

Ex d, Weatherproof

AVAILABLE IN
STAINLESS STEEL



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 lightweight 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.

Stainless steel, one of the most durable materials available on the market, is both hard wearing and corrosion resistant, increasing the life of products in harsh environments and therefore reducing maintenance costs.

Features

- Zone 1 and Zone 2 use.
- Ex d IICT4/T5/T6.
- ATEX approved Ex II 2GD.
- BASEEFA certified.
- IECEx certified Gb, Db.
- UL Listed for USA and Canada:
 - Class I, Div. 1, Groups C & D.
 - Class I, Zone 1 AExd IIB.
- CSA certified.
- CUTR certified*.
- Chinese (CQST) certified.
- Brazilian (Inmetro) certified.
- IP66 and IP67.
- Certified temperature: -55°C to $+70^{\circ}\text{C}$ *.
- 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.

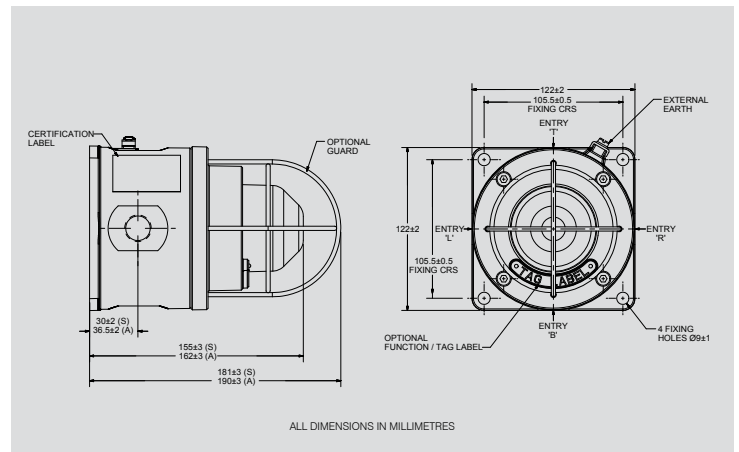
*Depending on version.

†Please contact MEDC Technical Sales.



Certification and Specification

ATEX Ex d:	Cert. no. Baseefa 03ATEX0222. Certified to: EN60079-0, EN60079-1, EN60079-31. HXB: Ex II 2GD, Ex d IIC T5/T6 Gb, Ex tb IIIC T65°C/ T80°C/ T95°C Db. LED: Ex II 2GD, Ex d IIC T6 Gb, Ex tb IIIC T55°C/ T70°C Db. XBT: Ex II 2GD, Ex d IIC T4 Gb, Ex tb IIIC T110°C Db.
IECEx Ex d:	Cert. no. IECEx BAS 09.0059. Certified to: IEC60079-0, IEC60079-1, IEC60079-31. HXB: Ex d IIC T5/T6 Gb, Ex tb IIIC T65°C/ T80°C/ T95°C Db. LED: Ex d IIC T6 Gb, Ex tb IIIC T55°C/ T70°C Db. XBT: Ex d IIC T4 Gb, Ex tb IIIC T110°C Db.
UL:	Listing no. E187894. Class I, Div 1, Groups C & D. Class I, Zones 1. (HXB & XBT only).
CSA:	Cert no. 96406. (HXB only). Certified to: C22.2 Nos 0, 0.4, 0.5, 9, 30-M1986, 94-M91, 137-M1981. Class I, Div 1, Group D.
CUTR Ex d:	HXB: 1Ex d IIC T5/T6 Gb, Ex tb IIIC T65°C/ T80°C/ T95°C Db. LED: 1Ex d IIC T6 Gb, Ex tb IIIC T55°C/ T70°C Db. XBT: 1Ex d IIC T4 Gb, Ex tb IIIC T110°C Db. Russian Fire Alarm approved.
Inmetro Ex d:	Exd IIC T4/T5/T6 Gb. HXB: Ex d IIC T5/T6 Gb, Ex tb IIIC T65°C/ T80°C/ T95°C Db. LED: Ex d IIC T6 Gb, Ex tb IIIC T55°C/ T70°C Db. XBT: Ex d IIC T4 Gb, Ex tb IIIC T110°C Db.
CQST:	Exd IIC T4/T5/T6. (HXB only).
Material:	HXBS, XBTS and LEDS – Grade 316 ANC4B Stainless Steel. HXBA, XBTA & LEDA – LM25 TF Marine Grade Alloy. Lens – Glass. UL version available only in marine grade alloy. CSA version available only in stainless steel.
Finish:	Epoxy paint finish as standard or to customer specification.
Certified Temp:	ATEX/IECEx HXB = -55°C to +70°C (T5) -55°C to +55°C (T6) LED = -55°C to +55°C*(T6) XBT = -55°C to +85°C (T4) CSA HXB = -50°C to +40°C UL HXB = -55°C to +70°C XBT = -40°C to +85°C GOST 'R' HXB = -55°C to +55°C *Operating temp is -20°C
Weight:	HXBS & LEDS – 3.8kg each (approx). HXBA & LEDA – 2kg. each (approx).
Ingress Protection:	IP66 & IP67.
Entries:	Up to 4 x M20 / M25 ISO or 1/2" / 3/4" NPT.
Terminals:	HXB & XBT – 6 off suitable for up to 1.5mm ² cable. LED – 6 off suitable for up to 1.5mm ² cable.
Relay Initiate:	Initiation by telephone ringing tone or low voltage control signals.
Labels:	Duty & Tag Labels optional.



