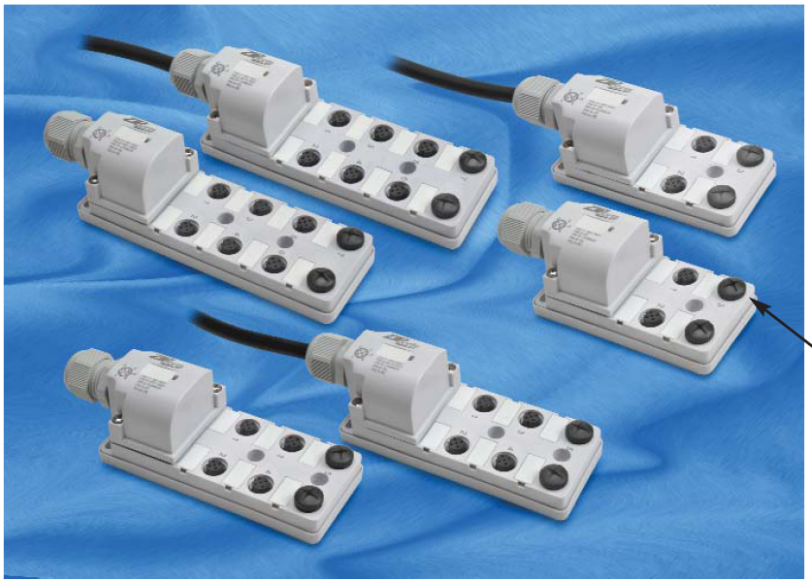
M12 Junction Blocks – Specifications



Note: 2 port caps for unused ports are included.

Overview

ZIPport multi-port interconnection junction blocks provide a simple and effective way to organize machine wiring for a variety of control systems, such as packaging equipment and conveying systems. These systems typically have many I/O points, such as sensors or solenoid-operated valves, consolidated in one location. Many times these devices are hardwired to a junction box or separately wired back to the main control cabinet. ZIPport multi-port junction blocks provide a more efficient and cost-effective solution: a main homerun control cable is run back to the main control cabinet, so the cost associated with errors in wiring, rewiring, and I/O replacement is greatly reduced. The designer can choose from a variety of circuit configurations in industry standard M12-style connection, in port configurations of 4-, 6- and 8-pole, with a choice of one I/O per port or two I/O per port.

ZIPport Junction Block Specifications		
Electrical Specifications		
Voltage Rating	Without LEDs: 0 to 150 V AC/DC max. With LEDs: 48 VDC max, in accordance with LED Configuration	
Current Rating	3 A per connector, 8 A per block	
Technical Specifications		
Agency Approvals	UL file E328610, RoHS compliant	
Degree of Protection	IP 67, with proper field wiring cable and all ports being used or covered with a protective cap.	
Operating Temperature Range	-20°C to +80°C (-4°F to 176°F)	
Material Specifications		
Body	Polypropylene	
Inserts	Polyamide	
Coupling Nuts	4, 6, and 8-Port: PBT	
Screws	Two m3x0.5x14 screws are used to assemble backshell.	
O-Ring	BUNA-N	
Cable Gland	M20x1.5	
Recommended Cable Diameters for Field Wireable	With inner grommet intact: • Max OD: 0.31" [7.9mm]. • Min OD: For PUR Cable 0.19" [4.8mm], For PVC Cable 0.17" [4.3mm]	With inner grommet removed: • Max OD: 0.49" [12.5mm]. • Min OD: For PUR Cable 0.28" [7.2mm], -For PVC cable 0.28" [7.2mm], -For SJT/SJE/ST/SE Cable 0.305" [7.75mm]
LED Lens	Polycarbonate	
Contacts	Copper Alloy with Gold Plating	
Marker Tags	Polyamide (supplied on all units)	
Accessories	2 port caps for unused ports included. Purchase additional caps (in packs of 5) separately.	

