

# SM87BG & SM87PB manual call point range

Ex d, Ex ia, weatherproof



## Overview

These manual fire alarm, emergency shutdown break-glass and pushbutton units have been designed for the most arduous environmental conditions.

The units are both easy to install and maintain. Intrinsically safe Ex ia and flameproof Ex d versions of each model are available.

A choice of either stainless steel or alloy makes the range suitable for either the offshore or onshore industries. 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 0, Zone 1 and Zone 2 use\*
  - Ex d IIC T5/T6 or Ex ia IIC T4
  - ATEX approved, Ex II 1G (Ex ia) or Ex II 2GD (Ex d)
  - UL listed for USA and Canada (PB only). Class I, Div 1, Groups C & D
  - ULC certified for Class I, Zone 1 Groups C & D
  - CSA certified
  - IECEx certified Gb, Db
  - TR CU certified
  - Chinese (CQST) certified
  - Brazilian (INMETRO) certified
  - CCOE certified
  - SIL 2 certified (SM87PB only)
  - IP66 and IP67
  - DNV type approval (IEC 60945) (SM87PB only)
  - Certified temperature: -55°C to +70°C\*
  - Stainless steel or marine grade alloy
  - Robust yet lightweight
  - Easy to maintain
- \*Model dependent



## Certifications

<b>ATEX Ex d</b>	Cert. no. Baseefa03ATEX0075. ATEX Approved Ex II 2GD Certified to: EN60079-0, EN60079-1, EN60079-31 Ex d IIC T5/T6 Gb, Ex tb IIIC T85°C/T100°C Db. IP66/IP67
<b>ATEX Ex ia</b>	Cert. no. Baseefa 02ATEX0152X. ATEX Approved Ex II 1G Certified to: EN60079-0, EN60079-11, EN60079-26 Ex ia IIC T4 Ga
<b>IECEX Ex d</b>	Cert. no. IECEX BAS 09.0060 Certified to: EN60079-0, EN60079-1, EN60079-31 Ex d IIC T5/T6 Gb, Ex tb IIIC T85°C/T100°C Db. IP66/IP67
<b>IECEX Ex ia</b>	Cert. no. IECEX BAS 10.0033X Certified to: IEC60079-0, IEC60079-11, IEC60079-26 Ex ia IIC T4 Ga
<b>UL</b>	Listing no. E186629 UL listed to Class 1, Div 1. Groups C & D. (SM87PBL)
<b>ULC</b>	Cert. no. 20091023-E320282 ULC certified for Class I, Zone 1 Groups C & D
<b>CSA Ex d</b>	Class 1, Div 1 & 2. Group D
<b>CSA Ex ia</b>	Class 1, Div 1 & 2. Groups A-D
<b>TR CU Ex d</b>	1Ex d IIC T5/T6 Gb, Ex tb IIIC T85°C/T100°C Db. IP66/IP67 Russian Fire Approved
<b>TR CU Ex ia</b>	0Ex ia IIC T4 Ga. Russian Fire Approved
<b>INMETRO Ex d</b>	Ex d IIC T5/T6 Gb
<b>CQST Exd</b>	Exd IIC T85°C/T100°C
<b>CQST Exia</b>	Exia IIC T4
<b>Type Approvals</b>	DNV (IEC 60945) (Stainless Steel SM87PB only)
<b>SIL</b>	SM87PB only - SIL2 Certification to IEC61508. Cert no. 20151118-4786827453

## Specifications

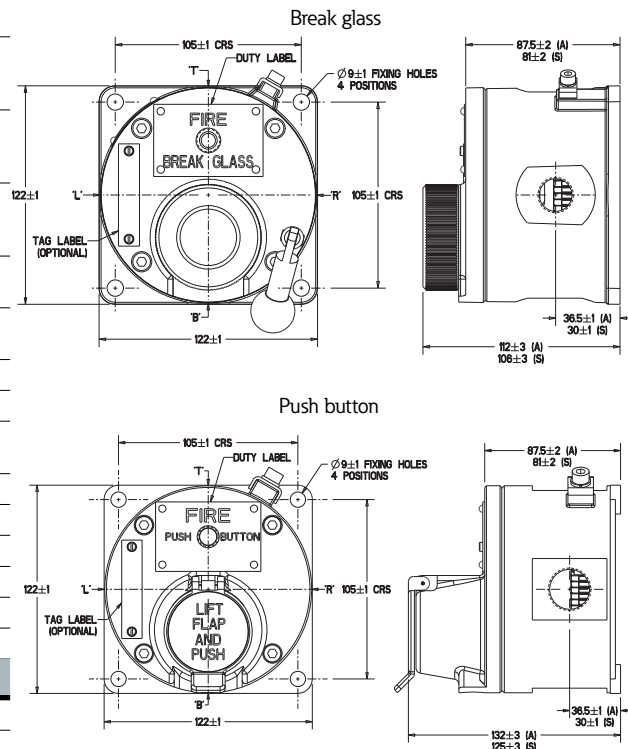
<b>Material</b>	Grade 316 ANC4B stainless steel or LM 25 TF marine grade alloy
<b>Finish</b>	Paint finish as standard or to customer specification
<b>Voltage</b>	Ex d 24V a.c./d.c. Ex ia 28V
<b>Rating</b>	2A
<b>Switches</b>	2 pole c/o, wired to terminals Optional up to 4 pole (UL version 2 pole only)
<b>Optional indicator</b>	A red high intensity LED can be fitted for alarm indication As standard the LED is not provided with over current protection. The forward current (If) should be limited to 20mA
<b>Certified temp</b>	Ex d* -55°C to +70°C. Ex ia*-55°C to +60°C -20°C to +55°C (LED version only) UL -40°C to +70°C, -20°C to +55°C (LED version only) CSA -50°C to +55°C (Ex d), -50°C to +40°C (Ex ia) *Note: includes ATEX, IECEX, CUTR, Brazilian & Chinese versions
<b>Weight</b>	3-8 kg. steel (approx.) or 2.5 kg. alloy (approx)
<b>Ingress protection</b>	IP66 & IP67. SM87PB IP68 (35m for 40 hours)
<b>Entries</b>	Up to 4 x M20 or M25 ISO Ex d/Ex ia Up to 4 x 1/2" or 3/4" NPT UL
<b>Terminals</b>	Will accept up to 1.5mm <sup>2</sup> cable
<b>Resistor values</b>	470R minimum (d.c. & I.S. units only)

## 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

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## General arrangement drawing (all dimensions in mm)



Both the Ex ia units and the Ex d units have the same external appearance. Also the internal components are identical throughout the range. Each unit can be wired for either NO, NC or CO contacts to customer specification