

## Sensor/actuator cable - SAC-5P-M12MS/20-150/M12FS 0,5 - 1405339

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, 5-pos., PUR, halogen-free, irradiated, RAL 2003 (orange), straight M12 plug (A-coded) to straight M12 socket (A-coded), cable length: 20 m

RoHS

### Key Commercial Data

|                        |                                                                                                         |
|------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit           | 1 pc                                                                                                    |
| Minimum order quantity | 25 pc                                                                                                   |
| GTIN                   | <br>4 046356 740449 |
| GTIN                   | 4046356740449                                                                                           |

### Technical data

#### Dimensions

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

#### Ambient conditions

|                      |      |
|----------------------|------|
| Degree of protection | IP65 |
|                      | IP67 |
|                      | IP68 |

#### 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 |
| Status display              | No           |
| Overvoltage category        | II           |
| Degree of pollution         | 3            |
| Insertion/withdrawal cycles | ≥ 100        |

# Sensor/actuator cable - SAC-5P-M12MS/20-150/M12FS 0,5 - 1405339

## Technical data

### Material

|                                        |                                             |
|----------------------------------------|---------------------------------------------|
| Flammability rating according to UL 94 | HB                                          |
| Contact material                       | CuSn                                        |
| Contact surface material               | Ni/Au                                       |
| Contact carrier material               | TPU GF                                      |
| Material of grip body                  | TPU, hardly inflammable, self-extinguishing |
| Material, knurls                       | Zinc die-cast, nickel-plated                |
| Sealing material                       | NBR                                         |

### Standards and Regulations

|                                        |    |
|----------------------------------------|----|
| Flammability rating according to UL 94 | HB |
|----------------------------------------|----|

### Cable

|                                    |                                                  |
|------------------------------------|--------------------------------------------------|
| Cable type                         | PUR irradiated halogen-free orange               |
| Cable type (abbreviation)          | 150                                              |
| Cable abbreviation                 | Li12Y11X                                         |
| Conductor cross section            | 5x 0.5 mm <sup>2</sup> (Signal line)             |
| AWG signal line                    | 20                                               |
| Conductor structure signal line    | 28x 0.15 mm                                      |
| Core diameter including insulation | 1.46 mm ±0.02 mm (Signal line)                   |
| Thickness, insulation              | ≥ 0.21 mm (Core insulation)                      |
|                                    | approx. 0.6 mm (Outer cable sheath)              |
| Wire colors                        | Black 1, black 2, black 3, black 4, green/yellow |
| Overall twist                      | 5 wires around filler to the core                |
| External sheath, color             | orange RAL 2003                                  |
| External cable diameter D          | 5.8 mm ±0.15 mm                                  |
| Number of bending cycles           | 5000000                                          |
| Bending radius                     | 5.3 mm                                           |
| Traversing path                    | 10 m                                             |
| Traversing rate                    | 3 m/s                                            |
| Outer sheath, material             | PUR                                              |
| Material, filler                   | PP                                               |
| Material conductor insulation      | TPE-E                                            |
| Conductor material                 | Bare Cu litz wires                               |
| Insulation resistance              | ≥ 100 MΩ*km                                      |
| Conductor resistance               | max. 39 Ω/km                                     |
| Nominal voltage, cable             | ≤ 300 V                                          |
| Test voltage, cable                | ≥ 3000 V                                         |
| Special properties                 | Silicone-free                                    |
|                                    | Irradiated                                       |
| Flame resistance                   | in accordance with DIN UL-Style 20549            |
| Halogen-free                       | in accordance with DIN VDE 0472 part 815         |
| Ambient temperature (operation)    | -25 °C ... 80 °C (cable, fixed installation)     |

