RoHS COMPLIANT

CIT Relay & Switch

AHB

Illuminated Anti-Vandal Pushbutton – 19mm

Specifications

Electrical Ratings	1A @ 24VDC 3A @ 125VAC / 250VAC
Sealing Degree	IP67
Electrical Life	50,000 cycles typical
Contact Resistance	≤ 50mΩ initial
Actuation Force	250 ± 50gF
Actuation Travel	2.5 ± 0.3mm

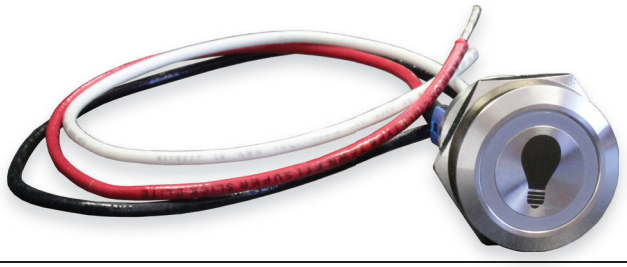
Dielectric Strength	2000Vrms min contact to contact 2000Vrms min contact to LED
Insulation Resistance	≥ 100MΩ min
Operating Temperature	-40ºC to 85ºC
Storage Temperature	-40ºC to 85ºC

Materials

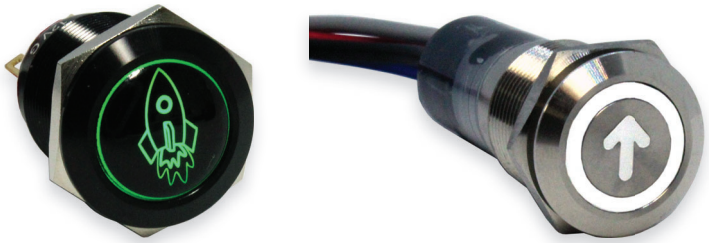
Actuator	Stainless Steel or Anodized Aluminum
LED Lens	Polycarbonate (PC)
Threaded Body	Stainless Steel or Anodized Aluminum
Terminal Support	Polybutylene Terephthalate (PBT)
Inner Switch Body	Polycarbonate (PC)
Contacts	Silver Alloy
Terminals	Tin Plated Brass
Hardware	One Hex Nut & One “O” Ring Supplied

