

1452738

https://www.phoenixcontact.com/us/products/1452738

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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: 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	1452738
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF41
Product key	BF3CBA
Catalog page	Page 262 (C-2-2019)
GTIN	4046356554015
Weight per piece (including packing)	2,233 g
Weight per piece (excluding packing)	2,106.6 g
Customs tariff number	85444290
Country of origin	DE



1452738

https://www.phoenixcontact.com/us/products/1452738

### Technical data

#### Notes

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	yes

### System properties

### Local diagnostics

Monitored function	Supply voltage
Optical representation	Green LED

### 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
Current carrying capacity per slot	4 A

### Connection data

#### Conductor connection

Sensor/actuator connection system	M12-SPEEDCON-socket
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
	1 / 2 (B) = GYPK
	2 / 4 (A) = GN
	2 / 2 (B) = RDBU
	3 / 4 (A) = YE



1452738

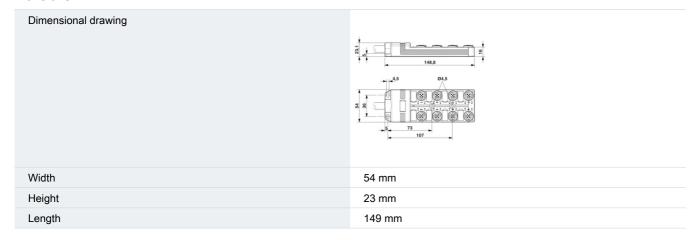
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	3 / 2 (B) = WHGN
	4 / 4 (A) = GY
	4 / 2 (B) = BNGN
	5 / 4 (A) = PK
	5 / 2 (B) = WHYE
	6 / 4 (A) = RD
	6 / 2 (B) = YEBN
	7 / 4 (A) = BK
	7 / 2 (B) = WHGY
	8 / 4 (A) = VT
	8 / 2 (B) = GYBN
	1-8 / 1 (+ 24 V) = BN
	1-8 / 3 (0 V) = BU
	1-8 / 5 (PE) = GNYE

### Signaling

Status display present	Yes
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### **Dimensions**



### Material specifications

Material Threaded sleeve	РВТ
Material Housing	РВТ
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

Cable length	10 m
PUR/PVC black [PUR]	



1452738

https://www.phoenixcontact.com/us/products/1452738

Dimensional drawing	
Cable weight	183.7 kg/km
UL AWM Style	20549 (80°C/300 V)
Number of positions	19
Shielded	no
Cable type	PUR/PVC black [PUR]
Conductor structure signal line	28x 0.15 mm
AWG signal line	20
Conductor cross section	16x 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	10.50 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, gray/pink, red/blue, white/green, brown/green, white/yellow, yellow/brown, white/gray, gray/brown
Inner sheath thickness	≥ 0.15 mm
Thickness, outer sheath	≥ 0.76 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
Smallest bending radius, fixed installation	79 mm
Smallest bending radius, movable installation	105 mm
Max. bending cycles	1500000
Minimum bending radius, drag chain applications	10 x D
Traversing path	2 m
Traversing rate	2 m/s
Flame resistance	according to 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



1452738

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	Ambient temperature (operation)	-40 °C 90 °C (cable, fixed installation)	
		-5 °C 80 °C (Cable, flexible installation)	
Environmental and real-life conditions			
	Ambient conditions		
	Degree of protection	IP65	
		IP67	
	Ambient temperature (operation)	-25 °C 80 °C	
Sta	andards and regulations		
	Standard designation	M12 connector	
	Standards/specifications	IEC 61076-2-101	

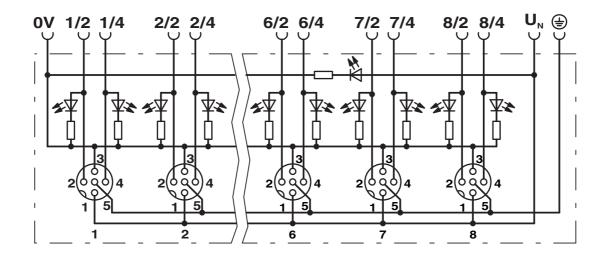


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### Drawings

Circuit diagram

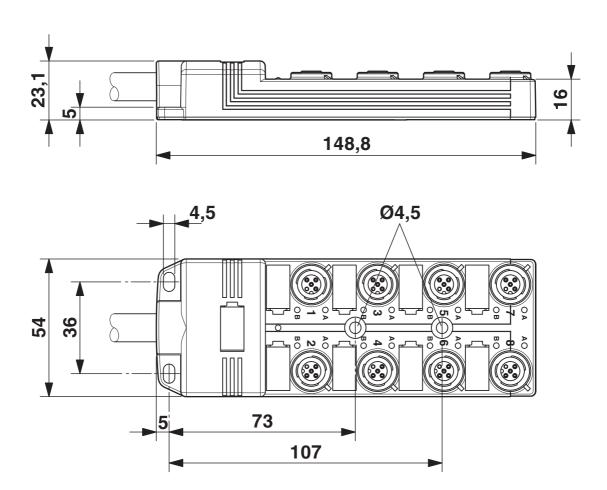




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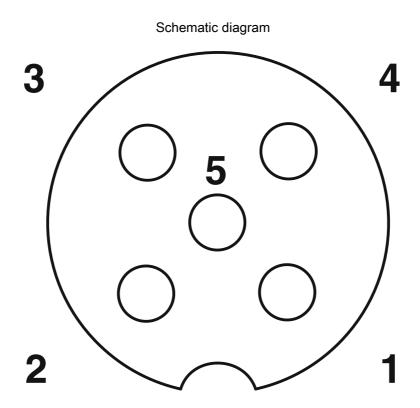
### Dimensional drawing





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M12 slot, socket, 5-pos.



1452738

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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1452738

. <b>91</b>	<b>cUL Recognized</b> Approval ID: E118976				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		24 V	-	-	-

<b>91</b> UL Recognized Approval ID: E118976				
	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	-	-

cULus Recognized
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### Classifications

### **ECLASS**

	ECLASS-11.0	27440108
	ECLASS-12.0	27440108
	ECLASS-13.0	27440108
ETIM		
	ETIM 9.0	EC002585
UNSPSC		
	UNSPSC 21.0	31251500



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### Environmental product compliance

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

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

### 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



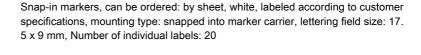
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#### UC-EM (17,5X9) CUS - Snap-in markers

0828238

https://www.phoenixcontact.com/us/products/0828238





#### 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



1452738

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### 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



### 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



1452738

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#### 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

#### 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



1452738

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### 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



### UTA 136 - DIN rail adapter

2853996

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

Universal DIN rail adapter, for screwing on switchgear





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### 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

### 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



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### 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

### 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



1452738

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#### 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



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