

## Sensor/actuator box - SACB-8/16-L- 5,0PUR SCO P - 1452725

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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: Fixed connection 180°, PUR/PVC, 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                                 | <br>4 046356 554008 |
| GTIN                                 | 4046356554008   |
| Weight per Piece (excluding packing) | 1,140.000 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  |
| 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 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   | PBT         |
| 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    |

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### Technical data

#### Pin assignment

|  |                       |
|--|-----------------------|
|  | 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 |
| Connection in acc. with standard       | CUL             |
| Flammability rating according to UL 94 | V0              |

#### Cable

|                                     |  |
|-------------------------------------|--|
| Cable type                          | PUR/PVC black  |
| Cable type (abbreviation)           | PUR  |
| Cable abbreviation                  | LiYY11Y-HF   |
| UL AWM style                        | 20549 (80°C/300 V)   |
| Conductor cross section             | 16x 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)  |
| 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 |

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### Technical data

#### Cable

|   |  |
|---|--|
| Overall twist                                   | Wires twisted in layers                                    |
| External sheath, color                          | black RAL 9005   |
| Inner sheath thickness                          | ≥ 0.15 mm  |
| Outer sheath thickness                          | ≥ 0.76 mm  |
| External cable diameter D                       | 10.5 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  |
| Minimum bending radius, drag chain applications | 10 x D   |
| Traversing path                                 | 2 m  |
| Traversing rate                                 | 2 m/s  |
| Cable weight                                    | 183.7 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                                | according to DIN EN 50265                                  |
| Resistance to oil                               | according to 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)             |

#### Environmental Product Compliance

|            |   |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|            | No hazardous substances above threshold values          |

### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27140815 |
| eCl@ss 4.1 | 27140815 |
| eCl@ss 5.0 | 27143423 |
| 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 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 |

## Approvals


### Approvals

#### Approvals

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 | 4 A   |   |               |

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## Approvals

|                    |  |   |               |
|--------------------|--|---|---------------|
| 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 voltage UN |  | 24 V  |               |

|     |  |                          |
|-----|--|--------------------------|
| EAC |  | RU C-<br>DE.BL08.B.00286 |
|-----|--|--------------------------|

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

## Accessories

### Accessories

#### Device marking

##### Snap-in markers - UC-EM (17,5X9) - 0827490



Snap-in markers, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID, BLUEMARK ID COLOR, BLUEMARK CLED, BLUEMARK LED, CMS-P1-PLOTTER, PLOTMARK, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm

##### Snap-in markers - UCT-EM (17,5X9) - 0801491



Snap-in markers, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm

##### Snap-in markers - UC-EM (17,5X9) YE - 0827494



Snap-in markers, Sheet, yellow, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm

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### Accessories

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#### Snap-in markers - UCT-EM (17,5X9) YE - 0801492



Snap-in markers, Sheet, yellow, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm

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#### Labeled device marker

#### Snap-in markers - UC-EM (17,5X9) CUS - 0828238



Snap-in markers, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm

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#### Snap-in markers - UCT-EM (17,5X9) CUS - 0801575



UniCard sheet, for labeling devices from other manufacturers, for overview table see download area, labeled according to customer specifications

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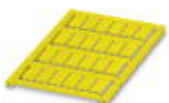
#### Snap-in markers - UC-EM (17,5X9) YE CUS - 0828239



Snap-in markers, can be ordered: by sheet, yellow, labeled according to customer specifications, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm

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#### Snap-in markers - UCT-EM (17,5X9) YE CUS - 0801576



UniCard sheet, for labeling devices from other manufacturers, for overview table see download area, labeled according to customer specifications

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## Sensor/actuator box - SACB-8/16-L- 5,0PUR SCO P - 1452725

### Accessories

#### Mounting rail adapter

DIN rail adapter - UTA 136 - 2853996

Universal DIN rail adapter, for screwing on switchgear



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#### Protective cap

Screw plug - PROT-MS SCO - 1553129



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#### 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

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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



## Sensor/actuator box - SACB-8/16-L- 5,0PUR SCO P - 1452725

### Accessories

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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### 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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