16MM PANEL SEALED 10 AMP, METAL PUSHBUTTON

The 10 Amp H57M is a miniature switch designed for rugged environments. The housing is zinc alloy with three optional finishes. It is available in maintained or momentary action. Lighting options include center spot, ring illumination and I/O Logo. This switch is ideal for ATM, medical and home automation industries.





ACTUAL SIZE

APPLICATIONS:

- Access Controls
- Home Automation
- Medical Equipment
- Industrial Meters
- ATMs

KEY FEATURES:

- Zinc Alloy/Velour Chrome Plated
- Center Spot , Ring and I/O lighted versions
- Maintained or Momentary Action
- Panel Sealed to IP67
- RoHS Compliant
- Electro-Mechanical
- 16-4044 & 16-530004 & 16-40443 (UL and CSA Certified): SPDT Form Z, Silver contacts

ORDERING INFORMATION:

Switch Function:
1 Mechanical, Momentary
2 Mechanical, Maintained

Housing Material:
1 Zinc Alloy Velour Chrome Plated
3 Zinc Alloy Black Electro-deposited Coating
4 Stainless Steel, Natural

Button Style:
0 Non-lit
1 Center Spot
2 Ring Illumination
3 Standby / Power
4 High Button Non-Illumination

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

Voltage Resistor:
If Blank*
05 5V Forward

Series 16 Switch:
/4044 Silver Solder Terminals
/530004 Bottom QC.110 Terminals
/40443 Silver Alloy Solder Terminals

H57M-

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

LED forward voltage:
– Red, Amber & Yellow: 2 V
– Green, Blue & White: 3.4 V

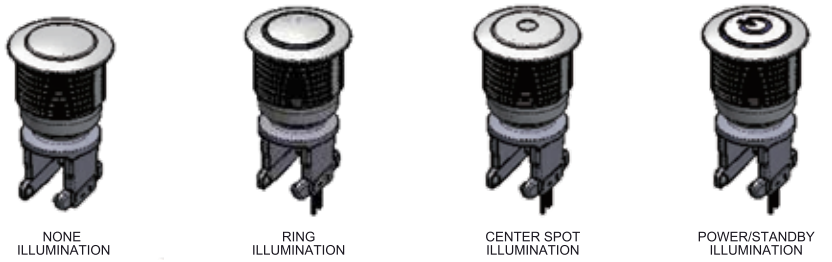
STANDARDS / AGENCY / RATINGS:

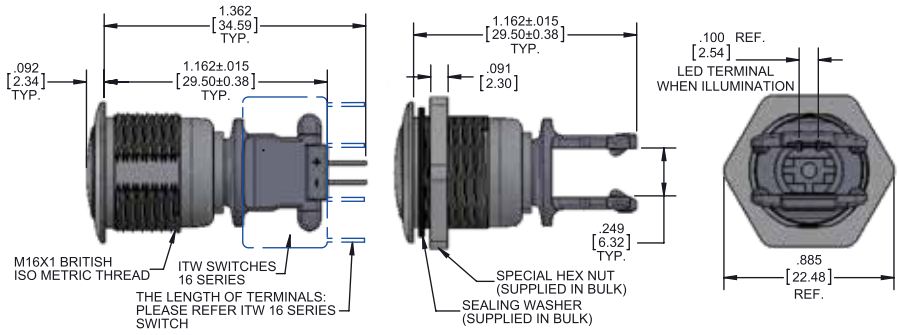
RoHS COMPLIANT 2002 / 95 / EC

IEC IP67 COMPLIANT

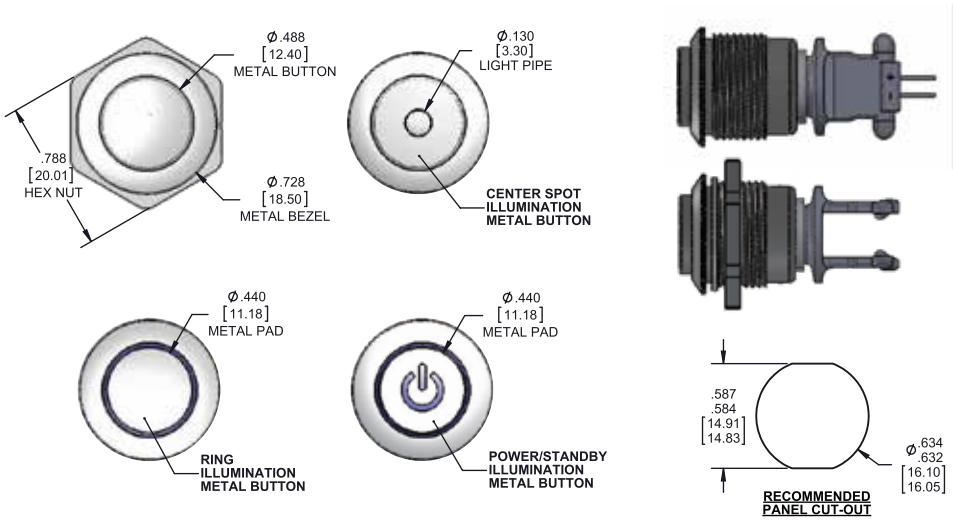
SERIES H57M: 16MM PANEL SEALED METAL PUSHBUTTON

PRODUCT DRAWINGS





High Button Type



MECHANICAL / ELECTRICAL CHARACTERISTICS:

Circuit:
SPDT-DB (Form Z)

Button travel (nominal):
0.09 inches (2.3 mm)

Operating force (nominal):
5.2N (520 grams)

Contact bounce (nominal):
1 millisecond

Panel thickness:
0.020"– 0.177" (0.5 – 4.5 mm)

Temperature index:
-40° C to +85° C (momentary)
-40° C to +65° C (maintained)

Torque (max):
10 inch pounds

LED operating temperature:
-13° F to +185° F
(-25° C to +85° C)

Current ratings:
10A @ 125/250 VAC (res)
10A @ 28 VDC (ind)

Actuator life (nominal):
500,000 cycles (momentary)
50,000 cycles (maintained)

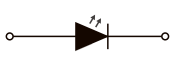
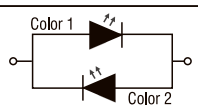
ELECTRICAL SPECIFICATIONS

Dielectric strength:
1,000 VAC

Insulation resistance:
1 GΩ

Contact resistance:
50 mΩ max (initial)

LED SPECIFICATIONS

LED CODE	LED		CIRCUITRY	Vf(VDC)		If
	Color 1	Color 2		Color 1	Color 2	(mA)
A	AMBER	—		1.6~2.0	—	20
R	RED	—		1.6~2.0	—	20
Y	YELLOW	—		1.6~2.0	—	20
B	BLUE	—		2.8~3.4	—	20
G	GREEN	—		2.8~3.4	—	20
W	WHITE	—		2.8~3.4	—	20
RB	RED	BLUE		1.6~2.0	2.8~3.4	20
RG	RED	GREEN		1.6~2.0	2.8~3.4	20

Notes:
1.) Lead Soldering Temperature (4mm form body) : 280°C for 5 seconds
2.) Head Soldering Temperature (4mm form body) : 280°C for 3 seconds

PANEL MOUNTING INFORMATION

The series H57M mounts easily into panels of minimum 0.020" (0.5 mm) and maximum 0.177" (4.5 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. The Basic Switch (16-4044 or 16-530004) has to be installed after the pushbutton actuator is firmly secured to specified torque onto the panel.

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