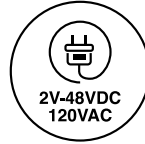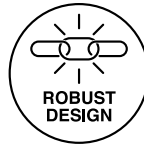# CCLB Series
0.319" (8.10mm) Prominent LED Indicator, Long Body and IP67 sealed

Long-body LED metal indicator which fit thick panels, especially designed for extreme, harsh and outdoor environments.

LED COLOR OPTIONS · LONG BODY · MOUNTING HOLE Ø0.319" · 20°-30° VIEWING ANGLE · DAYLIGHT VISIBILITY · IP67 · ROBUST DESIGN · 2V-48VDC 120VAC
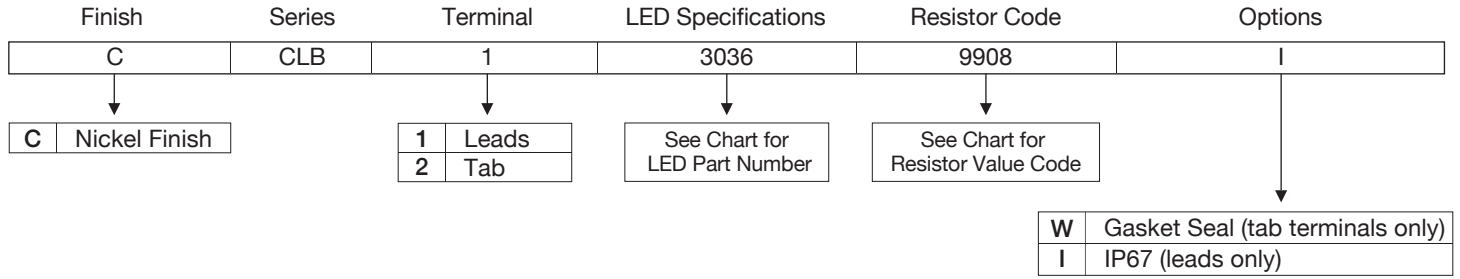
Applications

- Industrial
- Transportation
- People Movers
- Maritime, Oil and Gas Industry
- Automation and Control
- Slot, Gaming and Vending Machines
- Safety and Emergency
- Pilot Instrumentation
- Aircraft/Military Instrumentation

Key Features

- For panel hole diameter: 0.319" (8.10mm)
- Long-body indicator (longer threads) which fit thicker panels up to 0.354 (9mm)
- Available in nickel-plated brass housing
- Available with ultra bright and super ultra bright (daylight viewing) LEDs
- Designed for extreme, harsh and outdoor environments
- Offered with front and backside sealing for moisture (water) and dust resistance
- Available in operating voltage of 2V to 48V; 120VAC
- Optional resistor for 5V-48VDC
- Offered with 6" 24 AWG wire leads
- Solder tab terminal for fast, easy installation
- Available in seven single colors: red, yellow, green, orange, amber, blue and white
- Viewing angle: 20-30 (dependent on model)
- Mounting hardware provided: lock washer and hex nut and weather gasket (for W and I option)
- Thread size: M8*0.75mm (Distance across flats is 0.394" ± 0.005")
- Maximum mounting torque: 20 ± 2 in-lb (2.26 ± 0.23 N-mm)
- Resistant to vandal, shock and vibration
- For black matte finish, custom cable length, connectors or colors, contact VCC
- RoHS and REACH Compliant

Ordering Data

Finish	Series	Terminal	LED Specifications	Resistor Code	Options
C	CLB	1	3036	9908	I

C	Nickel Finish

1	Leads
2	Tab

See Chart for LED Part Number

See Chart for Resistor Value Code

W	Gasket Seal (tab terminals only)
I	IP67 (leads only)

Example:
CCLB-1-3036-9908-I
CCLB Nickel Finish, Wire Leads, Super Ultra Bright Red 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 (2θ$^{1/2}$)	Peak Wavelength (nm)

ULTRA BRIGHT - DAYLIGHT READABLE (Wire leads option only)

LED Part Numbers	Color	Luminous Intensity	IF	VF	IF	Viewing Angle	Peak Wavelength
3056	Red	400.0	20	1.9	20	30°	660
3055	Yellow	400.0	20	2.0	20	30°	590
3054	Green	300.0	20	3.2	20	30°	520
3060	Orange	600.0	20	2.1	20	30°	610

