

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
- DNV type approval (IEC 60945)
- 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

ATEX Ex de	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)
ATEX Ex ia	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
IECEX Ex ia	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
UL	Listing no. E186629 UL listed to Class 1, Div 2. Groups A – D UL listed for Ordinary Locations. Listing no. S8117
CSA	Cert. no. 79120-3. Class 1 groups A, B, C & D
TR CU Ex ed	1Ex d e IIC T6 Gb, Ex tb IIIC T85°C Db (switch only) 1Ex d e mb IIC T6 Gb X, Ex tb IIIC T85°C Db X (with LED) 1Ex d e mb IIC T4 Gb X, Ex tb IIIC T135°C Db X (with resistors & diodes) Russian Fire approved (Must be red and have burning house duty label)
TR CU Ex ia	Ex ia IIC T4 Russian Fire approved (must be red and have burning house duty label)
INMETRO Ex de	Ex de IIC T6 Gb (Switch only), Ex de mb IIC T4 Gb (other versions)
CQST Ex de	Ex de IIC T6 (switch only), Ex de mb IIC T4 (other versions)
CQST Ex ia	Ex ia IIC T4
Type Approvals	American Bureau of Shipping type approval (ABS) PBI only DNV (IEC 60945)
SIL	SIL2 Certification to IEC61508. Cert no. 20151118-4786827453

Specifications

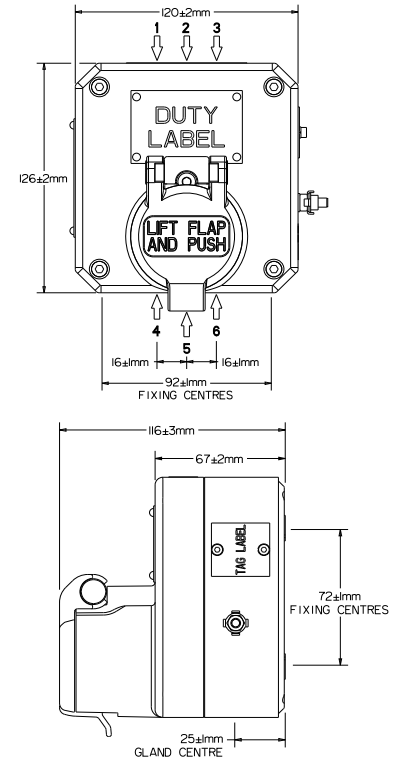
Material	Anti-static UV resistant glass reinforced polyester
Finish	Red painted finish as standard or to customer specification
Voltage	Up to 254V a.c. Up to 28V d.c
Weight	1.2 kg. (Varies with models and entries)
Ingress protection	IP66 & IP67
Entries	Up to 4 entries, M16 or M20 top and bottom (1/2" NPT available on UL version)
Terminals	7 x 2.5mm ² – standard 9 x 2.5mm ² optional – up to 60V only
Resistors	Various configurations available on versions up to 24V and all 'IS' versions. (Minimum Resistor value 100ΩPBE, 470ΩPBI)
Earth continuity	Internal and external earth continuity is provided with an optional earth plate
LED indication	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
Labelling	Duty label – worded to customers requirements. Riveted on Tag label – worded to customers requirements. Screwed on
Switch ratings (1 or 2 changeover switches fitted)	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

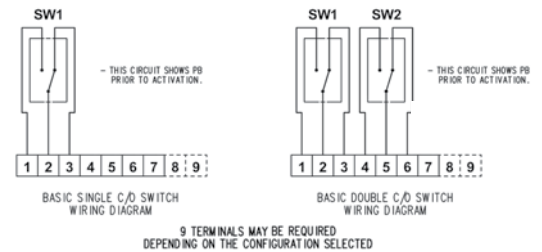
The following code is designed to help in selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box