M12 Junction Blocks – Selection

ZP-JBH85-N2-5 shown

ZIPport M12 Series Selection Chart											
Part Number	**Price**	**Ports**	**Wire/ Pins**	**Indicating LEDs**	**I/O per Socket**	**Rating per Socket**	**Home Run Connection Type**	**Wiring**	**Pin Out Table**	**Dimensions**	**Accessories**
4 Port											
ZP-JBH44-00-FW	<--->	4	4/5	No LED	1	150V AC/DC max, 3 A	cable clamp for field wiring	Diagram 1-A	–	Figure 1	ZP-JBH-CAP CDP12-0B-010-AA CDP12-0B-030-AA CDP12-0B-010-BB CDP12-0B-030-BB
ZP-JBH44-2P-FW	<--->			PNP	1	48V DC max, 3 A	cable clamp for field wiring	Diagram 1-B	–	Figure 1	
ZP-JBH44-2N-FW	<--->			NPN	1	48V DC max, 3 A	cable clamp for field wiring	Diagram 1-C	–	Figure 1	
ZP-JBH44-00-5	<--->			No LED	1	150V AC/DC max, 3 A	5-meter integrated cable	Diagram 1-A	Table 1	Figure 1	
ZP-JBH44-2P-5	<--->			PNP	1	48V DC max, 3 A	5-meter integrated cable	Diagram 1-B	Table 1	Figure 1	
ZP-JBH44-2N-5	<--->			NPN	1	48V DC max, 3 A	5-meter integrated cable	Diagram 1-C	Table 1	Figure 1	
ZP-JBH45-00-FW	<--->		5/5	No LED	2	150V AC/DC max, 3 A	cable clamp for field wiring	Diagram 2-A	–	Figure 2	
ZP-JBH45-2P-FW	<--->			PNP	2	48V DC max, 3 A	cable clamp for field wiring	Diagram 2-B	–	Figure 2	
ZP-JBH45-2N-FW	<--->			NPN	2	48V DC max, 3 A	cable clamp for field wiring	Diagram 2-C	–	Figure 2	
ZP-JBH45-00-5	<--->			No LED	2	150V AC/DC max, 3 A	5-meter integrated cable	Diagram 2-A	Table 2	Figure 2	
ZP-JBH45-2P-5	<--->			PNP	2	48V DC max, 3 A	5-meter integrated cable	Diagram 2-B	Table 2	Figure 2	
ZP-JBH45-2N-5	<--->			NPN	2	48V DC max, 3 A	5-meter integrated cable	Diagram 2-C	Table 2	Figure 2	
6 Port											
ZP-JBH64-00-FW	<--->	6	4/5	No LED	1	150V AC/DC max, 3 A	cable clamp for field wiring	Diagram 3-A	–	Figure 3	ZP-JBH-CAP CDP12-0B-010-AA CDP12-0B-030-AA CDP12-0B-010-BB CDP12-0B-030-BB
ZP-JBH64-2P-FW	<--->			PNP	1	48V DC max, 3 A	cable clamp for field wiring	Diagram 3-B	–	Figure 3	
ZP-JBH64-2N-FW	<--->			NPN	1	48V DC max, 3 A	cable clamp for field wiring	Diagram 3-C	–	Figure 3	
ZP-JBH64-00-5	<--->			No LED	1	150V AC/DC max, 3 A	5-meter integrated cable	Diagram 3-A	Table 3	Figure 3	
ZP-JBH64-2P-5	<--->			PNP	1	48V DC max, 3 A	5-meter integrated cable	Diagram 3-B	Table 3	Figure 3	
ZP-JBH64-2N-5	<--->			NPN	1	48V DC max, 2 A	5-meter integrated cable	Diagram 3-C	Table 3	Figure 3	
ZP-JBH65-00-FW	<--->		5/5	No LED	2	150V AC/DC max, 3 A	cable clamp for field wiring	Diagram 4-A	–	Figure 4	
ZP-JBH65-2P-FW	<--->			PNP	2	48V DC max, 3 A	cable clamp for field wiring	Diagram 4-B	–	Figure 4	
ZP-JBH65-2N-FW	<--->			NPN	2	48V DC max, 3 A	cable clamp for field wiring	Diagram 4-C	–	Figure 4	
ZP-JBH65-00-5	<--->			No LED	2	150V AC/DC max, 3 A	5-meter integrated cable	Diagram 4-A	Table 4	Figure 4	
ZP-JBH65-2P-5	<--->			PNP	2	48V DC max, 3 A	5-meter integrated cable	Diagram 4-B	Table 4	Figure 4	
ZP-JBH65-2N-5	<--->			NPN	2	48V DC max, 3 A	5-meter integrated cable	Diagram 4-C	Table 4	Figure 4	
8 Port											
ZP-JBH84-00-FW	<--->	8	4/5	No LED	1	150V AC/DC max, 3 A	cable clamp for field wiring	Diagram 5-A	–	Figure 5	ZP-JBH-CAP CDP12-0B-010-AA CDP12-0B-030-AA CDP12-0B-010-BB CDP12-0B-030-BB
ZP-JBH84-2P-FW	<--->			PNP	1	48V DC max, 3 A	cable clamp for field wiring	Diagram 5-B	–	Figure 5	
ZP-JBH84-2N-FW	<--->			NPN	1	48V DC max, 3 A	cable clamp for field wiring	Diagram 5-C	–	Figure 5	
ZP-JBH84-00-5	<--->			No LED	1	150V AC/DC max, 3 A	5-meter integrated cable	Diagram 5-A	Table 5	Figure 5	
ZP-JBH84-2P-5	<--->			PNP	1	48V DC max, 3 A	5-meter integrated cable	Diagram 5-B	Table 5	Figure 5	
ZP-JBH84-2N-5	<--->			NPN	1	48V DC max, 3 A	5-meter integrated cable	Diagram 5-C	Table 5	Figure 5	
ZP-JBH85-00-FW	<--->		5/5	No LED	2	150V AC/DC max, 3 A	cable clamp for field wiring	Diagram 6-A	–	Figure 6	
ZP-JBH85-2P-FW	<--->			PNP	2	48V DC max, 3 A	cable clamp for field wiring	Diagram 6-B	–	Figure 6	
ZP-JBH85-2N-FW	<--->			NPN	2	48V DC max, 3 A	cable clamp for field wiring	Diagram 6-C	–	Figure 6	
ZP-JBH85-00-5	<--->			No LED	2	150V AC/DC max, 3 A	5-meter integrated cable	Diagram 6-A	Table 6	Figure 6	
ZP-JBH85-2P-5	<--->			PNP	2	48V DC max, 3 A	5-meter integrated cable	Diagram 6-B	Table 6	Figure 6	
ZP-JBH85-2N-5	<--->			NPN	2	48V DC max, 3 A	5-meter integrated cable	Diagram 6-C	Table 6	Figure 6	

Accessories					
Part Number	**Price**	**Pcs/Pkg**	**Description**		**Use With**
ZP-JBH-CAP	<--->	5	Protective cap for unused ports.		M12 ZipPort junction blocks