

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

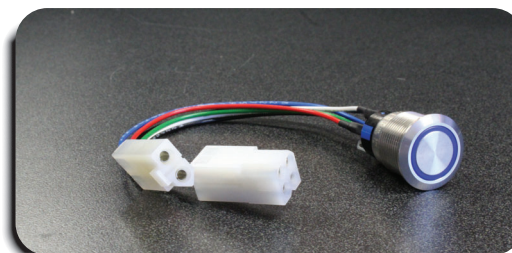
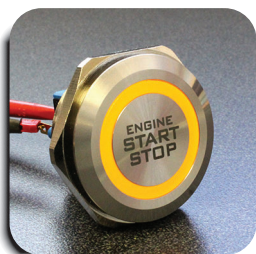
Actuation Force	16mm	500 ± 100gF
	19mm	550 ± 100gF
Actuation Travel	16mm	1.6 ± .25mm
	19mm	2.0 ± .25mm
Insulation Resistance		≥ 100MΩ min
Operating Temperature		-25°C to 55°C
Storage Temperature		-25°C to 55°C

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

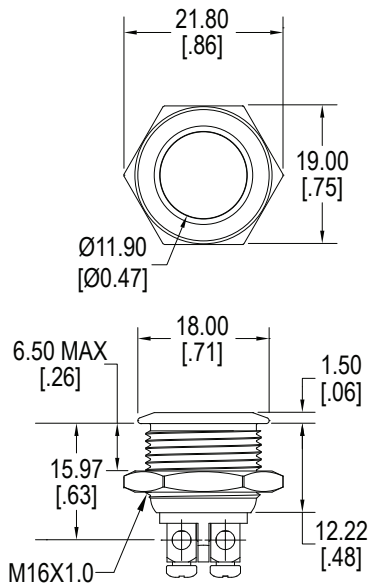
Illuminated Pushbutton - 16mm & 19mm

Ordering Information

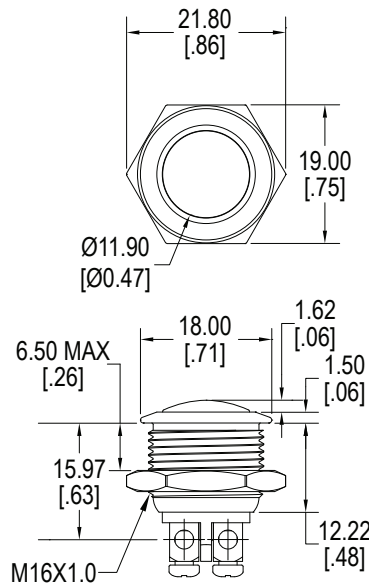
1. Series	BH16	N	R	S	Z	12
BH16 = 16mm BH19 = 19mm						
2. Bezel Style	Blank = Standard Bezel H = Straight Bezel					
3. Switch Function	N = Momentary					
4. Actuator Style:	F = Flush M = Round R = Raised B = Flush, ring illuminated C = Flush dot illuminated E = Raised, ring illuminated <small>Available in 16mm only</small> G = Flush, international stand-by symbol illuminated <small>Available in 16mm only</small> J = Round, ring illuminated <small>Available in 16mm only</small> K = Round, dot illuminated <small>Available in 16mm only</small> L = Raised, dot illuminated <small>Available in 16mm only</small> EC = Epoxy Convect <small>contact factory for details</small>					
5. Switch Finish:	B = Black anodized aluminum G = Green anodized aluminum <small>Contact factory for availability</small> N = Nickel plated brass P = Gold plated brass R = Red anodized aluminum <small>Contact factory for availability</small> S = Brushed stainless steel U = Blue anodized aluminum <small>Contact factory for availability</small> Y = Yellow anodized aluminum <small>Contact factory for availability</small>					
6. Terminal Options	B = Solder Lugs C = Quick Connect Terminal Z = Screw Terminal <small>Not available with RGB LED</small>					
7. LED Color	X = No LED R = Red Y = Yellow G = Green B = Blue W = White O = Orange RO = Red / Orange dual LED RY = Red / Yellow dual LED RG = Red / Green dual LED RB = Red / Blue dual LED OY = Orange / Yellow dual LED OG = Orange / Green dual LED 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 <small>Available in 16mm only</small>					

