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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Sensor/Actuator cable - SAC-4P- 5,0-28X/M12FS OD - 1454082

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Sensor/Actuator cable, 4-position, PE-X halogen-free, Black-gray RAL 7021, Free cable end, on Socket straight M12, A-coded, Cable length: 5 m, For outdoor applications, With high-grade steel knurl

Product Features

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Corrosion protection for all exposed metal parts, thanks to the use of stainless steel type 1.4404
- ✓ Robust throughout: resistant to oil, UV, and ozone, withstands temperatures from -40°C to +105°C



Key commercial data

Packing unit	1 PCE
Catalog page	Page 219 (PC-2011)
GTIN	 4 046356 568692
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	≥ 100 MΩ
Length of cable	5 m
Ambient temperature (operation)	-40 °C ... 105 °C (Plug / socket)
Ambient temperature (operation)	-40 °C ... 85 °C (On sudden changes in temperature (according to IEC 60512-11-4))

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Technical data

General characteristics

Standards/regulations	M12 plug-in connector IEC 61076-2-101
Coding	A - standard
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	PP
Material of grip body	PP
Material, knurls	High-grade steel
Sealing material	FPM
Status display	No

Conductor data

Cable type	PE-X black
Cable type (abbreviation)	28X
Cable abbreviation	Li2X2X
Conductor cross section	4x 0.5 mm ² (signal line)
AWG signal line	20
Conductor structure signal line	28x 0.15 mm
Core diameter including insulation	1.6 mm ±0.05 mm (signal line)
Thickness, insulation	approx. 0.3 mm (Core insulation)
Thickness, insulation	approx. 0.6 mm (Outer cable sheath)
Wire colors	brown, white, blue, black
Overall twist	4 wires, twisted
Length of twist, overall twist	61.6 mm
External sheath, color	Black-gray RAL 7021
External cable diameter D	5.2 mm ± 0.2 mm
Smallest bending radius, fixed installation	26 mm
Smallest bending radius, movable installation	52 mm
Number of bending cycles	2000000
Bending radius	52 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s ²
Cable weight	44 kg/km
Outer sheath, material	PE-X

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Technical data

Conductor data

Material conductor insulation	PE-X
Conductor material	Bare Cu litz wires
Insulation resistance	$\geq 100 \text{ M}\Omega \cdot \text{km}$ (at 20 °C)
Conductor resistance	max. 39 Ω/m (at 20 °C)
Nominal voltage, conductor	$\leq 300 \text{ V AC}$
Test voltage, conductor	$\geq 3000 \text{ V AC}$
Flame resistance	According to DIN 60332-1-2
Flame resistance	According to DIN EN 50266-2-5
Halogen-free	in accordance with DIN VDE 0472 part 815
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	UV resistant According to DIN VDE 0276-605
Ambient temperature (operation)	-40 °C ... 105 °C (cable, fixed installation)
Ambient temperature (operation)	-15 °C ... 105 °C (cable, flexible installation)

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
eCl@ss 7.0	27061801

Approvals

Approvals

Sensor/Actuator cable - SAC-4P- 5,0-28X/M12FS OD - 1454082

Approvals

Approvals

GOST

Ex Approvals

Approvals submitted

Approval details

GOST 

Accessories

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

Torque screwdriver - TSD-M 1,2NM - 1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

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Accessories

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

Adapter - SAC BIT M12-W14 - 1212513



SAC nut, for assembling M12 connectors with hexagonal high-grade steel knurl, with 4 mm hexagonal drive

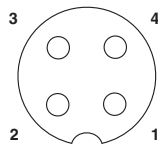
Plug-in connector - SACC-M12MS-4QO-0,75-VA - 1440779



Sensor/actuator connector, male connector, straight, 4-pos., M12, A-coded, QUICKON-ONE, high-grade steel knurl, maximum cable diameter of 8 mm

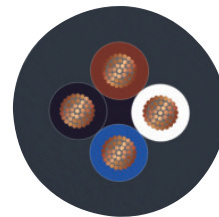
Drawings

Schematic diagram



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

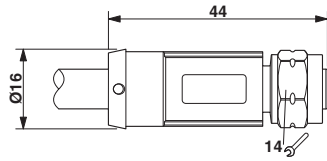
Cable cross section



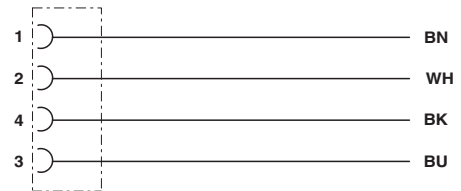
PE-X black [28X]

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Dimensioned drawing



Circuit diagram



M12 x 1 socket, straight

Contact assignment of the M12 socket