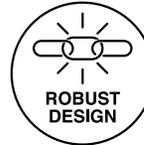# CD Series
.236″ (6.0mm) LED Indicator, IP67 sealed and Vandal Resistant

LED Indicator with high degree of protection, Prominent bezel style for increased visibility

LED COLOR OPTIONS — **MOUNTING HOLE Ø0.236"** — **25˚- 60˚ VIEWING ANGLE** — **DAYLIGHT VISIBILITY** — **IP67** — **ROBUST DESIGN**

Application

- Main Power Indication
- Machine Tools
- Civil Engineering Vehicles
- Maritime, Oil and Gas Industry
- Automation and Control
- Status indication
- Professional Electrical Appliance
- Instrumentation
- Aircraft/Military Instrumentation

Key Features

- For panel hole diameter: 0.236″ (6.0mm)
- Prominent bezel style LED indicator for increased visibility (3mm LED T-1)
- LED Indicator with high degree of protection, shock and vibration proof
- Maximum panel thickness: .09″ (2.29mm)
- Available in nickel-plated brass housing
- Available with ultra bright daylight viewing LEDs.
- Designed for the extreme, harsh and outdoor environment
- Sealed against moisture and dust (IP67)
- Optional resistor for 5V-28VDC and 120VAC
- Offered with 6″ 24 AWG wire leads or bi-pins
- Available in five single illumination colors: red, green, yellow, blue, and white
- Viewing angle: 25˚-60˚ (depending on model)
- Mounting hardware provided: lock washer, hex nut and gasket seal
- Thread size: M6*0.75mm
- Mounting torque: 20 ± 2 in-lb (2.26 ± 0.23 N-mm)
- Resistant to vandal, shock and vibration
- Life Expectancy: 50,000 hours average
- For custom cable length, voltage, connectors, finish or colors, contact VCC
- RoHS and REACH Compliant

Ordering Data

Series	Terminal	LED Specifications	Resistor Code	Sealing
CD	0	2700	9908	I

CD	Nickel finish	**0**	Bi-Pins	See Chart for LED Part Number	See Chart for Resistor Value Code	**I**	IP67
***BD**	Black finish	**1**	Leads				

*Contact VCC for black matte finish

Example:
CD-0-2700-9908-I
CD Nickel Finish, Bi-pins, Ultra Bright Green LED 12 Volt, IP67

LED Specification Chart Electrical and Optical Characteristics (TA = 25°C)

LED Part Numbers	Color	Luminous Intensity (mcd) Typ. @ IF (mA)		VF Typ. @ IF (mA)		Viewing Angle ($2\theta^{1/2}$)	Peak Wavelength (nm)

ULTRA BRIGHT - DAYLIGHT READABLE

LED Part Numbers	Color	Luminous Intensity	@ IF	VF Typ.	@ IF	Viewing Angle	Peak Wavelength
2702	Red	299.0	20	1.85	20	60°	660
2700	Green	199.0	20	2.1	20	60°	574
2701	Yellow	219.0	20	2.0	20	60°	590
8711	Blue	2300.0	20	3.5	20	25°	470
8712	White	250.0	20	3.6	20	30°	N/A

Resistor Chart Operating Specification

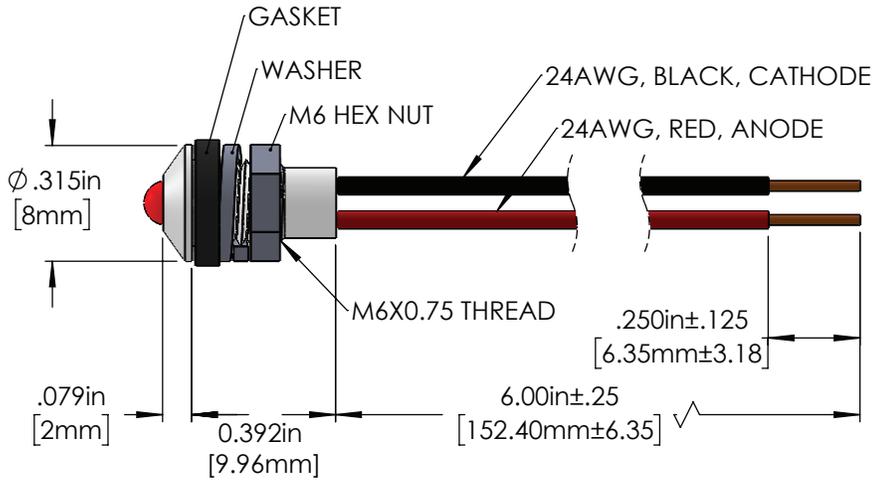| Resistor Value Code	Voltage	Current (mA)	Resistor Value (Ohms) Green, Yellow Red, Bicolor LED	Resistor Value (Ohms) Blue, White LED
0000	2	20	None	Not Available
9907	5	20	150	
9922	5	20		65
9908	12	20	511	
9909	12	20		357
9910	24	20	1100	
9911	24	20		953
9923	28	20	1500	
9933	28	20		1300
9920	120VAC	8	6490	Contact VCC

