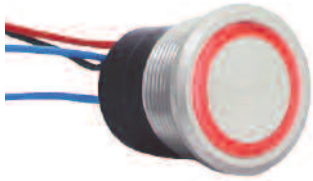
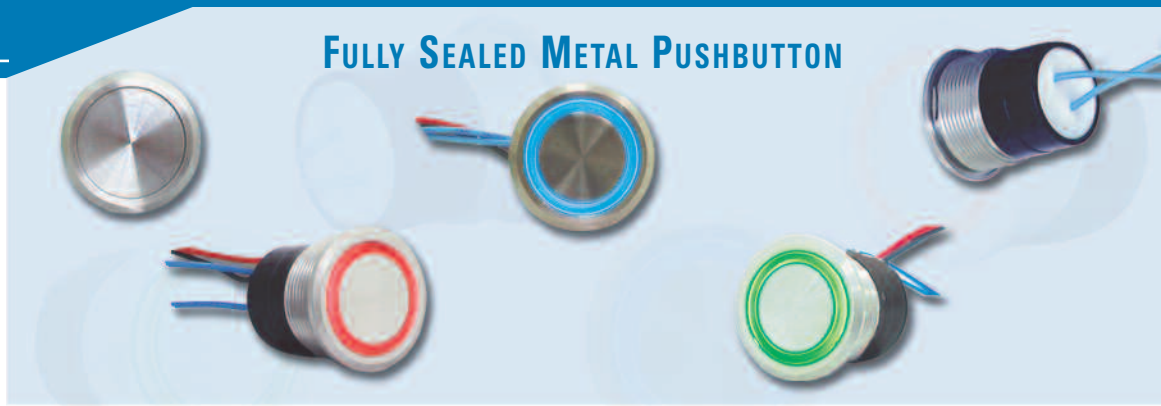


### SERIES 58M-EM:



ACTUAL SIZE



### FULLY SEALED METAL PUSHBUTTON SWITCHES 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.

#### 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

#### APPLICATIONS

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

#### ORDERING INFORMATION:

##### SWITCH FUNCTION:

- A.** MECHANICAL, MOMENTARY, WIRE LEADS
- B.** MECHANICAL, MAINTAINED, WIRE LEADS

##### HOUSING MATERIAL:

- 1.** STAINLESS STEEL
- 2.** ALUMINUM

##### BUTTON STYLE:

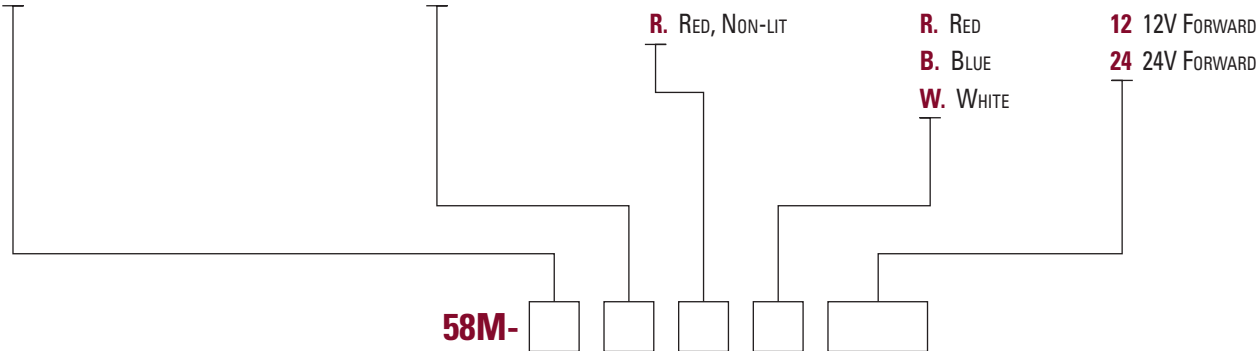
- 0.** NON-LIT
- 2.** RING ILLUMINATION
- R.** RED, NON-LIT

##### LED COLOR:

- N.** NONE
- G.** GREEN
- R.** RED
- B.** BLUE
- W.** WHITE

##### VOLTAGE RESISTOR

- If BLANK \*
- 05** 5V FORWARD
- 12** 12V FORWARD
- 24** 24V FORWARD



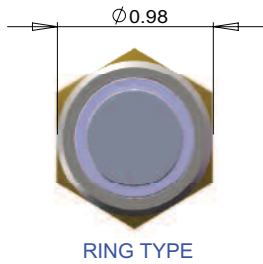
#### STANDARDS / AGENCY / RATINGS:



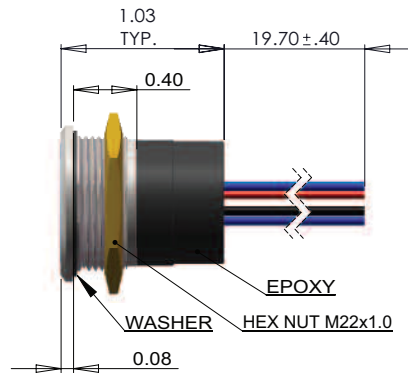
\* Current limiting resistor is required to limit LED forward current to 20 mA (not included).

