Series H48M

19MM PANEL SEALED 10 AMP METAL PUSHBUTTONS

These rugged electromechanical pushbuttons are available in stainless steel or zinc alloy housings and come in momentary or maintained action. Lighting options include center spot, or ring illumination. This 19mm size make the H48M ideal for many applications in the transportation, security, food processing and medical markets.

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
- Electro-Mechanical
- Panel Sealed to IP67
- ROHS Compliant
- 16-4044 & 16-530004 & 16-40443 (UL and CSA Certified): SPDT Form Z, Silver contacts

In2Connect UK Ltd
Unit L, Tyson Courtyard
Weldon South Industrial Estate
Corby
Northants
NN18 8AZ UK
Tel: 01962 773004
sales@in2connect.uk.com

ORDERING INFORMATION:

Switch Function:	Housing Material:	Button Style:	LED Color:	Voltage Resistor:	Series 16 Switch:
1 Mechanical, Momentary	1 Stainless Steel	0 Non-lit	N None	If Blank*	/4004 Silver Solder Terminals
2 Mechanical, Maintained	2 Zinc Alloy	1 Center Spot	G Green	05 5V Forward	/530004 Bottom QC.110 Terminals
	Velour Chrome Plated	2 Ring Illumination	R Red	12 12V Forward	/40443 Silver Alloy Solder Terminals
		3 Standby / Poewr	A Amber	24 24V Forward	
			B Blue		
			W White		
			Y Yellow		
			RB Red / Blue		
			RG Red / Green		

H48M- [ ] [ ] [ ] [ ] [ ]

* 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:

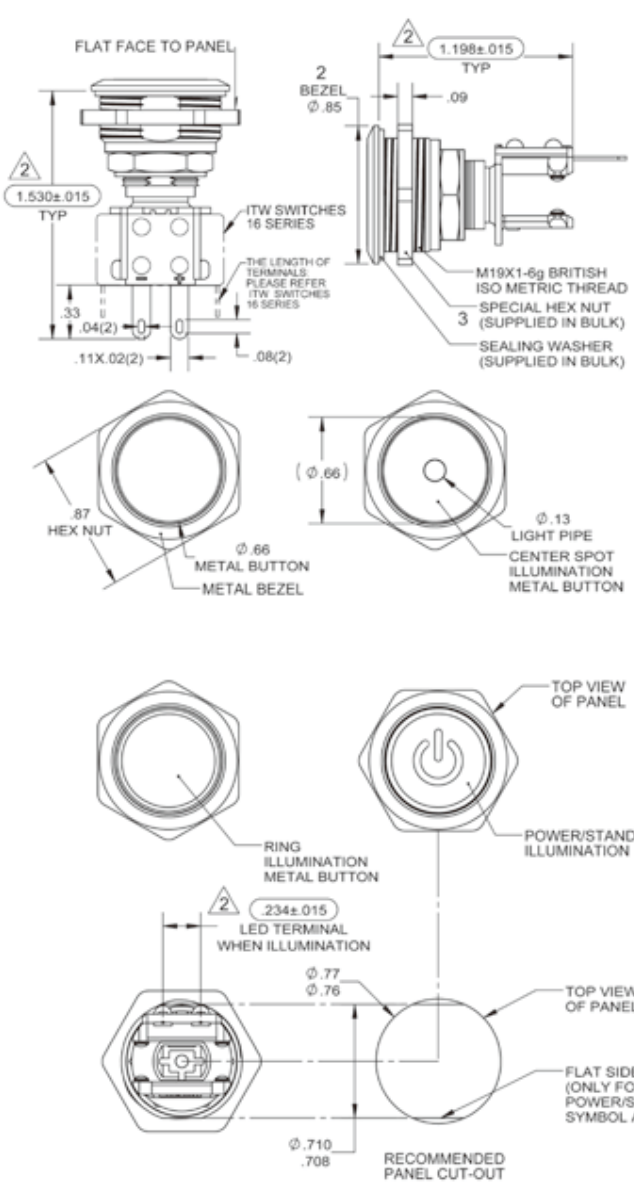
RoHS COMPLIANT 2002 / 95 / EC

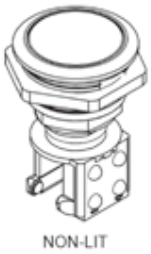
IEC IP67 COMPLIANT

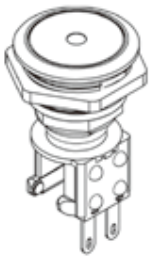
Contact an Authorized Distributor or Factory for Pricing

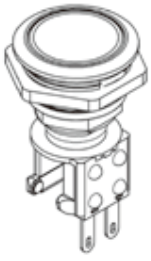
SERIES H48M: 19MM PANEL SEALED 10 AMP PUSHBUTTON

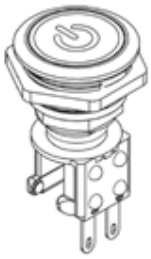
PRODUCT DRAWINGS




NON-LIT


CENTER SPOT


RING ILLUMINATION


POWER/STANDBY

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)

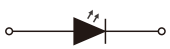
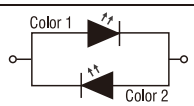
ELECTRO SPECIFICATIONS

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 H48M 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.

