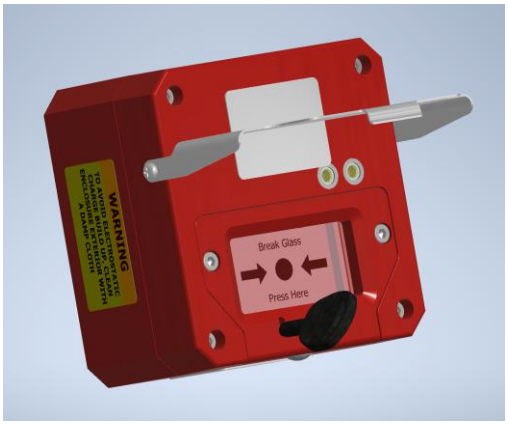
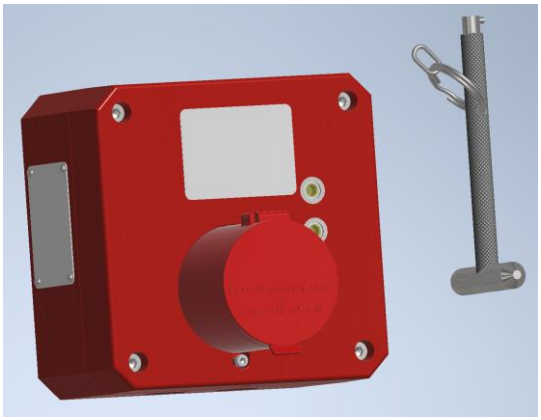
Call Point & Push Button 135

Installation and Technical Information

IMPORTANT: Read carefully before use and keep for future reference



CP135 Series



PB135 Series

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Symbols

CAUTION/Requirement for safe use

Additional Hazardous Area requirement

Introduction

The CP135 Call Point along with the PB135 Push Button are designed to enable personnel to activate alarms in areas where, during normal operation, an explosive atmosphere is likely to occur intermittently.

The releasing (Call Point) or depressing (Push Button) of a plunger serves to convert mechanical movement into an electrical signal via a changeover of micro switch contacts. Suitable for use in PLC, DCS and ESD systems, your Call Point or Push Button comes with one or two micro switches and, optionally, with LEDs to provide status indication.

Available in UV-resistant GRP, the robust materials of construction enable your Call Point or Push Button to resist corrosion and in combination with a versatile rating of IP66/IP67 makes the device suitable for use in a range of harsh environments.



Signalling Products shall be installed, maintained, repaired, and uninstalled by competent personnel in accordance with the requirements of applicable legislation, regulations and standards.

Storage Information

Store between **-40°C and +85°C**

Product Markings

All products have a rating label with the following important information:

Product order no:	eg CP135SNNLYTA (Refer to the datasheet for product order selection)
Input voltage:	
CP135	<50 V DC/5 A, or <250 V AC/11 A
PB135	<50 V DC/5 A, or <250 V AC/11 A
Gas Group and Category:	II 2G D
Marking:	Ex db IIB+H_2 T6 Gb Ex tb IIIC T85°C Tamb -40°C to +70°C
ATEX Certification No:	ExVeritas 26ATEX2348X
EX Mark:	
IECEx Certificate:	IECEx-EXV 26.0014X
CE Mark:	
UK CA Mark:	
Warning:	**DO NOT OPEN WHEN AN EXPLOSIVE GAS ATMOSPHERE IS PRESENT**
Finished product serial no:	YY-##### (e.g. 26-01234)

Picture 1 – Example rating label



Type Approval Standard

The Ex-Tech Signalling product range all have an EC Type Examination Certificate issued by ExVeritas and have been approved to the following standards:

EN 60079-0:2018 (IEC 60079-0:2018)
EN 60079-1:2014 (IEC 60079-1:2014)
EN 60079-31:2024 (IEC 60079-31:2024)

Zones, Gas Group, Category and Temperature Classification

The CP135 and PB135 series products have been certified IIB+H^2 T4~T6. This means that the units can be installed in locations with the following conditions:

Area Classification:

Zone 1: Explosive gas air mixture likely to occur in normal operation.