Electrical Ratings:

	d.c.		a.c. 50/60Hz				
	24	48	110	120	220	240	254
Voltage							
Tube Energy (Joules)	5	5	6	7	6	7	8
SM87 HXB XBT							
Peak Current	393	175	250	275	120	135	153
Consumption (mA)							
Current Consumption	165mA	85mA	N/A	N/A	N/A	N/A	N/A
SM87 LED							
Power Consumption (Watts)	7.2	7.6	25	27	25	27	35
Effective Intensity (Cd)	29	29	32	39	32	39	44
Peak Intensity (Cd)	22213	22213	25061	30187	25061	30187	34174

NOTE: The above figures (Cd) are for a clear lens @ 1Hz flash rate.

Multiplying Factor for Coloured Lenses.

Red	Blue	Amber	Green	Yellow
0.15	0.12	0.51	0.49	0.86

The photometric data given above has been verified by BSI. Reports are available if required.

LED Light Output. Steady or Flashing (customer selectable)

	Red	Blue	Amber	Green
Total LED Output (Candela)	192	64	64	17

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

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

Ordering Requirements

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

Model	Certification	Voltage	Lens/LED Colour	Guard	Entries	Tag/Duty	Options	Finish																																																																																																																								
<table border="1"> <thead> <tr> <th>Model</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>Xenon (stainless steel)</td><td>SM87HXBS</td></tr> <tr><td>Xenon (alloy)</td><td>SM87HXBA</td></tr> <tr><td>Xenon</td><td>SM87XBTA*</td></tr> <tr><td>High Temp. (alloy)</td><td></td></tr> <tr><td>Xenon</td><td>SM87XBTS*</td></tr> <tr><td>High Temp. (stainless steel)</td><td></td></tr> <tr><td>LED Exd (stainless steel)</td><td>SM87LEDS</td></tr> <tr><td>LED Exd (alloy)</td><td>SM87LEDA</td></tr> </tbody> </table> <p>* Only available 24V d.c.</p>	Model	Code	Xenon (stainless steel)	SM87HXBS	Xenon (alloy)	SM87HXBA	Xenon	SM87XBTA*	High Temp. (alloy)		Xenon	SM87XBTS*	High Temp. (stainless steel)		LED Exd (stainless steel)	SM87LEDS	LED Exd (alloy)	SM87LEDA	<table border="1"> <thead> <tr> <th>Certification</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>ATEX</td><td>B</td></tr> <tr><td>IECEx</td><td>J</td></tr> <tr><td>UL</td><td>UL</td></tr> <tr><td>CSA</td><td>C</td></tr> <tr><td>CUTR</td><td>G*</td></tr> <tr><td>Chinese (CQST)</td><td>Q</td></tr> <tr><td>Inmetro</td><td>DM</td></tr> </tbody> </table> <p>* Russian Fire Approval as standard.</p>	Certification	Code	ATEX	B	IECEx	J	UL	UL	CSA	C	CUTR	G*	Chinese (CQST)	Q	Inmetro	DM	<table border="1"> <thead> <tr> <th>Voltage</th> <th>Code</th> </tr> </thead> <tbody> <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. not LED</td><td>110</td></tr> <tr><td>120V a.c. not LED</td><td>120</td></tr> <tr><td>220V a.c. not LED</td><td>220</td></tr> <tr><td>240V a.c. not LED</td><td>240</td></tr> <tr><td>254V a.c. not LED</td><td>254</td></tr> </tbody> </table>	Voltage	Code	24V d.c.	024	48V d.c.	048	110V a.c. not LED	110	120V a.c. not LED	120	220V a.c. not LED	220	240V a.c. not LED	240	254V a.c. not LED	254	<table border="1"> <thead> <tr> <th>Colour</th> <th>Code</th> </tr> </thead> <tbody> <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>Clear</td><td>C</td></tr> <tr><td>Yellow (not LED)</td><td>Y</td></tr> </tbody> </table>	Colour	Code	Red	R	Blue	B	Green	G	Amber	A	Clear	C	Yellow (not LED)	Y	<table border="1"> <thead> <tr> <th>Guard</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>None</td><td>N</td></tr> <tr><td>Yes</td><td>Y</td></tr> </tbody> </table>	Guard	Code	None	N	Yes	Y	<table border="1"> <thead> <tr> <th>Entries</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>M20</td><td>1</td></tr> <tr><td>M25</td><td>2</td></tr> <tr><td>1/2" NPT</td><td>3</td></tr> <tr><td>3/4" NPT</td><td>4</td></tr> <tr><td>Top</td><td>*T</td></tr> <tr><td>Bottom</td><td>*B</td></tr> <tr><td>RHS</td><td>*R</td></tr> <tr><td>LHS</td><td>*L</td></tr> </tbody> </table> <p>* Prefix position with entry size code. e.g. 1T1B=M20 Top and Bottom entries.</p>	Entries	Code	M20	1	M25	2	1/2" NPT	3	3/4" NPT	4	Top	*T	Bottom	*B	RHS	*R	LHS	*L	<table border="1"> <thead> <tr> <th>Label</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>None</td><td>N</td></tr> <tr><td>Yes</td><td>Y*</td></tr> </tbody> </table> <p>* Please specify wording. (Note: 15 characters maximum).</p>	Label	Code	None	N	Yes	Y*	<table border="1"> <thead> <tr> <th>Options</th> <th>Code</th> </tr> </thead> <tbody> <tr><td>Telephone</td><td>T*</td></tr> <tr><td>Relay</td><td>R*</td></tr> <tr><td>EOL Resistor</td><td>E*†</td></tr> <tr><td>None</td><td>N</td></tr> </tbody> </table> <p>* Not available on UL versions. † Please specify.</p>	Options	Code	Telephone	T*	Relay	R*	EOL Resistor	E*†	None	N	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <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>Yellow/Black Stripe</td><td>X</td></tr> <tr><td>Grey</td><td>G</td></tr> <tr><td>White</td><td>W</td></tr> <tr><td>Special</td><td>S*</td></tr> </tbody> </table> <p>* Please specify.</p>	Finish	Code	Red	R	Blue	B	Yellow	Y	Yellow/Black Stripe	X	Grey	G	White	W	Special	S*
Model	Code																																																																																																																															
Xenon (stainless steel)	SM87HXBS																																																																																																																															
Xenon (alloy)	SM87HXBA																																																																																																																															
Xenon	SM87XBTA*																																																																																																																															
High Temp. (alloy)																																																																																																																																
Xenon	SM87XBTS*																																																																																																																															
High Temp. (stainless steel)																																																																																																																																
LED Exd (stainless steel)	SM87LEDS																																																																																																																															
LED Exd (alloy)	SM87LEDA																																																																																																																															
Certification	Code																																																																																																																															
ATEX	B																																																																																																																															
IECEx	J																																																																																																																															
