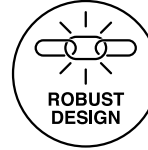# CS Series
Ø.230″ (5.84mm) Watertight LED indicator, IP66 & Vandal resistant

Robust LED metal Indicator with recessed bezel, especially suitable for high vibration environments and is ideal for heavy-duty applications

- LED COLOR OPTIONS
- MOUNTING HOLE Ø0.230"
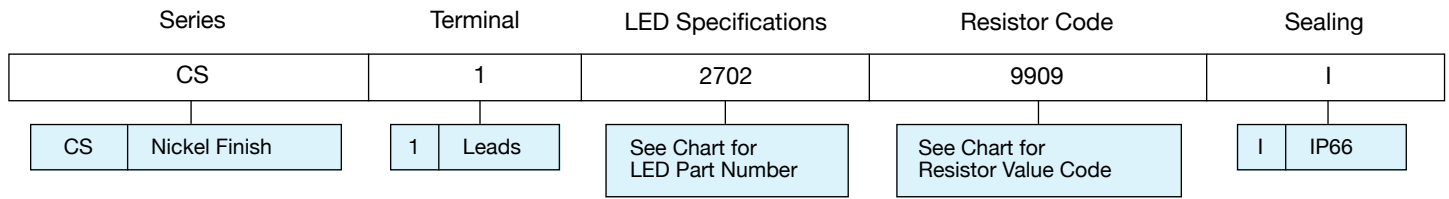- 25°- 60° VIEWING ANGLE
- IP66
- ROBUST DESIGN

Applications

- Main and Remote Power
- Status Maintenance
- Maintenance and Warning Indication
- Signaling
- Remote Power Indication
- Safety and Emergency
- Main Power Indication
- Aircraft/Military Instrumentation
- Maritime, Oil and Gas Industry

Key Features

- Mounting hole diameter: .230″ ± .002″ (5.84 ± 0.05 mm)
- Maximum panel thickness: .070″ (1.78mm) with gasket
- Sealed against moisture and dust - IP66
- Designed for extreme, harsh and outdoor environments
- Custom assemblies for 5V-60VAC and 120VAC
- Optional internal resistor for 5V-60VDC – resistor on lead for 3 leaded bicolor LED
- Offered with 6″ 24 AWG UL1061 wire leads, red (anode) and black(cathode)
- Mil Spec MIL-W22759/33 wire
- Robust nickel-plated metal housing
- Available in five single colors: red, yellow, green, blue, and white
- Viewing angle: 25°-60° (dependent on model)
- Mounting hardware provided: hex nut, washer, and gasket
- Thread size: M6 X 0.75mm
- Mounting torque: 20 ± 2 in-lb (2.26 ± 0.23 N-mm)
- For black matte finish, custom cable length, connectors or colors, contact VCC
- RoHS and REACH Compliant

Ordering Data

Series	Terminal	LED Specifications	Resistor Code	Sealing
CS	1	2702	9909	I

CS	Nickel Finish	1	Leads	See Chart for LED Part Number		See Chart for Resistor Value Code		I	IP66

Example:
CS-1-2702-9909-I
CS Nickel Finish, Wire Leads, Red LED 12 Volt, IP66

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)

SINGLE COLOR

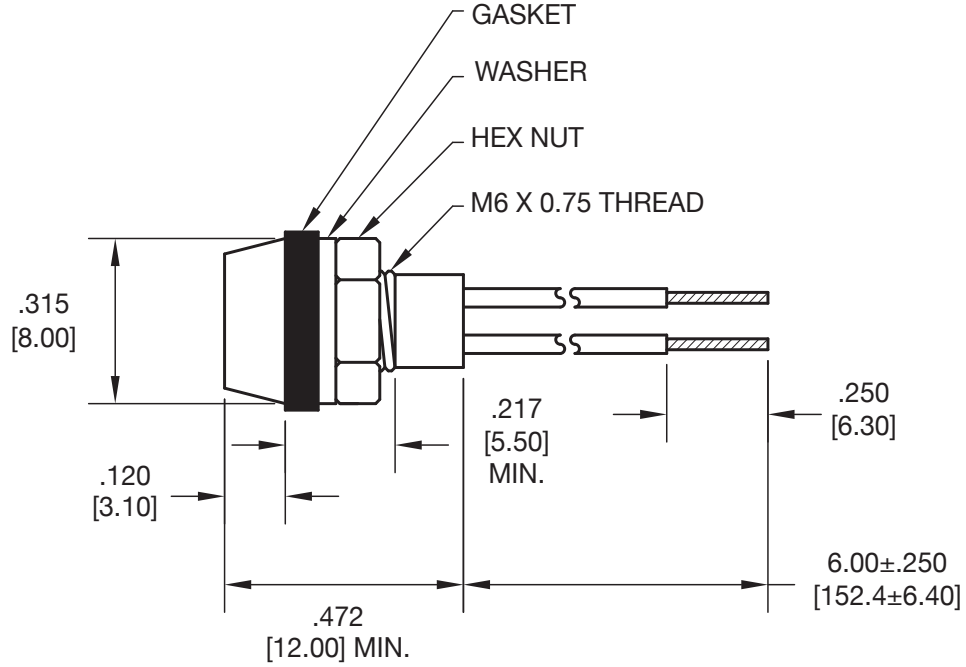| LED Part Numbers	Color	Luminous Intensity (mcd) Typ. @ IF (mA)		VF Typ. @ IF (mA)		Viewing Angle ($2\theta^{1/2}$)	Peak Wavelength (nm)
2702	Red	299.0	20	1.85	20	60°	660
2700	Green	199.0	20	2.1	20	60°	574
2701	Yellow	219.0	20	2.0	20	60°	590
8711	Blue	2300.0	20	3.5	20	25°	470
8712	White	250.0	20	3.6	20	30°	N/A

