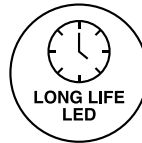
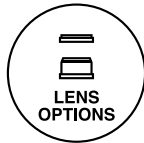
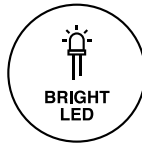




# P8 Series 0.500" (12.7mm) LED Panel Mount Indicator



Designed to enhance the LED contrast  
Available in tab terminals or wire leads



## Application

- Industrial
- Transportation
- Food Service
- People Mover
- Monitoring Equipment
- Commercial Kitchen
- Oil and Gas Industry
- Manufacturing
- Automation & Control

## Key features

- Snap-fit into 0.500" (12.7mm) panel hole
- Offered with wire leads or tab terminals, 2 different lens styles, 5 different lens colors and operating voltage range from 2 to 60 VDC and 120VAC
- Designed to enhance the LED contrast and features a front panel snap-in mounting that eases installation, and requires no additional hardware
- Available in two different lens styles: hi-hat or flat - all offered in five different lens colors with fresnel pattern lens that provides an excellent light focus and assures maximum light output
- Available with a variety of LEDs and provides low energy consumption, fast on/off cycling, low heat generation, and long operating life
- Available in six LED single colors: red, green, amber, orange, blue, and white
- Black housing offering which enhances the LED contrast
- "D" mounting hole prevents any rotation of the indicator when installed and connected during the assembly process
- Designed for quick installation in display panels and reduces overall cost due to less-frequent replacements
- Designed, manufactured and tested in accordance with the relevant UL standards
- Compliant with RoHS and REACH
- For customized options, please contact us

# Ordering Data

TO ORDER, FOLLOW THE EXAMPLE

Part Number: **P81-G24-CG**

Select one **BOLD** component from each numbered category in the tables below.

| 1 | Model      | 2 | LED       | 3 | Voltage   | 4 | Lens       |
|---|------------|---|-----------|---|-----------|---|------------|
|   | <b>P81</b> |   | <b>-G</b> |   | <b>24</b> |   | <b>-CG</b> |

1

| Model       | Characteristics            |
|-------------|----------------------------|
| <b>P81</b>  | Hi-Hat Lens/ Tab Terminals |
| <b>P81W</b> | Hi-Hat Lens/ Wire Leads    |
| <b>P84</b>  | Flat Lens/ Tab Terminals   |
| <b>P84W</b> | Flat Lens/ Wire Leads      |

3

| Voltage <sup>[3]</sup> |
|------------------------|
| <b>2</b>               |
| <b>5H</b>              |
| <b>6H</b>              |
| <b>12H</b>             |
| <b>15H</b>             |
| <b>24H</b>             |
| <b>28H</b>             |
| <b>48H</b>             |
| <b>60H</b>             |
| <b>120</b>             |

4

| Lens       |             |
|------------|-------------|
| <b>-CR</b> | Red         |
| <b>-CA</b> | Amber       |
| <b>-CG</b> | Green       |
| <b>-CB</b> | Blue        |
| <b>-CW</b> | Water Clear |

2

| High Intensity - Waterclear Encapsulation |       |                     |                   |               |                          |
|-------------------------------------------|-------|---------------------|-------------------|---------------|--------------------------|
| LED                                       | Color | $\lambda_{pk}$ (nm) | $I_v^{[1]}$ (mcd) | Viewing Angle | V/C Table <sup>[2]</sup> |
| <b>-R</b>                                 | RED   | 623                 | 900               | 75            | I                        |
| <b>-O</b>                                 | ORG   | 605                 | 360               | 75            | I                        |
| <b>-A</b>                                 | AMB   | 589                 | 540               | 75            | I                        |
| <b>-G</b>                                 | GRN   | 525                 | 1500              | 75            | II                       |
| <b>-B</b>                                 | BLU   | 460                 | 1350              | 75            | II                       |
| <b>-W</b>                                 | CWHT  |                     | 810               | 75            | II                       |

