

1452615

https://www.phoenixcontact.com/gb/products/1452615

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Sensor/actuator box, application: Standard, connection method: M12-SPEEDCON-socket Plastic, number of slots: 4, number of positions: 5, coding: A - standard, slot assignment: Double, 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 space: distributor box with double occupancy for two sensors in one slot
- · Save time, thanks to installation with SPEEDCON fast locking system

#### **Commercial Data**

Item number	1452615
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	BF3CBA
Product Key	BF3CBA
Catalog Page	Page 262 (C-2-2019)
GTIN	4046356553933
Weight per Piece (including packing)	1,423 g
Weight per Piece (excluding packing)	1,387.5 g
Customs tariff number	85444290
Country of origin	DE



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### **Technical Data**

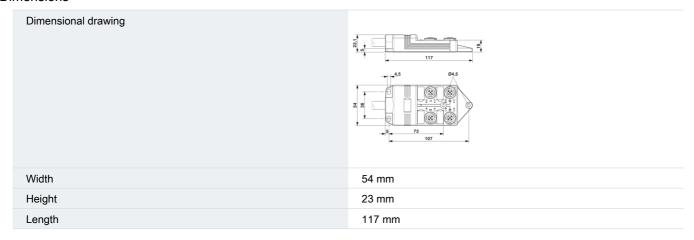
#### Notes

Assembly instruction:	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 boxes with M8 to M12 slots
Number of positions	5
Application	Standard
Number of slots	4
Coding	A - standard

#### **Dimensions**



### Ambient conditions

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

### LED signaling

Status display present	yes
Status display present	yes

### Electrical properties

Max. operating voltage U <sub>max</sub>	30 V DC
Local diagnostics	Supply voltage Green LED
	Status display I/O Yellow LED
Nominal voltage U <sub>N</sub>	24 V DC
Rated current, total	12 A
Max. current carrying capacity per path	2 A



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Current carrying capacity per slot

Conductor material

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			
	1-4 / 1 (+ 24 V) = BN			
	1-4 / 3 (0 V) = BU			
	1-4 / 5 (PE) = GNYE			
Material specifications				
Color	anthracite			
Flammability rating according to UL 94	V0			
Material of threaded sleeve	PBT			
Contact material	Cu alloy			
Contact surface material	gold-plated			
Contact carrier material	PA			
O-ring material	NBR			
Material of the moulding mass	PUR			
Housing material	PBT			
Cable / line				
Cable length	10 m			
Cable weight	122 kg/km			
UL AWM Style	20549			
Number of positions	11			
Shielded	no			
Cable type	PUR/PVC black [PUR]			
Conductor structure signal line	28x 0.15 mm			
AWG signal line	20			
Conductor cross section	8x 0.5 mm² (Signal line)			
	3x 1 mm² (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	8.7 mm ±0.2 mm			
Outer sheath, material	PUR			
External sheath, color	black RAL 9005			

Bare Cu litz wires

4 A



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Material wire insulation	PVC
Single wire, color	brown, blue, green/yellow, white, green, yellow, gray, gray/pink red/blue, white/green, brown/green
Inner sheath thickness	≥ 0.15 mm
Thickness, outer sheath	≥ 0.38 mm
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
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)
laster cable data/connection data	
Sensor/actuator connection system	M12-SPEEDCON-socket
Connection method	Fixed connection
Tightening torque of mounting screw for fixing the housing	0.5 Nm
Tightening torque slot sensor/actuator cable	0.4 Nm
mbient conditions	
Ambient temperature (operation)	-40 °C 90 °C (for fixed installation)
	-5 °C 80 °C (for flexible installation)
ndards and regulations	
Standards/specifications	IEC 61076-2-101
otalida do opcomoditorio	120 0101 0-2-101

