

RoHS Compliant

Illuminated Pushbutton - 16mm & 19mm

**Specifications**

Electrical Ratings	2A @ 36VDC 1A @ 125VAC 0.5A @ 250VAC
Sealing Degree	IP67
Electrical Life	50,000 cycles typical
Contact Resistance	≤ 50mΩ initial
Dielectric Strength	2000Vrms min contact to contact 2000Vrms min contact to LED

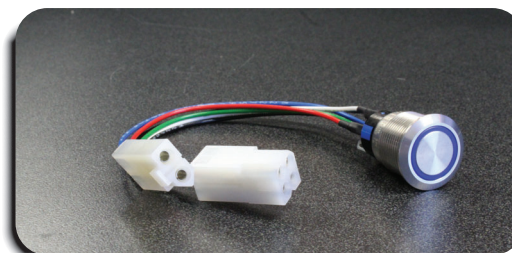
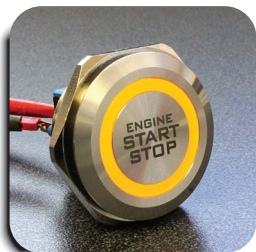
Actuation Force	16mm	500 ± 100gF
	19mm	550 ± 100gF
Actuation Travel	16mm	1.6 ± .25mm
	19mm	2.0 ± .25mm
Insulation Resistance		≥ 100MΩ min
Operating Temperature		-25°C to 55°C
Storage Temperature		-25°C to 55°C

**Materials**

Actuator	Stainless Steel or Nickel Plated Brass or Gold Plated Brass, Aluminum
LED Lens	Polycarbonate (PC)
Threaded Body	Stainless Steel or Nickel Plated Brass or Gold Plated Brass, Aluminum
Terminal Support	Polybutylene Terephthalate (PBT)
Contacts	Silver Alloy
Terminals	Brass, Epoxy Sealed
Hardware	One Hex Nut & One "O" Ring Supplied

**Contact Factory for**

- Cable Assembly
- Plastic Convex Actuator
- Shine Through Symbols
- Laser Etching



# BH

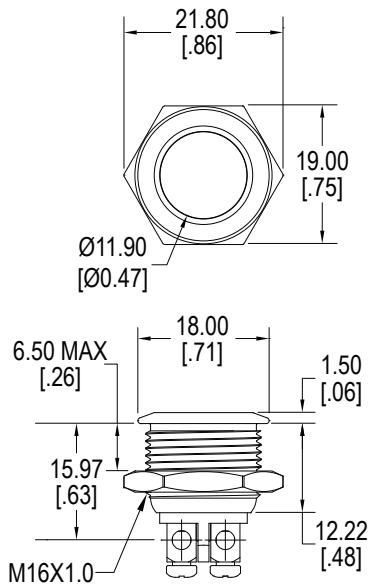
## Illuminated Pushbutton - 16mm & 19mm

### Ordering Information

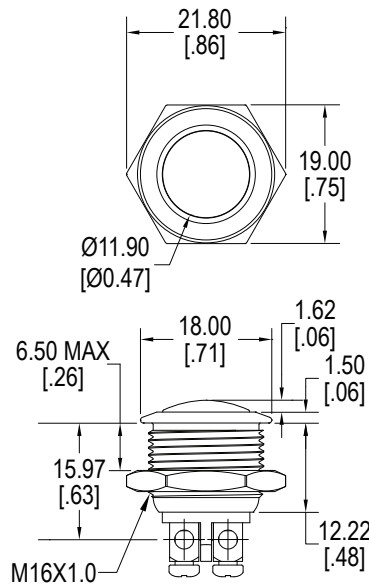
1. Series	BH16	N	R	S	Z	X
BH16 = 16mm BH19 = 19mm						
2. Bezel Style Blank = Standard Bezel H = Straight Bezel						
3. Switch Function N = Momentary						
4. Actuator Style: F = Flush M = Round R = Raised B = Flush, ring illuminated C = Flush dot illuminated E = Raised, ring illuminated Available in 16mm only G = Flush, international stand-by symbol illuminated Available in 16mm only J = Round, ring illuminated Available in 16mm only K = Round, dot illuminated Available in 16mm only L = Raised, dot illuminated Available in 16mm only EC = Epoxy Convect contact factory for details						
5. Switch Finish: B = Black anodized aluminum G = Green anodized aluminum Contact factory for availability N = Nickel plated brass P = Gold plated brass R = Red anodized aluminum Contact factory for availability S = Brushed stainless steel U = Blue anodized aluminum Contact factory for availability Y = Yellow anodized aluminum Contact factory for availability						
6. Terminal Options B = Solder Lugs C = Quick Connect Terminal Z = Screw Terminal Not available with RGB LED						
7. LED Color						
X = No LED	RO = Red / Orange dual LED					
R = Red	RY = Red / Yellow dual LED					
Y = Yellow	RG = Red / Green dual LED					
G = Green	RB = Red / Blue dual LED					
B = Blue	OY = Orange / Yellow dual LED					
W = White	OG = Orange / Green dual LED					
O = Orange	OB = Orange / Blue dual LED					
	OW = Orange / White dual LED					
	YG = Yellow / Green dual LED					
	YB = Yellow / Blue dual LED					
	GB = Green / Blue dual LED					
	GW = Green / White dual LED					
	RGB = Red / Green / Blue Available in 16mm only					