## Sensor/actuator cable - SAC-5P-M12MS/20-150/M12FS 0,5 - 1405339

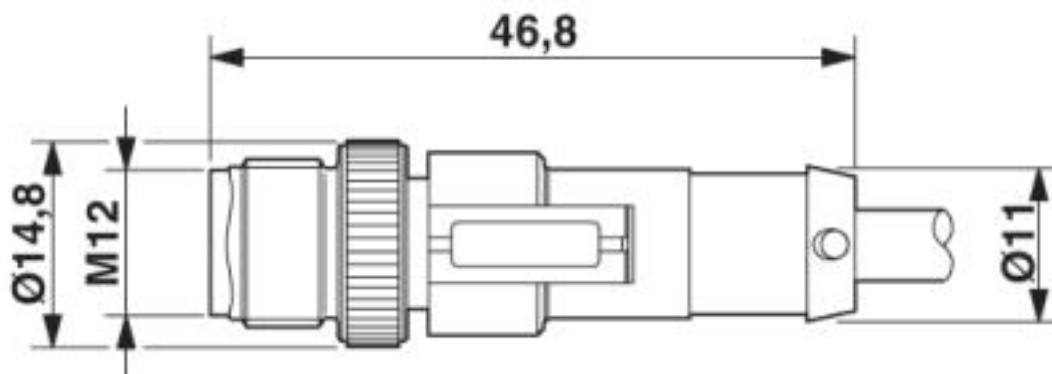
### Technical data

#### Cable

|  |                                                |
|--|------------------------------------------------|
|  | -5 °C ... 80 °C (cable, flexible installation) |
|--|------------------------------------------------|

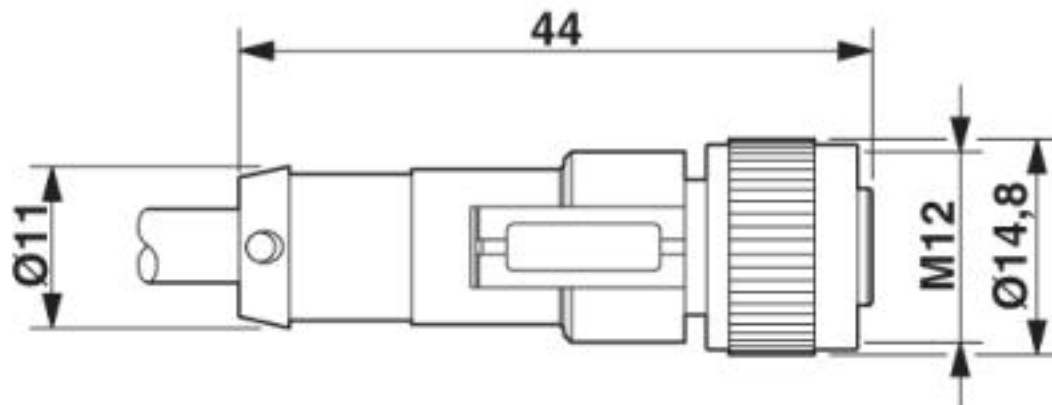
### Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

