

Sensor/Actuator cable - SAC-3P-M8Y/2X3,0-PUR/M 8FS - 1458693

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://phoenixcontact.com/download>)



Sensor/Actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M8, on Socket straight M8 and Socket straight M8, Cable length: 3 m



Key Commercial Data

Packing unit	1 STK
Weight per Piece (excluding packing)	160.0 g
Custom tariff number	85444290
Country of origin	Germany

Technical data

Dimensions

Length of cable	3 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	30 V
Number of positions	3
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M8 connector IEC 61076-2-104

Sensor/Actuator cable - SAC-3P-M8Y/2X3,0-PUR/M 8FS - 1458693

Technical data

General

Status display	No
Overvoltage category	II
Degree of pollution	3
Torque	0.2 Nm (M8 knurl)

Material

Flammability rating 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
Sealing material	NBR

Standards and Regulations

Standard designation	M8 connector
Standards/regulations	IEC 61076-2-104
Flammability rating according to UL 94	HB

Cable

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y11Y-HF
UL AWM style	20549
Conductor cross section	3x 0.25 mm ² (Signal line)
AWG signal line	24
Conductor structure signal line	32x 0.10 mm
Core diameter including insulation	1.17 mm ±0.02 mm (Signal line)
Thickness, insulation	≥ 0.38 mm (Core insulation)
Wire colors	brown, blue, black
Overall twist	3 wires, twisted
Length of twist, overall twist	40 mm
External sheath, color	black-gray RAL 7021
Outer sheath thickness	approx. 0.9 mm
External cable diameter D	4.4 mm ±0.15 mm
Smallest bending radius, fixed installation	22 mm
Smallest bending radius, movable installation	44 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D

Sensor/Actuator cable - SAC-3P-M8Y/2X3,0-PUR/M 8FS - 1458693

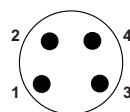
Technical data

Cable

Number of bending cycles	4000000
Bending radius	44 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s ²
Cable weight	24 kg/km
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 100 GΩ*km (at 20 °C)
Conductor resistance	≤ 78 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 3000 V
Special properties	Flexible cable conduit capable
	Silicone-free
	Free of substances which would hinder coating with paint or varnish
Flame resistance	in accordance with DIN UL-Style 20549
Halogen-free	in accordance with DIN VDE 0472 part 815
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	hydrolysis and microbe resistant
	Highly resistant to acids, alkaline solutions and solvents
	Resistant to salt water
	partly UV-resistant in accordance with DIN EN ISO 4892-2-A
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-25 °C ... 80 °C (cable, flexible installation)

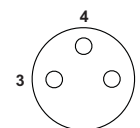
Drawings

Schematic diagram



Pin assignment M8 plug, 4-pos., view male side

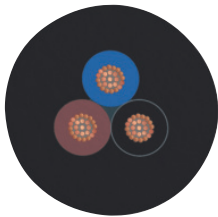
Schematic diagram



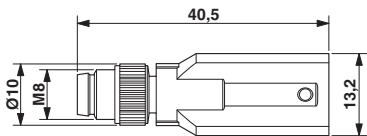
Pin assignment M8 socket, 3-pos., view female side

Sensor/Actuator cable - SAC-3P-M8Y/2X3,0-PUR/M 8FS - 1458693

Cable cross section



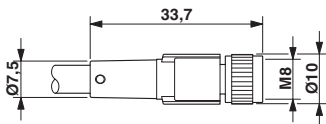
Dimensional drawing



Plug M8 x 1, Y-distributor

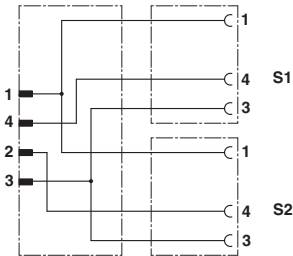
PUR halogen-free black [PUR]

Dimensional drawing



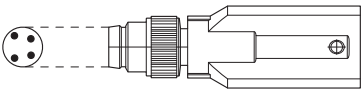
Socket M8 x 1, straight

Circuit diagram



Contact assignment of the M8 plug and the M8 socket

Schematic diagram



Alignment of the connector pin assignment

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	27279218
eCl@ss 9.0	27060311

Sensor/Actuator cable - SAC-3P-M8Y/2X3,0-PUR/M 8FS - 1458693

Classifications

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

Ex Approvals

Approvals submitted

Approval details

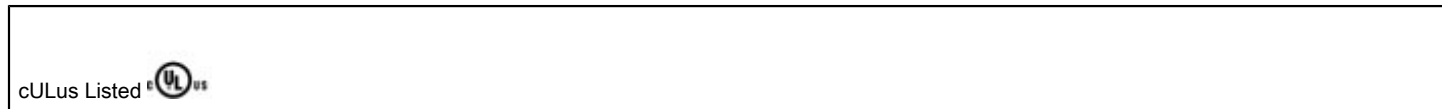
UL Listed 	
Nominal current I _N	4 A
Nominal voltage U _N	30 V

cUL Listed 	
Nominal current I _N	4 A

Sensor/Actuator cable - SAC-3P-M8Y/2X3,0-PUR/M 8FS - 1458693

Approvals

Nominal voltage UN	30 V
--------------------	------



Accessories

Accessories

Conductor marking

Insert label - PABA WH/15 - 1013151



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

Labeled conductor marker

Sensor/Actuator cable - SAC-3P-M8Y/2X3,0-PUR/M 8FS - 1458693

Accessories

Cable marker - PABA WH/15 CUS - 0824444



Cable marker, can be ordered: Strip, white, labeled according to customer specifications, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Cable marker - PABA YE/15 CUS - 0824447



Cable marker, can be ordered: Strip, yellow, labeled according to customer specifications, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Cable marker - PABA RD/15 CUS - 0824442



Cable marker, can be ordered: Strip, red, labeled according to customer specifications, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Cable marker - PABA BU/15 CUS - 0824441



Cable marker, can be ordered: Strip, blue, labeled according to customer specifications, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Protective cap

Screw plug - PROT-M8 - 1682540



An M8 screw plug for the unoccupied M8 sockets of the sensor/actuator cable, boxes and flush-type connectors

Sensor/Actuator cable - SAC-3P-M8Y/2X3,0-PUR/M 8FS - 1458693

Accessories

Screwdriver tools

Tool - SAC BIT M8-D10 - 1208461



Nut for assembling M8 connectors with longitudinal knurl and a knurl diameter of 10 mm, for 4 mm hexagonal drive

Torque tool

Torque screwdriver - TSD 02 SAC - 1208487



Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive for M8 connectors