**Dimensions**

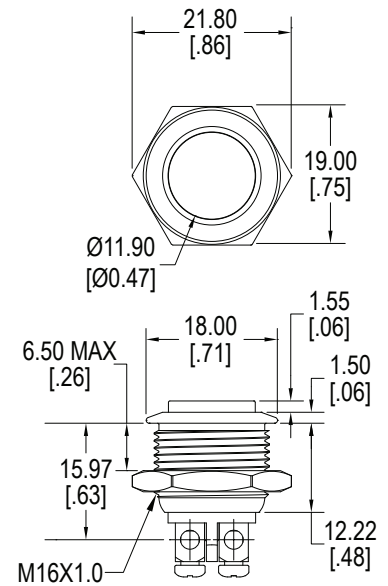
**16mm - Actuator Styles**



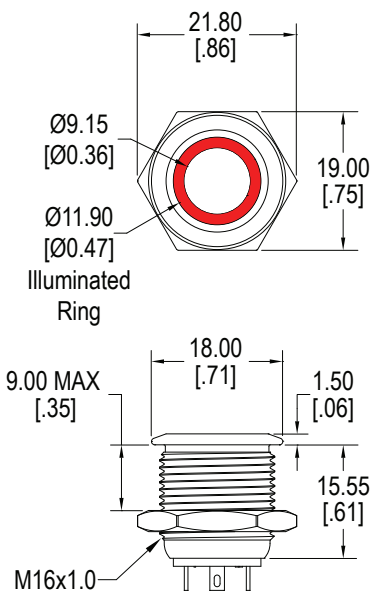
**Flush**



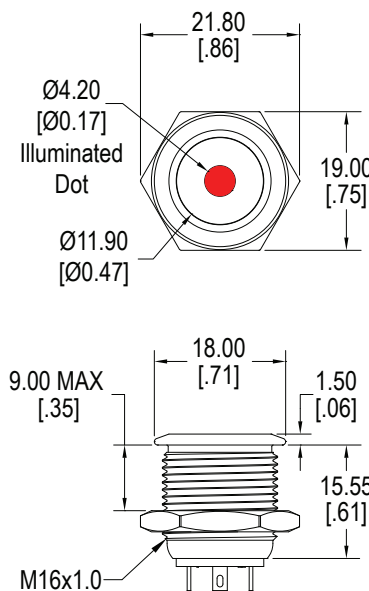
**Round**



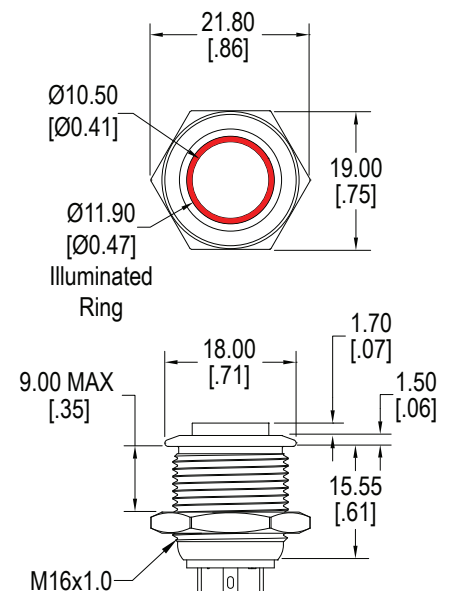
**Raised**



**Flush, Ring Illuminated**



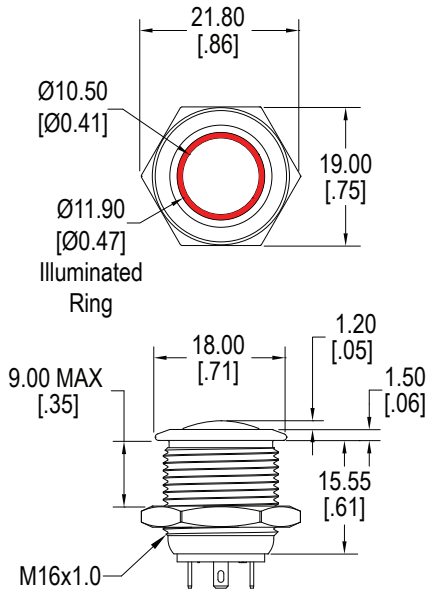
**Flush, Dot Illuminated**



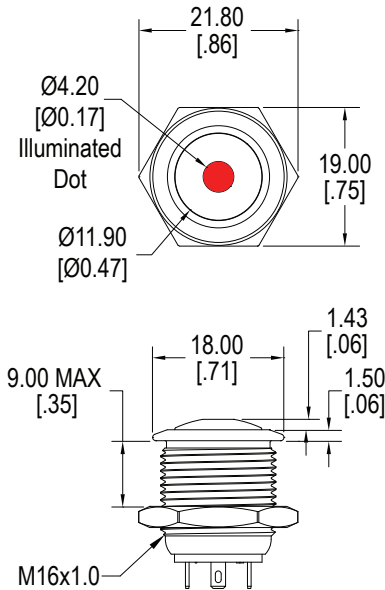
