

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



1452835

<https://www.phoenixcontact.com/us/products/1452835>

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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, slot assignment: Double, status display: Yes, pnp; master cable connection: Pluggable screw connection 180°, shielding: no

## Your advantages

- Safety in the field, thanks to molded housing and high degree of protection
- 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

## Commercial Data

Item number	1452835
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	BF41
Product Key	BF3CBD
Catalog Page	Page 263 (C-2-2019)
GTIN	4046356553698
Weight per Piece (including packing)	197.64 g
Weight per Piece (excluding packing)	197.64 g
Customs tariff number	85366990
Country of origin	DE

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## Technical Data

### Notes

General	For details about the PCB connectors used, refer to the technical data for MC 1,5/10-STF-3,5 (1847204)
General	<b>NOTE:</b> 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.
General	Unused slots are to be sealed off prior to commissioning. Suitable sealing elements are to be found under "Accessories".

### Product properties

Product type	Distributor boxes with M8 to M12 slots
Number of positions	5
Application	Standard
Number of slots	6
Coding	A
LED	yes

### Material specifications

Color	anthracite
Flammability rating according to UL 94	V0
Seal material O-ring	NBR
Contact material	Cu alloy
Contact surface material	gold-plated
Contact carrier material	PA
Material of contact, master cable side	CU alloy
Material of the contact carrier on the master cable side	PA
Material of contact surface, master cable side	Sn

### Dimensions

Dimensional drawing	
Width	54 mm
Height	43 mm
Length	123 mm

### Connection data

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## Conductor connection

Connection method	Pluggable screw connection
Stripping length	7 mm
	7 mm
Conductor cross section Flexible signal line	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section Flexible power supply	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Connection cross section AWG Flexible signal line	26 ... 16
Connection cross section AWG Flexible power supply	26 ... 16
Tightening torque, cover screw	1 Nm
Tightening torque slot sensor/actuator cable	0.4 Nm
Tightening torque of mounting screw for fixing the housing	0.5 Nm

## Pin assignment

Slot/position = Wire color or connection	1 / 4 (A) = WH
	1 / 2 (B) = GYPK
	2 / 4 (A) = GN
	2 / 2 (B) = RDBU
	3 / 4 (A) = YE
	3 / 2 (B) = WHGN
	4 / 4 (A) = GY
	4 / 2 (B) = BNGN
	5 / 4 (A) = PK
	5 / 2 (B) = WHYE
	6 / 4 (A) = RD
	6 / 2 (B) = YEBN
	1-6 / 1 (+ 24 V) = BN
	1-6 / 3 (0 V) = BU
1-6 / 5 (PE) = GNYE	

## Signaling

Status display present	Yes
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## Electrical properties

Max. operating voltage $U_{max}$	30 V DC
Local diagnostics	Supply voltage Green LED
	Status display I/O Yellow LED
Nominal voltage $U_N$	24 V DC
Rated current, total	10 A
Max. current carrying capacity per path	2 A
Current carrying capacity per slot	4 A

## Cable/line

Sensor/actuator connection system	M12-SPEEDCON-socket
Connection method	Pluggable screw connection

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External cable diameter	7 mm ... 12 mm
Metric conductor cross section (Signal)	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Cross section AWG (Signal)	26 ... 16
Stripping length (signal)	7 mm
Metric conductor cross section (Power)	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Cross section AWG (Power)	26 ... 16
Stripping length (power)	7 mm
Stripping length for sheath	50 mm (Master cable)
Tightening torque, cover screw	1 Nm
Tightening torque of mounting screw for fixing the housing	0.5 Nm
Tightening torque slot sensor/actuator cable	0.4 Nm
Tightening torque, union nut	2.5 Nm

## Standards and regulations

Standards/specifications	IEC 61076-2-101
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## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65
	IP67
Ambient temperature (operation)	-25 °C ... 80 °C

