# SERIES SHGV



# Description

The SHGV Series consist of a guard-mounted mechanical locking device and a 2-position key operated selector switch for control panel mounting. This unique key transfer system assures the removal of power before allowing the access control guard to be open ... without the need for electrical wiring at the interlocked machine guard location.

### Operation

When the machine guard is open the transfer key (for operating the 2-position selector switch) cannot be withdrawn from the guard locking mechanism.

Upon closing of the guard, the mechanical actuator key permits the transfer-key to be turned (locking the guard) and withdrawn. The transfer-key can now be removed and inserted into the 2-position selector switch, allowing it to be operated (e.g. power to be turned on) ... trapping the transfer key in the "on" position.

To unlock (open) the guard, the selector switch must be turned to the off position. The transfer-key can now be withdrawn and inserted into the guard-locking mechanism for release of the mechanical actuator key and opening of the guard.

The two lock barrel version allows the removal of a second transfer key when the mechanical actuator key has been released. This second transfer key prevents the removal of the "power control" transfer key from the keyed interlock. Thus it can be removed from the interlock by the operator to protect against the inadvertent start-up of the equipment.

# **Typical Applications**

Recommended for use where wiring directly to the movable guard is cost prohibitive or subject to damage due corrosive chemicals or other harsh environmental conditions.

## Features & Benefits

- **Highly tamper resistant** ... difficult to defeat with simple tools, thereby reducing liability exposure.
- Four optional key entry positions ... provides installation versatility.
- Three optional locking cylinder locations ... provides installation versatility.
- Corrosion resistant ... tolerates hostile environments.
- Funnel shaped entry ... forgiving of mechanical actuator key misalignment
- Low cost guard locking ... eliminates wiring at the guard.
- Meets rigid safety agency standards ...
- Selector switch: UL, CSA, IEC, BG, VDE

Mechanical key locking device: IEC, BG, VDE

#### AVAILABLE MODELS

Part Number	Description
SHGV/L1 (*) ESS21S2/103	Lock Barrel Left
SHGV/R1 (*) ESS21S2/103	Lock Barrel Right
SHGV/B1 (*) ESS21S2/103	Lock Barrel Rear
SHGV/LD1 (*) / (*) ESS21S2/103	Lock Barrel Left & Lock Barrel
SHGV/RD1 (*) / (*) ESS21S2/103	Lock Barrel Right & Lock Barrel

Includes guard device SHGV with standard BO actuator element, keyed selector switch ESS21S2, and contact block EF103 (1NO/1NC)

(\*) Individual key identification code stamped on selector switch cylinder.

#### Note:

This system is recommended for applications in which there is no residual motion or hazard after the removal of power. For applications in which there is residual motion or the presence of a hazard immediately following the removal of power, a solenoid-locking console (Model SVE) is recommended. Please consult factory.

#### **MECHANICAL SPECIFICATIONS**

Protection Class	IP 65 (Housing) IEC/EN 60529 IP 00 (Control Head) IEC/EN 60529
Actuating Forces	Insertion of actuating element - 15 N
	Withdrawal of actuating element - 5 N
Ambient temperature	- 25 °C to + 70 °C
Storage temperature	- 40 °C to + 80 °C
Material	ALsi 12 painted signal red (RAL 3000)
Housing	Steel passivated with
SHG Cover	Perbunan seals(oil and gasoline resistant)
Mechanical life	2 x 10 <sup>6</sup> operating cycles
Shock resistance	> 30 x g / 18ms
Vibration resistance	> 15 x g/10 200 Hz
Climatic resistance	40/91 to DIN 50015 FW 24 to DIN 50016

#### **ELECTRICAL SPECIFICATIONS**

Conformity to Standard	IEC/EN 60947-5-1
Protection Class	IP 65 to IEC/EN 60529
Contacts	Fine silver
Rated breaking capacity	230Vac/6A - 400VAC/4A
Rated operating current	230Vac/6A - 400VAC/4A
Rated insulation voltage	400VAC / 450VDC
Thermal test current	10 A
Utilization Category	AC-15; DC-13
Max. fuse rating	10 A (slow blow)
Ambient temperature	- 25 °C to + 80 °C
Switching frequency	6000 s/h



#### DIMENSIONAL DRAWING FOR SHGV GUARD LOCKING DEVICE