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## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## Sensor/actuator box - SACB-8/16-L-C SCO - 1516836

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Sensor/actuator box, application: Standard, 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: Pluggable screw connection 180°, shielding: no

### Why buy this product

- ✓ 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 STK                                                                                                   |
| GTIN         | <br>4 017918 967567 |
| GTIN         | 4017918967567                                                                                           |

### 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                      | 10 A                              |
|                                          | 2x 8 A (For electrical isolation) |
| Number of positions                      | 5                                 |
| Number of slots                          | 8                                 |
| Flammability rating according to UL 94   | V0                                |
| Sensor/actuator connection system        | M12-SPEEDCON-socket               |

## Sensor/actuator box - SACB-8/16-L-C SCO - 1516836

### Technical data

#### Ambient conditions

|                                 |                  |
|---------------------------------|------------------|
| Degree of protection            | IP65             |
|                                 | IP67             |
|                                 | IP69K            |
| Ambient temperature (operation) | -30 °C ... 80 °C |

#### Local diagnostics function

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

#### Master cable data/connection data

|                                                            |                            |
|------------------------------------------------------------|----------------------------|
| Connection method                                          | Pluggable screw connection |
| Conductor cross section min. (signal)                      | 0.14 mm <sup>2</sup>       |
| Conductor cross section max. (signal)                      | 1.5 mm <sup>2</sup>        |
| Conductor cross section AWG min. (signal)                  | 26                         |
| Conductor cross section AWG max. (signal)                  | 16                         |
| Stripping length (signal)                                  | 7 mm                       |
| Conductor cross section min. (energy)                      | 0.14 mm <sup>2</sup>       |
| Conductor cross section max. (energy)                      | 1.5 mm <sup>2</sup>        |
| Conductor cross section AWG min. (energy)                  | 26                         |
| Conductor cross section AWG max. (energy)                  | 16                         |
| External cable diameter min.                               | 7 mm                       |
| External cable diameter max.                               | 12 mm                      |
| Stripping length                                           | 50 mm (Master cable)       |
| Tightening torque, cover screw                             | 0.35 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 contact, master cable side                   | CU alloy      |
| Material of contact surface, master cable side           | Gold-plated   |
| Material of the contact carrier on the master cable side | PA 6.6 V0     |
| 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) = 1 / 4 |
|------------------------------------------|-------------------|

## Sensor/actuator box - SACB-8/16-L-C SCO - 1516836

### Technical data

#### Pin assignment

|  |                                   |
|--|-----------------------------------|
|  | 1 / 2 (B) = 1 / 2                 |
|  | 2 / 4 (A) = 2 / 4                 |
|  | 2 / 2 (B) = 2 / 2                 |
|  | 3 / 4 (A) = 3 / 4                 |
|  | 3 / 2 (B) = 3 / 2                 |
|  | 4 / 4 (A) = 4 / 4                 |
|  | 4 / 2 (B) = 4 / 2                 |
|  | 5 / 4 (A) = 5 / 4                 |
|  | 5 / 2 (B) = 5 / 2                 |
|  | 6 / 4 (A) = 6 / 4                 |
|  | 6 / 2 (B) = 6 / 2                 |
|  | 7 / 4 (A) = 7 / 4                 |
|  | 7 / 2 (B) = 7 / 2                 |
|  | 8 / 4 (A) = 8 / 4                 |
|  | 8 / 2 (B) = 8 / 2                 |
|  | 1-8 / 1 (+ 24 V) = U <sub>N</sub> |
|  | 1-8 / 3 (0 V) = 0 V               |
|  | 1-8 / 5 (PE) = PE                 |

#### 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              |

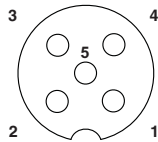
#### Environmental Product Compliance

|            |                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------|
| REACH SVHC | 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

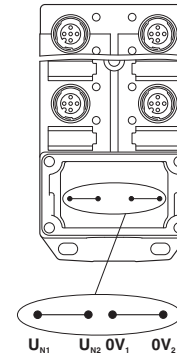
# Sensor/actuator box - SACB-8/16-L-C SCO - 1516836

Schematic diagram



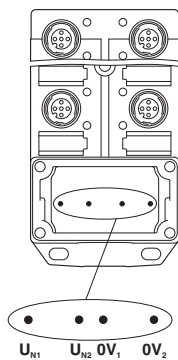
M12 slot, socket, 5-pos.

Schematic diagram



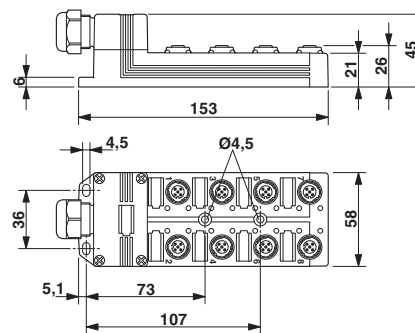
Potential  $U_{N1}$  and  $U_{N2}$  bridged. Potential assignment:  $U_{N1} = U_{N2} =$  slots 1,2,3,4,5,6,7,8.

Schematic diagram

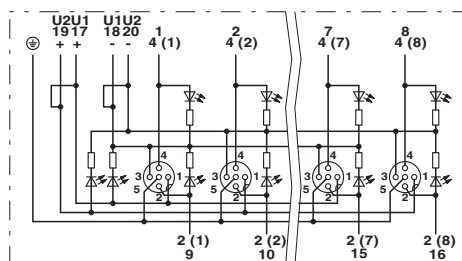


Electrically isolated. Potential assignment:  $U_{N1} =$  slots 1,3,5,7 and  $U_{N2} =$  slots 2,4,6,8.

Dimensional drawing



Circuit diagram



Approvals

Approvals

# Sensor/actuator box - SACB-8/16-L-C SCO - 1516836


## Approvals

Approvals


EAC / EAC / UL Recognized / cUL Recognized / cULus Recognized


Ex Approvals


### Approval details

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

|     |                                                                                   |                          |
|-----|-----------------------------------------------------------------------------------|--------------------------|
| EAC |  | RU C-<br>DE.AI30.B.01102 |
|-----|-----------------------------------------------------------------------------------|--------------------------|

|                    |                                                                                     |                                                                                                                                                       |               |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 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 |                                                                                     | 3 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 voltage UN |                                                                                     | 24 V                                                                                                                                                  |               |
| Nominal current IN |                                                                                     | 3 A                                                                                                                                                   |               |

|                  |                                                                                     |                                                                                                                                                       |
|------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| cULus 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> |
|------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|

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PHOENIX CONTACT GmbH & Co. KG  
Flachmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>