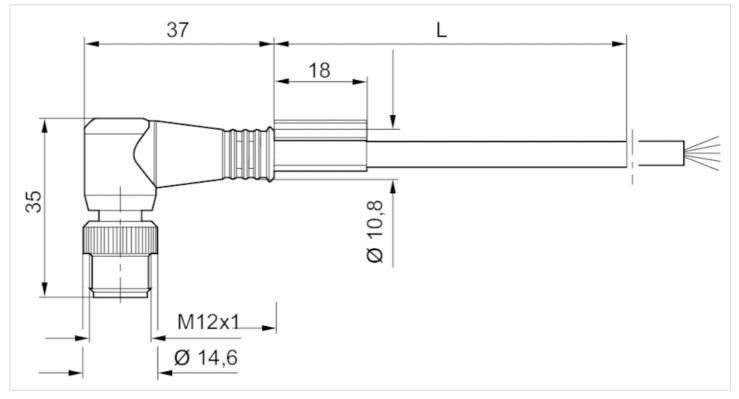


### Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

#### Dimensions

#### Dimensions



#### L = length

#### Pin assignments

#### Plug pin assignment



(1) BN=brown(2) WH=white3) BU=blue(4) BK=black

(5) GY=grey



- Socket M12x1 5-pin A-coded straight 180°
- Plug M12x1 5-pin A-coded angled 90°
- with cable
- suitable for dynamic laying
- unshielded



Ambient temperature min./max.	-25 85 °C
Operational voltage	48 V AC/DC
Protection class	IP68
Wire cross-section	0.34 mm <sup>2</sup>
Mounting screw tightening torque	0.8 Nm
Weight	See table below

$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	

#### Technical data

Part No.	Max. current	Number of wires	Bending radius min.	Cable-Ø	Cable length	Weight
R412021694	4 A	5	50 mm	5 mm	2 m	0.114 kg
R412021695	4 A	5	50 mm	5 mm	5 m	0.217 kg

suitable for dynamic laying

### Technical information

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

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

#### Page 40 | AVENTICS



### Dimensions

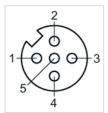
#### Dimensions



#### L = length

### Pin assignments

Pin assignment, socket



#### Plug pin assignment





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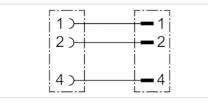
## Round plug connector, Series CON-RD

- Socket M8x1 3-pin A-coded straight 180°
- Plug M12x1 3-pin A-coded angled 90°
- with cable
- suitable for dynamic laying
- unshielded



Ambient temperature min./max. Operational voltage Protection class Wire cross-section Mounting screw tightening torque Weight See table below 48 V AC/DC

IP67 0.25 mm<sup>2</sup> 0.5 Nm See table below The delivered product may vary from that in the illustration.



#### Technical data

Part No.	Ambient temperature min./max.	Max. current	Number of wires	Bending radius min.	Cable-Ø	Cable length
R412021696	-25 80 °C	4 A	3	41 mm	4.1 mm	2 m
R412021697	-20 80 °C	4 A	3	41 mm	4.1 mm	5 m
	Part No			Weight		

Part No.	Weight
R412021696	0.077 kg
R412021697	0.135 kg

suitable for dynamic laying

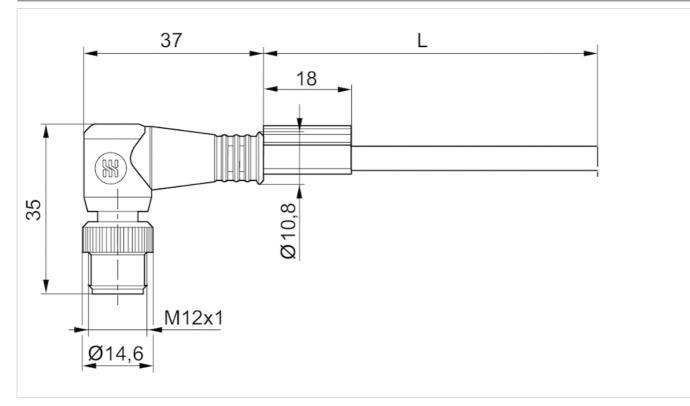
### Technical information

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

Material	
Housing	Polyurethane
Cable sheath	Polyurethane



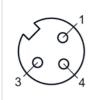
#### Dimensions



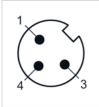
#### L = length

Pin assignments

Pin assignment, socket



Plug pin assignment





- Socket M12x1 5-pin A-coded straight 180°
- Plug M12x1 5-pin A-coded angled 90°
- with cable
- suitable for dynamic laying
- shielded



