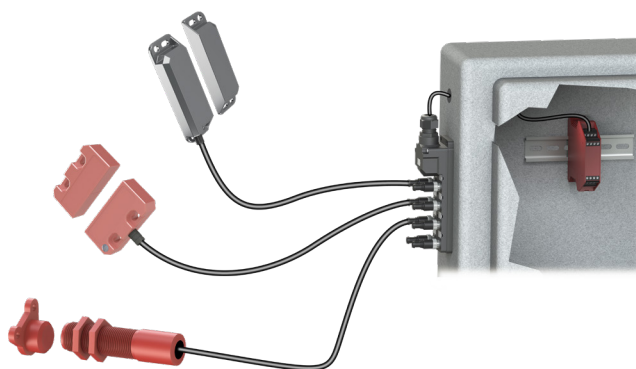


M12 Connection Box

For Use With Magnetic and RFID Coded Non-Contact Switches

**140210**

Features

- Allows you to connect up to eight switches in series to a single safety controller
- Configured for dual channel to a safety controller
- Shorting plugs must be inserted into all unused ports
- M20 conduit exit; M20 cable gland accepts cable OD 6.5-12.0 mm [0.26-0.47 in]

IDEM Junction Block Selection Chart

Part Number	Price	Description	Ports	Input Connections	Output Connection	Indicators
For use with IDEM coded and RFID switches only:						
140210	\$182.00	IDEM junction block for use with IDEM coded and RFID switches only	8	8-pin M12 sockets	Cable clamp for field-wired connection	24VDC LED
140207	\$31.50	Shorting plug, 8 pole, for use with IDEM coded and RFID connection blocks	—	—	—	—
For use with IDEM magnetic switches only:						
140213	\$182.00	IDEM junction block for use with IDEM magnetic switches only	8	8-pin M12 sockets	Cable clamp for field-wired connection	24VDC LED
140209	\$31.50	Shorting plug, 8-pole, for use with IDEM magnetic connection blocks	—	—	—	—

NOTE: The appropriate shorting plug must be inserted into all unused ports.

IDEM Junction Block Accessories Selection Chart

Part Number	Price	Description	Connection	Length	Cable Jacket
140201	\$42.50	Connection cable	8-pole M12 axial female to 8-pole M12 axial male	2m [6.56 ft]	Black PVC
140202	\$53.00	Connection cable	8-pole M12 axial female to 8-pole M12 axial male	5m [16.40 ft]	Black PVC
140203	\$63.00	Connection cable	8-pole M12 axial female to 8-pole M12 axial male	10m [32.81 ft]	Black PVC

**140201****140207**

M12 Connection Box Specifications	
Port Connection Type	8x8 pin M12 female sockets
Operating Temperature	-20 to +40°C [-4 to +104°F]
Supply Voltage	24VDC ±10%
Maximum Current	500mA
Body Material	Polyester
Internal Terminals	Screw type clamp for 16-30 AWG conductors
Cable Exit	M20 x 1.5 mm cable gland (M20 cable gland accepts cable OD 6.5 mm to 12.0 mm [0.26 in to 0.47 in])
Mounting	2xM4 bolts, 4.6 mm [0.18 in] diameter clearance holes
Accessory	Shorting plug for unused ports
LEDs (1-8)	Red, auxiliary indication of switch open

The schematic diagram illustrates a 2x2 LED matrix circuit. It features two 4-pin switches, labeled SWITCH 1 and SWITCH 8, each with pins numbered 1, 2, 3, 4, 5, 6, 7, and 8. The circuit is powered by a V+ supply at the top and a V- supply at the bottom. On the left side, there are four input lines: 1A, 2A, 2B, 1B, Y1, and Y8. On the right side, there are four input lines: 1A, 2A, 2B, 1B, Y1, and Y8. The circuit includes two LEDs, LED 1 and LED 8, connected to the V- supply. The connections are as follows: SWITCH 1 is connected to the V+ supply at pins 1, 2, 3, and 4. SWITCH 8 is connected to the V+ supply at pins 1, 2, 3, and 4. The output of SWITCH 1 (pins 5, 6, 7, and 8) is connected to the input lines 1A, 2A, 2B, and 1B. The output of SWITCH 8 (pins 5, 6, 7, and 8) is connected to the input lines 1A, 2A, 2B, and 1B. The input lines Y1 and Y8 are connected to the V- supply. The LEDs, LED 1 and LED 8, are connected to the V- supply at their cathodes and to the input lines Y1 and Y8 at their anodes.

