

Sensor/Actuator cable - SAC-4P-20,0-PUR/M12FR SH - 1514511

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Sensor/Actuator cable, 4-position, PUR halogen-free, Black-gray RAL 7021, shielded, Free cable end, on Socket straight M12, A-coded, Cable length: 20 m



Key commercial data

Packing unit	1 1
Minimum order quantity	5 1
Weight per Piece (excluding packing)	1016.0 GRM
Custom tariff number	85444290
Country of origin	Poland

Technical data

Dimensions

Length of cable	20 m
Stripping length of the free conductor end	50 mm

Ambient conditions

Degree of protection	IP65
	IP67

General

Rated current at 40°C	4 A
Rated voltage	250 V
Number of positions	4
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Status display	No
Surge voltage category	II

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Technical data

General

Pollution degree	3
Insertion/withdrawal cycles	≥ 100

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 shielded
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y-V1-C-V1-11Y
UL AWM style	20549 / 10493 (80°C/300 V)
Conductor cross section	4x 0.34 mm ² (signal line)
AWG signal line	22
Conductor structure signal line	42x 0.10 mm
Core diameter including insulation	1.27 mm ±0.02 mm (signal line)
Thickness, insulation	≥ 0.21 mm (Core insulation)
	approx. 1 mm (Outer cable sheath)
Wire colors	brown, white, blue, black
Overall twist	4 wires, twisted
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 ²
Cable weight	46 kg/km
Outer sheath, material	PUR

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Technical data

Cable

Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	$\geq 100 \text{ G}\Omega\cdot\text{km}$ (at 20 °C)
Conductor resistance	max. 58 Ω/km (at 20 °C)
Working capacitance	$\leq 80 \text{ pF}$ (Conductor-Conductor)
	$\leq 135 \text{ pF}$ (Wire/shield)
Wave impedance	$\geq 62 \Omega$ (f = 10 MHz)
Inductance	approx. 0.75 mH (f = 1 kHz)
Nominal voltage, cable	$\leq 300 \text{ V}$
Test voltage, cable	$\geq 3000 \text{ V}$
Special properties	Flexible cable conduit capable
	Silicone-free
	Free of substances which would hinder coating with paint or varnish
	Low adhesion surface
Flame resistance	In accordance with UL FT-2
Halogen-free	in accordance with DIN VDE 0472 part 815
	in accordance with DIN EN 50267-2-1
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
	Resistant to salt water
	partly UV-resistant in accordance with DIN EN ISO 4892-2-A
	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	27061801

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Classifications

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

UL Listed / cUL Listed / cULus Listed

Ex Approvals

Approvals submitted

Approval details

UL Listed 	
Nominal current I _N	4 A
Nominal voltage U _N	300 V

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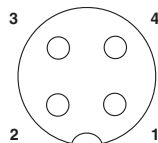
Approvals

cUL Listed 	
Nominal current I _N	4 A
Nominal voltage U _N	300 V

cULus Listed 	
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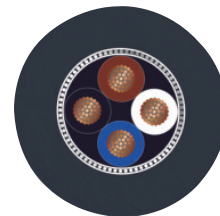
Drawings

Schematic diagram



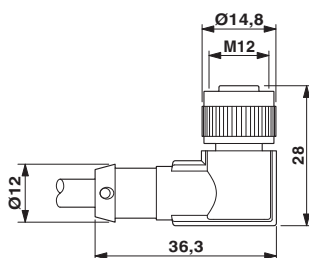
Pin assignment M12 socket, 4-pos., A-coded, view female side

Cable cross section



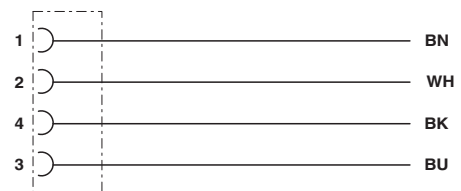
PUR halogen-free black shielded [PUR]

Dimensioned drawing



M12 x 1 socket, angled, shielded

Circuit diagram



Contact assignment of the M12 socket

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Diagram

