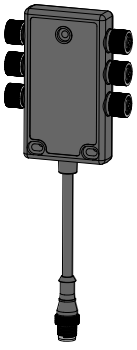
Features

6-Port Light Curtain and Mute Sensor Junction Block

R95 6-Port Muting



- Conjoin 5-pin light curtains and mute sensors into one cable
- Rugged design; easy installation with no assembly or individual wiring required
- Two 5-pin connectors for emitter and receiver light curtain connections
- Four 5-pin connectors for attachment of mute sensors
- Rugged over-molded design meets IP67
- 8-pin male home run cable

Models - Molded Junction Block Muting 6-port

Model	Ports	Homerun Connector	Wiring
R95-6M125-M128-S4BM	(6) Integral 5-pin M12 female quick-disconnect connectors	(1) 150 mm (6 in) PVC-jacketed cable with an 8-pin M12 male quick-disconnect connector	See "Wiring" on page 2

Product Overview

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

The 6-port muting block allows the connection of:

- Safety light curtain emitter and receiver
- Up to four muting sensors
- 8-pin cable to connect the Safety Controller or other muting device in the cabinet (see "Wiring" on page 2)

The Light Curtain (LC1) inputs are for any 4-pin or 5-pin light curtain.

- Created for use with the 5-pin S4B light curtains
- Works with 5-pin EZ-SCREEN LS light curtains
- Works with the 4-pin or 5-pin EZ-SCREEN (SLS) light curtains
- The exact position of the emitter and receiver does not matter (LC1 input ports are wired in parallel)
- Pin 5 is not internally connected

The mute sensor (MS1–4) inputs are for connecting two or four mute sensors.

- Power is supplied on pin 1 and pin 3
- Pin 2 accepts the PNP output to initiate the muted state
- Designed for use with the QS18VP6LP set to dark operate (DO) (works with any 4-pin or 5-pin sensor that functions similarly)
- If only two mute sensors are required for the application, connect them to MS1 and MS2
- If four mute sensors are required for the application, connect pair one to MS1 and MS2, while pair two is connected to MS3 and MS4

Mechanical Installation

Install the Molded Junction Block to allow access for functional checks, maintenance, and service or replacement.

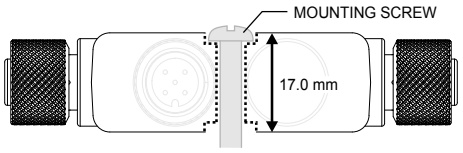
All mounting hardware is supplied by the user. Fasteners must be of sufficient strength to guard against breakage. Use of permanent fasteners or locking hardware is recommended to prevent the loosening or displacement of the device. The mounting hole (4.5 mm) in the Molded Junction Block accepts M4 (#8) hardware. See the figure below to help in determining the minimum screw length.

Original Instructions
20-Feb-26

© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

236631
p/n: 236631 Rev. C

ПРОМЭЛЕКТРОНИКА/ sales@prom-elec.com

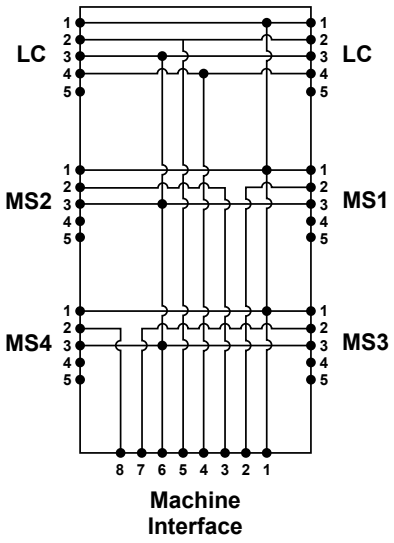


NOTE: The dotted line indicates the profile of the counterbore.

CAUTION: Do not overtighten the Molded Junction Block's mounting screw during installation. Overtightening can affect the performance of the Molded Junction Block.

