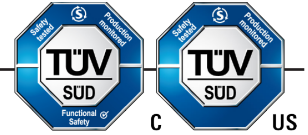


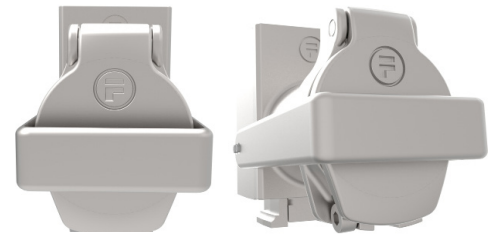
Operating Instructions: S40 Extracted Key Adaptor



Adaptors

Description

The S40E - Extracted Key Adaptor is an optional attachment for the amGardS40 range. The normal use of the Extracted Key adaptor is to provide the machine operator a safeguard whilst within the guard perimeters, which is enhanced by virtue of forcing the operator to remove the key fully before the door is able to open. The releasing version of the extracted key adaptor is the type that **MUST** be used if used in conjunction with any type of internal release function (push IR) or all in one head module with IR Handle.



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.

It is vitally important that the correct version of this unit is selected. If there is any requirement for an internal escape release element in the product, then the releasing version must be used.

WARNING: ENSURE CAM IS CORRECT TYPE AND POSITION BY TESTING SEQUENCE.

Note: The availability of spare Actuators and Keys makes it possible to easily bypass the safety devices and, for this reason, the security of any spare Actuators and Keys must be effectively monitored. Where applicable, the same also applies for Keys used for resetting after an Escape Release or Manual Override.

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 PLEASSED TO ADVISE AND ASSIST.

amGardS40 E Technical Specification

Housing Materials	Stainless Steel to BS3146
Colour	Stainless Steel
Internals	All Stainless Steel
Mechanical Life	>1,000,000 Switching Cycles
Vibration	Tested in accordance with: GS-ET-19
Performance Level	PLe
B10d	5,000,000
Ambient Temperature	-20°C to 80°C (-4°F to 176°F)*
Max. Altitude	2000m
Maximum Relative Humidity	80%@<=31°C; 50%@40°C
Environment	Indoor & Outdoor

*The units will only continue to work below freezing point (0°C) where it can be guaranteed that ice will not form on or in the unit; as it will cause the mechanical parts to bind and jam.

amGardS40 E - Extracted Key Lock Adaptor for Safety

This unit ensures that the door cannot be opened until the key has been removed from the lock, and the machine/process cannot be restarted without returning the key(s). It can furthermore prevent personnel being accidentally locked inside a guarded area.

- Provides unique link to mGard range.
- Only 1 Extracted key adaptor can be fitted in a configuration.

Operating Instructions: S40 Extracted Key Adaptor

amGardS40 E Safety Functions		Part No.
Safety Function 1	Does not allow safety contacts to be made unless safety key inserted in lock	S40EKL/R

