Series 57M-EM

16MM MINIATURE PANEL SEALED METAL

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



ACTUAL SIZE

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
- 5A / 28VDC with UL61058

ORDERING INFORMATION:

Series:
- **Blank** Gold Contact IP67
- **S** Silver Contact IP67
- **N** Silver Contact
- **D** Silver Contact Short Housing IP67
- **G** Silver Contact IP67/2A
- **SA** Silver Contact IP67/5A

Switch Function:
- **1** Mechanical, Momentary, Solder Terminal
- **2** Mechanical, Maintained, Solder Terminal
- **5** Mechanical, Momentary, PC Terminal
- **6** Mechanical, Maintained, PC Terminal
- **A** Mechanical, Momentary, Wireleads
- **B** Mechanical, Maintained, Wireleads
- **9** Special, Digits Are in Serial Order

(SA Silver Contact IP67/5A)
- **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** Zinc Alloy, Velour Chrome Plated
- **3** Zinc Alloy, Black
- **4** Stainless Steel, Natural

Illumination:
- **0** Nin-lit
- **1** Center Spot Illumination
- **2** Ring Illumination
- **3** Standby Logo Illumination
- **4** High Button Non-Illumination

LED Color:
- **N** None
- **G** Green
- **R** Red
- **A** Amber
- **Y** Yellow
- **B** Blue
- **W** White
- **RB** Red / Blue
- **RG** Red / 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).

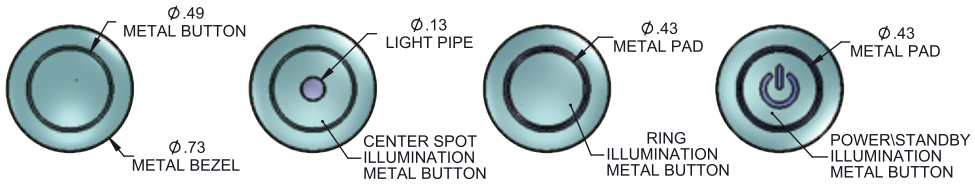
STANDARDS / AGENCY / RATINGS:

