Traffic Signal Housing

8" Diameter
12" Diameter
Aluminum
Polycarbonate

1-section shown in Federal yellow

3-section shown in Federal yellow

Overview

McCain's Traffic Signal Housings, available in eight and twelve inch varieties, provide a durable and low-maintenance housing for standard LED modules as well as McCain incandescent optical assemblies. Manufactured from polycarbonate or aluminum, the housings are compliant with multiple agency standards including the Institute of Transportation Engineers (ITE), Caltrans, and most state Departments of Transportation (DOTs). An industry leader in signal manufacturing and supply, McCain offers an extensive range of materials, configurations, and accessories, including backplates, visors, and signal assemblies, to meet your traffic signal requirements.

Benefits

- Modular design promotes flexible configuration options: one to five sections, vertical, horizontal, HAWK (3-section cluster), and doghouse (5-section cluster)
- Fabricated from aluminum or polycarbonate with or without10% fiberglass reinforcement
- 8" or 12" diameter
- Weathertight doors
- Custom hardware and terminal block locations available

Product Description

The McCain Traffic Signal Housings are modular in design, allowing a multitude of signal housing configurations for standard LEDs as well as McCain incandescent optical assemblies.

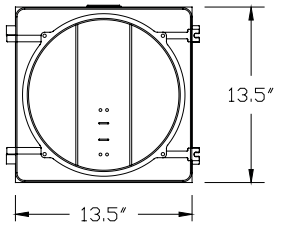
Available in polycarbonate and aluminum, each section is injection molded or cast in one piece. Reinforcement ribs and serrated ports, both top and bottom, provide strength and positive locking with other sections and mounting hardware. Positive latching of doors is achieved with stainless steel eyebolts and wing nut assemblies, and the doors feature four metal threaded inserts for visor attachment. A positive seal is assured with an E.P.D.M. rubber gasket creating a moisture-free and dust-tight atmosphere.

Traffic Signal Housings are compatible with McCain backplates and visors, available in both aluminum and ABS. The top and bottom ports allow installation into many framework mounting assemblies.

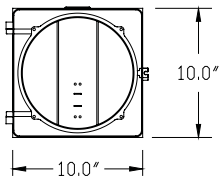
Traffic Signal Housing

Front

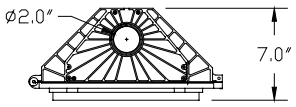
12" housing



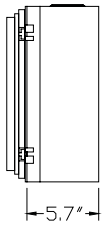
8" housing



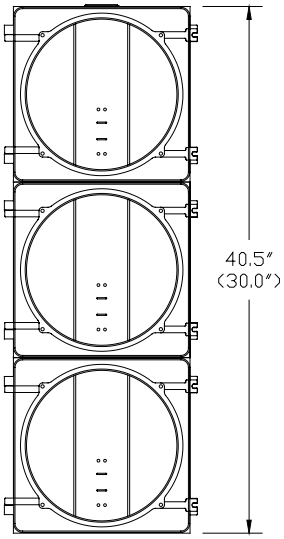
Top



Side



3-Section



Dimensions are approximate and may vary.

3-section 12" housing shown as an example configuration. 3-section 8" housing height dimensions is listed in parentheses.

Depth for the 8" and 12" housings are approximately the same.

Minor differences between the 8" and 12" may not be shown.

Standard Features

- Modular sections, one-piece, injection molded or cast
- 72-tooth serrated boss and reinforcing ribs, top and bottom
- Brass threaded inserts for visor attachment (4)
- Housings have a cast boss for mounting a 5 or 6-position terminal block; one side of terminal block with fast-on terminals, the other side with screw terminals
- The words red, amber, and green are cast next to each boss to identify light source lead wires
- 5 or 6-position terminal block installed in center section (1) (alternate mounting is available)
- Stainless steel door roll pins and eye bolt/wing nut assemblies
- Integral lugs on the housing and doors with stainless steel roll pins provide effective door hinges
- Weathertight E.P.D.M. rubber door gasket
- Aluminum and polycarbonate, and 8" and 12" housings can be mixed in one signal head

