



12-Inch Aluminum Pedestrian Signal

General

Each pedestrian signal consists of two identical sections securely mounted, one above the other. A “HAND” symbol or “DONT WALK” message sits above a “PEDESTRIAN” symbol or “WALK” message. The symbols/messages displayed are for pedestrian traffic only, and when illuminated, meet or exceed the latest version of specifications from the Institute of Transportation Engineers’ (ITE).

Housing

The housing of each section is a one-piece, corrosion-resistant aluminum alloy die-casting. Two integrally-cast hinge lugs and two integrally-cast latch screw slots are on each side of the housing. Built upon a symmetrical concept, each housing is capable of providing either a right- or left-hand door opening.

The top and bottom of the housing have an opening to accommodate standard 1½-inch pipe brackets. Each signal section is rigidly attached, one above the other, by means of corrosion-resistant bolts and a washer attachment that allow sections to be rotated about a vertical axis.

The top and bottom openings of the signal housing have an integrally-cast Shurlock boss. The radial angular grooves of the Shurlock boss, when used with Shurlock fittings, provide positive five-degree increment positioning of the entire signal head to eliminate rotation or misalignment of the signal.

Each housing has cast bosses for one five-position or six-position terminal block. Each position is identified with both number and function and is cast on the housing. Each housing has provisions for easily adding a back-plate. Hinge pins, door latching hardware, visor back-plate, and lens clip screws are high-quality stainless steel.

Features

- Straight sides - no protruding hinges or latches
- Reversible door - Left side standard, right side optional
- Ethylene Propylene Diene Monomer (EPDM)
- Terminal block identifiers cast into housing
- “Fast-on” tab terminal block
- Doors equipped with two eye bolts, washers, and wing nuts
- Stainless steel hardware
- Provisions for one five-position and one six-position terminal block in each housing
- Tested to over 80 mph wind loading on single point attachment

Housing Door

The housing door of each section is a one-piece, corrosion-resistant, aluminum alloy die-casting. Two hinge lugs are cast on one side of the door, and two latch points are cast on the other. The door is attached to the housing by means of two hinge pins. Two eye bolts and wing nuts on one side of the door provide for opening and closing the signal door without the use of any special tools.

A gasket groove on the inside of the door accommodates a weatherproof and mildew-proof resilient gasket which, when the door is closed, seals against a raised bead on the housing, creating a positive seal. The outer face of the door has four holes, equally spaced about the circumference of the lens opening, with four screws to accommodate the signal head visors. The door has at least two index points to enable easy positive orientation of the lens. The door and visor overlap to prevent light escaping between the visor and door (visor collar).

Optical System

All LED pedestrian signal modules shall be fully compliant to the ITE Pedestrian Traffic Control Signal Indications (PTCSI) Part 2: LED Pedestrian Traffic Signal Modules specifications adopted March 19, 2004.

The on-board circuitry of all LED traffic signal modules shall include voltage surge protection, to withstand high-repetition noise transients and low-repetition high-energy transients as stated in Section 2.1.8, NEMA Standard TS 2-2003.

Wiring

Each receptacle is provided with two leads with "Fast-on" type terminals. Wires are color coded per customer specifications.

Lamp receptacle conductors are No. 18 AWG (or larger) 600V appliance wiring material, which conform to Military Specification: MIL-W-16878 D, Type-B, with a vinyl nylon jacket rated 115°C.

Terminal Block

Each complete signal face is provided with a terminal block. The terminal block is placed in the bottom section unless otherwise specified. The terminal block for a standard three-section head is a five-position, ten-terminal, barrier-type strip that is attached to the orange and white signal sections, leaving the remaining screw-clamp terminal for field wires.

Visors

Visors are tunnel-shaped and a minimum of seven inches long. Visors are formed of corrosion-resistant aluminum alloy sheet.

Painting

All interior and exterior parts of the housing, door, back-plate, and visor are pretreated for painting in the following stages: degrease, hot rinse, etch with an iron phosphate solution, hot rinse, chemical seal, and dry for at least 10 minutes at 400°F. The parts are then painted with a single coat of environmentally-safe, ultraviolet-resistant, polyester powder coating, which is applied electrostatically at 90 kV and baked for 20 minutes at 400°F per ASTM D-3359, ASTM D-3363, and ASTM D-522. The signal head color is specified by the customer, except for the inside of the visor and the front side of the back-plate which are painted dull black. Stainless steel latching devices are not painted.

Standard colors are:

- Dark Olive Green (matches Federal Standard 595b-14056)
- Yellow (matches Federal Standard 595b-13538)
- Dull Black (matches Federal Standard 595b-37038)