Dimensions

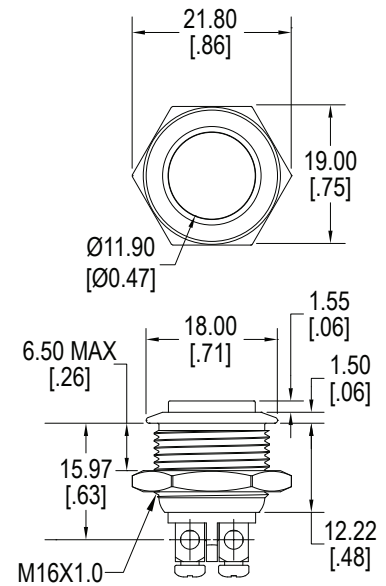
16mm - Actuator Styles



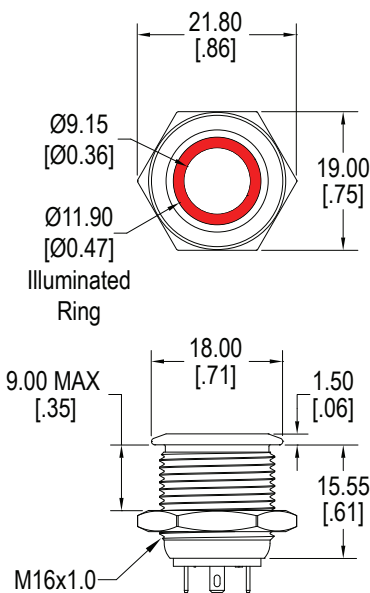
Flush



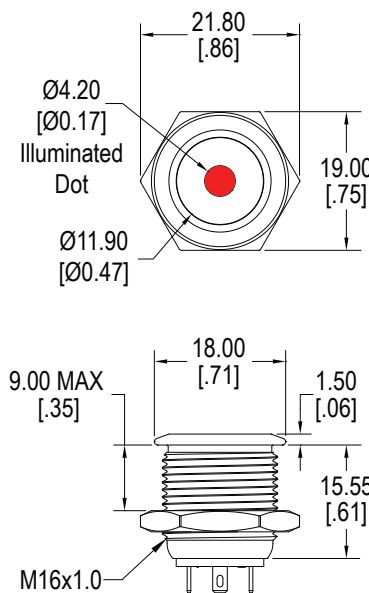
Round



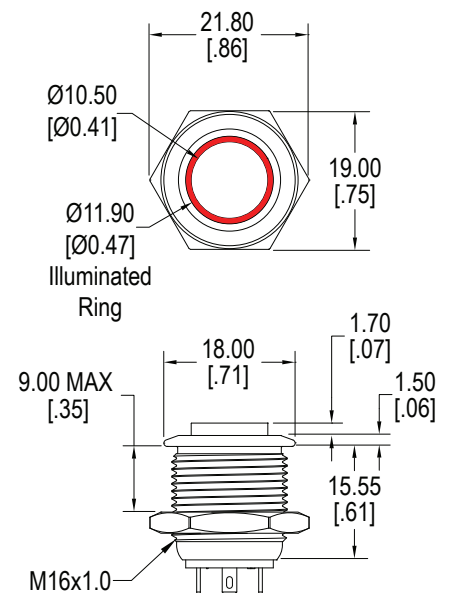
Raised



Flush, Ring Illuminated



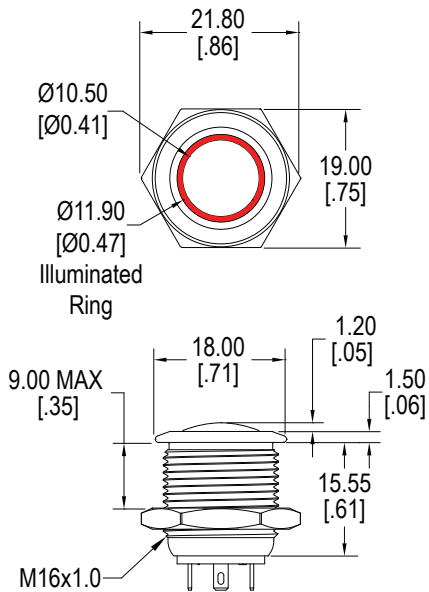
Flush, Dot Illuminated



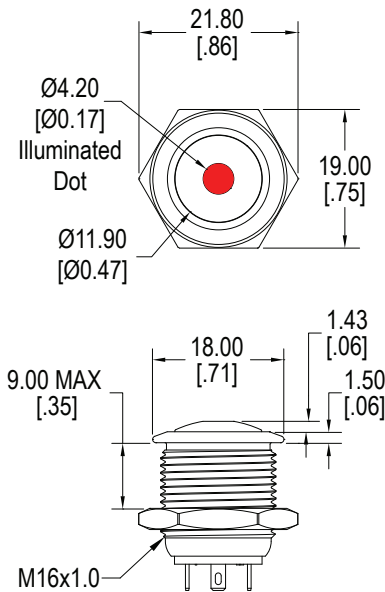
Raised, Ring Illuminated