SUPER ULTRA BRIGHT

LED Part Numbers	Color	Luminous Intensity	IF	VF	IF	Viewing Angle	Peak Wavelength
3036	Red	2800.0	20	1.85	20	20°	660
3046	Red	900.0	20	1.9	20	30°	626
3047	Green	5490.0	20	3.2	20	20°	520
3048	Amber	1300.0	20	2.02	20	30°	592

BLUE

LED Part Numbers	Color	Luminous Intensity	IF	VF	IF	Viewing Angle	Peak Wavelength
3057	Blue	640.0	20	3.3	20	20°	468

WHITE

LED Part Numbers	Color	Luminous Intensity	IF	VF	IF	Viewing Angle	Peak Wavelength
3061	White	27000.0	20	3.2	20	15°	N/A

Resistor Chart Operating Specification

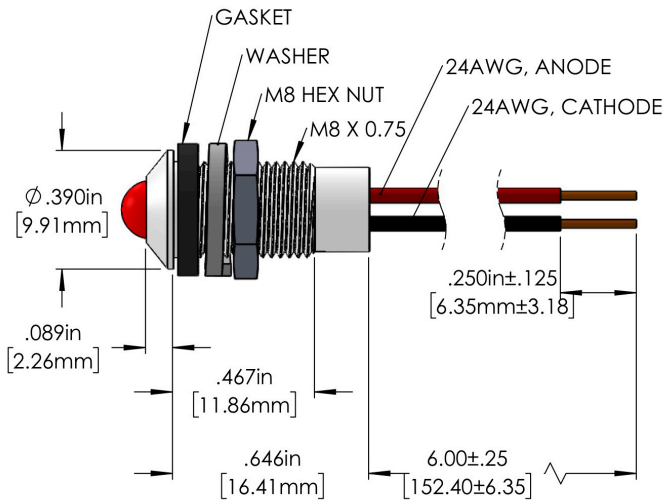| Resistor Value Code	Voltage	Current (mA)	Resistor Value (Ohms) Green,Yellow Red, Bicolor LED	Resistor Value (Ohms) Blue, White LED
0000	2	20	None	Not Available
9907	5	20	150	
9922	5	20		65
9908	12	20	511	
9909	12	20		357
9910	24	20	1100	
9911	24	20		953
9923	28	20	1500	
9933	28	20		1300
9912	48	9	4870	
9913	48	9		4530
9920	120VAC	8	6490	Contact VCC

***120VAC** - Wire leads option only

Product Dimensions

CCLB Series Wire Leads

GASKET
WASHER
M8 HEX NUT
M8 X 0.75
24AWG, ANODE
24AWG, CATHODE

∅.390in
[9.91mm]

.089in
[2.26mm]

.467in
[11.86mm]

.646in
[16.41mm]

.250in±.125
[6.35mm±3.18]

6.00±.25
[152.40±6.35]

Recommended Mounting Hole

∅ 0.319in $^{+0.004}_{0.000}$

[∅ 8.10mm $^{+0.10}_{0}$]
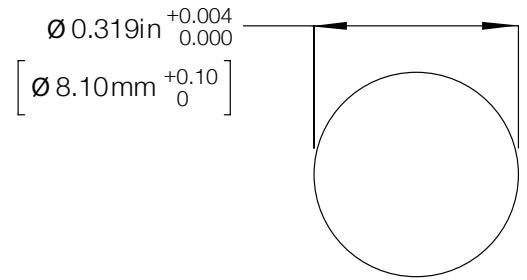
CCLB Series Tab Terminal

GASKET
WASHER
M8 HEX NUT
M8X0.75
AMP TAB 2.8X0.5 GOLD COLOR (ANODE)
AMP TAB 2.8X0.5 SILVER COLOR (CATHODE)

∅.390in
[9.91mm]

.089in
[2.26mm]

.467in
[11.86mm]

.276in
[7mm]

.315in
[8mm]

.098in
[2.50mm]

