



RoHS Compliant

Illuminated Pushbutton - 16mm & 19mm

Specifications

Electrical Ratings	2A @ 36VDC 1A @ 125VAC 0.5A @ 250VAC
Sealing Degree	IP65
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

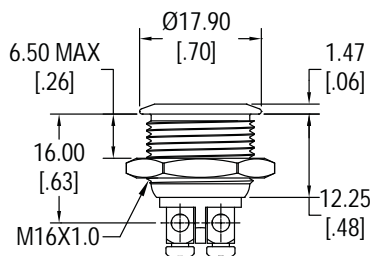
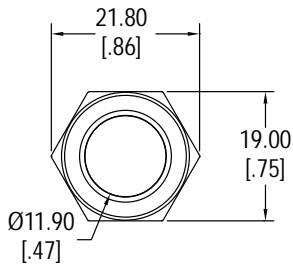
Illuminated Pushbutton - 16mm & 19mm

Ordering Information

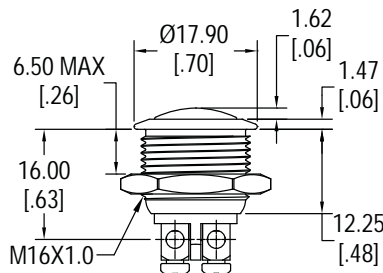
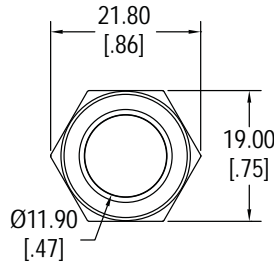
1. Series	BH16	N	R	S	Z	12																						
BH16 = 16mm BH19 = 19mm																												
2. Bezel Style	Blank = Standard Bezel H = Straight Bezel																											
3. Switch Function	N = Momentary																											
4. Actuator Style:	F = Flush M = Round R = Raised B = Flush, ring illuminated *Available in 16mm only, see AH for 19mm illuminated C = Flush dot illuminated *Available in 16mm only, see AH for 19mm illuminated E = Raised, ring illuminated *Available in 16mm only, see AH for 19mm illuminated G = Flush, international stand-by symbol illuminated *Not available with G,R, U or Y finish options J = Round, ring illuminated *Available in 16mm only, see AH for 19mm illuminated K = Round, dot illuminated *Available in 16mm only, see AH for 19mm illuminated L = Raised, dot illuminated *Available in 16mm only, see AH for 19mm illuminated																											
5. Switch Finish:	B = Black anodized aluminum G = Green anodized aluminum N = Nickel plated brass P = Gold plated brass R = Red anodized aluminum S = Brushed stainless steel U = Blue anodized aluminum Y = Yellow anodized aluminum																											
6. Terminal Options	B = Solder Lugs C = Quick Connect Terminal Z = Screw Terminal *not available with illuminated option																											
7. LED Color ** Only available in 16mm diameter	<table border="0"> <tr> <td>X = No LED</td> <td>RO = Red / Orange dual LED</td> </tr> <tr> <td>R = Red</td> <td>RY = Red / Yellow dual LED</td> </tr> <tr> <td>Y = Yellow</td> <td>RG = Red / Green dual LED</td> </tr> <tr> <td>G = Green</td> <td>RB = Red / Blue dual LED</td> </tr> <tr> <td>B = Blue</td> <td>OY = Orange / Yellow dual LED</td> </tr> <tr> <td>W = White</td> <td>OG = Orange / Green dual LED</td> </tr> <tr> <td>O = Orange</td> <td>OB = Orange / Blue dual LED</td> </tr> <tr> <td></td> <td>YG = Yellow / Green dual LED</td> </tr> <tr> <td></td> <td>YB = Yellow / Blue dual LED</td> </tr> <tr> <td></td> <td>GB = Green / Blue dual LED</td> </tr> <tr> <td></td> <td>RGB = Red / Green / Blue</td> </tr> </table>						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		YG = Yellow / Green dual LED		YB = Yellow / Blue dual LED		GB = Green / Blue dual LED		RGB = Red / Green / Blue
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																											
	YG = Yellow / Green dual LED																											
	YB = Yellow / Blue dual LED																											
	GB = Green / Blue dual LED																											
	RGB = Red / Green / Blue																											