Ambient temperature min./max.	-20 85 °C
Operational	48 V AC/DC
voltage	
Protection class	IP68
Wire cross-section	0.34 mm²
Mounting screw tightening torque	0.8 Nm

1 <b>—</b> 2 <b>—</b> 3 <b>—</b> 4 <b>—</b>		
5 -	( 5	

### Technical data

Part No.	Max. current	Number of wires	Bending radius min.	Cable-Ø	Cable length
R412022193	4 A	4	54 mm	5.4 mm	2 m

suitable for dynamic laying

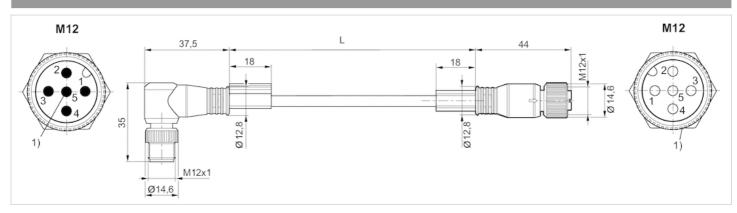
#### Technical information

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

Material	
Housing	Polyurethane
Cable sheath	Polyurethane



#### Dimensions



#### L = length

PIN assignment 1:1

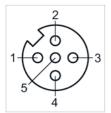
1) Shield is connected to pin 5 of the plug and the knurled screw of the socket.

### Pin assignments

#### Plug pin assignment



#### Pin assignment, socket





**AVENTICS** 

## Round plug connector, Series CON-RD

- Socket M12x1 8-pin A-coded straight 180°
- Plug M12x1 8-pin A-coded straight 180°
- with cable
- suitable for dynamic laying
- shielded



Ambient temperature min./max.-25 ... 80 °COperational30 / 36 V AC/DCvoltageProtection classProtection classIP67Wire cross-section0.25 mm²WeightSee table below

1		
2 -	- ( 2	
3 -		
4 -	- 4	
5 -	(5	
6 -		
7 -		
8 -	( 8	

#### Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Weight
8946202802	1.5 A	8	6.6 mm	0.5 m	0.067 kg
8946202812	1.5 A	8	6.6 mm	1 m	0.96 kg
8946202822	1.5 A	8	6.6 mm	2 m	0.161 kg
8946202832	1.5 A	8	6.6 mm	5 m	0.339 kg
8946202842	1.5 A	8	6.6 mm	10 m	0.65 kg

suitable for dynamic laying

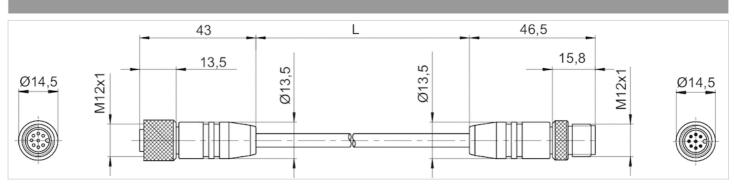
### Technical information

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

Material	
Housing	Polyurethane
Seals	Fluorocaoutchouc
Cable sheath	Polyurethane



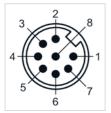
#### Dimensions



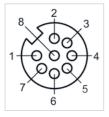
L = length

#### Pin assignments

Plug pin assignment



Pin assignment, socket





- Plug, M12x1, 4-pin, A-coded, straight, 180°
- UL (Underwriters Laboratories)
- unshielded



Screws
-40 85 °C
48 V AC/DC
IP67
0.016 kg



#### Technical data

Part No.	Max. current	suitable cable-Ø min./max
1834484222	4 A	4 / 6 mm

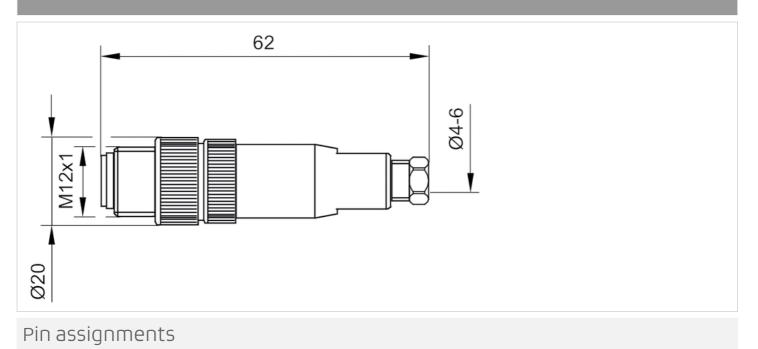
#### Technical information

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

Material	
Housing	Polyamide



#### Dimensions







- Plug, M12x1, 4-pin, A-coded, angled, 90° Plug, M12x1, 4-pin, A-coded, straight, 180°
- UL (Underwriters Laboratories)
- unshielded

