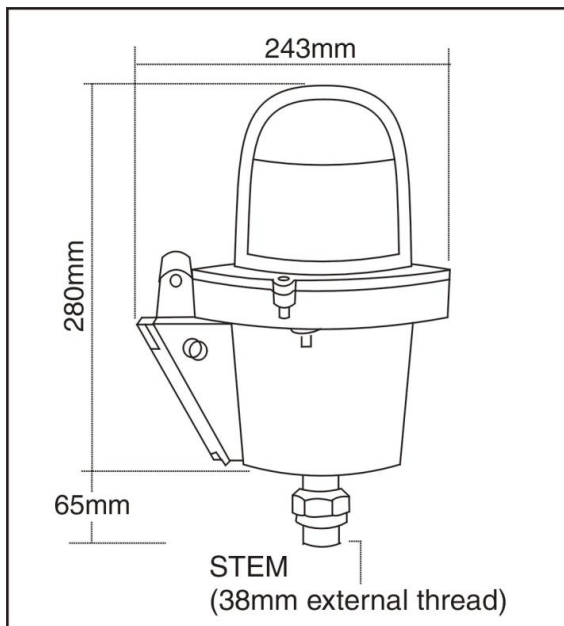


**BINAY
MODEL WL-1-LI-90 LED-BASED WARNING LIGHT
(Under Accepted Patent)**

BINAY's LED (Light Emitting Diode) Warning Light is a "fit-and-forget" solution that utilises the latest InP LED technology to eliminate the cost, hazard, and aggravation of frequent replacement



All dimensions are approximate

The **BINAY MODEL WL-1-LI-90 LED-based Warning Light (AOL)** utilises patented BINAY technology with highly reliable high luminosity LEDs to offer the following advantages:

- A long life of 1,00,000 hours (11 years calculated on a continuous burning basis, thus requiring **no further replacement once fitted**)
- Low power consumption of 10 to 15 watts only, giving significant reduction in energy costs
- Solid-state reliability; built-in fail-safe feature due to parallel circuits
- Shock-proof, vibration-resistant construction
- Ability to withstand voltage fluctuations
- Improvement in power factor
- A short payback period

Details of this model are given below.

BINAY MODEL WL-1-LI-90 LED WARNING LIGHT

Multiple-LED unit fitted in an LM-6 alloy cast metal AOL body. Thick clear glass cover. InP technology LED design. Total 360° (integrated) luminous intensity of all LEDs nominal 300cd, resulting in a designed radial (directional) intensity of 15cd (average) in any direction in the horizontal plane.

Model WL-1-LI-90 is guaranteed for three years against manufacturing defects.



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TECHNICAL SPECIFICATIONS
BINAY Model 'WL-1-LI-90' LED Warning Light
(Under ACCEPTED Patent)

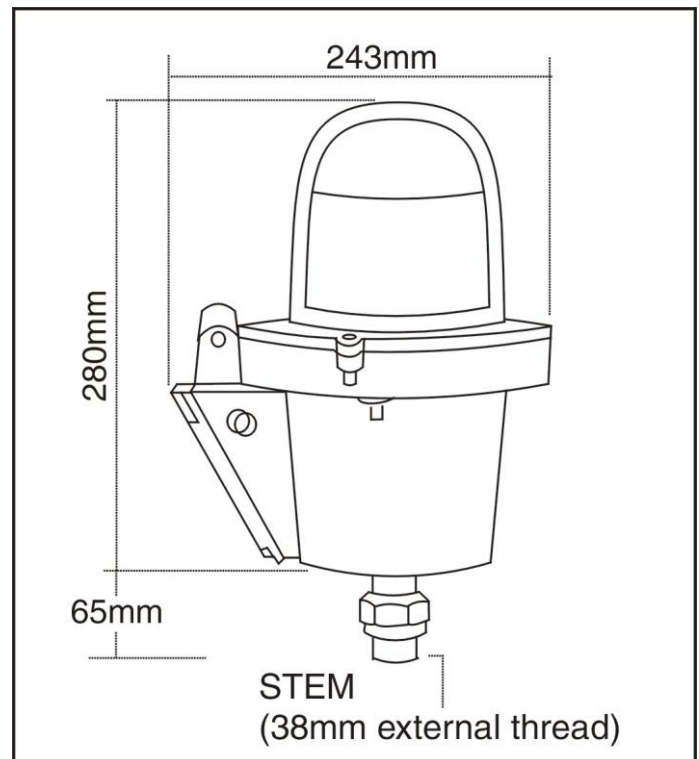
BINAY Model 'WL-1-LI-90' LED Warning Light, having an operating life in excess of 100,000 hours (11 years on a continuous burning basis), with a power consumption of less than 15 watts.

PHYSICAL DATA

Enclosure: Model 'A' design (as per diagram)
Protection: Weatherproof IP 65
Construction: Cast metal LM-6 alloy
Gasket: Endless neoprene
Weight: 4.5 kg. (approx.)
Cable entry: ET 19mm
Terminals: Fitted in a weatherproof box on the body of the unit.
 Earth terminal provided externally

LIGHT SERVICE DATA

LEDs: Multiple *InP technology* LEDs
No. of LEDs: 304 nos.
Colour: Red (wavelength: 615-650nm)
Total designed integrated candela: 300 candela nominal, resulting in a *relevant designed radial (directional) intensity* of 15-18cd in any direction in the horizontal plane.



All dimensions are approximate

ELECTRICAL DATA

NOTE: Each 230VAC unit is tested at 280VAC (20% over voltage) for 100 hours or seven days to ensure reliability. (This also serves as a test for verification of use of InP Technology LEDs, as well as for a technically sound circuit design.)

No. of circuits: Five (in parallel)
Maximum forward current: 160mA
Power factor: 0.05
Typical power consumption: 15W maximum at 230V AC (wattage consumption tested at ERTL, Department of Electronics, Government of India). Input voltage variability: Can withstand a fluctuation of $\pm 25\%$ PIV protection: LEDs internally protected against reverse voltages of up to 1 kV
Insulation resistance: 10 megohms at 500VDC
Dielectric strength: 2.5 kV
Earthing: Terminal provided on body
Spike Protection: Surge protectors provided
EMI/RFI Protection: Filter incorporated for protection against electromagnetic and radio frequency interference and random line noise

NOTE FOR FLASHING REQUIREMENT: The light can be supplied with a flasher for operating in flashing mode for warning indication. However, while we can place the flasher circuit inside the light body, we strongly suggest that the flasher unit be placed externally to the lighting unit, in an indoor environment (it can be mounted inside any enclosed area, such as a control room, or an enclosed junction box, so that it is protected from the outside environment). This is



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due to the fact that while LEDs have an intrinsically long life, the components of the flasher circuit (many of which are active electronic components) may require servicing earlier; if placed inside the body, the servicing becomes considerably inconvenient.



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