

Series DDL



AVENTICS™ Series DDL



Series DDL

- S-design
- Stand-alone bus coupler
- Fieldbus protocol PROFIBUS DP Interbus-S DeviceNet
- ATEX



Version	Stand-alone bus coupler
Certificates	ATEX
ATEX class G	II 3G Ex nA IIB T4 Gc X
Ambient temperature min./max.	5 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-20% / +20%
Operating voltage, actuators	24 V DC
Actuator voltage tolerance	0% / +10%
Total current for actuators	3 A
Protection class	IP65
Data transfer bit	128 bit
Max. cable length	40 m
Max. number of DDL participants	14
Number of inputs	1
Number of outputs	1
I/O connection	Socket (female), M12, 5-pin
Weight	See table below

The delivered product may vary from that in the illustration.

Technical data

Part No.	Fieldbus protocol	Port
		1
3375000250	PROFIBUS DP	Plug (male), M12x1, 5-pin, B-coded
3375000450	Interbus-S	Plug (male), M12x1, 5-pin, B-coded
R412006999	DeviceNet	Plug (male), M12x1, 5-pin, A-coded

Part No.	Port	power supply
	2	
3375000250	Socket (female), M12x1, 5-pin, B-coded	Plug (male), M12x1, 4-pin, A-coded
3375000450	Socket (female), M12x1, 5-pin, B-coded	Plug (male), M12x1, 4-pin, A-coded
R412006999	Socket (female), M12x1, 5-pin, A-coded	Plug (male), M12x1, 4-pin, A-coded

Part No.	I/O connection	Weight	Fig.
3375000250	Socket (female), M12, 5-pin	0.57 kg	Fig. 1
3375000450	Socket (female), M12, 5-pin	0.67 kg	Fig. 2
R412006999	Socket (female), M12, 5-pin	0.66 kg	Fig. 5

Technical information

Max. current in 0 V line: 4 A

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

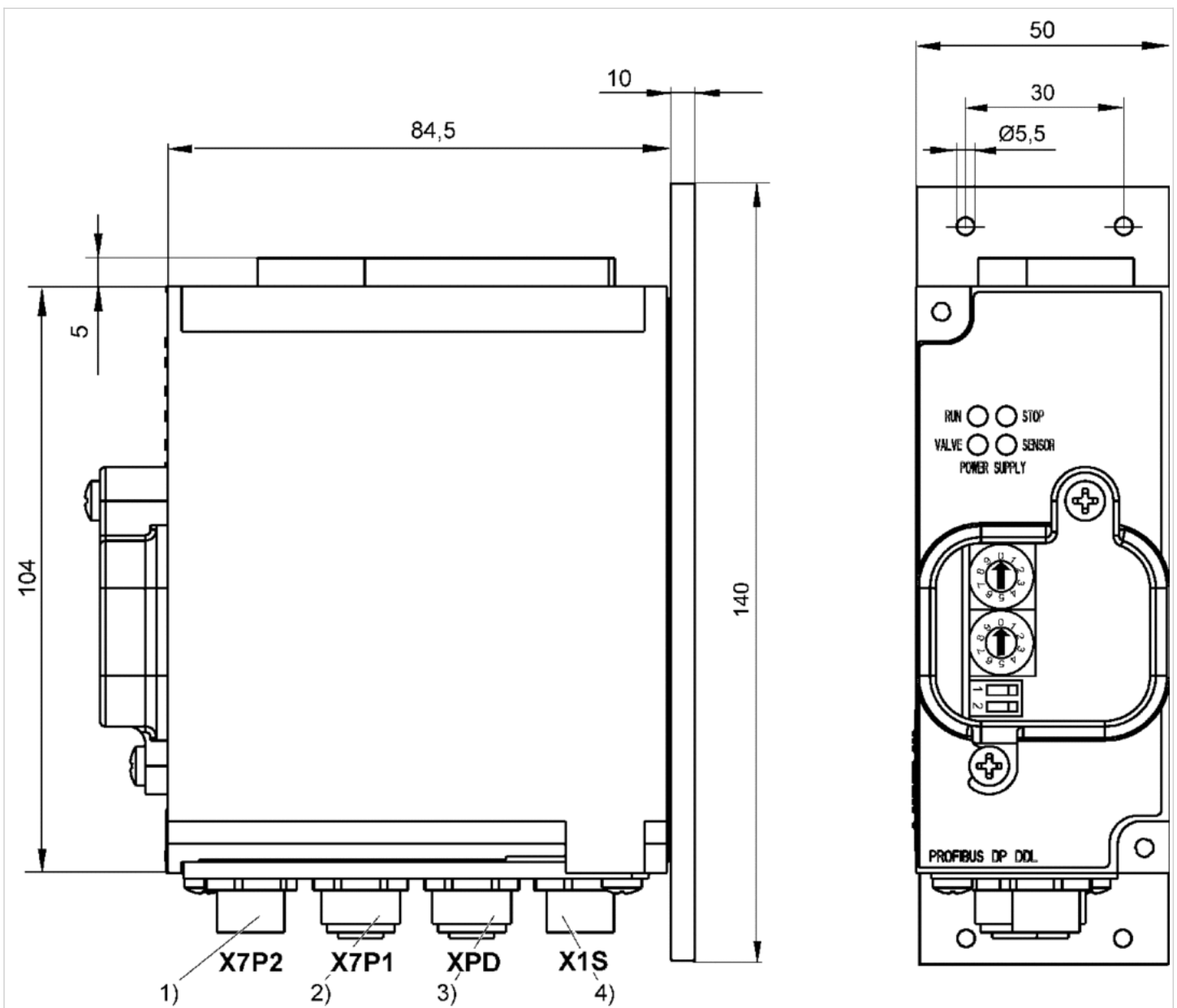
Caution: A reduced temperature range in accordance with the operating instructions may need to be considered in ATEX applications.

Technical information

Material	
Housing	Aluminum Stainless steel Polyarylamide

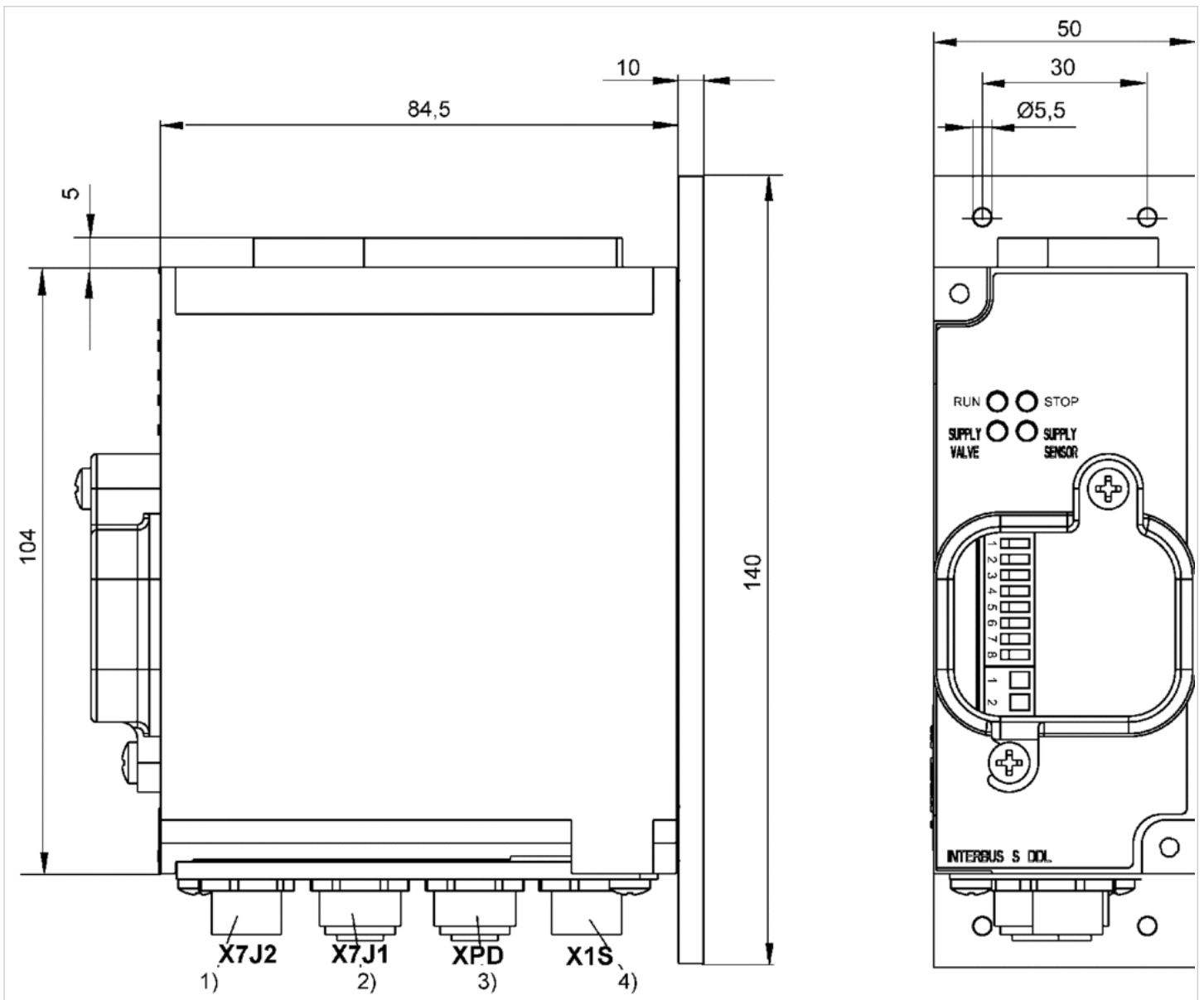
Dimensions

Fig. 1



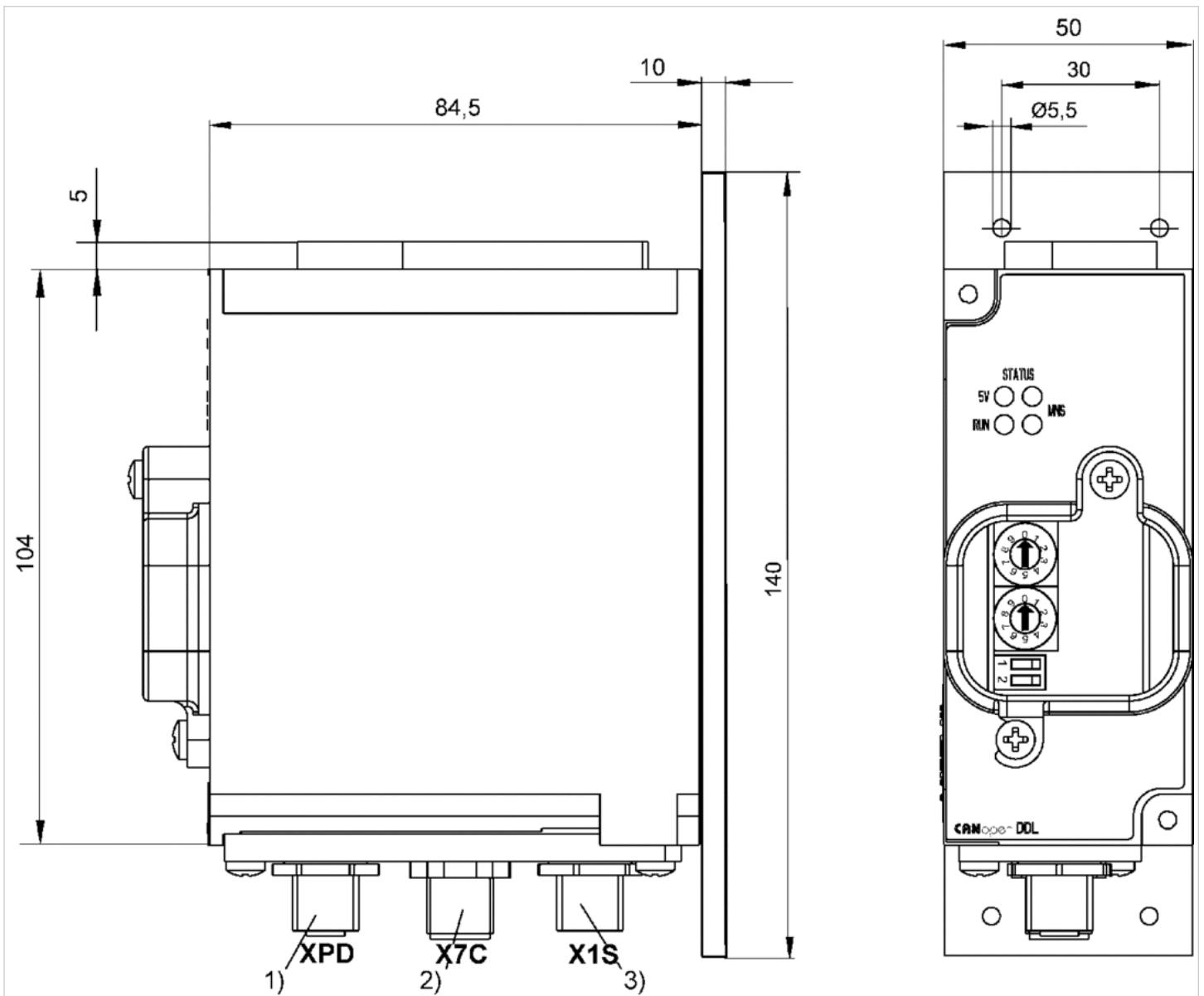
- 1) bus IN, M12x1, B-coded
- 2) bus OUT, M12x1, B-coded
- 3) DDL, M12, 5-pin
- 4) Power supply plug M12x1, 4-pin

Fig. 2



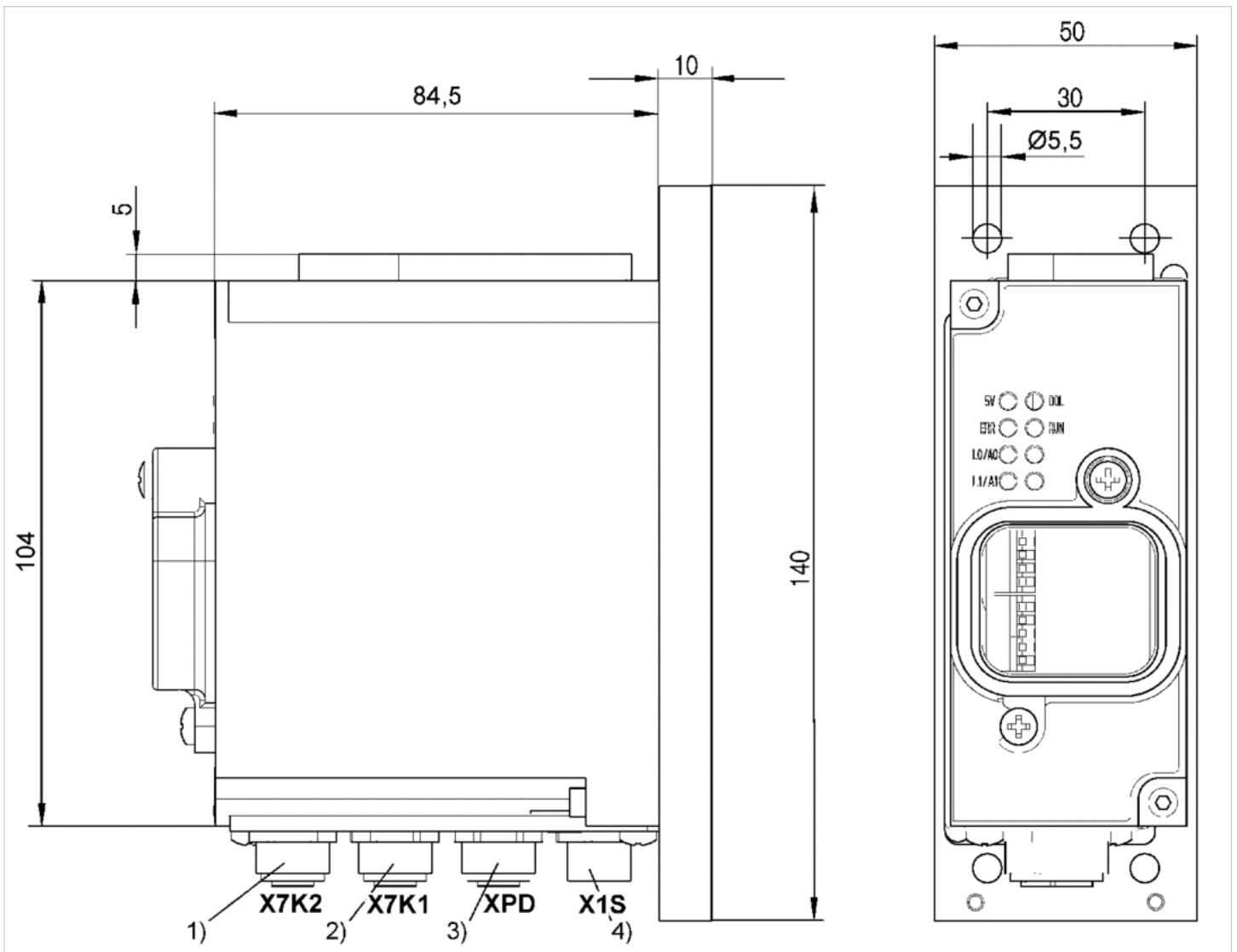
- 1) bus IN, M12x1, B-coded
- 2) bus OUT, M12x1, B-coded
- 3) DDL, M12, 5-pin
- 4) Power supply plug M12x1, 4-pin

