

12MM MINIATURE SEALED ELECTRO-MECHANICAL

This rugged multi-option sealed pushbutton series offers the utmost in choices of mounting styles, colors, terminations, bezels, lighting and momentary or alternate-action switching. The Series 48 offers all these options in one compact package size.

APPLICATIONS:

- Office equipment
- Medical equipment
- Industrial machinery
- Outdoor controls
- Mass transportation
- Food processing equipment

KEY FEATURES:

- Momentary or maintained action
- Gold contacts
- Many button colors
- Choice of LED colors (or non-lighted versions)
- Long life
- Solder, PC terminals or Wireleads
- Panel sealed to IP 67
- Metal, Plastic bezel / housing
- Raised button
- Snap action in SA series

ORDERING INFORMATION:

Series:	Module Type:	Switch Function:	Switch Termination:	Bezel Type:	Led [#]	Button [@] Color:	Mounting Type:	Voltage Resistor:
BLANK Gold Contact IP67	48-1	Momentary	Solder	Plastic Bezel:	N None	(H)RD Red (for High Button)	B Bushing	If Blank*
S Silver Contact IP67	48-2	Maintained	Solder	RB Round, Black	R Red	(H)GR Green (for High Button)	S Snap-fit	05 5V
N Silver Contact	48-5	Momentary	PC	SB Square, Black	G Green	(H)BK Black (for High Button)		Forward
C Silver Contact Screw Terminal IP67	48-6	Maintained	PC	Metal Bezel:	Y Yellow	(H)BL Blue (for High Button)		12 12V
G Silver Contact IP67/2A	48-A	Momentary	Wire Leads	RMB Round, Matte Black ^{\$}	A Amber	(H)YL Yellow (for High Button)		Forward
SA Silver Contact IP67/5A	48-B	Maintained	Wire Leads	RMG Round, Glossy Black ^{\$}	B Blue	(H)OR Orange (for High Button)		24 24V
				RMS Round, Velour Chrome ^{\$}	W White	(H)WH White (for High Button)		Forward
				PMC Round, Bright Chrome ^{\$}		PK Standby Symbol		

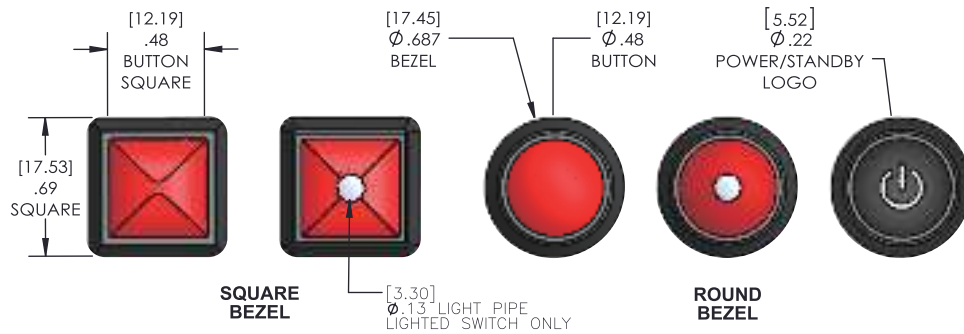
48-

STANDARDS / AGENCY / RATINGS:

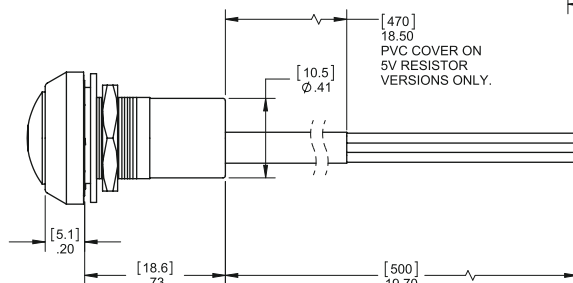
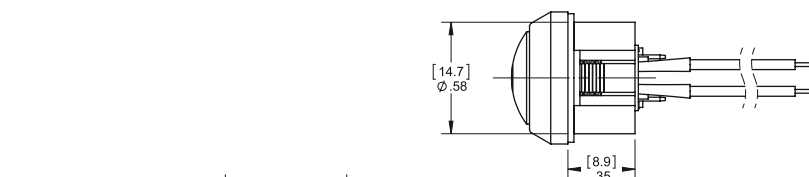
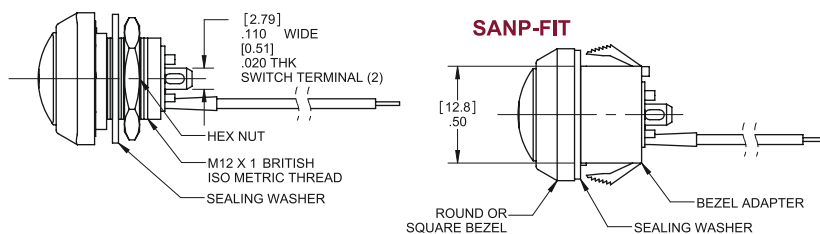
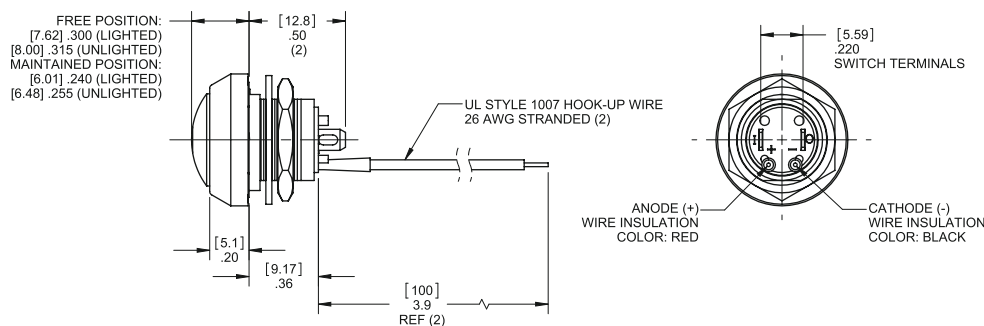