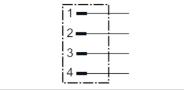


Connection type
Ambient temperature min./max.
Operational
voltage
Protection class
Weight

Screws -40 ... 85 °C 48 V AC/DC

Fig. 2

IP67 See table below The delivered product may vary from that in the illustration.



#### Technical data

Part No.	Electrical connection	Max. current	suitable cable-Ø min./max	Weight
	1			
1834484223	Plug M12x1 4-pin A-coded angled 90°	4 A	4 / 6 mm	0.02 kg
1834484246	Plug M12x1 4-pin A-coded straight 180°	4 A	2.1 / 3 mm	0.024 kg
	Part No.		Fig.	
1834484223			Fig. 1	

For the duo plug, the cable diameter to be used varies between 2.1 ... 3.0 mm and 4.0 ... 5.0 mm depending on the seal used.

### Technical information

The specified protection class is only valid in assembled and tested state. Included: 2 seals for 2 cables each with Ø 2.1 mm ... 3.0 mm and Ø 4.0 mm ... 5.0 mm .

1834484246

Material	
Housing	Polyamide



#### Fig. 1

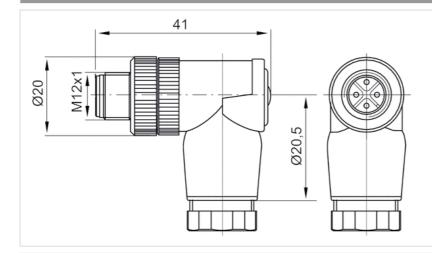
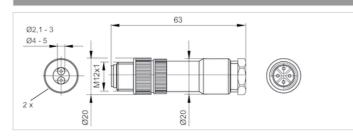


Fig. 2



duo plug

#### Pin assignments

Plug pin assignment





- Plug, M12x1, 4-pin, D-coded, straight, 180°
- for Ethernet, EtherNET/IP, EtherCAT, POWERLINK, sercos III
- shielded



Connection type	Thread cutting
Ambient temperature min./max.	-40 85 °C
Operational	48 V AC/DC
voltage	
Protection class	IP67
Weight	0.41 kg



#### Technical data

Part No.	Max. current	suitable cable-Ø min./max
R419801401	4 A	6 / 8 mm

#### Technical information

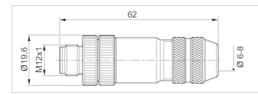
The specified protection class is only valid in assembled and tested state.

### Technical information

Material	
Housing	Brass, nickel-plated

#### Dimensions

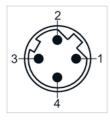
#### Dimensions





### Pin assignments

Plug pin assignment

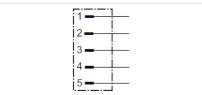




- Plug, M12x1, 5-pin, B-coded, straight, 180°
- for PROFIBUS DP
- UL (Underwriters Laboratories)
- shielded



Connection type	Screws
Ambient temperature min./max.	-25 85 °C
Operational	48 V AC/DC
voltage	
Protection class	IP67
Weight	0.06 kg



#### Technical data

Part No.	Max. current	suitable cable-Ø min./max
8941054054	4 A	4 / 9 mm

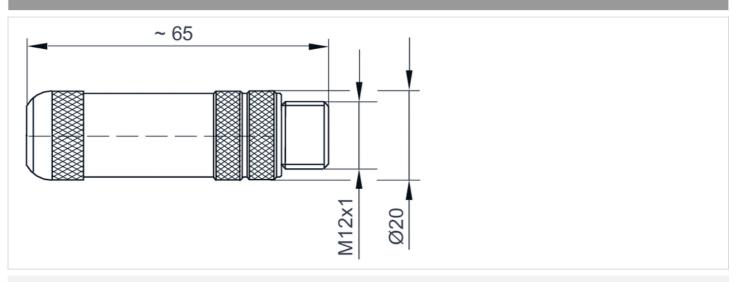
#### Technical information

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

Material	
Housing	Brass, nickel-plated
Seals	Fluorocarbon caoutchouc

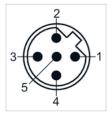


#### Dimensions



### Pin assignments

#### Plug pin assignment

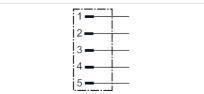




- Plug, M12x1, 5-pin, A-coded, straight, 180°
- for CANopen, DeviceNet
- UL (Underwriters Laboratories)
- shielded



