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Sensor/actuator box, application: Standard, connection method: M12-SPEEDCON-socket Metal, number of slots: 8, number of positions: 4, coding: A - standard, slot assignment: single, status display: yes, pnp; master cable connection: Fixed connection 180°, PUR/PVC, cable length: 10 m, shielding: no

Your advantages

- 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
GTIN	4 017918 967840
GTIN	4017918967840

Technical data

General

Rated voltage	24 V DC
Max. operating voltage U _{max}	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	8
Flammability rating according to UL 94	V0
Sensor/actuator connection system	M12-SPEEDCON-socket
Note	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.



Technical data

General

	Unused slots are to be sealed off prior to commissioning. Suitable sealing elements are to be found under "Accessories".
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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
O-ring material	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
	7 / 4 (A) = BK
	8 / 4 (A) = VT
	1-8 / 1 (+ 24 V) = BN
	1-8 / 3 (0 V) = BU
	1-8 / 5 (PE) = GN/YE



Technical data

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

Cable

Cable type	PUR/PVC black
Cable type (abbreviation)	PUR
Cable abbreviation	LiYY11Y-HF
UL AWM style	20549 (80°C/300 V)
Conductor cross section	8x 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)
Wire colors	brown, blue, green/yellow, white, green, yellow, gray, pink, red, black, violet
Overall twist	Wires twisted in layers
External sheath, color	black RAL 9005
Inner sheath thickness	≥ 0.15 mm
Outer sheath thickness	≥ 0.38 mm
External cable diameter D	8.5 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
Minimum bending radius, drag chain applications	10 x D
Traversing path	2 m
Traversing rate	2 m/s
Cable weight	107.4 kg/km
Outer sheath, material	PUR
Material, inner sheath	PVC
Material conductor insulation	PVC
Conductor material	Bare Cu litz wires
Insulation resistance	$\geq 5~\text{M}\Omega^*\text{km}$
Conductor resistance	\leq 53 Ω /km (Signal line)
	\leq 26 Ω /km (power line)
Nominal voltage, cable	300 V AC
Test voltage Core/Core	2000 V (50 Hz, 5 min.)



Technical data

Cable

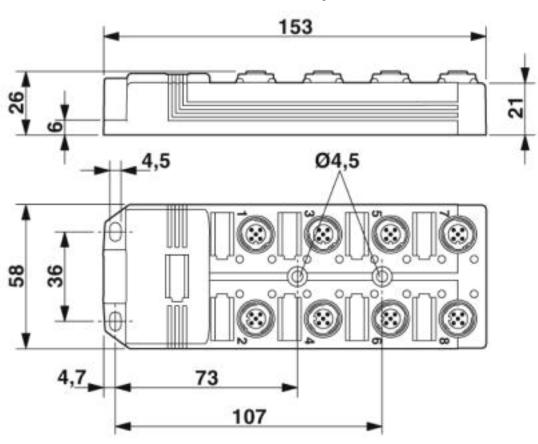
Special properties	Silicone-free
Flame resistance	DIN EN 50265
Resistance to oil	according to VDE 0472 Part 803
Other resistance	Highly resistant to acids, alkaline solutions and solvents
Ambient temperature (operation)	-40 °C 90 °C (cable, fixed installation)
	-5 °C 80 °C (cable, flexible installation)

Environmental Product Compliance

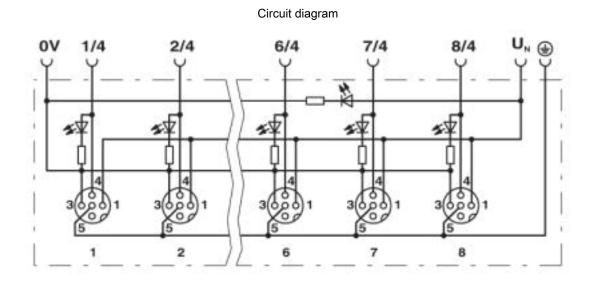
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Dimensional drawing

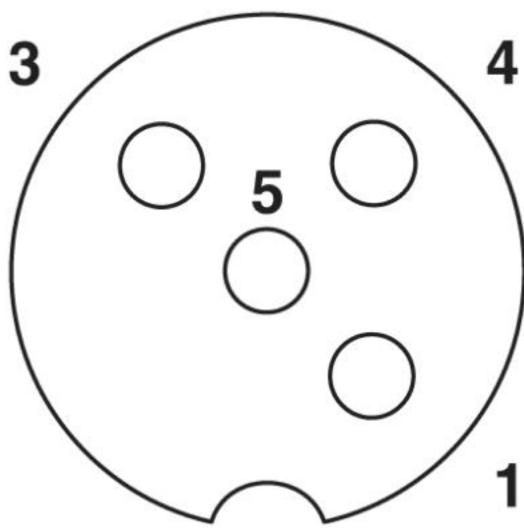








Schematic diagram



M12 slot, socket, 4-pos.



Cable cross section



PUR/PVC black [PUR]

Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / EAC / cULus Recognized

Ex Approvals

Approval details



Approvals

UL Recognized	<i>9</i> 1	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		FILE E 118976
Nominal voltage UN			24 V	
Nominal current IN			3 A	

cUL Recognized	.71 2°°	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		FILE E 118976
Nominal voltage UN			24 V	
Nominal current IN			3 A	

EAC	EAC	EAC-Zulassung
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cULus Recognized	c FL us		
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