

## Sensor/actuator cable - SAC-4P-20,0-600/M12FS HD - 1412215

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Sensor/actuator cable, 4-position, PP-EPDM halogen-free, gray RAL 7035, free cable end, on Socket straight M12, A-coded, cable length: 20 m, Hygienic design, with high-grade steel knurl

### Your advantages

- ✓ 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 pc
Minimum order quantity	25 pc
GTIN	
GTIN	4046356951722

### Technical data

#### Dimensions

Length of cable	20 m
-----------------	------

#### Ambient conditions

Degree of protection	IP65/IP68/IP69K
----------------------	-----------------

#### General

Rated current at 40°C	4 A
Rated voltage	250 V AC
	250 V DC
Number of positions	4
Insulation resistance	≥ 100 MΩ
Coding	A - standard

# Sensor/actuator cable - SAC-4P-20,0-600/M12FS HD - 1412215

## Technical data

### General

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

### 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	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
External sheath, color	gray RAL 7035
Outer sheath thickness	approx. 0.8 mm
External cable diameter D	4.7 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

## Sensor/actuator cable - SAC-4P-20,0-600/M12FS HD - 1412215

### Technical data

#### Cable

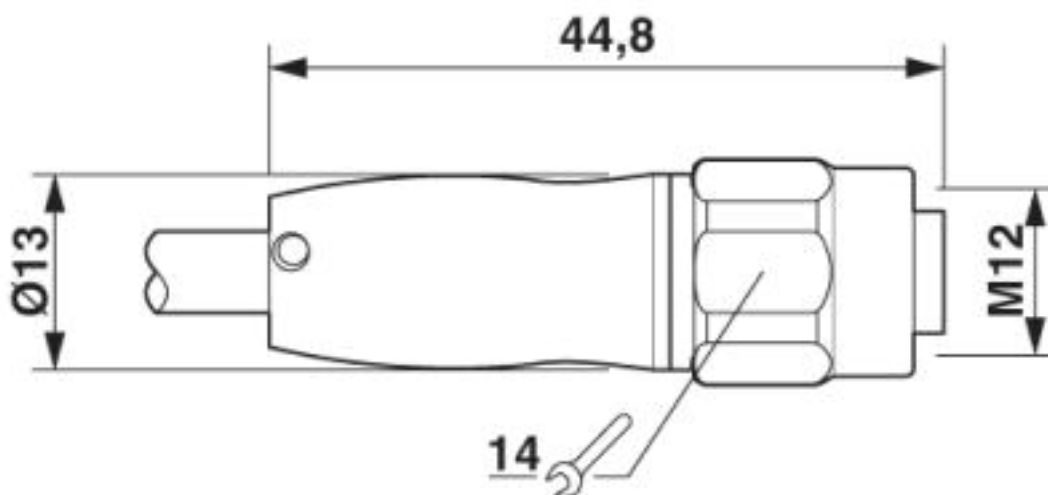
Traversing rate	3 m/s
Acceleration	10 m/s <sup>2</sup>
Torsion force	± 270 °/m (4,000,000 torsion cycles, max. 25 torsion cycles/min)
Cable weight	30 kg/km
Outer sheath, material	PP-EPDM
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Conductor resistance	58 Ω/km (at 20 °C)
Nominal 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