**Raised, Ring Illuminated**

**Dimensions**

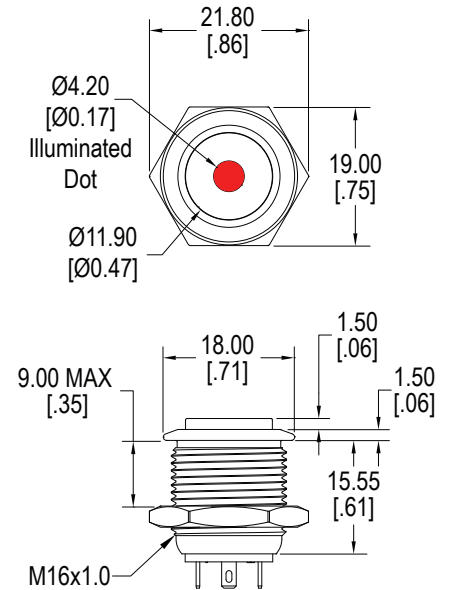
**16mm - Actuator Styles, Illuminated**



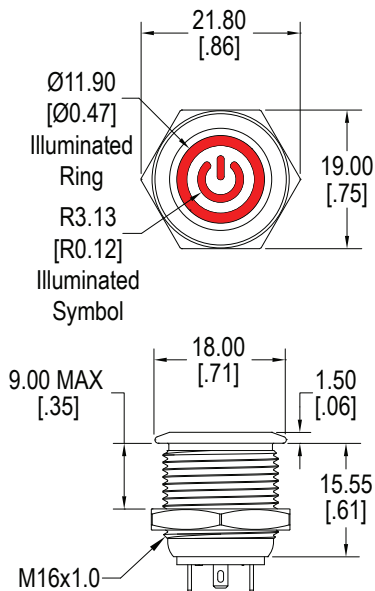
**Round, Ring Illuminated**



**Round, Dot Illuminated**



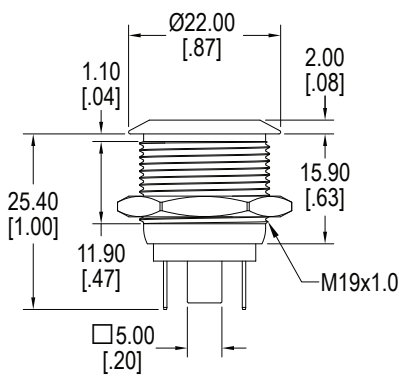
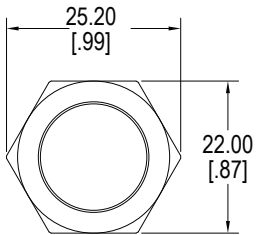
**Raised, Dot Illuminated**



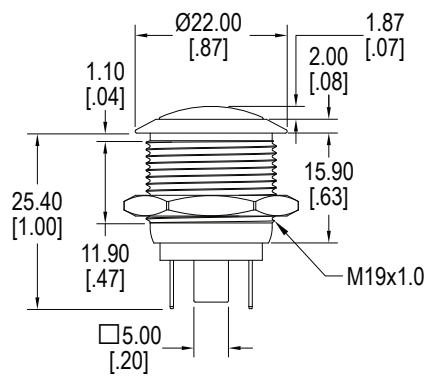
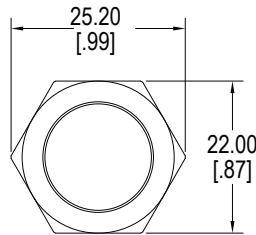
**Flush, Int'l Standby**