| Voltage/Current  |               | Voltage/Current  |               |
|------------------|---------------|------------------|---------------|
| Design $V_f/I_f$ | Max $V_f/I_f$ | Design $V_f/I_f$ | Max $V_f/I_f$ |
| V/C Table I      |               | V/C Table II     |               |
| 5V/22mA          | 5.5V/28mA     | 5V/15mA          | 5.5V/23mA     |
| 6V/21mA          | 7V/27mA       | 6V/15mA          | 7V/25mA       |
| 12V/20mA         | 14V/25mA      | 12V/15mA         | 14V/20mA      |
| 15V/24mA         | 16.5V/28mA    | 15V/15mA         | 16.5V/18mA    |
| 24V/17mA         | 26V/20mA      | 24V/15mA         | 26V/18mA      |
| 28V/16.5mA       | 30V/18mA      | 28V/15mA         | 30V/17mA      |
| 48V/15mA         | 50V/16mA      | 48V/9.5mA        | 50V/10mA      |
| 60V/9mA          | 65V/10mA      | 60V/7mA          | 65V/8mA       |
| 120VAC/3.5mA     | 130VAC/4mA    | 120VAC/3.5mA     | 130VAC/4mA    |

## Standard Wire Leads

6.0" total length (nominal)/.50" stripped (nominal), red anode/black cathode, 18 AWG stranded UL1015 insulation. Contact factory for other lengths, gauges and colors.

## All dimensions are in inches (mm)

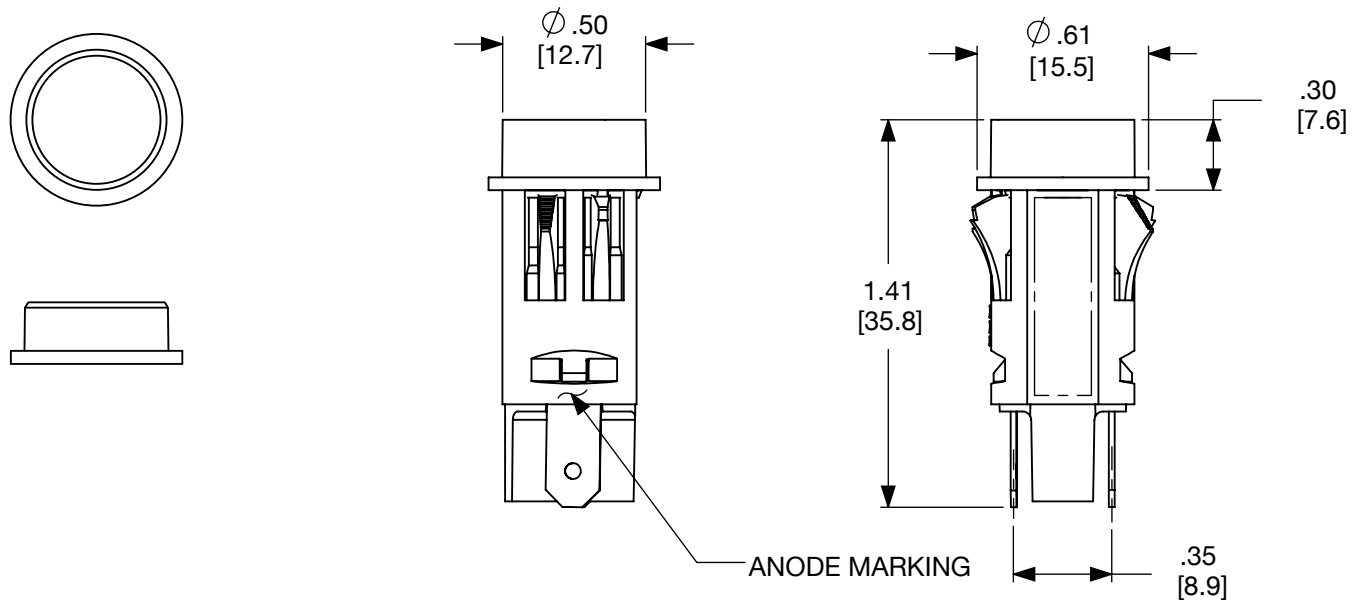
Tolerances: .xx"(.x)  $\pm$ .025"(.63) / .xxx"(.xx) $\pm$ .010"(.25). Specifications are subject to change without notice.

