# Contents

## Introduction



## Lamps





**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

**Options**



**Technical Information**



**Additional information**



**Key**

Ø = Mounting hole diameter



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## LED Panel Indication

Oxley Light Emitting Diode (LED) Indicator lamps combine the latest in LED technology with in-house mechanical and optical knowledge to provide a wide range of Panel Mounting LED Indicator lamps for both benign and hazardous environments.

With the exciting advances in LED Technology and the continuation of existing Panel Mounting Lamp ranges many options are available including wide angle and focussed viewing; Sunlight readability and Night Vision Compatibility (NVG).

With our knowledge and experience within the field of opto-electronics we can address high reliability applications, where LEDs are electrically screened ensuring typical Mean Time Before Failure (MTBF) ranging from 90,000 hours to in excess of 200,000 hours.

Oxley have a variety of LED Indicator lamps available which have various sealing specifications ranging from IP64 to IP 68, with low current models also available. All variants have optional flame retardant flying lead terminations which can be colour coded to suit customers special requirements.

Traditionally designed for the most demanding of applications both military and non-military, many devices are approved by the UK MoD and US DoD and hold allocated NATO Stock Numbers.

With monitoring hole diameters ranging from 5 mm to 10 mm and with many other options and features available we can provide suitable LED Panel Indication for all applications where needed.

## LED Bulb Replacement

With the increased mcd ratings of LEDs, Oxley have a wide range of filament replacement LEDs.

This particular product range has been available for many years but with recent product developments we can now offer higher levels of operating performances, versatility and reliability.

Both uni-polar and bi-polar options are available which operate from either AC or DC voltages. This product range is ideal for fit-and-forget use in military and professional illuminated pushbutton switches and ammunicators.

Available in either T1, T1¾, Telephone Slide base, BA7, BA9 etc. and with operating voltage ranges from 5 V to 240 V dc/ac dependant on the product type.

Options include a choice of six high intensity colours (red, orange, yellow, green, blue and white).



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Selection Chart

| | | | | | | LENS CHARACTERISTICS | | | | | | | | | | TERMINALS | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **GENERIC LAMP TYPE** | **Mounting Hole Dia. (mm)** | **Sealing Characteristics** | **Integral Resistor** | **EMI Shielding** | **Plano-Convex** | **Fresnel** | **Domed** | **Clear (Flat)** | **Diffused (Flat)** | **Sunlight Readable** | **Anti-Reflection Coating** | **Night Vision Compatible** | **Caption** | **Lens Material** | **LED Terminations** | **Spills** | **Tags** | **Flying Leads** | **Flying Leads with Connectors** | **LED** | **Neon** | **DESC 85122 Approved** | **DESC 87019 Approved XIR Secure Lighting** | **Body Material** | **Black Anodised Finish** | **Chromate Finish** | **Black Chrome** | **Nickel Plated** | **Page Number** | | | | |
| OXL/MIL50/- | 5.0 | 7 | O | X | | | | X | X | X | O | X | | G | X | O | O | O | O | X | | | | A | O | O | | | 14 | | | |
| SSI/5/ | 5.0 | 7 | O | | | | | | | | | | | E | O | X | X | O | O | X | | | | A | X | O | | | 13 | | | |
| PS/LH/8/- | 8.0 | 8 | | X | X | | O | O | O | X | O | X | O | G | X | | | O | O | X | | X | | A | O | O | | | 23 | | | |
| PS/LH/8/RAPP/- | 8.0 | 8 | | X | X | | O | O | O | X | O | X | O | G | X | | | O | O | X | | X | | A | O | O | | | 27 | | | |
| PS/LH/8/RAF/- | 8.0 | 8 | | X | X | | O | O | O | X | O | X | O | G | X | | | O | O | X | | X | | A | O | O | | | 26 | | | |
| STR/LH/8/- | 8.0 | 8 | X | X | X | | O | O | O | X | O | X | O | G | | X | X | O | O | X | | X | X | A | O | O | | | 29 | | | |
| STR/LH/8/RAF/- | 8.0 | 8 | X | X | X | | O | O | O | X | O | X | O | G | | X | X | O | O | X | | X | X | A | O | O | | | 36 | | | |
| STR/LH/8/RAPP/- | 8.0 | 8 | X | X | X | | O | O | O | X | O | X | O | G | | X | X | O | O | X | | X | X | A | O | O | | | 34 | | | |
| STR/LH23/10/- | 10.0 | 8 | X | O | O | | X | O | O | O | O | O | O | G | X | X | O | O | O | X | | | | A | X | O | | | 53 | | | |
| STR/5/LH/8/- | 8.0 | 8 | O | O | | | | X | X | X | O | X | | G | X | | O | O | O | X | | | | A | X | | | | 45 | | | |
| STR/5/LH/8/RAF/- | 8.0 | 8 | O | O | | | | X | X | X | O | X | | G | X | | O | O | O | X | | | | A | X | | | | 46 | | | |
| STR/5/LH/8/RAPP/- | 8.0 | 8 | O | O | | | | X | X | X | O | X | | G | X | | O | O | O | X | | | | A | X | | | | 47 | | | |
| STR/501/LH/8/- | 8.0 | 8 | X | O | | | | X | X | X | O | X | | G | X | | O | O | O | X | | | | A | X | | | | 48 | | | |
| STR501/LH/8/RAF/- | 8.0 | 8 | X | O | | | | X | X | X | O | X | | G | X | | O | O | O | X | | | | A | X | | | | 48 | | | |
| STR501/LH/8/RAPP/- | 8.0 | 8 | X | O | | | | X | X | X | O | X | | G | X | | O | O | O | X | | | | A | X | | | | 49 | | | |
| 2STR/LH23/10/- | 10.0 | 8 | | O | O | | O | O | X | O | O | O | | G | | X | O | O | O | X | | | | A | X | | | | 56 | | | |
| 3STR/LH23/10/- | 10.0 | 8 | | O | O | | O | O | X | O | O | O | | G | | X | O | O | O | X | | | | A | X | | | | 59 | | | |
| STR/NLH/- | 8.0 | 8 | X | X | X | | O | | O | | | | O | G | | | X | X | O | | X | | | A | O | O | | | 42 | | | |
| OXL/CLH/63/- | 6.35 | 6 | X | | | X | | | | | | | | P | X | | O | O | O | X | | | | A | X | | | | 19 | | | |
| OXL/CLH/63/P/- | 6.35 | 6 | X | | | X | | | | | | | | P | X | | O | O | O | X | | | | A | X | | | | 21 | | | |
| OXL/CLH/80/- | 8.0 | 7 | X | | | | | | | | | | | | X | | O | O | O | X | | | | A/B | O | O | O | X | 50 | | | |
| OXL/CLH/100/- | 10.0 | 6 | X | | | X | | | | | | | | P | X | | O | O | O | X | | | | B | | O | X | O | 61 | | | |
| OXL/CLH/100/P/- | 10.0 | 6 | X | | | X | | | | | | | | P | X | | O | O | O | X | | | | B | | O | X | O | 63 | | | |
| 20XL/LH23/-/- | 10.0 | 6 | | | | | | X | | | | | | P | X | | | O | O | X | | | | A | X | | | | 64 | | | |
| 30XL/LH23/-/-/- | 10.0 | 6 | | | | | | X | | | | | | P | X | | | O | O | X | | | | A | X | | | | 65 | | | |



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

**Key**

| | | | |
|---|---|---|---|
| X | Standard/basic build | G | Glass |
| O | Optional feature | E | Epoxy |
| C | Coloured | P | Polycarbonate |
| CD | Coloured diffused | B | Brass |
| 6 | Protected against the effects of strong water flow | A | Aluminium |
| 7 | Protected against the effects of temporary immersion in water | CB | Chromate Body Finish |
| 8 | Protected against the effects of continuous immersion in water | BC | Black Chrome Finish |

## Lamp Sealing

Various sealing options, denoted by IP ratings, are available for the different styles of lamps.

*IP Ratings*

The IP rating system provides a means of classifying the degrees of protection from dust, water and impact afforded by electrical equipment and enclosure. The system is recognised in most European countries and set out in BS EN 60529: 1992 Degrees of protection provided by enclosures (IP code).

**First Number = Protection against solid objects**

| IP | TESTS |
|---|---|
| 0 | No protection. |
| 1 | Protected against solid objects up to 50 mm, e.g. accidental touch by hand. |
| 2 | Protected against solid objects up to 12 mm, e.g. fingers. |
| 3 | Protected against solid objects over 2.5 mm, (tools and wires). |
| 4 | Protected against solid objects over 1 mm, (tools, wires and small wires). |
| 5 | Protected against dust - limited ingress (no harmful deposit). |
| 6 | Total protected against dust. |

**Second Number = Protection against liquids**

| IP | TESTS |
|---|---|
| 0 | No protection. |
| 1 | Protected against vertically falling drops of water (e.g. condensation). |
| 2 | Protected against direct sprays of water up to 15° from the vertical. |
| 3 | Protected against direct sprays of water up to 60° from the vertical. |
| 4 | Protected against water sprayed from all directions - limited ingress permitted. |
| 5 | Protected against low pressure jets of water from all directions - limited ingress permitted. |
| 6 | Protected against strong jets of water, e.g. for use on ships decks - limited ingress permitted |
| 7 | Protected against the effects of temporary immersion between 15 cm and 1 m. Duration of test 30 minutes. |
| 8 | Protected against long periods of immersion under pressure. |

**Note:** All LED Indicator Lamps range from IP66 to IP68



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Oxley Indicator Lamp Selection Chart (Descriptive Breakdown)

The selection chart on page 5 shows the major characteristics of Oxley indicator lamps.

For each generic lamp type the major characteristics of the basic lamp are indicated by an ‘X’ in the appropriate column, additional features, options that can be added to the lamp are indicated by an ‘0’ in the appropriate column.

It is important to note that the list of lamps and options available is by no means exhaustive and options may be mutually exclusive. Please consult factory for guidance on indicator lamps requiring a combination of options.

## Sealing Characteristics

The following codes are based upon BS EN 60529 (which has replaced BS 5490) and designed to indicate the levels of protection against the ingress of water through the Indicator Lamp into the equipment in which it is mounted:

**6** Protected against string jets of water, e.g. for use on the decks of ships –limited ingress permitted;

**7** Protected against the effects of temporary immersion in water;

**8** Protected against the effects of continuous immersion in water.

Please see Lamp Sealing chart on page 5.

**Integral Resistor**
The option of integral resistor eliminates the need for a current limiting resistor and therefore simplifies the external drive circuitry. Indicator lamps incorporating a current limiting resistor are identified by colour coded bush on the cathode terminal. The table below displays the standard supply voltage indicator lamps available with colour codes used to identify the supply voltage.

| Supply voltage (V dc) | Colour Code |
|---|---|
| 5 | Blue |
| 12 | Yellow |
| 15 | Green |
| 24 | Brown |
| 28 | Violet |
| 110 | Black/Black |
| 240 | Blue/Black |



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

The integral resistor limits the supply current to approximately 12 mA -15 mA at the specified supply voltage. Integral resistors for different supply voltages and currents are available, but limited by the space inside the indicator lamp body to dissipate the power generated. (Please consult factory for details).

The majority of our Indicator Lamps are generally fitted with integral blocking diodes electrically connected in series with the LED. The blocking diode prevents the LED from being damaged through inadvertent connection to a reverse polarity supply. In addition to providing protection from reverse polarity connection the diode also provides half-wave rectification, which allows the lamp to be operated from AC supplies, providing the supply frequency above 50 Hz to eliminate flicker.

## Lens Characteristics

**PLANO-CONVEX** - Rear surface of lens flat - 'plano' - diffused and front of lens convex. Focal length of lens designed to increase the 'virtual image' of the light source, this in combination with the diffusion on the rear of lens increases the area of the light source and provides even illumination across the viewing aperture.

**FRESNEL** - Flat or convex lens with a series of concentric rings (grooves) cut into the rear surface of the lens. This provides the best of both worlds by attaining maximum on-axis brightness from the light source, viewed through clear portions of the lens, in between the concentric grooves and increasing the viewing angle of the indicator lamp by diffusing and refracting the light from the light source in the concentric rings. Due to the relatively small size and complexity of fresnel lenses used in Oxley indicator lamps these lenses are plastic injection moulded, in a variety of colours including clear to match the colour of the light source and the application. Coloured lenses viewed under conditions of high ambient light can cause spurious ON/OFF indications.

**CAPTION** - Character engraved on rear surface of lens to provide indication of function, e.g. 'ON'.

**DOMED** - Domed lens. This lens provides 130° omn-directional viewing characteristics. Ideal for applications requiring wide angle visibility in low/high ambient light conditions where a high level of performance is required.

**FLAT - CLEAR** - used in applications where the indicator lamp is to be viewed under low ambient light conditions. Primarily used with focused light sources where the user is not concerned with the aesthetics of viewing the LED through the lens.

**DIFFUSED** - Light projected on to the rear diffused surface of the lens is 'spread out', improving the viewing angle and increasing the area of the viewed light source. Increases readability of indicator lamp under higher ambient light conditions; however, readability under sunlight conditions is compromised and improves the aesthetic appearance of the lamp, since the diffused surface on the rear of the lens provides a screen preventing direct viewing of the light source.

**EMI Shielding**
Special Electrostatic screen connected both electrically and mechanically between the light source and the lens. Shielding Efficiency – 20 dB reduction in transmission over the frequency range 5 MHz to 1 GHz when compared against a non-shielded device.


www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000
**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

**Sunlight Readable** - Flat lens with light attenuating properties that are used to increase the 'ON/OFF', contrast ratio of the indicator lamp, therefore achieving greater sunlight readability. There is a common misconception that the brighter the light source the greater the sunlight readability of the indicator, eliminating reflections and increasing the contrast ratio play the major part in achieving better sunlight readability.

The specially designed filters used in Oxley indicator lamps attenuate the light passing through the lens, without affecting the colour of the light source. Therefore, light emitted from the light source viewed by the user is also attenuated. However, external light passing through the lens is attenuated and any reflected light from the inner surfaces of the indicator lamp that may cause spurious ON / OFF indications is also attenuated, which produces the 'black hole' effect where reflected light is effectively quenched, thereby increasing the sunlight readability by increasing the contrast ratio. The above explains how a lamp with a lower luminous intensity can have better sunlight readability than a lamp with a higher luminous intensity.

**AR COATING** - Coating vacuum deposited on to the front face of the lens designed to reduce reflections, therefore enhancing the sunlight readability of the indicator lamp.

**LENS MATERIAL** - Material from which the lens is manufactured.

- **GLASS** - Used on the majority of Oxley indicator lamps due to precise control of optical properties and mechanical robustness. It also offers excellent resistance to temperature, thermal shock and solvents.
- **POLYCARBONATE** - Used for mechanically complex lenses, e.g. fresnel, that require injection moulding due to the complexity of the opto-mechanical design.

## Terminals

**SPILLS** - Indicates lamp terminals.

**TAGS** - Generally more robust terminations featuring pins for insertion into PCBs, wire wraps or eyelets for ease of connecting hook-up wires.

**FLYING LEADS** - Available with colour coded wire for indication of polarity and different grades of wire, e.g. flame retardant, MIL-Spec etc. Incorporation of flying lead option generally indicated by addition of 'FLxx' into the part No., where 'xx' indicates the length of the flying lead in centimetres.

**FLYING LEADS WITH CONNECTORS** - For ease of assembly and reduced solder joints.

## XIR (Secure Lighting)

Used exclusively to describe an indicator lamp designed to meet the parameters specified by DESC control drawing No. 87019. The main purpose of DESC 87019 is to define secure lighting of equipment that is going into 'front-line' combat operations where standard indicator lamps could give away the position of the equipment and personnel to enemy forces.

Secure lighting is achieved by meeting two main parameters:

1. Restricting the viewing angle of visible light emitted from the indicator lamp. e.g. the operator must be standing directly in front of the equipment to see the light source.

2 Restricting the amount of energy emitted from the indicator lamp in the near infrared (NIR) region in the bandwidth of approximately 600 to 930nm. This is to eliminate detection by enemy forces using image intensifying system (NVGs).

NVG - Is the nomenclature used to describe an indicator lamp that is Night Vision Goggle compatible. For an indicator to be NVG compatible the amount of energy emitted in the near infrared (NIR) region must be restricted as described above for the XIR indicator lamps; however, unlike the XIR lamps there is no restriction other than the application on the viewing angle of the indicator lamp.

The need for NVG compatibility is due to the operation of the Night Vision Goggles. Night Vision Goggles produce an image by amplifying light in the NIR from 600 nm to 930 nm region of the spectrum. The NVGs have an Automatic Gain Control (AGC) which controls the amplification of the NIR. As NIR levels illuminating a scene increase to maintain the contrast of the image being presented to the user, the AGC reduces the level of amplification. As NIR levels reduce the AGC increases the amplification to maintain the image. The effect of stray NIR light from an indicator lamp on a control panel close to the user of NVGs is for the amplification of the NVGs to be reduced thereby blinding the goggles; this is particularly critical for aerospace cockpit applications.

The restriction of the NIR spectrum is achieved by vacuum deposition of special materials with differing refractive indices on to the rear surface of the lens. To form the NIR blocking filter approximately 60 alternate layers of two different materials are vacuum deposited onto the lens.

**DESC 85122 APPROVED** - Indicates styles of indicator lamps which can be approved against DESC control drawing 85122.

Indicator lamps approved against DESC 85122 are 100% screened against the following test schedule:

**High Temperature Storage** - at 100°C, duration 72 hours minimum.

**Thermal Shock:**
- high = 100°C
- low = -55°C

10 cycles duration at each temperature, 15 minutes minimum.


www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000
**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

**Constant Acceleration:** 20,000 g.

**Seal test:** immersion per MIL- STD-750, test method 1011 condition A.

**Pre Burn-in Measurements:**

- Luminous Intensity (Iv)
- Forward Voltage (Vf)
- Reverse Current (Ir)
- Burn-In - (Forward bias) at ambient temperature. 168 hours minimum duration.

**Post Burn-in Measurements:**

- Iv (A Iv, 20% max. from initial value).
- Vf (A Vf ± 50 mV from initial value).
- Ir

**Insulation Resistance** >1,000 M at 500 V between both terminations and body.

**Mechanical Inspection -** Additional maintenance testing is carried out against sampling plan to ensure compliance with the specification.

**DESC 87019 APPROVED** - Indicates styles of indicator lamps which can be approved against DESC control drawing 87019.

Testing generally as specified for DESC 85122 with the addition of total power emission measurements between 350 nm to 930 nm.

**DESC - GENERAL -** Only indicator lamps that are specified on the DESC control drawing can be formally released against the drawing, however other styles of indicator lamps can be certified as meeting the screening and general requirements of the DESC drawing. (Please consult factory for details).



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Sub-Miniature Cone Lock Indicator Lamp

## Single Chip LED

## Push Fit

## IP67 - Ø5.0

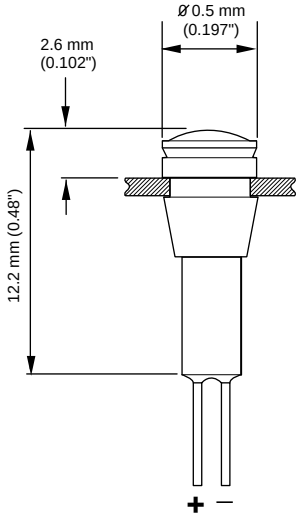
### Features

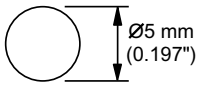
Self sealing indicator sealed to IP67;

For high density applications;

Fast, easy push fit mounting;

Optional black anodised body.




**Mounting Hole SSI/5**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| SSI/5/RD | | | 2.1 | 20 | 1 | 5 | | | |
| SSI/5/AR | | | 2.1 | 20 | 1.5 | 5 | | | |
| SSI/5/GN | | | 2.1 | 20 | 1.5 | 5 | | | |
| SSI/5/REF1/RD | | | 2.1 | 20 | 1 | 5 | | | |
| SSI/5/REF1/AR | | | 2.1 | 20 | 1.5 | 5 | | | |
| SSI/5/REF1/GN | | Coloured | 2.1 | 20 | 1.5 | 5 | | -40 | -40 |
| SSI/5/REF1/RD | | | 2.1 | 20 | 1 | 5 | | | |
| SSI/5/REF1/AR | | | 2.1 | 20 | 1.5 | 5 | 80° | to | to |
| SSI/5/REF1/GN | | | 2.1 | 20 | 1.5 | 5 | | | |
| SSI/5/REF1/RD | | Lens | 2.1 | 20 | 1 | 5 | | +85 | +85 |
| SSI/5/REF1/AR | | | 2.1 | 20 | 1.5 | 5 | | | |
| SSI/5/REF1/GN | | | 2.1 | 20 | 1.5 | 5 | | | |
| SSI/5/RD | | | 2.1 | 20 | 1 | 5 | | | |
| SSI/5/AR | | | 2.1 | 20 | 1.5 | 5 | | | |
| | | | **V** | **mA** | **mcd** | **V** | | **°C** | **°C** |

Mean time before failure 90,000 hrs

For optional black anodised body include BB within the part number. E.G. SSIBB/5/
Customer specials available on request.



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

# Type No. - OXL/MIL50

## Sub-Miniature — Single Chip LED

## Flat Lens — IP67 - Ø5.0

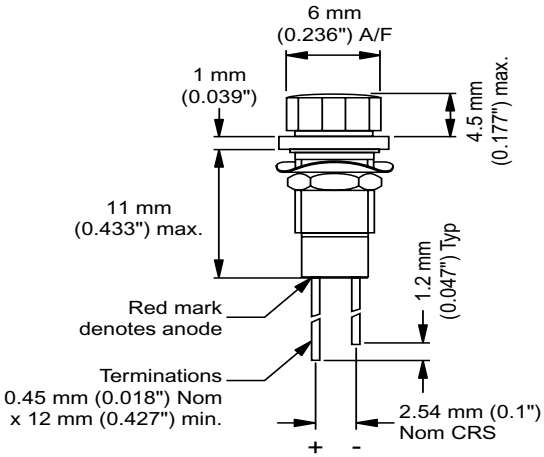
### Features

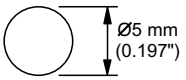
Rugged glass and metal construction;

Sealed top and rear to IP67;

Ideal where panel space is at a premium;

Black anodised bezel for harsh environment.