Zone 2: Explosive gas air mixture not likely to occur and, if it does, it will only exist for a short time.

Gas Groupings: IIA, IIB+H^2.

Zone 21: Explosive dust air mixture likely to occur in normal operation.

Zone 22: Explosive dust air mixture not likely to occur and, if it does, it will only exist for a short time.

Equipment Category: 2GD

Temperature Range: -40°C < Tamb <+70°C

Materials of Construction

Check that the sensor's materials of construction are compatible with both your process medium and the surrounding atmosphere.

Installation

General Requirement

The product must be installed in accordance with the latest IEC 60079-14 specification or the equivalent EN specification.

Product installation must be carried out in accordance with any local codes that may apply and should only be carried out by a competent electrical engineer.

Location

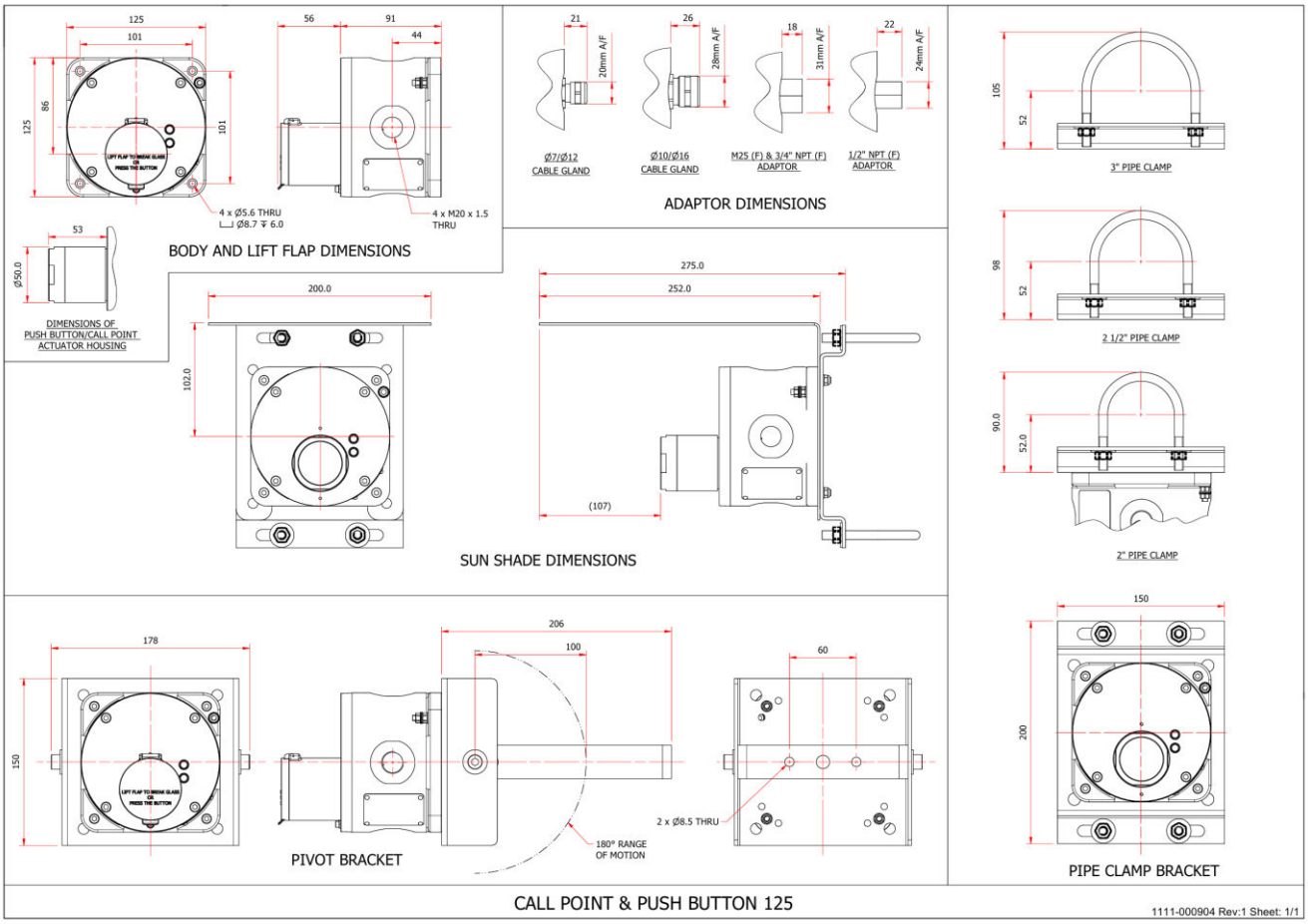
The location of the unit should be chosen with due regard to access. The unit should only be fixed to services that can support the weight of the unit.