## PRODUCT DRAWINGS

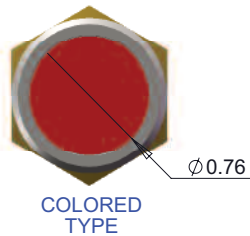
### ILLUMINATION



RING TYPE



### NON-ILLUMINATION

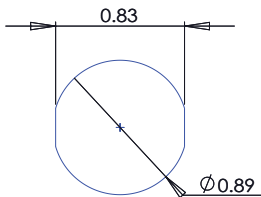


COLORED TYPE



NON.-LIT. TYPE

### RECOMMENDED PANEL CUTOUT



### WIRELEADS DESCRIPTION

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

## 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 millisecond

### Panel thickness:

0.50" – 0.150" (1.3 – 3.8mm)

### Temperature index:

-40°C to +85°C

### Torque (max):

10 inch pounds

### LED operating temperature:

-13° F to +185° F /

-25° C to +85° C

### Current ratings (resistive):

250mA @ 12VDC, 100K cycles

150mA @ 28VDC, 150K cycles (momentary)

100mA @ 48VDC, 100K cycles

10mA @ 12VDC, 1 million cycles (momentary)

## ELECTRO-MECHANICAL

### Dielectric strength:

1,000 VAC

### Insulation resistance:

1 GΩ

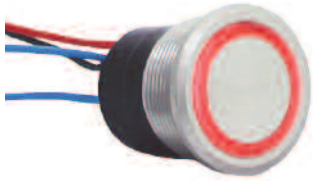
### Contact resistance:

50 mΩ max (initial)

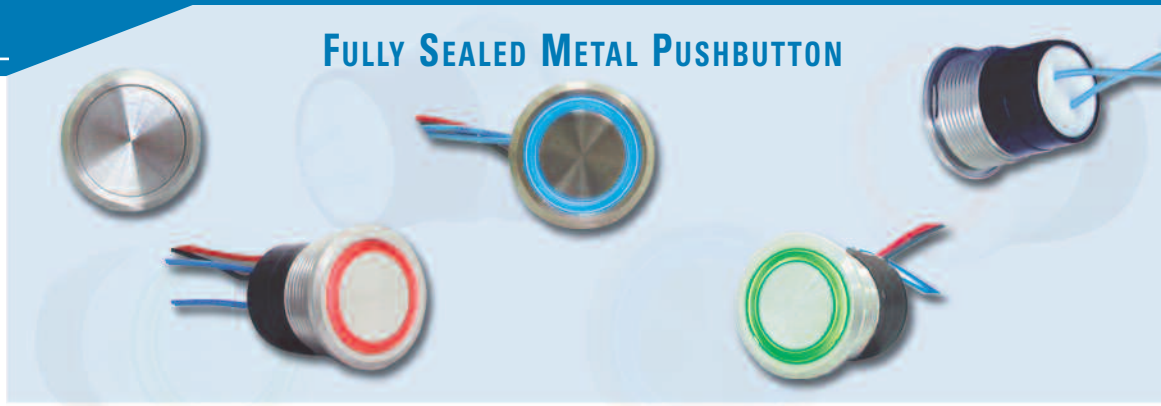
## PANEL MOUNTING AND CONSTRUCTION INFORMATION

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 brass hex nut tightened down to a torque of 10 inch pounds to achieve the correct sealing pressure.

### SERIES 58M-SS:



ACTUAL SIZE



### FULLY SEALED METAL PUSHBUTTON SWITCHES WITH WIRE LEADS

Built on the proven series 48 platform these rugged switches come in stainless steel or aluminum housings, solid state 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.