**Dimensions**

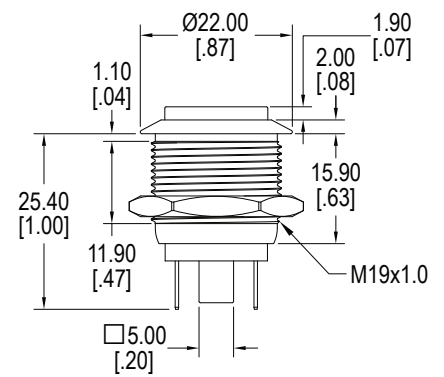
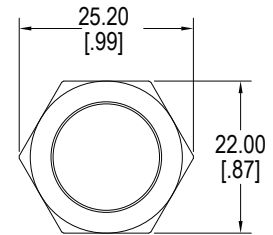
**19mm - Actuator Styles**



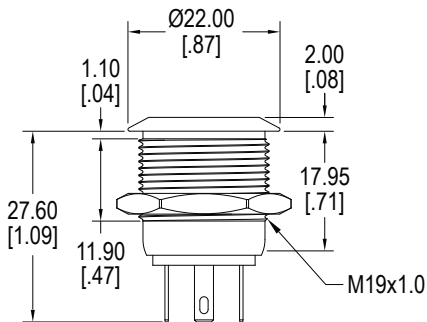
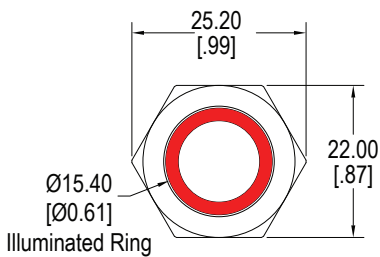
**Flush**



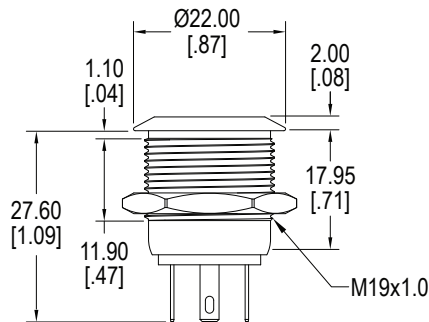
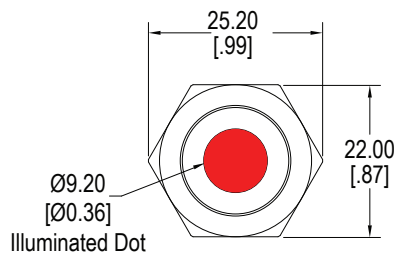
**Round**



**Raised**



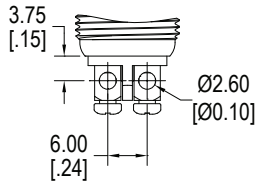
**Flush, Ring Illuminated**



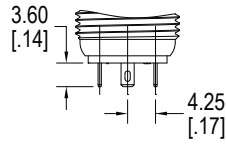
**Flush, Dot Illuminated**



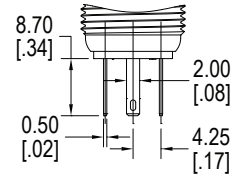
**16mm - Terminal Options**



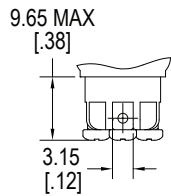
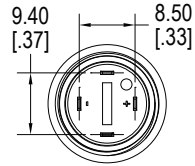
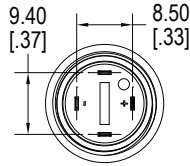
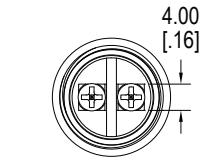
**Screw Terminals**



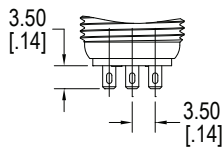
**Solder Lug**



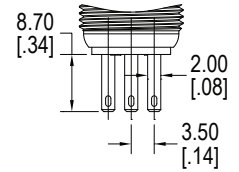
**Quick Connect**



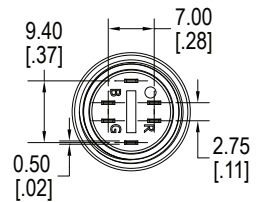
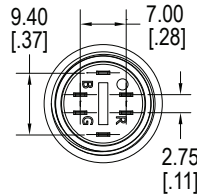
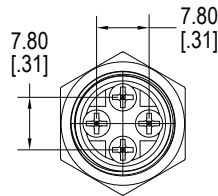
**LED Screw Terminals**