Mounting

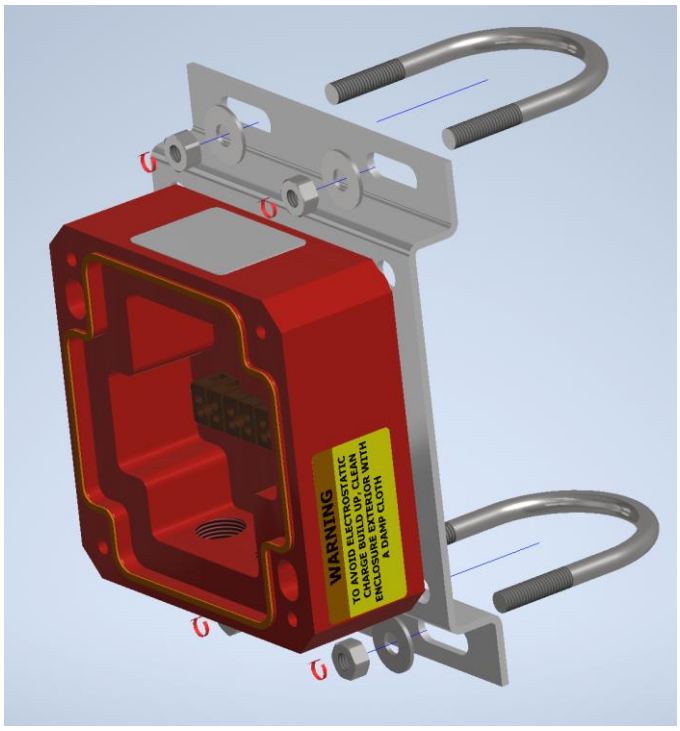
The product should be mounted on a vertical surface using two fixing holes in the base. The fixing holes are designed to fit M5 Cap Head Screws only. Use of stainless steel fasteners is recommended by Ex-Tech Signalling. The units can be operated in any orientation.

