

## H3111 Discriminating Detector

Spot Type Proportional Band



- Senses opaque and transparent material
- 2" (51 mm) and 4" (102 mm) standard gap to accommodate plane changes
- Visible and infrared light sources available
- Plug-in and spade lug end connections
- Discriminates against ambient light
- .22" (5.6 mm) field of view

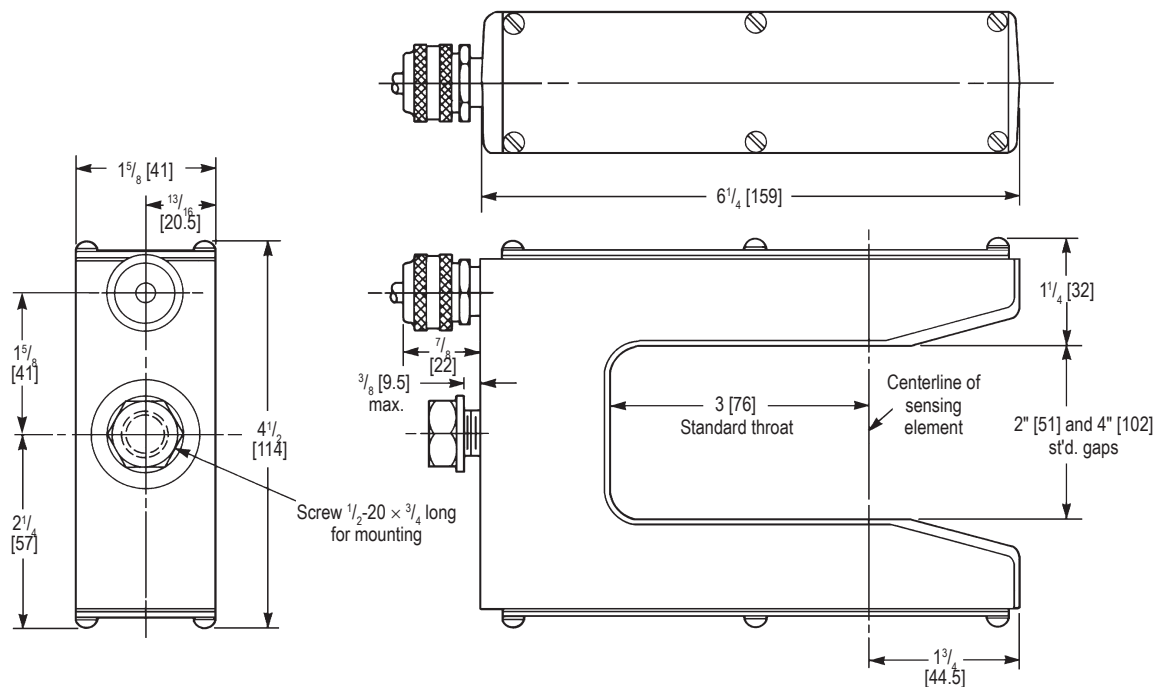
The Fives North American H3111 pulsed LED Discriminating Detector has a self-contained high frequency light source and discriminating receiver circuit for use in guiding applications. It is capable of sensing opaque and transparent material and is used for edge guide systems. The small field of view minimizes guide point shift on non-uniformly transparent material. It is also useful on transparent film where printing near the edge would otherwise enter the field of view.

The discriminating feature desensitizes the detector to any light other than the pulsed 4-6 kHz light source frequency.

This highly sensitive detector is an excellent choice where precision guiding is required in an industrial environment.

## DIMENSIONS

inches [mm]



DIMENSIONS SHOWN ARE SUBJECT TO CHANGE. PLEASE OBTAIN CERTIFIED PRINTS FROM FIVES NORTH AMERICAN COMBUSTION, INC.  
IF SPACE LIMITATIONS OR OTHER CONSIDERATIONS MAKE EXACT DIMENSION(S) CRITICAL.

## SPECIFICATIONS

<p><b>Power requirements:</b> +12 to 16 V dc at 40 mA (supplied by amplifier)</p> <p><b>LED pulse frequency:</b> 4 kHz to 6 kHz</p> <p><b>Power consumption:</b> 1 watt maximum</p> <p><b>Frequency response:</b> 20 Hz</p> <p><b>Ambient light rejection:</b> greater than 48 dB at 120 Hz greater than 50 dB at 60 Hz</p> <p><b>Output impedance:</b> 1000 ohms or less</p> <p><b>Cable:</b> see table below</p> <p><b>Light spectral range:</b> 700 nanometers (standard models)</p>	<p><b>Output voltage range:</b> 0 to 2.5 V dc from no light to full light</p> <p><b>Operating temperature:</b> 32 to 122 F [0 to 50 C]</p> <p><b>Field of view:</b> 0.22" [5.6 mm]</p> <p><b>Gap:</b> 2" and 4" standard</p> <p><b>Throat:</b> 3" standard (consult factory for special throats)</p> <p><b>Housing:</b> aluminum; gasketed dusttight to IP50</p> <p><b>Lenses:</b> Glass</p> <p><b>Weight:</b> 2 pounds [0.9 kg]</p>
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<p><b>MODEL NUMBERS:</b></p> <p>H3111-6415-2/3F</p> <p>H3111-6415-4/3F</p> <p>H3111B-201-03</p> <p>H3111C-201-03</p> <p>H3111B-401-03</p> <p>H3111C-401-03</p> <p>H3111-501-03D</p>	<p>2" gap, 3" throat, 15 ft straight cable for SimPlex™</p> <p>4" gap, 3" throat, 15 ft straight cable for SimPlex™</p> <p>2" gap, 20 ft cable and spade lug connection to controller</p> <p>2" gap, 20 ft cable and plug-in connection to H6400 controller</p> <p>4" gap, 20 ft cable and spade lug connection to controller</p> <p>4" gap, 20 ft cable and plug-in connection to H6400 controller</p> <p>5" gap, 6 ft coiled retractile cable and spade lug connection (used on positioners)</p>
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### Fives North American Combustion, Inc. Guiding Systems

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