Dimensions

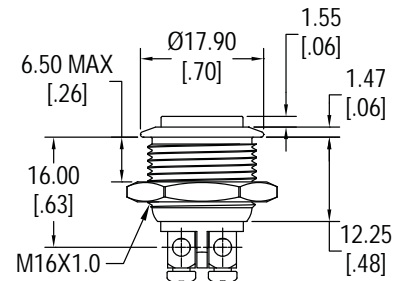
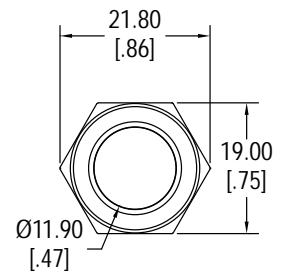
16mm - Actuator Styles



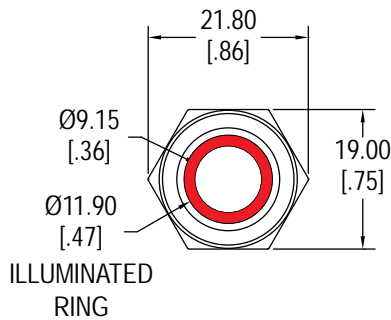
F Style



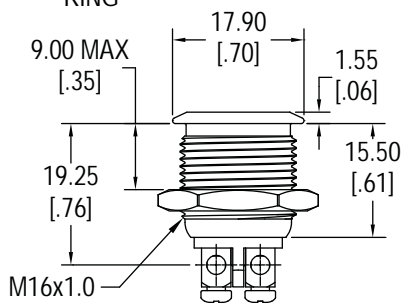
M Style



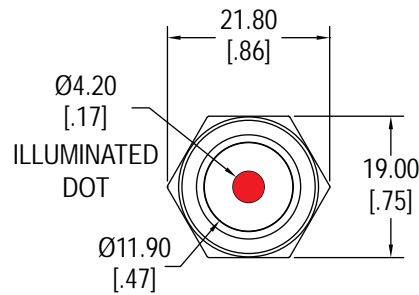
R Style



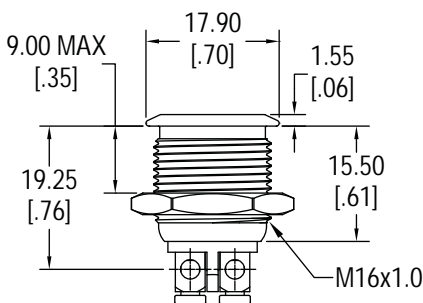
ILLUMINATED RING



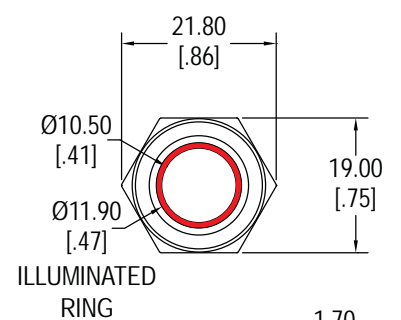
B Style



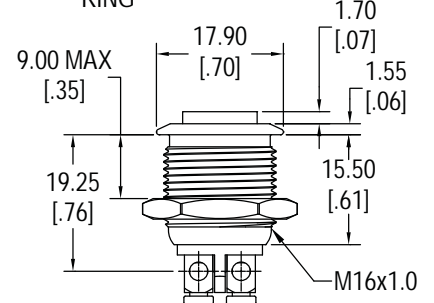
ILLUMINATED DOT



C Style



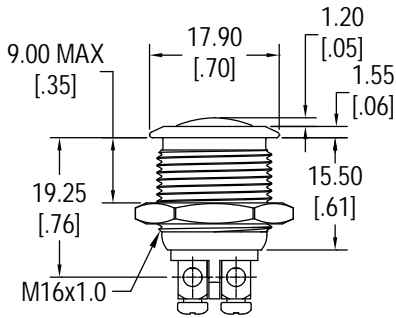
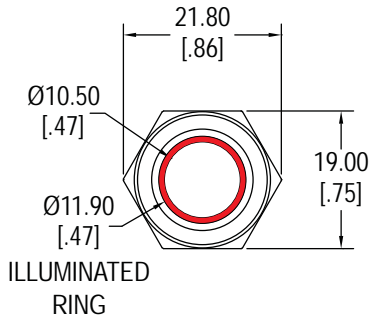
ILLUMINATED RING