Dimensions

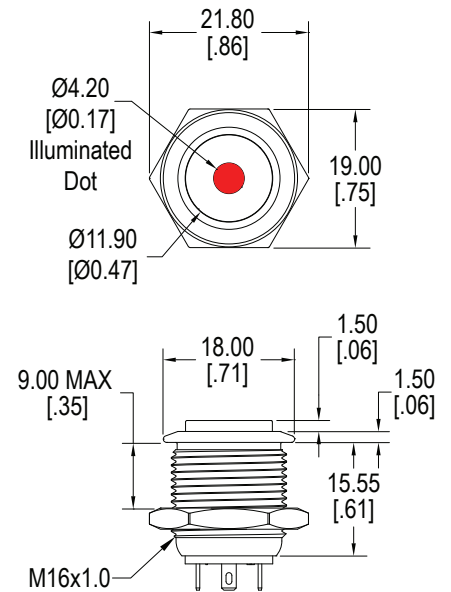
16mm - Actuator Styles, Illuminated



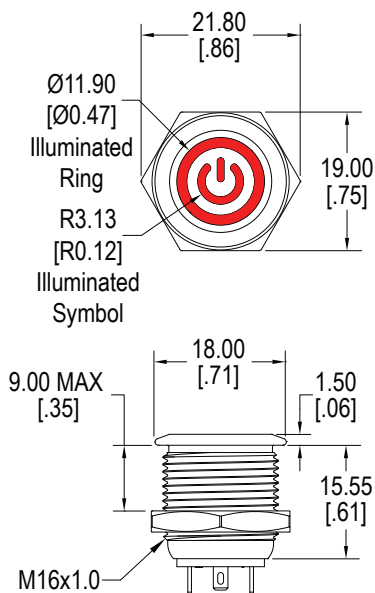
Round, Ring Illuminated



Round, Dot Illuminated



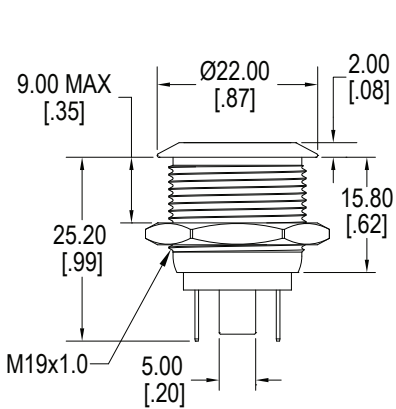
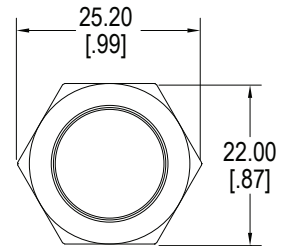
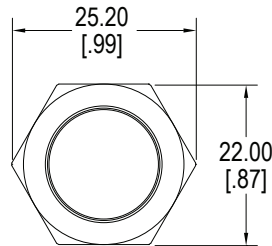
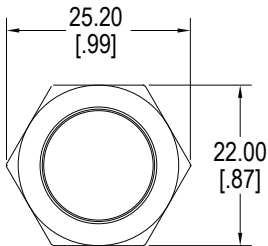
Raised, Dot Illuminated



