

## VL VERTICAL LIFT SPAN LIGHT Specifications



**GENERAL:** The vertical lift span light shall be Model VL, as manufactured by B&B Roadway, (888) 560-2060.

**APPLICATIONS:** The navigation light shall be designed for use as a marine signal light for marking vertical lift bridge spans, and shall meet or exceed all Coast Guard recommendations and requirements pertaining to vertical lift span marking signals.

**HOUSING and GENERAL CONSTRUCTION:** The housing shall be of cast aluminum [option: cast silicon bronze]. Casting alloy used shall be suitable for marine environment. Construction shall be rain-tight and fully gasketed. The light assembly shall be designed for heavy duty, long life service. Design shall provide ready access for lamp service.

**LENS:** Lens shall be heat-resistant fresnel glass. Lens sections shall be 180 degrees red over 360 degrees green. Inside lens diameter shall measure approximately 7" (175mm). Outside lens diameter shall measure approximately 8" (205mm).

**LAMP and RECEPTACLE:** Lamps, one per section, shall be 100W [option: 60W], 120V, A-19 shape, clear. Lamps shall have a rated life of 20,000 hours and shall be of a rough service design with multiple filament support fingers. Medium base receptacles shall be rated for 250V, 660W and shall be porcelain with a nickel-plated brass shell to resist lamp freezing. [option: Dual lamp option adds a second lamp and receptacle in one or both sections as specified.] [option: A single medium base, 120V, 100,000 hour LED lamp shall be provided in a color to match the lens.]

**STEM:** Lamp fixture head shall be suspended from the swivel on a 1 1/2" schedule 40 pipe, 1.90" O.D. (48mm) [option: 2" schedule 40 pipe, 2.375" O.D. (60mm)]. Pipe material shall be galvanized steel [option: stainless pipe used with bronze castings]. Standard dimension from center of swivel to focal plane of upper lens shall be 48" (1219mm) [option: dimension as specified].

**SWIVEL:** The swivel design shall provide for all wiring to be completely contained inside the light assembly. Gaskets and o-rings shall be used to provide a weather-tight assembly. Swivel shall be of heavy-duty construction, cast of the same material as the fixture head. Spindle shall be of stainless steel.

**AUTOMATIC LATCH:** An automatic latch shall hold the light securely in normal operating and service positions. A firm pull on the service chain shall automatically release the latch, allowing the fixture to pivot. As the light is raised, latch shall automatically engage to hold light in the service position. Service position shall be 30 degrees from vertical [option: as specified]. Fixture assembly shall be dual-handed (i.e. light may be pulled up from either side).

**MOUNTING:** Base shall be cast of the same material as the fixture head (aluminum or silicon bronze). Light assembly shall mount via four 1/2" diameter bolts through the base, provided by installer to suit installation.

**SWITCHING CONTROL:** Power shall be switched between red (bridge closed to maritime traffic) and green (bridge open) sections by a separate remote switch as part of the bridge controls.

**PARTIAL LIST OF AVAILABLE OPTIONS:** (items marked with \*\* are most popular options)

\*\* Junction Box: A cast junction box with gasketed access cover shall be provided when specified. Junction box shall be of the same material as the fixture assembly and shall match the navigation light base footprint. Orientation of junction box shall be capable of rotation in 90-degree increments. Junction box shall provide two conduit entries, threaded for 3/4" standard pipe size [option: 1" pipe size].

\*\* Dual Lamps: When specified, a dual lamp arrangement shall be provided. An automatic transfer relay shall switch power to the backup lamp upon failure of the primary lamp. The relay shall provide a second independent contact for remote signaling of "primary lamp failure" status. Transfer relay components shall be contained in a cast box of the same material as the fixture head.

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Indicator Light: An indicator light to signal "primary lamp failure" status shall be included, when specified, for remote installation. The indicator light shall have a 360 degree blue fresnel lens. A 27W lamp shall be included.

Rectifier: A rectifier shall be pre-wired as part of the light assembly, when specified. (Rectified power increases lamp life approximately 20%.)

*Revised 6/14*