

# Bus system cable - SAC-5P-MR/20,0-923/FS CAN SCO - 1419064

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Bus system cable, CANopen®, 5-position, PUR halogen-free, Gray RAL 7001, shielded, Plug angled M12-SPEEDCON, A-coded, on Socket straight M12-SPEEDCON, A-coded, Cable length: 20 m



## Key commercial data

Packing unit	0
Minimum order quantity	1
Catalog page	Page 395 (PC-2011)
GTIN	 4 046356 543255
Custom tariff number	85444290
Country of origin	GERMANY

## Technical data

### General data

Rated current at 40°C	4 A
Rated voltage	60 V
Number of positions	5
Length of cable	20 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
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

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### Technical data

#### Conductor data

Cable type	CAN Bus/DeviceNet
Cable type (abbreviation)	923
Conductor cross section	2x 0.2 mm <sup>2</sup> (signal line)
Conductor cross section	2x 0.32 mm <sup>2</sup> (Power supply)
Conductor cross section	1x 0.32 mm <sup>2</sup> (Drain wire)
AWG signal line	24
AWG power supply	22
Conductor structure signal line	19x 0.12 mm
Conductor structure, voltage supply	19x 0.15 mm
Core diameter including insulation	2.05 mm ±0.1 mm (signal line)
Core diameter including insulation	1.4 mm ±0.05 mm (Power supply)
Wire colors	Red-black, blue-white
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 %
External sheath, color	Gray RAL 7001
External cable diameter	6.70 mm
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>
Outer sheath, material	PUR
Material conductor insulation	PE (Power supply)
Material conductor insulation	Foamed PE (signal line)
Conductor material	Tin-plated Cu litz wires
Insulation resistance	≥ 5 GΩ*km (signal line)
Insulation resistance	≥ 100 MΩ*km (Power supply)
Conductor resistance	≤ 78.4 Ω/km (signal line)
Conductor resistance	≥ 51.6 Ω/km (Power supply)
Working capacitance	39.3 pF (Signal line, Core-Core)
Working capacitance	78.7 pF (Signal line, Core-Shield)
Nominal voltage, conductor	30 V (signal line)
Nominal voltage, conductor	300 V (Power supply)
Test voltage, conductor	1500 V (signal line)
Test voltage, conductor	2000 V (Power supply)
Halogen-free	complying with IEC 60754-1/2
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)

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## Technical data

### Conductor data

Ambient temperature (operation)	-20 °C ... 75 °C (cable, flexible installation)
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## Classifications

### eclass

eCl@ss 4.0	27060307
eCl@ss 4.1	27060307
eCl@ss 5.0	27061801
eCl@ss 5.1	27060307
eCl@ss 6.0	27279218
eCl@ss 7.0	27279218

### etim

ETIM 2.0	EC000830
ETIM 3.0	EC000830
ETIM 4.0	EC001855

### unspsc

UNSPSC 6.01	26121616
UNSPSC 7.0901	26121616
UNSPSC 11	26121604
UNSPSC 12.01	26121616
UNSPSC 13.2	26121616

## Approvals

### Approvals

Approvals

GOST

Ex Approvals

Approvals submitted

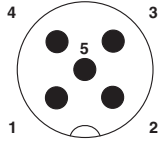
### Approval details

GOST 
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# Bus system cable - SAC-5P-MR/20,0-923/FS CAN SCO - 1419064

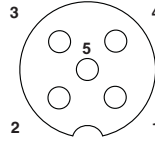
## Drawings

Schematic diagram



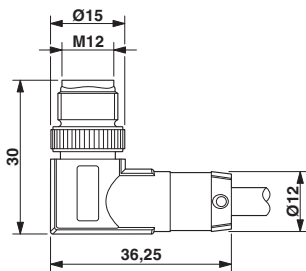
Pin assignment M12 male connector, 5-pos., A-coded, male side

Schematic diagram



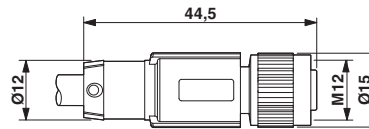
Pin assignment M12 socket, 5-pos., A-coded, socket side view

Dimensioned drawing



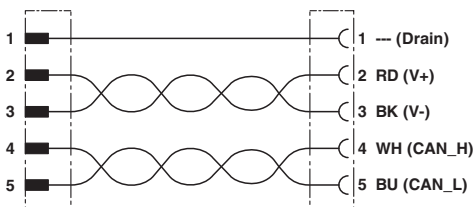
M12 x 1 male connector, angled

Dimensioned drawing



M12 x 1 female connector, straight

Circuit diagram



Contact assignment of the M12 plug and the M12 socket