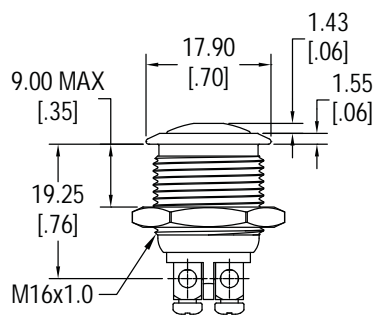
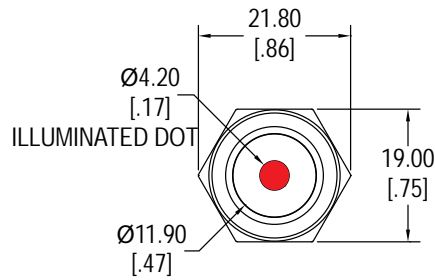
E Style

Dimensions

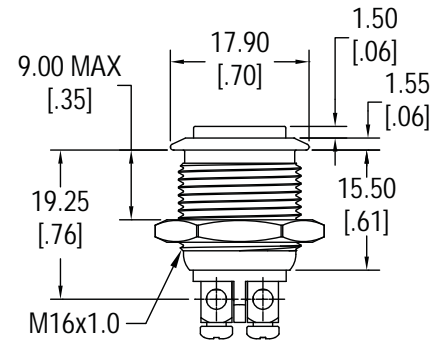
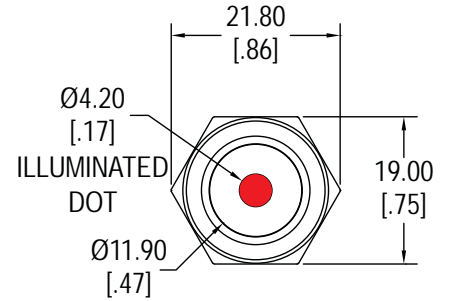
16mm - Actuator Styles, Illuminated



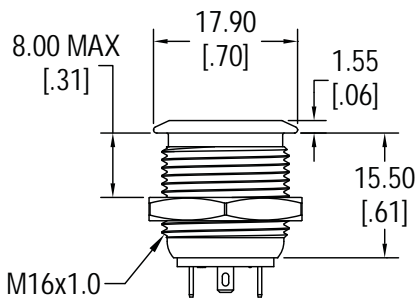
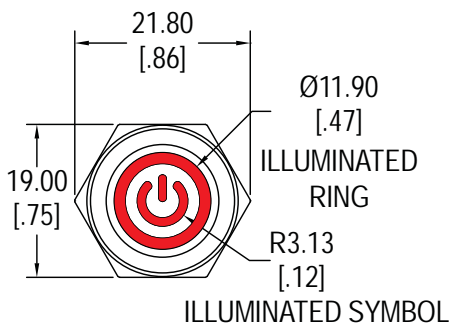
J Style