CP135 Series mounting diagrams

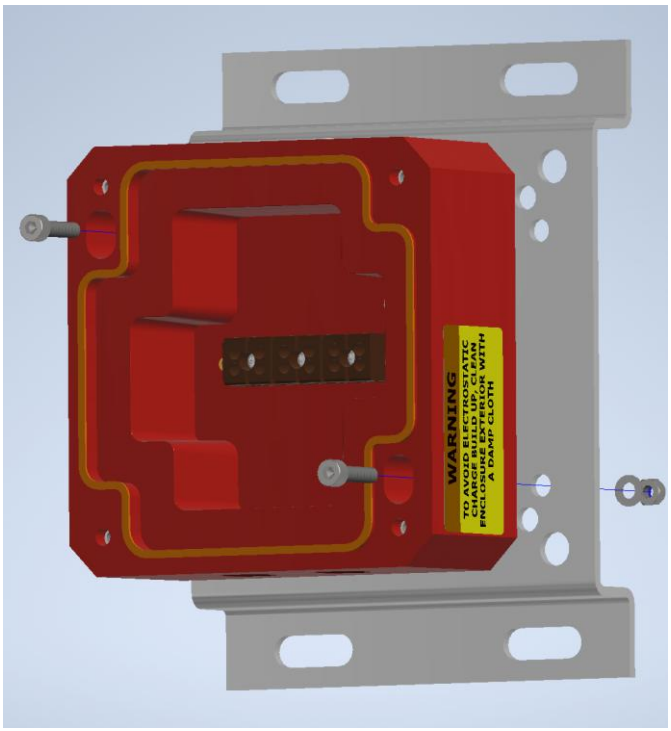
General Sizing



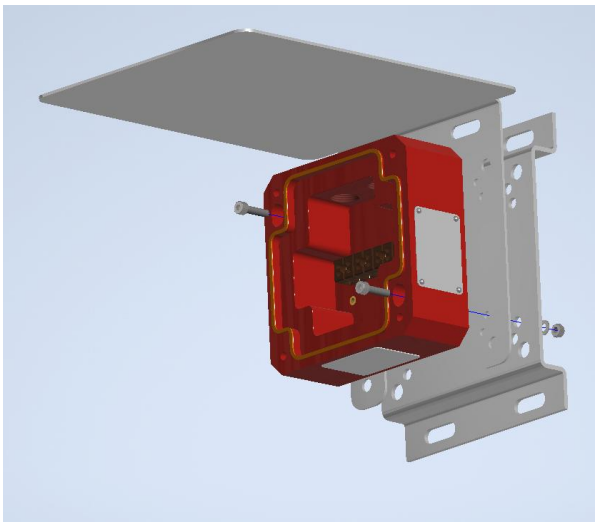
Pipe Mounting



Wall Mounting



Mounting with Sunshade



Wiring

General Requirement

Two threaded entries are provided with M20 x 1.5 threads.

Ex-Tech Signalling recommends that all cables and cores should be fully identified (suggest using cable from 2.0 to 2.5 mm^2). Ensure that all nuts and screws are secured.

Ensure that only certified cable glands, blanking plugs and adaptors are used. Ensure the installation is earthed correctly. Ensure that certified stopping plugs are used to blank of unused gland entry points. In order to maintain the IP rating of the product, sealing washers should be used. We can supply nickel plated brass adaptors, glands and blanking plugs, if required.

Special Conditions for Safe Use

Ex db and Ex db + Ex tb certified products

Tamb >60˚C, cable and cable glands must be suitably rated for +70˚C

Cable Gland

Only cable glands approved for Exd applications can be used with Ex-Tech Signalling Explosion Proof Products. These must be suitable for the type of cable being used and also meet the requirements of the Exd flameproof installation standard EN 60079-14.

Cable Connection – Wiring Diagram

4 The cable connection is made to the terminal block inside the enclosure. Cable connection should be carried out in accordance with relevant technical requirements.

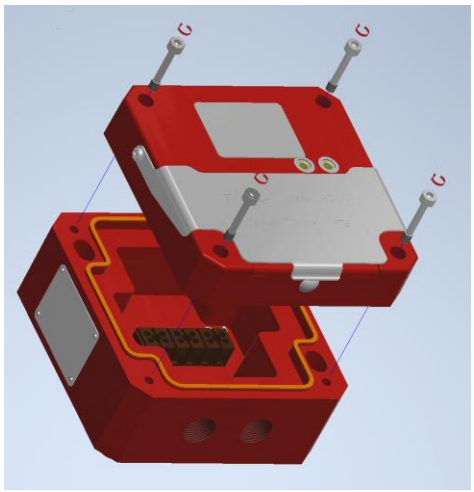
The CP135 Series terminal block is marked T1-T8 (**Error! Reference source not found.**). The P B135 Series terminal block is marked T1-T8 (**Error! Reference source not found.**).

