

# STEADY BEACONS

## EExd, Weatherproof

### FL11, FB11, FL12 & FB12 Range



FL11/FB11 Range



FL12/FB12 Range

## Introduction

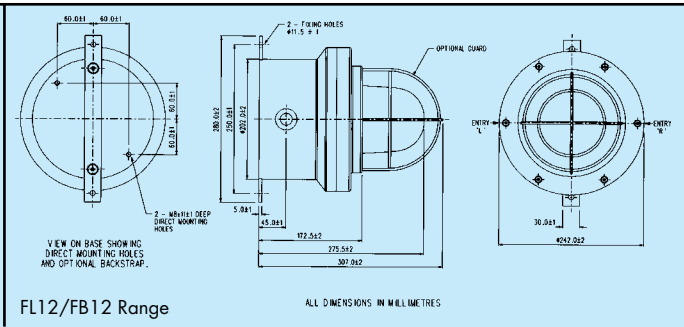
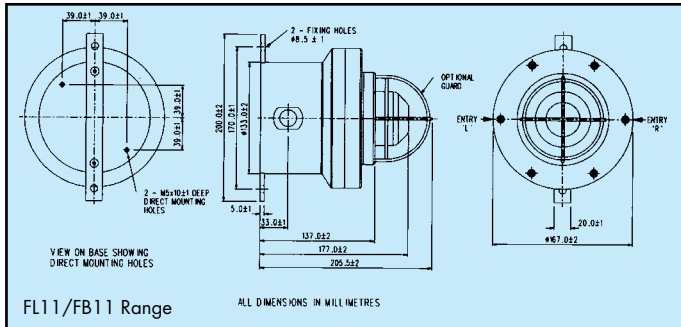
These certified steady beacons have been designed for use in potentially explosive atmospheres and harsh environmental conditions. The enclosures are suitable for use offshore or onshore, where light weight combined with corrosion resistance is required.

The beacon housing is manufactured completely from a U.V. stable, glass reinforced polyester. Stainless steel screws and mounting bracket are available ensuring a totally corrosion free product.

Units can be painted to customer specification and supplied with identification labels.

- ★ Zone 1 and Zone 2 use.
  - ★ EExd, IIB T4/T5.
  - ★ ATEX approved, Ex II 2GD\*.
  - ★ UL listed for USA and Canada\*
    - Class I, Div. 2, Groups C & D.
    - Class I, Zone 1, AExd IIB T4/T5.
  - ★ BASEEFA Certified.
  - ★ GOST 'R' Certified.
  - ★ Brazilian (Inmetro) Certified.
  - ★ Fluorescent.
  - ★ Filament.
  - ★ IP66 and IP67.
  - ★ Certified temperature  $-55^{\circ}\text{C}$  to  $+55^{\circ}\text{C}$ \*.
  - ★ Corrosion resistant GRP.
  - ★ Optional stainless steel backstrap.
  - ★ Various lens colours.
  - ★ Optional lens guard.
  - ★ 2 x M20 or 2 x  $1/2$ " NPT cable entries.
  - ★ Earth continuity option.
- \*Model dependent





