

Features

8-port Junction Block



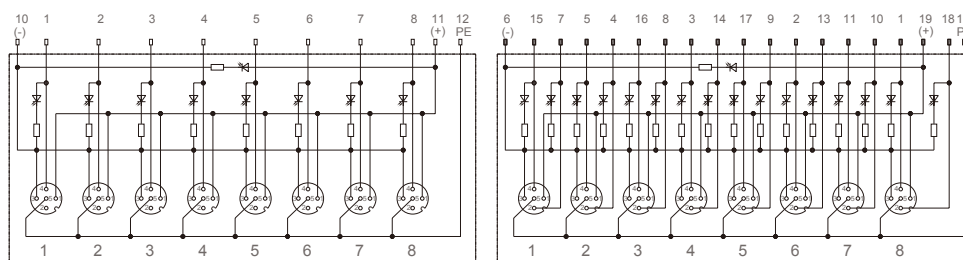
Banner's Junction Blocks are designed to reduce wiring and to simplify connecting multiple products.

- 5-pin M12 female termination with 19-pin or 12-pin M23 male connector
- NPN, PNP, and discrete models available
- 16 signals, 2 channels per port

Models

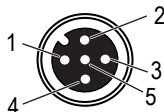
Model	Output	Indication	Home Run Connectors
JB-8M12-M23-P24	PNP	LED	19-pin M23 male quick-disconnect connector
JB-8M12-M23-N24	NPN		12-pin M23 male quick-disconnect connector
JB-8M12-M23-24	Discrete	Non-LED	

Wiring



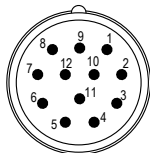
LED Indicating PNP
Other circuit diagram (NPN) can be customized

5-pin M12 Female Pinout



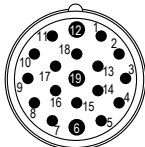
- 1 = Brown
- 2 = White
- 3 = Blue
- 4 = Black
- 5 = Gray

12-pin M23 Male Pinout



- 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-pin M23 Male Pinout



- 1 = Purple
- 2 = Red
- 3 = Gray
- 4 = Red/Blue
- 5 = Green
- 6 = Blue (18 AWG)
- 7 = Gray/Pink
- 8 = White/Green
- 9 = White/Yellow
- 10 = White/Gray
- 11 = Black
- 12 = Green/Yellow (18 AWG)
- 13 = Yellow/Brown
- 14 = Brown/Green
- 15 = White
- 16 = Yellow
- 17 = Pink
- 18 = Gray/Brown
- 19 = Brown (18 AWG)

Specifications

Voltage

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

Current

Overall Amperage is 6 A and max amp per port is 2 A

Contact Resistance

2 A per signal, 6 A total

Indicators (LED models only)

Power LED: Red (0, 8, or 16, depending on model)
Signal LED: Amber (0 or 1, depending on model)

Construction

Body: PBT
Coupling nut/screw: 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)