Fig. 3



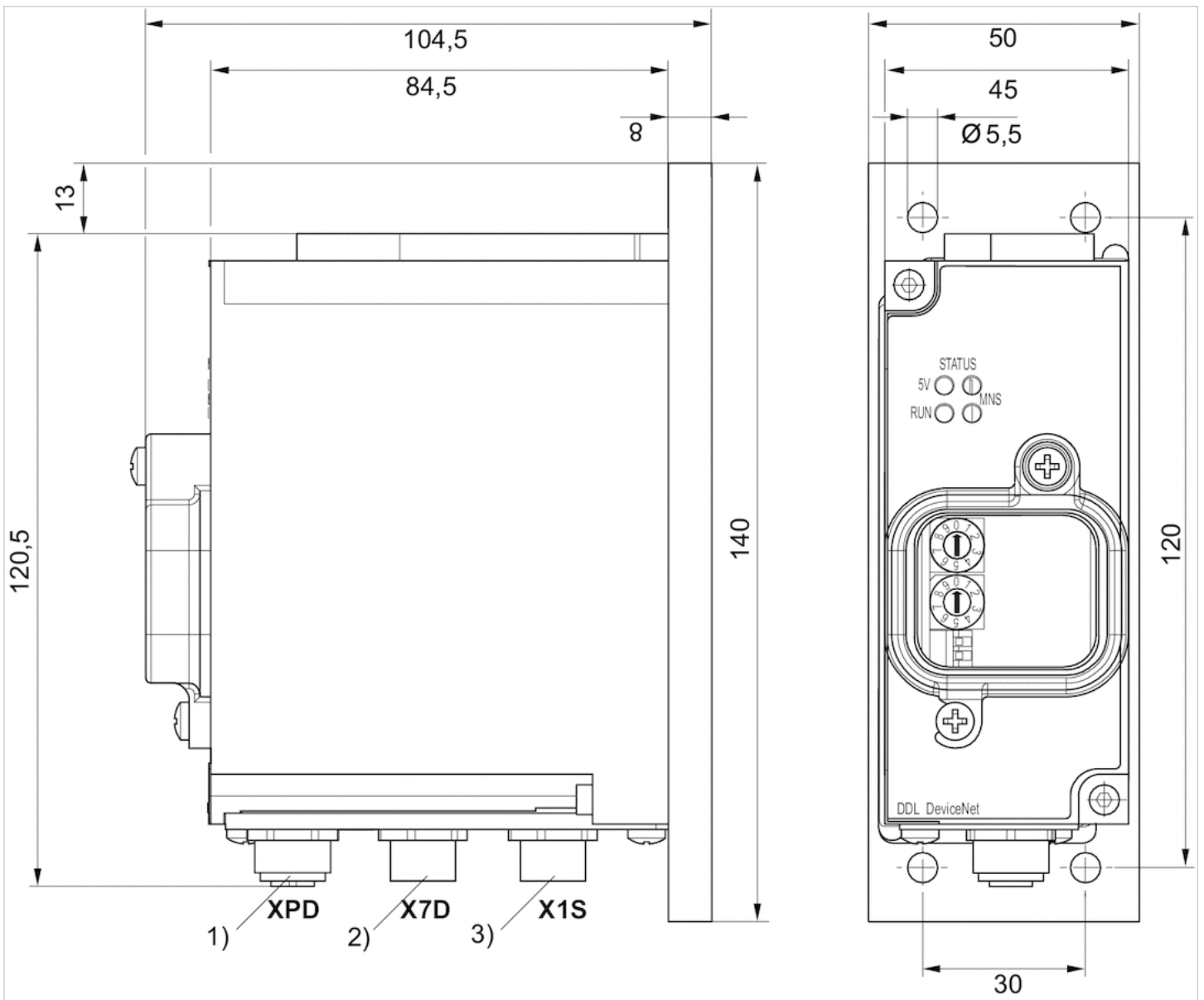
- 1) DDL, M12, 5-pin
- 2) Bus, M12x1, A-coded, 5-pin
- 3) Power supply plug M12x1, 4-pin

Fig. 4



- 1) bus IN, M12x1, D-coded
- 2) Bus OUT, M12x1, D-coded
- 3) DDL, M12, 5-pin
- 4) Power supply plug M12x1, 4-pin

Fig. 5



- 1) DDL, M12, 5-pin
- 2) Bus, M12x1, 5-pin
- 3) Power supply plug M12x1, 4-pin

Series DDL

- S-design
- Stand-alone bus coupler
- Socket (female), M12x1, 4-pin, D-coded
- Fieldbus protocol PROFINET IO



Version	Stand-alone bus coupler
Ambient temperature min./max.	5 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-20% / +20%
Operating voltage, actuators	24 V DC
Actuator voltage tolerance	0% / +10%
Total current for actuators	3 A
Protection class	IP65
Data transfer bit	128 bit
Max. cable length	40 m
Max. number of DDL participants	14
Number of inputs	1
Number of outputs	1
I/O connection	Socket (female), M12, 5-pin

The delivered product may vary from that in the illustration.

Technical data

Part No.	Fieldbus protocol	Port
		1
R412013399	PROFINET IO	Socket (female), M12x1, 4-pin, D-coded

Part No.	Port	power supply
	2	
R412013399	Socket (female), M12x1, 4-pin, D-coded	Plug (male), M12x1, 4-pin, A-coded

Part No.	I/O connection	Fig.
R412013399	Socket (female), M12, 5-pin	Fig. 4

The following operating instructions can be found in the Media Center for: PROFINET IO: R412013605

Technical information

Max. current in 0 V line: 4 A

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

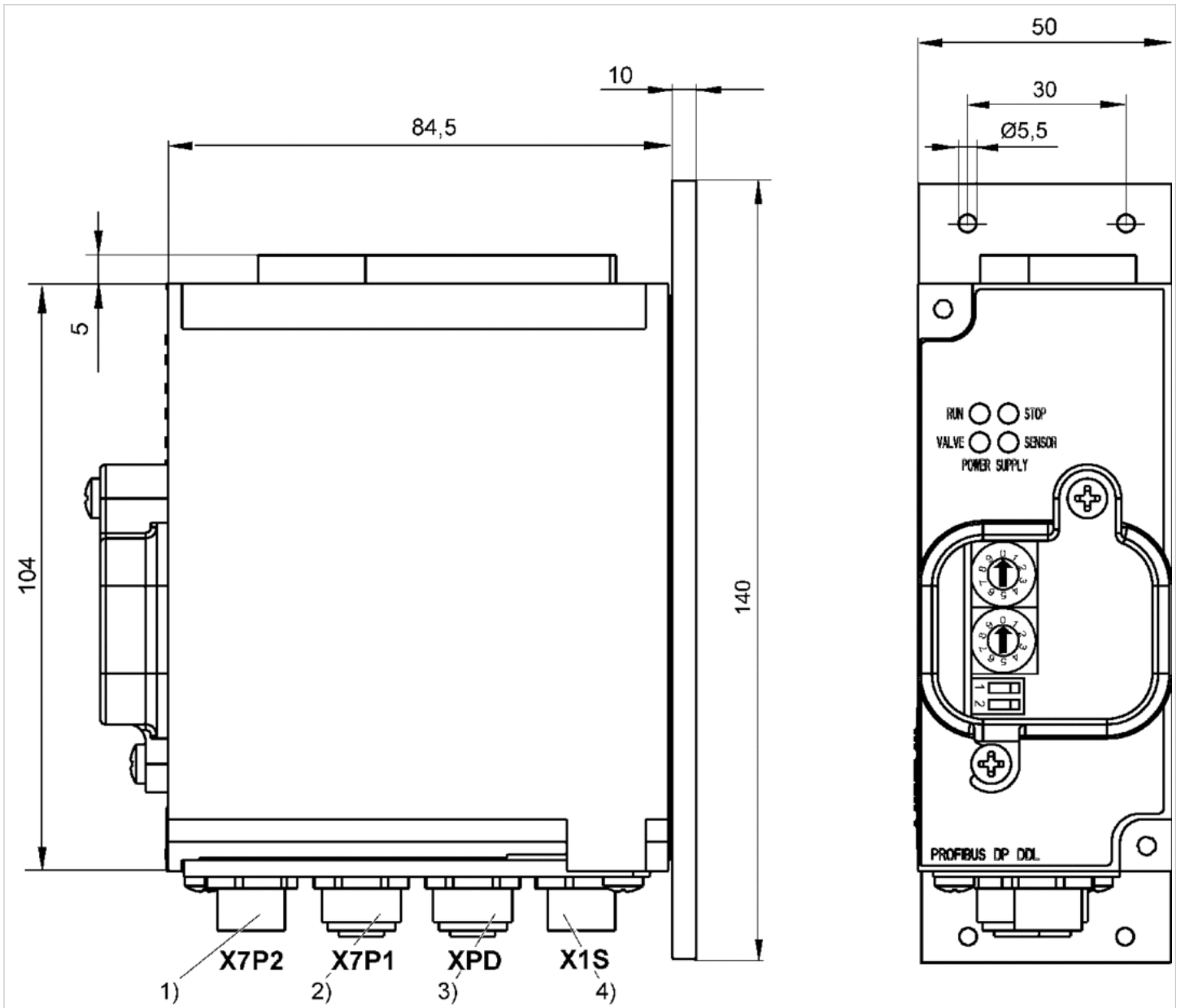
Caution: A reduced temperature range in accordance with the operating instructions may need to be considered in ATEX applications.

Technical information

Material	
Housing	Aluminum Stainless steel Polyarylamide

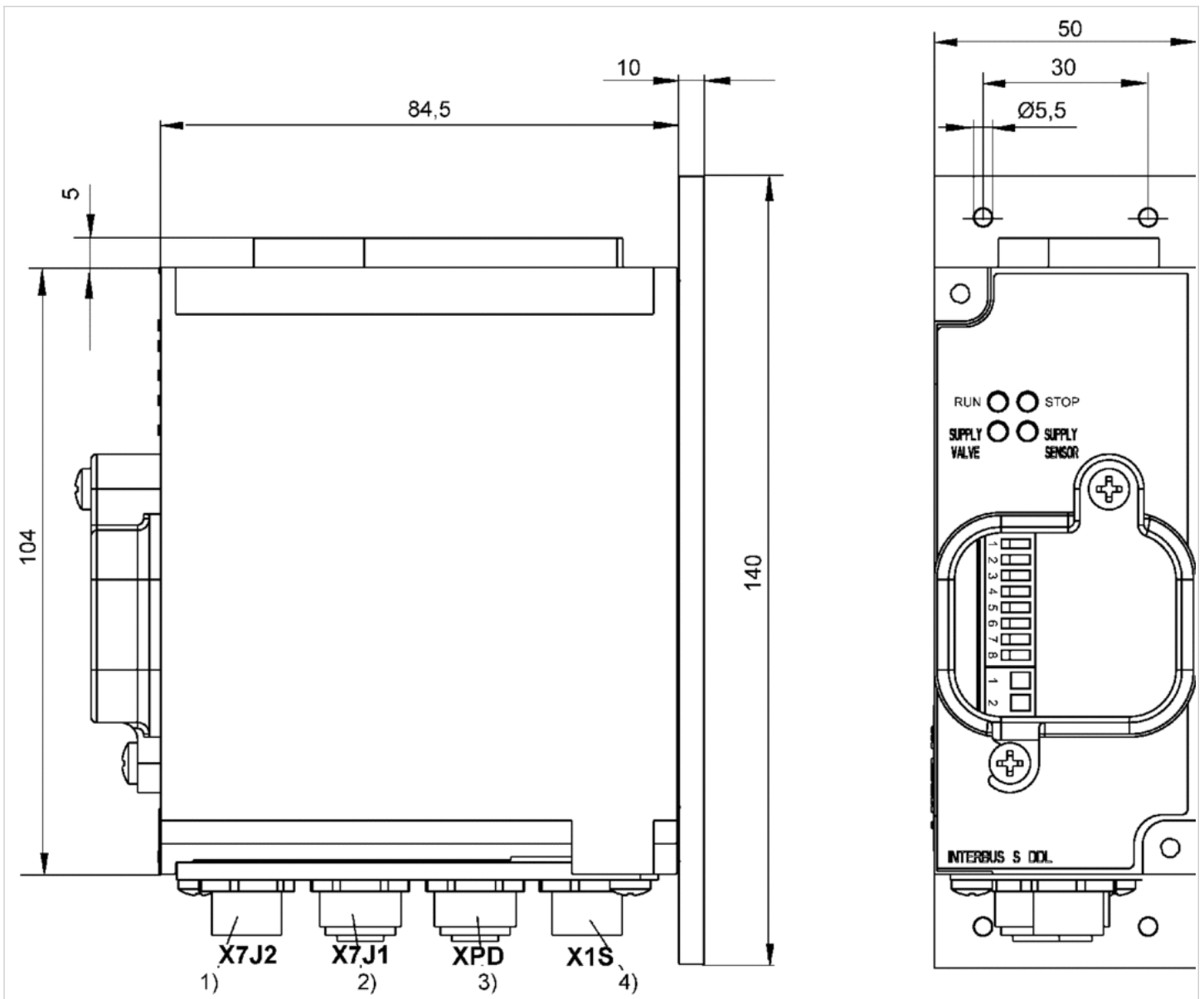
Dimensions

Fig. 1



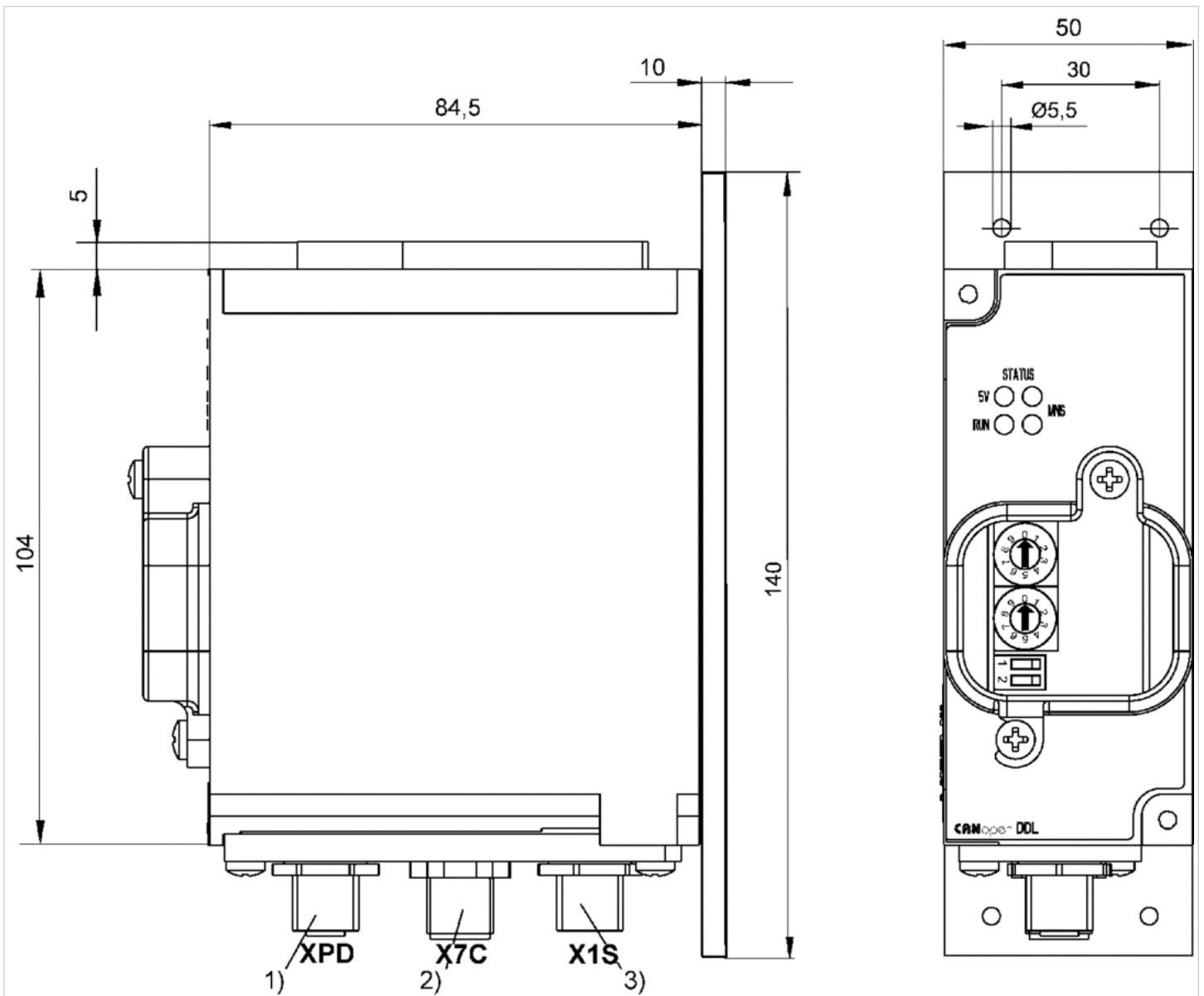
- 1) bus IN, M12x1, B-coded
- 2) bus OUT, M12x1, B-coded
- 3) DDL, M12, 5-pin
- 4) Power supply plug M12x1, 4-pin