[1]  $I_v$  = typical luminous intensity@  $I_f$  = 20mA ( $T_a$ =25°C).  $I_v$  is measured without lenses.

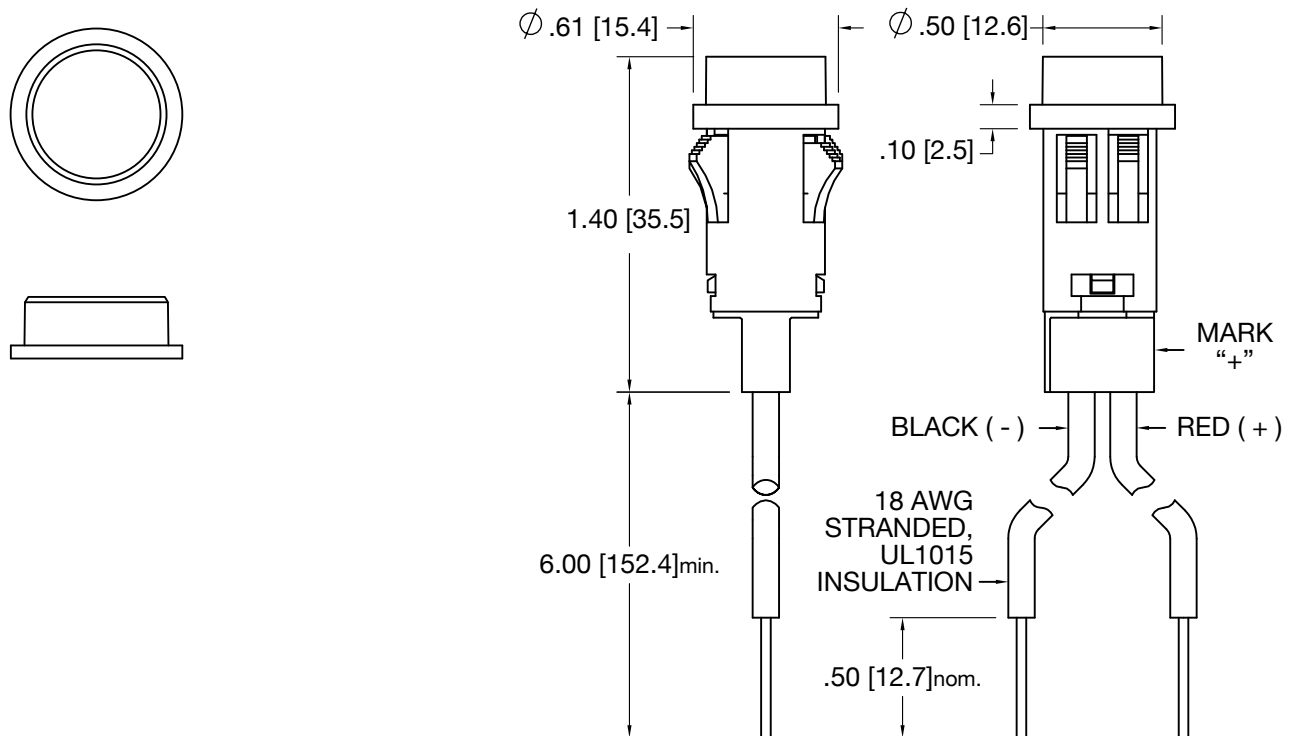
[2] See Voltage/Current table for design specifications.

[3]  $T_a$  = 25°C. Voltages 5 through 60 are VDC. For AC operation, insert D after Voltage (e.g 24D), D indicates built-in rectifier; not required for 5VDC or 120VAC. DC operation not available for 120V.