RoHS COMPLIANT 2002 / 95 / EC

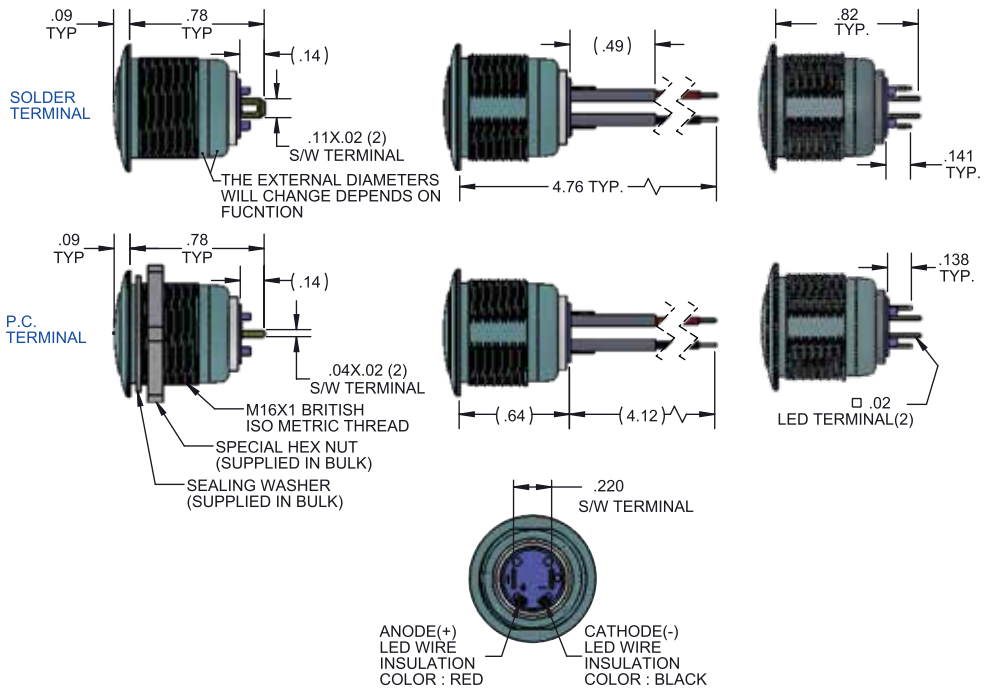
IEC IP67 COMPLIANT

SERIES 57M: 16MM MINIATURE PANEL SEALED METAL

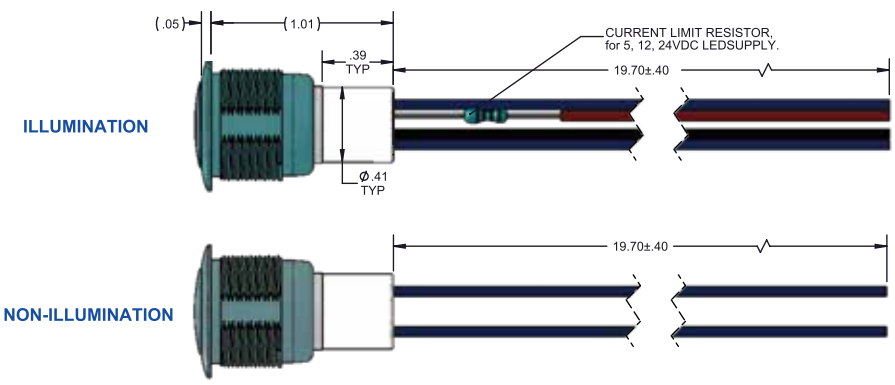
PRODUCT DRAWINGS



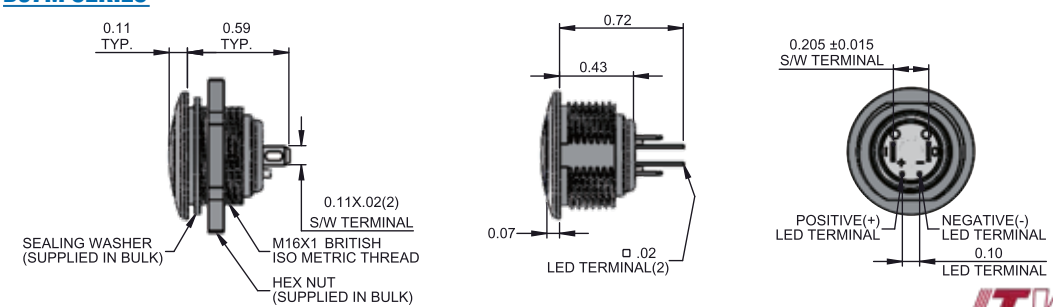
57M/ S57M SERIES



WIRELEADS



D57M SERIES



MECHANICAL / ELECTRICAL CHARACTERISTICS:

CIRCUIT:
SPST-NO-DB

BUTTON TRAVEL (Nominal):
0.09inches / 2.3mm

OPERATING FORCE (Nominal):
3N / 306g

CONTACT BOUNCE (Nominal):
1 millisecond

PANEL THICKNESS:
0.20 - 0.120 inches/
0.5 - 3mm

TEMPERATURE INDEX:
-40°C to +85°C

TORQUE (MAX):
10 inch pounds

LED OPERATION TEMPERATURE:
-13°F to +185°F / -25°C to +85°C

CURRENT RATINGS(Resistive)

57M (Momentary)
250mA @ 12VDC, 100k Cycles
150mA @ 28VDC, 150k Cycles
100mA @ 48VDC, 100k Cycles
10mA @ 12VDC, 1,000k Cycles

57M (Maintained)
50,000 Cycles Nominal

S57M (Momentary)
10mA @ 12VDC, 200k Cycles

S57M (Maintained)
20k Cycles Nominal

D57M (Momentary)
10mA @ 12VDC,200K Cycles

ELECTRICAL SPECIFICATIONS

DIELECTRIC STRENGTH:
1,000 VAC

INSULATION RESISTANCE:
1GΩ

CONTACT RESISTANCE:
50mΩ max (intial)

Designs and specifications are subject to change without notice due to product improvement.

SERIES 57M: 16MM MINIATURE PANEL SEALED METAL

MECHANICAL / ELECTRICAL CHARACTERISTICS:

CIRCUIT:
SPST-NO-DB

BUTTON TRAVEL (Nominal):
0.09inches / 2.3mm

OPERATING FORCE (Nominal):
3N / 306g

CONTACT BOUNCE (Nominal):
1 millisecond

PANEL THICKNESS:
0.20 - 0.120 inches/
0.5 - 3mm

TEMPERATURE INDEX:
-40°C to +85°C

TORQUE (MAX):
10 inch pounds

LED OPERATION TEMPERATURE:
-13°F to +185°F / -25°C to +85°C

CURRENT RATINGS(Resistive)

