

## Sensor/actuator box - SACB-4/ 8-L- 5,0PUR SCO P NPN - 1405713

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://download.phoenixcontact.com>)



Sensor/actuator box, Connection method: M12-SPEEDCON-socket Plastic, Number of slots: 4, Number of positions: 5, Slot assignment: Double, Status indication: Yes, npn; Master cable connection: Fixed connection 180°, PUR/PVC, Cable length: 5 m, Shielding: No

### Product Features

- ✓ 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 rapid interlock system



### Key commercial data

|                        |                                                                                                         |
|------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit           | 1 PCE                                                                                                   |
| Minimum order quantity | 25 PCE                                                                                                  |
| GTIN                   | <br>4 046356 782852 |
| Custom tariff number   | 85444290                                                                                                |
| Country of origin      | POLAND                                                                                                  |

### Technical data

#### General

|                                          |         |
|------------------------------------------|---------|
| Rated voltage                            | 24 V DC |
| Max. operating voltage U <sub>max</sub>  | 30 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                          | 4       |

# Sensor/actuator box - SACB-4/ 8-L- 5,0PUR SCO P NPN - 1405713

## Technical data

### General

|                                   |                     |
|-----------------------------------|---------------------|
| Sensor/actuator connection system | M12-SPEEDCON-socket |
|-----------------------------------|---------------------|

### Ambient conditions

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

### Local diagnostics function

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

### Master cable connection data

|                                              |                  |
|----------------------------------------------|------------------|
| Connection method                            | Fixed connection |
| Length of cable                              | 5 m              |
| Tightening torque slot sensor/actuator cable | 0.4 Nm           |
| Tightening torque screw plug                 | 0.4 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   | PBT         |
| 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     |
|                                          | 1-4 / 1 (+ 24 V) = BN |
|                                          | 1-4 / 3 (0 V) = BU    |
|                                          | 1-4 / 5 (PE) = GN/YE  |

# Sensor/actuator box - SACB-4/ 8-L- 5,0PUR SCO P NPN - 1405713

## Technical data

### Cable

|                                               |                                                            |
|-----------------------------------------------|------------------------------------------------------------|
| Cable type                                    | PUR/PVC black                                              |
| Cable type (abbreviation)                     | PUR                                                        |
| Cable abbreviation                            | LiYY11Y-HF                                                 |
| UL AWM style                                  | 20549                                                      |
| Conductor cross section                       | 8x 0.5 mm <sup>2</sup> (signal line)                       |
|                                               | 3x 1 mm <sup>2</sup> (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                                                |
| Core diameter including insulation            | 1.5 mm ±0.1 mm (signal line)                               |
|                                               | 2.1 mm ±0.1 mm (power line)                                |
| Thickness, insulation                         | ≥ 0.15 mm (Inner sheath)                                   |
|                                               | ≥ 0.38 mm (Outer cable sheath)                             |
| Overall twist                                 | Wires twisted in layers                                    |
| External sheath, color                        | Black RAL 9005                                             |
| External cable diameter D                     | 8.7 mm ± 0.2 mm                                            |
| Minimum bending radius, fixed installation    | 7.5 x D                                                    |
| Minimum bending radius, flexible installation | 10 x D                                                     |
| Number of bending cycles                      | 1500000                                                    |
| Bending radius                                | 87 mm                                                      |
| Traversing path                               | 2 m                                                        |
| Traversing rate                               | 2 m/s                                                      |
| Cable weight                                  | 122 kg/km                                                  |
| Outer sheath, material                        | PUR                                                        |
| Material, inner sheath                        | PVC                                                        |
| Material conductor insulation                 | PVC                                                        |
| Conductor material                            | Bare Cu litz wires                                         |
| Nominal voltage, cable                        | 300 V                                                      |
| Test voltage, cable                           | 2000 V                                                     |
| Special properties                            | Silicone-free                                              |
| 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-4/ 8-L- 5,0PUR SCO P NPN - 1405713

### 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 | 27279219 |
| eCl@ss 7.0 | 27279219 |
| eCl@ss 8.0 | 27279219 |

#### ETIM

|          |          |
|----------|----------|
| 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

UL Recognized / cUL Recognized / GOST / cULus Recognized

---

##### Ex Approvals

---

##### Approvals submitted

---

##### Approval details

## Sensor/actuator box - SACB-4/ 8-L- 5,0PUR SCO P NPN - 1405713

### Approvals

|                                                                                                 |      |
|-------------------------------------------------------------------------------------------------|------|
| UL Recognized  |      |
| Nominal voltage UN                                                                              | 24 V |

|                                                                                                  |      |
|--------------------------------------------------------------------------------------------------|------|
| cUL Recognized  |      |
| Nominal voltage UN                                                                               | 24 V |

|                                                                                        |  |
|----------------------------------------------------------------------------------------|--|
| GOST  |  |
|----------------------------------------------------------------------------------------|--|

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

### Accessories

#### Accessories

#### Marking

Contact marker – zack marker strip - SS-ZB 17,5 WH - 0804963



Contact marker – zack marker strip, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into flat marker groove, Lettering field: 17.5 x 8 mm

Contact marker – zack marker strip - SS-ZB 17,5 YE - 0804976



Contact marker – zack marker strip, Strip, yellow, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into flat marker groove, Lettering field: 17.5 x 8 mm

## Sensor/actuator box - SACB-4/ 8-L- 5,0PUR SCO P NPN - 1405713

### Accessories

Contactor marker – zack marker strip - SS-ZB 17,5 WH CUS - 0824468



Contactor marker – zack marker strip, Can be ordered: Strip, white, Labeled according to customer specifications, Mounting type: Snap into flat marker groove, Lettering field: 17.5 x 8 mm

Contactor marker – zack marker strip - SS-ZB 17,5 YE CUS - 0824469



Contactor marker – zack marker strip, Can be ordered: Strip, yellow, Labeled according to customer specifications, Mounting type: Snap into flat marker groove, Lettering field: 17.5 x 8 mm

### Protection and sealing elements

Screw plug - PROT-MS SCO - 1553129



M12 screw plug with SPEEDCON quick locking for unoccupied M12 sockets of the sensor/actuator cables, boxes and flush-type connectors

### Tools

Torque screwdriver - TSD 04 SAC - 1208429



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

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

# Sensor/actuator box - SACB-4/ 8-L- 5,0PUR SCO P NPN - 1405713

## Accessories

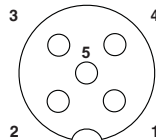
Tool - SACC BIT M12-D20 - 1208445



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

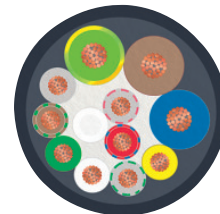
## Drawings

Schematic diagram



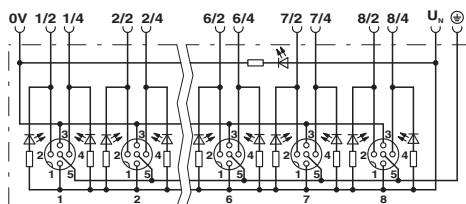
M12 slot, socket, 5-pos.

Cable cross section



PUR/PVC black [PUR]

Circuit diagram



Dimensioned drawing

