H3137 Pulsed Fluorescent Light Source with H3186R Remote Ballast

- For use with photoelectric detectors
- 20" (508 mm) to 92" (2337 mm) window sizes
- Impact resistant lens
- Remote ballast for easy access
- Integral lamp failure relay
- 120 and 240 V ac models available
- Rugged enclosure

Fives North Americans’ H3137 high frequency light source and the H3186R ballast are used together with optical detectors to sense material position in guiding applications. The H3186R ballast is mounted remotely from the light source and pulses the light at a frequency of 6 kilohertz. Discriminating detectors have circuitry which respond to this high frequency light while rejecting ambient light. The guiding system is therefore largely unaffected by moving light images that may be cast upon a detector receiver such as overhead crane lighting.

The H3137 light source is available in a wide range of lengths to suit specific application needs. The longer lengths are often used with Fives North Americans’ center-guide product line such as the H3118 and H3183 detectors. Shorter lengths are frequently specified for edge guiding applications where the control system guides to one edge, typically using a H3109 detector. For edge applications that involve various web widths, the edge detector may be mounted to a positioner such as a model H5540 or H5542. This allows an operator to reposition the detector to accommodate different material widths.

Depending on the detector of choice, the gap between the light source and detector can be up to 14 feet (4.3 m). For gaps less than 2 feet (0.6 m) with center-guide detectors, a light source with a blue lens is required. These units are designated with a BL suffix on the model number.
**SPECIFICATIONS**

- **Input power:**
  - H3186R-120-01: 90-130 V ac, 100 VA max.
  - H3186R-240-01: 180-260 V ac, 100 VA max.

- **Pulse frequency:**
  - H3186R: 2.5-3 kilohertz
  - H3137: 5-6 kilohertz

- **Operating temperature:**
  - 32-160 F (0-71 C)

- **Lens material:** acrylic

- **Connection type:**
  - H3186R: Terminal strip in enclosure accessible through \( \frac{3}{8} \) (9.5) dia. holes. 6 mtg. holes
  - H3137: 6 (152) 22 dia. conduit hole

- **NOTE:** Two leads, light blue color, 10 feet (3m) long supplied with light source for wiring ballast.

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**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.**

**Dimensions, inches (mm)**

<table>
<thead>
<tr>
<th>Model No.*</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>Bulb type</th>
</tr>
</thead>
<tbody>
<tr>
<td>H3137-018-14</td>
<td>20 (508)</td>
<td>14 (355)</td>
<td>–</td>
<td>12 (304)</td>
<td>4</td>
<td>F18T12/CW</td>
</tr>
<tr>
<td>H3137-024-20</td>
<td>26 (660)</td>
<td>20 (508)</td>
<td>–</td>
<td>18 (457)</td>
<td>4</td>
<td>F24T12/CW</td>
</tr>
<tr>
<td>H3137-036-32</td>
<td>38 (965)</td>
<td>32 (813)</td>
<td>–</td>
<td>30 (762)</td>
<td>4</td>
<td>F36T12/CW</td>
</tr>
<tr>
<td>H3137-048-44</td>
<td>50 (1270)</td>
<td>44 (1118)</td>
<td>20 (508)</td>
<td>–</td>
<td>6</td>
<td>F48T12/CW</td>
</tr>
<tr>
<td>H3137-060-56</td>
<td>62 (1575)</td>
<td>56 (1423)</td>
<td>27 (686)</td>
<td>–</td>
<td>6</td>
<td>F60T12/CW</td>
</tr>
<tr>
<td>H3137-072-68</td>
<td>74 (1880)</td>
<td>68 (1727)</td>
<td>27 (686)</td>
<td>–</td>
<td>6</td>
<td>F72T12/CW</td>
</tr>
<tr>
<td>H3137-084-80</td>
<td>86 (2184)</td>
<td>80 (2030)</td>
<td>39 (991)</td>
<td>–</td>
<td>6</td>
<td>F84T12/CW</td>
</tr>
<tr>
<td>H3137-096-92</td>
<td>98 (2489)</td>
<td>92 (2306)</td>
<td>39 (991)</td>
<td>–</td>
<td>6</td>
<td>F96T12/CW</td>
</tr>
</tbody>
</table>

**Light Source Lens Recommendations**

<table>
<thead>
<tr>
<th>Gap</th>
<th>Detector model</th>
<th>Light source model</th>
<th>Lens type</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 2 ft. (0.6 m)*</td>
<td>H3118</td>
<td>H3137-xxx-xxBL</td>
<td>Blue</td>
</tr>
<tr>
<td>2 ft. (0.6 m) and up</td>
<td>H3118</td>
<td>H3137-xxx-xx</td>
<td>Clear</td>
</tr>
<tr>
<td>less than 3 ft. (0.9 m)</td>
<td>H3109</td>
<td>H3137-xxx-xx</td>
<td>Clear</td>
</tr>
<tr>
<td>3 ft. (0.9 m) to 10 ft. (3 m)</td>
<td>H3109</td>
<td>H3137-xxx-xx</td>
<td>Clear</td>
</tr>
<tr>
<td>1 ft. (0.3 m) to 3 ft. (0.9 m)*</td>
<td>H3183</td>
<td>H3137-xxx-xxBL</td>
<td>Blue</td>
</tr>
</tbody>
</table>

Consult North American for gaps greater than 10 feet (3 m).

* Be sure to specify the "BL" suffix code to specify blue filtering lens.

**Maximum recommended distance between H3137 and H3186R:** 50 feet (15.2 m)

**Bulb type:** Single prong FxxT12/CW instant start fluorescent type (see table).

**Fault output contact ratings (in H3186R):** Two normally open and two normally closed contacts available off of a terminal strip. Three amp contact rating. Relay coil is powered when lamp is lit.

**NOTE:** The H3186R-120-02 and H3186R-240-02 ballast models are for use only with special double bulb light sources. Double bulb light source units are special order items.

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Fives North American Combustion, Inc.
Guiding Systems
4455 EAST 71st STREET, CLEVELAND, OH 44105 USA
Tel: 216.271.6000 Fax: 216.641.7852
email: fnaguiding@fivesgroup.com • www.fivesgroup.com/fivesna