

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, shielded, Plug straight M8, on Free cable end, Cable length: 10 m

#### **Product Features**

- Easy and safe: 100% electrically tested plug-in components
- Reliable signal transmission 360° shielding in environments with electromagnetic interference



#### Key commercial data

Packing unit	11
Weight per Piece (excluding packing)	373.1 GRM
Custom tariff number	85444290
Country of origin	Poland

#### 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

#### General

Rated current at 40°C	1.5 A
Rated voltage	30 V
Number of positions	6
Contact resistance	$\leq 5 \text{ m}\Omega$



### Technical data

#### General

Insulation resistance	$\geq$ 100 M $\Omega$
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	НВ
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 shielded
Cable type (abbreviation)	PUR
Conductor cross section	6x 0.14 mm² (signal line)
AWG signal line	26
Conductor structure signal line	18x 0.10 mm
Core diameter including insulation	1.05 mm ±0.02 mm
Wire colors	Brown, white, black, blue, gray, pink
External sheath, color	Black-gray RAL 7021
External cable diameter	5.20 mm
Smallest bending radius, fixed installation	52 mm
Smallest bending radius, movable installation	52 mm
Number of bending cycles	4000000
Bending radius	52 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s²
Cable weight	34 kg/km
Outer sheath, material	PUR
Conductor material	Bare Cu litz wires
Special properties	Flexible cable conduit capable



### Technical data

#### Cable

	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

## Approvals

#### Approvals



Approvals	
Approvals	
UL Listed / cUL Listed / GOST / cULus Listed	
Ex Approvals	
Approvals submitted	
Approval details	
UL Listed (II)	
Nominal current IN	4 A
Nominal voltage UN	125 V
cUL Listed •	
Nominal current IN	4 A
Nominal voltage UN 125 V	
GOST C	

Accessories

cULus Listed • 🕕 😘

Accessories

Conductor marking



#### 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



#### 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



#### 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  $\emptyset$  of 4.4 to 7 mm, any stripping length

Stripping tool - WIREFOX 10 - 1212150



Stripping tool, for cables and conductors from 0.02 -  $10 \text{ mm}^2$ , self-adjusting, stripping length of up to 18 mm, cutting capacity of up to  $10 \text{ mm}^2$  stranded/ $1.5 \text{ mm}^2$  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



Schematic diagram



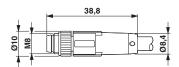
Pin assignment M8 plug, 6-pos., view male side

Cable cross section



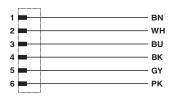
PUR halogen-free black shielded [PUR]

Dimensioned drawing



Plug M8 x 1, straight, shielded

#### Circuit diagram



Contact assignment of the M8 plug

© Phoenix Contact 2013 - all rights reserved http://www.phoenixcontact.com