

Sensor/actuator box - SACB-8/16-L- 5,0 80MC SCO - 1401199

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Sensor/actuator box, application: Robots and drag chains, connection method: M12-SPEEDCON-socket Metal, number of slots: 8, number of positions: 5, coding: A - standard, slot assignment: Double, status display: yes, pnp; master cable connection: Fixed connection 180°, PUR, halogen free, highly flexible, highly flexible, cable length: 5 m, shielding: no

Your advantages

- ✓ Safety in the field, thanks to molded housing and high degree of protection
- ✓ Flexible, distributed bundling of signals in one master cable
- ✓ Convenient: increased machine availability thanks to quick and easy diagnostics
- ✓ Save space: distributor box with double occupancy for two sensors in one slot
- ✓ Save time, thanks to installation with SPEEDCON fast locking system



Key Commercial Data

| | |
|--------------------------------------|---|
| Packing unit | 1 pc |
| GTIN |  4 046356 536110 |
| GTIN | 4046356536110 |
| Weight per Piece (excluding packing) | 1,280.000 g |
| Custom tariff number | 85444290 |
| Country of origin | Poland |

Technical data

General

| | |
|--|---------|
| Rated voltage | 24 V DC |
| Max. operating voltage U _{max} | 30 V DC |
| Current carrying capacity per I/O signal | 2 A |
| Current carrying capacity per slot | 4 A |
| Total rated current | 12 A |

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Technical data

General

| | |
|--|---|
| Number of positions | 5 |
| Number of slots | 8 |
| Flammability rating according to UL 94 | V0 |
| Sensor/actuator connection system | M12-SPEEDCON-socket |
| Note | NOTE: Observe the permissible bending radii when laying conductors, since the degree of protection may be put in jeopardy if the bending forces are too high. Alleviate mechanical loads upstream of the connector, e.g. by using cable ties. |
| | Unused slots are to be sealed off prior to commissioning. Suitable sealing elements are to be found under "Accessories". |

Ambient conditions

| | |
|---------------------------------|--|
| Degree of protection | IP65 |
| | IP67 |
| | IP69K |
| Ambient temperature (operation) | -30 °C ... 90 °C |
| | -40 °C ... 90 °C (cable, fixed installation) |
| | -5 °C ... 80 °C (cable, flexible installation) |

Master cable connection data

| | |
|--|------------------|
| Connection method | Fixed connection |
| Length of cable | 5 m |
| Tightening torque slot sensor/actuator cable | 0.4 Nm |
| Tightening torque of mounting screw for fixing the housing | 0.5 Nm |

Insulation material

| | |
|-------------------------------------|---------------|
| Housing material | PBT |
| Material of the moulding mass | PUR |
| Contact material | Cu alloy |
| Contact surface material | gold-plated |
| Contact carrier material | PA |
| Material of threaded sleeve | Zinc die-cast |
| Material of threaded sleeve surface | Nickel-plated |
| O-ring material | NBR |

Pin assignment

| | |
|--|-------------------|
| Slot/position = Wire color or connection | 1 / 4 (A) = WH |
| | 1 / 2 (B) = GY/PK |
| | 2 / 4 (A) = GN |
| | 2 / 2 (B) = RD/BU |
| | 3 / 4 (A) = YE |

Sensor/actuator box - SACB-8/16-L- 5,0 80MC SCO - 1401199

Technical data

Pin assignment

| | |
|--|-----------------------|
| | 3 / 2 (B) = WH/GN |
| | 4 / 4 (A) = GY |
| | 4 / 2 (B) = BN/GN |
| | 5 / 4 (A) = PK |
| | 5 / 2 (B) = WH/YE |
| | 6 / 4 (A) = RD |
| | 6 / 2 (B) = YE/BN |
| | 7 / 4 (A) = BK |
| | 7 / 2 (B) = WH/GY |
| | 8 / 4 (A) = VT |
| | 8 / 2 (B) = GY/BN |
| | 1-8 / 1 (+ 24 V) = BN |
| | 1-8 / 3 (0 V) = BU |
| | 1-8 / 5 (PE) = GN/YE |