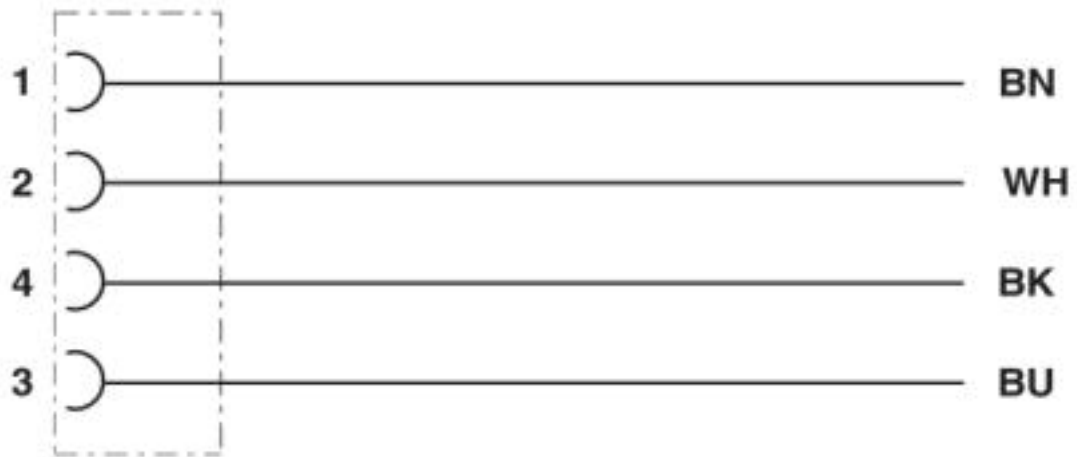
Dimensional drawing



M12 x 1 socket, straight

## Sensor/actuator cable - SAC-4P-20,0-600/M12FS HD - 1412215

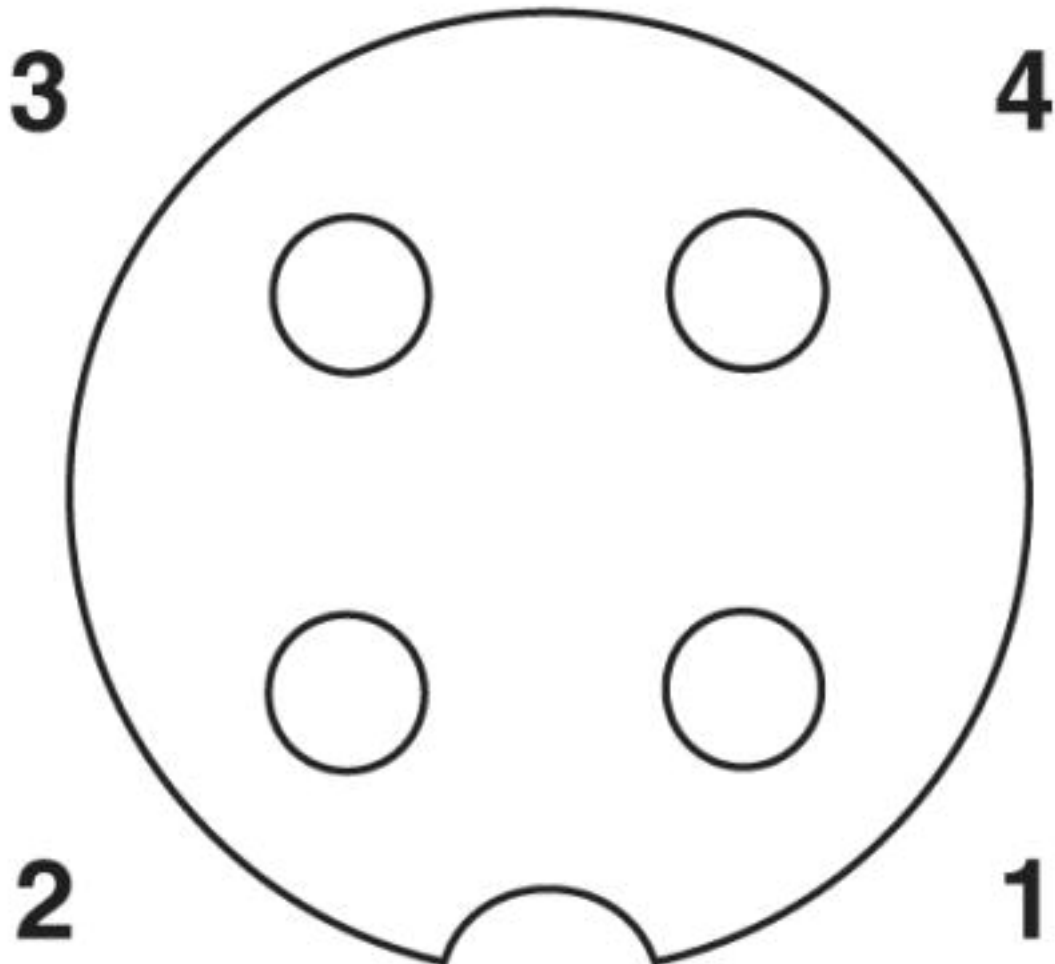
Circuit diagram



Contact assignment of the M12 plug and the M12 socket

## Sensor/actuator cable - SAC-4P-20,0-600/M12FS HD - 1412215

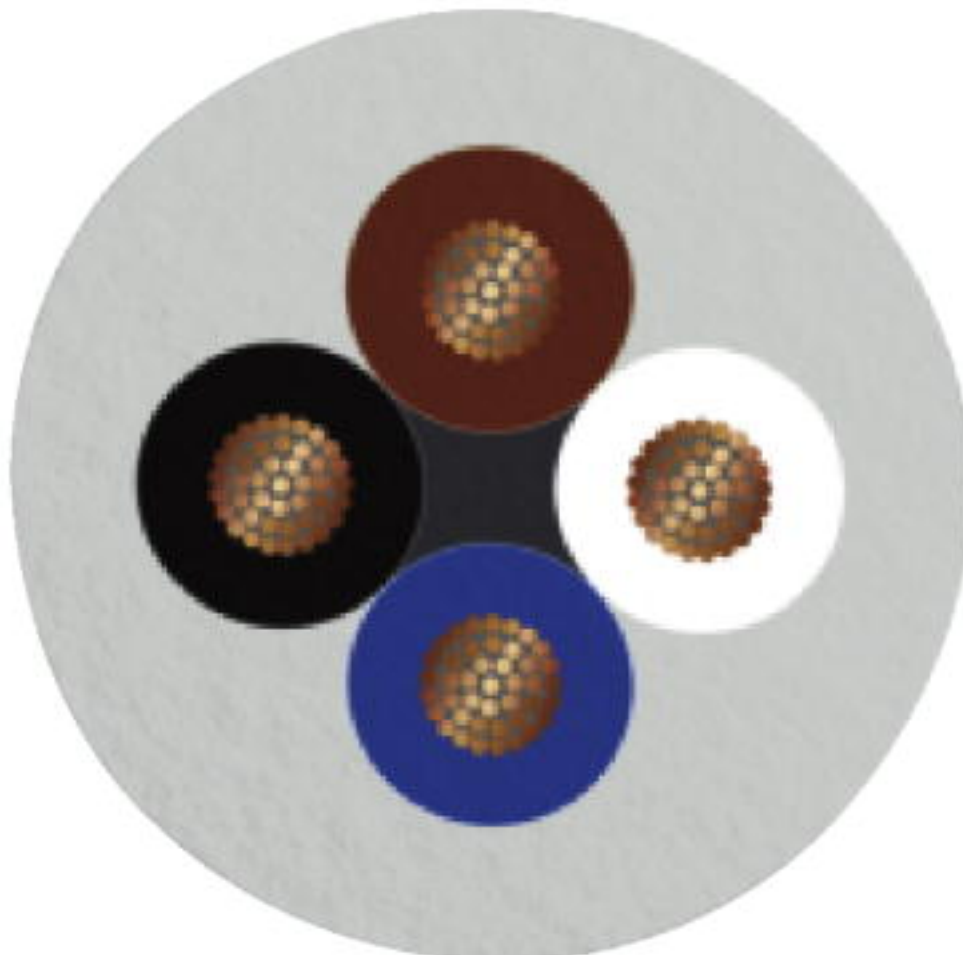
Schematic diagram



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

# Sensor/actuator cable - SAC-4P-20,0-600/M12FS HD - 1412215

Cable cross section



Halogen-free PP gray [600]

## Approvals

Approvals

---

Approvals

EAC

---

Ex Approvals

---

Approval details

## Sensor/actuator cable - SAC-4P-20,0-600/M12FS HD - 1412215

### Approvals

EAC



RU C-  
DE.BL08.B.00286

Phoenix Contact 2019 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>