# Series 58M-EM

## FULLY SEALED METAL PUSHBUTTON WITH WIRE LEADS

Built on the proven series 48 platform these rugged switches come in stainless steel or aluminum housings, electro-mechanical with either momentary or maintained action and lighted or unlighted versions. The variety of options in this compact package size make the 58M ideal for many applications: transportation, outdoor controls, security products, food processing and medical products.



ACTUAL SIZE

## APPLICATIONS

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

## KEY FEATURES:

- Momentary or Maintained Action
- Stainless Steel or Aluminum Housing
- Non Lit or Ring Illumination
- Variety of LED colors
- Electro-Mechanical
- Panel Sealed to IP67
- ROHS Compliant
- Gold Plated Contacts

## ORDERING INFORMATION:

**Series:**
- **BLANK** Gold Contact IP67
- **S** Silver Contact IP67
- **G** Silver Contact IP67/2A
- **SA** Silver Contact IP67/5A

**Switch Function:**
- **A** Mechanical, Momentary, Wire Leads
- **B** Mechanical, Maintained, Wire Leads
- **1** Mechanical, Momentary, Solder Terminal
- **A** Mechanical, Momentary, NO/NO Wireleads
- **C** Mechanical, Momentary, NC/NC Wireleads
- **E** Mechanical, Momentary, NC/NO Wireleads
- **2** Mechanical, Maintained, Solder Terminal
- **B** Mechanical, Maintained, NO/NO Wireleads
- **D** Mechanical, Maintained, NC/NC Wireleads
- **F** Mechanical, Maintained, NC/NO Wireleads

**Housing Material:**
- **1** Stainless Steel
- **2** Aluminum

**Button Style:**
- **0** Non-lit
- **2** Ring Illumination
- **3** Standby Logo Illumination
- **R** Red, Non-lit

**LED Color:**
- **N** None
- **G** Green
- **R** Red
- **B** Blue
- **W** White
- **RB** Red / Blue
- **RG** Red / Green
- **BG** Blue / Green

**Voltage Resistor:**
If Blank*
- **05** 5V Forward
- **12** 12V Forward
- **24** 24V Forward

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* Current limiting resistor is required to limit LED forward current to 20 mA (not included).

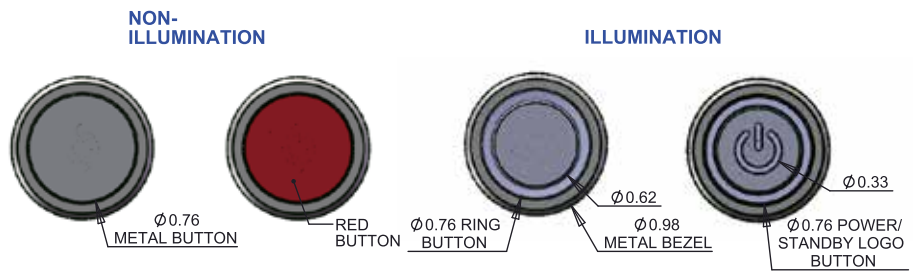
## STANDARDS / AGENCY / RATINGS:

RoHS COMPLIANT 2002 / 95 / EC

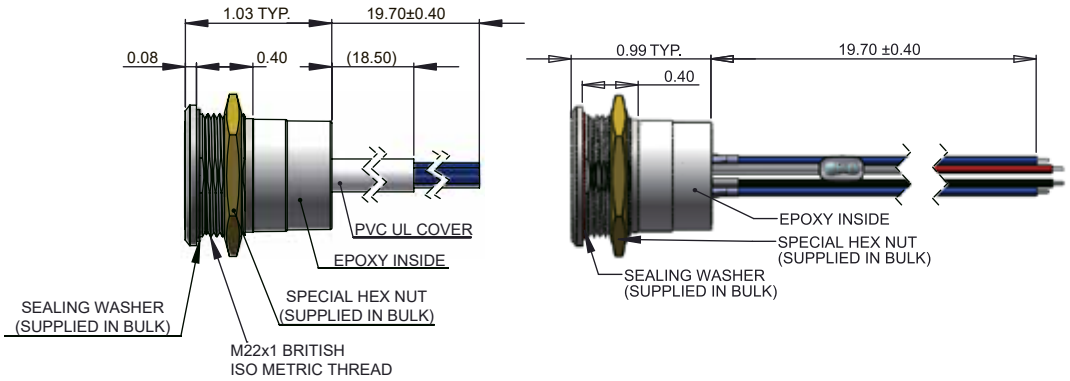
IEC IP67 COMPLIANT

# SERIES 58M: FULLY SEALED METAL PUSHBUTTON

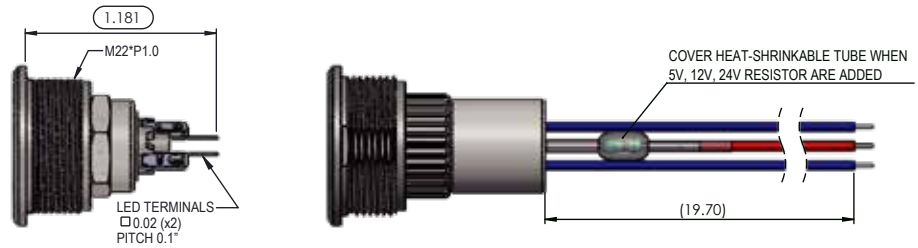
## PRODUCT DRAWINGS



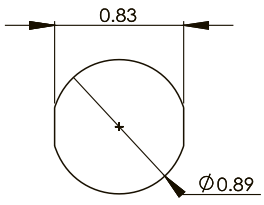

## 58M/S58M/G58M SERIES




## SA58M SERIES




## RECOMMENDED PANEL CUTOUT




**WIRELEADS DESCRIPTION**

| WIRELEADS TYPE | WIRELEADS SPECIFICATION | SW TERMINAL | | LED | |
|---|---|---|---|---|---|
| | | / | O | + | - |
| ILLUMINATION | AWG26/UL1007 | BLUE | BLUE | RED | BLACK |
| NON-ILLUMINATION | | BLUE | BLUE | --- | --- |

## PANEL MOUNTING AND CONSTRUCTION INFORMATION

The series 58M mounts easily into panels of minimum 0.50" (1.3 mm) and maximum 0.150" (3.8 mm) 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 metal hex nut tightened down to a torque of 10 inch pounds to achieve the correct sealing pressure.

## MECHANICAL / ELECTRICAL CHARACTERISTICS:

**Circuit:**
SPST-NO-DB (Form X)
**Button travel(nominal):**
0.09 inches / 2.3 mm
**Operating force(nominal):**
3N / 306 grams
**Contact bounce (nominal):**
1 ms
**Panel thickness:**
.020 - .177inches / 0.5 - 4.5mm
**Temperature index:**
-40˚F to +185˚F / -40˚C to +85˚C
**Torque (max):**
10 lb-in / 11.5 kgf-cm
**LED operating temperature:**
-13˚F to +185˚F / -25˚C to +85˚C

**Current ratings (resistive):**

**58M (Momentary)**
250mA @ 12VDC, 100K cycles
150mA @ 28VDC, 150K cycles
100mA @ 48VDC, 100K cycles
10mA @ 12VDC, 1 million cycles

**58M (Maintained)**
50,000 Cycles Nominal

**S58M (Momentary)**
10mA @ 12VDC, 100k Cycles

**S58M (Maintained)**
20K Cycles Nominal

**G58M (Momentary)**
2A @ 24VDC,40K Cycles
1A @ 250VAC,40K Cycles

**G58M (Maintained)**
2A @ 24VDC,20K Cycles
1A @ 250VAC,20K Cycles

**SA58M (Momentary)**
5A @ 28VDC, 25k Cycles

**SA58M (Maintained)**
5A @ 28VDC, 25k Cycles

## ELECTRICAL SPECIFICATIONS

**Dielectric strength:**
1,000 VAC
**Insulation resistance:**
1GΩ
**Contact resistance:**
50mΩ max(initial)