## Pushbutton Switches

### MINIATURE METAL PANEL SEALED PUSHBUTTON

This rugged panel sealed pushbutton is made of a special high creep strength non-spark zinc alloy suitable for use in mining or other potentially explosive atmospheres where dust and moisture are problematic.

# Series 59

ACTUAL SIZE

### **APPLICATIONS**

- Communications
- Instrumentation
- Data processing
- · Process controls
- Transportation/ Material handling

### **KEY FEATURES:**

- Panel sealed to IP67
- · Momentary action
- · Non-spark material
- 500,000 life cycles @ max power
- Impact resistant
- Gold contacts
- Wide temperature range: –55°C to +125°C

### **ORDERING INFORMATION:**

Part Number	Bezel Style	Button Color*
59-111	Round	Black
59-112	Round	Red
59-113	Round	Green
59-211	Square	Black
59-212	Square	Red
59-213	Square	Green
59-311	High Round	Black
59-312	High Round	Red
59-313	High Round	Green

### STANDARDS / AGENCY / RATINGS:









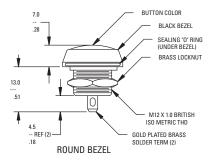


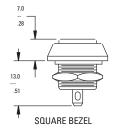
### **PRODUCT DRAWINGS**

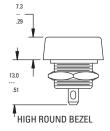


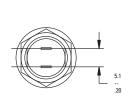


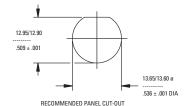












### PANEL MOUNTING AND CONSTRUCTION INFORMATION

The series 59 mounts easily into panels of minimum 1.5mm (.060 in.) and maximum 3mm (.118 in.) thickness. Front panel sealing to IP67 is achieved by a sealing "O" ring fitted into a premachined groove on 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 hex nut tightened down by a 14mm spanner, to a torque of between 1.5Nm to 3.0Nm to achieve the correct sealing pressure. A "D" flat is provided to prevent rotation.

# MECHANICAL / ELECTRICAL CHARACTERISTICS:

Travel (nom):

2.3mm (.090 in.)

Life (max):

1,000,000 cycles

**Operating force (nom):** 

3N / 306 grams

**Contact bounce (nom):** 

1 millisecond

Panel thickness (max):

3mm (.118 in.)

**Dielectric strength:** 

1000 VAC

**Insulation resistance:** 

 $1 \, \text{G}\Omega$ 

**Contact resistance (initial):** 

50 m $\Omega$  (Max)

**Current rating (typical):** 

400mA at 32 VAC resistive 100mA at 50 VDC resistive 125mA at 125 VAC resistive

Shock:

100G

**Operating temp range:** 

-55°C to +125°C (-67°F to +257°F)

**Body material:** 

zinc alloy, black

**Button material:** 

PBT thermoplastic

Contacts:

gold plated palladium nickel

**Terminals:** 

gold plated brass