**Mounting Hole**
**(OXL/MIL50/- or OXL/MIL50/SES/-)**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| OXL/MIL50/RD | Red | Flat | 2.2 | 20 | 20 | | 80° | -40 to +85 | -40 to +100 |
| OXL/MIL50/YW | Yellow | | 2.2 | 20 | 20 | | | | |
| OXL/MIL50/GN | Green | | 2.2 | 20 | 20 | | | | |
| OXL/MIL50/H/RD | Red | Clear | 1.9 | 20 | 1200 | | | | |
| OXL/MIL50/H/YW | Yellow | | 2.2 | 20 | 1000 | | | | |
| OXL/MIL50/H/GN | Green | | 3.6 | 20 | 1250 | | | | |
| OXL/MIL50/H/BE | Blue | | 3.6 | 20 | 1200 | | | | |
| OXL/MIL50/H/WE | White | | 3.6 | 20 | 1000 | | | | |
| OXL/MIL50/SES/RD | Red | Diffused Lens | 2.2 | 20 | 20 | | | | |
| OXL/MIL50/SES/YW | Yellow | | 2.2 | 20 | 20 | | | | |
| OXL/MIL50/SES/GN | Green | | 2.2 | 20 | 20 | | | | |
| OXL/MIL50/SES/H/RD | Red | | 1.9 | 20 | 1200 | | | | |
| OXL/MIL50/SES/H/YW | Yellow | | 2.2 | 20 | 1000 | | | | |
| OXL/MIL50/SES/H/GN | Green | | 3.6 | 20 | 1250 | | | | |
| OXL/MIL50/SES/H/BE | Blue | | 3.6 | 20 | 1200 | | | | |
| OXL/MIL50/SES/H/WE | White | | 3.6 | 20 | 1000 | | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Mean time before failure 90,000 hrs

For NVG compatible options please add **NVG** to the end of the order information.
e.g. OXL/MIL50/SES/NVG - 10 - Green, 20 - Yellow and 30 - Red



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Sub-Miniature Sunlight Viewable

## Single Chip LED

## Flat Lens

## IP67 - Ø5.0

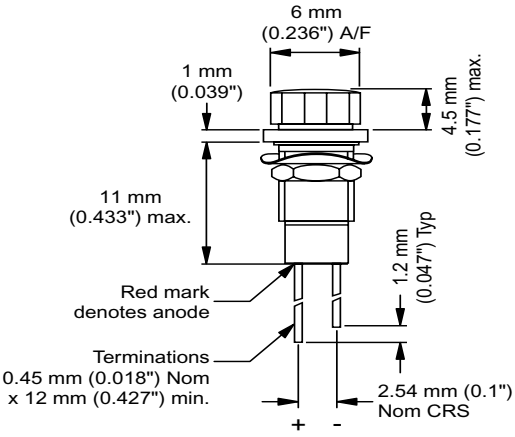
### Features

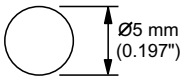
Rugged glass and metal construction;

Sealed top and rear to IP67;

Ideal where panel space is at a premium;

Black anodised bezel for good on/off contrast ratio.




**Mounting Hole**
**(OXL/MIL50/- or OXL/MIL50/SES/-)**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| OXL/MIL50/RAF/RD | Red | Flat | 2.2 | 20 | 20 | 5 | 80° | -40 to +85 | -40 to +100 |
| OXL/MIL50/RAF/YW | Yellow | | 2.2 | 20 | 20 | 5 | | | |
| OXL/MIL50/RAF/GN | Green | | 2.3 | 20 | 20 | 5 | | | |
| OXL/MIL50/RAF/H/RD | Red | Clear | 1.9 | 20 | 1200 | 5 | | | |
| OXL/MIL50/RAF/H/YW | Yellow | | 2.2 | 20 | 1000 | 5 | | | |
| OXL/MIL50/RAF/H/GN | Green | | 3.6 | 20 | 1250 | 5 | | | |
| OXL/MIL50/RAF/H/BE | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| OXL/MIL50/RAF/H/WE | White | | 3.6 | 20 | 1000 | 5 | | | |
| OXL/MIL50/RAF/SES/RD | Red | Diffused Lens | 2.2 | 20 | 20 | 5 | | | |
| OXL/MIL50/RAF/SES/YW | Yellow | | 2.2 | 20 | 20 | 5 | | | |
| OXL/MIL50/RAF/SES/GN | Green | | 2.2 | 20 | 20 | 5 | | | |
| OXL/MIL50/RAF/SES/H/RD | Red | | 1.9 | 20 | 1200 | 5 | | | |
| OXL/MIL50/RAF/SES/H/YW | Yellow | | 2.2 | 20 | 1000 | 5 | | | |
| OXL/MIL50/RAF/SES/H/GN | Green | | 3.6 | 20 | 1250 | 5 | | | |
| OXL/MIL50/RAF/SES/H/BE | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| OXL/MIL50/RAF/SES/H/WE | White | | 3.6 | 20 | 1000 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Mean time before failure 90,000 hrs

For night vision compatible options please add **NVG** to the end of the order information.
e.g. OXL/MIL50/RAF/NVG - 10 - Green, 20 - Yellow and 30 - Red.
Customer specials available on request: (1) Electro-Static screening - **SES** (2) **RAF** Focused Sunlight Viewing



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Type No. - OXL/MIL50

## Voltage Sub-Miniature — Single Chip LED

## Flat Lens — IP67 - Ø5.0

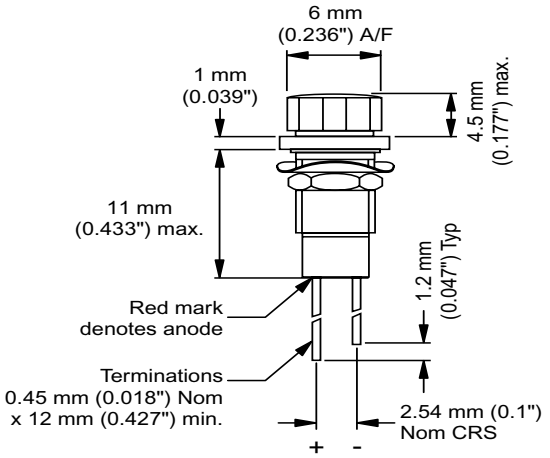
### Features

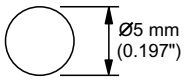
Rugged glass and metal construction;

Sealed top and rear to IP67;

Ideal where panel space is at a premium;

Black anodised bezel for harsh environment.




**Mounting Hole**
**(OXL/MIL50/- or OXL/MIL50/SES/-)**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| OXL/MIL50/5/RD | Red | Flat | 5 | 15 | 15 | 5 | 80° | -40 to +85 | -40 to +100 |
| OXL/MIL50/5/YW | Yellow | | 5 | 15 | 15 | 5 | | | |
| OXL/MIL50/5/GN | Green | | 5 | 15 | 15 | 5 | | | |
| OXL/MIL50/5/H/RD | Red | Clear | 5 | 15 | 900 | 5 | | | |
| OXL/MIL50/5/H/YW | Yellow | | 5 | 15 | 750 | 5 | | | |
| OXL/MIL50/5/H/GN | Green | | 5 | 15 | 940 | 5 | | | |
| OXL/MIL50/5/H/BE | Blue | | 5 | 15 | 900 | 5 | | | |
| OXL/MIL50/5/H/WE | White | | 5 | 15 | 750 | 5 | | | |
| OXL/MIL50/12/RD | Red | Diffused | 12 | 15 | 15 | 5 | | | |
| OXL/MIL50/12/YW | Yellow | | 12 | 15 | 15 | 5 | | | |
| OXL/MIL50/12/GN | Green | | 12 | 15 | 15 | 5 | | | |
| OXL/MIL50/12/H/RD | Red | Lens | 12 | 15 | 900 | 5 | | | |
| OXL/MIL50/12/H/YW | Yellow | | 12 | 15 | 750 | 5 | | | |
| OXL/MIL50/12/H/GN | Green | | 12 | 15 | 940 | 5 | | | |
| OXL/MIL50/12/H/BE | Blue | | 12 | 15 | 900 | 5 | | | |
| OXL/MIL50/12/H/WE | White | | 12 | 15 | 750 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Continued...



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| OXL/MIL50/15/RD | Red | | 15 | 15 | 15 | 5 | | | |
| OXL/MIL50/15/YW | Yellow | | 15 | 15 | 15 | 5 | | | |
| OXL/MIL50/15/GN | Green | | 15 | 15 | 15 | 5 | | | |
| OXL/MIL50/15/H/RD | Red | | 15 | 15 | 900 | 5 | | | |
| OXL/MIL50/15/H/YW | Yellow | Flat | 15 | 15 | 750 | 5 | | | |
| OXL/MIL50/15/H/GN | Green | | 15 | 15 | 940 | 5 | | | |
| OXL/MIL50/15/H/BE | Blue | | 15 | 15 | 900 | 5 | | -40 | -40 |
| OXL/MIL50/15/H/WE | White | | 15 | 15 | 750 | 5 | | | |
| OXL/MIL50/24/RD | Red | | 24 | 15 | 15 | 5 | | | |
| OXL/MIL50/24/YW | Yellow | Clear | 24 | 15 | 15 | 5 | | | |
| OXL/MIL50/24/GN | Green | | 24 | 15 | 15 | 5 | | | |
| OXL/MIL50/24/H/RD | Red | | 24 | 15 | 900 | 5 | | | |
| OXL/MIL50/24/H/YW | Yellow | | 24 | 15 | 750 | 5 | | | |
| OXL/MIL50/24/H/GN | Green | Diffused | 24 | 15 | 940 | 5 | 80° | to | to |
| OXL/MIL50/24/H/BE | Blue | | 24 | 15 | 900 | 5 | | | |
| OXL/MIL50/24/H/WE | White | | 24 | 15 | 750 | 5 | | | |
| OXL/MIL50/28/RD | Red | | 28 | 15 | 15 | 5 | | | |
| OXL/MIL50/28/YW | Yellow | | 28 | 15 | 15 | 5 | | | |
| OXL/MIL50/28/GN | Green | Lens | 28 | 15 | 15 | 5 | | | |
| OXL/MIL50/28/H/RD | Red | | 28 | 15 | 900 | 5 | | +85 | +100 |
| OXL/MIL50/28/H/YW | Yellow | | 28 | 15 | 750 | 5 | | | |
| OXL/MIL50/28/H/GN | Green | | 28 | 15 | 940 | 5 | | | |
| OXL/MIL50/28/H/BE | Blue | | 28 | 15 | 900 | 5 | | | |
| OXL/MIL50/28/H/WE | White | | 28 | 15 | 750 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Mean time before failure 90,000 hrs

For night vision compatible options please add **NVG** to the end of the order information.
e.g. OXL/MIL50/28/NVG - 10 - Green, 20 - Yellow and 30 - Red

Customer specials available on request.



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

# Sub-Miniature Sunlight Viewable Single Chip LED

# Flat Lens Two Part IP67 - Ø5.0

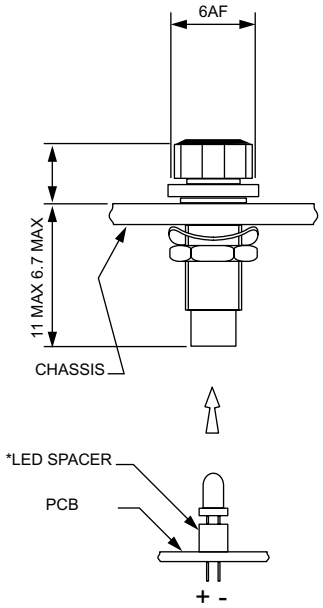
## Features

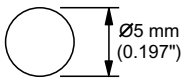
2 part construction permits wire-less detachment of front panels;

Rugged glass and metal construction;

Panel sealed to IP68;

Improved equipment reliability, fewer solder joints.




**Mounting Hole OXL/MIL50/-**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| OXL/MIL50/LX/RD | Red | Flat Diffused Lens | 2.2 | 20 | 20 | 5 | 80° | -40 to +85 | -40 to +100 |
| OXL/MIL50/LX/YW | Yellow | | 2.2 | 20 | 20 | 5 | | | |
| OXL/MIL50/LX/GN | Green | | 2.2 | 20 | 20 | 5 | | | |
| OXL/MIL50/LX/H/RD | Red | | 1.9 | 20 | 1200 | 5 | | | |
| OXL/MIL50/LX/H/YW | Yellow | | 2.2 | 20 | 1000 | 5 | | | |
| OXL/MIL50/LX/H/GN | Green | | 3.6 | 20 | 1250 | 5 | | | |
| OXL/MIL50/LX/H/BE | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| OXL/MIL50/LX/H/WE | White | | 3.6 | 20 | 1000 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Mean time before failure 90,000 hrs

For night vision compatible options please add **NVG** to the end of the order information.
e.g. OXL/MIL50/LX/NVG - 10 - Green, 20 - Yellow and 30 - Red

**SES** option available on request.



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Low Profile and Flush Mounting Single Chip LED

## Fresnel Lens IP66 - Ø6.35

### Features

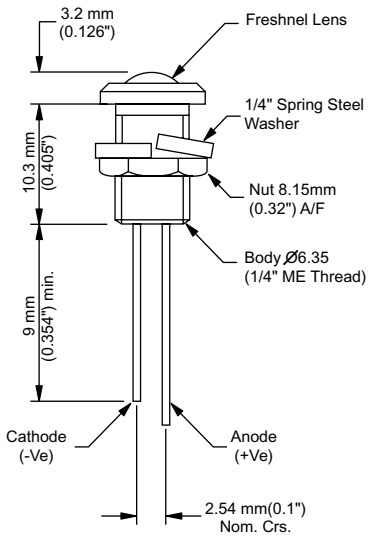
Coloured low profile and prominent fresnel lens;

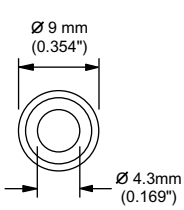
Standard aluminium and black anodized option;

Ideal where panel space is at a premium;

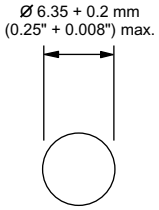
Five voltage ranges as standard.

Dimensions in mm (inches)




Front View




Mounting Hole

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| OXL/CLH/63/RD | Red | Coloured Fresnel Lens | 2.2 | 15 | 45 | 5 | 80° | -40 to +85 | -40 to +85 |
| OXL/CLH/63/YW | Yellow | | 2.2 | 15 | 45 | 5 | | | |
| OXL/CLH/63/GN | Green | | 2.2 | 15 | 45 | 5 | | | |
| OXL/CLH/63/H/RD | Red | | 1.9 | 15 | 1250 | 5 | | | |
| OXL/CLH/63/H/YW | Yellow | | 2.2 | 15 | 1000 | 5 | | | |
| OXL/CLH/63/H/GN | Green | | 3.6 | 15 | 1250 | 5 | | | |
| OXL/CLH/63/H/BE | Blue | | 3.6 | 15 | 1200 | 5 | | | |
| OXL/CLH/63/H/WE | White | | 3.6 | 15 | 1000 | 5 | | | |
| | | | V | mA | mcd | | | °C | °C |

Continued...



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| OXL/CLH/63/5/RD | Red | | 5 | 15 | 35 | 5 | | | |
| OXL/CLH/63/5/YW | Yellow | | 5 | 15 | 35 | 5 | | | |
| OXL/CLH/63/5/GN | Green | | 5 | 15 | 35 | 5 | | | |
| OXL/CLH/63/5/H/RD | Red | | 5 | 15 | 900 | 5 | | | |
| OXL/CLH/63/5/H/YW | Yellow | | 5 | 15 | 750 | 5 | | | |
| OXL/CLH/63/5/H/GN | Green | | 5 | 15 | 940 | 5 | | | |
| OXL/CLH/63/5/H/BE | Blue | | 5 | 15 | 900 | 5 | | | |
| OXL/CLH/63/5/H/WE | White | Coloured | 5 | 15 | 750 | 5 | | 40 | -40 |
| OXL/CLH/63/12/RD | Red | | 12 | 15 | 35 | 5 | | | |
| OXL/CLH/63/12/YW | Yellow | | 12 | 15 | 35 | 5 | | | |
| OXL/CLH/63/12/GN | Green | | 12 | 15 | 35 | 5 | | | |
| OXL/CLH/63/12/H/RD | Red | | 12 | 15 | 900 | 5 | | | |
| OXL/CLH/63/12/H/YW | Yellow | | 12 | 15 | 750 | 5 | | | |
| OXL/CLH/63/12/H/GN | Green | | 12 | 15 | 940 | 5 | | | |
| OXL/CLH/63/12/H/BE | Blue | | 12 | 15 | 900 | 5 | | | |
| OXL/CLH/63/12/H/WE | White | Fresnel | 12 | 15 | 750 | 5 | 80° | to | to |
| OXL/CLH/63/24/RD | Red | | 24 | 15 | 35 | 5 | | | |
| OXL/CLH/63/24/YW | Yellow | | 24 | 15 | 35 | 5 | | | |
| OXL/CLH/63/24/GN | Green | | 24 | 15 | 35 | 5 | | | |
| OXL/CLH/63/24/H/RD | Red | | 24 | 15 | 900 | 5 | | | |
| OXL/CLH/63/24/H/YW | Yellow | | 24 | 15 | 750 | 5 | | | |
| OXL/CLH/63/24/H/GN | Green | | 24 | 15 | 940 | 5 | | | |
| OXL/CLH/63/24/H/BE | Blue | | 24 | 15 | 900 | 5 | | | |
| OXL/CLH/63/24/H/WE | White | Lens | 24 | 15 | 750 | 5 | | +85 | +85 |
| OXL/CLH/63/28/RD | Red | | 28 | 15 | 35 | 5 | | | |
| OXL/CLH/63/28/YW | Yellow | | 28 | 15 | 35 | 5 | | | |
| OXL/CLH/63/28/GN | Green | | 28 | 15 | 35 | 5 | | | |
| OXL/CLH/63/28/H/RD | Red | | 28 | 15 | 900 | 5 | | | |
| OXL/CLH/63/28/H/YW | Yellow | | 28 | 15 | 750 | 5 | | | |
| OXL/CLH/63/28/H/GN | Green | | 28 | 15 | 940 | 5 | | | |
| OXL/CLH/63/28/H/BE | Blue | | 28 | 15 | 900 | 5 | | | |
| OXL/CLH/63/28/H/WE | White | | 28 | 15 | 750 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Mean time before failure 90,000 hrs

Clear lens and black anodised bodies available on request - denoted by **CL** and **BB** within the part number. e.g. OXL/CLH/63/BB/28/CL/H/WE

Customer specials available on request.



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Prominent Wide Viewing Fresnel Lens

## Single Chip LED IP66 Ø6.35

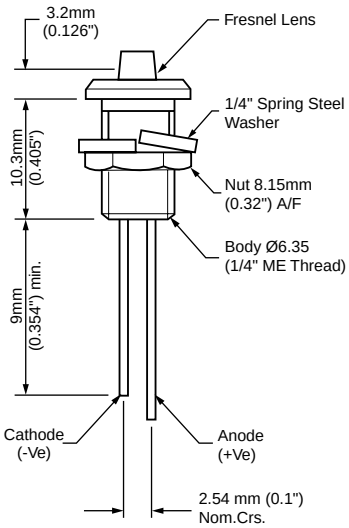
### Features

Coloured prominent Fresnel lens;

Rugged metal body construction;

Aluminium body
(black anodised optional);

Ideal where panel space is at a premium.







**Front View** **Mounting Hole**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| OXL/CLH/63/P/RD | Red | Coloured Prominent Fresnel Lens | 2.2 | 20 | 45 | 5 | 100° | -40 to +85 | -40 to +85 |
| OXL/CLH/63/P/YW | Yellow | | 2.2 | 20 | 45 | 5 | | | |
| OXL/CLH/63/P/GN | Green | | 2.2 | 20 | 45 | 5 | | | |
| OXL/CLH/63/P/H/RD | Red | | 1.9 | 20 | 1200 | 5 | | | |
| OXL/CLH/63/P/H/YW | Yellow | | 2.2 | 20 | 1000 | 5 | | | |
| OXL/CLH/63/P/H/GN | Green | | 3.6 | 20 | 1250 | 5 | | | |
| OXL/CLH/63/P/H/BE | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| OXL/CLH/63/P/H/WE | White | | 3.6 | 20 | 1000 | 5 | | | |
| OXL/CLH/63/5/P/RD | Red | | 5 | 15 | 35 | 5 | | | |
| OXL/CLH/63/5/P/YW | Yellow | | 5 | 15 | 35 | 5 | | | |
| OXL/CLH/63/5/P/GN | Green | | 5 | 15 | 35 | 5 | | | |
| OXL/CLH/63/5/P/H/RD | Red | | 5 | 15 | 900 | 5 | | | |
| OXL/CLH/63/5/P/H/YW | Yellow | | 5 | 15 | 750 | 5 | | | |
| OXL/CLH/63/5/P/H/GN | Green | | 5 | 15 | 940 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Continued ...