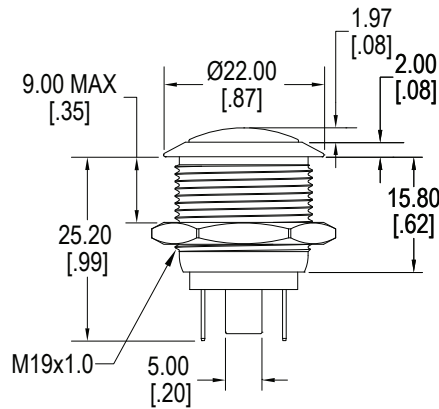
Flush, Int'l Standby

Dimensions

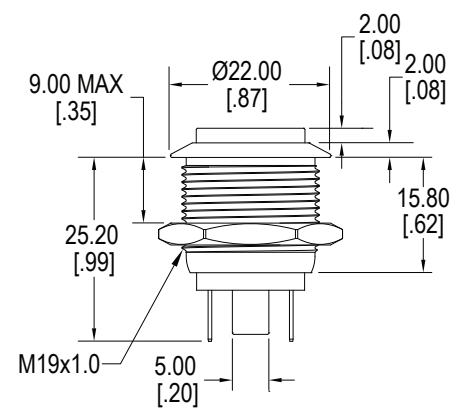
19mm - Actuator Styles



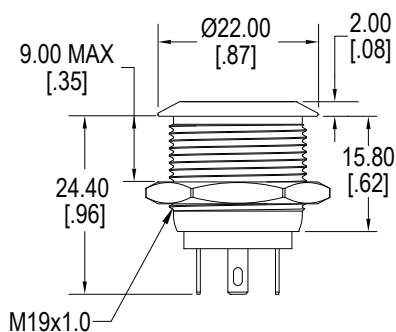
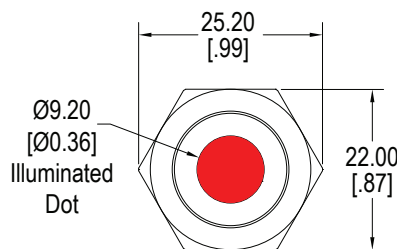
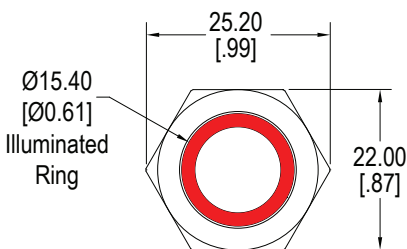
Flush



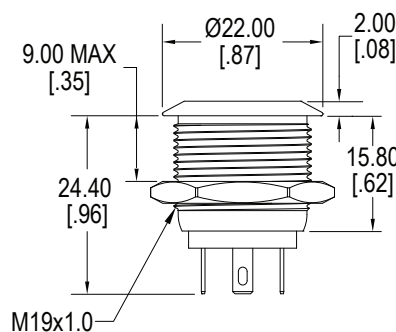
Round



Raised



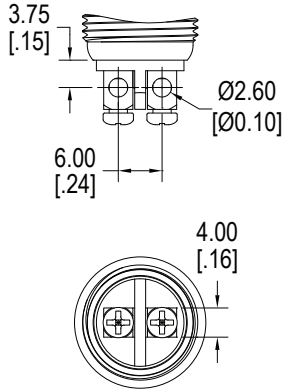
Flush, Ring Illuminated



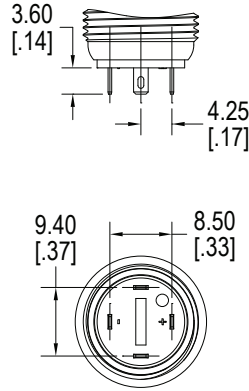
Flush, Dot Illuminated

ILLUMINATED PUSHBUTTON - 16mm & 19mm

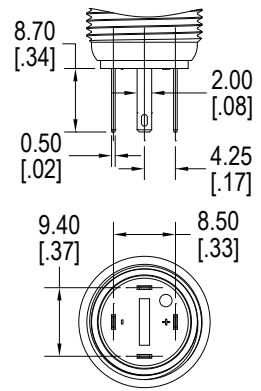
16mm - Terminal Options



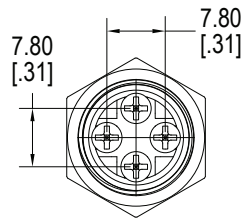
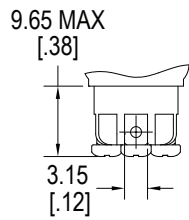
Screw Terminals



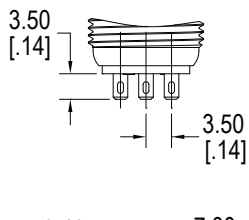
Solder Lug



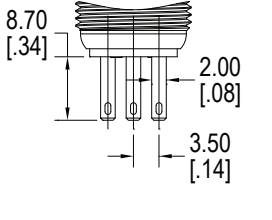
Quick Connect



LED Screw Terminals

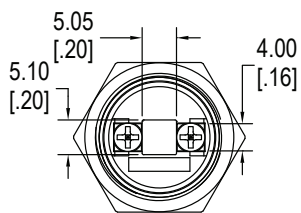
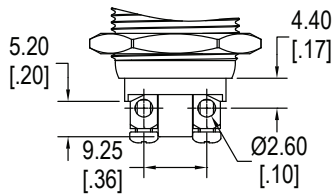


