

# GSS Series (Global Safety Switch)



## Features

- Striking red body colour
- EN 50041 mounting and characteristics
- Designed to IEC electrical standard for world-wide use in guarding applications
- Positive opening operation of Normally Closed contacts conforming to IEC 947-5-1-3
- Rugged housing (Zinc Die-cast)
- Full range of actuator heads and levers suitable for safety applications
- Sealing to IP67
- Snap action and slow action basic switches
- International conduit sizes
- Galvanically isolated contacts

## Benefits

- Immediately recognisable in the application as a safety component
- Standard mounting and characteristics
- Globally available and accepted
- Welded contacts will separate – vital security in safety applications
- Range of actuation methods for detecting safety conditions in guarding and machine status applications
- Wiring and body flexibility
- Suitable for inductive switching and safety relay interfaces
- Signalling and power/safety circuits may be different polarities or voltages

## Description

GSS Series products may be used alone as Category 1 safety components. In conjunction with other safety switches and our complete range of safety relays, it is possible to construct comprehensive protection schemes with up to Category 4 compliance.

Honeywell's design experience has resulted in a brand new patented concept in safety switching techniques. The sequential safety switch incorporates positive break on the downward stroke of each sequence point. This allows the user to have both a warning signal and a stop signal. With this information a door can be closed before it stops a machine or settings adjusted to stop excessive movement thus avoiding down time.



## Low Energy Switching

In today's demanding age of low energy controls, electromechanical switches are frequently used to interface directly with PLCs and other low energy devices. To accommodate this requirement GSS offers a new gold plated contact version 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 50V AC or DC
Operating Current $I_e$	1 microamp to 100mA

Example of catalogue listing using a low energy basic switch - GSAB07A1B

## **⚠ 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 to be referenced for each product.

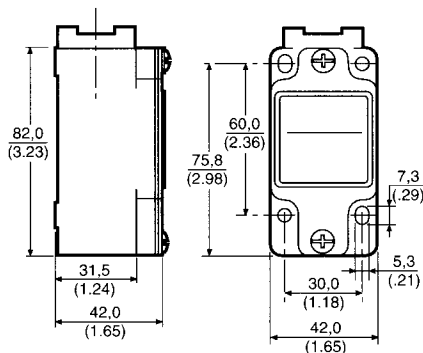
**Failure to comply with these instructions could result in death or serious injury.**

# GSA EN 50041 Safety Metal Standard

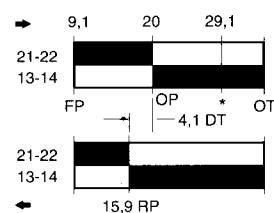
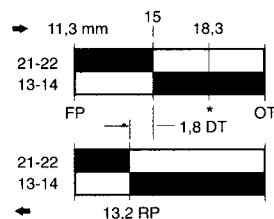
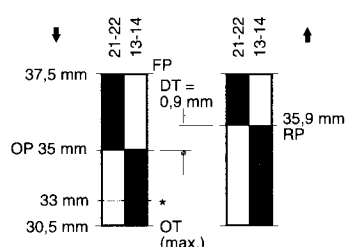
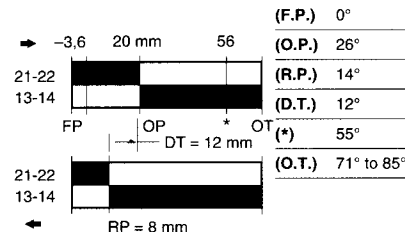
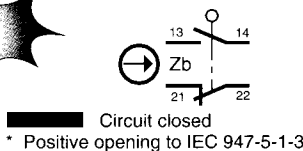
## Technical Data

<b>Mechanical life</b>	up to 15 million operations
<b>Degree of protection</b>	IP67 NEMA/UL type 1, 4, 12, 13
<b>Temperature range</b>	Operating : -25°C to +85°C -13°F to +185°F Storage : -40°C to +85°C -40°F to +185°F
<b>Approvals*</b>	IEC 947-5-1 EN60947-5-1 AC15 A300/A600 DC13 Q300 UL & CSA
<b>Vibration</b>	10 g conforming to IEC 68-2-6
<b>Shock</b>	50 g conforming to IEC 68-2-27 Terminal marking to EN 50013

