

## Sensor/actuator cable - SAC-4P-MR/ 5,0-547/FS SCO BK - 1424975


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Sensor/actuator cable, 4-position, PVC, yellow, Plug angled M12 SPEEDCON, coding: A, on Socket straight M12 SPEEDCON, coding: A, cable length: 5 m



### Key Commercial Data

|              |   |
|--------------|---|
| Packing unit | 1 pc  |
| GTIN         | <br>4 0 5 5 6 2 6 4 0 2 2 2 2 |
| GTIN         | 4055626402222   |

### Technical data

#### Dimensions

|                 |     |
|-----------------|-----|
| Length of cable | 5 m |
|-----------------|-----|

#### Ambient conditions

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

#### General

|                              |                               |
|------------------------------|-------------------------------|
| Rated current at 40°C        | 4 A                           |
| Rated voltage                | 250 V AC                      |
|                              | 250 V DC                      |
| Number of positions          | 4                             |
| Insulation resistance        | ≥ 10 MΩ                       |
| Coding                       | A - standard                  |
| Standards/regulations        | M12 connector IEC 61076-2-101 |
| Status display               | No                            |
| Protective circuit/component | unwired                       |
| Overvoltage category         | II                            |

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## Technical data

### General

|                     |                        |
|---------------------|------------------------|
| Degree of pollution | 3                      |
| Torque              | 0.4 Nm (M12 connector) |

### 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

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

### Cable

|  |   |
|--|---|
| Cable type                                 | PVC yellow 105 °C                             |
| Cable type (abbreviation)                  | 547   |
| UL AWM style                               | 2517 (105 °C / 300 V)                         |
| AWG signal line                            | 18  |
| Conductor structure signal line            | 41x 0.16 mm                                   |
| Core diameter including insulation         | 1.7 mm ±0.03 mm                               |
| Wire colors                                | brown, white, blue, black                     |
| Overall twist                              | 4 wires, twisted                              |
| External sheath, color                     | yellow  |
| External cable diameter D                  | 6 mm ±0.2 mm                                  |
| Minimum bending radius, fixed installation | 8 x D   |
| Outer sheath, material                     | PVC   |
| Material conductor insulation              | PVC   |
| Conductor material                         | Tin-plated Cu litz wires                      |
| Nominal voltage, cable                     | 300 V   |
| Special properties                         | C(UL) CMX OUTDOOR-CMG 105 °C                  |
|  | UL ITC/PLTC 105 °C                            |
|  | CSA AWM I/II A/B FT4 105 °C / 300 V           |
| Flame resistance                           | FT4   |
| Ambient temperature (operation)            | -30 °C ... 105 °C (cable, fixed installation) |

