

## SAC-5P-M12MS/ 2,0-920/M12FS

Order No.: 1507557



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=1507557>

Bus system cable, 5-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12, A-coded, on Socket, straight M12, A-coded, Cable length: 2 m



### Product notes

WEEE/RoHS-compliant since:  
11/17/2006



Commercial data	
GTIN (EAN)	4017918900342
sales group	D117
Pack	1 pcs.
Customs tariff	85444290
Weight/Piece	0.1536 KG
Catalog page information	Page 279 (PC-2009)

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### Technical data

#### General data

Rated current at 40°C	4 A
Rated voltage	60 V
Number of positions	5
Volume resistance	≤ 5 mΩ

Insulation resistance	≥ 100 MΩ
Length of cable	2 m
Ambient temperature (operation)	-25 °C ... 90 °C (Male connector / female connector)

#### General characteristics

Coding	A - standard
Surge voltage category	II
Pollution degree	3
Degree of protection	IP65/IP67/IP69K
Insertion/withdrawal cycles	≥ 100
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, (nickel-plated)
Sealing material	NBR
Status display	No

#### Conductor data

Cable type	CAN Bus/DeviceNet
Cable type (abbreviation)	920
Conductor cross section	0.2 mm <sup>2</sup> (signal line)
	0.32 mm <sup>2</sup> (Power supply)
	0.32 mm <sup>2</sup> (Drain wire)
AWG signal line	24
Conductor structure signal line	19x 0.12 mm
AWG power supply	22
Conductor structure, voltage supply	19x 0.15 mm
Core diameter including insulation	2.05 mm ±0.1 mm (signal line)
	1.4 mm ±0.05 mm (Power supply)
External cable diameter	6.70 mm
Wire colors	Red-black, blue-white
External sheath, color	Violet, RAL 4001
Insulation resistance	≥ 5 GΩ*km (signal line)
	≥ 100 MΩ*km (Power supply)

Conductor resistance	≤ 78.4 Ω/km (signal line)
	≥ 51.6 Ω/km (Power supply)
Working capacitance	39.3 pF (Signal line, Core-Core)
	78.7 pF (Signal line, Core-Shield)
Nominal voltage, conductor	30 V (signal line)
	300 V (Power supply)
Test voltage, conductor	1500 V (signal line)
	2000 V (Power supply)
Twisted pairs	2 cores to the pair
Type of pair shielding	Aluminum-lined polyester foil
Overall twist	2 pairs around a drain wire in the center to the core
Shielding	Tinned copper braided shield
Optical shield covering	70 %
Outer sheath, material	PUR
Material conductor insulation	PE (Power supply)
	Foamed PE (signal line)
Conductor material	Tin-plated Cu litz wires
Smallest bending radius, fixed installation	67 mm
Smallest bending radius, movable installation	67 mm
Number of bending cycles	5000000
Bending radius	67 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	7 m/s <sup>2</sup>
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-20 °C ... 75 °C (cable, flexible installation)
Halogen-free	complying with IEC 60754-1/2

### Certificates / Approvals

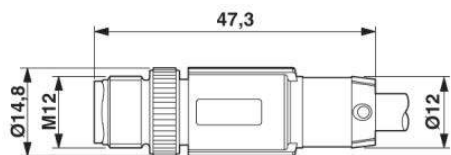


Certification

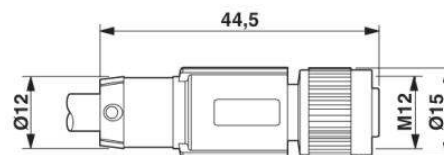
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## Diagrams/Drawings

### Dimensioned drawing

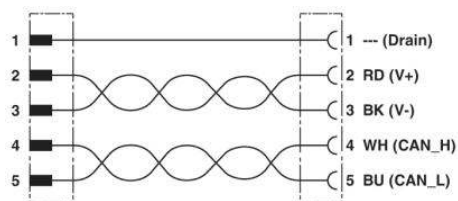


M12 x 1 male connector, straight, shielded



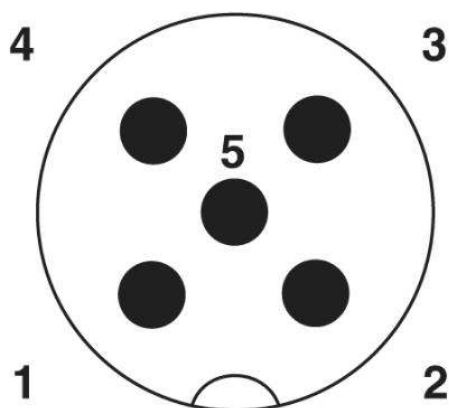
M12 x 1 female connector, straight, shielded

### Circuit diagram

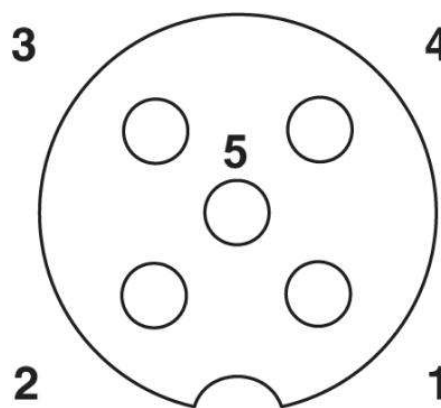


Contact assignment of the M12 connector and the M12 socket

### Schematic diagram



Pin assignment M12 male connector, 5-pos., A-coded, male side



Pin assignment M12 socket, 5-pos., A-coded, socket side view

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