



Illuminated Anti-Vandal Pushbutton – 10mm

## Specifications

Electrical Ratings	2A @ 48VDC	Actuation Force	350 ± 100gF
Sealing Degree	IP40	Dielectric Strength	1500Vrms min contact to contact 1500Vrms min contact to LED
Electrical Life	50,000 cycles average	Insulation Resistance	> 100MΩ min @ 500VDC
Mechanical Life	100,000 cycles average	Operating Temperature	-40°C to +85°C
Contact Resistance	≤ 50mΩ initial	Storage Temperature	-40°C to +85°C

## Materials

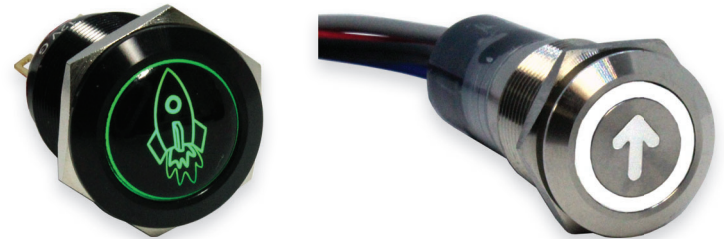
Actuator	Stainless Steel or Aluminum
LED Lens	Polycarbonate (PC)
Threaded Body	Stainless Steel or Aluminum
Terminal Support	Polybutylene Terephthalate (PBT)
Contacts	Silver Alloy
Terminals	Brass, Silver Plated
Hardware	One Hex Nut & One “O” Ring Supplied

## Custom Capabilities Contact Factory

### Cable Assemblies



### Shine Through Symbols



### Custom Laser Etching



### Custom Plastic Convex Actuators



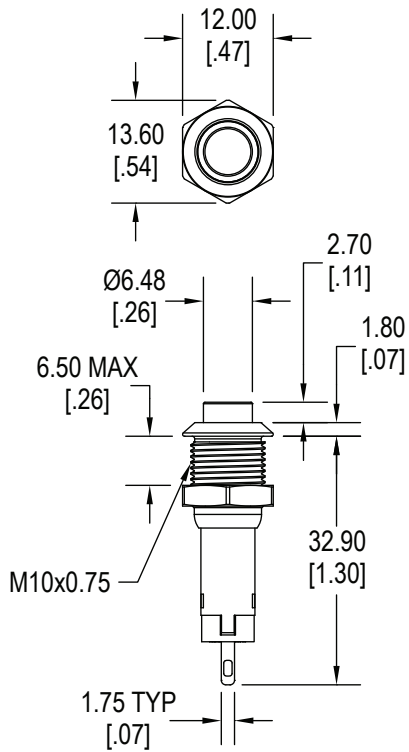
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## Ordering Information

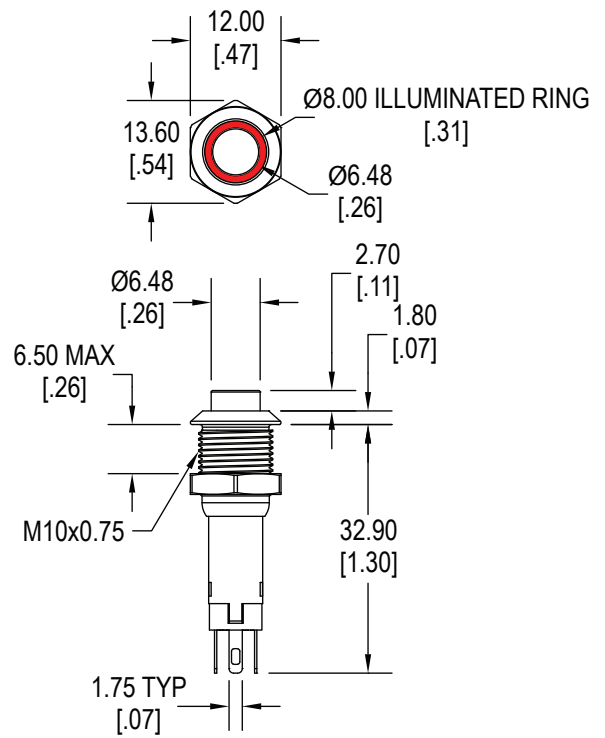
1. Series	GH	N	D	B	B	G																				
GH																										
2. Bezel Style	Blank = Standard Bezel																									
3. Switch Function	N = Momentary L = Latching																									
4. Actuator Style:	D = Raised actuator, non-illuminated E = Raised actuator, ring illuminated																									
5. 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																									
6. Terminal Options	B = Solder Lugs																									
7. LED Color	<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> </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
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8. LED Voltage	Blank = No LED N = No internal resistor in series with the LED																									

## Dimensions

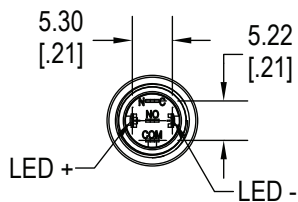
D Actuator



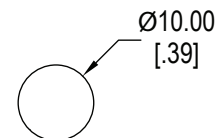
E Actuator



## Bottom View

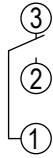


## Panel Cut-Out

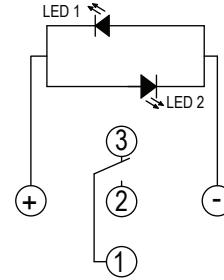


## Schematics

Non-Illuminated



Dual Color LED



## LED Characteristics

LED Ratings		Color							Units
		R	Y	G	B	O	W		
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	