Fig. 2



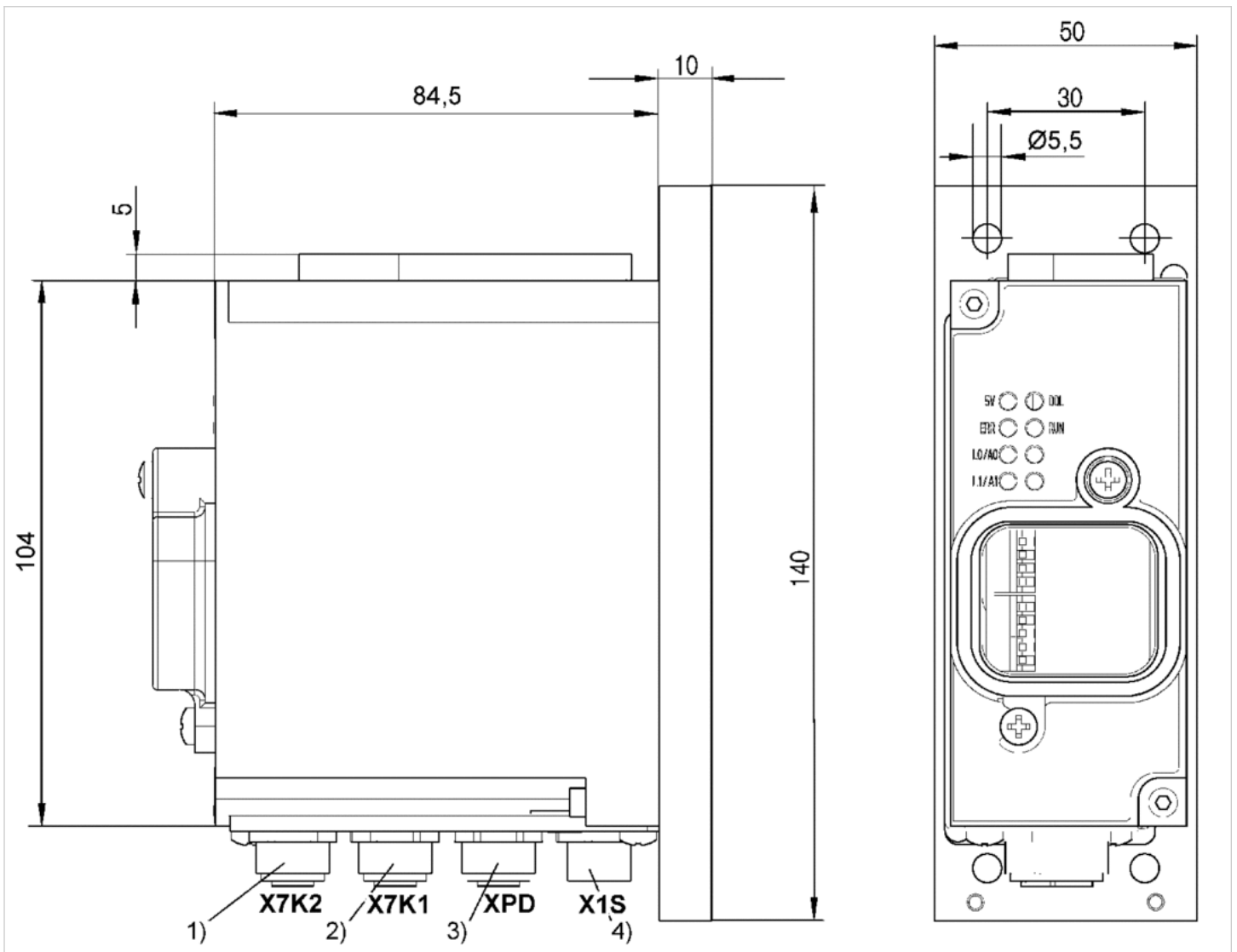
- 1) bus IN, M12x1, B-coded
- 2) bus OUT, M12x1, B-coded
- 3) DDL, M12, 5-pin
- 4) Power supply plug M12x1, 4-pin

Fig. 3



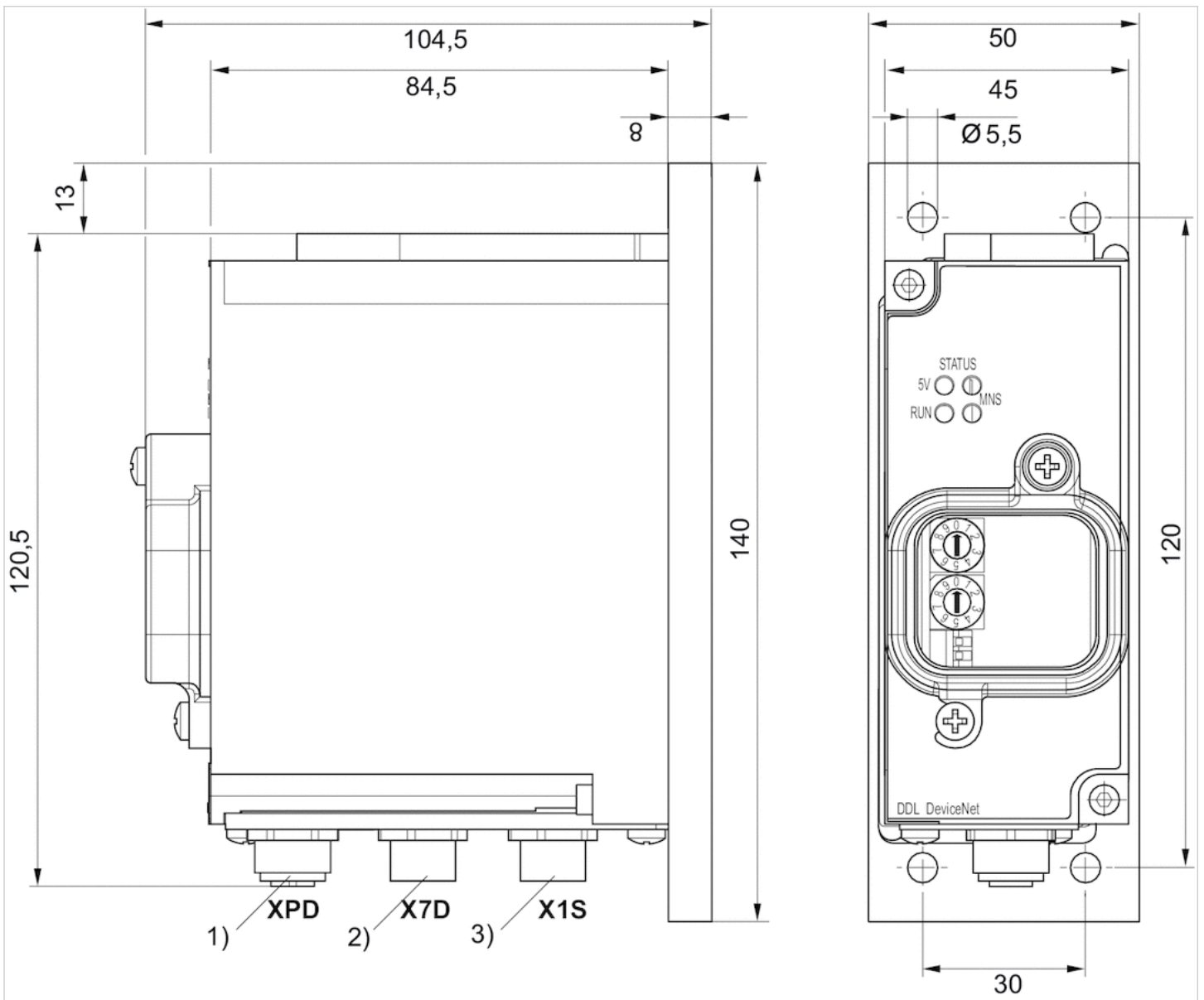
- 1) DDL, M12, 5-pin
- 2) Bus, M12x1, A-coded, 5-pin
- 3) Power supply plug M12x1, 4-pin

Fig. 4



- 1) bus IN, M12x1, D-coded
- 2) Bus OUT, M12x1, D-coded
- 3) DDL, M12, 5-pin
- 4) Power supply plug M12x1, 4-pin

Fig. 5



- 1) DDL, M12, 5-pin
- 2) Bus, M12x1, 5-pin
- 3) Power supply plug M12x1, 4-pin

Series DDL

- S-design
- Bus coupler with driver
- Fieldbus protocol ControlNet EtherNET/IP, MODBUS TCP, TCP/IP



Version	Bus coupler with driver
Ambient temperature min./max.	5 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-20% / +20%
Power consumption electronics	0.3 A
Operating voltage, actuators	24 V DC
Actuator voltage tolerance	0% / +10%
Total current for actuators	3 A
Protection class	IP65
Data transfer bit	128 bit
Number of solenoid coils max.	24
Max. power consumption per coil	0.2 mA
Max. cable length	40 m
Max. number of DDL participants	14
Number of inputs	1
Number of outputs	1
Port Valve system	Socket (female), D-Sub, 25-pin
I/O connection	Socket (female), M12, 5-pin
Weight	See table below

The delivered product may vary from that in the illustration.

Technical data

Part No.	Fieldbus protocol	Port
		1
3375000560	ControlNet	BNC plug connector
R412000732	EtherNET/IP, MODBUS TCP, TCP/IP	Plug (male), M12, 5-pin, A-coded

Part No.	Port	power supply
	2	
3375000560	BNC plug connector	Plug (male), M12, 4-pin, A-coded
R412000732	Plug (male), M12x1, 5-pin	Plug (male), M12, 4-pin, A-coded

Part No.	I/O connection	Weight	Fig.	
3375000560	Socket (female), M12, 5-pin	0.51 kg	Fig. 1	1)
R412000732	Socket (female), M12, 5-pin	0.67 kg	Fig. 2	-

The following operating instructions can be found in the Media Center for: ←ControlNet: R499050030←EtherNET/IP: R499050030

1) Manual (English) R499050031

Technical information

Max. current in 0 V line: 4 A

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

Caution: A reduced temperature range in accordance with the operating instructions may need to be considered in ATEX applications.

Technical information

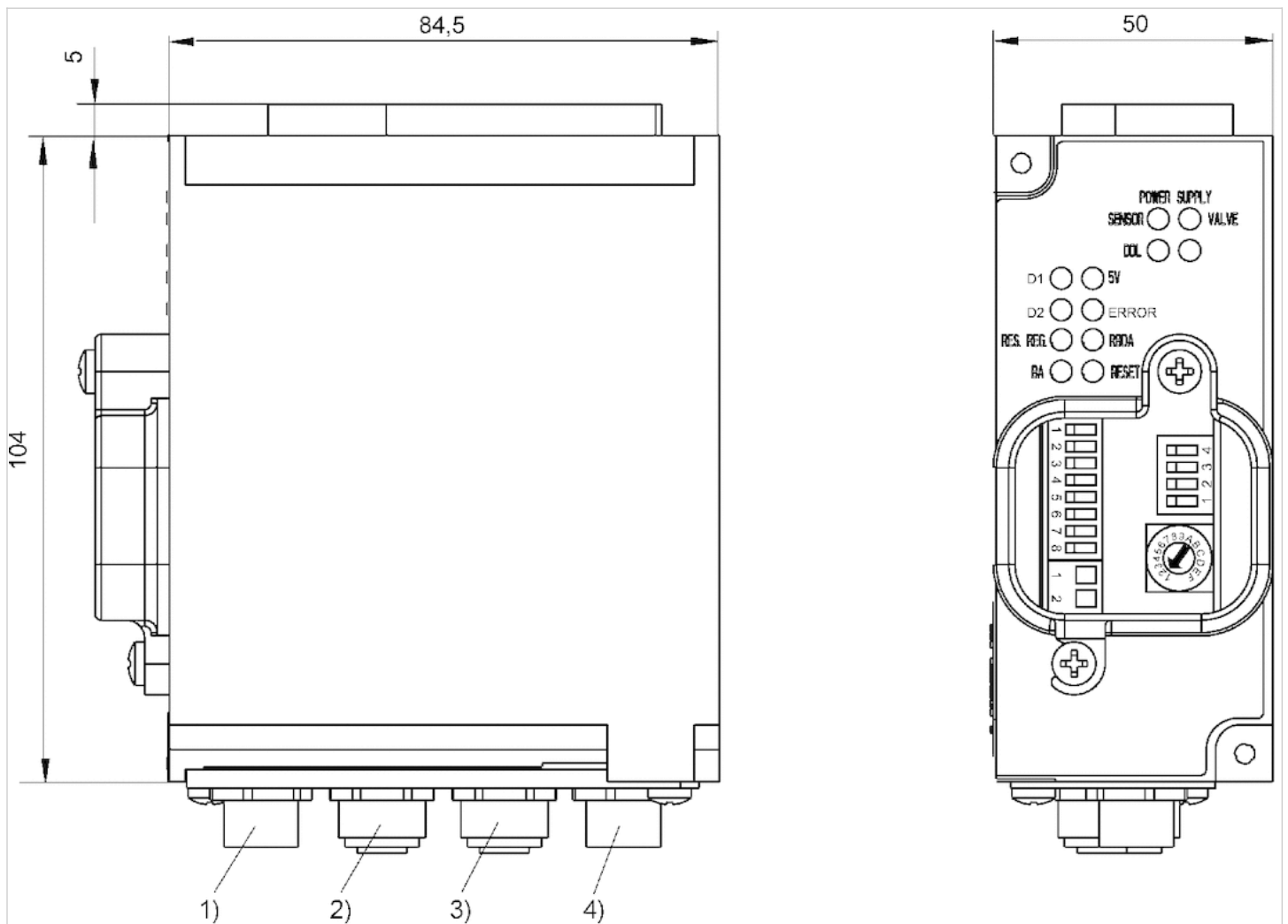
Material

Housing

Stainless steel Polyarylamide

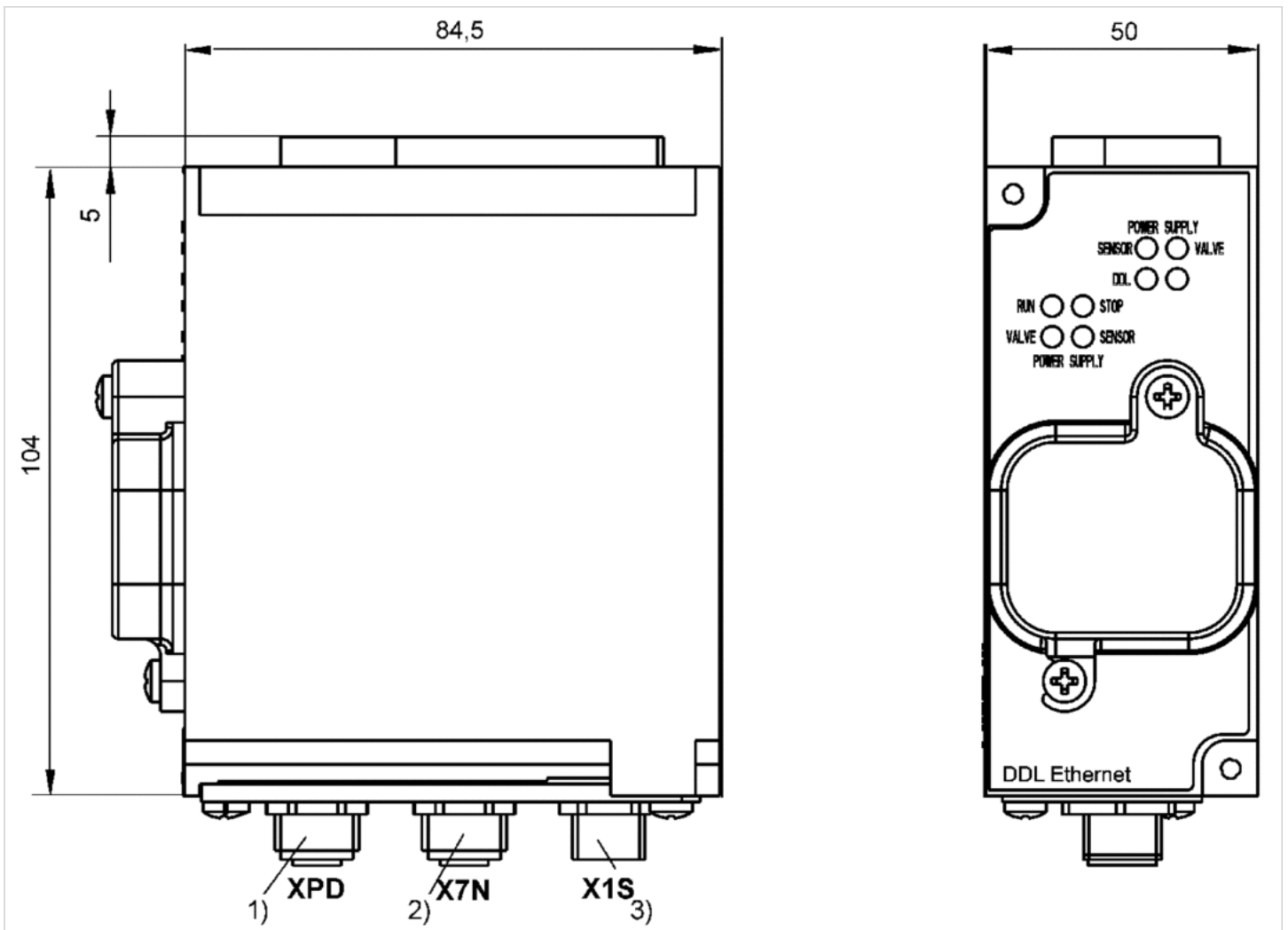
Dimensions

Fig. 1



- 1) Bus IN, M12x1, B-coded
- 2) Bus OUT, M12x1, B-coded
- 3) DDL, M12, 5-pin
- 4) Power supply plug M12, 4-pin