Custom Capabilities Contact Factory

Cable Assemblies



Shine Through Symbols



Custom Laser Etching

Custom Plastic Convex Actuators

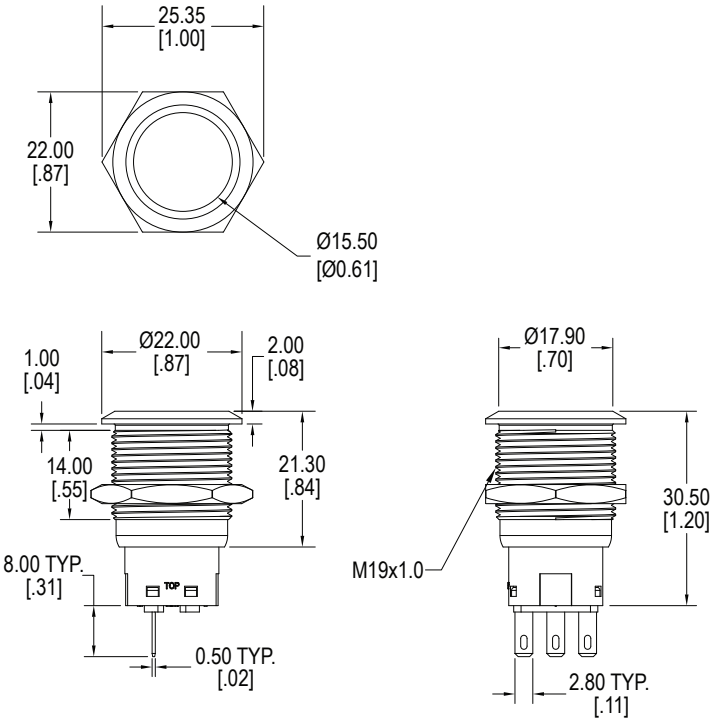
Ordering Information

1. Series	AHB	1		N	B	S	R	12
AHB								
2. Number of Poles 1 = SPDT 2 = DPDT								
3. Bezel Style Blank = Standard Bezel H = Straight Bezel								
4. Latching Option N = Momentary L = Latching								
5. Actuator Style A = Flush actuator, non-illuminated B = Flush actuator, ring illuminated C = Flush actuator, dot illuminated G = Flush actuator, international standby symbol + ring illuminated K = Flush actuator, international standby symbol illuminated EC = Epoxy Convex actuator, contact factory for details								
6. Switch Finish B = Black anodized aluminum G = Green anodized aluminum R = Red anodized aluminum S = Brushed stainless steel U = Blue anodized aluminum Y = Yellow anodized aluminum								
7. LED Color Z = 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 YG = Yellow / Green dual LED YB = Yellow / Blue dual LED GB = Green / Blue dual LED		RGB, only available with SPDT * Contact Factory for other LED options			
8. LED Voltage Blank = No LED 6 = 6VDC 12 = 12VDC 24 = 24VDC 110 = 110VAC 220 = 220VAC N = No internal resistor in series with the LED								

