

Sensor/Actuator cable - SAC-3P-M12MS/2,0-PVC B-L - 1431461

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>)



Sensor/Actuator cable, 3-position, PVC, Black RAL 9005, Plug straight M12, A-coded, on Free cable end, Cable length: 2 m

Product Features

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Our PVC cable for average mechanical strain



Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	80.0 GRM
Custom tariff number	85444290
Country of origin	China

Technical data

Dimensions

Length of cable	2 m
-----------------	-----

Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
Degree of protection	IP65
	IP67
	IP68

General

Rated current at 40°C	4 A
Rated voltage	250 V
Number of positions	3
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ

Sensor/Actuator cable - SAC-3P-M12MS/2,0-PVC B-L - 1431461

Technical data

General

Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Protective circuit/component	Unwired
Surge voltage category	II
Pollution degree	3
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 connector)

Material

Inflammability class according to UL 94	HB
Contact material	CuSn
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

Cable

Cable type	PVC black
Cable type (abbreviation)	PVC
Cable abbreviation	LiYY
UL AWM style	2464 / 1729 (80°C/300 V)
Conductor cross section	3x 0.34 mm ² (signal line)
AWG signal line	22
Conductor structure signal line	42x 0.10 mm
Core diameter including insulation	1.45 mm ±0.02 mm
Thickness, insulation	≥ 0.23 mm (Core insulation)
Wire colors	brown, blue, black
Overall twist	3 wires, twisted
External sheath, color	Black RAL 9005
Outer sheath thickness	≥ 0.76 mm
External cable diameter D	5.2 mm ± 0.2 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Cable weight	40 kg/km
Outer sheath, material	PVC
Material conductor insulation	PVC
Conductor material	Bare Cu litz wires

Sensor/Actuator cable - SAC-3P-M12MS/2,0-PVC B-L - 1431461

Technical data

Cable

Insulation resistance	≥ 100 MΩ*km (at 20 °C)
Conductor resistance	max. 58 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 3000 V
Flame resistance	As per UL-Style 2464
Resistance to oil	According to DIN EN 60811-2-1, 168 h at 90°C
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-25 °C ... 80 °C (cable, flexible installation)

Classifications

eCl@ss

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
eCl@ss 8.0	27061801

ETIM

ETIM 4.0	EC001855
ETIM 5.0	EC001855

UNSPSC

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

Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Sensor/Actuator cable - SAC-3P-M12MS/2,0-PVC B-L - 1431461

Approvals

Ex Approvals

Approvals submitted

Approval details

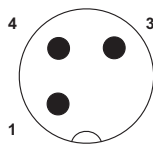
UL Listed	
Nominal current IN	4 A
Nominal voltage UN	300 V

cUL Listed	
Nominal current IN	4 A
Nominal voltage UN	300 V

cULus Listed	
--------------	--

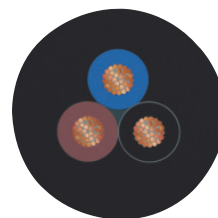
Drawings

Schematic diagram



Pin assignment M12 plug, 3-pos., A-coded, view male side

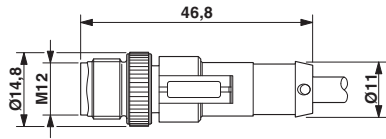
Cable cross section



PVC black [PVC]

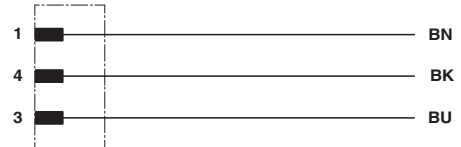
Sensor/Actuator cable - SAC-3P-M12MS/2,0-PVC B-L - 1431461

Dimensioned drawing



M12 x 1 plug, straight

Circuit diagram



Contact assignment of the M12 plug