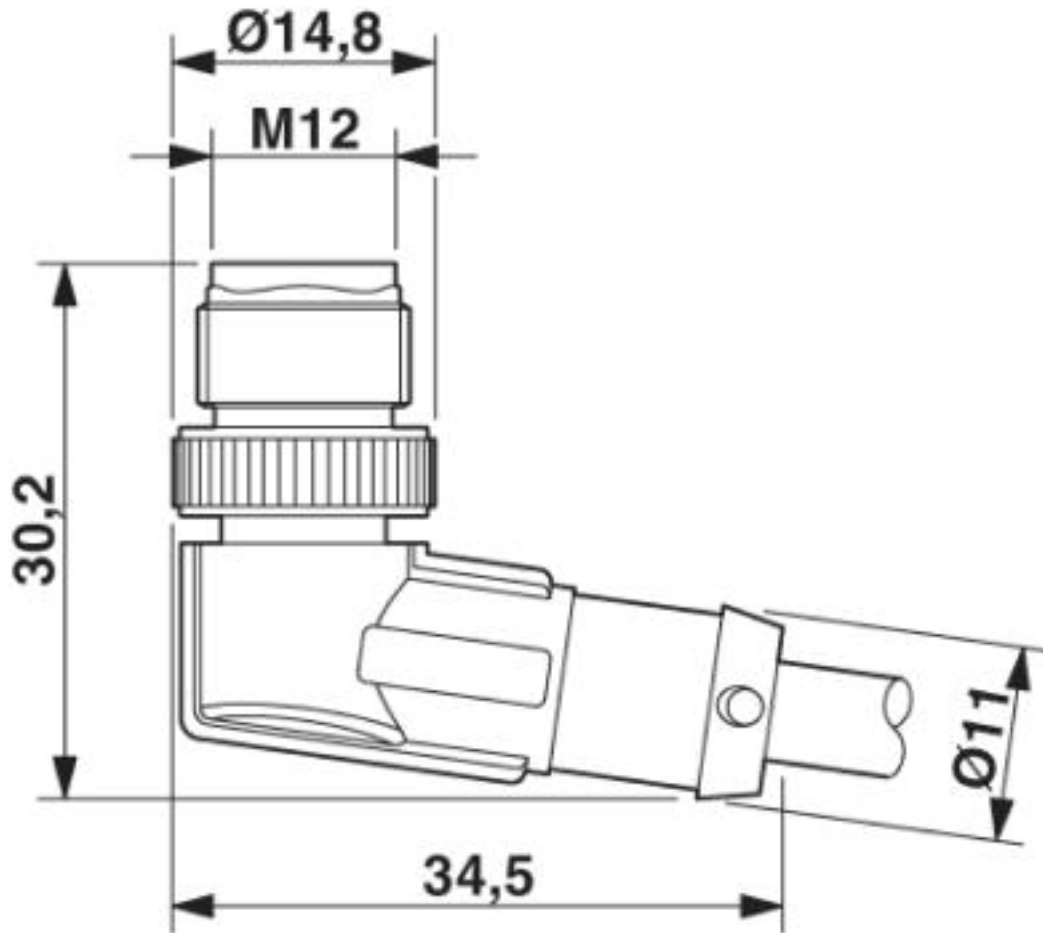
### Environmental Product Compliance

|            |   |
|------------|---|
| China RoHS | Environmentally Friendly Use Period = 50 years  |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

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## Drawings

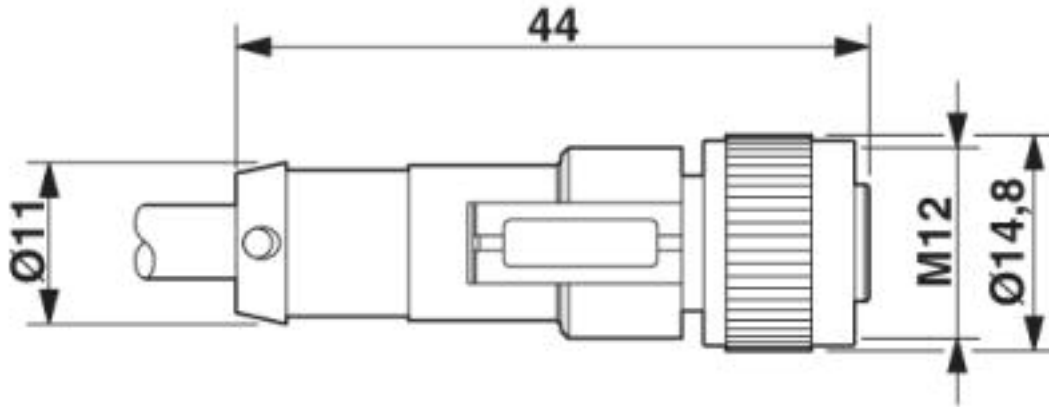
Dimensional drawing



M12 x 1 male plug, angled

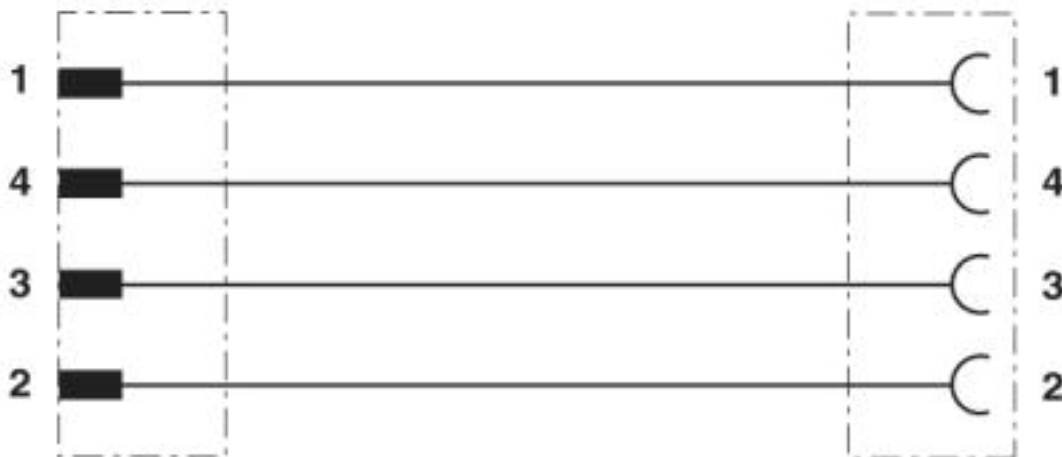
# Sensor/actuator cable - SAC-4P-MR/ 5,0-547/FS SCO BK - 1424975