Wiring

R95 6-Port Model



Machine Interface

Pin 1: +24 V DC
Pin 2: MS1 Pin 2
Pin 3: MS2 Pin 2
Pin 4: LC OSSD1
Pin 5: LC OSSD2
Pin 6: DC Com
Pin 7: MS3 Pin 2
Pin 8: MS4 Pin 2

Specifications

Voltage Input Range
30 V DC

Maximum Current
4 A

Construction
Coupling Material: Nickel-plated brass
Connector Body: TPU black

Certifications

Banner Engineering BV
Park Lane, Culliganlaan 2F bus 3
1831 Diegem, BELGIUM

Turck Banner LTD Blenheim House
Blenheim Court
Wickford, Essex SS11 8YT
GREAT BRITAIN

Vibration and Mechanical Shock
Vibration: BS EN 60512-6-4
Frequency Range: 10-500 Hz
Amplitude: 0.35 mm or 50 m/s^2
Sweep cycles: 10
Sweep cycle duration: 6 hours
Shock: BS EN 60512-6-3
Number of Shocks: 6 shocks each direction (36 total)
Pulse Shape: Half-sine
Peak acceleration: 50 g
Duration of Pulse: 11 ms

Environmental Ratings
IP67

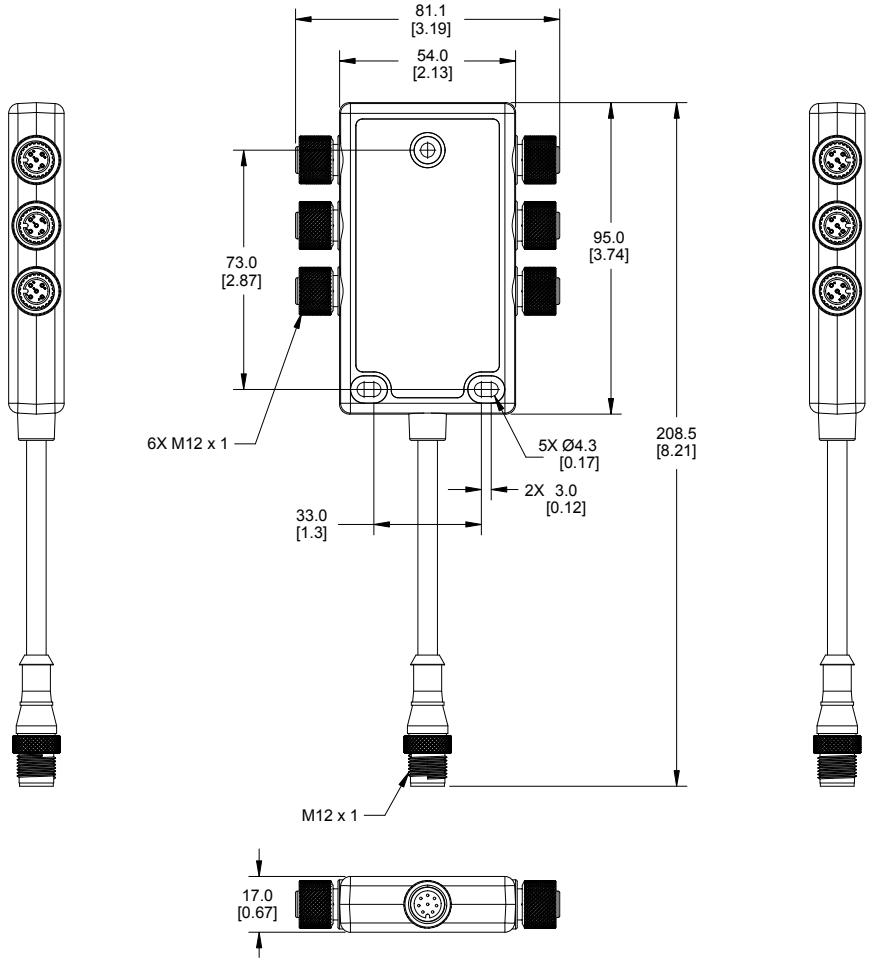
Operating Conditions
–40 °C to +70 °C (–40 °F to +158 °F)
90% at +70 °C maximum relative humidity (non-condensing)
Storage Temperature: –40 °C to +80 °C (–40 °F to +176 °F)

© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

Dimensions

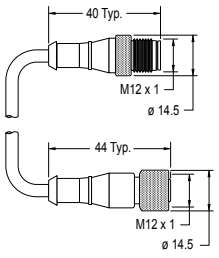
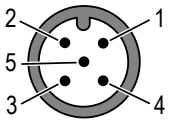
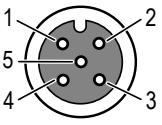
All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.

