



## SERIES 57 – MINIATURE VANDAL RESISTANT PUSHBUTTON

### FEATURES

- Vandal Resistant
- Wide temperature range  
– up to 125°C
- Panel sealed to IP67
- High environmental specifications
- Gold contacts
- Status illumination
- Solder terminals
- Mounts virtually flush to panel

## Technical Information

### Description

The Series 57 is a range of miniature, momentary action, rugged panel sealed push-button switches with a round button and bezel.  
The Series is available with or without LED status illumination. A locknut is supplied with each switch.

The body and button are manufactured from a non-spark zinc alloy and are velour chrome plated. It is panel sealed to IP67 and is designed to be impact resistant. The small size, robustness and panel sealing make this switch ideal in harsh environments.

#### Status Illuminated Version

The illuminated version is available with a choice of 2 high brightness LED colours.

### Mechanical

<b>Travel (nom)</b>	2.3mm
<b>Life (nom)</b>	1,000,000 cycles
<b>Operating force (nom)</b>	3N
<b>Contact bounce (nom)</b>	1ms
<b>Panel thickness (max)</b>	3mm

### Electrical

#### Switch & LED

<b>SWITCH</b>	
<b>Dielectric strength</b>	1000V a.c.
<b>Insulation resistance</b>	1GΩ
<b>Contact resistance (initial)</b>	50mΩ
<b>Current rating (typical)</b>	400mA at 32V a.c. resistive 100mA at 50V d.c. resistive 125mA at 125V a.c. resistive
<b>Life (min)</b>	500,000 cycles
<b>Switching power (max)</b>	16VA a.c.
<b>LED</b>	
<b>Typical fwd voltage (Vf at I operating)</b>	2,2V
<b>Max fwd voltage (Vf at I operating)</b>	3,0V
<b>Forward current (I operating)</b>	20mA
<b>Meantime between failures</b>	100,000 hours
<b>Luminous intensity (Iv at Iopr)</b>	Red LED – 100mcd
<b>Luminous intensity (Iv at Iopr)</b>	Green LED – 160mcd

### Environmental & Physical

<b>Ingress protection</b>	IP67 (panel sealed)
<b>Shock</b>	100g
<b>Vibration</b>	DEF STD 07-55
<b>Non-Illuminated</b>	
<b>Operating temperature range</b>	-40°C to + 125°C

## Technical Information

## Ordering Information

### Environmental & Physical

(continued)

#### Illuminated

<b>Operating temperature range</b>	-35°C to +85°C
<b>Body and Button material</b>	Velour chrome plated zinc alloy
<b>Contacts</b>	Gold plated palladium nickel
<b>Terminal</b>	Gold plated brass
<b>Salt mist</b>	BS2011 Part 2:1
<b>Soldering information</b>	320°C max for 3s

### Body Style

### Termination

### Button Colour

### LED Colour

Standard round bezel 1

Solder Terminals 1

Non-illuminated 1

Illuminated 2

Red R

Green G

(This digit is only required for illuminated part numbers)

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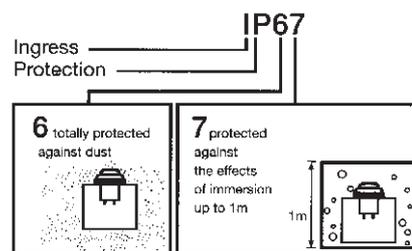
### Panel mounting

### & construction information

The Series 57 mounts easily into panels of maximum 3mm thickness. Front panel sealing to IP67 is achieved by the use of a sealing washer which is fitted behind the bezel of the body of the switch before it is inserted into the panel hole cut-out. It is held onto the panel by means of a brass locknut, tightened down by a 20mm spanner, to a torque of maximum 1,5Nm to achieve the correct sealing pressure.

A 'D' flat is provided to prevent rotation.

### Ingress Protection Impact Key

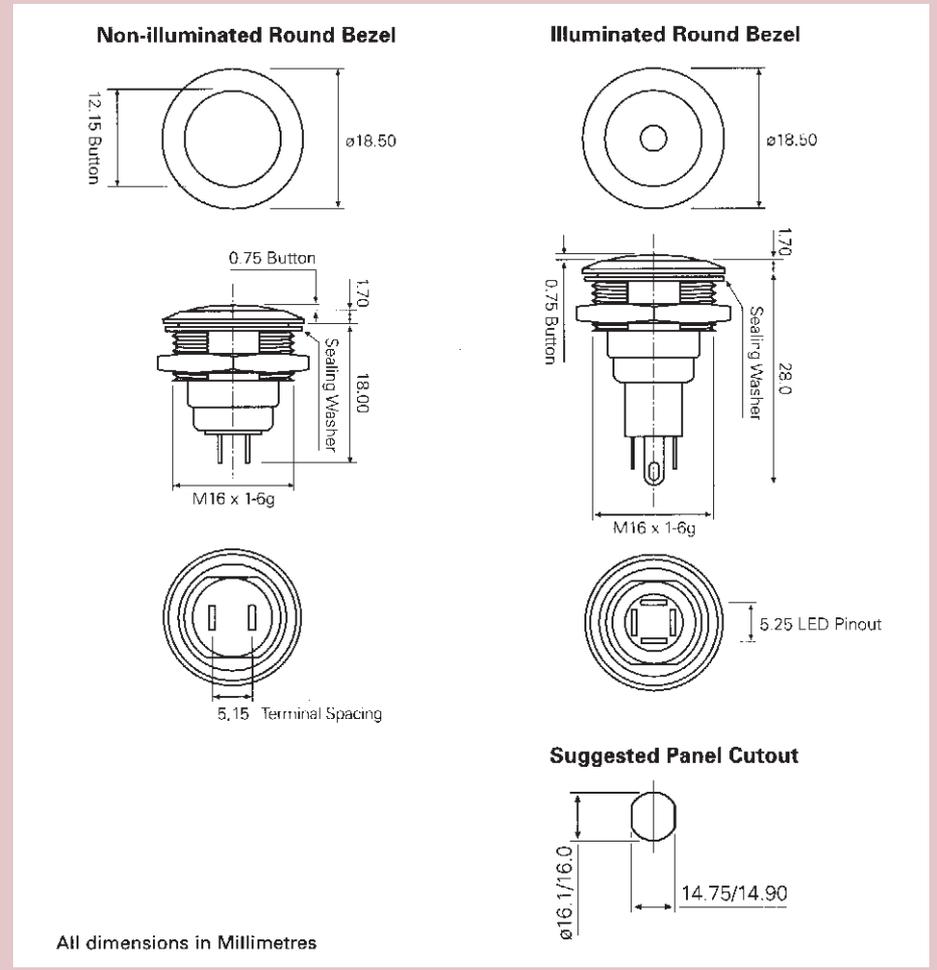


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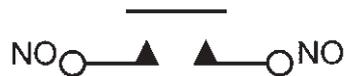
## Miniature Vandal Resistant Pushbutton

### Technical Information

#### Product Dimensions



#### Circuit Form



#### Application References

- Vandal resistant requirements
- Military environments
- Robust industrial requirements
- Flush-with-panel requirements
- Process control
- Railway carriage equipment
- External security door controls
- Elevators
- Fishing vessels
- Crane gantry equipment
- Earth moving equipment
- Upper deck yachting equipment
- Medical instrumentation

#### Further Information

For further information on our complete range of switch products, visit our website – [www.itwswitches.co.uk](http://www.itwswitches.co.uk) or contact our Sales Office.

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Due to our policy of continuous product development, ITW Switches retains the right to change the specification at any time without prior notice.