Connection type	Screws
Ambient temperature min./max.	-40 85 °C
Operational	48 V AC/DC
voltage	
Protection class	IP67
Weight	0.48 kg



#### Technical data

Part No.	Max. current	suitable cable-Ø min./max
8942051612	4 A	6 / 8 mm

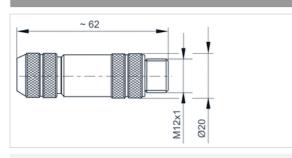
#### Technical information

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

Material	
Housing	Brass, nickel-plated



#### Dimensions



### Pin assignments

Plug pin assignment





## Y-Plug connector, series CON-AP

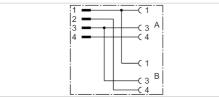
- Plug, M12x1, 4-pin, A-coded, straight, 180°
- Socket, M8x1, 3-pin, A-coded, straight, 180°
- unshielded



Ambient temperature min./max.
Operational
voltage
Protection class
Weight

-25 ... 90 °C 48 V AC/DC

IP67 0.02 kg The delivered product may vary from that in the illustration.



#### Technical data

Part No.	Max. current
8941002382	4 A

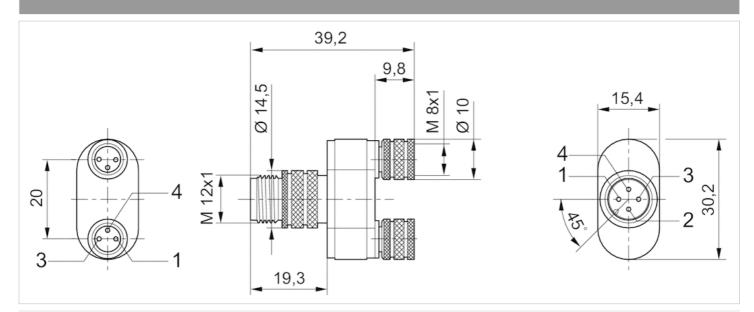
### Technical information

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

Material	
Housing	Polyurethane
Seals	Fluorocaoutchouc



#### Dimensions

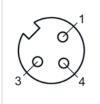


#### Pin assignments

#### Plug pin assignment



Pin assignment, socket





## Y-Plug connector, series CON-AP

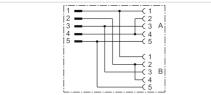
- Plug, M12x1, 5-pin, A-coded, straight, 180°
- Socket, M12x1, 5-pin, A-coded, straight, 180°
- unshielded



Ambient temperature min./max.
Operational
voltage
Protection class
Weight

-25 ... 90 °C 48 V AC/DC

IP67 0.029 kg The delivered product may vary from that in the illustration.



#### Technical data

Part No.	Max. current
8941002392	4 A

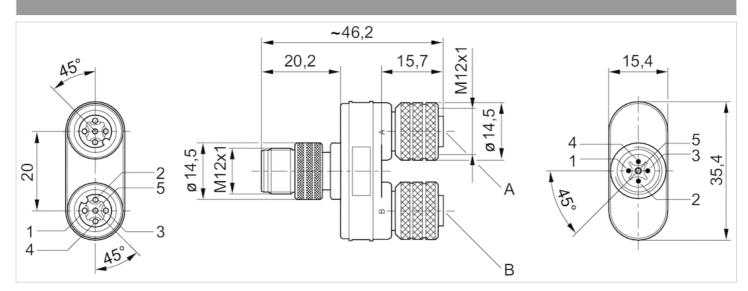
#### Technical information

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

Material	
Housing	Polyurethane
Seals	Fluorocaoutchouc



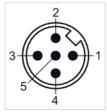
#### Dimensions



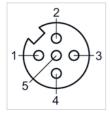
Sockets: Pin 2 and 4 bridged.