Standards and Regulations

| | |
|--|-------------------------------|
| Standards/specifications | M12 connector IEC 61076-2-101 |
| Flammability rating according to UL 94 | V0 |

Cable

| | |
|---|--|
| Cable type | PUR halogen-free, highly flexible |
| Cable type (abbreviation) | 80MC |
| Cable abbreviation | LS9Y11Y-J-EFK |
| Conductor cross section | 16x 0.5 mm ² (Signal line) |
| | 3x 1 mm ² (power line) |
| AWG signal line | 20 |
| AWG power supply | 17 |
| Conductor structure signal line | 28x 0.15 mm |
| Conductor structure, voltage supply | 56x 0.15 mm |
| Wire colors | brown, blue, green/yellow, white, green, yellow, gray, pink, red, black, violet, gray/pink, red/blue, white/green, brown/green, white/yellow, yellow/brown, white/gray, gray/brown |
| Overall twist | Wires twisted to an optimum in two layers |
| External sheath, color | black RAL 9005 |
| External cable diameter D | 10.75 mm |
| Smallest bending radius, fixed installation | 90 mm |
| Smallest bending radius, movable installation | 120 mm |
| Number of bending cycles | 5000000 |
| Bending radius | 120 mm |

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Technical data

Cable

| | |
|---------------------------------|---|
| Traversing path | 5 m |
| Traversing rate | 3 m/s |
| Acceleration | 5 m/s ² |
| Torsion force | ± 120 °/m (≥ 3 million torsion cycles) |
| Outer sheath, material | PUR |
| Material conductor insulation | PP |
| Conductor material | Bare Cu litz wires |
| Insulation resistance | ≥ 10 MΩ*km (at 20 °C) |
| Conductor resistance | 39 Ω/km (Signal line) |
| | 19.5 Ω/m (power line) |
| Nominal voltage, cable | 300 V |
| Test voltage, cable | 2000 V |
| Special properties | Silicone-free |
| | Free of substances which would hinder coating with paint or varnish |
| Flame resistance | DIN EN 50265-2-1 |
| Halogen-free | The cable is halogen-free |
| Resistance to oil | in accordance with DIN EN 60811-2-1 |
| Other resistance | somewhat resistant to welding sparks |
| Ambient temperature (operation) | -30 °C ... 70 °C (cable, fixed installation) |
| | 5 °C ... 70 °C (cable, flexible installation) |

