SACB-8/16-SC SCO P - Distributor box

1452974

https://www.phoenixcontact.com/us/products/1452974

Distributor box, application: Standard, connection method: M12-SPEEDCON-socket Plastic, number of slots: 8, number of positions: 5, coding: A, slot assignment: Double, status display: No, Universal; master cable connection: Spring-cage connection 180°, shielding: no

Your advantages

- Safety in the field, thanks to molded housing and high degree of protection
- 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	1452974
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF41
Product key	BF3CBC
Catalog page	Page 262 (C-2-2019)
GTIN	4046356553599
Weight per piece (including packing)	222.1 g
Weight per piece (excluding packing)	221.5 g
Customs tariff number	85366990
Country of origin	DE

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Technical data

Notes

General	When connecting the signal lines to the black PCB terminal blocks, please use a 0.4 x 2.0 mm screwdriver. The black PCB terminal blocks only require a minimal amount of operating force. Screwdriver: SZS 0,4X2,0 - 1205202 Using larger screwdrivers or excessive force may damage the PCB terminal blocks. When using ferrules, the wires can be inserted straight into the PCB terminal blocks without opening the clamping area.
Assembly 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.
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	5
Number of slots	8
Coding	A
LED	No

Electrical properties

Nominal voltage U_N	120 V AC
	120 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
Conductor cross section Flexible signal line	0.2 mm² ... 0.5 mm²
Conductor cross section Flexible power supply	0.2 mm² ... 1.5 mm²
Connection cross section AWG Flexible signal line	24 ... 20
Connection cross section AWG Flexible power supply	24 ... 16
Stripping length Signal line	6 mm
Stripping length Power supply	10 mm
Stripping length of the sheath	50 mm (Master cable)
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
Tightening torque, union nut	2.5 Nm
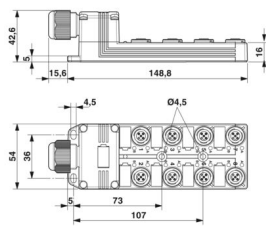
Pin assignment

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
	7 / 4 (A) = BK
	7 / 2 (B) = WHGY
	8 / 4 (A) = VT
	8 / 2 (B) = GYBN
	1-8 / 1 (+ 120 V) = BN
	1-8 / 3 (0 V) = BU
	1-8 / 5 (PE) = GNYE

Signaling

Status display present	No

Dimensions

Dimensional drawing	
Width	54 mm
Height	42 mm
Length	149 mm

Material specifications

Material Threaded sleeve	PBT
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