#### Pin assignments

#### Plug pin assignment



Pin assignment, socket





- Socket, M12x1, 4-pin, A-coded, straight, 180°
- UL (Underwriters Laboratories)
- unshielded



Connection type	S
Ambient temperature min./max.	-2
Operational	48
voltage	
Protection class	IF
Weight	0.

Screws 25 ... 90 °C 18 V AC/DC

IP67 0.029 kg The delivered product may vary from that in the illustration.

1	] 
2 )	<u> </u>
3 >	<u> </u>
4 )	<u> </u>

#### Technical data

Part No.	Max. current	suitable cable-Ø min./max
8941054324	4 A	4 mm

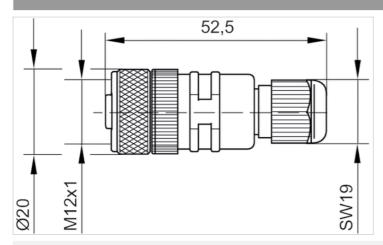
#### Technical information

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

Material	
Housing	Polybutyleneterephthalate
Seals	Fluorocarbon caoutchouc

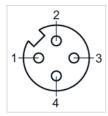


#### Dimensions



## Pin assignments

#### Pin assignment, socket





- Socket, M12x1, 4-pin, A-coded, angled, 90°

- unshielded



Connection type	Screws
Ambient temperature min./max.	-25 90 °C
Operational	48 V AC/DC
voltage	
Protection class	IP67
Weight	0.027 kg

12	
2 >	
3>	
4	

#### Technical data

Part No.	Max. current	suitable cable-Ø min./max
8941054424	4 A	4 mm

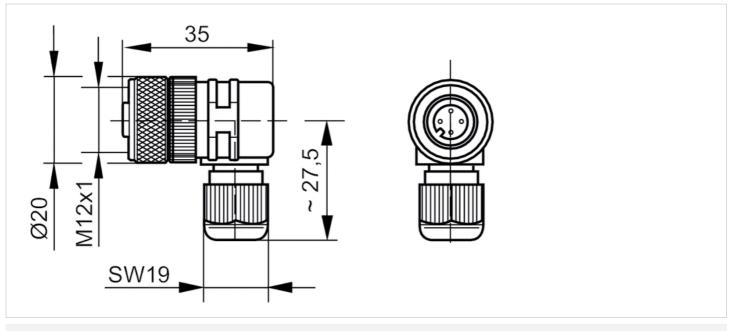
### Technical information

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

Material	
Housing	Polybutyleneterephthalate
Seals	Fluorocarbon caoutchouc

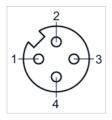


#### Dimensions



### Pin assignments

Pin assignment, socket





- Socket, M12x1, 5-pin, A-coded, straight, 180°
- for CANopen, DeviceNet
- UL (Underwriters Laboratories)
- shielded



Connection type	Screws
Ambient temperature min./max.	-40 85 °C
Operational	48 V AC/DC
voltage	
Protection class	IP67
Weight	0.051 kg



#### Technical data

Part No.	Max. current	suitable cable-Ø min./max
8942051602	4 A	6 mm

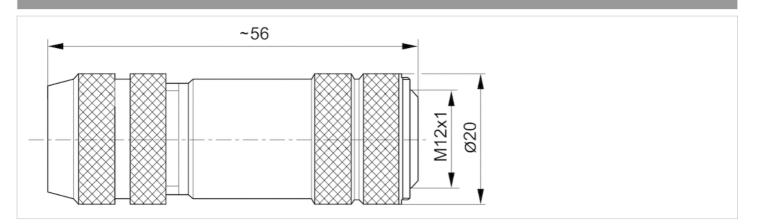
### Technical information

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

Material	
Housing	Brass, nickel-plated

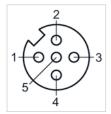


#### Dimensions



### Pin assignments

Pin assignment, socket



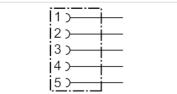


- Socket, M12x1, 5-pin, B-coded, straight, 180°

- for PROFIBUS DP
- UL (Underwriters Laboratories)
- shielded



Connection type	Screws
Ambient temperature min./max.	-40 85 °C
Operational	48 V AC/DC
voltage	
Protection class	IP67
Weight	0.06 kg