Fig. 2



- 1) DDL, M12, 5-pin
- 2) Bus, M12x1, A-coded
- 3) Power supply plug M12, 4-pin

Series DDL

- B-design
- Driver
- Plug (male), M12, 5-pin, A-coded



Version	Driver
Ambient temperature min./max.	0 ... 50 °C
Operational voltage electronics	24 V DC
Power consumption electronics	0.05 A
Operating voltage, actuators	24 V DC
Actuator voltage tolerance	-10% / +10%
Total current for actuators	3 A
Protection class	IP65
Number of solenoid coils max.	32
Max. power consumption per coil	0.1 mA
Max. cable length	40 m
Max. number of DDL participants	14
Port Valve system	Socket (female), 2.0 mm strip, 2x13-pin
Weight	0.29 kg

Technical data

Part No.	Port	
	1	2
R412008541	Plug (male), M12, 5-pin, A-coded	Socket (female), M12, 5-pin, A-coded

Part No.	power supply
R412008541	Plug (male), M12, 4-pin, A-coded

Scope of delivery incl. 2 tie rod extensions and seal, The following operating instructions can be found in the Media Center: R412009417 + R499050020

Technical information

Max. current in 0 V line: 4 A

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

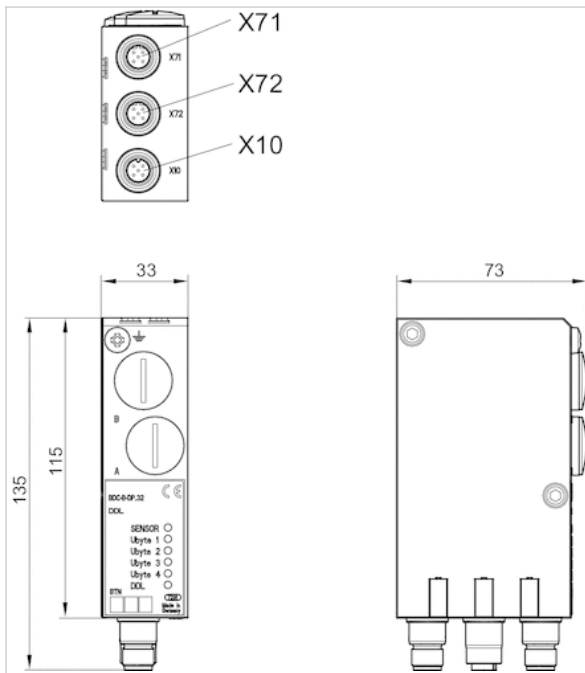
Caution: A reduced temperature range in accordance with the operating instructions may need to be considered in ATEX applications.

Technical information

Material	
Housing	Die-cast aluminum

Dimensions

Dimensions



X71 = Bus IN

X72 = Bus OUT

X10 = power supply

Series DDL

- B-design
- Driver
- Plug (male), M12, 5-pin, A-coded



Version	Driver
Ambient temperature min./max.	0 ... 50 °C
Operational voltage electronics	24 V DC
Power consumption electronics	0.2 A
Operating voltage, actuators	24 V DC
Actuator voltage tolerance	-10% / +10%
Total current for actuators	3 A
Protection class	IP65
Number of solenoid coils max.	24
Max. power consumption per coil	0.1 mA
Max. cable length	40 m
Max. number of DDL participants	14
Port Valve system	Socket (female), 2.0 mm strip, 3x13-pin
I/O module extension max.	6
I/O module extension Input Max.	3
I/O module extension Output Max.	3
Weight	1.04 kg

Technical data

Part No.	Port	
	1	2
R412006880	Plug (male), M12, 5-pin, A-coded	Socket (female), M12, 5-pin, A-coded

Part No.	power supply
R412006880	Plug (male), M12, 4-pin, A-coded

Scope of delivery incl. 2 tie rod extensions and seal, The following operating instructions can be found in the Media Center: R412009417 + R499050020

Technical information

Max. current in 0 V line: 4 A

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

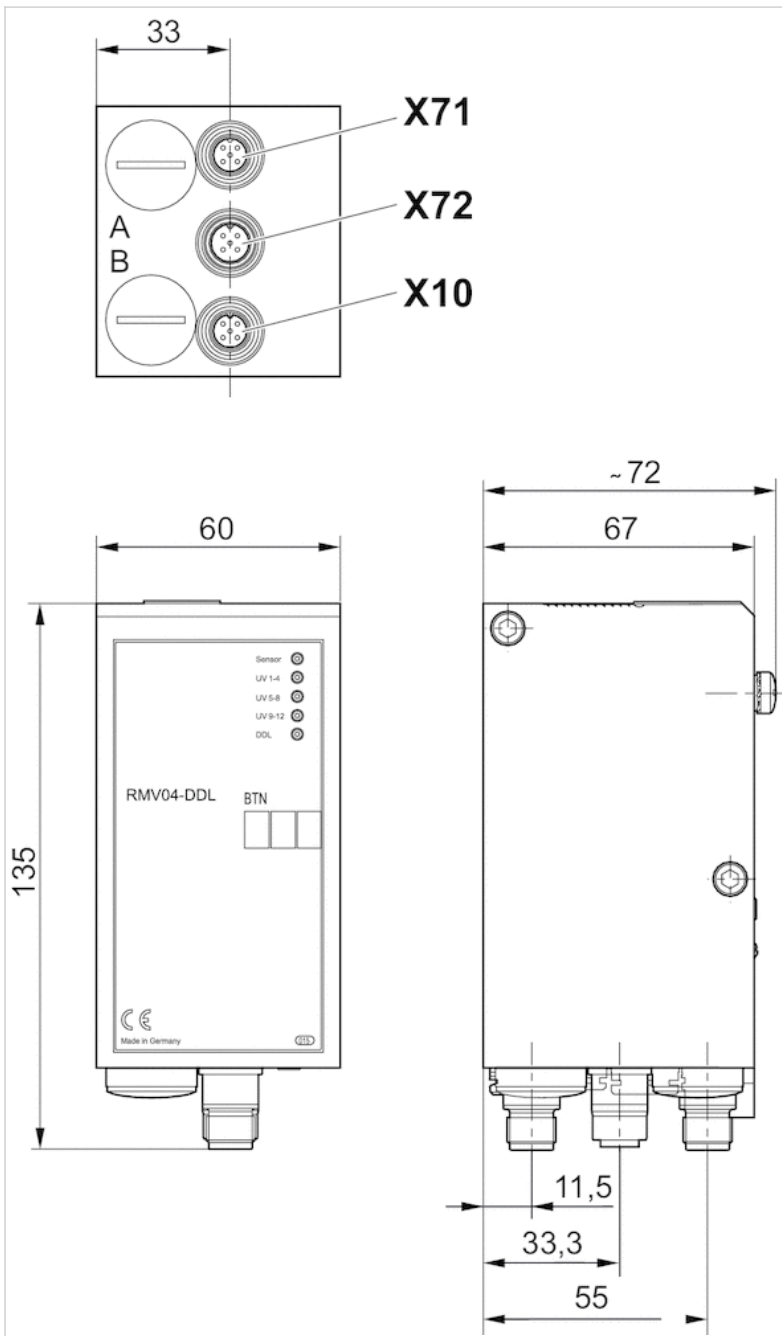
Caution: A reduced temperature range in accordance with the operating instructions may need to be considered in ATEX applications.

Technical information

Material	
Housing	Die-cast aluminum

Dimensions

Dimensions



Series DDL

- Digital inputs
- I/O module, active
- Plug (male), M12, 5-pin
- ATEX



Version	I/O module, active
Certificates	ATEX
ATEX class G	II 3G Ex nA IIB T4 Gc X
Ambient temperature min./max.	5 ... 50 °C
Operational voltage electronics	24 V DC
Power consumption electronics	0.1 A
Protection class	IP65
Total current of sensors max.	0,5 A
Max. cable length	40 m
Max. number of DDL participants	14
Number of inputs	16
I/O connection	Input, Socket, M12
Weight	0.63 kg

Technical data

Part No.	Port	
	1	2
3375002000	Plug (male), M12, 5-pin	Socket (female), M12, 5-pin

Part No.	power supply	I/O module version	I/O connection
3375002000	via communication connection plug	Digital inputs	Input, Socket, M12

Part No.	I/O connection	
	Number	
3375002000	8	

The following operating instructions can be found in the Media Center: R499050030 + R499050031

Technical information

Max. current in 0 V line: 4 A

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

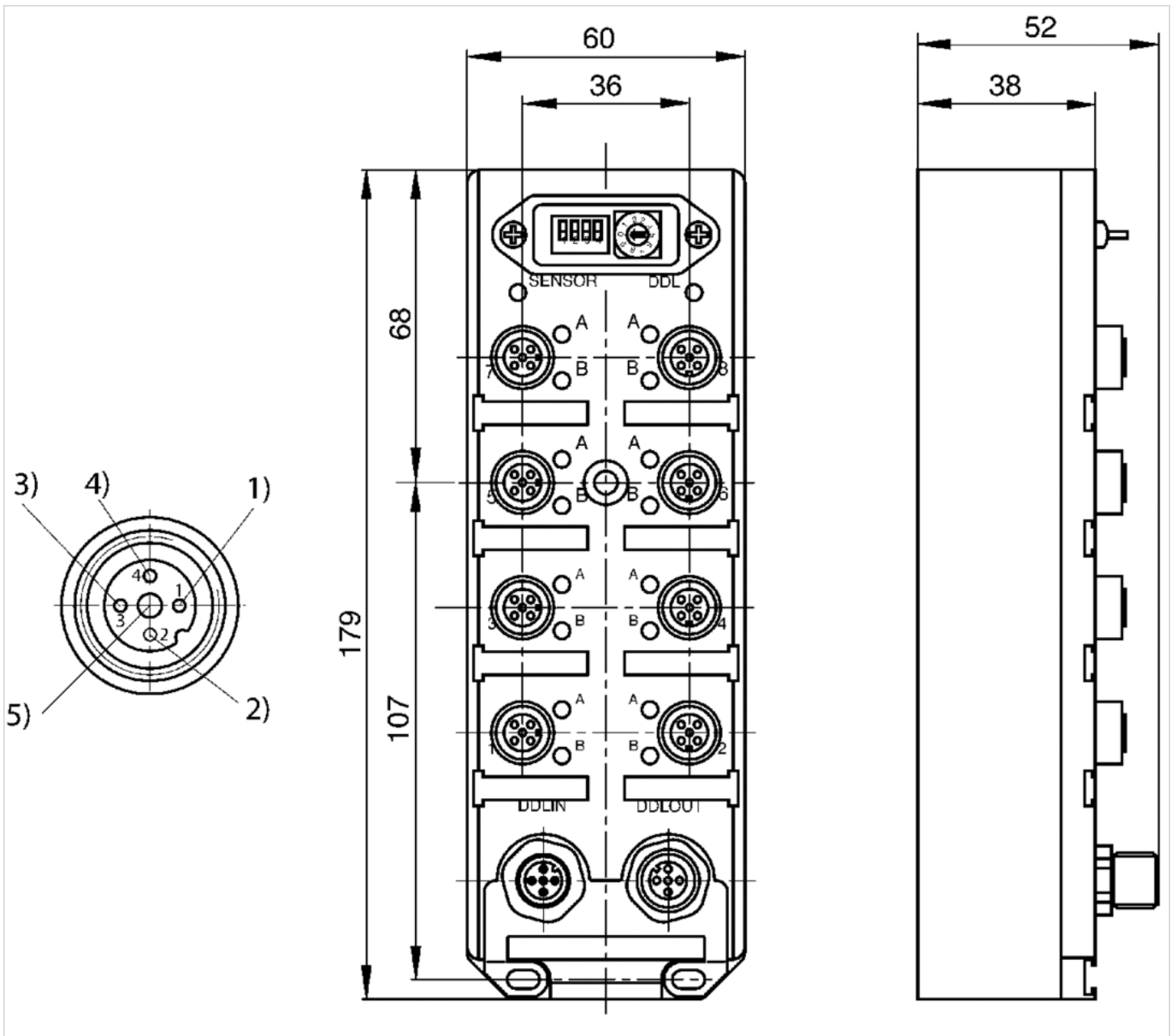
Caution: A reduced temperature range in accordance with the operating instructions may need to be considered in ATEX applications.

Technical information

Material	
Housing	Polyurethane

Dimensions

Dimensions



1) 24 V 2) Input 2 3) 0 V 4) Input 1 5) PE

Series DDL

- Digital outputs
- I/O module, active
- Plug (male), M12, 5-pin
- ATEX



Version	I/O module, active
Certificates	ATEX
ATEX class G	II 3G Ex nA IIB T4 Gc X
Ambient temperature min./max.	5 ... 50 °C
Operational voltage electronics	24 V DC
Power consumption electronics	0.1 A
Power supply for actuators	2x6 A
Protection class	IP65
Max. output current per output	2 A
Max. cable length	40 m
Max. number of DDL participants	14
Number of outputs	8
I/O connection	Output, Socket, M12
Weight	0.66 kg

Technical data

Part No.	Port	Port	power supply
	1	2	
3375002020	Plug (male), M12, 5-pin	Socket (female), M12, 5-pin	Plug (male), M23, 6-pin

Part No.	I/O module version	I/O connection	I/O connection
			Number
3375002020	Digital outputs	Output, Socket, M12	8

The following operating instructions can be found in the Media Center: R499050030 + R499050031

Technical information

Max. current in 0 V line: 4 A

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

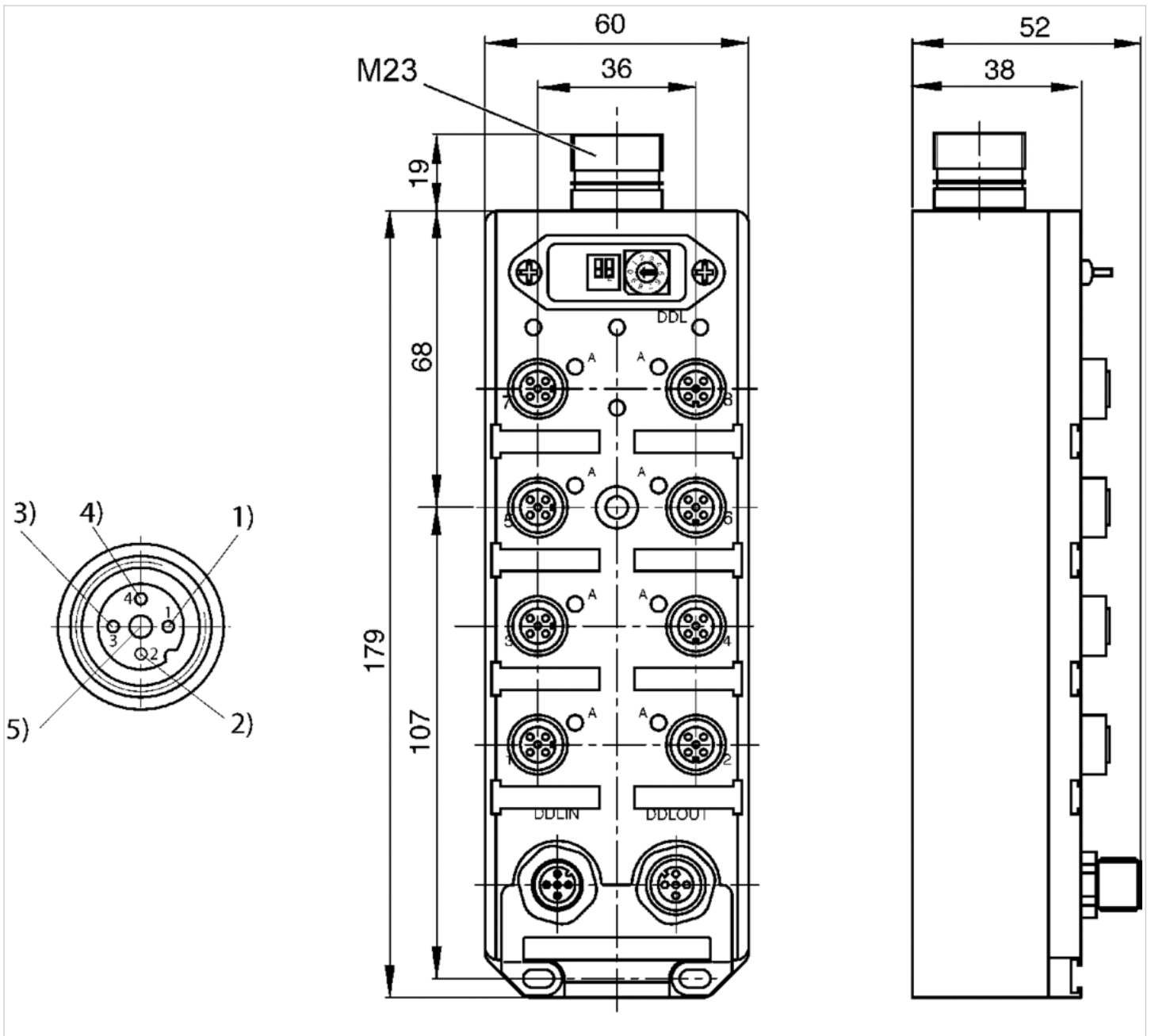
Caution: A reduced temperature range in accordance with the operating instructions may need to be considered in ATEX applications.