#### KEY FEATURES:

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

### APPLICATIONS

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

### ORDERING INFORMATION:

#### SWITCH FUNCTION:

- C.** SOLID STATE, , MOMENTARY, WIRE LEADS
- D.** SOLID STATE, , MAINTAINED, WIRE LEADS

#### HOUSING MATERIAL:

- 1.** STAINLESS STEEL
- 2.** ALUMINUM

#### BUTTON STYLE:

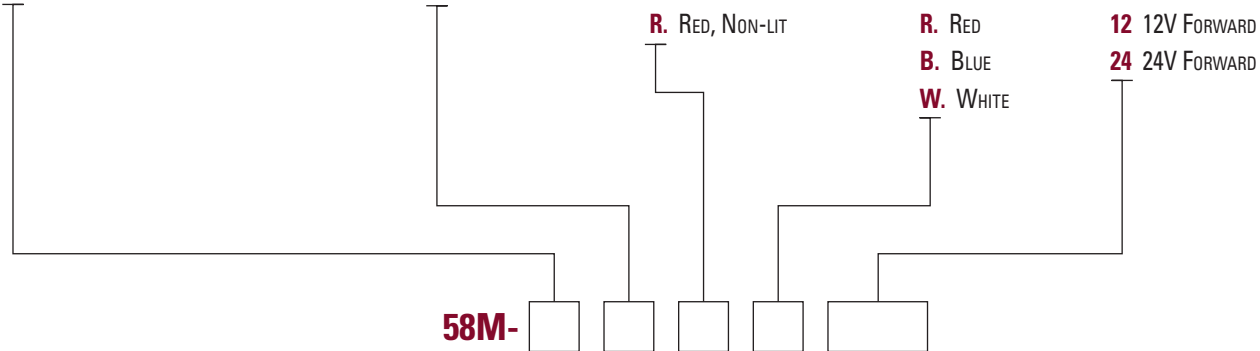
- 0.** NON-LIT
- 2.** RING ILLUMINATION
- R.** RED, NON-LIT

#### LED COLOR:

- N.** NONE
- G.** GREEN
- R.** RED
- B.** BLUE
- W.** WHITE

#### VOLTAGE RESISTOR

- If BLANK \*
- 05** 5V FORWARD
- 12** 12V FORWARD
- 24** 24V FORWARD



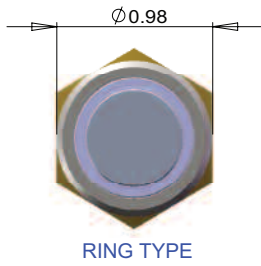
### STANDARDS / AGENCY / RATINGS:



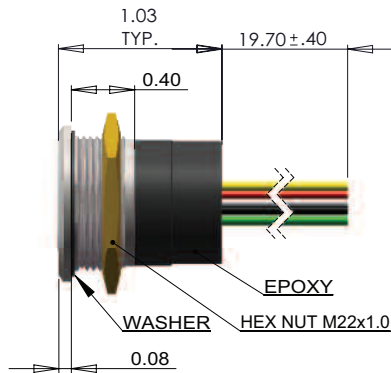
\* Current limiting resistor is required to limit LED forward current to 20 mA (not included).

## PRODUCT DRAWINGS

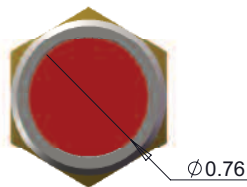
### ILLUMINATION



RING TYPE



### NON-ILLUMINATION

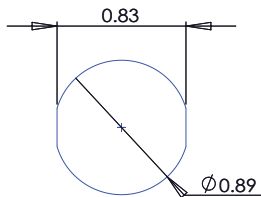


COLORED TYPE



NON-LIT. TYPE

### RECOMMENDED PANEL CUTOUT



### WIRELEADS DESCRIPTION

WIRELEADS TYPE	WIRELEADS SPECIFICATION	SW TERMINAL			LED	
		I	O	G	+	-
ILLUMINATION	AWG26/UL1007	YELLOW	GREEN	WHITE	RED	BLACK
NON-ILLUMINATION		YELLOW	GREEN	WHITE	---	---

## MECHANICAL / ELECTRICAL CHARACTERISTICS:

### Circuit:

SPST-NO-DB (Form X)

### Button travel (nominal):

0.09 inches / 2.3 mm

### Life (mechanical) (nominal):

1,000,000 cycles (momentary)

100,000 cycles (maintained)

### Operating force (nominal):

3N / 306 grams

### Panel thickness:

0.02 – 0.12 inches / 0.5 – 3mm

### Temperature index:

-40°F to + 185°F

### Supply voltage:

4.2V to 24V, 26.5V Max.

### Supply current:

B<Brp, Vcc=12V: 3mA Typ.

To 8mA Max.

B>Bop, Vcc=12V: 4mA Typ.

To 8mA Max.

### Output current:

20 mA

### Reverse battery voltage:

-30V Max.

### Reverse output current:

-50mA Max.

### Torque (max):

10 inch pounds

## 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 brass hex nut tightened down to a torque of 10 inch pounds to achieve the correct sealing pressure.