#### Technical data

Part No.	Max. current	suitable cable-Ø min./max
8941054044	4 A	6 / 8 mm

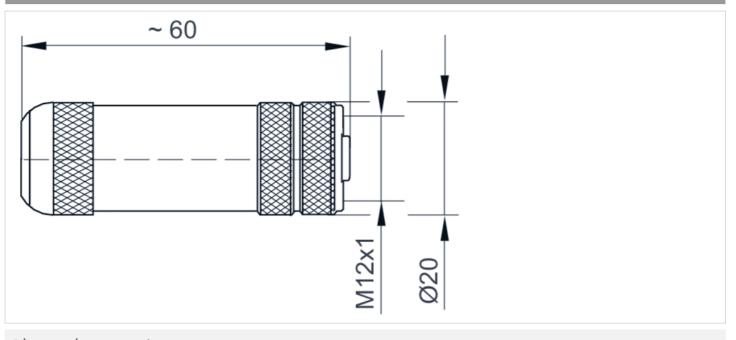
#### Technical information

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

Material	
Housing	Brass, nickel-plated
Seals	Fluorocarbon caoutchouc

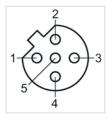


#### Dimensions



## Pin assignments







## Distributor, Series AES

- 4x passive distributor, M12x1, 8-pin / 4x M8x1, 3-pin
- Plug (male), M12x1, 8-pin



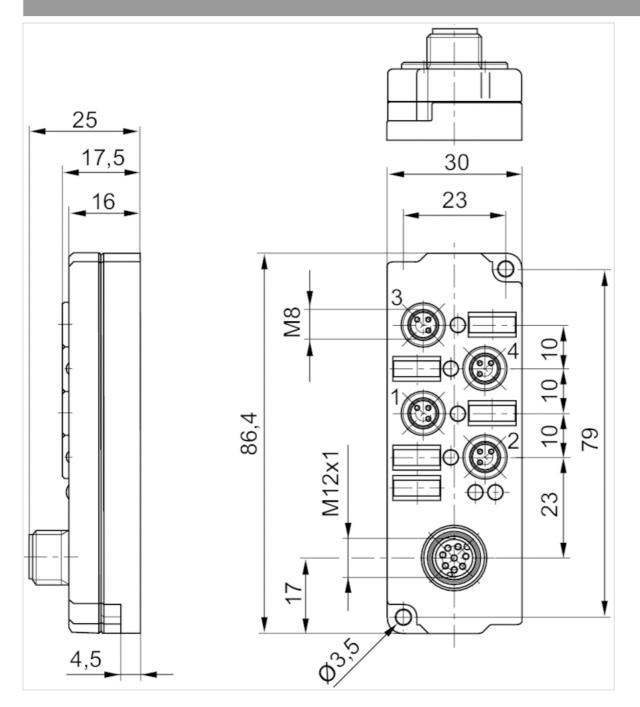
Ambient temperature min./max.	-30 80 °C
Operational voltage electronics	24 V DC
Power consumption electronics	2 A
Protection class	IP67
Weight	0.07 kg

#### Technical data

Part No.	Туре	Port	Port
			2
R402001810	16DI4M12 16DI8M8	Plug (male), M12x1, 8-pin	Socket (female), M8x1, 3-pin

Material	
Housing	Polyamide

#### Dimensions



EMERSON



# Protective cap, series CON-RD

- M8x1



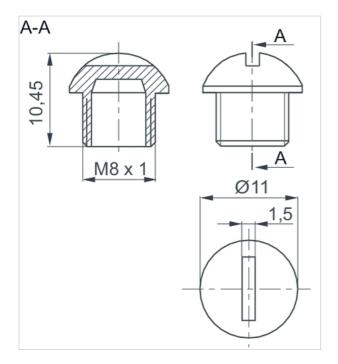
Ambient temperature min./max.	-40 85 °C
Protection class	IP67
Weight	0.001 kg

### Technical data

Part No.	Туре	Scope of delivery
R412003493	M8x1	25

Material	
Housing	Polyamide







# Protective cap, series CON-RD

- M12x1



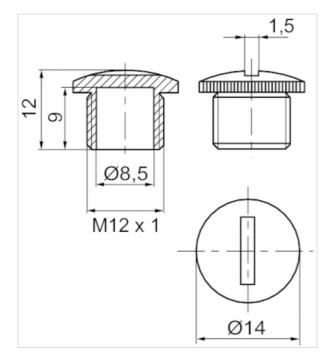
Ambient temperature min./max.	-40 85 °C
Protection class	IP67
Weight	0.001 kg

Technical data

Part No.	Туре	Delivery unit
1823312001	M12x1	50 piece

Material	
Housing	Polyamide





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