

SAC-3P- 5,0-540/M12FR BK - Sensor/actuator cable



1400502

<https://www.phoenixcontact.com/us/products/1400502>

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Sensor/actuator cable, 3-position, PVC, yellow, free cable end, on Socket angled M12, coding: A, cable length: 5 m

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 1400502 |
| Packing unit | 1 pc |
| Minimum order quantity | 50 pc |
| Note | Made to order (non-returnable) |
| Product key | AF1CBA |
| GTIN | 4046356498654 |
| Weight per piece (including packing) | 194 g |
| Weight per piece (excluding packing) | 156 g |
| Country of origin | DE |

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Technical data

Product properties

| | |
|----------------------|-----------------------|
| Product type | Sensor/actuator cable |
| Number of positions | 3 |
| No. of cable outlets | 1 |
| Coding | A |

Insulation characteristics

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

Material specifications

| | |
|----------------------------------------|---------------------------------------------|
| Flammability rating according to UL 94 | HB |
| Seal material | NBR |
| Material of grip body | TPU, hardly inflammable, self-extinguishing |
| Contact material | CuSn |
| Contact surface material | Ni/Au |
| Contact carrier material | TPU GF |
| Material for screw connection | Zinc die-cast, nickel-plated |

Electrical properties

| | |
|-----------------------|----------------------------|
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Nominal voltage U_N | 250 V AC |
| | 250 V DC |
| Nominal current I_N | 4 A |

Mechanical properties

Mechanical data

| | |
|-----------------------------|------------|
| Insertion/withdrawal cycles | ≥ 100 |
|-----------------------------|------------|

Signaling

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

Connection data

Conductor connection

| | |
|-------------------|--------|
| Tightening torque | 0.4 Nm |
|-------------------|--------|

Connector

Connection 1

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

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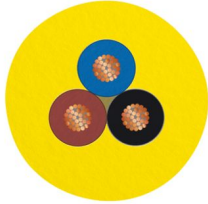
Connection 2

| | |
|---------------------|-------------------|
| Type | Socket angled M12 |
| Number of positions | 3 |
| Coding type | A |

Cable/line

| | |
|--------------|-----|
| Cable length | 5 m |
|--------------|-----|

PVC yellow [540]

| | |
|---------------------------------|------------------------------------------------------------------------------------------------|
| Dimensional drawing |  |
| Cable weight | 40 kg/km |
| Number of positions | 3 |
| Shielded | no |
| Cable type | PVC yellow [540] |
| Conductor structure signal line | 42x 0.10 mm |
| AWG signal line | 22 |
| Conductor cross-section | 0.34 mm ² |
| Wire diameter incl. insulation | 1.45 mm ±0.05 mm |
| External cable diameter | 5.20 mm ±0.2 mm |
| Outer sheath, material | PVC |
| External sheath, color | yellow |
| Conductor material | Bare Cu litz wires |
| Material wire insulation | PVC |
| Single wire, color | brown, blue, black |
| Thickness, insulation | ≥ 0.23 mm (Core insulation) ≥ 0.76 mm (Outer cable sheath) |
| Overall twist | 3 wires, twisted |
| Max. conductor resistance | max. 58 Ω/km (at 20 °C) |
| Insulation resistance | ≥ 1 GΩ*km (at 20 °C) |
| Nominal voltage, cable | ≤ 300 V |
| Test voltage | ≥ 3000 V |
| Flame resistance | As per UL-Style 2464 |
| Ambient temperature (operation) | -25 °C ... 80 °C (cable, fixed installation) -5 °C ... 80 °C (Cable, flexible installation) |

Environmental and real-life conditions

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Ambient conditions

| | |
|---------------------------------|------------------------------------------------|
| Degree of protection | IP65 |
| | IP67 |
| | IP68 |
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
| | -40 °C ... 80 °C (cable, fixed installation) |
| | -5 °C ... 80 °C (Cable, flexible installation) |

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Drawings

Dimensional drawing



M12 x 1 socket, angled

Schematic diagram



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

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Circuit diagram



Contact assignment of the M12 socket

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Approvals

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|  UL Listed Approval ID: FILE E 221474 | | | | |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| keine | | | | |
| | 300 V | 4 A | - | - |

|  cUL Listed Approval ID: FILE E 221474 | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
| keine | | | | |
| | 300 V | 4 A | - | - |

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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% |
|-------------------------------------|----------------------------|

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