K Style



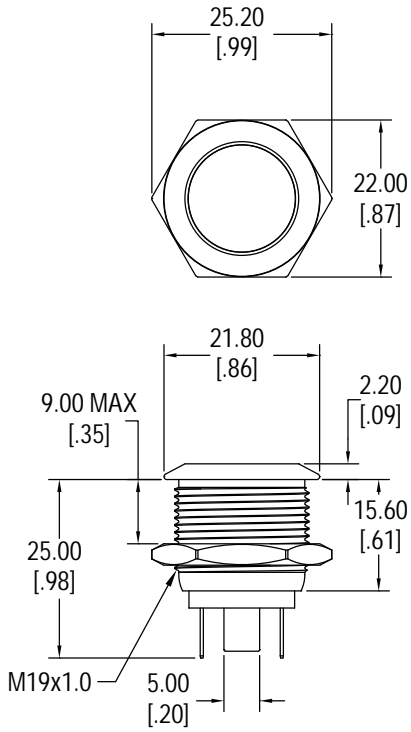
L Style



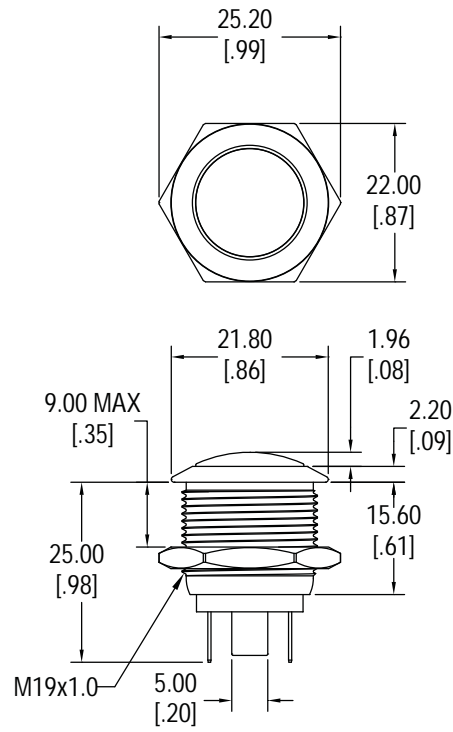
G Style

Dimensions

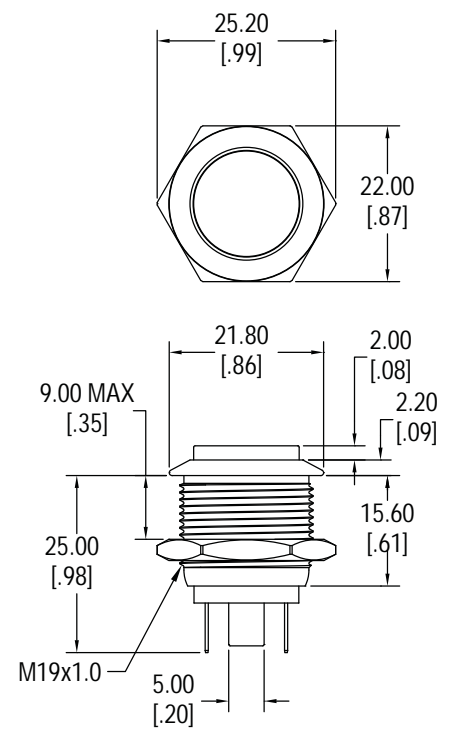
19mm - Actuator Styles



F Style



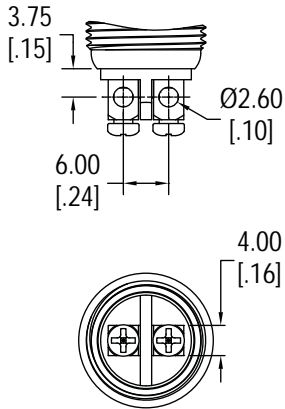
M Style



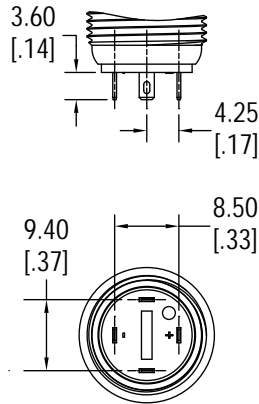
R Style

Illuminated Pushbutton - 16mm & 19mm

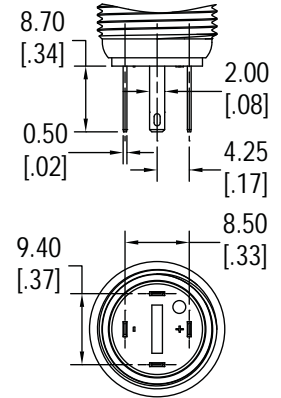
16mm - Terminal Options



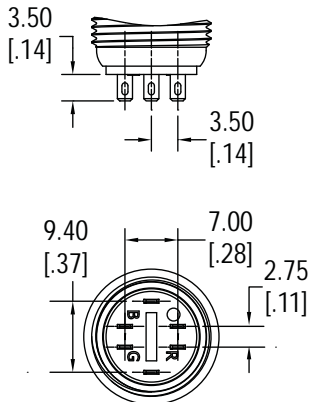
Screw Terminals



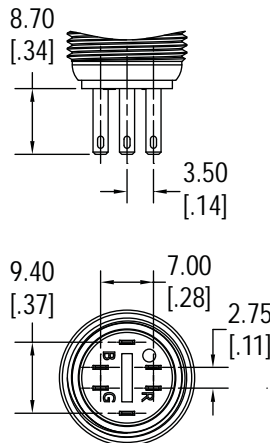
Solder Lug



Quick Connect

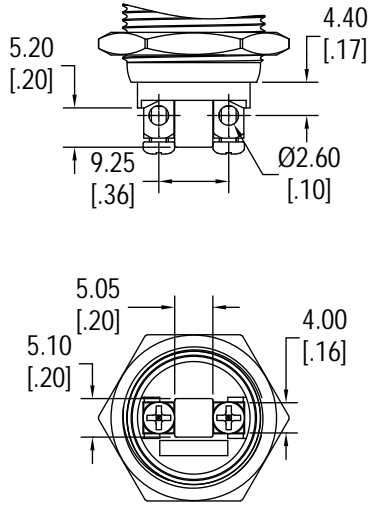


RGB Solder Lug

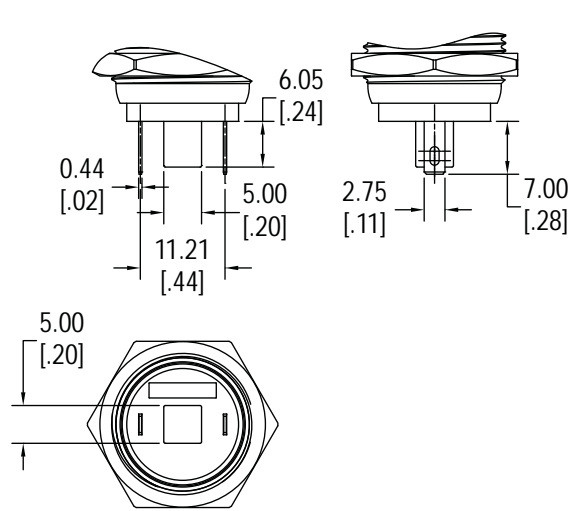


RGB Quick Connect

19mm - Terminal Options

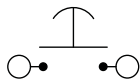


