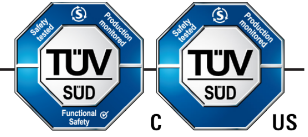


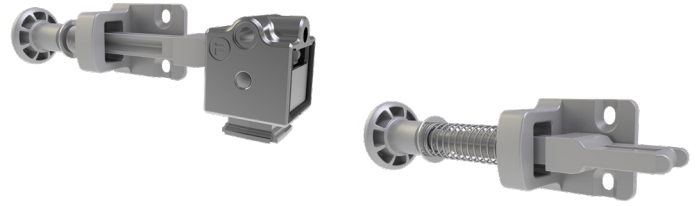
Operating Instructions: S40 Hand Operated Actuator



Actuators

Description

The S40 Hand Operated Actuator can be used with Fortress' modular amGardS40 range, incorporating an S40S6 Slimline Head. It is a hand operated sprung actuator with a slim SA tongue. The actuator is rotatable in 90° increments for flexibility. The S40 Hand Operated Actuator is particularly useful for applications using small radius, hinged doors (250mm minimum).



Options & Ordering Information

Description	Part No.
S40 Left Handing Hand Operated Actuator for S6 Slimline Head	S40SD2
S40 Right Handing Hand Operated Actuator for S6 Slimline Head	S40SD4

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 mis-application of this product.

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

amGardS40 Hand Operated Actuator Technical Specification

Housing Materials	Stainless Steel to BS3146
Colour	Stainless Steel
Operating Force (spring loaded)	12N
Retention Force (locked)	5,000N**
Mechanical Life	1,000,000 Switching Cycles
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.

**Destructive test of GS-ET-19, 5.18 exceeded 10,000N. Destructive testing performed as a side load on a hinged door application.

amGardS40 Hand Operated Actuator Safety Functions

Safety Function 1	Part No.
Provides link from interlock to door	S40SD

Operating Instructions: S40 Hand Operated Actuator

Functionality

To gain access to a guarded area

First remove any locking means by correctly operating any assembled S40 EK/SK/AK key adaptors or S40 LOK unit. Remove the S40 Hand Operated Actuator from the S40 AT Head by pulling on the knob casting.

To close and relock a guarded area

Close the door and drive the tongue of the S40 Hand Operated Actuator into the S40 AT Head using the knob casting. Relock the area by operating any S40 EK/SK/AK key adaptors or S40 LOK unit.

