

**SAC-6P- 5,0-970/FS SCO**

Order No.: 1428584

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Bus system cable, VARAN, 6-position, SANTOPRENE halogen-free  
halogen-free, Black RAL 9005, shielded, Free conductor end, on  
Socket, straight M12-SPEEDCON, A-coded, Cable length: 5 m

**Product notes**

WEEE/RoHS-compliant since:  
10/10/2007

**Commercial data**

GTIN (EAN)	 4 046356 322867
Note	Made-to-order
sales group	D117
Pack	1 pcs.
Customs tariff	85444290
Catalog page information	Page 324 (PC-2011)

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**Technical data****General data**

Rated current at 40°C	2 A
Rated voltage	30 V
Number of positions	6

Volume resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Length of cable	5 m
Stripping length of the free conductor end	50 mm
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	CuZn
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

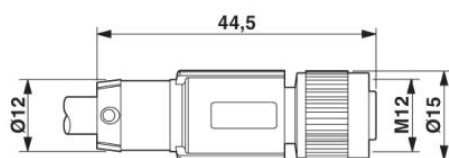
#### Conductor data

Cable type	VARAN
Cable type (abbreviation)	970
Cable abbreviation	Li9YD12Y
Cable structure	1x2xAWG22/19 + 1x4xAWG24/19
Conductor cross section	0.25 mm <sup>2</sup> (signal line) 0.38 mm <sup>2</sup> (Power supply)
AWG signal line	24
Conductor structure signal line	19x 0.13 mm
AWG power supply	22
Conductor structure, voltage supply	19x 0.16 mm
Core diameter including insulation	1.35 mm (signal line) 1.5 mm (Power supply)
External cable diameter	7.8 mm ± 0.2 mm
Wire colors	Brown, blue, white/orange, white/green, green, orange
External sheath, color	Black RAL 9005
Insulation resistance	5 GΩ*km (Data cable)

Conductor resistance	77 Ω/m (Data cable)
Transmission characteristics (category)	CAT5 (IEC 11801:2002), CAT5e (TIA 568B:2001)
Working capacitance	50 nF (Data cable)
Wave impedance	100 Ω ±15%
Nominal voltage, conductor	125 V (Data cable) 48 V (Power supply)
Test voltage, conductor	2000 V (Power supply) max. 700 V AC (Data cable)
Twisted pairs	2 cores to the pair
Type of pair shielding	Tinned copper braided shield, 90% covering
Overall twist	3 pairs to the core
Shielding	Tinned copper braided shield
Optical shield covering	95 %
Outer sheath, material	SANTOPRENE halogen-free
Conductor material	Bare Cu litz wires
Cable weight	81 kg/km
Smallest bending radius, fixed installation	≥ 93 mm
Smallest bending radius, movable installation	≥ 93 mm
Number of bending cycles	3000000
Bending radius	93 mm
Traversing path	2 m
Traversing rate	1 m/s
Acceleration	2 m/s <sup>2</sup>
Ambient temperature (operation)	0 °C ... 50 °C (for installation) -20 °C ... 80 °C (cable, fixed installation)
Halogen-free	in accordance with DIN EN 50267-2-1

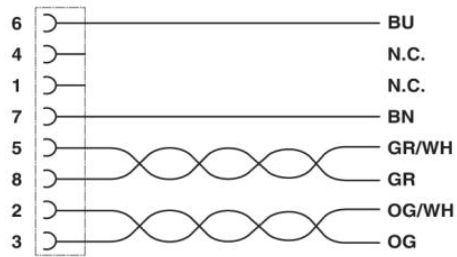
## Diagrams/Drawings

Dimensioned drawing



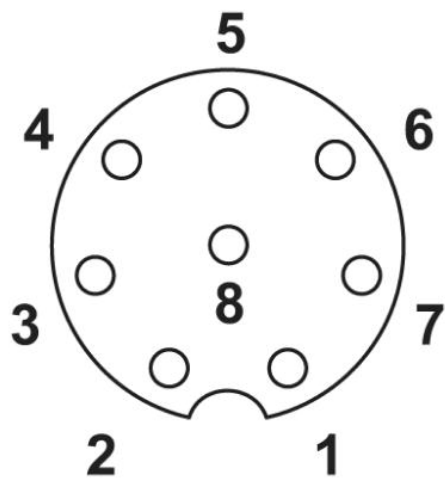
M12 x 1 female connector, straight, shielded

Circuit diagram



Contact assignment of the M12 socket

Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side

**Address**

PHOENIX CONTACT Inc., USA  
586 Fulling Mill Road  
Middletown, PA 17057, USA  
Phone (800) 888-7388  
Fax (717) 944-1625  
<http://www.phoenixcon.com>



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