

# SACB-8/ 8-L-10,0PUR SCO - Distributor box



1517178

<https://www.phoenixcontact.com/us/products/1517178>

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Distributor box, application: Standard, connection method: M12-SPEEDCON-socket Metal, number of slots: 8, number of positions: 4, coding: A, slot assignment: single, status display: Yes, pnp; master cable connection: Fixed connection 180°, PUR/PVC, cable length: 10 m, 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 time, thanks to installation with SPEEDCON fast locking system

## Commercial data

Item number	1517178
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF42
Product key	BF3CCA
Catalog page	Page 264 (C-2-2019)
GTIN	4017918967840
Weight per piece (including packing)	1,457.4 g
Weight per piece (excluding packing)	1,417.7 g
Customs tariff number	85444290
Country of origin	DE

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## Technical data

### Notes

Assembly note	<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.
Note on application	Unused slots are to be sealed off prior to commissioning. Suitable sealing elements are to be found under "Accessories".

### Product properties

Product type	Distributor box
Application	Standard
Number of positions	4
Number of slots	8
Coding	A
LED	yes

### System properties

Local diagnostics	
Monitored function	Supply voltage
Optical representation	Green LED

### 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	12 A
Max. current carrying capacity per path	2 A
Current carrying capacity per slot	4 A

### Connection data

Conductor connection	
Sensor/actuator connection system	M12-SPEEDCON-socket
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
	2 / 4 (A) = GN
	3 / 4 (A) = YE
	4 / 4 (A) = GY
	5 / 4 (A) = PK

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6 / 4 (A) = RD
7 / 4 (A) = BK
8 / 4 (A) = VT
1-8 / 1 (+ 24 V) = BN
1-8 / 3 (0 V) = BU
1-8 / 5 (PE) = GNYE

## Signaling

Status display present	Yes
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## Dimensions

Dimensional drawing	
Width	58 mm
Height	26 mm
Length	153 mm

## Material specifications

Material Threaded sleeve	Die-cast zinc
Material Housing	PBT
Material Molding compound	PUR
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

## Cable/line

Cable length	10 m
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PUR/PVC black [PUR]	
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Dimensional drawing	
Cable weight	107.4 kg/km

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UL AWM Style	20549 (80°C/300 V)
Number of positions	11
Shielded	no
Cable type	PUR/PVC black [PUR]
Conductor structure signal line	19x 0.15 mm
AWG signal line	22
Conductor cross section	8x 0.34 mm <sup>2</sup> (Signal line) 3x 0.75 mm <sup>2</sup> (power line)
Wire diameter incl. insulation	1.3 mm ±0.1 mm (Signal line) 1.8 mm ±0.1 mm (power line)
External cable diameter	8.50 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	black RAL 9005
Conductor material	Bare Cu litz wires
Material wire insulation	PVC
Single wire, color	brown, blue, green/yellow, white, green, yellow, gray, pink, red, black, violet
Inner sheath thickness	≥ 0.15 mm
Thickness, outer sheath	≥ 0.38 mm
Overall twist	Wires twisted in layers
Max. conductor resistance	≤ 53 Ω/km (Signal line) ≤ 26 Ω/km (power line)
Insulation resistance	≥ 5 MΩ*km
Nominal voltage, cable	300 V AC
Test voltage Core/Core	2000 V (50 Hz, 5 min.)
Minimum bending radius, fixed installation	7.5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	64 mm
Smallest bending radius, movable installation	85 mm
Max. bending cycles	1500000
Minimum bending radius, drag chain applications	10 x D
Traversing path	2 m
Traversing rate	2 m/s
Flame resistance	DIN EN 50265
Resistance to oil	according to VDE 0472 Part 803
Other resistance	Highly resistant to acids, alkaline solutions and solvents
Special properties	Silicone-free
Ambient temperature (operation)	-40 °C ... 90 °C (cable, fixed installation) -5 °C ... 80 °C (Cable, flexible installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65
	IP67

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	IP69K
Ambient temperature (operation)	-30 °C ... 90 °C

## Standards and regulations

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

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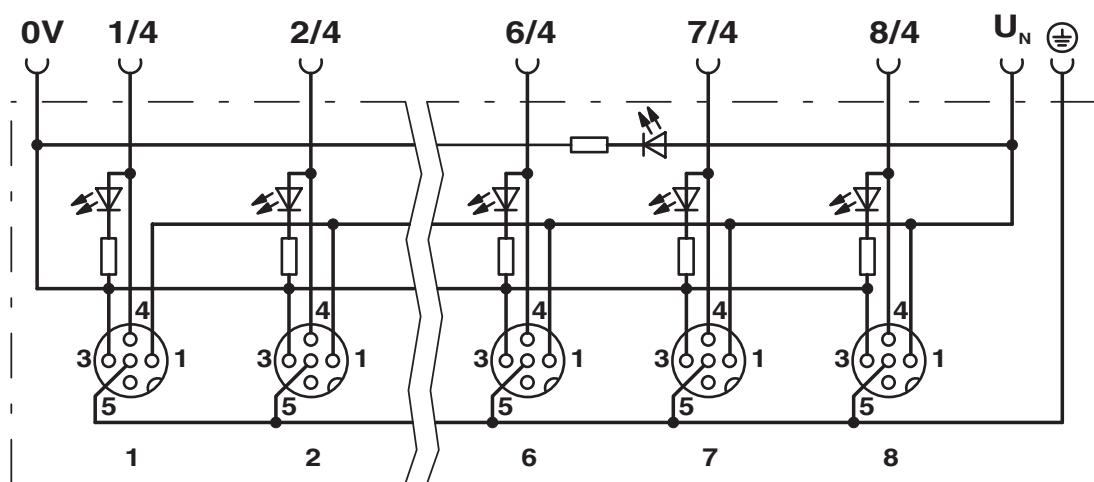
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## Drawings