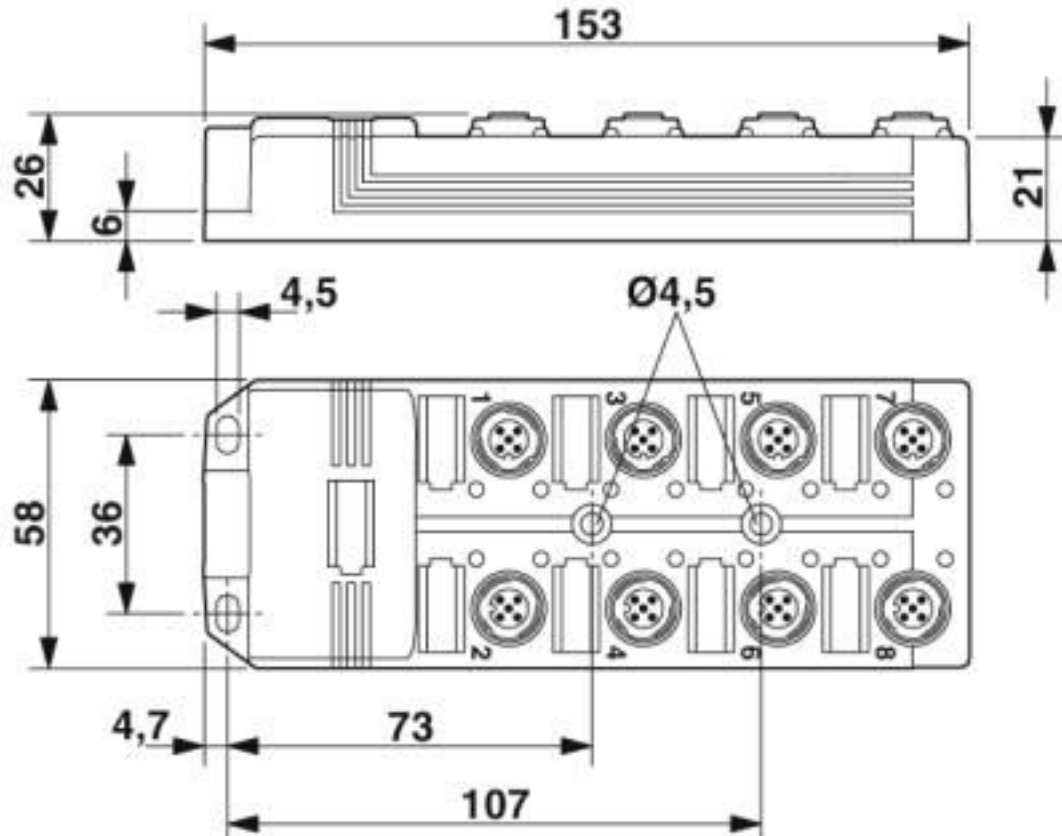
Environmental Product Compliance

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

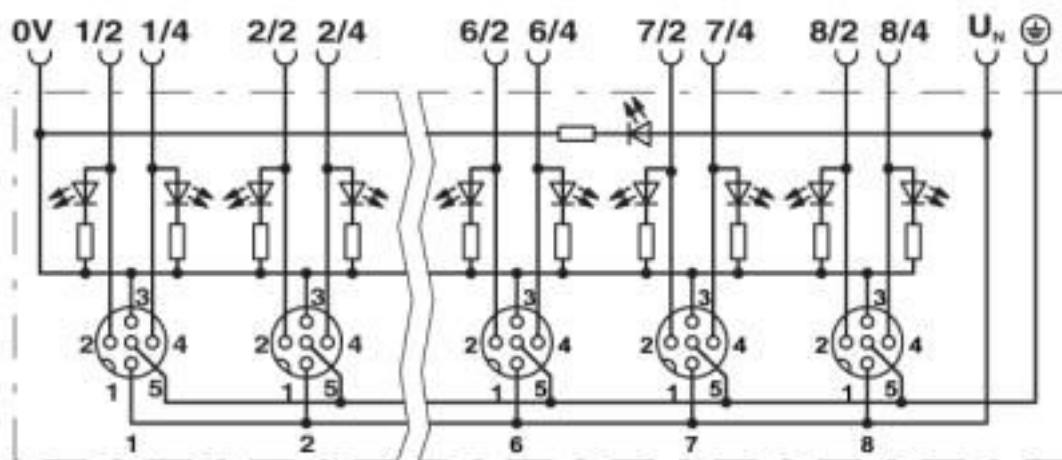
Drawings

Sensor/actuator box - SACB-8/16-L- 5,0 80MC SCO - 1401199

Dimensional drawing

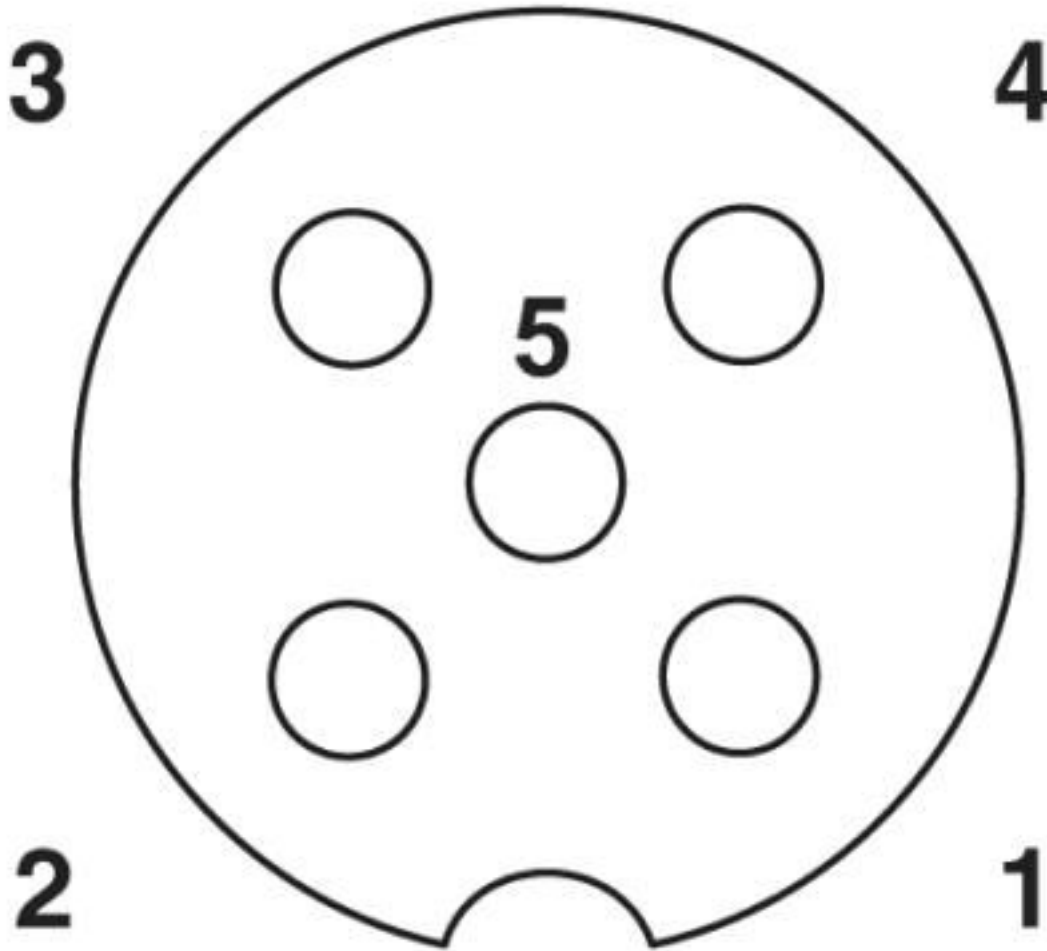


Circuit diagram



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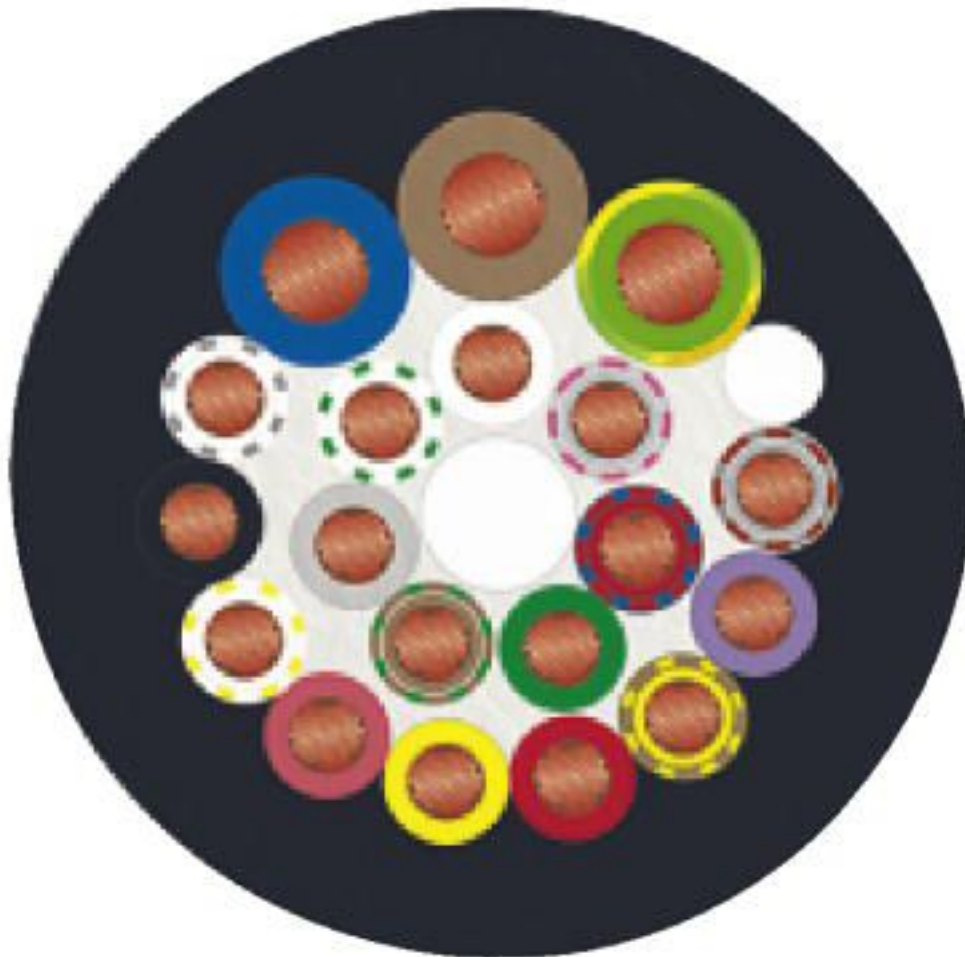
Schematic diagram



M12 slot, socket, 5-pos.

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Cable cross section



PUR halogen-free, highly flexible [80MC]

Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27440108 |
| eCl@ss 4.0 | 27140800 |
| eCl@ss 4.1 | 27140800 |
| eCl@ss 5.0 | 27143400 |
| eCl@ss 5.1 | 27250300 |
| eCl@ss 6.0 | 27279200 |
