

## Sensor/actuator box - SACB-8/16-L-PT SCO P - 1412060

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Sensor/actuator box, application: Standard, connection method: M12-SPEEDCON-socket Plastic, number of slots: 8, number of positions: 5, coding: A - standard, slot assignment: Double, status display: yes, pnp; master cable connection: Push-in-/Spring-cage connection 180°, 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
- ✓ Flexible: distributor box with connector hood for on-site assembly



### Key Commercial Data

|                                      |   |
|--------------------------------------|---|
| Packing unit                         | 1 pc  |
| GTIN                                 | <br>4 046356 958103 |
| GTIN                                 | 4046356958103   |
| Weight per Piece (excluding packing) | 215.100 g   |
| Custom tariff number                 | 85366990  |
| Country of origin                    | Germany   |

### 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                      | 8 A (Higher ratings can be achieved with different configurations) |
| Number of positions                      | 5  |
| Number of slots                          | 8  |

# Sensor/actuator box - SACB-8/16-L-PT SCO P - 1412060

## Technical data

### General

|  |   |
|--|---|
| 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             |
| Ambient temperature (operation) | -25 °C ... 80 °C |

### Local diagnostics function

|                   |                               |
|-------------------|-------------------------------|
| Local diagnostics | Supply voltage Green LED      |
|                   | Status display I/O Yellow LED |

### Master cable connection data

|  |                                 |
|--|---------------------------------|
| Connection method  | Push-in-/Spring-cage connection |
| Conductor cross section min. (signal)                      | 0.2 mm <sup>2</sup>             |
| Conductor cross section max. (signal)                      | 1 mm <sup>2</sup>               |
| Conductor cross section AWG min. (signal)                  | 24                              |
| Conductor cross section AWG max. (signal)                  | 16                              |
| Conductor cross section min. (energy)                      | 0.2 mm <sup>2</sup>             |
| Conductor cross section max. (energy)                      | 1 mm <sup>2</sup>               |
| Conductor cross section AWG min. (energy)                  | 24                              |
| Conductor cross section AWG max. (energy)                  | 16                              |
| External cable diameter min.                               | 7 mm                            |
| External cable diameter max.                               | 12 mm                           |
| Stripping length   | 8 mm                            |
| Tightening torque, cover screw                             | 1 Nm                            |
| Tightening torque, union nut                               | 2.5 Nm                          |
| 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 the contact carrier on the master cable side | PA          |
| Material of threaded sleeve                              | PBT         |

## Sensor/actuator box - SACB-8/16-L-PT SCO P - 1412060

### Technical data

#### Insulation material

|                  |                      |
|------------------|----------------------|
| O-ring material  | NBR                  |
| Sealing material | NBR (Connector hood) |

#### 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        |
|  | 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

