

# Vehicle & Pedestrian Signals

## 12-Inch Aluminum Pedestrian Signal

---

### What, exactly, is a signal?

A traffic signal is a signaling device that is positioned at road intersections, and other sites that control traffic. The signals are designed to ensure an orderly flow of traffic for vehicles, motorcycles, bicycles, and pedestrians by displaying colored lights in a sequence of phases. The colors signal the user to proceed (green), warn that a signal is changing to red (yellow) or prohibits any traffic from proceeding (red).

### Why do agencies use signals?

Traffic signals provide an opportunity for pedestrians or vehicles to safely cross an intersection from different directions. Traffic signals can also alleviate traffic capacity of an intersection or a given route which leads to lowering emissions from vehicles that are waiting in traffic.

### How do signals benefit the driving public?

Traffic signals increase the overall safety for all roadway users by reducing traffic collisions and providing efficient intersection operations. Traffic signals also provide a continuous movement of traffic at a defined speed along a given route which contributes to reducing commuting times.





## 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.

## 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).

## 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.

## Standard Colors

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

## 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.

