Vitalite® Rotating Warning Light

Models 121 and 121A

LIGHT DUTY VEHICULAR LIGHT

- Available in 12VDC and 24VDC

- Five dome colors

- 121 - Magnetic mount with cigarette lighter cord and plug

- 121A - Integrated pipe and surface mount

- Model 121 - Type 3R, IP32 enclosure

- Model 121A - Type 4X, IP66 enclosure

- UL and cUL Listed and CSA Certified

The Federal Signal Vitalite® Models 121 and 121A are compact, rotating lights designed for vehicular applications. They feature a parabolic reflector that rotates around an incandescent lamp, providing 60 flashes per minute in all directions. Both Models are available in five dome colors — amber, blue, clear, green and red.

The 121 comes with an integrated magnetic mount and steel mounting plate. Power is supplied to the 121 via a 10-foot electrical cord with a cigarette lighter type plug. The 121 is available in 12VDC.
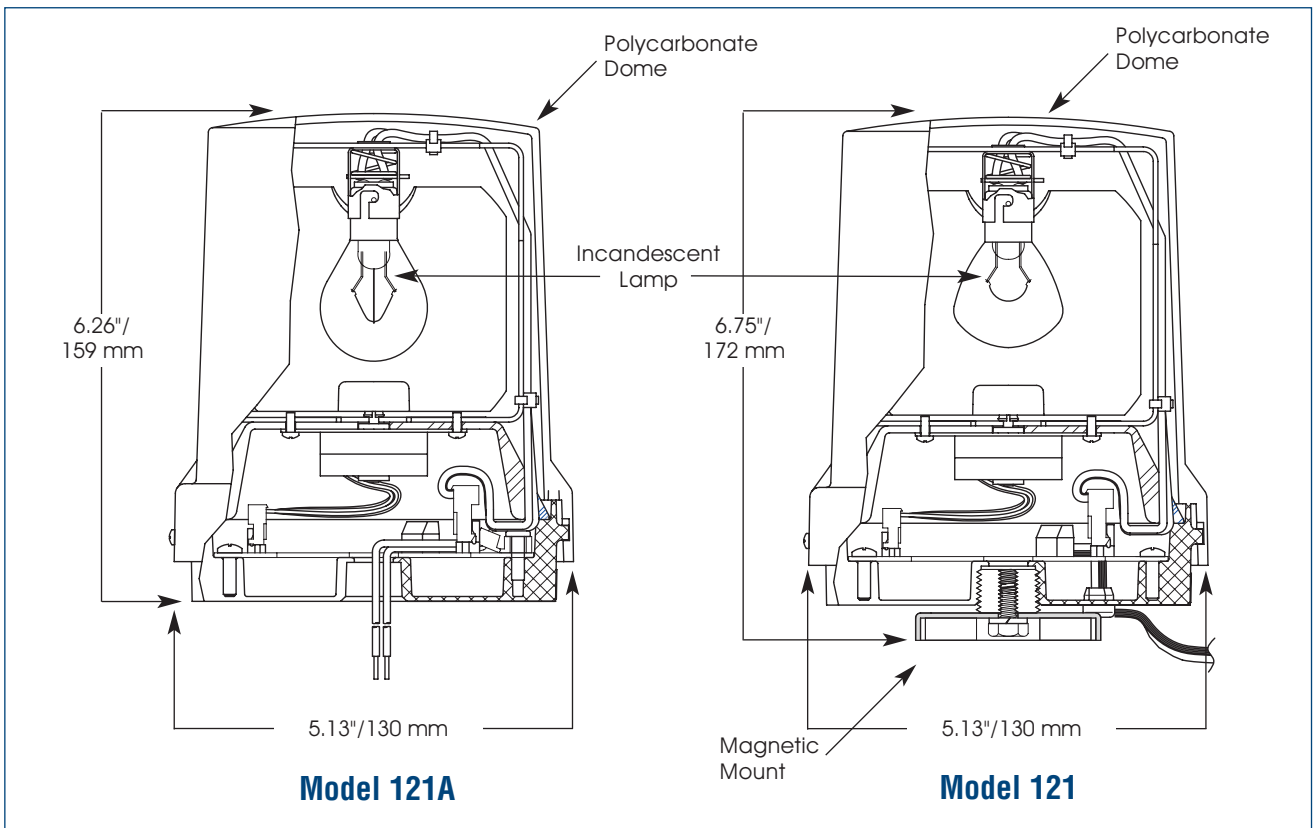
The 121A rotating light is designed for both vehicular and in-plant applications. This unit can be surface mounted or mounted on a $1/2$" pipe with the integrated pipe mount. The 121A is available in 12VDC and 24VDC. The enclosure is also rated Type 4x for a water tight and dust tight seal.

Both Models are UL Listed.

Model	Voltage	Operating Current	Flash Rate/ Minute	Candela	Mount
121	12VDC	3.0 amps	60	18,000	Magnetic
121A	12VDC	3.0 amps	60	18,000	Pipe/Surface
121A	24VDC	1.3 amps	60	4,000	Pipe/Surface

5 yr FEDERAL SIGNAL WARRANTY

VITALITE® ROTATING WARNING LIGHT (121/121A)

Model 121A — Polycarbonate Dome, Incandescent Lamp, 6.26"/159 mm, 5.13"/130 mm

Model 121 — Polycarbonate Dome, Incandescent Lamp, 6.75"/172 mm, 5.13"/130 mm, Magnetic Mount

SPECIFICATIONS

Lamp Life*:	300 Hours	300 Hours
Lamp Style:	Incandescent	Incandescent
Operating Temperature:	-31°F to 150°F	-35°C to 66°C
121A		
Net Weight:	1.8 lbs.	0.79 kg
Shipping Weight:	1.9 lbs.	0.86 kg
Height:	6.26"	159.0 mm
Diameter:	5.13"	130.0 mm
121		
Net Weight:	2.2 lbs.	1.0 kg
Shipping Weight:	2.3 lbs.	1.04 kg
Height:	6.75"	172.0 mm
Diameter:	5.13"	130.0 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Please refer to Model Number Index 121/121A beginning on page 373

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Dome, Amber	K8444357A-02	Dome, Red	K8444357A-03
Dome, Blue	K8444357A-01	Incandescent Lamp, 12VDC	K8107223A
Dome, Clear	K8444357A	Incandescent Lamp, 24VDC	K8107236A
Dome, Green	K8444357A-04	Motor, Stepper	K8444382A
Dome, Magenta	K8444357A-05	PC Board Assembly	K2001927A

Series A & B Domes on page 33

2645 Federal Signal Dr., University Park, IL 60466   Tel: 708.534.4756   Fax: 708.534.4852   www.federalsignal-indust.com

Vitalite® Rotating Warning Light

Model 121S

Federal Signal's Model 121S is a compact, rotating warning light designed for in-plant use. It features a parabolic reflector which rotates around an incandescent lamp, providing 60 flashes per minute in all directions. The 121S Vitalite® is available in five dome colors (amber, blue, clear, green and red). It is UL (Underwriters Laboratories) Listed, cUL Listed, and CSA Certified.

Federal Signal's 121S comes ready to mount on a $\frac{1}{2}$-inch pipe or surface mount. Optional brackets simplify installation on walls or in corners (see page 108). The enclosure is also rated Type 4x for a water tight and dust tight seal.

The lamp projects an intense, fixed beam onto a parabolic reflector which rotates 360°, producing 60 flashes per minute. The 121 features a twist and lock dome which allows for fast and easy access to inspect and change the lamp.

This light is particularly useful as a signaling or warning device in high ambient noise areas where it can supplement audible signaling devices. It is also effective alerting hazardous conditions or dangerous areas.

Federal Signal's Vitalite is an economical rotating warning light for emergency warning or status indication in noisy areas.

LIGHT DUTY WARNING LIGHT

- Available in 120VAC
- Five dome colors
- Integrated $\frac{1}{2}$ - inch pipe mount and surface mount
- Type 4X, IP66 enclosure
- UL and cUL Listed and CSA Certified

Model	Voltage	Operating Current	Flash Rate/Minute	Candela	Mount
121S	120VAC 50/60Hz	0.36 amps	60	2,100	Pipe/Surface

VITALITE® ROTATING WARNING LIGHT (121S)
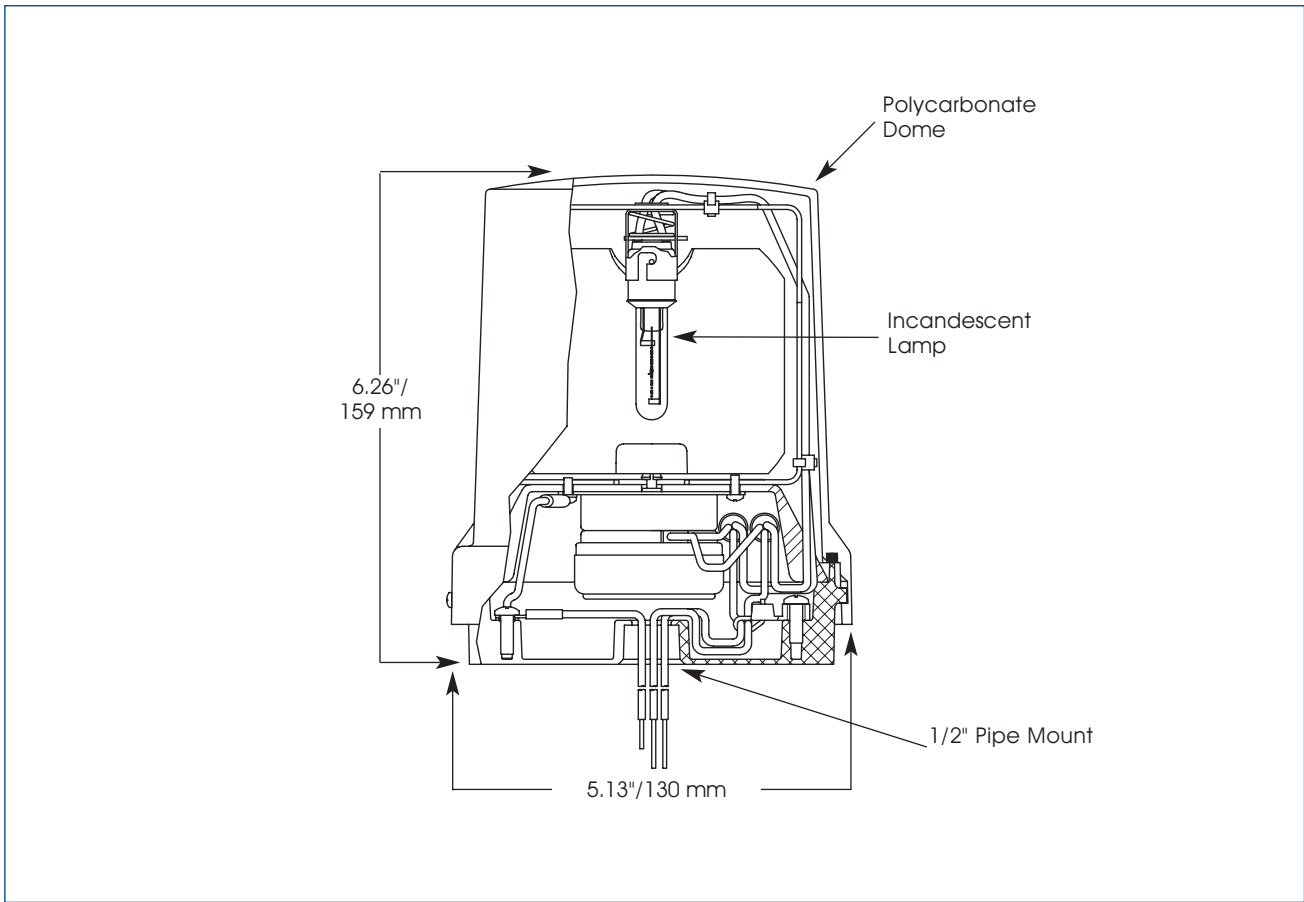
Polycarbonate Dome

Incandescent Lamp

6.26"/ 159 mm

1/2" Pipe Mount

5.13"/130 mm

SPECIFICATIONS

Lamp Style:	Incandescent	Incandescent
Operating Temperature:	-31°F to 150°F	-35°C to 66°C
Net Weight:	2.0 lbs.	0.91 kg
Shipping Weight:	2.1 lbs.	0.96 kg
Height:	6.26"	159.0 mm
Diameter:	5.13"	130.0 mm

HOW TO ORDER

- Specify model, voltage and color
- Specify options:
  Corner Bracket (LCMB2)
  Wall Bracket (LWMB2)
- Please refer to Model Number Index 121S beginning on page 373

REPLACEMENT PARTS

Description (Current Series)	Part Number	Description (Older Series)	Part Number
Dome, Amber, Series C	K8444357A-02	Motor, 120VAC	K8241A030-03
Dome, Blue, Series C	K8444357A-01	Dome, Amber, Series A and B	K8444B019A-12
Dome, Clear, Series C	K8444357A	Dome, Blue, Series A and B	K8444B019A-13
Dome, Green, Series C	K8444357A-04	Dome, Clear, Series A and B	K8444B019A-14
Dome, Magenta, Series C	K8444357A-05	Dome, Green, Series A and B	K8444B019A-15
Dome, Red, Series C	K8444357A-03	Dome, Magenta, Series A and B	K8444B019A-17
Incandescent Lamp, 120V, Krypton Series C	K8107251A	Dome, Red, Series A and B	K8444B019A-11
		Incandescent Lamp, 120V, Series A and B	K8107181A

Explosion-Proof Rotating Light

Model 121X

DESIGNED FOR USE IN EXPLOSION-PROOF ATMOSPHERES

- Available in 24VDC and 120VAC
- Five lens colors
- $^3/_4$ - inch pendant mount standard; other options available
- Optional dome guard
- Type 4X, IP66 enclosure
- UL and cUL Listed, CSA Certified and Marine Rated

Federal Signal's Model 121X rotating light flashes 90 times per minute and produces a 360° visual signal. This explosion-proof light has an incandescent lamp and is available in five lens colors – amber, blue, clear, green and red.

The Model 121X is UL Listed for Class I, Division 1, Groups C & D; Class II, Division 1, Groups E, F & G; Class I, Division 2, Groups A, B; and Class III. The 121X is CSA Certified, Marine Rated and constructed to Type 4X, IP66 standards.

This corrosion-resistant unit's copper-free aluminum housing is finished with a powder epoxy. All exposed hardware is constructed of 316 grade stainless steel.

The 121X uses a synchronous motor to drive a parabolic reflector around an incandescent lamp. This results in a 360° rotating beam which is concentrated in a horizontal plane.

The 121X features a spring-clip mounted lens for quick access when inspecting or relamping. A pendant mount is supplied and a ceiling mount and 90° wall mount are available options. Installation is simple; with the mounting box in place, the fixture is threaded onto the mounting box, making the electrical connection. Electrical continuity is made when five threads are engaged.

Federal Signal's rugged 121X Warning Light is designed for explosion-proof applications and/or corrosive environments. It is ideal for use in indoor and outdoor areas such as oil rigs, mines, refineries, and chemical plants.

Model	Voltage	Operating Current	Flash Rate/ Minute	Candela	Mount
121X	24VDC	1.05 amps	90	2,350	$^3/_4$" Pendant
121X	120VAC 60Hz	0.33 amps	90	1,800	$^3/_4$" Pendant

EXPLOSION-PROOF ROTATING LIGHT (121X)
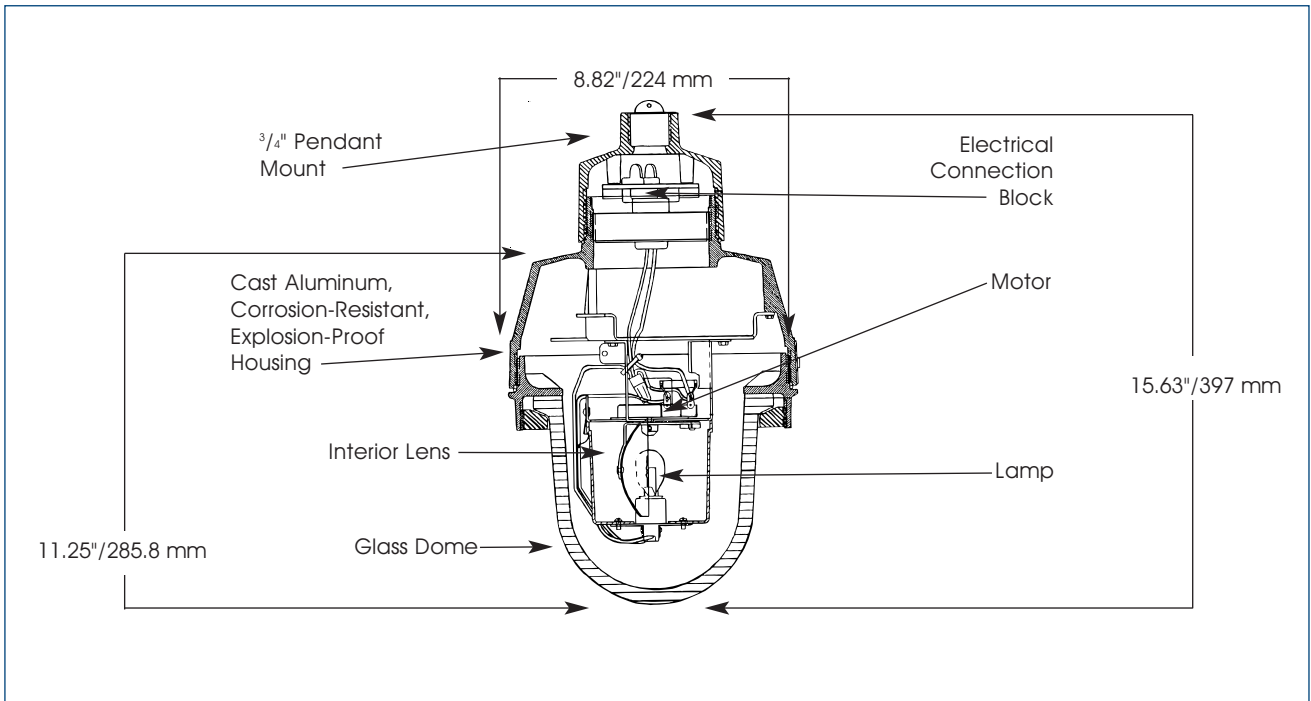
SPECIFICATIONS

Lamp Life*:	800 Hours	800 Hours
Lamp Style	Incandescent	Incandescent
Ambient Temperature Range:	-31°F to 150°F	-35°C to 66°C
Net Weight:	14.75 lbs.	6.69 kg
Shipping Weight:	18.9 lbs.	8.57 kg
Height:	15.63"	397.0 mm
Diameter:	8.82"	224.0 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Specify options:
  Ceiling Mount Kit (CMXC)
  Wall Mount (WMXC)
  Dome Guard (DGXC)
- Please refer to Model Number Index 121X beginning on page 373

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Exterior Dome Assembly, Clear	K8444C271A-01	24VDC Mechanism, Amber	K8444269A
Interior Lens, Amber	K8444242A	24VDC Mechanism, Blue	K8444269A-01
Interior Lens, Blue	K8444242A-01	24VDC Mechanism, Clear	K8444269A-02
Interior Lens, Clear	K8444242A-02	24VDC Mechanism, Green	K8444269A-03
Interior Lens, Green	K8444242A-03	24VDC Mechanism, Red	K8444269A-04
Interior Lens, Red	K8444242A-04	120VAC Mechanism, Amber	K8444277A
Lamp, 24VDC	K8107A041	120VAC Mechanism, Blue	K8444277A-01
Lamp, 120VAC	K8444A173A	120VAC Mechanism, Clear	K8444277A-02
		120VAC Mechanism, Green	K8444277A-03
		120VAC Mechanism, Red	K8444277A-04

Starfire® Strobe/Incandescent Combination Light

Model 131C

OUR BRIGHTEST MEDIUM DUTY STROBE… PLUS A STEADY-BURN INCANDESCENT

- Available in 24VDC and 120VAC

- Five dome colors

- Both a 10,000 hour strobe tube and a 7,000 hour incandescent

- $1/2$ - inch pipe mount

- Type 3R enclosure (Dome up orientation)

- Surface mount kit optional

Federal Signal introduces a new hybrid signal designed specifically for safety showers and emergency call stations.

Inside the 131C are two light sources — a 7,000 hour incandescent lamp and a 10,000 hour strobe tube. When power is present, the incandescent lamp burns steady to draw attention to the location of the emergency station and to indicate that the station is receiving power. When an emergency activation occurs, the strobe begins to flash, calling attention and indicating a status change.

The 131C measures less than nine inches high and six inches in diameter, yet is highly visible; the emergency signal flashes with an effective candela of 1000.

The fresnel dome is designed to stand up to impact and abuse and is available in amber, blue, clear, green and red. The base of the light is made of corrosion-resistant anodized aluminum. The 131C comes with a standard $1/2$-inch pipe mount.
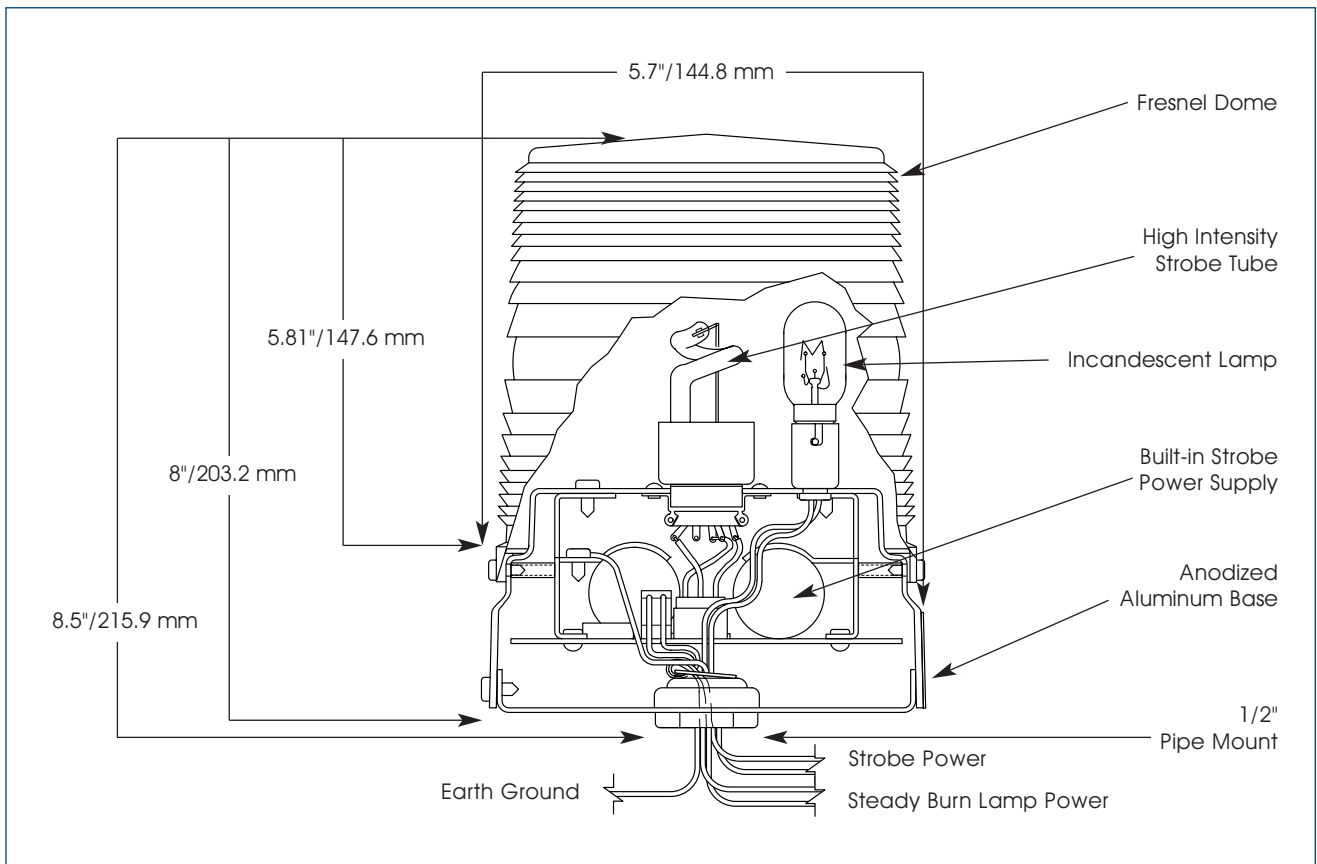
Model	Voltage	Operating Current	Flash Rate/ Minute	Strobe Candela Peak[1]	ECP[2]
131C	24VDC	1.25 amps (strobe) 0.50 amps (incandescent)	80	2,000,000	1,000
131C	120VAC	0.60 amps (strobe) 0.13 amps (incandescent)	80	2,000,000	1,000

[1] Peak candela is the maximum light intensity generated by a flashing light during its light pulse

[2] ECP (Effective Candela) is the intensity that would appear to an observer if the light were burning steadily

5 yr FEDERAL SIGNAL WARRANTY

STROBE/INCANDESCENT WARNING LIGHT (131C)

Fresnel Dome

High Intensity Strobe Tube

Incandescent Lamp

Built-in Strobe Power Supply

Anodized Aluminum Base

1/2" Pipe Mount

Strobe Power

Steady Burn Lamp Power

Earth Ground

5.7"/144.8 mm

5.81"/147.6 mm

8"/203.2 mm

8.5"/215.9 mm

SPECIFICATIONS

Lamp #1 Style:		10,000 Hour Strobe
Lamp #2 Style:		7,000 Hour Incandescent
Net Weight:	2.0 lbs.	1.0 kg
Shipping Weight:	3.4 lbs.	1.5 kg
Height:	8.5"	215.9 mm
Diameter:	5.7"	144.8 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Specify options:
  Corner Bracket (LCMB2)
  Wall Bracket (LWMB2)
  Surface Mount Kit (K8444A211B)
- Please refer to Model Number Index 131C beginning on page 377

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Dome, Amber	K8422B428A-01	PC Assembly, 24VDC	K2001260C
Dome, Blue	K8422B428A-02	PC Assembly, 120VAC	K2001188C
Dome, Clear	K8422B428A	Strobe Tube	K8107178A
Dome, Green	K8422B428A-03	Incandescent Lamp (24VDC)	K8107210A
Dome, Red	K8422B428A-04	Incandescent Lamp (120VAC)	K8107194A
Dome Gasket	K8444A193A		

Starfire® Strobe Warning Lights

Models 131ST and 131DST

Federal Signal's Starfire® strobe warning lights are available in single-flash (131ST) and double-flash (131DST) models. Through precise timing of the strobe flash, the double flash unit produces 1,200 effective candela; the single flash unit produces 1,000 effective candela.

Starfire models are available in 12-24VDC, 120VAC (50/60Hz) and 240VAC (50/60Hz). All units are less than nine inches high and six inches in diameter, but powerfully effective.

Starfire strobe warning lights contain their own strobe power supply in the base of the light. The strobe flash tube is mounted in an eight-pin octal socket base. The fresnel dome stands up to impact and abuse and is available in amber, blue, clear, green and red. The base of the light is made of corrosion-resistant anodized aluminum. Each Starfire model comes with a standard $1/2$-inch pipe mount. An optional surface mount can be ordered.

Because of its convenient size and intense light output, the Starfire strobes can be used for multiple applications. Excellent for in-plant use, the Models 131ST/DST warn of hazardous conditions, mark dangerous areas (either permanently or temporarily) and mounts on lift trucks, cranes and other moving devices. These powerful strobes can be used on emergency, utility, maintenance or any other vehicle requiring emergency warning.