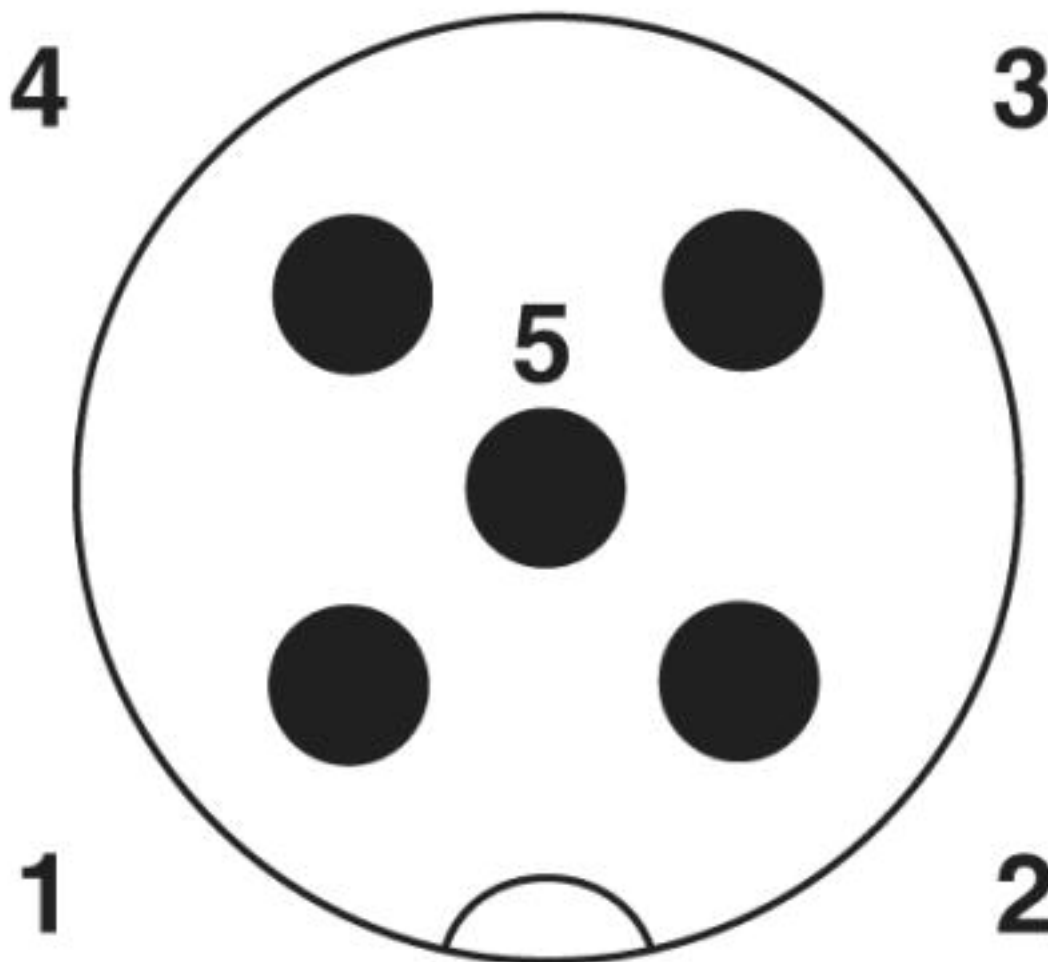
Dimensional drawing



M12 x 1 socket, straight

## Sensor/actuator cable - SAC-5P-M12MS/20-150/M12FS 0,5 - 1405339

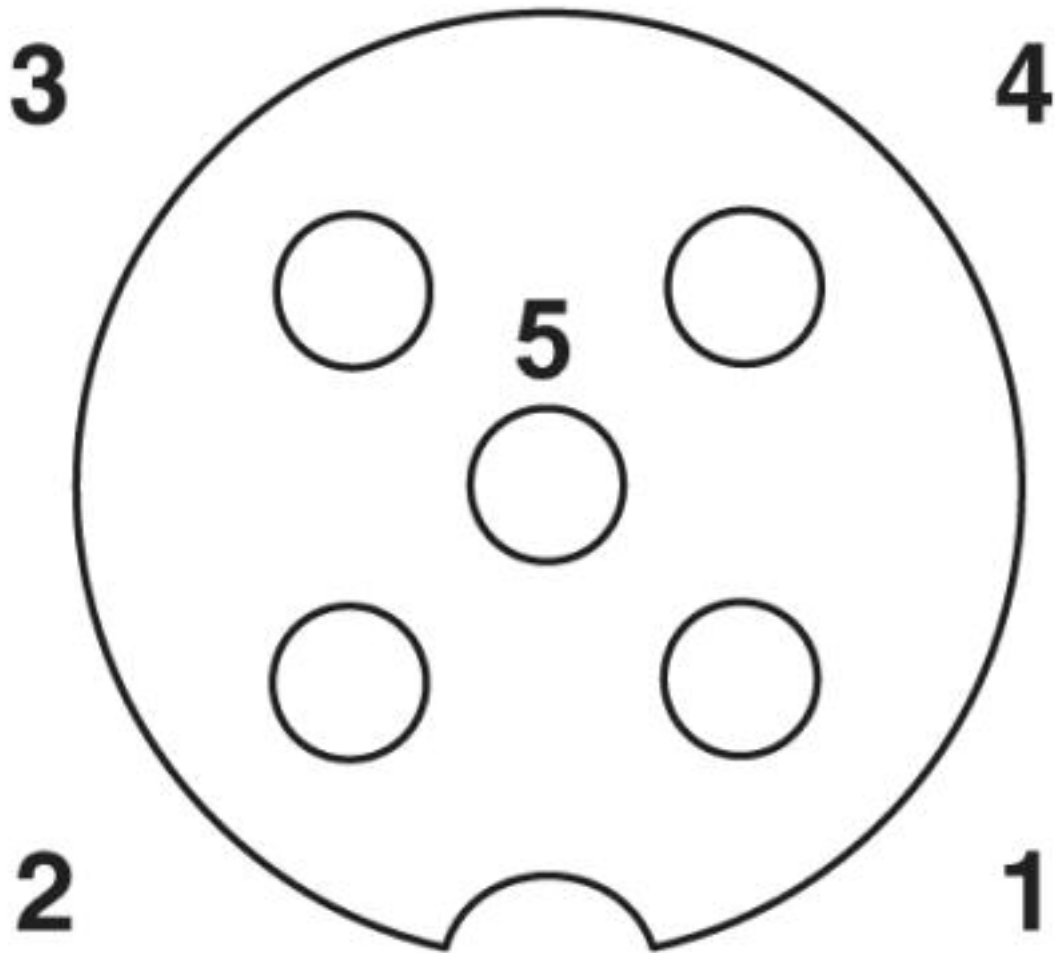
Schematic diagram



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

## Sensor/actuator cable - SAC-5P-M12MS/20-150/M12FS 