

# Sensor/Actuator cable - SAC-4P-M12MS/0,6-600/FS SH HD - 1403991

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Sensor/Actuator cable, 4-position, PP-EPDM halogen-free, Gray RAL 7035, shielded, Plug straight M12, A-coded, on Socket straight M12, A-coded, Cable length: 0.6 m, Hygienic design, With high-grade steel knurl



## Key commercial data

Packing unit	0
Minimum order quantity	1
GTIN	 4 046356 677455
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	0.6 m
Ambient temperature (operation)	-40 °C ... 105 °C (Male connector / female connector)

### General characteristics

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

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## Technical data

### General characteristics

Contact surface material	Ni/Au
Contact carrier material	PP
Material of grip body	PP
Material, knurls	High-grade steel
Sealing material	FKM
Status display	No

### Conductor data

Cable type	Halogen-free PP gray shielded
Cable type (abbreviation)	600
Cable abbreviation	Li9YV1-C-V1-9Y
Conductor cross section	4x 0.34 mm <sup>2</sup> (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)
Wire colors	brown, white, blue, black
Overall twist	4 wires, twisted
Length of twist, overall twist	48 mm
Shielding	Braided copper wires
Optical shield covering	85 %
External sheath, color	Gray RAL 7035
Outer sheath thickness	Approx. 0.8 mm
External cable diameter D	5.55 mm ± 0.2 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Cable weight	40 kg/km
Outer sheath, material	PP-EPDM
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Conductor resistance	58 Ω/km (At an ambient temperature of 20°C)
Nominal voltage, conductor	≤ 300 V AC
Test voltage, conductor	≥ 3000 V AC (Spark test)
Test voltage Core/Shield	≥ 2000 V AC (for 60 s)
Special properties	FDA compliant
Halogen-free	in accordance with DIN VDE 0472 part 815
Ambient temperature (operation)	-40 °C ... 105 °C (cable, fixed installation)

## Classifications

### ETIM

ETIM 3.0	EC001855
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## 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

## 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

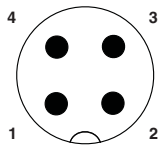
Adapter - SAC BIT M12-W14 - 1212513



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

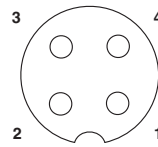
## Drawings

Schematic diagram



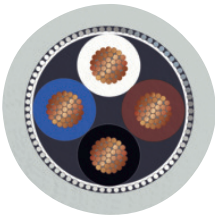
Pin assignment M12 plug, 4-pos., A-coded, view plug side

Schematic diagram



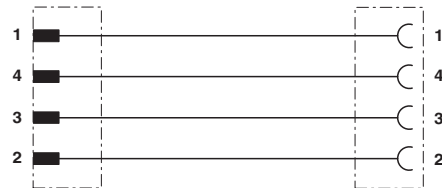
Pin assignment M12 socket, 4-pos., A-coded, view female side

Cable cross section



Halogen-free PP gray shielded [600]

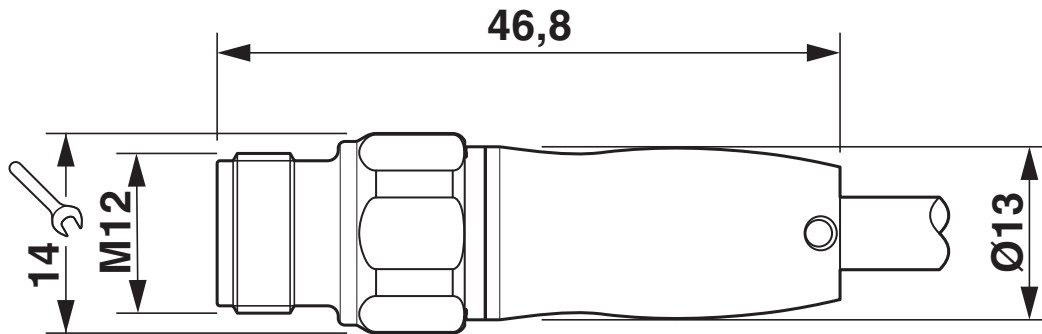
Circuit diagram



Contact assignment of the M12 plug and the M12 socket

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Dimensioned drawing



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Dimensioned drawing

