

SAC-12P-MS/ 3,0-PVC SCO - Sensor/actuator cable



1554788

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Sensor/actuator cable, 12-position, PVC, black RAL 9005, Plug straight M12 SPEEDCON, coding: A, on free cable end, cable length: 3 m

Your advantages

- 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

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1554788 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | BF03 |
| Product key | AF1CGA |
| GTIN | 4046356176200 |
| Weight per piece (including packing) | 166.5 g |
| Weight per piece (excluding packing) | 163.3 g |
| Customs tariff number | 85444290 |
| Country of origin | DE |

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Technical data

Product properties

| | |
|----------------------|-----------------------|
| Product type | Sensor/actuator cable |
| Application | Standard |
| Number of positions | 12 |
| No. of cable outlets | 1 |
| Shielded | no |
| Coding | A |

Insulation characteristics

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

Material specifications

| | |
|--|---|
| Flammability rating according to UL 94 | HB |
| 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 | Zinc die-cast, nickel-plated |

Electrical properties

| | |
|-----------------------|---------|
| Insulation resistance | ≥ 10 MΩ |
| Nominal voltage U_N | 30 V AC |
| | 30 V DC |
| Nominal current I_N | 1.5 A |

Signaling

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

Connection data

Conductor connection

| | |
|-------------------|------------------------|
| Tightening torque | 0.4 Nm (M12 connector) |
|-------------------|------------------------|

Connector

Connection 1

| | |
|---------------------|----------------------------|
| Type | Plug straight M12 SPEEDCON |
| Number of positions | 12 |
| Locking type | SPEEDCON |
| Coding type | A |

Connection 2

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

Cable/line

| | |
|--------------|-----|
| Cable length | 3 m |
|--------------|-----|

PVC black [PVC]

| | |
|---|--|
| Dimensional drawing |  |
| Number of positions | 12 |
| Shielded | no |
| Cable type | PVC black [PVC] |
| Conductor structure signal line | 18x 0.10 mm |
| AWG signal line | 26 |
| Conductor cross-section | 12x 0.14 mm ² (Signal line) |
| Wire diameter incl. insulation | 1 mm ±0.05 mm (Signal line) |
| External cable diameter | 5.80 mm |
| Outer sheath, material | PVC |
| External sheath, color | black RAL 9005 |
| Conductor material | Bare Cu litz wires |
| Material wire insulation | PVC |
| Single wire, color | white, brown, green, yellow, gray, pink, blue, red, black, violet, gray/pink, red/blue |
| Overall twist | 12 wires twisted in layers |
| Max. conductor resistance | ≤ 142 Ω/km (at 20 °C) |
| Insulation resistance | > 10 MΩ*km |
| Nominal voltage, cable | 250 V |
| Test voltage Core/Core | 1500 V AC |
| Smallest bending radius, fixed installation | 29 mm |
| Smallest bending radius, movable installation | 87 mm |
| Flame resistance | DIN EN 50265-2-1 |
| Ambient temperature (operation) | -25 °C ... 80 °C (cable, fixed installation) -5 °C ... 80 °C (Cable, flexible installation) |

Environmental and real-life conditions

Ambient conditions

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

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| | |
|---|--|
| Ambient temperature (operation) (male connector/female connector) | -25 °C ... 85 °C (Plug / socket) |
| Ambient temperature (operation) (Cable, fixed installation) | -25 °C ... 80 °C (cable, fixed installation) |
| Ambient temperature (operation) (Cable, flexible installation) | -5 °C ... 80 °C (Cable, flexible installation) |

Standards and regulations

| | |
|--------------------------|-----------------|
| Standard designation | M12 connector |
| Standards/specifications | IEC 61076-2-101 |

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Drawings

Dimensional drawing



M12 SPEEDCON plug, straight

Schematic diagram



Pin assignment M12 male connector, 12-pos., male side view

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Circuit diagram



Contact assignment of the M12 plug

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Approvals

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|  UL Listed Approval ID: E221474 | | | | |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| keine | | | | |
| | 30 V | 1 A | - | - |

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

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Classifications

ECLASS

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

ETIM

| | |
|-----------|----------|
| ETIM 10.0 | 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% |
|-------------------------------------|----------------------------|

EF3.1 Climate Change

| | |
|---------|---------------|
| CO2e kg | 2.527 kg CO2e |
|---------|---------------|

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