

Bus system cable - SAC-5P-MSB/ 5,0-900/FSB SCO - 1577451

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Bus system cable, INTERBUS, 5-position, PUR halogen-free, may green RAL 6017, shielded, Plug straight M12 SPEEDCON, coding: B, on Socket straight M12 SPEEDCON, coding: B, cable length: 5 m



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	25 pc
Weight per Piece (excluding packing)	222.220 g
Custom tariff number	85444290
Country of origin	Poland

Technical data

Dimensions

Length of cable	5 m
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Ambient conditions

Degree of protection	IP65
	IP67
	IP68

General

Rated current at 40°C	4 A
Rated voltage	60 V
Number of positions	5
Insulation resistance	≥ 100 MΩ
Coding	B - inverse
Signal type/category	INTERBUS
Status display	No

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Technical data

General

Overvoltage category	II
Degree of pollution	3

Material

Flammability rating according to UL 94	V0
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR

Standards and Regulations

Flammability rating according to UL 94	V0
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Cable

Cable type	INTERBUS
Cable type (abbreviation)	900
Cable structure	3 x 2 x 0.22 mm ²
Conductor cross section	3x 2x 0.22 mm ²
AWG signal line	24
Conductor structure signal line	32x 0.10 mm
Wire colors	Green-yellow, white-brown, gray-pink
Twisted pairs	2 cores to the pair
Overall twist	3 pairs to the core
Shielding	Braided copper wires
External sheath, color	may green RAL 6017
External cable diameter D	8 mm
Minimum bending radius, fixed installation	7.5 x D
Minimum bending radius, flexible installation	15 x D
Number of bending cycles	5000000
Bending radius	120 mm
Traversing path	10 m
Traversing rate	1.6 m/s
Acceleration	3.2 m/s ²
Cable weight	70 kg/km
Outer sheath, material	PUR
Material conductor insulation	PE
Conductor material	Bare Cu litz wires

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Technical data

Cable

Insulation resistance	$\geq 5 \text{ G}\Omega \cdot \text{km}$
Loop resistance	$\leq 159.80 \text{ }\Omega/\text{km}$
Cable capacity	$\leq 60 \text{ nF/km (At 800 Hz)}$
Wave impedance	$120 \text{ }\Omega \pm 20\% \text{ (at 64 kHz)}$
	$100 \text{ }\Omega \pm 15\% \text{ (with 1 MHz)}$
Near end crosstalk attenuation (NEXT)	$\geq 61 \text{ dB (at 772 kHz)}$
	$\geq 59 \text{ dB (with 1 MHz)}$
	$\geq 55 \text{ dB (at 2 MHz)}$
	$\geq 50 \text{ dB (at 4 MHz)}$
	$\geq 46 \text{ dB (at 8 MHz)}$
	$\geq 44 \text{ dB (at 10 MHz)}$
	$\geq 41 \text{ dB (at 16 MHz)}$
	$\geq 40 \text{ dB (at 20 MHz)}$
Attenuation	$\leq 15 \text{ dB/km (at 256 kHz)}$
	$\leq 24 \text{ dB/km (at 772 kHz)}$
	$\leq 27 \text{ dB/km (with 1 MHz)}$
	$\leq 52 \text{ dB/km (at 4 MHz)}$
	$\leq 84 \text{ dB/km (at 10 MHz)}$
	$\leq 112 \text{ dB/km (at 16 MHz)}$
	$\leq 119 \text{ dB/km (at 20 MHz)}$
Signal speed	0.66 c
Coupling resistance	$< 250.00 \text{ m}\Omega/\text{m (at 30 MHz)}$
Nominal voltage, cable	250 V (Peak value, not for high-power applications)
Test voltage Core/Core	1500 V _{rms}
Test voltage Core/Shield	1000 V _{rms}
Flame resistance	according to VDE 0472, Part 4, test type B
	according to IEC 60332-1
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-30 °C ... 70 °C (cable, flexible installation)

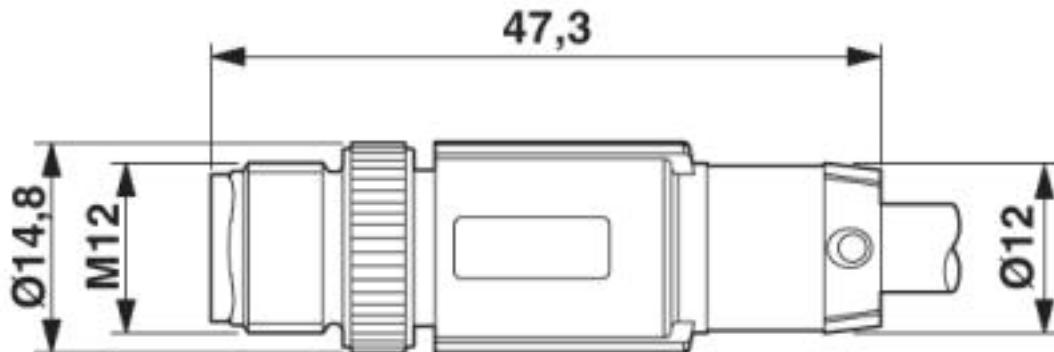
Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