Figure 1: Dimensional Drawing -

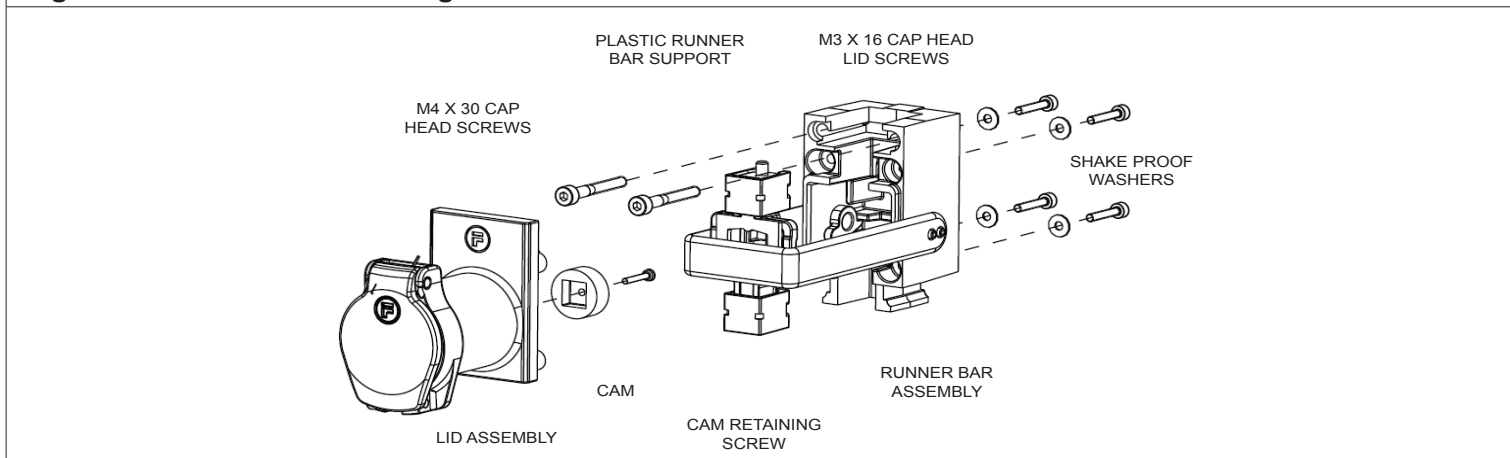


Figure 2: CAM POSITIONS

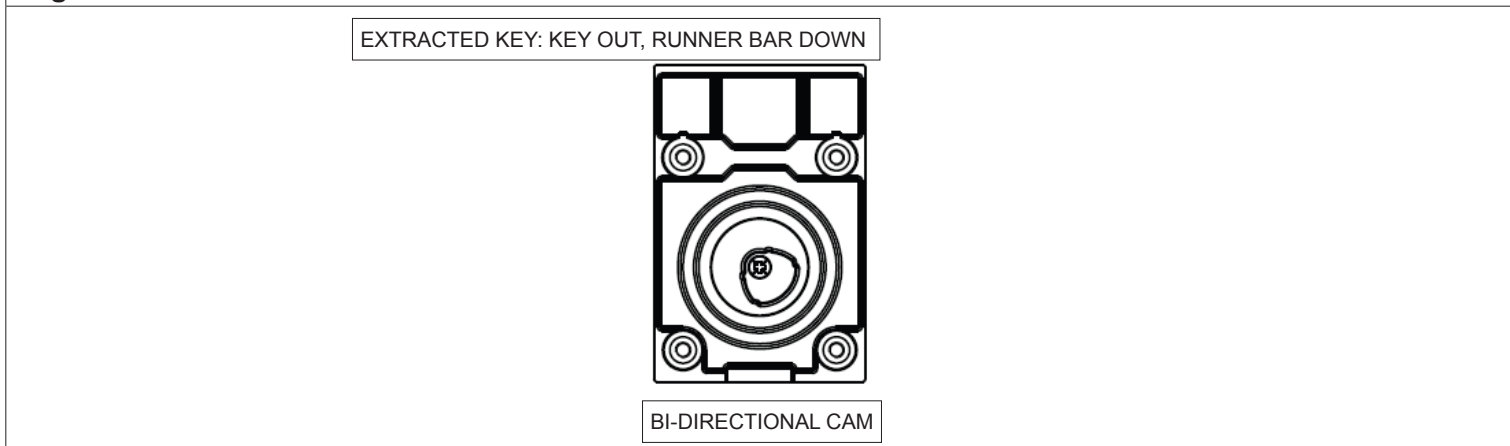
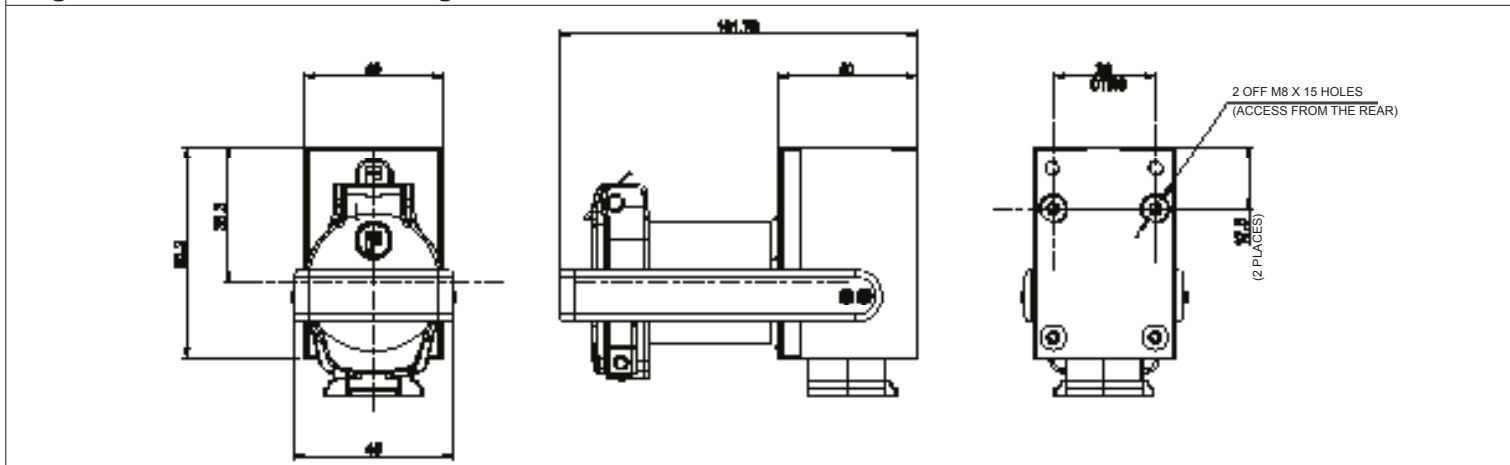
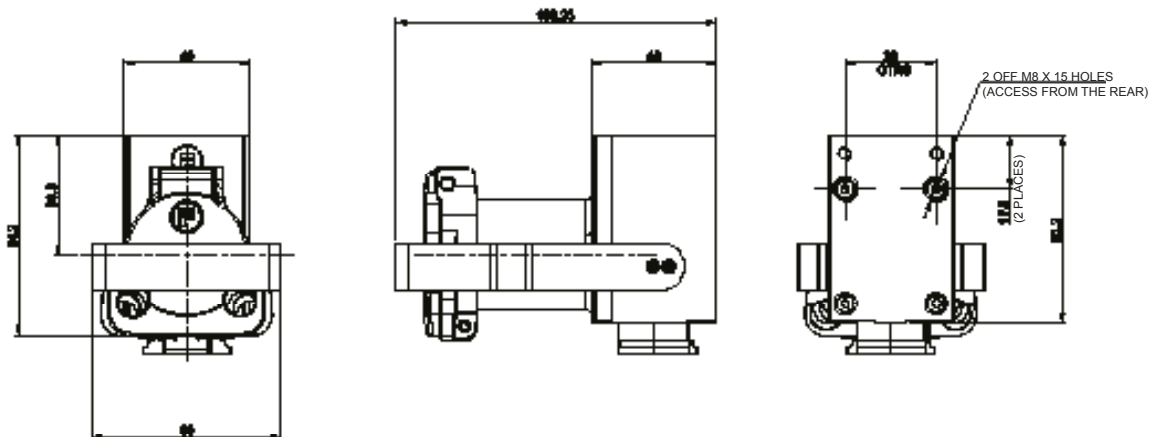


