

## Sensor/Actuator cable - SAC-6P-M 8MR/10,0-PUR - 1522176

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://download.phoenixcontact.com>)



Sensor/Actuator cable, 6-position, PUR halogen-free, Black-gray RAL 7021, Plug angled M8, on Free cable end, Cable length: 10 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 1
Weight per Piece (excluding packing)	457.6 GRM
Custom tariff number	85444290
Country of origin	Germany

### Technical data

#### Dimensions

Length of cable	10 m
Stripping length of the free conductor end	50 mm

#### Ambient conditions

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

#### General

Rated current at 40°C	1.5 A
Rated voltage	30 V
Number of positions	6
Contact resistance	≤ 5 mΩ

## Sensor/Actuator cable - SAC-6P-M 8MR/10,0-PUR - 1522176

### Technical data

#### General

Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M8 connector IEC 61076-2-104
Status display	No
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	CuZn
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

#### Cable

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y11Y
Conductor cross section	6x 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
Thickness, insulation	≥ 0.21 mm (Core insulation)
Wire colors	brown, white, blue, black, gray, pink
Overall twist	Six cores around the filler to the core
External sheath, color	Black-gray RAL 7021
Outer sheath thickness	approx. 0.7 mm
External cable diameter	5.00 mm
External cable diameter D	5 mm ±0.15 mm
Cable weight	34 kg/km
Outer sheath, material	PUR
Material, filler	PE
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 100 MΩ*km (at 20 °C)

## Sensor/Actuator cable - SAC-6P-M 8MR/10,0-PUR - 1522176

### Technical data

#### Cable

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	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)
	-5 °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	27061801

#### 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

# Sensor/Actuator cable - SAC-6P-M 8MR/10,0-PUR - 1522176

## Approvals

Approvals

---

Approvals

UL Listed / cUL Listed / GOST / 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

GOST 	
--	--

cULus Listed 	
--	--

## Accessories

Accessories

Conductor marking

## Sensor/Actuator cable - SAC-6P-M 8MR/10,0-PUR - 1522176

### Accessories

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

---

### Cutting tools

Cable-cutting tool - CUTFOX-S VDE - 1212207



Diagonal cutter for copper and aluminum conductors, VDE-tested

---

### Marker carrier cable

Conductor marker carrier - PATG 2/15 - 1013038



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 2-4 mm, Lettering field: 4 x 15 mm

## Sensor/Actuator cable - SAC-6P-M 8MR/10,0-PUR - 1522176

### Accessories

---

#### Conductor marker carrier - PATG 3/15 - 1013041



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 4-7 mm, Lettering field: 4 x 15 mm

#### Conductor marker carrier - PATG 4/15 - 1013054



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 6-10 mm, Lettering field: 4 x 15 mm

### 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

### 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

## Sensor/Actuator cable - SAC-6P-M 8MR/10,0-PUR - 1522176

### Accessories

Tool - SAC BIT M8-D10 - 1208461



Nut for assembling sensor/actuator cables with M8 connector and for M8 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive

---

### Stripping tool

Stripping tool - WIREFOX SAC - 1212623



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from  $\varnothing$  of 4.4 to 7 mm, any stripping length

---

Stripping tool - WIREFOX 10 - 1212150



Stripping tool, for cables and conductors from 0.02 - 10 mm<sup>2</sup>, self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm<sup>2</sup> stranded/1.5 mm<sup>2</sup> solid, replaceable stripping blade

---

### Torque tool

Torque screwdriver - TSD 02 SAC - 1208487



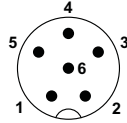
Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive for M8 connectors

---

### Drawings

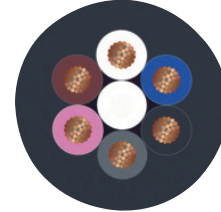
# Sensor/Actuator cable - SAC-6P-M 8MR/10,0-PUR - 1522176

Schematic diagram



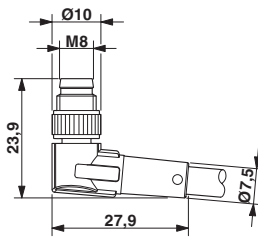
Pin assignment M8 plug, 6-pos., view male side

Cable cross section



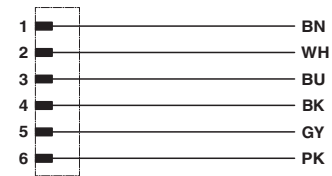
PUR halogen-free black [PUR]

Dimensioned drawing



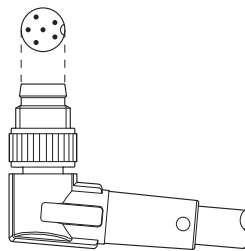
M8 x 1 male plug, angled version

Circuit diagram



Contact assignment of the M8 plug

Schematic diagram



Layout of connector pin assignments