

Bus system cable - SAC-6P-MS/10,0-970/FS SCO



1428678

<https://www.phoenixcontact.com/pc/products/1428678>

Please be informed that the data shown in this PDF document is generated from our Online Catalog. Please find the complete data in the user documentation. Our General Terms of Use for Downloads are valid.



Bus system cable, VARAN (100 Mbps), 6-position, SANTOPRENE halogen-free/TPE halogen-free, black RAL 9005, shielded, Plug straight M12 SPEEDCON, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: 10 m

Commercial Data

Item number	1428678
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	BF1CMM
Catalog Page	Page 324 (PC-2011)
GTIN	4046356322959
Weight per Piece (including packing)	795.8 g
Weight per Piece (excluding packing)	795.8 g
Customs tariff number	85444290
Country of origin	PL

Bus system cable - SAC-6P-MS/10,0-970/FS SCO



1428678

<https://www.phoenixcontact.com/pc/products/1428678>

Technical Data

Product properties

Product type	Data cable preassembled
Number of positions	6
Application	Standard
No. of cable outlets	1
Coding	A - standard

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Interfaces

Bus system	VARAN
Signal type/category	VARAN, 100 Mbps

LED signaling

Status display	No
Status display present	No

Electrical properties

Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	30 V AC 30 V DC
Nominal current I_N	2 A
Transmission medium	Copper

Material specifications

Color Handle area	black
Flammability rating according to UL 94	HB
Sealing material	NBR
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material for screw connection	Zinc die-cast, nickel-plated

Connection data

Pin assignment

Contact Color (signal designation) Contact (optional)	1 (Plug) = N.C. = 1 (Socket)
	4 (Plug) = N.C. = 4 (Socket)
	6 (Plug) = BU (Power) = 6 (Socket)

Bus system cable - SAC-6P-MS/10,0-970/FS SCO



1428678

<https://www.phoenixcontact.com/pc/products/1428678>

	7 (Plug) = BN (Power) = 7 (Socket)
	5 (Plug) = GNWH (RD+) = 5 (Socket)
	8 (Plug) = GN (RD-) = 8 (Socket)
	2 (Plug) = OGWH (TD+) = 2 (Socket)
	3 (Plug) = OG (TD-) = 3 (Socket)

Connector

Connection 1

Head design	Plug
Head cable outlet	straight
Head thread type	M12
Head locking type	SPEEDCON
Coding	A


Connection 2

Head design	Socket
Head cable outlet	straight
Head thread type	M12
Head locking type	SPEEDCON
Coding	A

Cable / line

Cable length	10 m
--------------	------

VARAN [970]

Dimensional drawing	
Cable weight	81 kg/km
Number of positions	6
Shielded	yes
Cable type	VARAN [970]
Conductor structure	1x2xAWG22/19 + 1x4xAWG24/19
Conductor structure signal line	19x 0.13 mm
AWG signal line	24
Conductor cross section	4x 0.25 mm ² (Signal line) 2x 0.38 mm ² (Power supply)
Wire diameter incl. insulation	1.35 mm (Signal line) 1.5 mm (Power supply)

Bus system cable - SAC-6P-MS/10,0-970/FS SCO



1428678

<https://www.phoenixcontact.com/pc/products/1428678>

External cable diameter	7.8 mm ±0.2 mm
Outer sheath, material	SANTOPRENE halogen-free
External sheath, color	black RAL 9005
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	Brown, blue, white/orange, white/green, green, orange
Type of pair shielding	Tinned copper braided shield, 95 % covering
Overall twist	1 star quad and 2 wires with 2 fillers
Max. conductor resistance	77 Ω/m (Data cable)
Insulation resistance	5 GΩ*km (Data cable)
Wave impedance	100 Ω ±15 %
Working capacitance	50 nF (Data cable)
Nominal voltage, cable	125 V (Data cable)
	48 V (Power supply)
Test voltage	2000 V (Power supply)
	max. 700 V AC (Data cable)
Smallest bending radius, fixed installation	≥ 93 mm
Smallest bending radius, movable installation	≥ 93 mm
Max. bending cycles	3000000
Halogen-free	in accordance with DIN EN 50267-2-1
Ambient temperature (operation)	-20 °C ... 80 °C (Cable)
Ambient temperature (installation)	0 °C ... 50 °C

Ambient conditions

Degree of protection	IP65
	IP67
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)