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800.544.3354

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Series H57M

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:
/4004 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

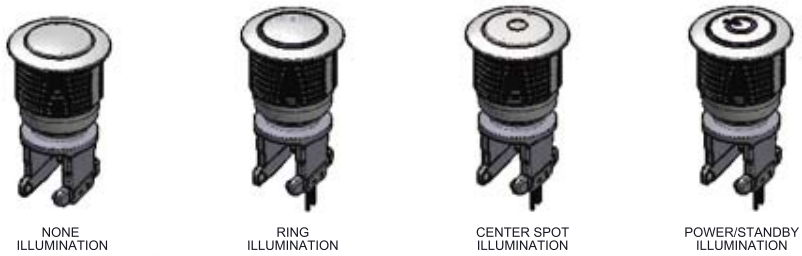
IEC IP67 COMPLIANT

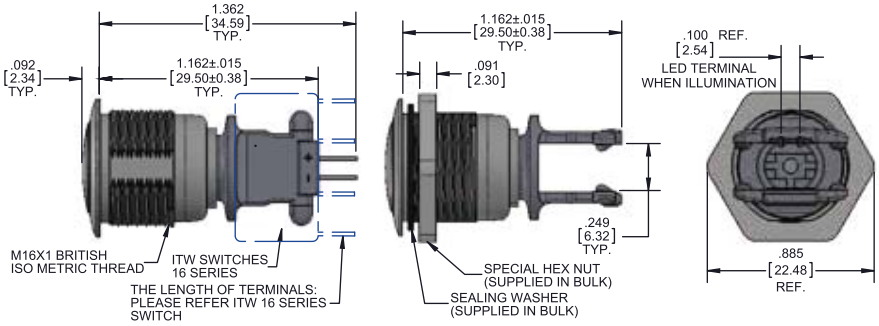
www.itwswitches.com

Contact an Authorized Distributor or Factory for Pricing

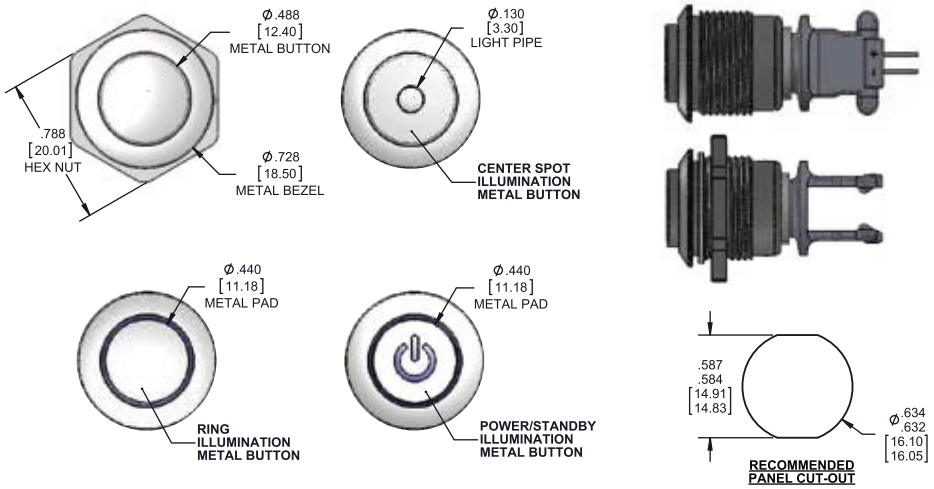
SERIES H57M: 16MM PANEL SEALED METAL PUSHBUTTON

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)

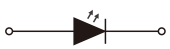
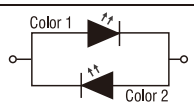
ELECTRICAL SPECIFICATIONS

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.

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Series H58M

22MM, PANEL SEALED 10 AMP METAL PUSHBUTTON

These rugged electromechanical pushbuttons come in stainless or aluminum housings, momentary or maintained actions and available with lighted ring option. The 22mm size makes the H58M ideal for many applications in the transportation, security, food processing and industrial control markets.

