

H3218 Center-guide Detector

Patent Applied for: U.S. PTO 61/220,598



- Digital self-calibration
- Accomodates width changes without repositioning detectors
- Self diagnostics with status output
- Tolerant to passline changes
- 10 to 30 Vdc operation
- All plug-in connections

The Fives North American H3218 center-guide detector provides a signal proportional to the center position of a strip of material; independent of material width. Two models of the H3218 are available; depending upon light source choice. The H3218 is for use with the H3137 family of fluorescent light sources. An enhanced version, the H3218E, is for use with the H3157E LED light source. Advanced signal processing allows the H3218 to discriminate between the pulsed light from either the H3137 or H3157 and other sources of light.

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

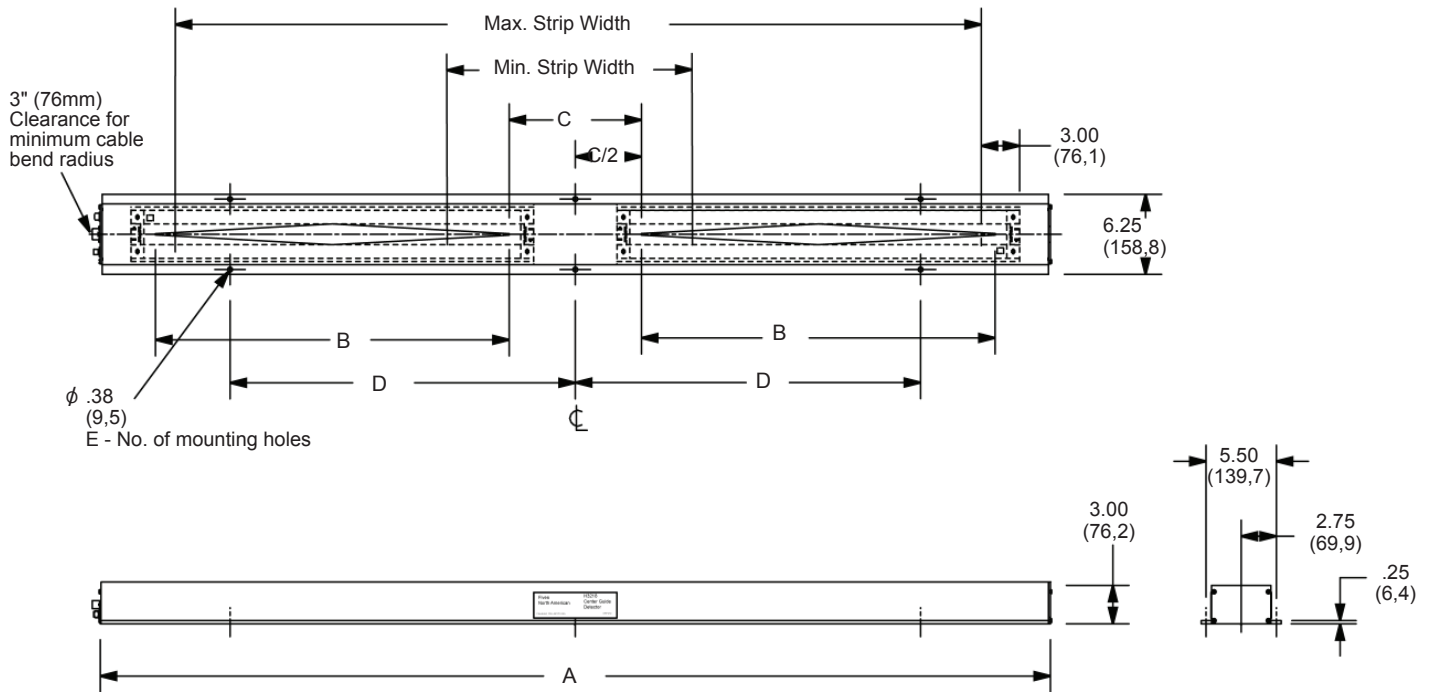
The H3218, powered by 10 to 30 Vdc, features all plug-in connections and requires no critical alignment between detector and light source. An automatic calibration routine can be initiated either locally via a pushbutton or remotely through a contact closure. The calibration routine allows the detector to compensate for varying light levels based on detector-to-light source gap. The calibration routine will also compensate for dirt accumulation on either the detector or light source.

The distance between the detector and light source can range from 2 to 10 feet (0.6 to 3 meters); providing greater flexibility for system installation.

The H3218 provides a contact closure; indicating the status of the detector. This signal, when combined with the status outputs of other Fives North American equipment, will provide a continuous indication of guiding system operation.