Special Conditions for Safe Use

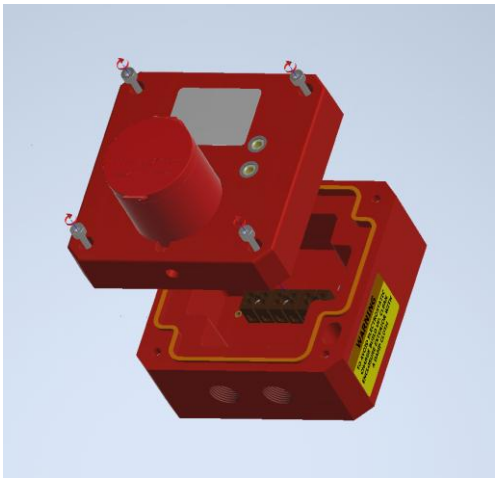
Ex db and Ex db + Ex tb certified products

The permitted supply short circuit current is 10kA

CP135 Series Lid Removal



PB135 Series Lid Removal



CAUTION: Before removing the cover, ensure the power to the unit is isolated.

Unscrew the four (4) M5 retained Hexagon socket head screws. The cover will lift off freely once the screws are disengaged.

Note: It is recommended to open one blind plug to avoid internal vacuum in the unit.

This will release the cover from the base and allow the cover to hang on the retaining wire strap. Before replacing the cover, check that the flameproof joints are clean, free from damage and the gasket is still retained in its groove.

Reinstall the cover by reversing the steps above. The recommended bolt torque for the four (4) M5 retained Hexagon socket head screws is 4.5 Nm.

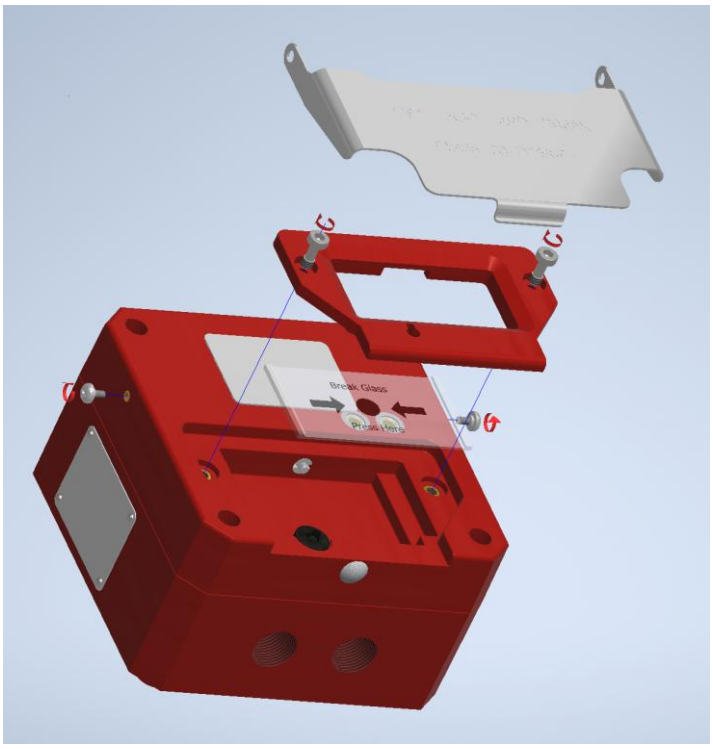
Operation

The call point units either come with a hinged flap (to prevent accidental activation of the unit), or no hinged flap. In either case, the glass must be broken with the hammer supplied with the unit to active it.

Replacement of Glass

To replace the glass after operation of the unit, remove the small cover held in place by the two slotted screws. Very carefully remove the glass and all broken fragments from the unit. Put new glass into the unit and replace the cover.