Figure 1: Dimensional Drawing - S40SD2S6

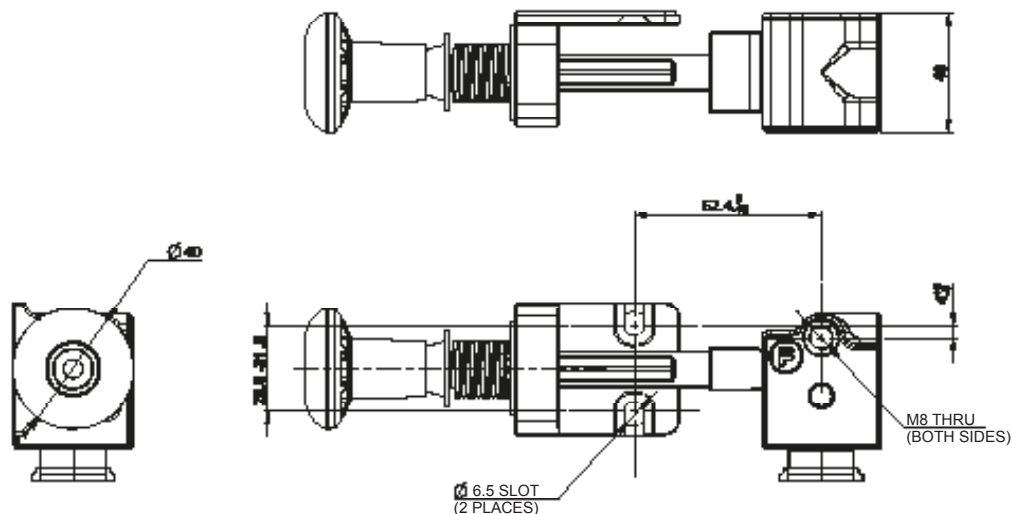
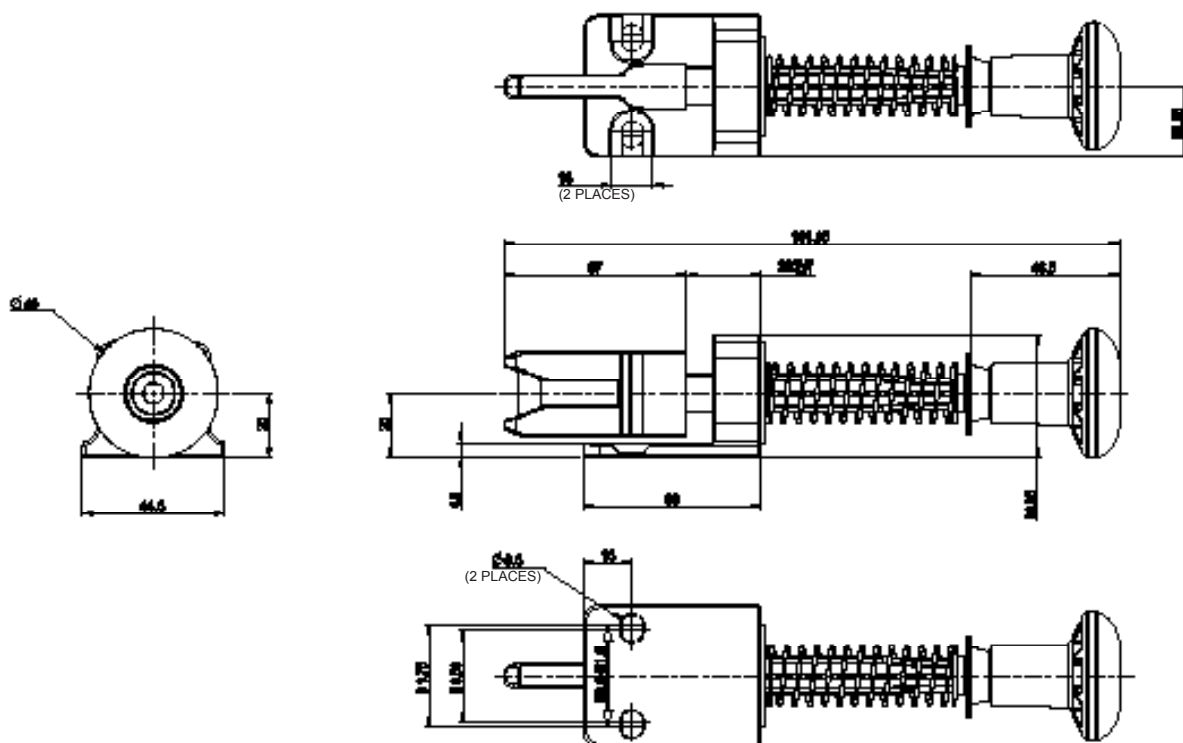


Figure 2: Dimensional Drawing - S40SD



Operating Instructions: S40 Hand Operated Actuator

Tools and Fixings Required (for Actuator mounting only)
M6 Tap or Ø 6.5 Drill 2 x M6 screws (Screws must be suitable length for a minimum of 6mm thread engagement if mounting to a threaded panel, or a suitable length to ensure full engagement with M6 Nut if mounted through a panel. Required screw type and class; A2 70. Required torque setting; 4-6 Nm.) 2 x M6 Nuts (optional) 2 x M6 Washers
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 <ul style="list-style-type: none">• 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
<ol style="list-style-type: none">1. Mount the complete Guard Interlocking Device only in its correctly assembled condition.2. Locate the S40 Hand Operated Actuator so that it is within easy reach.3. The actuator must be fitted to a flat metal panel, of minimum thickness 6mm, permanently attached to the guard.4. Machine the panel using the dimensions from figure 1.5. Mount the actuator to the panel using the 2 M6 screws nuts and washers, as applicable.6. 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.7. 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.8. 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.
Testing
The complete guard installation must be tested against the requirements of the host unit. Refer to the S40 ATHead Stop/ LOK installation instructions. 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.
Service and Inspection
There are no user serviceable parts in this unit. If damage or wear is found the whole unit must be replaced.
Disposal
The S40 Hand Operated Actuator does not contain any certified hazardous materials so should be disposed of as industrial waste. All stainless steel can be recycled.
Liability Coverage is Voided Under the Following Conditions:
<ul style="list-style-type: none">• If these instructions are not followed.• Non-compliance with safety regulations.• Installation not performed by authorised personnel.• Non-implementation of functional checks.
The manufacturer reserves the right to modify the design at any time and without notice.
This guide should be retained for future reference.