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Sensor/actuator box, Application: Standard, Connection method: M12-SPEEDCON-socket Plastic, Number of slots: 6, Number of positions: 4, Slot assignment: Single, Status indication: Yes, pnp; Master cable connection: Fixed connection 180°, PUR/PVC, Cable length: 10 m, Shielding: No

#### Product Features

- ${\ensuremath{\,^{\scriptstyle\blacksquare}}}$  Safety in the field, thanks to molded housing and high degree of protection
- Flexible, distributed bundling of signals in one master cable
- Convenient: increased machine availability thanks to quick and easy diagnostics
- Save time, thanks to installation with SPEEDCON fast locking system



### Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	1160.0 GRM
Custom tariff number	85444290
Country of origin	Poland

## Technical data

#### General

Rated voltage	24 V DC
Max. operating voltage U <sub>max</sub>	30 V DC
Current carrying capacity per I/O signal	2 A
Current carrying capacity per slot	4 A
Total rated current	12 A
Number of positions	4
Number of slots	6
Sensor/actuator connection system	M12-SPEEDCON-socket
Ambient conditions	

# Degree of protection IP65



# Technical data

#### Ambient conditions

	IP67
Ambient temperature (operation)	-25 °C 80 °C
	-40 °C 90 °C (for fixed installation)
	-5 °C 80 °C (for flexible installation)

### Local diagnostics function

Local diagnostics	Supply voltage Green LED
	Status display I/O Yellow LED

### Master cable connection data

Connection method	Fixed connection
Length of cable	10 m
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 threaded sleeve	РВТ
Material, O-ring	NBR

### Pin assignment

Slot/position = Wire color or connection	1 / 4 (A) = WH
	2 / 4 (A) = GN
	3 / 4 (A) = YE
	4 / 4 (A) = GY
	5 / 4 (A) = PK
	6 / 4 (A) = RD
	1-6 / 1 (+ 24 V) = BN
	1-6 / 3 (0 V) = BU
	1-6 / 5 (PE) = GN/YE

### Cable

Cable type	PUR/PVC black
Cable type (abbreviation)	PUR
Cable abbreviation	LiYY11Y-HF
UL AWM style	20549



# Technical data

Cable

Conductor cross section	6x 0.34 mm² (signal line)
	3x 0.75 mm <sup>2</sup> (power line)
AWG signal line	22
AWG power supply	18
Conductor structure signal line	19x 0.15 mm
Conductor structure, voltage supply	42x 0.15 mm
Core diameter including insulation	1.3 mm ±0.1 mm (signal line)
	1.8 mm ±0.1 mm (power line)
Thickness, insulation	$\geq$ 0.15 mm (Inner sheath)
	$\geq$ 0.38 mm (Outer cable sheath)
Overall twist	Wires twisted in layers
External sheath, color	Black RAL 9005
External cable diameter D	8 mm ±0.2 mm
Minimum bending radius, fixed installation	7.5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	1500000
Bending radius	80 mm
Traversing path	2 m
Traversing rate	2 m/s
Cable weight	96.6 kg/km
Outer sheath, material	PUR
Material, inner sheath	PVC
Material conductor insulation	PVC
Conductor material	Bare Cu litz wires
Nominal voltage, cable	300 V
Test voltage, cable	2000 V
Special properties	Silicone-free
Flame resistance	DIN EN 50265
Resistance to oil	As per VDE 0472 Part 803
Other resistance	Highly resistant to acids, alkaline solutions and solvents
Ambient temperature (operation)	-40 °C 90 °C (cable, fixed installation)
	-5 °C 80 °C (cable, flexible installation)

# Classifications

eCl@ss

eCl@ss 4.0	27140815
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# Classifications

### eCl@ss

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

## ETIM

ETIM 4.0	EC002585
ETIM 5.0	EC002585

### UNSPSC

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

# Approvals

Approvals

#### Approvals

UL Recognized / cUL Recognized / GOST / cULus Recognized

Ex Approvals

Approvals submitted

### Approval details

Nominal voltage UN	24 V	

10/10/2014 Page 4 / 8



## Approvals

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Nominal voltage UN	24 V

GOST 📀

cULus Recognized

### Accessories

Accessories

Device marking

Contactor marker - zack marker strip - SS-ZB 17,5 WH - 0804963



Contactor marker – zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, Lettering field: 17.5 x 9 mm

Contactor marker - zack marker strip - SS-ZB 17,5 YE - 0804976



Contactor marker – zack marker strip, Strip, yellow, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, Lettering field: 17.5 x 9 mm

Labeled device marker



## Accessories

Contactor marker - zack marker strip - SS-ZB 17,5 WH CUS - 0824468



Contactor marker – zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, Mounting type: Snap into flat marker groove, Lettering field: 17.5 x 9 mm

Contactor marker - zack marker strip - SS-ZB 17,5 YE CUS - 0824469



Contactor marker – zack marker strip, can be ordered: Strip, yellow, labeled according to customer specifications, Mounting type: Snap into flat marker groove, Lettering field: 17.5 x 9 mm

#### Mounting rail adapter

Assembly adapters - UTA 107 - 2853983

Universal DIN rail adapter



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



## 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 for M12 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive

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



Nut for assembling SACC M12 connectors for free assembly, excluding M12 connectors with QUICKON fast connection technology, for 4 mm hexagonal drive

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

10/10/2014 Page 7 / 8



# Drawings

Schematic diagram



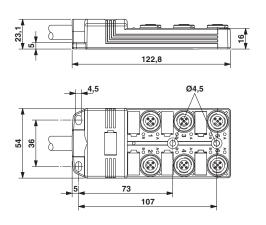
M12 slot, socket, 4-pos.

Cable cross section

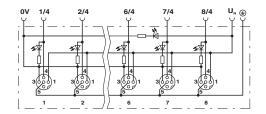


PUR/PVC black [PUR]

Dimensioned drawing



Circuit diagram



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