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Sensor/actuator box, Connection method: M12-SPEEDCON-socket Metal, Number of slots: 4, 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**

- 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 PCE
Weight per Piece (excluding packing)	980.0 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	4
Inflammability class according to UL 94	V0
Sensor/actuator connection system	M12-SPEEDCON-socket

#### Ambient conditions



# 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
Tightening torque of mounting screw for fixing the housing	0.5 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
	2 / 4 (A) = GN
	3 / 4 (A) = YE
	4 / 4 (A) = GY
	1-4 / 1 (+ 24 V) = BN
	1-4 / 3 (0 V) = BU
	1-4 / 5 (PE) = GN/YE

## Cable

Cable type	PUR/PVC black
Cable type (abbreviation)	PUR
Cable abbreviation	LiYY11Y-HF



# Technical data

## Cable

UL AWM style	20549
Conductor cross section	4x 0.34 mm² (signal line)
	3x 0.75 mm² (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	≥ 0.15 mm (Inner sheath)
	≥ 0.38 mm (Outer cable sheath)
Overall twist	Wires twisted in layers
External sheath, color	Black RAL 9005
External cable diameter D	6.9 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	69 mm
Traversing path	2 m
Traversing rate	2 m/s
Cable weight	77.9 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
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

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Approvals

UL Recognized / cUL Recognized / GOST / cULus Recognized

Ex Approvals

Approvals submitted

## Approval details



# Approvals

UL Recognized <b>5</b>	
Nominal current IN	3 A
Nominal voltage UN	24 V

cUL Recognized <b>31</b>	
Nominal current IN	3 A
Nominal voltage UN	24 V

GOST 🖭			

cULus Recognized • 9 Us		

## 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, 4-pos.

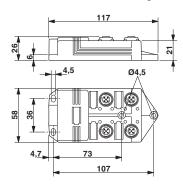
#### Cable cross section

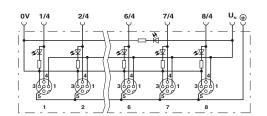


PUR/PVC black [PUR]

Circuit diagram

Dimensioned drawing





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