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

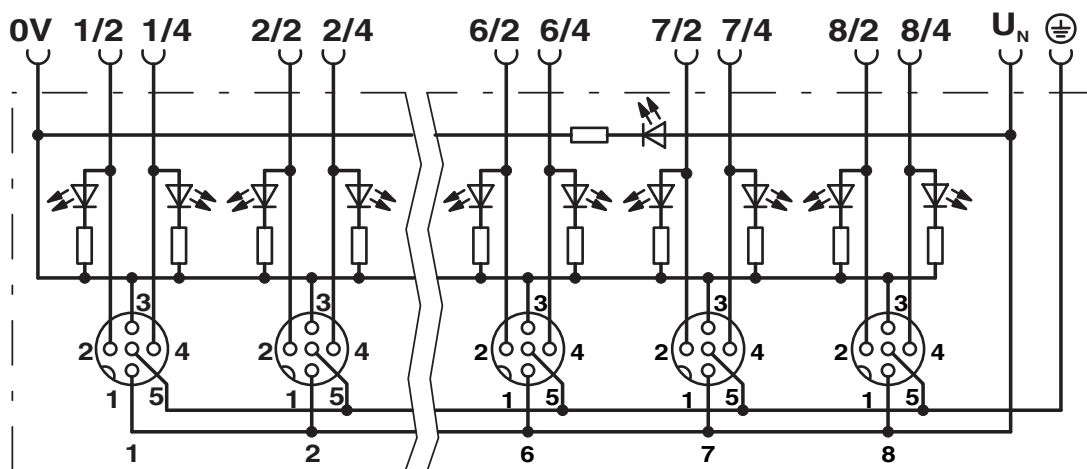


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## Drawings

Circuit diagram



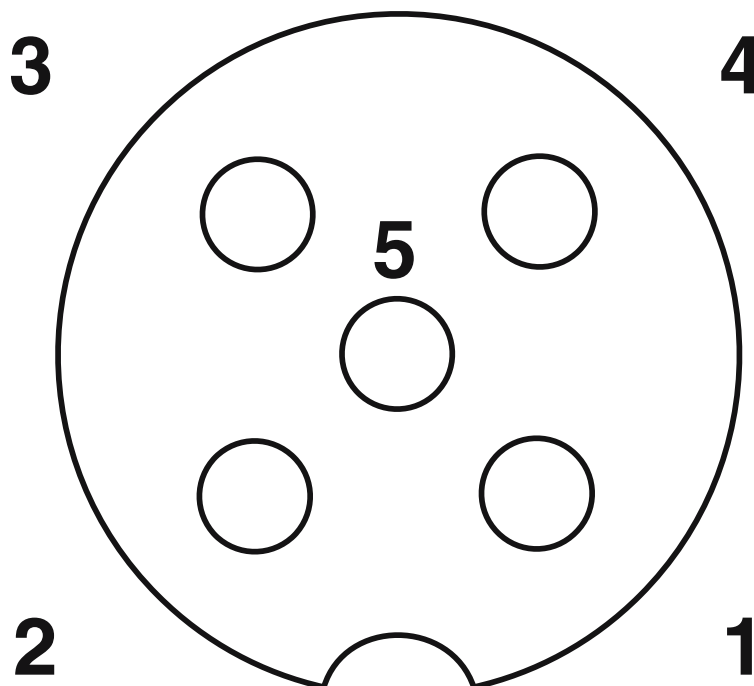
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Schematic diagram



M12 slot, socket, 5-pos.