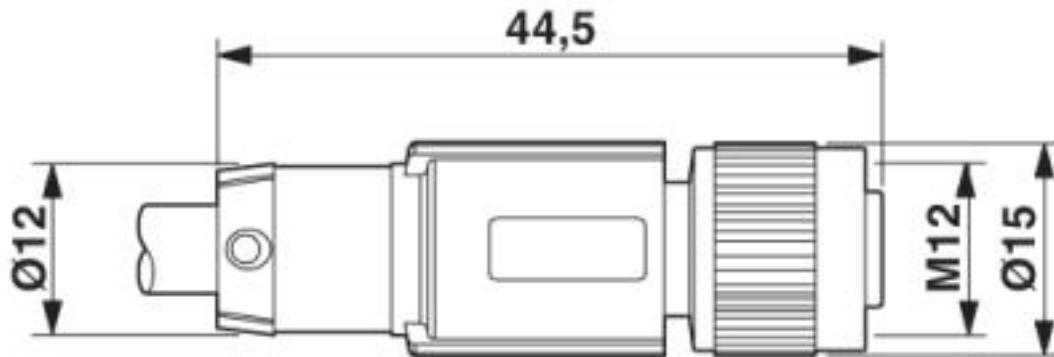
Bus system cable - SAC-5P-MSB/ 5,0-900/FSB SCO - 1577451