Figure 3: Dimensional Drawing - S40 with stainless steel dustcover



Operating Instructions: S40 Extracted Key Adaptor

Figure 4: Dimensional Drawing - S40 with stainless steel padlockable dustcover



Tools and Fixings Required

2.5mm A/F Hex wrench (Torque Setting 0.8 - 1.0 Nm)

Ø8.2mm Drill

2 x M8 screws for fixing Adaptors. (Screws must be suitable length for a minimum of 10mm thread engagement with Adaptor. Required screw type and class; A2 70. Required torque setting; 4-6 Nm.)

Required Torque Settings

If removed during mounting, re-orientation or electrical wiring, all supplied fixing screws of the complete Guard Interlocking Device must be refitted using the following torque settings;

- M3 Screws – 0.8-1.0 Nm.
- M4 Screws – 2-4 Nm.
- M5 Screws – 2-4 Nm.
- M8 Screws (required for device mounting but not supplied) – 4-6 Nm.

Mounting

1. Locate the device so that inspection and replacement are possible.
2. Mount the enclosure assembly together with head assembly to a flat metal, static part of the machine. Use M8 screws from the rear. The mounting surface should be flat.
3. Refit any lids to host units after cabling is completed.
4. All fixing screws used to mount the complete Guard Locking Device must be permanently prevented from removal, either by vibration or by personnel using standard tools. If mounting fixings are visible, they must be secured against manipulation and un-authorized or un-identifiable removal. In these cases, a middle strength adhesive screwlocker is required.
5. To ensure correct operation of unit, dust cover must not be removed.
6. The installation and operation of the complete Guard Interlocking Device must take into account the requirements of EN ISO 14119; in particular Section 7 – Design for minimising defeat possibilities.
7. The complete Guard Interlocking Device must not be used as a mechanical stop. Where applicable, precautions must be made to ensure the door or gate of any guarded area has sufficient support and stops to prevent the impact on the Guard Interlocking Device.
8. If fitted in conjunction with an S40 Push IR Escape Release module, the complete Guard Interlocking Device must be mounted in the correctly assembled condition so that the Escape Release action is only possible from within the guarded area (danger zone).

Adding extra modules to existing units

See AT Head Installation Instructions & www.youtube.com/user/FortressInterlocks/videos for guidance.

Testing (Unpowered)

The complete guard installation should be tested prior to use. All locking means (access lock(s) and / or solenoid) will require unlocking before extracted key can be removed. Head will require extracted key to be rotated, removed and the 'Gate' swung over the front of the lock before it will unlock. Safety circuits will remain open, access keys will be trapped and head will not lock until the extracted key (and any safety keys) are returned and rotated.

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

Warning: This device does not contain the Machine Reset or Restart facility after an escape or auxiliary release of the guard locking. Addition measures are required to achieve the reset of the machine system.

Operating Instructions: S40 Extracted Key Adaptor

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
- WD40, 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

The S40 Extracted Key Lock Adaptor 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.

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: Careful product selection is required, which is best performed under the guidance of a Fortress Sales Representative.

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

This guide should be retained for future reference.