Notes
Indicator also available with a long-body (longer threads) which fit thicker panels up to .256'' (6.5mm) - check out the CDLB series.
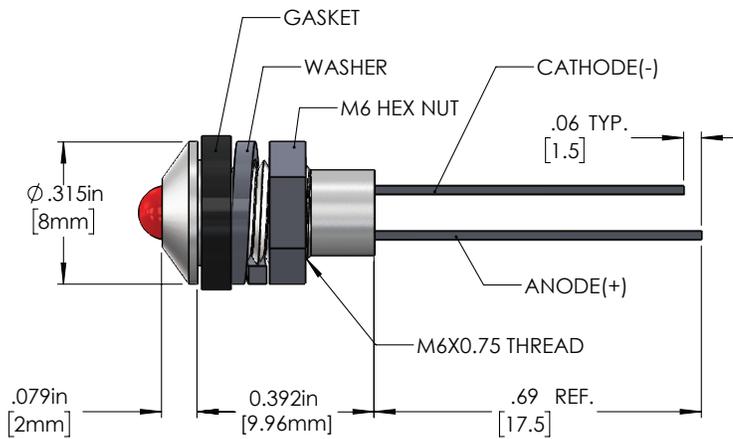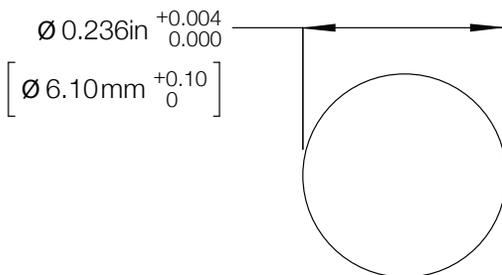
Product Dimensions

CD Series Wire Leads

GASKET
WASHER
M6 HEX NUT
24AWG, BLACK, CATHODE
24AWG, RED, ANODE

Ø .315in
[8mm]

M6X0.75 THREAD

.250in±.125
[6.35mm±3.18]

.079in
[2mm]

0.392in
[9.96mm]

6.00in±.25
[152.40mm±6.35]

CD Series Bi-Pins

GASKET
WASHER
M6 HEX NUT
CATHODE(-)

.06 TYP.
[1.5]

Ø .315in
[8mm]

ANODE(+)

M6X0.75 THREAD

.079in
[2mm]

0.392in
[9.96mm]

.69 REF.
[17.5]

Recommended Mounting Hole

Ø 0.236in $^{+0.004}_{0.000}$

$\left[\varnothing\, 6.10\text{mm}\, ^{+0.10}_{0}\right]$

Notes:
1. All dimensions are in inches [millimeters]
2. Tolerance is ±[0.25] 0.01 unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

Product Specifications

Materials

Housing	Nickel-plated brass housing
Wire Leads	24 awg, 6″ length, red anode, black cathode
Washer	Stainless steel
Gasket (for W and I option)	70 BUNA
Hex Nut	Brass Alloy 360 - 1/2 Hard

Electrical Specifications

Operating Voltage	Refer to table
Operating Current	Refer to table

Installation Specifications

Mounting Hole	0.236″ +.004/-.000″ (6.0mm +0.10/-0.00mm)
Panel Thickness (max.)	0.09″ (2.29mm)
Wire Leads	24AWG UL1061 6.0″ (152.4mm) red (anode) and black (cathode), leads stripped .250″ (6.35mm)
Wire Leads AC Version	Black (hot) White (neutral) with external diode on black wire
Mounting Torque	20 ± 2in-lb (2.26 ± 0.23 N-mm)

Temperature Specifications

Operating Temperature	Red, Green and Yellow -40°C to +85°C Blue and White -40°C to +80°C
Storage Temperature	Red, Green and Yellow -40°C to +85°C Blue and White -40°C to +100°C

Custom Connector

VCC can add crimped connections to your panel mount indicators (PMIs) and combine two final steps into one seamless transaction. We offer a range of connector options, including:

2 Position Connector	Wire-to-Wire Crimp Housing	Crimp Housing Connector	Micro-Fit Connector - Dual Row	Micro Rectangular Power Connector

Compliances and Approvals

REACH COMPLIANCE

RoHS COMPLIANT

IP67