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| OXL/CLH/63/5/P/H/BE | Blue | | 5 | 15 | 900 | 5 | | | |
| OXL/CLH/63/5/P/H/WE | White | | 5 | 15 | 750 | 5 | | | |
| OXL/CLH/63/12/P/RD | Red | | 12 | 15 | 35 | 5 | | | |
| OXL/CLH/63/12/P/YW | Yellow | | 12 | 15 | 35 | 5 | | | |
| OXL/CLH/63/12/P/GN | Green | Coloured | 12 | 15 | 35 | 5 | | -40 | -40 |
| OXL/CLH/63/12/P/H/RD | Red | | 12 | 15 | 900 | 5 | | | |
| OXL/CLH/63/12/P/H/YW | Yellow | | 12 | 15 | 750 | 5 | | | |
| OXL/CLH/63/12/P/H/GN | Green | | 12 | 15 | 940 | 5 | | | |
| OXL/CLH/63/12/P/H/BE | Blue | | 12 | 15 | 900 | 5 | | | |
| OXL/CLH/63/12/P/H/WE | White | | 12 | 15 | 750 | 5 | | | |
| OXL/CLH/63/15/P/RD | Red | | 15 | 15 | 35 | 5 | | | |
| OXL/CLH/63/15/P/YW | Yellow | | 15 | 15 | 35 | 5 | | | |
| OXL/CLH/63/15/P/GN | Green | | 15 | 15 | 35 | 5 | | | |
| OXL/CLH/63/15/P/H/RD | Red | Prominent | 15 | 15 | 900 | 5 | | | |
| OXL/CLH/63/15/P/H/YW | Yellow | | 15 | 15 | 750 | 5 | | | |
| OXL/CLH/63/15/P/H/GN | Green | | 15 | 15 | 940 | 5 | | | |
| OXL/CLH/63/15/P/H/BE | Blue | | 15 | 15 | 900 | 5 | | | |
| OXL/CLH/63/15/P/H/WE | White | | 15 | 15 | 750 | 5 | 100° | to | to |
| OXL/CLH/63/24/P/RD | Red | | 24 | 15 | 35 | 5 | | | |
| OXL/CLH/63/24/P/YW | Yellow | | 24 | 15 | 35 | 5 | | | |
| OXL/CLH/63/24/P/GN | Green | | 24 | 15 | 35 | 5 | | | |
| OXL/CLH/63/24/P/H/RD | Red | Fresnel | 24 | 15 | 900 | 5 | | | |
| OXL/CLH/63/24/P/H/YW | Yellow | | 24 | 15 | 750 | 5 | | | |
| OXL/CLH/63/24/P/H/GN | Green | | 24 | 15 | 940 | 5 | | | |
| OXL/CLH/63/24/P/H/BE | Blue | | 24 | 15 | 900 | 5 | | | |
| OXL/CLH/63/24/P/H/WE | White | | 24 | 15 | 750 | 5 | | | |
| OXL/CLH/63/28/P/RD | Red | | 28 | 15 | 35 | 5 | | | |
| OXL/CLH/63/28/P/YW | Yellow | | 28 | 15 | 35 | 5 | | | |
| OXL/CLH/63/28/P/GN | Green | | 28 | 15 | 35 | 5 | | | |
| OXL/CLH/63/28/P/H/RD | Red | | 28 | 15 | 900 | 5 | | | |
| OXL/CLH/63/28/P/H/YW | Yellow | Lens | 28 | 15 | 750 | 5 | | +85 | +85 |
| OXL/CLH/63/28/P/H/GN | Green | | 28 | 15 | 940 | 5 | | | |
| OXL/CLH/63/28/P/H/BE | Blue | | 28 | 15 | 900 | 5 | | | |
| OXL/CLH/63/28/P/H/WE | White | | 28 | 15 | 750 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Coloured standard lens / Optional prominent clear lens available - denoted by **P/CL** in part numbering.
e.g. OXL/CLH/63/P/CL/GN

Customer specials available on request.



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Panel Sealed

## Single Chip LED

## Convex Lens

## IP68 - Ø8.0

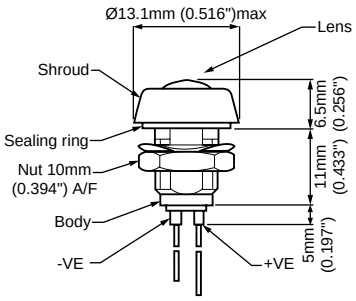
### Features

Rugged glass and metal construction;

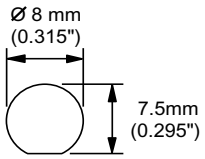
Short body length - ideal for applications where space is critical behind panel;

Panel sealed to IP68;

High intensity options available in all colours including blue and white.




Terminations 14 mm (0.551") to 200 mm (0.787") long




**Mounting Hole**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| PS/LH/8/RD | Red | Clear | 2.2 | 20 | 50 | 5 | 60° | -40 to +85 | -55 to +100 |
| PS/LH/8/YW | Yellow | | 2.2 | 20 | 40 | 5 | | | |
| PS/LH/8/GN | Green | | 2.2 | 20 | 50 | 5 | | | |
| PS/LH/8/H/RD | Red | Diffused | 1.9 | 20 | 1200 | 5 | | | |
| PS/LH/8/H/YW | Yellow | | 2.2 | 20 | 1000 | 5 | | | |
| PS/LH/8/H/GN | Green | | 3.6 | 20 | 1250 | 5 | | | |
| PS/LH/8/H/BE | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| PS/LH/8/H/WE | White | | 3.6 | 20 | 1000 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

## Low Current Range

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| PS/LH/8/LC/RD | Red | Clear | 1.8 | 2.0 | 2.0 | 5 | 60° | -40 to +85 | -55 to +100 |
| PS/LH/8/LC/YW | Yellow | Diffused | 1.9 | 2.0 | 2.0 | 5 | | | |
| PS/LH/8/LC/GN | Green | | 1.9 | 2.0 | 3.0 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Mean time before failure 90,000 hrs. Low current (LC) models 200,000 hrs

Custom specials available on request.



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

# Type No. - PS/LH/8

## Panel Sealed — Single Chip LED

## Domed Lens — IP68 - Ø8.0

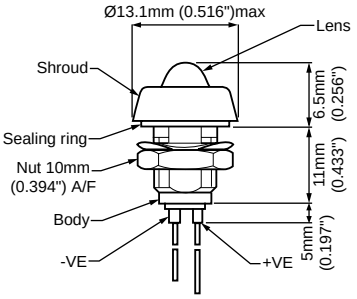
### Features

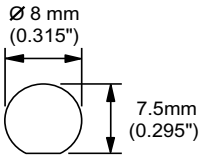
Rugged glass and metal construction;

Short body length - ideal for applications where space is critical behind panel;

Panel sealed to IP68;

High intensity options available in all colours including blue and white.




**Mounting Hole**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| PS/LH/8/DOM/RD | Red | Clear / Diffused | 2.2 | 20 | 50 | 5 | 100° | -40 to +85 | -55 to +100 |
| PS/LH/8/DOM/YW | Yellow | | 2.2 | 20 | 40 | 5 | | | |
| PS/LH/8/DOM/GN | Green | | 2.2 | 20 | 50 | 5 | | | |
| PS/LH/8/DOM/H/RD | Red | | 1.9 | 20 | 1200 | 5 | | | |
| PS/LH/8/DOM/H/YW | Yellow | | 2.2 | 20 | 1000 | 5 | | | |
| PS/LH/8/DOM/H/GN | Green | | 3.6 | 20 | 1250 | 5 | | | |
| PS/LH/8/DOM/H/BE | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| PS/LH/8/DOM/H/WE | White | | 3.6 | 20 | 1000 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

## Low Current Range

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| PS/LH/8/LC/DOM/RD | Red | Clear | 1.8 | 2.0 | 2.0 | 5 | 100° | -40 to +85 | -55 to +100 |
| PS/LH/8/LC/DOM/YW | Yellow | Diffused | 1.9 | 2.0 | 3.0 | 5 | | | |
| PS/LH/8/LC/DOM/GN | Green | | 1.9 | 2.0 | 2.0 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Mean time before failure 90,000 hrs. Low current (LC) models 200,000 hrs

Custom specials available on request.




**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Panel Sealed

## Convex Lens

## Single Chip LED

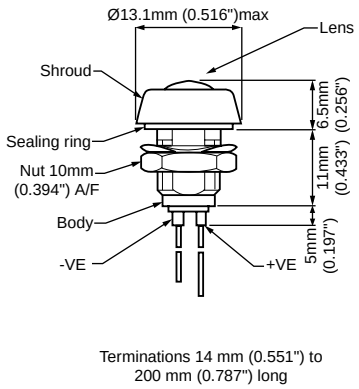
## IP68 - Ø8.0

### Features

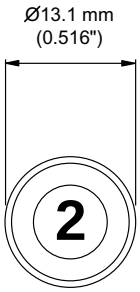
Rugged glass and metal construction;

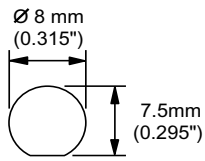
Short body length - ideal for applications where space is critical behind panel;

Panel sealed to IP68.




Terminations 14 mm (0.551") to 200 mm (0.787") long




**Mounting Hole**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| PS/LH/8/CAPT/RD | Red | Clear | 2.2 | 20 | 50 | 5 | 60° | -40 to +85 | -55 to +100 |
| PS/LH/8/CAPT/YW | Yellow | | 2.2 | 20 | 40 | 5 | | | |
| PS/LH/8/CAPT/GN | Green | | 2.2 | 20 | 50 | 5 | | | |
| PS/LH/8/CAPT/H/RD | Red | Diffused | 1.9 | 20 | 1200 | 5 | | | |
| PS/LH/8/CAPT/H/YW | Yellow | | 2.2 | 20 | 1000 | 5 | | | |
| PS/LH/8/CAPT/H/GN | Green | | 3.6 | 20 | 1250 | 5 | | | |
| PS/LH/8/CAPT/H/BE | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| PS/LH/8/CAPT/H/WE | White | | 3.6 | 20 | 1000 | 5 | | | |
| | | | V | mA | mcd | | | °C | °C |

Mean time before failure 90,000 hrs.

Customer specials available on request.



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Panel Sealed — Single Chip LED

## Sunlight Viewable — IP68 - Ø8.0

### Features

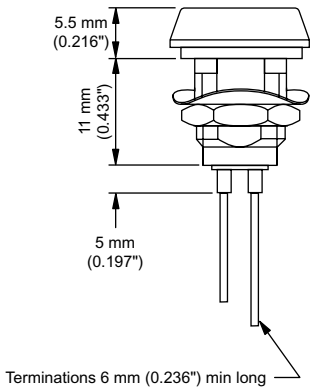
Rugged glass and metal construction;

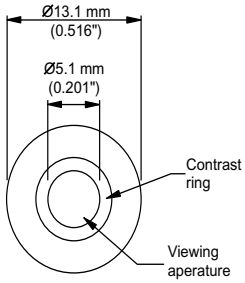
Visible up to 100,000 LUX ambient illumination;

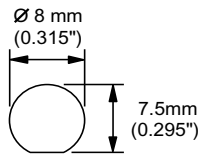
Special neutral density lens eliminates reflected sunlight;

Contrast enhancing shroud design;

Panel sealed to IP68.




**Mounting Hole**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| PS/LH/8/RAF/RD | Red | Flat | 2.2 | 20 | 15 | 5 | 30° | -40 to +85 | -55 to +100 |
| PS/LH/8/RAF/YW | Yellow | | 2.2 | 20 | 12 | 5 | | | |
| PS/LH/8/RAF/GN | Green | | 2.2 | 20 | 15 | 5 | | | |
| PS/LH/8/RAF/H/RD | Red | Neutral Density | 1.9 | 20 | 360 | 5 | | | |
| PS/LH/8/RAF/H/YW | Yellow | | 3.6 | 20 | 375 | 5 | | | |
| PS/LH/8/RAF/H/GN | Green | | 2.2 | 20 | 300 | 5 | | | |
| PS/LH/8/RAF/H/BE | Blue | | 3.6 | 20 | 360 | 5 | | | |
| PS/LH/8/RAF/H/WE | White | | 3.6 | 20 | 300 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Mean time before failure 90,000 hrs.

RAF - denotes sunlight viewable focused beam source (30°).

For night vision compatible options please denote **NVG** at the end of the ordering information.
e.g. PS/LH/8/RAF/NVG - 10 = Green, 20 = Yellow and 30 = Red.

Customer Specials available on request.



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Panel Sealed

## Single Chip LED

## Sunlight Viewable

## IP68 - Ø8.0

### Features

Rugged glass and metal construction;

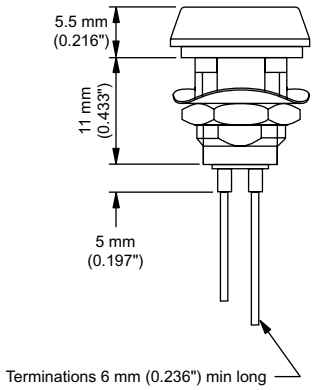
Visible up to 100,000 LUX ambient illumination;

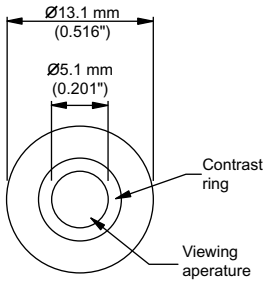
Special neutral density lens eliminates reflected sunlight;

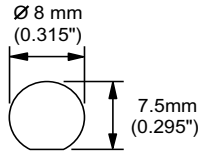
Contrast enhancing shroud design;

Panel sealed to IP68;

100° viewing angle.




**Mounting Hole**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| PS/LH/8/RAPP/RD | Red | Flat | 2.2 | 20 | 2 | 5 | 100° | -40 to +85 | -55 to +100 |
| PS/LH/8/RAPP/YW | Yellow | | 2.2 | 20 | 1 | 5 | | | |
| PS/LH/8/RAPP/GN | Green | | 2.2 | 20 | 2 | 5 | | | |
| PS/LH/8/RAPP/H/RD | Red | Neutral | 1.9 | 20 | 54 | 5 | | | |
| PS/LH/8/RAPP/H/YW | Yellow | | 2.2 | 20 | 45 | 5 | | | |
| PS/LH/8/RAPP/H/GN | Green | | 3.6 | 20 | 56 | 5 | | | |
| PS/LH/8/RAPP/H/BE | Blue | Density | 3.6 | 20 | 54 | 5 | | | |
| PS/LH/8/RAPP/H/WE | White | | 3.6 | 20 | 45 | 5 | | | |
| | | | V | mA | mcd | | | °C | °C |

Mean time before failure 90,000 hrs.

RAPP - denotes sunlight viewable pinpoint wide viewing.

For night vision compatible options please denote **NVG** at the end of the ordering information.
e.g. PS/LH/8/RAPP/NVG - 10 = Green, 20 = Yellow and 30 = Red.

Customer Specials available on request.



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Type No. - PS/LH/8

LED DISPLAYS

OXLEY

## Panel Sealed — Single Chip LED

## Two-Part LED — IP68 - Ø8.0

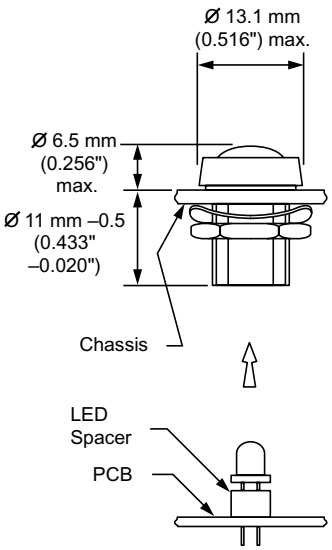
### Features

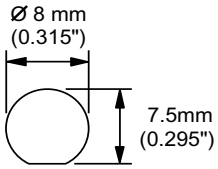
2 part construction permits wire-less detachment of front panel;

Rugged glass and metal construction;

Panel sealed to IP68;

Improved equipment reliability, improved solder joints.




**Mounting Hole**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| PS/LH/8/LX/RD | Red | Clear | 2.2 | 20 | 20 | 5 | 60° | -40 to +85 | -55 to +100 |
| PS/LH/8/LX/YW | Yellow | | 2.2 | 20 | 20 | 5 | | | |
| PS/LH/8/LX/GN | Green | | 2.2 | 20 | 20 | 5 | | | |
| PS/LH/8/LX/H/RD | Red | Diffused Lens | 1.9 | 20 | 1200 | 5 | | | |
| PS/LH/8/LX/H/YW | Yellow | | 2.2 | 20 | 1000 | 5 | | | |
| PS/LH/8/LX/H/GN | Green | | 3.6 | 20 | 1250 | 5 | | | |
| PS/LH/8/LX/H/BE | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| PS/LH/8/LX/H/WE | White | | 3.6 | 20 | 1000 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Mean time before failure 90,000 hrs.

For SES options please denote **SES** in the ordering information.
e.g. PS/LH/8/SES/LX/H/RD

Customer Specials available on request.



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Panel and Lamp Body Sealed — Single Chip LED

## Domed Lens — IP68 - Ø8.0

### Features

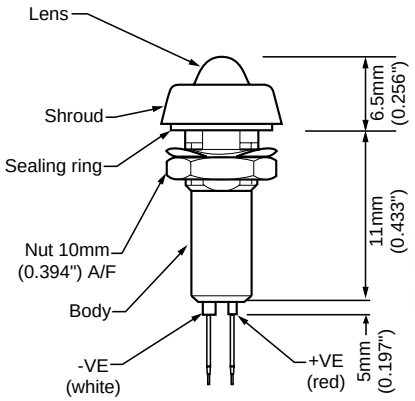
Panel and lamp body sealed;

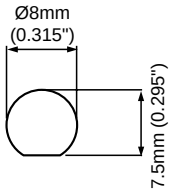
Rugged glass and metal construction;

Five voltage ranges as standard;

Sealed to IP68;

High intensity options available
in all colours including blue and white.




**Mounting Hole**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/LH/8/DOM/RD | Red | Clear | 2.2 | 20 | 50 | 5 | 100° | -40 to +85 | -55 to +100 |
| STR/LH/8/DOM/YW | Yellow | | 2.2 | 20 | 40 | 5 | | | |
| STR/LH/8/DOM/GN | Green | | 2.2 | 20 | 50 | 5 | | | |
| STR/LH/8/5/DOM/RD | Red | | 5 | 15 | 38 | 5 | | | |
| STR/LH/8/5/DOM/YW | Yellow | | 5 | 15 | 30 | 5 | | | |
| STR/LH/8/5/DOM/GN | Green | | 5 | 15 | 38 | 5 | | | |
| STR/LH/8/12/DOM/RD | Red | | 12 | 15 | 38 | 5 | | | |
| STR/LH/8/12/DOM/YW | Yellow | | 12 | 15 | 30 | 5 | | | |
| STR/LH/8/12/DOM/GN | Green | | 12 | 15 | 38 | 5 | | | |
| STR/LH/8/24/DOM/RD | Red | Diffused | 24 | 15 | 38 | 5 | | | |
| STR/LH/8/24/DOM/YW | Yellow | | 24 | 15 | 30 | 5 | | | |
| STR/LH/8/24/DOM/GN | Green | | 24 | 15 | 38 | 5 | | | |
| STR/LH/8/28/DOM/RD | Red | | 28 | 15 | 38 | 5 | | | |
| STR/LH/8/28/DOM/YW | Yellow | | 28 | 15 | 30 | 5 | | | |
| STR/LH/8/28/DOM/GN | Green | | 28 | 15 | 38 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Mean time before failure 90,000 hrs

Custom specials available on request.



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

# Panel and Lamp Body Sealed — Single Chip LED

# Convex Lens — IP68 - Ø8.0

## Features

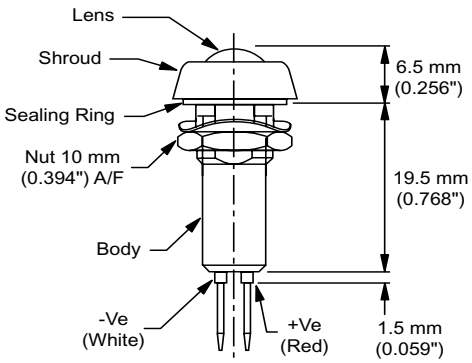
Panel and lamp body sealed;

Rugged glass and metal construction;

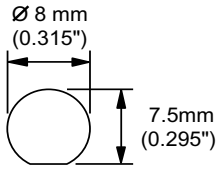
Five voltage ranges as standard;

Sealed to IP68;

Customer specified caption on all lamps.




Terminations 8 mm (0.315") to 11 mm (0.433") long




**Mounting Hole**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/LH/8/RD | Red | Clear | 2.2 | 20 | 50 | 5 | 60° | -40 to +85 | -40 to +100 |
| STR/LH/8/YW | Yellow | | 2.2 | 20 | 40 | 5 | | | |
| STR/LH/8/GN | Green | | 2.2 | 20 | 50 | 5 | | | |
| STR/LH/8/H/RD | Red | | 1.9 | 20 | 1200 | 5 | | | |
| STR/LH/8/H/YW | Yellow | | 2.2 | 20 | 1000 | 5 | | | |
| STR/LH/8/H/GN | Green | | 3.6 | 20 | 1250 | 5 | | | |
| STR/LH/8/H/BE | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| STR/LH/8/H/WE | White | | 3.6 | 20 | 1000 | 5 | | | |
| STR/LH/8/5/RD | Red | Diffused | 5 | 15 | 38 | 5 | | | |
| STR/LH/8/5/YW | Yellow | | 5 | 15 | 30 | 5 | | | |
| STR/LH/8/5/GN | Green | | 5 | 15 | 38 | 5 | | | |
| STR/LH/8/5/H/RD | Red | | 5 | 15 | 900 | 5 | | | |
| STR/LH/8/5/H/YW | Yellow | | 5 | 15 | 750 | 5 | | | |
| STR/LH/8/5/H/GN | Green | | 5 | 15 | 940 | 5 | | | |
| STR/LH/8/5/H/BE | Blue | | 5 | 15 | 900 | 5 | | | |
| STR/LH/8/5/H/WE | White | | 5 | 15 | 750 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Continued...



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/LH/8/12/RD | Red | Clear | 12 | 15 | 38 | 5 | 60° | -40 to +85 | -40 to +100 |
| STR/LH/8/12/YW | Yellow | | 12 | 15 | 30 | 5 | | | |
| STR/LH/8/12/GN | Green | | 12 | 15 | 38 | 5 | | | |
| STR/LH/8/12/H/RD | Red | | 12 | 15 | 900 | 5 | | | |
| STR/LH/8/12/H/YW | Yellow | | 12 | 15 | 750 | 5 | | | |
| STR/LH/8/12/H/GN | Green | | 12 | 15 | 940 | 5 | | | |
| STR/LH/8/12/H/BE | Blue | | 12 | 15 | 900 | 5 | | | |
| STR/LH/8/12/H/WE | White | | 12 | 15 | 750 | 5 | | | |
| STR/LH/8/24/RD | Red | | 24 | 15 | 38 | 5 | | | |
| STR/LH/8/24/YW | Yellow | | 24 | 15 | 30 | 5 | | | |
| STR/LH/8/24/GN | Green | | 24 | 15 | 38 | 5 | | | |
| STR/LH/8/24/H/RD | Red | | 24 | 15 | 900 | 5 | | | |
| STR/LH/8/24/H/YW | Yellow | | 24 | 15 | 750 | 5 | | | |
| STR/LH/8/24/H/GN | Green | | 24 | 15 | 940 | 5 | | | |
| STR/LH/8/24/H/BE | Blue | | 24 | 15 | 900 | 5 | | | |
| STR/LH/8/24/H/WE | White | | 24 | 15 | 750 | 5 | | | |
| STR/LH/8/28/RD | Red | Diffused | 28 | 15 | 38 | 5 | | | |
| STR/LH/8/28/YW | Yellow | | 28 | 15 | 30 | 5 | | | |
| STR/LH/8/28/GN | Green | | 28 | 15 | 38 | 5 | | | |
| STR/LH/8/28/H/RD | Red | | 28 | 15 | 900 | 5 | | | |
| STR/LH/8/28/H/YW | Yellow | | 28 | 15 | 750 | 5 | | | |
| STR/LH/8/28/H/GN | Green | | 28 | 15 | 940 | 5 | | | |
| STR/LH/8/28/H/BE | Blue | | 28 | 15 | 900 | 5 | | | |
| STR/LH/8/28/H/WE | White | | 28 | 15 | 750 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Mean time before failure 90,000 hrs.

