

## Sensor/actuator cable - SAC-4P-M 8MS/ 3,0-PUR/M 8FSSH - 1574603

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, shielded, Plug straight M8, on Socket straight M8, cable length: 3 m

### Your advantages

- Easy and safe: 100% electrically tested plug-in components
- Our standard: robust halogen-free PUR cable
- Reliable signal transmission – 360° shielding in environments with electromagnetic interference

**RoHS**

### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 427845
GTIN	4046356427845
Weight per Piece (excluding packing)	0.120 g
Custom tariff number	85444290
Country of origin	Poland

### Technical data

#### Dimensions

Length of cable	3 m
-----------------	-----

#### Ambient conditions

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

#### General

# Sensor/actuator cable - SAC-4P-M 8MS/ 3,0-PUR/M 8FSSH - 1574603

## Technical data

### General

Rated current at 40°C	4 A
Rated voltage	48 V AC
	60 V DC
Number of positions	4
Insulation resistance	$\geq 100 \text{ M}\Omega$
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	$\geq 100$
Torque	0.2 Nm (M8 connectors)

### 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
Flammability rating according to UL 94	HB

### Cable

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	LiF9YC11Y
UL AWM style	20549
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 $\pm 0.02$ mm (Signal line)
Thickness, insulation	$\geq 0.21$ mm (Core insulation)
	approx. 0.5 mm (Outer cable sheath)
Wire colors	brown, white, blue, black

# Sensor/actuator cable - SAC-4P-M 8MS/ 3,0-PUR/M 8FSSH - 1574603

## Technical data

### Cable

Overall twist	4 wires, twisted
Shielding	Braided copper wires
Optical shield covering	80 %
External sheath, color	black-gray RAL 7021
External cable diameter D	4.7 mm $\pm 0.15$ mm
Smallest bending radius, fixed installation	24 mm
Smallest bending radius, movable installation	48 mm
Number of bending cycles	10000000
Bending radius	48 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>
Cable weight	31 kg/km
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	$\geq 100 \text{ G}\Omega \cdot \text{km}$ (at 20 °C)
Conductor resistance	max. 78 $\Omega/\text{km}$ (at 20 °C)
Nominal voltage, cable	$\leq 300$ V
Test voltage, cable	$\geq 3000$ 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 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
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)