R95 Model

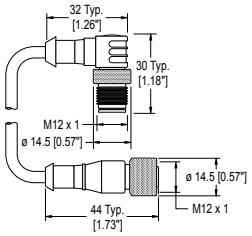
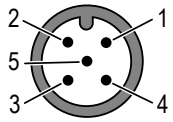
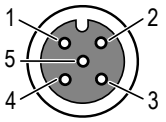


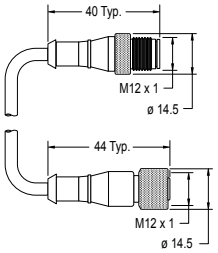
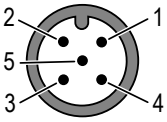
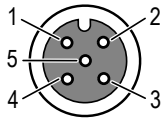
Accessories

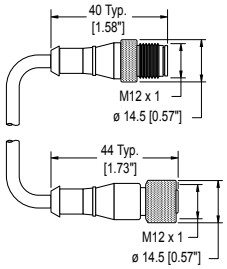
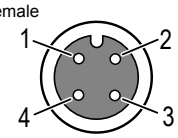
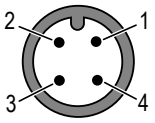
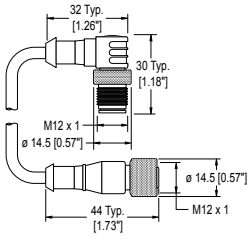
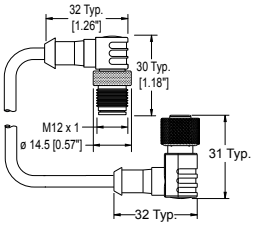
Cordsets

5-Pin Double-Ended M12 Female to M12 Male Cordsets					
Model	**Length**	**Style**	**Dimensions**	**Pinout (Male)**	**Pinout (Female)**
MQDEC-501SS	0.31 m (1.02 ft)	Male Straight/Female Straight			
MQDEC-503SS	0.91 m (2.99 ft)			1 = Brown 2 = White 3 = Blue	4 = Black 5 = Gray
MQDEC-506SS	1.83 m (6 ft)				
MQDEC-512SS	3.66 m (12 ft)				
MQDEC-515SS	5 m (16.4 ft)				
MQDEC-530SS	9 m (29.5 ft)				
MQDEC-550SS	15 m (49.2 ft)				

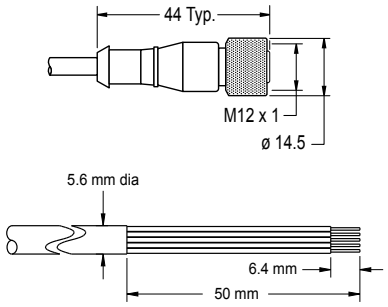
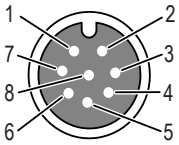
© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

5-Pin Double-Ended M12 Female to M12 Male Cordsets					
Model	**Length**	**Style**	**Dimensions**	**Pinout (Male)**	**Pinout (Female)**
MQDEC-501RS	0.31 m (1.02 ft)	Male Right-angle/ Female Straight			
MQDEC-503RS	0.91 m (2.99 ft)			1 = Brown 2 = White 3 = Blue	4 = Black 5 = Gray
MQDEC-506RS	1.83 m (6 ft)				
MQDEC-512RS	3.66 m (12 ft)				

5-Pin Double-Ended M12 Female to M12 Male Cordsets					
Model	**Length**	**Style**	**Dimensions**	**Pinout (Male)**	**Pinout (Female)**
DEE2R-51D	0.3 m (1 ft)	Female Straight/Male Straight			
DEE2R-53D	0.91 m (3 ft)				
DEE2R-58D	2.44 m (8 ft)				
DEE2R-515D	4.57 m (15 ft)				
DEE2R-525D	7.62 m (25 ft)				
DEE2R-550D	15.2 m (50 ft)			1 = Brown 2 = White 3 = Blue	4 = Black 5 = Green/Yellow
DEE2R-575D	22.9 m (75 ft)				
DEE2R-5100D	30.5 m (100 ft)				

