

Multi-Connector Blocks



Multi-Connector Blocks

Product Description

The Multi-Connector Block from Eaton's electrical sector is an easy way to quickly connect sensors to a control system. Using a variety of double-ended, industry-standard M12 micro-connector cables, a system can be wired up in minutes, therefore saving installation time and money.

For further convenience and installation troubleshooting, LEDs provide both power and output status on the block.

Global Plus Multi-Connector Blocks were designed with the most heavy-duty applications in mind—such as automotive manufacturing, metalworking and machinery OEMs. Put Eaton's Global Plus Multi-Connector Blocks to the test for your next machine design.

Application Description

Typical Applications

- Automotive manufacturing
- Metalworking
- Many types of Machinery OEMs
- Power Control and Panel Shops

Contents

Description

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Features

- Model options with four, six or eight sensor ports in one block
- Block capacity can be doubled with Micro Splitter Accessory (CSDY5)
- Available with a molded cable or spring-cage main body exit
- Capacity of up to 4 amps per port and 12 amps per block
- Robust design to resist vibration and moisture penetration
- Ideal for extreme temperature environments from -13° to 167°F (-25° to 75°C)

Standards and Certifications

- UL Recognized
- CSA Certified

**DANGER**

THIS SENSOR IS NOT A SAFETY DEVICE AND IS NOT INTENDED TO BE USED AS A SAFETY DEVICE. This sensor is designed only to detect and read certain data in an electronic manner and perform no use apart from that, specifically no safety-related use. This sensor product does not include self-checking redundant circuitry, and the failure of this sensor product could cause either an energized or de-energized output condition, which could result in death, serious bodily injury, or property damage.

For the most current information on this product, visit our Web site: www.eaton.com

For Customer Service in the U.S. call 1-877-ETN CARE (386-2273), in Canada call 1-800-268-3578.

For Application Assistance in the U.S. and Canada call 1-800-426-9184.

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Sensor Connectivity

Multi-Connector Blocks

Product Selection

Multi-Connector Block

Micro-Style Molded Cable



Micro-Style Molded Cable

Voltage Style	Number of Ports	Connection	Pin Configuration/Wire Colors	Catalog Number
DC PNP	4-port	5m cable	See Wiring Diagrams on Pages V8-T10-15 and V8-T10-16	CBDR4P05
		10m cable		CBDR4P10
	6-port	5m cable		CBDR6P05
		10m cable		CBDR6P10
	8-port	5m cable		CBDR8P05
		10m cable		CBDR8P10

Micro-Style Spring Cage



Micro-Style Spring Cage

Voltage Style	Number of Ports	Connection	Pin Configuration/Wire Colors	Catalog Number
DC PNP	4-port	Connector	See Wiring Diagrams on Pages V8-T10-15 and V8-T10-16	CBDR4PSC
DC NPN				CBDR4NSC
DC PNP	6-port			CBDR6PSC
DC NPN				CBDR6NSC
DC PNP	8-port			CBDR8PSC
DC NPN				CBDR8NSC

Accessories

Closure Cap



Closure Cap

Description	Catalog Number
Seals off unused connector ports on multi-connector blocks, micro female type	CBCAP

Technical Data and Specifications

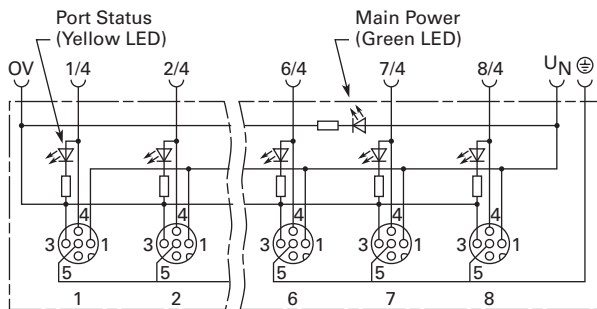
Multi-Connector Blocks

Description	Specification
General	
Nominal voltage (Vdc)	24
Maximum operating voltage (Vdc)	30
Current capacity per port (A)	4
Residual current (A)	12
Operating current of each LED (mA)	≤5
Protection type (IEC 60 529 / EN 60 529 / DIN VDE 0470-1)	IP65
Ambient temperature	−13° to 167°F (−25° to 75°C)
Jacket material	Nylon with brass receptacles
Contact material	Gold-plated copper alloy
O-ring	Nitrile rubber
Voltage rating	10–30 Vdc
Current rating	4A per port; 12A max. per unit
Contact resistance	5M ohms max.
Isolation resistance	1000M ohms min.
Protection	NEMA 6P, IP68
Temperature range	−13° to 194°F (−25° to 90°C)
LED Status Indication	
Supply voltage	Green
Status display of I/O	Yellow