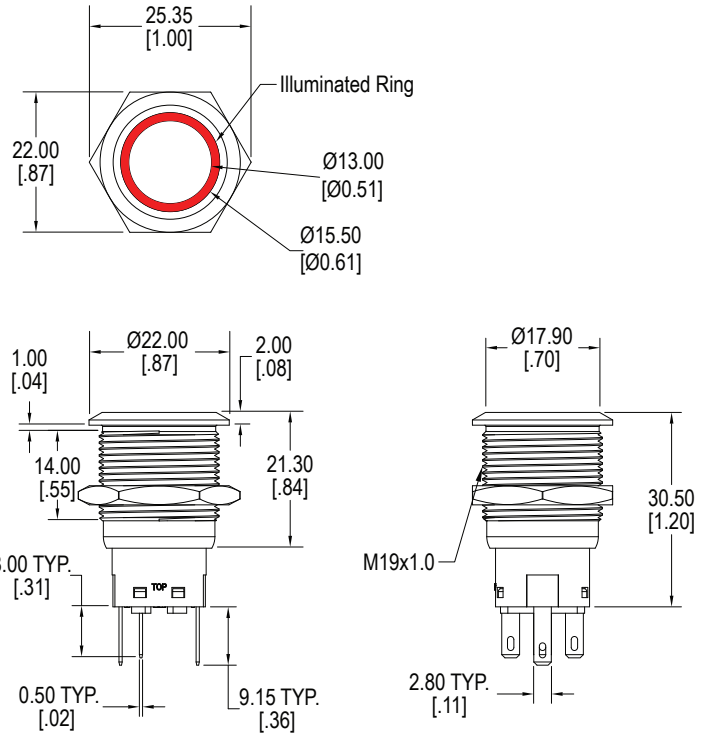
OPTIONAL Socket Housing available

Dimensions

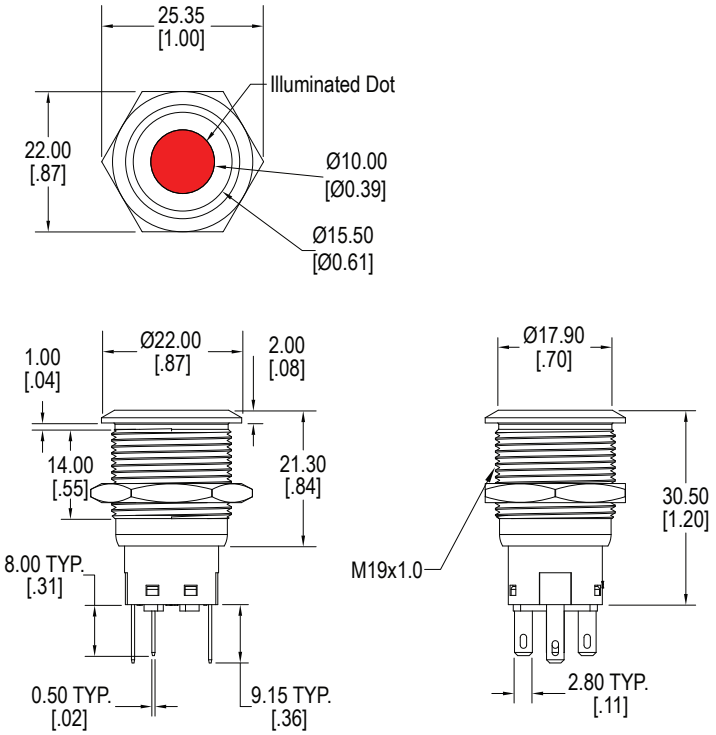
A Actuator



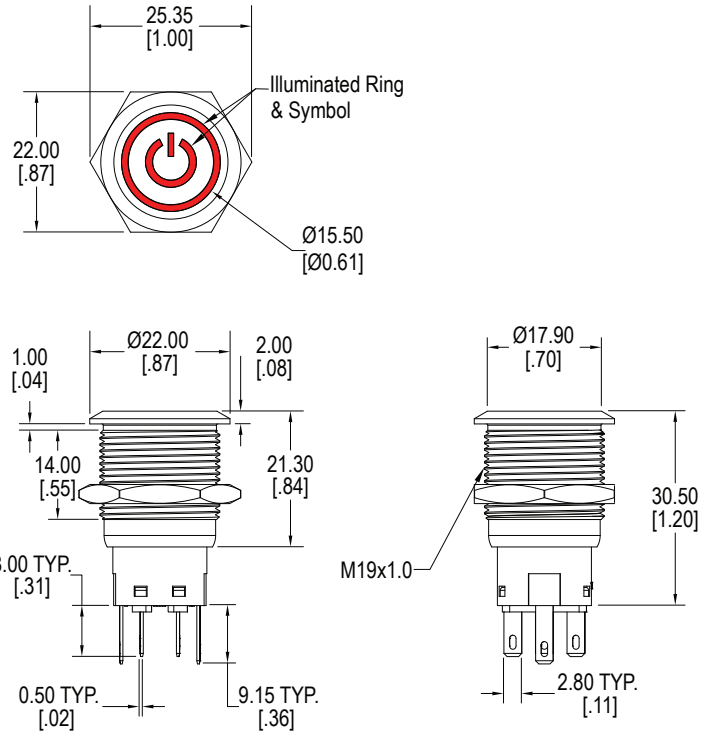
B Actuator



C Actuator

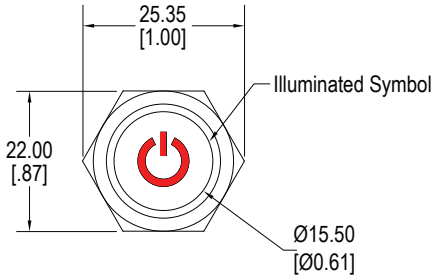


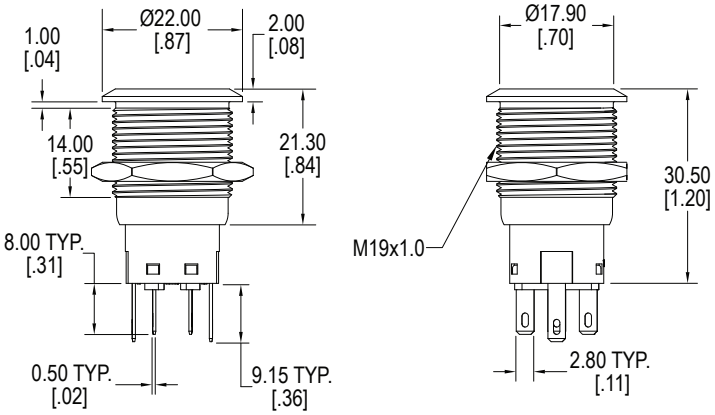
G Actuator



Dimensions - continued

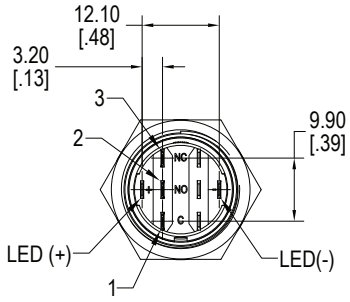
K Actuator



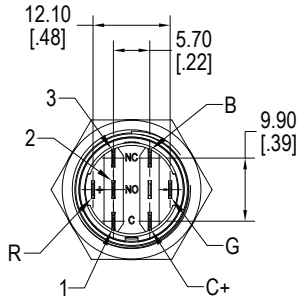


Bottom Views

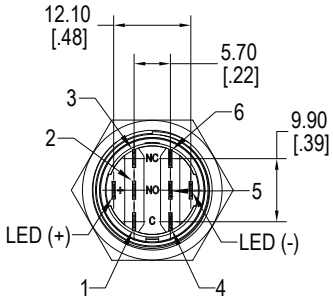
Single Pole Double Throw



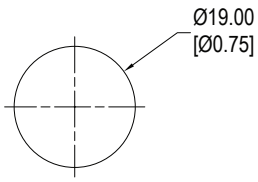
Single Pole Double Throw RGB LED



Double Pole Double Throw

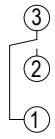


Panel Cut-Out

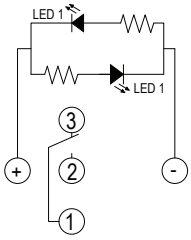


Schematics