Screw Terminals

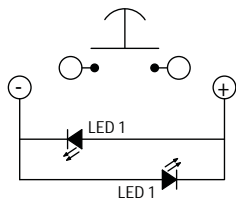


Solder Lug/ .110" Quick Connect

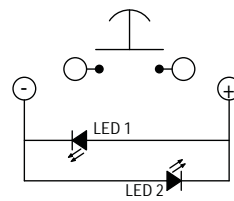
Schematics



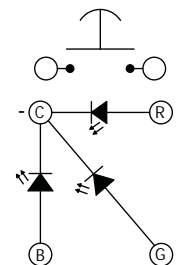
No LED



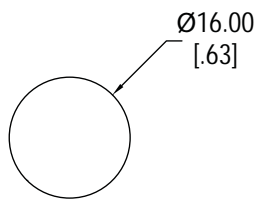
Single LED



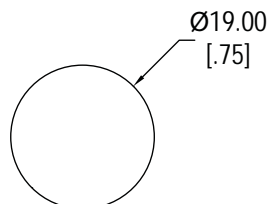
Dual LED



RGB LED



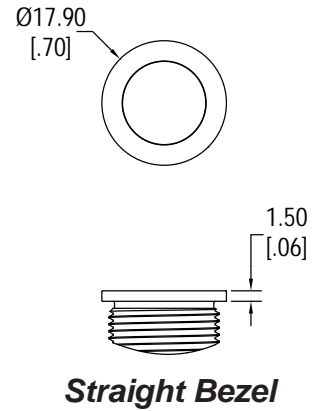
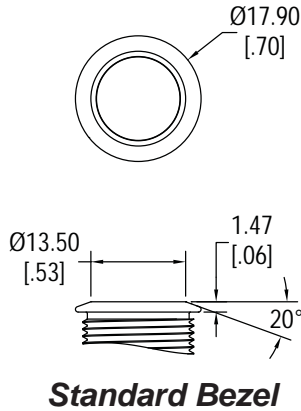
16mm Panel Cut Out



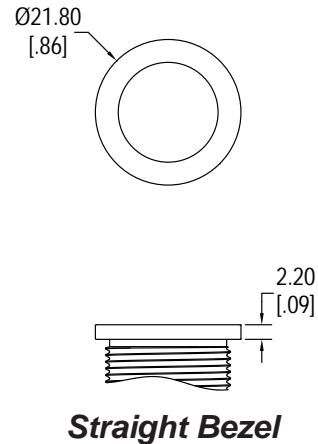
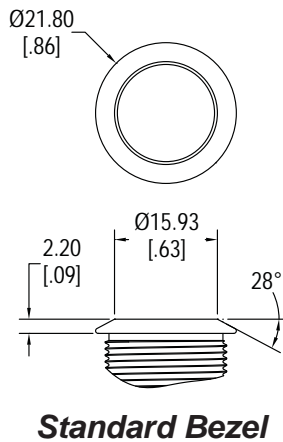
19mm Panel Cut Out

Illuminated Pushbutton - 16mm & 19mm

16mm - Bezel Detail



19mm - Bezel Detail



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 Emission $I_F = 20mA$	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