For SES options please denote **SES** in the ordering information.
e.g. STR/LH/8/28/SES/H/WE

For night vision compatible options please denote **NVG** at the end of the ordering information.
e.g. STR/LH/8/28/NVG - 10 = Green, 20 = Yellow and 30 = Red.

Custom specials available on request.



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

# Panel and Lamp Body Sealed — Dual Polarity

# Convex Lens — IP68 - Ø8.0

## Features

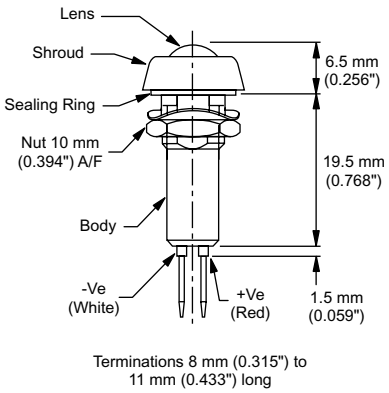
Panel and lamp body sealed;

Rugged glass and metal construction;

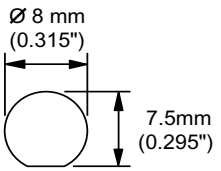
Short body length - ideal for applications where space is critical behind panel;

Sealed to IP68;

High intensity options available in all colours.




Terminations 8 mm (0.315") to 11 mm (0.433") long




**Mounting Hole**

## Ordering Information and Technical Characteristics (Ta = 25°C)

**a.c. or d.c.**

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/LH/8/DMC/RD | Red | Clear | 5.5 | 20 | 80 | 5 | 60° | -40 to +85 | -40 to +100 |
| STR/LH/8/DMC/YW | Yellow | | 5.5 | 20 | 25 | 5 | | | |
| STR/LH/8/DMC/GN | Green | Diffused | 5.5 | 20 | 80 | 5 | | | |
| STR/LH/8/DMC/AR | Amber | | 5.5 | 20 | 25 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Mean time before failure 90,000 hrs.

Customer specials available on request.



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Voltage Options Range

**a.c. or d.c.**

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/LH/8/12/DMC/RD | Red | Clear | 12 | 20 | 80 | 5 | 60° | -40 to +85 | -40 to +100 |
| STR/LH/8/12/DMC/YW | Yellow | | 12 | 20 | 25 | 5 | | | |
| STR/LH/8/12/DMC/GN | Green | | 12 | 20 | 80 | 5 | | | |
| STR/LH/8/12/DMC/AR | Amber | | 12 | 20 | 25 | 5 | | | |
| STR/LH/8/12/DMC/RD | Red | | 24 | 20 | 80 | 5 | | | |
| STR/LH/8/12/DMC/YW | Yellow | | 24 | 20 | 25 | 5 | | | |
| STR/LH/8/12/DMC/GN | Green | | 24 | 20 | 80 | 5 | | | |
| STR/LH/8/12/DMC/AR | Amber | Diffused | 24 | 20 | 25 | 5 | | | |
| STR/LH/8/12/DMC/RD | Red | | 28 | 20 | 80 | 5 | | | |
| STR/LH/8/12/DMC/YW | Yellow | | 28 | 20 | 25 | 5 | | | |
| STR/LH/8/12/DMC/GN | Green | | 28 | 20 | 80 | 5 | | | |
| STR/LH/8/12/DMC/AR | Amber | | 28 | 20 | 25 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Mean time before failure 90,000 hrs.

Customer specials available on request.



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Panel and lamp Body Sealed — Single Chip LED

## Sunlight Viewable — IP68 Ø8.0

### Features

Panel and lamp body sealed;

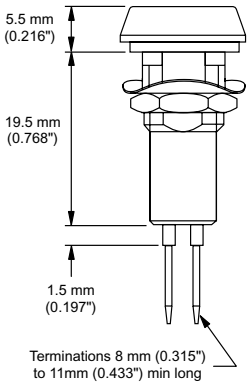
Rugged glass and metal construction;

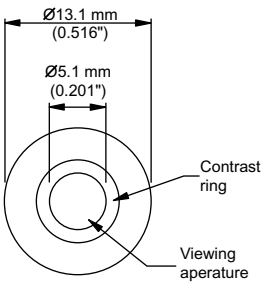
Visible up to 100,000 LUX ambient illumination;

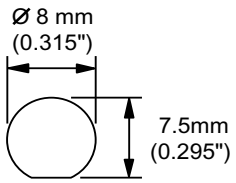
Special neutral density lens eliminates reflected sunlight;

Contrast enhancing shroud design;

Sealed to IP68.




**Mounting Hole**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/LH/8/RAPP/RD | Red | | 2.2 | 20 | 2 | 5 | | | |
| STR/LH/8/RAPP/YW | Yellow | | 2.2 | 20 | 1 | 5 | | | |
| STR/LH/8/RAPP/GN | Green | | 2.2 | 20 | 2 | 5 | | -40 | -40 |
| STR/LH/8/RAPP/H/RD | Red | Flat | 1.9 | 20 | 54 | 5 | | | |
| STR/LH/8/RAPP/H/YW | Yellow | | 2.2 | 20 | 45 | 5 | | | |
| STR/LH/8/RAPP/H/GN | Green | | 3.6 | 20 | 56 | 5 | | | |
| STR/LH/8/RAPP/H/BE | Blue | | 3.6 | 20 | 54 | 5 | | | |
| STR/LH/8/RAPP/H/WE | White | Neutral | 3.6 | 20 | 45 | 5 | 100° | to | to |
| STR/LH/8/5/RAPP/RD | Red | | 5 | 15 | 1.5 | 5 | | | |
| STR/LH/8/5/RAPP/YW | Yellow | | 5 | 15 | 0.75 | 5 | | | |
| STR/LH/8/5/RAPP/GN | Green | | 5 | 15 | 1.5 | 5 | | | |
| STR/LH/8/5/RAPP/H/RD | Red | Density | 5 | 15 | 41 | 5 | | | |
| STR/LH/8/5/RAPP/H/YW | Yellow | | 5 | 15 | 34 | 5 | | +85 | +100 |
| STR/LH/8/5/RAPP/H/GN | Green | | 5 | 15 | 42 | 5 | | | |
| STR/LH/8/5/RAPP/H/BE | Blue | | 5 | 15 | 41 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Continued ...



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/LH/8/12/RAPP/RD | Red | | 12 | 15 | 1.5 | 5 | | | |
| STR/LH/8/5/RAPP/H/WE | White | | 5 | 15 | 34 | 5 | | | |
| STR/LH/8/12/RAPP/YW | Yellow | | 12 | 15 | 0.75 | 5 | | | |
| STR/LH/8/12/RAPP/GN | Green | | 12 | 15 | 1.5 | 5 | | | |
| STR/LH/8/12/RAPP/H/RD | Red | Flat | 12 | 15 | 41 | 5 | | -40 | -40 |
| STR/LH/8/12/RAPP/H/YW | Yellow | | 12 | 15 | 34 | 5 | | | |
| STR/LH/8/12/RAPP/H/GN | Green | | 12 | 15 | 42 | 5 | | | |
| STR/LH/8/12/RAPP/H/BE | Blue | | 12 | 15 | 41 | 5 | | | |
| STR/LH/8/12/RAPP/H/WE | White | | 12 | 15 | 34 | 5 | | | |
| STR/LH/8/24/RAPP/RD | Red | | 24 | 15 | 1.5 | 5 | | | |
| STR/LH/8/24/RAPP/YW | Yellow | Neutral | 24 | 15 | 0.75 | 5 | 100° | to | to |
| STR/LH/8/24/RAPP/GN | Green | | 24 | 15 | 1.5 | 5 | | | |
| STR/LH/8/24/RAPP/H/RD | Red | | 24 | 15 | 41 | 5 | | | |
| STR/LH/8/24/RAPP/H/YW | Yellow | | 24 | 15 | 34 | 5 | | | |
| STR/LH/8/24/RAPP/H/GN | Green | | 24 | 15 | 42 | 5 | | | |
| STR/LH/8/24/RAPP/H/BE | Blue | | 24 | 15 | 41 | 5 | | | |
| STR/LH/8/24/RAPP/H/WE | White | | 24 | 15 | 34 | 5 | | | |
| STR/LH/8/28/RAPP/RD | Red | Density | 28 | 15 | 1.5 | 5 | | +85 | +100 |
| STR/LH/8/28/RAPP/YW | Yellow | | 28 | 15 | 0.75 | 5 | | | |
| STR/LH/8/28/RAPP/GN | Green | | 28 | 15 | 1.5 | 5 | | | |
| STR/LH/8/28/RAPP/H/RD | Red | | 28 | 15 | 41 | 5 | | | |
| STR/LH/8/28/RAPP/H/YW | Yellow | | 28 | 15 | 34 | 5 | | | |
| STR/LH/8/28/RAPP/H/GN | Green | | 28 | 15 | 42 | 5 | | | |
| STR/LH/8/28/RAPP/H/BE | Blue | | 28 | 15 | 41 | 5 | | | |
| STR/LH/8/28/RAPP/H/WE | White | | 28 | 15 | 34 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Mean time before failure 90,000 hrs.

For SES options please denote **SES** in the ordering information.
e.g. STR/LH/8/28/SES/H/WE

RAPP denote pinpoint wide viewing (100°)

For night vision compatible options please denote **NVG** at the end of the ordering information.
e.g. STR/LH/8/24/RAPP/NVG - 10 = Green, 20 = Yellow and 30 = Red.

Custom specials available on request.



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Panel and lamp Body Sealed — Single Chip LED

## Sunlight Viewable — IP68 - Ø8.0

### Features

Panel and lamp body sealed;

Rugged glass and metal construction;

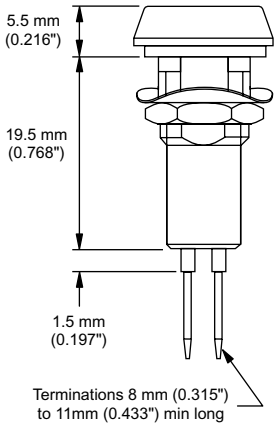
Visible up to 100,000 LUX ambient illumination;

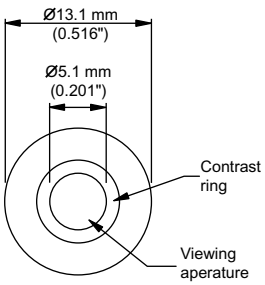
Special neutral density lens eliminates reflected sunlight;

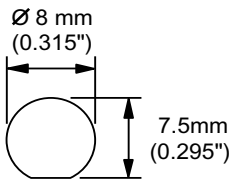
Contrast enhancing shroud design;

Sealed to IP68;

Five voltage ranges as standard.




**Mounting Hole**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/LH/8/RAF/RD | Red | Flat | 2.2 | 20 | 15 | 5 | 30° | -40 to +85 | -40 to +100 |
| STR/LH/8/RAF/YW | Yellow | | 2.2 | 20 | 12 | 5 | | | |
| STR/LH/8/RAF/GN | Green | | 2.2 | 20 | 15 | 5 | | | |
| STR/LH/8/RAF/H/RD | Red | | 1.9 | 20 | 360 | 5 | | | |
| STR/LH/8/RAF/H/YW | Yellow | | 2.2 | 20 | 300 | 5 | | | |
| STR/LH/8/RAPP/H/GN | Green | | 3.6 | 20 | 375 | 5 | | | |
| STR/LH/8/RAF/H/BE | Blue | Neutral | 3.6 | 20 | 360 | 5 | | | |
| STR/LH/8/RAF/H/WE | White | | 3.6 | 20 | 300 | 5 | | | |
| STR/LH/8/5/RAF/RD | Red | | 5 | 15 | 12 | 5 | | | |
| STR/LH/8/5/RAF/YW | Yellow | | 5 | 15 | 9 | 5 | | | |
| STR/LH/8/5/RAF/GN | Green | Density | 5 | 15 | 12 | 5 | | | |
| STR/LH/8/5/RAF/H/RD | Red | | 5 | 15 | 270 | 5 | | | |
| STR/LH/8/5/RAF/H/YW | Yellow | | 5 | 15 | 225 | 5 | | | |
| STR/LH/8/5/RAF/H/GN | Green | | 5 | 15 | 282 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Continued ...



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/LH/8/5/RAF/H/BE | Blue | | 5 | 15 | 270 | 5 | | | |
| STR/LH/8/5/RAF/H/WE | White | | 5 | 15 | 225 | 5 | | | |
| STR/LH/8/12/RAF/RD | Red | | 12 | 15 | 12 | 5 | | | |
| STR/LH/8/12/RAF/YW | Yellow | | 12 | 15 | 9 | 5 | | | |
| STR/LH/8/12/RAF/GN | Green | | 12 | 15 | 12 | 5 | | | |
| STR/LH/8/12/RAF/H/RD | Red | Flat | 12 | 15 | 270 | 5 | | -40 | -40 |
| STR/LH/8/12/RAF/H/YW | Yellow | | 12 | 15 | 225 | 5 | | | |
| STR/LH/8/12/RAF/H/GN | Green | | 12 | 15 | 282 | 5 | | | |
| STR/LH/8/12/RAF/H/BE | Blue | | 12 | 15 | 270 | 5 | | | |
| STR/LH/8/12/RAF/H/WE | White | | 12 | 15 | 225 | 5 | | | |
| STR/LH/8/24/RAF/RD | Red | | 24 | 15 | 12 | 5 | | | |
| STR/LH/8/24/RAF/YW | Yellow | | 24 | 15 | 9 | 5 | | | |
| STR/LH/8/24/RAF/GN | Green | Neutral | 24 | 15 | 12 | 5 | 30° | to | to |
| STR/LH/8/24/RAF/H/RD | Red | | 24 | 15 | 270 | 5 | | | |
| STR/LH/8/24/RAF/H/YW | Yellow | | 24 | 15 | 225 | 5 | | | |
| STR/LH/8/24/RAF/H/GN | Green | | 24 | 15 | 282 | 5 | | | |
| STR/LH/8/24/RAF/H/BE | Blue | | 24 | 15 | 270 | 5 | | | |
| STR/LH/8/24/RAF/H/WE | White | | 24 | 15 | 225 | 5 | | | |
| STR/LH/8/28/RAF/RD | Red | | 28 | 15 | 12 | 5 | | | |
| STR/LH/8/28/RAF/YW | Yellow | Density | 28 | 15 | 9 | 5 | | +85 | +100 |
| STR/LH/8/28/RAF/GN | Green | | 28 | 15 | 12 | 5 | | | |
| STR/LH/8/28/RAF/H/RD | Red | | 28 | 15 | 270 | 5 | | | |
| STR/LH/8/28/RAF/H/YW | Yellow | | 28 | 15 | 225 | 5 | | | |
| STR/LH/8/28/RAF/H/GN | Green | | 28 | 15 | 282 | 5 | | | |
| STR/LH/8/28/RAF/H/BE | Blue | | 28 | 15 | 270 | 5 | | | |
| STR/LH/8/28/RAF/H/WE | White | | 28 | 15 | 225 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Mean time before failure 90,000 hrs.

For SES options please denote **SES** in the ordering information.
e.g. STR/LH/8/28/SES/H/WE

RAF denotes focused beam source.

For night vision compatible options please denote **NVG** at the end of the ordering information.
e.g. STR/LH/8/24/RAF/NVG - 10 = Green, 20 = Yellow and 30 = Red.

Custom specials available on request.



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

# DESC 85122 Approved Indicator Lamps — Single Chip LED

## Indicator Lamp — IP68 - Ø8.0

### Features

Panel and lamp body sealed;

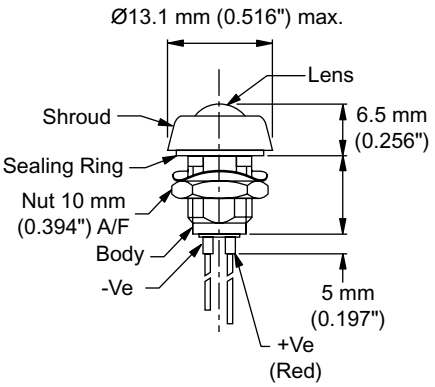
Rugged glass and metal construction;

100% screened, A and B tested per MIL-5-19500 JANTX;

DESC approved for use in DoD projects;

Sealed to IP68;

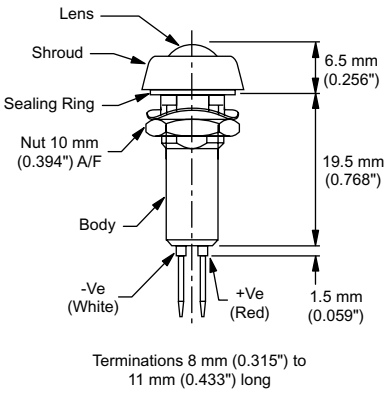
Approved to DESC drawing 85122.




Terminations 14 mm (0.551") to 20 mm (0.787") long

**PS/LH/8**

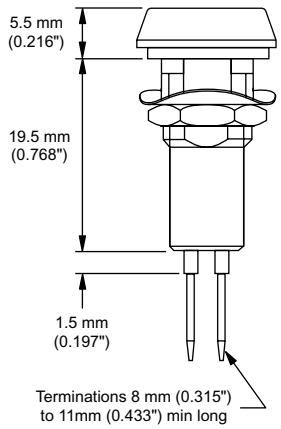
| DESC Drawing Dash Number | Oxley Part Number |
|---|---|
| 85122-X011 | 0X1100X1 |



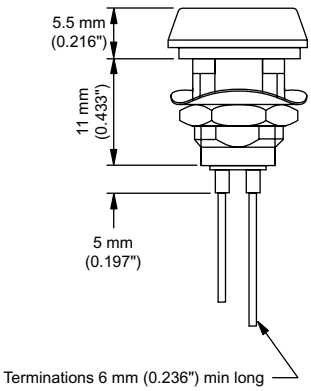

Terminations 8 mm (0.315") to 11 mm (0.433") long

**STR/LH/8/-**

| DESC Drawing Dash Number | Oxley Part Number |
|---|---|
| 85122-X02 | 0X2100X |
| 85122-X11 | 0X2101X |

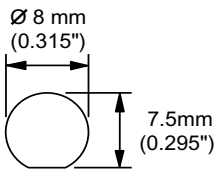



| DESC Drawing Dash Number | Oxley Part Number |
|---|---|
| 85122-X05 | 0X2200X |
| 85122-X05 | 0X2300X |
| 85122-X05 | 0X2210X |
| 85122-X05 | 0X2310X |
| 85122-X05 | 0X2211X |
| 85122-X05 | 0X2311X |




**PS/LH/8/RAF**

| DESC Drawing Dash Number | Oxley Part Number |
|---|---|
| 85122-X05 | 0X1200X |
| 85122-X05 | 0X1300X |




**Mounting Hole Details PS/LH/8 or STR/LH/8/-**



**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

# DESC 87019 Approved Indicator Lamps

# Single Chip LED

## Indicator Lamp

## IP68 - Ø8.0

### Features

Panel and lamp body sealed;

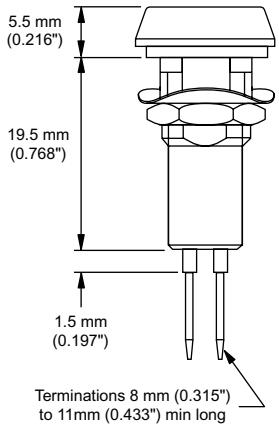
Rugged glass and metal construction;

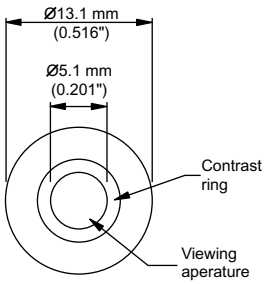
100% screened, A and B tested per MIL-5-19500 JANTX;

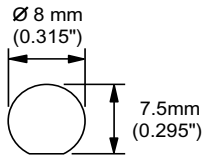
Meets US CECOM secure lighting;

Sealed to IP68;

Approved to DESC drawing 87019.




**Mounting Hole**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| DESC Drawing Dash Number | Oxley Part Number | Oxley Cross Reference Type Number | Features |
|---|---|---|---|
| 87019-X01 | OX2410X | STR/LH/8/XIR | Secure |
| 87019-X02 | OX2411X | STR/LH/8/XIR/SES | Secure - EMI Screen |

## Optical Characteristics

| All Types | | Red | Yellow | Green |
|---|---|---|---|---|
| **Minimum luminous intensity (on-axis at 10 mA) mcd** | | 0.5 | 0.5 | 0.5 |
| **Minimum luminous intensity (on axis at 10 mA) mcd** | | 2.4 | 4 | 5 |
| **Power emission (% of total) (in accordance with DESC 87019)** | **700-930nm** | 0.2% | - | - |
| | **675-930nm** | - | 0.2% | - |
| | **620-930nm** | - | - | 0.2% |
| **Dominant wavelength** | **min.** | 615 | 580 | 556 |
| | **max.** | 630 | 588 | 572 |

Mean time before failure 90,000 hrs.