The diagram shows a 2x2 LED matrix circuit. It features two 8-pin DIP switches, labeled SWITCH 1 and SWITCH 8. Each switch has pins numbered 1 through 8. The circuit is powered by V+ and ground. The output of SWITCH 1 is connected to LED 1, and the output of SWITCH 8 is connected to LED 8. The circuit also includes two input lines, 1A and 2A, and two output lines, 1B and 2B. The circuit is labeled with V+, 1A, 2A, SWITCH 1, SWITCH 8, LED 1, and LED 8.

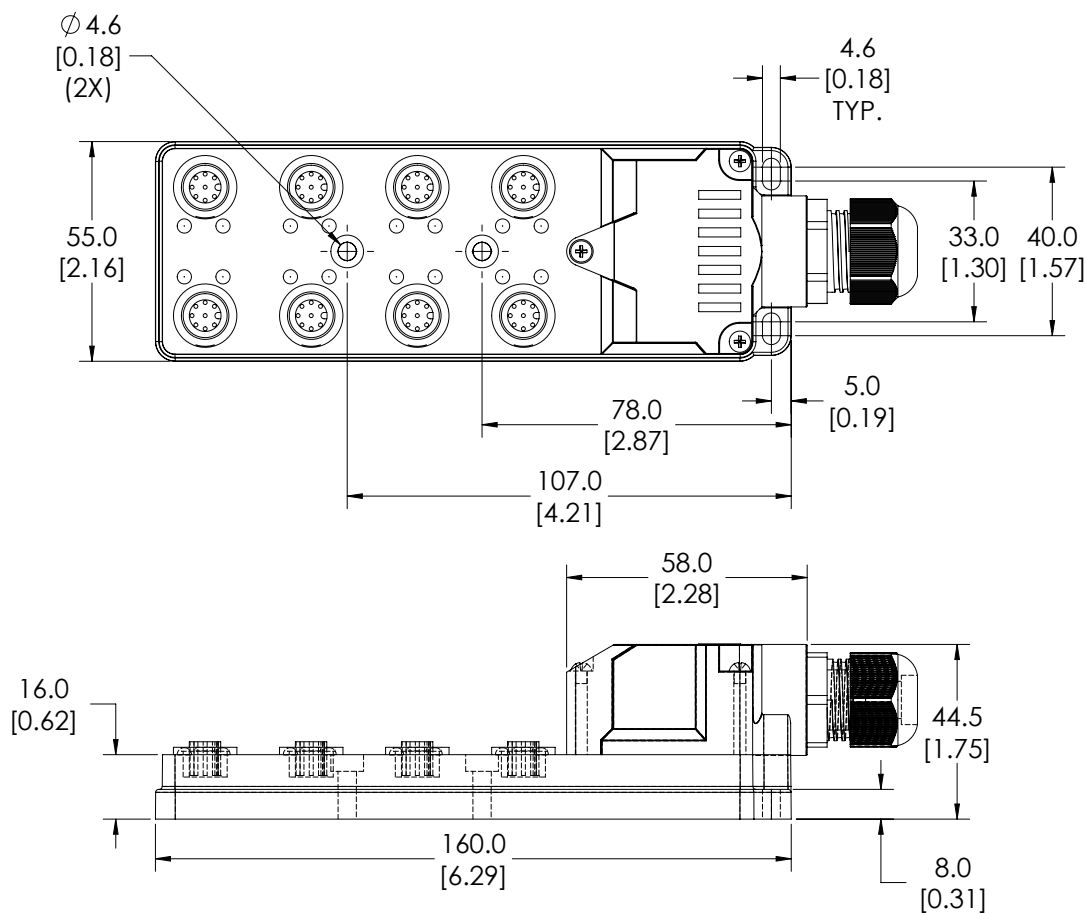
Output Terminal Connections			
Terminal	Output	Indication	LED Status
Y1	Auxiliary out +24VDC	Switch 1 open	LED 1 on
Y2	Auxiliary out +24VDC	Switch 2 open	LED 2 on
Y3	Auxiliary out +24VDC	Switch 3 open	LED 3 on
Y4	Auxiliary out +24VDC	Switch 4 open	LED 4 on
Y5	Auxiliary out +24VDC	Switch 5 open	LED 5 on
Y6	Auxiliary out +24VDC	Switch 6 open	LED 6 on
Y7	Auxiliary out +24VDC	Switch 7 open	LED 7 on
Y8	Auxiliary out +24VDC	Switch 8 open	LED 8 on
2A	NC2 closed when all switches are closed (series connection)		
2B			
1A	NC1 closed when all switches are closed (series connection)		
1B			
V+	Supply +24VDC		
V-	Supply 0VDC		

M12 Connection Box

For Use With Magnetic and RFID Coded Non-Contact Switches

Dimensions

mm [in]



See our website www.AutomationDirect.com for complete engineering drawings.