G57M (Momentary)
2A @ 24VDC, 40k Cycles
1A @ 250VAC, 40k Cycles

G57M (Maintained)
2A @ 24VDC, 20k Cycles
1A @ 250VAC, 20k Cycles

N57M (Momentary)
10mA @ 12VDC, 200k Cycles

N57M (Maintained)
20k Cycles Nominal

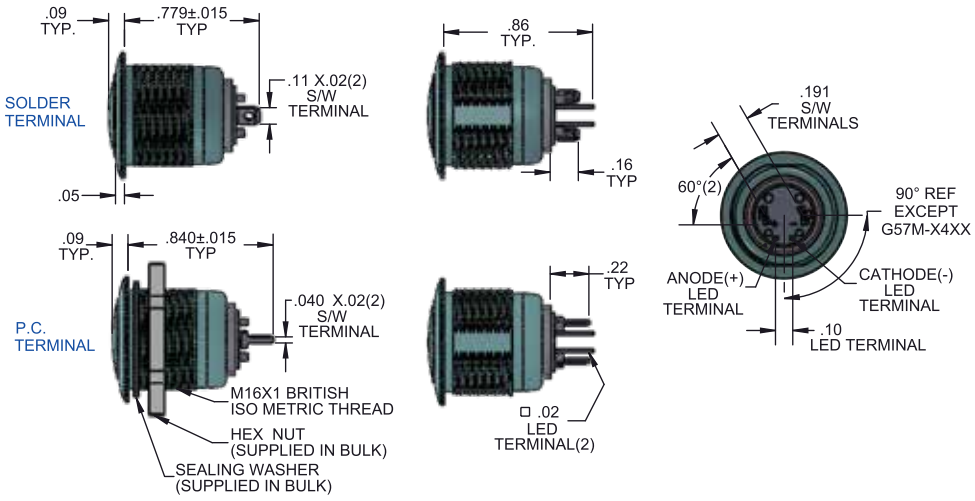
ELECTRICAL SPECIFICATIONS

DIELECTRIC STRENGTH:
1,000 VAC

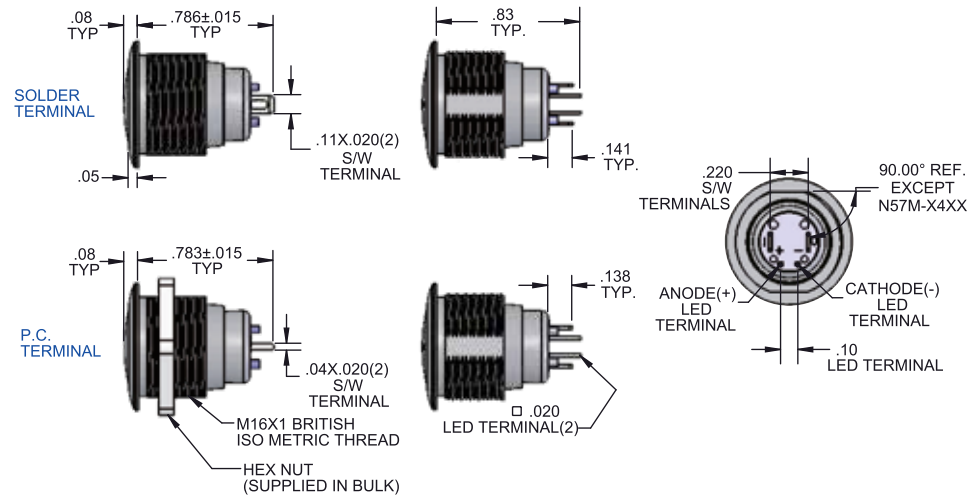
INSULATION RESISTANCE:
1GΩ

CONTACT RESISTANCE:
50mΩ max (intial)