## Panel and Lamp Body Sealed — Dual Polarity

## LED Indicator Mains Powered — IP68 - Ø8.0

### Features

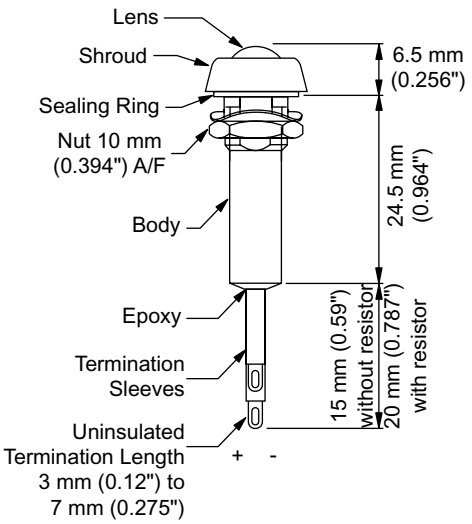
Panel and lamp body sealed;

Rugged glass and metal construction;

Two voltage variants available;

Sealed to IP68;

Loop hole tag terminals.




**STR/LH/8/-/Ref1**


**Mounting Hole Details**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/LH/8/110/REF1/RD | Red | Clear / Diffused / Lens | 110 | 5 | 20 | - | 60° | -40 to +85 °C | -40 to +100 °C |
| STR/LH/8/110/REF1/RD | Red | | 110 | 5 | 10 | - | | | |
| STR/LH/8/110/REF1/AR | Amber | | 110 | 5 | 6 | - | | | |
| STR/LH/8/110/REF1/YW | Yellow | | 110 | 5 | 6 | - | | | |
| STR/LH/8/110/REF1/GN | Green | | 110 | 5 | 20 | - | | | |
| STR/LH/8/110/REF1/RD | Red | | 240 | 5 | 20 | - | | | |
| STR/LH/8/110/REF1/RD | Red | | 240 | 5 | 10 | - | | | |
| STR/LH/8/110/REF1/AR | Amber | | 240 | 5 | 6 | - | | | |
| STR/LH/8/110/REF1/YW | Yellow | | 240 | 5 | 6 | - | | | |
| STR/LH/8/110/REF1/GN | Green | | 240 | 5 | 20 | - | | | |
| | | | V | mA | mcd | | | °C | °C |

Supply frequency (Hz) 50-60

Unlike neons, LED arrays operate below 50% supply voltage without flicker. Reduction in light output is proportional to fall in supply voltage.

Customer specials available on request.



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Panel and Lamp Body Sealed — Dual Polarity

## Convex Lens — IP68 - Ø8.0

## Features

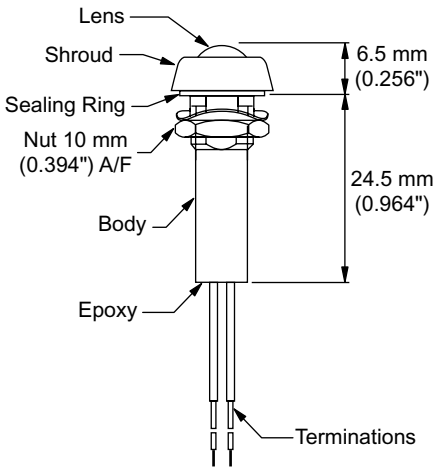
Panel and lamp body sealed;

Rugged glass and metal construction;

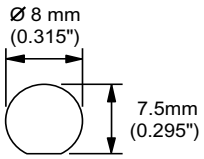
Sealed to IP68;

Two voltage variants available;

Flying lead terminals
(standard length of 200mm).




**STR/LH/8/-**




**Mounting Hole**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/LH/8/110/AL | AlGaAs Red | Clear Diffused Lens | 110 | 5 | 20 | - | 60° | -40 to +85 | -40 to +100 |
| STR/LH/8/110/RD | Red | | 110 | 5 | 10 | - | | | |
| STR/LH/8/110/AR | Amber | | 110 | 5 | 6 | - | | | |
| STR/LH/8/110/YW | Yellow | | 110 | 5 | 6 | - | | | |
| STR/LH/8/110/GN | Green | | 110 | 5 | 20 | - | | | |
| STR/LH/8/240/AL | AlGaAs Red | | 240 | 5 | 20 | - | | | |
| STR/LH/8/240/RD | Red | | 240 | 5 | 10 | - | | | |
| STR/LH/8/240/AR | Amber | | 240 | 5 | 6 | - | | | |
| STR/LH/8/240/YW | Yellow | | 240 | 5 | 6 | - | | | |
| STR/LH/8/240/GN | Green | | 240 | 5 | 20 | - | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Supply frequency (Hz) 50-60.

Unlike neons, LED arrays operate below 50% supply voltage without flicker. Reduction in light output is proportional to fall in supply flicker.

Customer specials available on request.



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Panel and Lamp Body Sealed — Neon Bulb

## Neon Indicator Mains Powered — IP68 - Ø8.0

### Features

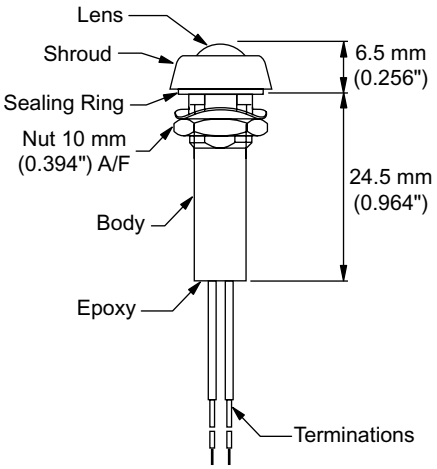
Panel and lamp body sealed;

Rugged glass and metal construction;

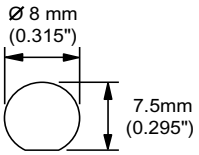
Sealed to IP68;

Two voltage variants available;

Flying lead terminations
(standard length of 200 mm).




**STR/LH/8/-**




**Mounting Hole**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/NLH/31/110 | AlGaAs Red | Coloured Diffused Lens | 110 | 1 | 0.15 | - | 80° | -40 to +85 | -40 to +100 |
| STR/NLH/32/110 | Red | | 110 | 1 | 0.15 | - | | | |
| STR/NLH/34/110 | Amber | | 110 | 1 | 0.15 | - | | | |
| STR/NLH/36/110 | Yellow | | 110 | 1 | 0.15 | - | | | |
| STR/NLH/31/240 | Green | | 240 | 1 | 0.15 | - | | | |
| STR/NLH/32/240 | AlGaAs Red | | 240 | 1 | 0.15 | - | | | |
| STR/NLH/34/240 | Red | | 240 | 1 | 0.15 | - | | | |
| STR/NLH/36/240 | Amber | | 240 | 1 | 0.15 | - | | | |
| | | | V | mA | mcd | | | °C | °C |

Proof voltage (terminations to body): 1,000 V.d.c.
Insulation resistance (at 500 V.d.c.): >5,000 Mohms.

Customer specials available on request.



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Panel and Lamp Body Sealed — Neon Bulb

## Neon Indicator Mains Powered — IP68 - Ø8.0

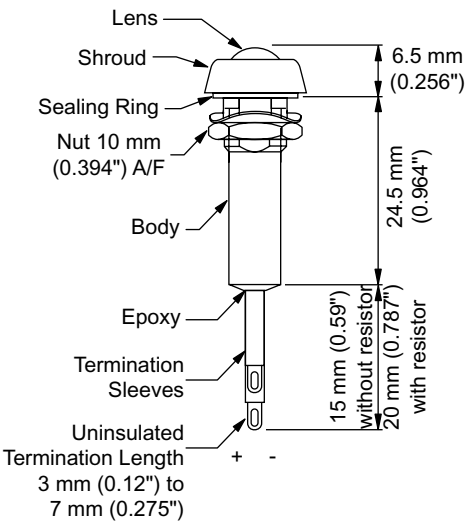
### Features

Panel and lamp body sealed;

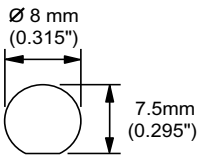
Rugged glass and metal construction;

Sealed to IP68;

Two voltage variants available.




**STR/LH/8/-/Ref1**




**Mounting Hole**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/NLH/31/REF1/110 | Red | Coloured Diffused Lens | 110 | 1 | 0.15 | - | 80° | -40 to +85 | -40 to +100 |
| STR/NLH/32/REF1/110 | Amber | | 110 | 1 | 0.15 | - | | | |
| STR/NLH/34/REF1/110 | Green | | 110 | 1 | 0.15 | - | | | |
| STR/NLH/36/REF1/110 | Clear | | 110 | 1 | 0.15 | - | | | |
| STR/NLH/31/REF1/240 | Red | | 240 | 1 | 0.15 | - | | | |
| STR/NLH/32/REF1/240 | Amber | | 240 | 1 | 0.15 | - | | | |
| STR/NLH/34/REF1/240 | Green | | 240 | 1 | 0.15 | - | | | |
| STR/NLH/36/REF1/240 | Clear | | 240 | 1 | 0.15 | - | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

REF1 denotes loop hole tag terminations.

Proof voltage (terminations to body): 1000 V dc
Insulation resistance (at 500 V dc): >5000 Mohms.

Customer specials available on request.



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Panel and Lamp Body Sealed — Neon Bulb

## Neon Indicator Mains Powered — IP68 - Ø8.0

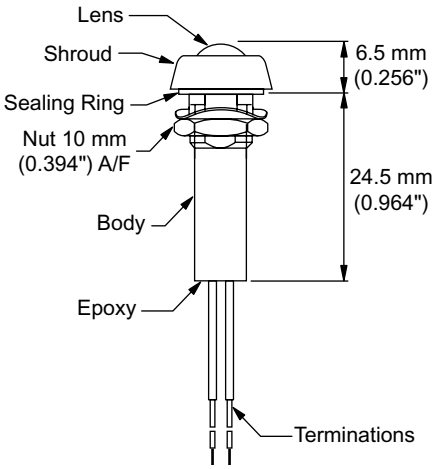
### Features

Panel and lamp body sealed;

Rugged glass and metal construction;

Sealed to IP68;

Flying lead terminals
(standard length of 200mm).




**STR/LH/8/-**


**Mounting Hole**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/NLH/31/WR | Red | Coloured | 110 | 1 | 0.15 | - | 80° | -40 to +85 | -40 to +100 |
| STR/NLH/32/WR | Amber | | 110 | 1 | 0.15 | - | | | |
| STR/NLH/34/WR | Green | | 110 | 1 | 0.15 | - | | | |
| STR/NLH/36/WR | Clear | Diffused Lens | 110 | 1 | 0.15 | - | | | |
| STR/NLH/31/REF1/WR | Red | | 240 | 1 | 0.15 | - | | | |
| STR/NLH/32/REF1/WR | Amber | | 240 | 1 | 0.15 | - | | | |
| STR/NLH/34/REF1/WR | Green | | 240 | 1 | 0.15 | - | | | |
| STR/NLH/36/REF1/WR | Clear | | 240 | 1 | 0.15 | - | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

WR denotes Without Resistor

Proof voltage (terminations to body): 1000 V dc
Insulation resistance (at 500 V dc): >5000 Mohms.

**Note**: To calculate series resistor for -/WR version, use the following formula:-

R = Vs-VN (kohm)
whereVs = supply voltage (nm 90 V ac)
whereVN = 65 V (neon maintaining voltage)

Customer specials available on request.



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Panel and Lamp Body Sealed — Single Chip LED

## Indicator Lamp Rear Mounting — IP68 - Ø8.0

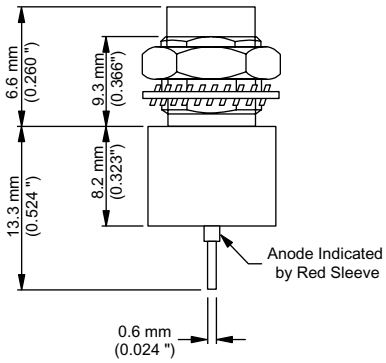
### Features

Panel and lamp body sealed;

Reduces assembly time when access to rear/front of panel is limited;

Sealed to IP67;

Lamp removal possible without removing terminations.



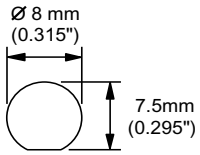

**Orientation of Terminations**

STR5/LH/8
"A" Versions

Polarity Anode to flat

STR5/LH/8
"K" Versions

Polarity Cathode to flat




**STR5/-**
**Mounting Hole Size**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/5/LH/8/RD | Red | Flat | 2.2 | 1 | 50 | 5 | 60° | -40 to +85 | -40 to +100 |
| STR/5/LH/8/YW | Yellow | | 2.2 | 1 | 40 | 5 | | | |
| STR/5/LH/8/GN | Green | | 2.2 | 1 | 50 | 5 | | | |
| STR/5/LH/8/H/RD | Red | Diffused | 1.9 | 1 | 1200 | 5 | | | |
| STR/5/LH/8/H/YW | Yellow | | 2.2 | 1 | 1000 | 5 | | | |
| STR/5/LH/8/H/GN | Green | | 3.6 | 1 | 1250 | 5 | | | |
| STR/5/LH/8/H/BE | Blue | Lens | 3.6 | 1 | 1200 | 5 | | | |
| STR/5/LH/8/H/WE | White | | 3.6 | 1 | 1000 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Mean time before failure 90,000 hrs.

For NVIS compatability, please contact our Sales Department.

Customer specials available on request.



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

# Type No. - STR5/LH/8

## Panel and Lamp Body Sealed — Single Chip LED

## Sunlight Viewable Rear Mounting — IP68 - Ø8.0

### Features

Panel and lamp body sealed;

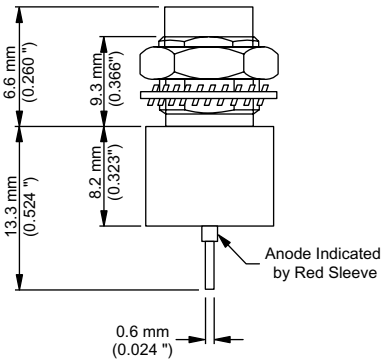
Can reduce assembly time when access to rear/front of panel is limited;

Visible up to 100,00 LUX ambient illumination;

Sealed to IP67;

Lamp removal possible without removing terminations;

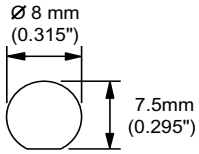
Special neutral density lens eliminates reflected sunlight.




**Orientation of Terminations**

STR5/LH/8
"A" Versions


STR5/LH/8
"K" Versions


**STR5/-**
**Mounting Hole Size**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/5/LH/8/RAF/GN | Green | Flat Diffused Lens | 2.2 | 20 | 15 | 5 | 60° | -40 to +85 | -40 to +100 |
| STR/5/LH/8/RAF/YW | Yellow | | 2.2 | 20 | 12 | 5 | | | |
| STR/5/LH/8/RAF/RD | Red | | 2.2 | 20 | 15 | 5 | | | |
| STR/5/LH/8/RAF/H/GN | Green | | 3.6 | 20 | 375 | 5 | | | |
| STR/5/LH/8/RAF/H/YW | Yellow | | 2.2 | 20 | 300 | 5 | | | |
| STR/5/LH/8/RAF/H/RD | Red | | 1.9 | 20 | 360 | 5 | | | |
| STR/5/LH/8/RAF/H/BE | Blue | | 3.6 | 20 | 360 | 5 | | | |
| STR/5/LH/8/RAF/H/WE | White | | 3.6 | 20 | 300 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

For NVIS compatability, please contact our Sales Department
RAF denotes focussed beam source.

(1) Please specify the A or K version at the end of the part number when ordering.

Mean time before failure 90,000 hrs.

Customer specials available on request.



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Panel and Lamp Body Sealed

## Single Chip LED

## Sunlight Viewable Rear Mounting

## IP68 - Ø8.0

### Features

Panel and lamp body sealed;

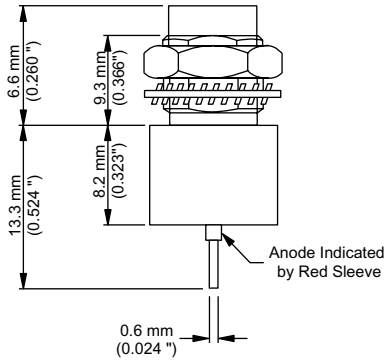
Can reduce assembly time when access to rear/front of panel is limited;

Visible up to 100,00 LUX ambient illumination;

Sealed to IP67;

Lamp removal possible without removing terminations;

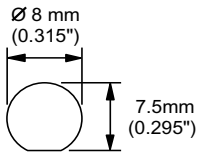
Special neutral density lens eliminates reflected sunlight.




**Orientation of Terminations**

STR5/LH/8
"A" Versions


STR5/LH/8
"K" Versions


**STR5/-**
**Mounting Hole Size**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/5/LH/8/RAPP/GN | Green | Flat Diffused Lens | 2.2 | 20 | 2 | 5 | 60° | -40 to +85 | -40 to +100 |
| STR/5/LH/8/RAPP/YW | Yellow | | 2.2 | 20 | 1 | 5 | | | |
| STR/5/LH/8/RAPP/RD | Red | | 2.2 | 20 | 2 | 5 | | | |
| STR/5/LH/8/RAPP/H/GN | Green | | 3.6 | 20 | 56 | 5 | | | |
| STR/5/LH/8/RAPP/H/YW | Yellow | | 2.2 | 20 | 45 | 5 | | | |
| STR/5/LH/8/RAPP/H/RD | Red | | 1.9 | 20 | 54 | 5 | | | |
| STR/5/LH/8/RAP/H/BE | Blue | | 3.6 | 20 | 54 | 5 | | | |
| STR/5/LH/8/RAPP/H/WE | White | | 3.6 | 20 | 45 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

For NVIS compatability, please contact our Sales Department

RAPP denotes wide viewing 100°.

Mean time before failure 90,000 hrs.

Customer specials available on request.



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

# Indicator Lamp

# Rear Mounting

## Single Chip LED

## IP68 - Ø8.0

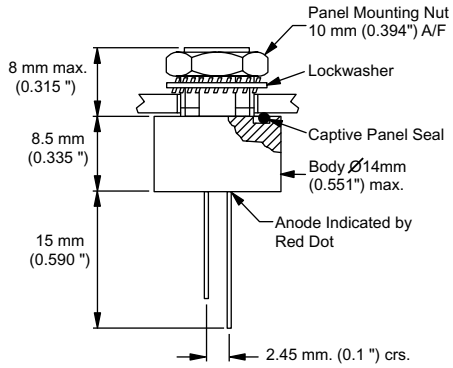
### Features

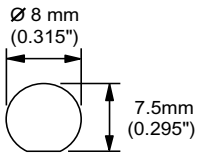
Can reduce assembly time when access to rear/front of panel is limited;

Sealing to MIL-L-3661;

High reliability;

Lamp removal possible without removing terminations.




**STR501/**
**Mounting Hole Size**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/501/LH/8/RD | Red | Flat | 5 | 20 | 50 | 5 | 60° | -40 to +85 | -55 to +100 |
| STR/501/LH/8/YW | Yellow | | 5 | 20 | 40 | 5 | | | |
| STR/501/LH/8/GN | Green | | 5 | 20 | 50 | 5 | | | |
| STR/501/LH/8/H/RD | Red | | 1.9 | 20 | 1200 | 5 | | | |
| STR/501/LH/8/H/YW | Yellow | | 2.2 | 20 | 1000 | 5 | | | |
| STR/501/LH/8/H/GN | Green | | 3.6 | 20 | 1250 | 5 | | | |
| STR/501/LH/8/H/BE | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| STR/501/LH/8/H/WE | White | | 3.6 | 20 | 1000 | 5 | | | |
| STR/501/LH/5/RD | Red | Diffused Lens | 5 | 15 | 38 | 5 | | | |
| STR/501/LH/5/YW | Yellow | | 5 | 15 | 30 | 5 | | | |
| STR/501/LH/5/GN | Green | | 5 | 15 | 38 | 5 | | | |
| STR/501/LH/5/H/RD | Red | | 1.9 | 15 | 900 | 5 | | | |
| STR/501/LH/5/H/YW | Yellow | | 2.2 | 15 | 750 | 5 | | | |
| STR/501/LH/5/H/GN | Green | | 3.6 | 15 | 940 | 5 | | | |
| STR/501/LH/5/H/BE | Blue | | 3.6 | 15 | 900 | 5 | | | |
| STR/501/LH/5/H/WE | White | | 3.6 | 15 | 750 | 5 | | | |
| | | | V | mA | mcd | | | °C | °C |



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/501/LH/12/RD | Red | | 5 | 20 | 38 | 5 | | | |
| STR/501/LH/12/YW | Yellow | | 5 | 20 | 30 | 5 | | | |
| STR/501/LH/12/GN | Green | | 5 | 20 | 38 | 5 | | | |
| STR/501/LH/12/H/RD | Red | | 1.9 | 20 | 900 | 5 | | | |
| STR/501/LH/12/H/YW | Yellow | | 2.2 | 20 | 750 | 5 | | | |
| STR/501/LH/12/H/GN | Green | | 3.6 | 20 | 940 | 5 | | | |
| STR/501/LH/12/H/BE | Blue | | 3.6 | 20 | 900 | 5 | | | |
| STR/501/LH/12/H/WE | White | | 3.6 | 20 | 750 | 5 | | | |
| STR/501/LH/15/RD | Red | | 5 | 15 | 38 | 5 | | | |
| STR/501/LH/15/YW | Yellow | Flat | 5 | 15 | 30 | 5 | | -40 | -55 |
| STR/501/LH/15/GN | Green | | 5 | 15 | 38 | 5 | | | |
| STR/501/LH/15/H/RD | Red | | 1.9 | 15 | 900 | 5 | | | |
| STR/501/LH/15/H/YW | Yellow | | 2.2 | 15 | 750 | 5 | | | |
| STR/501/LH/15/H/GN | Green | | 3.6 | 15 | 940 | 5 | | | |
| STR/501/LH/15/H/BE | Blue | | 3.6 | 15 | 900 | 5 | | | |
| STR/501/LH/15/H/WE | White | | 3.6 | 15 | 750 | 5 | | | |
| STR/501/LH/24/RD | Red | | 5 | 15 | 38 | 5 | | | |
| STR/501/LH/24/YW | Yellow | | 5 | 15 | 30 | 5 | | | |
| STR/501/LH/24/GN | Green | Diffused | 5 | 15 | 38 | 5 | 60° | to | to |
| STR/501/LH/24/H/RD | Red | | 1.9 | 15 | 900 | 5 | | | |
| STR/501/LH/24/H/YW | Yellow | | 2.2 | 15 | 750 | 5 | | | |
| STR/501/LH/24/H/GN | Green | | 3.6 | 15 | 940 | 5 | | | |
| STR/501/LH/24/H/BE | Blue | | 3.6 | 15 | 900 | 5 | | | |
| STR/501/LH/24/H/WE | White | | 3.6 | 15 | 750 | 5 | | | |
| STR/501/LH/28/RD | Red | | 5 | 15 | 38 | 5 | | | |
| STR/501/LH/28/YW | Yellow | | 5 | 15 | 30 | 5 | | | |
| STR/501/LH/28/GN | Green | | 5 | 15 | 38 | 5 | | | |
| STR/501/LH/28/H/RD | Red | | 1.9 | 15 | 900 | 5 | | | |
| STR/501/LH/28/H/YW | Yellow | Lens | 2.2 | 15 | 750 | 5 | | +85 | +100 |
| STR/501/LH/28/H/GN | Green | | 3.6 | 15 | 940 | 5 | | | |
| STR/501/LH/28/H/BE | Blue | | 3.6 | 15 | 900 | 5 | | | |
| STR/501/LH/28/H/WE | White | | 3.6 | 15 | 750 | 5 | | | |
| | | | **V** | **mA** | **mcd** | | | **°C** | **°C** |

Voltage variants ranging from 5 to 28 volts.