Dimensional drawing



Plug, M12 x 1, straight, shielded

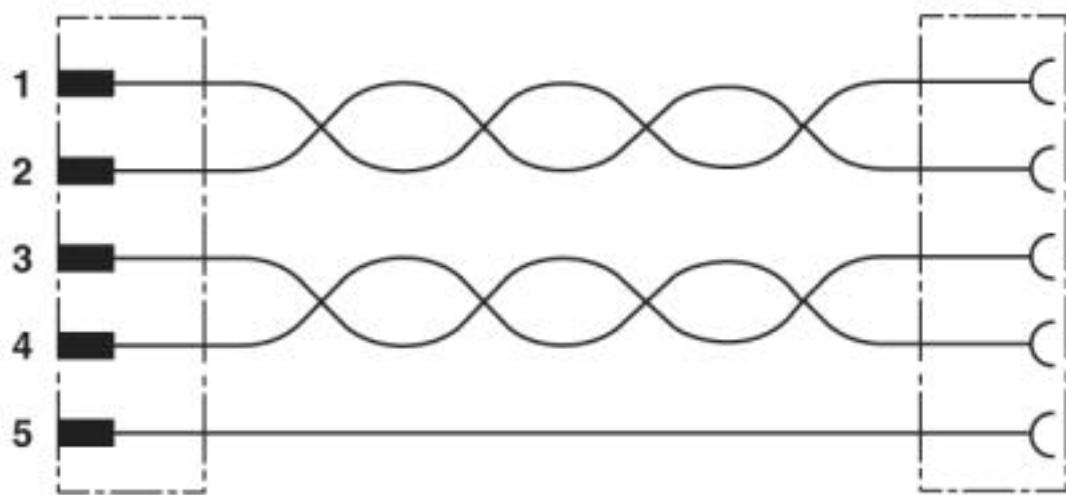
Dimensional drawing



M12 x 1 socket, straight, shielded

Bus system cable - SAC-5P-MSB/ 5,0-900/FSB SCO - 1577451

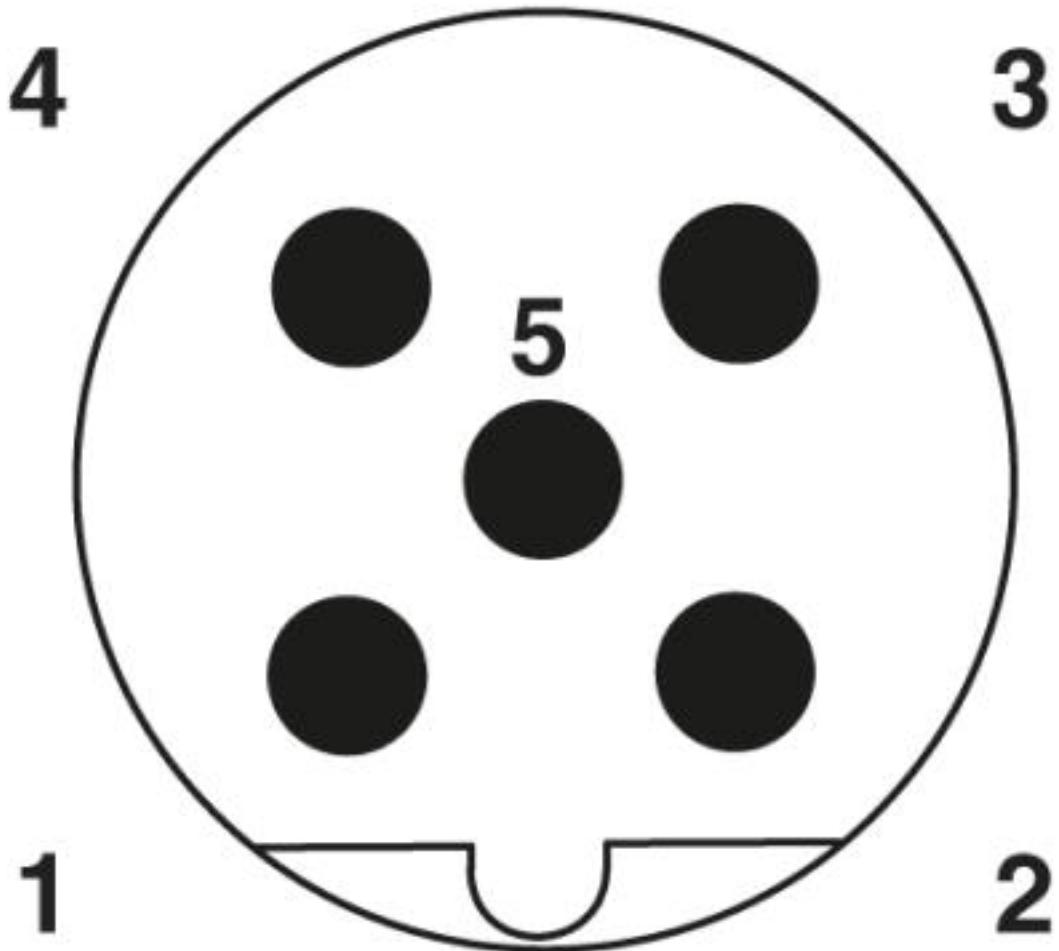
Circuit diagram



Contact assignment of the M12 connector and the M12 socket

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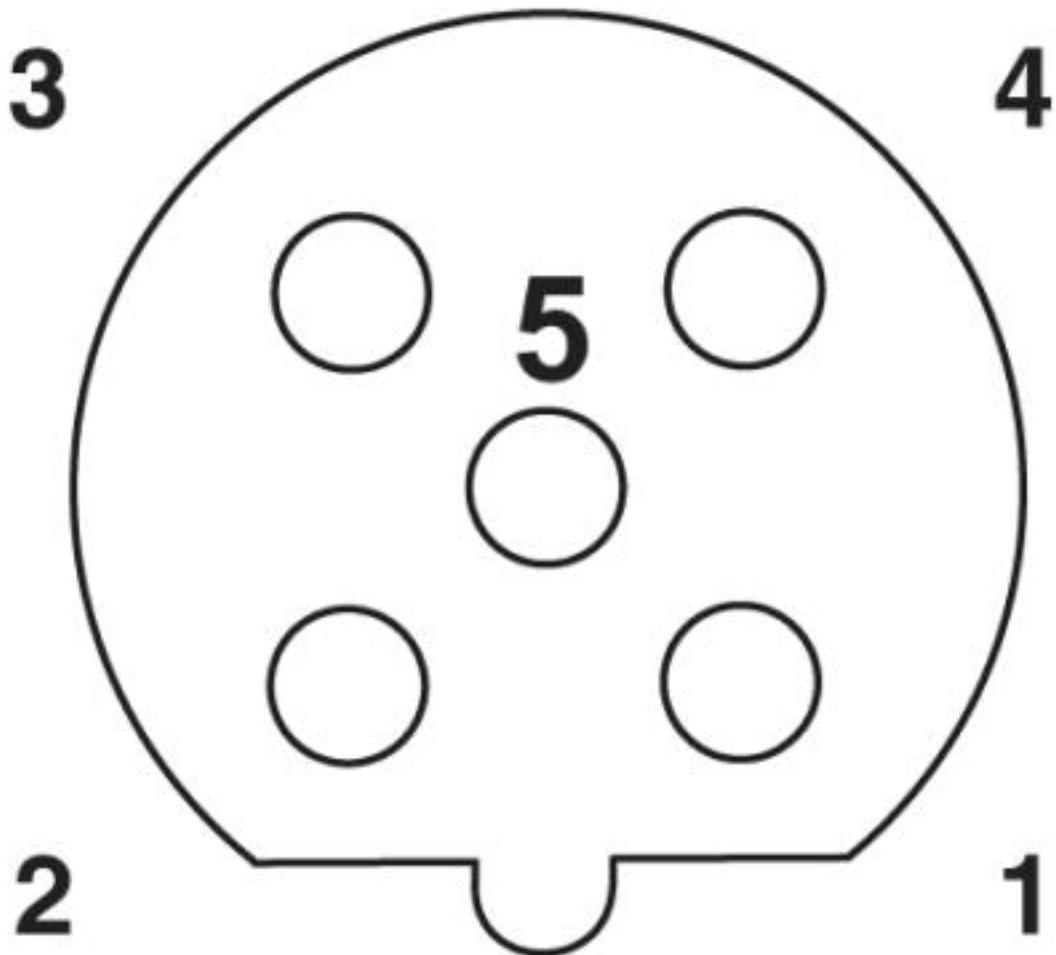
Schematic diagram



