

## Sensor/Actuator cable - SAC-8P-M 8MS/ 3,0-PUR/M 8FS SH - 1404136

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Sensor/Actuator cable, 8-position, PUR, Black RAL 9005, shielded, Plug straight M8, on Socket straight M8, Cable length: 3 m

### Product Features

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



### Key commercial data

Packing unit	1 PCE
GTIN	 4 046356 680462
Custom tariff number	85444290
Country of origin	GERMANY

### Technical data

#### General data

Rated current at 40°C	1.5 A
Rated voltage	30 V
Number of positions	8
Volume resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Length of cable	3 m
Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)

#### General characteristics

Standards/regulations	M8 plug-in connector IEC 61076-2-104
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### Technical data

#### General characteristics

Coding	A - standard
Pollution degree	3
Degree of protection	IP65
Degree of protection	IP67
Insertion/withdrawal cycles	≥ 100
Torque	0.2 Nm (M8 plug-in connectors)
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
Status display	No

#### Conductor data

Cable abbreviation	Li9YV1-C-V1-11Y
UL AWM style	20549
Conductor cross section	8x 0.14 mm <sup>2</sup> (signal line)
AWG signal line	26
Conductor structure signal line	18x 0.10 mm
Core diameter including insulation	1 mm ±0.02 mm (signal line)
Thickness, insulation	≥ 0.21 mm (signal line)
Thickness, insulation	≥ 0.38 mm (Outer cable sheath)
Wire colors	white, brown, green, yellow, gray, pink, blue, red
Overall twist	8 wires around filler to the core
Length of twist, overall twist	58 mm
Shielding	Tinned copper braided shield
Optical shield covering	85 %
External sheath, color	Black-gray RAL 7021
External cable diameter D	5.9 mm ± 0.2 mm
Smallest bending radius, fixed installation	29.5 mm
Smallest bending radius, movable installation	59 mm
Number of bending cycles	2000000
Bending radius	59 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>
Outer sheath, material	PUR

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### Technical data

#### Conductor data

Material, filler	PE
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	1 GΩ*km (at 20 °C)
Conductor resistance	139 Ω/km (at 20 °C)
Nominal voltage, conductor	≤ 300 V AC
Test voltage, conductor	≥ 3000 V AC (Spark test)
Test voltage Core/Shield	≥ 2000 V AC (for 60 s)
Flame resistance	according to UL 758/1581 (horizontal)
Flame resistance	In accordance with UL 758/1581 FT2
Halogen-free	in accordance with DIN VDE 0472 part 815
Halogen-free	in accordance with DIN EN 50267-2-1
Resistance to oil	According to DIN EN 60811-2-1, 168 h at 100°C
Other resistance	hydrolysis and microbe resistant
Other resistance	Resistant to salt water
Other resistance	Low adhesion
Other resistance	abrasion-resistant
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
Ambient temperature (operation)	-25 °C ... 80 °C (cable, flexible installation)

### Classifications

#### ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855

#### UNSPSC

UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501
UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501

#### eCl@ss

eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801

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## Classifications

### eCl@ss

eCl@ss 5.1	27061801
eCl@ss 6.0	27061801
eCl@ss 7.0	27061801

## Accessories

### Accessories

### Marking

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

Conductor marker carrier - PATO 2/15 - 1013122



Conductor marker carrier, transparent, Unlabeled, Mounting type: Clip on, Cable diameter: 2.8-4.4 mm, Lettering field: 4 x 15 mm

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### Accessories

Conductor marker carrier - PATO 3/15 - 1013135



Conductor marker carrier, transparent, Unlabeled, Mounting type: Clip on, Cable diameter: 4.4-6.7 mm, Lettering field: 4 x 15 mm

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Conductor marker carrier - PATO 4/15 - 1013148



Conductor marker carrier, transparent, Unlabeled, Mounting type: Clip on, Cable diameter: 6.7-10 mm, Lettering field: 4 x 15 mm

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Marker pen - B-STIFT - 1051993



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

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### Protection and sealing elements

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

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



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

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



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## Accessories

### Tools

Torque screwdriver - TSD 02 SAC - 1208487



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

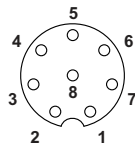
Tool - SAC BIT M8-D10 - 1208461



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

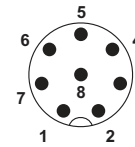
## Drawings

Schematic diagram



Connector pin assignment of M8 socket, 8-pos., view of socket side

Schematic diagram



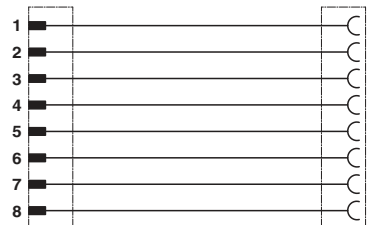
M8 plug pin assignment, 8-pos., view of pin side

Cable cross section



PUR halogen-free black shielded [PUR]

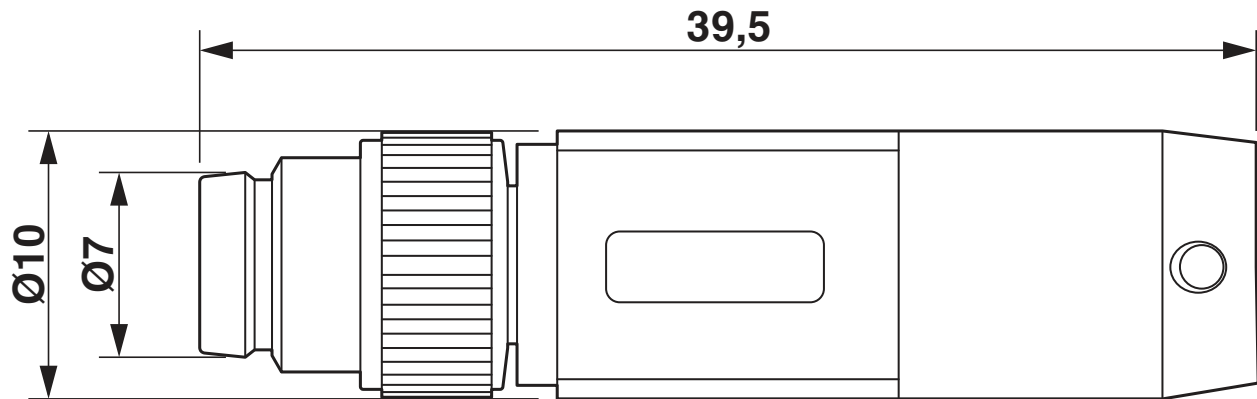
Circuit diagram



Contact assignment of M8 plugs/sockets

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Dimensioned drawing



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Dimensioned drawing