For RAF - focused sunlight viewable (30°), RAPP - pin point wide viewing sunlight viewable (100°) and NVIS compatibility. (Please contact our Sales Department.)



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

# Panel Sealed Single Chip LED

# Bezeled LED Indicator IP68 - Ø8.0

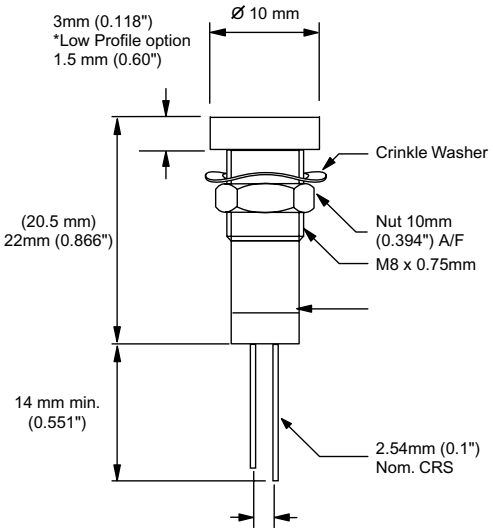
## Features

Protective cone bezel;

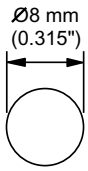
Reflective cone design;

Sealing available to IP67;

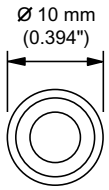
Low profile option available.




**OXL/CLH/80**
***OXL/CLH/80/LP/BB**




**Mounting Hole**




**Front View**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| OXL/CLH/80/RD | Red | LED Lens | 2.2 | 20 | 45 | 5 | 80° | -40 to +85 | -40 to +85 |
| OXL/CLH/80/YW | Yellow | | 2.2 | 20 | 45 | 5 | | | |
| OXL/CLH/80/GN | Green | | 2.2 | 20 | 45 | 5 | | | |
| OXL/CLH/80/H/RD | Red | | 1.9 | 20 | 1200 | 5 | | | |
| OXL/CLH/80/H/YW | Yellow | | 2.2 | 20 | 1000 | 5 | | | |
| OXL/CLH/80/H/GN | Green | | 3.6 | 20 | 1250 | 5 | | | |
| OXL/CLH/80/H/BE | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| OXL/CLH/80/H/WE | White | | 3.6 | 20 | 1000 | 5 | | | |
| OXL/CLH/80/5/RD | Red | | 5 | 15 | 34 | 5 | | | |
| OXL/CLH/80/5/YW | Yellow | | 5 | 15 | 34 | 5 | | | |
| OXL/CLH/80/5/GN | Green | | 5 | 15 | 34 | 5 | | | |
| OXL/CLH/80/5/H/RD | Red | | 5 | 15 | 900 | 5 | | | |
| OXL/CLH/80/5/H/YW | Yellow | | 5 | 15 | 750 | 5 | | | |
| OXL/CLH/80/5/H/GN | Green | | 5 | 15 | 940 | 5 | | | |
| OXL/CLH/80/5/H/BE | Blue | | 5 | 15 | 900 | 5 | | | |
| OXL/CLH/80/5/H/WE | White | | 5 | 15 | 750 | 5 | | | |
| | | | **V** | **mA** | **mcd** | **V** | | **°C** | **°C** |

Continued ...



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| OXL/CLH/80/12/RD | Red | | 12 | 15 | 34 | 5 | | | |
| OXL/CLH/80/12/YW | Yellow | | 12 | 15 | 34 | 5 | | | |
| OXL/CLH/80/12/GN | Green | | 12 | 15 | 34 | 5 | | | |
| OXL/CLH/80/12/H/RD | Red | | 12 | 15 | 900 | 5 | | | |
| OXL/CLH/80/12/H/YW | Yellow | | 12 | 15 | 750 | 5 | | | |
| OXL/CLH/80/12/H/GN | Green | | 12 | 15 | 940 | 5 | | | |
| OXL/CLH/80/12/H/BE | Blue | LED | 12 | 15 | 900 | 5 | | -40 | -40 |
| OXL/CLH/80/12/H/WE | White | | 12 | 15 | 750 | 5 | | | |
| OXL/CLH/80/15/RD | Red | | 15 | 15 | 34 | 5 | | | |
| OXL/CLH/80/15/YW | Yellow | | 15 | 15 | 34 | 5 | | | |
| OXL/CLH/80/15/GN | Green | | 15 | 15 | 34 | 5 | | | |
| OXL/CLH/80/15/H/RD | Red | | 15 | 15 | 900 | 5 | | | |
| OXL/CLH/80/15/H/YW | Yellow | | 15 | 15 | 750 | 5 | | | |
| OXL/CLH/80/15/H/GN | Green | | 15 | 15 | 940 | 5 | | | |
| OXL/CLH/80/15/H/BE | Blue | | 15 | 15 | 900 | 5 | | | |
| OXL/CLH/80/15/H/WE | White | | 15 | 15 | 750 | 5 | 80° | to | to |
| OXL/CLH/80/24/RD | Red | | 24 | 15 | 34 | 5 | | | |
| OXL/CLH/80/24/YW | Yellow | | 24 | 15 | 34 | 5 | | | |
| OXL/CLH/80/24/GN | Green | | 24 | 15 | 34 | 5 | | | |
| OXL/CLH/80/24/H/RD | Red | | 24 | 15 | 900 | 5 | | | |
| OXL/CLH/80/24/H/YW | Yellow | | 24 | 15 | 750 | 5 | | | |
| OXL/CLH/80/24/H/GN | Green | | 24 | 15 | 940 | 5 | | | |
| OXL/CLH/80/24/H/BE | Blue | | 24 | 15 | 900 | 5 | | | |
| OXL/CLH/80/24/H/WE | White | | 24 | 15 | 750 | 5 | | | |
| OXL/CLH/80/28/RD | Red | | 28 | 15 | 34 | 5 | | | |
| OXL/CLH/80/28/YW | Yellow | Lens | 28 | 15 | 34 | 5 | | +85 | +85 |
| OXL/CLH/80/28/GN | Green | | 28 | 15 | 34 | 5 | | | |
| OXL/CLH/80/28/H/RD | Red | | 28 | 15 | 900 | 5 | | | |
| OXL/CLH/80/28/H/YW | Yellow | | 28 | 15 | 750 | 5 | | | |
| OXL/CLH/80/28/H/GN | Green | | 28 | 15 | 940 | 5 | | | |
| OXL/CLH/80/28/H/BE | Blue | | 28 | 15 | 900 | 5 | | | |
| OXL/CLH/80/28/H/WE | White | | 28 | 15 | 750 | 5 | | | |
| | | | **V** | **mA** | **mcd** | **V** | | **°C** | **°C** |

Mean time before failure 90,000 hrs.

Customer specials available on request.



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Panel Sealed — Single Chip LED

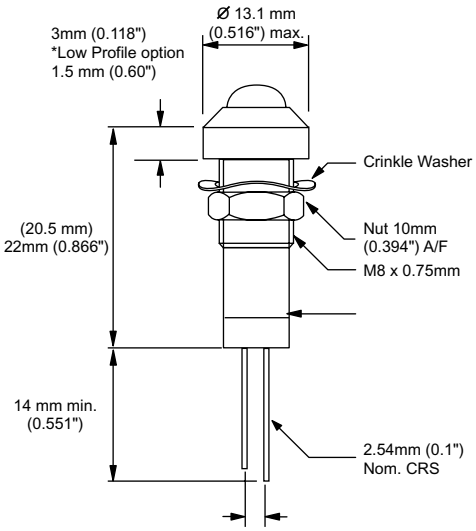
## Bezeled LED Indicator — IP68 Ø8.0

### Features

Low profile;

Black anodized body for corrosive atmospheres;

Sealing available to IP67.





**Front View**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| OXL/CLH/80/P/BB/RD | Red | LED Lens | 2.2 | 20 | 45 | 5 | 80° | -40 to +85 | -40 to +85 |
| OXL/CLH/80/P/BB/YW | Yellow | | 2.2 | 20 | 45 | 5 | | | |
| OXL/CLH/80/P/BB/GN | Green | | 2.2 | 20 | 45 | 5 | | | |
| OXL/CLH/80/P/BB/H/RD | Red | | 1.9 | 20 | 1200 | 5 | | | |
| OXL/CLH/80/P/BB/H/YW | Yellow | | 2.2 | 20 | 1000 | 5 | | | |
| OXL/CLH/80/P/BB/H/GN | Green | | 3.6 | 20 | 1250 | 5 | | | |
| OXL/CLH/80/P/BB/H/BE | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| OXL/CLH/80/P/BB/H/WE | White | | 3.6 | 20 | 1000 | 5 | | | |
| | | | **V** | **mA** | **mcd** | **V** | | **°C** | **°C** |

Mean time before failure 90,000 hrs.

Voltage versions and specials available on request.



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Panel and Lamp Body Sealed

## Single Chip LED

## Domed Lens

## IP68 - Ø10.0

### Features

Panel and lamp body sealed;

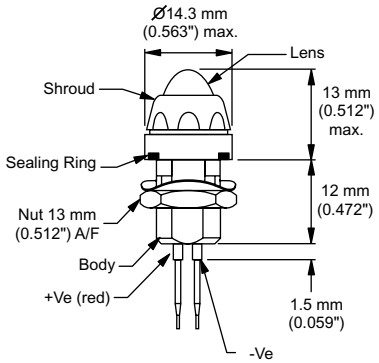
Rugged glass and metal construction;

Black anodised body for salt laden atmospheres;

Domed lens, wide viewing angle;

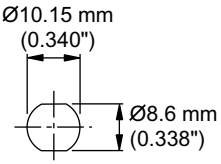
Sealed to IP68;

Integral resistors - five standard voltage variants avaailable.




Terminations 8 mm (0.315") to 11 mm (0.433") long

**STR/LH23/10/-**




**Mounting Hole**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/LH23/10/RD | Red | Clear | 1.9 | 20 | 50 | 5 | 100° | -40 to +85 | -40 to +100 |
| STR/LH23/10/AR | Amber | | 2.2 | 20 | 40 | 5 | | | |
| STR/LH23/10/YW | Yellow | | 2.2 | 20 | 40 | 5 | | | |
| STR/LH23/10/GN | Green | | 2.2 | 20 | 50 | 5 | | | |
| STR/LH23/10/5/RD | Red | Diffused | 5 | 15 | 38 | 5 | | | |
| STR/LH23/10/5/AR | Amber | | 5 | 15 | 30 | 5 | | | |
| STR/LH23/10/5/YW | Yellow | Domed | 5 | 15 | 30 | 5 | | | |
| STR/LH23/10/5/GN | Green | | 5 | 15 | 38 | 5 | | | |
| STR/LH23/10/12/RD | Red | Lens | 12 | 15 | 38 | 5 | | | |
| STR/LH23/10/12/AR | Amber | | 12 | 15 | 30 | 5 | | | |
| STR/LH23/10/12/YW | Yellow | | 12 | 15 | 30 | 5 | | | |
| STR/LH23/10/12/GN | Green | | 12 | 15 | 38 | 5 | | | |
| | | | V | mA | mcd | V | | °C | °C |

Mean time before failure 90,000 hrs



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/LH23/10/15/RD | Red | Clear | 15 | 15 | 38 | 5 | 100° | -40 to +85 | -40 to +100 |
| STR/LH23/10/15/AR | Amber | | 15 | 15 | 30 | 5 | | | |
| STR/LH23/10/15/YW | Yellow | | 15 | 15 | 30 | 5 | | | |
| STR/LH23/10/15/GN | Green | | 15 | 15 | 38 | 5 | | | |
| STR/LH23/10/24/RD | Red | Diffused | 24 | 15 | 38 | 5 | | | |
| STR/LH23/10/24/AR | Amber | | 24 | 15 | 30 | 5 | | | |
| STR/LH23/10/24/YW | Yellow | Domed | 24 | 15 | 30 | 5 | | | |
| STR/LH23/10/24/GN | Green | | 24 | 15 | 38 | 5 | | | |
| STR/LH23/10/28/RD | Red | Lens | 28 | 15 | 38 | 5 | | | |
| STR/LH23/10/28/AR | Amber | | 28 | 15 | 30 | 5 | | | |
| STR/LH23/10/28/YW | Yellow | | 28 | 15 | 30 | 5 | | | |
| STR/LH23/10/28/GN | Green | | 28 | 15 | 38 | 5 | | | |
| | | | **V** | **mA** | **mcd** | **V** | | **°C** | **°C** |

Mean time before failure 90,000 hrs

High Intensity options and customer specials available on request.



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Two-Part LED Indicator

## Single Chip LED

## Domed Lens

## IP68 - Ø10.0

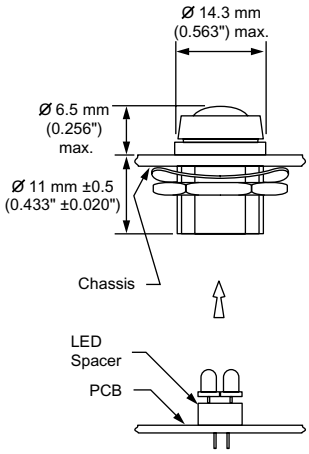
### Features

2 part construction permits wire-less detachment of front panel;

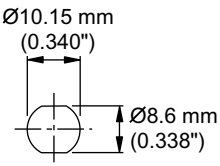
Rugged glass and metal construction;

Panel sealed to IP68;

Improved equipment reliability, fewer solder joints.




**2STR/LH23/10~LX**




**Mounting Hole (STR/LH23/10/-)**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| STR/LH23/10/LX/RD | Red | Clear | 2.2 | 20 | 20 | 5 | 80° | -40 to +85 | -40 to +100 |
| STR/LH23/10/LX/YW | Yellow | | 2.2 | 20 | 20 | 5 | | | |
| STR/LH23/10/LX/GN | Green | | 2.2 | 20 | 20 | 5 | | | |
| STR/LH23/10/LX/H/RD | Red | Diffused | 1.9 | 20 | 1200 | 5 | | | |
| STR/LH23/10/LX/H/YW | Yellow | | 2.2 | 20 | 1000 | 5 | | | |
| STR/LH23/10/LX/H/GN | Green | Lens | 3.6 | 20 | 1250 | 5 | | | |
| STR/LH23/10/LX/H/BE | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| STR/LH23/10/LX/H/WE | White | | 3.6 | 20 | 1000 | 5 | | | |
| | | | | | | | | | °C |

Mean time before failure 90,000 hrs.

Custom specials available on request.



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Bi-Segmented LED Indicator

## Flat Lens

## Single Chip LED

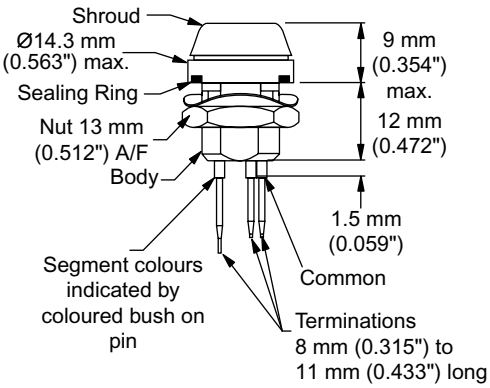
## IP68 - Ø10.0

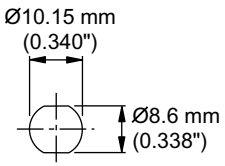
### Features

Replaces two single indicators;

Independently addressable segments;

Sealed to IP68.




**Mounting Hole 2/STR/LH23/10/-**

## Ordering Information and Technical Characteristics (Ta = 25°C).

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| 2STR/LH23/10/RD/RD | Red | | 2.2 | 20 | 15 | 5 | | | |
| | Red | | 2.2 | | 15 | 5 | | | |
| 2STR/LH23/10/RD/GN | Red | | 2.2 | 20 | 15 | 5 | | | |
| | Green | | 2.2 | | 15 | 5 | | | |
| 2STR/LH23/10/RD/YW | Red | | 2.2 | 20 | 15 | 5 | | | |
| | Yellow | | 2.2 | | 12 | 5 | | | |
| 2STR/LH23/10/GN/GN | Green | Flat | 2.2 | 20 | 15 | 5 | | -40 | -40 |
| | Green | | 2.2 | | 15 | 5 | | | |
| 2STR/LH23/10/GN/RD | Green | Clear | 2.2 | 20 | 15 | 5 | 60° | to | to |
| | Red | | 2.2 | | 15 | 5 | | | |
| 2STR/LH23/10/GN/YW | Green | Diffused | 2.2 | 20 | 15 | 5 | | +85 | +100 |
| | Yellow | | 2.2 | | 12 | 5 | | | |
| 2STR/LH23/10/YW/YW | Yellow | | 2.2 | 20 | 12 | 5 | | | |
| | Yellow | | 2.2 | | 12 | 5 | | | |
| 2STR/LH23/10/YW/RD | Yellow | | 2.2 | 20 | 12 | 5 | | | |
| | Red | | 2.2 | | 15 | 5 | | | |
| | | | V | mA | mcd | V | | °C | °C |

Continued ...



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| 2STR/LH23/10/YW/GN | Yellow | | 2.2 | 20 | 12 | 5 | | | |
| | Green | | 2.2 | | 15 | 5 | | | |
| 2STR/LH23/10/H/RD/RD | Red | | 1.9 | 20 | 1200 | 5 | | | |
| | Red | | 2.2 | | 15 | 5 | | | |
| 2STR/LH23/10/H/RD/YW | Red | | 1.9 | 20 | 1200 | 5 | | | |
| | Yellow | | 2.2 | | 1000 | 5 | | | |
| 2STR/LH23/10/H/RD/GN | Red | | 1.9 | 20 | 1200 | 5 | | | |
| | Green | | 3.6 | | 1250 | 5 | | | |
| 2STR/LH23/10/H/RD/YW | Red | Flat | 1.9 | 20 | 1200 | 5 | | -40 | -40 |
| | Yellow | | 2.2 | | 1000 | 5 | | | |
| 2STR/LH23/10/H/YW/YW | Yellow | | 2.2 | 20 | 1000 | 5 | | | |
| | Yellow | | 2.2 | | 1000 | 5 | | | |
| 2STR/LH23/10/H/YW/RD | Yellow | | 2.2 | 20 | 1000 | 5 | | | |
| | Red | | 1.9 | | 1200 | 5 | | | |
| 2STR/LH23/10/H/YW/GN | Yellow | | 2.2 | 20 | 1000 | 5 | | | |
| | Green | | 3.6 | | 1250 | 5 | | | |
| 2STR/LH23/10/H/YW/BE | Yellow | | 2.2 | 20 | 1000 | 5 | | | |
| | Blue | | 3.6 | | 1200 | 5 | | | |
| 2STR/LH23/10/H/YW/WE | Yellow | Clear | 2.2 | 20 | 1000 | 5 | 60° | to | to |
| | White | | 3.6 | | 1000 | 5 | | | |
| 2STR/LH23/10/H/GN/RD | Green | | 3.6 | 20 | 1250 | 5 | | | |
| | Red | | 2.2 | | 1200 | 5 | | | |
| 2STR/LH23/10/H/GN/YW | Green | | 3.6 | 20 | 1250 | 5 | | | |
| | Yellow | | 2.2 | | 1000 | 5 | | | |
| 2STR/LH23/10/H/GN/GN | Green | | 3.6 | 20 | 1250 | 5 | | | |
| | Green | | 3.6 | | 1250 | 5 | | | |
| 2STR/LH23/10/H/GN/BE | Green | | 3.6 | 20 | 1250 | 5 | | | |
| | Blue | | 3.6 | | 1000 | 5 | | | |
| 2STR/LH23/10/H/GN/WE | Green | Diffused | 3.6 | 20 | 1250 | 5 | | +85 | +100 |
| | White | | 3.6 | | 1000 | 5 | | | |
| 2STR/LH23/10/H/BE/BE | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| | Blue | | 3.6 | | 1200 | 5 | | | |
| 2STR/LH23/10/H/BE/WE | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| | White | | 3.6 | | 1000 | 5 | | | |
| 2STR/LH23/10/H/BE/RD | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| | Red | | 1.9 | | 1200 | 5 | | | |
| 2STR/LH23/10/H/BE/YW | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| | Yellow | | 2.2 | | 1000 | 5 | | | |
| | | | **V** | **mA** | **mcd** | **V** | | **°C** | **°C** |

Continued ...



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

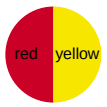
**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

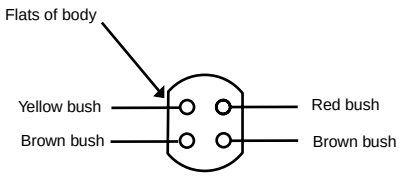
| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| 2STR/LH23/10/H/BE/GN | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| | Green | | 3.6 | | 1250 | 5 | | | |
| 2STR/LH23/10/H/WE/WE | White | Flat | 3.6 | 20 | 1000 | 5 | | -40 | -40 |
| | White | | 3.6 | | 1000 | 5 | | | |
| 2STR/LH23/10/H/WE/RD | White | | 3.6 | 20 | 1000 | 5 | | | |
| | Red | Clear | 1.9 | | 1200 | 5 | 60° | to | to |
| 2STR/LH23/10/H/WE/GN | White | | 3.6 | 20 | 1000 | 5 | | | |
| | Green | | 3.6 | | 1000 | 5 | | | |
| 2STR/LH23/10/H/WE/BE | White | Diffused | 3.6 | 20 | 1000 | 5 | | +85 | +100 |
| | Blue | | 3.6 | | 1200 | 5 | | | |
| | | | **V** | **mA** | **mcd** | **V** | | **°C** | **°C** |

Mean time before failure 90,000 hrs.