1.000in
[25.41mm]
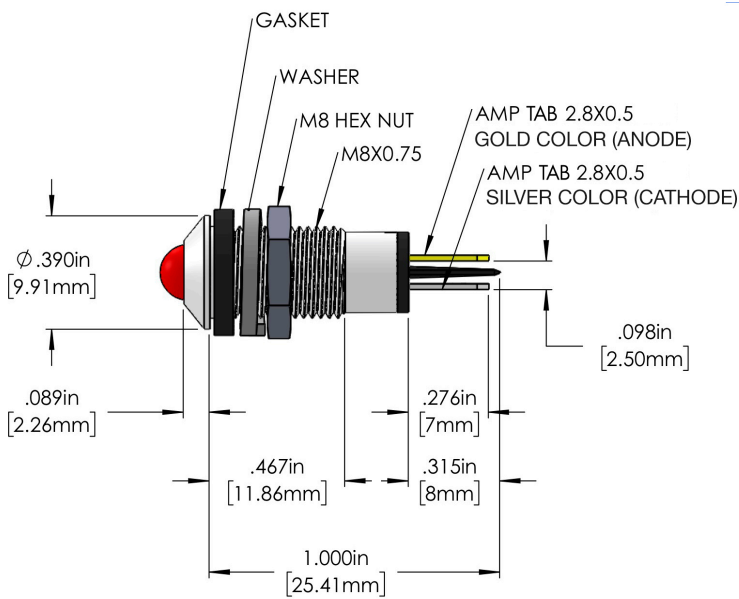
Notes:
1. All dimensions are in inches [millimeters]
2. Tolerance is ±[0.25] 0.01 unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

Product Dimensions

| Materials	
Housing	Nickel-plated brass housing
Wire Leads	24 awg, 6" length, red anode, black cathode
Washer	Stainless steel
Gasket	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	0.319" +.004/-.000" (8.10 mm +0.10/-0.00 mm)
Panel Thickness (max.)	0.354" (9.0mm)
Wire Leads	24AWG UL1061 6.0" (152.4mm) red (anode) and black (cathode), leads stripped .250" (6.35mm)
Tab Terminals	2.8 x 5.00mm "Gold color" tab = anode "Silver color" tab = cathode
Mounting Torque	20 ± 2in-lb (2.26 ± 0.23 N-mm)

Temperature Specifications	
Operating Temperature	-40°C to +85°C -40°F to +185°F
Storage Temperature	-40°C to +85°C -40°F to +185°F

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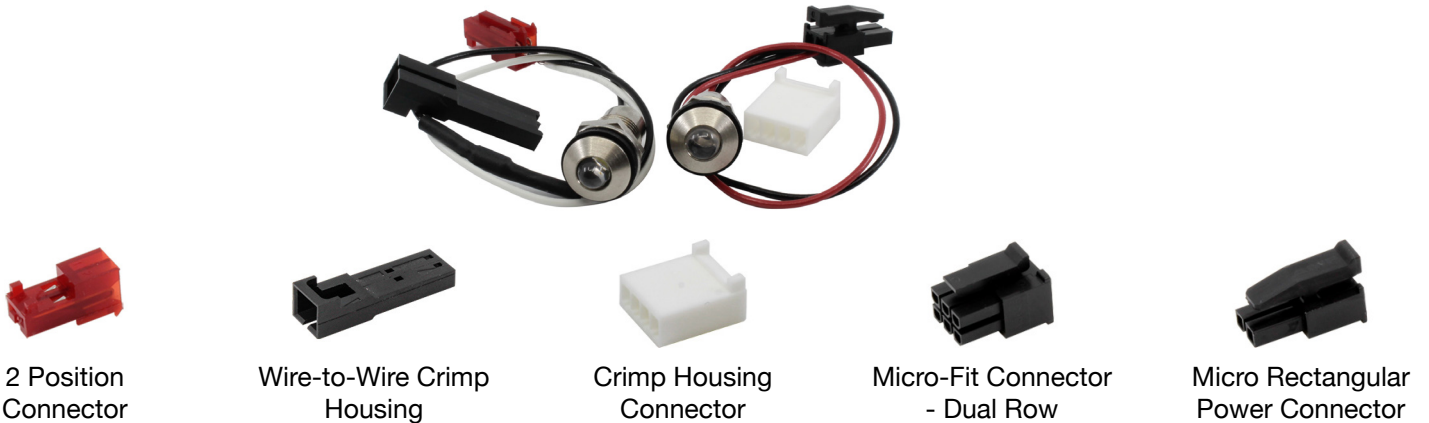
| 2 Position Connector | Wire-to-Wire Crimp Housing | Crimp Housing Connector | Micro-Fit Connector - Dual Row | Micro Rectangular Power Connector |

Compliances and Approvals

REACH COMPLIANCE RoHS COMPLIANT IP67