Model	Certification	Entries	Labels	Voltage	Switches	Options	Terminals	Finish																																																																								
PB																																																																																
		<table border="1"> <thead> <tr> <th>Entries</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>M16</td> <td>A*</td> </tr> <tr> <td>M20</td> <td>B*</td> </tr> <tr> <td>1/2" NPT</td> <td>C*</td> </tr> </tbody> </table> <p>*Prefix entry size (see diagram above) with entry position code e.g. 4B6B. UL versions only available with 1/2" NPT entries</p>	Entries	Code	M16	A*	M20	B*	1/2" NPT	C*	<table border="1"> <thead> <tr> <th>Label</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>None</td> <td>0</td> </tr> <tr> <td>Duty label reqd</td> <td>4*</td> </tr> <tr> <td>Tag label reqd</td> <td>5*</td> </tr> <tr> <td>Burning house duty label</td> <td>8†</td> </tr> </tbody> </table> <p>*Specify wording on 4 or 5 as required †Must be selected for Russian Fire approval</p>	Label	Code	None	0	Duty label reqd	4*	Tag label reqd	5*	Burning house duty label	8†	<table border="1"> <thead> <tr> <th>Voltage</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>a.c.</td> <td>A</td> </tr> <tr> <td>d.c.</td> <td>D*</td> </tr> </tbody> </table> <p>*Must be selected for CSA certified unit</p>	Voltage	Code	a.c.	A	d.c.	D*	<table border="1"> <thead> <tr> <th>Switches</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>Single changeover</td> <td>S</td> </tr> <tr> <td>Double changeover</td> <td>D</td> </tr> </tbody> </table>	Switches	Code	Single changeover	S	Double changeover	D	<table border="1"> <thead> <tr> <th>Option</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>None</td> <td>N</td> </tr> <tr> <td>LED</td> <td>A</td> </tr> <tr> <td>Resistor series</td> <td>C*</td> </tr> <tr> <td>Resistor EOL</td> <td>D*</td> </tr> <tr> <td>Diode</td> <td>E†</td> </tr> <tr> <td>Earth continuity</td> <td>F**</td> </tr> <tr> <td>Turn and push</td> <td>T†</td> </tr> <tr> <td>Self reset (momentary)</td> <td>M</td> </tr> <tr> <td>Resistor series and EOL</td> <td>S*†</td> </tr> </tbody> </table> <p>*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</p>	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*†	<table border="1"> <thead> <tr> <th>Terminals</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>7 x 2.5mm (standard)</td> <td>7</td> </tr> <tr> <td>9 x 2.5mm (optional)</td> <td>9</td> </tr> </tbody> </table>	Terminals	Code	7 x 2.5mm (standard)	7	9 x 2.5mm (optional)	9	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>Red (standard)</td> <td>R†</td> </tr> <tr> <td>Natural black</td> <td>N</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>Yellow/black stripes</td> <td>X</td> </tr> <tr> <td>Special</td> <td>S*</td> </tr> </tbody> </table> <p>*Please specify † Must be selected for Russian Fire approval</p>	Finish	Code	Red (standard)	R†	Natural black	N	Blue	B	Yellow	Y	Grey	G	Yellow/black stripes	X	Special	S*
Entries	Code																																																																															
M16	A*																																																																															
M20	B*																																																																															
1/2" NPT	C*																																																																															
Label	Code																																																																															
None	0																																																																															
Duty label reqd	4*																																																																															
Tag label reqd	5*																																																																															
Burning house duty label	8†																																																																															
Voltage	Code																																																																															
a.c.	A																																																																															
d.c.	D*																																																																															
Switches	Code																																																																															
Single changeover	S																																																																															
Double changeover	D																																																																															
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*†																																																																															
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*																																																																															
			<table border="1"> <thead> <tr> <th>Certification</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>ATEX/CENELEC - Ex de</td> <td>EB</td> </tr> <tr> <td>ATEX/CENELEC - Ex ia</td> <td>IB</td> </tr> <tr> <td>IECEX - Ex ia</td> <td>IJ</td> </tr> <tr> <td>CSA - Ex ia</td> <td>IC</td> </tr> <tr> <td>UL - Listed</td> <td>UL</td> </tr> <tr> <td>UL (Ordinary Locations)</td> <td>UW</td> </tr> <tr> <td>TR CU - Ex ia</td> <td>IG</td> </tr> <tr> <td>TR CU Ex de</td> <td>EG</td> </tr> <tr> <td>TR CU - Ex ia Russian Fire</td> <td>IGF*</td> </tr> <tr> <td>TR CU - Ex de Russian Fire</td> <td>EGF*</td> </tr> <tr> <td>CQST - Ex de</td> <td>EQ†</td> </tr> <tr> <td>CQST - Ex ia</td> <td>IQ†</td> </tr> <tr> <td>INMETRO - Ex de</td> <td>EM</td> </tr> <tr> <td>Uncertified</td> <td>WN</td> </tr> </tbody> </table> <p>*For Russian Fire approval red housing and burning house duty label must be selected †Not suitable for use in China on fire alarm systems</p>	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 de	EG	TR CU - Ex ia Russian Fire	IGF*	TR CU - Ex de Russian Fire	EGF*	CQST - Ex de	EQ†	CQST - Ex ia	IQ†	INMETRO - Ex de	EM	Uncertified	WN																																															
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 de	EG																																																																															
TR CU - Ex ia Russian Fire	IGF*																																																																															
TR CU - Ex de Russian Fire	EGF*																																																																															
CQST - Ex de	EQ†																																																																															
CQST - Ex ia	IQ†																																																																															
INMETRO - Ex de	EM																																																																															
Uncertified	WN																																																																															

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