

Sensor/actuator cable - SAC-4P-M12MS/5,0-600/M12FS HD - 1410443

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Sensor/actuator cable, 4-position, PP-EPDM halogen-free, gray RAL 7035, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 5 m, Hygienic design, with high-grade steel knurl

RoHS

Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	 4 046356 896757
GTIN	4046356896757
Weight per Piece (excluding packing)	160.000 g
Custom tariff number	85444290
Country of origin	Poland

Technical data

Dimensions

Length of cable	5 m
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Ambient conditions

Degree of protection	IP65
	IP67

General

Rated current at 40°C	4 A
Rated voltage	250 V AC
	250 V DC
Number of positions	4

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Technical data

General

Insulation resistance	$\geq 100 \text{ M}\Omega$
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
	Material conformance FDA 21 CFR 177.2600
Status display	No
Overvoltage category	II
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 connector)

Material

Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PP
Material of grip body	PP
Material, knurls	Stainless steel
Sealing material	FKM

Standards and Regulations

Standards/specifications	M12 connector IEC 61076-2-101
	Material conformance FDA 21 CFR 177.2600

Cable

Cable type	Halogen-free PP gray
Cable type (abbreviation)	600
Cable abbreviation	Li9Y9Y
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 \pm 0.02 mm (Signal line)
Thickness, insulation	$\geq 0.21 \text{ mm}$ (Core insulation)
Wire colors	brown, white, blue, black
Overall twist	4 wires, twisted
Length of twist, overall twist	48 mm
External sheath, color	gray RAL 7035
Outer sheath thickness	approx. 0.8 mm
External cable diameter D	4.7 mm \pm 0.15 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D

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Technical data

Cable

Number of bending cycles	4000000
Minimum bending radius, drag chain applications	10 x D
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s ²
Torsion force	± 270 °/m (4,000,000 torsion cycles, max. 25 torsion cycles/min)
Cable weight	30 kg/km
Outer sheath, material	PP-EPDM
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Conductor resistance	58 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage, cable	≥ 3000 V AC (Spark test)
Special properties	FDA compliant according to FDA 21 CFR 177.2600
	highly flexible
	Flexible cable conduit capable
Halogen-free	in accordance with DIN VDE 0472 part 815
Other resistance	Resistant to cold bending and cold impacts According to DIN EN 60811-1-4 (-40 °C)
Ambient temperature (operation)	-40 °C ... 105 °C (cable, fixed installation)
	-25 °C ... 105 °C (cable, flexible installation)

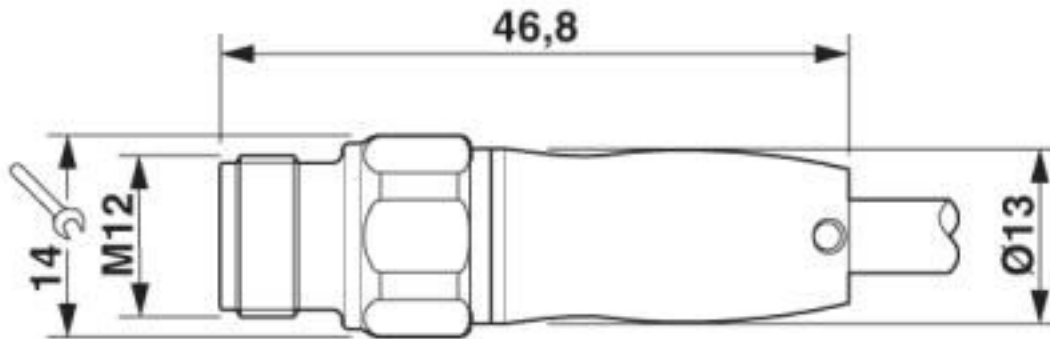
Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