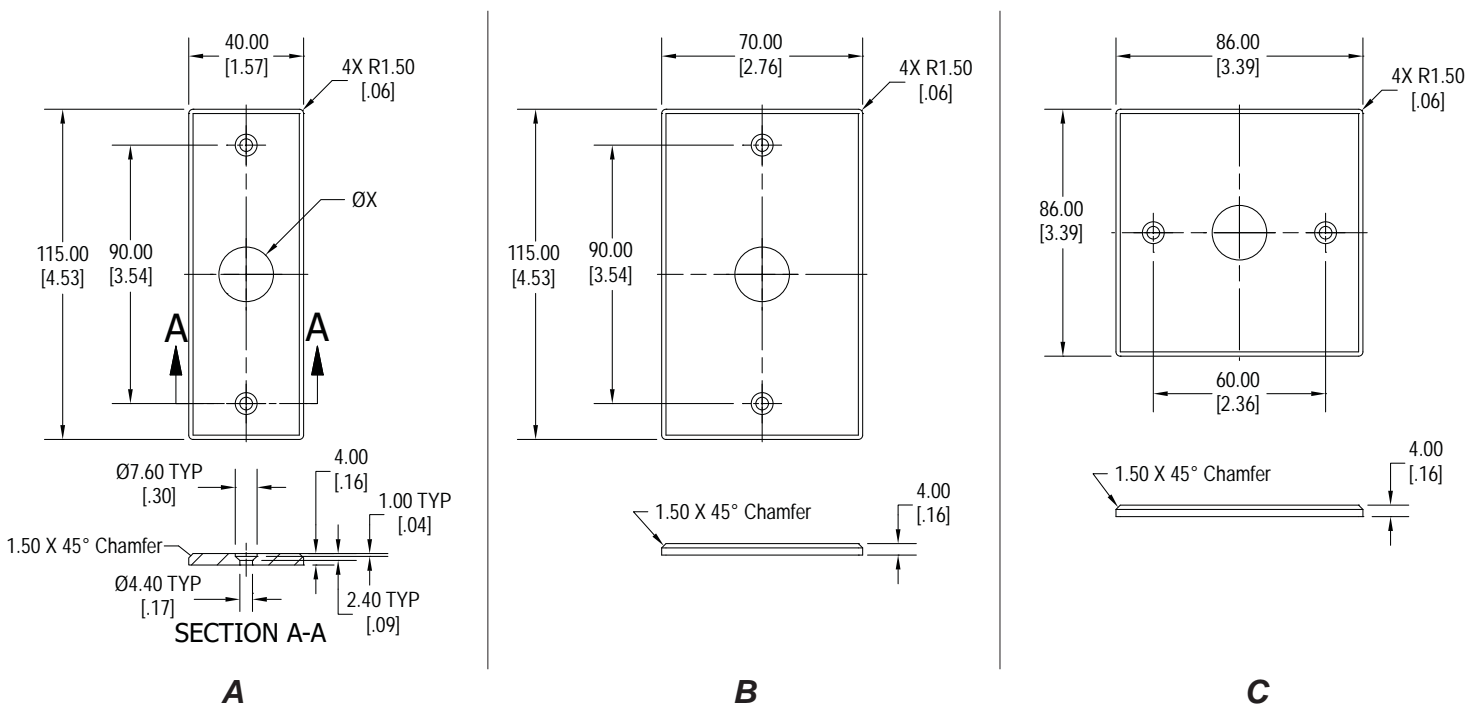
Features

- ◆ Fits standard size electrical boxes
- ◆ Multiple size options
- ◆ 2 finish options
- ◆ Laser etching available

Ordering Information

1. Series	WP	B	16	A	X
WP					
2. Size:	A = 40mm x 115mm B = 70mm x 115mm C = 86mm x 86mm				
3. Hole Size:	16 = 16mm diameter 19 = 19mm diameter				
4. Material	A = Brushed aluminum Y = Brushed aluminum, yellow anodized				
5. Laser Etching Symbol:	Contact Factory with artwork				

Dimensions



AVH

Aluminum Anti-Vandal Switch Housing

Features

- ◆ Easy installation
- ◆ Multiple size options
- ◆ Aluminum housing



Ordering Information

1. Series	AVH	F	4	19
AVH				
2. Mounting Options: F = With mounting flange T = Without mounting flange				
3. Number of Positions: 1 = 1 position 2 = 2 positions 3 = 3 positions 4 = 4 positions 5 = 5 positions Contact Factory for custom sizes and number of positions				
4. Hole Size: 16 = 16mm diameter 19 = 19mm diameter				

Dimensions

