

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's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



Sensor/actuator box, application: Standard, connection method: M12-SPEEDCON-socket Plastic, number of slots: 6, number of positions: 5, coding: A - standard, slot assignment: Double, status display: No, Universal; master cable connection: Spring-cage connection 180°, shielding: no

Figure shows version with diagnostic and status indicator

#### Your advantages

- Safety in the field, thanks to molded housing and high degree of protection
- Flexible, distributed bundling of signals in one master cable
- 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 pc
GTIN	4 0 4 6 3 5 6 5 5 3 5 7 5
GTIN	4046356553575
Weight per Piece (excluding packing)	180.000 g
Custom tariff number	85366990
Country of origin	Poland

## Technical data

#### General

Rated voltage	120 V AC
	120 V DC
Current carrying capacity per I/O signal	2 A
Current carrying capacity per slot	4 A

07/29/2019 Page 1 / 11



## Technical data

#### General

Total rated current	12 A
Number of positions	5
Number of slots	6
Flammability rating according to UL 94	V0
Sensor/actuator connection system	M12-SPEEDCON-socket
Note	When connecting the signal lines to the black PCB terminal blocks, please use a 0.4 x 2.0 mm screwdriver. The black PCB terminal blocks only require a minimal amount of operating force. Screwdriver: SZS 0,4X2,0 - 1205202 Using larger screwdrivers or excessive force may damage the PCB terminal blocks. When using ferrules, the wires can be inserted straight into the PCB terminal blocks without opening the clamping area.
	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.
	Unused slots are to be sealed off prior to commissioning. Suitable sealing elements are to be found under "Accessories".

#### Ambient conditions

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

### Master cable data/connection data

Connection method	Spring-cage connection
Conductor cross section min. (signal)	0.2 mm <sup>2</sup>
Conductor cross section max. (signal)	0.5 mm <sup>2</sup>
Conductor cross section AWG min. (signal)	24
Conductor cross section AWG max. (signal)	20
Stripping length (signal)	6 mm
Conductor cross section min. (energy)	0.2 mm <sup>2</sup>
Conductor cross section max. (energy)	1.5 mm <sup>2</sup>
Conductor cross section AWG min. (energy)	24
Conductor cross section AWG max. (energy)	16
Stripping length (power)	10 mm
External cable diameter min.	7 mm
External cable diameter max.	12 mm
Stripping length	50 mm (Master cable)
Tightening torque, cover screw	1 Nm



## Technical data

#### Master cable data/connection data

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	PA
Material of threaded sleeve	РВТ
O-ring material	NBR
Sealing material	NBR (Connector hood)

#### Pin assignment

Slot/position = Wire color or connection	1 / 4 (A) = WH	
	1 / 2 (B) = GY/PK	
	2 / 4 (A) = GN	
	2 / 2 (B) = RD/BU	
	3 / 4 (A) = YE	
	3 / 2 (B) = WH/GN	
	4 / 4 (A) = GY	
	4 / 2 (B) = BN/GN	
	5 / 4 (A) = PK	
	5 / 2 (B) = WH/YE	
	6 / 4 (A) = RD	
	6 / 2 (B) = YE/BN	
	1-6 / 1 (+ 120 V) = BN	
	1-6 / 3 (0 V) = BU	
	1-6 / 5 (PE) = GN/YE	

## 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**

REACh SVHC	Lead 7439-92-1



## Technical data

### **Environmental Product Compliance**

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

## Classifications

#### eCl@ss

eCl@ss 4.0	27140815
eCl@ss 4.1	27140815
eCl@ss 5.0	27143423
eCl@ss 5.1	27250300
eCl@ss 6.0	27279200
eCl@ss 7.0	27279219
eCl@ss 8.0	27279219
eCl@ss 9.0	27440108

### ETIM

ETIM 4.0	EC002585
ETIM 5.0	EC002585
ETIM 6.0	EC002585
ETIM 7.0	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 / cULus Recognized

Ex Approvals



Approvals

Approval details

UL Recognized	17	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 118976		FILE E 118976
Nominal voltage UN			120 V	

Nominal voltage UN 120 V	cUL Recognized	c <b>Al</b>	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 118976		FILE E 118976
Nominal voltage UN 120 V					
	Nominal voltage UN			120 V	

EAC	ERE	RU C- DE.AI30.B.01102
-----	-----	--------------------------

cULus Recognized



## Accessories

Г

Accessories

Cable by the meter

Master cable ring - SACB-12X0,5/ 3X1,0-50,0 PUR - 1503360



Master cable for sensor/actuator boxes, with PE conductor, unshielded, material PUR/PVC, 15-pos.,  $12 \times 0.50 \text{ mm}^2$  and  $3 \times 1.00 \text{ mm}^2$ , length: 50 m

Cable end sleeve



## Accessories

Ferrule - A 0,5 - 6 - 3200218



Ferrule, length: 6 mm, color: silver

#### Ferrule - A 0,75-10 - 3200234



Ferrule, length: 10 mm, color: silver

#### Ferrule - A 1 - 10 - 3200250



Ferrule, length: 10 mm, color: silver

Ferrule - A 1,5 -10 - 3200276



Ferrule, length: 10 mm, color: silver

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

07/29/2019 Page 6 / 11



## Accessories

Snap-in markers - UCT-EM (17,5X9) - 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 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 COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, 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: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snapped into marker carrier, lettering field size: 17.5 x 9 mm

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

07/29/2019 Page 7 / 11



## Accessories

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

DIN rail adapter - UTA 107 - 2853983

Universal DIN rail adapter



Protective cap

Screw plug - PROT-MS SCO - 1553129



Screwdriver tools

07/29/2019 Page 8 / 11



### Accessories

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

Philips screwdriver - SZK PZ2 VDE - 1206463



Screwdriver, PZ crosshead, VDE insulated, size: PZ 2 x 100 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



07/29/2019 Page 9 / 11



## Accessories

Screw insert - SF-BIT-PZ 2-50 - 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

Screwdriver - SZS 0,4X2,0 - 1205202

Micro screwdriver, bladed, size: 0.4 x 2.0 x 60 mm, 2-component grip, with non-slip grip and twist cap

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

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



## Accessories

Torque screwdriver - TSD-M 3NM - 1212225



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

Phoenix Contact 2019 © - all rights reserved http://www.phoenixcontact.com