5BEx 5" UNIVERSAL INTRINSICALLY SAFE BASE AND ACCESSORIES FOR USE WITH THE 811Exn SERIES DETECTORS
PRODUCT APPLICATION & DESIGN INFORMATION

1. 5BEx 5" UNIVERSAL BASE

The 5BEx 5" Universal Base is compatible with M600Ex, MX 800Ex and the 800Exn ranges of Detectors. This document describes its use with the 800Exn series of detectors. Thus, a ceiling-mounted detector comprises the specific detector type, plus a 5BEx 5" Universal Base. The range is intended for two-wire operation.

The detector base is made of fire resistant FR110 'BAYBLEND'.

The base can be used with the DHM-5B.

The base accepts an address label carrier from the detector when it is fitted to the base. The base also has four electrical contacts which align with the contacts on the detector once the latter is fitted and fully latched into position.

The raised rib is aligned with a raised rib on the detector when the detector is in the fully home position.

Loop cabling is connected to base terminals L (-ve) and L1 (+ve).

A drive is provided for a remote indicator connected between loop positive and terminal R.

Terminal L2 is not used.

When the detector is mounted on the base, the detector LED provides a visual indication of its status through 360 degrees.

The detector may be locked in position by inserting a locking key which is part of the detector moulding. This is broken from the sprue and inserted in the locking key slot.

Special Conditions for Safe Use:.

1) When the detector is removed, the base must be provided with a degree of protection of at least IP54.
2) This apparatus does not meet the resistance to light requirements. It must be installed away from direct sunlight.
3) When installed, adequate precautions must be taken to ensure that cabling is restrained and not subject to any stress.

THE FOLLOWING LEGEND IS PRINTED ON THE RIM OF THE BASE:
5BEx FOR Ex/EXN DETECTORS ONLY ELECTROSTATIC HAZARD : CLEAN ONLY WITH A DAMP CLOTH

Fig. 1 5BEx 5" Universal Base

1.1 TECHNICAL SPECIFICATION

Mechanical Construction

See Fig. 1 and Fig. 2.

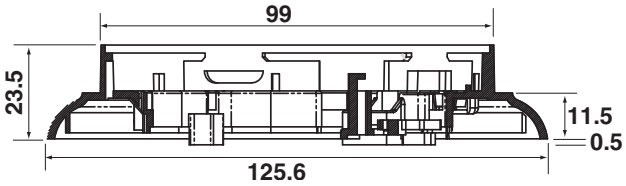

Fig. 2 Overall Base Dimensions

Material

Base:	FR110 'BAYBLEND' Flame Retardant
Base Contacts:	Stainless steel/Nickel plated
Base screws:	Steel/Zinc plated

Weight

Base:	0.064kg

Environmental

Operating Temperature:	-25°C to +70°C (+90°C for short periods)
Storage Temperature:	-40°C to +80°C
Relative Humidity:	95% non-condensing

1.2 ELECTRICAL CHARACTERISTICS

Through supply voltage:	40V dc max with addressable waveform (polarity conscious)

The Base has four terminals:

R	Remote LED connector
L	-ve IN/OUT
L1	+ve IN/OUT
L2	Not connected

1.3 CABLING

Cables are to be selected in accordance with Publication 17A-02-D. Only Two loop connections L and L1 are provided on the base itself, the input and output connection being made at the same terminal. The monitoring system will allow 'teed' or 'spur' junctions which may be used to simplify the installation cabling. However, a maximum of two 1.5mm^2 cables may be connected at any one terminal. End of line devices are not required on addressed circuits, see Fig. 3 and Fig. 4.

It is suggested that the he loop cable should be run in a metal cable tray and the cable secured with metal fastners at approximately half metre intervals.

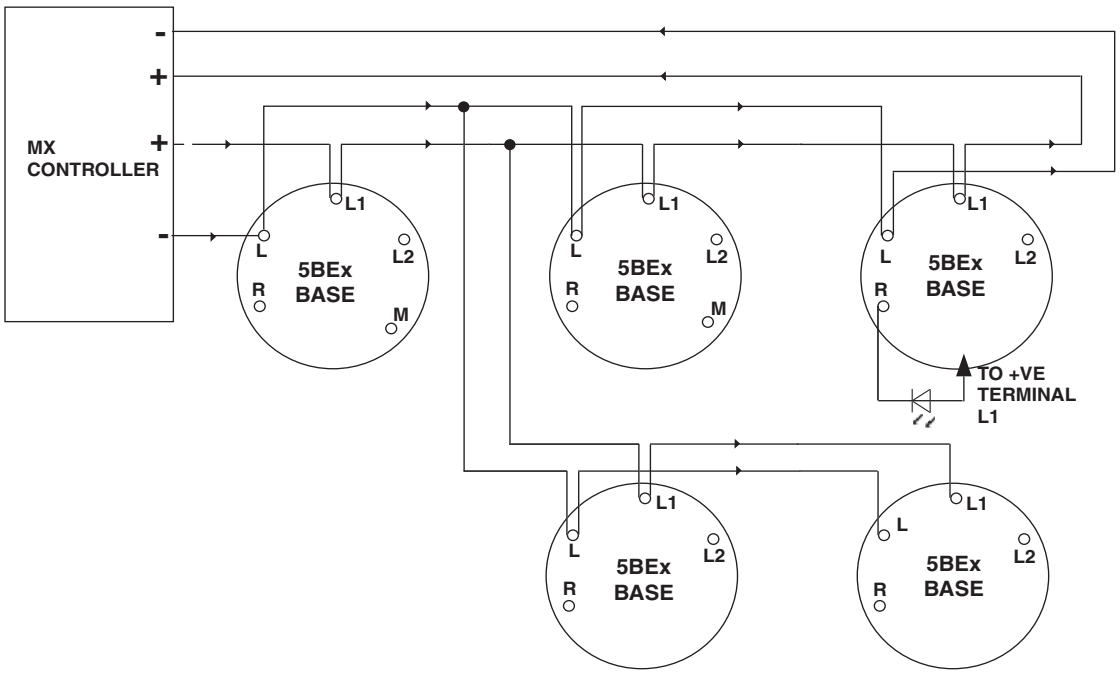

Fig. 3 Simplified Circuit Wiring Diagram