Wiring Diagrams

Micro-Style Connector Blocks

PNP Block



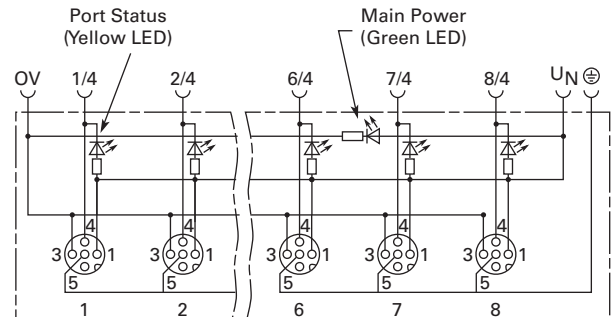
Master Cable—Spring Cage Connection

Description	Specification
Signal line, stranded in mm ² (AWG)	0.14–1 (26–18)
Voltage supply, stranded in mm ² (AWG)	0.2–1.5 (24–16)
Cable diameter in mm [in]	6.5–9.5 [0.255–0.374]
Stripped length of signal line in mm [in]	10 [0.395]

Master Cable—Pre-Wired Cable Connection

Description	Specification
Signal line, stranded in mm ² (AWG)	0.34 (22)
Voltage supply, stranded in mm ² (AWG)	3 x 1.0 (17)
Cable diameter in mm [in]	
4 and 6 port	8.7 [0.3425]
8 Port	9.2 [0.3622]
Material	PUR
Cable strain relief	30 lbs. min.

NPN Block



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Sensor Connectivity

Multi-Connector Blocks

Wiring Diagram for Molded Cable Blocks

Micro DC Port/pin,	4-Port Wire Color	6-Port Wire Color	8-Port Wire Color
1/4	WH	WH	WH
2/4	GN	GN	GN
3/4	YE	YE	YE
4/4	GY	GY	GY
5/4	—	PK	PK
6/4	—	RD	RD
7/4	—	—	BK
8/4	—	—	VT
1-8/1; U _N (+V)	BN	BN	BN
1-8/3; 0V (-)	BU	BU	BU
1-8/5; PE (GND)	GN/YE	GN/YE	GN/YE

Wiring Diagram for Spring Cage Blocks

Micro DC Port/pin,	4-Port Terminal	6-Port Terminal	8-Port Terminal
1/4	1/4	1/4	1/4
2/4	2/4	2/4	2/4
3/4	3/4	3/4	3/4
4/4	4/4	4/4	4/4
5/4	—	5/4	5/4
6/4	—	6/4	6/4
7/4	—	—	7/4
8/4	—	—	8/4
1-8/1; U _N (+V)	U _N	U _N	U _N
1-8/5; PE (GND)	PE	PE	PE

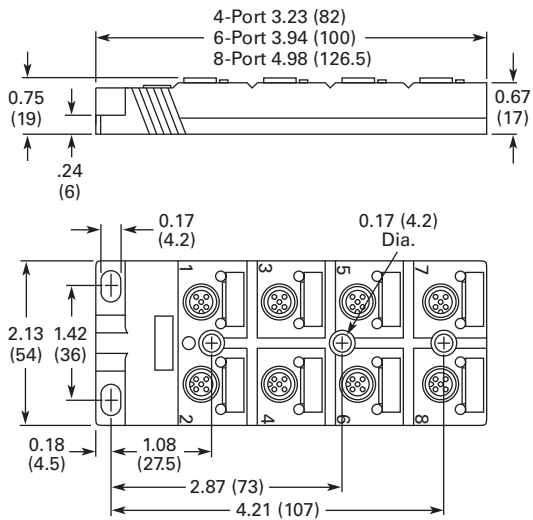
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Dimensions

Approximate Dimensions in Inches (mm)

Micro-Style Connector Blocks

Top Female Cable



Top Female Connector

