

1452851

https://www.phoenixcontact.com/us/products/1452851

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



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: Pluggable screw connection 180°, 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
- Flexible: distributor box with connector hood for on-site assembly

Commercial data

Item number	1452851
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF41
Product key	BF3CBD
Catalog page	Page 263 (C-2-2019)
GTIN	4046356553711
Weight per piece (including packing)	229.8 g
Weight per piece (excluding packing)	229.8 g
Customs tariff number	85366990
Country of origin	DE



1452851

https://www.phoenixcontact.com/us/products/1452851

Technical data

Notes

Note regarding documentation	For details about the PCB connectors used, refer to the technical data for MC 1,5/10-STF-3,5 (1847204)
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 _{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	10 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
Conductor cross section Flexible signal line	0.14 mm² 1.5 mm²
Conductor cross section Flexible power supply	0.14 mm² 1.5 mm²
Connection cross section AWG Flexible signal line	26 16
Connection cross section AWG Flexible power supply	26 16
Stripping length Signal line	7 mm
Stripping length Power supply	7 mm
Stripping length of the sheath	50 mm (Master cable)



1452851

https://www.phoenixcontact.com/us/products/1452851

Tightening torque, cover screw	1 Nm
Tightening torque slot sensor/actuator cable	0.4 Nm
Tightening torque of mounting screw for fixing the housing	0.5 Nm
Tightening torque, union nut	2.5 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
	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

Signaling

Status display present	Yes
Ctatas display present	163

1-8 / 5 (PE) = GNYE

Dimensions

Dimensional drawing	5.6 148.8 Q4.5 Q4.5 Q4.5 Q4.5 Q4.5 Q4.5 Q4.5 Q4.5
Width	54 mm
Height	43 mm
Length	149 mm

Material specifications

Material Threaded sleeve	PBT
Material Housing	PBT



1452851

https://www.phoenixcontact.com/us/products/1452851

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
Material of contact, master cable side	CU alloy
Material of the contact carrier on the master cable side	PA
Material of contact surface, master cable side	Sn

Cable/line

External cable diameter	7 mm 12 mm
Connection method	Pluggable screw connection

Environmental and real-life conditions

Ambient conditions

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

Standards and regulations

M12

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

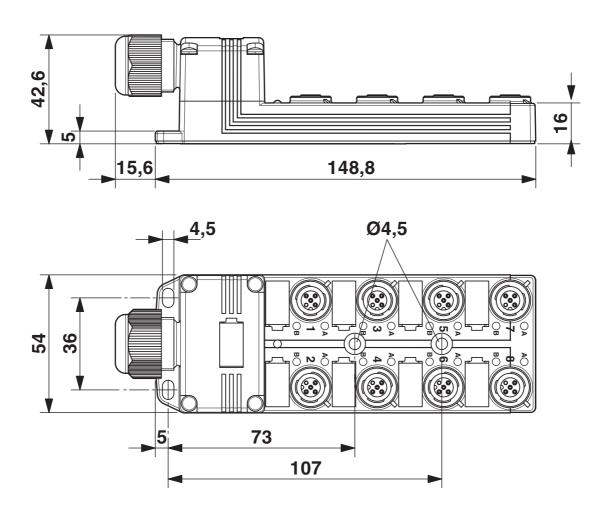


1452851

https://www.phoenixcontact.com/us/products/1452851

Drawings

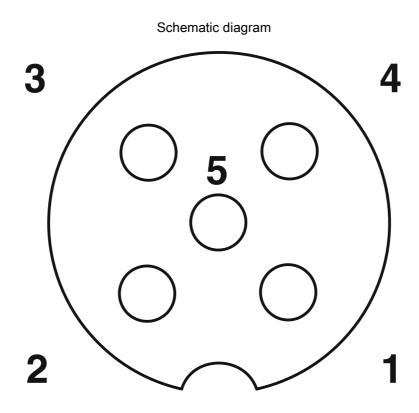
Dimensional drawing





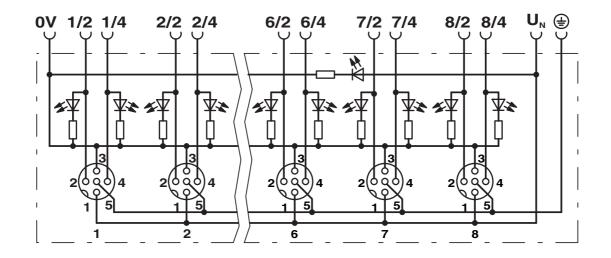
1452851

https://www.phoenixcontact.com/us/products/1452851



M12 slot, socket, 5-pos.

