



#### **Head Modules**

## proAT Head & Tongue Actuator





The *pro*ATHead is a robust, heavy duty, head for use with a safety switch. It provides a sliding operation to trap/release the tongue, which can be beneficial to open and close doors quickly.

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 tongue 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 3 x M8 screws

# Mount the safety unit only in the correctly assembled condition.

- 1. Locate the safety unit so that inspection and replacement are possible.
- 2. Remove the Tongue assembly from the head.
- 3. The head may be rotated in increments of 90° to suit the installation, see below.

# Rotating the Head When your assembled configuration has

# **amGard***pro* **Push IR module.**i. Trigger Internal Release by depressing emergency

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

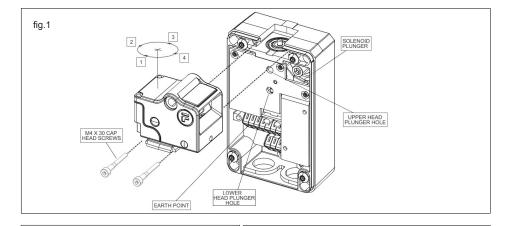
# When your assembled configuration has no Internal Release and no proLock adaptors. proLok

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.
- iii. 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).
- iii. 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.



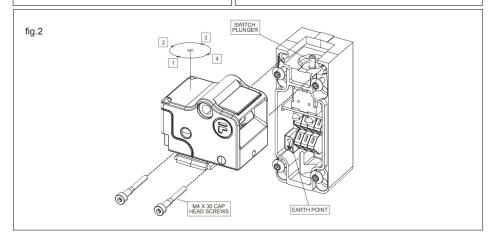
### proStop

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.
- ii. 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.

- i. Put tongue/actuator into head.
- If a proLok / proLok+ unit is fitted unlock solenoid (typically using override key).
- iii. Remove the 4 lid screws of the top lock module. 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 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, lid and lid screws ensuring the cam is in the correct orientation. (see fig. 3)
- viii Check that the required sequence is available before final fitting to the guard. Is the key being released at the right time? Has the insertion of the key provided the correct functionality.

#### Mounting continued

- 5. Mount the host assembly together with head assembly to a flat metal static part of the machine, (see host I&M).
  - Use M5 screws through the unit or M8 screws from the rear. The mounting surface should be flat.
- 6. The tongue bracket can be rotated through 90° to provide an alternative mounting option. To do this, remove the pozi-drive screw, slide out the shim plate, rotate bracket (keeping grooved surface pointing towards tongue), replace shim plate and pozi-drive screw.
- Align the tongue and fix it to a flat metal plate permamently attached to the guard using 2 x M8 screws from the rear. Ensure tongue full engages into head.
- Make sure that the gap around the perimeter of the guard when closed (safety circuits closed), does not exceed the limits specified in En294 and En953.
- All fixing screws must be permamently 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.

In environments with high levels of airbourne particles, mounting upside down is advantageous as it allows the unit to self clean.

#### Testing (Unpowered)

The complete guard installation should be tested prior to use. Insert the tongue into the head, checking that the alignment is acceptable and full engagement is achieved.

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: 200m

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**

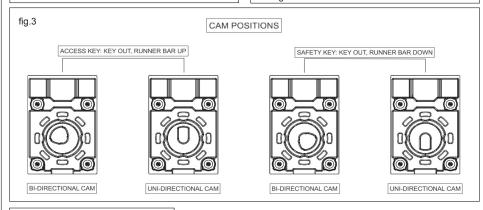
A lasting and correct safety function requires that the unit be protected against the ingress of foreign bodies such as swarf, sand, blasting shot, etc. The unit is to be mounted away from the machine, or by the use of anti-vibration mountings, in order to avoid the effects of vibration, shock and bump.

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.

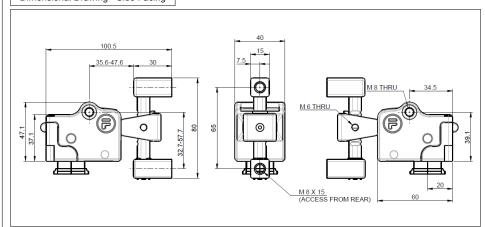
#### Use in Corrosive Environments is not allowed

The manufacturer reserves the right to modify the design at any time and without notice.

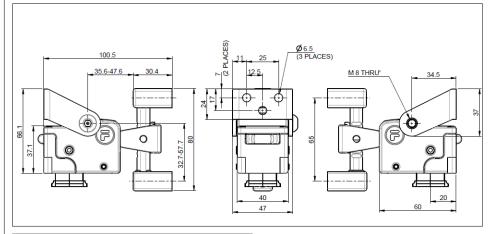
This guide should be retained for future reference.



#### Dimensional Drawing - Side Facing



#### Dimensional Drawing - Front Facing



## Dimensional Drawing - proAT Head with Tongue Actuator