External cable diameter	7 mm ... 12 mm
Connection method	Spring-cage connection

Environmental and real-life conditions

Ambient conditions

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

Standards and regulations

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

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Drawings

Circuit diagram
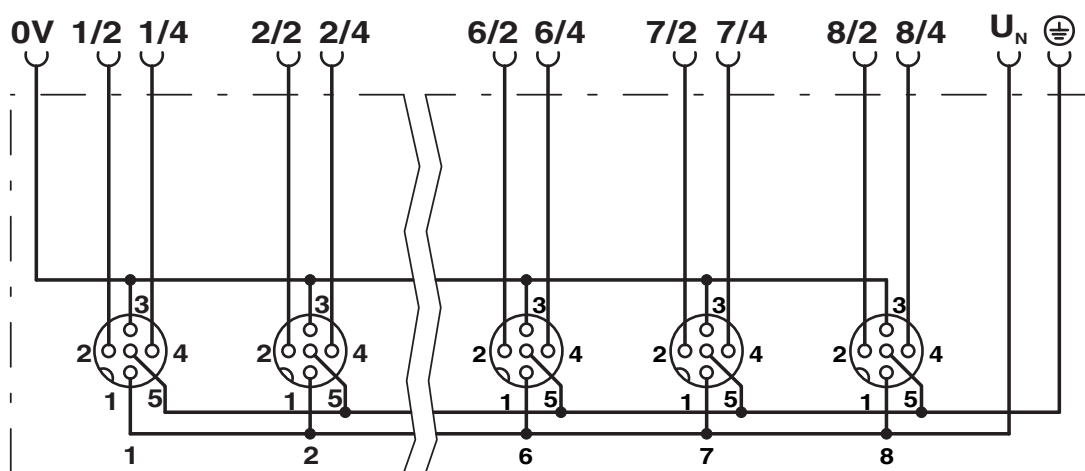
Dimensional drawing

SACB-8/16-SC SCO P - Distributor box
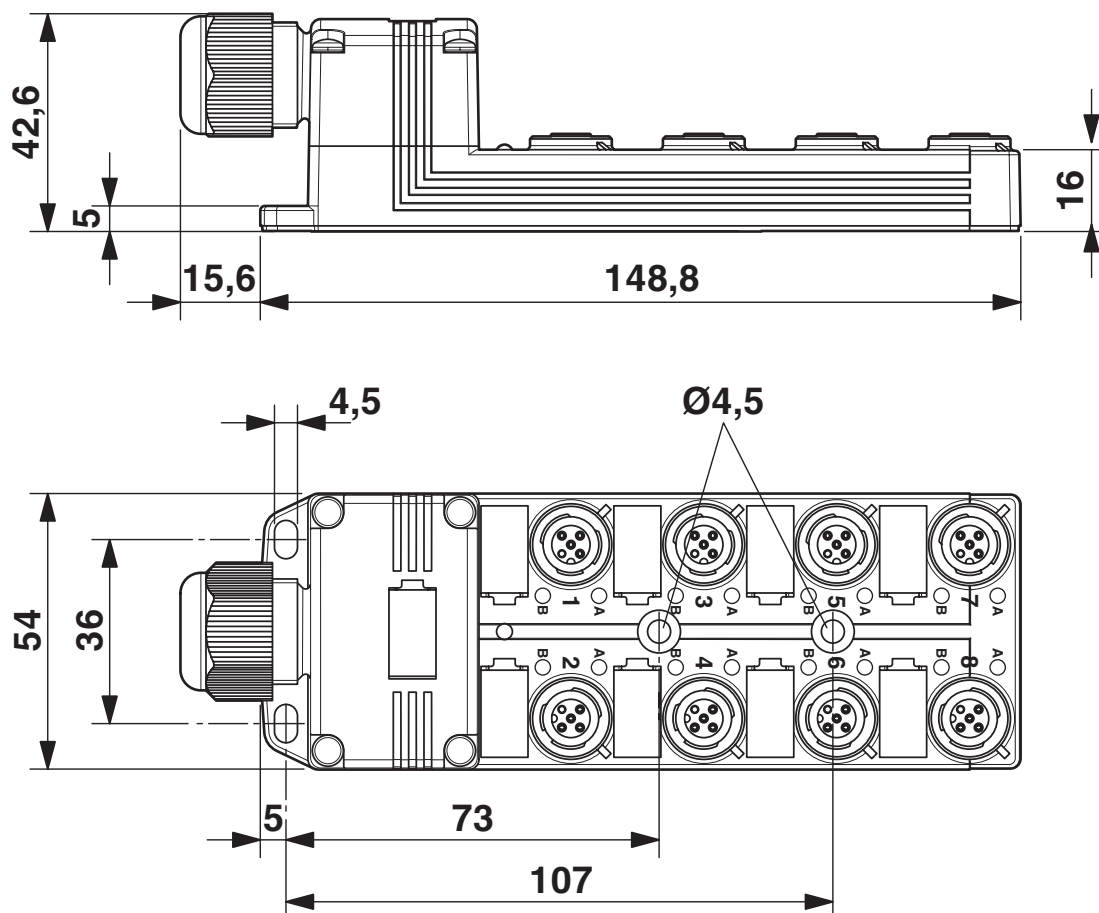
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Schematic diagram
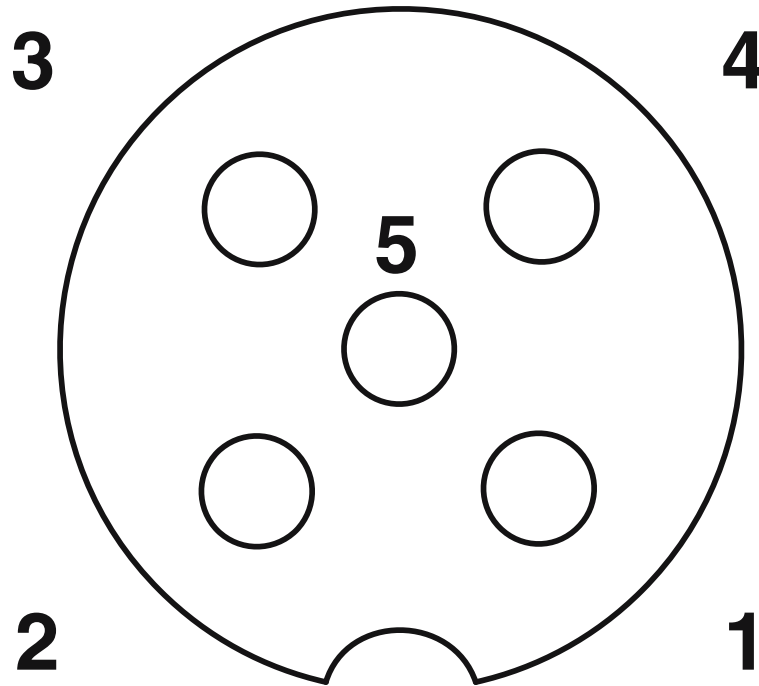
M12 slot, socket, 5-pos.

