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Sensor/actuator cable, 8-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Socket straight M8, coding: A, cable length: 10 m

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Save space – with high-pos. connectors

Commercial data

| | |
|--------------------------------------|---------------------|
| Item number | 1404190 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | BF01 |
| Product key | BF1BGA |
| Catalog page | Page 207 (C-2-2019) |
| GTIN | 4046356681124 |
| Weight per piece (including packing) | 320.2 g |
| Weight per piece (excluding packing) | 300.7 g |
| Customs tariff number | 85444290 |
| Country of origin | PL |

Technical data

Product properties

| | |
|----------------------|-----------------------|
| Product type | Sensor/actuator cable |
| Application | Standard |
| Number of positions | 8 |
| No. of cable outlets | 1 |
| Shielded | no |
| Coding | A |

Insulation characteristics

| | |
|---------------------|---|
| Degree of pollution | 3 |
|---------------------|---|

Material specifications

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

Electrical properties

| | |
|-----------------------|----------------------------|
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Nominal voltage U_N | 30 V AC |
| | 30 V DC |
| Nominal current I_N | 1.5 A |

Mechanical properties

Mechanical data

| | |
|-----------------------------|------------|
| Insertion/withdrawal cycles | ≥ 100 |
|-----------------------------|------------|

Signaling

| | |
|------------------------|----|
| Status display | No |
| Status display present | No |

Connection data

Conductor connection

| | |
|-------------------|------------------------|
| Tightening torque | 0.2 Nm (M8 connectors) |
|-------------------|------------------------|

Connector

Connection 1

| | |
|------|----------------|
| Type | free cable end |
|------|----------------|

SAC-8P-10,0-PUR/M 8FS - Sensor/actuator cable



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Connection 2

| | |
|---------------------|--------------------|
| Type | Socket straight M8 |
| Number of positions | 8 |
| Coding type | A |

Cable/line

| | |
|--------------|------|
| Cable length | 10 m |
|--------------|------|

PUR halogen-free black [PUR]

| | |
|---|--|
| Dimensional drawing |  |
| Cable weight | 31.4 kg/km |
| UL AWM Style | 20549 |
| Number of positions | 8 |
| Shielded | no |
| Cable type | PUR halogen-free black [PUR] |
| Conductor structure signal line | 18x 0.10 mm |
| AWG signal line | 26 |
| Conductor cross section | 8x 0.14 mm ² (Signal line) |
| Wire diameter incl. insulation | 1 mm ±0.02 mm (Signal line) |
| External cable diameter | 5.10 mm ±0.15 mm |
| Outer sheath, material | PUR |
| External sheath, color | black-gray RAL 7021 |
| Conductor material | Bare Cu litz wires |
| Material, filler | PE |
| Material wire insulation | PP |
| Single wire, color | white, brown, green, yellow, gray, pink, blue, red |
| Thickness, insulation | ≥ 0.21 mm (Signal line) ≥ 0.38 mm (Outer cable sheath) |
| Overall twist | 8 wires around filler to the core |
| Length of twist, overall twist | 58 mm |
| Max. conductor resistance | 139 Ω/km (at 20 °C) |
| Insulation resistance | 1 GΩ*km (at 20 °C) |
| Nominal voltage, cable | ≤ 300 V AC |
| Test voltage | ≥ 3000 V AC (Spark test) |
| Minimum bending radius, fixed installation | 5 x D |
| Minimum bending radius, flexible installation | 10 x D |
| Smallest bending radius, fixed installation | 25.5 mm |

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| | |
|---|---|
| Smallest bending radius, movable installation | 51 mm |
| Max. bending cycles | 4000000 |
| Halogen-free | in accordance with DIN VDE 0472 part 815 in accordance with DIN EN 50267-2-1 |
| Flame resistance | according to UL 758/1581 (horizontal) in accordance with UL 758/1581 FT2 |
| Resistance to oil | According to DIN EN 60811-2-1, 168 h at 100°C |
| Other resistance | hydrolysis and microbe resistant Resistant to salt water Low adhesion abrasion-resistant partly UV-resistant (in accordance with DIN EN ISO 4892-2-A) |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation) -25 °C ... 80 °C (Cable, flexible installation) |

