

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 (not available for turn and push version).

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 (not available for turn and push version)
- Latching as standard. Self reset (momentary) available



ATEX IECEx



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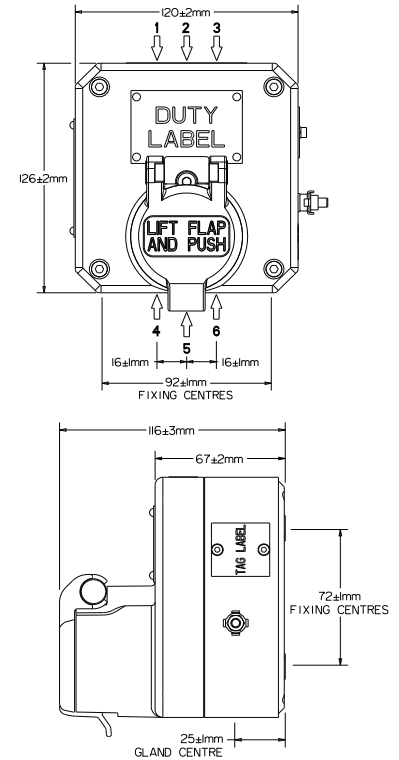
Certifications

| | |
|-----------------------|---|
| ATEX Ex de | Cert. no. BAS02ATEX2105X. ATEX Approved Ex II 2GD Certified to: EN60079-0, EN60079-1, EN60079-7, EN60079-18, EN60079-31 Ex db eb IIC T6 Gb, Ex tb IIIC T85°C Db (switch only) Ex db eb mb IIC T6 Gb, Ex tb IIIC T85°C Db (with LED) Ex db eb 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 de | Cert. no. IECEX BAS 18.0100X. Certified to: IEC60079-0, IEC60079-1, IEC60079-7, IEC60079-18, IEC60079-31 Ex db eb IIC T6 Gb, Ex tb IIIC T85°C Db (switch only) Ex db eb mb IIC T6 Gb, Ex tb IIIC T85°C Db (with LED) Ex db eb mb IIC T4 Gb, Ex tb IIIC T135°C Db (with resistors & diodes) |
| 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,B,C & 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 | 0Ex ia IIC T4 Ga X, Ex ia IIIC T135°C Da Russian Fire approved (must be red and have burning house duty label) |
| INMETRO Ex de | Ex db eb IIC T6 Gb, Ex tb IIIC T85°C Db (switch only) Ex db eb mb IIC T6 Gb, Ex tb IIIC T85°C Db (with LED) Ex db eb mb IIC T4 Gb, Ex tb IIIC T135°C Db (with resistors & diodes) |
| 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 |

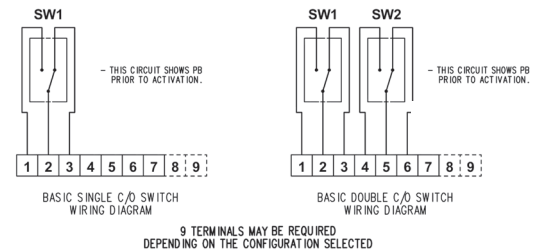
Specifications

| | |
|---|---|
| Material | Anti-static UV resistant glass reinforced polyester |
| Finish | Red painted finish as standard or to customer specification |
| Voltage | Up to 250Vac. Up to 50Vdc (model dependent) |
| 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) | Switch only 30Vdc 5A (resistive) or 3A (inductive) 30-50Vdc 1A (resistive or inductive) 250Vac 5A (resistive or inductive) LED 24Vdc 0.05A Resistor(s) 24Vdc 0.05A |

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

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 | | | | | | | | |

| Entries | Code |
|----------|------|
| M16 | A* |
| M20 | B* |
| 1/2" 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* |
| Burning house duty label | 8† |

*Specify wording on 4 or 5 as required
†Must be selected for Russian Fire approval

| Switches | Code |
|-------------------|------|
| Single changeover | S |
| Double changeover | D |

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

| 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

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

*Please specify
† Must be selected for Russian Fire approval

| Certification | Code | Certification | Code |
|-------------------------|------|----------------------------|------|
| ATEX/CENELEC - Ex de | EB | TR CU Ex de | EG |
| ATEX/CENELEC - Ex ia | IB | TR CU - Ex ia Russian Fire | IGF* |
| IECEX - Ex ia | IJ | TR CU - Ex de Russian Fire | EGF* |
| IECEX - Ex de | EJ | CQST - Ex de | EQ† |
| CSA - Ex ia | IC | CQST - Ex ia | IQ† |
| UL - Listed | UL | INMETRO - Ex de | EM |
| UL (Ordinary Locations) | UW | Uncertified | WN |
| TR CU - Ex ia | IG | | |

*For Russian Fire approval red housing and burning house duty label must be selected
†Not suitable for use in China on fire alarm systems