Sensor/Actuator cable - SAC-3P-M12MS/1,5-PUR/A-1L-Z - 1400770

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's documentation. Our General Terms of Use for Downloads are valid (http://download.phoenixcontact.com)



The illustration shows the SPEEDCON version

Sensor/Actuator cable, 3-position, PUR halogen-free, Black-gray RAL 7021, Plug straight M12, A-coded, on A valve plug, with 1 LED, connected with Z diode, Cable length: 1.5 m

Key commercial data

Packing unit	0
Minimum order quantity	1
GTIN	4 046356 509527
Custom tariff number	85444290
Country of origin	POLAND

Technical data

General data

Rated current at 40°C	4 A
Rated voltage	24 V
Number of positions	3
Volume resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Length of cable	1.5 m
Ambient temperature (operation)	-25 °C ... 90 °C (Male connector / female connector)
Ambient temperature (operation)	-20 °C ... 85 °C (valve plug)

General characteristics

Standards/regulations	M12 connector IEC 61076-2-101
Standards/regulations	Valve connector EN 175301-803
Coding	A - standard
Surge voltage category	III
Pollution degree	3
Degree of protection	IP65/67
Insertion/withdrawal cycles	≥ 100 (M12 connector)
Torque	0.4 Nm (M12 connector)

Sensor/Actuator cable - SAC-3P-M12MS/1,5-PUR/A-1L-Z - 1400770

Technical data

General characteristics

Torque	0.6 Nm (Valve plug-in connector)
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material of grip body	TPU
Contact material	CuSn
Contact surface material	Sn
Valve plug contact insert material	PA 66
Material housing valve plug	TPU
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	TPU (Seal molded)
Status display	1 LED
Protective circuit/component	Z diode

Conductor data

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y11Y-HF
UL AWM Style	20549
Conductor cross section	3x 0.5 mm²
AWG signal line	20
Conductor structure signal line	28x 0.15 mm
Core diameter including insulation	1.5 mm ±0.05 mm (signal line)
External cable diameter	4.5 mm ± 0.2 mm
Wire colors	Black 1, black 2, green/yellow
External sheath, color	Black-gray RAL 7021
Insulation resistance	min. 20 MΩ*km
Conductor resistance	39 Ω/km (at 20 °C)
Nominal voltage, conductor	≤ 300 V
Test voltage, conductor	≥ 1200 V
Overall twist	3 wires, twisted
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Smallest bending radius, fixed installation	22.5 mm
Number of bending cycles	15000000
Bending radius	50 mm
Traversing path	0.9 m
Traversing rate	5 m/s
Acceleration	30 m/s²
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
Ambient temperature (operation)	-20 °C ... 80 °C (cable, flexible installation)

Sensor/Actuator cable - SAC-3P-M12MS/1,5-PUR/A-1L-Z - 1400770

Technical data

Conductor data

Flame resistance	According to DIN VDE 0482
Flame resistance	According to DIN EN 50265-2-1
Halogen-free	in accordance with DIN VDE 0472 part 815
Other resistance	Largely oil-resistant
Other resistance	partly UV-resistant in accordance with DIN EN ISO 4892-2-A

Classifications

eclass

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

etim

ETIM 3.0	EC001855
ETIM 4.0	EC001855

unspsc

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

Accessories

Accessories

Assembly

Screw - SAC-V-SCREW-M3-29 KNURL - 1403779



Fillister head screw with plastic knurl, M3 x 40

Fuse

Sensor/Actuator cable - SAC-3P-M12MS/1,5-PUR/A-1L-Z - 1400770

Accessories

Fuse clip - SAC-M12-EXCLIP-M - 1558988



Fuse clip for the pin side of various M12 sensor/actuator connectors prevents plug-in connections being interrupted without using a tool

Marking

Insert label - PABA WH/15 - 1013151



Insert label, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Insert label - PABA YE/15 - 1013698



Insert label, yellow, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Insert label - PABA RD/15 - 1013944



Insert label, red, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Conductor marker carrier - PATO 2/15 - 1013122



Conductor marker carrier, transparent, Unlabeled, Mounting type: Clip on, Cable diameter: 2.8-5 mm, Lettering field: 4 x 15 mm

Sensor/Actuator cable - SAC-3P-M12MS/1,5-PUR/A-1L-Z - 1400770

Accessories

Conductor marker carrier - PATO 3/15 - 1013135



Conductor marker carrier, transparent, Unlabeled, Mounting type: Clip on, Cable diameter: 5-8 mm, Lettering field: 4 x 15 mm

Conductor marker carrier - PATO 4/15 - 1013148



Conductor marker carrier, transparent, Unlabeled, Mounting type: Clip on, Cable diameter: 8-10 mm, Lettering field: 4 x 15 mm

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

Protection and sealing elements

Sealing cap - PROT-M12 FS-PA-CHAIN - 1430873

M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 sockets



Tools

Screw insert - SF-BIT-PH 1-70 - 1212582



Screw bit, PH crosshead, E6.3-1/4" drive, size: PH 1 x 70 mm, hardened, suitable for holder according to DIN 3126-F6.3/ISO 1173

Sensor/Actuator cable - SAC-3P-M12MS/1,5-PUR/A-1L-Z - 1400770

Accessories

Torque screwdriver - TSD 04 SAC - 1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

Torque screwdriver - TSD-M 1,2NM - 1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

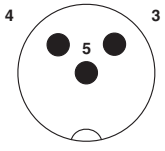
Tool - SAC BIT M12-D15 - 1208432



Nut for assembling sensor/actuator cables with M12 connector and for M12 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive

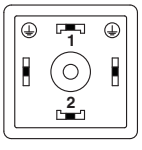
Drawings

Schematic diagram



Pin assignment M12 plug, 3-pos., valve connector

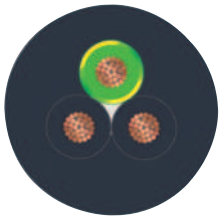
Schematic diagram



Valve connector pin assignment, type A

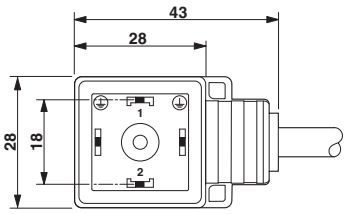
Sensor/Actuator cable - SAC-3P-M12MS/1,5-PUR/A-1L-Z - 1400770

Cable cross section



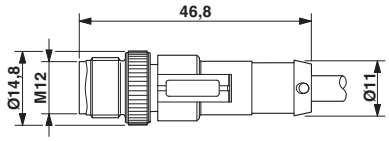
PUR halogen-free black [PUR]

Dimensioned drawing



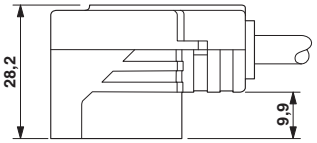
Valve plug, type A

Dimensioned drawing



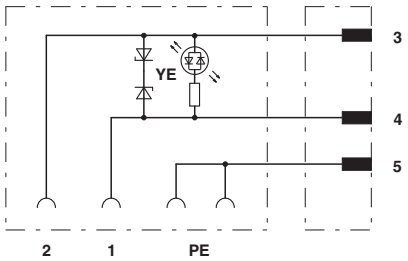
M12 x 1 male connector, straight

Dimensioned drawing



Valve connector, type A, side view

Circuit diagram



Contact assignment of M12 plug and valve connector

© Phoenix Contact 2012 - all rights reserved
http://www.phoenixcontact.com