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Sensor/Actuator cable, 3-position, TPE, yellow RAL 1021, Plug straight M12 SPEEDCON, A-coded, on Socket angled M12 SPEEDCON, A-coded, Cable length: 0.5 m



## Key Commercial Data

| Packing unit                         | 1 pc          |
|--------------------------------------|---------------|
| Weight per Piece (excluding packing) | 50.0 g        |
| Country of origin                    | United States |

## Technical data

#### Dimensions

| Length of cable                 | 0.5 m                        |
|---------------------------------|------------------------------|
| Ambient conditions              |                              |
| Ambient temperature (operation) | -25 °C 90 °C (Plug / socket) |
| Degree of protection            | IP65/IP67                    |

General

| Rated current at 40°C        | 4 A                           |
|------------------------------|-------------------------------|
| Rated voltage                | 250 V                         |
| Number of positions          | 3                             |
| Coding                       | A - standard                  |
| Standards/regulations        | M12 connector IEC 61076-2-101 |
| Status display               | No                            |
| Protective circuit/component | Unwired                       |
| Overvoltage category         | Ш                             |
| Degree of pollution          | 3                             |
| Torque                       | 0.4 Nm (M12 connector)        |



### Technical data

#### Material

| Flammability rating according to UL 94 | НВ  |
|--|---|
| Contact material                       | CuSn  |
| 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 | НВ              |

#### Cable

| Cable type                         | TPE yellow 105 °C                         |
|------------------------------------|---|
| Cable type (abbreviation)          | 647                                       |
| UL AWM style                       | 20327 (105°C/300 V)                       |
| AWG signal line                    | 18  |
| Conductor structure signal line    | 41x 0.16 mm                               |
| Core diameter including insulation | 1.8 mm                                    |
| Thickness, insulation              | 0.23 mm                                   |
| Overall twist                      | 3 wires, twisted                          |
| External sheath, color             | yellow                                    |
| Outer sheath thickness             | 0.89 mm                                   |
| External cable diameter D          | 5.7 mm ±0.25 mm                           |
| Cable weight                       | 23 kg/km                                  |
| Outer sheath, material             | TPE                                       |
| Material conductor insulation      | PVC                                       |
| Nominal voltage, cable             | 300 V                                     |
| Flame resistance                   | According to FT1                          |
| Resistance to oil                  | OIL RES I according to UL 2256            |
| Other resistance                   | UV resistant (720 h) to UL 2256           |
| Ambient temperature (operation)    | -30 °C 105 °C (cable, fixed installation) |

## Classifications

eCl@ss

| eCl@ss 5.1 | 27061801 |
|------------|----------|
|------------|----------|



### Classifications

#### eCl@ss

| eCl@ss 6.0 | 27061801 |
|------------|----------|
| eCl@ss 8.0 | 27279218 |
| eCl@ss 9.0 | 27060311 |

#### Accessories

Accessories

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 sockets



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



### Accessories

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

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



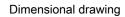
Pin assignment M12 plug, 3-pos., A-coded, view male side

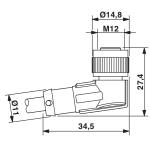
Cable cross section



TPE yellow 105 °C [647]

M12 x 1 plug, straight





M12 x 1 socket, angled

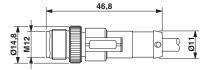
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#### Schematic diagram

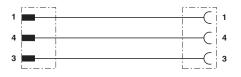


Pin assignment M12 socket, 3-pos., A-coded, view female side

Dimensional drawing







Contact assignment of the M12 plug and the M12 socket