OUR BRIGHTEST MEDIUM DUTY STROBE LIGHT

- Available in 12-24VDC, 120VAC and 240VAC
- Five dome colors
- 10,000 hour strobe tube
- Single or double flash strobe
- $1/2$ - inch pipe mount
- Indoor use only
- Type 3R, IP45 enclosure (Dome up orientation)
- UL and cUL Listed and CSA Certified

Model	Voltage	Operating Current	Flash Rate/ Minute	Candela Peak[1]	ECP[2]	Mount[4]
131DST	12-24VDC	3.0-1.9 amps	80[3]	1,000,000	1,200	$1/2$" Pipe
131DST	120VAC	0.60 amps	80[3]	1,000,000	1,200	$1/2$" Pipe
131DST	240VAC	0.30 amps	80[3]	1,000,000	1,200	$1/2$" Pipe
131ST	12-24VDC	2.75-1.25 amps	80	2,000,000	1,000	$1/2$" Pipe
131ST	120VAC 50/60Hz	0.60 amps	80	2,000,000	1,000	$1/2$" Pipe
131ST	240VAC 50/60Hz	0.30 amps	80	2,000,000	1,000	$1/2$" Pipe

[1] Peak candela is the maximum light intensity generated by a flashing light during its light pulse
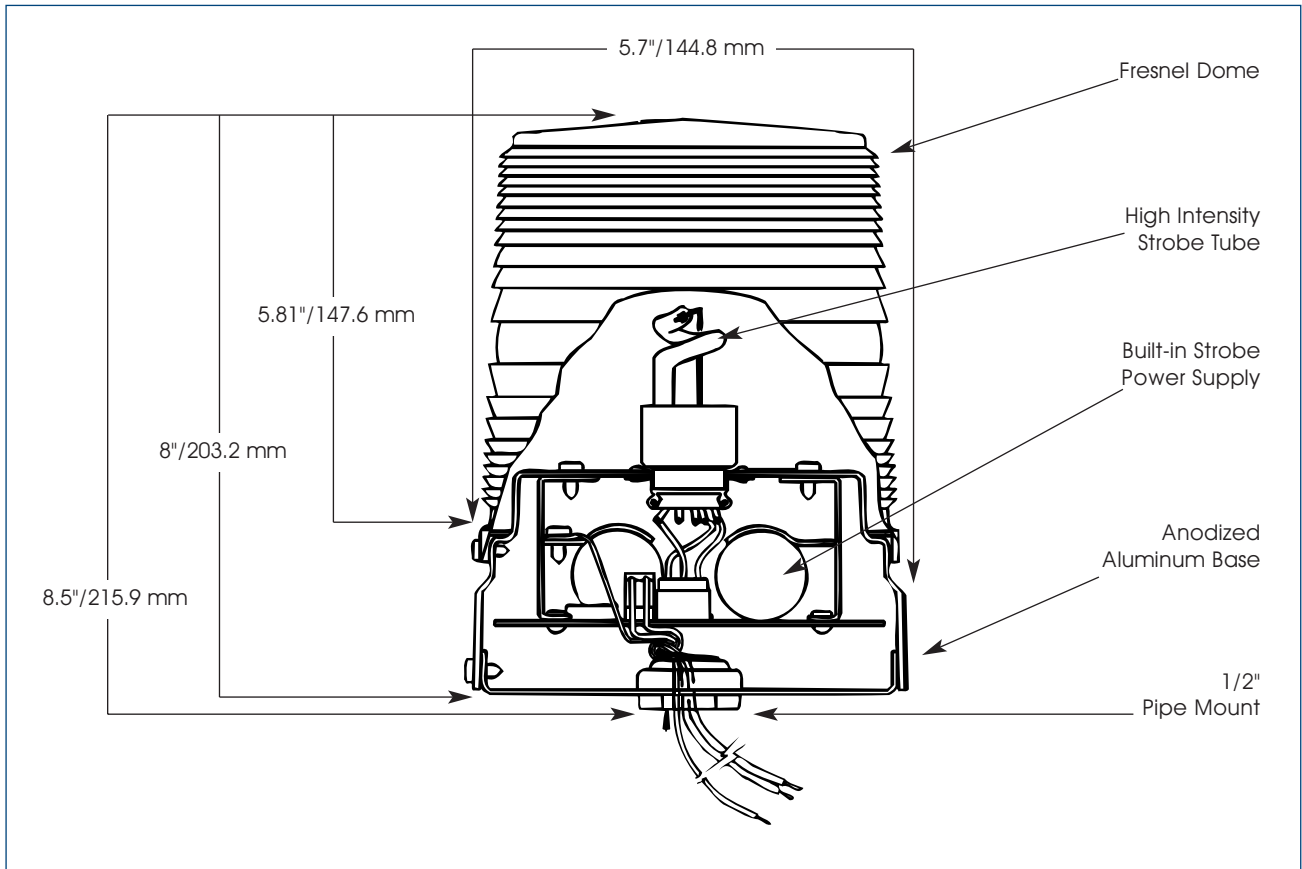
[2] ECP (Effective Candela) is the intensity that would appear to an observer if the light were burning steadily

[3] Double Flash

[4] Magnet and surface mount kits available

STARFIRE® STROBE WARNING LIGHT (131ST/131DST)

Fresnel Dome

High Intensity Strobe Tube

Built-in Strobe Power Supply

Anodized Aluminum Base

1/2" Pipe Mount

5.7"/144.8 mm

5.81"/147.6 mm

8"/203.2 mm

8.5"/215.9 mm

SPECIFICATIONS

Lamp Life*:	10,000 Hours	10,000 Hours
Lamp Style:	Strobe	Strobe
Operating Temperature:	-31°F to 150°F	-35°C to 66°C
Net Weight:	2.0 lbs.	1.0 kg
Shipping Weight:	3.4 lbs.	1.5 kg
Height:	8.5"	215.9 mm
Width:	5.7"	144.8 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Specify options:
  Corner Bracket (LCMB2)
  Wall Bracket (LWMB2)
  Surface Mount (K8444A211B)
- Please refer to Model Number Index 131ST/131DST beginning on page 376

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Dome, Amber	K8422B428A-01	PC Assembly, 12-24VDC (131ST)	K2001260C
Dome, Blue	K8422B428A-02	PC Assembly, 120VAC (131ST)	K2001188C
Dome, Clear	K8422B428A	PC Assembly, 240VAC (131ST)	K2001188C-01
Dome, Green	K8422B428A-03	PC Assembly, 12-24VDC (131DST)	K2001265D
Dome, Red	K8422B428A-04	PC Assembly, 120VAC (131DST)	K200865G
Dome, Magenta	K8422B428A-05	PC Assembly, 120VAC (131DST)	K200865G
Strobe Tube	K8107178A	PC Assembly, 240VAC (131DST)	K200865G-01
Surface Mount Kit	K8444A211B	Dome Gasket	K8444A193A

Electraflash®
Flashing Lights

Model 141

DESIGNED FOR INDUSTRIAL OR VEHICULAR USE

- Available in 12VDC, 24VDC, 36VDC, and 120VAC

- Five dome colors

- Surface mount or integrated $1/2$ - inch pipe mount

- Type 3R enclosure

- UL Listed and CSA Certified

Federal Signal's Electraflash® Model 141 is an economical incandescent flashing light. The Electraflash is less than six inches high and six inches in diameter. It is available in five impact-resistant fresnel dome colors: amber, blue, clear, green and red. The 120VAC model is UL Listed and CSA Certified.

The Model 141 is available in 12VDC, 24VDC, 36VDC and 120VAC. This light consists of a flasher unit with an incandescent bayonet lamp secured to its base (screw-in type lamp in 120VAC only).

The 12, 24 and 36VDC units each provide three holes for easy flat surface mounting. The 120VAC unit is ready to mount on a $1/2$-inch pipe. Optional mounting brackets are available for the 120VAC unit, including the Model LWMB2 wall mount bracket and the Model LCMB2 corner mount bracket.
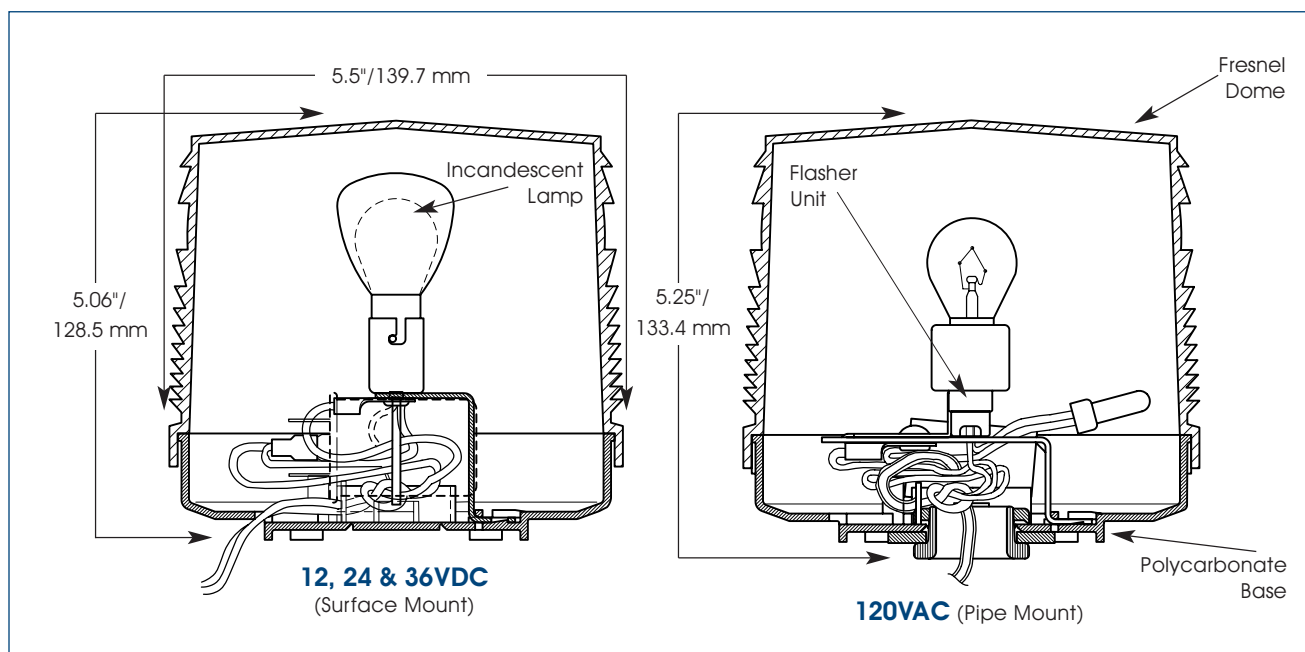
Federal Signal's economical flashing lights are designed for both indoor and outdoor environments. Model 141's convenient size and intense light output are ideal for maintenance vehicles, fork lifts, and other material handling equipment. The Electraflash can effectively identify hazardous conditions or dangerous areas.

Federal Signal's Electraflash is a compact warning light designed specifically for use in light-duty industrial applications.

Model	Voltage	Operating Current	Flash Rate/ Minute	Candela	Mount
141	12VDC	3.00 amps	70	325	Surface
141	24VDC	0.90 amps	70	125	Surface
141	36VDC	0.60 amps	70	200	Surface
141	120VAC 50/60Hz	0.38 amps	70	275	$1/2$" Pipe

ELECTRAFLASH® FLASHING LIGHT (141)

5.5"/139.7 mm
Incandescent Lamp
5.06"/128.5 mm
12, 24 & 36VDC (Surface Mount)

Fresnel Dome
Flasher Unit
5.25"/133.4 mm
120VAC (Pipe Mount)
Polycarbonate Base

SPECIFICATIONS

Lamp Life*:

12VDC - Incandescent	1,000 Hours	1,000 Hours
24VDC - Incandescent	7,000 Hours	7,000 Hours
36VDC - Incandescent	500 Hours	500 Hours
120VAC - Incandescent	7,000 Hours	7,000 Hours
Operating Temperature:	-31°F to 150°F	-35°C to 66°C
Net Weight:		
DC Versions	0.8 lbs.	0.4 kg
AC Version	1.0 lb.	0.5 kg
Shipping Weight:		
DC Versions	1.1 lbs.	0.5 kg
AC Version	1.3 lbs.	0.6 kg
Height:		
DC Versions	5.06"	128.5 mm
AC Version	5.25"	133.4 mm
Diameter:		
DC Versions	5.5"	139.7 mm
AC Version	5.5"	139.7 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Specify options (120VAC only):
  Corner Bracket (LCMB2)
  Wall Bracket (LWMB2)
- Please refer to Model Number Index 141 beginning on page 374

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Dome, Amber	K8263073A	Incandescent Lamp (36VDC)	K8263078A
Dome, Blue	K8263073A-01	Incandescent Lamp (120VAC)	K8107181A
Dome, Clear	K8263073A-03	Flasher (12VDC)	K8263A083A
Dome, Green	K8263073A-04	Flasher (24VDC & 36VDC)	K8285237A
Dome, Red	K8263073A-02	Flasher (120VAC)	K8285238A-01
Incandescent Lamp (12VDC)	K8107212A	Pipe Mount Kit	K8263093A
Incandescent Lamp (24VDC)	K8107213A		

Electraflash®
Strobe Warning Light

Model 141ST

Federal Signal's Electraflash® 141ST is an economical strobe light designed for a variety of industrial uses. This compact warning light is less than six inches tall and six inches in diameter. Models are available in four fresnel dome colors, including amber, blue, green and red. All models are UL Listed for indoor/outdoor use and the 120VAC models are CSA Certified.

The Model 141ST is available in 12VDC, 24VDC, 120VAC and 240VAC and includes a removable strobe mechanism. The 12VDC and 24VDC units have three holes for flat surface mounting. The 120VAC and 240VAC versions come ready to mount on a $1/2$-inch pipe. Optional wall mounting brackets (Model LWMB2) or corner mounting brackets (Model LCMB2) are available for the 120VAC and 240VAC units.

Federal Signal's Electraflash strobe lights are designed for both indoor and outdoor industrial environments. The unit's convenient size and intense light output make it ideal for use on maintenance vehicles, fork lifts, and other material handling equipment. The economical Model 141ST effectively alerts of hazardous conditions or dangerous areas.

Federal Signal's Electraflash strobe warning light is an affordable visual signal which is ideally suited for light duty applications.

DESIGNED FOR INDUSTRIAL OR VEHICULAR USE

- Available in 12VDC, 24VDC, 120VAC and 240VAC

- Four dome colors

- 4,000 hour strobe tube

- Surface mount or integrated $1/2$ - inch pipe mount

- Indoor use only

- Type 3R enclosure

- UL Listed and CSA Certified

Model	Voltage	Operating Current	Flash Rate/ Minute	Candela Peak[1]	Mount
141ST	12VDC	0.18 amps	80	100,000	Surface
141ST	24VDC	0.08 amps	80	100,000	Surface
141ST	120VAC 50/60HZ	0.06 amps	80	100,000	$1/2$" Pipe
141ST	240VAC 50/60HZ	0.03 amps	80	100,000	$1/2$" Pipe

[1] Peak candela is the maximum light intensity generated by a flashing light during its light pulse

ELECTRAFLASH® STROBE LIGHT (141ST)
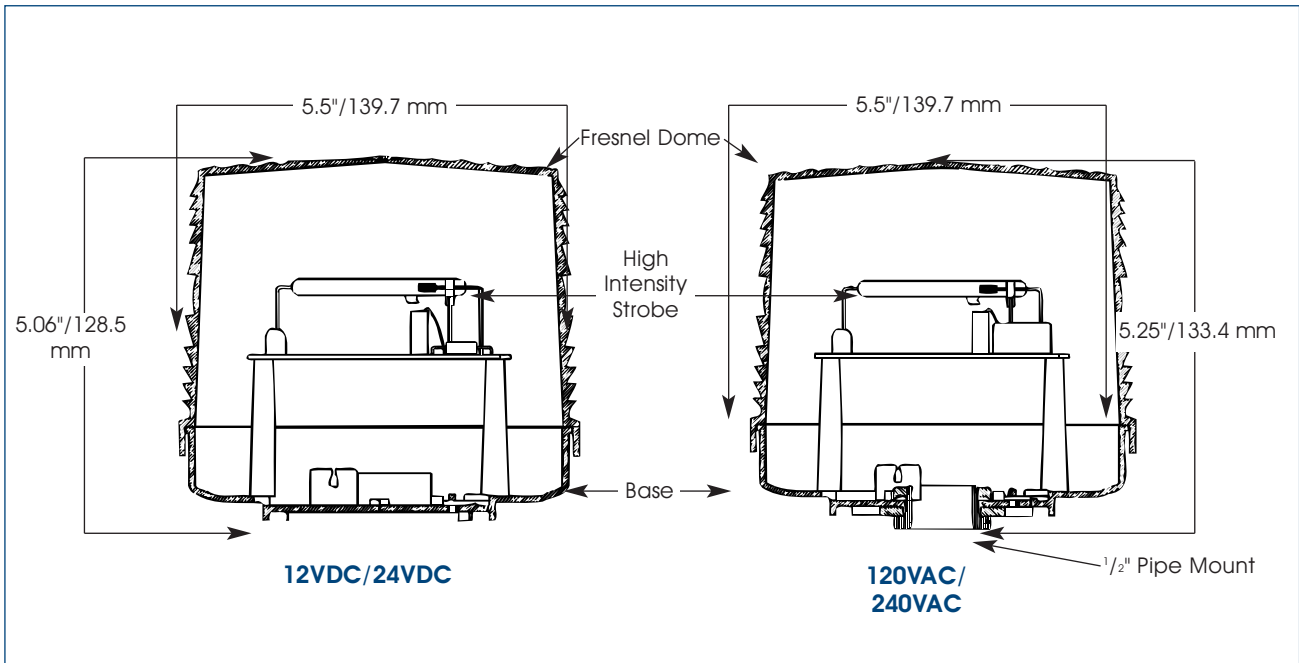
12VDC/24VDC **120VAC/240VAC**

SPECIFICATIONS

Lamp Life*:	4,000 hours	4,000 hours
Lamp Style:	Strobe	Strobe
Operating Temperature:	-31°F to 150°F	-35°C to 66°C
Net Weight:		
DC Models	0.8 lbs.	0.4 kg
AC Models	0.9 lbs.	0.4 kg
Shipping Weight:		
DC Models	1.3 lbs.	0.5 kg
AC Models	1.4 lbs.	0.5 kg
Height:		
DC Models	5.06"	128.5 mm
AC Models	5.25"	133.4 mm
Diameter:		
DC Models	5.5"	139.7 mm
AC Models	5.5"	139.7 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Specify options (120VAC and 240VAC only):
  Corner Bracket (LCMB2)
  Wall Bracket (LWMB2)
- Please refer to Model Number Index 141ST beginning on page 375

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Dome, Amber	K8263079A	PC Assembly, 24VDC	K2001201B-01
Dome, Blue	K8263079A-01	PC Assembly, 120VAC	K2001195D
Dome, Green	K8263079A-03	PC Assembly, 240VAC	K2001195D-01
Dome, Red	K8263079A-02	Strobe Tube	K149128A
PC Assembly, 12VDC	K2001201B	Pipe Mount Kit	K8263093A

Hazardous Location Warning Light

Model 151XST

Federal Signal's Model 151XST hazardous location strobe light provides 80 high-intensity flashes per minute. This warning light is available in 12-24VDC, 120VAC and 240VAC, 50/60Hz.

The Model 151XST strobe light is UL Listed and CSA Certified for Class I, Division 2, Groups A, B, C and D; Class II, Division 1, Groups E, F and G; and Class III.

The 151XST meets Type 4X water-tight, dust-tight, and corrosion-resistant requirements; constructed to IP66. This hazardous location warning light has an aluminum base, coated for corrosion-resistance that is ready for mounting on a $3/4$-inch pipe. The Dome Guard (included) fits over the glass dome to protect it against accidental collision with moving equipment, such as forklifts.

The 151XST has an effective candela (ECP) of 165 and a 520,000 peak candela. It is available in six dome colors, including amber, blue, clear, green and red (magenta upon request).

Federal Signal's rugged 151XST strobe warning light is specifically designed for hazardous locations or corrosive environments where a very bright visual signal is required. This warning light can be used for plant evacuation or other communication needs.
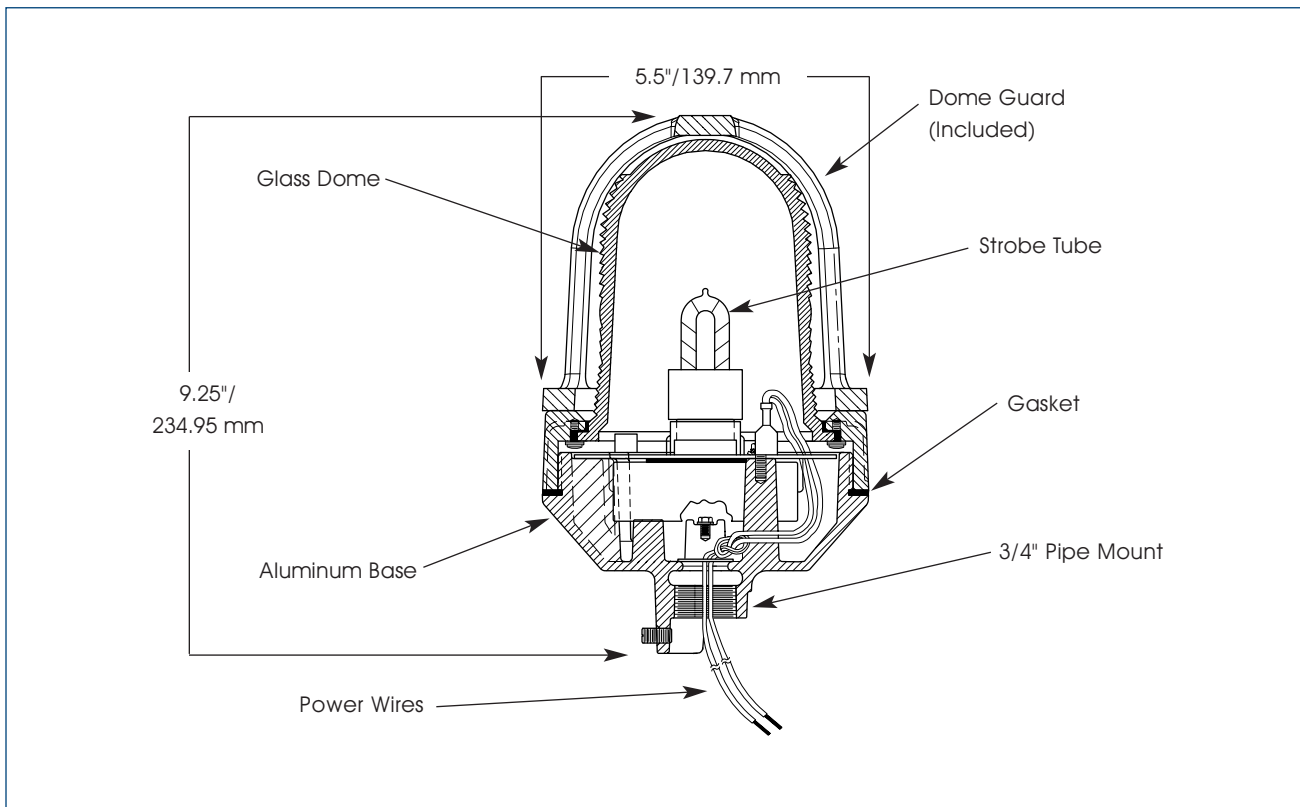
RUGGED DESIGN FOR USE IN HAZARDOUS LOCATIONS

- Available in 12-24VDC, 120VAC and 240VAC

- Six dome colors

- 10,000-hour high-intensity strobe

- $3/4$ - inch pipe mount

- Dome guard included

- Indoor use only

- Type 4X, IP66 enclosure

- Marine Rated

- UL and cUL Listed and CSA Certified

Model	Voltage	Operating Current	Flash Rate/ Minute	Candela Peak[1]	ECP[2]	Mount
151XST	12-24VDC	1.3-0.60 amps	80	520,000	165	$3/4$" Pipe
151XST	120VAC 50/60Hz	0.35 amps	80	520,000	165	$3/4$" Pipe
151XST	240VAC 50/60Hz	0.18 amps	80	520,000	165	$3/4$" Pipe

[1] Peak candela is the maximum light intensity generated by a flashing light during its light pulse

[2] ECP (Effective Candela) is the intensity that would appear to an observer if the light were burning steadily

5yr FEDERAL SIGNAL WARRANTY

HAZARDOUS LOCATION STROBE LIGHT (151XST)

Glass Dome · Dome Guard (Included) · Strobe Tube · Gasket · Aluminum Base · 3/4" Pipe Mount · Power Wires · 5.5"/139.7 mm · 9.25"/234.95 mm

SPECIFICATIONS

Lamp Life*:	10,000 Hours	10,000 Hours
Lamp Style	Strobe	Strobe
Operating Temperature:	-31°F to 150°F	-35°C to 66°C
Net Weight:	3.8 lbs.	1.7 kg
Shipping Weight:	4.5 lbs.	2.0 kg
Height:	9.25"	234.95 mm
Diameter:	5.5"	139.7 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Please refer to Model Number Index 151XST beginning on page 376

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Series C Dome and Ring Assembly*			
Dome & Ring Assembly, Amber	K8449078C-01	PC Assembly, 12-24VDC	K2001173A
Dome & Ring Assembly, Blue	K8449078C-02	PC Assembly, 120VAC	K2001071B
Dome & Ring Assembly, Clear	K8449078C-04	PC Assembly, 240VAC	K2001071B-01
Dome & Ring Assembly, Green	K8449078C-03	Strobe Tube	K149122B
Dome & Ring Assembly, Red	K8449078C	Dome Gaskets	K8449080B
Dome & Ring Assembly, Magenta	K8449078C-05	Guard	K8449090B

* Call the factory for Series A and B part numbers.

Hazardous Location Steady-Burning Light

Model 191X

Federal Signal's Model 191X hazardous location steady burning light is rated for operation with any voltage from 24 - 250 VAC or VDC. The user determines the voltage based on the lamp used. The fixture will accommodate lamps up to a 100 watt/A-19 (user supplied).

The Model 191X is UL Listed and CSA Certified for Class I, Division 2, Groups A, B, C and D; Class II, Division 1 and 2, Groups E and F.

The 191X has been certified by UL and CSA as meeting Type 4X water-tight and corrosion-resistant requirements; constructed to meet IP66. This hazardous location steady burning light has an aluminum base ready for mounting on a $^3/_4$-inch pipe. The base features electrostatically applied (e-coated) epoxy paint for corrosion-resistance. A dome guard fits over the glass dome to protect it against accidental collision with moving equipment, such as forklifts.

To determine the proper lamp wattage and wire insulation rating for a specific application, refer to the Operating Temperature Chart below. Model 191X is available in six dome colors – amber, blue, clear, green, red and magenta.

Federal Signal's Model 191X steady burning light is designed for hazardous locations where a visual signal is needed. This fixture can be used for status indication or area lighting on offshore oil rigs, in mines, and in refineries.
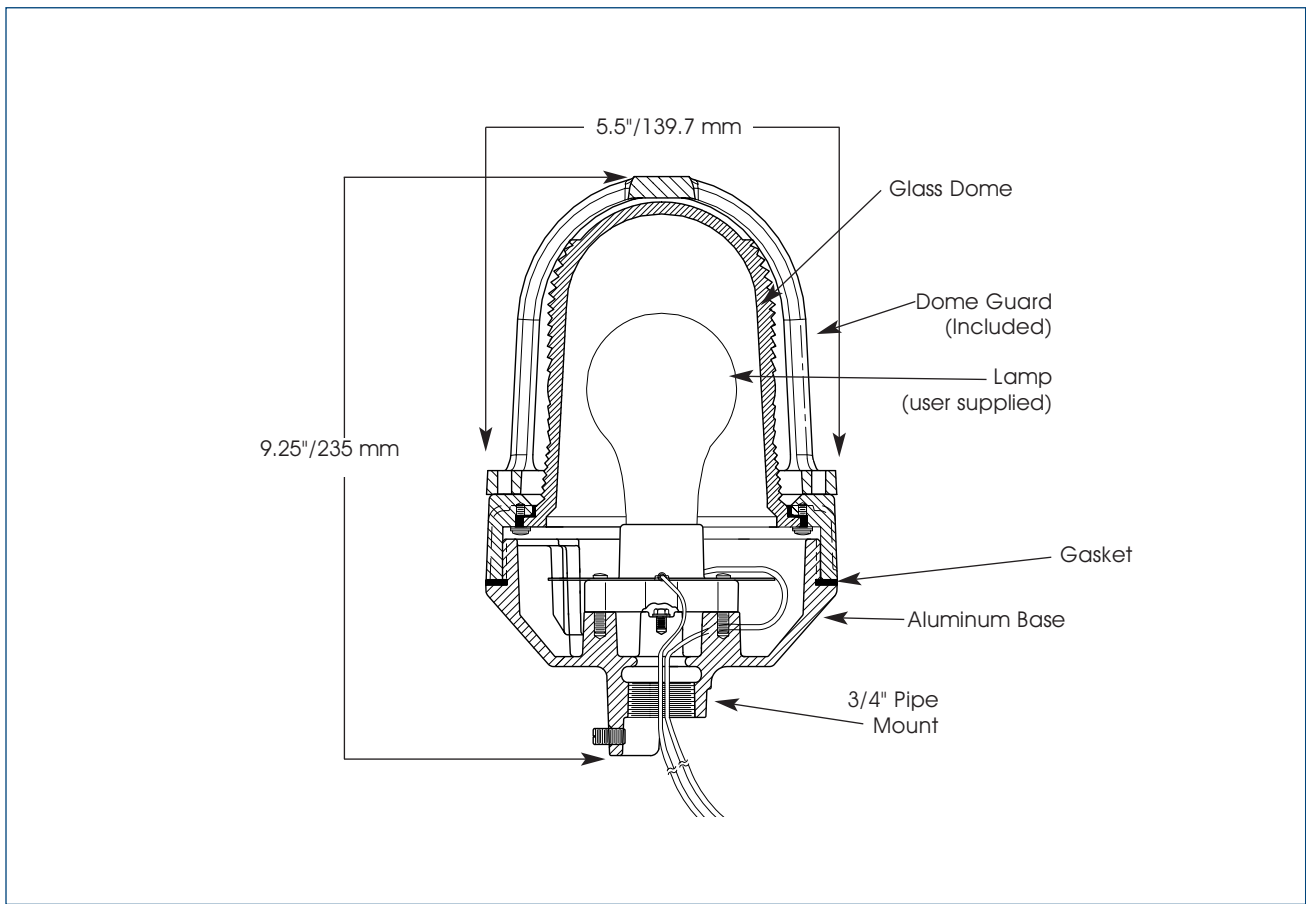
DESIGNED FOR USE IN HAZARDOUS LOCATIONS

- 24-250 VAC/VDC
- Six tempered glass dome colors
- Uses standard A-19 incandescent lamp (40W-100W)
- $^3/_4$ - inch pipe mount
- Dome Guard included
- Indoor use only
- Type 4X, IP66 enclosure
- UL and cUL Listed and CSA Certified

OPERATING TEMPERATURE CODES

Hazardous Environment	Max. Temperature*/ UL Temp. Code	Dome Color	Lamp Wattage	Supply Wire Insulation Rating
Class I, Division 2	350°C/T1	Blue	100 (A-19)	125°C
	325°C/T1	Red, Green, Amber	100 (A-19)	125°C
	260°C/T2B	Clear	100(A-19)	125°C
	215°C/T2D	All	40(A-19)	85°C
Class II, Division 1	200°C/T3	All	40(A-19)	85°C
Class II, Division 2	200°C/T3	All	40(A-19)	85°C

* at 40°C ambient

HAZARDOUS LOCATION LIGHT (191X)

Diagram labels: 5.5"/139.7 mm, 9.25"/235 mm, Glass Dome, Dome Guard (Included), Lamp (user supplied), Gasket, Aluminum Base, 3/4" Pipe Mount

SPECIFICATIONS

Lamp Style:	Incandescent A-19s (40W-100W)	
Operating Voltage:	24-250VAC/VDC	24-250VAC/VDC
Mount:	³/₄" Pipe	³/₄" Pipe
Net Weight:	3.3 lbs.	1.5 kg
Shipping Weight:	4.2 lbs.	1.9 kg
Height:	9.25"	235 mm
Diameter:	5.5"	139.7 mm

HOW TO ORDER

- Specify model, voltage and color
- Please refer to Model Number Index 191X beginning on page 374

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Series C Dome and Ring Assembly*			
Glass Dome & Ring Assembly, Amber	K8449078C-01	Glass Dome & Ring Assembly, Magenta	K8449078C-05
Glass Dome & Ring Assembly, Blue	K8449078C-02	Glass Dome & Ring Assembly, Red	K8449078C
Glass Dome & Ring Assembly, Clear	K8449078C-04	Gasket	K8449080B
Glass Dome & Ring Assembly, Green	K8449078C-03	Guard	K8449090B

* Call the factory for Series A part numbers.

LED

Flashing LED Hazardous Location Warning Light with XLT™

Model 191XL

The model 191XL is a hazardous location flashing signal light that features the super bright LED array with XLT™, eXtreme Light Technology. The unit is available in 24VAC/DC, 120VAC or 240VAC and four colors – amber, blue, green and red. The 191XL comes standard in flashing mode and is field configurable to steady burn mode for maximum functionality.