Resistor Chart Operating Specification

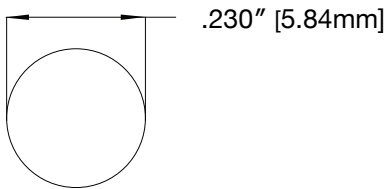| Resistor Value Code	Voltage	Current (mA)	Resistor Value (Ohms) Green, Yellow Red, Bicolor LED	Resistor Value (Ohms) Blue, White LED
0000	2	20	None	Not Available
9907	5	20	150	
9922	5	20		65
9908	12	20	511	
9909	12	20		357
9910	24	20	1100	
9911	24	20		953
9912	48	9	4870	
9913	48	9		4350
9914	60	7	8250	
9915	60	7		7500
9920	120VAC	8	6490	Contact VCC

Product Dimensions

CS Series

GASKET

WASHER

HEX NUT

M6 X 0.75 THREAD

.315 [8.00]

.120 [3.10]

.217 [5.50] MIN.

.250 [6.30]

.472 [12.00] MIN.

6.00±.250 [152.4±6.40]

Recommended Mounting Hole

.230″ [5.84mm]

Notes:

1. All dimensions are in inches [millimeters]
2. Tolerance is ± 0.005 [0.12] unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
4. *AC version has an external diode with heat shrink tube on black wire except with bipolar leds

Product Specifications

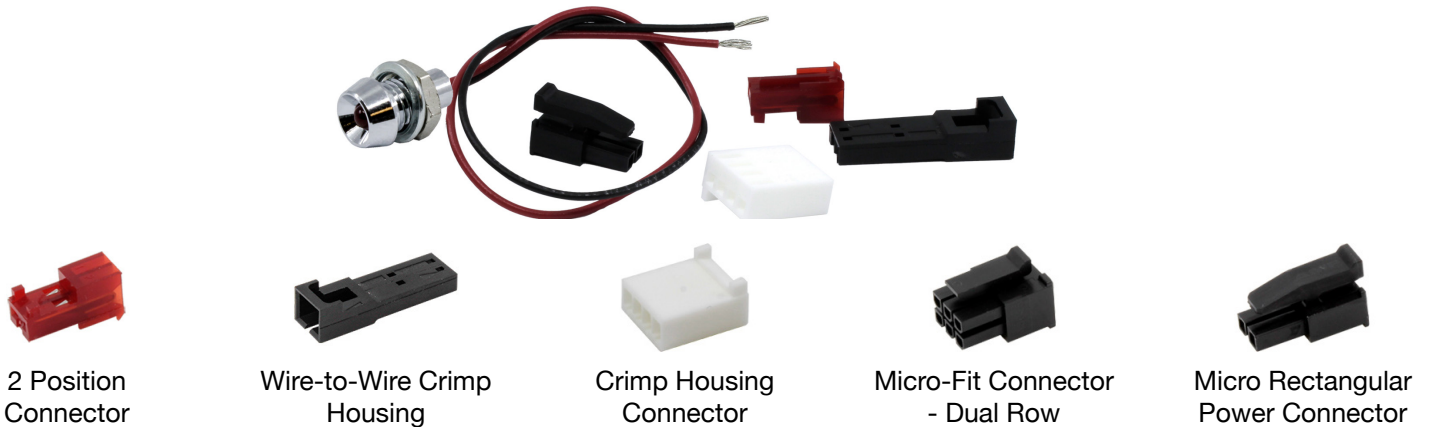| Materials	
Housing	Nickel-plated metal housing
Wire Leads	24 AWG, 6″ length, red anode, black cathode
Washer	Stainless steel
Gasket (for I option)	Buna
Hex Nut	Brass Alloy 360 - 1/2 Hard

Electrical Specifications	
Operating Voltage	Refer to table
Operating Current	Refer to table

Installation Specifications	
Mounting Hole	.230″ ± .002″ (5.84 ± 0.05 mm)
Panel Thickness (max.)	.070″ (1.78 mm)
Wire Leads	24 AWG 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 ± 2 in-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