

# PB manual call point range

Ex de, Ex ia, weatherproof



## Overview

These new and improved manual alarm call points have been designed for use in hazardous locations and harsh environmental conditions. The GRP enclosure is suitable for use onshore or offshore where light weight combined with a high level of corrosion resistance is required. The unit is now supplied with a lift flap that latches firmly in place.

## Features

- ATEX certified
- IECEx certified
- UL certified for Haz locs
- UL certified for Ord locs
- TR CU certified
- Chinese (CQST) certified
- Brazilian (INMETRO) certified
- CCOE certified
- SIL 2 certified
- IP66 and IP67
- Corrosion free GRP construction
- Variety of colours available
- Up to 9 terminals available
- Optional LED – indicates that the unit has been operated
- Earth continuity option for metal glands
- 1 or 2 changeover switches
- Captive cover screws
- Lift Flap as standard
- Latching as standard. Self reset (momentary) available



## Certifications

<b>ATEX Ex de</b>	Cert. no. BAS02ATEX2105X. ATEX Approved Ex II 2GD EN60079-0, EN60079-1, EN60079-7, EN60079-31 Ex de IIC T6 Gb, Ex tb IIIC T85°C Db switch only Ex de mb IIC T6 Gb, Ex tb IIIC T85°C Db with LED Ex de mb IIC T4 Gb, Ex tb IIIC T135°C Db with resistors & diodes
<b>ATEX Ex ia</b>	Cert no. Baseefa 03ATEX0084X. ATEX Approved Ex II 1GD Certified to: EN60079-0, EN60079-11 Ex ia IIC T4 Ga, Ex ia IIIC T135°C Da
<b>IECEX Ex ia</b>	Cert. no. IECEX BAS 12.0093X Certified to: IEC 60079-0, IEC 60079-11 Ex ia IIC T4 Ga, Ex ia IIIC T135°C Da
<b>UL</b>	Listing no. E186629 UL listed to Class 1, Div 2. Groups A – D UL listed for Ordinary Locations. Listing no. S8117
<b>CSA</b>	Cert. no. 79120-3. Class 1 groups A, B, C & D
<b>TR CU Ex ed</b>	2Ex ed IIC T6, DIP A21 T85°C IP66/IP67 (switch only) 2Ex e md IIC T4, DIP A21 T135°C IP66/IP67 (other versions) Russian Fire Approved
<b>TR CU Ex ia</b>	0Exia IIC T4. Russian Fire Approved
<b>INMETRO Ex de</b>	Ex de IIC T6 Gb (Switch only), Ex de mb IIC T4 Gb (other versions)
<b>CQST Ex de</b>	Ex de IIC T6 (switch only), Ex de mb IIC T4 (other versions)
<b>CQST Ex ia</b>	Ex ia IIC T4
<b>Type Apps</b>	American Bureau of Shipping type approval (ABS) PBI only
<b>SIL</b>	SIL2 Certification to IEC61508. Cert no. 20151118-4786827453