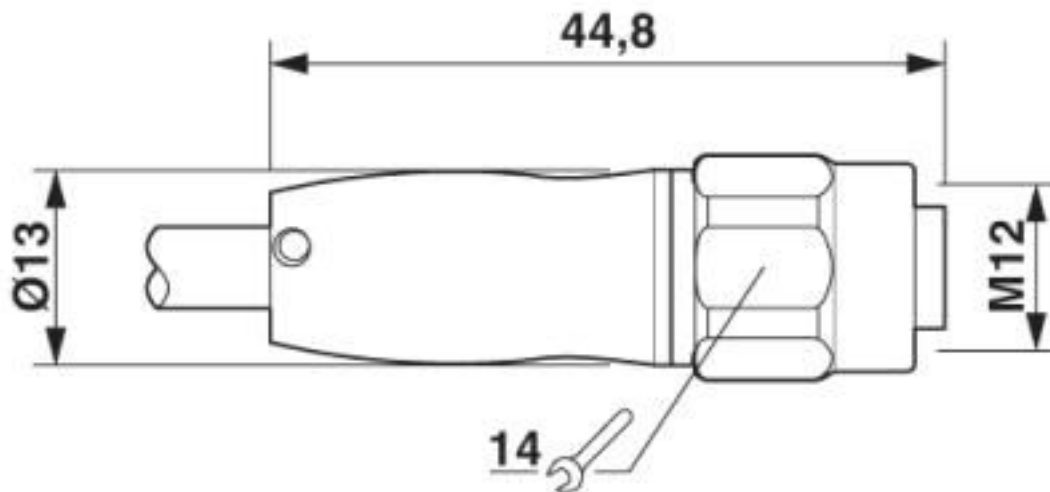
Sensor/actuator cable - SAC-4P-M12MS/5,0-600/M12FS HD - 1410443

