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Sensor/actuator box, application: Standard, connection method: M12-SPEEDCON-socket Metal, number of slots: 4, number of positions: 5, coding: A - standard, slot assignment: Double, status display: No, Universal; master cable connection: Pluggable screw connection 180°, shielding: no

### Why buy this product

- Safety in the field, thanks to molded housing and high degree of protection
- Flexible, distributed bundling of signals in one master cable
- 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



## Key Commercial Data

Packing unit	1 STK
GTIN	4 017918 967581
GTIN	4017918967581
Weight per Piece (excluding packing)	259.500 g
Custom tariff number	85366990
Country of origin	Poland

## Technical data

### General

Rated voltage	120 V
Max. operating voltage U <sub>max</sub>	135 V
Current carrying capacity per I/O signal	2 A
Current carrying capacity per slot	4 A
Total rated current	10 A



# Technical data

#### General

	2x 8 A (For electrical isolation)
Number of positions	5
Number of slots	4
Flammability rating according to UL 94	V0
Sensor/actuator connection system	M12-SPEEDCON-socket

#### Ambient conditions

Degree of protection	IP65
	IP67
	IP69K
Ambient temperature (operation)	-30 °C 80 °C

### Master cable data/connection data

Connection method	Pluggable screw connection
Conductor cross section min. (signal)	0.14 mm <sup>2</sup>
Conductor cross section max. (signal)	1.5 mm <sup>2</sup>
Conductor cross section AWG min. (signal)	26
Conductor cross section AWG max. (signal)	16
Stripping length (signal)	7 mm
Conductor cross section min. (energy)	0.14 mm <sup>2</sup>
Conductor cross section max. (energy)	1.5 mm <sup>2</sup>
Conductor cross section AWG min. (energy)	26
Conductor cross section AWG max. (energy)	16
External cable diameter min.	7 mm
External cable diameter max.	12 mm
Stripping length	50 mm (Master cable)
Tightening torque, cover screw	0.35 Nm
Tightening torque, union nut	2.5 Nm
Tightening torque slot sensor/actuator cable	0.4 Nm
Tightening torque of mounting screw for fixing the housing	0.5 Nm

#### Insulation material

Housing material	РВТ
Material of the moulding mass	PUR
Contact material	Cu alloy
Contact surface material	gold-plated
Contact carrier material	РА
Material of contact, master cable side	CU alloy
Material of contact surface, master cable side	Gold-plated



# Technical data

#### Insulation material

Material of the contact carrier on the master cable side	PA 6.6 V0
Material of threaded sleeve	Zinc die-cast
Material of threaded sleeve surface	Nickel-plated
O-ring material	NBR

### Pin assignment

Slot/position = Wire color or connection	1 / 4 (A) = 1 / 4
	1 / 2 (B) = 1 / 2
	2 / 4 (A) = 2 / 4
	2 / 2 (B) = 2 / 2
	3 / 4 (A) = 3 / 4
	3 / 2 (B) = 3 / 2
	4 / 4 (A) = 4 / 4
	4 / 2 (B) = 4 / 2
	1-4 / 1 (+ 120 V) = U <sub>N</sub>
	1-4 / 3 (0 V) = 0 V
	1-4 / 5 (PE) = PE

### Standards and Regulations

Standard designation	M12 connector
Standards/regulations	IEC 61076-2-101
Connection in acc. with standard	CUL
Flammability rating according to UL 94	V0

## **Environmental Product Compliance**

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

# Drawings

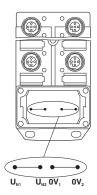


### Schematic diagram



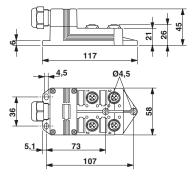
M12 slot, socket, 5-pos.

#### Schematic diagram

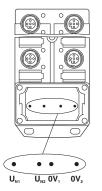


Potential  $U_{\text{N1}}$  and  $U_{\text{N2}}$  bridged. Potential assignment:  $U_{\text{N1}}$  =  $U_{\text{N2}}$  = slots 1,2,3,4.

#### Dimensional drawing

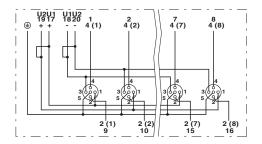


Schematic diagram



Electrically isolated. Potential assignment:  $U_{N1}$  = slots 1,3 and  $U_{N2}$  = slots 2,4.

