

Option Pods

General

Option Pods are available to mechanically fit to either the Fortress Lok body, AmLok host units, or as a stand alone product. The Option Pods may contain either a key switch, or a combination of pushbuttons and/or indicator lamps.

IMPORTANT

This product is designed for use according to the installation and operating instructions enclosed. It must be installed by competent and qualified personnel who have read and understood the whole of this document prior to commencing installation. Any modification to or deviation from these instructions invalidates all warranties. Fortress Interlocks Ltd accepts no liability whatsoever for any situation arising from misuse or mis-application of this product. This product is not to be used as a Mains Isolator or Emergency Stop. The unit is a component to be added to a permanent electrical installation meeting the requirements of the applicable IEC/EN standards.

The voltages used within the Option Pod circuits must all be of the same type i.e. ALL Hazardous Live or ALL Machine Extra Low Voltage.

IF YOU HAVE ANY QUESTIONS OR QUERIES OF ANY NATURE WHATSOEVER PLEASE CONTACT THE SUPPLIER WHO WILL BE PLEASED TO ADVISE AND ASSIST.

Tools and Fixings Required

Pin Hex Driver Bit (Provided with host unit)
1/4" Driver (to Suit above)
3.5mm Flat Blade Electrical Screwdriver

Mounting

If the Option Pod is to be used with a host unit, it must be connected by Fortress approved personnel, as specialist tools are required.

All Option Pods must be mounted to a flat metal plate. If the mounting plate is Aluminium, the minimum thickness is 6mm. If the mounting plate is steel, the minimum plate thickness is 3mm.

All option Pods have M4 x 8 threaded holes to the rear for fixing to the mounting plate. All fixings must be used and the hole centres are shown on Fig 1.

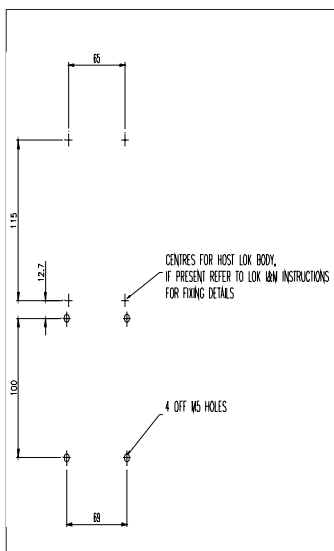


Fig 1: Mounting Plate Hole Centres

Protection Against Environmental Influences

A lasting and correct safety function requires that the unit be protected against the ingress of foreign bodies such as swarf, sand, blasting shot, etc.

The unit is to be mounted away from the machine, or by the use of anti-vibration mountings, in order to avoid the effects of vibration, shock and bump.

Electrical Connection

1. Make sure the electrical supply is isolated. Remove the lid from the Pod by use of the tamperproof driver. Note the orientation of the cam, if fitted. Attach suitable conduit(s) via the PG13.5 cable gland(s). Unused entries should be sealed with the blanking plug supplied with the unit. Cable glands/blanking plug, of the correct size and type must be used to achieve IP66 sealing.

2. Bond both the enclosures to Earth potential via the Earth points provided. The earth wire used must be multi-stranded Yellow and Green PVC sheathed and approved to BS 6231 with conductor cross-sectional area of 2.5mm

The Earth lead must be fitted such that it will be the last to be broken if the wiring loom is pulled from the product.

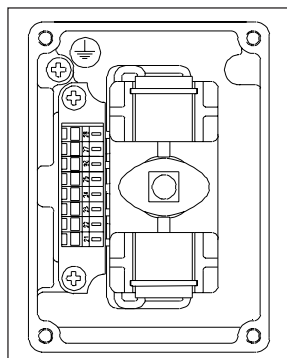


Fig 2: Internal View of Keyswitch Option Pod

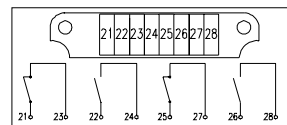


Fig 3: Wiring Diagram for the Keyswitch Option Pod

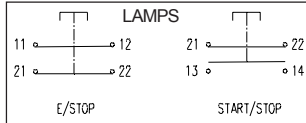


Fig 4: Wiring Diagram for the Push Button

3. Make the electrical connections to the machine control, referring to the information below.

The cabling for both the Pod and the host unit may then be completed through the two PG1 3.5 gland holes at the base of the Pod. Ensure all cables are clear from moving parts bearing in mind the position and movement of the Cam if a keyswitch is being fitted. Connect the host unit, if fitted in accordance with the installation instruction for that product.

4. Test both the host unit, if present and the Pod, for correct operation. All switch circuits are rated at 3A, 230v. Each circuit must incorporate fuse protection with a Quick-Acting (F) fuse (maximum rating 3A, 250v to IEC 127).

