

## H3183 Discriminating Center Guide Detector



- Developed specifically for open weave fabrics
- Accommodates width changes without repositioning detectors
- Attenuates effect of ambient light
- Tolerant to passline changes
- Simple installation
- Rugged anodized aluminum housing

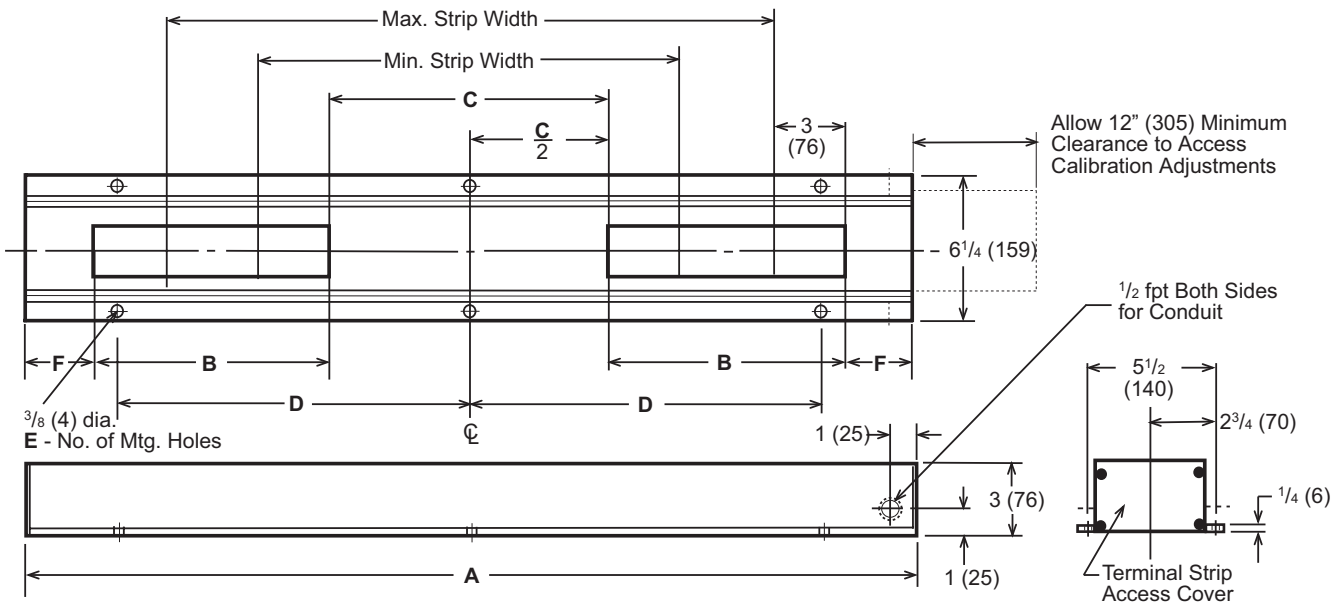
Fives North American's H3183 center guide detector is for use in applications that require center-guiding material with large product width variations. Used with a high frequency pulsed light source, such as the model H3137, the detector senses the intensity of the light projected on the area of the rectangular-shaped receivers. This light intensity varies with the lateral position of the process material, and thus represents material position relative to process centerline.

The processing circuitry discriminates between the high frequency pulsed light from the light source, and that of steady state ambient light. Thus, the circuit attenuates and does not react to most ambient light conditions.

Control is maintained during width changes, even at spliced joints. No repositioning of the detector is required during product width change.

The detector and light source are both easy to install and require no critical alignment. The distance between the detector and light source can range from two to ten feet (.6 to 3.0m) giving the user great flexibility in design.

## 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.

Model No. (see notes 1, 2, 4)	No offset ability		With ±3" (76) offset capability (see note 3)		Dimensions, inches (mm)						Light source
	max. inches (mm)	min. inches (mm)	max. inches (mm)	min. inches (mm)	A	B	C	D	F	E	
H3183-15-38	26 (660)	8 (203)	20 (508)	14 (356)	38 (965)	15 (381)	2 (51)	15 (381)	3 (76)	4	H3137-048-42
H3183-20-50	38 (965)	10 (254)	32 (813)	16 (406)	50 (1270)	20 (508)	4 (102)	20 (508)	3 (76)	6	H3137-060-56
H3183-27-62	50 (1270)	8 (203)	44 (1118)	14 (356)	62 (1575)	27 (686)	2 (51)	27 (686)	3 (76)	6	H3137-072-68
H3183-30-74	62 (1575)	14 (356)	56 (1422)	20 (508)	74 (1880)	30 (762)	8 (203)	27 (686)	3 (76)	6	H3137-084-80
H3183-20-86	74 (1880)	46 (1168)	68 (1727)	52 (1321)	86 (2184)	20 (508)	40 (1016)	39 (991)	3 (76)	6	H3137-096-92
H3183-33-86	74 (1880)	20 (508)	68 (1727)	26 (660)	86 (2184)	33 (838)	14 (356)	39 (991)	3 (76)	6	H3137-096-92
H3183-30-98	86 (2184)	38 (965)	80 (2032)	44 (1118)	98 (2489)	30 (762)	32 (813)	39 (991)	3 (76)	6	(2)H3137-048-42

See notes on page 3.

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## SPECIFICATIONS

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**Power requirements:**  $\pm 10$  to  $\pm 15$  VDC at 26 mA  
(nominal)

**Output signal:**  $\pm 10$  VDC nominal ( $\pm 14$  VDC maximum)

**Output impedance:** 100 ohms or less

**Ambient light rejection:**  
Greater than 48 dB at 120 Hz  
Greater than 50 dB at 60 Hz

**Light frequency sensitivity band:** 3 kHz to 10 kHz

**Frequency response:** 2 Hz

**Recommended face to face gap with light source:** 2 to 10 feet (.6 to 3m) [consult factory for larger gaps]

**Connections:** Terminal strip accessible from end cover

**Operating temperature:** 32-120 F (0-49 C)

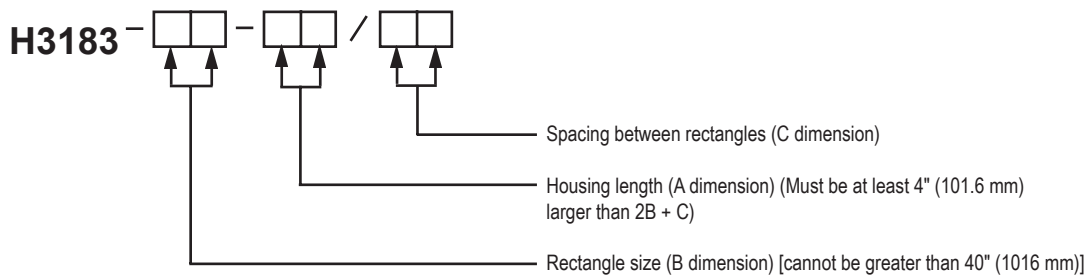
**Housing material:** Anodized aluminum

**Lens material:** Polycarbonate

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### NOTES:

1. Units are factory tested at 3' (1 m) gap. Calibration after installation is required for optimum results.
2. Use this column for systems with electronic offset, such as model H6220, H6220B or H6229.
3. Models with special housing lengths or rectangle sensor spacing are available as special order. To specify, use the following coding method.



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