

# Brad Safety MPIS Distribution Box



**Rugged, IP67-rated Brad Safety MPIS Distribution Boxes with M12 connections are dedicated to the management of safety devices installed around the machine, and simplify safety wiring in factory-automation environments**



Brad Safety MPIS Distribution Boxes  
120248-0520, 120248-0500, 120248-0510

## Product Features and Advantages\*

**Pre-wired Safety MPIS (Multi-Port Interconnection System) Distribution Box concentrates multiple IO signals into one home-run cable**

Ribbon cable assemblies enable consistent cable management implementations for thermal solutions

**Color options available for the MPIS, tees and cordsets**

Targets the easy identification of the safety infrastructures compared to the standard IO infrastructure. Custom colors available

**Scalable safety solutions**

Ranges from simplified serializing to improved safety management. Fulfills different customer application requirements. Enables simple and efficient system expansion

**Customization options for I/O port of the MPIS modules**

Combines different types of signals (Safe 4 Poles, Safe 8 poles, Standard I/O 5 Poles, etc.). Enhances operational and application flexibility to dedicated customer requirements and regional safety standards. Opens a path to work directly with safety device manufacturers and create private labeled solution

**Combination of safety inputs (4 ports, 8 pins) with standard signal inputs (4 ports, 4 and 5 pins) in one 8-port MPIS**  
Permits installation of standard I/O wiring systems in limited space. Maximizes cost-performance and safety design flexibility

**Seal rated IP67**

Designed for harsh industrial applications both indoors and outdoors. Eliminates ingress of dust and light jets of water

## Applications

### Industrial Automation

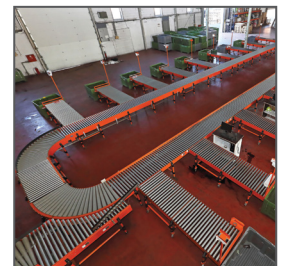
- Food and Beverage
  - Machine Manufacturers
- Machining Centers
  - Grinding and Milling
- Conveying and Sorting
  - Baggage Handling
  - Postal Sorting
  - Packaging Applications
- Safety Device Manufacturers
  - Safe Switches
  - Light Curtains
  - Drives and Motors
  - Locking Systems



Food and Beverage



Robot Cells



Conveying and Sorting

# Brad Safety MPIS Distribution Box



## Specifications

### REFERENCE INFORMATION

UL File No.: E152210  
 Mates With: M12 Micro-Change Cordsets  
 IP Rating: IP67  
 Keying: A-Coding

### ELECTRICAL

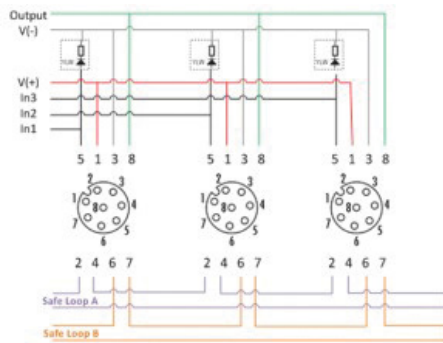
Voltage (max.): Port: 10-30V DC  
 Current (max.):  
 Module: 12.0A  
 Port: 4.0A  
 Poles: 4, 5 or 8  
 Ports: 4 or 8

### PHYSICAL

Housing: PBT  
 Metal: Copper Alloy  
 Contact Plating: Gold over Nickel  
 Orientation: Top Mount  
 Cable Type: WSOR  
 Operating Temperature: -25 to +85°C

## Safety MPIS Wiring Diagrams

### 8-Pole Port



### 4-Pole Port



## Ordering Information

### Safety MPIS Distribution Boxes

Order No.	Ports	Type	Housing Color	Length	Engineering No.
120248-0500	8	4 Safety Ports with 8 Pole M12 4 Standard I/O Ports with 5 Pole M12	Black	5 Meter*	BTB851P-FBW-05
120248-0510		8 Safety Ports with 8 Pole M12	Red	5 Meter*	BTR831P-FBW-05
120248-0520	4	4 Safety Ports with 4 Pole M12		N/A	BTR4300-FBF

### Safety Cordsets and Patchcords (used on Safety Ports)

Order No.	Type	Poles	Gender	Length	Engineering No.
120065-2378	Single-Ended Cordset	4	Male	1 Meter*	804006B30M010R
120065-2388			Female		804000B30M010R
120065-2383		8	Male		808006B41M010R
120065-2393			Female		808000B41M010R
120066-5456	Double-Ended Patchcord	4	Male - Female		884030B30M010R
120066-5461		8	Male - Female		888030B41M010R

### Safety Splitters, Tees and Grounding Plugs

Order No.	Type	Poles	Gender	Length	Engineering No.
120065-2378	Y Splitter	4	Male - Female/Female	N/A	SAFESPLIT000
120065-2388	TEE	4	Female - Male - Female		SAFETEE000
120076-8034	Grounding Plug	4	Male		804006R-SP000
120076-8035		8	Male		808006R-SP000

\*Additional lengths available, contact our Automation Solutions Technical Support at (800) 225-7724

### Standard Cordsets and Patchcords (used on 4 Standard I/O Ports of #BTB851P-FBW-05)

Order No.	Type	Poles	Gender	Length	Engineering No.
120065-9526	Single-Ended Cordset	5	Male	1 Meter*	805006B30M010
120066-8992	Double-Ended Patchcord		Male - Female		885030B30M010

[www.molex.com/link/passivempis.html](http://www.molex.com/link/passivempis.html)