

# 5 JOULE XENON & HIGH INTENSITY LED BEACONS EExd, Weatherproof SM87 & LED Ranges



Now VNIPO  
Approved

## Introduction

These certified beacons have been designed for use in harsh environmental conditions. The stainless steel or marine grade alloy enclosures are suitable for use offshore or onshore, where light weight combined with corrosion resistance and strength is required. Units can be painted to customer specification and fitted with identification labels.

LED version available, offering extended lifetimes.

A high temperature version is available – contact MEDC for details.

- ★ Zone 1 and Zone 2 use.
  - ★ EExd IICT4/T6.
  - ★ ATEX approved Ex II 2GD.
  - ★ BASEEFA Certified.
  - ★ UL Listed for USA and Canada:
    - Class I, Div. 1, Groups C & D.
    - Class I, Zone 1 AExd IIB.
  - ★ CSA Certified.
  - ★ GOST 'R' & 'K' Certified\*.
  - ★ Chinese (CQST) Certified.
  - ★ Brazilian (Inmetro) Certified.
  - ★ IP66 and IP67.
  - ★ Certified temperature\* –55°C to +70°C.
  - ★ High temperature version (up to 85°C) available.
  - ★ Stainless steel or marine grade alloy.
  - ★ Xenon or LED versions.
  - ★ Various lens colours.
  - ★ Optional lens guard.
  - ★ Telephone or relay initiated.
- \*Depending on version.

# Specification

Certification: ATEX EExdIIC T6.

Cert. No. Baseefa 03ATEX0222.

CENELEC EN50014 and EN50018 and EN50019.

CSA Certification to C22.2 Nos. 0, 0.4, 0.5, 9, 30-M1986, 94-M91, 137-M1981. Class I. Div 1. Group D. Enclosure 3/4. Cert. No. 96406. (HXB only).

UL Listed for USA & Canada: Class I, Div 1, Groups C & D and Class 1, Zone 1. (HXB & XBT only). Listing No. E187894.

Refer to UL data sheet, at rear of catalogue, for complete information.

GOST 'R' Certification: 1Exd IIC T4, (HXB only) Russian Fire Approved (VNIPO).

GOST 'K' Certification: Exd IIC T4.

Chinese (CQST) Certification: Exd IIC T4/T6, (HXB only).

Brazilian (Inmetro) Certification: BR-Ex d IIC T3/T4/T5/T6

Material: HXBS, XBTS and LEDS – Grade 316 ANC4B Stainless Steel.

HXBA, XBTA & LEDA – LM25 TF Marine Grade Alloy.

Lens – Glass.

Note: Terminal Chamber available only in Stainless Steel.

UL version available only in marine grade alloy.

CSA version available only in stainless steel.

Finish: Epoxy paint finish as standard or to customer's specification.

| Voltage                   | DC    |       | AC 50/60 Hz |       |       |       |       |
|---------------------------|-------|-------|-------------|-------|-------|-------|-------|
|                           | 24    | 48    | 110         | 120   | 220   | 240   | 254   |
| <b>SM87 HXB XBT</b>       |       |       |             |       |       |       |       |
| Tube Energy (Joules)      | 5     | 5     | 6           | 7     | 6     | 7     | 8     |
| Peak Current              |       |       |             |       |       |       |       |
| Consumption (mA)          | 320   | 170   | 250         | 275   | 120   | 135   | 150   |
| Effective Intensity (Cd)  | 29    | 29    | 32          | 39    | 32    | 39    | 44    |
| Peak Intensity            | 22213 | 22213 | 25061       | 30187 | 25061 | 30187 | 34174 |
| Power Consumption (Watts) | 7.2   | 7.6   | 25          | 27    | 25    | 27    | 35    |
| <b>SM87 LED</b>           |       |       |             |       |       |       |       |
| Current Consumption       | 165mA | 85mA  | N/A         | N/A   | N/A   | N/A   | N/A   |

FOR COLOURED LENSES

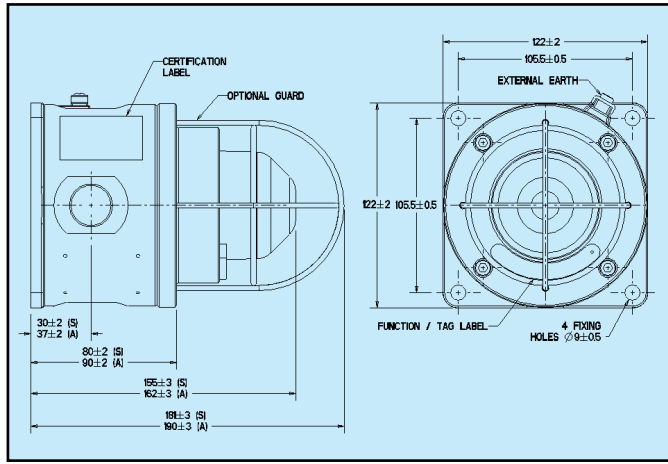
| Colour             | Red  | Blue | Amber | Green | Yellow |
|--------------------|------|------|-------|-------|--------|
| Multiplying Factor | 0.15 | 0.12 | 0.51  | 0.49  | 0.86   |

The photometric data has been verified by BSI. A report is available if required.

| LED Light Output                         | Colour | Total LED Output (Candela) |
|--|--------|----------------------------|
| Steady or Flashing (customer selectable) | Red    | 192                        |
|  | Amber  | 64                         |
|  | Green  | 17                         |
|  | Blue   | 64                         |

LED/Lens Colour: Red, Blue, Green, Amber, Yellow (not LED) or Clear (not LED).

