





Visit our Website for a complete list of our products. www.batteryholders.com www.memoryprotectiondevices.com We specialize in custom parts! sales@memoryprotectiondevices.com

# IR SAFETY SENSOR BEAMS SERIES:

## **Application:**

The hold beams act as obstruction or proximity detection sensors for a machine or system. Example applications include motorized garage door, gate, or window shade obstruction detection. These applications typically require UL325 compliance. The hold beams have UL325 compliance in UL File E325114. Manufacturers of equipment or machines that would use the hold beams in a UL325 application would need to know the UL "E" File number.

Other applications include proximity sensing in machinery or automated production line equipment. Machinery may be required to comply with safety standard NFPA-79, The Electrical Standard for Industrial Machinery. The hold beams comply with UL60947-1 and UL60947-5-2 which demonstrate compliance with the requirements of NFPA-79. The UL File number is E517822. Manufacturers of equipment or machines that would use the beams in an NFPA 79 factory automation or machinery application would need to know the UL "E" File number.

\*\*\*Note that at this time the hold beams are certified by UL to UL60947 in <a href="mailto:category">category</a>
<a href="MRKH">NRKH</a>
 as a proximity detection sensor. The hold beams are <a href="mailto:notemory">notemory</a>
 certified in NFPA 79 safety applications where a risk of personal injury could occur, such <a href="mailto:as a light curtain">as a light curtain</a> (category NIOZ.)

# Transmitter Models: Emits Infrared Light

HBTX15, HBTX15CON. The only difference between the transmitters is that the HBTX15CON part has a 3 pin connector and HBTX15 has loose wires to connect to.





Visit our Website for a complete list of our products. www.batteryholders.com www.memoryprotectiondevices.com We specialize in custom parts! sales@memoryprotectiondevices.com

# Receiver Models: Detects Infrared Light

HBRXNO15 - "NO" means N Type, Normally Open. When no obstruction is detected, the receiver's output will be open circuit. When an obstruction is detected, the receiver's output will be driven to "ground" (0VDC.)

HBRXNC15 - "NC" means N Type, Normally Closed. When no obstruction is detected, the receiver's output will be driven to "ground" (0VDC.) When an obstruction is detected, the receiver's output will be open circuit.

HBRXPO15 - "PO" means P Type, Normally Open. When no obstruction is detected, the receiver's output will be open circuit. When an obstruction is detected, the receiver's output will be driven to "Power Input" (9 to 30VDC).

HBRXPC15 - "PC" means P Type, Normally Closed. When no obstruction is detected, the receiver's output will be driven to "Power Input" (9 to 30 VDC). When an obstruction is detected, the receiver's output will be open circuit.

HBRXNO15CON - Same as HBRXNO15 but with a connector on the end instead of loose wires.

HBRXNC15CON - Same as HBRXNC15 but with a connector on the end instead of loose wires.

HBRXPO15CON - Same as HBRXPO15 but with a connector on the end instead of loose wires.

HBRXPC15CON - Same as HBRXPC15 but with a connector on the end instead of loose wires.

#### **Certifications:**

Hold beams used in motorized garage door, gate or window shade applications: UL325

File on UL: https://iq.ulprospector.com/en/profile?e=1571016

### Hold beams used as a proximity switch:

UL60947-1 and UL60947-5-2 (USA)

CAN C22.2 No. 60947-1-13 and CAN C22.2 No. 60947-5-2-14 (Canada)

File on UL: https://ig.ulprospector.com/en/profile?e=209672





Visit our Website for a complete list of our products. www.batteryholders.com www.memoryprotectiondevices.com We specialize in custom parts! sales@memoryprotectiondevices.com

## **Unique Feature:**

The hold beams we have developed have a unique feature as compared to competitors. When the hold beams are aligned, and there is no obstruction, the receiver emits a yellow light to indicate that status to the installer. If there is an obstruction, or the beams are significantly misaligned, the yellow light will be turned off. This is a troubleshooting aid. The beams we have developed illuminate the yellow light in the clear ring around the receiver's face. This means that after installation into a door jamb, for example, the yellow alignment / obstruction light can be seen. Competitors' receivers illuminate an LED in the side of the receiver, in a plane perpendicular to the front cover. This means that after installation in a door jamb, an installer cannot see the yellow light and must either remove the receiver from the door jamb or troubleshoot in a different, more difficult way.

#### COMPETITOR CROSS REFERENCE TABLE:

Company Name	Part Number	MPD Part Number
Carlo Gavazzi	PE12CNT15	HBTX15
Carlo Gavazzi	PE12CNT15-C2	HBTX15CON
Carlo Gavazzi	PE12CNT15N0	HBRXNO15
Carlo Gavazzi	PE12CNT15NC	HBRXNC15
Carlo Gavazzi	PE12CNT15NC-C2	HBRXNC15CON
Carlo Gavazzi	PE12CNT15NO-C2	HBRXNO15CON
Carlo Gavazzi	PE12CNT15PC	HBRXPC15
Carlo Gavazzi	PE12CNT15PC-C2	HBRXPC15CON
Carlo Gavazzi	PE12CNT15PO	HBRXPO15
Carlo Gavazzi	PE12CNT15PO-C2	HBRXPO15CON





# COMPETITOR CROSS REFERENCE TABLE:

Company Name	Part Number	MPD Part or Info
Omron	E3FB-TN	ALL MPD HBTX & RX
Omron	E3FB-TN11	
Omron	E3FB-TN21	
Omron	E3FB-TP11	
Omron	E3FB-TP21	

Company Name	Part Number	MPD Part or Info
Omron	E3T-CT	ALL MPD HBTX & RX
Omron	E3T-CT12	
Omron	E3T-CT14	
Omron	E3T-CT22S	
Omron	E3T-CT24S	

Company Name	Part Number	MPD Part or Info
Panasonic	CY-111A	ALL MPD HBTX AND HBRX
Panasonic	CY-111B	ALL MPD HBTX AND HBRX
Panasonic	CY-111P	ALL MPD HBTX AND HBRX
Panasonic	CY-111VA	ALL MPD HBTX AND HBRX
Panasonic	CY-111VB	ALL MPD HBTX AND HBRX