Bus system cable - SAC-6P-MS/10,0-970/FS SCO

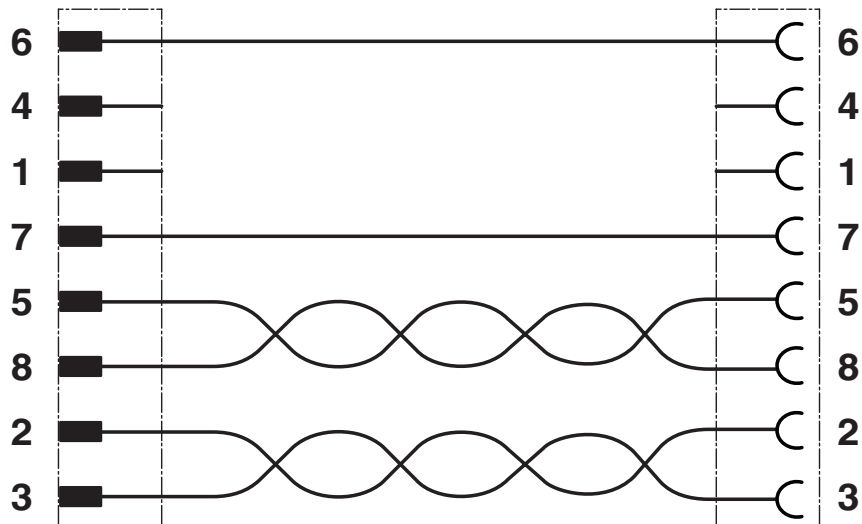


1428678

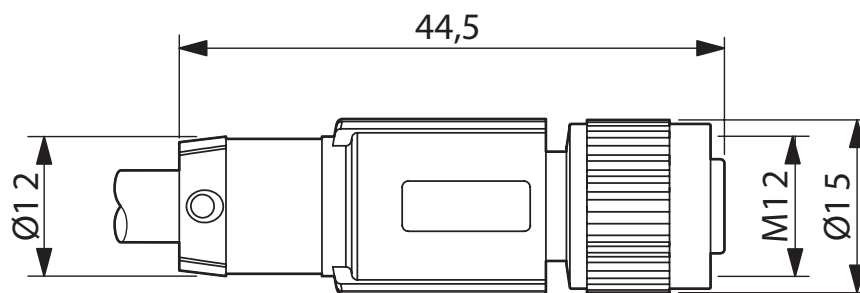
<https://www.phoenixcontact.com/pc/products/1428678>

Drawings

Circuit diagram



Dimensional drawing



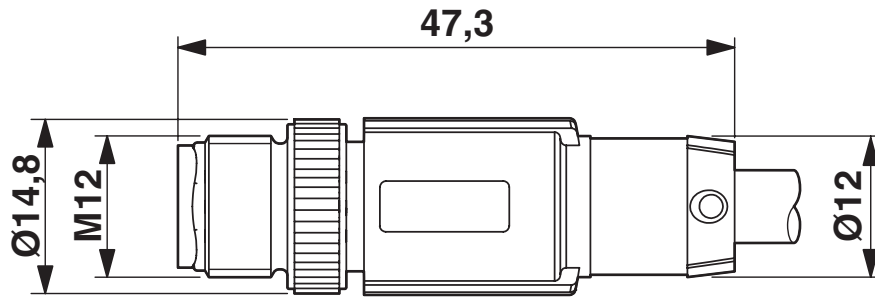
M12 x 1 socket, straight, shielded

Bus system cable - SAC-6P-MS/10,0-970/FS SCO

1428678

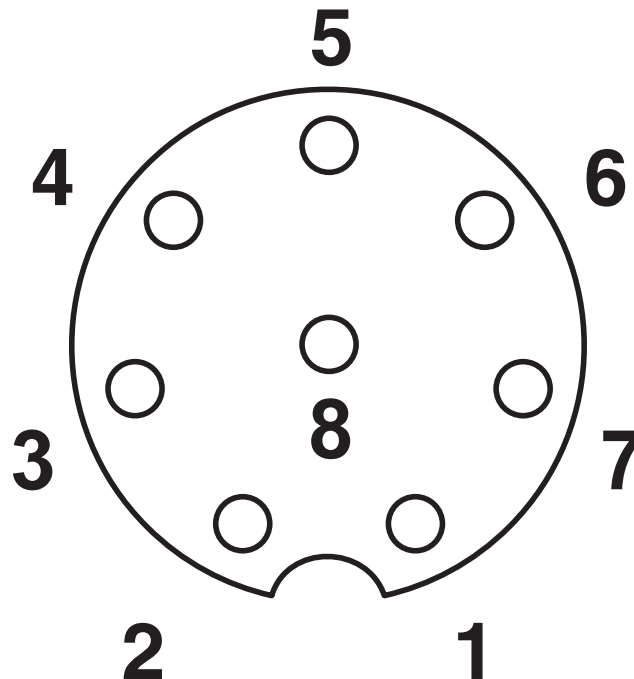
<https://www.phoenixcontact.com/pc/products/1428678>

Dimensional drawing



Plug, M12 x 1, straight, shielded

Schematic diagram



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

Bus system cable - SAC-6P-MS/10,0-970/FS SCO

1428678

<https://www.phoenixcontact.com/pc/products/1428678>



Schematic diagram



Pin assignment M12 plug, 8-pos., view plug side

Bus system cable - SAC-6P-MS/10,0-970/FS SCO



1428678

<https://www.phoenixcontact.com/pc/products/1428678>

Approvals



EAC

Approval ID: RU C-DE.BL08.B.00286



EAC

Approval ID: RU D-DE.HB35.B.00387

Bus system cable - SAC-6P-MS/10,0-970/FS SCO



1428678

<https://www.phoenixcontact.com/pc/products/1428678>

Classifications

ECLASS

ECLASS-9.0	27060308
ECLASS-10.0.1	27060308
ECLASS-11.0	27060307

ETIM

ETIM 8.0	EC001855
----------	----------

UNSPSC

UNSPSC 21.0	26121600
-------------	----------

Bus system cable - SAC-6P-MS/10,0-970/FS SCO



1428678

<https://www.phoenixcontact.com/pc/products/1428678>

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Phoenix Contact 2022 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachmarktstraße 8
D-32825 Blomberg
+49 (0) 5235-3 00
info@phoenixcontact.com