

## 16MM MINIATURE PANEL SEALED METAL

The 57M is a miniature switch designed for rugged environments. The housing is zinc alloy with velour chrome plating. It is available as maintained or momentary action, Electro-mechanical operation with Gold plated contacts and solder terminals. It is ideal for a multitude of applications.

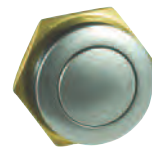
### APPLICATIONS

- Security Equipment
- Industrial Control
- Medical Equipment
- Military Equipment
- Food Processing
- Transportation
- Computers

### KEY FEATURES:

- Zinc Alloy/Velour Chrome Plated
- Center Spot LED and Non-Lighted Versions
- Maintained or Momentary Action
- Panel Sealed to IP67
- RoHS Compliant
- Electro-Mechanical
- Gold Plated Contacts and Terminals

## Series 57M-EM



ACTUAL SIZE

### ORDERING INFORMATION:

| SWITCH FUNCTION:                           | HOUSING MATERIAL:                   | ILLUMINATION †:             | LED COLOR:           | VOLTAGE RESISTOR  |
|--------------------------------------------|-------------------------------------|-----------------------------|----------------------|-------------------|
| 1. MECHANICAL, MOMENTARY, SOLDER TERMINAL  | 1. ZINC ALLOY, VELOUR CHROME PLATED | 0. NON-LIT                  | N. NONE              | IF BLANK *        |
| 2. MECHANICAL, MAINTAINED, SOLDER TERMINAL |                                     | 1. CENTER SPOT ILLUMINATION | G. GREEN L.E.D.      | 05 5V FORWARD     |
| 5. MECHANICAL, MOMENTARY, PC TERMINAL      | 2. ZINC ALLOY, MIRROR BLACK         | 2. RING ILLUMINATION        | R. RED L.E.D.        | 12 12V FORWARD ** |
| 6. MECHANICAL, MAINTAINED, PC TERMINAL     |                                     | 3. STANBY LOGO ILLUMINATION | A. AMBER L.E.D.      | 24 24V FORWARD ** |
| A. MECHANICAL, MOMENTARY, WIRE LEADS       |                                     |                             | B. BLUE L.E.D.       |                   |
| B. MECHANICAL, MAINTAINED, WIRE LEADS      |                                     |                             | W. WHITE L.E.D.      |                   |
| 9. SPECIAL, DIGITS ARE IN SERIAL ORDER     |                                     |                             | RB. RED/BLUE L.E.D.  |                   |
|                                            |                                     |                             | RG. RED/GREEN L.E.D. |                   |

† Lighted switches come with wires on LEDs to protect from solder heat.

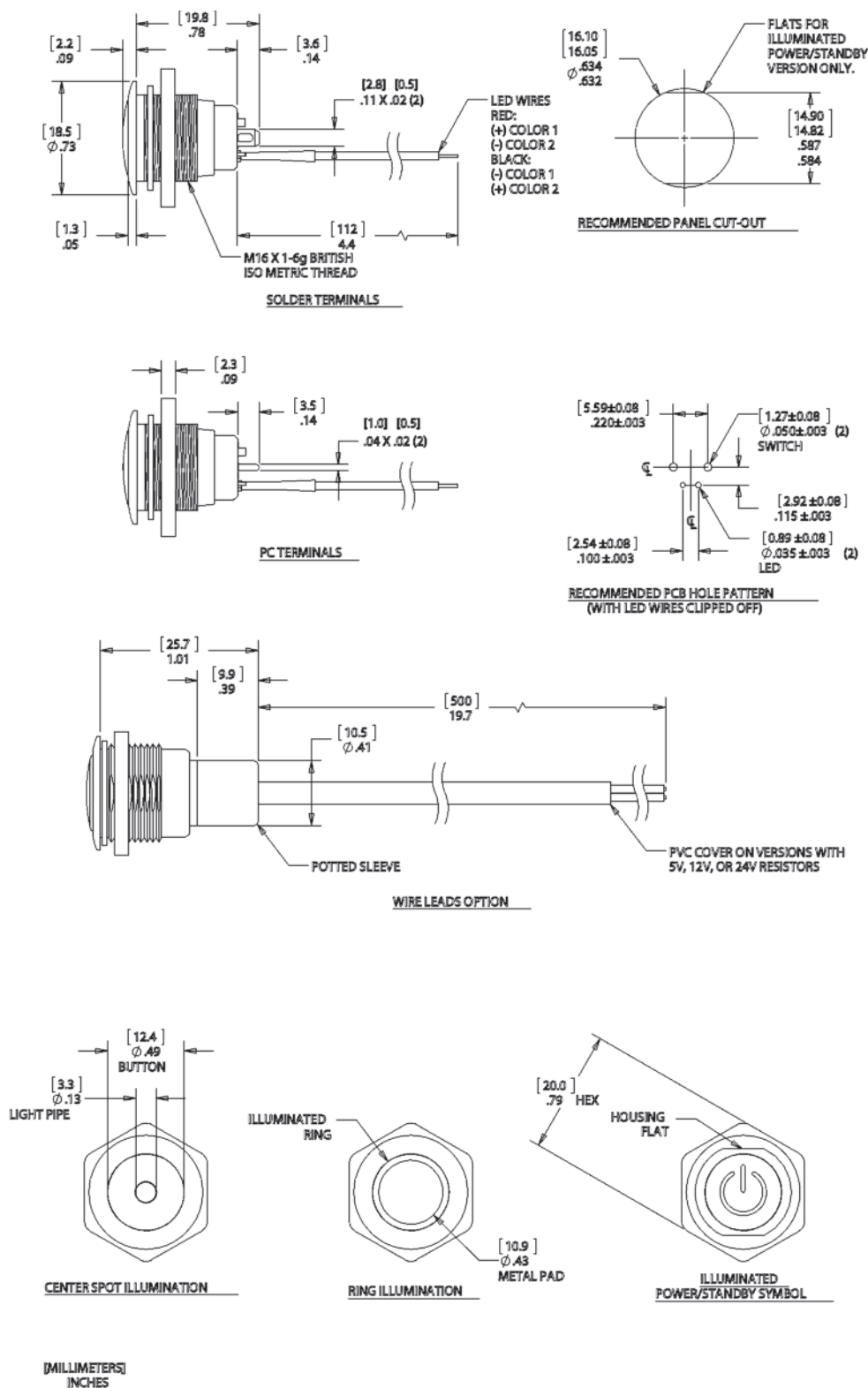
\* Current limiting resistor is required to limit LED forward current to 20 mA (not included).

\*\* 12 and 24 V resistors are available with wirelead versions only.

### STANDARDS / AGENCY / RATINGS:



## PRODUCT DRAWINGS



## MECHANICAL CHARACTERISTICS

### CIRCUIT:

SPST-NO-DB (FORM X)

### BUTTON TRAVEL (NOM):

[2.3] .09

### OPERATING FORCE (NOM):

[3N] 306g

### CONTACT BOUNCE (NOM):

1 ms

### PANEL THICKNESS:

[0.0 to 6.0] .00 to .24

### 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

### CURRENT RATING (resistive):

250mA @ 12VDC, 100K CYCLES

150mA @ 28VDC, 150K CYCLES  
(MOMENTARY)

100mA @ 48VDC, 100K CYCLES

10mA @ 12VDC, 1 MILLION CYCLES  
(MOMENTARY)

### DIELECTRIC STRENGTH:

1,000 VAC

### INSULATION RESISTANCE:

1G OHM

### CONTACT RESISTANCE:

50m OHMS

### WIRE LEADS:

UL STYLE 1007

26 AWG, STRANDED