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years

## Sensor/actuator cable - SAC-4P-M 8MS/ 3,0-PUR/M 8FSSH - 1574603

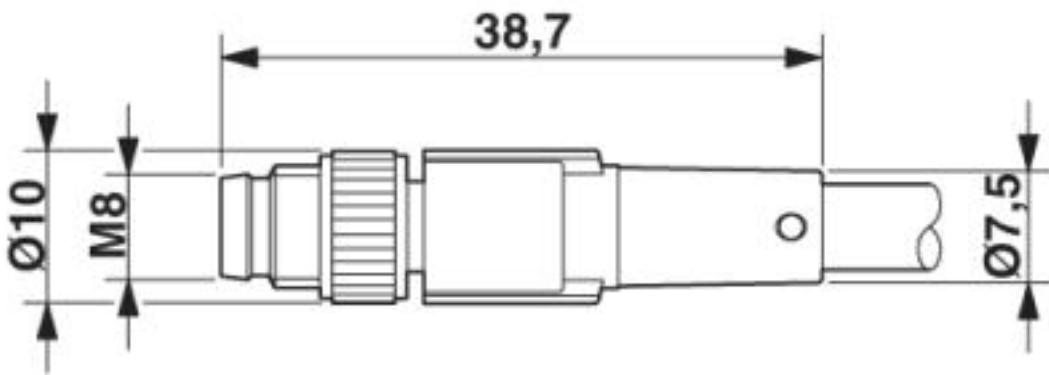
### Technical data

#### Environmental Product Compliance

For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

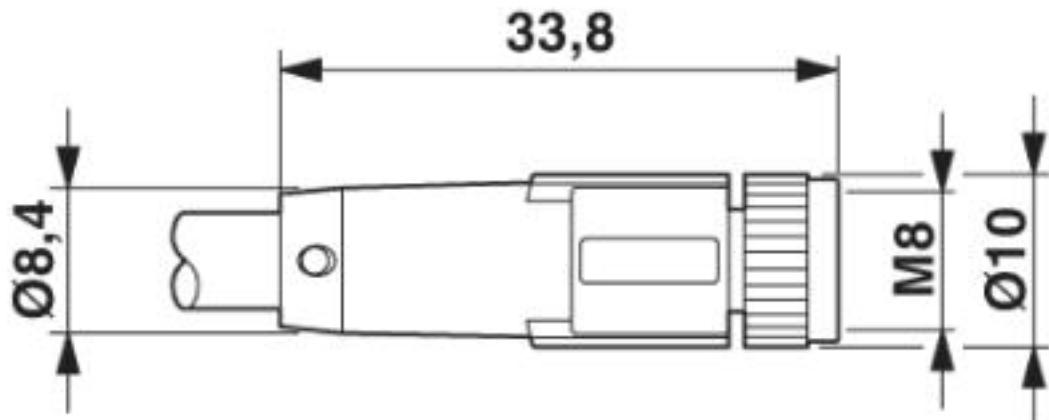
### Drawings

Dimensional drawing



M8 x 1 male plug, straight version

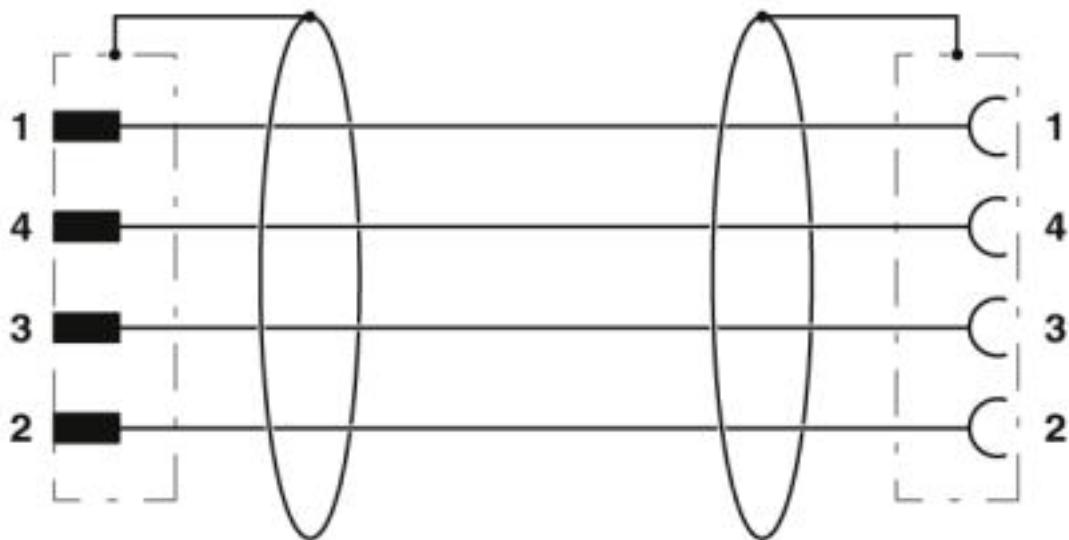
Dimensional drawing



Socket M8 x 1, straight, shielded

## Sensor/actuator cable - SAC-4P-M 8MS/ 3,0-PUR/M 8FSSH - 1574603

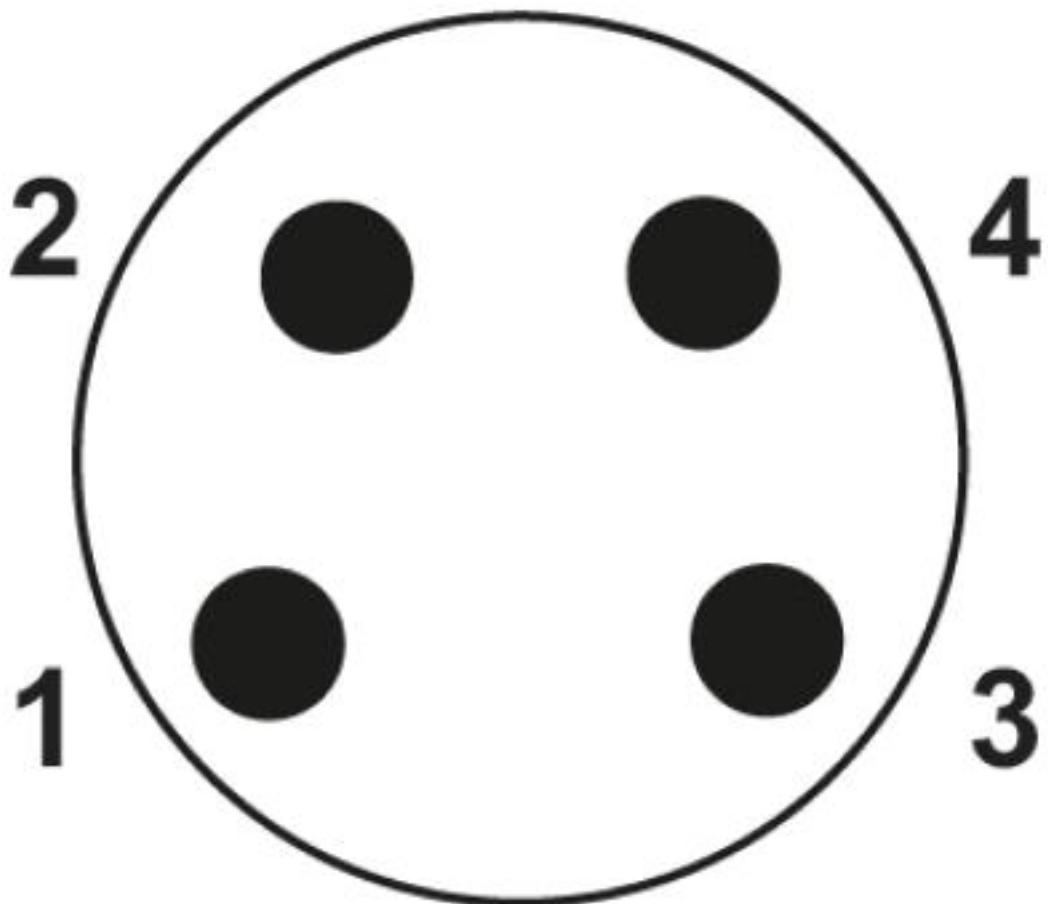
Circuit diagram



Contact assignment of M8 plugs/sockets

## Sensor/actuator cable - SAC-4P-M 8MS/ 3,0-PUR/M 8FSSH - 1574603

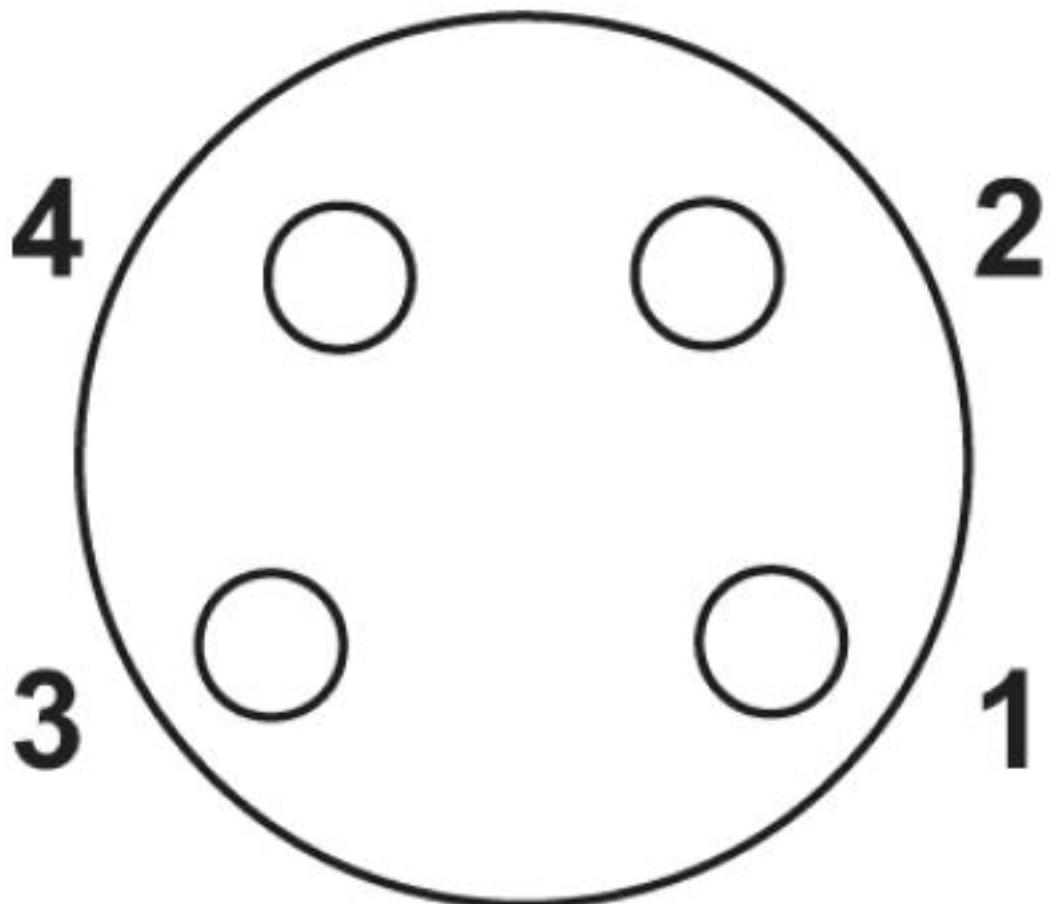
Schematic diagram



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

## Sensor/actuator cable - SAC-4P-M 8MS/ 3,0-PUR/M 8FSSH - 1574603

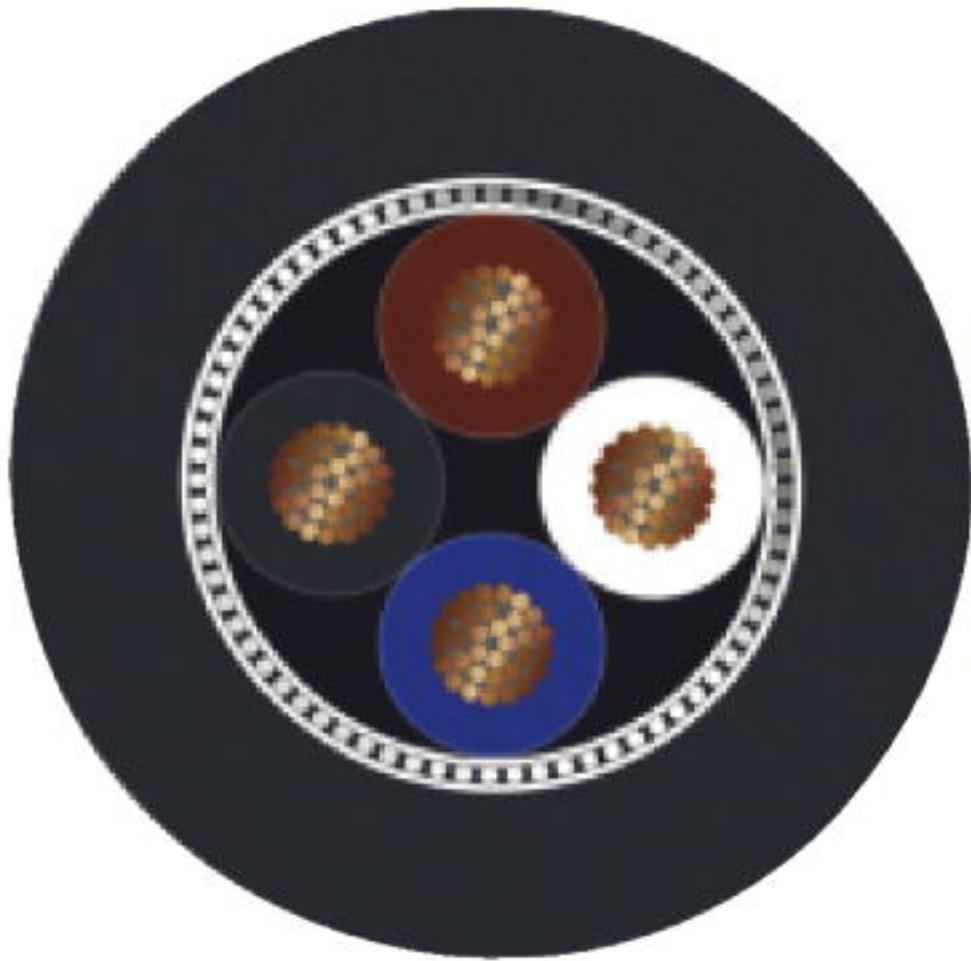
