

# Sensor/actuator box - SACB-6/12-10,0PUR



1680911

<https://www.phoenixcontact.com/us/products/1680911>

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Sensor/actuator box, connection method: M12 socket Plastic, number of slots: 6, number of positions: 5, coding: A - standard, slot assignment: Double, status display: No, Universal; master cable connection: Fixed connection 180°, PUR/PVC, cable length: 10 m, shielding: no

## Your advantages

- Safety in the field, thanks to robust housing and high degree of protection
- Save space: distributor box with double occupancy for two sensors in one slot

## Commercial Data

Item number	1680911
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Sales Key	00
Product Key	BF3CBA
Catalog Page	Page 114 (PC-2009)
GTIN	4017918171216
Weight per Piece (including packing)	1,641.3 g
Weight per Piece (excluding packing)	1,641.3 g
Customs tariff number	85444290
Country of origin	PL

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## Technical Data

### Product properties

Product type	Distributor boxes with M8 to M12 slots
Number of positions	5
Number of slots	6
Coding	A - standard

### Material specifications

Color	green
Flammability rating according to UL 94	V0
Material of threaded sleeve	PA
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA
O-ring material	NBR
Housing material	PA

### Dimensions

Dimensional drawing	
Width	54 mm
Height	19 mm
Length	129 mm

### Connection data

#### 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

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	6 / 2 (B) = YE BN
	1-6 / 1 (+ 120 V) = BN
	1-6 / 3 (0 V) = BU
	1-6 / 5 (PE) = G NYE

## LED signaling

Status display present	No
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## Electrical properties

Max. operating voltage $U_{max}$	135 V
Nominal voltage $U_N$	120 V
Rated current, total	12 A
Max. current carrying capacity per path	2 A
Current carrying capacity per slot	4 A

## Cable / line

Cable length	10 m
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### PUR/PVC black [PUR]

Cable weight	150.9 kg/km
UL AWM Style	20549
Number of positions	15
Shielded	no
Cable type	PUR/PVC black [PUR]
Conductor structure signal line	28x 0.15 mm
AWG signal line	20
Conductor cross section	12x 0.5 mm <sup>2</sup> (Signal line) 3x 1 mm <sup>2</sup> (power line)
Wire diameter incl. insulation	1.5 mm ±0.1 mm (Signal line) 2.1 mm ±0.1 mm (power line)
External cable diameter	9.4 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, gray/pink, red/blue, white/green, brown/green, white/yellow, yellow/brown
Thickness, insulation	≥ 0.15 mm (Inner sheath) ≥ 0.76 mm (Outer cable sheath)
Overall twist	Wires twisted in layers
Nominal voltage, cable	300 V
Test voltage	2000 V
Minimum bending radius, fixed installation	7.5 x D
Minimum bending radius, flexible installation	10 x D

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Max. bending cycles	1500000
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)
	80 °C (in acc. with UL)

## Ambient conditions

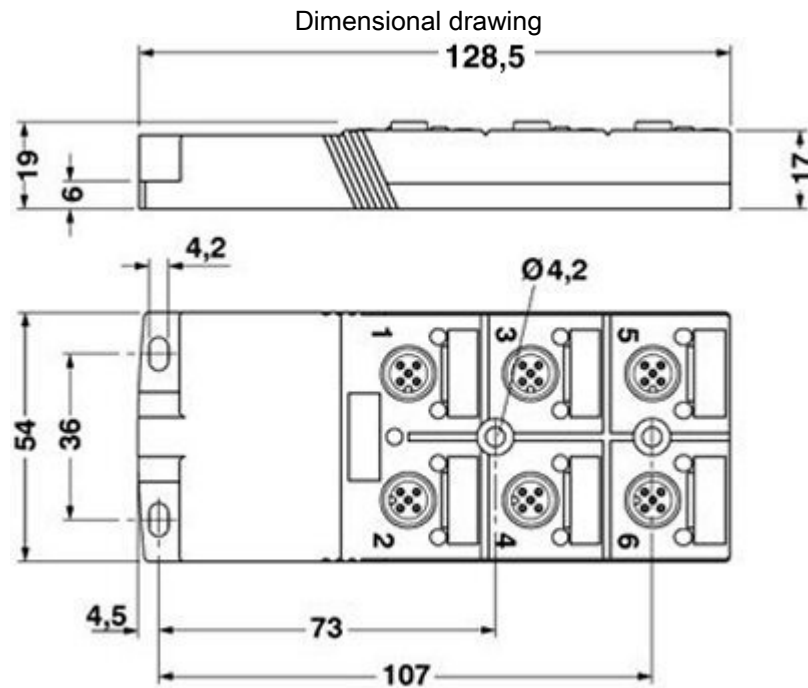
Degree of protection	IP65
	IP67
Ambient temperature (operation)	-25 °C ... 75 °C

# Sensor/actuator box - SACB-6/12-10,0PUR

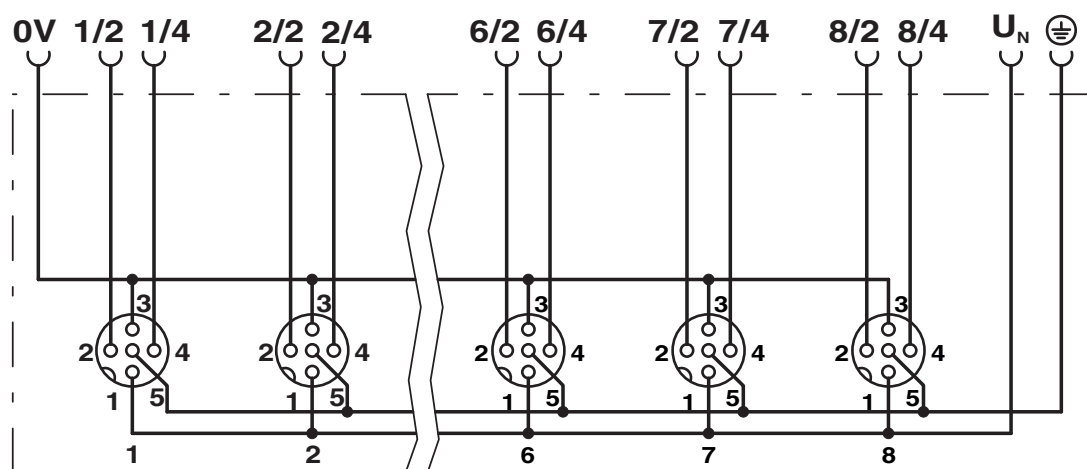
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## Drawings



Circuit diagram



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Schematic diagram



M12 slot, socket, 5-pos.

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## Classifications

### ECLASS

ECLASS-9.0	27440108
ECLASS-11.0	27440108

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## Accessories

### Screw plug

Screw plug - PROT-M12 - 1680539

<https://www.phoenixcontact.com/us/products/1680539>



An M12 screw plug for the unoccupied M12 sockets of the sensor/actuator cable, boxes and flush-type connectors

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### Zack marker strip

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128

<https://www.phoenixcontact.com/us/products/2809128>



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snapped, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5



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## Torque screwdriver

Torque screwdriver - TSD 04 SAC - 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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## Tool

Tool - SAC BIT M12-D15 - 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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## Tool

Tool - SACC BIT M12-D20 - 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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