

Sensor/actuator cable - SAC-8P-M12MS/ 0,3-PVC/M12FR - 1415745

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Sensor/actuator cable, 8-position, PVC, black RAL 9005, Plug straight M12, A-coded, on Socket angled M12, A-coded, cable length: 0.3 m

Your advantages

- ✔ Easy and safe: 100% electrically tested plug-in components



Key Commercial Data

| | |
|--------------------------------------|---|
| Packing unit | 1 pc |
| GTIN |  4 055626 052588 |
| GTIN | 4055626052588 |
| Weight per Piece (excluding packing) | 35.500 g |
| Custom tariff number | 85444290 |
| Country of origin | Poland |

Technical data

Dimensions

| | |
|-----------------|-------|
| Length of cable | 0.3 m |
|-----------------|-------|

Ambient conditions

| | |
|---------------------------------|----------------------------------|
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
| Degree of protection | IP65 |
| | IP67 |
| | IP68 |

General

| | |
|-----------------------|---------|
| Rated current at 40°C | 2 A |
| Rated voltage | 30 V AC |
| | 30 V DC |
| Number of positions | 8 |

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Technical data

General

| | |
|------------------------------|-------------------------------|
| Insulation resistance | ≥ 100 MΩ |
| Coding | A - standard |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| Status display | No |
| Protective circuit/component | unwired |
| Overvoltage category | II |
| Degree of pollution | 3 |
| Insertion/withdrawal cycles | ≥ 100 |

Material

| | |
|--|---|
| Flammability rating according to UL 94 | HB |
| Contact material | CuZn |
| 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

| | |
|--|-----------------|
| Standard designation | M12 connector |
| Standards/regulations | IEC 61076-2-101 |
| Flammability rating according to UL 94 | HB |

Cable

| | |
|---|--|
| Cable type | PVC black |
| Cable type (abbreviation) | PVC |
| Cable abbreviation | LiYY |
| UL AWM style | 2464 / 1729 (80°C/300 V) |
| Conductor cross section | 8x 0.25 mm ² (Signal line) |
| AWG signal line | 24 |
| Conductor structure signal line | 14x 0.15 mm |
| Core diameter including insulation | 1.17 mm ±0.05 mm |
| Thickness, insulation | ≥ 0.23 mm |
| Wire colors | white, brown, green, yellow, gray, pink, blue, red |
| Overall twist | 8 wires around filler to the core |
| External sheath, color | black RAL 9005 |
| Outer sheath thickness | ≥ 0.76 mm |
| External cable diameter D | 5.9 mm ±0.2 mm |
| Minimum bending radius, fixed installation | 5 x D |
| Minimum bending radius, flexible installation | 10 x D |
| Cable weight | 54 kg/km |
| Outer sheath, material | PVC |

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Technical data

Cable

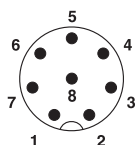
| | |
|---------------------------------|---|
| Material conductor insulation | PVC |
| Conductor material | Bare Cu litz wires |
| Insulation resistance | $\geq 200 \text{ M}\Omega \cdot \text{km}$ (at 20 °C) |
| Conductor resistance | $79 \text{ }\Omega/\text{km}$ (at 20 °C) |
| Nominal voltage, cable | $\leq 300 \text{ V AC}$ |
| Test voltage, cable | $\geq 3000 \text{ V AC}$ |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation) |
| | -25 °C ... 80 °C (cable, flexible installation) |

Environmental Product Compliance

| | |
|------------|---|
| REACH SVHC | Lead 7439-92-1 |
| China RoHS | Environmentally Friendly Use Period = 50 |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

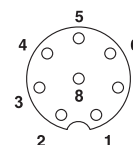
Drawings

Schematic diagram



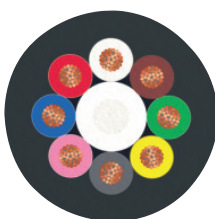
Pin assignment M12 plug, 8-pos., view plug side