Dimensional drawing



Plug, M12 x 1, straight, shielded

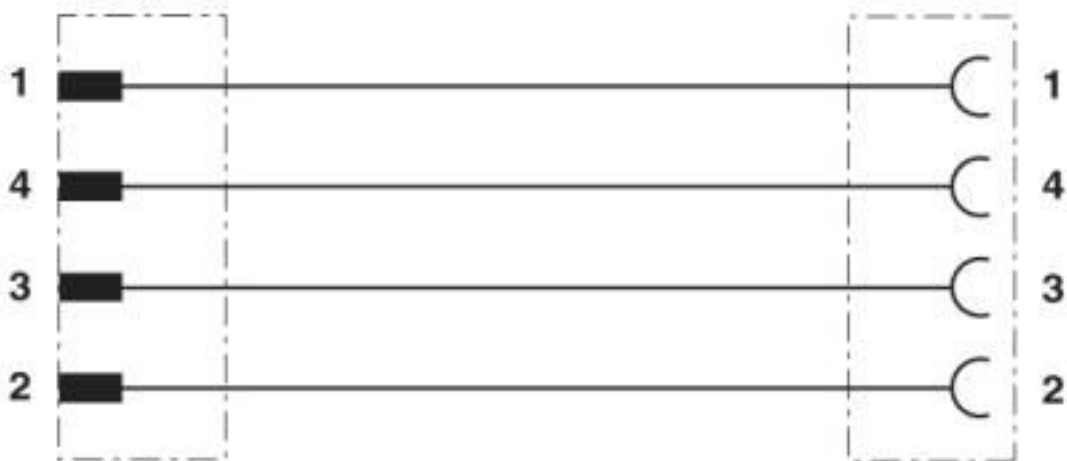
Dimensional drawing



M12 x 1 socket, straight

Sensor/actuator cable - SAC-4P-M12MS/5,0-600/M12FS HD - 1410443

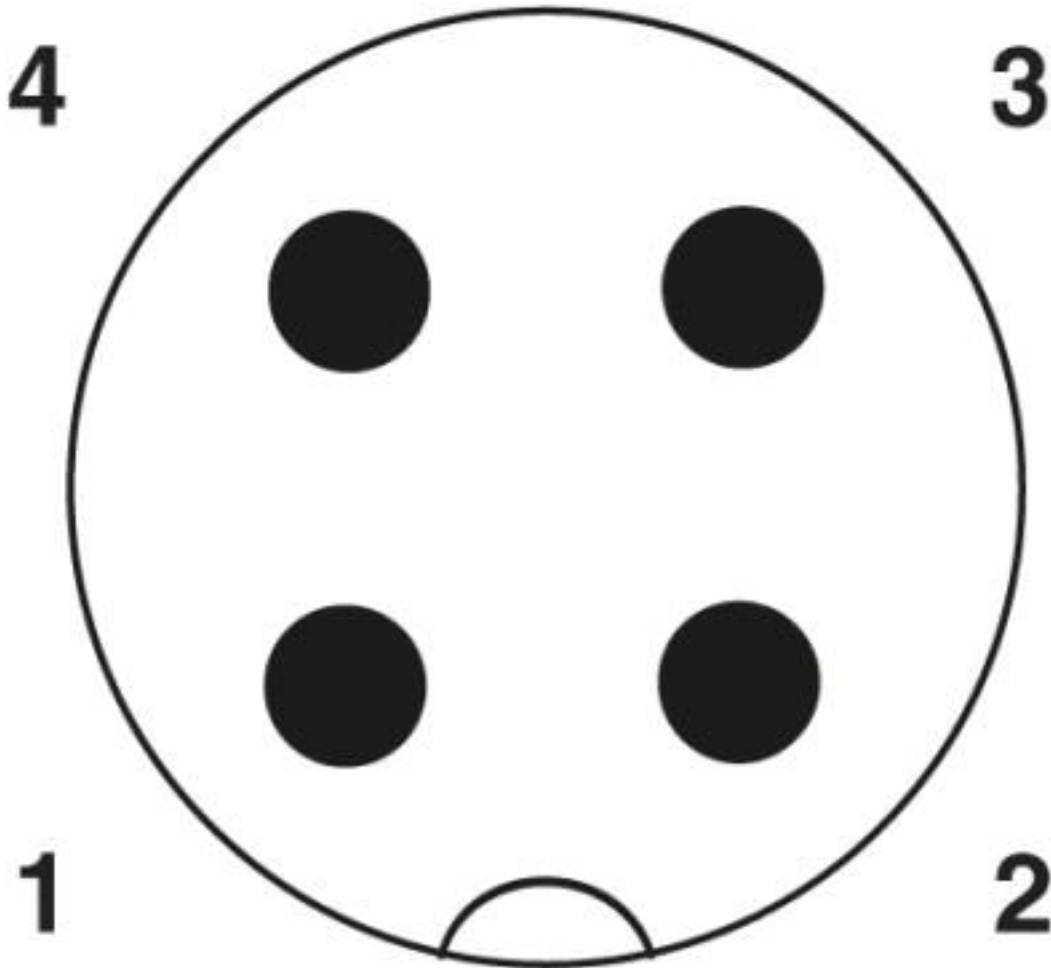
Circuit diagram



Contact assignment of the M12 plug and the M12 socket

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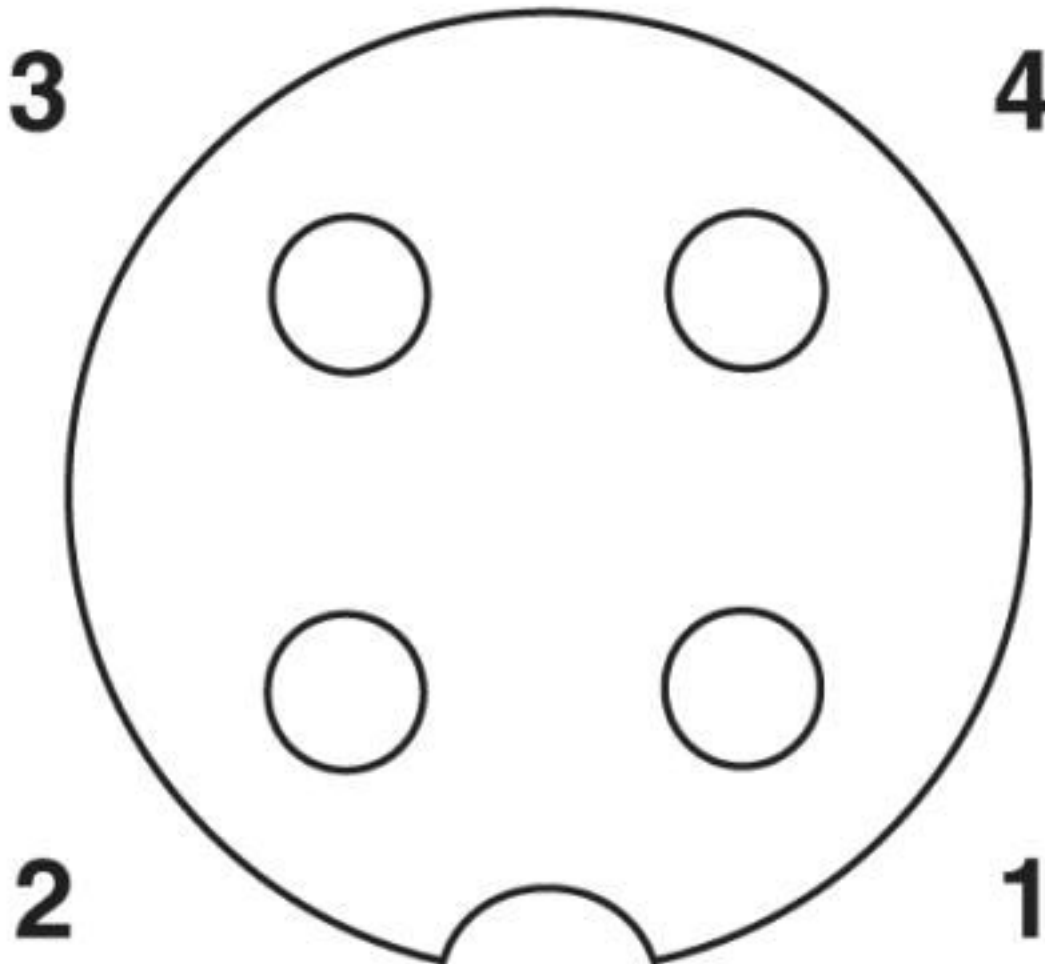
Schematic diagram