Approvals

💡 To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1452974

cUL Recognized
Approval ID: FILE E 118976

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	120 V	-	-	-

UL Recognized
Approval ID: FILE E 118976

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	120 V	-	-	-

EAC
Approval ID: RU C-DE.BL08.B.00511

cULus Recognized

Classifications

ECLASS

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

ETIM

ETIM 9.0	EC003558

UNSPSC

UNSPSC 21.0	31251500

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

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

SACB-16X0,5/ 3X1,0-50,0 PUR - Master cable ring

1503373

https://www.phoenixcontact.com/us/products/1503373

Master cable for sensor/actuator boxes, with PE conductor, unshielded, material PUR/PP, 19-pos., 16 x 0.50 mm^2 and 3 x 1.00 mm^2, length: 50 m

SACB-16X0,5/ 3X1,0-200,0 PUR - Master cable ring

1559893

https://www.phoenixcontact.com/us/products/1559893

Master cable for sensor/actuator boxes, with PE conductor, unshielded, material PUR/PP, 19-pos., 16 x 0.50 mm^2 and 3 x 1.00 mm^2, length: 200 m on drum

SACB-8/16-SC SCO P - Distributor box

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https://www.phoenixcontact.com/us/products/1452974

SACB-16X0,5/ 3X1,0-50,0 VPUR - Master cable ring

1430938

https://www.phoenixcontact.com/us/products/1430938

Master cable for sensor/actuator boxes, with PE conductor, unshielded, material PUR/PP, 19-pos., 16 x 0.50 mm^2 and 3 x 1.00 mm^2, length: 50 m

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

SACB-8/16-SC SCO P - Distributor box

1452974

https://www.phoenixcontact.com/us/products/1452974

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

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

SACB-8/16-SC SCO P - Distributor box

1452974

https://www.phoenixcontact.com/us/products/1452974

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

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

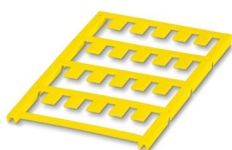# SACB-8/16-SC SCO P - Distributor box

1452974

https://www.phoenixcontact.com/us/products/1452974

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

0827494

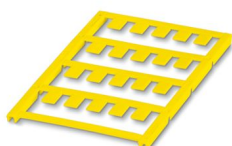https://www.phoenixcontact.com/us/products/0827494

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

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

SACB-8/16-SC SCO P - Distributor box

1452974

https://www.phoenixcontact.com/us/products/1452974

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

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

SACB-8/16-SC SCO P - Distributor box

A 0,5 - 6 - Ferrule

Ferrule, color: silver

A 0,75-10 - Ferrule

Ferrule, color: silver

SACB-8/16-SC SCO P - Distributor box

A 1 -10 - Ferrule

3200250

https://www.phoenixcontact.com/us/products/3200250

Ferrule, color: silver

A 1,5 -10 - Ferrule

3200276

https://www.phoenixcontact.com/us/products/3200276

Ferrule, sleeve length: 10 mm, color: silver

SACB-8/16-SC SCO P - Distributor box

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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

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

SACB-8/16-SC SCO P - Distributor box

1452974

https://www.phoenixcontact.com/us/products/1452974

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

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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https://www.phoenixcontact.com/us/products/1452974

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

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

SACB-8/16-SC SCO P - Distributor box

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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

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

SACB-8/16-SC SCO P - Distributor box

1452974

https://www.phoenixcontact.com/us/products/1452974

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

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

SACB-8/16-SC SCO P - Distributor box

1452974

https://www.phoenixcontact.com/us/products/1452974

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

SZS 0,4X2,0 - Screwdriver

1205202

https://www.phoenixcontact.com/us/products/1205202

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