## Series 48M


**Panel Sealed Metal Pushbutton Switches**

Built on the proven series 48 platform these rugged vandal resistant switches come in stainless steel or chrome plated zinc housings, electro-mechanical or solid-state, momentary or maintained action, lighted or unlighted versions. The variety of options in this compact package size make the 48M ideal for many applications: outdoor controls, security products, food processing and medical products.

### Applications

- Outdoor Controls
- Kiosks
- Security Equipment
- Medical Equipment
- Food Processing Equipment
- Military Equipment
- Industrial Machinery
- Transportation: Mass-Transit, Marine, Lift Trucks

### Key Features:

- Momentary or Maintained Action
- Stainless Steel or Chrome Plated Zinc Housing
- Center Spot or Ring Illumination
- Variety of LED colors
- Electro-Mechanical or Solid-State (Hall Effect)
- Panel Sealed to IP67
- ROHS Compliant

### Ordering Information:

**Switch Function:**

1. Mechanical, Momentary, Solder Terminal
2. Mechanical, Maintained, Solder Terminal
3. Solid State, Momentary, Solder Terminal
4. Solid State, Maintained, Solder Terminal
5. Mechanical, Momentary, P.C. Terminal
6. Mechanical, Maintained, P.C. Terminal
7. Solid State, Momentary, P.C. Terminal
8. Solid State, Maintained, P.C. Terminal
9. Special, Following digits are in serial order

**Housing Material:**

1. Stainless Steel
2. Chrome Plated Zinc Alloy

**Illumination:**

0. Non-lit
1. Center Spot Illumination
2. Ring Illumination

**LED Color:**

- **N.** None
- **G.** Green L.E.D.
- **R.** Red L.E.D.
- **A.** Amber L.E.D.
- **B.** Blue L.E.D.
- **W.** White L.E.D.

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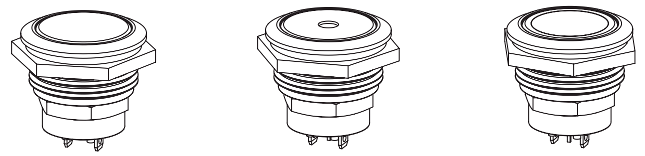
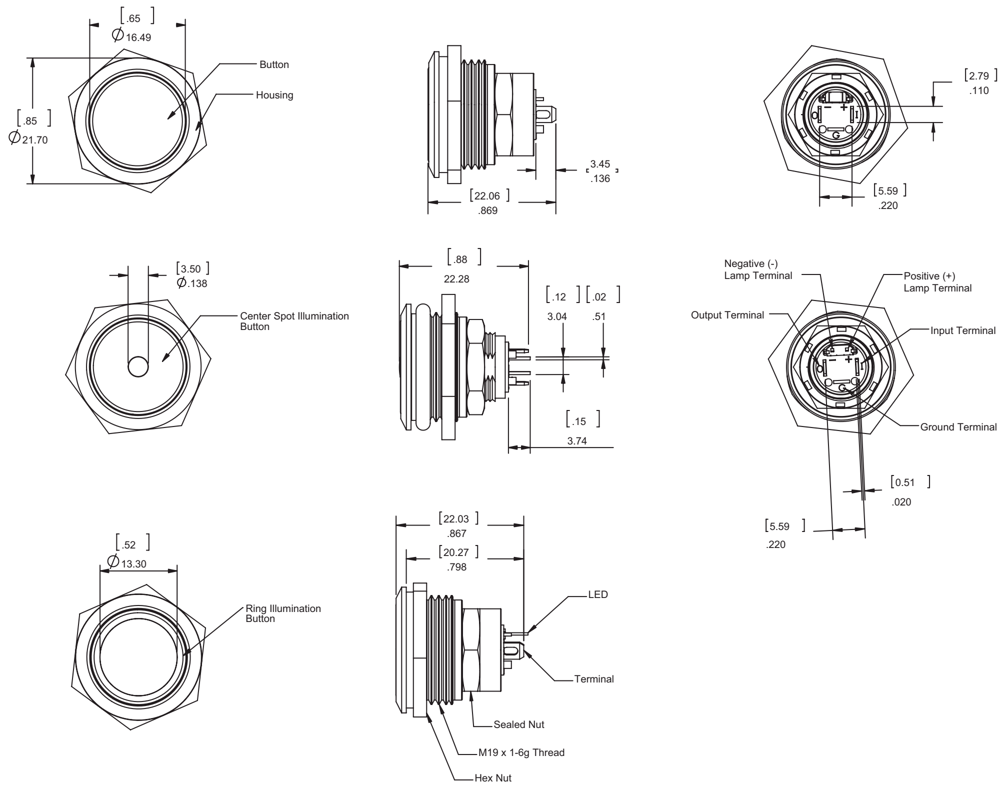
### Standards / Agency / Ratings:

RoHS COMPLIANT 2002 / 95 / EC

IEC IP67 COMPLIANT

# SERIES 48M—PANEL SEALED METAL PUSHBUTTON






## PANEL MOUNTING AND CONSTRUCTION INFORMATION

The series 48M mounts easily into panels of minimum 0.03” (0.8mm) and maximum 0.118” (3mm) thickness. Front panel sealing to IP67 is achieved by a sealing o-ring fitted to 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 to a torque of 10 inch pounds to achieve the correct sealing pressure.

ITW Switches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## MECHANICAL / ELECTRICAL CHARACTERISTICS:

**Circuit:**
SPST-NO-DB

**Button travel (nominal):**
0.09” / 2.3 mm

**Life (mechanical):**
500,000 cycles max (momentary)
100,000 cycles max (maintained)

**Operating force (nominal):**
3N/306g

**Contact bounce (nominal):**
1 ms

**Panel thickness:**
0.03”– 0.118” (0.8 – 3mm)

**Temperature index:**
-40°C to +85°C

**Torque (max):**
10 inch pounds

## ELECTRO-MECHANICAL

**Current ratings:**
400mA, 32 VAC Res.
100 mA, 50 VDC Res.
125mA, 125 VAC Res.

**Dielectric strength:**
1,000 VAC

**Insulation resistance:**
1G OHM

**Contact resistance:**
50m OHMS max (initial)

## SOLID-STATE (HALL-EFFECT)

**Supply voltage:**
4.2V to 24V, 26.5 Max.

**Supply current:**
B<Brp, Vcc=12V: 3mA Typ.
To 8mA Max.
B>Bop, Vcc=12V: 4mA Typ.
To 8mA Max.

**Output current:**
30 to 50 mA

**Reverse battery voltage:**
-30V Max.

**Reverse output current:**
-50mA Max.

*Contact an Authorized Distributor or Factory for Pricing*