Circuit diagram



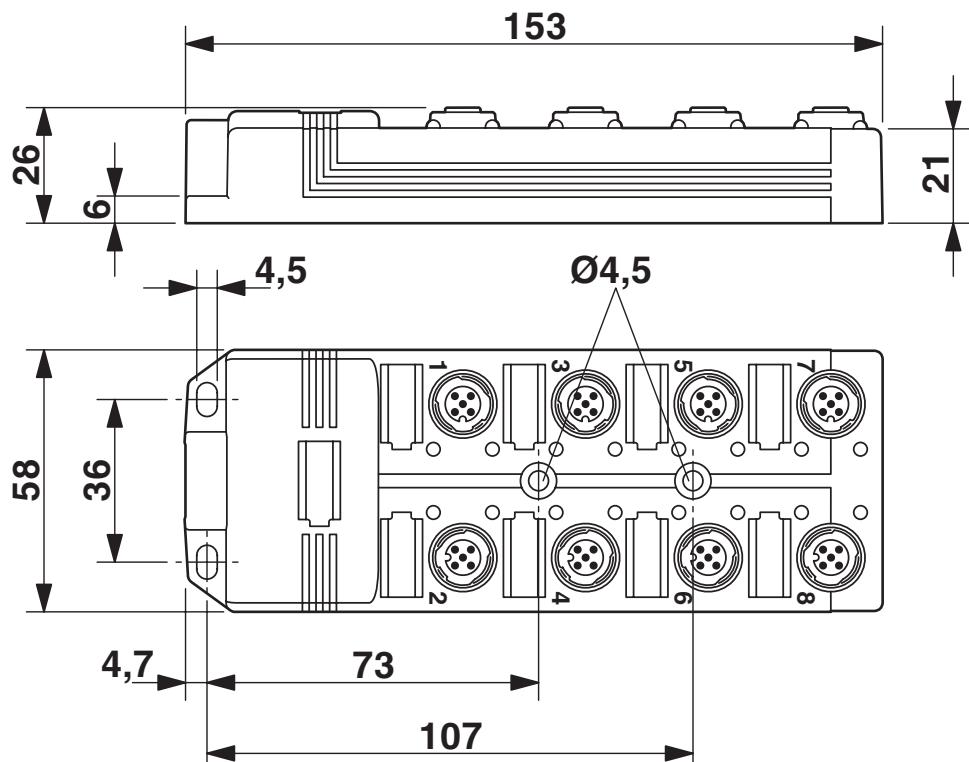
# SACB-8/ 8-L-10,0PUR SCO - Distributor box

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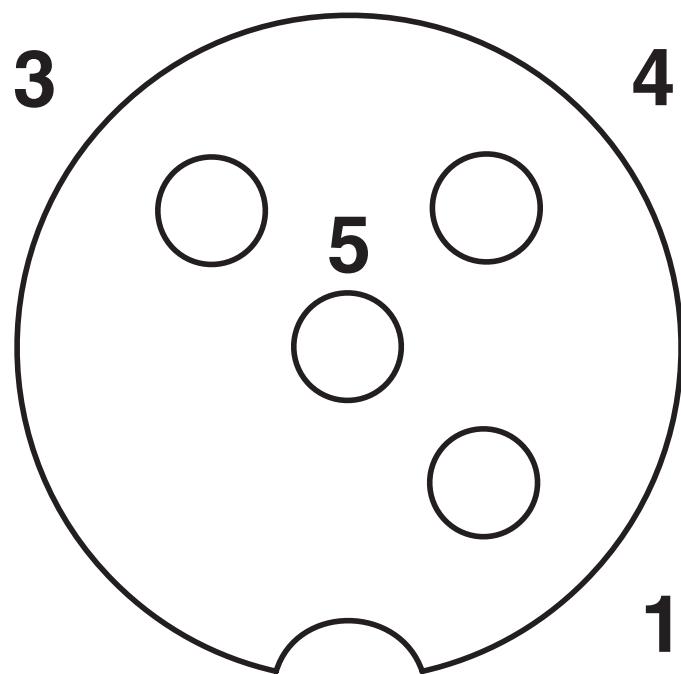
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Dimensional drawing



Schematic diagram



M12 slot, socket, 4-pos.

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## Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1517178>

cUL Recognized				
Approval ID: FILE E 118976				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
	24 V	3 A	-	-

UL Recognized				
Approval ID: FILE E 118976				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
	24 V	3 A	-	-

cULus Recognized

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## Classifications

### ECLASS

ECLASS-11.0	27440108
ECLASS-12.0	27440108
ECLASS-13.0	27440108

### ETIM

ETIM 9.0	EC002585
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### UNSPSC

UNSPSC 21.0	31251500
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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## Accessories

### 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

### 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



## 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



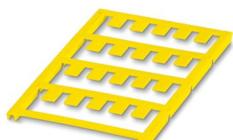
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## UC-EM (17,5X9) YE - Snap-in markers

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



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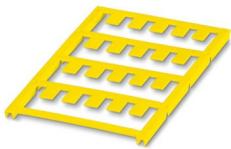


## UC-EM (17,5X9) YE CUS - Snap-in markers

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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## UTA 136 - DIN rail adapter

2853996

<https://www.phoenixcontact.com/us/products/2853996>

Universal DIN rail adapter, for screwing on switchgear



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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



## 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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Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)