Environmental and real-life conditions

Ambient conditions

| | |
|---------------------------------|----------------------------------|
| Degree of protection | IP65 IP67 IP68 |
| Ambient temperature (operation) | -25 °C ... 85 °C (Plug / socket) |

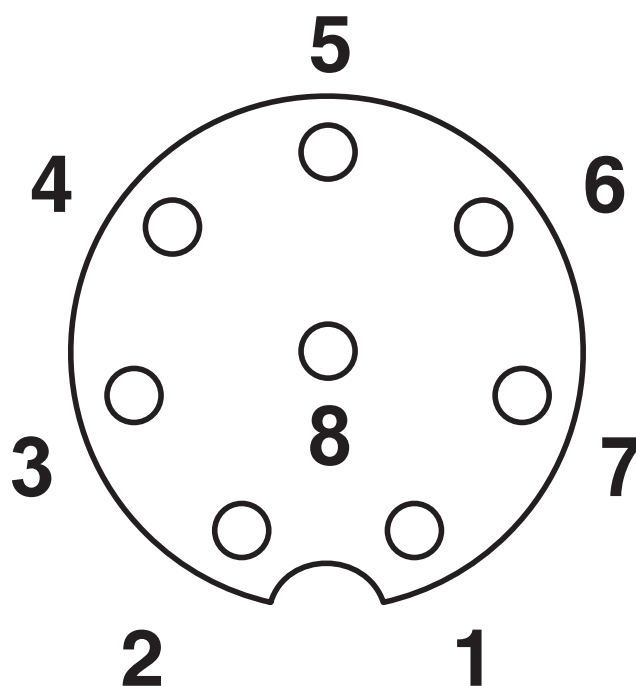
Standards and regulations

M8

| | |
|--------------------------|-----------------|
| Standard designation | M8 connector |
| Standards/specifications | IEC 61076-2-104 |

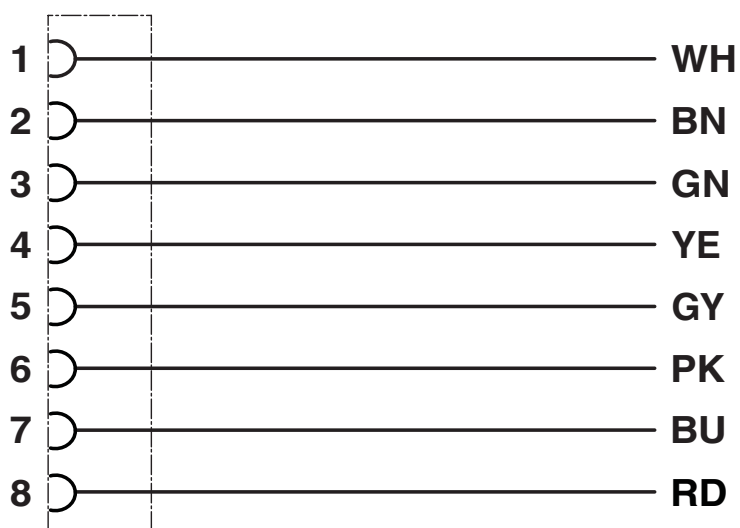
Drawings

Schematic diagram



Connector pin assignment of M8 socket, 8-pos., view of socket side

Circuit diagram



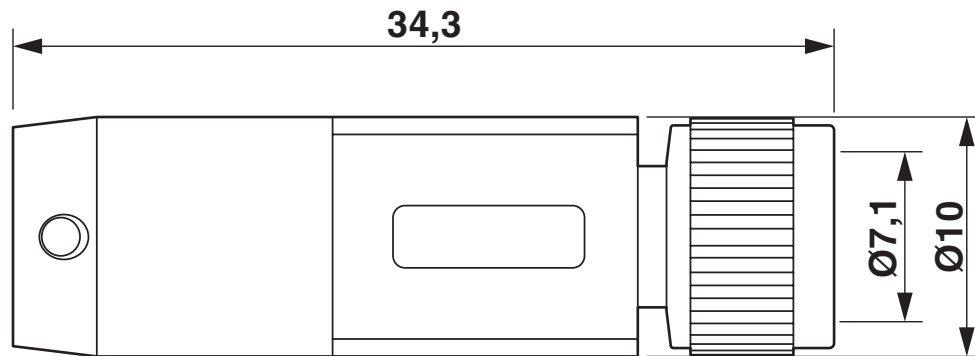
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Dimensional drawing