UL	UL																																																																																																																															
CSA	C																																																																																																																															
CUTR	G*																																																																																																																															
Chinese (CQST)	Q																																																																																																																															
Inmetro	DM																																																																																																																															
Voltage	Code																																																																																																																															
24V d.c.	024																																																																																																																															
48V d.c.	048																																																																																																																															
110V a.c. not LED	110																																																																																																																															
120V a.c. not LED	120																																																																																																																															
220V a.c. not LED	220																																																																																																																															
240V a.c. not LED	240																																																																																																																															
254V a.c. not LED	254																																																																																																																															
Colour	Code																																																																																																																															
Red	R																																																																																																																															
Blue	B																																																																																																																															
Green	G																																																																																																																															
Amber	A																																																																																																																															
Clear	C																																																																																																																															
Yellow (not LED)	Y																																																																																																																															
Guard	Code																																																																																																																															
None	N																																																																																																																															
Yes	Y																																																																																																																															
Entries	Code																																																																																																																															
M20	1																																																																																																																															
M25	2																																																																																																																															
1/2" NPT	3																																																																																																																															
3/4" NPT	4																																																																																																																															
Top	*T																																																																																																																															
Bottom	*B																																																																																																																															
RHS	*R																																																																																																																															
LHS	*L																																																																																																																															
Label	Code																																																																																																																															
None	N																																																																																																																															
Yes	Y*																																																																																																																															
Options	Code																																																																																																																															
Telephone	T*																																																																																																																															
Relay	R*																																																																																																																															
EOL Resistor	E*†																																																																																																																															
None	N																																																																																																																															
Finish	Code																																																																																																																															
Red	R																																																																																																																															
Blue	B																																																																																																																															
Yellow	Y																																																																																																																															
Yellow/Black Stripe	X																																																																																																																															
Grey	G																																																																																																																															
White	W																																																																																																																															
Special	S*																																																																																																																															

All 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.