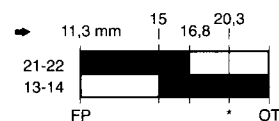
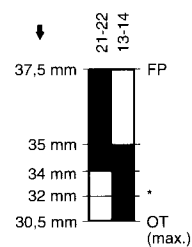
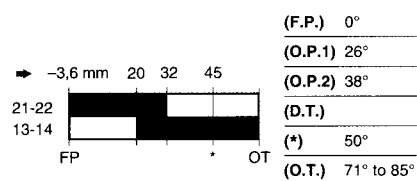
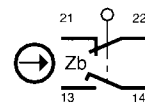
\* See Standards (page 5)



## Snap-Action Contacts



## Slow-Action Contacts MAKE BEFORE BREAK



\* Point from which the positive opening is assured

## Conduit Thread

Standard = **A** **A** = 1/2" NPT

**B** = PG 13,5

**C** = 20 mm

**D** = PF 1/2

Ordering :

**GS**

**X**

**X**

▲ Low Energy Contacts

Note: See page 17

**01**

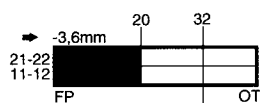
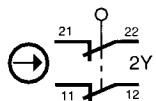
**07<sup>A</sup>**

**04**

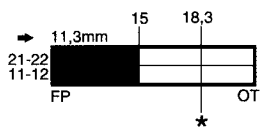
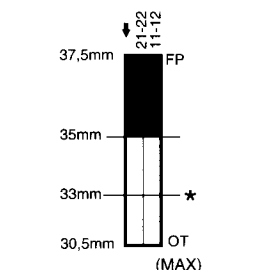
**34<sup>A</sup>**

**XX**

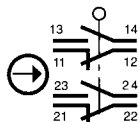
# Slow-Action Contacts 2 NORMALLY CLOSED



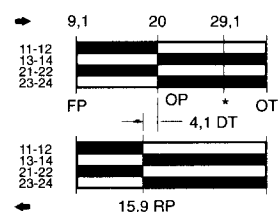
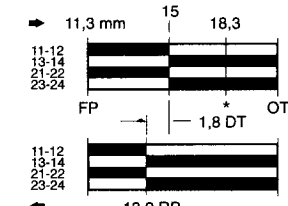
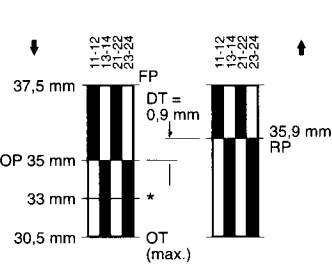
(F.P.) 0°  
(O.P.) 26°  
(R.P.)  
(D.T.)  
(\*) 38°  
(O.T.) 71° to 85°



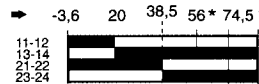
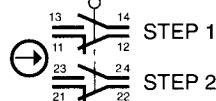
# Snap-Action Contacts DOUBLE POLE



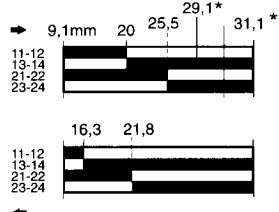
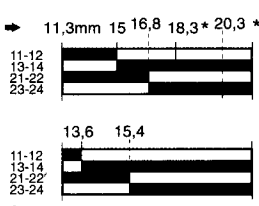
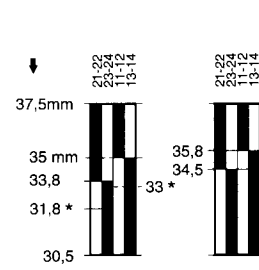
(F.P.) 0°  
(O.P.) 26°  
(R.P.) 14°  
(D.T.) 12°  
(\*) 55°  
(O.T.) 71° to 85°



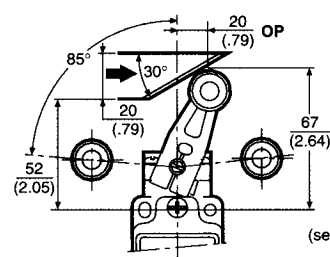
# Snap-Action Contacts DOUBLE POLE SEQUENTIAL



(F.P.) 0°  
(O.P.1) 27°  
(O.P.2) 42°  
(\*1) 55°  
(\*2) 70°  
(O.T.) 71° to 85°

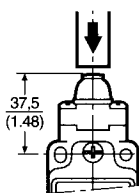


# Actuator Types

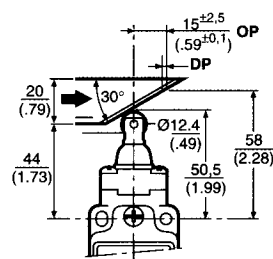


A1B

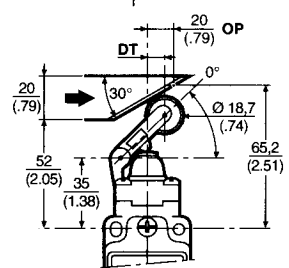
Additional  
levers  
available  
(see page 20)