Socket M8 x 1, straight

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1404190>

| | | | | |
|--|--|-----------------------|-------------------|-----------------------------|
| | UL Listed Approval ID: FILE E 221474 | | | |
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| | 30 V | 1.5 A | - | - |

| | | | | |
|--|---|-----------------------|-------------------|-----------------------------|
| | cUL Listed Approval ID: FILE E 221474 | | | |
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| | 30 V | 1.5 A | - | - |

| | | | | |
|--|--|--|--|--|
| | EAC-RoHS Approval ID: RU D-DE.HB35.B.00387 | | | |
| | | | | |

| | | | | |
|---------------------|--|--|--|--|
| cULus Listed | | | | |
|---------------------|--|--|--|--|

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-11.0 | 27060311 |
| ECLASS-12.0 | 27060311 |
| ECLASS-13.0 | 27060311 |

ETIM

| | |
|----------|----------|
| ETIM 9.0 | EC001855 |
|----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 26121600 |
|-------------|----------|

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Environmental product compliance

EU RoHS

| | |
|---|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|---|--------------------|

China RoHS

| | |
|--|--|
| Environment friendly use period (EFUP) | EFUP-E |
| | No hazardous substances above the limits |

EU REACH SVHC

| | |
|-------------------------------------|----------------------------|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

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Accessories

WP-CTA POM 13,0 BK - Protective hose adapter

1422884

<https://www.phoenixcontact.com/us/products/1422884>



Protective hose adapter, for corrugated hoses with a nominal size of 13 (10 x 13), corrugated in parallel

WP-PA HF 13,0 BK - Protective hose

3240681

<https://www.phoenixcontact.com/us/products/3240681>



Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: V0, inner diameter: 10 mm, Total length: 50 m

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WP-PA HF-HB 13,0 BK - Protective hose

3240839

<https://www.phoenixcontact.com/us/products/3240839>



Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: HB, inner diameter: 10 mm, Total length: 50 m

PROT-M 8 MS-PA-CHAIN - Screw plug

1430860

<https://www.phoenixcontact.com/us/products/1430860>

M8 sealing cap made of plastic with fixing band for sensor cables, for M8 sockets



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TSD 02 SAC - Torque screwdriver

1208487

<https://www.phoenixcontact.com/us/products/1208487>



Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive for M8 connectors

SAC BIT M8-D10 - Tool

1208461

<https://www.phoenixcontact.com/us/products/1208461>



Nut for assembling M8 connectors with longitudinal knurl and a knurl diameter of 10 mm, for 4 mm hexagonal drive

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B-STIFT - Marker pen

1051993

<https://www.phoenixcontact.com/us/products/1051993>



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

CUTFOX-S VDE - Diagonal cutter

1212207

<https://www.phoenixcontact.com/us/products/1212207>



Diagonal cutter for hard (piano wire) and soft wires, VDE 1000 V AC/1500 V DC tested

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WIREFOX SAC-1 - Stripping tool

1212757

<https://www.phoenixcontact.com/us/products/1212757>



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from Ø of 3.2 to 4.4 mm, any stripping length

WIREFOX SAC - Stripping tool

1212623

<https://www.phoenixcontact.com/us/products/1212623>



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

SAC-8P-10,0-PUR/M 8FS - Sensor/actuator cable



1404190

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WIREFOX 10 - Stripping tool

1212150

<https://www.phoenixcontact.com/us/products/1212150>



Stripping tool, for cables and conductors from 0.02 - 10 mm², self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm² stranded/1.5 mm² solid, replaceable stripping blade

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