

https://www.phoenixcontact.com/us/products/1166980

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Sensor/actuator box, application: Standard, connection method: M8 socket Metal, number of slots: 8, number of positions: 3, coding: A, slot assignment: single, status display: Yes, pnp; master cable connection: M16 plug connection 90°, 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

Commercial Data

Item number	1166980
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	BF40
Product Key	BF3BCB
GTIN	4063151184087
Weight per Piece (including packing)	146.8 g
Weight per Piece (excluding packing)	140 g
Customs tariff number	85444290
Country of origin	DE

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Technical Data

Notes

General	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.
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	3
Application	Standard
Number of slots	8
Coding	A
LED	yes

Material specifications

Color	black
Material Threaded sleeve	Cu alloy
Material Housing	PBT
Material Molding compound	PUR
Seal material O-ring	FKM
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PBT
Material of contact, master cable side	CU alloy

Dimensions

Dimensional drawing	$ \begin{array}{c} 134.4 \\ 29.2 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0$
Width	30 mm
Height	27 mm
Length	134.4 mm

Connection data

Connection method M16 plug connection	Conductor connection	
Who plug connection	Connection method	M16 plug connection



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Tightening torque slot sensor/actuator cable	0.2 Nm
Tightening torque - master cable - plug connection	1.5 Nm
Tightening torque of mounting screw for fixing the housing	0.8 Nm
Pin assignment	
Slot/position = Wire color or connection	1 / 4 (A) = P
	2 / 4 (A) = J
	3 / 4 (A) = T
	4 / 4 (A) = S
	5 / 4 (A) = G
	6 / 4 (A) = R
	7 / 4 (A) = E
	8 / 4 (A) = O
	1-8 / 1 (+ 24 V) = A+M
	1-8 / 3 (0 V) = L+U
naling	
Status display present	Yes

Electrical properties

Max. operating voltage U _{max}	30 V DC
Local diagnostics	Supply voltage per module Green LED
	Status display I/O Yellow LED
Nominal voltage U _N	24 V DC
Rated current, total	6 A
Max. current carrying capacity per path	2 A
Current carrying capacity per slot	2 A

Cable/line

Sensor/actuator connection system	M8 socket
Connection method	M16 plug connection
Tightening torque - master cable - plug connection	1.5 Nm
Tightening torque of mounting screw for fixing the housing	0.8 Nm
Tightening torque slot sensor/actuator cable	0.2 Nm

Standards and regulations

Standards/specifications	IEC 61076-2-104

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP67
Ambient temperature (operation)	-20 °C 80 °C

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Drawings

Schematic diagram



M8 slot, socket, 3-pos.



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Dimensional drawing





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Schematic diagram



M16 plug connection pin, 14-pos.

Circuit diagram



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Classifications

ECLASS

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

ETIM

	ETIM 8.0	EC003558	
UNSPSC			
	UNSPSC 21.0	31251500	

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Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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Accessories

SAC-12P- 5,0-PUR/M16FR - Master cable

1693720

https://www.phoenixcontact.com/us/products/1693720



Master cable, application: Sensor/actuator box, connection method: M8 socket Metal, number of slots: 8, number of positions: 12, slot assignment: single, status display: No; master cable connection: M16 plug connection, PUR/PVC, cable length: 5 m, shielding: no, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1260747

SAC-12P-10,0-PUR/M16FR - Master cable

1693733

https://www.phoenixcontact.com/us/products/1693733



Master cable, application: Sensor/actuator box, connection method: M8 socket, number of slots: 8, number of positions: 12, slot assignment: single, status display: No; master cable connection: M16 plug connection, PUR/PVC, cable length: 10 m, shielding: no, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1260746

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UCT-TM 6 - Marker for terminal blocks

0828736

https://www.phoenixcontact.com/us/products/0828736



Marker for terminal blocks, 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, for terminal block width: 6.2 mm, lettering field size: 5.6 x 10.5 mm, Number of individual labels: 60

SACC-M16FS-14CON-M - Connector

1500554 https://www.phoenixcontact.com/us/products/1500554



M16 socket, 14-pos., with solder connection, freely configurable, straight, for a 6. 0 mm conductor diameter ... 8.0 mm

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SACC-M16FR-14CON-M - Connector

1500253

https://www.phoenixcontact.com/us/products/1500253

M16 socket, 14-pos., with solder connection, freely configurable, angled, for a 6. 0 mm conductor diameter \dots 8.0 mm



PROT-M8 - Screw plug

1682540 https://www.phoenixcontact.com/us/products/1682540



An M8 screw plug for the unoccupied M8 sockets of the sensor/actuator cable, boxes and flush-type connectors

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TSD 02 SAC - Torque screwdriver

1208487

https://www.phoenixcontact.com/us/products/1208487



Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive for M8 connectors

SAC BIT M8-D10 - Tool

1208461 https://www.phoenixcontact.com/us/products/1208461



Nut for assembling M8 connectors with longitudinal knurl and a knurl diameter of 10 mm, for 4 mm hexagonal drive

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SACC BIT M8-D12 - Tool

1208474

https://www.phoenixcontact.com/us/products/1208474



Nut for assembling M8 connectors with longitudinal knurl and a knurl diameter of 12 mm, for 4 mm hexagonal drive

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