

Sensor/Actuator cable - SAC-3P-M 8MS/0,3-PUR/M 8FR - 1681949

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Sensor/Actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M8, on Socket angled M8, Cable length: 0.3 m

Your advantages

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Our standard: robust halogen-free PUR cable

Key commercial data

package_quantity	1
GTIN	4017918158606

Technical data

Dimensions

Length of cable	0.3 m
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Ambient conditions

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

General

Rated current at 40°C	4 A
Rated voltage	60 V
Number of positions	3
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M8 connector IEC 61076-2-104
Status display	No
Protective circuit/component	Unwired
Overvoltage category	II
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100
Torque	0.2 Nm (M8 connectors)

Material

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Technical data

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
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

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Technical data

Cable

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
Special properties	Silicone-free
Special properties	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
Other resistance	Highly resistant to acids, alkaline solutions and solvents
Other resistance	Resistant to salt water
Other resistance	partly UV-resistant in accordance with DIN EN ISO 4892-2-A
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
Ambient temperature (operation)	-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	27279218
eCl@ss 9.0	27060311

ETIM

ETIM 2.0	EC000830
ETIM 3.0	EC001855
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

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Approvals

UL Listed / cUL Listed / EAC / cULus Listed /

Approval details

UL Listed s 	
Nominal voltage UN	125 V
Nominal current IN	4 A
mm²/AWG/kcmil	

cUL Listed s 	
Nominal voltage UN	125 V
Nominal current IN	4 A
mm²/AWG/kcmil	

EAC s

cULus Listed s 
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Accessories

Torque tool

TSD 02 SAC - 1208487



TSD 02 SAC - 1208487



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Accessories

Screwdriver tools

SAC BIT M8-D10 - 1208461



SAC BIT M8-D10 - 1208461



Protective cap

PROT-M 8 FS-PA-CHAIN - 1430857



PROT-M 8 MS-PA-CHAIN - 1430860



Conductor marking

PABA WH/15 - 1013151



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Accessories

PABA YE/15 - 1013698



PABA RD/15 - 1013944



Marker carrier cable

PATO 2/15 - 1013122



PATO 3/15 - 1013135



PATO 4/15 - 1013148



Marker pen

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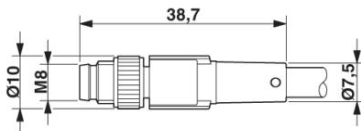
Accessories

B-STIFT - 1051993



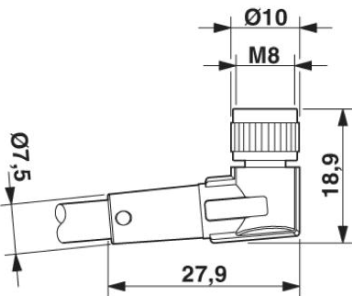
Drawings

Dimensional drawing



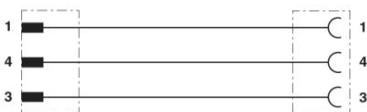
M8 x 1 male plug, straight version

Dimensional drawing



Socket M8 x 1, angled

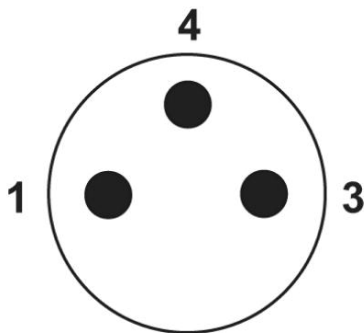
Circuit diagram



Contact assignment of M8 plugs/sockets

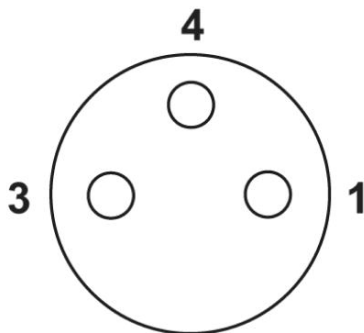
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Schematic diagram



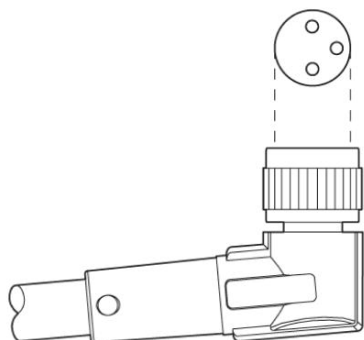
Pin assignment M8 plug, 3-pos., view male side

Schematic diagram



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

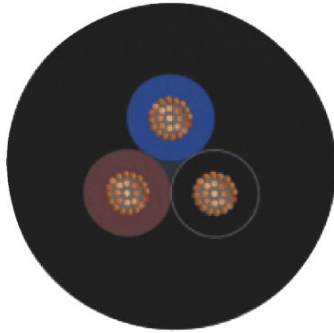
Schematic diagram



Layout of connector pin assignments

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Cable cross section



PUR halogen-free black [PUR]

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