## Pushbutions

Sensors, Switches, Electronic Controls

## SERIES 59 - MINIATURE SEALED PUSHBUTTON

The Series 59 is a range of miniature, momentary action, rugged panel sealed pushbutton switches.
The Series is available with square or round bezel versions, with or without LED status illumination.
A locknut is supplied with each switch. A choice of body material is provided of either a non spark zinc alloy or a hard wearing moulded PBT therefore making this switch suitable for use in most applications.
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.

## Non-IIluminated Version

The non-illuminated range includes a choice of 7 button colours with solder terminal connection. PCB terminals, a high round bezel, surface and sublimation printing are available as non-standard.

## Status Illuminated Version

An illuminated version is available in the round bezel versions with a choice of 3 button colours and 2 high brightness LED colours. Non standard options include additional button and LED colours (subject to minimum order quantities).

## APPLICATIONS:

- Communications
- Instrumentation
- Data entry
- Military environments
- Environmentally demanding keypads
- Mass transport controls


## Key Features:

- Non-spark material
- Wide temperature range
- Panel sealed - To IP67
- High environmental specifications
- Gold contacts
- Status illumination



## Non-Standard Options:

- Overboot available for protection against icing
- Surface or sublimation legend printing on the button (non-illuminated version)


## Pushbuttons

## Product Drawings



Circuit Form:
Ingress Protection Rating Key:


## Pushbuttons

## LED Characteristics:

Typical fwd voltage (VF at I operating):
Forward current (I operating): 20mA 2.2 V

Max fwd voltage (VF at I operating): 3.0 V

## Panel Mounting \& Construction Information:

The Series 59 mounts easily into panels of minimum 1.5 mm and maximum 3 mm thickness. Front panel sealing to IP67 is achieved by the use of a sealing ' 0 ' ring 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 14 mm spanner, to a torque of between 1.0 Nm to 2.0 Nm to achieve the correct sealing pressure.

A ' $D$ ' flat is provided to prevent rotation.

Ordering Information:


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## Mechanical/ Electrical Characteristics:

## Travel (nom): 2.3 mm

Life (max): 1,000,000 cycles
Operating force (nom): 3 N
Contact bounce (nom): 1 ms
Panel thickness (max):
$1.5-3 \mathrm{~mm}$
Panel cut out:
ø13.6mm (with 'D' flat)

## SWITCH

Dielectric strength: 1000 V a.c. Insulation resistance: $1 \mathrm{G} \Omega$
Contact resistance: $50 \mathrm{~m} \Omega$
Current rating (typical):
400 mA at 32 V a.c. resistive 100 mA at 50 V d.c. resistive 125 mA at 125 V a.c. resistive
Life (min): 500,000 cycles
Switching power (max):
16VA a.c.

Ingress protection:
IP67 (Panel Sealed)
Shock:
100 g non - illuminated
40 g illuminated
Vibration: DEF STD 07-55
Non-Illuminated
Operating temperature range:
$-55^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}$
with zinc alloy body
$-40^{\circ} \mathrm{C}$ to $+105^{\circ} \mathrm{C}$ with PBT body
Illuminated
Operating temperature range:
$-35^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$
Body material:
Zinc alloy (standard) or PBT
Button material: PBT
Contacts: Gold plated nickel
Salt mist: BS2011 Part 2:1
Soldering information:
$320^{\circ} \mathrm{C}$ max for 3 s

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[^0]:    * Illuminated version only available with Black, Red \& Green as standard. Non-standard colours subject to M00's
    ** This digit is only required for illuminated switches.