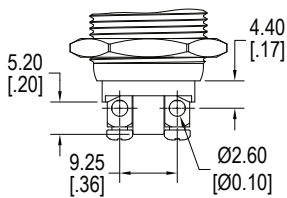
**RGB Solder Lug**



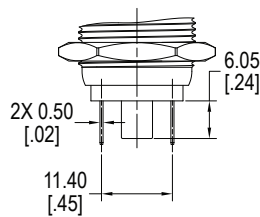
**RGB Quick Connect**



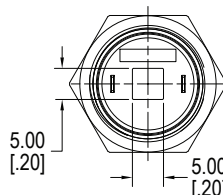
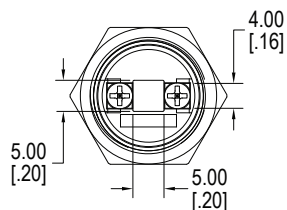
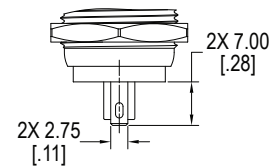
**19mm - Terminal Options**



**Screw Terminals**

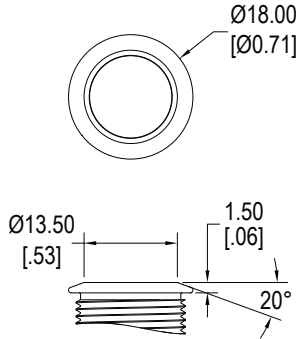


**Solder Lug/ .110" Quick Connect**

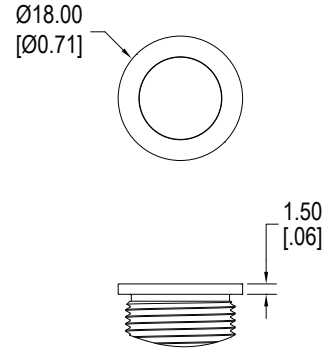




## 16mm - Bezel Detail

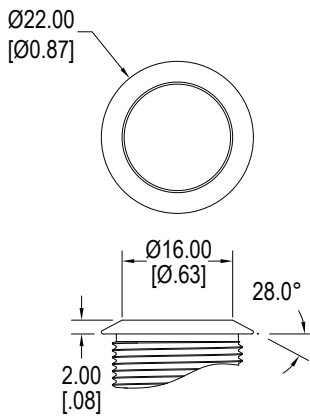


**Standard Bezel**

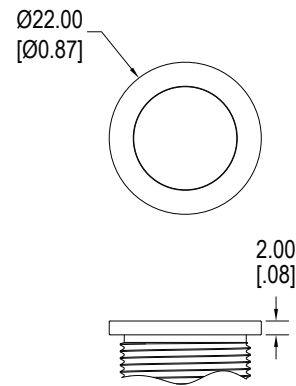


**Straight Bezel**

## 19mm - Bezel Detail



**Standard Bezel**



**Straight Bezel**

## LED Characteristics

LED Ratings		Color						
		R	Y	G	B	O	W	Units
Reverse Voltage	$V_R$	5	5	5	5	5	5	V
Forward Current (avg)	$I_F$	25	25	30	30	25	30	mA
Forward Current (peak)	$I_{FS}$	120	120	160	160	120	160	mA
Reverse Current $V_R = 5V$	$I_R$	10	10	10	10	10	10	$\mu A$
Power Dissipation	$P_T$	80	80	120	120	80	120	mW
Operating & Storage Temperature	$T_A$	-40 ~ +85						C°
Forward Voltage (typ) $I_F = 20mA$	$V_F$	2.1	2.1	3.3	3.3	2.0	3.0	V
Forward Voltage (max) $I_F = 20mA$	$V_F$	2.4	2.5	3.6	3.6	2.3	3.6	V
Wavelength at Peak Emmission $I_F = 20mA$	$\lambda_P$	635	592	516	463	606	n/a	nm
Spectral Line Half-Width $I_F = 20mA$	$\Delta\lambda$	14	12	28	20	12	n/a	nm
Luminous Intensity, $I_F = 20mA$	LI	120	120	170	100	120	700	mcd
Viewing Angle	$\Theta$	145	145	145	145	145	145	deg