The Model 191XL has been certified by UL as meeting Type 4X watertight and corrosion-resistant requirements, and IP66 rated. This hazardous location warning light has an aluminum base ready for mounting on a 3/4 inch pipe. The base features electrostatically applied (e-coated) epoxy paint for corrosion-resistance. A dome guard fits over the glass dome to protect it against accidental collision with moving equipment, such as a forklift. The outer glass dome and LED pairing are available in four colors – amber, blue green and red.
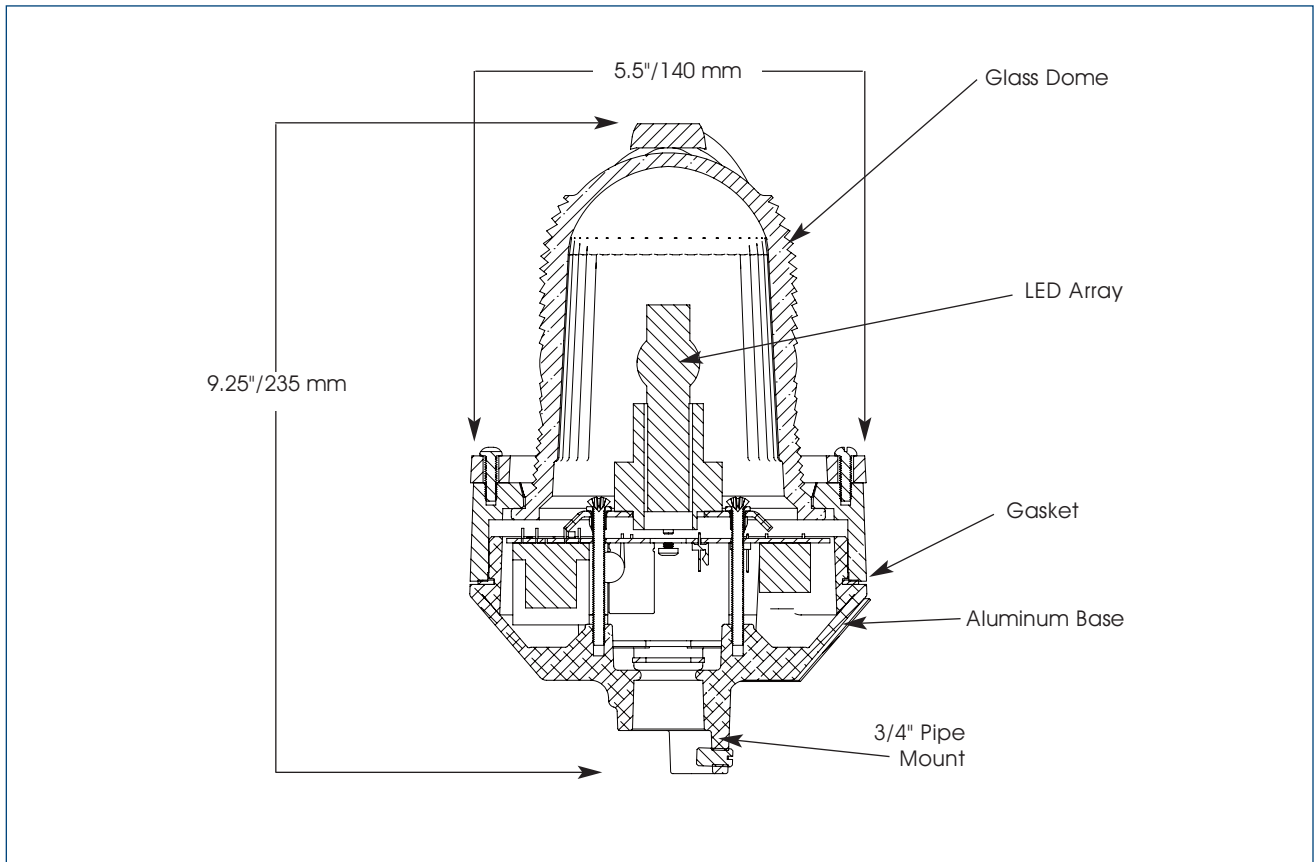
Federal Signal's super bright LED array used in the 191XL with XLT inside produces intense light output and 60,000 hours of service. Increased shock and vibration resistance add to this unit's rugged industrial portfolio of features.

The 191XL is UL Listed for Class I, Division 2, Groups A, B, C and D; Class II Division 1, Groups E, F and G; and Class III.

RUGGED DESIGN FOR USE IN HAZARDOUS LOCATIONS

- XLT™ Technology
- Available in 24VAC/DC, 120VAC and 240VAC
- Four lamp/lens colors
- Flashing mode standard, configurable to Steady-burn
- 60,000 hour, vibration resistant LED lamp
- $3/4$ - inch pipe mount
- Dome guard included
- Type 4X, IP66 enclosure, Marine Listed
- UL and cUL Listed

Model	Voltage	Operating Current	In-rush Current	Flash Rate/Minute	Mount
191XL	24VAC/DC	0.38 amps	1.75 amps, 5.0 mS	60	$3/4$" Pipe
191XL	120VAC	0.21 amps	2.0 amps, 0.25 mS	60	$3/4$" Pipe
191XL	240VAC	0.13 amps	2.0 amps, 0.25 mS	60	$3/4$" Pipe

5 yr FEDERAL SIGNAL WARRANTY

HAZARDOUS LOCATION LED WARNING LIGHT (191XL)

Glass Dome
LED Array
Gasket
Aluminum Base
3/4" Pipe Mount
5.5"/140 mm
9.25"/235 mm

SPECIFICATIONS

Operating Temperature:	-58°F to 150°F	-50°C to 66°C
Net Weight:	4.0 lbs.	1.82 kg
Shipping Weight:	4.25 lbs.	1.93 kg
Height (with Dome Guard):	9.25"	235.0 mm
Diameter:	5.5"	140.0 mm

HOW TO ORDER

- Specify model, voltage and color
- Please refer to Model Number Index 191XL beginning on page 374

REPLACEMENT PARTS

Description	Part Number	Dome and Ring Assembly*	
PC Board Assembly, 24VDC	K2005455A	Glass Dome/Ring Assembly, Amber	K8449078C-01
PC Board Assembly, 120/240VAC	K2005416A	Glass Dome/Ring Assembly, Blue	K8449078C-02
LED array, Amber	K147169A-06	Glass Dome/Ring Assembly, Green	K8449078C-03
LED array, Blue	K147169A-07	Glass Dome/Ring Assembly, Red	K8449078C
LED array, Green	K147169A-08	Gasket	K8449080B
LED array, Red	K147169A-09		

* Call the factory for Series A part numbers.

Explosion-Proof LED Warning Light

2000 Series Model LED

DESIGNED FOR USE IN ATEX ZONE RATED ATMOSPHERES

- Super bright output with XLT™ Technology

- 3 remotely selectable flash patterns

- 50,000 hour lamp life

- Available in five colors

- Ex 'e' terminal chamber available

- AC and DC voltage ranges

- Approved for use in Zone 1, 2, 21, 22 Atmospheres

ATEX IEC ⟨Ex⟩ CE

The 2000 Series model LED beacon, with XLT™ technology, is a visual signal warning light for use in hazardous locations requiring ATEX approval. The beacon can produce three light patterns depending on the configuration of a field selectable jumper wire or remote contact closure. The light patterns are: steady-on, slow flash and rapid flash. An optional telephone initiation feature also allows the beacon to flash when telephone ringing voltage is present.

The 2000 Series LED beacon is sealed from dust and water by a nitrile rubber o-ring seal. All exterior cast aluminum surfaces are finished in powder coat paint and external hardware is manufactured from stainless steel to resist corrosion. Available signal colors are amber, blue, green, red and yellow.

The 2000 Series LED beacon is externally powered by 24VDC or 110-240VAC source. All AC powered units feature a switch mode power supply that accommodates a wide input voltage range without requiring any additional configuration from the user. The current consumption from the beacon is less than 500mA and the in-rush current is low enough to allow PLC initiation without the use of an external relay. Screw type terminal blocks are provided for field wiring on all units.
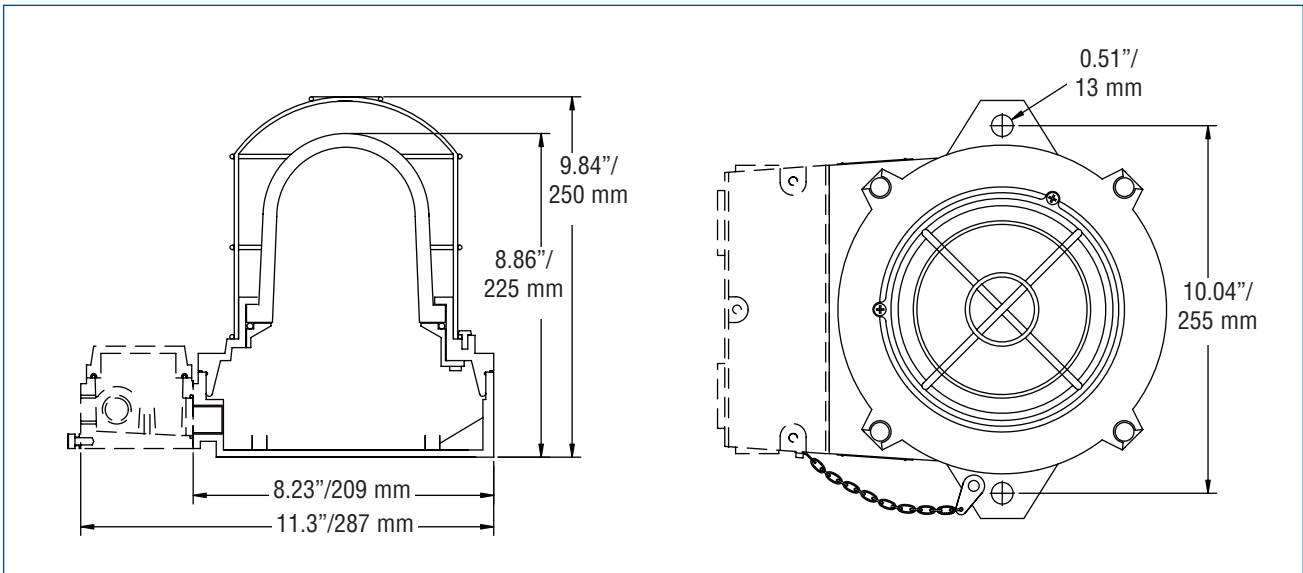
All variations of the 2000 Series LED beacon feature a four entry fixture to allow cable looping. These cable entries are metric M20 X 1.5, but other configurations are available upon request.

Model	Voltage	Operating Current	Flash Rate/ Minute	Max In-Rush Current
LED	24VDC	0.50 amps	60-80	1.75A for 5.00mS
LED	110VAC	0.22 amps	60-80	2.00A for 0.25mS
LED	240VAC	0.13 amps	60-80	2.00A for 0.25mS

5 yr FEDERAL SIGNAL WARRANTY

EXPLOSION-PROOF WARNING LIGHT (2000 SERIES LED)

9.84"/ 250 mm
8.86"/ 225 mm
8.23"/209 mm
11.3"/287 mm

0.51"/ 13 mm
10.04"/ 255 mm

SPECIFICATIONS

Lamp Style:		LED
Operating Temperature:		
Ex d and Ex de:	-40°F to 131°F	-40°C to 55°C
Net Weight:		
Ex d:	13.23 lbs.	6.0 kg
Ex de:	15.43 lbs.	7.0 kg
Shipping Weight:	16.5 lbs.	7.5 kg
Height:	9.84"	250.0 cm
Width:	10.04"	255.0 cm
Length:	8.23"	209.0 cm
ATEX Certificate Number:	Baseefa 07ATEX0150	
IECEx Certificate Number:	IECEx BAS 07.0038	
Certification Marking:	Ex d IIB T6 Ex tD A21	Ex de IIB T6 Ex tD A21

Terminals:	
Ex d:	4 way block mounted PCB
Ex de:	12 way block in terminal chamber
Cable entries:	
Ex d:	4 entries - M20 x 1.5
Ex de:	4 entries - M20 x 1.5
Mounting:	Via fixed cast lugs at two mounting points
Body:	Marine Grade Alloy painted Regal Red
Exterior dome:	Toughened glass
Guard:	316 Stainless steel
Ingress Protection:	IP66

LIGHT OUTPUT

Amber	113cd
Blue	12cd
Green	66cd
Yellow	60cd
Red	63cd

LED **D4** **U** **N** **A**

PROTECTION
Exde - **DE**
Exd 4 Entry - **D4**

TYPE
LED Lamp - **LED**

VOLTAGE (-20%/+10%)
U - 110-240VAC (50/60 Hz)[2]
B - 24VDC

FACILITIES
N - None
T - Telephone Link[1]

COLOR
Amber - **A**
Blue - **B**
Green - **G**
Red - **R**
Yellow - **Y**
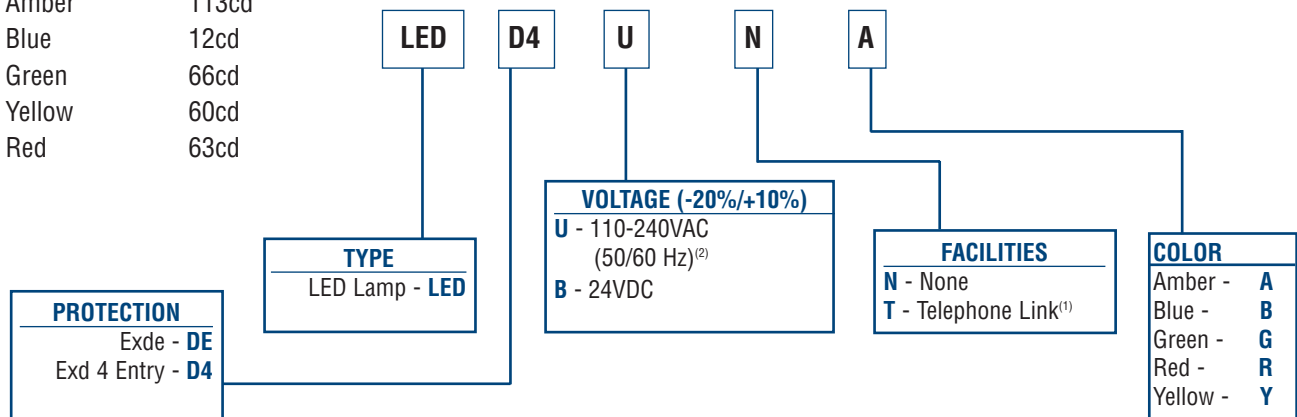
NOTES:
(1) Applicable to Xenon AND LED beacons only
(2) LED beacon available in 24VDC and 110-240VAC only

Explosion-Proof Static Warning Lights

2000 Series Models FL18 and FL36

The 2000 Series model FL18 and FL36 static warning beacons are visual signals designed for use in hazardous locations that require ATEX approval. At the heart of its design is a compact fluorescent lamp configuration that provides long life, excellent vibration resistance and a signal-specific colored glow.

FL18 and FL36 beacons are sealed from dust and water by a nitrile rubber o-ring seal. All exterior cast aluminum surfaces are finished in powder coat paint and external hardware is manufactured from stainless steel to resist corrosion. Available signal colors are amber, blue, clear, green, red, and yellow.

The FL18 and FL36 beacons are externally powered by an AC or DC source. Screw type terminal blocks are provided for field wiring on all units.
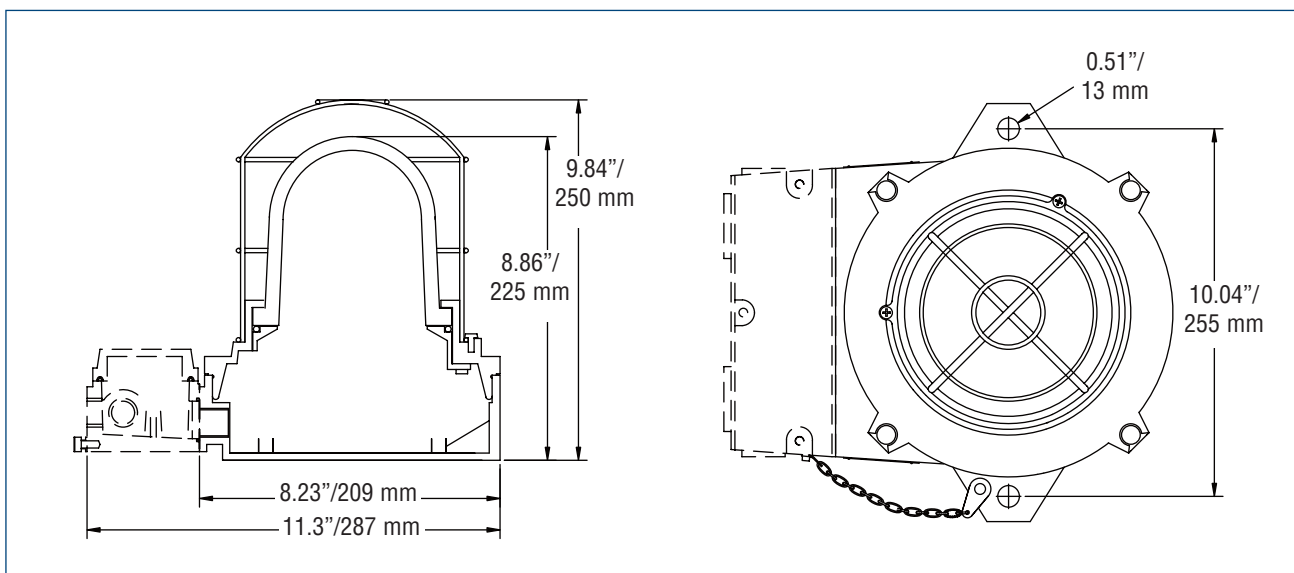
All variations of the FL18 and FL36 beacons feature a four entry fixture to allow cable looping. These cable entries are metric M20 X 1.5, but other configurations are available upon request.

DESIGNED FOR USE IN ATEX ZONE RATED ATMOSPHERES

- Twin Flourescent lamps for security
- Individual lamp control gear
- 8,000 hour lamp life
- Available in five colors and clear
- Ex 'e' terminal chamber available
- AC and DC voltage ranges
- Approved for use in Zone 1, 2, 21, 22 Atmospheres

ATEX IEC ⟨Ex⟩ CE

Model	Voltage	Operating Current	Equivalent Wattage
FL18	240VAC	0.18 amps	17.5W
FL18	110VAC	0.27 amps	16.0W
FL18	110VDC	0.14 amps	14.5W
FL18	48VDC	0.42 amps	19.2W
FL18	24VDC	0.87 amps	20.9W
FL36	240VAC	0.18 amps	40.2W

EXPLOSION-PROOF STATIC WARNING LIGHTS (2000 SERIES FL18/FL36)

0.51"/ 13 mm

9.84"/ 250 mm

8.86"/ 225 mm

10.04"/ 255 mm

8.23"/209 mm

11.3"/287 mm

SPECIFICATIONS

Lamp Style:	Flourescent	
Operating Temperature:		
Ex d and Ex de:	-40°F to 158°F	-40°C to 70°C(T4)
Net Weight:		
Ex d:	13.23 lbs.	6.0 kg
Ex de:	15.43 lbs.	7.0 kg
Shipping Weight:	16.5 lbs.	7.5 kg
Height:	9.84"	250.0 mm
Width:	10.04"	255.0 mm
Length:	8.23"	209.0 mm
ATEX Certificate Number:	Baseefa 07ATEX0150	
IECEx Certificate Number:	IECEx BAS 07.0038	
Certification Marking:	Ex d IIB T4 Ex tD A21	Ex de IIB T4 Ex tD A21

Terminals:	
Ex d:	4 way block mounted PCB
Ex de:	12 way block in terminal chamber
Cable entries:	
Ex d:	4 entries - M20 x 1.5
Ex de:	4 entries - M20 x 1.5
Mounting:	Via fixed cast lugs at two mounting points
Body:	Marine Grade Alloy painted Regal Red
Exterior dome:	Toughened glass
Guard:	316 Stainless steel
Ingress Protection:	IP66

HOW TO ORDER

- Flourescent Lamps Sold Separately
- Two Required for FL18, Four Required for FL36

FL Tube, Red	P/N A2158R
FL Tube, Yellow	P/N A2158Y
FL Tube, Blue	P/N A2158B
FL Tube, Green	P/N A2158G
FL Tube, Clear	P/N A2158
FL Tube, Amber	P/N A2158A

FL18   D2   M   N   O

TYPE
Fluorescent, 18W[4] - **FL18**
Fluorescent, 36W[1,4] - **FL36**

PROTECTION
Exde - **DE**
Exd 4 Entry - **D4**

VOLTAGE (±10%)
M - 240VAC
B - 024VDC[2][6]
L - 110VAC
C - 048VDC
D - 110VDC[3]

FACILITIES
N - None
T - Telephone Link[5]

SPECIAL FEATURES
For special features and future variations
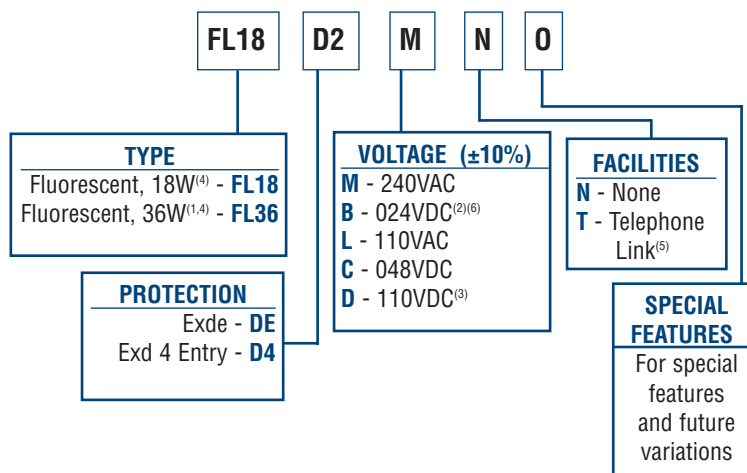
NOTES:
(1) Only the 240VAC voltage is available with FL36 beacon
(2) Range 22VDC to 32VDC with FL18 beacon
(3) Range 100VDC to 135VDC with xenon beacons (inclusive of ±10%).
    FL18 is 100VDC to 150VDC inclusive of ±10%.

(4) 2 pcs. required for FL18, 4 pcs. required for FL36
(5) Applicable to Xenon AND LED beacons only
(6) LED beacon available in 24VDC and 110-240VAC only

2645 Federal Signal Dr., University Park, IL 60466   Tel: 708.534.4756   Fax: 708.534.4852   www.federalsignal-indust.com

Explosion-Proof Strobe Lights

2000 Series Models XEN1 and XEN4

The 2000 Series Models XEN1 and XEN4 Xenon beacons are visual warning lights for use in hazardous locations that require ATEX approval. Model XEN1 is a strobe light that contains a single xenon flashing tube. This makes it ideally suited for use in indoor explosion-proof areas that require compliance to European electrical safety directives.

Model XEN4 is a strobe light that utilizes four strobe tubes, timed in a sequential manner, to simulate the operation of a mechanical rotating beacon. This four-strobe version is ideal in outdoor situations where a conventional beacon may not be adequate.

The 2000 Series Xenon beacon is sealed from dust and water by a nitrile rubber o-ring seal. All exterior cast aluminum surfaces are finished in powder coat paint and external hardware is manufactured from stainless steel to resist corrosion. Available signal colors are amber, blue, clear green, red, and yellow. An optional telephone initiation feature is also available for either beacon that allows the product to flash when telephone ringing voltage is present.
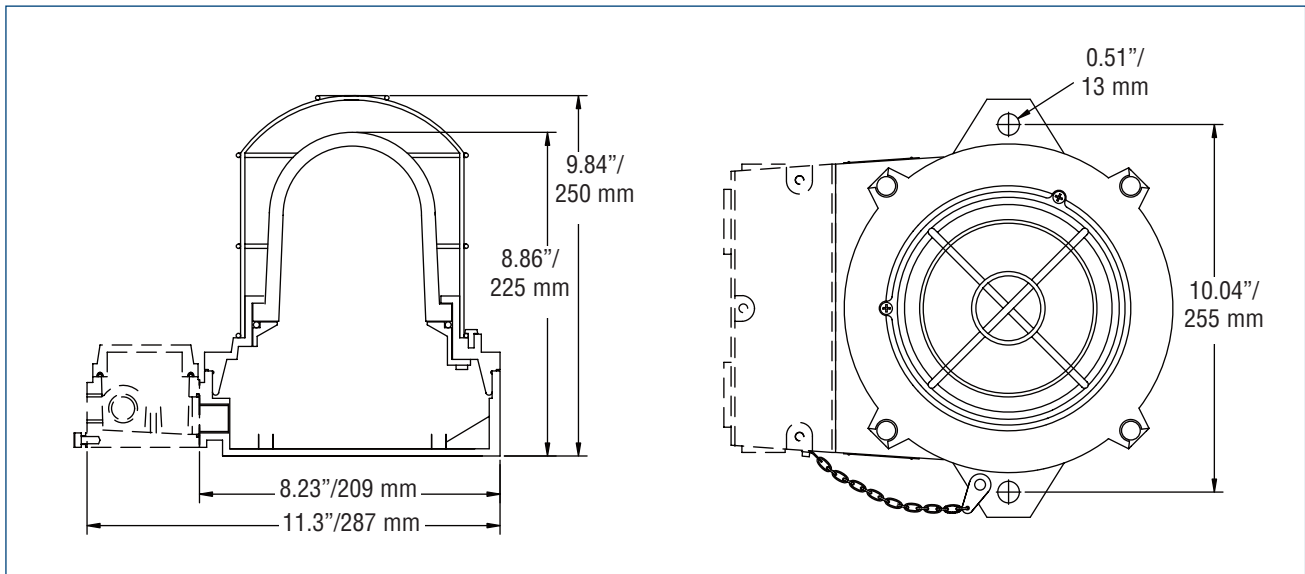
The 2000 Series Xenon beacon is externally powered by a DC or AC power source. Screw type terminal blocks are provided for field wiring on all units.

All variations of the 2000 Series Xenon beacon feature a four entry fixture to allow cable looping. These cable entries are metric M20 X 1.5, but other configurations are available upon request.

DESIGNED FOR USE IN ATEX ZONE RATED ATMOSPHERES

- Single and four tube models
- Internal fresnel lens
- Available in five colors and clear
- Ex 'e' terminal chamber available
- AC and DC voltage ranges
- Approved for use in Zone 1, 2, 21, 22 Atmospheres

ATEX IEC ⟨Ex⟩ C E

Model	Voltage	Operating Current	Flash Rate/ Minute
XEN1	24VDC	0.93 amps	80
XEN1	48VDC	0.81 amps	80
XEN1	110VDC	0.61 amps	80
XEN1	110VAC	0.48 amps	80
XEN1	240VAC	0.38 amps	80
XEN4	24VDC	1.90 amps	N/A
XEN4	48VDC	1.22 amps	N/A
XEN4	110VDC	0.92 amps	N/A
XEN4	110VAC	0.53 amps	N/A
XEN4	240VAC	0.41 amps	N/A

EXPLOSION-PROOF STROBE LIGHTS (2000 SERIES XEN1/XEN4)

9.84"/250 mm
8.86"/225 mm
8.23"/209 mm
11.3"/287 mm

0.51"/13 mm
10.04"/255 mm

SPECIFICATIONS

Lamp Style:	Xenon	
Operating Temperature:		
Ex d and Ex de:	-40°F to 131°F	-40°C to 70°C
Net Weight:		
Ex d:	13.23 lbs.	6.0 kg
Ex de:	15.43 lbs.	7.0 kg
Shipping Weight:	16.5 lbs.	7.5 kg
Height:	9.84"	250.0 cm
Width:	10.04"	255.0 cm
Length:	8.23"	209.0 cm
ATEX Certificate Number:	Baseefa 07ATEX0150	
IECEx Certificate Number:	IECEx BAS 07.0038	
Certification Marking:	Ex d IIB T4 Ex tD A21	Ex de IIB T4 Ex tD A21

Terminals:		
Ex d:	4 way block mounted PCB	
Ex de:	12 way block in terminal chamber	
Cable entries:		
Ex d:	4 entries - M20 x 1.5	
Ex de:	4 entries - M20 x 1.5	
Mounting:	Via fixed cast lugs at two mounting points	
Body:	Marine Grade Alloy painted Regal Red	
Exterior dome:	Toughened glass	
Guard:	316 Stainless steel	
Ingress Protection:	IP66	

HOW TO ORDER

- Colored Xenon Lens Ordered Separately
- Part Numbers Are As Follows:

Red	A1779S
Yellow	A3410S
Blue	A1111S
Green	A1198S
Clear	A2133S
Amber	A1131S

XEN1 | D4 | M | N | O

TYPE
Xenon, Single - **XEN1**
Xenon, Four - **XEN4**

PROTECTION
Exde - **DE**
Exd 4 Entry - **D4**

VOLTAGE (±10%)
M - 240VAC
B - 024VDC
L - 110VAC
C - 048VDC
D - 110VDC[1]

FACILITIES
N - None
T - Telephone Link[2]

SPECIAL FEATURES
For special features and future variations
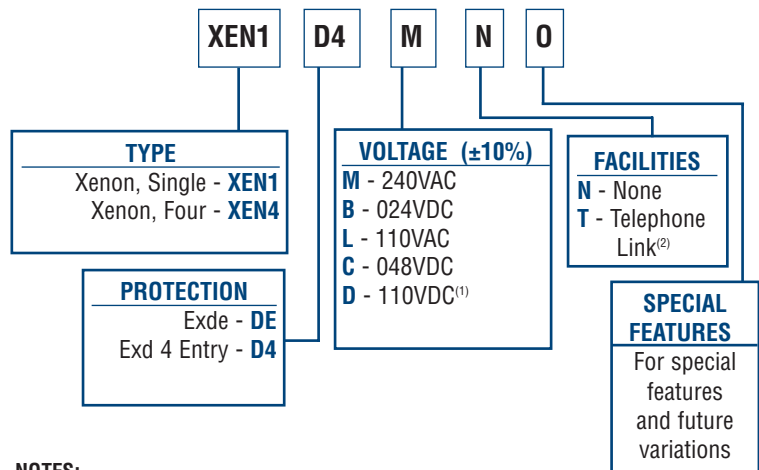
NOTES:
(1) Range 100VDC to 135VDC with xenon beacons (inclusive of ±10%).
FL18 is 100VDC to 150VDC inclusive of ±10%.
(2) Applicable to Xenon AND LED beacons only

Electraray® Rotating Warning Light

Model 225

The Federal Signal Electraray® Model 225 is a compact, economical rotating warning light designed for industrial uses. This innovative dome design features a single retaining screw that allows quick and easy access for inspection and relamping.