Schematic diagram



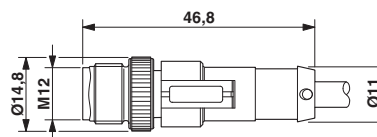
Pin assignment M12 socket, 8-pos., A-coded, view female side

Cable cross section



PVC black [PVC]

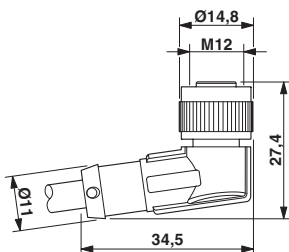
Dimensional drawing



Plug, M12 x 1, straight, shielded

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Dimensional drawing



Circuit diagram



M12 x 1 socket, angled

Contact assignment of the M12 plug and the M12 socket

Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 5.1 | 27061800 |
| eCl@ss 6.0 | 27279200 |
| eCl@ss 7.0 | 27279218 |
| eCl@ss 8.0 | 27279218 |
| eCl@ss 9.0 | 27060311 |

ETIM

| | |
|----------|----------|
| ETIM 5.0 | EC001855 |
| ETIM 6.0 | EC001855 |

UNSPSC

| | |
|-------------|----------|
| UNSPSC 13.2 | 31251501 |
|-------------|----------|

Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals


Approval details


| | | | |
|--------------------|------|---|---------------|
| UL Listed | | http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm | FILE E 221474 |
| Nominal voltage UN | 30 V | | |

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Approvals

| | |
|--------------------------------|-----|
| Nominal current I _N | 2 A |
|--------------------------------|-----|

| | | | |
|--------------------------------|---|---|---------------|
| cUL Listed |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 221474 |
| Nominal voltage U _N | 30 V | | |
| Nominal current I _N | 2 A | | |

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

Accessories

Accessories

Conductor marking

Insert label - PABA WH/15 - 1013151



Insert label, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: thread on, cable diameter range: 0.6 - 50 mm, lettering field size: 15 x 4 mm

Insert label - PABA YE/15 - 1013698



Insert label, Strip, yellow, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: thread on, cable diameter range: 0.6 - 50 mm, lettering field size: 15 x 4 mm

Insert label - PABA RD/15 - 1013944



Insert label, Strip, red, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: thread on, cable diameter range: 0.6 - 50 mm, lettering field size: 15 x 4 mm

Marker carrier cable

Sensor/actuator cable - SAC-8P-M12MS/ 0,3-PVC/M12FR - 1415745

Accessories

Conductor marker carrier - PATO 2/15 - 1013122



Conductor marker carrier, transparent, unlabeled, mounting type: clip on, cable diameter range: 2.8 - 4.4 mm, lettering field size: 4 x 15 mm

Conductor marker carrier - PATO 3/15 - 1013135



Conductor marker carrier, transparent, unlabeled, mounting type: clip on, cable diameter range: 4.4 - 6.7 mm, lettering field size: 4 x 15 mm

Conductor marker carrier - PATO 4/15 - 1013148



Conductor marker carrier, transparent, unlabeled, mounting type: clip on, cable diameter range: 6.7 - 10 mm, lettering field size: 4 x 15 mm

Marker pen

Marker pen - B-STIFT - 1051993



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

Protective cap

Sealing cap - PROT-M12 FS-PA-CHAIN - 1430873

M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 plugs



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Accessories

Screw plug - PROT-M12 MS-PA-CHAIN - 1430899

M12 sealing cap with fixing band, for sensor cables, for free M12 sockets



Safety locking

Locking clip - SAC-M12-EXCLIP-M - 1558988



Locking clip for the pin side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools

Locking clip - SAC-M12-EXCLIP-F - 1558991



Locking clip for the socket side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools

Screwdriver tools

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

Tool - SAC BIT M12-D15 - 1208432



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive

Torque tool

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Accessories

Torque screwdriver - TSD 04 SAC - 1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

Torque screwdriver - TSD-M 1,2NM - 1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm
