

SAC-8P-100,0-PUR/M12FS SH VA - Sensor/actuator cable



1404965

<https://www.phoenixcontact.com/us/products/1404965>

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 documentation. Our general terms of use for downloads are valid.



Sensor/actuator cable, 8-pos., PUR, halogen free, RAL 7021 (black gray), shielded, free cable end, to straight M12 socket, A-coded, cable length: 100 m, high-grade steel knurl

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 1404965 |
| Packing unit | 1 pc |
| Minimum order quantity | 5 pc |
| Note | Made to order (non-returnable) |
| Sales key | BF03 |
| Product key | AF1CMA |
| GTIN | 4046356730051 |
| Weight per piece (including packing) | 5,299 g |
| Weight per piece (excluding packing) | 5,299 g |
| Customs tariff number | 85444290 |
| Country of origin | PL |

SAC-8P-100,0-PUR/M12FS SH VA - Sensor/actuator cable



1404965

<https://www.phoenixcontact.com/us/products/1404965>

Technical data

Product properties

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

Insulation characteristics

| | |
|----------------------|----|
| Overvoltage category | II |
| Degree of pollution | 3 |

Material specifications

| | |
|--|---|
| Flammability rating according to UL 94 | HB |
| Seal material | NBR |
| Material of grip body | TPU, hardly inflammable, self-extinguishing |
| Contact material | CuZn |
| Contact surface material | Ni/Au |
| Contact carrier material | TPU GF |
| Material for screw connection | Stainless steel |

Electrical properties

| | |
|-----------------------|----------------------------|
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Nominal voltage U_N | 30 V AC |
| | 30 V DC |
| Nominal current I_N | 2 A |

Mechanical properties

Mechanical data

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

Signaling

| | |
|------------------------|----|
| Status display | no |
| Status display present | no |

Connector

Connection 1

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

Connection 2


| | |
|---------------------|---------------------|
| Type | Socket straight M12 |
| Number of positions | 8 |
| Coding type | A |

SAC-8P-100,0-PUR/M12FS SH VA - Sensor/actuator cable

1404965

<https://www.phoenixcontact.com/us/products/1404965>

Cable/line

| | |
|---|---|
| Cable length | 100 m |
| PUR halogen-free black [PUR] | |
| Dimensional drawing |  |
| Cable weight | 53 kg/km |
| UL AWM Style | 20549 / 10493 (80°C/300 V) |
| Number of positions | 8 |
| Shielded | yes |
| Cable type | PUR halogen-free black [PUR] |
| Conductor structure signal line | 32x 0.10 mm |
| AWG signal line | 24 |
| Conductor cross-section | 8x 0.25 mm ² (Signal line) |
| Wire diameter incl. insulation | 1.17 mm ±0.02 mm |
| External cable diameter | 5.90 mm ±0.2 mm |
| Outer sheath, material | PUR |
| External sheath, color | black-gray RAL 7021 |
| Conductor material | Bare Cu litz wires |
| Material wire insulation | PP |
| Single wire, color | brown, white, green, yellow, gray, pink, blue, red |
| Thickness, insulation | approx. 0.20 mm |
| Thickness, outer sheath | approx. 0.50 mm |
| Overall twist | 8 wires around filler to the core |
| Optical shield covering | 85 % |
| Max. conductor resistance | ≤ 78 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) |
| Test voltage Core/Shield | ≥ 2000.00 V AC (for 60 s) |
| Minimum bending radius, fixed installation | 5 x D |
| Minimum bending radius, flexible installation | 10 x D |
| Smallest bending radius, fixed installation | 30 mm |
| Smallest bending radius, movable installation | 59 mm |
| Dynamic load capacity (bending) | Max. bending cycles: 10000000, Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s ² |
| Dynamic load capacity (torsion) | Torsion: ±180 °/m, Torsion cycles: ≥5000000, Torsional |

SAC-8P-100,0-PUR/M12FS SH VA - Sensor/actuator cable



1404965

<https://www.phoenixcontact.com/us/products/1404965>

| | |
|---------------------------------|---|
| | frequency: 35 cycles/min. |
| Halogen-free | in accordance with DIN VDE 0472 part 815 according to IEC 60754-1 |
| Flame resistance | in acc. with UL FT-2 according to UL 758/1581 (horizontal) in accordance with UL 758/1581 FT2 According to DIN EN 60332-2-2 (20 s) |
| Resistance to oil | in accordance with IEC 60811-404 |
| Other resistance | hydrolysis and microbe resistant Resistant to salt water low-abrasion partly UV-resistant (in accordance with DIN EN ISO 4892-2-A) |
| Special properties | Flexible cable conduit capable |
| 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 IP69K |
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) -25 °C ... 80 °C (cable, fixed installation) -5 °C ... 80 °C (Cable, flexible installation) |

SAC-8P-100,0-PUR/M12FS SH VA - Sensor/actuator cable

1404965

<https://www.phoenixcontact.com/us/products/1404965>

Drawings

Dimensional drawing



M12 x 1 socket, straight, shielded

Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side

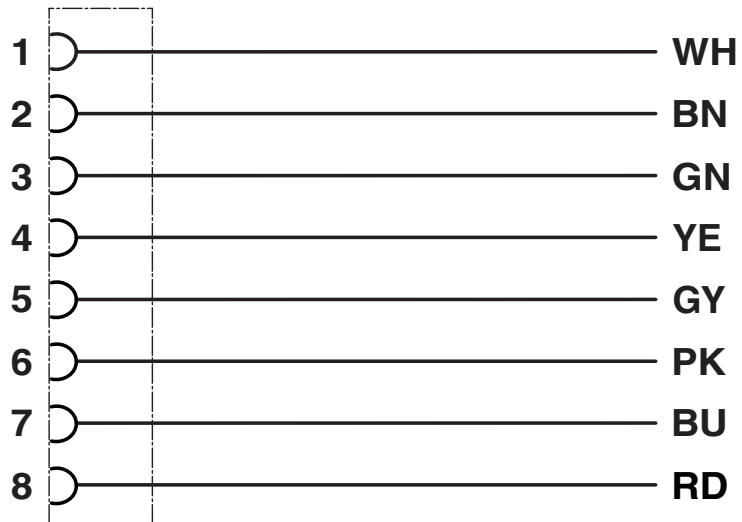
SAC-8P-100,0-PUR/M12FS SH VA - Sensor/actuator cable



1404965

<https://www.phoenixcontact.com/us/products/1404965>

Circuit diagram



Contact assignment of the M12 socket

SAC-8P-100,0-PUR/M12FS SH VA - Sensor/actuator cable



1404965

<https://www.phoenixcontact.com/us/products/1404965>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1404965>



EAC-RoHS

Approval ID: RU D-DE.HB35.B.00387

SAC-8P-100,0-PUR/M12FS SH VA - Sensor/actuator cable



1404965

<https://www.phoenixcontact.com/us/products/1404965>

Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27060311 |
| ECLASS-15.0 | 27060311 |

ETIM

| | |
|-----------|----------|
| ETIM 10.0 | EC001855 |
|-----------|----------|

UNSPSC

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

SAC-8P-100,0-PUR/M12FS SH VA - Sensor/actuator cable



1404965

<https://www.phoenixcontact.com/us/products/1404965>

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% |
|-------------------------------------|----------------------------|

Phoenix Contact 2026 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com