

SAC-12P-MS/ 1,5-PUR/FS SCO - Sensor/actuator cable



1405281

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Sensor/actuator cable, 12-position, PUR halogen-free, black RAL 9005, Plug straight M12 SPEEDCON, on Socket straight M12 SPEEDCON, cable length: 1.5 m

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Save time, thanks to installation with SPEEDCON fast locking system
- Our standard: robust halogen-free PUR cable
- Save space – with high-pos. connectors

Commercial data

Item number	1405281
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF03
Product key	BF1CGA
GTIN	4046356740463
Weight per piece (including packing)	125.1 g
Weight per piece (excluding packing)	127.8 g
Customs tariff number	85444290
Country of origin	DE

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Technical data

Product properties

Product type	Sensor/actuator cable
Number of positions	12
No. of cable outlets	1
Coding	A

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

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

Electrical properties

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	30 V AC
	30 V DC
Nominal current I_N	1.5 A

Signaling

Status display	No
Status display present	No

Connection data

Conductor connection

Tightening torque	0.4 Nm (M12 connector)
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Connector

Connection 1

Type	Plug straight M12 SPEEDCON
Locking type	SPEEDCON

Connection 2

Type	Socket straight M12 SPEEDCON
Locking type	SPEEDCON

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Cable/line

Cable length	1.5 m
PUR halogen-free black [PUR]	
Dimensional drawing	
Cable weight	17 kg/km
Number of positions	12
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	18x 0.10 mm
AWG signal line	26
Conductor cross section	12x 0.14 mm ² (Signal line)
Wire diameter incl. insulation	1 mm ±0.05 mm (Signal line)
External cable diameter	7.20 mm
Outer sheath, material	PUR
External sheath, color	black RAL 9005
Conductor material	Tin-plated Cu litz wires
Material wire insulation	PP
Single wire, color	white, brown, green, yellow, gray, pink, blue, red, black, violet, gray/pink, red/blue
Overall twist	12 wires twisted in layers
Max. conductor resistance	142 Ω/km
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 1500 V
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	36 mm
Smallest bending radius, movable installation	72 mm
Max. bending cycles	4000000
Halogen-free	in accordance with DIN EN 50267-2-1
Flame resistance	in acc. to UL VW1 DIN EN 60332-1-2
Resistance to oil	EN 60811-2-1
Other resistance	EN 50525-2-21:2012-01 partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)
Special properties	Low adhesion surface
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)

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	-5 °C ... 80 °C (Cable, flexible installation)
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Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)
	-40 °C ... 80 °C (cable, fixed installation)
	-20 °C ... 80 °C (Cable, flexible installation)

Standards and regulations

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

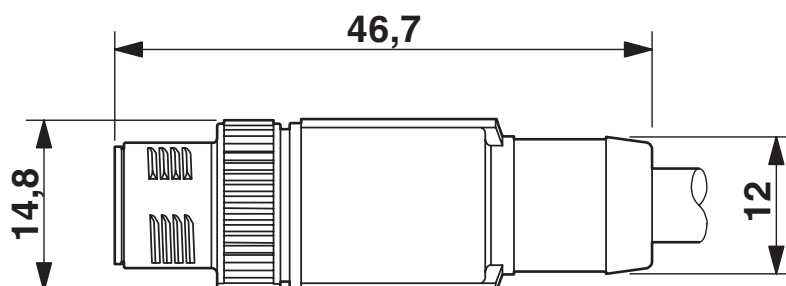
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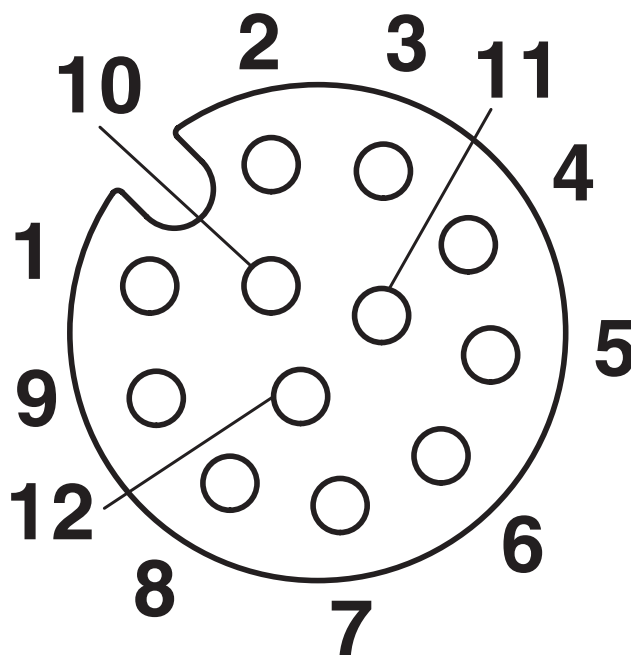
Drawings

Dimensional drawing



M12 SPEEDCON plug, straight

Schematic diagram



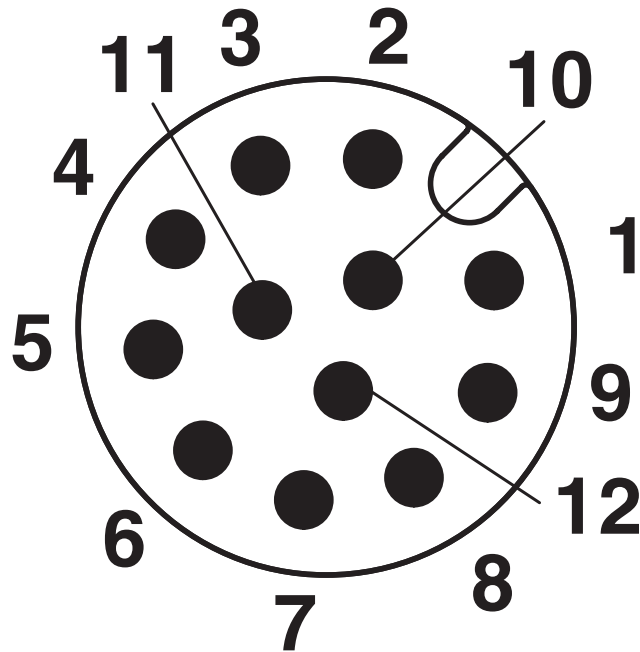
Pin assignment M12, 12-pos., female side view

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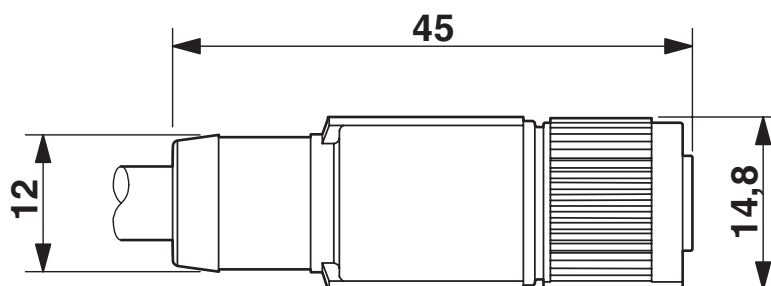
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Schematic diagram



Pin assignment M12 male connector, 12-pos., male side view

Dimensional drawing



M12-SPEEDCON socket, straight

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1405281>

 UL Listed Approval ID: FILE E 221474	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
	30 V	1 A	-	-

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Classifications

ECLASS

ECLASS-11.0	27060311
ECLASS-12.0	27060311
ECLASS-13.0	27060311

ETIM

ETIM 8.0	EC001855
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	6641b387-6a6f-4996-8b5f-c7293511be26

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