

Sensor/Actuator cable - SAC-4P-MR/3,0-647/FR SCO BK - 1415138

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Sensor/Actuator cable, 4-position, TPE, yellow RAL 1021, Plug angled M12 SPEEDCON, A-coded, on Socket angled M12 SPEEDCON, A-coded, Cable length: 3 m



Key Commercial Data

| | |
|--------------------------------------|---------------|
| Packing unit | 1 pc |
| Weight per Piece (excluding packing) | 100.0 g |
| Country of origin | United States |

Technical data

Dimensions

| | |
|-----------------|-----|
| Length of cable | 3 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 | 4 |
| 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 |
| Torque | 0.4 Nm (M12 connector) |

Sensor/Actuator cable - SAC-4P-MR/3,0-647/FR SCO BK - 1415138

Technical data

Material

| | |
|--|---|
| Flammability rating according to UL 94 | HB |
| 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 | HB |

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 | 4 wires, twisted |
| External sheath, color | yellow |
| Outer sheath thickness | 0.89 mm |
| External cable diameter D | 6 mm ±0.25 mm |
| Cable weight | 31 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 |
|------------|----------|

Sensor/Actuator cable - SAC-4P-MR/3,0-647/FR SCO BK - 1415138

Classifications

eCl@ss

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

ETIM

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

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

Sensor/Actuator cable - SAC-4P-MR/3,0-647/FR SCO BK - 1415138

Accessories

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

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



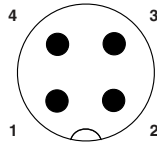
Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

Sensor/Actuator cable - SAC-4P-MR/3,0-647/FR SCO BK - 1415138

Accessories

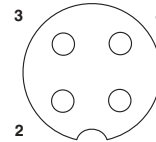
Drawings

Schematic diagram



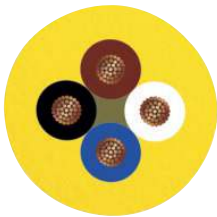
Pin assignment M12 plug, 4-pos., A-coded, view plug side

Schematic diagram



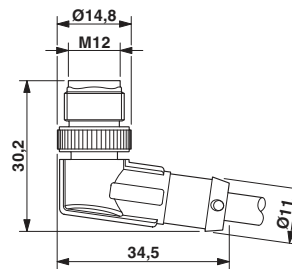
Pin assignment M12 socket, 4-pos., A-coded, view female side

Cable cross section



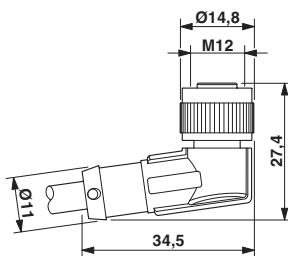
TPE yellow 105 °C [647]

Dimensional drawing



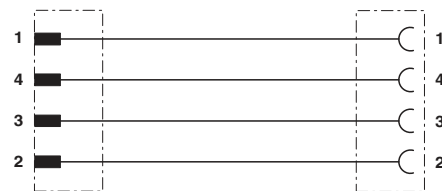
M12 x 1 male plug, angled

Dimensional drawing



M12 x 1 socket, angled

Circuit diagram



Contact assignment of M8 plugs / M12 sockets