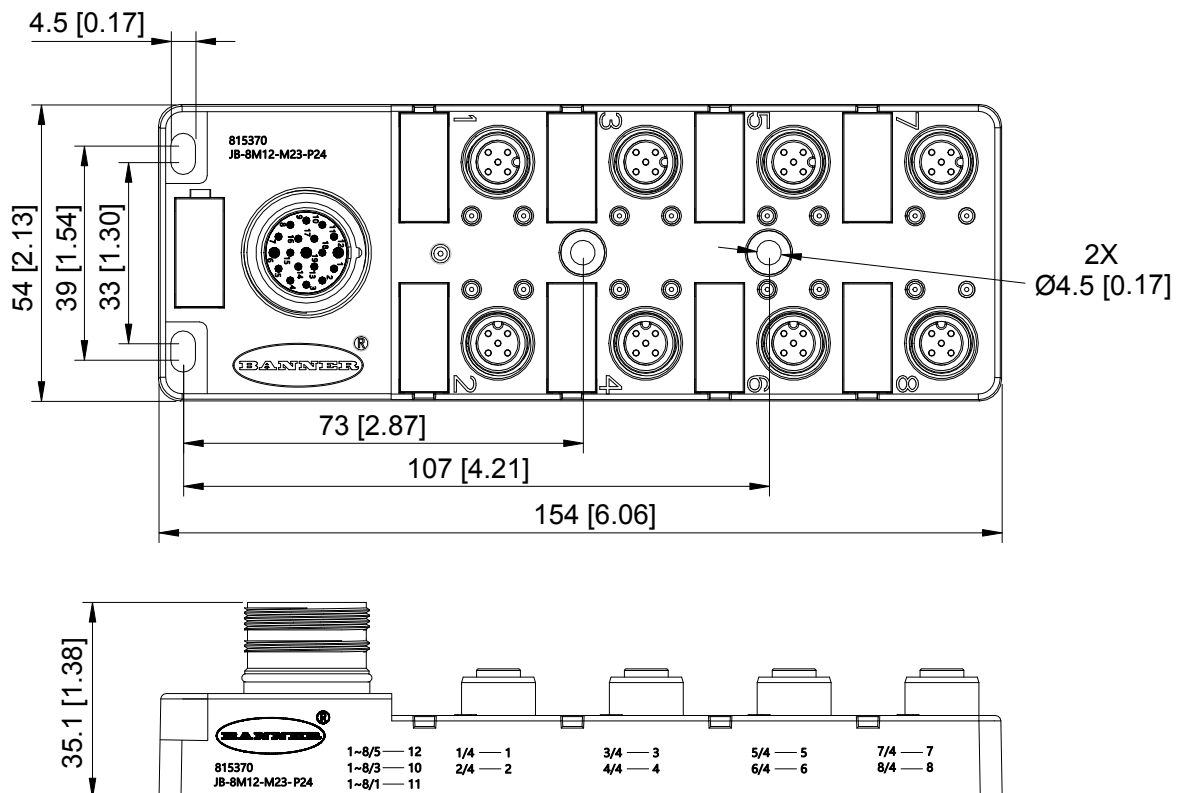
Certifications



Dimensions

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

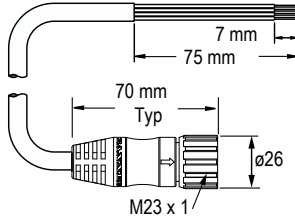
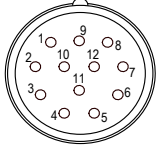
The 19-pin PNP model is shown; all models have the same dimensions.

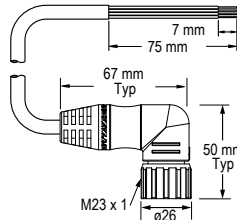
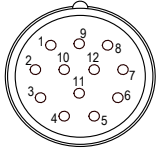


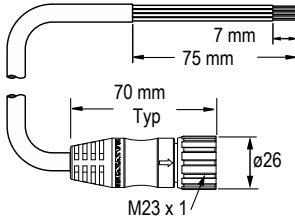
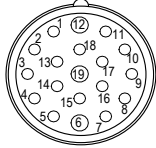
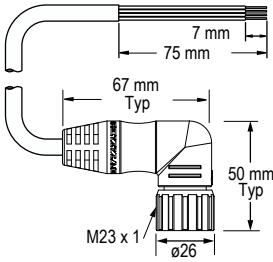
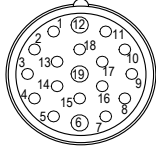
Accessories

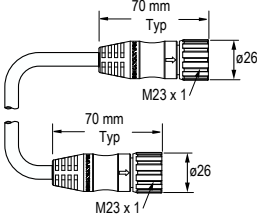
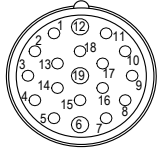
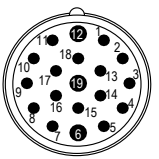
Cordsets

