

## Sensor/actuator box - SACB-8/16- 5,0PUR SH - 1695825

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 box, Application: Standard, Connection method: M12 socket Metal, Number of slots: 8, Number of positions: 5, Slot assignment: Double, Status indication: No, Universal; Master cable connection: Fixed connection 180°, PUR/PVC, Cable length: 5 m, Shielding: Yes

### Product Features

- ✓ Safety in the field, thanks to molded housing and high degree of protection
- ✓ Flexible, distributed bundling of signals in one master cable
- ✓ Save space: distributor box with double occupancy for two sensors in one slot
- ✓ Reliable signal transmission – 360° shielding in environments with electromagnetic interference



### Key commercial data

|                                      |            |
|--------------------------------------|------------|
| Packing unit                         | 1 pc       |
| Weight per Piece (excluding packing) | 1682.1 GRM |
| Custom tariff number                 | 85444290   |
| Country of origin                    | Poland     |

### Technical data

#### General

|  |            |
|--|------------|
| Rated voltage                            | 48 V       |
|  | 60 V DC    |
| Current carrying capacity per I/O signal | 2 A        |
| Current carrying capacity per slot       | 4 A        |
| Total rated current                      | 12 A       |
| Number of positions                      | 5          |
| Number of slots                          | 8          |
| Inflammability class according to UL 94  | V0         |
| Sensor/actuator connection system        | M12 socket |

#### Ambient conditions

## Sensor/actuator box - SACB-8/16- 5,0PUR SH - 1695825

### Technical data

#### Ambient conditions

|                                 |                  |
|---------------------------------|------------------|
| Degree of protection            | IP65             |
|                                 | IP67             |
| Ambient temperature (operation) | -25 °C ... 70 °C |
|                                 | -40 °C ... 90 °C |
|                                 | -5 °C ... 80 °C  |

#### Master cable connection data

|  |                  |
|--|------------------|
| Connection method                            | Fixed connection |
| Length of cable                              | 5 m              |
| Tightening torque slot sensor/actuator cable | 0.4 Nm           |

#### Insulation material

|  |               |
|--|---------------|
| Housing material                               | Aluminum      |
| Housing surface material                       | Nickel-plated |
| Material of the moulding mass                  | PUR           |
| Contact material                               | Cu alloy      |
| Contact surface material                       | Gold-plated   |
| Contact carrier material                       | PA            |
| Material of contact, master cable side         | CU alloy      |
| Material of contact surface, master cable side | Gold-plated   |
| Material of threaded sleeve                    | Aluminum      |
| Material, O-ring                               | 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    |
|  | 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    |

## Sensor/actuator box - SACB-8/16- 5,0PUR SH - 1695825

### Technical data

#### Pin assignment

|  |                       |
|--|-----------------------|
|  | 8 / 2 (B) = GY/BN     |
|  | 1-8 / 1 (+ 48 V) = BN |
|  | 1-8 / 3 (0 V) = BU    |
|  | 1-8 / 5 (PE) = GN/YE  |

#### Cable

|   |   |
|---|---|
| Cable type                                      | PUR/PVC shielded, black   |
| Cable type (abbreviation)                       | PUR   |
| Cable abbreviation                              | LiYY11Y-HF  |
| Conductor cross section                         | 16x 0.5 mm <sup>2</sup> (signal line)                               |
|   | 3x 1 mm <sup>2</sup> (Power supply)                                 |
| AWG signal line                                 | 20  |
| AWG power supply                                | 17  |
| Conductor structure signal line                 | 64x 0.10 mm   |
| Conductor structure, voltage supply             | 128x 0.10 mm  |
| Overall twist                                   | Wires twisted in layers   |
| Shielding                                       | Tinned copper braided shield  |
| External sheath, color                          | deep black RAL 9005   |
| External cable diameter D                       | 11.6 mm ±0.3 mm   |
| Number of bending cycles                        | 1500000   |
| Minimum bending radius, drag chain applications | 10 x D  |
| Traversing path                                 | 2 m   |
| Traversing rate                                 | 2 m/s   |
| Outer sheath, material                          | PUR   |
| Material conductor insulation                   | PVC   |
| Conductor material                              | Bare Cu litz wires  |
| 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  |
| Resistance to oil                               | As per VDE 0472 Part 803  |
| Other resistance                                | Highly resistant to acids, alkaline solutions and solvents          |
| Ambient temperature (operation)                 | -40 °C ... 90 °C (cable, fixed installation)                        |
|   | -5 °C ... 80 °C (cable, flexible installation)                      |