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

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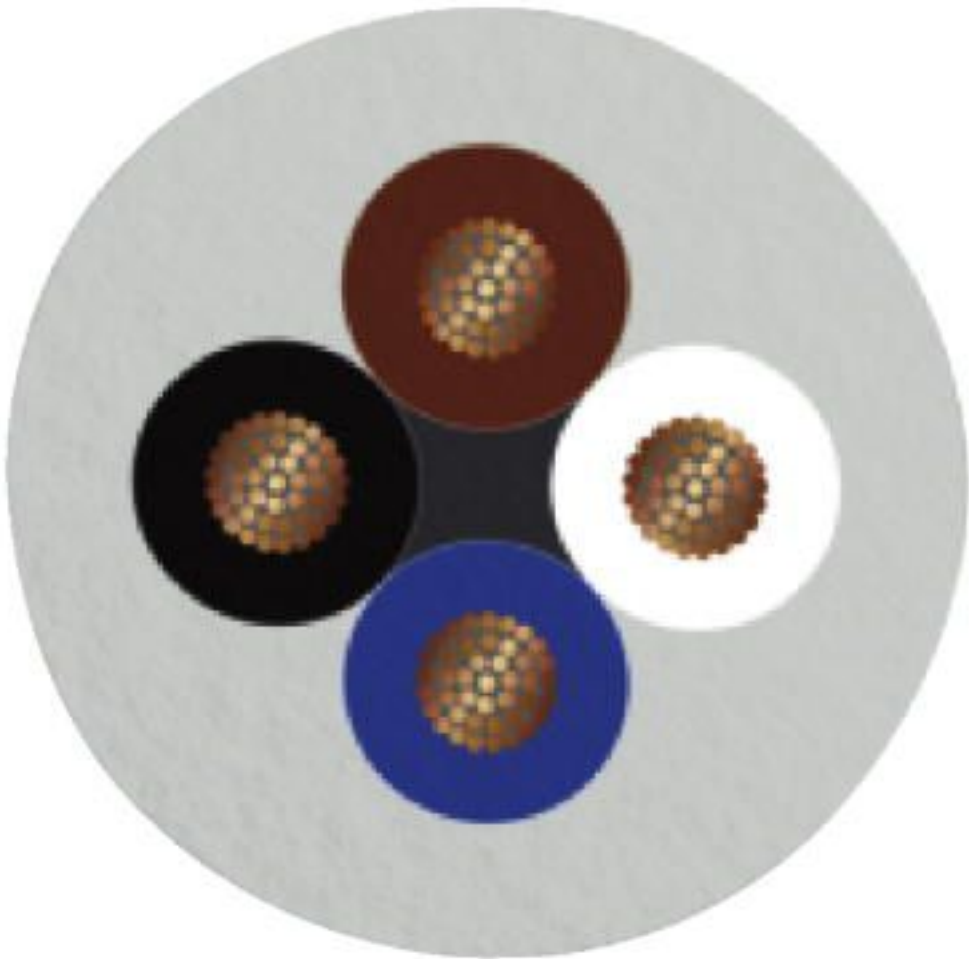
Schematic diagram



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

Sensor/actuator cable - SAC-4P-M12MS/5,0-600/M12FS HD - 1410443

Cable cross section



Halogen-free PP gray [600]

Classifications

eCl@ss

eCl@ss 4.0	27060300
eCl@ss 4.1	27060300
eCl@ss 5.0	27061800
eCl@ss 5.1	27061800
eCl@ss 6.0	27279200
eCl@ss 7.0	27279218
eCl@ss 8.0	27279218

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Classifications

eCl@ss

eCl@ss 9.0	27060311
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ETIM

ETIM 5.0	EC001855
ETIM 6.0	EC001855
ETIM 7.0	EC001855

UNSPSC

UNSPSC 13.2	31251501
UNSPSC 19.0	31251501
UNSPSC 20.0	31251501
UNSPSC 21.0	31251501

Accessories

Accessories

Screwdriver tools

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



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a hexagonal knurl wrench size of 14 mm, with 4 mm hexagonal drive

Torque tool

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Accessories

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
