

Sensor/actuator cable - SAC-3P-M8Y/2X0,6-PUR/M 8FR - 1458716

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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M8, on Socket angled M8 and Socket angled M8, cable length: 0.6 m



Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4046356638067

Technical data

Dimensions

Length of cable	0.6 m
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Ambient conditions

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

General

Rated current at 40°C	4 A
Rated voltage	48 V AC
	60 V DC
Number of positions	3
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M8 connector IEC 61076-2-104
Status display	No

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Technical data

General

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

Standards/specifications	M8 connector IEC 61076-2-104
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Cable

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y11Y-HF
UL AWM style	20549 / 10493 (80°C/300 V)
Conductor cross section	3x 0.25 mm ²
AWG signal line	24
Conductor structure signal line	32x 0.10 mm
Core diameter including insulation	1.17 mm ±0.02 mm
Thickness, insulation	≥ 0.21 mm (Core insulation)
Wire colors	brown, blue, black
Overall twist	3 wires, twisted
Length of twist, overall twist	40 mm
Outer sheath thickness	approx. 0.5 mm
External cable diameter D	3.6 mm ±0.15 mm
Smallest bending radius, fixed installation	18 mm
Smallest bending radius, movable installation	36 mm
Number of bending cycles	10000000
Bending radius	44 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s ²
Cable weight	18 kg/km
External sheath, color	black-gray RAL 7021
Outer sheath, material	PUR
Material conductor insulation	PP

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Technical data

Cable

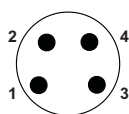
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 100 GΩ*km (at 20 °C)
Conductor resistance	≤ 78 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 3000 V
Special properties	Flexible cable conduit capable
	Silicone-free
	Free of substances which would hinder coating with paint or varnish
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
Flame resistance	in accordance with UL 758/1581 FT2
	DIN EN 60332-2-2 (20 s)
Halogen-free	in accordance with DIN VDE 0472 part 815
Resistance to oil	in accordance with DIN EN 60811-2-1
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-25 °C ... 80 °C (Cable, flexible installation)

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

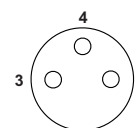
Drawings

Schematic diagram



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

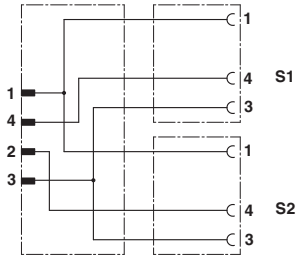
Schematic diagram



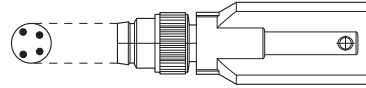
Pin assignment M8 socket, 3-pos., view female side

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Circuit diagram



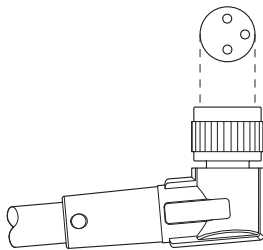
Schematic diagram



Alignment of the connector pin assignment

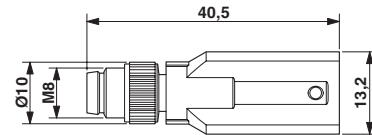
Contact assignment of the M8 plug and the M8 socket

Schematic diagram



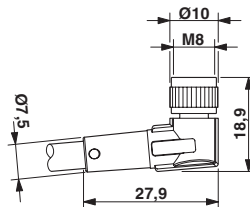
Alignment of the connector pin assignment