### P81 Hi-Hat Lens (Tab Terminals)

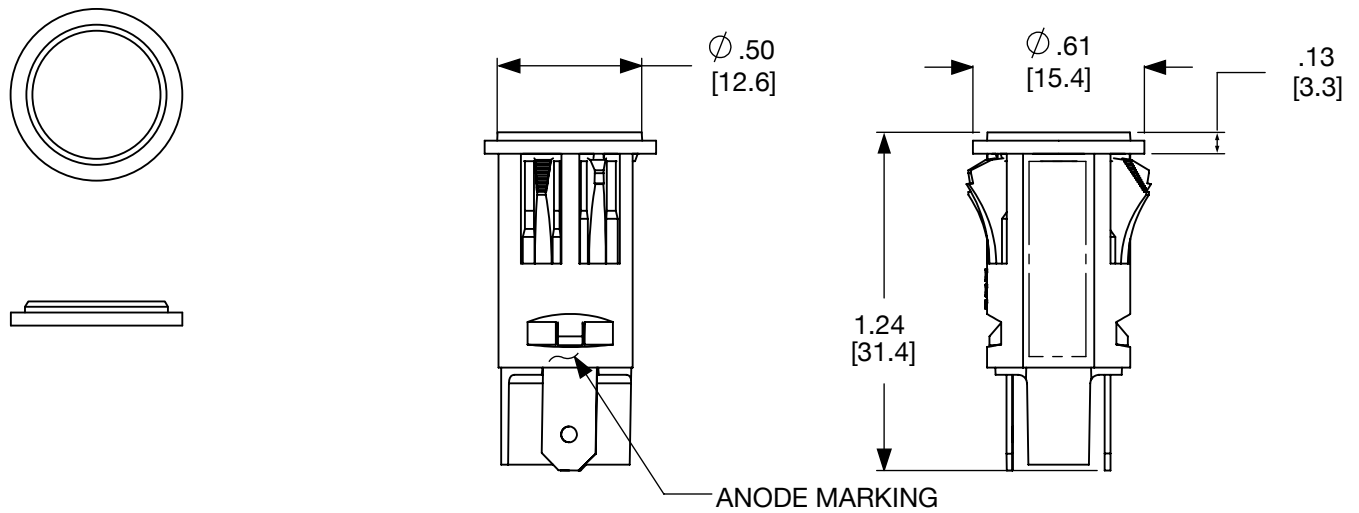


### P81W Hi-Hat Lens (Wire Leads)

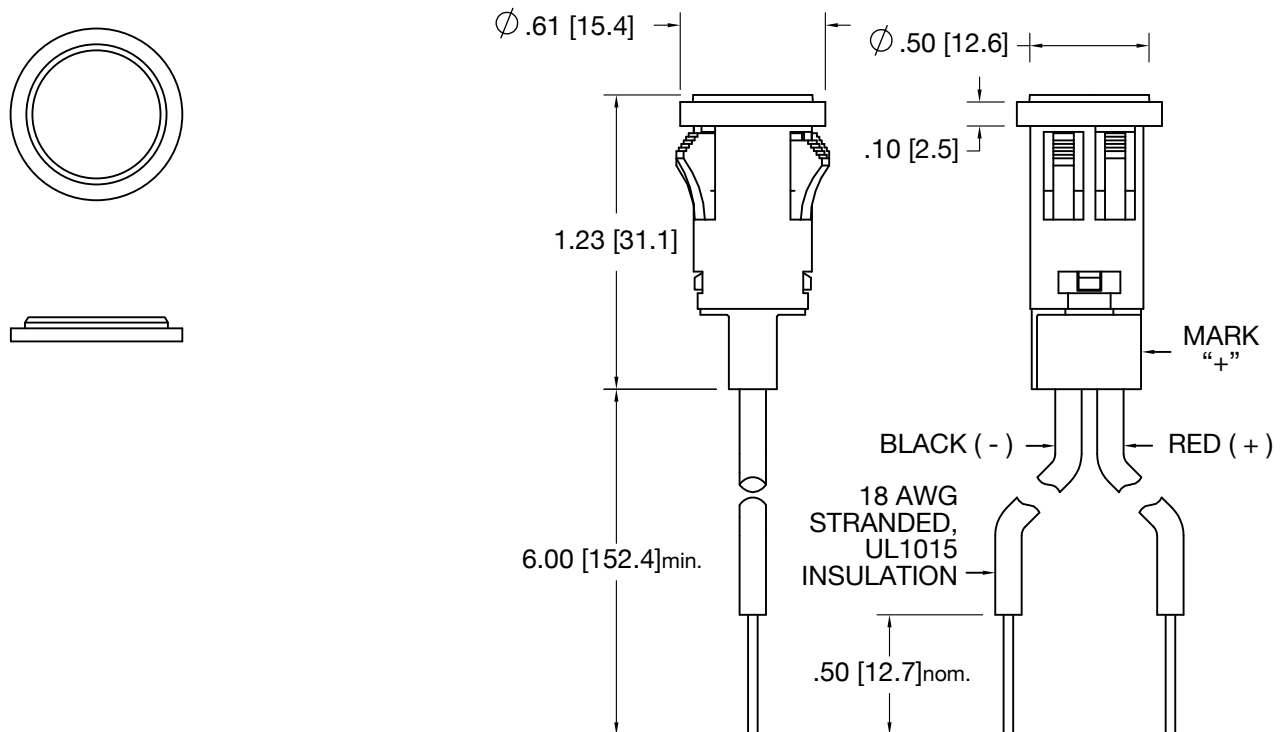


Dimensions in inches [mm]

### P84 Flat Lens (Tab Terminals)

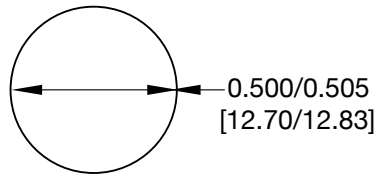


### P84 Flat Lens (Wire Leads)

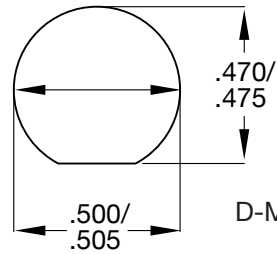


Dimensions in inches [mm]

## Mounting Hole



Standard Mounting Hole



D-Mounting Hole

Dimensions in inches [mm]

## Product Specifications

| Materials             |                                                             |
|-----------------------|-------------------------------------------------------------|
| Housing               | Black Nylon UL94 V-2                                        |
| Lens                  | Clear Polycarbonate<br>Fresnel Lexan                        |
| Bezel                 | Pattern Black Nylon                                         |
| Tab<br>(P81 and P84)  | Quick-connect tinned brass                                  |
| Wire<br>(P81W & P84W) | 18AWG Red anode/Black cathode<br>Stranded UL1015 insulation |

| Installation Specifications |                                         |
|-----------------------------|-----------------------------------------|
| Mounting Hole               | 0.500" to 0.505"<br>(12.70 to 12.83 mm) |
| D-Mounting Hole             | 0.470" to 0.475"<br>(11.94 to 12.07 mm) |
| Panel Thickness             | 0.020" to 0.100"<br>(0.51 to 2.54 mm)   |
| Tab Terminals               | 0.187" (4.75mm) terminals               |