#### Circuit diagram



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# Classifications

### eCl@ss

eCl@ss 4.0	27140815
eCl@ss 4.1	27140815
eCl@ss 5.0	27143423
eCl@ss 5.1	27143423
eCl@ss 6.0	27143423
eCl@ss 7.0	27449001
eCl@ss 8.0	27279219
eCl@ss 9.0	27440108

## ETIM

ETIM 2.0	EC000200
ETIM 3.0	EC001856
ETIM 4.0	EC002585
ETIM 5.0	EC002585
ETIM 6.0	EC002585

### UNSPSC

UNSPSC 6.01	31261501
UNSPSC 7.0901	31261501
UNSPSC 11	31261501
UNSPSC 12.01	31261501
UNSPSC 13.2	31251501

## Approvals

### Approvals

#### Approvals

UL Recognized / cUL Recognized / EAC / EAC / cULus Recognized

#### Ex Approvals

### Approval details



# Approvals

Γ

UL Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 11	
Nominal current IN	3 A	
Nominal voltage UN	120 V	

cUL Recognized	http://database.ul.co	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 118976	
Nominal current IN		3 A	
Nominal voltage UN		120 V	

EAC	EAC-Zulassung
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EAC	RU C- DE.Al30.B.01102
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cULus Recognized

http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm

### Accessories

Accessories

Cable by the meter

Master cable ring - SACB- 8X0,5/ 3X1,0-50,0 PUR - 1503357



Master cable for sensor/actuator boxes, with PE conductor, unshielded, material PUR/PVC, 11-pos., 8 x 0.50 mm<sup>2</sup> and 3 x 1.00 mm<sup>2</sup>, length: 50 m

Connector hood without master cable

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### Accessories

Connector hood - SACB-C-H180 8/16 SCO - 1516713



Connector hood with an integrated connector, for M12 sensor/actuator boxes with metal thread and pluggable screw connection, for 4, 6 or 8 slots

#### Device marking

Snap-in markers - UC-EM (17,5X9) - 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 into marker carrier, lettering field size: 17.5 x 9 mm

Snap-in markers - UCT-EM (17,5X9) - 0801491



Snap-in markers, Sheet, white, unlabeled, can be labeled with: THERMOMARK PRIME, THERMOMARK CARD, BLUEMARK ID, BLUEMARK ID COLOR, BLUEMARK CLED, BLUEMARK LED, TOPMARK NEO, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm

#### Snap-in markers - UC-EM (17,5X9) YE - 0827494



Snap-in markers, Sheet, yellow, unlabeled, can be labeled with: BLUEMARK ID, BLUEMARK ID COLOR, BLUEMARK CLED, BLUEMARK LED, CMS-P1-PLOTTER, PLOTMARK, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm

Snap-in markers - UCT-EM (17,5X9) YE - 0801492



Snap-in markers, Sheet, yellow, unlabeled, can be labeled with: THERMOMARK PRIME, THERMOMARK CARD, BLUEMARK ID, BLUEMARK ID COLOR, BLUEMARK CLED, BLUEMARK LED, TOPMARK NEO, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm



## Accessories

Labeled device marker

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

#### Snap-in markers - UCT-EM (17,5X9) CUS - 0801575



UniCard sheet, for labeling devices from other manufacturers, for overview table see download area, labeled according to customer specifications

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

Snap-in markers - UCT-EM (17,5X9) YE CUS - 0801576



UniCard sheet, for labeling devices from other manufacturers, for overview table see download area, labeled according to customer specifications

Mounting rail adapter

Electronic housing - UTA 107 - 2853983

Universal DIN rail adapter



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### Accessories

#### Protective cap

Screw plug - PROT-MS SCO - 1553129



M12 screw plug with SPEEDCON quick locking for unoccupied M12 sockets of the sensor/actuator cables, boxes and flush-type connectors

#### Screwdriver tools

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600

Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

#### Tool - SAC BIT M12-D15 - 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 - SACC BIT M12-D20 - 1208445



Nut for assembling M12 connectors for assembly with a knurl diameter of 20 mm, for 4 mm hexagonal drive



## Accessories

Philips screwdriver - SZK PZ1 VDE - 1206450



Screwdriver, PZ crosshead, VDE insulated, size: PZ 1 x 80 mm, 2-component grip, with non-slip grip

#### Tool - SAC BIT HOOD-W 24 - 1212486

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



Screw insert - SF-BIT-PZ 1-50 - 1212591



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

Torque tool

Torque screwdriver - TSD 04 SAC - 1208429



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

Torque screwdriver - TSD-M 1,2NM - 1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

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### Accessories

Torque screwdriver - TSD 25 SAC - 1212315



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

Torque screwdriver - TSD-M 3NM - 1212225



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

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