Technical information

Material	
Housing	Polyurethane

Dimensions

Dimensions



- 1) No contact
 - 2) Output (x + 1) only for socket 1/3/5/7
 - 3) 0 V
 - 4) Output x
 - 5) PE
- x = socket no.

Series DDL

- Digital inputs, Digital outputs
- I/O module, active
- Plug (male), M12, 5-pin
- ATEX



Version	I/O module, active
Certificates	ATEX
ATEX class G	II 3G Ex nA IIB T4 Gc X
Ambient temperature min./max.	5 ... 50 °C
Operational voltage electronics	24 V DC
Power consumption electronics	0.1 A
Power supply for actuators	1,6 A
Protection class	IP65
Max. output current per output	0.1 A
Total current of sensors max.	0,5 A
Max. cable length	40 m
Max. number of DDL participants	14
Number of inputs	8
Number of outputs	8
I/O connection	input or output, Socket, M12
Weight	0.63 kg

Technical data

Part No.	Port	
	1	2
R412006712	Plug (male), M12, 5-pin	Socket (female), M12, 5-pin

Part No.	power supply	I/O module version
R412006712	via communication connection plug	Digital outputs Digital inputs

Part No.	I/O connection	I/O connection
		Number
R412006712	input or output, Socket, M12	8

The following operating instructions can be found in the Media Center: R499050030 + R499050031

Either 8 outputs and 8 inputs or 16 outputs

Technical information

Max. current in 0 V line: 4 A

The sockets x5 to x8 may be used interchangeably for input or output.

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

Caution: A reduced temperature range in accordance with the operating instructions may need to be considered in ATEX applications.

Technical information

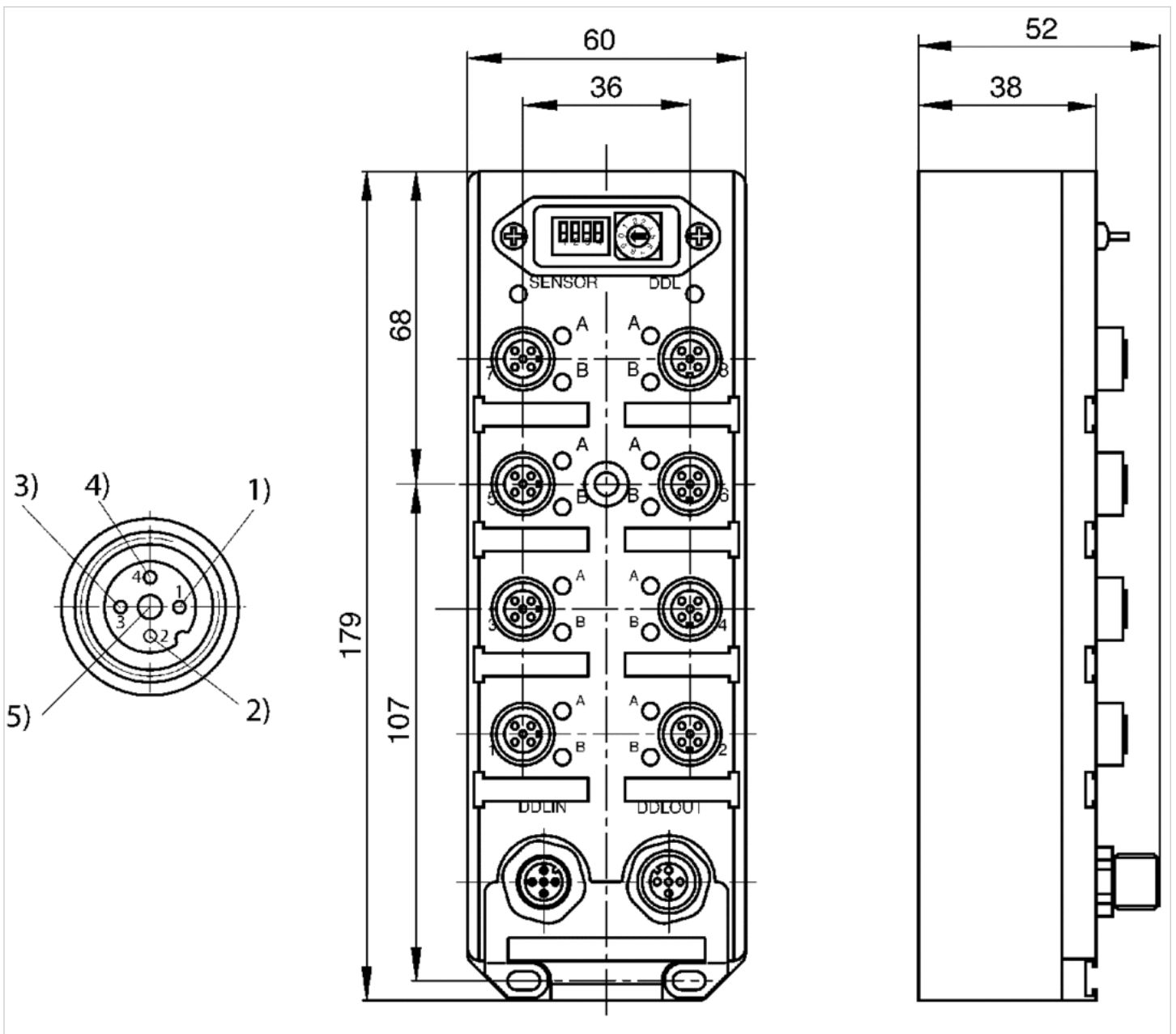
Material

Housing

Polyurethane

Dimensions

Dimensions



1) 24 V 2) Input 2 3) 0 V 4) Input 1 5) PE

Series DDL

- Optional tool to simplify commissioning of DDL components



Ambient temperature min./max.	5 ... 50 °C
Operational voltage electronics	24 V DC
Electronics voltage tolerance	-20% / +20%
Operating voltage, actuators	24 V DC
Actuator voltage tolerance	-20% / +20%
Total current for actuators	2.5 A
Protection class	IP20
Weight	3.1 kg

Technical data

Part No.

R412008352

Scope of delivery:↔1 DDL-X-Tool↔1 USB adapter↔1 USB adapter manual↔1 driver CD-ROM↔1 installation manual↔1 9-pin D-SUB cable, 1m↔1 power pack 24 V DC, 2.5 A↔3 mains plug cables for the power pack (EU, GB, US)↔1 CD-ROM with software for DDLfWin master, DDLfWin viewer, and operating instructions↔1 DDLfWin installation instructions↔1 case with foam inlay

Technical information

The DDL-X-Tool is used to test and control DDL components, if fieldbus communication is not yet available (master function), or for observation purposes during fieldbus operation (viewer function).

Suitable for all DDL components from AVENTICS.

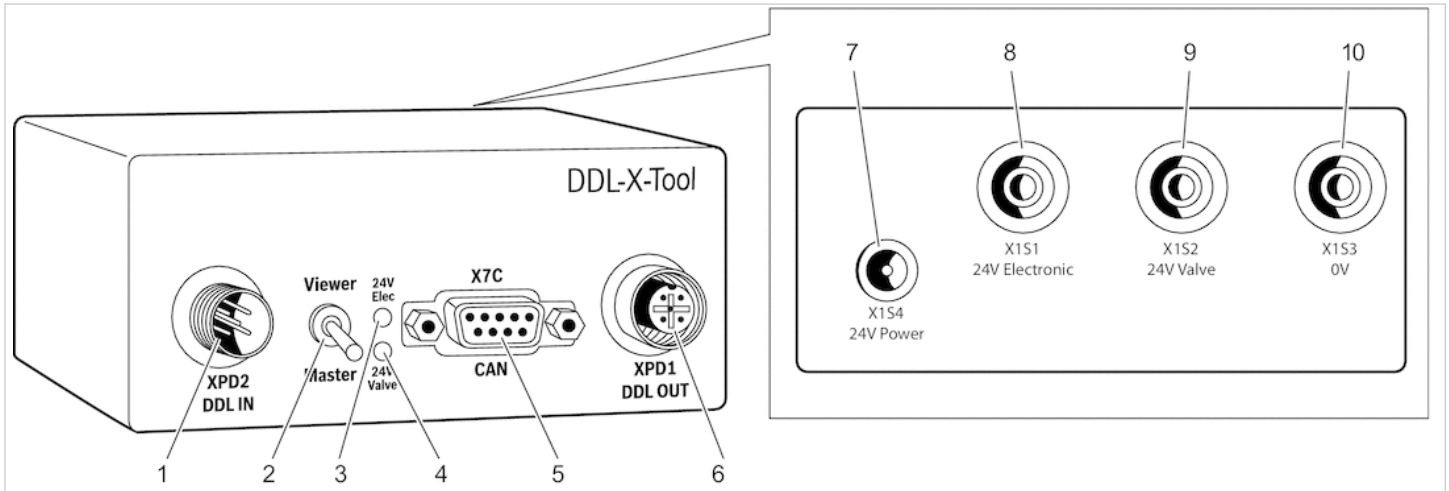
A PC is required for operation.

System requirements: PIII processor with 800 MHz, 256 MB RAM, USB interface, CD-ROM drive, Microsoft Windows 98SE, 2000, or XP operating system.

The DDL-X-Tool is a diagnostic tool and should not permanently remain in the DDL line.

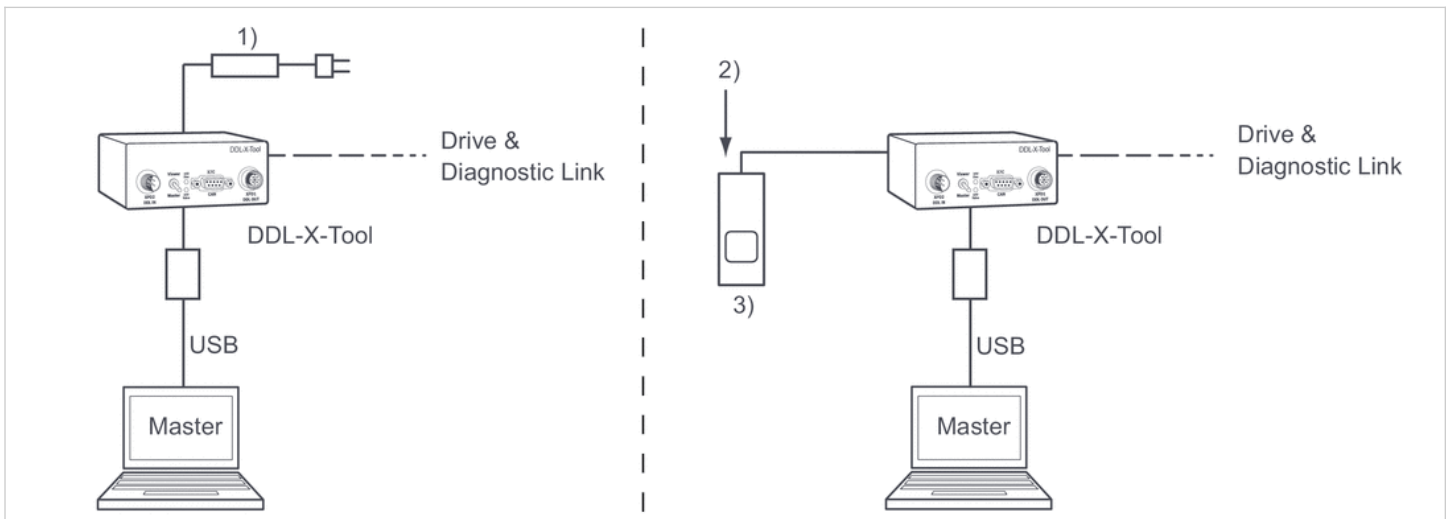
Dimensions

DDL-X-Tool connections



- 1) Integrated plug (DDL line coming from the bus coupler)
- 2) Selector switch (master/viewer mode)
- 3) LED
- 4) LED
- 5) D-Sub plug (PC connection)
- 6) Integrated socket (DDL line going to the modules)
- 7) Mains connection socket (for DDL supply of electronics and valves)
- 8) Integrated socket (separate supply for electronics, alternative to 7)
- 9) Integrated socket (separate supply for valves, emergency OFF, alternative to 7)
- 10) Integrated socket (0 V, alternative to 7)

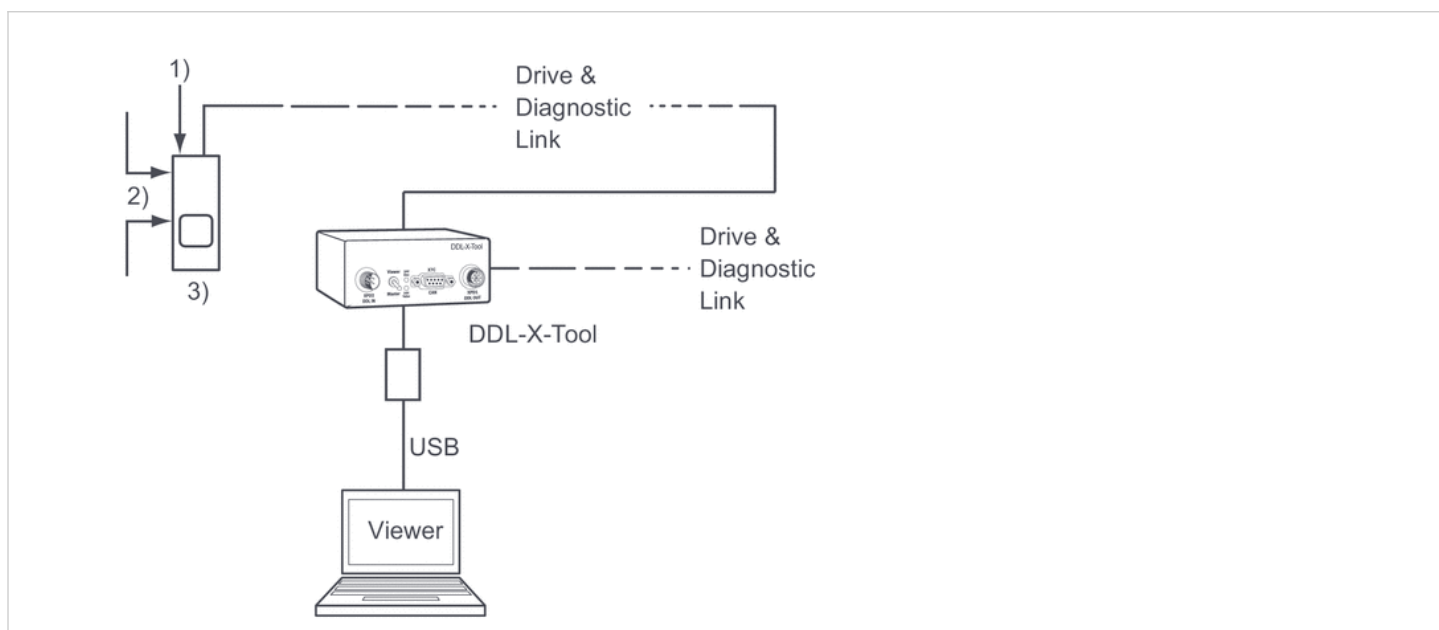
Master function to simplify commissioning



- 1) Power pack
- 2) Electronics 24 V/valves 24 V
- 3) Bus coupler

In the master function, all outputs from the components in the DDL line can be controlled and all inputs are visible.

Viewer function for observation purposes during fieldbus operation



- 1) Electronics 24 V/valves 24 V
- 2) Fieldbus
- 3) Bus coupler

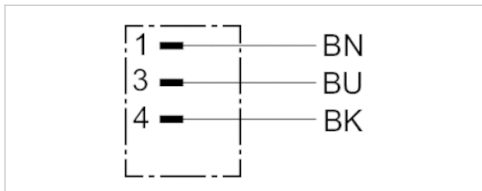
In the viewer function, the DDL-X-Tool displays all inputs and outputs from the components in the DDL line.

Round plug connector, Series CON-RD

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



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



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

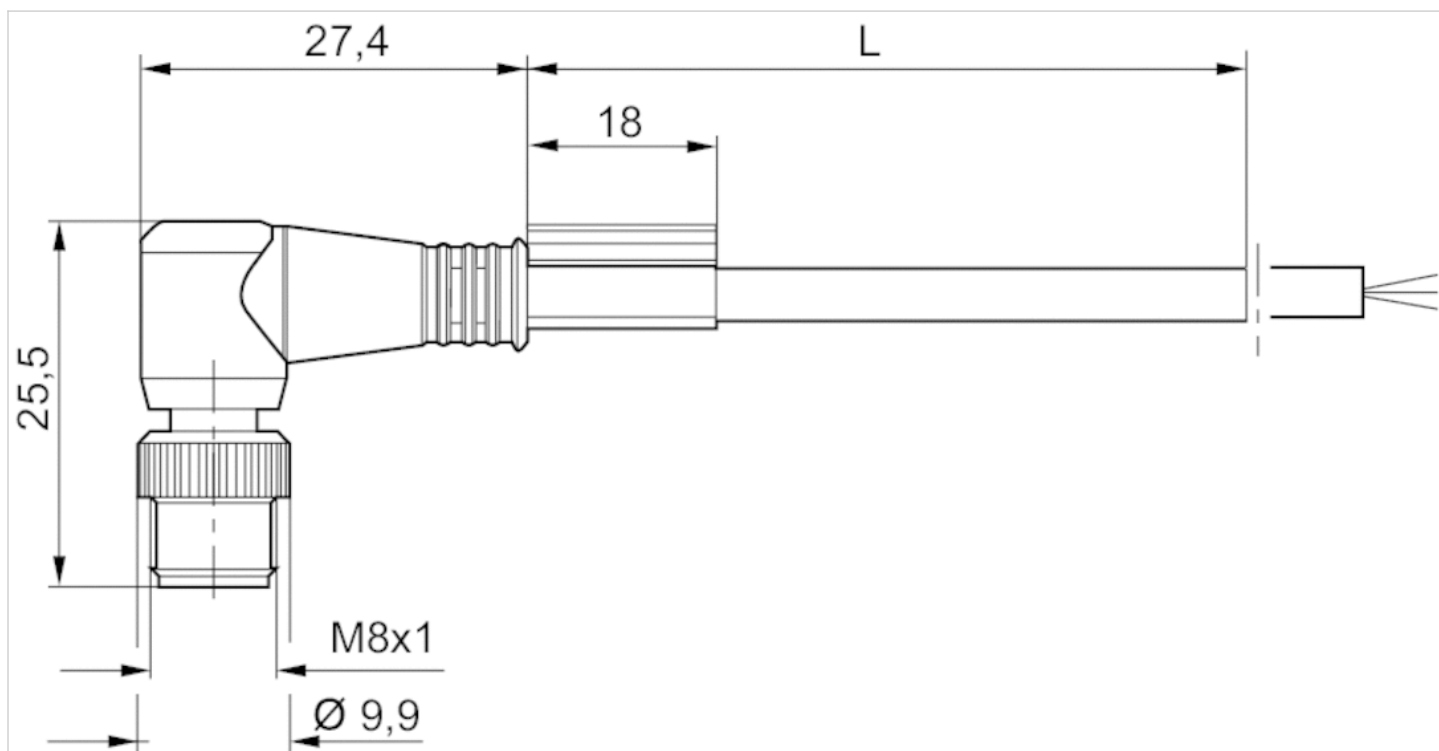
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

Dimensions

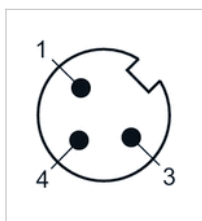
Dimensions



L = length

Pin assignments

Plug pin assignment



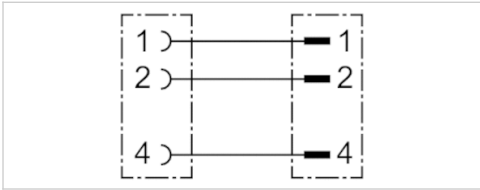
- (1) BN=brown
- (3) BU=blue
- (4) BK=black

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 voltage	48 V AC/DC
Protection class	IP68
Wire cross-section	0.25 mm ²
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.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyurethane

Dimensions

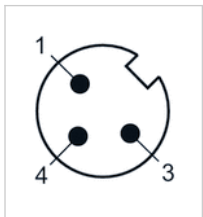
Dimensions



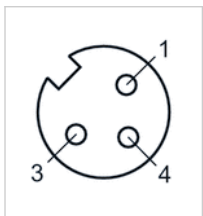
L = length

Pin assignments

Plug pin assignment



Pin assignment, socket



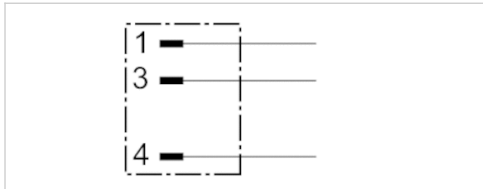
Round plug connector, Series CON-RD

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



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

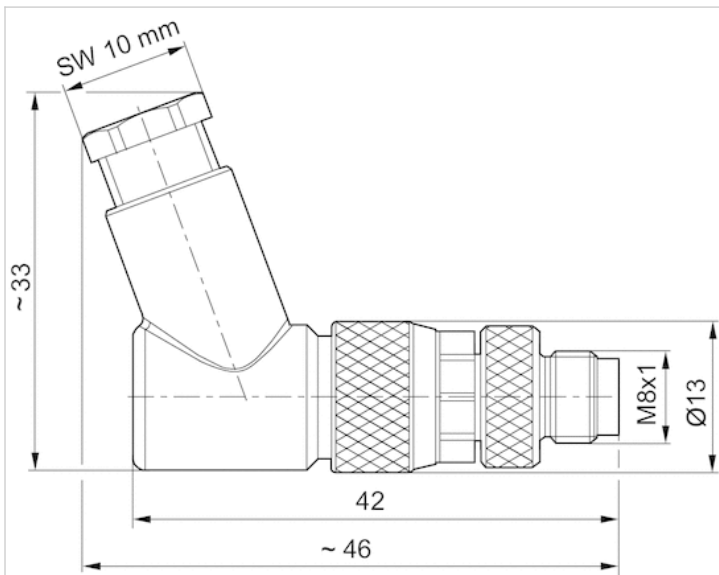
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyamide

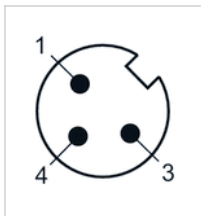
Dimensions

Dimensions



Pin assignments

Plug pin assignment

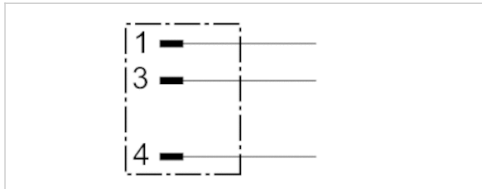


Round plug connector, Series CON-RD

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



Connection type	Screws
Ambient temperature min./max.	-40 ... 85 °C
Operational voltage	48 V AC/DC
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

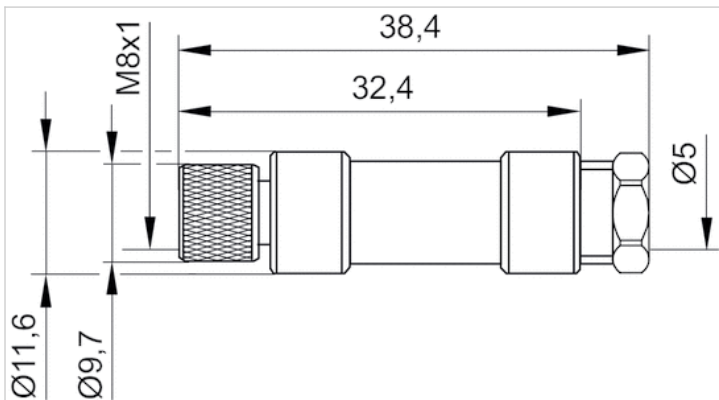
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyamide

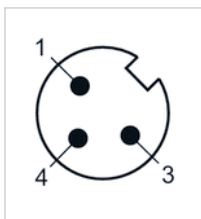
Dimensions

Dimensions



Pin assignments

Plug pin assignment

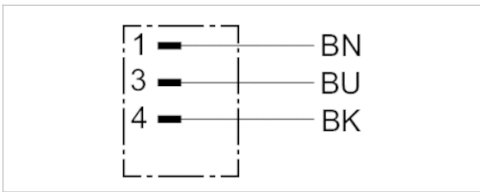


Round plug connector, Series CON-RD

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



Ambient temperature min./max.	-25 ... 80 °C
Operational voltage	30 V AC/DC
Protection class	IP67
Wire cross-section	0.25 mm ²
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

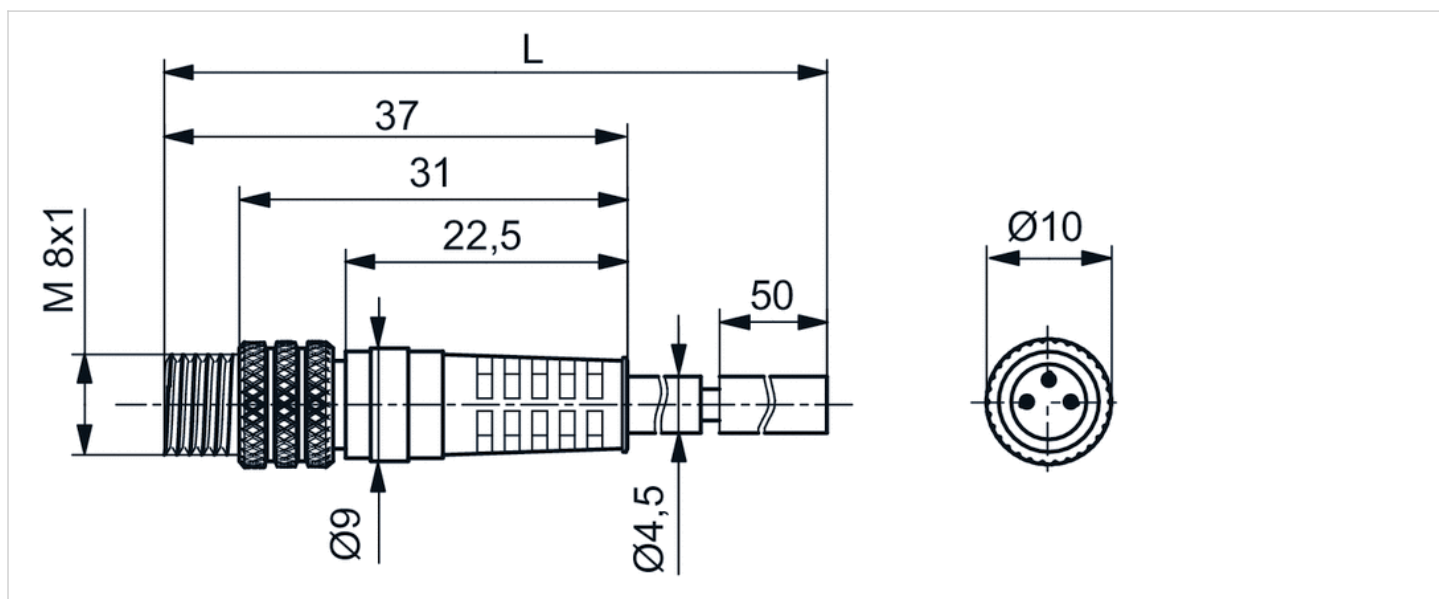
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Cable sheath	Polyvinyl chloride

Dimensions

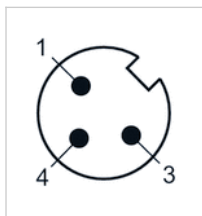
Dimensions



L = length

Pin assignments

Plug pin assignment



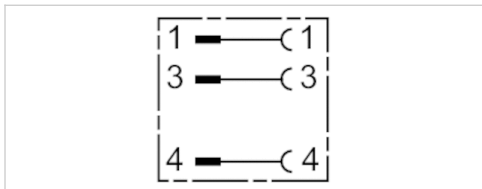
- (1) BN=brown
- (3) BU=blue
- (4) BK=black

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 voltage	48 V AC/DC
Protection class	IP67
Weight	0.013 kg



Technical data

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

Technical information

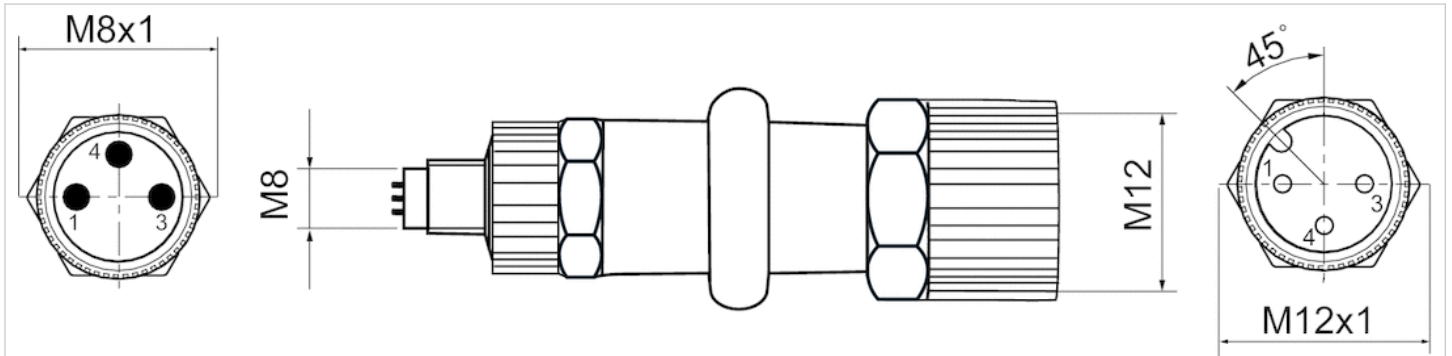
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane

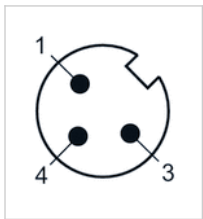
Dimensions

Dimensions

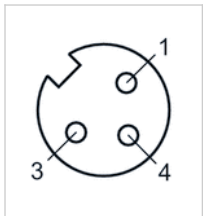


Pin assignments

Plug pin assignment



Pin assignment, socket



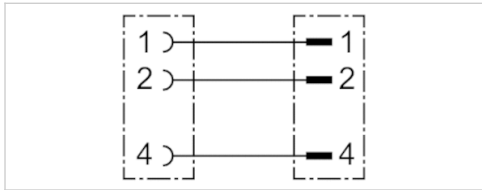
Round plug connector, Series CON-RD

- 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

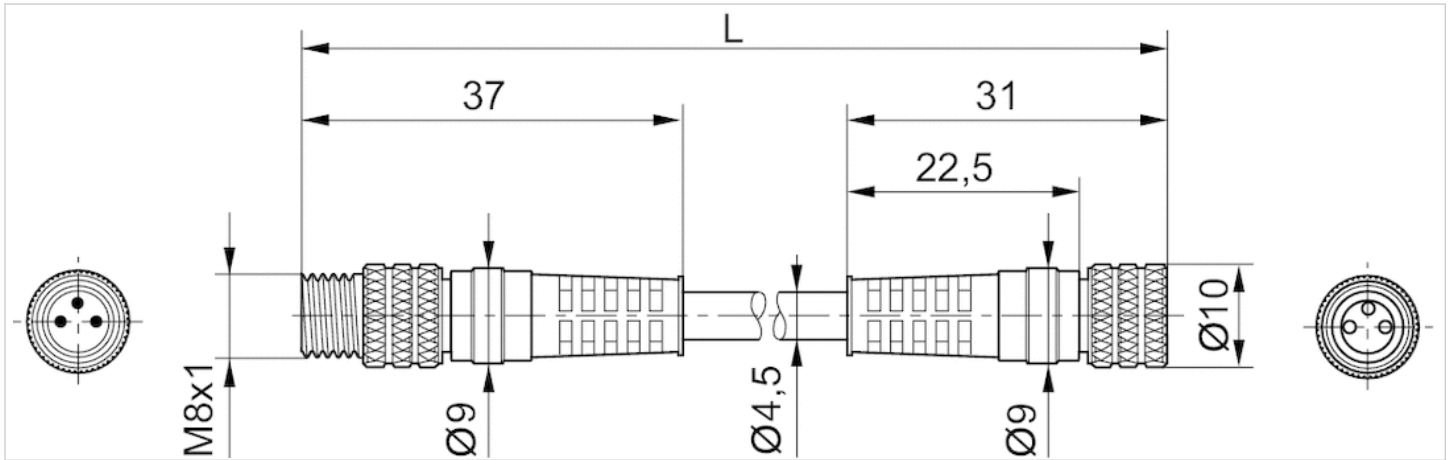
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Cable sheath	Polyvinyl chloride

Dimensions

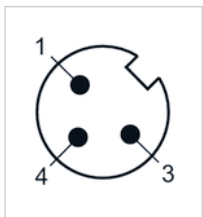
Dimensions



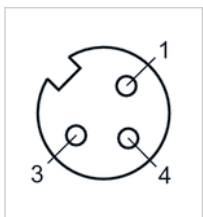
L = length

Pin assignments

Plug pin assignment



Pin assignment, socket

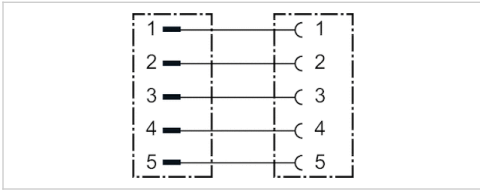


Round plug connector, Series CON-RD

- Socket M12x1 5-pin A-coded straight 180°
- Plug M12x1 5-pin A-coded straight 180°
- for DDL
- with cable
- shielded



Ambient temperature min./max.	-25 ... 80 °C
Operational voltage	30 / 36 V AC/DC
Protection class	IP67
Wire cross-section	0.34 mm ²
Weight	See table below



Technical data

Part No.	Max. current	Number of wires	Bending radius min.	Cable-Ø	Cable length	Weight
8946054662	4 A	5	45 mm	6 mm	0.3 m	0.051 kg
8946054672	4 A	5	45 mm	6 mm	0.5 m	0.051 kg
8946054682	4 A	5	45 mm	6 mm	1 m	0.088 kg
8946054692	4 A	5	45 mm	6 mm	2 m	0.139 kg
8946054702	4 A	5	45 mm	6 mm	5 m	0.289 kg
8946054712	4 A	5	45 mm	6 mm	10 m	0.536 kg

Technical information

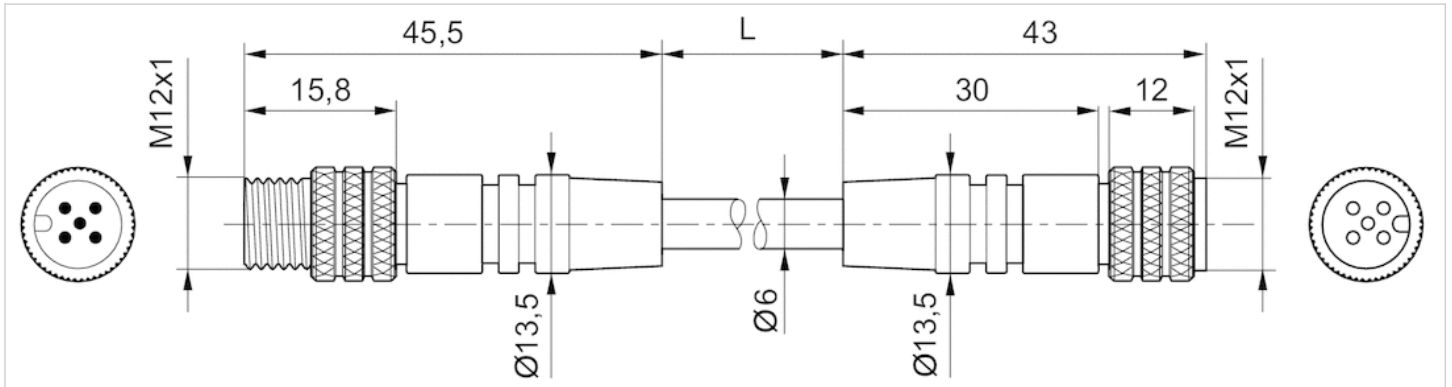
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyurethane
Seals	Fluorocaoutchouc
Cable sheath	Polyurethane

Dimensions

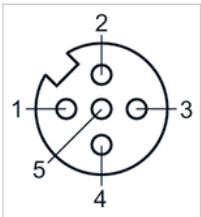
Dimensions



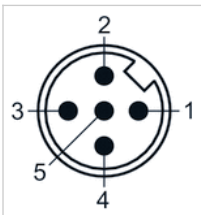
L = cable length

Pin assignments

Pin assignment, socket



Plug pin assignment

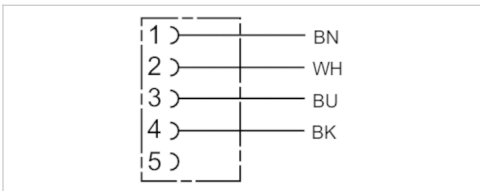


Round plug connector, Series CON-RD

- Socket M12x1 5-pin A-coded angled 90°
- open cable ends
- for DeviceNet
- with cable
- unshielded



Ambient temperature min./max.	-40 ... 85 °C
Operational voltage	48 V AC/DC
Protection class	IP65
Wire cross-section	0.34 mm ²
Weight	See table below



Technical data

Part No.	Max. current	Number of wires	Cable-Ø	Cable length	Weight
1834484259	4 A	4	5.2 mm	3 m	0.126 kg
1834484260	4 A	4	5.2 mm	5 m	0.195 kg
1834484261	4 A	4	5.2 mm	10 m	0.38 kg

Technical information

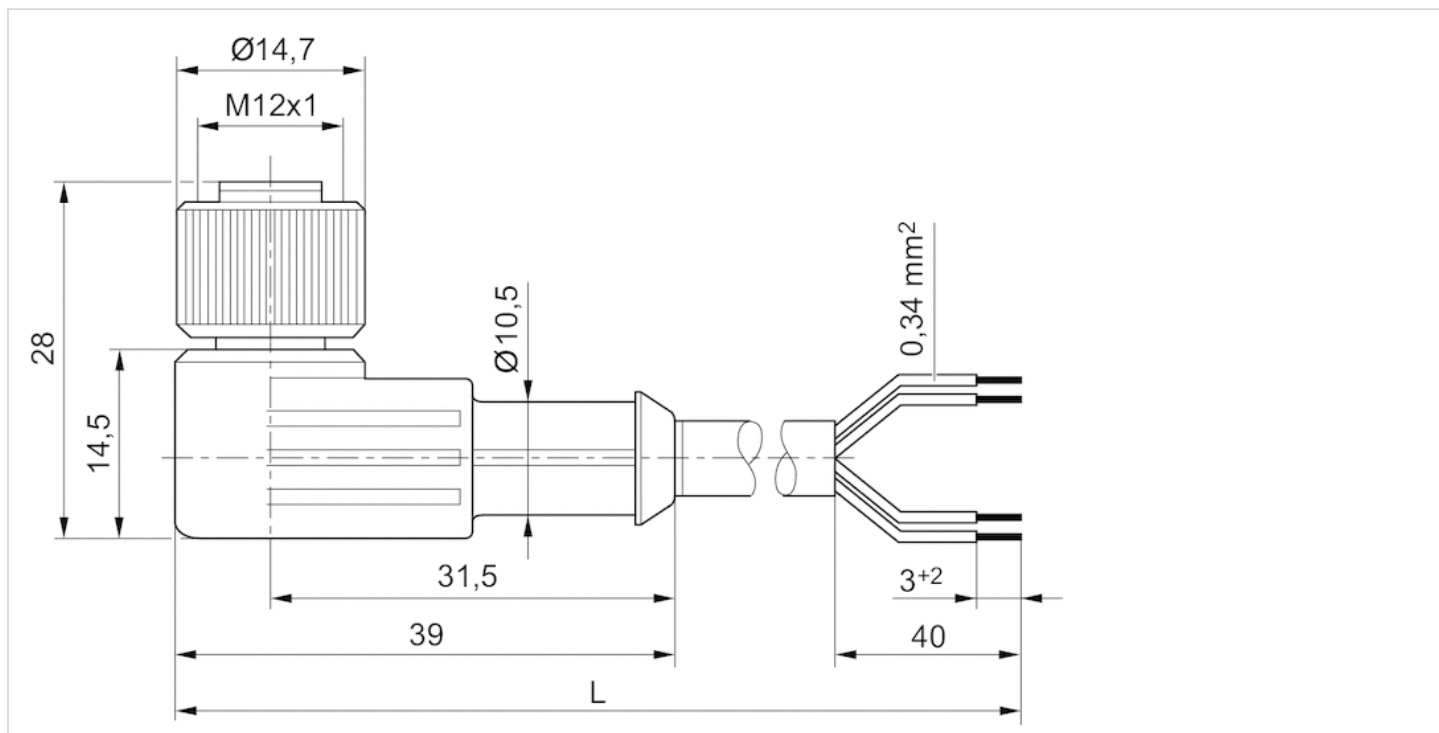
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Cable sheath	Polyurethane

Dimensions

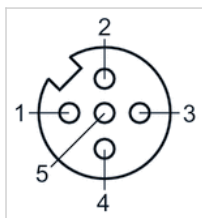
Dimensions



L = length

Pin assignments

Pin assignment, socket



- (1) BN=brown
- (2) WH=white
- (3) BU=blue
- (4) BK=black
- (5) not assigned

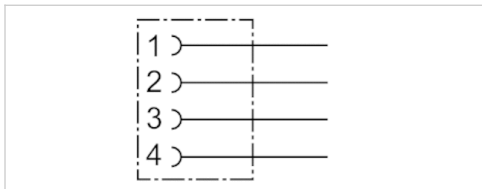
Round plug connector, Series CON-RD

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



Connection type	Screws
Ambient temperature min./max.	-25 ... 90 °C
Operational voltage	48 V AC/DC
Protection class	IP67
Weight	0.029 kg

The delivered product may vary from that in the illustration.



Technical data

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

Technical information

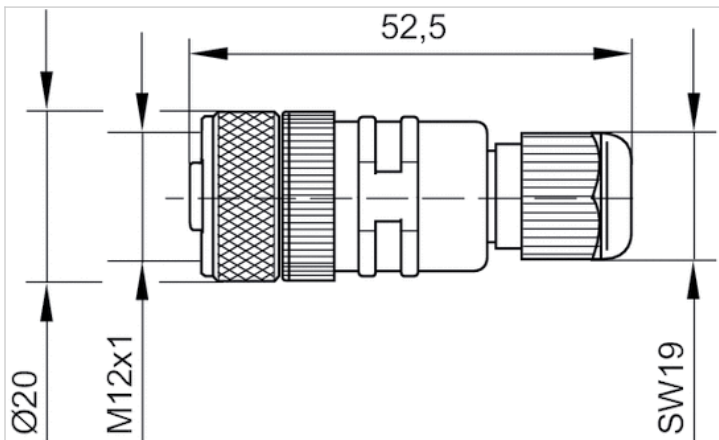
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polybutyleneterephthalate
Seals	Fluorocarbon caoutchouc

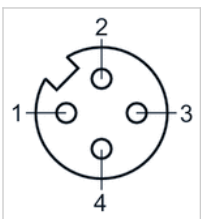
Dimensions

Dimensions



Pin assignments

Pin assignment, socket



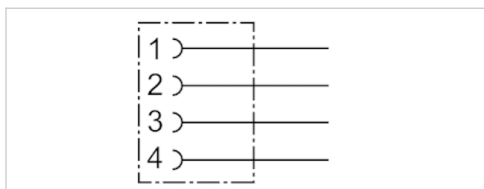
Round plug connector, Series CON-RD

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

- unshielded



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



Technical data

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

Technical information

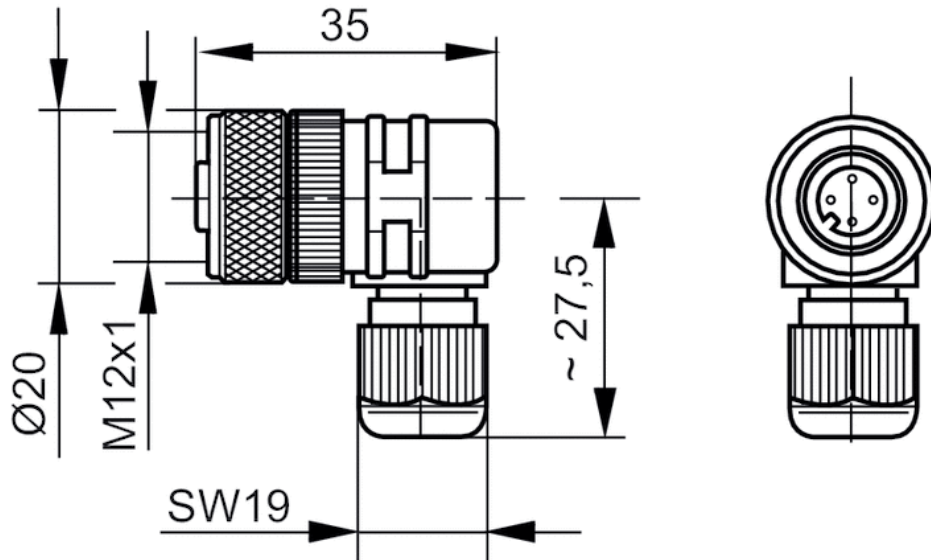
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polybutyleneterephthalate
Seals	Fluorocarbon caoutchouc

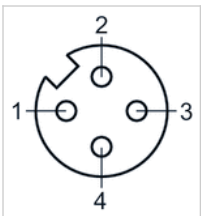
Dimensions

Dimensions



Pin assignments

Pin assignment, socket

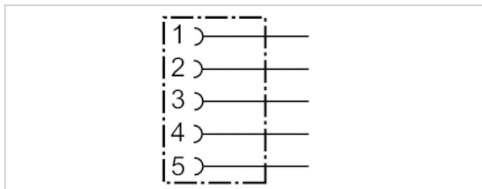


Round plug connector, Series CON-RD

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



Connection type	Screws
Ambient temperature min./max.	-40 ... 85 °C
Operational voltage	48 V AC/DC
Protection class	IP67
Weight	0.016 kg



Technical data

Part No.	Max. current	suitable cable-Ø min./max
4407230020	4 A	4 mm

Technical information

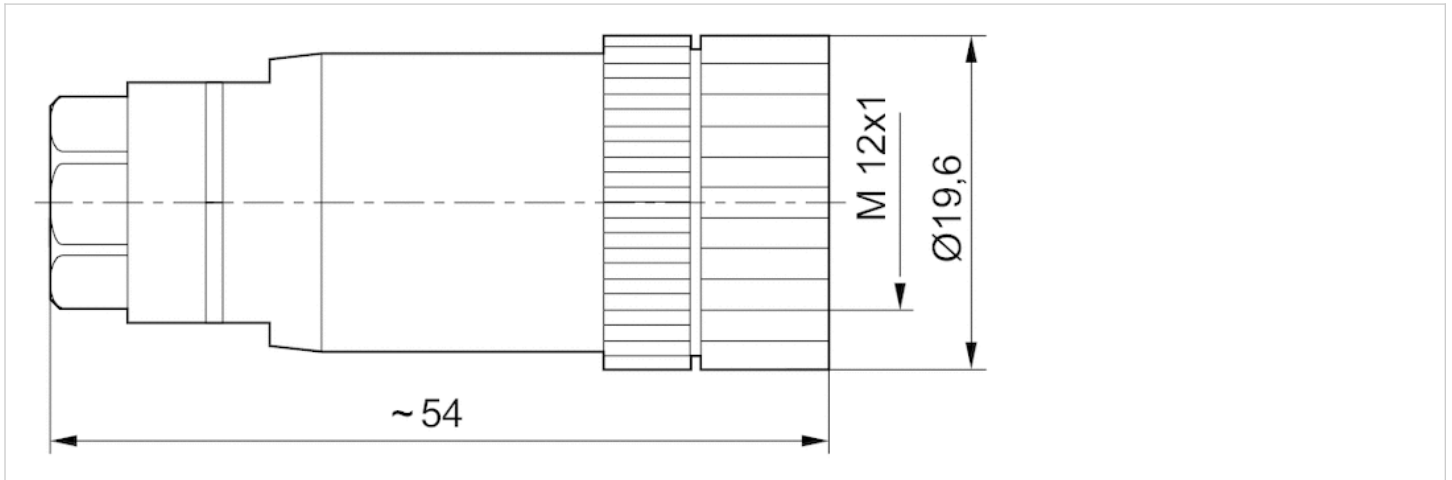
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Polyamide

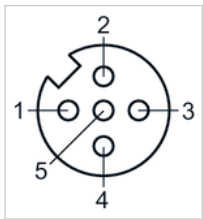
Dimensions

Dimensions



Pin assignments

Pin assignment, socket

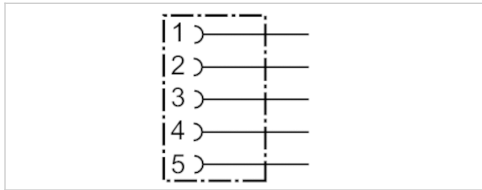


Round plug connector, Series CON-RD

- 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 voltage	48 V AC/DC
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

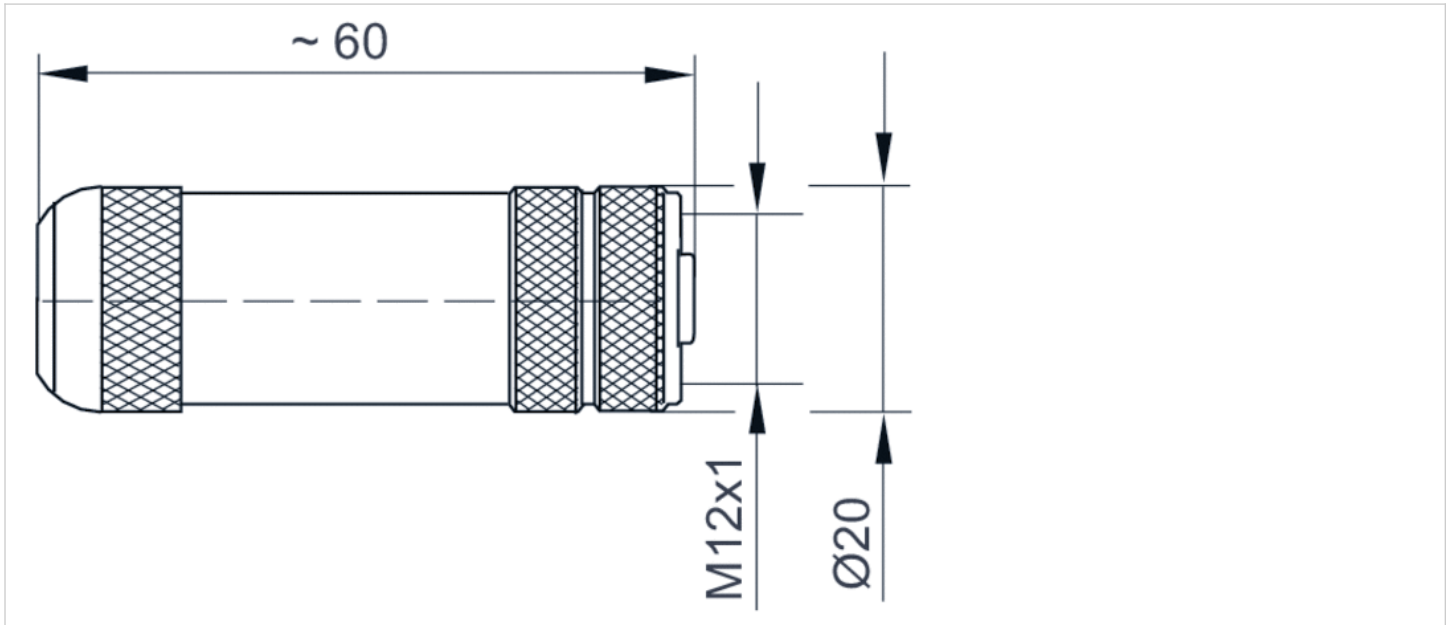
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Brass, nickel-plated
Seals	Fluorocarbon caoutchouc