ACTUAL SIZE

APPLICATIONS

- Industrial Machinery
- Access Controls
- Food Processing Equipment
- Mass Transportation
- Lift Trucks
- Military/Aerospace

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
- 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 Stainless Steel
2 Aluminum

Button Style:
0 Non-lit
2 Ring Illumination
3 Standby Logo Illumination
R Red, Non-lit

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

Voltage Resistor:
If Blank*
05 5V Forward
12 12V Forward
24 24V Forward

Series 16 Switch:
/4004 Silver Solder Terminals
/530004 Bottom QC.110 Terminals
/40443 Silver Alloy Solder Terminals

H58M- [ ] [ ] [ ] [ ] [ ] [ ]

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

LED forward voltage:
– Green, Blue & White: 3.4 V

STANDARDS / AGENCY / RATINGS:

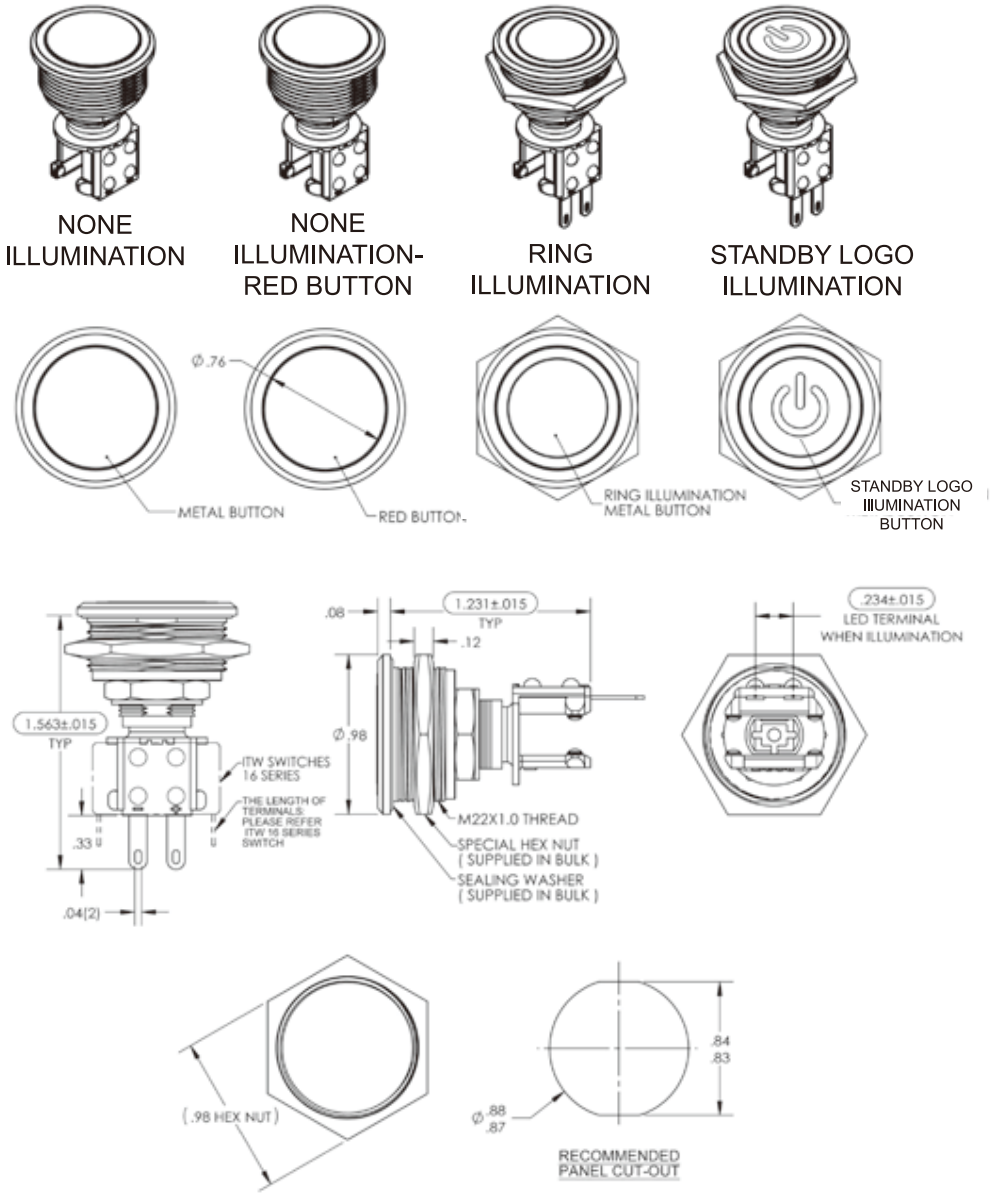
RoHS COMPLIANT 2002 / 95 / EC

IEC IP67 COMPLIANT

Contact an Authorized Distributor or Factory for Pricing

SERIES H58M: 22MM PANEL SEALED METAL PUSHBUTTON

PRODUCT DRAWINGS



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)

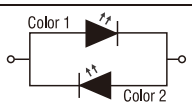
ELECTRICAL SPECIFICATIONS

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 H58M 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.

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