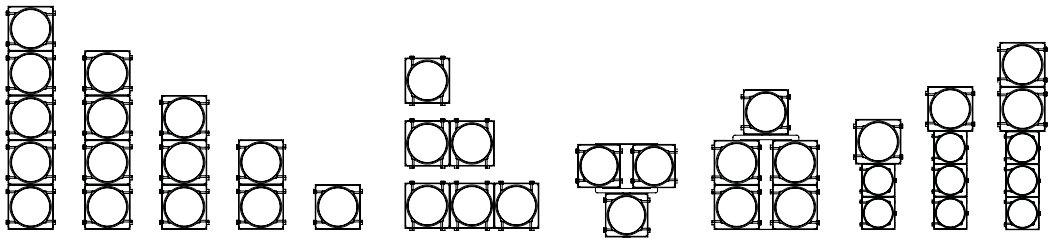
General Specifications

Dimensions: (1-section)	8": 10.0" H x 10.0" W x 7.0" D 12": 13.5" H x 13.5" W x 7.0" D		
Material:	Polycarbonate: Ultraviolet and heat stabilized, flame retardant, permanently colored, 10% fiber-glass reinforcement Aluminum: Type 360, reduced corrosion, increased powder coat adhesion		
Finish(es):	Polycarbonate: Colored resins integral to housing Aluminum: Powder coated		
Color(s):	Federal yellow, signal green, black, or custom colors		
Mounting:	2.0" hole top and bottom fits 1.5" NPT fittings		
Environmental:	Operating temperature: -37° C to +74° C Humidity: 0 to 95% (non-condensing)		
Shipping Weight: (empty, 1-section)	Polycarbonate:	8" - 2.1 lbs	12" - 4.2 lbs
	Aluminum:	8" - 4.0 lbs	12" - 7.8 lbs

Options

- Fiberglass-free polycarbonate
- Location, quantity, and type of terminal blocks
- Door mounting hardware: Push pin (removable) or roll pin (permanent)
- Visors
- Backplates
- Mounting: Various framework, orientation, and configurations
- Light Source: LED or incandescent
- High-performance (highly directional) signal version

Typical configurations



Vertical *Horizontal* *HAWK* *Doghouse* *Mixed Sizes*

To learn more about McCain's Integrated Traffic Solutions, please contact ***info@mccain-inc.com*** *or call* ***(760) 727-8100***

McCain®

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Signal Visors

Aluminum
Polycarbonate

45° Angle
Cap
Full Circle
Scoop
Tunnel

Full Circle

Tunnel

Scoop

Cap

45° Angle

Overview

McCain's Signal Visors increase signal visibility in sunlight while still allowing an unobstructed view for multiple lanes of approaching drivers and pedestrians. McCain produces a range of standard and angled visors including tunnel, full circle, and cap, that offer a variety of signal viewing angles. Whether you are looking for aluminum or polycarbonate, Federal yellow, signal green, black, or custom colors, McCain has the visors to meet your needs.

Benefits

- Increases signal visibility in sunlight
- Available in a variety of materials, sizes, styles, and angles to meet your specific requirements
- Twist-on tabs facilitate ease of installation
- One-piece construction (except Scoop Visor)

Product Description

McCain's Signal Visors, molded polycarbonate or stamped and formed aluminum, are available in eight inch and 12 inch signal configurations. Integrally formed, twist-on mounting tabs make installation and maintenance a snap, and a standard three degree downward tilt facilitates signal visibility.

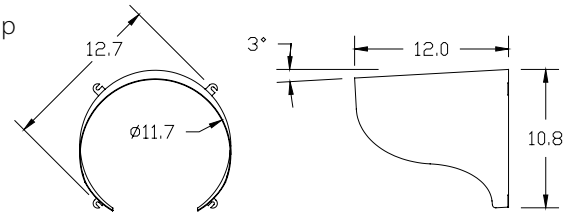
Specialty visors include the 45° Angle Visor and the Scoop Visor. The 45° Angle Visor comes in two standard lengths, 18" and 27" and in right and left versions. It is designed to narrow visibility for locations such as an angled intersection.

The Scoop Visor is designed to resist snow build-up on signal lenses in colder climates. A louvered vent on top and an open bottom contribute to the increased vertical movement of air across the face of the signal lens thereby increasing resistance to the deposit of snow.