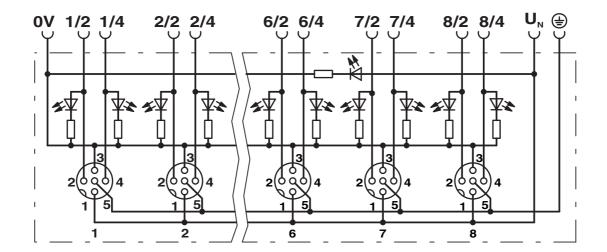


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### Drawings

Circuit diagram

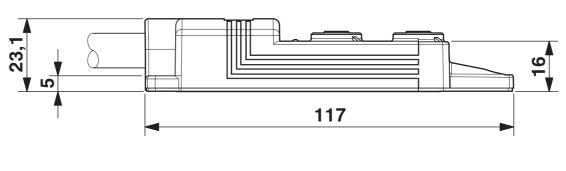


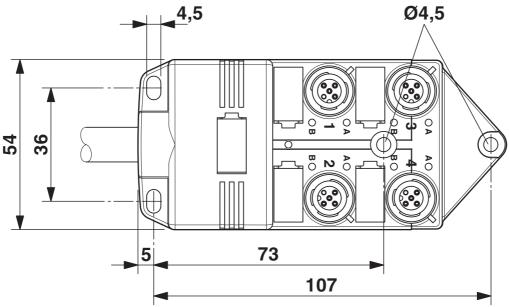


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### Dimensional drawing

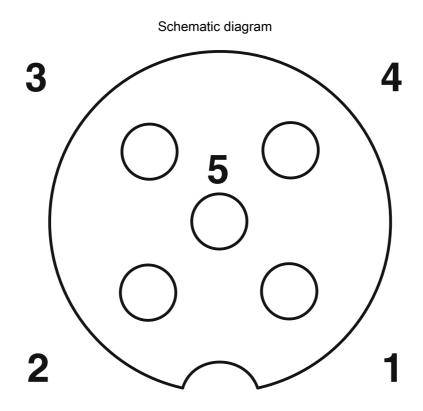






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M12 slot, socket, 5-pos.



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### Approvals

. <b>7.1</b>	<b>cUL Recognized</b> Approval ID: FILE E 118	1976			
		Nominal Voltage $U_N$	Nominal Current I <sub>N</sub>	Cross Section AWG	Cross Section mm <sup>2</sup>
		24 V		-	-

UL Recognize Approval ID: FILE	e <b>d</b> E 118976			
	Nominal Voltage $U_N$	Nominal Current I <sub>N</sub>	Cross Section AWG	Cross Section mm <sup>2</sup>
Signal		2 A	-	-
	24 V	4 A	-	-

EAC	EAC
LIIL	Approval ID: RU C-DE.BL08.B.00286

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

### cULus Recognized



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### Classifications

#### **ECLASS**

	ECLASS-10.0.1	27440108	
	ECLASS-9.0	27440108	
	ECLASS-11.0	27440108	
ETIM			
	ETIM 8.0	EC002585	
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

#### Screw plug

Screw plug - PROT-MS SCO - 1553129 https://www.phoenixcontact.com/gb/products/1553129



M12 screw plug with fast-locking system for unoccupied M12 female connectors of sensor/actuator cables, boxes, and flush-type connectors

#### Torque screwdriver

Torque screwdriver - TSD 04 SAC - 1208429 https://www.phoenixcontact.com/gb/products/1208429



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



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#### Torque screwdriver

Torque screwdriver - TSD-M 1,2NM - 1212224 https://www.phoenixcontact.com/gb/products/1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0. 3 - 1.2 Nm

#### Adapter insert

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600 https://www.phoenixcontact.com/gb/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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#### Tool

Tool - SAC BIT M12-D15 - 1208432

https://www.phoenixcontact.com/gb/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

#### Tool

Tool - SACC BIT M12-D20 - 1208445

https://www.phoenixcontact.com/gb/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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#### Snap-in markers

Snap-in markers - UC-EM (17,5X9) - 0827490 https://www.phoenixcontact.com/gb/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

#### Snap-in markers

Snap-in markers - UC-EM (17,5X9) CUS - 0828238 https://www.phoenixcontact.com/gb/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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#### Snap-in markers

Snap-in markers - UCT-EM (17,5X9) - 0801491 https://www.phoenixcontact.com/gb/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

#### Snap-in markers

Snap-in markers - UCT-EM (17,5X9) CUS - 0801575 https://www.phoenixcontact.com/gb/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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#### Snap-in markers

Snap-in markers - UC-EM (17,5X9) YE - 0827494 https://www.phoenixcontact.com/gb/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

#### Snap-in markers

Snap-in markers - UC-EM (17,5X9) YE CUS - 0828239 https://www.phoenixcontact.com/gb/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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#### Snap-in markers

Snap-in markers - UCT-EM (17,5X9) YE - 0801492 https://www.phoenixcontact.com/gb/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

#### Snap-in markers

Snap-in markers - UCT-EM (17,5X9) YE CUS - 0801576 https://www.phoenixcontact.com/gb/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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#### DIN rail adapter

DIN rail adapter - UTA 107 - 2853983 https://www.phoenixcontact.com/gb/products/2853983

Universal DIN rail adapter, for screwing on switchgear



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