

Neon / LED Illuminated Round Rocker

- Wide variety of applications from industrial to consumer products
- Single pole single throw with neon lamp and LED options
- Quick connect termination
- Full or dot illumination
- Numerous choices in illumination colors and markings

## Specifications

Switch Function	SPST	Contact Resistance	≤ 50mΩ initial
Electrical Ratings	UL 61058-1 15A @ 125VAC General Purpose 10A @ 250VAC General Purpose	Dielectric Strength	1500Vrms min
		Insulation Resistance	≥ 100MΩ min
		Operating Temperature	-20°C to 70°C
Electrical Life	10,000 cycles typical	Storage Temperature	-20°C to 70°C
		Sealing Degree	IP40

## Materials

Base	6/6 Nylon
Housing	6/6 Nylon
Actuator	6/6 Nylon or Polycarbonate
Actuator Lens	Polycarbonate (PC)
Contacts	Silver Alloy
Terminals	Brass, Silver Plated



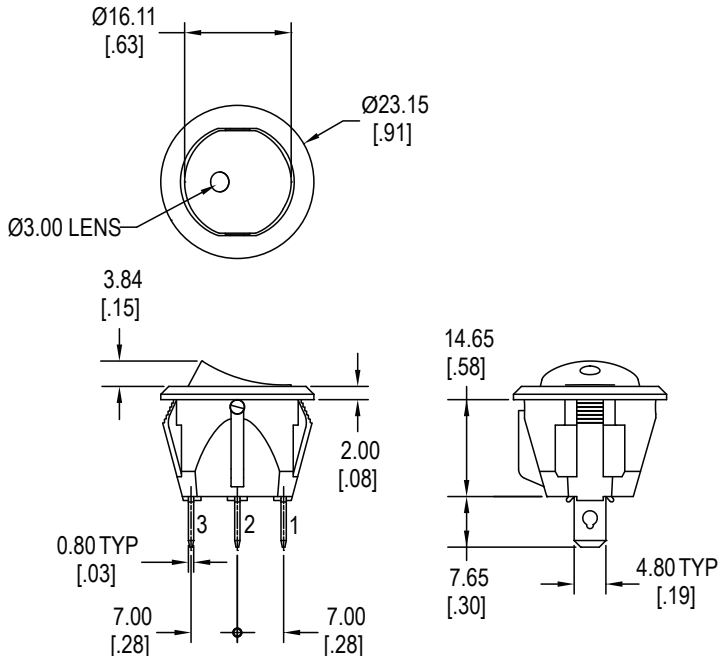
Neon / LED Illuminated Round Rocker

**Ordering Information**

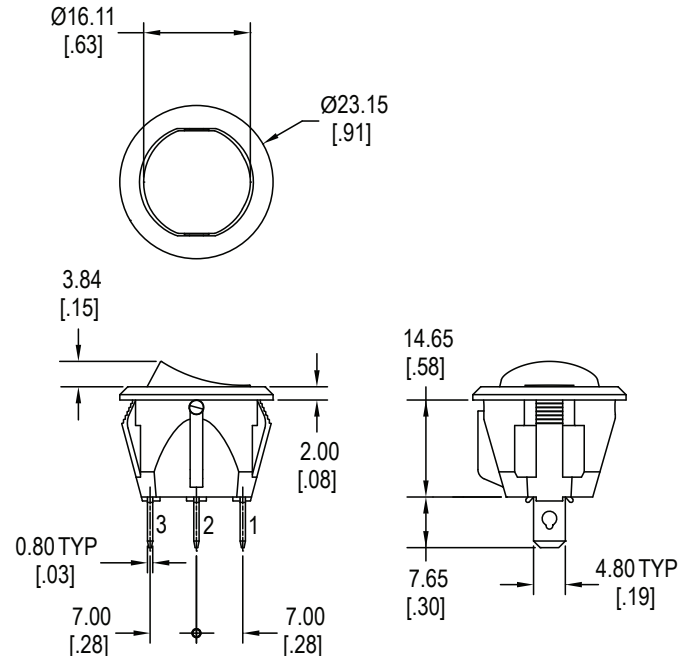
1. Series	RR3	1	1	2	23T	FB	C	N17
RR3								
2. Number of Poles 1 = Single Pole								
3. Switch Function 1 = OFF - ON								
4. Housing Color 1 = White 2 = Black 9 = Gray								
5a. Solid Actuator Color with Lens — <i>Requires lens color choice below</i> 1 = White      4 = Yellow      7 = Blue 2 = Black      5 = Green      8 = Purple 3 = Red      6 = Orange      9 = Gray  Lens Color 0T = Clear (Transparent)      5T = Green (Transparent) 3T = Red (Transparent)      7T = Blue (Transparent) 4T = Yellow (Transparent)								
5b. Transparent Actuator Color: 1T = White      5T = Green 3T = Red      6T = Orange 4T = Yellow      7T = Blue								
6. Actuator Marking — <i>Requires marking color choice below</i> A      E B      F C      G D      K  Actuator Marking Color Blank = No Marking B = Black W = White R = Red								
7. Terminal Option C = .187" Quick Connect / Solder Lug								
8a. Lamp Options* N1 = 125VAC Neon Lamp N2 = 250VAC Neon Lamp <i>*Requires lamp color choice below</i>  Neon Lamp Colors 0 = standard lamp 5 = Green 7 = Blue								
8b. LED Options** R12 = Red LED 12V      B12 = Blue LED 12V R24 = Red LED 24V      B24 = Blue LED 24V Y12 = Yellow LED 12V      W12 = White LED 12V Y24 = Yellow LED 24V      W24 = White LED 24V G12 = Green LED 12V G24 = Green LED 24V								
<i>**only available with fully transparent actuators (Section 5b)</i>								

