

#### **SERIES 59 – MINIATURE SEALED PUSHBUTTON**

#### **FEATURES**

- Non-spark material
- Wide temperature range – Up to 125°C
- Panel sealed To IP67
- High environmental specifications
- Gold contacts
- Status illumination

#### **NON-STANDARD OPTIONS**

- Overboot for protection
  against icing
- PCB terminals
- High round bezel
- Surface or sublimation legend printing on the button (non-illuminated version)



### **Technical Information**

Series 59			
	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-Illuminated 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).		
Mechanical			
	Travel (nom)	2,3mm	
	Life (max)	1,000,000 cycles	
	Operating force (nom)	3N	
	Contact bounce (nom)	1ms	
	Panel thickness (max)	1,5 - 3mm	
	Panel cut out	ø13,6mm (with 'D' flat)	
Electrical			
Switch & LED	SWITCH		
	Dielectric strength	1000V a.c.	
	Insulation resistance	1GΩ	
	Contact resistance	50mΩ	
	Current rating (typical)	400mA at 32V a.c. resistive 100mA at 50V a.c. resistive 125mA at 125V a.c. resistive	
	Life (min)	500,000 cycles	
	Switching power (max)	16VA a.c.	
	LED	2 21/	
	Typical fwd voltage (VF at I operating)	2,2V	
	Max fwd voltage (VF at I operating)	3,0V	
	Forward current (I operating) Meantime between failures	20mA	
		100,000 hours Red LED – 100mcd	
	Luminous intensity (Iv at lopr) Luminous intensity (Iv at lopr)	Green LED – 160mcd	
		Green EED - Toomca	
Environmental & Physical			
	Ingress protection	IP67	
	Shock	100g	
	Vibration	DEF STD 07-55	
	Non-Illuminated		
	Operating temperature range	-40°C to +125°C with zinc alloy body -40°C to +105°C with PBT body	

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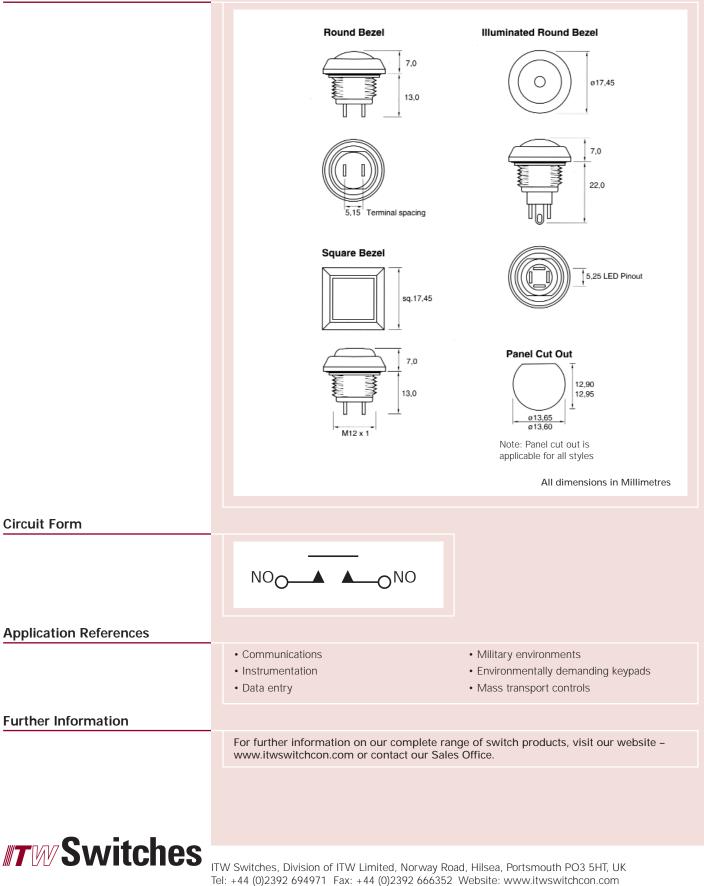
# Ordering Information

Environmental & Physical			
(continued)	Illuminated Operating temperature range Body material Button material Contacts Terminals Salt mist Soldering information	-35°C to +85°C Zinc alloy (standard) or PBT PBT Gold plated nickel Gold plated brass BS2011 Part 2:1 320°C max for 3s	
Body Style			
	Standard round bezel Standard square bezel Illuminated round bezel	59 – 1 2 4	
Townsingstion	PBT round bezel	5	
Termination	Solder terminals	1	
Button Colour		,	
	Black Red	1 2	
	Green White	3 4	
	Yellow	5	
	Blue	6	
	Orange (Illuminated version only available with Black, Red and Green as standard. Non-standard colours subject to MOQ's)	7	
LED Colour			
	Red Green (This digit is only required for illuminated part numbers)	R G	
Panel Mounting			
& Construction Information	The Series 59 mounts easily into panels of minimum 1,5mm and maximum 3mm thickness. Front panel sealing to IP67 is achieved by the use of a sealing 'O' 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 14mm spanner, to a torque of between 1.0Nm to 2.0Nm to achieve the correct sealing pressure. A 'D' flat is provided to prevent rotation.		
Ingress Protection Impact Key			
	Ingress Protection 6 to hely protected opened that E	P67	

## SERIES 59 Miniature Sealed Pushbutton

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Due to our policy of continuous product development, ITW Switches retain the right to change the specification at any time without prior notice. Designed & printed in the UK.