


# SAC-5P-5,0-600/M12FS HD

Order No.: 1404051



<http://catalog.phoenixcontact.net/phoenix/treeViewClick.do?UID=1404051>

Sensor/Actuator cable, 5-position, PP-EPDM halogen-free, Gray RAL 7035, free cable end, on Socket straight M12, A-coded, Cable length: 5 m, Hygienic design, With high-grade steel knurl

Commercial data	
EAN	 4 046356 677899
Note	Made-to-order
sales group	D112
Pack	1 Pcs.
Customs tariff	85444290
Gross weight in pieces	0.1711 KG
Net weight per piece	0.1711 KG
Catalog page information	Page 143 (C-4-2013)

#### Product notes

WEEE/RoHS-compliant since:  
07/07/2011



<http://www.download.phoenixcontact.com>  
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

Technical data	
<b>Dimensions</b>	
Length of cable	5 m
<b>Ambient conditions</b>	
Ambient temperature (operation)	-40 °C ... 105 °C (Plug / socket)

Degree of protection	IP65
	IP67
	IP68
	IP69K

#### General

Rated current at 40°C	4 A
Rated voltage	60 V
Number of positions	5
Contact resistance	≤ 5 mΩ
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
Surge voltage category	II
Pollution degree	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	High-grade steel
Sealing material	FKM

#### Cable

Cable type	Halogen-free PP gray
Cable type (abbreviation)	600
Cable abbreviation	Li9Y9Y
Conductor cross section	5x 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, 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 <sup>2</sup>
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
	partly suitable for use with drag chain
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)

### Certificates / Approvals

Certification

Certifications applied for:

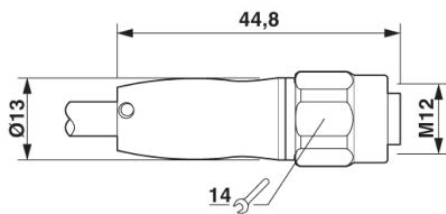
Certification Ex:

**Accessories**

Item	Designation	Description
<b>Tools</b>		
1212207	CUTFOX-S VDE	Diagonal cutter for copper and aluminum conductors, VDE-tested
1212513	SAC BIT M12-W14	SAC nut, for assembling M12 connectors with hexagonal high-grade steel knurl, with 4 mm hexagonal drive
1208429	TSD 04 SAC	Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors
1212224	TSD-M 1,2NM	Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm
1212600	TSD-M SAC-BIT ADAPTER	Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits
1212150	WIREFOX 10	Stripping tool, for cables and conductors from 0.02 - 10 mm <sup>2</sup> , self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm <sup>2</sup> stranded/1.5 mm <sup>2</sup> solid, replaceable stripping blade
1212623	WIREFOX SAC	Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from Ø of 4.4 to 7 mm, any stripping length

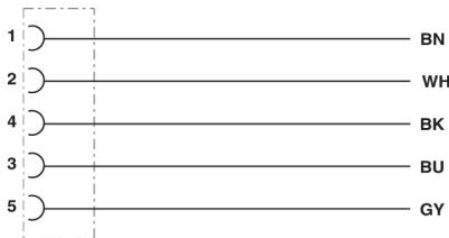
**Drawings**

Dimensioned drawing



M12 x 1 socket, straight

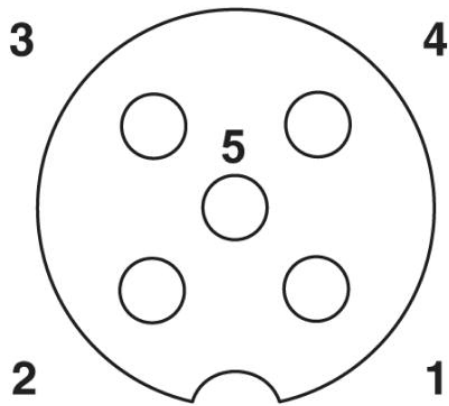
Circuit diagram



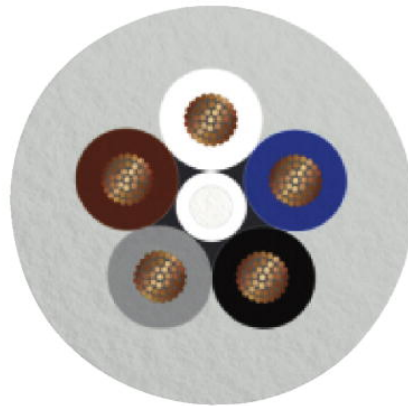
Contact assignment of the M12 socket

Schematic diagram

---



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



Halogen-free PP gray [600]

**Address**

PHOENIX CONTACT Deutschland GmbH  
Flachmarktstr. 8  
32825 Blomberg, Germany  
Phone +49 5235 3 12000  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>



© 2014 Phoenix Contact  
Technical modifications reserved;