

1452589

https://www.phoenixcontact.com/in/products/1452589

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Sensor/actuator box, application: Standard, connection method: M12-SPEEDCON-socket Plastic, number of slots: 4, number of positions: 4, coding: A, slot assignment: single, 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 time, thanks to installation with SPEEDCON fast locking system

Commercial Data

Item number	1452589		
Packing unit	1 pc		
Minimum order quantity	1 pc		
Sales Key	BF3		
Product Key	BF3CBA		
Catalog Page	Page 262 (C-2-2019)		
GTIN	4046356553919		
Weight per Piece (including packing)	958 g		
Weight per Piece (excluding packing)	912.7 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

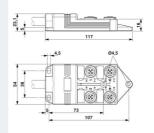
Product type	Distributor boxes with M8 to M12 slots	
Number of positions	4	
Application	Standard	
Number of slots	4	
Coding	A	
LED	yes	

Material specifications

Color	anthracite	
Material Threaded sleeve	PBT	
Material Housing	PBT	
Material Molding compound	PUR	
Flammability rating according to UL 94	VO	
Seal material O-ring	NBR	
Contact material	Cu alloy	
Contact surface material	gold-plated	
Contact carrier material	PA	

Dimensions

Dimensional drawing



Width	54 mm
Height	23 mm
Length	117 mm

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		
	1-4 / 1 (+ 24 V) = BN		
	1-4 / 3 (0 V) = BU		
	1-4 / 5 (PE) = GNYE		
ignaling			
Status display present	Yes		
lectrical properties			
Max. operating voltage U _{max}	30 V DC		
Local diagnostics	Supply voltage Green LED		
	Status display I/O Yellow LED		
Nominal voltage U _N	24 V DC		
Rated current, total	12 A		
Max. current carrying capacity per path	2 A		

Cable/line

Cable length 10 m	

4 A

PUR/PVC black [PUR]

Dimensional drawing

Current carrying capacity per slot



Cable weight	77.9 kg/km		
UL AWM Style	20549		
Number of positions	7		
Shielded	no		
Cable type	PUR/PVC black [PUR]		
Conductor structure signal line	19x 0.15 mm		
AWG signal line	22		
Conductor cross section	4x 0.34 mm² (Signal line)		



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	3x 0.75 mm ² (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	6.9 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
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)

Standards and regulations

Standards/specifications	IEC 61076-2-101	

Environmental and real-life conditions

Ambient conditions

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

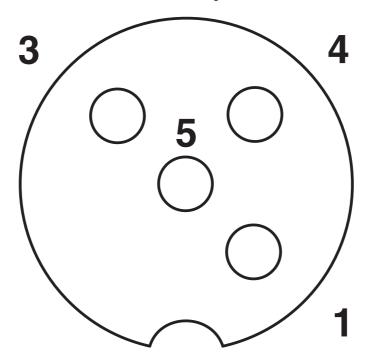


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Drawings

Schematic diagram

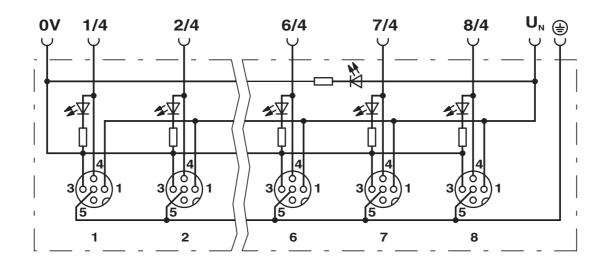


M12 slot, socket, 4-pos.



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Circuit diagram

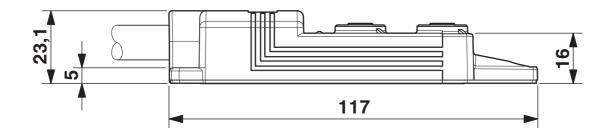


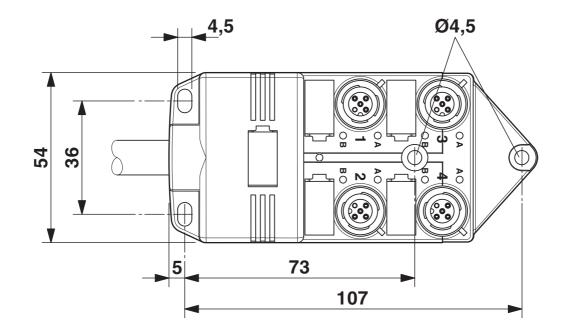


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Dimensional drawing







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Approvals

Approval ID: FILE E 118976					
		Nominal Voltage U _N	Nominal Current I _N	Cross Section AWG	Cross Section mm ²
		24 V	-	-	-

Approval ID: FILE E 118976				
	Nominal Voltage U _N	Nominal Current I _N	Cross Section AWG	Cross Section mm ²
Signal	-	2 A	-	-
	24 V	4 A	-	-

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

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

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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PHŒN

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 \mbox{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

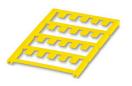
https://www.phoenixcontact.com/in/products/0827494



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: $17.5 \times 9 \text{ mm}$, 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 107 - DIN rail adapter

2853983

https://www.phoenixcontact.com/in/products/2853983

Universal DIN rail adapter, for screwing on switchgear



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