

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Sensor/actuator box, application: Standard, connection method: M12-SPEEDCON-socket Metal, number of slots: 8, number of positions: 5, coding: A - standard, slot assignment: Double, status display: yes, pnp; master cable connection: Fixed connection 180°, PUR/PVC, cable length: 5 m, shielding: no

#### Why buy this product

- 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



### **Key Commercial Data**

Packing unit	1 STK
GTIN	4 017918 967857
GTIN	4017918967857

### 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	8
Flammability rating according to UL 94	V0
Sensor/actuator connection system	M12-SPEEDCON-socket

### Ambient conditions

Degree of protection	IP65



### Technical data

### Ambient conditions

	IP67
	IP69K
Ambient temperature (operation)	-30 °C 90 °C

### 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	5 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	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
	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
	7 / 4 (A) = BK
	7 / 2 (B) = WH/GY
	8 / 4 (A) = VT
	8 / 2 (B) = GY/BN
	1-8 / 1 (+ 24 V) = BN
	1-8 / 3 (0 V) = BU



### Technical data

### Pin assignment

Cable weight

Outer sheath, material

Material, inner sheath

Material conductor insulation

Conductor material

Test voltage, cable

Nominal voltage, cable

	1-8 / 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
Cable	<u>'</u>
Cable type	PUR/PVC black
Cable type (abbreviation)	PUR
Cable abbreviation	LiYY11Y-HF
UL AWM style	20549 (80°C/300 V)
Conductor cross section	16x 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)
Wire colors	brown, blue, green/yellow, white, green, yellow, gray, pink, red, black, violet, gray/pink, red/blue, white/green, brown/green, white/yellow, yellow/brown, white/gray, gray/brown
Overall twist	Wires twisted in layers
External sheath, color	black RAL 9005
Inner sheath thickness	≥ 0.15 mm
Outer sheath thickness	≥ 0.76 mm
External cable diameter D	10.5 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

183.7 kg/km

Bare Cu litz wires

PUR PVC

PVC

300 V 2000 V



### Technical data

### Cable

Special properties	Silicone-free	
Flame resistance	according to 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

Schematic diagram



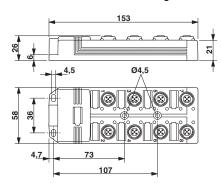
M12 slot, socket, 5-pos.

Cable cross section

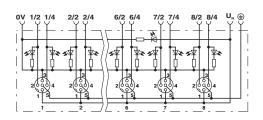


### PUR/PVC black [PUR]

Dimensional drawing



### Circuit diagram



### Approvals

### Approvals

Approvals

EAC / UL Recognized / cUL Recognized / cULus Recognized



Approvals			
Ex Approvals			
Approval details			
EAC	EAC		EAC-Zulassung
UL Recognized	<b>7.1</b>	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	. <b>71</b>	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	
		244	
Nominal voltage UN  Nominal current IN		24 V 3 A	
cULus Recognized	c <b>F11</b> us	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	

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