Flash Rate: 60fpm as standard, other flash rates available on request.



Weight: HXBS & LEDS – 3.8kg each (approx).  
HXBA & LEDA – 2kg. each (approx.).

BASEEFA HXB = -55°C to +70°C.

Certified LED = -20°C to +40°C.

Temperature: Versions are available certified up to +55°C maximum with a T4 rating.  
XBT (High temp) = -40°C to +85°C.

CSA Certified

Temperature: -50°C to +40°C.

UL Certified

Temperature: HXB = -55°C to +70°C. XBT (High Temp.) = -40°C to +85°C.

GOST 'R' Certified

Temperature: HXB = -55°C to +55°C.

Ingress

Protection: IP66 & IP67.

Terminals: HXB & XBT – 6 off suitable for up to 2.5mm<sup>2</sup> cable.

LED – 6 off suitable for up to 2.5mm<sup>2</sup> cable.

Telephone initiation or relay interface:

Initiation by telephone ringing tone or low voltage control signals.

Labels: Duty & Tag Labels optional.

Entries: Up to 4 x 20mm/25mm ISO or 1/2"/3/4" NPT.

## 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. **For standard products, available ex-stock, contact sales office for details.**

| Model                              | Certification        | Voltage                                     | Lens/LEDcolour       | Lens Guard                | Entries              | Tag/Duty Label                           | Initiate Option      | Finish                         |             |
|------------------------------------|----------------------|---|----------------------|---------------------------|----------------------|--|----------------------|--------------------------------|-------------|
| <input type="text"/>               | <input type="text"/> | <input type="text"/>                        | <input type="text"/> | <input type="text"/>      | <input type="text"/> | <input type="text"/>                     | <input type="text"/> | <input type="text"/>           |             |
| <b>Type</b>                        | <b>Code</b>          | <b>Certification</b>                        | <b>Code</b>          | <b>Colour</b>             | <b>Code</b>          | <b>Entries</b>                           | <b>Code</b>          | <b>Initiate Option</b>         | <b>Code</b> |
| Xenon (stainless steel)            | SM87HXBS             | ATEX  | B                    | Red                       | R                    | 20mm                                     | 1                    | Telephone                      | *T          |
| Xenon (alloy)                      | SM87HXBA             | UL  | UL                   | Blue                      | B                    | 25mm                                     | 2                    | Relay                          | *R          |
| Xenon High Temp. (alloy)           | SM87XBTA*            | CSA   | C                    | Green                     | G                    | 1/2" NPT                                 | 3                    | EOL Resistor                   | *E          |
| Xenon High Temp. (stainless steel) | SM87XBTS*            | GOST 'R'                                    | G                    | Amber                     | A                    | 3/4" NPT                                 | 4                    | None                           | N           |
| LED EExd (stainless steel)         | SM87LEDS             | GOST 'K'                                    | K                    | Yellow                    | Y                    | Top                                      | *T                   | *Not available on UL versions. |             |
| LED EExd (alloy)                   | SM87LEDA             | GOST 'K'                                    | K                    | (not LED)                 |                      | Bottom                                   | *B                   |                                |             |
|                                    |                      | Chinese (CQST)                              | Q                    | Clear                     | C                    | RHS                                      | *R                   |                                |             |
|                                    |                      | Inmetro                                     | DM                   | (not LED)                 |                      | LHS                                      | *L                   |                                |             |
|                                    |                      | Only HXBS is available CSA certified.       |                      | <b>Voltage</b>            | <b>Code</b>          | *prefix position with entry size code.   |                      | <b>Finish</b>                  | <b>Code</b> |
|                                    |                      | Only HXBA & XBTA is available UL certified. |                      | 24V d.c.                  | 024                  | e.g. 1R1B=20mm Right and Bottom entries. |                      | Red                            | R           |
|                                    |                      | *VNIPO Approved as standard.                |                      | 48V d.c. not XBT          | 048                  | <b>Guard</b>                             | <b>Code</b>          | Blue                           | B           |
|                                    |                      |   |                      | 110V a.c. not LED, XBT110 | 110                  | None                                     | N                    | Yellow                         | Y           |
|                                    |                      |   |                      | 120V a.c.                 | 120                  | Yes                                      | Y                    | Yellow/Black Stripe            | X           |
|                                    |                      |   |                      | 220V a.c.                 | 220                  | Yes                                      | Y                    | Grey                           | G           |
|                                    |                      |   |                      | 240V a.c.                 | 240                  | Yes                                      | Y                    | White                          | W           |
|                                    |                      |   |                      | 254V a.c.                 | 254                  |  |                      | Special Finish                 | S           |



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.