MPD

MEMORY PROTECTION DEVICES, INC.

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 **category NRKH** as a proximity detection sensor. The hold beams are **not currently certified in** NFPA 79 safety applications where a risk of personal injury could occur, such **as a light curtain** (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.

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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://iq.ulprospector.com/en/profile?e=209672

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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.