RGB Solder Lug

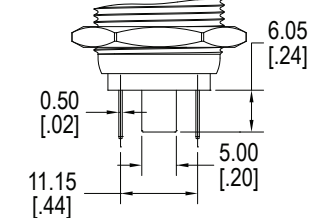


RGB Quick Connect

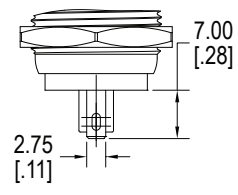
19mm - Terminal Options



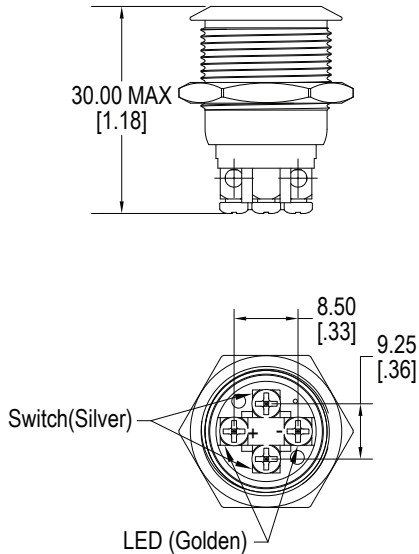
Screw Terminals



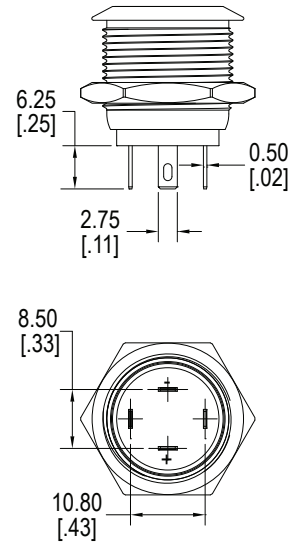
Solder Lug/ .110" Quick Connect



19mm - Terminal Options

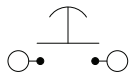


Screw Terminals with LED

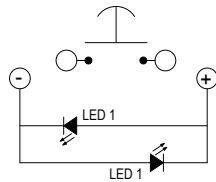


Solder Lug / .110" Quick Connect with LED

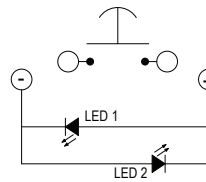
Schematics



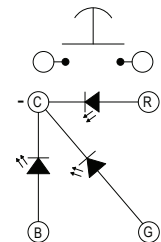
No LED



Single LED

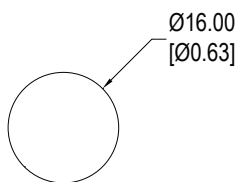


Dual LED

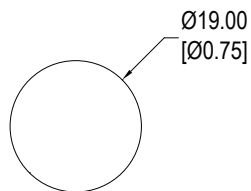


RGB LED

Panel Cutout

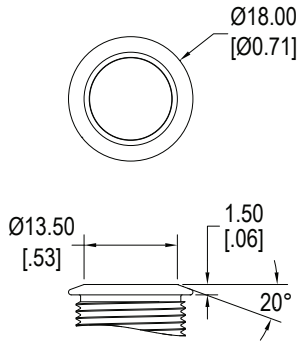


16mm

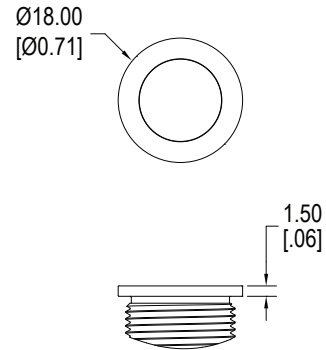


19mm

16mm - Bezel Detail

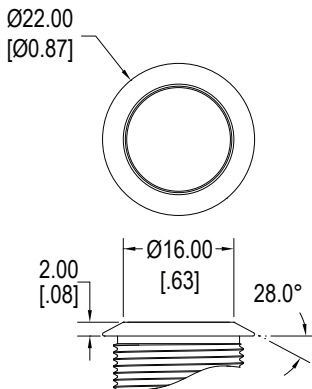


Standard Bezel

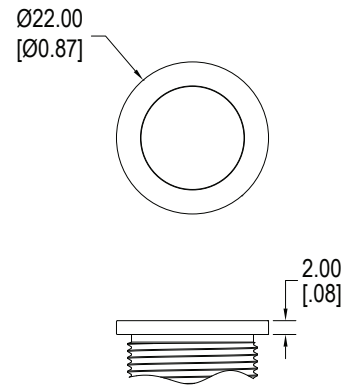


Straight Bezel

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	μA
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 $I_F = 20mA$	λ_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	Θ	145	145	145	145	145	145	deg