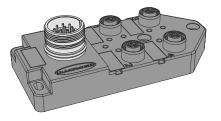


# Features

#### 4-port junction block

Banner's Junction Blocks are designed to reduce wiring and to simplify connecting multiple products.

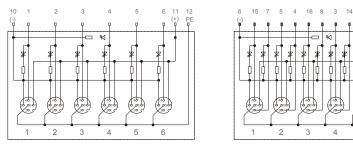


- M12 5-pin female termination with M23 12-pin male connector
- 4 ports
- NPN, PNP, and discrete models available
- 8 signals, 2 channels per port

# Models

Model	Output	Indication
JB-4M12-M23-P24	PNP	
JB-4M12-M23-N24	NPN	LED
JB-4M12-M23-24	Discrete	Non-LED

### Wiring



LED Indicating PNP Other circuit diagram (NPN) can be customized

#### M12 5-pin Female Pinout



#### M23 12-pin Male Pinout



# 1 = White 2 = Brown

1 = Brown 2 = White 3 = Blue 4 = Black5 = Gray

1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red 9 = Orange 10 = Tyrian Purple 11 = Black 12 = Violet

19 13 12

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5

6

# Specifications

#### Voltage

LED models: 30 V DC Non-LED models: 60 V DC



#### Current

2 A per port / 6 A total

#### Indicators (LED models only)

Power LED: Red (0, 4 or 8, depending on model) Signal LED: Amber (0 or 1, depending on model)

#### Construction

Body: PBT Coupling nut: Nickel-plated brass

#### Vibration

Method: EN 60068-2-6:2008 Frequency Range: 10-55 Hz (Sine) Amplitude: 0.5 mm Sweep Cycle Duration: 5 minutes (2.5 min per sweep) Dwell Duration at resonant frequency: 30 Minutes

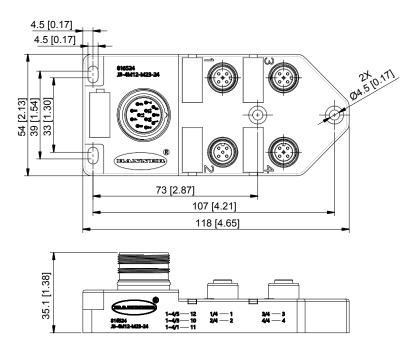
#### Mechanical Shock Method: EN 60068-2-27:2009 Pulse Shape: Half-Sine Peak Acceleration: 30 G Duration of the pulse: 11 mS Environmental Ratings IP67 Operating Conditions

–25 °C to +80 °C (–13 °F to +176 °F)



### Dimensions

All measurements are listed in millimeters, unless noted otherwise. The measurements provided are subject to change.



### Accessories

### Cordsets

#### Home Run Cordsets

12-pin Single-Ended M23 Female Cordsets				
Model	Length	Dimensions (mm)	Pinout (Female)	
BC-M23F12-22-1	1 m (3.28 ft)			1 = White
BC-M23F12-22-2	2 m (6.56 ft)	$\int \int \frac{7 \text{ mm}}{75 \text{ mm}} = 7$	0	2 = Brown 3 = Green
BC-M23F12-22-5	5 m (16.4 ft)	70 mm	$\begin{pmatrix} 1 & 0 & 0 \\ 2 & 10 & 12 \\ 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 0 & 0 &$	4 = Yellow 5 = Gray
BC-M23F12-22-10	10 m (32.8 ft)	Тур —	$\begin{pmatrix} 0 & 0 & 0 & 0_7 \\ 3_0 & 0 & 0_6 \end{pmatrix}$	6 = Pink 7 = Blue 8 = Red
BC-M23F12-22-15	15 m (49.2 ft)		40 05	o – Reu 9 = Orange 10 = Tyrian Purple
BC-M23F12-22-20	20 m (65.6 ft)	M23 x 1		11 = Black 12 = Violet

12-pin Single-Ended M23 Female Right-Angle Cordsets				
Model	Length	Dimensions (mm)	Pinout (Female)	
BC-M23F12A-22-2	2 m (6.56 ft)			1 = White
BC-M23F12A-22-5	5 m (16.4 ft)	(		2 = Brown 3 = Green
BC-M23F12A-22-10	10 m (32.8 ft)	M23 x 1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red 9 = Orange 10 = Tyrian Purple 11 = Black 12 = Violet

#### 12-pin Double-Ended M23 Female to M23 Male Cordsets

Model	Length	Dimensions (mm)	Pinout (Female)	Pinout (Male)
BC-M23F12-M23M12-22-2	2 m (6.56 ft)		0	
BC-M23F12-M23M12-22-5	5 m (16.4 ft)	70 mm Typ —	$\begin{pmatrix} 1 & 0 & 0 \\ 2 & 10 & 12 \\ 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 0 & 0 &$	
BC-M23F12-M23M12-22-10	10 m (32.8 ft)		$\begin{pmatrix} 0 & 0 & 0 & 0_7 \\ 3_0 & 0 & 0_6 \end{pmatrix}$	$\begin{pmatrix} \begin{pmatrix} \bullet & \bullet & \bullet \\ 6 & \bullet^{11} & 3 \end{pmatrix}$
BC-M23F12-M23M12-22-15	15 m (49.2 ft)	M23 x 1	40 05	5 • • 4
BC-M23F12-M23M12-22-20	20 m (65.6 ft)	70 mm Typ 026 M23 x 1	1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink	7 = Blue 8 = Red 9 = Orange 10 = Tyrian Purple 11 = Black 12 = Violet

#### Signal Port Cordsets

5-pin Double-Ended M12 Female to M12 Male Cordsets				
Model	Length	Dimensions (mm)	Pinouts	
BC-M12F5-M12M5-22-1	1 m (3.28 ft)		Female	
BC-M12F5-M12M5-22-2	2 m (6.56 ft)	40 Typ	1.	
BC-M12F5-M12M5-22-5	5 m (16.4 ft)		1000 3	
BC-M12F5-M12M5-22-8	8 m (26.25 ft)	M12 x 1 J ø 14.5 [0.57"] J	4-5	1 = Brown 2 = White
BC-M12F5-M12M5-22-10	10 m (30.81 ft)	لم الم الم الم الم الم الم الم الم الم ا	Male	3 = Blue 4 = Black
BC-M12F5-M12M5-22-15	15 m (49.2 ft)	11.737 M12 x 1 ø 14.5 [0.577]		5 = Gray

# Product Support and Maintenance

### Repairs

Contact Banner Engineering for troubleshooting of this device. **Do not attempt any repairs to this Banner device; it contains no fieldreplaceable parts or components.** If the device, device part, or device component is determined to be defective by a Banner Applications Engineer, they will advise you of Banner's RMA (Return Merchandise Authorization) procedure.

**IMPORTANT:** If instructed to return the device, pack it with care. Damage that occurs in return shipping is not covered by warranty.

### Contact Us

Banner Engineering Corp. headquarters is located at: 9714 Tenth Avenue North | Plymouth, MN 55441, USA | Phone: + 1 888 373 6767

For worldwide locations and local representatives, visit www.bannerengineering.com.

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