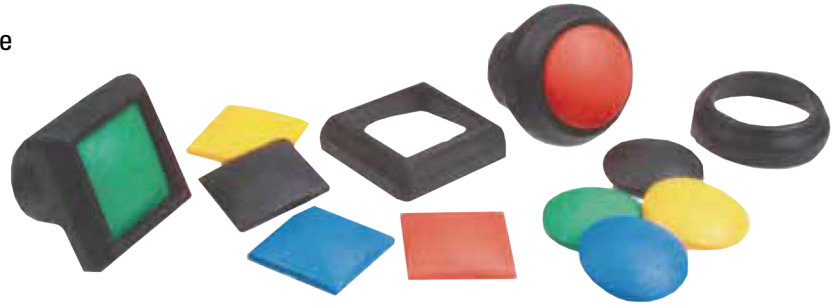


SERIES 48 - 12MM MINIATURE SEALED ELECTRO-MECHANICAL

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
- Seven button colors
- Choice of LED colors (or non-illuminated versions)
- Solder or PC terminals
- Panel sealed to IP67 (Threaded Bush)
- Plastic bezel/ housing
- Raised button
- Snap action (see SA12 series)

ORDERING INFORMATION:

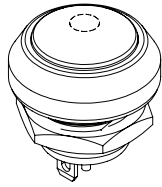
Series:	Module Type:	Switch Function:	Switch Termination:	Bezel Type:	Led:	Button Color:	Mounting Type:	Voltage Resistor: If Blank*
48	Gold Contact	1	Momentary	Solder	RB Round, Black	N None	B Bushing	05 5V Forward
		2	Maintained	Solder	SB Square, Black [#]	R Red	S Snap-fit	12 12V Forward
		5	Momentary	PC		G Green		24 24V Forward
		6	Maintained	PC		Y Yellow		
					A Amber	BL Blue		
					B Blue	YL Yellow		
					W White	OR Orange		
						WH White		

* Current limiting resistor maybe required to limit LED forward current to 20mA

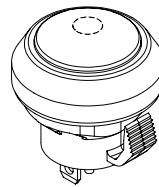
[#] A setup charge maybe required for the Square Bezel

PRODUCT DRAWINGS

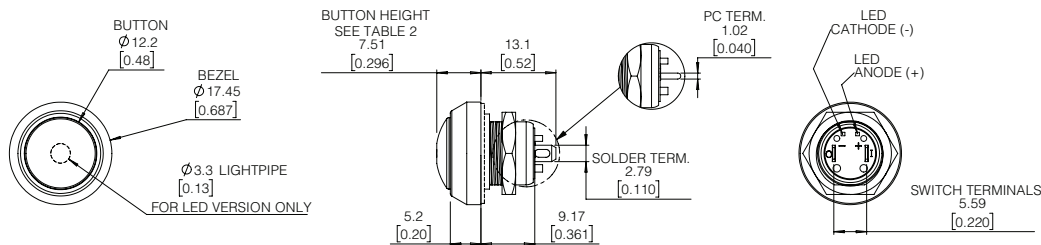
THREADED BUSH



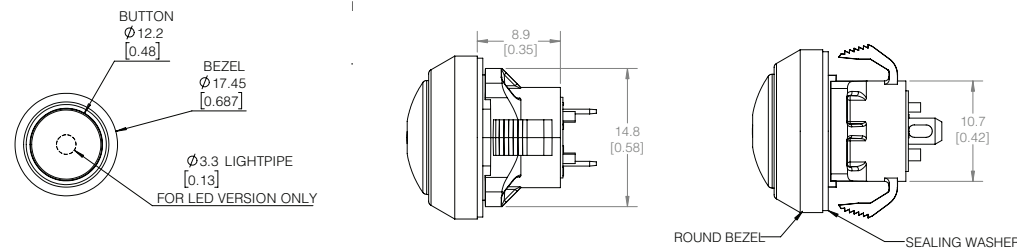
SNAP-FIT



THREADED BUSH



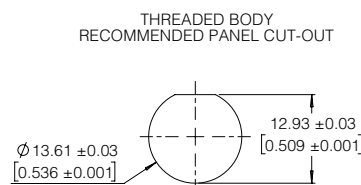
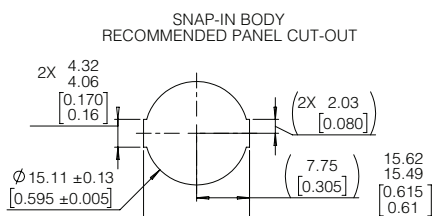
SNAP-FIT



BUTTON HEIGHT

	FREE POSITION	MAINTAINED
WITH LED	7.51 [0.296]	6.00 [0.236]
NO LED	8.19 [0.323]	6.67 [0.263]

PANEL CUT-OUT



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:
Threaded Bush - Supplied with Panel Seal and Hex Nut in bags with the product packaging.

Snap-Fit - Panel Seal supplied fitted to the switch

ENVIRONMENTAL SPECIFICATIONS

Actuator Ingress Protection: IP67 (Threaded Bush)

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