## Specification

|                     |  |
|---------------------|--|
| Models:             | FL11 & FL12 – Fluorescent, EExd.<br>FB11 & FB12 – Filament, EExd.<br>FB12 – Filament, EExd & UL Listed.  |
| Certification:      | CENELEC EN50014 and EN50018.<br>FB11/FL11 Cert. No. BAS99 ATEX 2195X.<br>FB12/FL12 Cert. No. BAS99 ATEX 2196.<br>BASEEFA EExd IIB – for T rating see table.<br><b>UL Listed for USA and Canada</b> (FB11 & FB12 only)<br>– Class I, Div. 2, Groups C & D and<br>– Class I, Zone 1, AExd IIB T4/T5. UL Listing No. E187814.<br><b>GOST 'R':</b> 1Exd IIB (for T ratings see table).<br><b>Brazilian (Inmetro) Certified:</b> BR-Ex d IIB T4/T5/T6 |
| Voltage:            | FL11 & FL12 – 24V d.c., 240V a.c.<br>FB11 & FB12 – 24V d.c., 48V d.c.<br>–110V a.c., 120V a.c., 220V a.c., 240V a.c., 254V a.c.  |
| Fluorescent:        | 5 Watt type light output 250 Lumens (FL11 24V d.c. version only) – G23 lamp holder.<br>10 Watt type light output 600 Lumens (FL11 240V a.c. version only) – G23 lamp holder.<br>13 Watt type light output 900 Lumens (FL12, per tube) – G24Q-1 lamp holder.  |
| Filament:           | FB11 – 10W filament fitted as standard – (SBC lamp holder).<br>FB12 – 60W or 100W single filament fitted as standard. Others may be available (UL Listed – 60W only) – (ES27 lamp holder).   |
| Material:           | Body: – Glass reinforced polyester (GRP).<br>Lens: – Glass.<br>Cover Screws + Backstrap: – Stainless steel 316.  |
| Finish:             | Natural black or painted to customer specification.  |
| Ingress Protection: | IP66 & IP67.   |
| Fire Retardancy:    | GRP is fire retardant to ISO 1210.   |
| Earth Continuity:   | Optional for metal glands provided via a brass plate.  |

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| Terminals:             | FL11 (a.c.) 4 x 2.5mm <sup>2</sup> .<br>FL11 (d.c.), FB11 6 x 2.5mm <sup>2</sup> .<br>FB12/FL12 6 x 6.0mm <sup>2</sup> .<br>FB12 UL 6 x 10 AWG. |
| Labels:                | Duty/Tag Label optional.  |
| Entries:               | 2 x 20mm ISO EExd.<br>2 x 1/2" NPT UL Listed.   |
| Certified Temperature: | FB11 & FB12, EExd = –55°C to + 55°C*.<br>FL11 & FL12, EExd = –20°C to + 55°C*.<br>*Model dependent – see table for details.                     |

| Type | Voltage/Wattage | T Class | Min. Amb. | Max. Amb. |
|------|-----------------|---------|-----------|-----------|
| FB11 | All             | T5      | -55°C     | +40°C     |
|      |                 | T4      | -55°C     | +55°C     |
| FL11 | All             | T5      | -20°C     | +40°C     |
|      |                 | T4      | -20°C     | +55°C     |
| FB12 | 60W             | T5      | -55°C     | +40°C     |
|      | 60W             | T4      | -55°C     | +55°C     |
|      | 100W            | T3      | -55°C     | +30°C     |
| FL12 | 13W a.c. & d.c. | T6      | -20°C     | +40°C     |
|      | 13W a.c.        | T5      | -20°C     | +55°C     |
|      | 26W a.c.        | T5      | -20°C     | +40°C     |
|      | 26W a.c.        | T4      | -20°C     | +55°C     |
|      | 39W a.c.        | T4      | -20°C     | +40°C     |

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| Weight: | FL11, FB11 – 2.8 kg*.<br>FL12 – 7.2 kg*.<br>FB12 – 7.6 kg*.<br>*dependant on model. |
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## Ordering Requirements

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box.

