

Sensor/Actuator cable - SAC-12P- 5,0-35T/FS SH SCO - 1430145

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Sensor/Actuator cable, 12-position, PUR/PVC, Black RAL 9005, shielded, Free cable end, on Socket straight M12 SPEEDCON, A-coded, Cable length: 5 m

Product Features

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Save time, thanks to installation with SPEEDCON fast locking system
- ✓ Save space – with high-pos. connectors
- ✓ Reliable signal transmission – 360° shielding in environments with electromagnetic interference



Key commercial data

| | |
|--------------------------------------|-----------|
| Packing unit | 1 pc |
| Weight per Piece (excluding packing) | 460.0 GRM |
| Custom tariff number | 85444290 |
| Country of origin | Germany |

Technical data

Dimensions

| | |
|--|-------|
| Length of cable | 5 m |
| Stripping length of the free conductor end | 35 mm |

Ambient conditions

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

General

| | |
|-----------------------|-------|
| Rated current at 40°C | 1.5 A |
| Rated voltage | 30 V |

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Technical data

General

| | |
|------------------------------|-------------------------------|
| Number of positions | 12 |
| Contact resistance | ≤ 5 mΩ |
| Insulation resistance | ≥ 100 MΩ |
| Coding | A - standard |
| Standards/regulations | M12 connector IEC 61076-2-101 |
| Status display | No |
| Protective circuit/component | Unwired |
| Surge voltage category | II |
| Pollution degree | 3 |
| Torque | 0.4 Nm (M12 connector) |

Material

| | |
|---|---|
| Inflammability class according to UL 94 | V0 |
| Contact material | CuZn |
| Contact surface material | Ni/Au |
| Contact carrier material | PA 66 |
| Material of grip body | TPU, hardly inflammable, self-extinguishing |
| Material, knurls | Zinc die-cast, nickel-plated |
| Sealing material | NBR |

Cable

| | |
|---|--|
| Cable type | Black PUR/PVC twisted pair |
| Cable type (abbreviation) | 35T |
| Cable abbreviation | LSPYwC11Y |
| UL AWM style | 20233 / 1061 (80°C/300 V) |
| Conductor cross section | 12x 0.14 mm ² (signal line) |
| AWG signal line | 26 |
| Conductor structure signal line | 18x 0.10 mm |
| Core diameter including insulation | 1 mm ±0.05 mm (signal line) |
| Wire colors | White-brown, green-yellow, gray-pink, blue-red, black-violet, gray/pink-red/ blue |
| Twisted pairs | 2 cores to the pair |
| Overall twist | Six pairs around the filler to the core |
| Shielding | Tinned copper braided shield |
| Optical shield covering | 85 % |
| External sheath, color | Black RAL 9005 |
| External cable diameter D | 8.5 mm ±0.2 mm |
| Minimum bending radius, fixed installation | 5 x D |
| Minimum bending radius, flexible installation | 10 x D |

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Technical data

Cable

| | |
|---------------------------------|--|
| Number of bending cycles | 2000000 |
| Bending radius | 85 mm |
| Traversing path | 10 m |
| Traversing rate | 3 m/s |
| Acceleration | 10 m/s ² |
| Cable weight | 87 kg/km |
| Outer sheath, material | PUR |
| Material, inner sheath | PVC |
| Material conductor insulation | PVC |
| Conductor material | Tin-plated Cu litz wires |
| Insulation resistance | ≥ 10 MΩ*km (at 20 °C) |
| Conductor resistance | ≤ 142 Ω/km (at 20 °C) |
| Nominal voltage, cable | 42 V AC |
| Test voltage, cable | 1500 V AC |
| Special properties | Flexible cable conduit capable |
| Flame resistance | According to DIN EN 60332-1-2 |
| | According to VW-1 |
| Halogen-free | According to EN 50267-2-1 |
| Resistance to oil | in accordance with DIN EN 60811-2-1 |
| Other resistance | hydrolysis and microbe resistant according to EN 50396 |
| Ambient temperature (operation) | -30 °C ... 80 °C (cable, fixed installation) |
| | -5 °C ... 80 °C (cable, flexible installation) |

Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27060306 |
| eCl@ss 4.1 | 27060306 |
| eCl@ss 5.0 | 27061801 |
| eCl@ss 5.1 | 27061801 |
| eCl@ss 6.0 | 27061801 |
| eCl@ss 7.0 | 27061801 |
| eCl@ss 8.0 | 27061801 |

ETIM

| | |
|----------|----------|
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |

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Classifications

ETIM

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

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11 | 31251501 |
| UNSPSC 12.01 | 31251501 |
| UNSPSC 13.2 | 31251501 |

Approvals

Approvals


Approvals

GOST

Ex Approvals

Approvals submitted

Approval details

| |
|--|
| GOST  |
|--|

Accessories

Accessories

Conductor marking

Insert label - PABA WH/15 - 1013151



Insert label, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

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Accessories

Insert label - PABA YE/15 - 1013698



Insert label, Strip, yellow, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Insert label - PABA RD/15 - 1013944



Insert label, Strip, red, Unlabeled, Can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Cutting tools

Cable-cutting tool - CUTFOX-S VDE - 1212207



Diagonal cutter for copper and aluminum conductors, VDE-tested

Marker carrier cable

Conductor marker carrier - PATG 2/15 - 1013038



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 2-4 mm, Lettering field: 4 x 15 mm

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Accessories

Conductor marker carrier - PATG 3/15 - 1013041



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 4-7 mm, Lettering field: 4 x 15 mm

Conductor marker carrier - PATG 4/15 - 1013054



Conductor marker carrier, transparent, Unlabeled, Mounting type: Slide on, Cable diameter: 6-10 mm, Lettering field: 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

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

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



Safety locking

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Accessories

Fuse clip - SAC-M12-EXCLIP-F - 1558991



Fuse clip for the socket side of various M12 sensor/actuator connectors prevents plug-in connections being interrupted without using a tool

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 for M12 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive

Stripping tool

- WIREFOX SAC-1 - 1212757

Stripping tool - WIREFOX SAC - 1212623



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from \varnothing of 4.4 to 7 mm, any stripping length

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Accessories

Stripping tool - WIREFOX 10 - 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

Torque tool

Torque screwdriver - TSD 04 SAC - 1208429



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

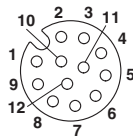
Torque screwdriver - TSD-M 1,2NM - 1212224



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

Drawings

Schematic diagram



Pin assignment M12, 12-pos., female side view

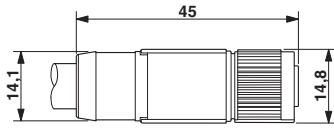
Cable cross section



Black PUR/PVC twisted pair [35T]

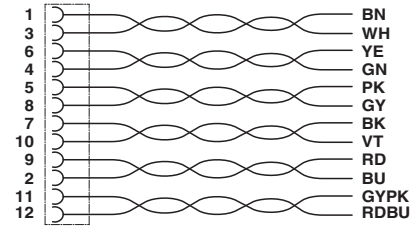
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Dimensioned drawing



Socket M12-SPEEDCON, straight, shielded

Circuit diagram



Contact assignment of the M12 socket