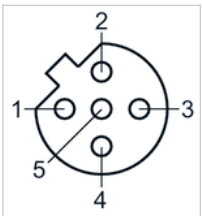
Dimensions

Dimensions



Pin assignments

Pin assignment, socket

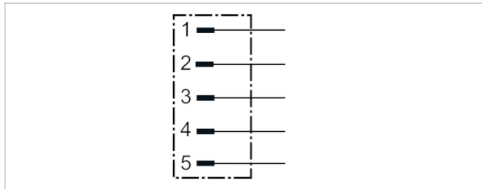


Data final plug, Series CON-RD

- 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

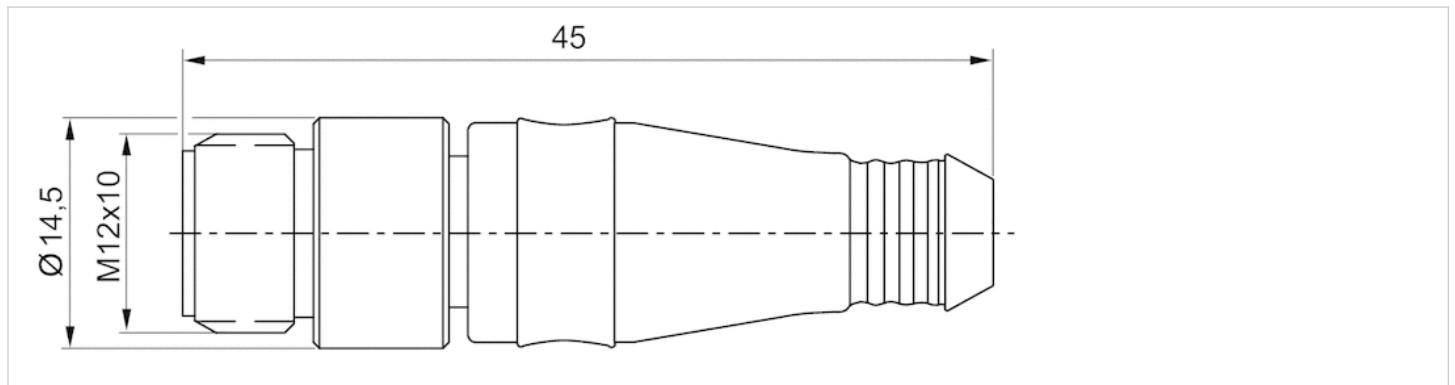
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Thermoplastic elastomer

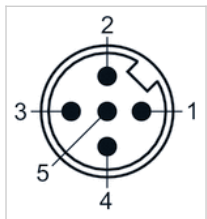
Dimensions

Dimensions



Pin assignments

Plug pin assignment

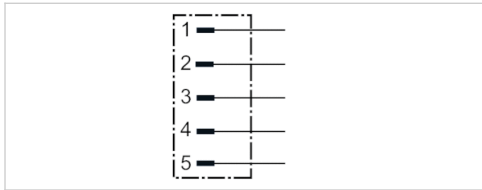


Round plug connector, Series CON-RD

- 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 voltage	48 V AC/DC
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

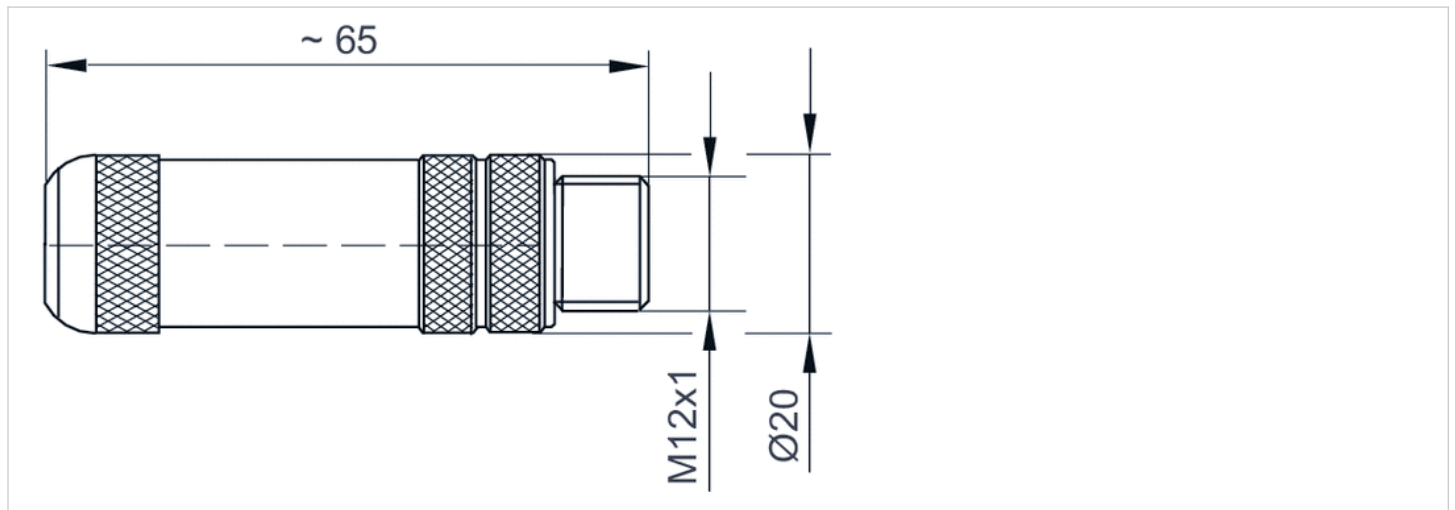
The specified protection class is only valid in assembled and tested state.

Technical information

Material	
Housing	Brass, nickel-plated
Seals	Fluorocarbon caoutchouc

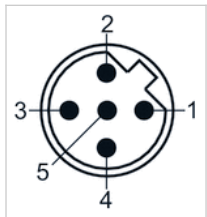
Dimensions

Dimensions



Pin assignments

Plug pin assignment



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

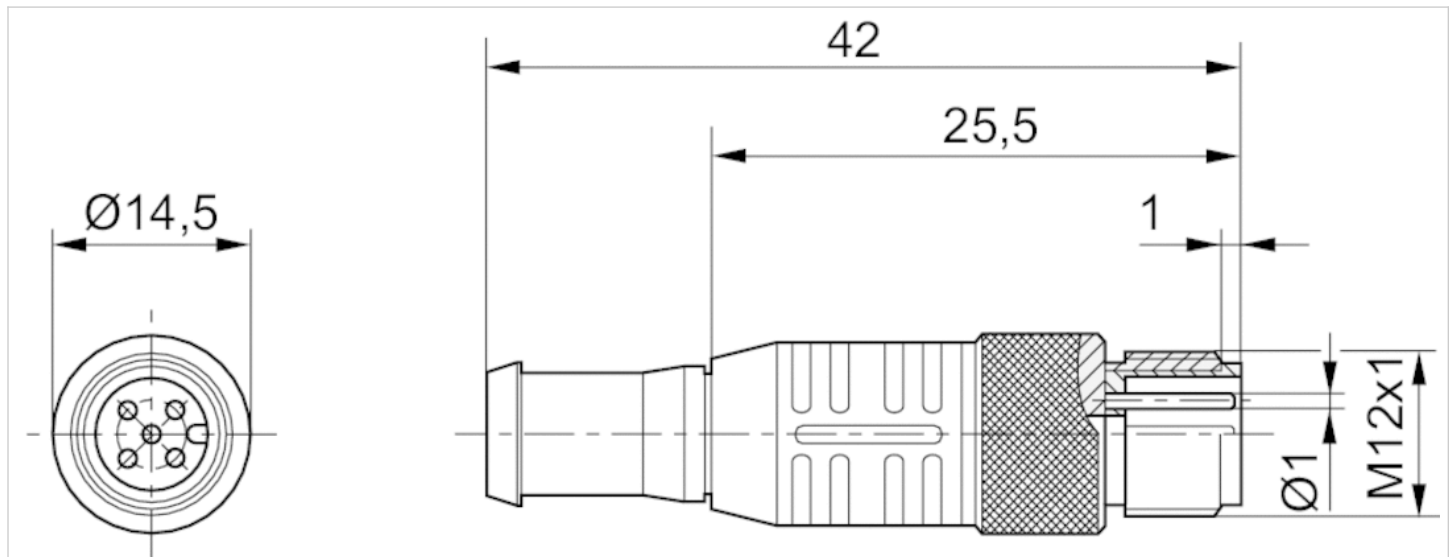
The specified protection class is only valid in assembled and tested state.
 PROFIBUS DP bus termination plug

Technical information

Material	
Housing	Thermoplastic elastomer

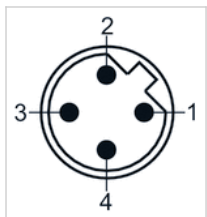
Dimensions

Dimensions



Pin assignments

Plug pin assignment



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



Weight

0.141 kg

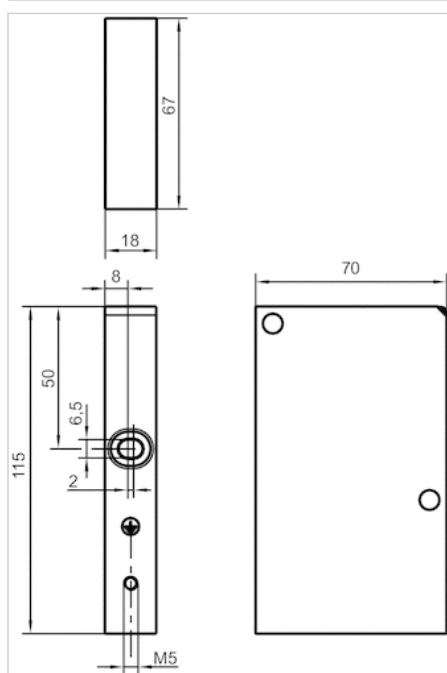
Technical data

Part No.	Type
R412003490	End plate left

Includes screws and seals.

Dimensions

Dimensions



Base plate

- Stand-alone bus coupler
- for DDL



Ambient temperature min./max. 5 ... 50 °C
 Weight 0.14 kg

Technical data

Part No.
R412008542

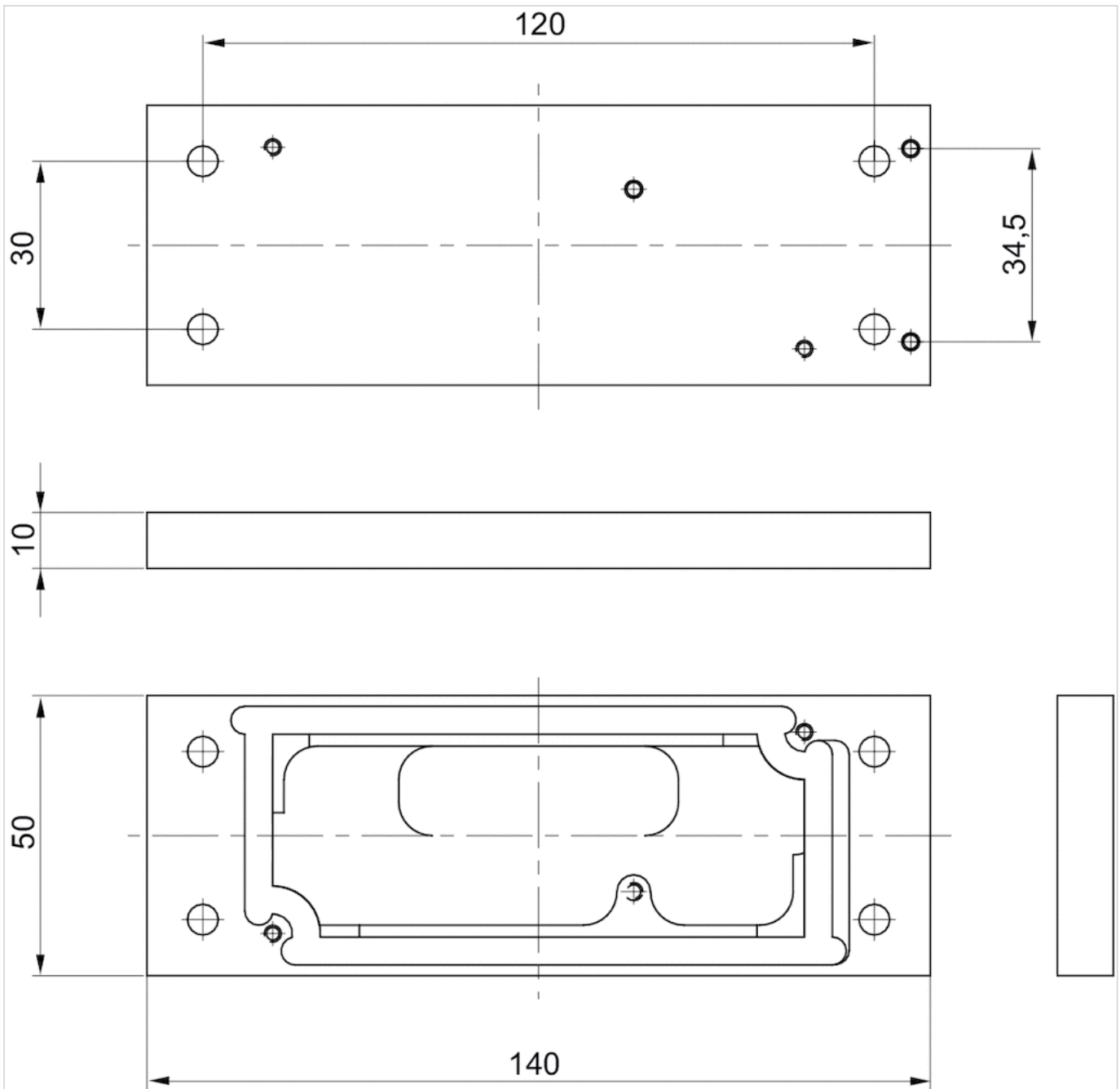
scope of delivery incl. seal

Technical information

Material	
Base plate	Aluminum

Dimensions

Dimensions



Protective cap, series CON-RD

- M8x1



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

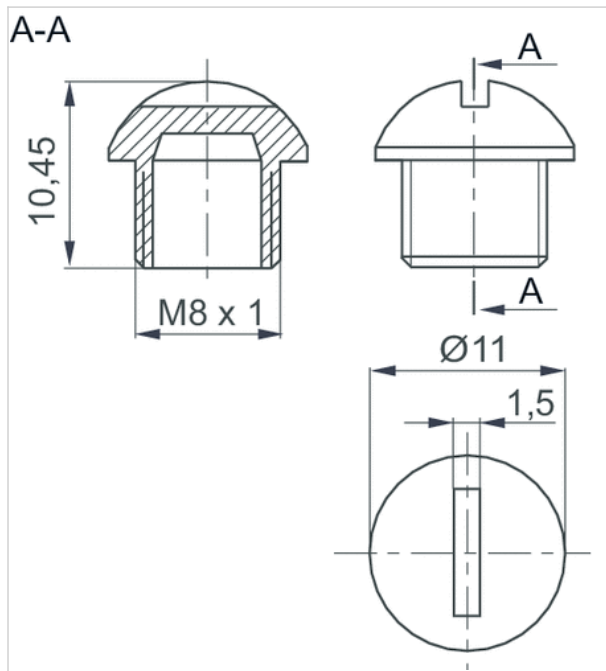
Technical data

Part No.	Type	Scope of delivery
R412003493	M8x1	25

Technical information

Material	
Housing	Polyamide

Dimensions



Protective cap, series CON-RD

- M12x1



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

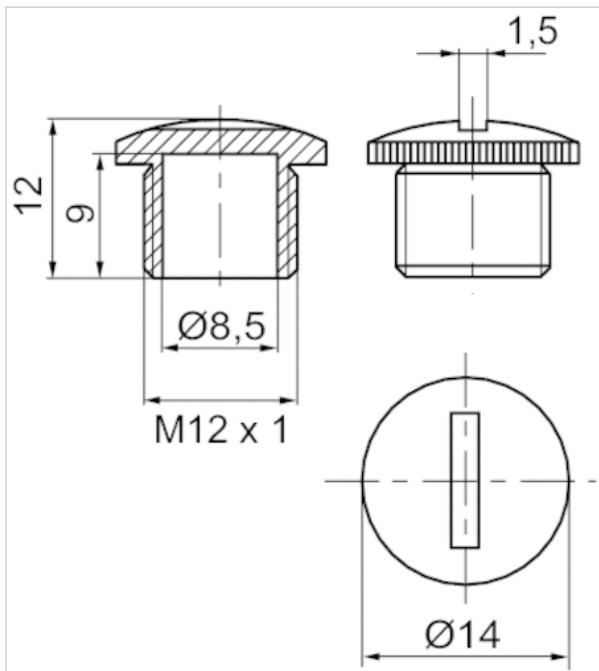
Technical data

Part No.	Type	Delivery unit
1823312001	M12x1	50 piece

Technical information

Material	
Housing	Polyamide

Dimensions



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