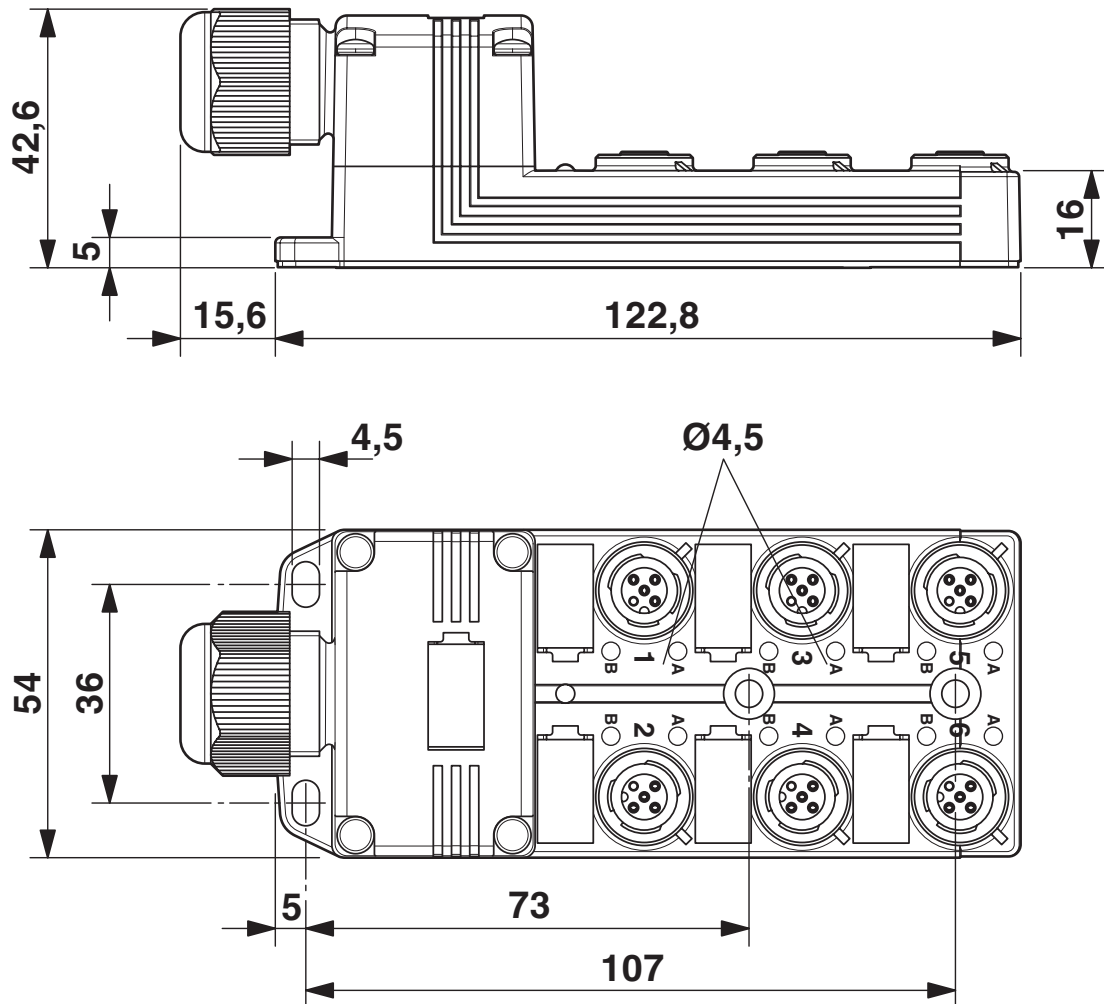
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Dimensional drawing



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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1452835>

 <b>cUL Recognized</b> Approval ID: FILE E 118976				
	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	24 V	-	-	-

 <b>UL Recognized</b> Approval ID: FILE E 118976				
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	24 V	-	-	-



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## Classifications

### ECLASS

ECLASS-11.0	27440111
ECLASS-12.0	27440111
ECLASS-13.0	27440111

### ETIM

ETIM 8.0	EC003558
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### UNSPSC

UNSPSC 21.0	31251500
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## Environmental Product Compliance

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

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## Accessories

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

1503360

<https://www.phoenixcontact.com/us/products/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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### PROT-MS SCO - Screw plug

1553129

<https://www.phoenixcontact.com/us/products/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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## TSD 04 SAC - Torque screwdriver

1208429

<https://www.phoenixcontact.com/us/products/1208429>



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

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## TSD-M 1,2NM - Torque screwdriver