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.	Strip width with no Offset Capability		Strip width with +/-3" Offset Capability (see note 1)		Dimensions, inches (mm)					Light Source	
	Max in (mm)	Min in (mm)	Max in (mm)	Min in (mm)	A	B	C	D	E	For H3218E	For H3218
H3218E, H3218-10-26/0	20 (508)	3 (76)	14 (356)	9 (229)	26 (660)	10 (254)	0	9 (229)	4	H3157E-B1-24	H3137-036-32
H3218E, H3218-15-38	30 (762)	4 (102)	24 (610)	10 (254)	38 (965)	15 (381)	2 (51)	15 (381)	4	H3157E-B1-36	H3137-048-44
H3218E, H3218-20-50	42 (1067)	6 (152)	36 (914)	12 (305)	50 (1270)	20 (508)	4 (102)	20 (508)	6	H3157E-B1-48	H3137-060-56
H3218E, H3218-27-62	54 (1372)	4 (102)	48 (1219)	10 (254)	62 (1575)	27 (686)	2 (51)	27 (686)	6	H3157E-B1-60	H3137-072-68
H3218E, H3218-30-74	66 (1676)	10 (254)	60 (1524)	16 (406)	74 (1880)	30 (762)	8 (203)	27 (686)	6	H3157E-B1-72	H3137-084-80
H3218E, H3218-33-86	78 (1981)	16 (406)	72 (1829)	22 (559)	86 (2184)	33 (838)	14 (356)	39 (991)	6	H3157E-B1-84	H3137-096-92
H3218E, H3218-30-98	90 (2286)	34 (864)	84 (2134)	40 (1016)	98 (2489)	30 (762)	32 (813)	39 (991)	6	H3157E-B1-96	(2)H3137-048-42
H3218E, H3218-40-98	92 (2337)	16 (406)	86 (2184)	22 (559)	98 (2489)	40 (1016)	14 (356)	39 (991)	6	H3157E-B1-96	(2)H3137-048-42

Note(1): Use this column for systems with electronic offset, such as model H6220, H6220B, or H6229.

Cables and Accessories

Part Number	Description
H6610-PWR-80W	24 Vdc System Power Supply
H3218-RMTC-01	H3218 Power Supply and Remote Calibration Interface
H6610-F5M-3S	H6610 System Power/Communications Cable, 3 meters long Note: Other lengths available
H6610-M3L-15S	H3218 Ouput/Cal Cable, 15 meters long with flying leads
H6610-F3M-3S	H6610 Analog Signal Cable, 3 meters long Note: Other lengths available

SPECIFICATIONS

Power Requirements: 10 to 30 Vdc at 3.3 watts

Light Source:

- H3157E with H3218E
- H3137 or H3137 with Blue Lens with H3218

Note: Light source is dependent upon detector and gap. Consult with FivesNA Application Engineer.

Analog Output: +/- 10 Vdc proportional to strip centerline

Status Output: Contact closure indicates normal detector operation

Recommended Gap with Light Source: 2 to 10 feet (0.6 to 3 meters)

Sensor Sizing: Sensor is sized based on minimum and maximum strip widths. Refer to selection chart for specific sensor model numbers.

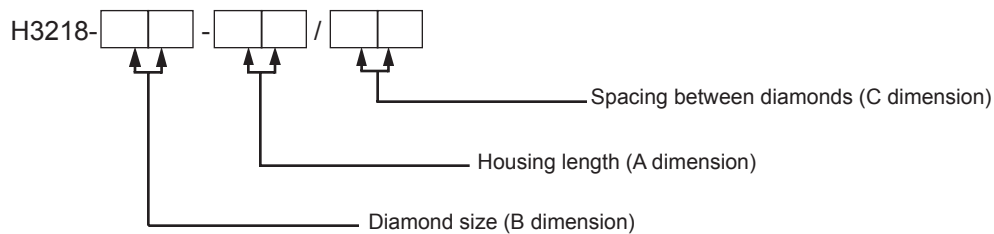
Connectors: 3: Two for power and communications, one for H3218 analog output

Lens Materials: Polycarbonate

Operating Temperature Range: 0 to 50 C (32 to 122F)

Recommended Passline (from light source to material):
50% of gap.

Note: Models with special housing length or diamond spacing are available as special order. The following coding method is used:



Fives North American Combustion, Inc. Guiding Systems

4455 East 71st Street - Cleveland, OH 44105 USA - Tel: 216.271.6000 - Fax: 216.641.7852
email: fna.guiding@fivesgroup.com - www.fivesgroup.com/fivesna