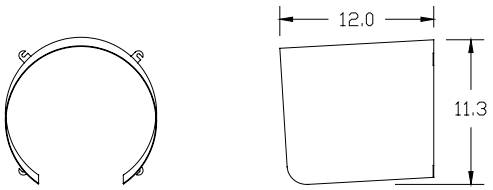
Signal Visors

Front Side

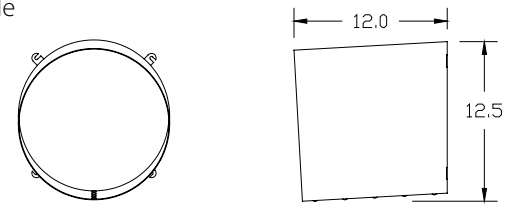
Cap



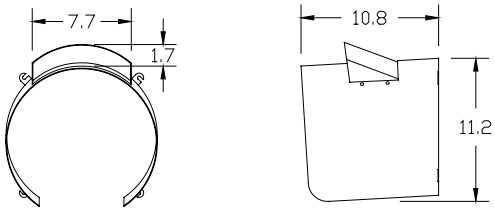
Tunnel



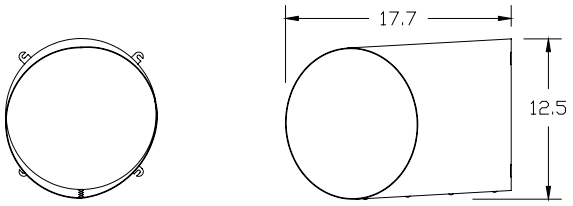
Full Circle



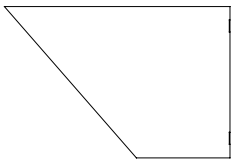
Scoop



45° (18" right angle version)



Top



Dimensions rounded to the nearest 0.1"
All visors shown are 12" signal versions
Dimensions shown in Cap front view and degree of tilt shown in side view are typical of all 12" visors

Standard Features

- One-piece construction (except Scoop)
- Twist-on mounting tabs
- 3° downward tilt

General Specifications

		Diameter	Depth
Dimensions:	Standard Visors:	8"	8"
		12"	12"
	45° Angle Visors:	8"	18"
		12"	18"
		12"	27"

Degree of Tilt:	3° (down)
Material:	Aluminum: Type 3003, very good corrosion resistance, 0.050" thick
	Polycarbonate (standard visors only): Ultraviolet and heat stabilized, flame retardant, permanently colored, 0.10" nominal thickness
Finish(es):	Aluminum: Powder coated Polycarbonate (standard visors only): Colored resins integral to visor
Color(s):	Exterior: Federal yellow, signal green, black, or custom Interior: Flat black
Mounting:	Twist-on tabs
Shipping Weight:	1 - 4 lbs., varies based on material, size, and style

Options

- Other lengths available
- Degree of tilt

To learn more about McCain's Integrated Traffic Solutions, please contact ***info@mccain-inc.com*** *or call* ***(760) 727-8100***

Project

Type

Catalog No.

IL6-P3 Series
LED 8” and 12” Traffic Signal Module
Incandescent Look Ball

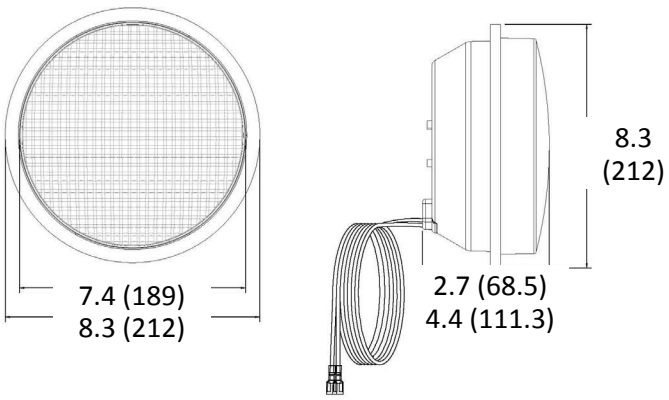
Leading the LED Industry since 1992 with the most energy efficient ITE-compliant traffic signal module.
With over 7,000,000 units installed globally