4-Pin Double-Ended M12 Female to M12 Male Cordsets				
Model	**Length**	**Style**	**Dimensions**	**Pinout**
MQDEC-401SS	0.31 m (1 ft)	Male Straight / Female Straight		Female  Male  1 = Brown 2 = White 3 = Blue 4 = Black c UL us
MQDEC-403SS	0.91 m (2.99 ft)			
MQDEC-406SS	1.83 m (6 ft)			
MQDEC-412SS	3.66 m (12 ft)			
MQDEC-415SS	4.58 m (15 ft)			
MQDEC-420SS	6.10 m (20 ft)			
MQDEC-430SS	9.14 m (30.2 ft)			
MQDEC-450SS	15.2 m (49.9 ft)			
MQDEC-403RS	0.91 m (2.99 ft)	Male Right-Angle / Female Straight		
MQDEC-406RS	1.83 m (6 ft)			
MQDEC-412RS	3.66 m (12 ft)			
MQDEC-420RS	6.10 m (20 ft)			
MQDEC-430RS	9.14 m (30.2 ft)			
MQDEC-450RS	15.2 m (49.9 ft)			
MQDEC-403RR	0.9 m (2.9 ft)	Male Right-Angle / Female Right-Angle		
MQDEC-406RR	1.8 m (5.9 ft)			
MQDEC-412RR	3.6 m (11.8 ft)			
MQDEC-420RR	6.1 m (20 ft)			

© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com

8-pin A-Code Single-Ended M12 Female Cordsets (datasheet p/n 235941)				
Model	**Length**	**Dimensions (mm)**	**Pinout (Female)**	
BC-M12F8-24-1	1 m (3.28 ft)			1 = White 2 = Brown 3 = Green 4 = Yellow 5 = Gray 6 = Pink 7 = Blue 8 = Red
BC-M12F8-24-2	2 m (6.56 ft)			
BC-M12F8-24-5	5 m (16.4 ft)			
BC-M12F8-24-10	10 m (30.81 ft)			

Product Support

Maintenance and Service

Do not use alcohol-based cleaning agents. The Molded Junction Block is maintenance-free.

Contact Us

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

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

Banner Engineering Corp Limited Warranty

Banner Engineering Corp. warrants its products to be free from defects in material and workmanship for one year following the date of shipment. Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture which, at the time it is returned to the factory, is found to have been defective during the warranty period. This warranty does not cover damage or liability for misuse, abuse, or the improper application or installation of the Banner product.

THIS LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESS OR IMPLIED (INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), AND WHETHER ARISING UNDER COURSE OF PERFORMANCE, COURSE OF DEALING OR TRADE USAGE.

This Warranty is exclusive and limited to repair or, at the discretion of Banner Engineering Corp., replacement. **IN NO EVENT SHALL BANNER ENGINEERING CORP. BE LIABLE TO BUYER OR ANY OTHER PERSON OR ENTITY FOR ANY EXTRA COSTS, EXPENSES, LOSSES, LOSS OF PROFITS, OR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM ANY PRODUCT DEFECT OR FROM THE USE OR INABILITY TO USE THE PRODUCT, WHETHER ARISING IN CONTRACT OR WARRANTY, STATUTE, TORT, STRICT LIABILITY, NEGLIGENCE, OR OTHERWISE.**

Banner Engineering Corp. reserves the right to change, modify or improve the design of the product without assuming any obligations or liabilities relating to any product previously manufactured by Banner Engineering Corp. Any misuse, abuse, or improper application or installation of this product or use of the product for personal protection applications when the product is identified as not intended for such purposes will void the product warranty. Any modifications to this product without prior express approval by Banner Engineering Corp will void the product warranties. All specifications published in this document are subject to change; Banner reserves the right to modify product specifications or update documentation at any time. Specifications and product information in English supersede that which is provided in any other language. For the most recent version of any documentation, refer to: www.bannerengineering.com.

For patent information, see www.bannerengineering.com/patents.

© Banner Engineering Corp. All rights reserved.
www.bannerengineering.com