B



C



D

06

36<sup>A</sup>

20

22<sup>A</sup>

21

28<sup>A</sup>

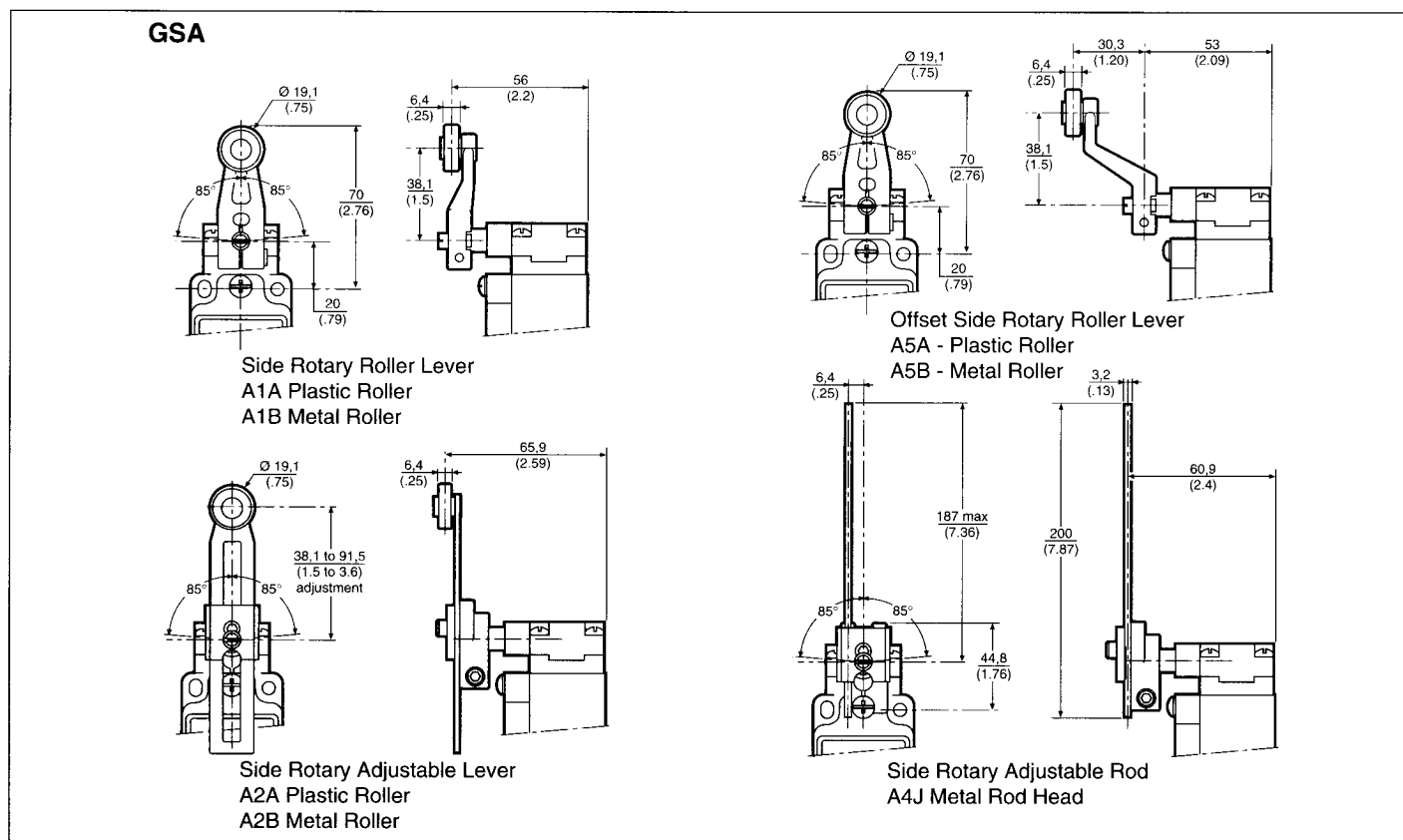
XXX

# Additional Lever Types

For use with all Side Rotary Head Styles.

Figure 1 illustrates Standard lever types which conform to EN 50041.

All dimensions are in mm/(inches).



**Note:** When installing all side rotary type levers, care must be taken to ensure that the lever set position is not changed due to forces in the application.