



### Head Modules

## proAM Head & Handle Actuator



*pro*AmHead is a robust, heavy duty, head for use with a safety switch. It provides a 90 degree operation to trap/release the handle, which can be beneficial to retain a door in the closed position without the use of other locking means, such as keys or solenoids.

When properly installed, it provides for safe access and control of a variety of machinery. This unit may be installed in any orientation at 90 degree positions, to either hinged or sliding doors. The key incorporates a self-aligning feature to cater for wear on hinged guards.

### 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. If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired. 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 misapplication of this product.

# BEWARE OF INTENTIONAL MISUSE CAUSED BY OPERATORS WANTING TO BYPASS SAFETY SYSTEMS. THE INSTALLER SHOULD ASSESS THE RISKS AND MITIGATE AGAINST THEM.

## 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**

- Ø8.2mm Drill
- Ø5.2mm Drill
- Circlip Pliers (Optional)
- 1 x M8 screws 2 x M5 screws counter sunk

## Mount the safety unit only in the correctly

### assembled condition.

- 1. Locate the safety unit so that inspection and replacement are possible.
- Remove the actuator assembly from the unit by rotating the handle 90° anticlockwise.
- 3. The Head may be rotated in increments of 90° to suit the installation, see below.

### www.youtube.com/user/FortressInterlocks/videos contains videos on many of the following procedures Rotating the Head

## When your assembled configuration has amGard*pro* Push IR module.

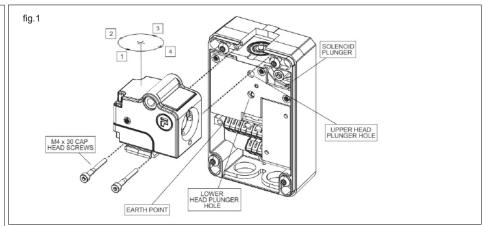
- i.Trigger Internal Release by depressing emergency release button.
- ii.Remove the 4 lid screws of the *proIR* module, remove the lid assembly.
- iv.Remove 2 x M4 screws retaining the head.
- v. Lift head out and rotate to desired position.
- vi.Replace 2 x M4 screws and proIR lid and screws. vii.Re-set the proIR module.

# When your assembled configuration has no Internal Release and no *pro*Lock adaptors. *pro*Lok

- If the head is to be repositioned, refer to fig. 1 and continue as follows.
- Using the driver bit provided, loosen the 4 or 6 tamperproof lid screws on the host unit. Remove the lid assembly.
- ii. Remove 2 x M4 cap head screws.
- Depress the solenoid plunger and hold against the spring pressure. Insert the electrical screwdriver in the lower head plunger hole and hold the head plunger against spring pressure (see fig. 1).
- iv. Release the solenoid plunger and slide the head out.Do not insert the tongue while the head is detached

## from the interlock.

- iv. Reposition the head and slide into place.
- v. Remove the screwdriver from the head plunger hole. vi. Reaffix with the cap head screws and ensure that the
- head is firmly fixed in position. vii.Ensure the head M8 fixing is also used.

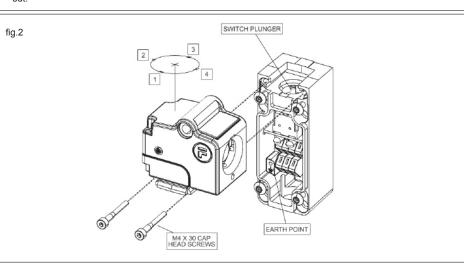


### proStop

- If the head is to be repositioned, refer to fig. 2 and continue as follows.
- i. Unscrew and remove the two M4 x 30 Cap Head screws.
- Depress the switch plunger and hold it down against the spring pressure by placing the electrical screwdriver in the slot in the plunger. Slide the head out.

## Do not insert the tongue while the head is detached from the interlock.

- iii. Keep the switch plunger held with the screwdriver. Reposition the head and slide it into place. Release the switch plunger.
- iv. Refit the Cap Head screws. Ensure that the head is firmly fixed in position.



