

## Series 48M-SS

### 19MM PANEL SEALED METAL HALL-EFFECT

Built on the proven series 48 platform these rugged switches come in stainless steel or chrome plated housings with either momentary or maintained action and lighted or unlighted versions. The variety of options in this compact package size make the 48M ideal for many applications.



ACTUAL SIZE

### APPLICATIONS

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

### KEY FEATURES:

- Momentary or Maintained Action
- Stainless Steel Housing
- Center Spot or Ring Illumination
- Variety of LED colors
- Solid State
- Panel Sealed to IP67
- ROHS Compliant
- Gold Plated Contact and Terminals

### ORDERING INFORMATION:

#### SWITCH FUNCTION:

- 3. SOLID STATE, MOMENTARY, SOLDER TERMINAL
- 4. SOLID STATE, MAINTAINED, SOLDER TERMINAL
- 7. SOLID STATE, MOMENTARY, PC TERMINAL
- 8. SOLID STATE, MAINTAINED, PC TERMINAL
- C. SOLID STATE, , MOMENTARY, WIRE LEADS
- D. SOLID STATE, , MAINTAINED, WIRE LEADS
- 9. SPECIAL, DIGITS ARE IN SERIAL ORDER

#### HOUSING MATERIAL:

- 1. STAINLESS STEEL
- 2. ZINC ALLOY CHROME PLATED

#### ILLUMINATION †:

- 0. NON-LIT
- 1. CENTER SPOT ILLUMINATION
- 2. RING ILLUMINATION
- 3. ILLUMINATED POWER SYMBOL

#### 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.
- RB. RED/BLUE L.E.D.
- RG. RED/GREEN L.E.D.

#### VOLTAGE RESISTOR

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

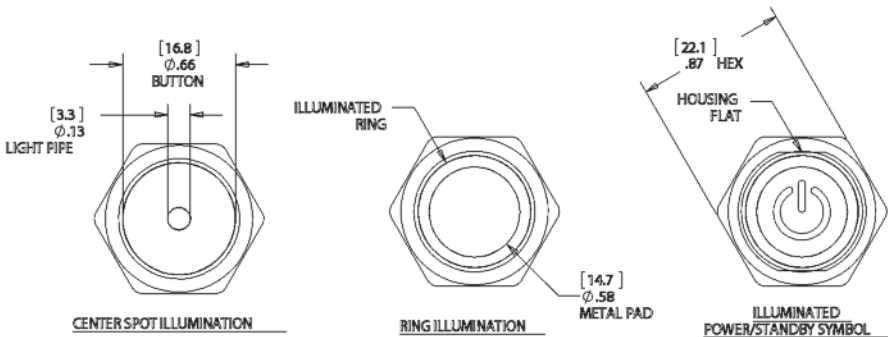
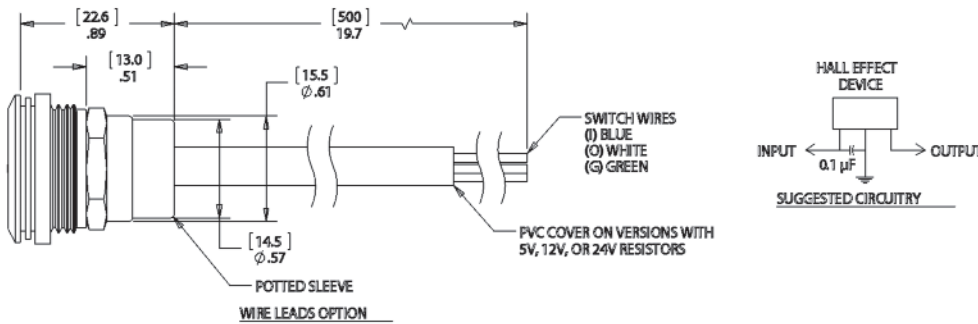
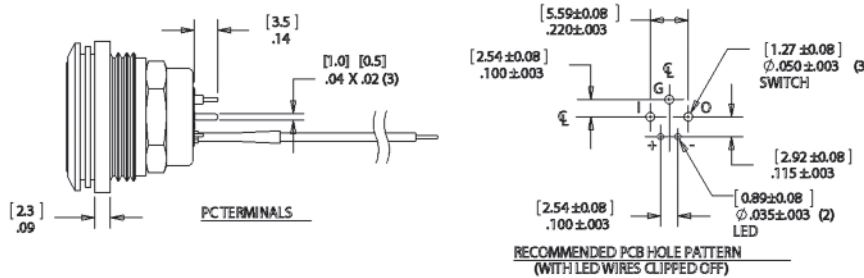
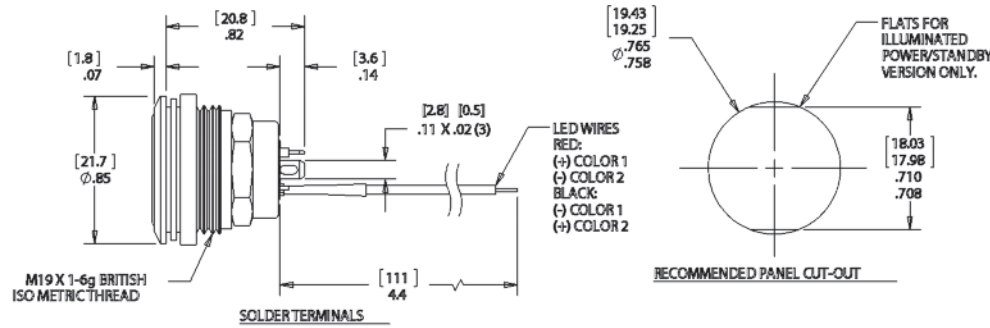
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† Lighted switches come with wires on LEDs to protect from solder heat.  
 \* Current limiting resistor is required to limit LED forward current to 20 mA (not included).  
 \*\* 12 and 24 V resistors are available with wirelead versions only.

### STANDARDS / AGENCY / RATINGS:



## PRODUCT DRAWINGS



[MILLIMETERS]  
[INCHES]

## MECHANICAL CHARACTERISTICS

### CIRCUIT:

SPST-NO-DB (FORM X)

### BUTTON TRAVEL (NOM):

[2.3] .09

### OPERATING FORCE (NOM):

[3N] 306g

### PANEL THICKNESS:

[0.5 to 4.5] .02 to .18

### NUT TORQUE (MAX):

[11.5 kgf/cm] 10 lb/in

## HARDWARE:

BULK PACKAGED SEALING WASHER AND HEX NUT ARE INCLUDED.

## ENVIRONMENTAL SPECIFICATIONS

### ACTUATOR INGRESS PROTECTION:

IP67

### OPERATING TEMPERATURE:

NON-LIT: [-40 C to +85 C]  
-40 F to +185 F

ILLUMINATED: [-25 C to +85 C]  
-13 F to +185 F

## ELECTRICAL SPECIFICATIONS

### 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 LOAD:

SINKING (I out MAX = 25mA)

REVERSE BATTERY VOLTAGE:  
-30V MAX

REVERSE OUTPUT CURRENT:  
-50mA MAX

### SWITCH LIFE:

MOMENTARY: 1,000,000 CYCLES  
MAINTAINED: 50,000 CYCLES

### WIRE LEADS:

UL STYLE 1007  
26 AWG, STRANDED