**Note:** The first colour within the order information is located on the left side of the segment as shown.

e.g. 2STR/LH23/10/RED/YELLOW




Front Panel View



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Tri-Segmented LED Indicator

## Single Chip LED

## Flat Lens

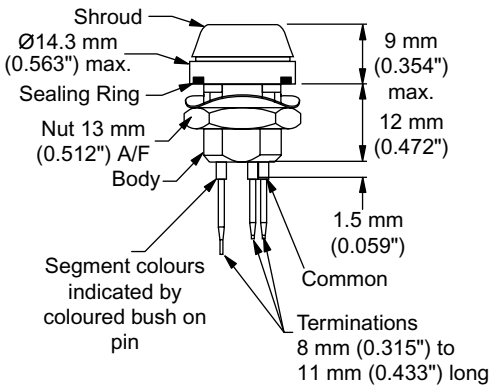
## IP68 - Ø10.0

### Features

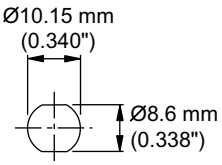
Replaces three single indicators;

Independently addressable segments;

Sealed to IP68.




**3/STR/LH23/10/-**




**Mounting Hole**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| 3STR/LH23/10/R/G/Y | Red | | 2.2 | 20 | 15 | 5 | | | |
| | Green | | 2.2 | | 15 | | | | |
| | Yellow | | 2.2 | | 12 | | | | |
| 3STR/LH23/10/R/Y/G | Red | Flat | 2.2 | 20 | 15 | 5 | | | |
| | Yellow | | 2.2 | | 12 | | | -40 | -40 |
| | Green | | 2.2 | | 15 | | | | |
| 3STR/LH23/10/R/R/R | Red | Clear | 2.2 | 20 | 15 | 5 | | | |
| | Red | | 2.2 | | 15 | | | | |
| | Red | | 2.2 | | 15 | | 60° | to | to |
| 3STR/LH23/10/G/Y/R | Green | Diffused | 2.2 | 20 | 15 | 5 | | | |
| | Yellow | | 2.2 | | 12 | | | +85 | +100 |
| | Red | | 2.2 | | 15 | | | | |
| 3STR/LH23/10/Y/R/G | Yellow | Lens | 2.2 | 20 | 12 | 5 | | | |
| | Red | | 2.2 | | 15 | | | | |
| | Green | | 2.2 | | 15 | | | | |
| | | | **V** | | **mcd** | | | **°C** | **°C** |

Continued ...



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

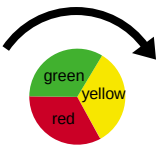
# Type No. - 3STR/LH23/10

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| 3STR/LH23/10/G/G/G | Green | | 2.2 | 20 | 15 | 5 | | | |
| | Green | | 2.2 | | 15 | | | | |
| | Green | | 2.2 | | 15 | | | | |
| 3STR/LH23/10/Y/Y/Y | Yellow | | 2.2 | 20 | 12 | 5 | | | |
| | Yellow | | 2.2 | | 12 | | | | |
| | Yellow | | 2.2 | | 12 | | | | |
| 3STR/LH23/10/H/R/R/R | Red | Flat | 1.9 | 20 | 1200 | 5 | | -40 | -40 |
| | Red | | 1.9 | | 1200 | | | | |
| | Red | | 1.9 | | 1200 | | | | |
| 3STR/LH23/10/H/R/G/Y | Red | | 1.9 | 20 | 1200 | 5 | | | |
| | Green | | 3.6 | | 1250 | | | | |
| | Yellow | | 2.2 | | 1000 | | | | |
| 3STR/LH23/10/H/R/Y/G | Red | Clear | 1.9 | 20 | 1200 | 5 | 60° | to | to |
| | Yellow | | 2.2 | | 1000 | | | | |
| | Green | | 3.6 | | 1250 | | | | |
| 3STR/LH23/10/H/R/B/W | Red | | 1.9 | 20 | 1200 | 5 | | | |
| | Blue | Diffused | 3.6 | | 1200 | | | | |
| | White | | 3.6 | | 1000 | | | | |
| 3STR/LH23/10/H/W/W/W | White | | 3.6 | 20 | 1000 | 5 | | | |
| | White | Lens | 3.6 | | 1000 | | | +85 | +100 |
| | White | | 3.6 | | 1000 | | | | |
| 3STR/LH23/10/H/B/W/B | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| | White | | 3.6 | | 1000 | | | | |
| | Blue | | 3.6 | | 1200 | | | | |
| 3STR/LH23/10/H/B/Y/G | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| | Yellow | | 2.2 | | 1000 | | | | |
| | Green | | 3.6 | | 1250 | | | | |
| 3STR/LH23/10/H/W/B/G | White | | 3.6 | 20 | 1000 | 5 | | | |
| | Blue | | 2.2 | | 1000 | | | | |
| | Green | | 3.6 | | 1250 | | | | |
| | | | **V** | **mA** | **mcd** | **V** | | **°C** | **°C** |

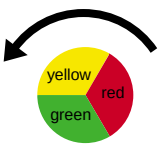
Mean time before failure 90,000 hrs.

Note: When ordering parts please specify orientation of colours.

e.g. 3STR/LA23/10/R/G/Y




Clockwise




Counter Clockwise



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Low Profile LED Indicator

## Single Chip LED

## Fresnel Lens

## IP66 - Ø10.0

### Features

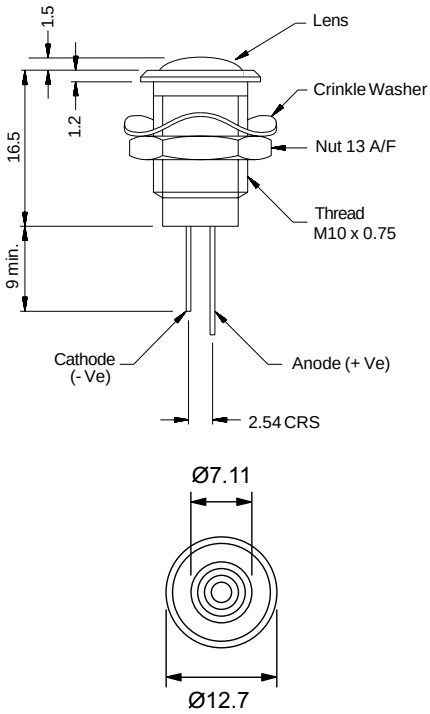
Plastic fresnel lens;

Black anodized body for corrosive atmospheres;

Sealing available to IP66.

Customer specials available on request.

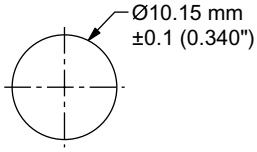
Dimensions in mm







**Front View**




**Mounting Hole**
**2/OXL/ and 3/OXL/**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| OXL/CLH/100/RD | Red | Plastic Fresnel Lens | 2.2 | 20 | 45 | 5 | 80° | -40 to +85 | -40 to +85 |
| OXL/CLH/100/YW | Yellow | | 2.2 | 20 | 45 | 5 | | | |
| OXL/CLH/100/GN | Green | | 2.2 | 20 | 45 | 5 | | | |
| OXL/CLH/100/H/RD | Red | | 1.9 | 20 | 1200 | 5 | | | |
| OXL/CLH/100/H/YW | Yellow | | 2.2 | 20 | 1000 | 5 | | | |
| OXL/CLH/100/H/GN | Green | | 3.6 | 20 | 1250 | 5 | | | |
| OXL/CLH/100/H/BE | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| OXL/CLH/100/H/WE | White | | 3.6 | 20 | 1000 | 5 | | | |
| OXL/CLH/100/5/RD | Red | | 5 | 15 | 34 | 5 | | | |
| | | | V | mA | mcd | V | | °C | °C |

Continued ...



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

# Type No. - OXL/CLH/100

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| OXL/CLH/100/5/YW | Yellow | | 5 | 15 | 34 | 5 | | | |
| OXL/CLH/100/5/GN | Green | | 5 | 15 | 34 | 5 | | | |
| OXL/CLH/100/5/H/RD | Red | | 5 | 15 | 900 | 5 | | | |
| OXL/CLH/100/5/H/YW | Yellow | | 5 | 15 | 750 | 5 | | | |
| OXL/CLH/100/5/H/GN | Green | | 5 | 15 | 940 | 5 | | | |
| OXL/CLH/100/5/H/BE | Blue | | 5 | 15 | 900 | 5 | | | |
| OXL/CLH/100/5/H/WE | White | | 5 | 15 | 750 | 5 | | | |
| OXL/CLH/100/12/RD | Red | | 12 | 15 | 34 | 5 | | | |
| OXL/CLH/100/12/YW | Yellow | Plastic | 12 | 15 | 34 | 5 | | -40 | -40 |
| OXL/CLH/100/12/GN | Green | | 12 | 15 | 34 | 5 | | | |
| OXL/CLH/100/12/H/RD | Red | | 12 | 15 | 900 | 5 | | | |
| OXL/CLH/100/12/H/YW | Yellow | | 12 | 15 | 750 | 5 | | | |
| OXL/CLH/100/12/H/GN | Green | | 12 | 15 | 940 | 5 | | | |
| OXL/CLH/100/12/H/BE | Blue | | 12 | 15 | 900 | 5 | | | |
| OXL/CLH/8100/12/H/WE | White | | 12 | 15 | 750 | 5 | | | |
| OXL/CLH/100/15/RD | Red | | 15 | 15 | 34 | 5 | | | |
| OXL/CLH/100/15/YW | Yellow | | 15 | 15 | 34 | 5 | | | |
| OXL/CLH/100/15/GN | Green | Fresnel | 15 | 15 | 34 | 5 | 80° | to | to |
| OXL/CLH/8100/15/H/RD | Red | | 15 | 15 | 900 | 5 | | | |
| OXL/CLH/100/15/H/YW | Yellow | | 15 | 15 | 750 | 5 | | | |
| OXL/CLH/100/15/H/GN | Green | | 15 | 15 | 940 | 5 | | | |
| OXL/CLH/100/15/H/BE | Blue | | 15 | 15 | 900 | 5 | | | |
| OXL/CLH/100/15/H/WE | White | | 15 | 15 | 750 | 5 | | | |
| OXL/CLH/100/24/RD | Red | | 24 | 15 | 34 | 5 | | | |
| OXL/CLH/100/24/YW | Yellow | | 24 | 15 | 34 | 5 | | | |
| OXL/CLH/100/24/GN | Green | Lens | 24 | 15 | 34 | 5 | | +85 | +85 |
| OXL/CLH/100/24/H/RD | Red | | 24 | 15 | 900 | 5 | | | |
| OXL/CLH/100/24/H/YW | Yellow | | 24 | 15 | 750 | 5 | | | |
| OXL/CLH/100/24/H/GN | Green | | 24 | 15 | 940 | 5 | | | |
| OXL/CLH/100/24/H/BE | Blue | | 24 | 15 | 900 | 5 | | | |
| OXL/CLH/100/24/H/WE | White | | 24 | 15 | 750 | 5 | | | |
| OXL/CLH/100/28/RD | Red | | 28 | 15 | 34 | 5 | | | |
| OXL/CLH/100/28/YW | Yellow | | 28 | 15 | 34 | 5 | | | |
| OXL/CLH/100/28/GN | Green | | 28 | 15 | 34 | 5 | | | |
| OXL/CLH/100/28/H/RD | Red | | 28 | 15 | 900 | 5 | | | |
| OXL/CLH/100/28/H/YW | Yellow | | 28 | 15 | 750 | 5 | | | |
| OXL/CLH/100/28/H/GN | Green | | 28 | 15 | 940 | 5 | | | |
| OXL/CLH/100/28/H/BE | Blue | | 28 | 15 | 900 | 5 | | | |
| OXL/CLH/100/28/H/WE | White | | 28 | 15 | 750 | 5 | | | |
| | | | **V** | **mA** | **mcd** | **V** | | **°C** | **°C** |

Mean time before failure 90,000 hrs.



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Prominent Lens

## Fresnel Lens

## Single Chip LED

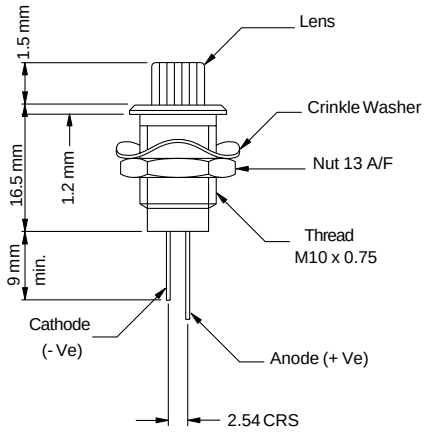
## IP66 - Ø10.0

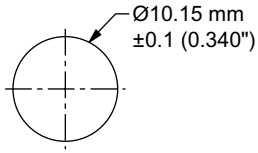
### Features

Plastic fresnel prominent lens wide viewing (100°);

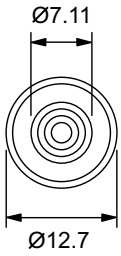
Black anodized body for corrosive atmospheres;

Sealing available to IP66.




**Mounting Hole (2/OXL and 3/OXL)**




**Front View**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| OXL/CLH/100/P/RD | Red | Plastic Fresnel Lens | 2.2 | 20 | 45 | 5 | 80° | -40 to +85 | -40 to +85 |
| OXL/CLH/100/P/YW | Yellow | | 2.2 | 20 | 45 | 5 | | | |
| OXL/CLH/100/P/GN | Green | | 2.2 | 20 | 45 | 5 | | | |
| OXL/CLH/100/P/H/RD | Red | | 1.9 | 20 | 1200 | 5 | | | |
| OXL/CLH/100/P/H/YW | Yellow | | 2.2 | 20 | 1000 | 5 | | | |
| OXL/CLH/100/P/H/GN | Green | | 3.6 | 20 | 1250 | 5 | | | |
| OXL/CLH/100/P/H/BE | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| OXL/CLH/100/P/H/WE | White | | 3.6 | 20 | 1000 | 5 | | | |
| | | | V | mA | mcd | V | | °C | °C |

Mean time before failure 90,000 hrs.

Voltage variants and customer specials are available on request.



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

# Bi/Tri-Segmented Indicator Lamps

# Single Chip LED

## Flat Lens

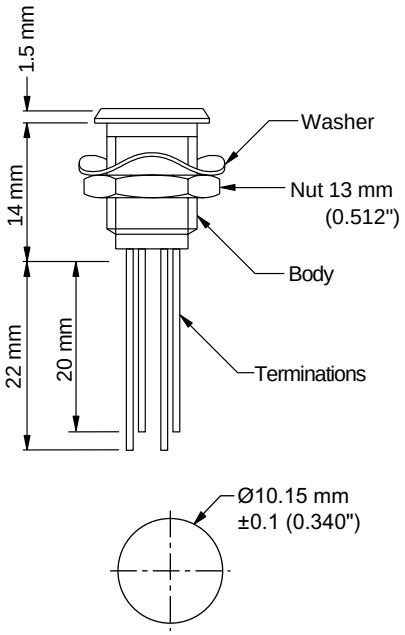
## IP66 - Ø10.0

### Features

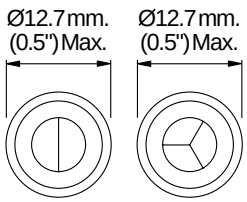
Replaces two/three single indicators;

Black body aids contrast of light output;

Independant addressable segments.




**Mounting Hole**




## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| 20XL/LH23/R/R | Red | | 2.2 | 20 | 30 | 5 | | | |
| | Red | Flat | 2.2 | | 35 | | | -40 | -40 |
| 20XL/LH23/R/G | Yellow | Clear | 2.2 | 20 | 30 | 5 | | | |
| | Green | Diffused | 2.2 | | 35 | | 80° | to | to |
| 20XL/LH23/R/Y | Green | Lens | 2.2 | 20 | 30 | 5 | | | |
| | Yellow | | 2.2 | | 25 | | | +85 | +85 |
| 20XL/LH23/H/R/R | Red | | 1.9 | 20 | 1200 | 5 | | | |
| | Red | | 1.9 | | 1200 | | | | |
| | | | **V** | **mA** | **mcd** | **V** | | **°C** | **°C** |

Continued ...



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| 20XL/LH23/H/R/G | Yellow | | 2.2 | 20 | 1000 | 5 | | | |
| | Green | | 3.6 | | 1250 | | | | |
| 20XL/LH23/H/R/Y | Green | | 3.6 | 20 | 1250 | 5 | | | |
| | Yelow | Flat | 3.6 | | 1000 | | | -40 | -40 |
| 20XL/LH23/H/B/W | Blue | | 3.6 | 20 | 1200 | 5 | | | |
| | White | | 3.6 | | 1000 | | | | |
| 20XL/LH23/H/W/W | White | | 2.2 | 20 | 1000 | 5 | | | |
| | White | Clear | 2.2 | | 1000 | | | | |
| | Red | | 2.2 | 20 | 30 | 5 | | | |
| 30XL/LH23/R/R/R | Red | | 2.2 | | 30 | | 80° | to | to |
| | Red | | 2.2 | | 30 | | | | |
| | Red | Diffused | 2.2 | 20 | 30 | 5 | | | |
| 30XL/LH23/R/Y/G | Yellow | | 2.2 | | 25 | | | | |
| | Green | | 2.2 | | 35 | | | | |
| | Red | | 2.2 | 20 | 30 | 5 | | | |
| 30XL/LH23/R/G/Y | Green | Lens | 2.2 | | 35 | | | +85 | +85 |
| | Yellow | | 2.2 | | 25 | | | | |
| | Red | | 1.9 | 20 | 1200 | 5 | | | |
| 30XL/LH23/H/R/Y/G | Yellow | | 2.2 | | 1000 | | | | |
| | Green | | 3.6 | | 1250 | | | | |
| | White | | 3.6 | 20 | 1000 | 5 | | | |
| 30XL/LH23/H/W/B/G | Blue | | 3.6 | | 1200 | | | | |
| | Green | | 3.6 | | 1250 | | | | |
| | | | **V** | **mA** | **mcd** | **V** | | **°C** | **°C** |

Mean time before failure 90,000 hrs.

Different colour combinations are available on request.



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## LED Bulb Replacement

## Unipolar

## Single Chip LED

## T1¾ Midget Flanged Cap

### Features

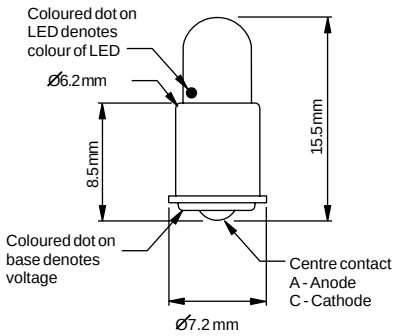
Replaces less reliable filament bulbs;

Reduces maintenance costs;

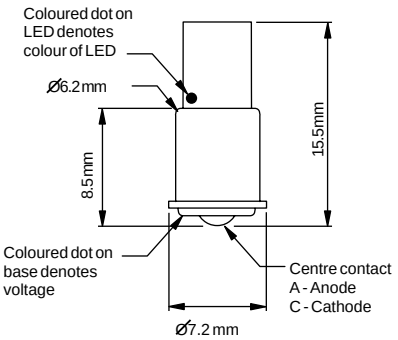
Cool light reduces heat dissipation;

Reduces power consumption.

**Option 1**




**Option 2**




## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| ELED/1750/A/6/H/WE | White | LED Lens | 6 | 17 | 1000 | 5 | 60° | -40 to +85 | -40 to +85 |
| ELED/1750/A/6/H/RD | Red | | 6 | 17 | 1200 | 5 | | | |
| ELED/1750/A/6/H/AR | Amber | | 6 | 17 | 1000 | 5 | | | |
| ELED/1750/A/6/H/BE | Blue | | 6 | 17 | 1200 | 5 | | | |
| ELED/1750/A/6/H/GN | Green | | 6 | 17 | 1250 | 5 | | | |
| ELED/1750/A/6/H/OE | Orange | | 6 | 17 | 1000 | 5 | | | |
| ELED/1750/A/12/H/WE | White | | 12 | 17 | 1000 | 5 | | | |
| ELED/1750/A/12/H/RD | Red | | 12 | 17 | 1200 | 5 | | | |
| ELED/1750/A/12/H/AR | Amber | | 12 | 17 | 1000 | 5 | | | |
| ELED/1750/A/12/H/BE | Blue | | 12 | 17 | 1200 | 5 | | | |
| ELED/1750/A/12/H/GN | Green | | 12 | 17 | 1250 | 5 | | | |
| | | | **V** | **mA** | **mcd** | **V** | | **°C** | **°C** |

Continued ...



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| ELED/1750/A/12/H/OE | Orange | LED Lens | 12 | 17 | 1000 | 5 | 60° | -40 to +85 | -40 to +85 |
| ELED/1750/A/24/H/WE | White | | 24 | 17 | 1000 | 5 | | | |
| ELED/1750/A/24/H/RD | Red | | 24 | 17 | 1200 | 5 | | | |
| ELED/1750/A/24/H/AR | Amber | | 24 | 17 | 1000 | 5 | | | |
| ELED/1750/A/24/H/BE | Blue | | 24 | 17 | 1200 | 5 | | | |
| ELED/1750/A/24/H/GN | Green | | 24 | 17 | 1250 | 5 | | | |
| ELED/1750/A/24/H/OE | Orange | | 24 | 17 | 1000 | 5 | | | |
| ELED/1750/A/28/H/WE | White | | 28 | 17 | 1000 | 5 | | | |
| ELED/1750/A/28/H/RD | Red | | 28 | 17 | 1200 | 5 | | | |
| ELED/1750/A/28/H/AR | Amber | | 28 | 17 | 1000 | 5 | | | |
| ELED/1750/A/28/H/BE | Blue | | 28 | 17 | 1200 | 5 | | | |
| ELED/1750/A/28/H/GN | Green | | 28 | 17 | 1250 | 5 | | | |
| ELED/1750/A/28/H/OE | Orange | | 28 | 17 | 1000 | 5 | | | |
| | | | **V** | **mA** | **mcd** | **V** | | **°C** | **°C** |

Mean time before failure 90,000 hrs

**Note:** Optional center contact cathode available by changing the letter ‘A’ in the part no: to ‘C’, Option 2 wide viewing is available denoted by ‘FT’ into the part nunmber.

e.g. ELED/1750/A/28/FT/H/RD

Customer specials available on request.