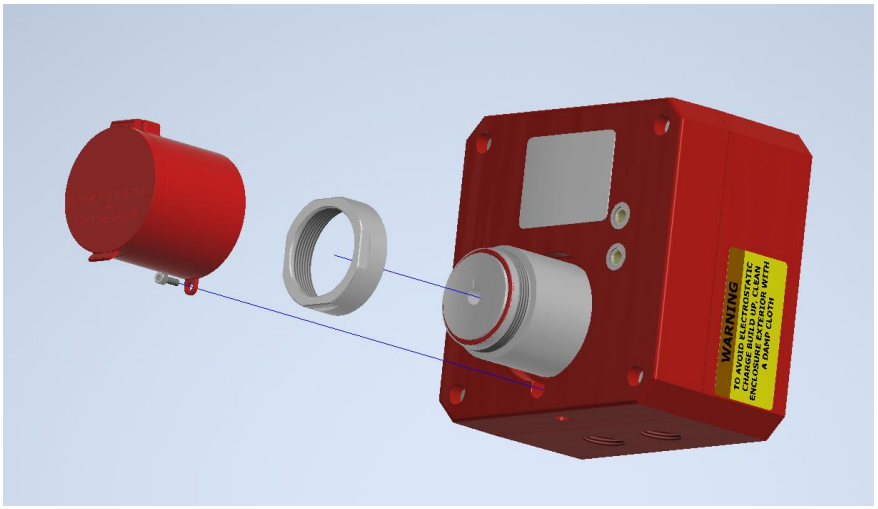
CP135 Series glass replacement



Testing the Unit

To reset the unit after use, insert the test key into the keyhole located in the centre of the button. Turn the key clockwise 90 degrees and pull the button slightly toward you. Then turn the key anticlockwise 90 degrees to the set position and remove the key.

PB135 Series with hinged flap glass replacement



SAFETY WARNING

If units are used at high ambient temperatures, i.e. over +40°C, then the cable entry temperature may exceed +70°C and therefore suitable heat resisting cable glands must be used, with a rated service temperature of at least +95°C.

If a high Ingress Protection (IP) rating is required, a suitable sealing washer must be fitted under the cable gland. Any unused cable entry holes must be closed with an Exd flameproof blanking plug, which must be suitably approved for the installation requirements.

End of Line Monitoring

An End of Line monitoring Diode or an End of Line monitoring Resistor can be connected across the 24V+ and 0 terminals. Resistor values for the End of Line will be determined by the customer with a minimum value of 470Ω.

Maintenance

Little or no maintenance is required during the normal working life of the product. The Ex-Tech Signalling Exd enclosures are resistant to most acids, alkalis and chemicals and have been designed to withstand severe weather conditions. However, it is suggested that to avoid the possibility of potential electrostatic charge build up, the exterior of the product is periodically wiped down with a clean damp cloth. A visual inspection is then recommended to ensure that the product is in good working order and no damage has been sustained during its normal operation.

SAFETY WARNING

In the case of Anti-Static and UV Resistant GRP, the painting of the enclosure surface has been processed specially. To maintain the product to be Anti-Static, extra normal painting is not allowed.

Enclosures not being Anti-Static is clearly labelled with a yellow WARNING label with the following text; **To avoid electrostatic charge to be build up, clean enclosures exterior with a damp cloth**.

Special Conditions for Safe Use

Ex db and Ex db + Ex tb certified products

Flamepaths are not intended for repair or modification, do not attempt any alterations to the flamepaths.

When installed in H2 areas capacitance of external metallic parts must not exceed 10pF

Yield strength of fasteners is 450MPa, only use fasteners supplied by Ex-Tech Signalling

The equipment must not be installed in a location where it may be subjected to external conditions which might cause a build-up of electrostatic charges on non-conducting surfaces. Additionally, cleaning of the equipment should be done only with a damp cloth.

When fitted with LED indicator's the equipment installation must provide UV light protection.

Do not paint or change the surface finish of the unit. The coating applied by the manufacturer is Anti-Static and UV Stable.

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