Schematic diagram



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

## Sensor/actuator cable - SAC-4P-M 8MS/ 3,0-PUR/M 8FSSH - 1574603

Cable cross section



PUR halogen-free black [PUR]

### Classifications

eCl@ss

eCl@ss 10.0.1	27060311
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

## Sensor/actuator cable - SAC-4P-M 8MS/ 3,0-PUR/M 8FSSH - 1574603

### Classifications

#### eCl@ss

eCl@ss 8.0	27279218
eCl@ss 9.0	27060311

#### ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855
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 / cULus Listed

---

#### Ex Approvals

---

#### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 221474
Nominal voltage UN		30 V	
Nominal current IN		4 A	

## Sensor/actuator cable - SAC-4P-M 8MS/ 3,0-PUR/M 8FSSH - 1574603

### Approvals

cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 221474
Nominal voltage UN		30 V	
Nominal current IN		4 A	

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

### Accessories

#### Accessories

#### Conductor marking

Insert label - PABA WH/23 - 1013779



Insert label, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: thread on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20

---

Insert label - PABA YE/23 - 1013782



Insert label, Strip, yellow, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: thread on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20

---

#### Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

## Sensor/actuator cable - SAC-4P-M 8MS/ 3,0-PUR/M 8FSSH - 1574603

### Accessories

Plug for cable screw gland

Screw plug - PROT-M 8 MS-PA-CHAIN - 1430860

M8 sealing cap made of plastic with fixing band for sensor cables, for M8 sockets



Protective cap

Sealing cap - PROT-M 8 FS-PA-CHAIN - 1430857

M8 sealing cap made of plastic with fixing band for sensor cables, for M8 plugs



### 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