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Type No. - ELED/1750/-

# LED Bulb Replacement

# Multi-Chip LED

# Bipolarity

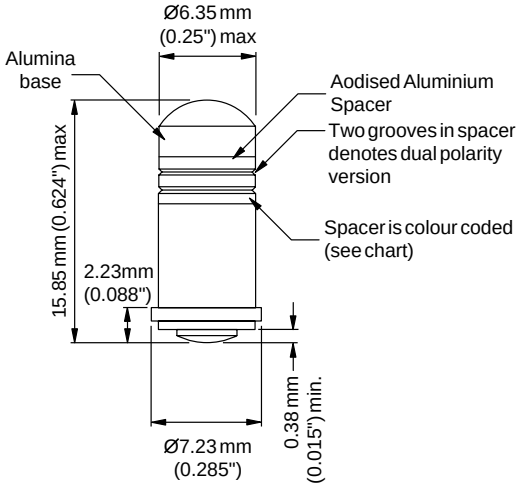
# T1¾ Midget Flanged Cap

### Features

Replaces unreliable filament bulbs;

Dual polarity D.C. or A.C. operation;

High thermal conductivity potting.




**ELED/1750/DMC/-**

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| ELED/1750/DMC/12/AL | AlGaAsRed | LED | 12 | 20 | 70 | 5 | 120° | -40 to +70 | -40 to +70 |
| ELED/1750/DMC/12/RD | Red | | 12 | 20 | 40 | 5 | | | |
| ELED/1750/DMC/12/AR | Amber | | 12 | 20 | 30 | 5 | | | |
| ELED/1750/DMC/12/YW | Yellow | | 12 | 20 | 40 | 5 | | | |
| ELED/1750/DMC/12/GN | Green | | 12 | 20 | 70 | 5 | | | |
| ELED/1750/DMC/12/EG | Emerald Green | | 12 | 20 | 30 | 5 | | | |
| ELED/1750/DMC/24/AL | AlGaAsRed | | 24 | 20 | 70 | 5 | | | |
| ELED/1750/DMC/24/RD | Red | | 24 | 20 | 40 | 5 | | | |
| ELED/1750/DMC/24/AR | Amber | | 24 | 20 | 30 | 5 | | | |
| ELED/1750/DMC/24/YW | Yellow | | 24 | 20 | 40 | 5 | | | |
| ELED/1750/DMC/24/GN | Green | | 24 | 20 | 70 | 5 | | | |
| ELED/1750/DMC/24/EG | Emerald Green | | 24 | 20 | 30 | 5 | | | |
| ELED/1750/DMC/28/AL | AlGaAsRed | Lens | 28 | 20 | 70 | 5 | | | |
| ELED/1750/DMC/28/RD | Red | | 28 | 20 | 40 | 5 | | | |
| ELED/1750/DMC/28/AR | Amber | | 28 | 20 | 30 | 5 | | | |
| ELED/1750/DMC/28/YW | Yellow | | 28 | 20 | 40 | 5 | | | |
| ELED/1750/DMC/28/GN | Green | | 28 | 20 | 40 | 5 | | | |
| ELED/1750/DMC/28/EG | Emerald Green | | 28 | 20 | 30 | 5 | | | |
| | | | **V** | **mA** | **mcd** | **V** | | **°C** | **°C** |

Mean time before failure 90,000 hrs

Customer specials available on request.



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## LED Bulb Replacement

## Single Chip LED

## Bipolarity

## T1¾ Midget Flanged Cap

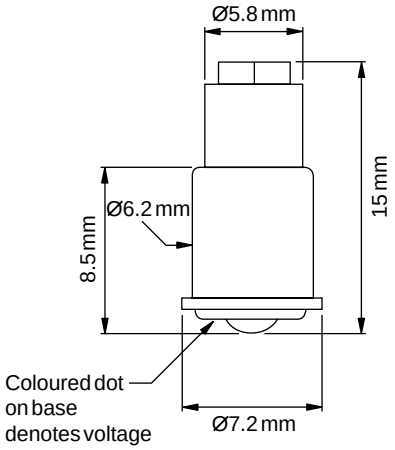
### Features

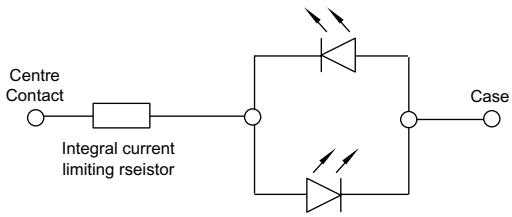
Replaces less reliable filament bulbs;

Cool light reduces heat dissipation;

Reduces power consumption;

Reduces maintenance costs.




**Electrical Configuration**



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Ordering Information and Technical Characteristics (Ta = 25°C)

| Ordering Information | Colour | Lens Type | Forward Voltage | Current (mA) | Luminous Intensity | Reverse Voltage | Viewing Angle | Operating Temp | Storage Temp |
|---|---|---|---|---|---|---|---|---|---|
| ELED/1750/MF/BT/6/WE | White | | 6 | 17 | 1000 | 5 | | | |
| ELED/1750/MF/BT/6/RD | Red | | 6 | 17 | 1200 | 5 | | | |
| ELED/1750/MF/BT/6/AR | Amber | | 6 | 17 | 1000 | 5 | | | |
| ELED/1750/MF/BT/6/YW | Yellow | | 6 | 17 | 1000 | 5 | | | |
| ELED/1750/MF/BT/6/GN | Green | | 6 | 17 | 1250 | 5 | | | |
| ELED/1750/MF/BT/6/BE | Blue | | 6 | 17 | 1200 | 5 | | | |
| ELED/1750/MF/BT/12/WE | White | | 12 | 17 | 1000 | 5 | | | |
| ELED/1750/MF/BT/12/RD | Red | | 12 | 17 | 1200 | 5 | | | |
| ELED/1750/MF/BT/12/AR | Amber | | 12 | 17 | 1000 | 5 | | | |
| ELED/1750/MF/BT/12/YW | Yellow | LED | 12 | 17 | 1000 | 5 | | -40 | -40 |
| ELED/1750/MF/BT/12/GN | Green | | 12 | 17 | 1250 | 5 | | | |
| ELED/1750/MF/BT/12/BE | Blue | | 12 | 17 | 1200 | 5 | | | |
| ELED/1750/MF/BT/24/WE | White | | 24 | 17 | 1000 | 5 | | | |
| ELED/1750/MF/BT/24/RD | Red | | 24 | 17 | 1200 | 5 | 120° | to | to |
| ELED/1750/MF/BT/24/AR | Amber | | 24 | 17 | 1000 | 5 | | | |
| ELED/1750/MF/BT/24/YW | Yellow | | 24 | 17 | 1200 | 5 | | | |
| ELED/1750/MF/BT/24/GN | Green | | 24 | 17 | 1250 | | | | |
| ELED/1750/MF/BT/24/BE | Blue | Lens | 24 | 17 | 1200 | | | +85 | +85 |
| ELED/1750/MF/BT/28/WE | White | | 28 | 17 | 1000 | | | | |
| ELED/1750/MF/BT/28/RD | Red | | 28 | 17 | 1200 | | | | |
| ELED/1750/MF/BT/28/AR | Amber | | 28 | 17 | 1000 | | | | |
| ELED/1750/MF/BT/28/YW | Yellow | | 28 | 17 | 1000 | | | | |
| ELED/1750/MF/BT/28/GN | Green | | 28 | 17 | 1250 | | | | |
| ELED/1750/MF/BT/28/BE | Blue | | 28 | 17 | 1200 | | | | |
| | | | **V** | **mA** | **mcd** | **V** | | **°C** | **°C** |

Mean time before failure 90,000 hrs

Customer specials available on request.



www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

# Recommended Mounting Hardware and Material Details

## Ø5.0 mm Mounting Indicator Lamps

| | | |
|---|---|---|
| SS1/5/- | Chassis Thickness | 1.6 mm (0.063") - 3.2 mm (0.126") |
| | Mounting Hole | Ø5 mm ±0.05 (0.197" ±0.002") to be clean and burr free |
| | Mounting Hardware | White PTFE bush (black PTFE for -/BB/- versions) |
| Materials | Body | Brass BS 2874 CZ121 nickel plated (black anodised aluminium alloy to special order) |
| | Lens | Epoxy |
| | Flat Termination | Copper alloy - silver plated |
| | Round Termination | Copper alloy - tin plated |
| | | |
| OXL/MIL50/- | Chassis Thickness | 1 mm (0.039") - 4 mm (0.157") |
| | Mounting Hole | Ø5 mm (0.197" ±0.002") to be clean and burr free |
| | Mounting Hardware | Sealing ring: Flurocarbon rubber<br>Nut: Aluminium alloy<br>Crinkle washer: Aluminium alloy |
| Materials | Body | Aluminium alloy (black anodised available) |
| | Lens | Glass |
| | Shroud | Aluminium alloy - black anodised |
| | Terminations | Solderability to BS 2011 test T |
| | Recommended Mouting Torque | 1 N m (0.74 lbf ft) |

## Ø6.35 Mounting Indicator Lamp

| | | |
|---|---|---|
| OXL/CLH/63/- | Chassis Thickness | 1.5 mm (0.059") - 5 mm (0.197") |
| | Mounting Hole | Ø6.35 mm $^{+0.2}_{-0.0}$ (0.25" ±0.0035") to be clean and burr free |
| | Mounting Hardware | Nut - aluminium alloy<br>Washer - spring steel - zinc plated |
| Materials | Body | Aluminium or optional black anodised |
| | Lens | Polycarbonate - clear/coloured |
| | Terminations | Silver plated or tin lead (solderability exceeds BS 2011 test T) |



**Oxley Inc.**
Email: sales@oxleyinc.com
TEl: (203) 488 1033

**Oxley UK**
Electronics Components Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Ø8.0 mm Mounting Indicator Lamps

| | | |
|---|---|---|
| PS/LH/8/-<br>STR/LH/8/-<br>STR/NLH/- | Chassis Thickness | 1.5 mm (0.059") - 3.2 mm (0.126") |
| | Mounting Hole | Ø8 mm $^{+0.1}_{-0.0}$ (0.315" ±0.002") to be clean and burr free |
| | Mounting Hardware | Nut: Aluminium alloy<br>Washer: Beryllium copper alloy - tin plated<br>Sealing ring: PTFE |
| Materials | Body | Aluminium alloy |
| | Shroud | Aluminium alloy - black anodised |
| | Lens | Glass |
| | Termination | Solderability to BS 2011 test T |
| | Recommended Mouting Torque | 1 N m (0.74 lbf ft) |
| | | |
| OXL/CLH/80/- | Chassis Thickness | 1.5 mm (0.059") - 5 mm (0.197") |
| | Mounting Hole | Ø8 mm $^{+0.1}_{-0.0}$ (0.315" ±0.002") to be clean and burr free |
| | Mounting Hardware | Nut: Aluminium alloy<br>Washer: Beryllium copper alloy - tin plated |
| Materials | Body | Brass - nickel plated/aluminium - black anodised |

## Ø10.0 mm Mounting Indicator Lamps

| | | |
|---|---|---|
| STR/LH23/10/- | Chassis Thickness | 1.5 mm (0.059") - 6.5 mm (0.256") |
| | Mounting Hole | Ø10 mm $^{+0.1}_{-0.0}$ (0.394" ±0.002") to be clean and burr free |
| | Mounting Hardware | Nut: Aluminium alloy<br>Washer: Beryllium copper alloy - tin plated<br>Sealing ring: Flurocarbon rubber |
| Materials | Body | Aluminium alloy, black anodised available |
| | Lens | Glass |
| | Termination | Solderability to BS 2011 test T |
| | Recommended Mouting Torque | 1 N m (0.74 lbf ft) |
| | | |
| OXL/CLH/100/- | Chassis Thickness | 1.5 mm (0.059") - 6.5 mm (0.256") |
| | Mounting Hole | Ø10 mm $^{+0.1}_{-0.0}$ (0.394" ±0.002") to be clean and burr free. |
| | Mounting Hardware | Nut: Aluminium alloy<br>Washer: Beryllium copper alloy - tin plated |
| Materials | Body | Aluminium alloy - black anodised |
| | Lens | Polycarbonate - clear/coloured |



**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

# Flying Leads

All indicator lamps are available with flying lead terminations of a specified length given in centimetres. Standard colours for temination wire are shown below.

**Indicator Working**

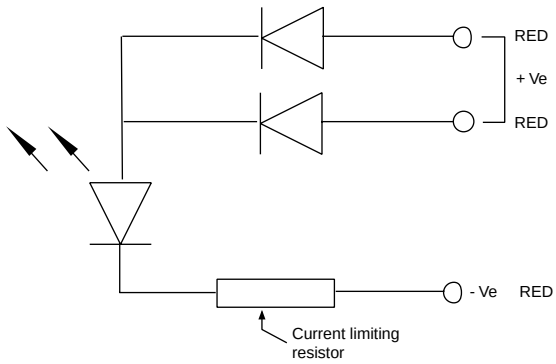
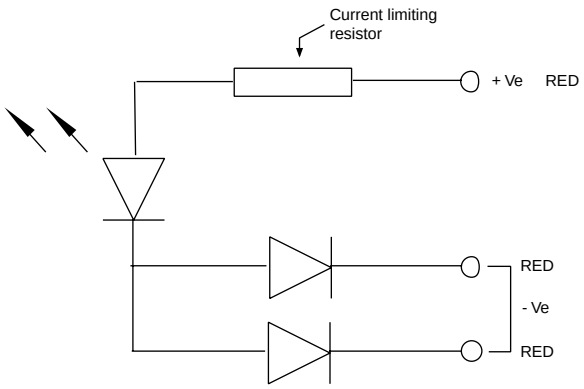
| Order Code | Voltage Supply | Wire Colour | Wire Length | Wire Type | Comments |
|---|---|---|---|---|---|
| FL20 | *1.9 - 3.6 V dc | Red - cathode<br>Black - anode | 20 cm | Type 44 Standard insulated wire 24 gauge. | Available on all Panel Indicators 20 cm length standard. |
| | 5 - 28 V dc | Red - cathode<br>Black - anode<br>Blue sleeving 5 V dc operation<br>Yellow sleeving 12 V dc operation<br>Green sleeving 15 V dc operation<br>Brown sleeving 24 V dc operation<br>Violet sleeving 28 V dc operation | | | |
| | 110 V ac/dc | Black wire (Black sleeving)<br>Black wire (Blue sleeving) | | | |
| | 240 V ac/dc | Black wire (Black sleeving)<br>Black wire (Black termination) | | | |

**Note:** Suffix ‘FL20’ denotes a standard flying lead length of 20 cm (200 mm).

Optional customer preference available: e.g. FL90 (90 cm) etc. dependant on customer.

## Lamp Test Facility

Panel Mount Indicator Lamps are available with an additional Anode/Cathode termination to provde a seperate line test facility.

| Termination | Circuit | Comments |
|---|---|---|
| 20 cm of flying leads or customer preference | TEST NEGATIVE   TEST POSITIVE   | Available against the following series:-<br><br>STR/LH/8/-<br>STR/LH23/10/-<br>OXL/CLH/100/-<br><br>Add LT to ordering suffix for Test Negative<br><br>Add LT/A to ordering suffix for Test Positive |



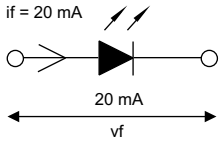
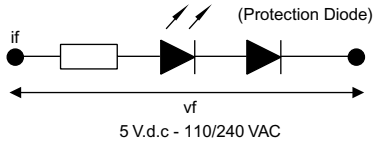
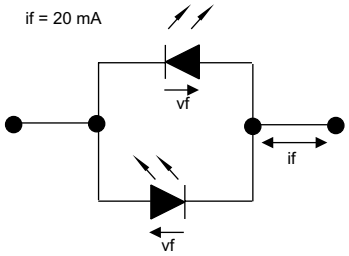
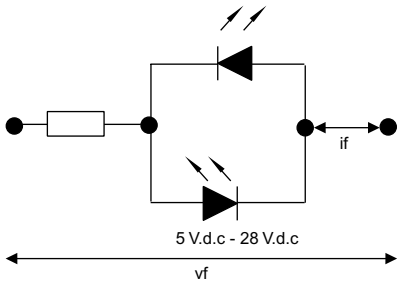
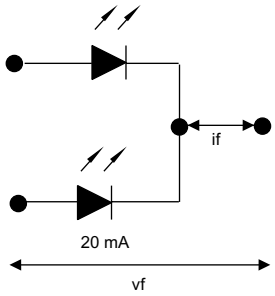
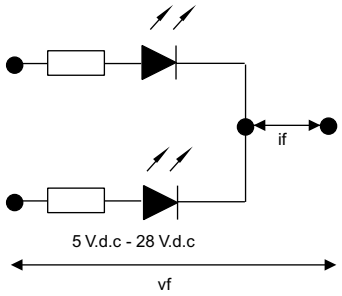
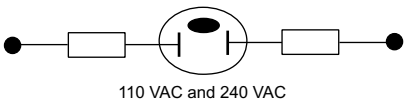
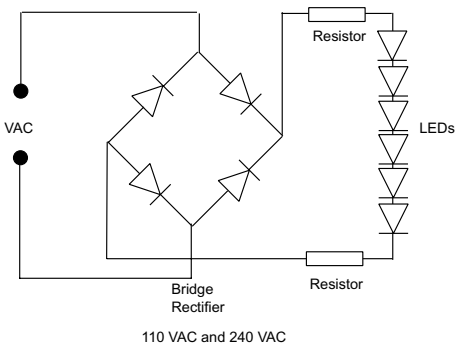
www.oxleygroup.com/lamps

ODC: SMEPD: 40565/2-10/2000

**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## Circuit Diagrams

| | | |
|---|---|---|
| **Single Chip LED Models** |  |  |
| **Bi-Colour LED Models 2 pin Devices** |  |  |
| **Bi-Colour LED Models 3 lead Device** |  |  |
| **Neon Models** |  | |
| **Mains LED Devices (Multi-chip)** |  | |

## Lens Design

### Specification

All models are fitted with robust shatterproof glass lens assemblies for advanced LED panel lamps and Fresnel lens assemblies for LED panel lamps which have been specially designed to optically match the LED and neon output characteristics.

## Lens Characteristics

| | |
|---|---|
| Clear diffused Flat Glass/Polycarbonate Fresnel Lens: | Ideal for low profile wide viewer off-axis of 135° Combined with black anodised surround. |
| Sunlight Readable Filtered Flat Glass Lens: | Excellent solution for applications where sunlight viewability is critical. The special sunlight viewable filter provides excellent high on/off contrast ratio whilst giving excellent focused and wide viewing characteristics. |
| Clear Diffused Plano-Convex Glass/Polycarbonate Lens: | Ideal for applications where on-axis viewing is critical but also giving a limited degree of off-axis viewing. |
| Clear Diffused Domed Glass/Polycarbonate Lens: | Excellent off-axis viewing characteristics of 180° makes this lens ideal choice for applications requiring wide angle visibility in low normal lighting conditions. |
| Coloured Plano-Convex Glass Lens: | Ideal for neon applications where colour indication is required. |

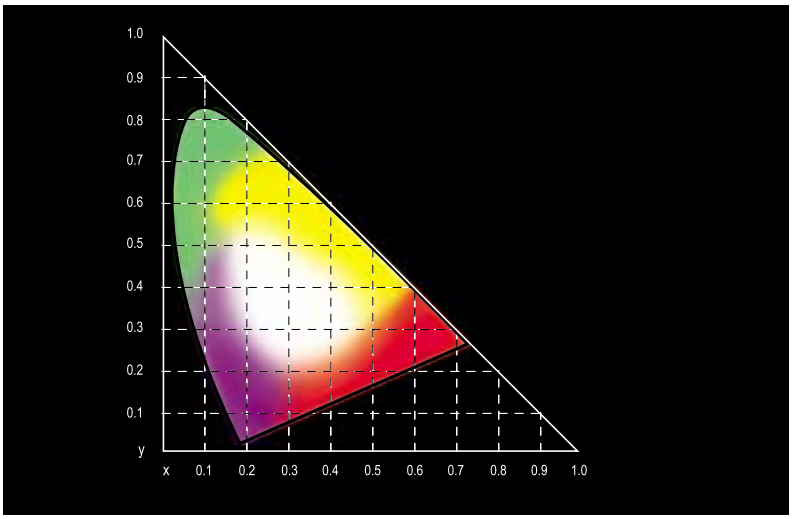


**Oxley Inc.**
Email: sales@oxleyinc.com
Tel: (203) 488 1033

**Oxley UK**
Electronics Componenst Division
Email: sales@oxley.co.uk
Tel: +44 (0)1229 582621

## The CIE System

The first international agreement concerning the mathematical treatment of colour was concluded at the "Commission Internationale de l'Eclairage" conference which was held in 1931 in the University town of Cambridge, UK. The result was the CIE chromaticity diagram. This system is an adaptation from the 'Maxwell colour triangle' with the addition of two co-ordinates, x and y, used on the axis of a graph, colours can therefore be defined by plotting the x, y co-ordinates. The curved outer line is known as the 'spectrum focus' and represents pure spectral colours (single wavelength). LED colours fall on or close to this line while incandescent sources fall near to the centre of the graph, within the white area.




## Spectral Diagram

The spectral diagram or graph of an LED shows the percentage of radiated light against wavelength and is referred to as the LED 'spectral curve'. The spectral distribution graph displays individual LED spectral curves, which can be seen to be a narrow band of light. The spectral response curve (Vl) of the human eye is also shown which illustrates that green LED emission lies close to the maximum value of this curve, whilst the response for red and blue LEDs drops rapidly. Therefore a 565 nm green LED appears approximately nine times brighter than a 650 nm red LED of the same efficiency.