0,5 - 1405339

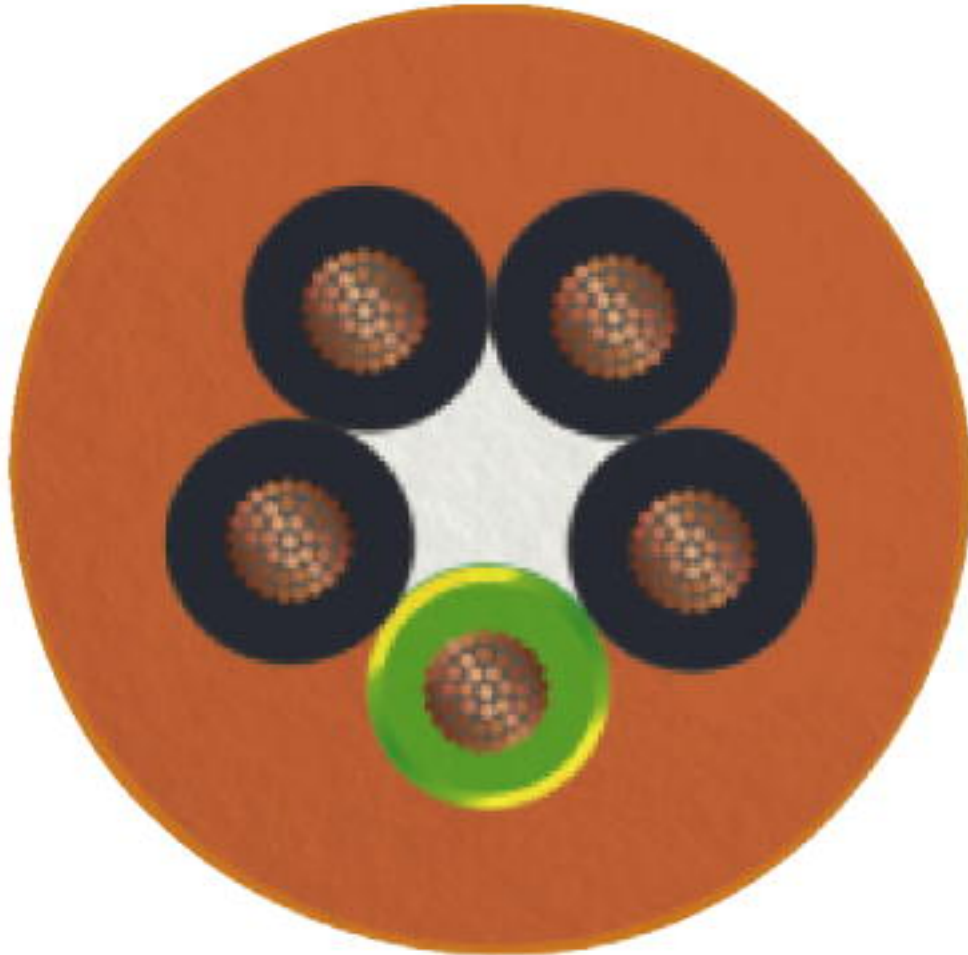
Schematic diagram



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

## Sensor/actuator cable - SAC-5P-M12MS/20-150/M12FS 0,5 - 1405339

Cable cross section



PUR irradiated halogen-free orange [150]

---

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>