

## Sensor/actuator box - SACB-6/12-L-PT SCO P - 1412059

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Sensor/actuator box, application: Standard, connection method: M12-SPEEDCON-socket Plastic, number of slots: 6, number of positions: 5, coding: A - standard, slot assignment: Double, status display: yes, pnp; master cable connection: Push-in-/Spring-cage connection 180°, 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
- ✓ Flexible: distributor box with connector hood for on-site assembly



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 958110
GTIN	4046356958110
Weight per Piece (excluding packing)	180.000 g
Custom tariff number	85366990
Country of origin	Germany

### 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

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## Technical data

### General

Total rated current	8 A (Higher ratings can be achieved with different configurations)
Number of positions	5
Number of slots	6
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

### Local diagnostics function

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

### Master cable connection data

Connection method	Push-in-/Spring-cage connection
Conductor cross section min. (signal)	0.2 mm <sup>2</sup>
Conductor cross section max. (signal)	1 mm <sup>2</sup>
Conductor cross section AWG min. (signal)	24
Conductor cross section AWG max. (signal)	16
Conductor cross section min. (energy)	0.2 mm <sup>2</sup>
Conductor cross section max. (energy)	1 mm <sup>2</sup>
Conductor cross section AWG min. (energy)	24
Conductor cross section AWG max. (energy)	16
External cable diameter min.	7 mm
External cable diameter max.	12 mm
Stripping length	8 mm
Tightening torque, cover screw	1 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
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### Technical data

#### Insulation material

Material of the moulding mass	PUR
Contact material	Cu alloy
Contact surface material	gold-plated
Contact carrier material	PA
Material of the contact carrier on the master cable side	PA
Material of threaded sleeve	PBT
O-ring material	NBR
Sealing material	NBR (Connector hood)

#### 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
	1-6 / 1 (+ 24 V) = BN
	1-6 / 3 (0 V) = BU
	1-6 / 5 (PE) = GN/YE

#### Standards and Regulations

Standards/specifications	M12 connector IEC 61076-2-101
Flammability rating according to UL 94	V0

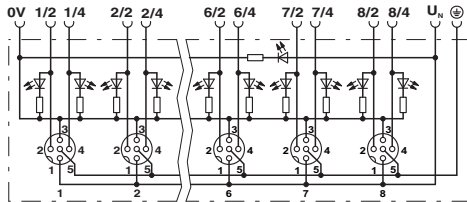
#### Environmental Product Compliance

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

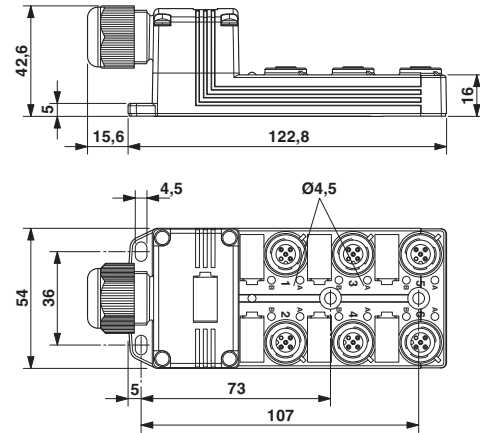
### Drawings

# Sensor/actuator box - SACB-6/12-L-PT SCO P - 1412059

Circuit diagram



Dimensional drawing



Schematic diagram



M12 slot, socket, 5-pos.

## Classifications

eCl@ss

eCl@ss 10.0.1	27440111
eCl@ss 11.0	27440111
eCl@ss 5.1	27250300
eCl@ss 6.0	27279200
eCl@ss 7.0	27279219
eCl@ss 9.0	27440108

ETIM

ETIM 4.0	EC002585
ETIM 6.0	EC002585
ETIM 7.0	EC002585

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## Classifications

### UNSPSC

UNSPSC 13.2	31251501
UNSPSC 19.0	31251501
UNSPSC 20.0	31251501
UNSPSC 21.0	31251501

## Approvals


### Approvals


#### Approvals


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


#### Ex Approvals

### Approval details

EAC		EAC-Zulassung
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EAC		RU C- DE.BL08.B.00511
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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	8 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 current IN	24 A		

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### Approvals

mm <sup>2</sup> /AWG/kcmil	8
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cULus Recognized

### Accessories

#### Accessories

#### Cable by the meter

Master cable ring - SACB-12X0,5/ 3X1,0-50,0 PUR - 1503360



Master cable for sensor/actuator boxes, with PE conductor, unshielded, material PUR/PVC, 15-pos., 12 x 0.50 mm<sup>2</sup> and 3 x 1.00 mm<sup>2</sup>, length: 50 m

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#### Cable end sleeve

Ferrule - A 0,5 - 8 - 3202481



Ferrule, length: 8 mm, color: silver

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Ferrule - A 0,75- 8 - 3202504



Ferrule, length: 8 mm, color: silver

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### Accessories

Ferrule - A 1 - 8 - 3202517



Ferrule, length: 8 mm, color: silver

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### Plug for cable screw gland

Screw plug - PROT-MS SCO - 1553129



M12 screw plug with fast-locking system for unoccupied M12 female connectors of sensor/actuator cables, boxes, and flush-type connectors

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### Screwdriver tools

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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Philips screwdriver - SZK PZ2 VDE - 1206463



Screwdriver, PZ crosshead, VDE insulated, size: PZ 2 x 100 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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### Accessories

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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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Screwdriver - SZS 0,4X2,0 - 1205202



Micro screwdriver, bladed, size: 0.4 x 2.0 x 60 mm, 2-component grip, with non-slip grip and twist cap

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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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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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## Sensor/actuator box - SACB-6/12-L-PT SCO P - 1412059

### Accessories

Torque screwdriver - TSD-M 3NM - 1212225



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