

## Sensor/actuator box - SACB-4/ 4-L-C SCO - 1516784

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Sensor/actuator box, application: Standard, connection method: M12-SPEEDCON-socket Metal, number of slots: 4, number of positions: 4, coding: A - standard, slot assignment: single, 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 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	 4 017918 967512
GTIN	4017918967512
Weight per Piece (excluding packing)	255.700 g
Custom tariff number	85366990
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	10 A
	2x 8 A (For electrical isolation)
Number of positions	4
Number of slots	4

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## Technical data

### General

Flammability rating according to UL 94	V0
Sensor/actuator connection system	M12-SPEEDCON-socket

### 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

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## Technical data

### Insulation material

O-ring material	NBR
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### Pin assignment

Slot/position = Wire color or connection	1 / 4 (A) = 1 / 4
	2 / 4 (A) = 2 / 4
	3 / 4 (A) = 3 / 4
	4 / 4 (A) = 4 / 4
	1-4 / 1 (+ 24 V) = U <sub>N</sub>
	1-4 / 3 (0 V) = 0 V
	1-4 / 5 (PE) = PE

### Standards and Regulations

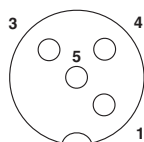
Standard designation	M12 connector
Standards/regulations	IEC 61076-2-101
Connection in acc. with standard	CUL
Flammability rating according to UL 94	V0

### Environmental Product Compliance

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

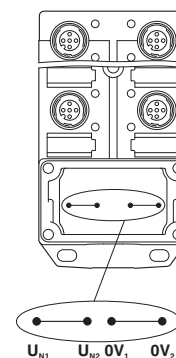
## Drawings

Schematic diagram



M12 slot, socket, 4-pos.

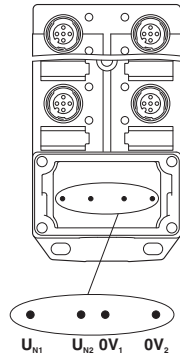
Schematic diagram



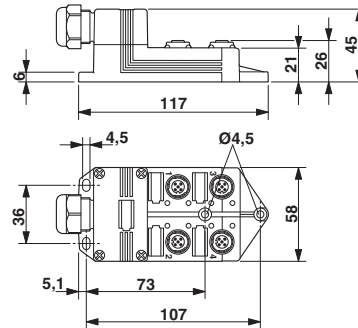
Potential U<sub>N1</sub> and U<sub>N2</sub> bridged. Potential assignment: U<sub>N1</sub> = U<sub>N2</sub> = slots 1,2,3,4.

# Sensor/actuator box - SACB-4/ 4-L-C SCO - 1516784

Schematic diagram

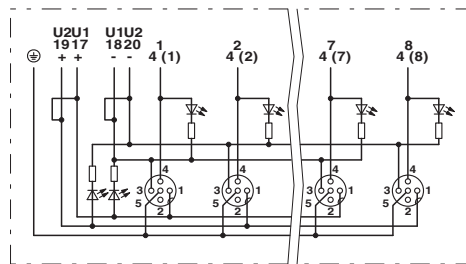


Dimensional drawing



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

Circuit diagram



## 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	27279219
eCl@ss 9.0	27440108

ETIM

ETIM 2.0	EC000200
ETIM 3.0	EC001856
ETIM 4.0	EC002585
ETIM 5.0	EC002585
ETIM 6.0	EC002585

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## Classifications

### 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 current IN		3 A	
Nominal voltage UN		24 V	

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		3 A	
Nominal voltage UN		24 V	

EAC		RU C-DE.AI30.B.01102
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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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## Sensor/actuator box - SACB-4/ 4-L-C SCO - 1516784

### Accessories

#### Accessories

#### Cable by the meter

Master cable ring - SACB- 4X0,34/ 3X0,75-50,0 PUR - 1503328



Master cable for sensor/actuator boxes, with PE conductor, unshielded, material PUR/PVC, 7-pos., 4 x 0.34 mm<sup>2</sup> and 3 x 0.75 mm<sup>2</sup>

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#### Connector hood without master cable

Connector hood - SACB-C-H180 8/16 SCO - 1516713



Connector hood with an integrated connector, for M12 sensor/actuator boxes with metal thread and pluggable screw connection, for 4, 6 or 8 slots

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#### Device marking

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



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

## Sensor/actuator box - SACB-4/ 4-L-C SCO - 1516784

### Accessories

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



Snap-in markers, Sheet, yellow, unlabeled, can be labeled with: THERMOMARK PRIME, THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, 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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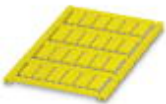
Snap-in markers - UC-EM (17,5X9) YE CUS - 0828239



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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### Mounting rail adapter

## Sensor/actuator box - SACB-4/ 4-L-C SCO - 1516784

### Accessories

Electronic housing - UTA 107 - 2853983

Universal DIN rail adapter



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### Protective cap

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

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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

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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



## Sensor/actuator box - SACB-4/ 4-L-C SCO - 1516784

### Accessories

Philips screwdriver - SZK PZ1 VDE - 1206450



Screwdriver, PZ crosshead, VDE insulated, size: PZ 1 x 80 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

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Screw insert - SF-BIT-PZ 1-50 - 1212591



Screw bit, PZ crosshead, E6.3-1/4" drive, size: PZ 1 x 50 mm, hardened, suitable for holder according to DIN 3126-F6.3/ISO 1173

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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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## Sensor/actuator box - SACB-4/ 4-L-C SCO - 1516784

### Accessories

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

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Torque screwdriver - TSD-M 3NM - 1212225



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

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