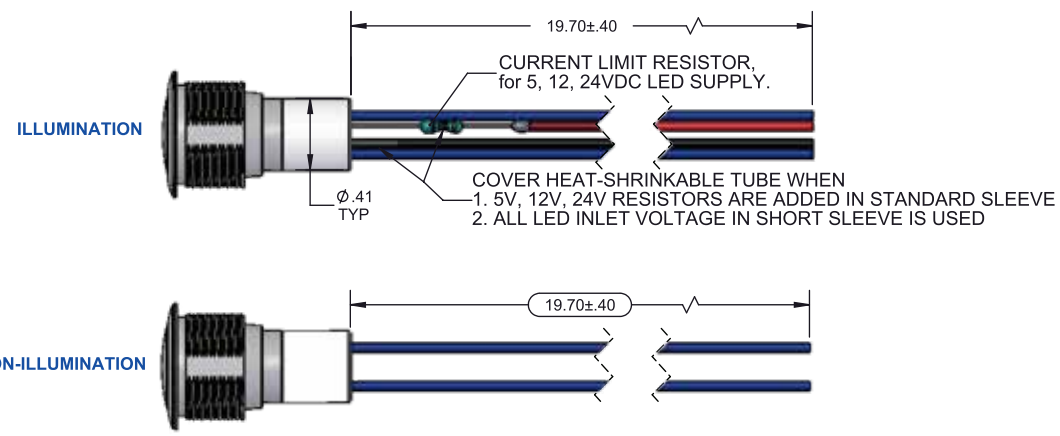
G57M SERIES



N57M SERIES

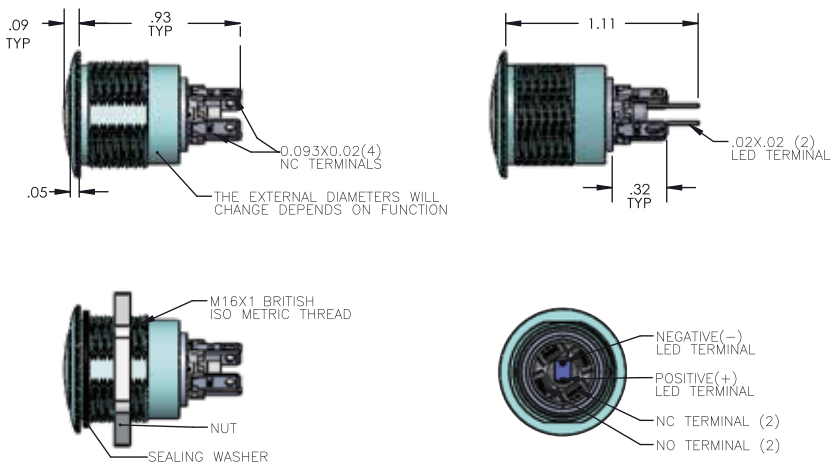


WIRELEADS

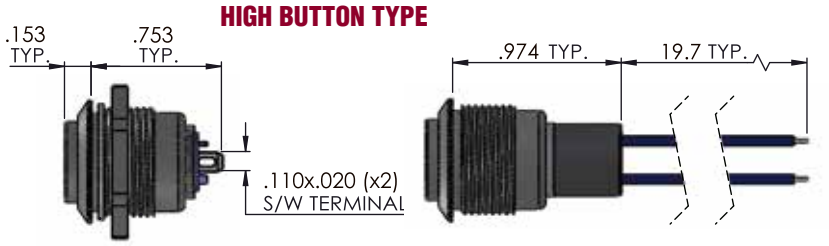


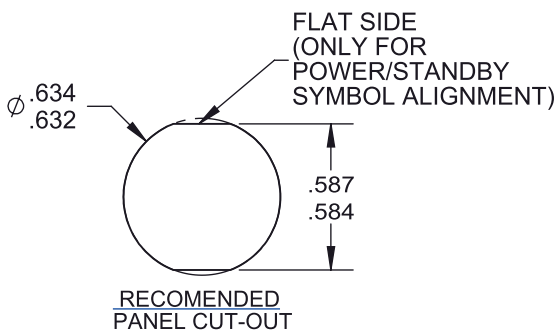
SERIES 57M: 16MM MINIATURE PANEL SEALED METAL

SA57M SERIES



HIGH BUTTON TYPE





MECHANICAL / ELECTRICAL CHARACTERISTICS:

CIRCUIT:
SPST-NO-DB

BUTTON TRAVEL (Nominal):
0.09inches / 2.3mm

OPERATING FORCE (Nominal):
3N / 306g

CONTACT BOUNCE (Nominal):
1 millisecond

PANEL THICKNESS:
0.20 - 0.120 inches/
0.5 - 3mm

TEMPERATURE INDEX:
-40°C to +85°C

TORQUE (MAX):
10 inch pounds

LED OPERATION TEMPERATURE:
-13°F to +185°F / -25°C to +85°C

CURRENT RATINGS(Resistive)

SA57M (Momentary)
5A@28VDC,125/250 VAC 25K Cycles Nominal

ELECTRICAL SPECIFICATIONS

DIELECTRIC STRENGTH:
1,000 VAC

INSULATION RESISTANCE:
1GΩ

CONTACT RESISTANCE:
50mΩ max (intial)

PANEL MOUNTING AND CONSTRUCTION INFORMATION

The series 57M mounts easily into panels of minimum 0.20"(0.5mm) and maximum 0.120"(3mm) thicknesses. Front panel sealing to IP67 is achieved by a sealing washer which is fitted to the body of the switch before it is inserted into the panel hole cutout. 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. Designs and specifications are subject to change without notice due to productim provement.