

TECHNICAL SPECIFICATION

ITEM 00692 SYMBOLIC PEDESTRIAN SIGNAL HEAD (INCANDESCENT TYPE)

692.1 Description. This specification describes the minimum acceptable requirements for an incandescent type pedestrian signal head with housing and doors made of die cast aluminum alloy or polycarbonate resin material.

692.2 General. The design, material, and construction of the pedestrian signal heads shall be in accordance with the requirements for the incandescent type signal set forth in the latest "Adjustable Face Pedestrian Signal Head Standard" of the Institute of Traffic Engineers.

These signals may be used alone or in conjunction with traffic signals in a complete assembly.

692.3 Design Requirements for the Housing Case and Door. The front of the signal shall be approximately square and no larger than necessary to accommodate the message.

The signal head shall be a one piece assembly constructed of die cast aluminum alloy, or molded polycarbonate. Polycarbonate housing cases shall be a minimum of .250 inches thick and shall be ribbed for strength. Polycarbonate cases and doors shall have ultraviolet inhibitors to reduce deterioration due to exposure to light. Openings in the top and bottom of the signal head shall accommodate a standard 1-1/2" (38mm) bracket arm.

The electrical system of the signal head shall be designed to operate from a 115 volt, single phase, 60 Hz alternating current power supply and use 60-116 watt, standard A-21 traffic light bulbs.

The signal head shall contain one (1) four point terminal with the two common points wired together by the supplier. The terminal block shall accommodate AWG 12 field wires.

The assembly shall provide a dustproof and weatherproof enclosure and shall provide easy access to all components.

All gaskets shall be continuous neoprene gaskets.

Aluminum doors shall be a one-piece corrosion resistant, aluminum alloy casting with two hinged lugs cast at the bottom and two latch slots cast at the top of each door. Two stainless steel wing screws or wing nuts shall be used to open and close the door. Latching or unlatching the door shall not require tools.

Polycarbonate doors shall be one piece and shall be a minimum of 0.250 inches thick with two hinged lugs at the bottom and two latch slots at the top of each door. Two stainless steel wing screws or wing nuts shall be used to open and close the door. Latching or unlatching the door shall not require tools.

692.4 Design Requirements for the Optical System. The lens shall be glass unless specified in the invitation to bid.

The symbolic messages shall be a minimum of 11 inches high and 6 inches wide. The "hand" (don't walk) symbol shall be portland orange in color and displayed on the left side of the signal head. The "walking person" (walk) symbol shall be white in color and be displayed on the right. These colors shall be in accordance with the requirements set forth in the latest "Adjustable Face Pedestrian Signal Head Standard" of the Institute of Traffic Engineers.

The lens shall have a gasket to provide a dustproof and weatherproof seal with the door.

Reflectors shall be made of polished ALZAK aluminum. The lamp assembly shall be adjustable to allow the orientation of the open end of the lamp filament upward.

Each signal head shall be furnished with a flush "egg-crate" type visor with diagonal and horizontal louvers (such as the I.C.C. Z-Crate or the McCain Vantage Visor) to eliminate sun phantom. The visor may be part of a one piece door/visor assembly.

692.5 Mounting Attachments. The type of mounting attachments shall be traditional unless otherwise specified.

Traditional Mounting (option which must be specified by purchaser). All mounting attachments shall be of adequate strength for the purpose intended and shall be constructed of materials not affected by continuous exposure to corrosive atmospheres, particularly salt air. Provisions shall be made for carrying the signal leads enclosed in the mounting attachment. The mounting attachments together with supporting arms and assembled housings, shall comprise a dust and moisture proof enclosure for optical units and lead wiring. Mounting attachments shall be of the design shown on the attached drawings or as described on the item description.

All bracket arms shall be fabricated from 1-1/2" (38mm) diameter pipe.

Threaded crosses shall be used to make all joints in the bracket assemblies. All segments of these crosses that are not attached to a bracket arm shall be plugged with an ornamental plug and a gasket.

692.6 Paint/Painting. All exposed metal surfaces of the assembled pedestrian traffic signal head with mounting attachments shall be given two (2) coats of high grade yellow enamel as used by the manufacturer of the signal equipment. Each coat shall be separately baked. Powder costing is acceptable.

692.7 Shipment and Delivery. Each pedestrian signal head shall be delivered completely assembled and wired without the lamp installed. Each signal head shall be ready for immediate installation.

Each signal head assembly shall be individually packaged. The crate and the signal head shall be tagged showing manufacturer, type, and catalog number. The crate tag shall also display the requisition or contract numbers on which the item was delivered.

692.8 Measurement. Measurement shall be made of each complete "Pedestrian Signal Head (Incandescent Type)" as specified in this specification and delivered f.o.b. to the point specified in the invitation for bids.