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

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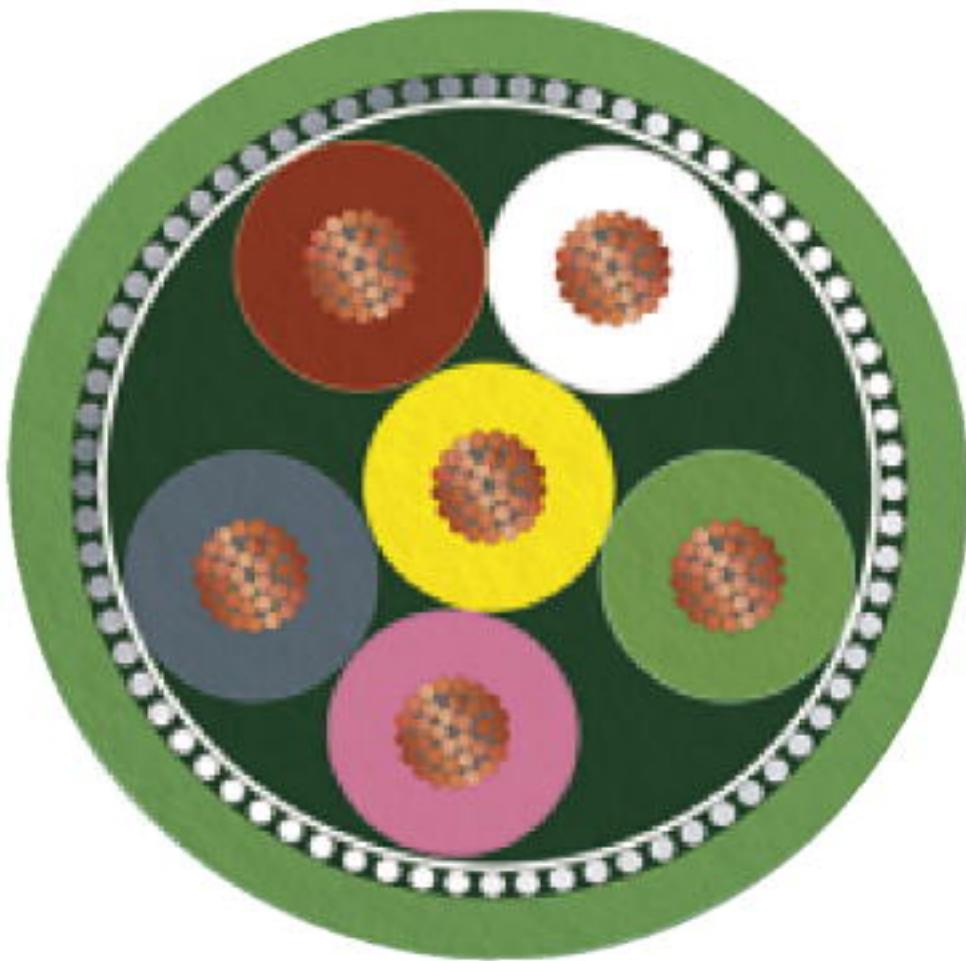
Schematic diagram



Pin assignment M12 socket, 5-pos., B-coded, female side

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Cable cross section



INTERBUS [900]

Classifications

eCl@ss

eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801
eCl@ss 5.1	27061801
eCl@ss 6.0	27061801
eCl@ss 7.0	27061801
eCl@ss 8.0	27279218

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Classifications

eCl@ss

eCl@ss 9.0	27060308
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ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855

UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501