Home Run Cordsets

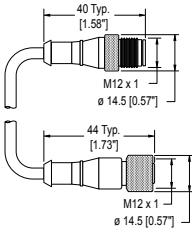
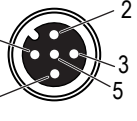
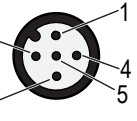
12-pin Single-Ended M23 Female Cordsets				
Model	Length	Dimensions (mm)	Pinout (Female)	
BC-M23F12-22-1	1 m (3.28 ft)			1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red 9 = Orange 10 = Tyrian Purple 11 = Black 12 = Violet
BC-M23F12-22-2	2 m (6.56 ft)			
BC-M23F12-22-5	5 m (16.4 ft)			
BC-M23F12-22-10	10 m (32.8 ft)			
BC-M23F12-22-15	15 m (49.2 ft)			
BC-M23F12-22-20	20 m (65.6 ft)			

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 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red 9 = Orange 10 = Tyrian Purple 11 = Black 12 = Violet
BC-M23F12A-22-5	5 m (16.4 ft)			
BC-M23F12A-22-10	10 m (32.8 ft)			

19-pin Single-Ended M23 Female Cordsets (datasheet p/n 242993)				
Model	Length	Dimensions (mm)	Pinout (Female)	
BC-M23F19-1822-1	1 m (3.28 ft)			1 = Purple 2 = Red 3 = Gray 4 = Red/Blue 5 = Green 6 = Blue (18 AWG) 7 = Gray/Pink 8 = White/Green 9 = White/Yellow 10 = White/Gray 11 = Black 12 = Green/Yellow (18 AWG) 13 = Yellow/Brown 14 = Brown/Green 15 = White 16 = Yellow 17 = Pink 18 = Gray/Brown 19 = Brown (18 AWG)
BC-M23F19-1822-2	2 m (6.56 ft)			
BC-M23F19-1822-5	5 m (16.4 ft)			
BC-M23F19-1822-10	10 m (32.8 ft)			
BC-M23F19-1822-15	15 m (49.2 ft)			
BC-M23F19-1822-20	20 m (65.6 ft)			
BC-M23F19A-1822-2	2 m (6.56 ft)			1 = Purple 2 = Red 3 = Gray 4 = Red/Blue 5 = Green 6 = Blue (18 AWG) 7 = Gray/Pink 8 = White/Green 9 = White/Yellow 10 = White/Gray 11 = Black 12 = Green/Yellow (18 AWG) 13 = Yellow/Brown 14 = Brown/Green 15 = White 16 = Yellow 17 = Pink 18 = Gray/Brown 19 = Brown (18 AWG)
BC-M23F19A-1822-5	5 m (16.4 ft)			
BC-M23F19A-1822-10	10 m (32.8 ft)			

19-pin Double-Ended M23 Female to M23 Male Cordsets (datasheet p/n 242034)				
Model	Length	Dimensions (mm)	Pinout (Female)	Pinout (Male)
BC-M23F19-M23M19-1822-1	1 m (3.28 ft)		 1 = Purple 2 = Red 3 = Gray 4 = Red/Blue 5 = Green 6 = Blue (18 AWG) 7 = Gray/Pink 8 = White/Green 9 = White/Yellow 10 = White/Gray	 11 = Black 12 = Green/Yellow (18 AWG) 13 = Yellow/Brown 14 = Brown/Green 15 = White 16 = Yellow 17 = Pink 18 = Gray/Brown 19 = Brown (18 AWG)
BC-M23F19-M23M19-1822-2	2 m (6.56 ft)			
BC-M23F19-M23M19-1822-5	5 m (16.4 ft)			
BC-M23F19-M23M19-1822-10	10 m (32.8 ft)			
BC-M23F19-M23M19-1822-15	15 m (49.2 ft)			
BC-M23F19-M23M19-1822-20	20 m (65.6 ft)			

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  Male 	1 = Brown 2 = White 3 = Blue 4 = Black 5 = Gray
BC-M12F5-M12M5-22-2	2 m (6.56 ft)			
BC-M12F5-M12M5-22-5	5 m (16.4 ft)			
BC-M12F5-M12M5-22-8	8 m (26.25 ft)			
BC-M12F5-M12M5-22-10	10 m (30.81 ft)			
BC-M12F5-M12M5-22-15	15 m (49.2 ft)			

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 field-replaceable 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

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

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