SERIES 48: 12MM MINIATURE SEALED ELECTRO-MECHANICAL

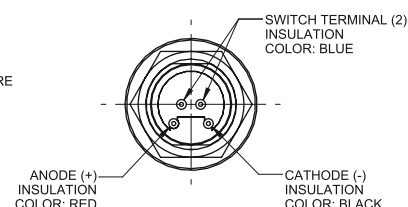
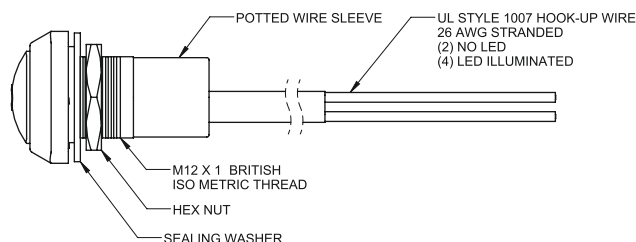
PRODUCT DRAWINGS



48 SERIES



WIRELEADS



MECHANICAL CHARACTERISTICS

SPST-NO-DB (FORM X)

BUTTON TRAVEL (NOM):

[2.3] .09

OPERATING FORCE (NOM):

[3N] 306g

CONTACT BOUNCE (NOM):

1 ms

PANEL THICKNESS:

BUSHING MOUNTING: [0.5-3.0]

.02-.12

SNAP-FIT MOUNTING: [1.3-3.0]

.05-.12

NUT TORQUE (MAX):

[6 kgf-cm] 5.2 lb-in

HARDWARE

BUSHING MOUNTING: BULK

PACKAGED SEALING WASHER

AND HEX NUT ARE INCLUDED.

ENVIRONMENTAL SPECIFICATIONS

ACTUATOR INGRESS

PROTECTION:

IP67

OPERATING TEMPERATURE:

[-40°C to +85°C] -40°F to +185°F

ELECTRICAL SPECIFICATIONS

CURRENT RATING (resistive):

48 (Momentary)

250mA @ 12VDC, 100K CYCLES

150mA @ 28VDC, 150K CYCLES

100mA @ 48VDC, 100K CYCLES

10mA @ 12VDC, 1 MILLION CYCLES

48 (Maintained)

50K CYCLES NOMINAL

DIELECTRIC STRENGTH:

1,000 VAC

INSULATION RESISTANCE:

1G OHM

CONTACT RESISTANCE:

50m OHMS

WIRE LEADS:

UL STYLE 1007

26 AWG, STRANDED

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:

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.02-.12

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ENVIRONMENTAL SPECIFICATIONS

ACTUATOR INGRESS

PROTECTION:

IP67

OPERATING TEMPERATURE:

[-40°C to +85°C] -40°F to +185°F

ELECTRICAL SPECIFICATIONS

CURRENT RATING (resistive):

S48 / N48 (Momentary)

10mA @ 12VDC, 200K CYCLES

S48 / N48 (Maintained)

20K CYCLES NOMINAL

G48 (Momentary)

2A @ 24VDC, 40K CYCLES

2A @ 250VAC, 40K CYCLES

G48 (Maintained)

2A @ 24VDC, 20K CYCLES

2A @ 250VAC, 20K CYCLES

SA48

5A @ 28VDC, 25K CYCLES

5A @ 125/250VAC, 25K CYCLES

DIELECTRIC STRENGTH:

1,000 VAC

INSULATION RESISTANCE:

1G OHM

CONTACT RESISTANCE:

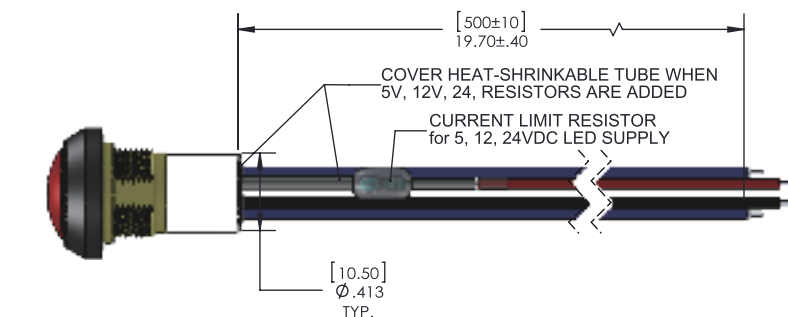
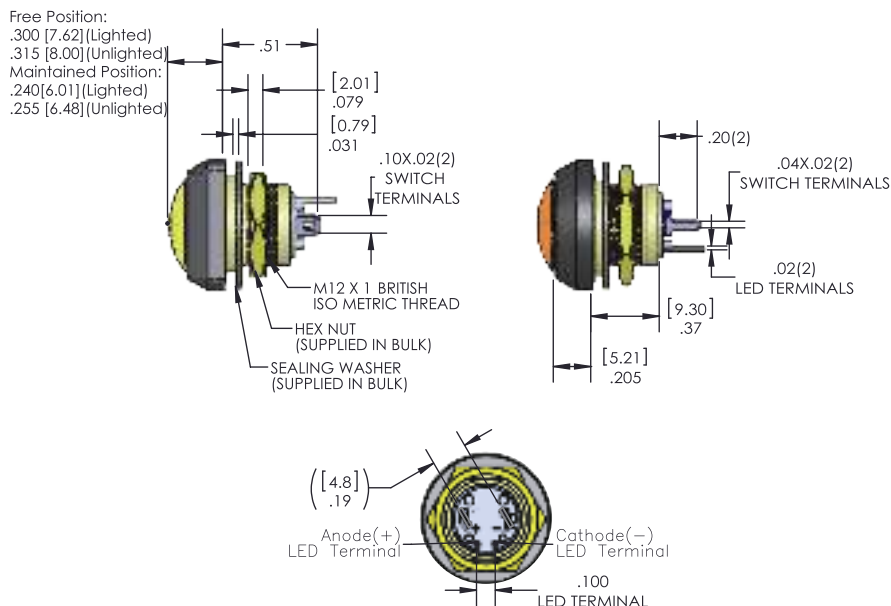
50m OHMS

WIRE LEADS:

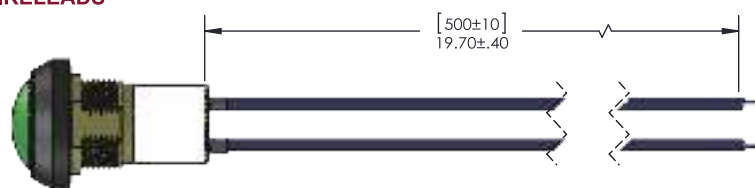
UL STYLE 1007

26 AWG, STRANDED

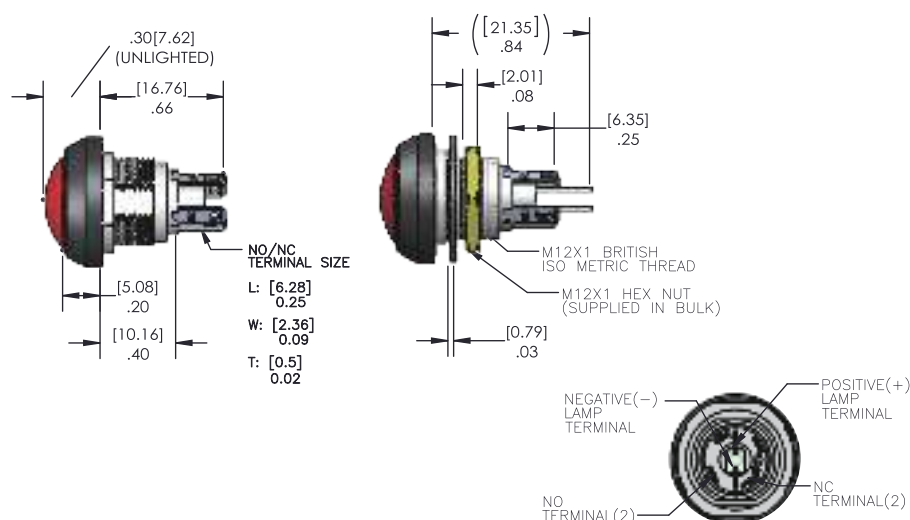
G48/ N48/ S48 SERIES



WIRELEADS

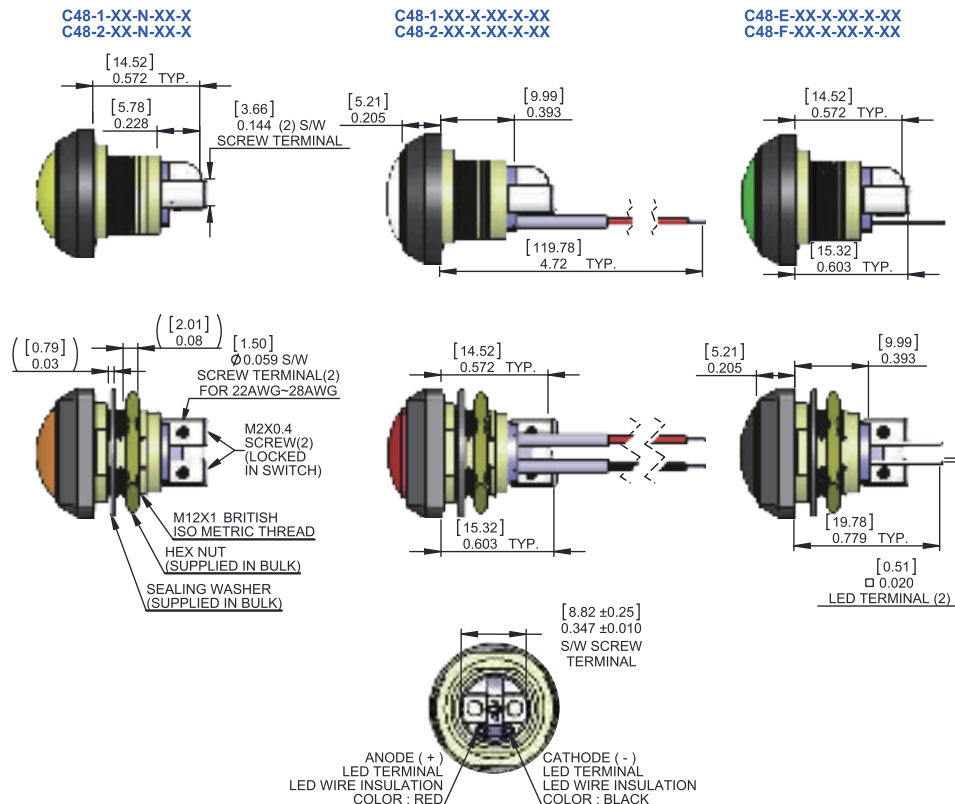


SA48 SERIES

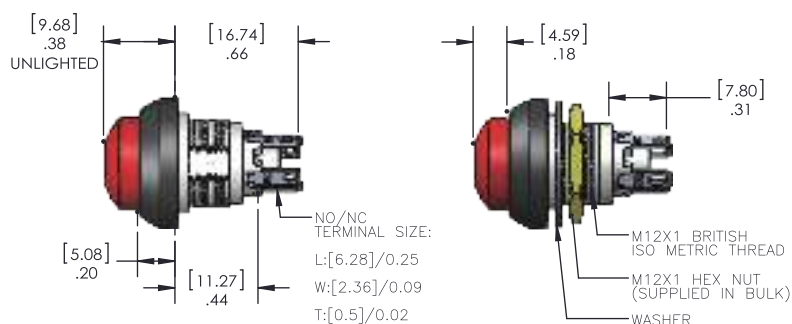


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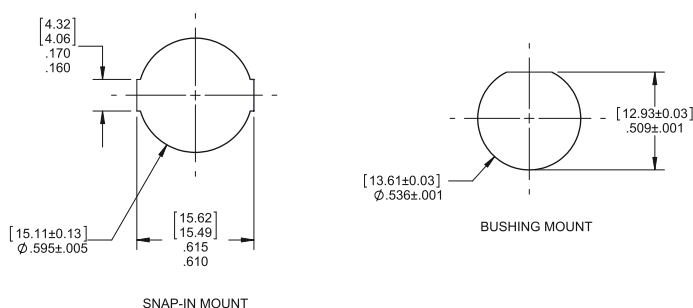
C48 SERIES



HIGH BUTTON TYPE



RECOMMENDED PANEL CUT-OUT



MECHANICAL CHARACTERISTICS

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OPERATING FORCE (NOM):

[3N] 306g

CONTACT BOUNCE (NOM):

1 ms

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