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

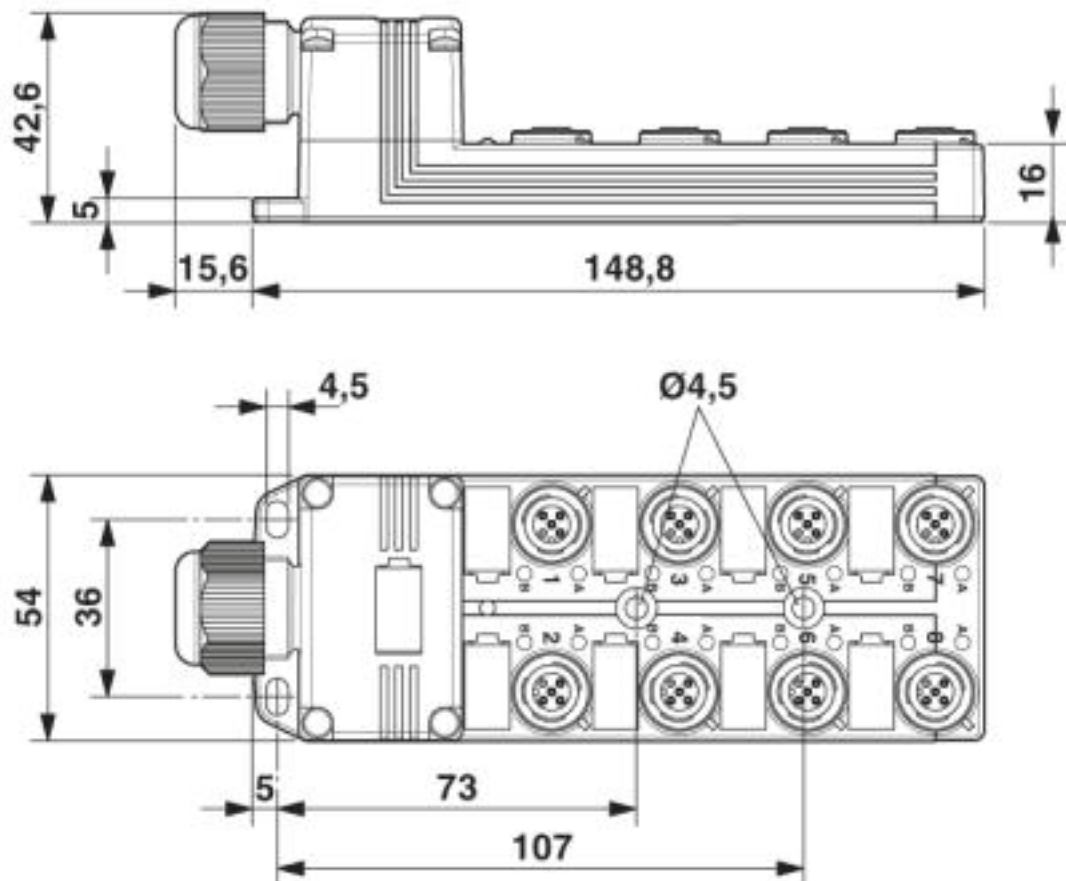
#### Environmental Product Compliance

|            |   |
|------------|---|
|            | Lead 7439-92-1  |
| China RoHS | Environmentally Friendly Use Period = 50  |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