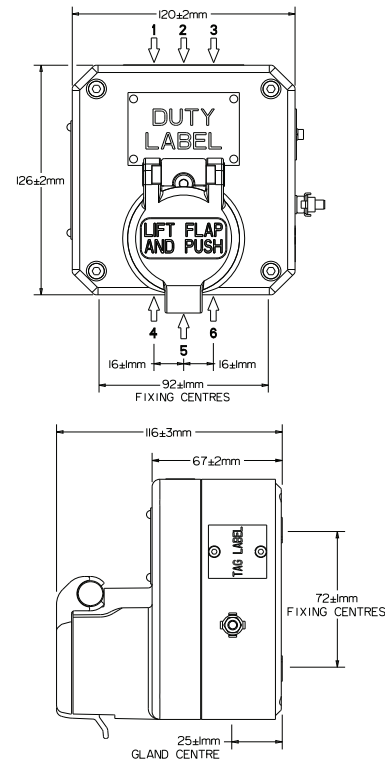
## Specifications

<b>Material</b>	Anti-static UV resistant glass reinforced polyester
<b>Finish</b>	Red painted finish as standard or to customer specification
<b>Voltage</b>	Up to 254V a.c. Up to 28V d.c
<b>Weight</b>	1.2 kg. (Varies with models and entries)
<b>Ingress protection</b>	IP66 & IP67
<b>Entries</b>	Up to 4 entries, M16 or M20 top and bottom (1/2" NPT available on UL version)
<b>Terminals</b>	7 x 2.5mm <sup>2</sup> – standard 9 x 2.5mm <sup>2</sup> optional – up to 60V only
<b>Resistors</b>	Various configurations available on versions up to 24V and all 'IS' versions. (Minimum Resistor value 100ΩPBE, 470ΩPBI)
<b>Earth continuity</b>	Internal and external earth continuity is provided with an optional earth plate
<b>LED indication</b>	A high intensity red LED can be fitted as an optional extra to indicate operation on versions up to 24V and all 'IS' versions As standard the LED is not provided with over current protection. The forward current (If) should be limited to 20mA
<b>Labelling</b>	Duty label – worded to customers requirements. Riveted on Tag label – worded to customers requirements. Screwed on
<b>Switch ratings (1 or 2 changeover switches fitted)</b>	d.c. 0-30v 5A (resistive) or 3A (inductive) 30-50v 1A (resistive or inductive) a.c. 0-254V 5A (resistive or Inductive)

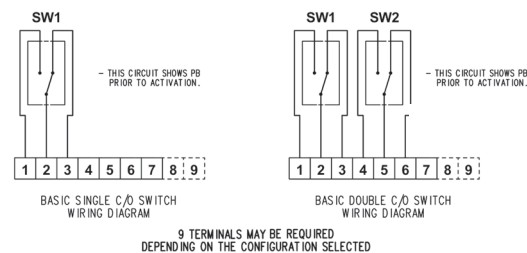
## Ordering requirements

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

## General arrangement drawing (all dimensions in mm)



PB standard wiring configuration



## Temperature

Model	PBW	PBUL	PBE	PBI	CSA
	-40°C to +70°C	-25°C to +55°C†	-40°C to +70°C*	-40°C to +70°C	-30°C to +40°C

\* -35°C to +70°C with LED  
† -25°C to +50°C with resistors or LED fitted

Model	Certification	Entries	Labels	Voltage	Switches	Options	Terminals	Finish
PB								

Entries	Code
M16	A*
M20	B*
½" NPT	C*

\*Prefix entry size (see diagram above) with entry position code e.g. 4B6B.  
UL versions only available with 1/2" NPT entries

Label	Code
None	0
Duty label reqd	4*
Tag label reqd	5*

\*Specify wording on 4 or 5 as required

Switches	Code
Single changeover	S
Double changeover	D

Voltage	Code
a.c.	A
d.c.	D*

\*Must be selected for CSA certified unit

Option	Code
None	N
LED	A
Resistor series	C*
Resistor EOL	D*
Diode	E†
Earth continuity	F**
Turn and push	T†
Self reset (momentary)	M
Resistor series and EOL	S*†

\*Specify values  
\*\*Must be selected when selecting CSA certification  
†Choose for PBE only - on the PBW, choose C & D  
‡Not available for UL/CSA versions

Terminals	Code
7 x 2.5mm (standard)	7
9 x 2.5mm (optional)	9

Finish	Code
Red (standard)	R
Natural black	N
Blue	B
Yellow	Y
Grey	G
Yellow/black stripes	X
Special	S*

\*Please specify

Certification	Code
ATEX/CENELEC - Ex de	EB
ATEX/CENELEC - Ex ia	IB
IECEX - Ex ia	IJ
CSA - Ex ia	IC
UL - Listed	UL
UL (Ordinary Locations)	UW
TR CU - Ex ia	IG*
TR CU Ex ed	EG*
CQST - Ex de	EQ†
CQST - Ex ia	IQ†
INMETRO - Ex de	EM
Uncertified	VN

\*Russian Fire Approved as standard  
†Not suitable for use in China on fire alarm systems