


22260795	DATA SHEET	
Valid from: 24.01.2024	AB-DN-M12MS-(L*)PUR-M12FS	

Product description

- Bus system cable, 5-pol, shielded, PUR halogen free, purple
- For DeviceNet/CANopen
- Straight M12-plug fast connect on straight M12-jack fast connect



General characteristics

Fieldbus	Can Bus DeviceNet
Number of pins	5
Ambient temperature	-25 °C to +90 °C (-13°F to 194°F) (plug / jack) -40 °C to +80 °C (-40°F to 176°F) (cable, fixed installation) -30 °C to +70 °C (-22°F to 158°F) (cable, movable installation) -20 bis +60 °C (-4°F bis 140°F) (at installation) -20 bis +60 °C (-4°F bis 140°F) (cable, drag chain use)
Degree of protection	IP65 / IP67
Stripping length of the free cable end	50 mm
Coding	A - Standard
Tightening torque	0,4 Nm (M12-connector)
Plugging cycles	≥ 100

Variation

Article number	Description	Length [m]	Configuration
22260795	AB-DN-M12MS-0,3PUR-M12FS	0,3	straight - straight
22260796	AB-DN-M12MS-1,0PUR-M12FS	1	straight - straight
22260797	AB-DN-M12MS-2,0PUR-M12FS	2	straight - straight
22260798	AB-DN-M12MS-5,0PUR-M12FS	5	straight - straight
22260799	AB-DN-M12MS-10,0PUR-M12FS	10	straight - straight

Additional note

Data sheet also valid for variant lengths. Other lengths on request.


Electrical properties

Rated voltage	60 V DC / 48 V AC
Rated current	4 A
Overvoltage category	II
Pollution degree	3
Characteristic impedance, line	120 Ω ± 10 % (bei 1 MHz)

Connector pin assignment

Pol = color of conductor (Signal) = Pol (optional)	1 (plug) = SR (shield) 2 (plug) = RD (V+) 3 (plug) = BK (V-) 4 (plug) = WH (CAN_H) 5 (plug) = BU (CAN_L)
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Mechanical properties


Plug, jack

Inflammability class in accordance with UL 94	HB
Contact, material	CuSn
Contact carrier, material	TPU GF
Contact surface, material	Ni/Au
Knurl, material	Zinc diecasting, nickel-plated
Handle, material	TPU, flame retardant, self-extinguishing
Seal, material	NBR

Line

Cable construction	2 x AWG24 / 19 (data line) 2 x AWG22 / 19 (power supply) 1 x AWG22 (drain wire)
Conductor construction	19 x 0,13 mm (data line) 19 x 0,15 mm (power supply)
Conductor cross-section	0,25 mm ² (data line) 0,34 mm ² (power supply) 0,34 mm ² (drain wire)
Conductor diameter including isolation	1,95 mm ± 0,05 mm (data line) 1,4 mm ± 0,05 mm (power supply)
Cable outer diameter	6,7 mm ± 0,3 mm
Insulation color	Red-black, blue-white
Sheath color	purple, RAL 4001
Shielding	braiding of tinned copper wires
Number of bending cycles	5.000.000
Bending radius	70 mm
Traveling distance	4,5 m
Traveling speed	3 m/s
Acceleration	3 m/s ²
Cable weight	90 kg/km
Outer coating, material	PUR
Wire insulation, material	foamed PE (data line) PE (power supply)
Insulation resistance	≥ 5 GΩ*km (data line) ≥ 5 GΩ*km (power supply)
Conductor resistance	≤ 181,80 Ω/km (data line) ≤ 114,80 Ω/km (power supply)
Flame resistance	acc. to UL 1581 Section 1060 and UL 2556 Section 9.3 (FT1) UL 1581, Section 1100 and UL 2556, Section 9.1 (HFT/FT2) IEC 60332-1-2 acc. to ISO 6722-1 5.22 (UN ECE-R 118.01) acc. to DIN VDE 0472 Part 815
Halogen-free	IEC 60754-1

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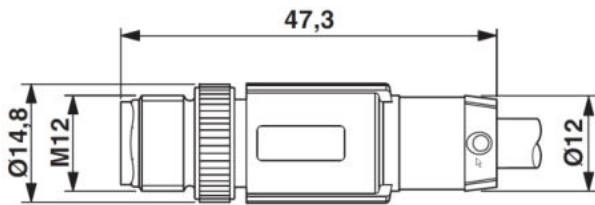
Standards/Approvals

Product standard, M12 connector

IEC 61076-2-101

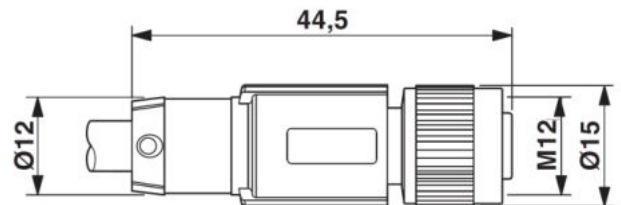
Technical drawing

Dimensional drawing



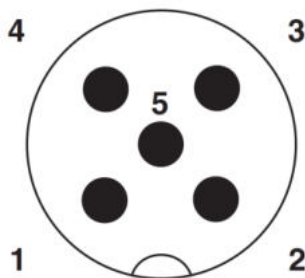
Plug M12 x 1, straight, shielded

Dimensional drawing



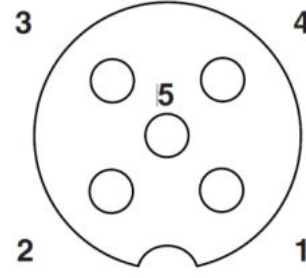
Jack M12 x 1, straight, shielded

Drawing



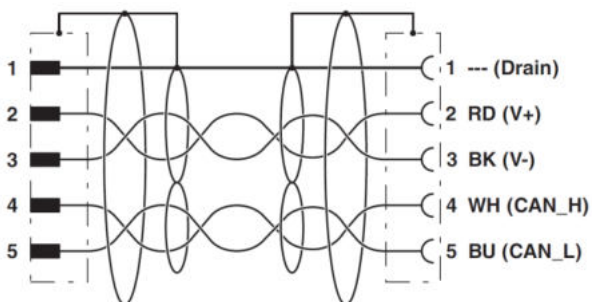
Pin assignment M12-plug, 5-pol, A-coding

Drawing



Pin assignment M12-jack, 5-pol, A-coding

Circuit diagram



Pin assignment between M12-plug and M12-jack

Wire cross section



Application range

Automation, industrial machinery and plant engineering

Note

Photographs are not true to scale and do not represent detailed images of the respective products.

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