

## Sensor/Actuator cable - SAC-4P-M 8MS/0,3-PUR/M 8FR - 1682184

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, 4-position, PUR halogen-free, black-gray RAL 7021, Plug straight M8, on Socket angled M8, Cable length: 0.3 m

### Product Features

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



### Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	17.6 GRM
Custom tariff number	85444290
Country of origin	Germany

### Technical data

#### Dimensions

Length of cable	0.3 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	4
Contact resistance	≤ 5 mΩ

## Sensor/Actuator cable - SAC-4P-M 8MS/0,3-PUR/M 8FR - 1682184

### Technical data

#### General

Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M8 connector IEC 61076-2-104
Status display	No
Protective circuit/component	Unwired
Surge voltage category	II
Pollution degree	3
Insertion/withdrawal cycles	≥ 100
Torque	0.2 Nm (M8 connectors)

#### 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
Sealing material	NBR

#### Cable

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y11Y-HF
Conductor cross section	4x 0.25 mm <sup>2</sup> (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	≥ 0.21 mm (Core insulation)
	approx. 0.7 mm (Outer cable sheath)
Wire colors	brown, white, blue, black
Overall twist	4 wires, twisted
External sheath, color	black-gray RAL 7021
External cable diameter D	4.4 mm ±0.15 mm
Smallest bending radius, fixed installation	22 mm
Smallest bending radius, movable installation	44 mm
Number of bending cycles	4000000
Bending radius	44 mm
Traversing path	10 m

## Sensor/Actuator cable - SAC-4P-M 8MS/0,3-PUR/M 8FR - 1682184

### Technical data

#### Cable

Traversing rate	3 m/s
Acceleration	5 m/s <sup>2</sup>
Cable weight	25 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	max. 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	Highly resistant to acids, alkaline solutions and solvents
	hydrolysis and microbe resistant
	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)

### 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

#### ETIM

ETIM 2.0	EC000830
ETIM 3.0	EC001855
ETIM 4.0	EC001855

# Sensor/Actuator cable - SAC-4P-M 8MS/0,3-PUR/M 8FR - 1682184

## Classifications

### ETIM

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 / EAC / cULus Listed

---

#### Ex Approvals

---

#### Approvals submitted

---

## Approval details

UL Listed	
Nominal current IN	4 A
Nominal voltage UN	125 V

cUL Listed	
Nominal current IN	4 A
Nominal voltage UN	125 V

# Sensor/Actuator cable - SAC-4P-M 8MS/0,3-PUR/M 8FR - 1682184

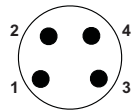
## Approvals

EAC

cULus Listed

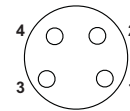
## Drawings

Schematic diagram



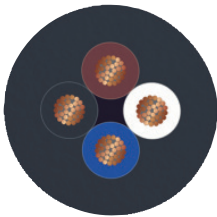
Pin assignment M8 plug, 4-pos., view male side

Schematic diagram



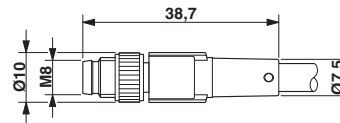
Pin assignment M8 socket, 4-pos., view female side

Cable cross section



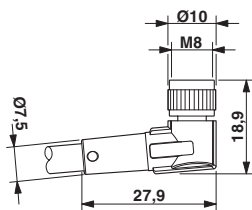
PUR halogen-free black [PUR]

Dimensional drawing



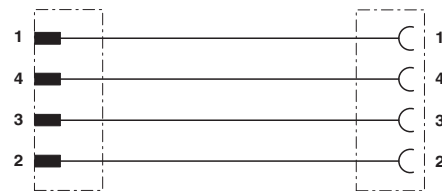
M8 x 1 male plug, straight version

Dimensional drawing



Socket M8 x 1, angled

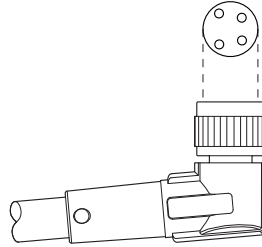
Circuit diagram



Contact assignment of M8 plugs/sockets

## Sensor/Actuator cable - SAC-4P-M 8MS/0,3-PUR/M 8FR - 1682184

Schematic diagram



Layout of connector pin assignments

---

Phoenix Contact 2015 © - all rights reserved  
<http://www.phoenixcontact.com>