| Unit Type  | Certification | Voltage | Lamp Wattage | Lens Colour | Guard       | Unit Fixing | Earth Continuity | Tag/Duty Label | Finish     |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
|--|---------------|---------|--------------|-------------|-------------|-------------|------------------|----------------|------------|------|------------|-----|-----------|----------|------------|-----|---|----|---|-------|----------------------|------|---|--------------|------|--|-------|--------------------------|------|--------------------------------------|-----|--------------------------------------|------------------|---------------------------|--|---------------------------|------|-------------------------------------|----|----------------------------------|-----|---|--------|------|-----|---|------|---|-------|---|-------|---|--------|---|-------|---|--|------------|------|------|---|------|---|--------------------------------|--|---|--------|------|---------------|---|-----|---|------|---|--------|---|------|---|-------|---|----------------|---|
| <table border="1"> <tr><td>FL11</td><td>Cert.</td><td>Code</td></tr> <tr><td>FB11</td><td>Uncertified</td><td>W</td></tr> <tr><td>FL12</td><td>ATEX</td><td>B</td></tr> <tr><td>FB12</td><td>UL Listed*</td><td>UL</td></tr> <tr><td></td><td>GOST 'R'</td><td>G</td></tr> <tr><td></td><td>Inmetro</td><td>DM</td></tr> </table> <p>*UL listed only available FB11 &amp; FB12.</p>  | FL11          | Cert.   | Code         | FB11        | Uncertified | W           | FL12             | ATEX           | B          | FB12 | UL Listed* | UL  |           | GOST 'R' | G          |     | Inmetro                                   | DM | <table border="1"> <tr><td>Guard</td><td>Code</td></tr> <tr><td>None</td><td>N</td></tr> <tr><td>Yes</td><td>Y</td></tr> </table> | Guard | Code                 | None | N   | Yes          | Y    | <table border="1"> <tr><td>Label</td><td>Code</td></tr> <tr><td>None</td><td>N</td></tr> <tr><td>Yes</td><td>Y</td></tr> <tr><td colspan="2">(Please specify)</td></tr> </table> | Label | Code                     | None | N                                    | Yes | Y                                    | (Please specify) |                           | <table border="1"> <tr><td>Unit Fixing</td><td>Code</td></tr> <tr><td>Direct Mounting</td><td>D</td></tr> <tr><td>Backstrap</td><td>B</td></tr> </table> | Unit Fixing               | Code | Direct Mounting                     | D  | Backstrap                        | B   | <table border="1"> <tr><td>Colour</td><td>Code</td></tr> <tr><td>Red</td><td>R</td></tr> <tr><td>Blue</td><td>B</td></tr> <tr><td>Green</td><td>G</td></tr> <tr><td>Amber</td><td>A</td></tr> <tr><td>Yellow</td><td>Y</td></tr> <tr><td>Clear</td><td>C</td></tr> </table> | Colour | Code | Red | R | Blue | B | Green | G | Amber | A | Yellow | Y | Clear | C | <table border="1"> <tr><td>Continuity</td><td>Code</td></tr> <tr><td>None</td><td>N</td></tr> <tr><td>Yes*</td><td>Y</td></tr> <tr><td colspan="2">*Not available in UL versions.</td></tr> </table> | Continuity | Code | None | N | Yes* | Y | *Not available in UL versions. |  | <table border="1"> <tr><td>Finish</td><td>Code</td></tr> <tr><td>Natural Black</td><td>N</td></tr> <tr><td>Red</td><td>R</td></tr> <tr><td>Blue</td><td>B</td></tr> <tr><td>Yellow</td><td>Y</td></tr> <tr><td>Grey</td><td>G</td></tr> <tr><td>White</td><td>W</td></tr> <tr><td>Special Finish</td><td>S</td></tr> </table> | Finish | Code | Natural Black | N | Red | R | Blue | B | Yellow | Y | Grey | G | White | W | Special Finish | S |
| FL11   | Cert.         | Code    |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| FB11   | Uncertified   | W       |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| FL12   | ATEX          | B       |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| FB12   | UL Listed*    | UL      |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
|  | GOST 'R'      | G       |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
|  | Inmetro       | DM      |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Guard  | Code          |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| None   | N             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Yes  | Y             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Label  | Code          |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| None   | N             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Yes  | Y             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| (Please specify)   |               |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Unit Fixing  | Code          |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Direct Mounting  | D             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Backstrap  | B             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Colour   | Code          |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Red  | R             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Blue   | B             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Green  | G             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Amber  | A             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Yellow   | Y             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Clear  | C             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Continuity   | Code          |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| None   | N             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Yes*   | Y             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| *Not available in UL versions.   |               |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Finish   | Code          |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Natural Black  | N             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Red  | R             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Blue   | B             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Yellow   | Y             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Grey   | G             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| White  | W             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Special Finish   | S             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| <table border="1"> <tr><td>Voltage</td><td>Code</td></tr> <tr><td>24V d.c.</td><td>024</td></tr> <tr><td>48V d.c.*</td><td>048</td></tr> <tr><td>110V a.c.*</td><td>110</td></tr> <tr><td>120V a.c.†</td><td>120</td></tr> <tr><td>220V a.c.*</td><td>220</td></tr> <tr><td>240V a.c.</td><td>240</td></tr> <tr><td>254V a.c.*</td><td>254</td></tr> <tr><td colspan="2">Other voltages available, please specify.</td></tr> <tr><td colspan="2">*FB11 &amp; FB12 only</td></tr> <tr><td colspan="2">†FB12 UL Listed only</td></tr> </table> | Voltage       | Code    | 24V d.c.     | 024         | 48V d.c.*   | 048         | 110V a.c.*       | 110            | 120V a.c.† | 120  | 220V a.c.* | 220 | 240V a.c. | 240      | 254V a.c.* | 254 | Other voltages available, please specify. |    | *FB11 & FB12 only   |       | †FB12 UL Listed only |      | <table border="1"> <tr><td>Lamp Wattage</td><td>Code</td></tr> <tr><td>FL11† 5W d.c. (1 x 5W tube)*</td><td>5</td></tr> <tr><td>10W a.c. (1 x 10W tube)*</td><td>10</td></tr> <tr><td>FB11† 10W a.c. &amp; d.c. (1 x 10W bulb)</td><td>10</td></tr> <tr><td>FL12 13W a.c. &amp; d.c. (1 x 13W tube)*</td><td>13</td></tr> <tr><td>26W a.c. (2 x 13W tubes)*</td><td>26</td></tr> <tr><td>39W a.c. (3 x 13W tubes)*</td><td>39</td></tr> <tr><td>FB12 60W a.c. &amp; d.c. (1 x 60W bulb)</td><td>60</td></tr> <tr><td>100W a.c. &amp; d.c. (1 x 100W bulb)</td><td>100</td></tr> </table> <p>*Not available in UL versions.<br/>†Inmetro Only available on FL11 &amp; FB11</p> | Lamp Wattage | Code | FL11† 5W d.c. (1 x 5W tube)*   | 5     | 10W a.c. (1 x 10W tube)* | 10   | FB11† 10W a.c. & d.c. (1 x 10W bulb) | 10  | FL12 13W a.c. & d.c. (1 x 13W tube)* | 13               | 26W a.c. (2 x 13W tubes)* | 26   | 39W a.c. (3 x 13W tubes)* | 39   | FB12 60W a.c. & d.c. (1 x 60W bulb) | 60 | 100W a.c. & d.c. (1 x 100W bulb) | 100 |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Voltage  | Code          |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| 24V d.c.   | 024           |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| 48V d.c.*  | 048           |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| 110V a.c.*   | 110           |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| 120V a.c.†   | 120           |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| 220V a.c.*   | 220           |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| 240V a.c.  | 240           |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| 254V a.c.*   | 254           |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Other voltages available, please specify.  |               |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| *FB11 & FB12 only  |               |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| †FB12 UL Listed only   |               |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| Lamp Wattage   | Code          |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| FL11† 5W d.c. (1 x 5W tube)*   | 5             |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| 10W a.c. (1 x 10W tube)*   | 10            |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| FB11† 10W a.c. & d.c. (1 x 10W bulb)   | 10            |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| FL12 13W a.c. & d.c. (1 x 13W tube)*   | 13            |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| 26W a.c. (2 x 13W tubes)*  | 26            |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| 39W a.c. (3 x 13W tubes)*  | 39            |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| FB12 60W a.c. & d.c. (1 x 60W bulb)  | 60            |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |
| 100W a.c. & d.c. (1 x 100W bulb)   | 100           |         |              |             |             |             |                  |                |            |      |            |     |           |          |            |     |   |    |   |       |                      |      |   |              |      |  |       |                          |      |                                      |     |                                      |                  |                           |  |                           |      |                                     |    |                                  |     |   |        |      |     |   |      |   |       |   |       |   |        |   |       |   |  |            |      |      |   |      |   |                                |  |   |        |      |               |   |     |   |      |   |        |   |      |   |       |   |                |   |



All the above specifications, dimensions, weights and tolerances are nominal (typical) and MEDC reserve the right to vary all data without prior notice. No liability is accepted for any consequence of use.