

1452518

https://www.phoenixcontact.com/in/products/1452518

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Sensor/actuator box, application: Standard, connection method: M12-SPEEDCON-socket Plastic, number of slots: 8, number of positions: 4, coding: A, slot assignment: single, status display: No, Universal; master cable connection: Fixed connection 180°, PUR/PVC, cable length: 5 m, shielding: no

### Your advantages

- · Safety in the field, thanks to molded housing and high degree of protection
- · Save time, thanks to installation with SPEEDCON fast locking system

#### Commercial Data

Item number	1452518
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	BF3
Product Key	BF3CBA
Catalog Page	Page 262 (C-2-2019)
GTIN	4046356553865
Weight per Piece (including packing)	801 g
Weight per Piece (excluding packing)	748.5 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".

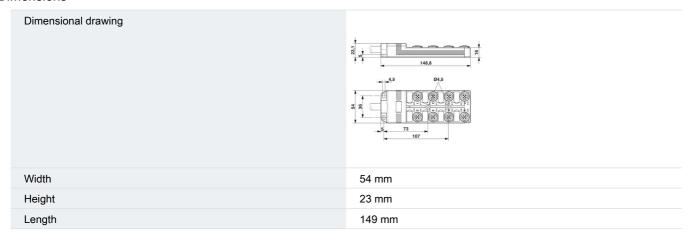
### Product properties

Product type	Distributor boxes with M8 to M12 slots
Number of positions	4
Application	Standard
Number of slots	8
Coding	A
LED	No

### Material specifications

Color	anthracite
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

#### **Dimensions**



### Connection data

#### Conductor connection



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Connection method	Fixed connection		
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		
	6 / 4 (A) = RD		
	7 / 4 (A) = BK		
	8 / 4 (A) = VT		
	1-8 / 1 (+ 120 V) = BN		
	1-8 / 3 (0 V) = BU		
	1-8 / 5 (PE) = GNYE		
Signaling			
Status display present	No		
Electrical properties			
Nominal voltage U <sub>N</sub>	120 V AC		
J. N.	120 V DC		
Rated current, total	12 A		
Max. current carrying capacity per path	2 A		
Current carrying capacity per slot	4 A		
Cable/line			
Cable length	5 m		
PUR/PVC black [PUR]			
Dimensional drawing			
Cable weight	107.4 kg/km		
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		



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AWG signal line	22
Conductor cross section	8x 0.34 mm² (Signal line)
	3x 0.75 mm² (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	8.5 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
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)

### Standards and regulations

M12

Standards/specifications	IEC 61076-2-101
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### Environmental and real-life conditions

### Ambient conditions

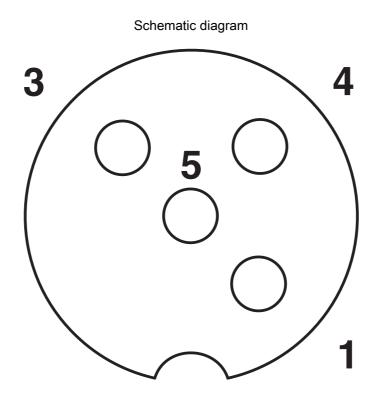
Degree of protection	IP65
	IP67
Ambient temperature (operation)	-25 °C 80 °C



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### Drawings



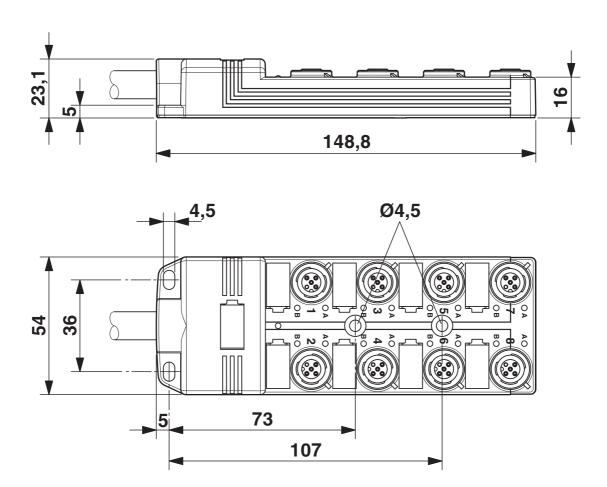
M12 slot, socket, 4-pos.



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### Dimensional drawing

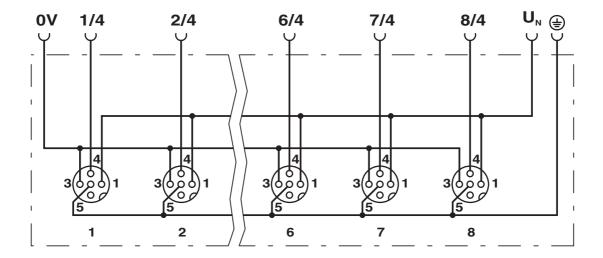




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### Circuit diagram





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### Approvals

. <b>7.1</b>	<b>cUL Recognized</b> Approval ID: FILE E 1189	976			
		Nominal Voltage U <sub>N</sub>	Nominal Current I <sub>N</sub>	Cross Section AWG	Cross Section mm <sup>2</sup>
		120 V	-	-	-

<b>71</b>	<b>UL Recognized</b> Approval ID: FILE E 118	976			
		Nominal Voltage $U_N$	Nominal Current I <sub>N</sub>	Cross Section AWG	Cross Section mm <sup>2</sup>
		120 V	-	-	-

EAC	<b>EAC</b> Approval ID: RU C-DE.BL08.B.00286

EAC	EAC Approval ID: RU C-DE Al30 B 01102
EHL	Approval ID: RU C-DE.Al30.B.01102

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

### **ECLASS**

	ECLASS-11.0	27440108		
	ECLASS-12.0	27440108		
	ECLASS-13.0	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

### PROT-MS SCO - Screw plug

1553129

https://www.phoenixcontact.com/in/products/1553129



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

### TSD 04 SAC - Torque screwdriver

1208429

https://www.phoenixcontact.com/in/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/in/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/in/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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#### SAC BIT M12-D15 - Tool

1208432

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

0827490

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

0801491

https://www.phoenixcontact.com/in/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/in/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/in/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/in/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/in/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/in/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/in/products/2853996

Universal DIN rail adapter, for screwing on switchgear



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