

## GSS Series

### Hinge Mount Safety Limit Switch

#### FEATURES

- Positive opening of NC (normally closed) contacts conforms to IEC/EN 60947-5-1-3
- Low profile limit switch design
- Choice of zinc die-cast or plastic housings
- Tamper resistant design uses TORX® head security screws
- Available with three actuator styles (left, center, right)
- Actuator head may be rotated in 90° increments
- Sealed to IP 66; NEMA 1, 4, 12, 13
- Available with wide choice of positive opening contact blocks
- Red body colour for easy safety recognition

#### APPLICATIONS

- Dual direction access doors
- Access doors with space limitations
- Applications where tampering is a concern and internal mounting is desired

#### TARGET MARKETS

- Packaging equipment
- Electronic assembly
- Specialty equipment
- Upgrade of installed machinery/ equipment to meet code



EN 60947-5-1-3



The Hinge Mount Safety Limit Switch is designed for use on machine access doors as an alternative solution to key operated interlocks and safety limit switches. When the access door is opened, a follower pin (not supplied) slides down the slot in the actuator lever, forcing the actuator lever to rotate and positively open the NC safety circuit to shut off the machine. Closing the access door rotates the actuator lever to the reset position, closing the NC safety contacts.

The Hinge Mount Safety Limit Switch minimizes alignment problems because it may be offset-mounted from the hinge point of the door. The tamper-resistant design and the positive opening contacts provide a higher level of safety than the conventional spring-driven limit switches often used to monitor door position.

#### LOW ENERGY SWITCHING

In today's demanding age of low energy controls, electromechanical switches are frequently used to interface directly with safety relays, PLCs and other low energy devices. To accommodate this requirement GSS offers gold plated contact versions of the standard basic switch. This improves reliability of switching at low currents and voltages by protecting the contact surfaces from contamination during operation or storage prior to use.

Standard silver contacts have a disadvantage in that the contact surface may tarnish under certain environmental conditions, e.g. in the presence of moisture.

Low energy basic switches are rated as follows:

Operating Voltage $U_e$	1 to 50 Vac or Vdc
Operating Current $I_e$	1 $\mu$ A to 100 mA

#### **▲ WARNING**

##### MISUSE OF DOCUMENTATION

- The information presented in this product sheet (or catalogue) is for reference only. DO NOT USE this document as system installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.



# GSC/D EN 50047

Safety Standard

GSC Metal

GSD Plastic

## Technical Data

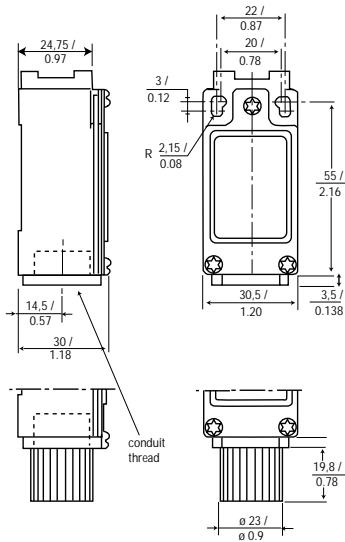
**Mechanical life** up to 1 million operations  
**Degree of protection** IP 66, NEMA type 1, 4 (GSC), 12, 13

**Temperature range**  
*Operating:*  
 -25 °C to +85 °C /  
 -13 °F to +185 °F  
*Storage:*  
 -40 °C to +85 °C /  
 -40 °F to +185 °F

**Approvals\***  
 IEC 60947-5-1  
 EN 60947-5-1  
 ac15 A300  
 dc13 Q300  
 BG, UL, CSA

\*See Standards (page 179)

Dimensions in mm / in



Note: Incorporates safety screws

**C** = Metal

**D** = Plastic

Ordering: ↓

**GS X**

Example: GSC C 01 SZ

**Conduit Thread**

**A** = 1/2" NPT (Adapter)

**C** = 20 mm (Adapter - GSD only)

**X**

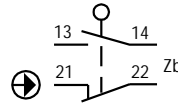
**01**

▲ Low Energy Contacts

Note: See page 209

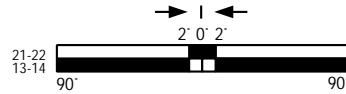
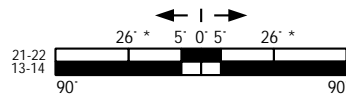
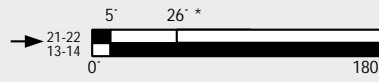
**XX**