1212224

<https://www.phoenixcontact.com/us/products/1212224>



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

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## TSD-M SAC-BIT ADAPTER - Adapter insert

1212600

<https://www.phoenixcontact.com/us/products/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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## SAC BIT M12-D15 - Tool

1208432

<https://www.phoenixcontact.com/us/products/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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## SACC BIT M12-D20 - Tool

1208445

<https://www.phoenixcontact.com/us/products/1208445>

Nut for assembling M12 connectors for assembly with a knurl diameter of 20 mm, for 4 mm hexagonal drive



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

0827490

<https://www.phoenixcontact.com/us/products/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, lettering field size: 17.5 x 9 mm, Number of individual labels: 20



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

0828238

<https://www.phoenixcontact.com/us/products/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, Number of individual labels: 20

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

0801491

<https://www.phoenixcontact.com/us/products/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, lettering field size: 17.5 x 9 mm, Number of individual labels: 24

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

0801575

<https://www.phoenixcontact.com/us/products/0801575>

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



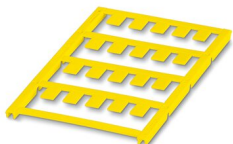
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## UC-EM (17,5X9) YE - Snap-in markers

0827494

<https://www.phoenixcontact.com/us/products/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, lettering field size: 17.5 x 9 mm, Number of individual labels: 20





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

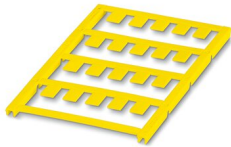
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## UC-EM (17,5X9) YE CUS - Snap-in markers

0828239

<https://www.phoenixcontact.com/us/products/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, Number of individual labels: 20

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

0801492

<https://www.phoenixcontact.com/us/products/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, lettering field size: 17.5 x 9 mm, Number of individual labels: 24

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

0801576

<https://www.phoenixcontact.com/us/products/0801576>

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



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## SZK PZ2 VDE - Screwdriver

1206463

<https://www.phoenixcontact.com/us/products/1206463>

Screwdriver, PZ crosshead, VDE insulated, size: PZ 2 x 100 mm, 2-component grip, with non-slip grip



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## TSD 25 SAC - Torque screwdriver

1212315

<https://www.phoenixcontact.com/us/products/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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## TSD-M 3NM - Torque screwdriver

1212225

<https://www.phoenixcontact.com/us/products/1212225>



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

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## SAC BIT HOOD-W 24 - Tool

1212486

<https://www.phoenixcontact.com/us/products/1212486>

Nut for assembling pressure nuts with 24 mm wrench size, for 4 mm hexagonal drive



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## SF-BIT-PZ 2-50 - Screw insert

1212592

<https://www.phoenixcontact.com/us/products/1212592>

Screw bit, PZ crosshead, E6.3-1/4" drive, size: PZ 2 x 50 mm, hardened, suitable for holder according to DIN 3126-F6.3/ISO 1173



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## UTA 107 - DIN rail adapter

2853983

<https://www.phoenixcontact.com/us/products/2853983>

Universal DIN rail adapter, for screwing on switchgear



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## SZS 0,4X2,5 VDE - Screwdriver

1205037

<https://www.phoenixcontact.com/us/products/1205037>

Screwdriver, slot-headed, VDE insulated, size: 0.4 x 2.5 x 80 mm, 2-component grip, with non-slip grip



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



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## SF-BIT-SL 0,45X2,4-70 - Screw insert

1212607

<https://www.phoenixcontact.com/us/products/1212607>



Screw bit, slotted, E6.3-1/4" drive, size: 0.45 x 2.4 x 70 mm, hardened, suitable for holder according to DIN 3126-F6.3/ISO 1173

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## SF-M BH - Screwdriver

1212070

<https://www.phoenixcontact.com/us/products/1212070>



Bit screwdriver, with 1/4" quick-action chuck, handle length 119 mm, 2-component handle, with non-slip grip, suitable for bits according to DIN 3126-C 6.3 and E 6.3/ISO 1173, magnetic

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