# Sensor/actuator box - SACB-8/16- 5,0PUR SH - 1695825

## Classifications

### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27140815 |
| eCl@ss 4.1 | 27140815 |
| eCl@ss 5.0 | 27143423 |
| eCl@ss 5.1 | 27143423 |
| eCl@ss 6.0 | 27143423 |
| eCl@ss 7.0 | 27449001 |
| eCl@ss 8.0 | 27449001 |

### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC000200 |
| ETIM 3.0 | EC001856 |
| ETIM 4.0 | EC002585 |
| ETIM 5.0 | EC002585 |

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 31261501 |
| UNSPSC 7.0901 | 31261501 |
| UNSPSC 11     | 31261501 |
| UNSPSC 12.01  | 31261501 |
| UNSPSC 13.2   | 31261501 |

## Approvals

### Approvals

---

Approvals

GOST / GOST

---

Ex Approvals

---

Approvals submitted

---

Approval details

## Sensor/actuator box - SACB-8/16- 5,0PUR SH - 1695825

### Approvals

GOST 

GOST 

### Accessories

#### Accessories

#### Device marking

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128



Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 18 mm, Lettering field: 18 x 5 mm

---

#### Labeled device marker

Zack marker strip - ZBN 18 CUS - 0825059



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, Mounting type: Snap into tall marker groove, for terminal block width: 18 mm, Lettering field: 18 x 5 mm

Zack marker strip - ZBN 18 YE CUS - 0825058



Zack marker strip, can be ordered: Strip, yellow, labeled according to customer specifications, Mounting type: Snap into tall marker groove, for terminal block width: 18 mm, Lettering field: 18 x 5 mm

---

#### Protective cap

## Sensor/actuator box - SACB-8/16- 5,0PUR SH - 1695825

### Accessories

Screw plug - PROT-M12 SH - 1503302



An M12 screw plug for the unoccupied M12 sockets of the shielded sensor/actuator cable, boxes and flush-type connectors

---

### 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 for M12 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive

---

Tool - SACC BIT M12-D20 - 1208445



Nut for assembling SACC M12 connectors for free assembly, excluding M12 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive

---

### Terminal marking

Marker for terminal blocks - UC-TMF 16 YE - 0819259



Marker for terminal blocks, Sheet, yellow, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 16 mm, Lettering field: 15.45 x 5.1 mm

# Sensor/actuator box - SACB-8/16- 5,0PUR SH - 1695825

## Accessories

---

### 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

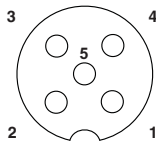


Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

---

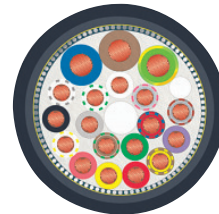
## Drawings

Schematic diagram



M12 slot, socket, 5-pos.

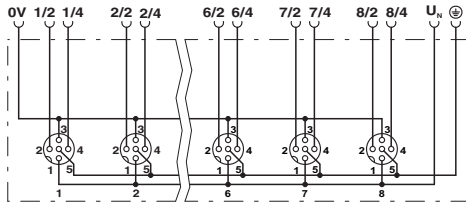
Cable cross section



PUR/PVC shielded, black [PUR]

# Sensor/actuator box - SACB-8/16- 5,0PUR SH - 1695825

Circuit diagram



Dimensioned drawing

