


**SAC-3P- 5,0-PUR/M 8FS**

Order No.: 1669628

<http://catalog.phoenixcontact.net/phoenix/treeViewClick.do?UID=1669628>

Sensor/Actuator cable, 3-position, PUR halogen-free, Black-gray RAL 7021, Free cable end, on Socket straight M8, Cable length: 5 m

**Commercial data**

EAN	 4 017918 134563
sales group	D130
Pack	1 Pcs.
Customs tariff	85444290
Gross weight in pieces	0.1202 KG
Net weight per piece	0.1164 KG
Catalog page information	Page 120 (PC-2011)

**Product notes**WEEE/RoHS-compliant since:  
06/01/2005

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**Technical data****General data**

Rated current at 40°C	4 A
Rated voltage	60 V
Number of positions	3
Volume resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ

Length of cable	5 m
Stripping length of the free conductor end	50 mm
Ambient temperature (operation)	-25 °C ... 90 °C (Male connector / female connector)

#### General characteristics

Standards/regulations	M8 plug-in connector IEC 61076-2-104
Coding	A - standard
Surge voltage category	II
Pollution degree	3
Degree of protection	IP65/67
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 type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y11Y-HF
UL AWM style	20549
Conductor cross section	3x 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	≥ 0.38 mm (Core insulation)
	Approx. 0.9 mm (Outer cable sheath)
Wire colors	brown, blue, black
Overall twist	3 wires, twisted
Length of twist, overall twist	40 mm
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
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>
Cable weight	24 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	≤ 78 Ω/km (at 20 °C)
Nominal voltage, conductor	≤ 300 V
Test voltage, conductor	≥ 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	hydrolysis and microbe resistant
	Highly resistant to acids, alkaline solutions and solvents
	Resistant to salt water
	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)

#### Certificates / Approvals



Certification

cULus Listed, GOST

Certifications applied for:

Certification Ex:

**Accessories**

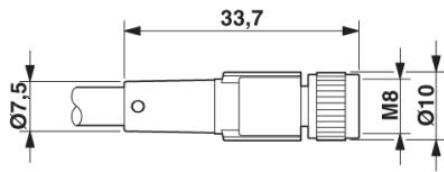
Item	Designation	Description
<b>Marking</b>		
1051993	B-STIFT	Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm
1013944	PABA RD/15	Insert label, red, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm
1013151	PABA WH/15	Insert label, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm
1013698	PABA YE/15	Insert label, yellow, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm
1013850	PATG 2/23	Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 2-4 mm, Lettering field: 4 x 23 mm
1013863	PATG 3/23	Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 4-7 mm, Lettering field: 4 x 23 mm
0808011	PATG 4/23	Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 6-10 mm, Lettering field: 4 x 23 mm

<b>Protection and sealing elements</b>		
1430860	PROT-M 8 MS-PA-CHAIN	M8 sealing cap made of plastic with fixing band for sensor cables, for M8 sockets

<b>Tools</b>		
1212207	CUTFOX-S VDE	Diagonal cutter for copper and aluminum conductors, VDE-tested
1208461	SAC BIT M8-D10	Nut for assembling sensor/actuator cables with M8 connector and for M8 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive
1208487	TSD 02 SAC	Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive for M8 connectors
1212150	WIREFOX 10	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
1212623	WIREFOX SAC	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

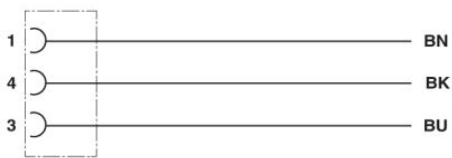
## Drawings

### Dimensioned drawing



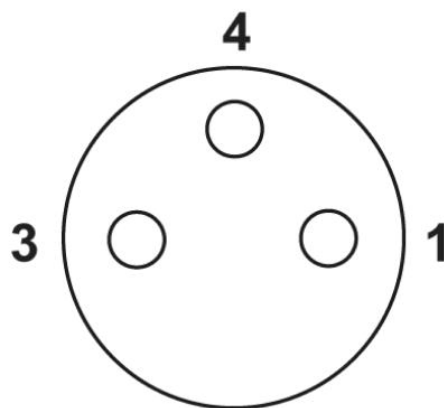
Socket M8 x 1, straight

### Circuit diagram

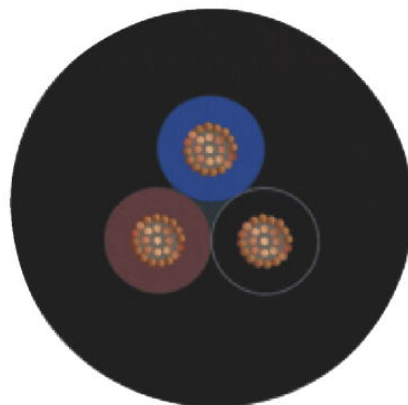


Contact assignment of M8 socket

### Schematic diagram



Pin assignment M8 socket, 3-pos., view female side



PUR halogen-free black [PUR]

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