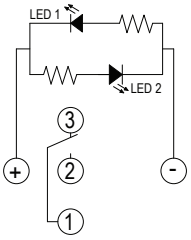
SPDT, Non-Illuminated



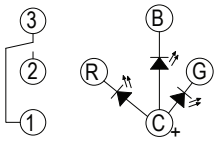
SPDT, Single LED



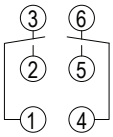
SPDT, Dual LED



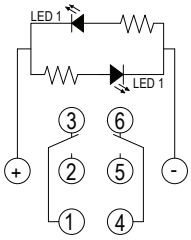
SPDT, RGB LED



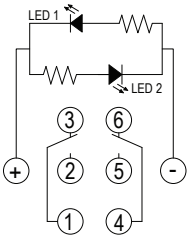
DPDT, Non-Illuminated



DPDT, Single LED

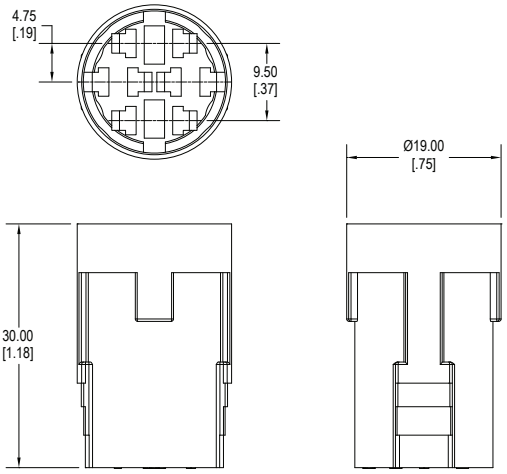


DPDT, Dual LED

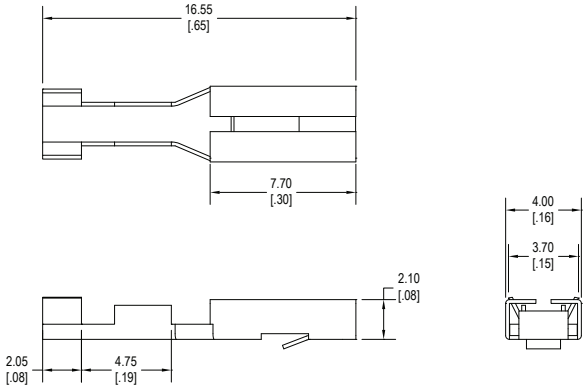


Optional Socket Housing

SS2002



SS Terminal
for use with wire size 18AWG to 24AWG



LED Characteristics

LED Ratings		Color						
		R	Y	G	B	O	W	Units
Reverse Voltage	V_R	5	5	5	5	5	5	V
Forward Curent (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						Cº
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