

BS BASCULE SPAN LIGHT Specifications



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

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

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 tempered fresnel glass. Lens sections shall be 180 degrees green over 180 degrees red. Inside lens diameter shall measure approximately 7" (175mm). Outside lens diameter shall measure approximately 8" (205mm). Lens shall have a wide angle of divergence suitable for high mounting on bridges or structures. The angle of divergence shall not be less than 27 degrees.

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]. Dimension from center of swivel to focal plane of upper lens shall be 48" (1219mm) [option: 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.

ANTI-SWING BRAKE: The brake shall allow the light to pivot under its own weight as the bascule leaf rotates while preventing oscillation of the light during windy conditions.

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.

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

Switching Control: Power shall be switched between red (bridge closed to maritime traffic) and green (bridge open) sections by a rotation sensing switch. [option: automatic transfer switch - see below]

** Automatic transfer switch: when specified, an adjustable, automatic transfer switch shall be included with each light. Switch shall transfer power between the red and green sections of the light based on rotation position. Switching position shall be preset but shall permit field adjustment. Transfer switch shall be fully pre-wired, mounted in a cast box attached to the base through a junction box. All wiring shall be fully enclosed.

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 ¾" 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.

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

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