Dimensional drawing



Plug M8 x 1, Y-distributor

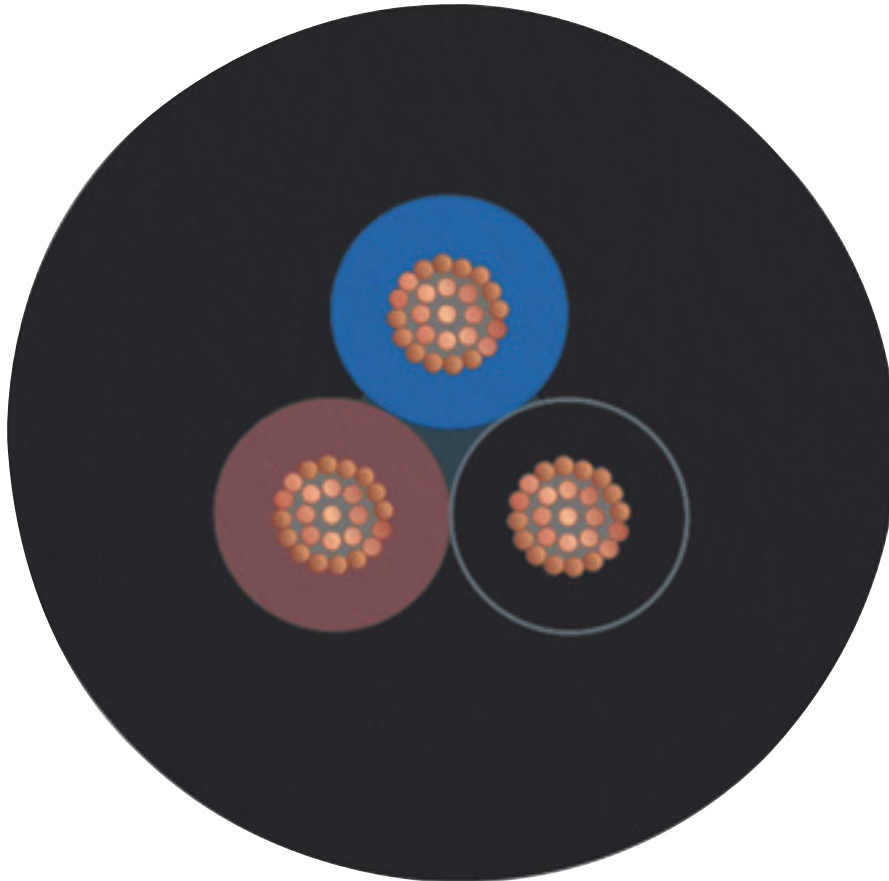
Dimensional drawing



Socket M8 x 1, angled

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Cable cross section



PUR halogen-free black [PUR]

Classifications

eCl@ss

eCl@ss 10.0.1	27060313
eCl@ss 11.0	27060313
eCl@ss 4.0	27060300
eCl@ss 4.1	27060300
eCl@ss 5.0	27061800
eCl@ss 5.1	27061800
eCl@ss 6.0	27279200
eCl@ss 7.0	27279218
eCl@ss 9.0	27060313

ETIM

ETIM 4.0	EC001855
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Classifications

ETIM

ETIM 6.0	EC001855
ETIM 7.0	EC001855

UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501
UNSPSC 19.0	31251501
UNSPSC 20.0	31251501
UNSPSC 21.0	31251501

Approvals


Approvals


Approvals

UL Listed / cUL Listed / EAC-RoHS / EAC / cULus Listed

Ex Approvals

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 221474
Nominal voltage UN		60 V	
Nominal current IN		4 A	

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 221474
Nominal voltage UN		60 V	
Nominal current IN		4 A	

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Approvals

EAC-RoHS		RU D- DE.HB35.B.00387
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EAC		RU C- DE.BL08.B.00286
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cULus Listed		
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Accessories

Accessories

Conductor marking

Insert label - PABA WH/15 - 1013151



Insert label, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: 0.6 ... 50 mm, lettering field size: 15 x 4 mm, Number of individual labels: 20

Insert label - PABA YE/15 - 1013698



Insert label, Strip, yellow, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: 0.6 ... 50 mm, lettering field size: 15 x 4 mm, Number of individual labels: 20

Insert label - PABA RD/15 - 1013944



Insert label, Strip, red, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: 0.6 ... 50 mm, lettering field size: 15 x 4 mm, Number of individual labels: 20

Labeled conductor marker

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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 range: 0.6 ... 50 mm, lettering field size: 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 range: 0.6 ... 50 mm, lettering field size: 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 range: 0.6 ... 50 mm, lettering field size: 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 range: 0.6 ... 50 mm, lettering field size: 15 x 4 mm

Plug for cable screw gland

Screw plug - PROT-M8 - 1682540



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

Screwdriver tools

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Accessories

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

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