Circuit diagram





1452851

https://www.phoenixcontact.com/us/products/1452851

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1452851

. 51 1	cUL Recognized Approval ID: FILE E 118976				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		24 V	-	-	-

71	UL Recognized Approval ID: FILE E 118976				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		24 V	-	-	-

cULus Recognized



1452851

https://www.phoenixcontact.com/us/products/1452851

Classifications

ECLASS

	ECLASS-11.0	27440111
	ECLASS-12.0	27440111
	ECLASS-13.0	27440111
ETIM		
	ETIM 9.0	EC003558
UNSPSC		
	UNSPSC 21.0	31251500



1452851

https://www.phoenixcontact.com/us/products/1452851

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%



1452851

https://www.phoenixcontact.com/us/products/1452851

Accessories

SACB-16X0,5/3X1,0-50,0 PUR - Master cable ring

1503373

https://www.phoenixcontact.com/us/products/1503373



Master cable for sensor/actuator boxes, with PE conductor, unshielded, material PUR/PP, 19-pos., $16 \times 0.50 \text{ mm}^2$ and $3 \times 1.00 \text{ mm}^2$, length: 50 m

SACB-16X0,5/3X1,0-200,0 PUR - Master cable ring

1559893

https://www.phoenixcontact.com/us/products/1559893



Master cable for sensor/actuator boxes, with PE conductor, unshielded, material PUR/PP, 19-pos., $16 \times 0.50 \text{ mm}^2$ and $3 \times 1.00 \text{ mm}^2$, length: 200 m on drum



1452851

https://www.phoenixcontact.com/us/products/1452851

SACB-16X0,5/ 3X1,0-50,0 VPUR - Master cable ring

1430938

https://www.phoenixcontact.com/us/products/1430938



Master cable for sensor/actuator boxes, with PE conductor, unshielded, material PUR/PP, 19-pos., 16 x 0.50 $\,\text{mm}^2$ and 3 x 1.00 $\,\text{mm}^2$, length: 50 m

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



1452851

https://www.phoenixcontact.com/us/products/1452851

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

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

0828238

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





1452851

https://www.phoenixcontact.com/us/products/1452851

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

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





1452851

https://www.phoenixcontact.com/us/products/1452851

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

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



1452851

https://www.phoenixcontact.com/us/products/1452851

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

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





1452851

https://www.phoenixcontact.com/us/products/1452851

UTA 136 - DIN rail adapter

2853996

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

Universal DIN rail adapter, for screwing on switchgear



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



1452851

https://www.phoenixcontact.com/us/products/1452851

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

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



1452851

https://www.phoenixcontact.com/us/products/1452851

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

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





1452851

https://www.phoenixcontact.com/us/products/1452851

SZK PZ2 VDE - Screwdriver

1206463

https://www.phoenixcontact.com/us/products/1206463



Screwdriver, PZ crosshead, VDE insulated, size: PZ 2 x 100 mm, 2-component grip, with non-slip grip

TSD 25 SAC - Torque screwdriver

1212315

https://www.phoenixcontact.com/us/products/1212315



Torque screwdriver, with preset torque of 2.5 Nm and 4 mm hexagonal drive for the pressure nut of the connector hood



1452851

https://www.phoenixcontact.com/us/products/1452851

TSD-M 3NM - Torque screwdriver

1212225

https://www.phoenixcontact.com/us/products/1212225



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 1. 2 - 3 Nm

SAC BIT HOOD-W 24 - Tool

1212486

https://www.phoenixcontact.com/us/products/1212486

Nut for assembling pressure nuts with 24 mm wrench size, for 4 mm hexagonal drive





1452851

https://www.phoenixcontact.com/us/products/1452851

SF-BIT-PZ 2-50 - Screw insert

1212592

https://www.phoenixcontact.com/us/products/1212592



Screw bit, PZ crosshead, E6.3-1/4" drive, size: PZ 2 x 50 mm, hardened, suitable for holder according to DIN 3126-F6.3/ISO 1173

SZS 0,4X2,5 VDE - Screwdriver

1205037

https://www.phoenixcontact.com/us/products/1205037



Screwdriver, slot-headed, VDE insulated, size: $0.4 \times 2.5 \times 80$ mm, 2-component grip, with non-slip grip



1452851

https://www.phoenixcontact.com/us/products/1452851

SF-BIT-SL 0,45X2,4-70 - Screw insert

1212607

https://www.phoenixcontact.com/us/products/1212607



Screw bit, slotted, E6.3-1/4" drive, size: $0.45 \times 2.4 \times 70$ mm, hardened, suitable for holder according to DIN 3126-F6.3/ISO 1173

SF-M BH - Screwdriver

1212070

https://www.phoenixcontact.com/us/products/1212070



Bit screwdriver, with 1/4" quick-action chuck, handle length 119 mm, 2-component handle, with non-slip grip, suitable for bits according to DIN 3126-C 6.3 and E 6.3/ISO 1173, magnetic

Phoenix Contact 2024 © - all rights reserved https://www.phoenixcontact.com

Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com