**Snap-Action Contacts**  
 1 NORMALLY CLOSED/  
 1 NORMALLY OPEN

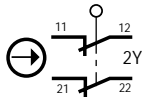


█ Circuit closed

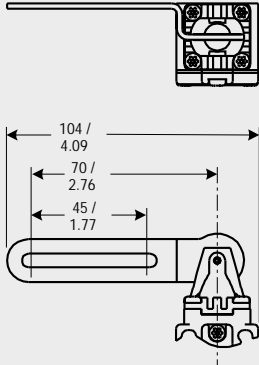
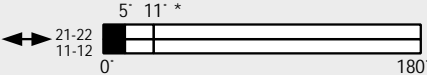
\*Positive opening to IEC/EN 60947-5-1-3



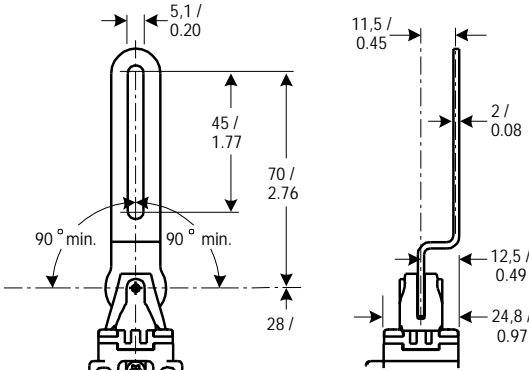
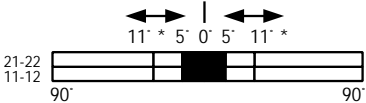
Slow-Action Contacts  
2 NORMALLY CLOSED



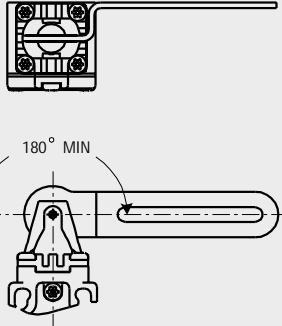
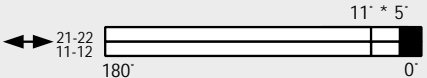
Actuator Types



S1



S2



S3

36<sup>A</sup>

XX

GSS

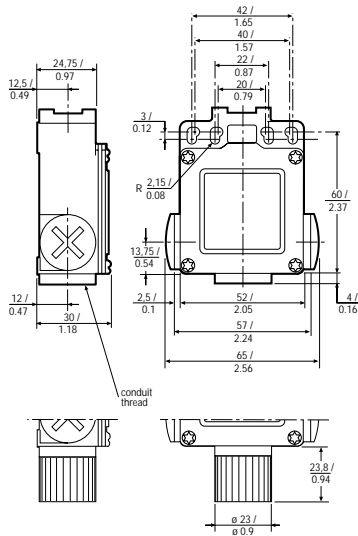
# GSE EN 50047 Compatible Safety 3 Conduit Metal Standard

## Technical Data

<b>Mechanical life</b>	up to 1 million operations
<b>Degree of protection</b>	IP 66 NEMA/UL type 1, 4, 12, 13
<b>Temperature range</b>	<i>Operating:</i> -25 °C to +85 °C / -13 °F to +185 °F <i>Storage:</i> -40 °C to +85 °C / -40 °F to +185 °F
<b>Approvals*</b>	IEC 60947-5-1 EN 60947-5-1 ac15 A300 dc13 Q300 BG, UL, CSA

\*See Standards (page 179)

Dimensions in mm / in



Note: Incorporates safety screws

Conduit Thread  
**A** = 1/2" NPT

**C** = 20 mm

Ordering:

