Sensor/Actuator cable - SAC-4P-M12MS/ 3,0-800/M12FR - 1457092

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Sensor/Actuator cable, 4-position, PUR halogen-free, welding sputter-resistant, highly flexible, Gray RAL 7001, Plug straight M12, A-coded, on Socket angled M12, A-coded, Cable length: 3 m, for robots and drag chains

Product Features

- Easy and safe: 100% electrically tested plug-in components
- Flexible: cable supports a high degree of torsion and bending
- Reliable solution for the body shop as cable is resistant to welding sparks

Key commercial data

Packing unit	1 PCE
Catalog page	Page 227 (PC-2011)
GTIN	4 046356 593458
Custom tariff number	85444290
Country of origin	POLAND

Technical data

General data

Rated current at 40°C	4 A
Rated voltage	250 V
Number of positions	4
Volume resistance	≤ 5 mΩ
Insulation resistance	≥ 10 MΩ
Length of cable	3 m
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)

General characteristics

Standards/regulations	M12 plug-in connector IEC 61076-2-101

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Technical data

General characteristics

Coding	A - standard
Surge voltage category	II
Pollution degree	3
Degree of protection	IP65/IP68/IP69K
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 plug-in connector)
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

Note	As a result of the extremely rugged outer sheath, this cable should only be stripped in 5 cm steps.
Cable type	Gray, highly flexible PUR
Cable type (abbreviation)	800
Cable abbreviation	Li12YYTPE-HF
Conductor cross section	4x 0.34 mm² (signal line)
AWG signal line	22
Conductor structure signal line	42x 0.10 mm
Core diameter including insulation	1.3 mm ±0.05 mm (signal line)
Wire colors	brown, white, blue, black
Overall twist	4 wires, twisted
External sheath, color	Gray RAL 7001
External cable diameter D	4.8 mm ± 0.2 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	5 x D
Number of bending cycles	15000000
Bending radius	50 mm
Traversing path	0.9 m
Traversing rate	5 m/s
Acceleration	30 m/s²
Torsion force	± 360 °/m
Outer sheath, material	PUR
Material conductor insulation	PES

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Technical data

Conductor data

Conductor material	Bare Cu litz wires
Insulation resistance	≥ 20 MΩ*km
Conductor resistance	approx. 53 Ω/km
Nominal voltage, conductor	300 V
Test voltage, conductor	2000 V
Special properties	Sheath resistant to welding beads, can be recycled, matt, without adhesion, wear-resistant, flame resistant and self-extinguishing
Special properties	Free from silicone and cadmium
Special properties	Free of substances which would hinder coating with paint or varnish
Flame resistance	DIN VDE 0472 part 804, test type B
Flame resistance	IEC 60332-1
Flame resistance	in accordance with FT1 as per UL 758
Halogen-free	The cable is halogen-free
Resistance to oil	Excellent oil-resistance (as per DIN VDE 0250 T.407)
Other resistance	Highly resistant to acids, alkaline solutions and solvents
Ambient temperature (operation)	-40 °C ... 90 °C (cable, fixed installation)
Ambient temperature (operation)	-30 °C ... 90 °C (cable, flexible installation)
Ambient temperature (operation)	to 120 °C (for 3000 h)

Classifications

ETIM

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
eCl@ss 5.1	27061801
eCl@ss 6.0	27061801

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Classifications

eCl@ss

eCl@ss 7.0	27061801

Approvals

Approvals

Approvals

GOST

Ex Approvals

Approvals submitted

Approval details

GOST

Accessories

Accessories

Protection and sealing elements

Sealing cap - PROT-M12 FS-PA-CHAIN - 1430873

M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 sockets



Screw plug - PROT-M12 MS-PA-CHAIN - 1430899

M12 sealing cap with fixing band, for sensor cables, for free M12 sockets



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Accessories

Tools

Torque screwdriver - TSD 04 SAC - 1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

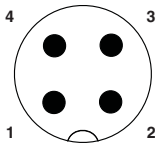
Tool - SAC BIT M12-D15 - 1208432



Nut for assembling sensor/actuator cables with M12 connector and for M12 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive

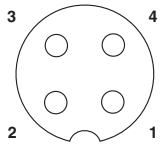
Drawings

Schematic diagram



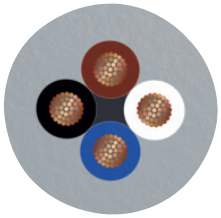
Pin assignment M12 plug, 4-pos., A-coded, view plug side

Schematic diagram



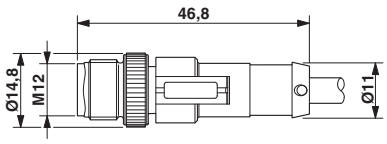
Pin assignment M12 socket, 4-pos., A-coded, view female side

Cable cross section



Gray, highly flexible PUR [800]

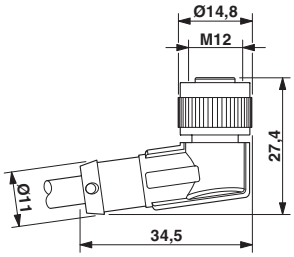
Dimensioned drawing



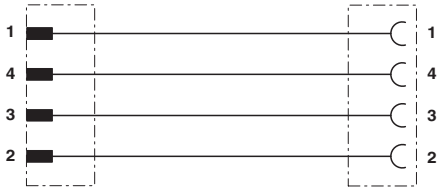
M12 x 1 plug, straight

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Dimensioned drawing



Circuit diagram



Contact assignment of the M12 plug and the M12 socket

M12 x 1 socket, angled

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