## Dimensions

Solid Actuator with Lens



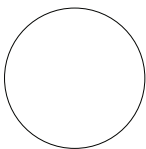
Transparent Actuator



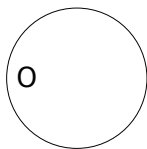
<b>Function</b>	<b>Position 1</b>	<b>Position 2</b>
<b>1</b>	<b>OFF</b>	<b>ON</b>
<b>Terminals</b>	<b>--</b>	<b>1 ~ 2</b>

## Actuator Marking Options

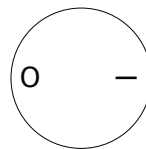
A Marking



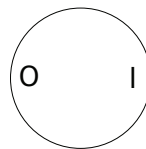
B Marking



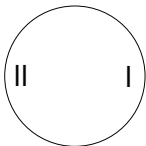
C Marking



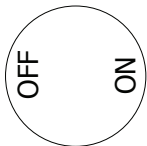
D Marking



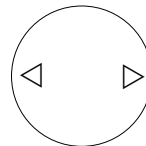
E Marking



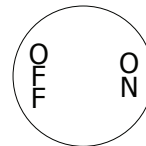
F Marking



G Marking

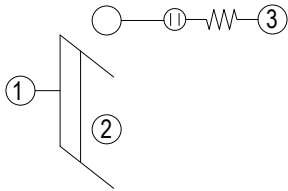


K Marking

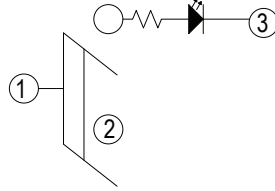


### Schematics

Neon



LED with Resistor

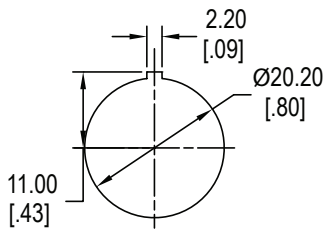


### LED Characteristics

LED Ratings		Color					Units
		R	Y	G	B	W	
Reverse Voltage	$V_R$	5	5	5	5	5	V
Forward Current (avg)	$I_F$	30	30	30	30	30	mA
Reverse Current $V_R = 5V$	$I_R$	10	10	10	10	10	$\mu A$
Power Dissipation	$P_T$	56	56	46	72	76	mW
Operating & Storage Temperature	$T_A$	-40 ~ +85					C°
Forward Voltage (min) $I_F = 20mA$	$V_F$	1.7	1.7	1.8	2.8	2.8	V
Forward Voltage (max) $I_F = 20mA$	$V_F$	2.4	2.4	2.4	3.4	3.4	V
Wavelength (min) $I_F = 20mA$	$\lambda_d$	620	585	565	460	n/a	nm
Wavelength (max) $I_F = 20mA$	$\lambda_d$	630	595	575	470	n/a	nm
Luminous Intensity, $I_F = 20mA$	LI	50	150	30	140	500	mcd
Viewing Angle	$\Theta$	50	50	70	120	70	deg

### Panel Cut Out

Panel cut out material thickness : 0.8mm ~ 3.0mm



### Terminal Options

C

