

Sensor/actuator cable - SAC-5P-M12MS/3,0-600/M12FR HD - 1404070

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Sensor/actuator cable, 5-position, PP-EPDM halogen-free, gray RAL 7035, Plug straight M12, A-coded, on Socket angled M12, A-coded, cable length: 3 m, Hygienic design, with high-grade steel knurl

Why buy this product

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Easy to clean, thanks to the special hygienic design
- ✓ Corrosion protection for all exposed metal parts, thanks to the use of stainless steel type 1.4404
- ✓ Contamination can be detected quickly – thanks to the light color

Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 678070
GTIN	4046356678070
Custom tariff number	85444290
Country of origin	Poland

Technical data

Dimensions

Length of cable	3 m
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Ambient conditions

Ambient temperature (operation)	-40 °C ... 105 °C (Plug / socket)
Degree of protection	IP65
	IP67
	IP68

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Technical data

Ambient conditions

	IP69K
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General

Rated current at 40°C	4 A
Rated voltage	48 V AC
	60 V DC
Number of positions	5
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
	Material conformance FDA 21 CFR 177.2600
Status display	No
Protective circuit/component	Unwired
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

Standard designation	M12 connector
Standards/regulations	IEC 61076-2-101
Standard designation	Material conformance
Standards/regulations	FDA 21 CFR 177.2600

Cable

Cable type	Halogen-free PP gray
Cable type (abbreviation)	600
Cable abbreviation	Li9Y9Y
Conductor cross section	5x 0.34 mm ² (Signal line)
AWG signal line	22
Conductor structure signal line	42x 0.10 mm

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Technical data

Cable

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, gray
Overall twist	5 cores, twisted
Length of twist, overall twist	55 mm
External sheath, color	gray RAL 7035
Outer sheath thickness	approx. 0.7 mm
External cable diameter D	5 mm ±0.15 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
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	34 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
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)

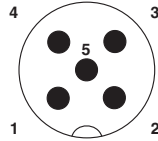
Environmental Product Compliance

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

Drawings

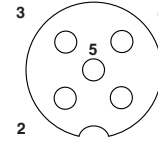
Sensor/actuator cable - SAC-5P-M12MS/3,0-600/M12FR HD - 1404070

Schematic diagram



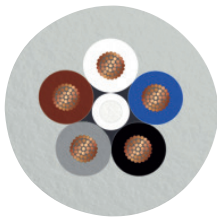
Pin assignment M12 male connector, 5-pos., A-coded, male side

Schematic diagram



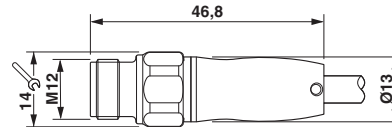
Pin assignment M12 socket, 5-pos., A-coded, socket side view

Cable cross section



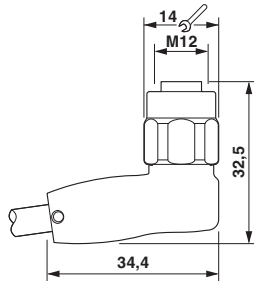
Halogen-free PP gray [600]

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



M12 x 1 socket, angled

Circuit diagram



Contact assignment of the M12 connector and the M12 socket

Classifications

eCl@ss

eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801
eCl@ss 5.1	27061800
eCl@ss 6.0	27279200

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Classifications

eCl@ss

eCl@ss 7.0	27279218
eCl@ss 8.0	27279218
eCl@ss 9.0	27060311

ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855
ETIM 6.0	EC001855

UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	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