**GSE**

**X**

▲ Low Energy Contacts  
Note: See page 209

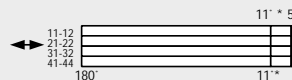
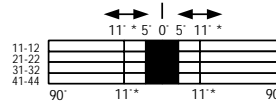
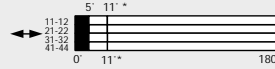
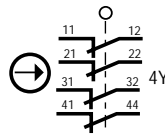
**41▲**

**47▲**

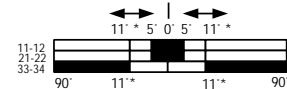
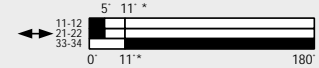
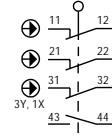
**XX**

Example: GSE C 20 S3

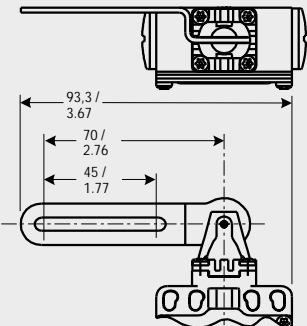
### Slow-Action Contacts 4 NORMALLY CLOSED/



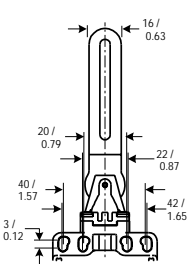
### Slow-Action Contacts BREAK BEFORE MAKE 3 NORMALLY CLOSED/ 1 NORMALLY OPEN



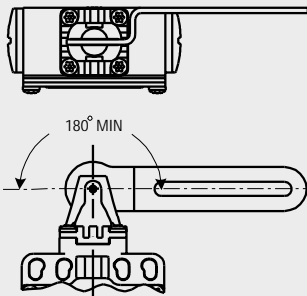
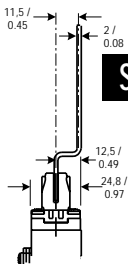
Actuator Types



S1



S2



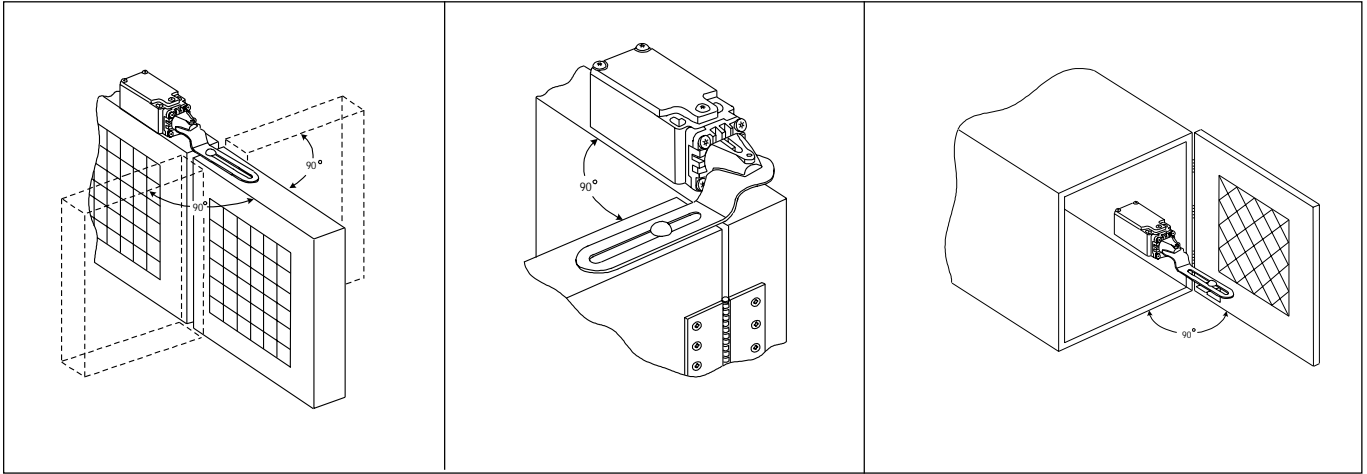
S3

XX

GSS

# Application suggestions

All dimensions are in mm / in



GSS