



## 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

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

### Electrical

#### Switch & LED

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

### Environmental & Physical

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



## Technical Information

## Ordering Information

### Environmental & Physical

(continued)

Illuminated	
Operating temperature range	-35°C to +85°C
Body and Button material	Velour chrome plated zinc alloy
Contacts	Gold plated palladium nickel
Terminals	Gold plated brass
Salt mist	BS2011 Part 2:1
Soldering information	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)	

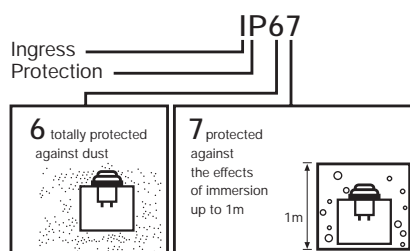
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### Panel mounting

### & 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



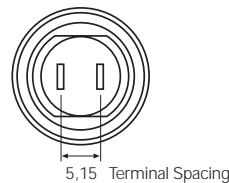
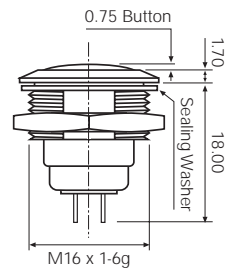
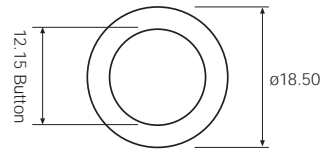
# SERIES 57

## Miniature Vandal Resistant Pushbutton

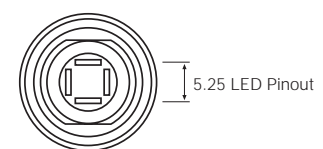
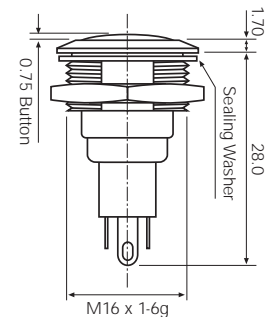
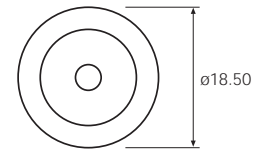
### Technical Information

#### Product Dimensions

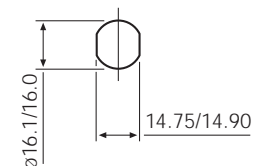
Non-illuminated Round Bezel



Illuminated Round Bezel



Suggested Panel Cutout



All dimensions in Millimetres

#### 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.itwswitchcon.com](http://www.itwswitchcon.com) or contact our Sales Office.

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