| Wire Leads                  | 18AWG 6" length/0.5" stripped           |

| Temperature Specifications |                                    |
|----------------------------|------------------------------------|
| Operating Temperature      | -30°C to +60°C<br>-22°F to +185°F  |
| Storage Temperature        | -40°C to +100°C<br>-40°F to +212°F |

| Parameter                                                        | LED color |        |       |       |      |       |            | Unit |
|------------------------------------------------------------------|-----------|--------|-------|-------|------|-------|------------|------|
|                                                                  | Red       | Orange | Amber | Green | Blue | White | Warm-white |      |
| TYP. Luminous intensity @ I <sub>f</sub> =20mA                   | 780       | 360    | 600   | 780   | 168  | 700   | 600        | mcd  |
| Reverse breakdown @ I <sub>r</sub> =100uA @ I <sub>r</sub> =50uA | 5         | 5      | 5     | 5     | 5    | 5     | 5          | V    |
| Peak wavelength                                                  | 629       | 611    | 592   | 520   | 465  | -     | -          | nm   |
| Dominant wavelength                                              | 623       | 605    | 590   | 525   | 470  | -     | -          | nm   |
| TYP. Color temperature                                           | -         | -      | -     | -     | -    | 6500  | 3000       | K    |

## Compliances and Approvals