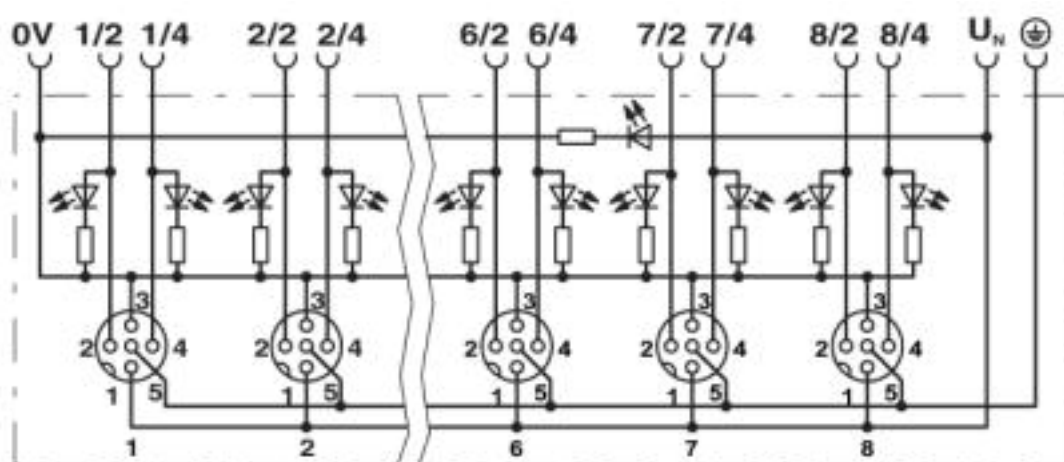
### Drawings

## Sensor/actuator box - SACB-8/16-L-PT SCO P - 1412060

Dimensional drawing

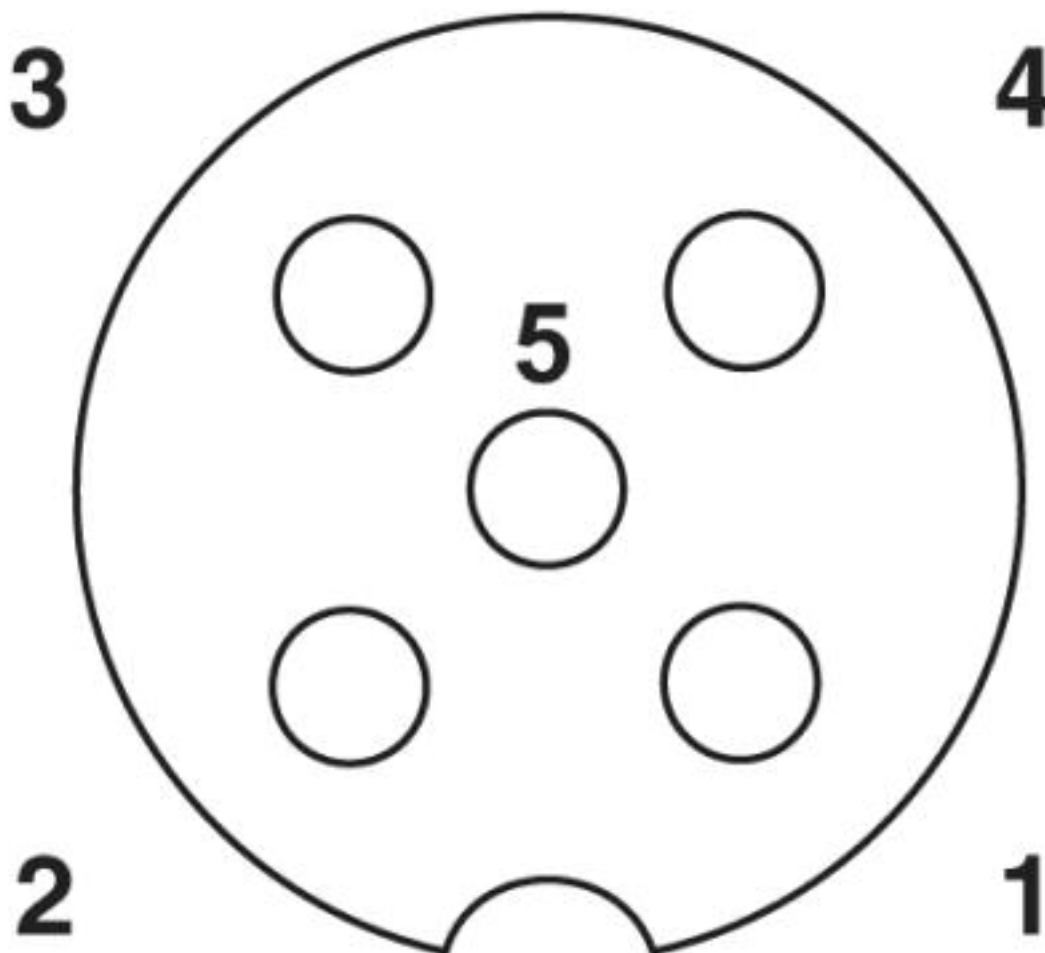


Circuit diagram



## Sensor/actuator box - SACB-8/16-L-PT SCO P - 1412060

Schematic diagram



M12 slot, socket, 5-pos.

### Classifications

eCl@ss

|            |          |
|------------|----------|
| eCl@ss 5.1 | 27250300 |
| eCl@ss 6.0 | 27279200 |
| eCl@ss 7.0 | 27279219 |
| eCl@ss 8.0 | 27279219 |
| eCl@ss 9.0 | 27440108 |

ETIM

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

## Sensor/actuator box - SACB-8/16-L-PT SCO P - 1412060

### Classifications

#### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 13.2 | 31251501 |
| UNSPSC 19.0 | 31251501 |
| UNSPSC 20.0 | 31251501 |
| UNSPSC 21.0 | 31251501 |

### Approvals


#### Approvals


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UL Recognized / cUL Recognized / EAC / cULus Recognized


#### Ex Approvals

#### Approval details

|                    |   |   |               |
|--------------------|---|---|---------------|
| UL Recognized      |  | <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 118976 |
| Nominal voltage UN | 24 V  |   |               |
| Nominal current IN | 8 A   |   |               |

|                    |   |   |               |
|--------------------|---|---|---------------|
| cUL Recognized     |  | <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 118976 |
| Nominal current IN | 24 A  |   |               |
| mm²/AWG/kcmil      | 8   |   |               |

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

|                  |   |
|------------------|---|
| cULus Recognized |  |
|------------------|---|

### Accessories

#### Accessories

## Sensor/actuator box - SACB-8/16-L-PT SCO P - 1412060

### Accessories

#### Cable by the meter

Master cable ring - SACB-16X0,5/ 3X1,0-50,0 PUR - 1503373



Master cable for sensor/actuator boxes, with PE conductor, unshielded, material PUR/PP, 19-pos., 16 x 0.50 mm<sup>2</sup> and 3 x 1.00 mm<sup>2</sup>, length: 50 m

Master cable ring - SACB-16X0,5/ 3X1,0-200,0 PUR - 1559893



Master cable for sensor/actuator boxes, with PE conductor, unshielded, material PUR/PP, 19-pos., 16 x 0.50 mm<sup>2</sup> and 3 x 1.00 mm<sup>2</sup>, length: 200 m on drum

Master cable ring - SACB-16X0,5/ 3X1,0-50,0 VPUR - 1430938



Master cable for sensor/actuator boxes, with PE conductor, unshielded, material PUR/PP, 19-pos., 16 x 0.50 mm<sup>2</sup> and 3 x 1.00 mm<sup>2</sup>, length: 50 m

#### Cable end sleeve

Ferrule - A 0,5 - 8 - 3202481



Ferrule, length: 8 mm, color: silver

Ferrule - A 0,75- 8 - 3202504



Ferrule, length: 8 mm, color: silver

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### Accessories

Ferrule - A 1 - 8 - 3202517



Ferrule, length: 8 mm, color: silver

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### Plug for cable screw gland

Screw plug - PROT-MS SCO - 1553129



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### Screwdriver tools

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

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Philips screwdriver - SZK PZ2 VDE - 1206463



Screwdriver, PZ crosshead, VDE insulated, size: PZ 2 x 100 mm, 2-component grip, with non-slip grip

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Tool - SAC BIT HOOD-W 24 - 1212486



Nut for assembling pressure nuts with 24 mm wrench size, for 4 mm hexagonal drive



## Sensor/actuator box - SACB-8/16-L-PT SCO P - 1412060

### Accessories

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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Screwdriver - SZS 0,4X2,0 - 1205202



Micro screwdriver, bladed, size: 0.4 x 2.0 x 60 mm, 2-component grip, with non-slip grip and twist cap

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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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Torque screwdriver - TSD 25 SAC - 1212315



Torque screwdriver, with preset torque of 2.5 Nm and 4 mm hexagonal drive for the pressure nut of the connector hood

## Sensor/actuator box - SACB-8/16-L-PT SCO P - 1412060

### Accessories

Torque screwdriver - TSD-M 3NM - 1212225



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 1.2 - 3 Nm