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Sensor/actuator box, Connection method: M12-SPEEDCON-socket Metal, Number of slots: 6, Number of positions: 5, Slot assignment: Double, Status indication: Yes, pnp; Master cable connection: Fixed connection 180°, PUR/PVC, Cable length: 10 m, Shielding: No

#### **Product Features**

- 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 space: distributor box with double occupancy for two sensors in one slot
- ☑ Save time, thanks to installation with SPEEDCON fast locking system



### Key commercial data

Packing unit	1 PCE
Weight per Piece (excluding packing)	2111.1 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	5
Number of slots	6
Inflammability class according to UL 94	V0
Sensor/actuator connection system	M12-SPEEDCON-socket



# Technical data

### Ambient conditions

Degree of protection	IP65
	IP67
	IP69K
Ambient temperature (operation)	-30 °C 90 °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

#### Insulation material

Housing material	PBT
Material of the moulding mass	PUR
Contact material	Cu alloy
Contact surface material	Gold-plated
Contact carrier material	PA
Material of threaded sleeve	Zinc die-cast
Material of threaded sleeve surface	Nickel-plated
Material, O-ring	NBR

### 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



# Technical data

## Pin assignment

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
Conductor cross section	12x 0.5 mm² (signal line)
	3x 1 mm² (power line)
AWG signal line	20
AWG power supply	17
Conductor structure signal line	28x 0.15 mm
Conductor structure, voltage supply	56x 0.15 mm
Core diameter including insulation	1.5 mm ±0.1 mm (signal line)
	2.1 mm ±0.1 mm (power line)
Thickness, insulation	≥ 0.15 mm (Inner sheath)
	≥ 0.76 mm (Outer cable sheath)
Overall twist	Wires twisted in layers
External sheath, color	Black RAL 9005
External cable diameter D	9.4 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	94 mm
Traversing path	2 m
Traversing rate	2 m/s
Cable weight	150.9 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



## Technical data

### Cable

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
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	27449001

#### **ETIM**

ETIM 2.0	EC000200
ETIM 3.0	EC001856
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

Approvals submitted

### Approval details

UL Recognized <b>\$\)</b>		
Nominal current IN	3 A	
Nominal voltage UN	24 V	

cUL Recognized		
Nominal current IN	3 A	
Nominal voltage UN	24 V	

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GOST	

cULus Recognized c Sus

#### 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 8 mm

Protective cap



#### Accessories

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

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

## **Drawings**



### Schematic diagram



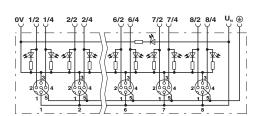
M12 slot, socket, 5-pos.

Cable cross section

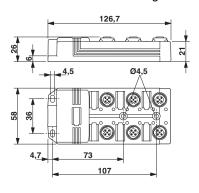


PUR/PVC black [PUR]

Circuit diagram



## Dimensioned drawing



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