Superior Performance and Reliability

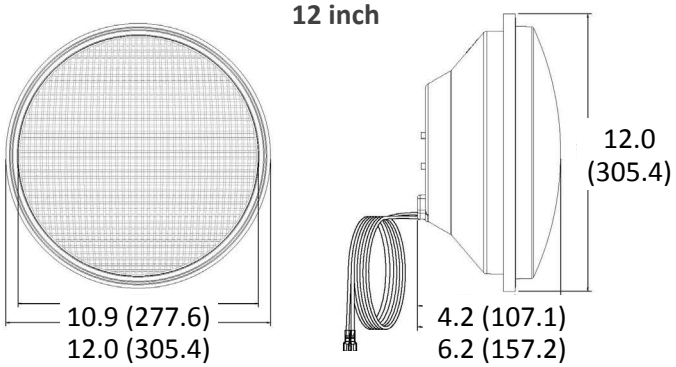
- Unique masking options available
- Intertek ETL verified
- Meets and/or exceeds all ITE standards ITE VTCSH LED Circular Signal Supplement dated June 27, 2005
- More energy efficient than previous model
- Easy installation into existing signal housings
- Patented innovative optical technology
- Wider viewing angle and enhanced uniformity
- Maintains 70% of the initial lumen intensity after 100,000 hours of operation
- Overmolded electrical connectors provide fully-weatherized seal
- Excellent moisture and dust resistance
- Utilizes constant current source to maintain consistent light output
- Superior thermal management
- Environmentally friendly
- 5-year limited warranty

Mechanical Dimensions [in(mm)]

8 inch



12 inch



IL6-P3 Series
LED 8” and 12” Traffic Signal Module
Incandescent Look Ball

Model Specifications and Ordering Options

Operating Temperature: -40°F to 165°F (-40°C to 74°C)	Turn-On/Turn-Off Time: < 75msec
Operating Voltage: 80 - 135Vac	Turn-Off Voltage: > 35Vac
Power Factor: > 0.90	Total Harmonic Distortion (THD): < 20%

	Model Number and Color	Wattage Drawn	Voltage	Dominant Wavelength	Maintained Intensity (cd) Min.	Standard
IL6-P3	**8 inch ball**					
	TSL-08R-LX-IL6-A1-P3	6	80-135Vac	626	165	ITE 2005/ETL/Caltrans
	TSL-08Y-LX-IL6-A1-P3	6	80-135Vac	589	410	ITE 2005/ETL/Caltrans
	TSL-08G-LX-IL6-A1-P3	6	80-135Vac	500	215	ITE 2005/ETL/Caltrans
	12 inch ball					
	TSL-12R-LX-IL6-A1-P3	6.2	80-135Vac	626	365	ITE 2005/ETL/Caltrans
	TSL-12Y-LX-IL6-A1-P3	9.7	80-135Vac	589	910	ITE 2005/ETL/Caltrans
	TSL-12G-LX-IL6-A1-P3	6.7	80-135Vac	500	475	ITE 2005/ETL/Caltrans

Notes:
1 Tinted lens standard, clear lens optional. When ordering clear lens, please add “-CLR” to model number. Both tinted and clear lens are Intertek ETL Verified.

Standard Conformance

- FCC Compliant for Electrical Noise
- MIL-STD-810F Moisture Resistant
- MIL-STD-883 Mechanical Vibration
- NEMA TS2 Section 2.1.8, Transient Voltage Protection over 2000V
- IEC 1000-4-5, 3KV, 2 ohm source impedance
- ANSI/IEEE C62.41-2002; IEC 61000-4-12, 6KV, 200A, 100KHz ring wave

ITE VTCSH Compliance - LED Circular Signal Supplement – June 27, 2005

• Conditioning	ITE 6.4.2	• Luminous Intensity	ITE 6.4.4.1-4
• Mechanical Vibration	ITE 6.4.3.1	• Chromaticity	ITE 6.4.4.6
• Temperature Cycling	ITE 6.4.3.2	• Current Consumption	ITE 6.4.6.1