# imall

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!



## Contact us

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Sensor/actuator box, Connection method: M12 socket Plastic, Number of slots: 6, Number of positions: 5, Slot assignment: Double, Status indication: Yes, pnp; Master cable connection: Pluggable screw connection 90°, Shielding: No

The illustration shows a version with 8 slots

#### **Product Features**

- Safety in the field, thanks to robust 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
- ${\ensuremath{\,^{\scriptsize \ensuremath{\mathbb{M}}}}}$  Save space: distributor box with double occupancy for two sensors in one slot
- Flexible: distributor box with connector hood for on-site assembly



#### Key commercial data

Packing unit	1 PCE
Weight per Piece (excluding packing)	144.4 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	10 A
	2x 8 A (For electrical isolation)
Number of positions	5
Number of slots	6



#### Technical data

#### General

Inflammability class according to UL 94	V0
Sensor/actuator connection system	M12 socket
Ambient conditions	
Degree of protection	IP65
	IP67
Ambient temperature (operation)	-25 °C 75 °C
Local diagnostics function	
Local diagnostics	Supply voltage per module Green LED
	Status display I/O Yellow LED
Master cable data/connection data	
Connection method	Pluggable screw connection
Conductor cross section min. (signal)	0.14 mm <sup>2</sup>
Conductor cross section max. (signal)	1.5 mm <sup>2</sup>
Conductor cross section AWG min. (signal)	26
Conductor cross section AWG max. (signal)	16
Stripping length (signal)	7 mm
Conductor cross section min. (energy)	0.14 mm <sup>2</sup>
Conductor cross section max. (energy)	1.5 mm <sup>2</sup>
Conductor cross section AWG min. (energy)	26
Conductor cross section AWG max. (energy)	16
External cable diameter min.	7 mm
External cable diameter max.	12 mm
Tightening torque, union nut	2.5 Nm

#### Insulation material

Tightening torque slot sensor/actuator cable

Housing material	PA
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA
Material of contact, master cable side	CU alloy
Material of contact surface, master cable side	Sn
Material of the contact carrier on the master cable side	PA 66 V0
Material of threaded sleeve	PA
Material, O-ring	NBR

0.4 Nm

Pin assignment



#### Technical data

#### Pin assignment

Slot/position = Wire color or connection	1 / 4 (A) = 1 / 4
	1 / 2 (B) = 1 / 2
	2 / 4 (A) = 2 / 4
	2 / 2 (B) = 2 / 2
	3 / 4 (A) = 3 / 4
	3 / 2 (B) = 3 / 2
	4 / 4 (A) = 4 / 4
	4 / 2 (B) = 4 / 2
	5 / 4 (A) = 5 / 4
	5 / 2 (B) = 5 / 2
	6 / 4 (A) = 6 / 4
	6 / 2 (B) = 6 / 2
	$1-6 / 1 (+ 24 V) = U_N$
	1-6 / 3 (0 V) = 0 V
	1-6 / 5 (PE) = PE

### 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

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 submitted

#### Approval details

UL Recognized	
mm²/AWG/kcmil	22-16
Nominal voltage UN	24 V

mm²/AWG/kcmil	22-16
Nominal voltage UN	24 V

GOST CO cULus Recognized CNUS Accessories

Accessories

Cable by the meter



#### Accessories

Master cable ring - SACB-12X0,5/ 3X1,0-50,0 PUR - 1503360



Master cable for sensor/actuator boxes, with PE conductor, unshielded, material PUR/PVC, 15-pos., 12 x 0.50 mm<sup>2</sup> and 3 x 1.00 mm<sup>2</sup>, length: 50 m

#### Connector hood without master cable

Connector hood - SACB-C-H180 8/16 - 1695977



Connector hood with integrated connector, for M12 sensor/actuator boxes with plastic thread and plug-in screw connection, for 4, 6 or 8 slots

#### Device marking

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128



Zack marker strip, Strip, white, Unlabeled, Can be labeled with: Plotter, Mounting type: Snap into tall marker groove, For terminal block width: 18 mm, Lettering field: 18 x 5 mm

#### Protective cap

Screw plug - PROT-M12 - 1680539



An M12 screw plug for the unoccupied M12 sockets of the sensor/actuator cable, boxes and flush-type connectors

Screwdriver tools



#### Accessories

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

Philips screwdriver - SZK PZ2 VDE - 1206463



Screwdriver, PZ crosshead, VDE insulated, size: PZ 2 x 100 mm, 2-component grip, with non-slip grip

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

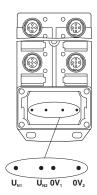


Schematic diagram



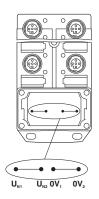
M12 slot, socket, 5-pos.

Schematic diagram



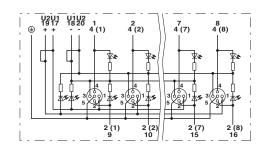
Electrically isolated. Potential assignment:  $U_{N1}$  = slots 1,3,5 and  $U_{N2}$  = slots 2,4,6.

#### Schematic diagram

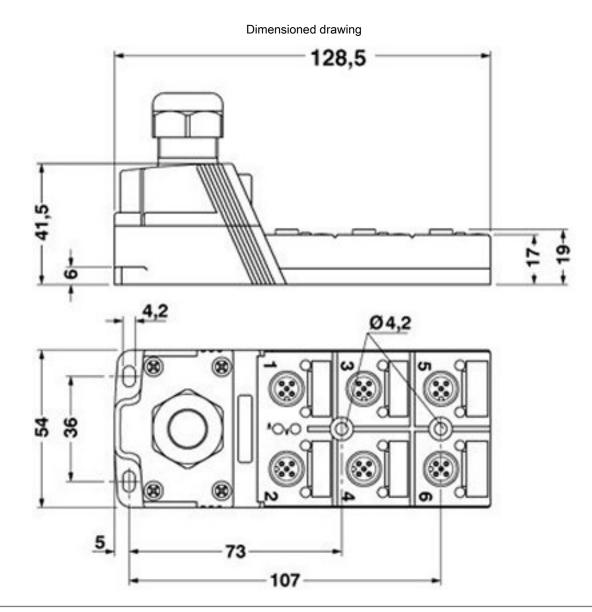


Potential  $U_{N1}$  and  $U_{N2}$  bridged. Potential assignment:  $U_{N1} = U_{N2}$  = slots 1,2,3,4,5,6.

#### Circuit diagram







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