5. When all wiring is complete, conduct a Protective Earth Test to BS 60204, clause 20.

6. Ensure that the cam, if fitted, is still in the same orientation as at the start.
7. Replace the lid, making sure that the lid seal remains in position.

Electrical Function Test

Keyswitch Option Pod

Rotate the key fully anti-clockwise and remove from the pod. The machine should start its run down cycle. The machine must not restart until the key is returned and fully rotated clockwise.

Push Button Option Pod

Push the red stop button to start the machine run down. The machine must not restart until the green button is pressed and the red button reset by twisting anti-clockwise.

Service and Inspection

Regular weekly inspection of the following is necessary to ensure trouble-free, lasting operation:

- Correct switching function
- Secure mounting of components
- Debris and wear
- Sealing of cable entry
- Loose cable terminals or plug connectors

If a BL Lock assembly is used, it should be lubricated with CK Dry Powder Graphite lubricant, every 10,000 operations.

If a CL lock assembly is used, it should be, lubricated with WD40 every 10,000 operations. Do not use dry lubricant in a CL

There are no user serviceable parts in the Option Pod. If damage or wear is found the whole unit must be replaced.

The pod must be replaced after 1 million switching operations

Liability coverage is voided under the following conditions:

- if these instructions are not followed
- non-compliance with safety regulations
- installation and electrical connection not performed by authorised personnel

Disposal

This product does not contain any certified hazardous materials so should be disposed of as industrial waste.

Environmental Specification

Environment Type **Indoor**
Max. Altitude **2000m**
Ambient Temperature **-5°C to +40°C**
Maximum Relative Humidity **80% @ <= 31°C**

50% @ 40°C
Transient Overvoltages Installation **Category III**

Pollution Degree (IEC 664) **Degree 2**

Ingress Protection **IP66**

The manufacturer reserves the right to modify the design at any time and without notice. This guide should be retained for future reference.

Installation Instructions

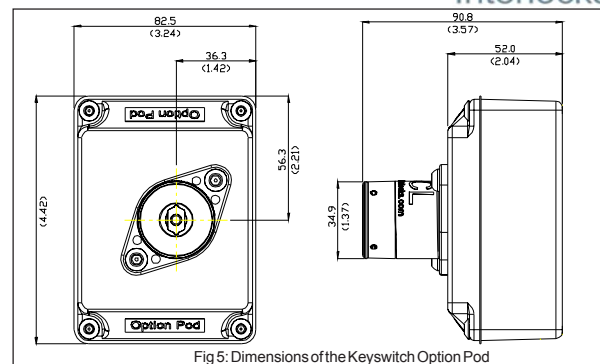


Fig 5: Dimensions of the Keyswitch Option Pod

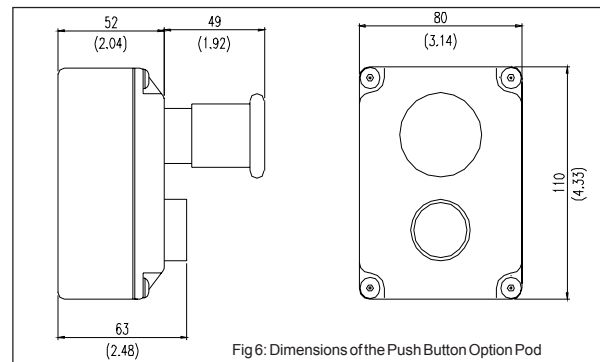


Fig 6: Dimensions of the Push Button Option Pod

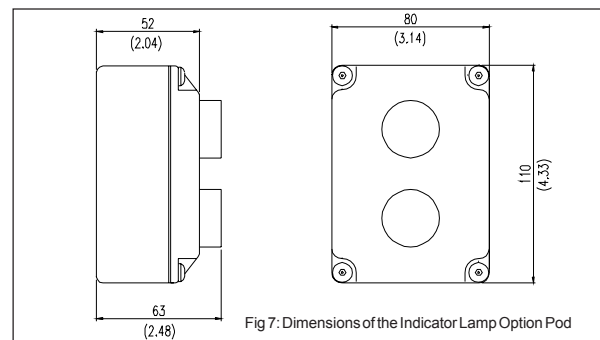


Fig 7: Dimensions of the Indicator Lamp Option Pod

Fortress Interlocks Limited
148-150 Birmingham New Road
Wolverhampton, UK, WV4 6NT
Tel: +44 (0) 1902 499600
Fax: +44 (0) 1902 499610

E-mail: sales@fortress-interlocks.co.uk
Web Site: www.fortressinterlocks.com