Dimensional drawing



M12 x 1 socket, straight

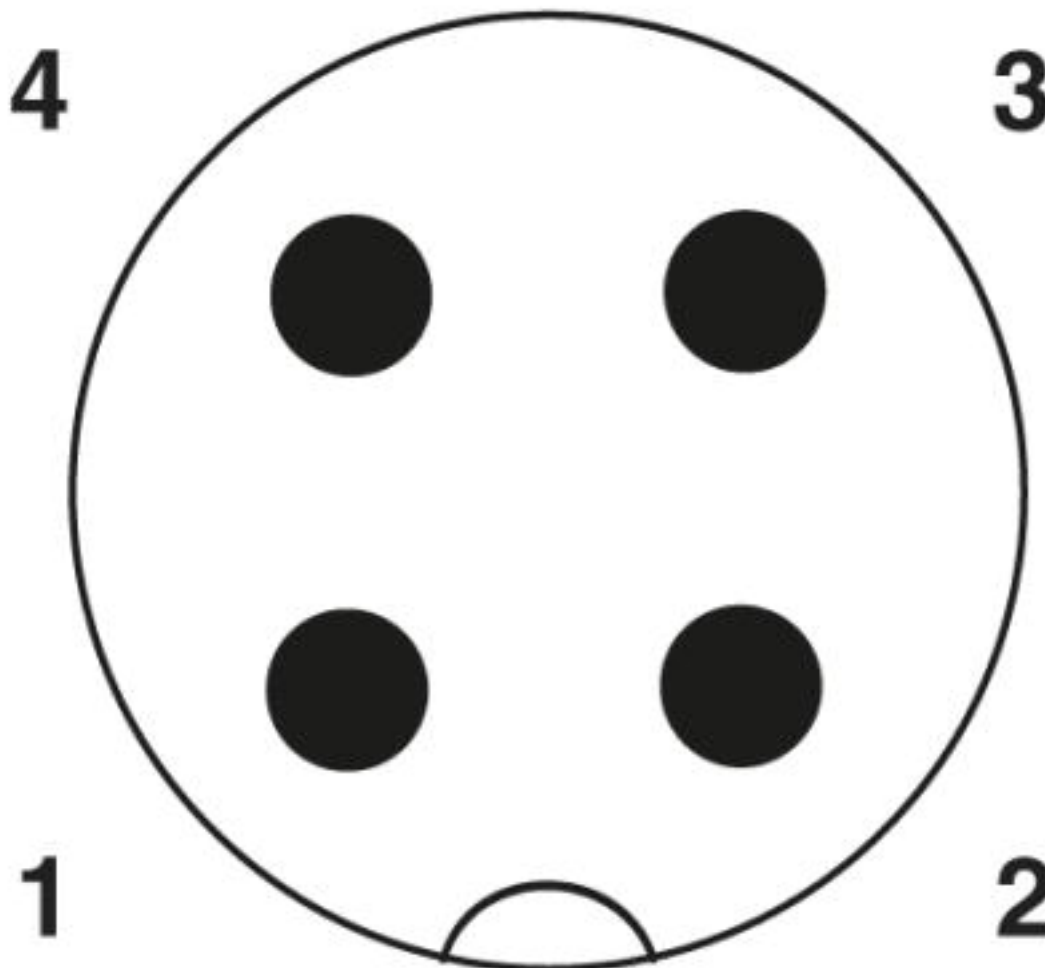
Circuit diagram



Contact assignment of the M12 plug and the M12 socket

# Sensor/actuator cable - SAC-4P-MR/ 5,0-547/FS SCO BK - 1424975

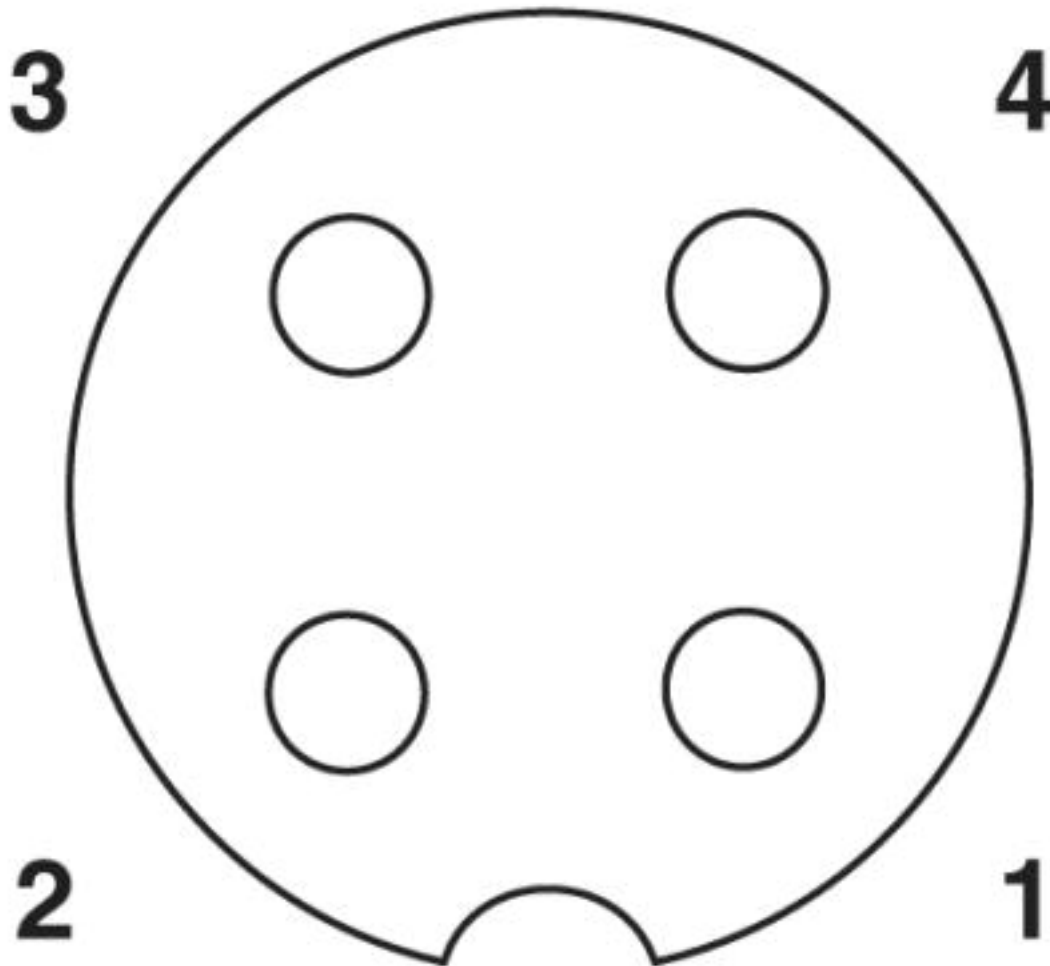
Schematic diagram



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

# Sensor/actuator cable - SAC-4P-MR/ 5,0-547/FS SCO BK - 1424975

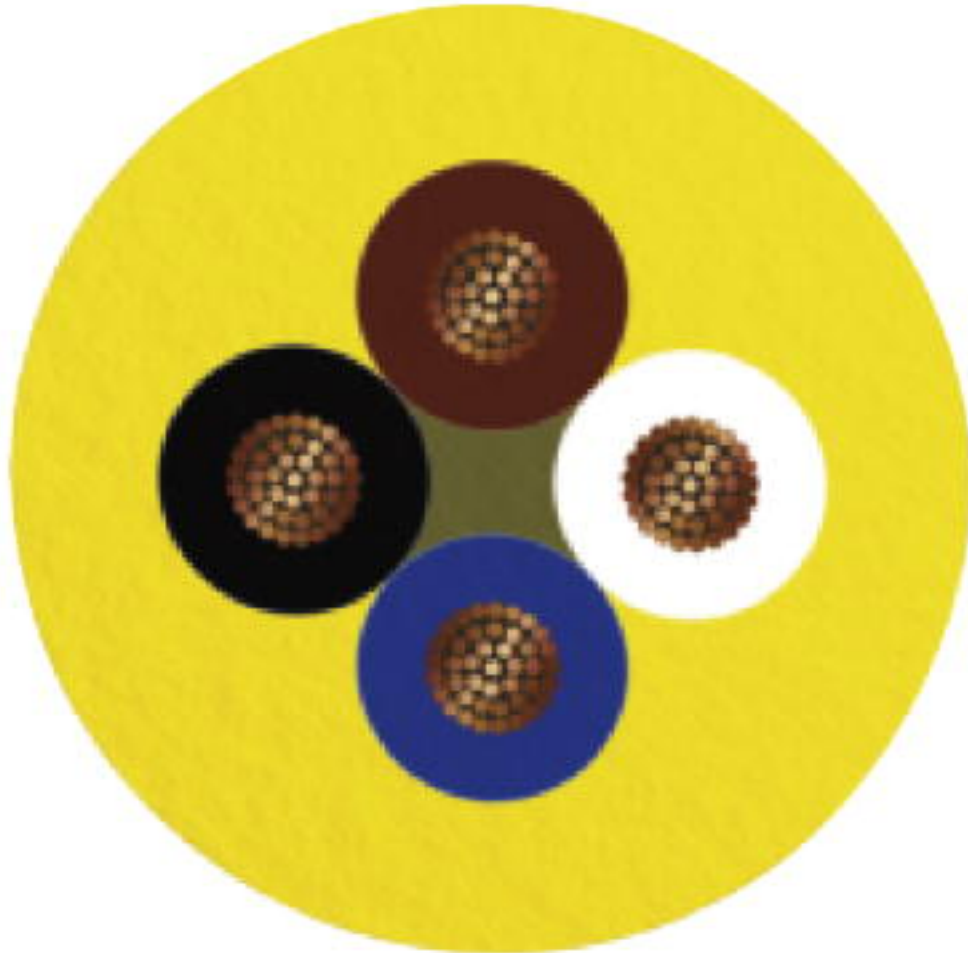
Schematic diagram



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

# Sensor/actuator cable - SAC-4P-MR/ 5,0-547/FS SCO BK - 1424975

Cable cross section



PVC yellow 105 °C [547]

## Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27060311 |
| eCl@ss 4.0    | 27060306 |
| eCl@ss 4.1    | 27060306 |
| eCl@ss 5.0    | 27061801 |
| eCl@ss 5.1    | 27061801 |
| eCl@ss 6.0    | 27279200 |
| eCl@ss 7.0    | 27279218 |
| eCl@ss 8.0    | 27279218 |
| eCl@ss 9.0    | 27060311 |

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## Classifications

### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC000830 |
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |
| ETIM 6.0 | EC001855 |
| ETIM 7.0 | EC001855 |

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11     | 31251501 |
| UNSPSC 12.01  | 31251501 |
| UNSPSC 13.2   | 31251501 |
| UNSPSC 19.0   | 31251501 |
| UNSPSC 20.0   | 31251501 |
| UNSPSC 21.0   | 31251501 |

## Approvals


### Approvals


#### Approvals

UL Listed / cUL Listed / EAC / cULus Listed

#### Ex Approvals

### Approval details

|                    |   |   |               |
|--------------------|---|---|---------------|
| UL Listed          |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 221474 |
| Nominal voltage UN | 300 V   |   |               |
| Nominal current IN | 4 A   |   |               |

|                    |   |   |               |
|--------------------|---|---|---------------|
| cUL Listed         |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 221474 |
| Nominal voltage UN | 300 V   |   |               |



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## Approvals

|                                |     |
|--------------------------------|-----|
| Nominal current I <sub>N</sub> | 4 A |
|--------------------------------|-----|

|     |  |                          |
|-----|--|--------------------------|
| EAC |  | RU D-<br>DE.HB35.B.00387 |
|-----|--|--------------------------|

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

## Accessories

### Accessories

#### Plug for cable screw gland

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

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



#### 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



#### 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/ 5,0-547/FS SCO BK - 1424975

### 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

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### 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

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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

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### 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

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



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

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