SAC-12P-MS/10,0-PUR/FS SCO - Sensor/actuator cable

1413186

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Sensor/actuator cable, 12-position, PUR halogen-free, black RAL 9005, Plug straight M12 SPEEDCON, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: 10 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	1413186
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF03
Product key	AF1CGA
GTIN	4046356993258
Weight per piece (including packing)	614.3 g
Weight per piece (excluding packing)	602 g
Customs tariff number	85444290
Country of origin	DE

Technical data

Product properties

Product type	Sensor/actuator cable
Application	Standard
Number of positions	12
No. of cable outlets	1
Shielded	no
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	≥ 100 MΩ
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)

Connector

Connection 1

Type	Plug straight M12 SPEEDCON
Number of positions	12
Locking type	SPEEDCON
Coding type	A (Standard)

Connection 2

Type	Socket straight M12 SPEEDCON
Locking type	SPEEDCON
Coding type	A (Standard)

Cable/line

Cable length	10 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 mm² (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
Dynamic load capacity (bending)	Max. bending cycles: 4000000, Bending radius: 54 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s²
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)
	-5 °C ... 80 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

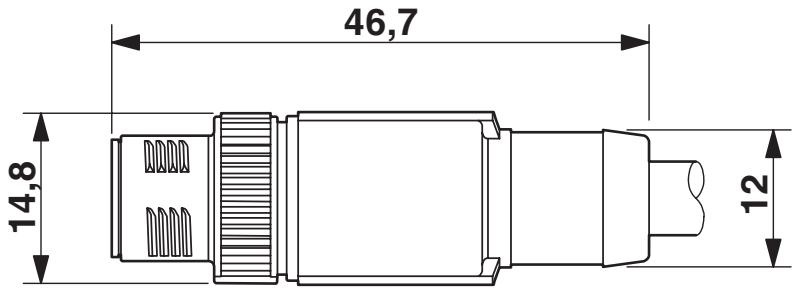
Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)
Ambient temperature (operation) (Cable, fixed installation)	-40 °C ... 80 °C (cable, fixed installation)
Ambient temperature (operation) (Cable, flexible installation)	-20 °C ... 80 °C (Cable, flexible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

Standards and regulations

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

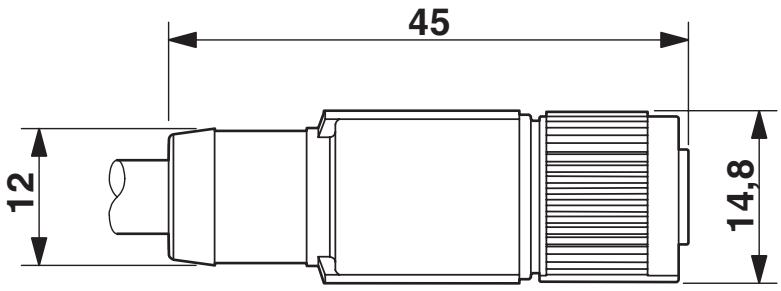
Drawings

Dimensional drawing



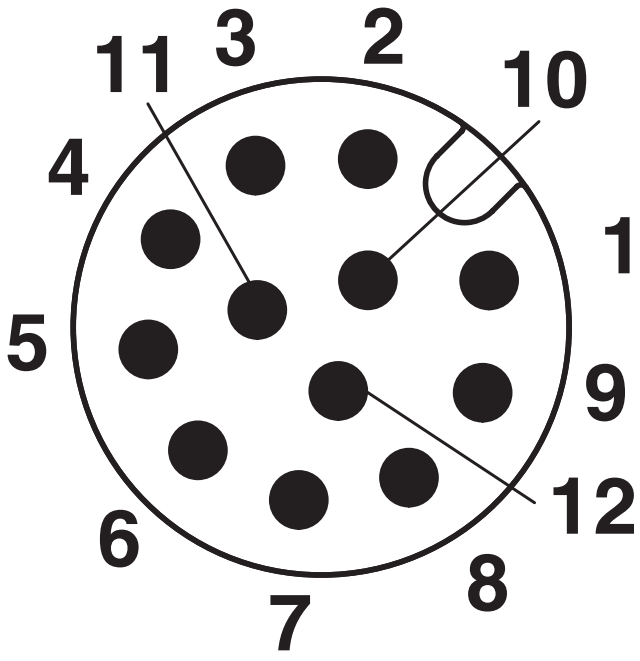
M12 SPEEDCON plug, straight

Dimensional drawing



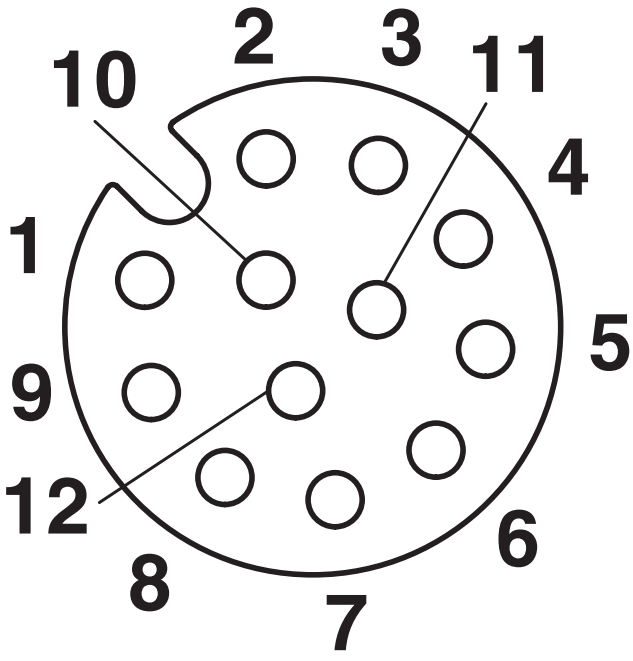
M12-SPEEDCON socket, straight

Schematic diagram



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

Schematic diagram



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

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1413186

UL Listed
Approval ID: E221474

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	30 V	1 A	-	-

Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

ETIM

ETIM 10.0	EC001855

UNSPSC

UNSPSC 21.0	26121600

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%

EF3.1 Climate Change

CO2e kg	7.802 kg CO2e

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