

OB-3000-F

OPTICAL BARRIER

***RETRO REFLECTIVE SINGLE SENSOR FOR NON-CONTACT,
LONG RANGE, PRECISE, **DETECTION**
OF COLD AND HOT PRODUCT***



FEATURES:

- **LASER DOT POSITIONING IN MILL-DUTY, WATER-COOLED POSITIVE-PRESSURE, AIR-PURGED HOUSING**
- **PROXIMITY SENSOR WITHOUT REFLECTOR**
- **RELAY OUTPUT: 3A /125 V**
- **RESPONSE TIME: <10ms**
- **STATUS LED's**
- **24 VDC or 100 to 240 VAC, 50 Hz / 60 Hz**
- **PRECISE DIGITAL SET UP via RS-232 PORT / BLUETOOTH WIRELESS**

APPLICATIONS:

The **OB-3000-F** Optical Barrier is the best-designed and precise detection system for cold and hot product applications including:

- **Dummy Bar Positioning**
- **Safety Barriers**
- **Product Positioning**
- **Anti-Collision**



MADE IN THE USA

DESCRIPTION:

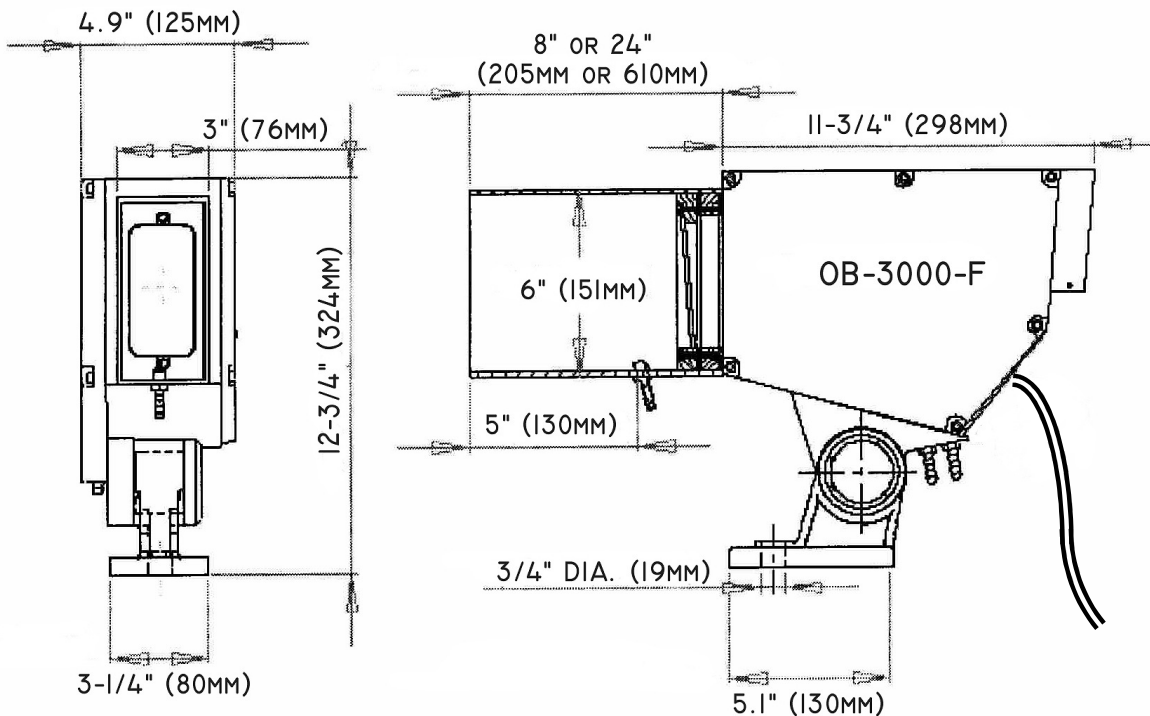
The OB-3000-F Optical Barrier has a programmable Trip Distance so that the sensor detects an object, hot or cold, that comes across the laser beam. The Trip Distance is set by the user based on the specifications of the user. The sensor will then look for a change in distance that is shorter than the Trip Distance and will send out a signal when a change is detected. A green LED is displayed when the product is detected. The OB-3000-F does not need a reflector or emitter on the other side.

The sensor trip signal is available as a simple relay output and static output.

The trip signal will stay active (High/ON) for as long as an object is within the measurement beam, and will return to the inactive (Low/OFF) state when the object exits the beam.

The response time of the output signal is based upon the fact that the sensor uses 30 laser pulses to determine if the Trip Distance has been exceeded. At a pulse rate of 3 kHz, this computes to a time latency of 10 milliseconds for a state change of the output signal.

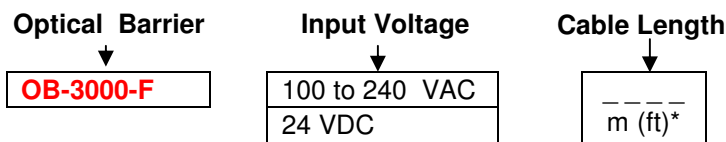
DIMENSIONS:



SPECIFICATIONS:

SYSTEM	
WAVE LENGTH LASER POINTER	650nm
WAVE LENGTH MEASUREMENT PULSE	905nm
POINTER OPTICAL POWER	1mW average
CLASS	Pointer: Class2 Measurement Pulse: Class1
DIVERGENCE	0,6 mrad
SIGNALS	
DETECT RELAY	Detect Relay and Solid State Output
DIGITAL OUTPUT RATE	5 s/r to 50 r/s
RANGE	65 Meters (typical)
ELECTRICAL	
POWER SUPPLY	100 to 240 VAC / 15 W (50-60 Hz), or 24 VDC / 8 W
POWER CONSUMPTION	20 VA or 10 VA for 24V
SHIELDED CABLE	2 Meter, high-temperature Teflon cable
CONNECTOR	Direct Wire
SERIAL LINK DIGITAL COMMUNICATION	RS232 or Optional RS485
MECHANICAL	
HOUSING	Cast aluminium housing rating: IP66 (NEMA 4)
WATER / AIR COOLING	Removable water / air-cooling jacket
PROTECTIVE HOOD	Hood with positive pressure air purge: 4-16 liters/min at 2 bars (0.14 -0.56 ft3/min at 29 PSI)
MOUNTING	Fully Adjustable foot mount swivel stand
OPERATING TEMPERATURE	-28°C to 60°C (-18°F to 140° F) Above 60°C (140° F) auxiliary cooling is required: 1-2 bars at 1-2 liters/min. (14.5 - 29 PSI at 0.035 - 0.07 ft3/min)
INSIDE TEMPERATURE ALARM	Alarm via Digital Output
TOTAL WEIGHT	12.25 kg / 27 lbs.

ORDERING INFORMATION:



All sensors are equipped with a 2 meter Teflon-shielded cable with Harting Connector.
 Please specify if additional length is required.