| eCl@ss 7.0 | 27279219 |

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Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 8.0 | 27279219 |
| eCl@ss 9.0 | 27440108 |

ETIM

| | |
|----------|----------|
| ETIM 3.0 | EC001856 |
| ETIM 4.0 | EC002585 |
| ETIM 5.0 | EC002585 |
| ETIM 6.0 | EC002585 |
| ETIM 7.0 | EC002585 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 31261501 |
| UNSPSC 7.0901 | 31261501 |
| UNSPSC 11 | 31261501 |
| UNSPSC 12.01 | 31261501 |
| UNSPSC 13.2 | 31251501 |
| UNSPSC 19.0 | 31251501 |
| UNSPSC 20.0 | 31251501 |
| UNSPSC 21.0 | 31251501 |

Approvals

Approvals

Approvals

EAC / EAC / EAC


Ex Approvals

Approval details

| | | |
|-----|---|---------------|
| EAC |  | EAC-Zulassung |
|-----|---|---------------|

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Approvals

| | | |
|-----|---|--------------------------|
| EAC |  | RU C- DE.BL08.B.00286 |
|-----|---|--------------------------|

| | | |
|-----|---|--------------------------|
| EAC |  | RU C- DE.BL08.B.00511 |
|-----|---|--------------------------|

Accessories

Accessories

Plug for cable screw gland

Screw plug - PROT-MS SCO - 1553129



Screwdriver tools

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

Tool - SACC BIT M12-D20 - 1208445



Nut for assembling M12 connectors for assembly with a knurl diameter of 20 mm, for 4 mm hexagonal drive

Torque tool

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Accessories

Torque screwdriver - TSD 04 SAC - 1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors