PHŒNIX CONTACT

Sensor/Actuator cable - SAC-8P-10,0-PUR/M 8FS SH - 1404150

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Sensor/Actuator cable, 8-position, PUR halogen-free, Black RAL 9005, shielded, free cable end, on Socket straight M8, Cable length: 10 m

Why buy this product

☑ Easy and safe: 100% electrically tested plug-in components

☑ Our standard: robust halogen-free PUR cable

☑ Save space – with high-pos. connectors

☑ Reliable signal transmission – 360° shielding in environments with electromagnetic interference

Key commercial data

Packing unit	1 pc
GTIN	4 046356 680684
Weight per Piece (excluding packing)	478.7 g
Custom tariff number	85444290
Country of origin	Poland
Note	Made to Order (non-returnable)

Technical data

Dimensions

Length of cable	10 m

Ambient conditions

Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)
Degree of protection	IP65
	IP67

General

Rated current at 40°C	1.5 A
Rated voltage	30 V
Number of positions	8
Contact resistance	$\leq 5\ m\Omega$

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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
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 abbreviation	Li9YV1-C-V1-11Y
UL AWM style	20549
Conductor cross section	8x 0.14 mm² (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)
	≥ 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/s²

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Cable

Outer sheath, material	PUR
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, cable	≤ 300 V AC
Test voltage, cable	≥ 3000 V AC (Spark test)
Test voltage Core/Shield	≥ 2000 V AC (for 60 s)
Flame resistance	according to UL 758/1581 (horizontal)
	in accordance with UL 758/1581 FT2
Halogen-free	in accordance with DIN VDE 0472 part 815
	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
	Resistant to salt water
	Low adhesion
	abrasion-resistant
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 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855

UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501

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Classifications

UNSPSC

UNSPSC 12.01	31251501
UNSPSC 13.2	31251501

Accessories

Accessories

Conductor 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

Cutting tools

Diagonal cutter - CUTFOX-S VDE - 1212207

Diagonal cutter for copper and aluminum conductors, VDE-tested

Marker carrier cable

Sensor/Actuator cable - SAC-8P-10,0-PUR/M 8FS SH - 1404150

Accessories

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

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

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

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

Screwdriver tools

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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

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Stripping tool

Stripping tool - WIREFOX SAC-1 - 1212757

Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from Ø of 3.2 to 4.4 mm, any stripping length

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Stripping tool - WIREFOX SAC - 1212623

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

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Stripping tool - WIREFOX 10 - 1212150

Stripping tool, for cables and conductors from 0.02 - 10 mm², self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm² stranded/1.5 mm² solid, replaceable stripping blade

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Torque tool
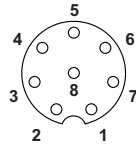
Torque screwdriver - TSD 02 SAC - 1208487

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

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Drawings

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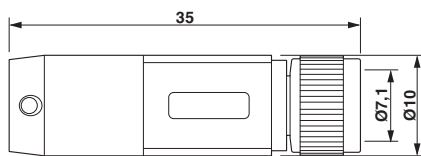
Schematic diagram

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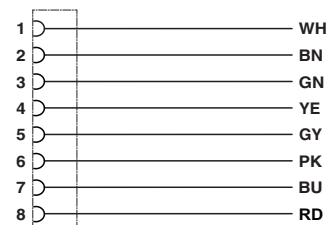
Cable cross section

PUR halogen-free, black [PUR]

Dimensioned drawing

Socket M8 x 1, straight

Circuit diagram

1	WH
2	BN
3	GN
4	YE
5	GY
6	PK
7	BU
8	RD

Contact assignment of M8 socket