#### When your assembled configuration has a proLock adaptor but no Internal Release

- Put tongue/actuator into head.
- ii. If a proLok / proLok+ unit is fitted unlock solenoid (typically using override key).
- Remove the 4 lid screws of the top lock module. iii Remove the lid assembly, taking care to retain the cam in the lid.
- iv. Remove 2 x M4 screws in retaining head. Ensure runner bar (and proE adaptor gate V. mechanism) is held down (either by finger pressure or by a lower lock module) having first unlocked all modules mounted below.
- vi. Lift head out and rotate to desired position
- vii.Replace 2 x M4 screws
- viii.Replace the lock lid ensuring the cam is engaged correctly in the runnerbar beneath. Turn the key back & forth until the red lid sits flush to the black case. ix. Refit the 4 x lid screws.

### Mounting continued

- 5. Mount the host assembly together with head assembly to a flat metal, static part of the machine. (see host I&M).
- 6. Align the Actuator and fix it to a flat metal plate, permanently attached to the guard, using 2 x M5 countersunk screws from the front. Ensure that the actuator locks in place when the guard is closed. The handle position may be adjusted rotationally in  $45^\circ$  increments. This is done by removing the circlip on the end, pulling the handle and disengaging the drive. Once the preferred position has been selected, refit the circlip.
- 7. Make sure internal release lever can turn to release actuator. If you need to swap internal release lever to other side (when changing handing) ensure the lock nut is fully tightened.
- 8. Make sure that the gap around the perimeter of the guard, when closed (Safety Circuits Closed), does not exceed the limits specified in En294 & En953.
- 9. All fixing screws must be permanently prevented from removal, either by vibration or by personnel using standard tools.

### **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.

### Testing (Unpowered)

The complete guard installation should be tested prior to use. Insert the handle into the head. It must turn fully 90 degrees

Restoration of the protection is necessary before normal operation is resumed.

Warning: This device does not contain the reset facility after emergency and auxiliary release of guard locking. Additional measures are required to achieve the reset of the machine system.

### Service and Inspection

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

- Correct operating function
- Secure mounting of components - Debris and wear

CK Dry Powder Graphite Lubricant, every 10,000 operations

There are no user serviceable parts in this product. If damage or wear is found with an assembly, please contact

your local Fortress stockist. The complete interlock must be replaced after 1 million switching operations.

Disposal

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

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

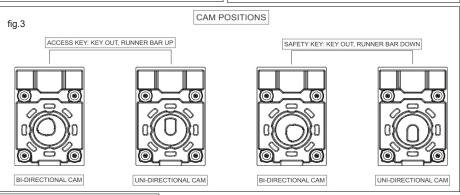
- Non-implementation of functional checks.

### **Environmental Specification**

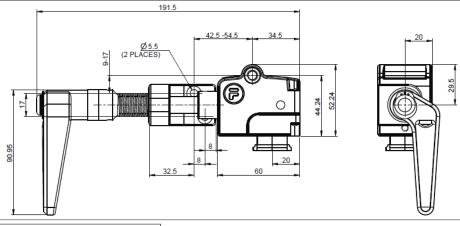
Environment Type: Indoor & Outdoor Max. Altitude: 2000m Ambient Temperature: -5°C to +80°C Maximum Relative Humidity: 80%@<31°C 50%@40°C Vibration: Tested in accordance with: GS-ET-19 **Protection Against Environmental Influences** A lasting and correct safety function requires that the unit be protected 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.

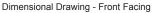
Use in Dusty Environments: Careful product selection is required, which is best performed under the guidance of a Fortress Sales Representative, in order to assess the dust type and product style required. Use in Corrosive Environments is not allowed

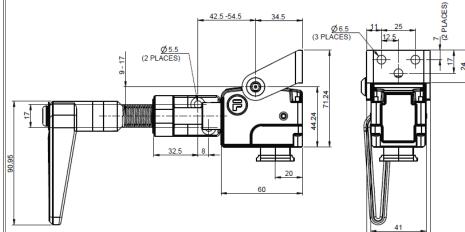
The manufacturer reserves the right to modify the design at any time and without notice This guide should be retained for future reference.

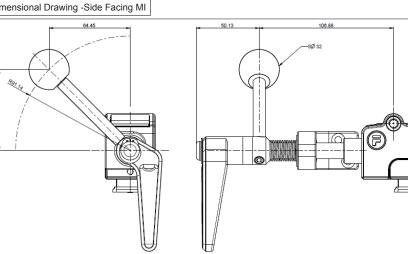


**Dimensional Drawing - Side Facing** 









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Dimensional Drawing -Side Facing MI