The Federal Signal Electraray has a closed cell neoprene gasket that makes it water resistant. The injection molded reflector rotates around an incandescent lamp and produces 90 flashes per minute. It is available in five dome colors (amber, blue, clear, green and red) and is UL Listed for Type 4X. Constructed to IP66 specifications, the Electraray 225 is ready to mount on a $1/2$-inch pipe. Optional mounting brackets are available, simplifying installation on walls and in corners.
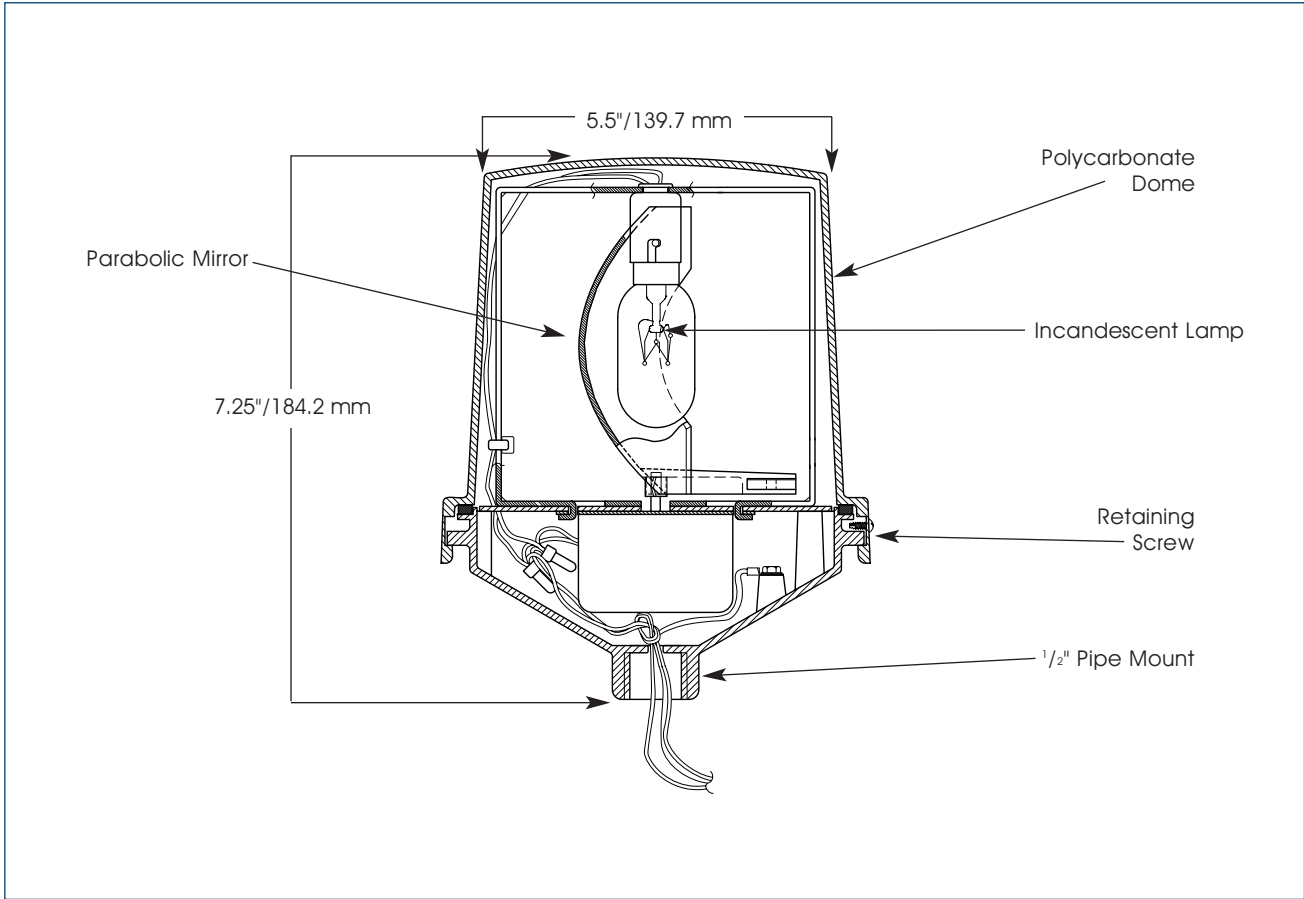
The Electraray 225 is one of the most economical rotating signaling lights in the Federal Signal product line. Its design makes it easily adaptable for a multitude of indoor and outdoor applications. It is designed for permanent mounting where a 120VAC, 50/60Hz line is available. This light provides an effective, economical means of supplementing audible signaling devices.

Federal Signal's Electraray rotating light is an inexpensive warning light for calling attention to emergency situations or process status changes.

ECONOMICAL LIGHT DUTY WARNING LIGHT

- Available in 120VAC
- Five dome colors
- Integrated $1/2$ - inch pipe mount
- Indoor use only
- Type 4X, IP66 enclosure
- UL and cUL Listed

Model	Voltage	Operating Current	Flash Rate/Minute	Candela	Mount
225	120VAC 50/60HZ	0.22 amps	90	1,000	$1/2$" Pipe

5 yr FEDERAL SIGNAL WARRANTY

ELECTRARAY® (225)

Parabolic Mirror

7.25"/184.2 mm

5.5"/139.7 mm

Polycarbonate Dome

Incandescent Lamp

Retaining Screw

¹/₂" Pipe Mount

SPECIFICATIONS

Lamp Style:	Incandescent	Incandescent
Operating Temperature:	-31°F to 150°F	-35°C to 66°C
Net Weight:	2.0 lbs.	0.9 kg
Shipping Weight:	2.7 lbs.	1.2 kg
Height:	7.25"	184.0 mm
Diameter:	5.5"	140.0 mm

HOW TO ORDER

- Specify model, voltage and color
- Specify options:
  Corner Bracket (LCMB2)*
  Wall Bracket (LWMB2)*
- Please refer to Model Number Index 225 beginning on page 373

  * Mounting brackets not rated for Type 4X

REPLACEMENT PARTS

Description	*Part Number*
Dome, Amber	K8444D219C-03
Dome, Blue	K8444D219C-01
Dome, Clear	K8444D219C-04
Dome, Green	K8444D219C-02
Dome, Red	K8444D219C
Lamp	K149123A
Motor, 120VAC	K8241A030-02

Electraray® Hazardous Location Rotating Warning Light

Model 225X

The new Federal Signal Electraray® Model 225X is a compact, economical rotating warning light designed for a variety industrial applications. This innovative dome design, with a single screw allows quick and easy access for inspection and relamping.

The Federal Signal Electraray 225X features a silicone rubber gasket that provides a water-resistant seal between the dome and the black poly-coated base. The injection molded reflector rotates around a 25-watt lamp producing 90 flashes per minute. It is available in five dome colors (amber, blue, clear, green and red) and is UL listed for Class I, Division 2, Group A, B, C and D; Class II, Division 2, Groups F and G; and Class III. The Electraray 225X is ready to mount on a 1/2" pipe.
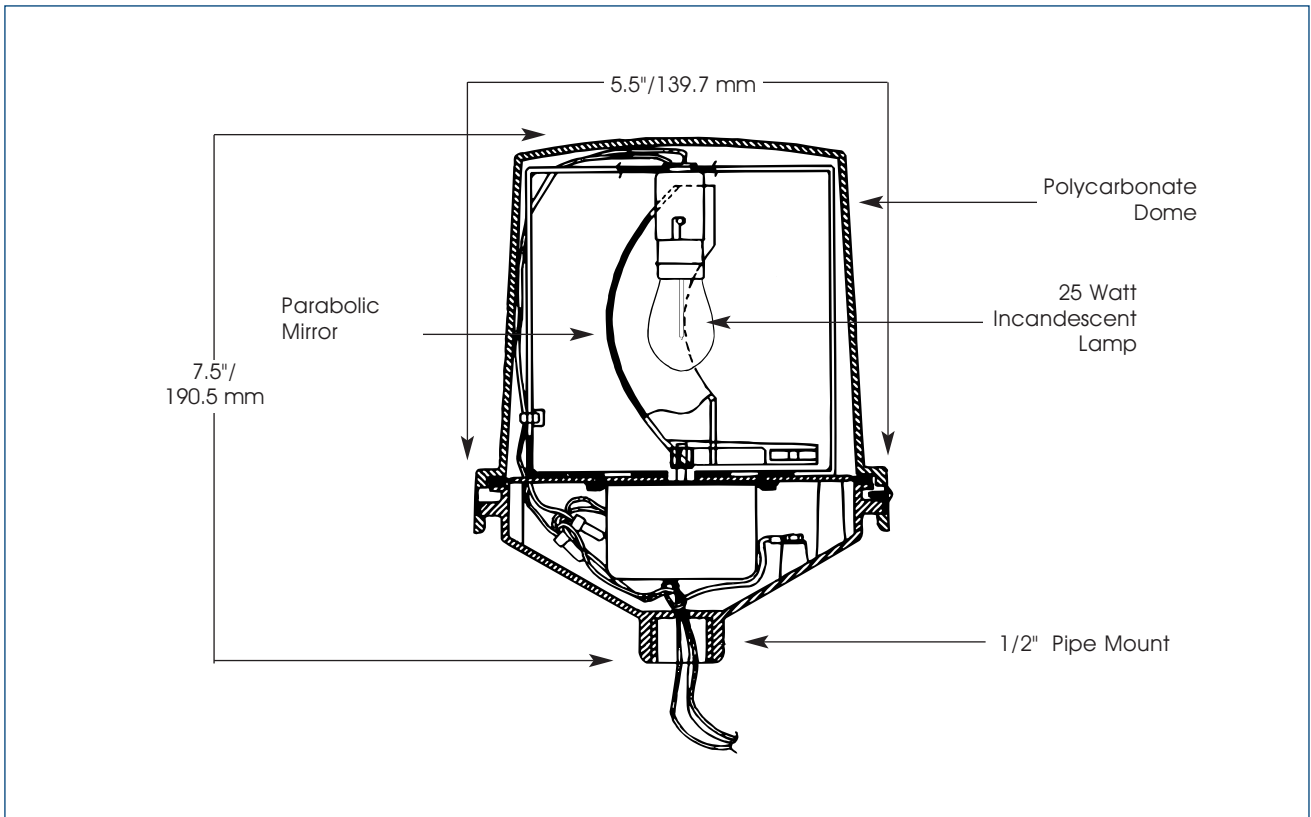
The Electraray 225X design makes it a good choice for a multitude of indoor and outdoor applications. It is designed for permanent mounting where 120VAC, 50/60Hz is available. This particular light provides an effective means of supplementing audible signaling devices in hazardous environments.

Federal Signal's affordable Electraray rotating warning light is specifically designed for use in hazardous locations or where corrosive materials are present.

DESIGNED FOR USE IN HAZARDOUS LOCATIONS

- Available in 120VAC and 240VAC
- Five dome colors
- 25-watt incandescent lamp
- 1/2 - inch pipe mount
- Indoor use only
- Type 4X, IP66 enclosure
- UL and cUL Listed and CSA Certified

Model	Voltage	Operating Current	Flash Rate/ Minute	Candela	Mount
225X	120VAC 50/60Hz	0.220 amps	90	1,000	1/2" Pipe
225X	240VAC 50/60Hz	0.120 amps	90	1,000	1/2" Pipe

5 yr FEDERAL SIGNAL WARRANTY

ELECTRARAY® HAZARDOUS LOCATION WARNING LIGHT (225X)

Diagram labels:
- 5.5"/139.7 mm
- Parabolic Mirror
- 7.5"/190.5 mm
- Polycarbonate Dome
- 25 Watt Incandescent Lamp
- 1/2" Pipe Mount

SPECIFICATIONS

Lamp Life*:	200 Hours	200 Hours
Lamp Style:	Incandescent	Incandescent
Operating Temperature:	-40°F to 104°F	-40°C to 40°C
Net Weight:	2.0 lbs.	0.9 kg
Shipping Weight:	2.7 lbs.	1.2 kg
Height:	7.5"	190.5 mm
Diameter:	5.5"	139.7 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Please refer to Model Number Index 225X beginning on page 373

REPLACEMENT PARTS

Description	Part Number
Dome, Amber	K8444D219C-03
Dome, Blue	K8444D219C-01
Dome, Clear	K8444D219C-04
Dome, Green	K8444D219C-02
Dome, Red	K8444D219C
Lamp, 120VAC	K149123A
Lamp, 240VAC	K8107A149A
Motor, 120VAC	K8241A030-02

Electraray®
Hazardous Location
LED Flashing Warning
Light with XLT™

Model 225XL

The Model 225XL is a hazardous location flashing signal light that features the super bright LED array with XLT™, eXtreme Light Technology. The unit is available in 24VAC/DC, 120VAC or 240VAC and four colors – amber, blue, green and red. The 225XL comes standard in flashing mode and is field configurable to steady burn mode for maximum functionality.

The Model 225XL has been certified by UL as meeting Type 4X watertight and corrosion-resistant requirements, and is rated for Division 2 applications. This hazardous location warning light has a black polyurethane-coated base and the inner Fresnel lens is available in four colors – amber, blue green and red. The clear polycarbonate outer dome can be quickly removed for access while changing the lamp or inspecting the unit.

Federal Signal's super bright LED array used in the 225XL with XLT inside produces intense light output and 60,000 hours of service. Increased shock and vibration resistance add to this unit's rugged industrial portfolio of features.

The 225XL is UL Listed for Class I, Division 2, Groups A, B, C and D; Class II Division 2, Groups F and G; and Class III.

The Federal Signal Model 225XL is ideal for wet, corrosive atmospheres like those found in food processing industries or anywhere a vibration-resistant visual signal is needed.

LED-BASED WARNING LIGHT FOR HEAVY-DUTY INDUSTRIAL APPLICATIONS

- XLT™ Technology

- Available in 24VAC/DC, 120VAC and 240VAC

- Four lens/lamp colors

- Flashing mode standard, configurable to Steady-burn

- 60,000-hour, vibration-resistant LED lamp

- $^1/_2$ - inch pipe mount

- Type 4X, IP66 enclosure, Marine Listed

- UL and cUL Listed for Class 1, Division 2 applications

Model	Voltage	Operating Current	In-rush Current	Flash Rate/Minute	Mount
225XL	24VAC/DC	0.38 amps	1.75 amps, 5.0 mS	60	$^1/_2$" Pipe
225XL	120VAC	0.21 amps	2.00 amps, 0.25 mS	60	$^1/_2$" Pipe
225XL	240VAC	0.13 amps	2.00 amps, 0.25 mS	60	$^1/_2$" Pipe

ELECTRARAY® HAZARDOUS LOCATION LED LIGHT (225XL)
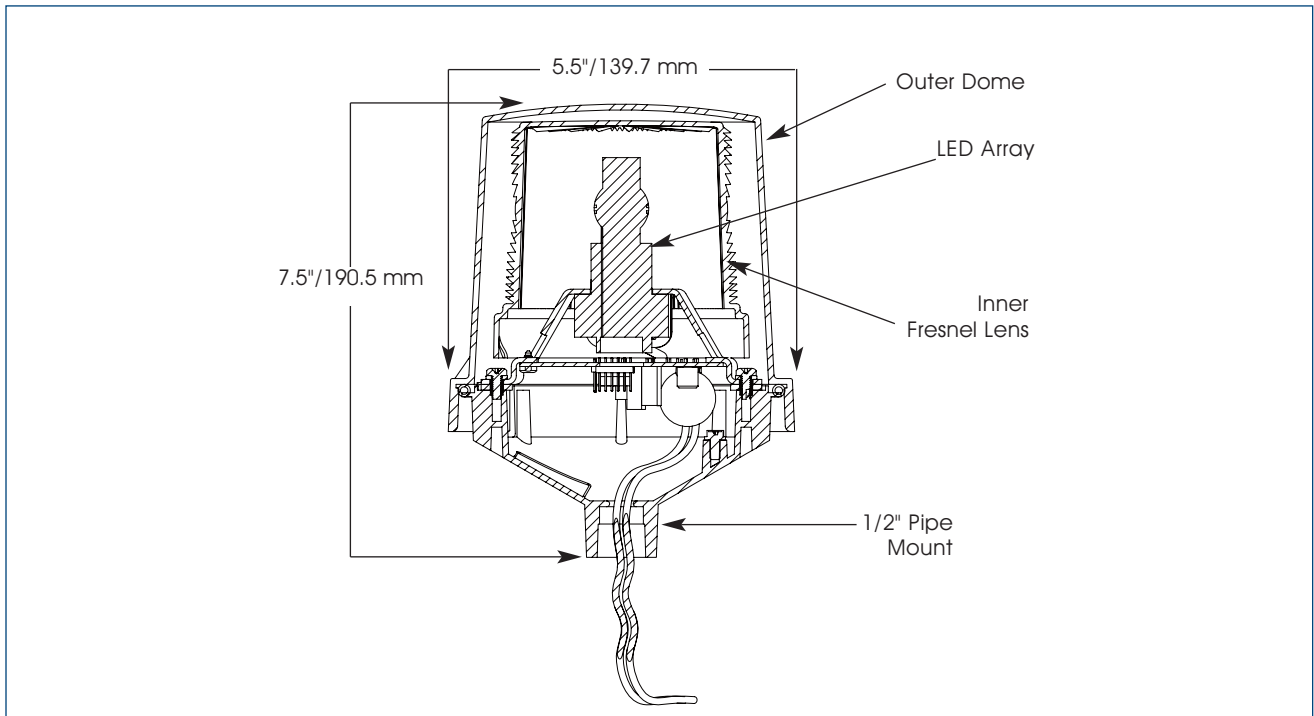
SPECIFICATIONS

Lamp Life*:	60,000 hours	60,000 hours
Lamp Style:	LED-based Lamp	LED-based Lamp
Operating Temperature:	-58°F to 150°F	-50°C to 66°C
Net Weight:	3.2 lbs.	1.5 kg
Shipping Weight:	4.0 lbs.	1.8 kg
Height:	7.5"	190.5 mm
Diameter:	5.5"	139.7 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Please refer to Model Number Index 225XL beginning on page 374

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Exterior Dome, Clear	K8444D219C-04	PC Board Assembly, 24VAC/DC	K2005455A
Interior Lens, Blue	K8550C095A-01	PC Board Assembly, 120/240VAC	K2005416A
Interior Lens, Amber	K8550C095A-02	LED Lamp, Amber	K147169A-06
Interior Lens, Red	K8550C095A-03	LED Lamp, Blue	K147169A-07
Interior Lens, Green	K8550C095A-04	LED Lamp, Green	K147169A-08
		LED Lamp, Red	K147169A-09

Electraray®
Hazardous Location
Strobe Warning Light

Model 225XST and 225XST-I

Federal Signal's Electraray® Model 225XST hazardous location strobe light provides 80 high intensity flashes per minute. This warning light is available in 12-24VDC, 24VDC, 120VAC and 240VAC.

The Model 225XST has been certified by UL as meeting Type 4X water tight and corrosion resistant requirements; constructed to IP66 (in dome up orientation). This hazardous location warning light has a black polyurethane coated base and the inner fresnel lens is available in six colors (including magenta). The clear poly-carbonate outer dome can be quickly removed for easy access to inspect the unit or change the lamp. The 225XST has an effective candela of 240 and a 580,000 peak candela.

The 24VDC 225XST-I features a voltage in-rush limiting PCB design that provides greater compatibility with factory automation control systems and less electrical interference with in-rush sensitive devices.

The 225XST is UL Listed and CSA Certified for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F and G; and Class III.

Model 225XST is ideal for wet, corrosive atmospheres like those found in food processing industries, or anywhere a visual signal is needed.

Federal Signal's affordable Electraray Strobe Warning Light is specifically designed for use in hazardous locations or where corrosive materials are present.
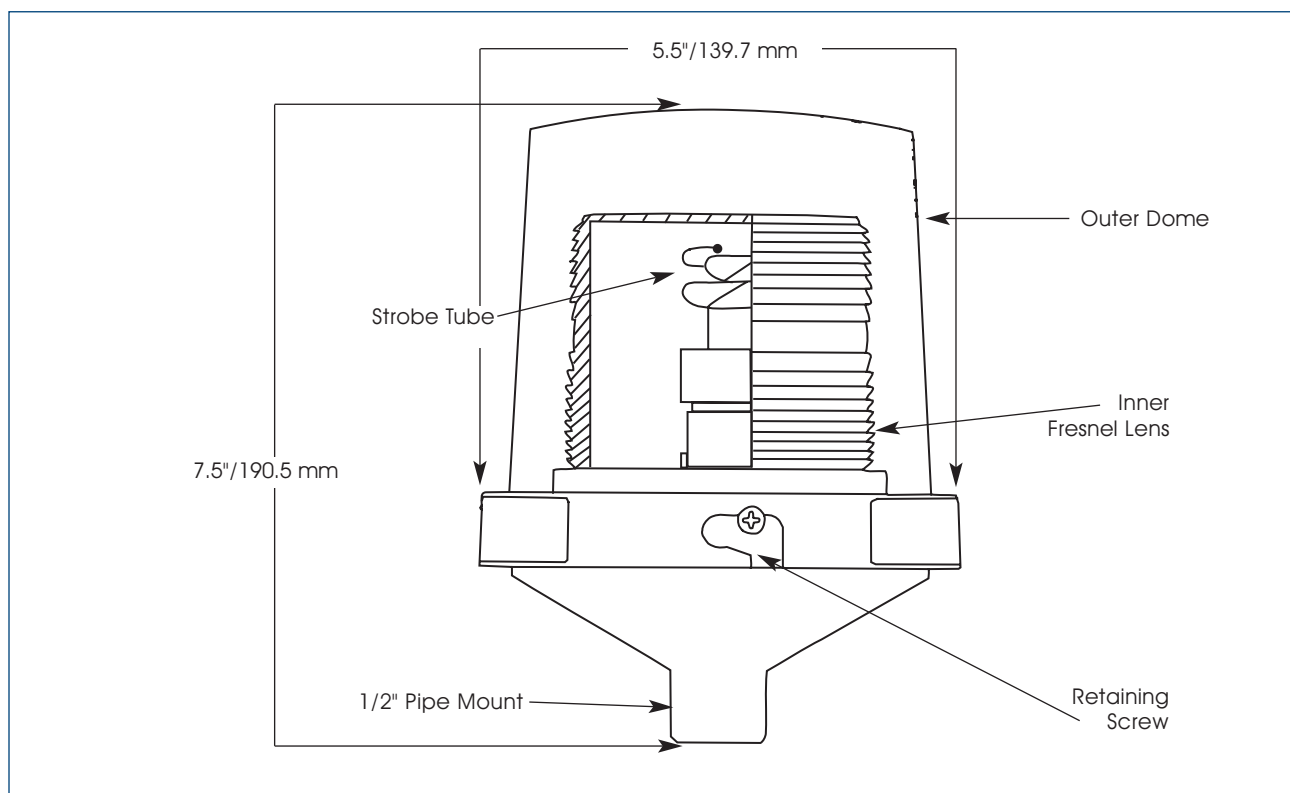
DESIGNED FOR USE IN HAZARDOUS LOCATIONS

- 12-24VDC, 24VDC, 120VAC and 240VAC

- Six lens colors

- 5,000 hour, high-intensity strobe tube

- $\frac{1}{2}$ - inch pipe mount

- Indoor use only

- Type 4X, IP66 enclosure (Dome up orientation)

- UL and cUL Listed and CSA Certified

Model	Voltage	Operating Current	Flash Rate/ Minute	Candela Peak[1]	ECP[2]	Mount
225XST	12-24VDC	1.70-0.70 amps	80	580,000	240	$\frac{1}{2}$" Pipe
225XST-I	24VDC	0.70 amps (2.0 amp In-rush)	80	580,000	240	$\frac{1}{2}$" Pipe
225XST	120VAC	0.25 amps	80	580,000	240	$\frac{1}{2}$" Pipe
225XST	240VAC	0.20 amps	80	580,000	240	$\frac{1}{2}$" Pipe

[1] Peak candela is the maximum light intensity generated by a flashing light during its light pulse
[2] ECP (Effective Candela) is the intensity that would appear to an observer if the light were burning steadily

ELECTRARAY® HAZARDOUS LOCATION WARNING LIGHT (225XST/225XST-I)

5.5"/139.7 mm

Outer Dome

Strobe Tube

Inner Fresnel Lens

7.5"/190.5 mm

1/2" Pipe Mount

Retaining Screw

SPECIFICATIONS

Lamp Life*:	10,000 Hours	10,000 Hours
Lamp Style:	Strobe	Strobe
Operating Temperature:	-40°F to 149°F	-40°C to 65°C
Net Weight:	1.5 lbs.	0.68 kg
Shipping Weight:	2.0 lbs.	0.9 kg
Height:	7.5"	190.5 mm
Diameter:	5.5"	139.7 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Please refer to Model Number Index 225XST/225XST-I beginning on page 376

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Interior Lens		Exterior Dome, Clear	K8444D219C-04
Amber	K8550C095A-02	PC Assembly, 024VDC	K2001202C-01
Blue	K8550C095A-01	PC Assembly, 120VAC	K2001905A
Clear	K8550C095A	PC Assembly, 240VAC	K2001905A-01
Green	K8550C095A-04	Strobe Tube	K8107177A
Magenta	K8550C095A-07		
Red	K8550C095A-03		

Pioneer™ Rotating Beacon Ray

Model 27S

MEDIUM DUTY WARNING LIGHT

- Available in 120VAC
- Six lens colors
- 2,000 hour sealed beam lamp
- Integrated $1/2$ - inch pipe mount
- Type 3R enclosure
- UL and cUL Listed and CSA Certified

Federal Signal's Model 27S is a medium sized, highly effective warning light designed for upright mounting and AC operation.

The 27S streamlined design features a sturdy housing finished in gray enamel. The Pioneer™ is available in six lens colors (amber, blue, clear, green, magenta and red), and is UL Listed and CSA Certified.

The Model 27S is ready to mount on a $1/2$-inch pipe. In addition, optional mounting brackets simplify installation on walls or in corners.

A high intensity 65-watt sealed beam lamp projects a fixed beam downward onto a 360° rotating reflector set at a 45° angle, producing the 60 flashes per minute in all directions.

Model 27S is a versatile warning or signaling light useful in a variety of in-plant applications. It has been designed for permanent installation where a 120VAC, 50/60Hz line voltage is available.

This light is particularly useful as a signaling or warning device in high ambient noise areas where it can be used to supplement or supplant audible signaling devices.
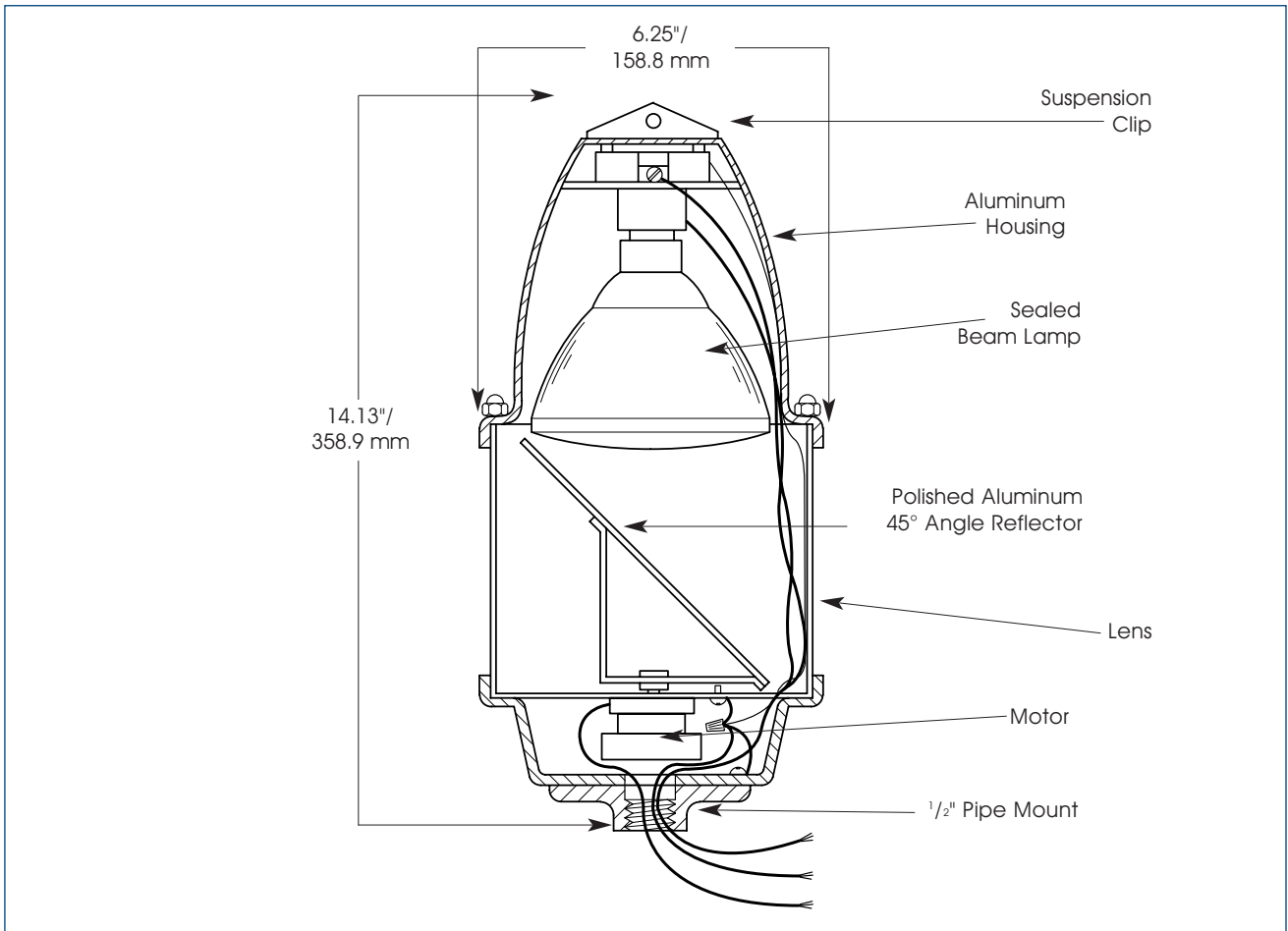
The 27S is effective for alerting of hazardous conditions or identifying dangerous areas.

Federal Signal's Pioneer Rotating Beacon Ray is a dependable mid-range warning light which meets or exceeds the durability and light output requirements of most manufacturing environments.

Model	Voltage	Operating Current	Flash Rate/ Minute	Candela	Mount
27S	120VAC 50/60HZ	0.64 amps	60	6,000	$1/2$" Pipe

PIONEER™ BEACON RAY (27S)

6.25"/
158.8 mm

Suspension Clip

Aluminum Housing

Sealed Beam Lamp

14.13"/
358.9 mm

Polished Aluminum 45° Angle Reflector

Lens

Motor

$^1/_2$" Pipe Mount

SPECIFICATIONS

Lamp Life*:	2,000 Hours	2,000 Hours
Lamp Style:	65-watt Sealed Beam	65-watt Sealed Beam
Operating Temperature:	32°F to 120°F	0°C to 49°C
Net Weight:	3.1 lbs.	1.4 kg
Shipping Weight:	4.0 lbs.	1.8 kg
Height:	14.13"	358.9 mm
Diameter:	6.25"	158.9 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Specify options:
  Corner Bracket (LCMB2)
  Wall Bracket (LWMB2)
- Please refer to Model Number Index 27S beginning on page 373

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Dome, Amber	K8241B031K-16	Dome, Magenta	K8241B031K-15
Dome, Blue	K8241B031K-14	Dome, Red	K8241B031K-12
Dome, Clear	K8241B031K-13	Sealed Beam Lamp, 120V	K8241A014B
Dome, Green	K8241B031K-11	Motor, 120VAC	K8241A030-03

2645 Federal Signal Dr., University Park, IL 60466   Tel: 708.534.4756   Fax: 708.534.4852   www.federalsignal-indust.com

Explosion-Proof LED Warning Light with XLT™

Model 27XL

Federal Signal's Model 27XL explosion-proof LED light with XLT™ produces 60 high-intensity flashes per minute. This warning light operates on 24VDC, 120VAC, and 240VAC 50/60Hz and is UL Listed for Class I, Division 1, Groups C & D; Class II, Division 1, Groups E, F & G; Class I, Division 2, Groups A, B; and Class III. The 27XL is also Marine Rated.

eXtreme Light Technology (XLT) is a break through high-intensity LED array designed to meet the demands of industrial customers, producing maximum light output and superior lens fill. Configurable to either steady burning state or flashing mode XLT provides improved performance over standard LED's and increased versatility while maintaining low power consumption and vibration resistances expected from LED signals.

The 27XL features a standard low in-rush circuitry design that provides greater compatibility with factory automation control systems and less electrical interference with in-rush sensitive devices.

The 27XL is Type 4X rated; constructed to IP66. Corrosion resistance is achieved with a powder epoxy finish applied over the copper-free aluminum housing. All exposed hardware is 316 grade stainless steel.

Federal Signal's Model 27XL has an effective candela (ECP) of up to 134. A pendant mount is supplied and a ceiling mount and 90° wall mount are available options. For easy installation, the mounting box is first installed and the fixture is then threaded onto the mounting box, making the electrical connection. Electrical continuity is made when five threads are engaged.

Federal Signal's Model 27XL is specifically designed for explosion-proof atmospheres and/or corrosive environments. Because it is easy to install and requires very low maintenance, it is ideal for use in areas such as oil rigs, mines, refineries, and chemical plants.

DESIGNED FOR USE IN EXPLOSION-PROOF ATMOSPHERES

- XLT™ Technology
- Available in 24VDC, 120VAC and 240VAC
- Available in flashing or steady-burn mode
- Four lens colors
- 60,000 hour LED
- $^3/_4$ - inch pendant mount standard; other options available
- Dome guard optional
- UL and cUL Listed
- Type 4X, IP66 enclosure
- Marine Listed

Model	Voltage	Operating Current	Flash Rate/ Minute	Candela Peak[1]	ECP[2]	Mount
27XL	24VDC	380mA	60	211	134	$^3/_4$" Pendant
27XL	120VAC	210mA	60	211	134	$^3/_4$" Pendant
27XL	240VAC	130mA	60	211	134	$^3/_4$" Pendant

[1] Peak candela is the maximum light intensity generated by a flashing light during its light pulse through amber lens
[2] ECP (Effective Candela) is the intensity that would appear to an observer if the light were burning steadily through amber lens

EXPLOSION-PROOF LED LIGHT (27XL)
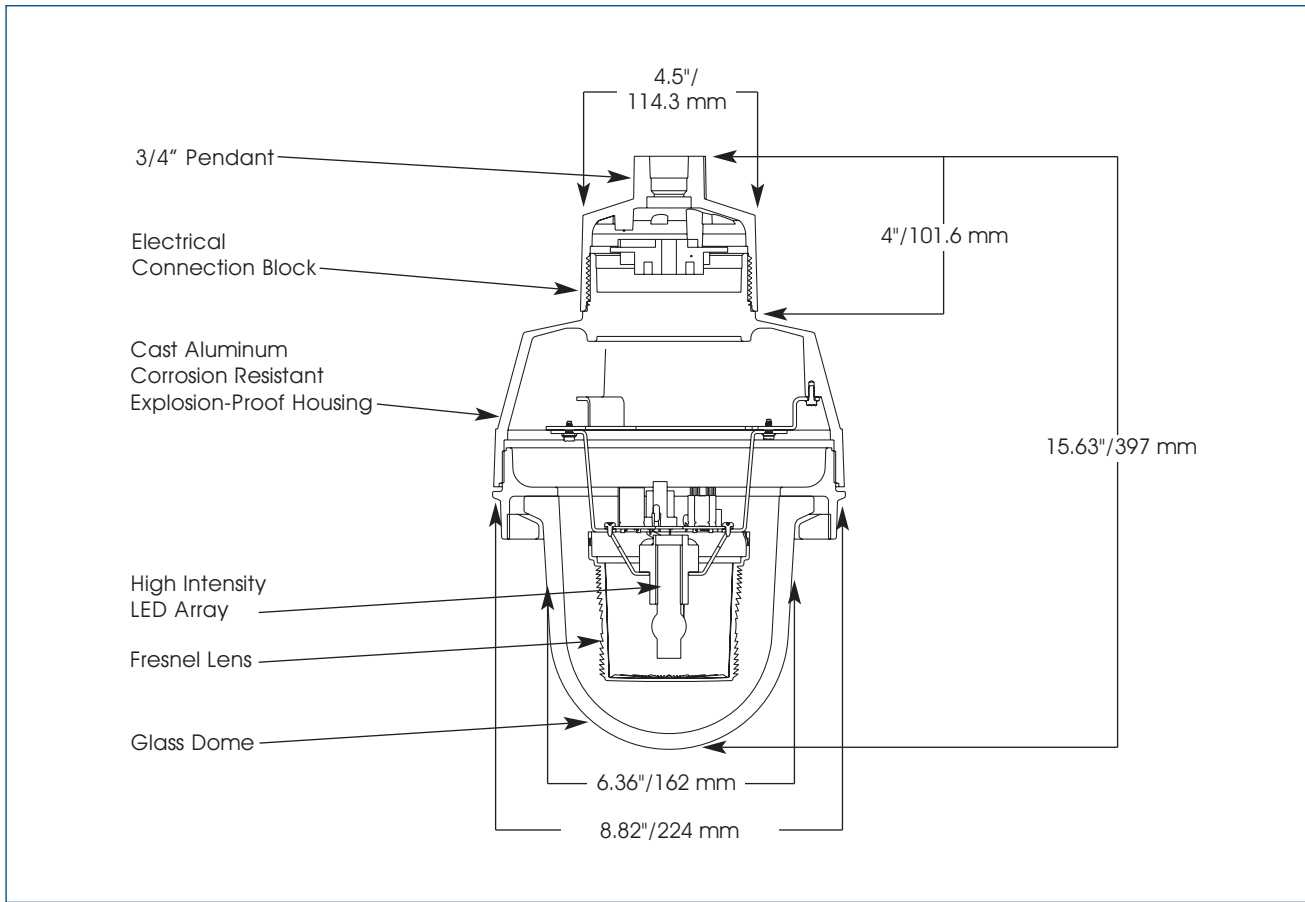
SPECIFICATIONS

Lamp Life*:	60,000 hours	60,000 hours
Lamp Style:	LED	LED
Ambient Temp. Range:	-55°C to 70°C	Canada
	-25° to 65°C	USA
Net Weight:	14.1 lbs.	6.45 kg
Shipping Weight:	18.4 lbs.	8.35 kg
Height:	15.63"	397.0 mm
Diameter:	8.82"	224.0 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color

- Specify options:
  Dome Guard (DGXC)
  Ceiling Mount (CMXC)
  Wall Mount (WMXC)

- Please refer to Model Number
  Index 27XL beginning
  on page 374

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Exterior Dome Assembly, Clear	K8444C271A-01	PC board assembly, 24VDC	K2005455A
Interior Lens Assembly, Amber	K8550C095A-02	PC board assembly, 120/240VAC	K2005416A
Interior Lens Assembly, Blue	K8550C095A-01	LED array, Amber	K147169A
Interior Lens Assembly, Green	K8550C095A-04	LED array, Blue	K147169A-01
Interior Lens Assembly, Red	K8550C095A-03	LED array, Green	K147169A-02
		LED array, Red	K147169A-03

Explosion-Proof Strobe Light

Model 27XST

DESIGNED FOR USE IN EXPLOSION-PROOF ATMOSPHERES

- Available in 24VDC, 120VAC and 240VAC

- Six lens colors

- 10,000 hour strobe tube

- $^3/_4$ - inch pendant mount standard; other options available

- Dome guard optional

- Type 4X, IP66 enclosure

- Marine Rated

- UL and cUL Listed, CSA Certified and CSFM Approved

Federal Signal's Model 27XST explosion-proof strobe light produces 80 high-intensity flashes per minute. This warning light operates on 24VDC, 120VAC, and 240VAC 50/60Hz.

The 27XST is UL Listed for Class I, Division 1, Groups C & D; Class II, Division 1, Groups E, F & G; Class I, Division 2, Groups A, B; and Class III. The 27XST is CSA Certified and Marine Rated.

The 24VDC 27XST features a voltage in-rush limiting PCB design that provides greater compatibility with factory automation control systems and less electrical interference with in-rush sensitive devices.

The 27XST is Type 4X rated; constructed to IP66. Corrosion resistance is achieved with a powder epoxy finish applied over the copper-free aluminum housing. All exposed hardware is 316 grade stainless steel.

Federal Signal's Model 27XST has an effective candela (ECP) of 850 and a two million peak candela. A pendant mount is supplied and a ceiling mount and 90° wall mount are available options. For easy installation, the mounting box is first installed and the fixture is then threaded onto the mounting box, making the electrical connection. Electrical continuity is made when five threads are engaged.

Federal Signal's Model 27XST is specifically designed for explosion-proof atmospheres and/or corrosive environments. Because it is easy to install and requires very low maintenance, it is ideal for use in areas such as oil rigs, mines, refineries, and chemical plants.

Model	Voltage	Operating Current	Flash Rate/ Minute	Candela Peak[1]	ECP[2]	Mount
27XST	24VDC	1.90 amps (3.0 amp In-rush)	80	2,000,000	850	$^3/_4$" Pendant
27XST	120VAC 50/60Hz	0.60 amps	80	2,000,000	850	¾" Pendant
27XST	240VAC 50/60Hz	0.30 amps	80	2,000,000	850	¾" Pendant

[1] Peak candela is the maximum light intensity generated by a flashing light during its light pulse

[2] ECP (Effective Candela) is the intensity that would appear to an observer if the light were burning steadily

5 yr FEDERAL SIGNAL WARRANTY

EXPLOSION-PROOF STROBE LIGHT (27XST)
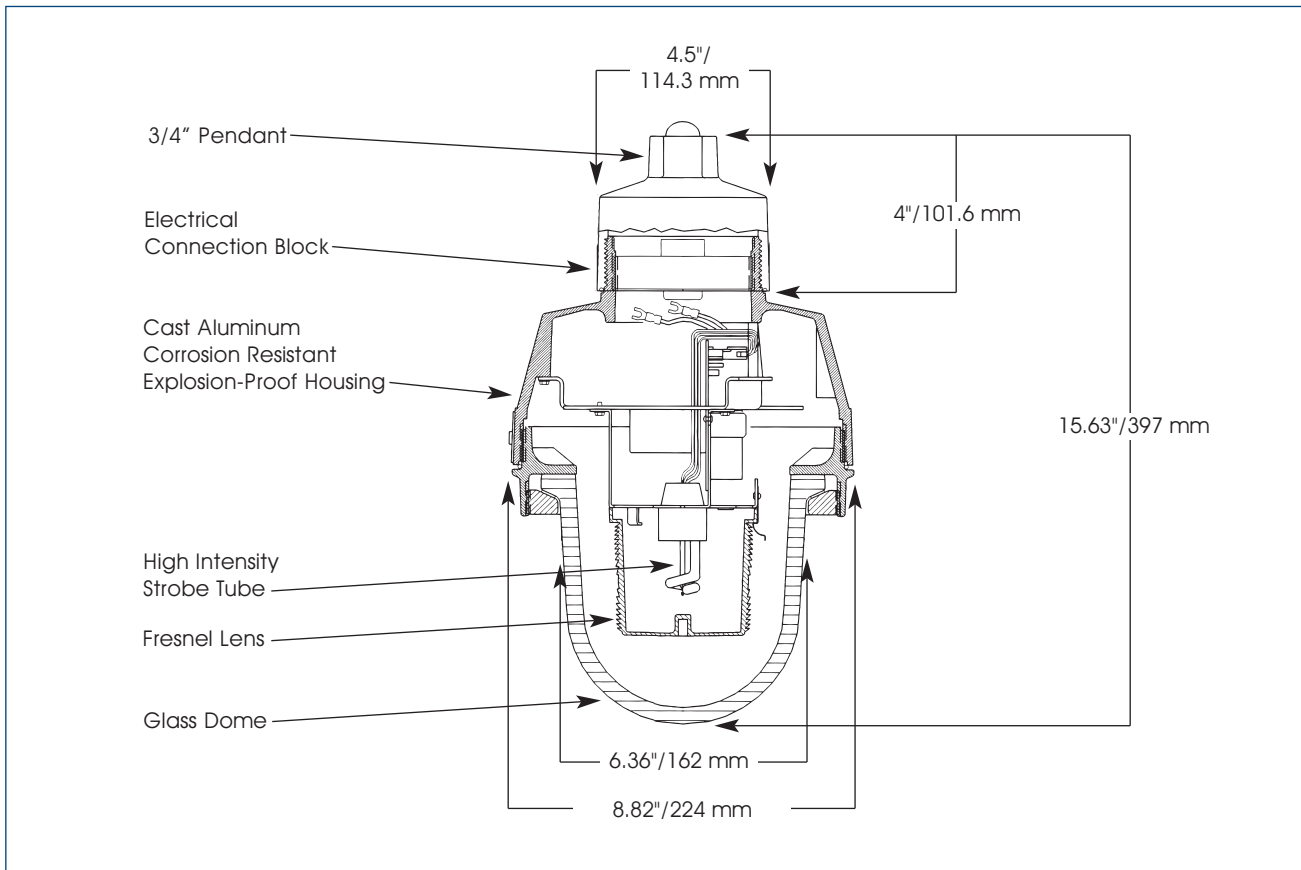
SPECIFICATIONS

Lamp Life*:	10,000 hours	10,000 hours
Lamp Style:	Strobe	Strobe
Ambient Temp. Range:	-50°C to 65°C	Canada
	-25°C to 65°C	USA
Net Weight:	14 lbs.	6.4 kg
Shipping Weight:	18.1 lbs.	8.2 kg
Height:	15.63"	397.0 mm
Diameter:	8.82"	224.0 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color (Magenta upon request)
- Specify options:
  Dome Guard (DGXC)
  Ceiling Mount (CMXC)
  Wall Mount (WMXC)
- Please refer to Model Number Index 27XST beginning on page 377

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Exterior Dome Assembly, Clear	K8444C271A-01	24VDC Mechanism	K8436107F-03
Interior Lens Assembly, Amber	K8550C095A-02	120VAC Mechanism	K8436107E-02
Interior Lens Assembly, Blue	K8550C095A-01	240VAC Mechanism	K8436107E-01
Interior Lens Assembly, Clear	K8550C095A	Strobe Tube, Series C1, C2	K8107159A
Interior Lens Assembly, Green	K8550C095A-04	Strobe Tube, Series C1, C2	K8107159A
Interior Lens Assembly, Red	K8550C095A-03	Pendant Mount	K8444A272A
Interior Lens Assembly, Magenta	K8550C095A-07		

Commander® Rotating Warning Lights

Models 371 and 371L

Federal Signal Models 371/371L incandescent warning lights have a powerful sealed beam lamp that rotates 360° within a glass or polycarbonate dome. Power is delivered to the Commander's rotating lamp by a unique collector ring. The lamp itself is mounted in a pivoting yoke. This allows the lamp beam angle to be adjusted through 90 degrees from horizontal to vertical. Changing the beam angle allows the user to create unique light patterns and/or direct the light for better visibility.

The Model 371 features a 200-watt sealed beam lamp and a high-temperature resistant glass dome. The glass dome of the 371 is ideal for applications such as steel mills or arc furnaces/smelters where high ambient temperatures or red hot materials would melt or damage the dome.

The Model 371L features a 100-watt sealed beam lamp and an impact-resistant polycarbonate dome. The thinner polycarbonate dome allows more light to pass through while protecting the lamp.

Both models of the Commander® are available in five colors (amber, blue, clear, green and red). The dome and ring assembly simply screws on, providing access to the interior of the light.
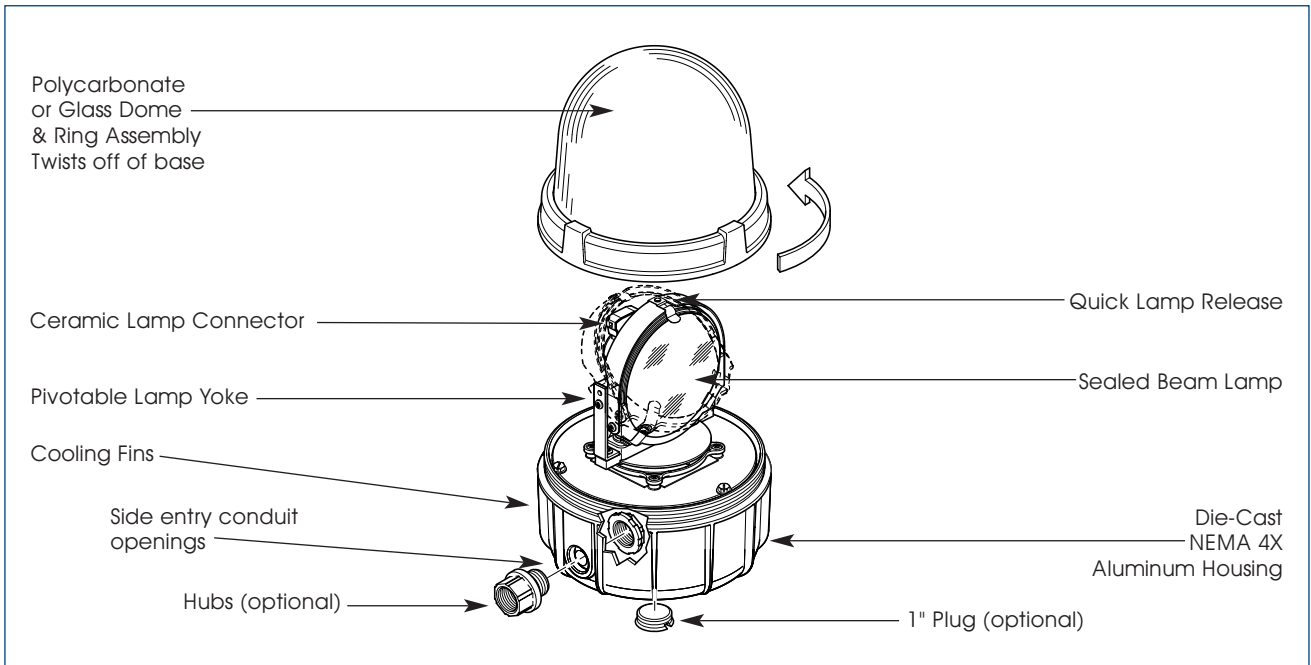
The new 371/371L base features electrostatically applied (e-coated) black epoxy paint for greater corrosion-resistance. Wiring can be routed through the pipe-mount opening in the bottom of the light or the two side knockouts can be used for side entry wiring. Installation can be surface- or 1-inch pipe-mount. Optional wall and corner mount brackets are available.

The 371 and 371L are Type 4X, IP66 rated, UL and cUL Listed and CSA Certified.

HEAVY DUTY WARNING LIGHTS

- Available in 120VAC
- Five dome colors
- Pivoting lamp yoke
- Surface mount and integrated 1-inch pipe mount
- Type 4X, IP66 enclosure
- UL and cUL Listed and CSA Certified

Model	Voltage	Operating Current	Flash Rate/ Minute	Candela	Mount
371	120VAC 50/60HZ	1.75 amps	60	36,000	1" Pipe/Surface
371L	120VAC 50/60HZ	0.80 amps	60	20,000	1" Pipe/Surface

5 yr FEDERAL SIGNAL WARRANTY

COMMANDER® ROTATING LIGHTS (371/371L)

Polycarbonate or Glass Dome & Ring Assembly Twists off of base

Ceramic Lamp Connector

Pivotable Lamp Yoke

Cooling Fins

Side entry conduit openings

Hubs (optional)

Quick Lamp Release

Sealed Beam Lamp

Die-Cast NEMA 4X Aluminum Housing

1" Plug (optional)

SPECIFICATIONS

Lamp Life*:		2,000 Hours	2,000 Hours
Lamp Style:	371	200W Sealed Beam	200W Sealed Beam
	371L	100W Sealed Beam	100W Sealed Beam
Operating Temperature:		-31°F to 150°F	-35°C to 66°C
Net Weight:			
371		13.25 lbs.	6.0 kg
371L		9.8 lbs.	4.4 kg
Shipping Weight:			
371		14.25 lbs.	6.5 kg
371L		10.8 lbs.	4.9 kg
Height:		11.38"	288.9 mm
Diameter:		9.12"	231.8 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Specify options:
  Corner Bracket (LCMB2)*
  Wall Bracket (LWMB2)*
  Solid Surface Mounting Bracket
    (371BRCKT)*
  Shock Mount Kit (K8459A076C)
  3/4" Hub Kit (K8459138A)
  1" Plug Kit (K8459130A)
- Please refer to Model Number Index 371/371L beginning on page 373

* Rated for NEMA 3R installations.

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Series B Dome and Ring Assembly*			
Amber Glass (371)	K8459126A	Lamp (371)	K8442A039
Blue Glass (371)	K8459126A-01	Lamp (371L)	K8107A130
Red Glass (371)	K8459126A-02	Motor Replacement Kit (371/371L)	K8459A113B
Clear Glass (371)	K8459126A-03	Worm Gear Assembly (371/371L)	K8459A017
Green Glass (371)	K8459126A-04	Brush and Spring (371/371L)	K8442A028
Amber Polycarbonate (371L)	K8459125A	Gasket, Surface Mount	K8459127A
Blue Polycarbonate (371L)	K8459125A-01		
Clear Polycarbonate (371L)	K8459125A-02		
Green Polycarbonate (371L)	K8459125A-03		
Red Polycarbonate (371L)	K8459125A-04		

* Call factory for Series A part numbers

2645 Federal Signal Dr., University Park, IL 60466   Tel: 708.534.4756   Fax: 708.534.4852   www.federalsignal-indust.com

Commander® Double Strobe Hazardous Location Warning Light

Model 371DST

Federal Signal Model 371DST is a double-flash strobe housed in a Type 4X enclosure. At 80 flashes per minute and 1,000 effective candela, the Commander® is the largest strobe signal in the Federal Signal product line.

The 371DST features an impact resistant polycarbonate dome available in five colors (amber, blue, clear, green, and red). The dome and ring assembly simply screws on, allowing for quick access to the strobe tube and printed circuit board assembly.

The new base of the Commander features electrostatically applied, black epoxy paint for greater corrosion resistance. Wiring can be routed through the pipe mount opening in the bottom of the light or the side knockouts can be used for side entry wiring. Installation can be surface- or 1-inch pipe mount. Optional wall and corner mount brackets are available for the 371DST. The Commander is rated Type 4X, IP66 (watertight, dust tight, corrosion resistant).

The 371DST is also rated for Hazardous Location, Class I Division 2, Groups A,B,C, and D, Class II Division 2, Groups F & G; and Class III. The LWMB2 wall mount bracket and the LCMB2 corner mount bracket can be used for all non-hazardous environments. This strobe is also UL and cUL Listed and CSA Certified.

DESIGNED FOR USE IN HAZARDOUS LOCATIONS

- Available in 12-24VDC, 120VAC and 240VAC

- Five dome colors

- Surface mount and integrated 1-inch pipe mount

- Type 4X, IP66 enclosure

- UL and cUL Listed and CSA Certified

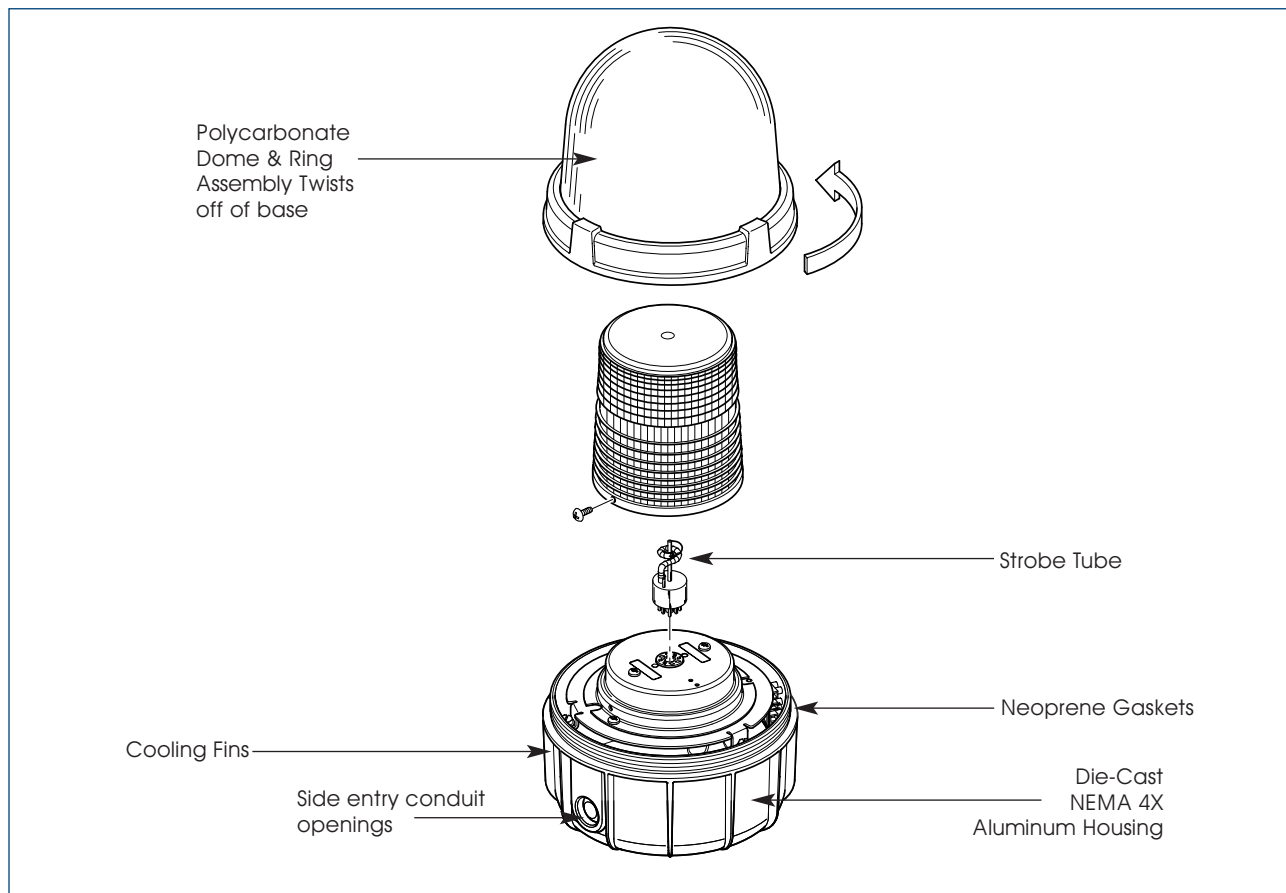| Model	Voltage	Operating Current	Flash Rate/Minute	Candela Peak[1]	ECP[2]	Mount
371DST	12-24 VDC	3.00-1.90 amps	80[3]	750,000	1,000	1" Pipe or Surface
371DST	120VAC 50/60Hz	0.60 amps	80[3]	750,000	1,000	1" Pipe or Surface
371DST	240VAC 50/60Hz	0.30 amps	80[3]	750,000	1,000	1" Pipe or Surface

[1] Peak candela is the maximum light intensity generated by a flashing light during its light pulse

[2] ECP (Effective Candela) is the intensity that would appear to an observer if the light were burning steadily

[3] Double flash

COMMANDER® STROBE LIGHT (371DST)

Polycarbonate Dome & Ring Assembly Twists off of base

Strobe Tube

Cooling Fins

Neoprene Gaskets

Side entry conduit openings

Die-Cast NEMA 4X Aluminum Housing

SPECIFICATIONS

Lamp Life*:	10,000 Hours	10,000 Hours
Lamp Style:	Strobe	Strobe
Operating Temperature:	-31°F to 104°F	-35°C to 40°C
Net Weight:	6.23 lbs.	2.83 kg
Ship. Weight:	8.3 lbs.	3.76 kg
Height:	11.38"	288.9 mm
Diameter:	9.13"	231.8 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Specify options:
  Corner Bracket (LCMB2)*
  Solid Surface Mounting
    Bracket (371BRCKT)
  Shock Mount Kit (K8459A076C)
  Wall Bracket (LWMB2)*
  3/4" Hub Kit (K8459138A)
  1" Plug Kit (K8459130A)
- Please refer to Model Number Index 371DST beginning on page 376

* Not rated for Div. 2 applications; Type 3R.

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Series B Dome and Ring Assembly*			
Amber Polycarbonate	K8459125A	PCB Assembly 12-24VDC	K2001265D-01
Blue Polycarbonate	K8459125A-01	PCB Assembly 120VAC	K200865G-02
Clear Polycarbonate	K8459125A-02	PCB Assembly 240VAC	K200865G-03
Green Polycarbonate	K8459125A-03	Gasket, Surface Mount	K8459127A
Red Polycarbonate	K8459125A-04	Strobe Tube	K8107178A

* Call the factory for Series A part numbers.

Commander®
Strobe Warning Light

Model 371ST

HEAVY DUTY STROBE LIGHT

- Available in 250VDC

- Five dome colors

- Surface mount and integrated 1-inch pipe mount

- Type 4X, IP66 enclosure

Federal Signal Model 371ST is a single-flash strobe housed in a Type 4X enclosure. At 60 flashes per minute and 275 effective candela, the Commander® is the largest strobe signal in the Federal Signal product line.

The 371ST features a heat resistant glass dome available in five colors (amber, blue, clear, green, and red). The dome and ring assembly simply screws on, allowing for easy access to the strobe tube and printed circuit board assembly.

The new base of the Commander features electrostatically applied, black epoxy paint for greater corrosion resistance. Wiring can be routed through the pipe mount opening in the bottom of the light or the side knockouts can be used for side entry wiring. Installation can be surface- or 1-inch pipe mount. Optional wall and corner mount brackets are available for the 371ST. The Commander is rated Type 4X, IP66 (watertight, dust tight, corrosion resistant).

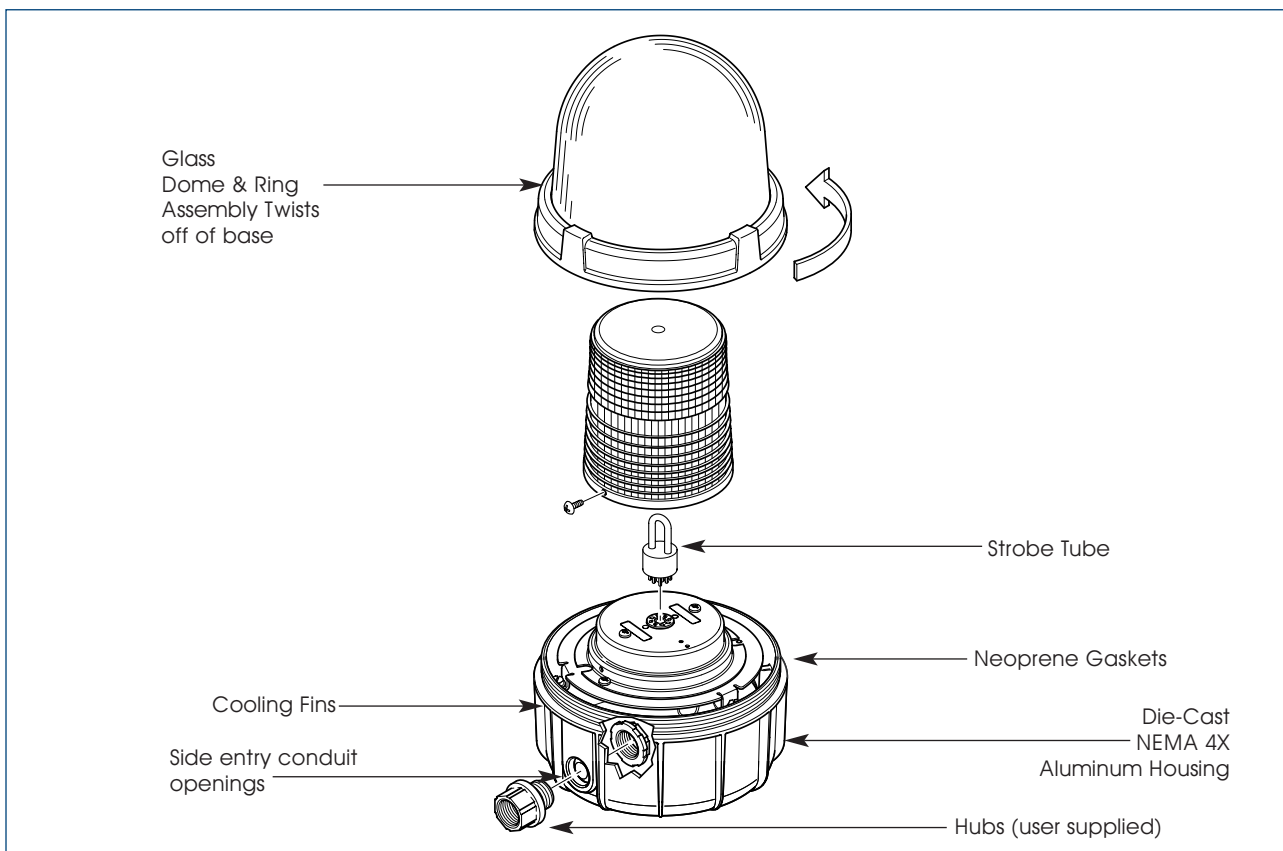The LWMB2 wall mount bracket and the LCMB2 corner mount bracket can be used to mount this strobe light.

Model	Voltage	Operating Current	Flash Rate/ Minute	Candela Peak[1]	ECP[2]	Mount
371ST	250VDC	0.25 amps	60	625,000	275	1" Pipe or Surface

[1] Peak candela is the maximum light intensity generated by a flashing light during its light pulse

[2] ECP (Effective Candela) is the intensity that would appear to an observer if the light were burning steadily

COMMANDER® STROBE LIGHT (371ST)

Glass Dome & Ring Assembly Twists off of base

Strobe Tube

Neoprene Gaskets

Cooling Fins

Side entry conduit openings

Die-Cast NEMA 4X Aluminum Housing

Hubs (user supplied)

SPECIFICATIONS

Lamp Life*:	10,000 Hours	10,000 Hours
Lamp Style:	Strobe	Strobe
Operating Temperature:	-31°F to 150°F	-35°C to 66°C
Net Weight:	10.0 lbs.	4.54 kg
Shipping Weight:	12.4 lbs.	5.62 kg
Height:	11.38"	288.9 mm
Diameter:	9.13"	231.8 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Specify options:
    Corner Bracket (LCMB2)*
    Solid Surface Mounting
      Bracket (371BRCKT)
    Shock Mount Kit (K8459A076C)
    Wall Bracket (LWMB2)*
    3/4" Hub Kit (K8459138A)
    1" Plug Kit (K8459130A)
- Please refer to Model Number Index 371ST beginning on page 376

* Type 3R applications.

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Series B Dome and Ring Assembly*			
Amber Glass	K8459126A	Clear, Inner Polycarbonate Dome	K8422B428A
Blue Glass	K8459126A-01	PC Assembly 250VDC	K2001070B
Clear Glass	K8459126A-03	Gasket, Surface Mount	K8459127A
Green Glass	K8459126A-04	Strobe Tube	K149122B
Red Glass	K8459126A-02		

* Call the factory for Series A part numbers.

Rotating Combination Audible/Visual Warning Signal

Model 400R

AUDIBLE AND VISUAL WARNING IN A SINGLE VERSATILE UNIT

- Available in 120VAC

- Five dome colors

- Wall mount

- Sounder/Horn (Model 350) sold separately

- Indoor use only

- Type 3R enclosure

- UL and cUL Listed

Federal Signal's Model 400R audible/visual signal combines the effective warning of a rotating light with an optional Federal Signal Model 350 horn.

The Model 400R includes a large 4.25-inch diameter rotating reflector assembly for projecting light beams. The unit features an incandescent lamp that produces 60 flashes per minute.

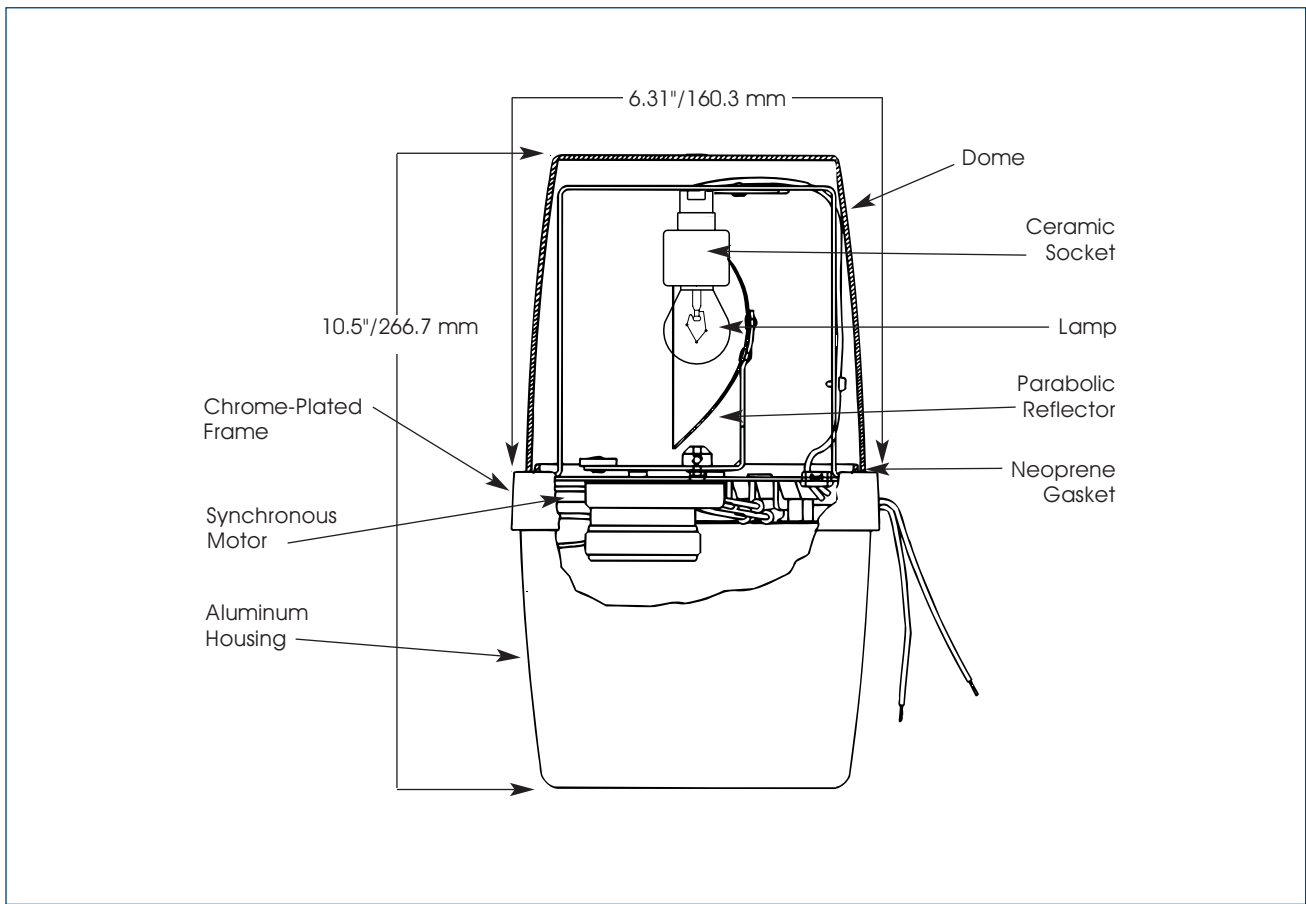Available in five dome colors: amber, blue, clear, green and red.

The Model 400R is ideal for use wherever both audible and visual warning signals are needed. This rugged unit is excellent for industrial use and adaptable to most in-plant signaling needs.

A modern housing design makes the Model 400R suitable for use in institutional or non-industrial settings requiring an audible/visual alarm system, where heavy-duty industrial equipment might not be appropriate. Sounder/Horn (Model 350) sold separately.

Model	Voltage	Operating Current	Flash Rate/ Minute	Candela	Mount
400R	120VAC 50/60Hz	0.33 amps	60	85	Wall/Surface

ROTATING AUDIBLE/VISUAL WARNING SIGNAL (400R)

SPECIFICATIONS

Lamp Style:	Incandescent	Incandescent
Operating Temperature:	-31°F to 150°F	-35°C to 66°C
Net Weight:	4.5 lbs.	2.0 kg
Shipping Weight:	5.1 lbs.	2.3 kg
Height:	10.5"	266.7 mm
Diameter:	6.31"	160.3 mm

REPLACEMENT PARTS

Description	*Part Number*
Exterior Dome, Amber	K8547C001A-04
Exterior Dome, Blue	K8547C001A-02
Exterior Dome, Clear	K8547C001A-05
Exterior Dome, Green	K8547C001A-03
Exterior Dome, Red	K8547C001A-01
Lamp, 120VAC	K8107181A

HOW TO ORDER

- Specify model, voltage and color
- Specify options:
  Audible signaling with horn (350)
  and mounting kit (400HMK-AC)
  sold separately
- Please refer to Model Number Index
  400R beginning on page 377

Strobe Combination Audible/Visual Warning Signal

Model 400ST

Federal Signal's Model 400ST audible/visual signal combines the effective warning of a strobe light with an optional Federal Signal Model 350 horn.

The Model 400ST includes a fresnel lens, providing 360-degree flash coverage. Its strobe tube produces bright, high-intensity flashes at 400 effective candela at 75 flashes per minute.

Available in five dome colors: amber, blue, clear, green and red.

The Model 400ST is ideal for use wherever both audible and visual warning signals are needed. This rugged unit is excellent for industrial use and adaptable to most in-plant signaling needs.

A modern housing design makes the Model 400ST suitable for use in institutional or non-industrial settings requiring an audible/visual alarm system, where heavy-duty industrial equipment might not be appropriate. Sounder/Horn (Model 350) sold separately.

AUDIBLE AND VISUAL WARNING IN A SINGLE VERSATILE UNIT

- Available in 120VAC
- Five dome colors
- 10,000 hour strobe tube
- Wall mount
- Sounder/Horn (Model 350) sold separately
- Indoor use only
- Type 3R enclosure (In dome up orientation)
- UL and cUL Listed

Model	Voltage	Operating Current	Flash Rate/ Minute	Candela Peak[1]	ECP[2]	Mount
400ST	120VAC 50/60Hz	0.6 amps	75	900,000	400	Wall/Surface

[1] Peak candela is the maximum light intensity generated by a flashing light during its light pulse

[2] ECP (Effective Candela) is the intensity that would appear to an observer if the light were burning steadily

STROBE AUDIBLE/VISUAL WARNING SIGNAL (400ST)
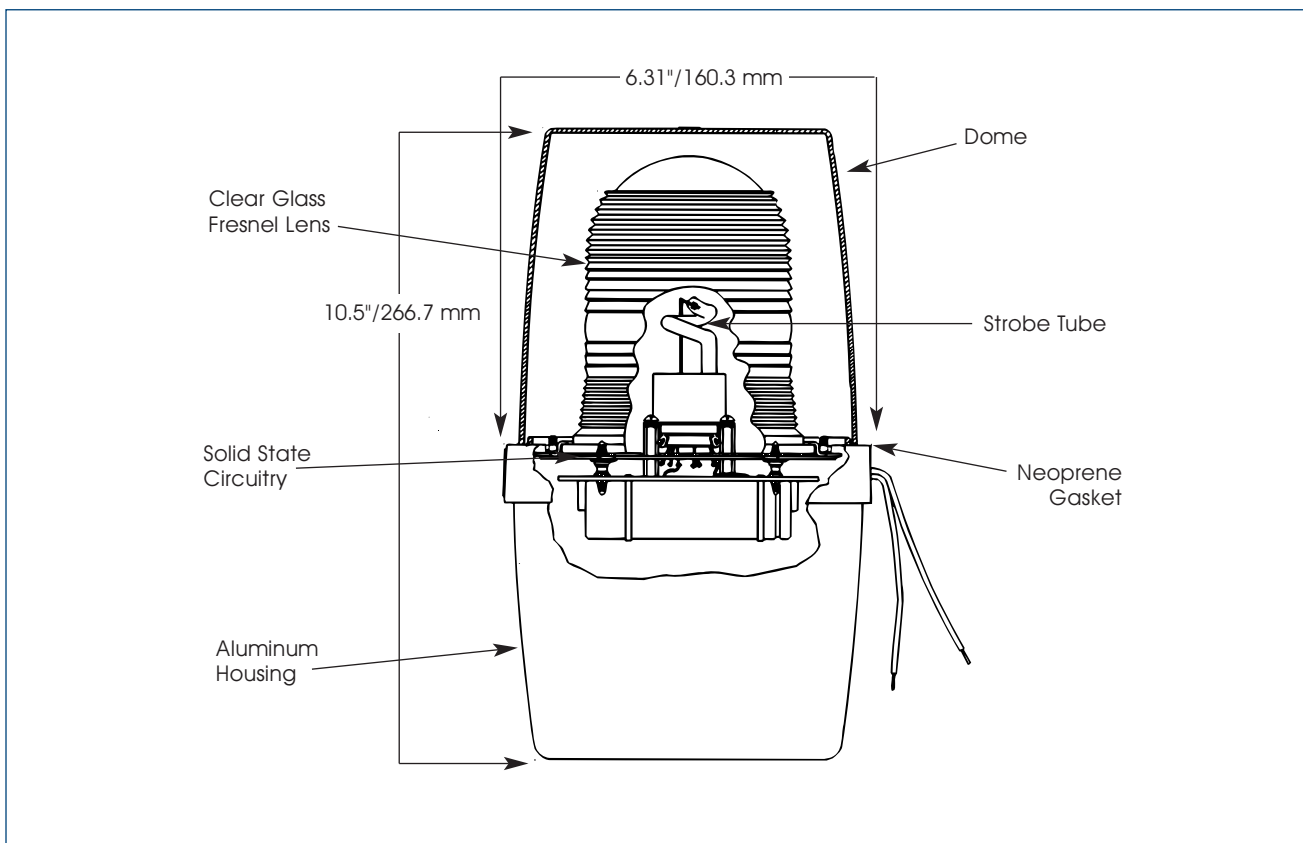
SPECIFICATIONS

Lamp Life*:	10,000 hours	10,000 hours
Lamp Style:	Strobe	Strobe
Operating Temperature:	-31°F to 150°F	-35°C to 66°C
Net Weight:	4.5 lbs.	2.0 kg
Shipping Weight:	5.1 lbs.	2.3 kg
Height:	10.5"	266.7 mm
Diameter:	6.31"	160.3 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Specify options:
  Audible signaling with horn (350) and mounting kit (400HMK-AC) sold separately
- Please refer to Model Number Index 400ST beginning on page 377

REPLACEMENT PARTS

Description	Part Number
Exterior Dome, Amber	K8547C001A-04
Exterior Dome, Blue	K8547C001A-02
Exterior Dome, Clear	K8547C001A-05
Exterior Dome, Green	K8547C001A-03
Exterior Dome, Red	K8547C001A-01
Interior Fresnel Lens, Clear	K8248C004E-04
Strobe Tube	K8107178A
PC Assembly, 120VAC	K200D825E

Red Aviation Obstruction Light

Model 810DE

FAA APPROVED LIGHTING

- Available in 120VAC
- Dual lamps
- 116 watt lamps
- 8,000 hour lamp life
- 1-inch pipe mount
- Optional photoelectric cell
- Optional transfer relay
- FAA L-810 Certified, ETL tested

Federal Signal Obstruction Lights are designed to mark tall structures that present hazards to air navigation. When installed in accordance with FAA AC 70/7460-1, these lights increase the conspicuity of obstructions for pilots flying at night.

Federal Signal Model 810DE is a steady burning double obstruction light (FAA Ref. L-810). The 810DE features a die-cast aluminum housing with a wiring enclosure and mounts on 1" NPT pipe. The corrosion resistant housing is sealed with aviation yellow powder-coat paint and includes stainless steel hardware. For ease of installation and maintenance the housing is equipped with captive cover screws, stainless steel tethers secure the glass domes and stainless steel bands provide tool-free access to the lamp.
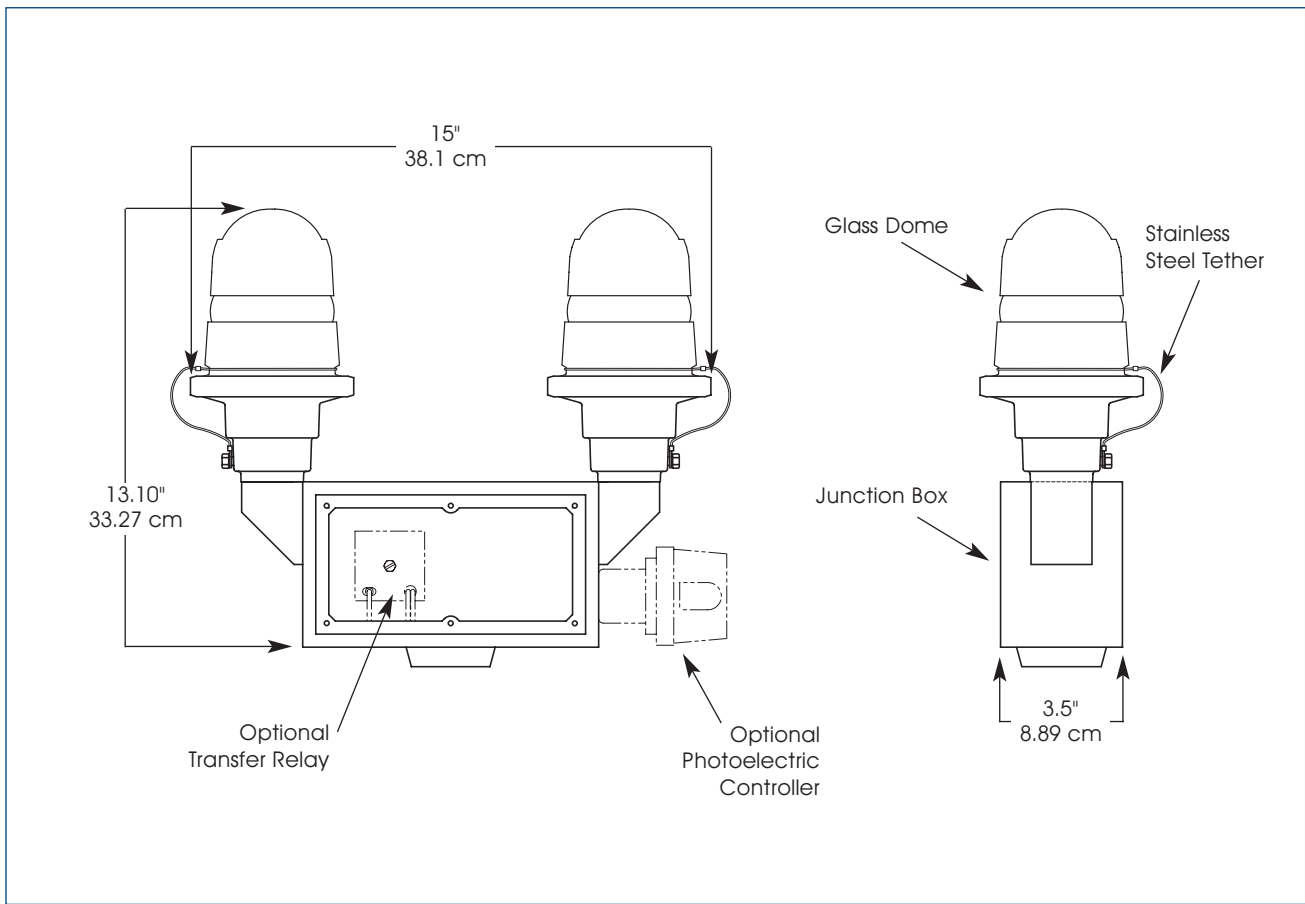
An optional photoelectric controller provides automatic light activation at dusk per FAA specifications. The optional transfer relay powers the standby lamp if the operating lamp fails. All Federal Signal Obstruction Lights are shipped factory-assembled with lamps and options.

The 116-Watt lamps are rated for 8000 hours of continuous use. The Photoelectric Cells are rated at over 5000 on/off operations for years of reliability.

Typical applications include water towers, cellular phone towers, antennas, smoke stacks, skyscrapers and airport perimeter fencing. For the number and placement of lights, the required duration of operation, and recommendations for specific types of structures, refer to FAA Advisory Circular No. 70/7460-1K.

5 yr FEDERAL SIGNAL WARRANTY

RED AVIATION OBSTRUCTION LIGHT (810DE)

SPECIFICATIONS

Lamp Life:*	8,000 hours	8,000 hours
Lamp Style:	Incandescent	Incandescent
Operating Temperature:	-35°F to 150°F	-37°C to 40°C
Net Weight:	14.0 lbs.	6.35 kg
Shipping Weight:	15.0 lbs.	6.8 kg
Height:	13.1"	33.27 cm
Width:	15.0"	38.1 cm
Depth:	3.5"	8.89 cm

* Optimal hours under ideal conditions.

REPLACEMENT PARTS

Description	Part Number
Lens, Red with Tether	K8449121A
Lamp, 116W	K8107234A

HOW TO ORDER

- Specify model, voltage and color
- Please refer to Model Number Index 810DE beginning on page 377

Red Aviation Obstruction Light

Model 810S

FAA APPROVED LIGHTING

- Available in 120VAC
- Single lamp
- 116 watt lamp
- 8,000 hour lamp life
- 1-inch pipe mount
- FAA L-810 Certified, ETL tested

Federal Signal Obstruction Lights are designed to mark tall structures that present hazards to air navigation. When installed in accordance with FAA AC 70/7460-1, these lights increase the conspicuity of obstructions for pilots flying at night.

Federal Signal Model 810S is a steady burning obstruction light (FAA Ref. L-810). The 810S mounts on 1" NPT pipe. For ease of installation and maintenance the fixture is equipped with a stainless steel tether securing the glass dome and a stainless steel band providing tool-free access to the lamp.

The 116-Watt lamp is rated for 8000 hours of continuous use. All Federal Signal Obstruction Lights are shipped factory-assembled with lamps.

Typical applications include water towers, cellular phone towers, antennas, smoke stacks, skyscrapers and airport perimeter fencing. For the number and placement of lights, the required duration of operation, and recommendations for specific types of structures, refer to FAA Advisory Circular No. 70/7460-1K.

RED AVIATION OBSTRUCTION LIGHT (810S)

Glass Dome

Stainless Steel
Tether

9.5"
24.13 cm

4.5"
11.43 cm
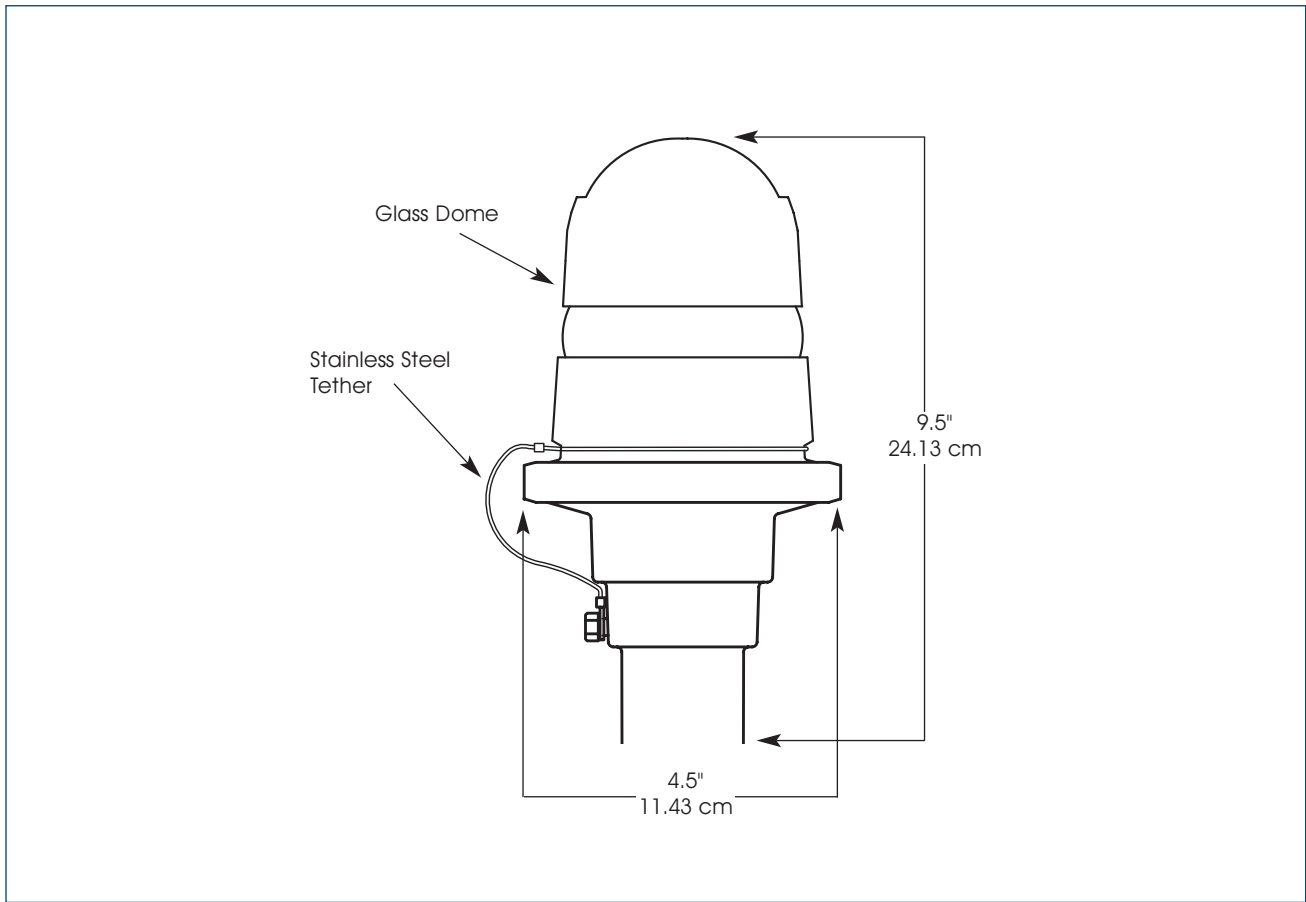
SPECIFICATIONS

Lamp Life:*	8,000 hours	8,000 hours
Lamp Style:	Incandescent	Incandescent
Operating Temperature:	-35°F to 150°F	-37°C to 40°C
Net Weight:	4.0 lbs.	1.81 kg
Shipping Weight:	5.0 lbs.	2.27 kg
Height:	9.5"	24.13 cm
Diameter:	4.5"	11.43 cm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model
- Please refer to Model Number Index 810S beginning on page 377

REPLACEMENT PARTS

Description	Part Number
Lens, Red with Tether	K8449121A
Lamp, 116W	K8107234A

Red Aviation Obstruction Light

Model 810SE

FAA APPROVED LIGHTING

- Available in 120VAC
- Single lamp
- 116 watt lamp
- 8,000 hour lamp life
- 1-inch pipe mount
- Optional photoelectric cell
- FAA L-810 Certified, ETL tested

Federal Signal Obstruction Lights are designed to mark tall structures that present hazards to air navigation. When installed in accordance with FAA AC 70/7460-1,these lights increase the conspicuity of obstructions for pilots flying at night.

Federal Signal Model 810SE is a steady burning obstruction light (FAA Ref. L-810). The 810SE features a die-cast aluminum housing with a wiring enclosure and mounts on 1" NPT pipe. For ease of installation and maintenance the housing is equipped with captive cover screws, a stainless steel tether secures the glass dome and a stainless steel band provides tool-free access to the lamp.

An optional photoelectric controller provides automatic light activation at dusk per FAA specifications. All Federal Signal Obstruction Lights are shipped factory-assembled with lamps and options.

The 116-Watt lamp is rated for 8000 hours of continuous use. Photoelectric Cells are rated at over 5000 on/off operations for years of reliability.

Typical applications include water towers, cellular phone towers, antennas, smoke stacks, skyscrapers and airport perimeter fencing. For the number and placement of lights, the required duration of operation, and recommendations for specific types of structures, refer to FAA Advisory Circular No. 70/7460-1K.

RED AVIATION OBSTRUCTION LIGHT (810SE)
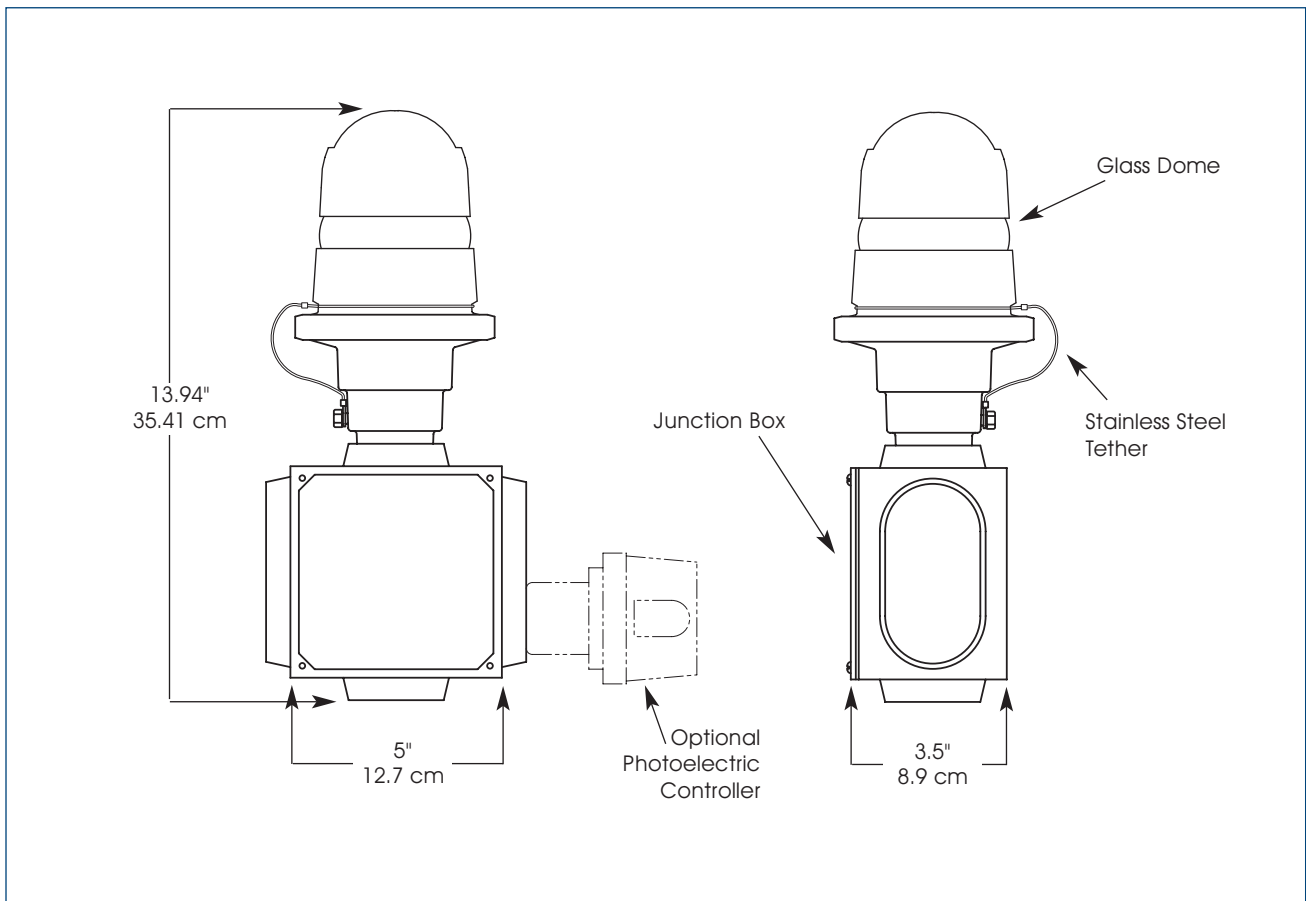
Glass Dome

Junction Box

Stainless Steel Tether

13.94"
35.41 cm

5"
12.7 cm

Optional Photoelectric Controller

3.5"
8.9 cm

SPECIFICATIONS

Lamp Life:*	8,000 hours	8,000 hours
Lamp Style:	Incandescent	Incandescent
Operating Temperature:	-35°F to 150°F	-37°C to 40°C
Net Weight:	10.0 lbs.	4.54 kg
Shipping Weight:	11.0 lbs.	4.99 kg
Height:	13.94"	35.41 cm
Width:	5.0"	12.7 cm
Depth:	3.5"	8.9 cm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Please refer to Model Number Index 810SE beginning on page 377

REPLACEMENT PARTS

Description	Part Number
Lens, Red with Tether	K8449121A
Lamp, 116W	K8107234A

Flashing Combination Audible/Visual Signal

Model AV1

Federal Signal introduces the Model AV1 combination audible/visual signal. The AV1 features a 100% polycarbonate housing that is rated for Type 3R rain-tight applications. Available dome colors include amber, blue, clear, green and red.

The AV1 design provides three mounting configurations. The black base will accommodate mounting to a $1/2$-inch NPT pipe, a 4-inch octagonal electrical box or any flat surface. The surface mount gasket serves as a template for preparing a flat surface with appropriate mounting holes.

All AV1 units feature a unique twist and lock dome to allow for tool-free access to the incandescent lamp. The fresnel lensing provides superior visibility in all directions.

The integrated buzzer provides 85dB output at 10 feet (95dB @ 1 meter). The sounder is synchronized to buzz at the same rate as the visual signal — 75 times per minute.

The AV1 comes in two voltage variations: 24VDC and 120VAC. Each unit is factory assembled with two color-coded leads. If desired, the user can remove the leads and connect directly to the terminal block located in the base of the unit. The AV1 is UL and cUL Listed and CSA Certified.

ECONOMICAL AUDIBLE/VISUAL SIGNAL

- Available in 24VDC and 120VAC

- Surface mount, integrated $1/2$ - inch pipe mount, and 4-inch electrical box mount

- Five dome colors

- Twist-off lens for easy access

- Internal buzzer produces 85dB at 10' (95dB @ 1m)

- Type 3R enclosure

- UL and cUL Listed and CSA Certified

Model	Voltage	Operating Current	Flash Rate/ Minute	Decibels @ 10'	1m	Mount
AV1	24VDC	0.98 amps	75	85	95	Pipe/Surface
AV1	120VAC	0.27 amps	75	85	95	Pipe/Surface

5 yr
FEDERAL SIGNAL
WARRANTY

AUDIBLE/VISUAL SIGNALING DEVICE (AV1)

Fresnel dome optimizes light output

Incandescent lamp features standard bayonet base

Lens gasket provides a raintight seal

Buzzer is located under upper housing
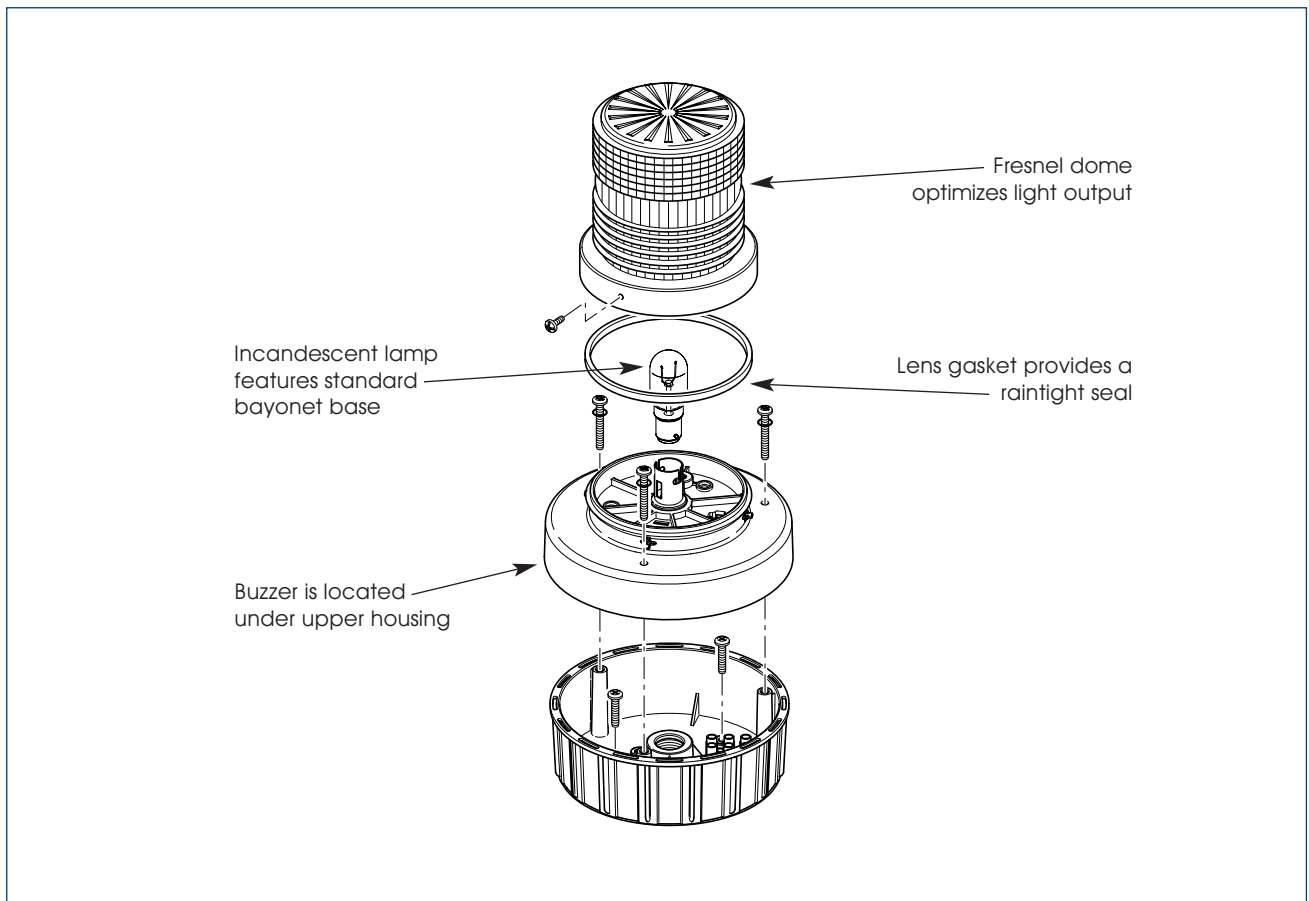
SPECIFICATIONS

Lamp Life*:	1,000 hours	1,000 hours
Lamp Style:	Incandescent	Incandescent
Operating Temperature:	-31°F to 150°F	-35°C to 66°C
Net Weight:	1.25 lbs.	0.57 kg
Shipping Weight:	1.75 lbs.	0.8 kg
Height (from bottom):	6.48"	16.5 cm
Diameter:	5.76"	14.6 cm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Please refer to Model Number Index AV1 beginning on page 377

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Dome, Amber	K8550292A-02	Incandescent Lamp (24VDC)	K8107210A
Dome, Blue	K8550292A-01	Incandescent Lamp (120VAC)	K149123A
Dome, Clear	K8550292A	Flasher, 24VDC	K8285237A-01
Dome, Green	K8550292A-04	Flasher, 120VAC	K8285238A-01
Dome, Red	K8550292A-03	Buzzer, 24VDC	K8591002A-01
Lens Gasket	K8550306A	Buzzer, 120VAC	K8591002A
Surface Mount Gasket	K8591003A		

Strobe Combination Audible/Visual Signal

Model AV1ST

Federal Signal introduces the Model AV1ST combination audible/visual signal. The AV1ST features a 100% polycarbonate housing that is rated for Type 3R rain-tight applications. Available dome colors include amber, blue, clear, green and red.

The AV1ST design provides three mounting configurations. The black base will accommodate mounting to a $1/2$-inch NPT pipe, a 4-inch octagonal electrical box or any flat surface. The surface mount gasket serves as a template for preparing a flat surface with appropriate mounting holes.

All AV1ST units feature a unique twist and lock dome to allow for tool free access to the strobe tube. The fresnel lensing provides superior visibility in all directions.

The integrated buzzer provides 85dB output at 10 feet (95dB @ 1 meter).

The AV1ST comes in two voltage variations: 24VDC and 120VAC. Each unit is factory assembled with two color-coded leads. If desired, the user can remove the leads and connect directly to the terminal block located in the base of the unit. The AV1ST is UL and cUL Listed and CSA Certified.

ECONOMICAL AUDIBLE/ VISUAL SIGNAL

- Available in 24VDC and 120VAC

- Surface mount, integrated $1/2$ - inch pipe mount, and 4-inch electrical box mount

- Five dome colors

- Twist-off lens for easy access

- Internal buzzer produces 85dB at 10' (95dB @ 1m)

- Type 3R enclosure

- UL and cUL Listed and CSA Certified

Model	Voltage	Operating Current	Flash Rate/ Minute	Joule Output	Candela Peak[1]	ECP[2]	Decibels @ 10'	1m	Mount
AV1ST	24VDC	0.39 amps	65-95	2.2	175,000	51.5	85	95	Pipe/Surface
AV1ST	120VAC	0.15 amps	65-95	2.2	175,000	51.5	85	95	Pipe/Surface

[1] Peak candela is the maximum light intensity generated by a flashing light during its light pulse
[2] ECP (Effective Candela) is the intensity that would appear to an observer if the light were burning steadily

AUDIBLE/VISUAL SIGNALING DEVICE (AV1ST)

Fresnel dome optimizes light output

Strobe Tube

Lens gasket provides a raintight seal

Buzzer is located under upper housing

SPECIFICATIONS

Lamp Life*	7000 Hours	7000 Hours
Lamp Style:	Strobe	Strobe
Operating Temperature:	-31°F to 150°F	-35°C to 66°C
Net Weight:	1.25 lbs.	0.57 kg
Shipping Weight:	1.75 lbs.	0.8 kg
Height (from bottom):	6.48"	16.5 cm
Diameter:	5.76"	14.6 cm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Please refer to Model Number Index AV1ST beginning on page 377

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Dome, Amber	K8550292A-02	PCB Assembly (120VAC)	K2001887A
Dome, Blue	K8550292A-01	PCB Assembly (24VDC)	K2005083A
Dome, Clear	K8550292A	Lens Gasket	K8550306A
Dome, Green	K8550292A-04	Surface Mount Gasket	K8591003A
Dome, Red	K8550292A-03	Strobe Tube	K149130A
		Buzzer, 24VDC	K8591002A-01
		Buzzer, 120VAC	K8591002A

Battery Powered Warning Light

Model BPL26

PORTABLE WARNING LIGHT

- 12VDC — uses two standard 6VDC lantern batteries

- Five dome colors

- 300-hour, 5W incandescent lamp

- Type 3R enclosure

Federal Signal's Model BPL26 is a portable, battery powered warning light which flashes 65 times per minute. The solid state flasher features components which are moisture-proof and reverse polarity protected to ensure extended battery life and trouble-free performance.

The BPL26 is available in five fresnel dome colors; amber, blue, clear, green and red. For increased durability, the dome is made of impact-resistant polycarbonate materials, and the base is constructed from a high-density polyethylene. A flexible, rubber seal covers the on/off switch to protect it from the elements.

A steel carrying handle on the top of the unit makes this warning light completely portable. Power is supplied by two standard 6-volt DC, spring terminal lantern batteries (not included).

The Model BPL26 is ideal for job sites requiring temporary warning lights or for any location where primary power is unavailable.

Model	Voltage	Operating Current	Flash Rate/Minute	Mount
BPL26	12VDC	0.58 amps	65	Portable

BATTERY POWERED LIGHT (BPL26)
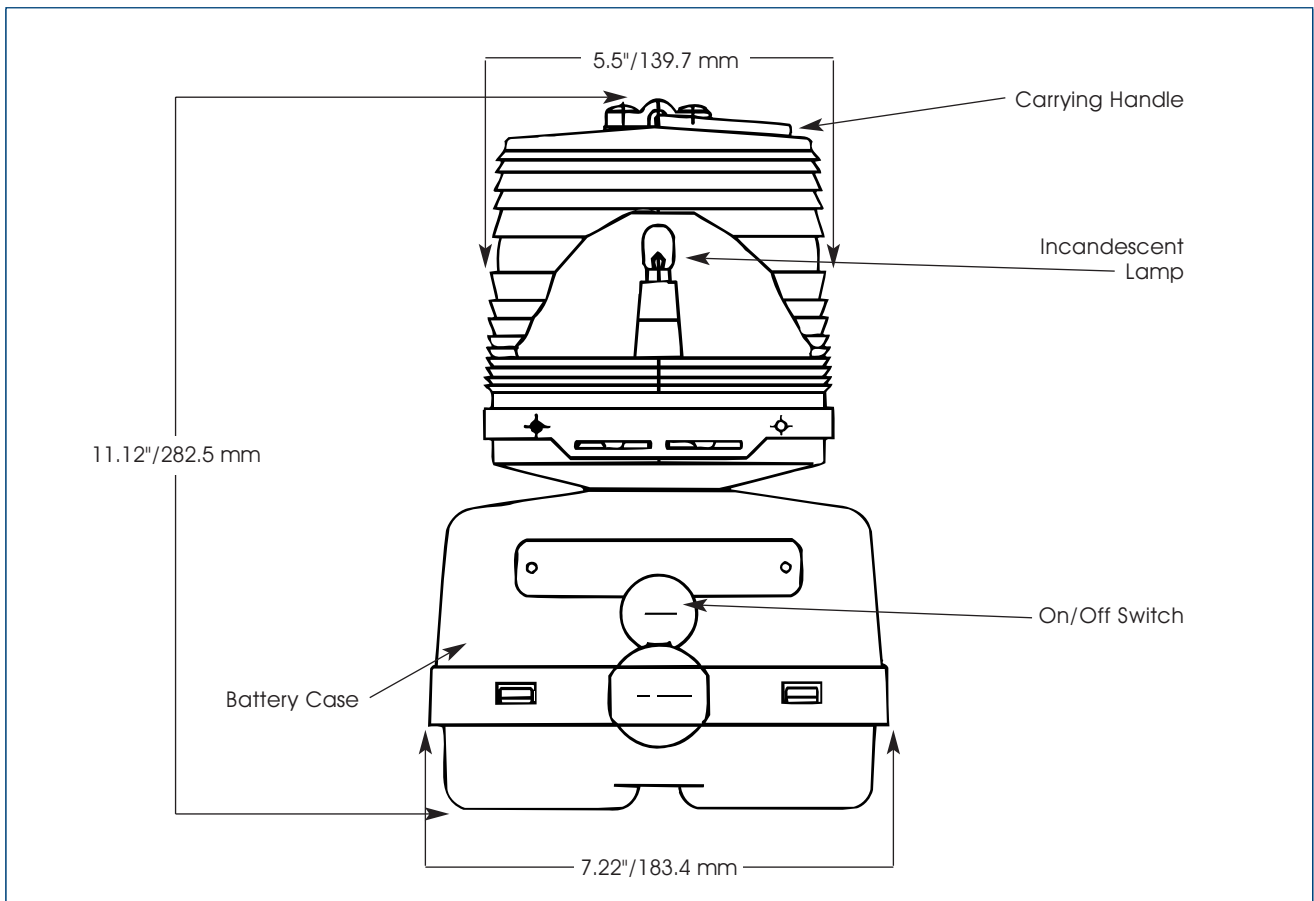
Carrying Handle

Incandescent Lamp

On/Off Switch

Battery Case

5.5"/139.7 mm

11.12"/282.5 mm

7.22"/183.4 mm

SPECIFICATIONS

Lamp Life*:	300 Hours	300 Hours
Lamp Style:	Incandescent	Incandescent
Operating Voltage:	12VDC	12VDC
Net Weight:	1.9 lbs.	0.86 kg
Shipping Weight:	3.0 lbs.	1.36 kg
Height:	11.12"	282.5 mm
Width:	7.22"	183.4 mm
Diameter of Dome:	5.5"	139.7 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model number and color
- Please refer to Model Number Index BPL26 beginning on page 374

REPLACEMENT PARTS

Description	Part Number
Dome, Amber	K8263A084A
Dome, Blue	K8263A084A-01
Dome, Red	K8263A084A-02
Dome, Clear	K8263A084A-03
Dome, Green	K8263A084A-04
12VDC, 5-watt Lamp	K8107A151A

2645 Federal Signal Dr., University Park, IL 60466   Tel: 708.534.4756   Fax: 708.534.4852   www.federalsignal-indust.com

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

Battery Powered Strobe Warning Light

Model BPL26ST

Federal Signal's Model BPL26ST is a portable, battery-powered strobe warning light which flashes 65 times per minute. Components are moisture-proof and reverse polarity protected to ensure extended battery life and trouble-free performance.

The BPL26ST is available in five fresnel dome colors; amber, blue, clear, green and red. For increased durability, the dome is made of impact-resistant polycarbonate materials and the base is constructed from a high-density polyethylene. A flexible rubber seal covers the on/off switch to protect it from the elements.

Two Magnetic pads (not shown) are included for simple yet secure, temporary mounting.

Power is supplied by two standard 6VDC, spring terminal lantern batteries (not included).

The Model BPL26ST is ideal for job sites requiring temporary warning lights or for any location where primary power is unavailable.

PORTABLE WARNING LIGHT

- 12VDC — uses two standard 6VDC lantern batteries
- 4,000 Hour strobe tube
- Five dome colors
- Type 3R weatherproof enclosure
- Magnetic mount

Model	Voltage	Operating Current	Flash Rate/ Minute	Mount
BPL26ST	12VDC	0.48 amps	60	Magnetic

5yr FEDERAL SIGNAL WARRANTY

BATTERY POWERED LIGHT (BPL26ST)

5.5"/139.7 mm

11.12"/282.5 mm

On/Off Switch

Battery Case

7.22"/183.4 mm

Magnetic
Mounting Pads
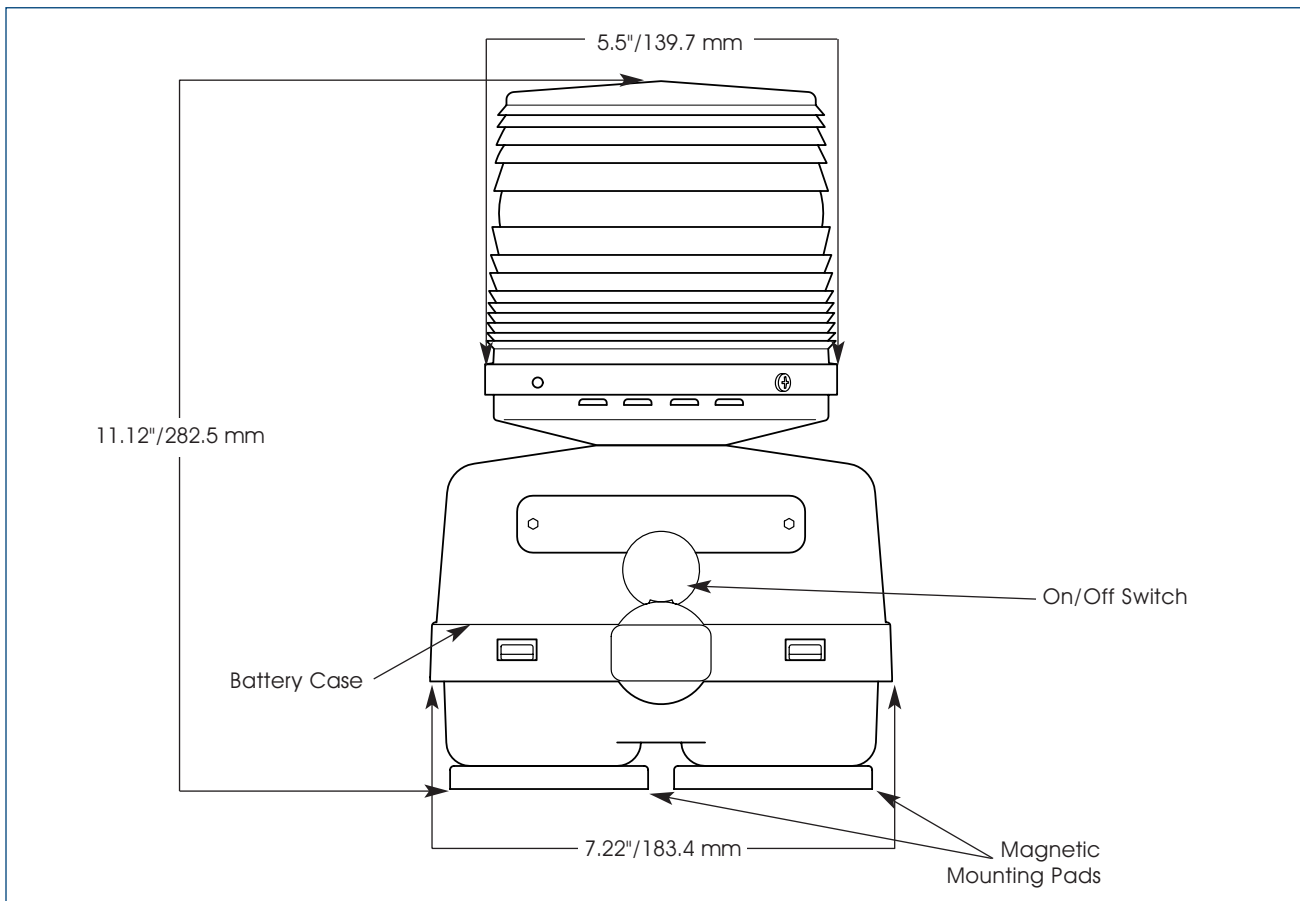
SPECIFICATIONS

Lamp Life*:	4,000 Hours	4,000 Hours
Lamp Style:	Strobe	Strobe
Operating Voltage:	12VDC	12VDC
Net Weight:	2.3 lbs.	1.04 kg
Shipping Weight:	3.5 lbs.	1.59 kg
Height:	10.5"	266.7 mm
Width:	7.22"	183.4 mm
Diameter of Dome:	5.5"	139.7 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model number and color
- Please refer to Model Number Index BPL26ST beginning on page 375

REPLACEMENT PARTS

Description	Part Number
Dome, Amber	K8263079A
Dome, Blue	K8263079A-01
Dome, Clear	K8263079A-04
Dome, Red	K8263079A-02
Dome, Green	K8263079A-03
Strobe Tube	K8107215A

Fireball®
Strobe Warning Light

Model FB2PST and FB2PST-I

Federal Signal's brightest and most compact strobe light, the Fireball® emits a powerful "lightning bolt" flash of light. Approximately five inches tall and four inches in diameter and rated at 300 effective candela, the Fireball is an economical solution to a wide variety of stationary and vehicular warning requirements. The Fireball is available in 12-24VDC, 24VDC, 120VAC and 240VAC. All models are UL Listed and CSA Certified. The FB2PST is available in six colors – amber, blue, clear, green, magenta, and red.

The 24VDC Model FB2PST-I features a voltage in-rush limiting PCB design that provides greater compatibility with factory automation control systems and less electrical interference with in-rush sensitive devices.

The Fireball features a unique dome that twists off easily for quick dome and lamp replacements. The newly redesigned base features an integrated $1/2$-inch pipe mount base as well as the three holes required for surface mount configurations. Black epoxy paint is electrostatically applied to the base for superior corrosion resistance. The Fireball dome and base design provides a watertight, dust-tight and corrosion resistant Type 4X rating.

The FB2PST is designed for stationary pipe and surface mount applications.

The Fireball can be used in any application where a superior visual signal is needed. It is especially effective in the warning of industrial hazards, process control, status indication and in areas with high ambient noise levels.

Federal Signal's Fireball Strobe is a very low-maintenance warning light for industrial applications where a vibration-resistant light is required to signal an emergency or process status.

LIGHT DUTY STROBE LIGHT

- Available in 12-24VDC, 120VAC and 240VAC

- Six dome colors

- 10,000 hour strobe tube

- Integrated $1/2$ - inch pipe and surface mount

- Indoor use only

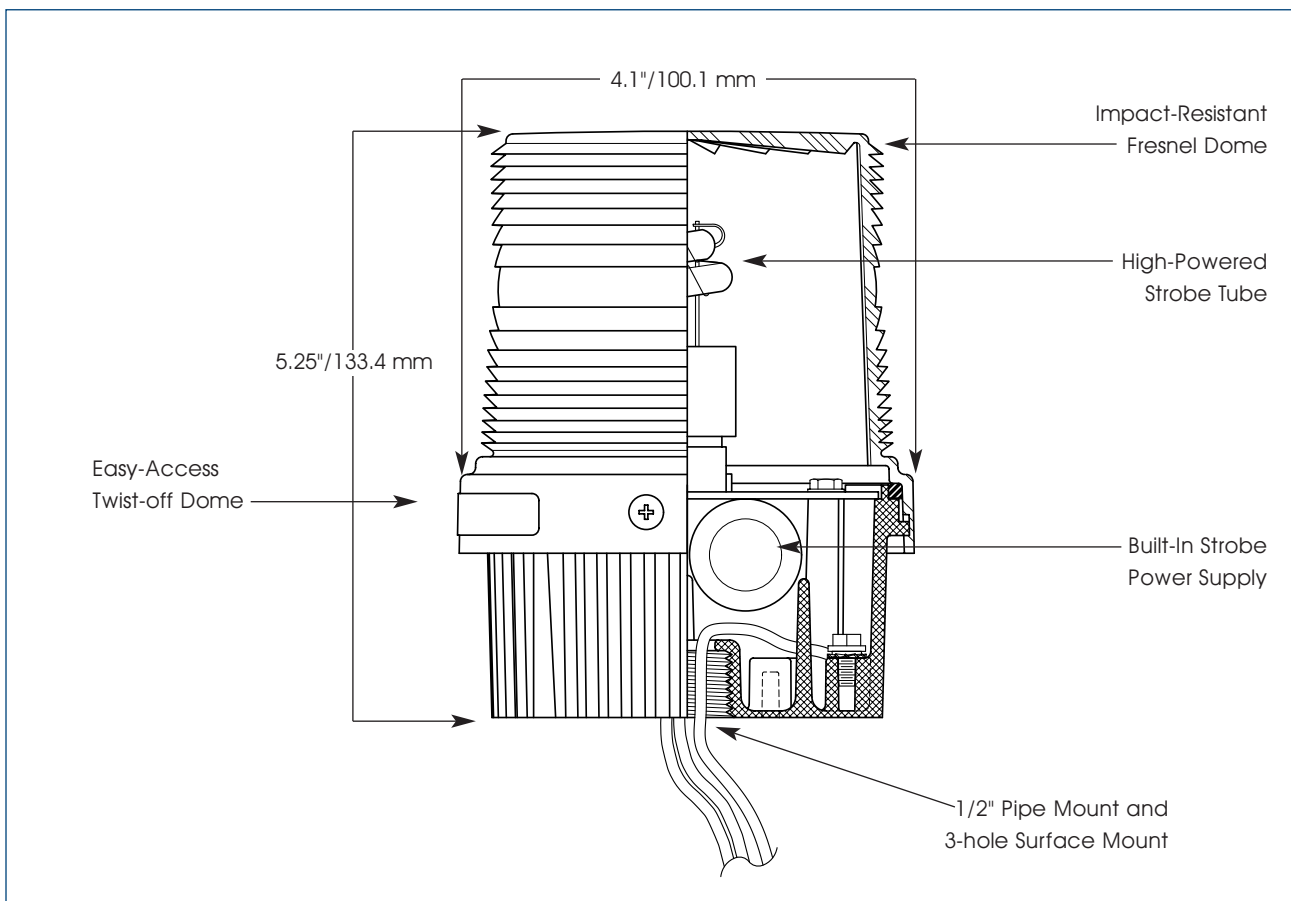- Type 4X, IP66 enclosure

- UL and cUL Listed and CSA Certified

Model	Voltage	Operating Current	Flash Rate/ Minute	Candela Peak[1]	ECP[2]	Mount
FB2PST	12-24VDC	1.70-0.70 amps	80	1,000,000	300	$1/2$" Pipe/Surface
FB2PST-I	24VDC	0.70 amps (2.0 amp In-rush)	80	1,000,000	300	$1/2$" Pipe/Surface
FB2PST	120VAC 50/60Hz	0.25 amps	90	1,000,000	300	$1/2$" Pipe/Surface
FB2PST	240VAC 50/60Hz	0.20 amps	90	1,000,000	300	$1/2$" Pipe/Surface

[1] Peak candela is the maximum light intensity generated by a flashing light during its light pulse
[2] ECP (Effective Candela) is the intensity that would appear to an observer if the light were burning steadily

5yr FEDERAL SIGNAL WARRANTY

FIREBALL® STROBE WARNING LIGHT (FB2PST)

4.1"/100.1 mm

5.25"/133.4 mm

Impact-Resistant Fresnel Dome

High-Powered Strobe Tube

Easy-Access Twist-off Dome

Built-In Strobe Power Supply

1/2" Pipe Mount and 3-hole Surface Mount

SPECIFICATIONS

Lamp Life*:	10,000 Hours	10,000 Hours
Lamp Style:	Strobe	Strobe
Operating Temperature:	-31°F to 150°F	-35°C to 66°C
Net Weight:	2.0 lbs.	0.9 kg
Shipping Weight:	2.12 lbs.	0.96 kg
Height:	5.25"	133.4 mm
Diameter:	4.10"	100.1 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Specify options:
  Corner Bracket (LCMB2)*
  Wall Bracket (LWMB2)*
- Please refer to Model Number Index FB2PST beginning on page 375

  * Not Type 4X rated.

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Dome, Amber	K8550320A	PC Assembly, 12-24VDC	K2001202C
Dome, Blue	K8550320A-01	PC Assembly, 120VAC	K200D866G
Dome, Clear	K8550320A-02	PC Assembly, 240VAC	K200D866G-01
Dome, Green	K8550320A-03	Strobe Tube, Series A, A1, A2, A3	Call Factory
Dome, Red	K8550320A-04	Strobe Tube, Series A4, A5, B	K8107177A
Dome, Magenta	K8550320A-05	120VAC Fuse	K148A155A-01

Fireball® 2 Explosion-Proof Strobe Warning Light

Model FB2PSTX and FB2PSTX-I

Federal Signal's FB2PSTX explosion-proof strobe light is a compact unit that produces a "lightning bolt" flash of light. Measuring 13.69" (348mm) high and 7.44" (189mm) in diameter, the FB2PSTX is available in 12-24VDC, 24VDC, 120VAC and 230-240VAC. These strobe lights are well suited for a wide range of explosion-proof warning light applications.

All models are UL and cUL Listed for indoor/outdoor and marine use. This model is UL Listed for Class I, Division 1, Groups C and D; Class I, Division 2, Groups A, B, C and D; Class II, Division 1, Groups E, F and G; Class II, Division 2, Groups F and G; and Class III.

Model FB2PSTX has a self-contained power supply. The copper-free aluminum finned base dissipates heat and ensures long life. The outer dome is made of tempered glass. Polycarbonate inner lenses are available in amber, blue, clear, green and red. A rugged ceiling mount fixture is standard; optional wall mounts and dome guards are also available.

The FB2PST-I features a voltage in-rush limiting PCB design that provides greater compatibility with factory automation control systems and less electrical interference with in-rush sensitive devices.

The Model FB2PSTX is suited for any application where a superior visual signal is needed and is especially effective for warning of industrial hazards, process control, status indication or in areas with high ambient noise levels.

DESIGNED FOR USE IN EXPLOSION-PROOF ATMOSPHERES

- Available in 12-24VDC, 120VAC and 230-240VAC

- Five lens colors

- 10,000 hour strobe tube

- Ceiling mount standard; other options available

- Marine Listed

- Type 4X, IP66 enclosure

- UL and cUL Listed

Model	Voltage	Operating Current	Flash Rate/ Minute	Candela Peak[1]	ECP[2]
FB2PSTX	12-24VDC	1.70-0.70 amps	80	800,000	320
FB2PSTX-I	24VDC	0.70 amps (2.0 amp In-rush)	80	800,000	320
FB2PSTX	120VAC 50/60HZ	0.25 amps	80	800,000	320
FB2PSTX	230-240VAC 50/60HZ	0.20 amps	80	800,000	320

[1] Peak candela is the maximum light intensity generated by a flashing light during its light pulse
[2] ECP (Effective Candela) is the intensity that would appear to an observer if the light were burning steadily

EXPLOSION-PROOF STROBE LIGHT (FB2PSTX/FB2PSTX-I)

3/4" NPT Conduit

Set Screws

Copper-Free
Aluminum Housing

Holder

Strobe Flash Tube

Internal Lens

Glass Outer Dome

External Ground
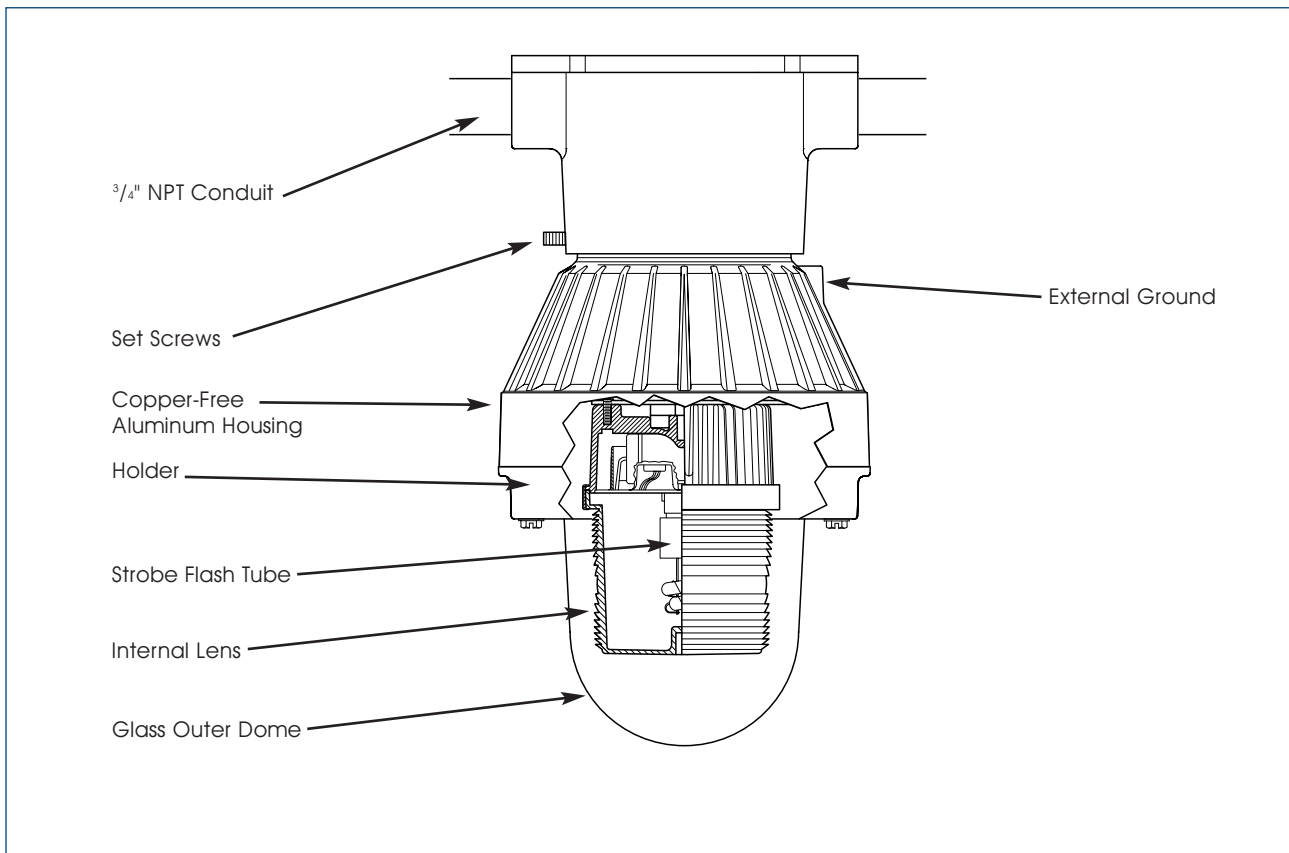
SPECIFICATIONS

Lamp Life*:	10,000 Hours	10,000 Hours
Operating Temperature:	-13°F to 149°F	-25°C to 65°C
Net Weight:	9.6 lbs.	4.35 kg
Shipping Weight:	13.1 lbs.	5.94 kg
Height:	13.69"	348.0 mm
Diameter:	7.44"	189.0 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Specify options:
   Wall Mount (WMXC)
   Dome Guard (DGFBX)
- Please refer to Model Number Index
   FB2PSTX beginning on page 376

REPLACEMENT PARTS

Description	Part Number
Inner Lens, Amber	K8550292A-02
Inner Lens, Blue	K8550292A-01
Inner Lens, Clear	K8550292A
Inner Lens, Green	K8550292A-04
Inner Lens, Red	K8550292A-03
Outer Dome Assembly	K8550272A-01
PC Assembly, 12-24VDC	K2001202C
PC Assembly, 120VAC	K200D866G
PC Assembly, 240VAC	K200D866G-01
Strobe Tube	K8107177A

FireBeam® Compact Vehicular Warning Light

Model FB3SM

Federal Signal's FireBeam® is a super-bright, compact vehicular warning light. This rotating 55-watt halogen light produces 68,000 candelas per flash.

Each lightweight unit features a polycarbonate base and snap-on dome. The light is easily and quickly serviced without the use of tools.

The jewel-shaped lens is available in five colors: amber, blue, clear, green, and red. Each FireBeam comes with a black half-dome that snaps over the back of the unit and prevents back flash when used inside vehicles.

The FireBeam features a dual speed motor with a convenient slide switch that allows you to choose an operating speed of 95 or 175 flashes per minute.

Power is supplied to the FireBeam via a 10-foot coil cord with a cigarette lighter-type plug. The FireBeam operates on 12VDC.

The FireBeam is supplied with both a magnetic mount for use outside the vehicle on the roof or hood and a swivel mount for permanent installation.

OUR BRIGHTEST VEHICULAR WARNING LIGHT!

- Available in 12VDC
- 68,000 candela output
- 55-watt Halogen lamp
- Dual Speed Motor for 95 or 175 FPM
- Five dome colors
- Low profile — only 3.8" high

Model	Voltage	Operating Current	Flash Rate/ Minute	Candela Output
FB3SM	12VDC	4.3 amps	95 or 175	68,000

FIREBEAM® COMPACT VEHICULAR WARNING LIGHT (FB3SM)

Optional Snap-On Half Lens in Black eliminates backflash

Rotating Parabolic Reflector operates at 95 or 175 flashes per minute

55-Watt Halogen Lamp

10-foot electrical coil-cord features a cigarette lighter type plug for 12VDC power

A

A

Mounting Options:
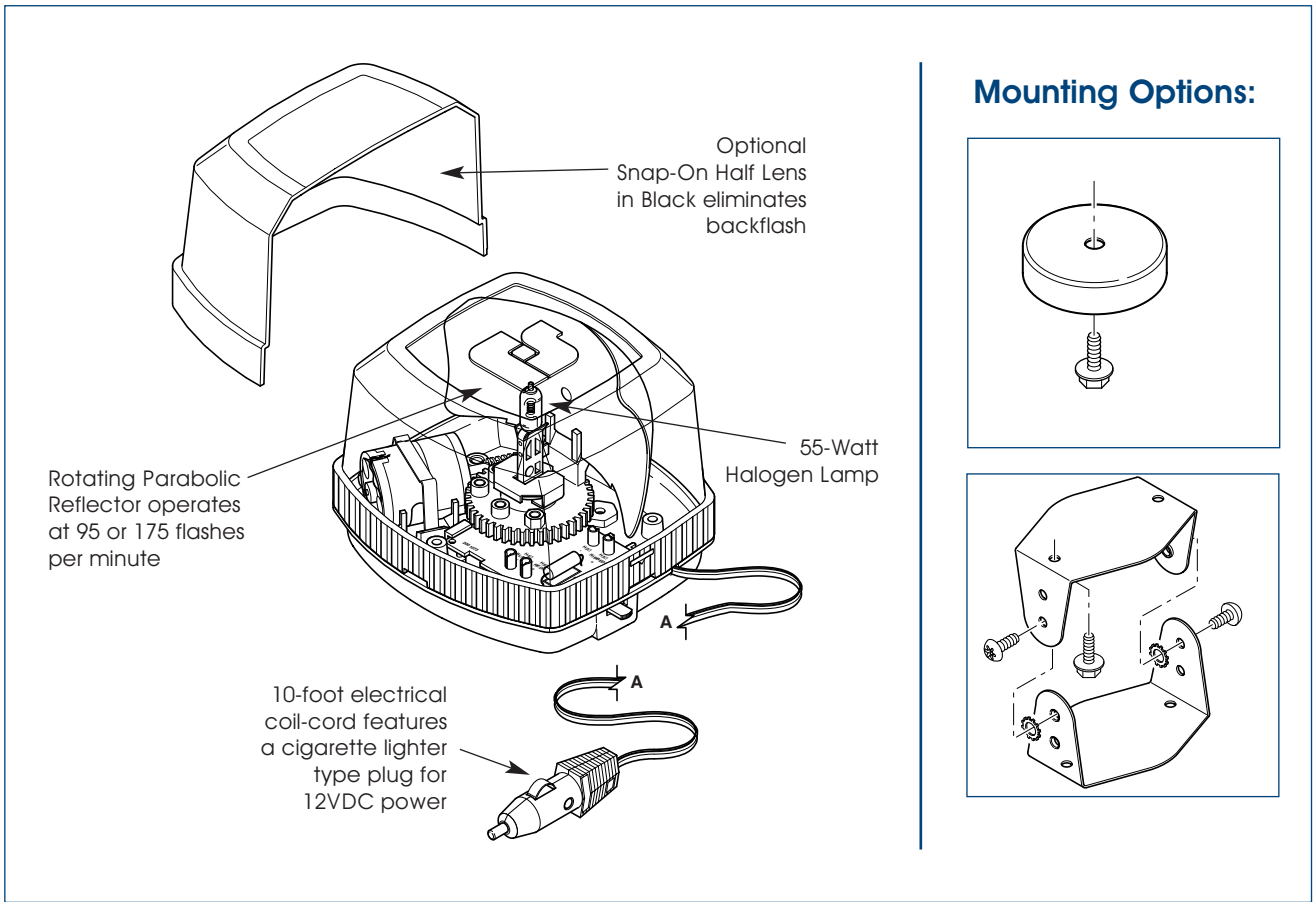
SPECIFICATIONS

Lamp Life:*	200 hours	200 hours
Lamp Style:	Halogen	Halogen
Net Weight:	1.8 lbs.	0.8 kg
Shipping Weight:	2.0 lbs.	0.9 kg
Height:	4.8"	12.0 cm
Width:	3.8"	9.5 cm
Depth:	5.1"	13.0 cm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model and color
- Please refer to Model Number Index FB3SM beginning on page 373

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Dome, Amber	K8550137A-02	55-Watt Halogen Lamp, 12VDC	K8440A265A-02
Dome, Blue	K8550137A-03	Motor for FB3SM	K8422B463B-02
Dome, Clear	K8550137A	Half Lens Cover, Black	K8550140A
Dome, Red	K8550137A-01	Cigarette Plug Cord	K8550318A
Dome, Green	K8550137A-04	Magnet Mount Assembly	K8550A012A

Streamline® Low Profile Mini Strobe

Model LP1

Federal Signal introduces the Model LP1 low profile strobe light. This rectangular Type 4X strobe light is available in five colors: amber, blue, clear, green and red. The LP1 is designed to be flush mounted to control panels or other flat surfaces. Mounting is accomplished with two supplied 1¹/₄", ⁸/₃₂ slotted hex bolts. A polypropylene gasket is supplied to create a water-tight and dust-tight seal. The gasket mounts between the base of the light and the mounting surface.

The user replaceable strobe tube is rated for 4,000 hours of life. The LP1 is available in 12VDC, 24VDC, 120VAC and 240VAC versions. The unit is UL Listed. Access to the printed circuit board and strobe tube is provided through the back of the unit.

With its Type 4X rating, small size, and bright signal, the LP1 suits an endless number of applications. The LP1 is especially suited for use on control panels, machines, above entry ways, on walls, and along assembly lines. The 12/24VDC units are suitable in battery backup systems and vehicular applications such as forklifts and moving guided vehicles.

COMPACT, ECONOMICAL STROBE LIGHT — IDEAL FOR CONTROL PANEL APPLICATIONS

- Available in 12VDC, 24VDC, 120VAC and 240VAC
- Easy access dome available in five colors
- Surface mount
- Low profile — only 2.6" High by 2.33" Wide by 5" Long
- Type 4X, IP65 enclosure
- UL Listed

Model	Voltage	Operating Current	Flash Rate/ Minute	Candela Peak[1]	ECP[2]	Mount
LP1	12VDC	0.18 amps	80	108,000	30	Surface
LP1	24VDC	0.08 amps	80	108,000	30	Surface
LP1	120VAC	0.06 amps	80	108,000	30	Surface
LP1	240VAC	0.03 amps	80	108,000	30	Surface

[1] Peak candela is the maximum light intensity generated by a flashing light during its light pulse

[2] ECP (Effective Candela) is the intensity that would appear to an observer if the light were burning steadily

LOW-PROFILE MINI STROBE (LP1)
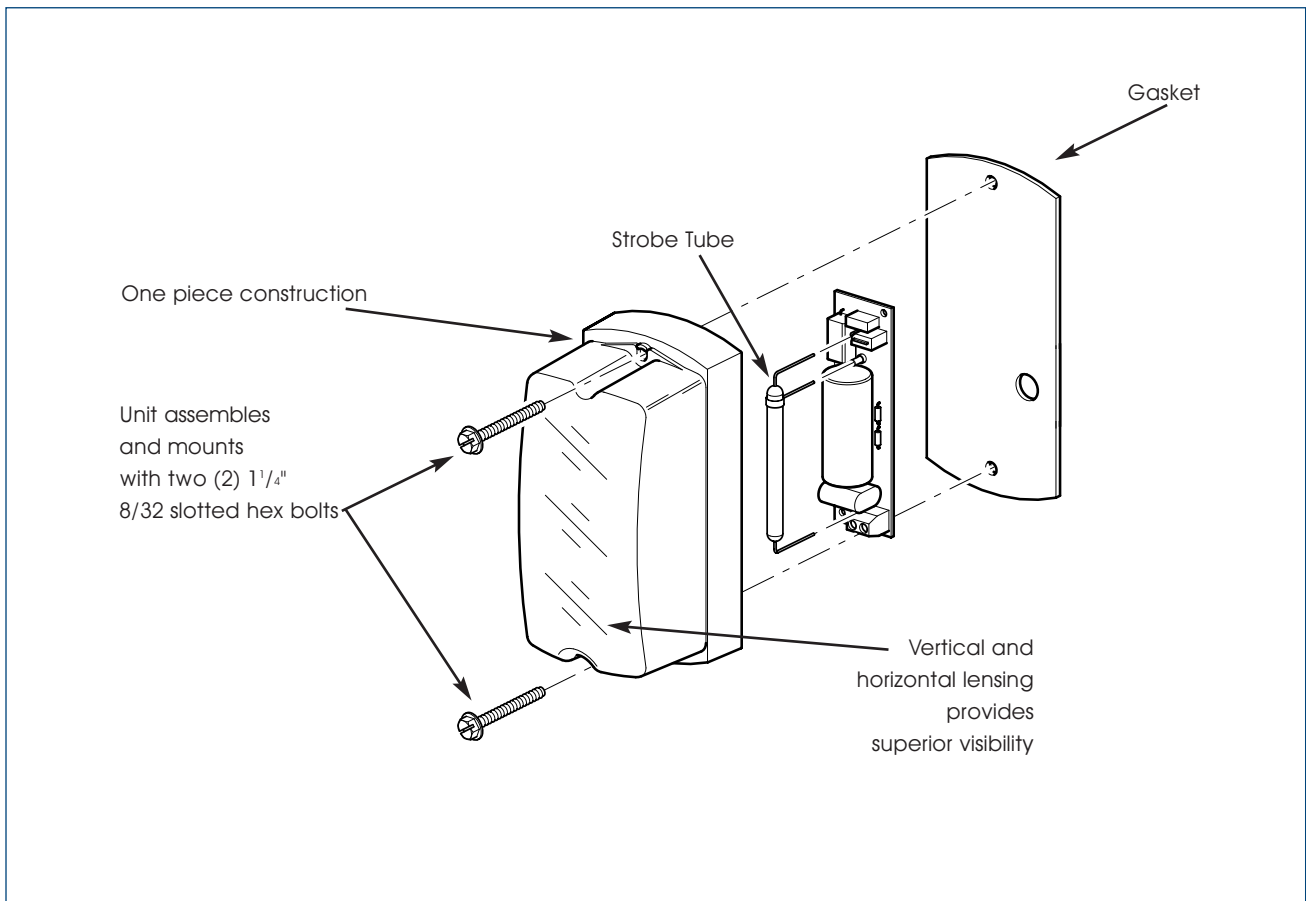
Gasket

Strobe Tube

One piece construction

Unit assembles and mounts with two (2) 1¼" 8/32 slotted hex bolts

Vertical and horizontal lensing provides superior visibility

SPECIFICATIONS

Lamp Life:	4,000 hours	4,000 hours
Lamp Style:	Strobe	Strobe
Operating Temperature:	-31°F to 151°F	-35°C to 66°C
Net Weight:	0.23 lbs.	0.1 kg
Shipping Weight:	0.6 lbs.	0.27 kg
Height:	2.61"	6.63 cm
Width:	2.33"	5.92 cm
Length:	5.05"	12.83 cm

REPLACEMENT PARTS

Description	Part Number
Replacement Strobe Tube	K149128A
Dome, Amber	K8435711A-02
Dome, Blue	K8435711A-03
Dome, Clear	K8435711A
Dome, Green	K8435711A-04
Dome, Red	K8435711A-01

HOW TO ORDER

- Specify model, voltage and color
- Please refer to Model Number Index LP1 beginning on page 374

Streamline®
Low Profile Light

Model LP2

PERFECT SIZE MEETS SUPERIOR PERFORMANCE

- Available in 24VAC/VDC and 120VAC

- Surface or panel mount

- Steady burning

- Five dome colors

- Type 4X enclosure

- Low profile — only 2.5" H x 3" diameter (65mm x 76mm)

- Built-in strain relief

- Incandescent lamp included

- UL and cUL Listed and CE Compliant

The Streamline® Model LP2 is a unique, steady burning incandescent light, ideal for both horizontal and vertical panel mount installation. This device mounts easily through any 1.54" (39mm) diameter hole; a lock nut secures the light firmly in place. A gasket positioned above the mounting surface assures a water-tight and dust-tight fit. The lamp is easily replaced from below the mounting surface. Inherent strain relief secures all wiring from the rear, for added durability. The enclosure consists of a polycarbonate dome in five colors (amber, blue, clear, green and red), and a polyamide base; the enclosure with gasket is rated Type 4X.

A 6-watt incandescent lamp is included with the 24VAC/DC and 120VAC units. The double-contact bayonet base (Type S-6) is a standard lamp style, readily available when replacement is required. Lamp life is approximately 1,500 hours when run on AC power.
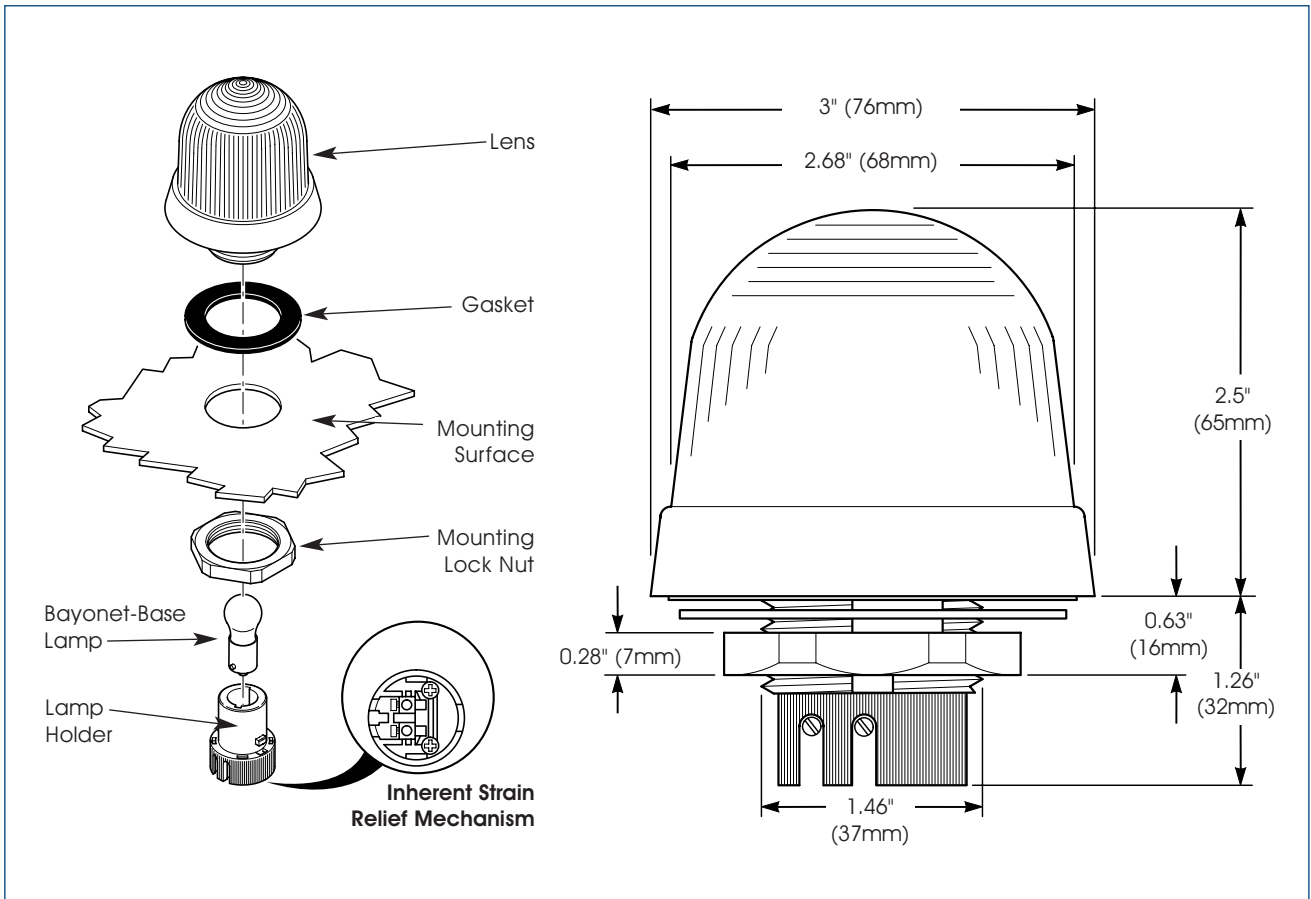
Like all Federal Signal products, the StreamLine LP2 is designed with customer applications in mind. The LP2 functions in most PLC applications (including triac outputs). Careful consideration has been given to the relationship between lamp shape and lens design for maximum light output.

When your application calls for a compact signal with unparalleled reliability, Federal Signal's Streamline products are the clear choice.

Model	Voltage	Power	Operating Current
LP2	24VAC/DC	6 watts	0.30 amps
LP2	120VAC	6 watts	0.06 amps

5 yr FEDERAL SIGNAL WARRANTY

STREAMLINE® LOW PROFILE LIGHT (LP2)

Lens

Gasket

Mounting Surface

Mounting Lock Nut

Bayonet-Base Lamp

Lamp Holder

Inherent Strain Relief Mechanism

3" (76mm)

2.68" (68mm)

2.5" (65mm)

0.28" (7mm)

0.63" (16mm)

1.26" (32mm)

1.46" (37mm)

SPECIFICATIONS

Lamp Life:*	1,500 hours	1,500 hours
Lamp Style:	Incandescent	Incandescent
Operating Temperature:	-4°F to 140°F	-20°C to 60°C
Net Weight:	3.4 oz.	96.4 g
Shipping Weight:	4.5 oz.	127.6 g
Height — above surface:	2.5"	65.0 mm
Height — below surface:	1.26"	32.0 mm
Diameter:	3.0"	75.0 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Please refer to Model Number Index LP2 beginning on page 373

REPLACEMENT PARTS

Description	*Part Number*
Lamp, 24VAC/DC	K8107195A
Lamp, 120VAC	K8107195A-01

Streamline® Low Profile Strobe Light

Models LP3S, LP3E, LP3M

PERFECT SIZE MEETS SUPERIOR PERFORMANCE

- LP3S and LP3M are available in 12-48VDC, 120VAC and 240VAC; LP3E in 120VAC

- Surface mount, Edison mount, or integrated $1/2$ - inch pipe mount

- Five dome colors

- Screw-on lens provides easy access

- Low profile — Model LP3S is only 5" high

- Type 4X, IP66 enclosure

- PLC and triac compatible

- UL and cUL Listed, CSA Certified and CE Approved*

  * CE Approval for S, M models only.

Federal Signal introduces the Model LP3 low profile strobe light. This Type 4X strobe is available in five colors: amber, blue, clear, green and red.

The LP3 is offered in three mounting configurations: the LP3S features a three-hole surface mount — ideal for control panels and other flat or flush surfaces; the LP3E features a standard A-19 medium Edison screw base; the LP3M features a $1/2$" male pipe mount and 18' wire leads.

Both the LP3S and LP3M include a surface gasket to complete the Type 4X installation. An optional dome guard is available for use with the LP3M when installed flush with a panel. All LP3 units feature a unique threaded screw-on lens to provide for tool free wiring and strobe tube replacement. The strobe tube is rated for 7,000 hours.

LP3 comes in three voltage variations: 12-48VDC, 120VAC and 240VAC. The state-of-the-art strobe mechanism produces 2.2 joules of energy, while drawing relatively low amperage.

StreamLine® strobes feature high-quality, long-life strobe tubes which are designed to reduce tungsten build-up for longer lamp maintenance cycles. Careful consideration is given to the relationship between tube shape and lens design for maximum light output. StreamLine products make use of surface mount technology, which provides a more powerful light in a much smaller package. The high-quality dry-electrolyte capacitor used in StreamLine products runs cooler than those used in many competitive strobes, resulting in a more reliable product that won't fail due to overheating.

Model	Voltage	Operating Current	Flash Rate/ Minute	Joule Output	Candela Peak[1]	ECP[2]
LP3	12-48VDC	0.44-0.10 amps	65-95	2.2	175,000	51.5
LP3	120VAC	0.10 amps	65-95	2.2	175,000	51.5
LP3	240VAC	0.07 amps	65-95	2.2	175,000	51.5

[1] Peak candela is the maximum light intensity generated by a flashing light during its light pulse
[2] ECP (Effective Candela) is the intensity that would appear to an observer if the light were burning steadily

STREAMLINE® LOW PROFILE STROBE LIGHT (LP3S/LP3E/LP3M)

LP3S

- Dome
- Lens Gasket
- Set Screw
- Custom Strobe Tube
- Snap-in Printed Circuit Board Assembly
- Surface Mount Base
- Gasket
- Mounting Surface

Power Connection Schematic

LP3E — A-19 Medium Edison Screw-in Base

LP3M — ¹/₂" Male Pipe Mount

SPECIFICATIONS

Lamp Life:*	7,000 hours	7,000 hours
Lamp Style:	Strobe	Strobe
Operating Temperature:	-31°F to 150°F	-35°C to 66°C
Net Weight:	7.3 oz.	206.96 g
Shipping Weight:	8.5 oz.	240.98 g
Diameter:	3.125"	7.94 cm
Height (from bottom):		
LP3S	5.0"	12.7 cm
LP3E	6.1"	15.5 cm
LP3M	5.8"	14.7 cm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Specify options
  Wire/Dome guard for LP3S and LP3M (LP3G)
- Please refer to Model Number Index LP3 (E.M) beginning on page 375

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Dome, Amber	K8589063A	PC Assembly, 12-48VDC	K2001316B
Dome, Blue	K8589063A-01	PC Assembly, 120VAC	K2001317A
Dome, Clear	K8589063A-02	PC Assembly, 240VAC	K2001317A-01
Dome, Green	K8589063A-03	Gasket, Lens	K8589013A
Dome, Red	K8589063A-04	Gasket, Base LP3S	K8589011A
Strobe Tube	K149130A		

StreamLine®
Low Profile
Steady Burning Light

Models LP3MI, LP3PI, LP3TI

Federal Signal introduces the Model LP3I low profile steady burning light. The Type 4X light is available in five colors: amber, blue, clear, green, and red.

The LP3I is offered in three mounting configurations. LP3PI features an integrated $1/2$-inch NPT pipe mount. LP3MI features an integrated $1/2$-inch male pipe mount. The "T-mount" LP3TI has a popular 2-hole design for wall or flush mounting.

Both the LP3MI and LP3TI include a surface gasket to complete the Type 4X installation. All LP3I units feature a threaded screw-on lens. The LP3I comes in two voltages: 24VDC and 120VAC.

A 15-watt incandescent lamp is included with all units. The lamp features a standard double-contact bayonet base readily available when replacement is required.
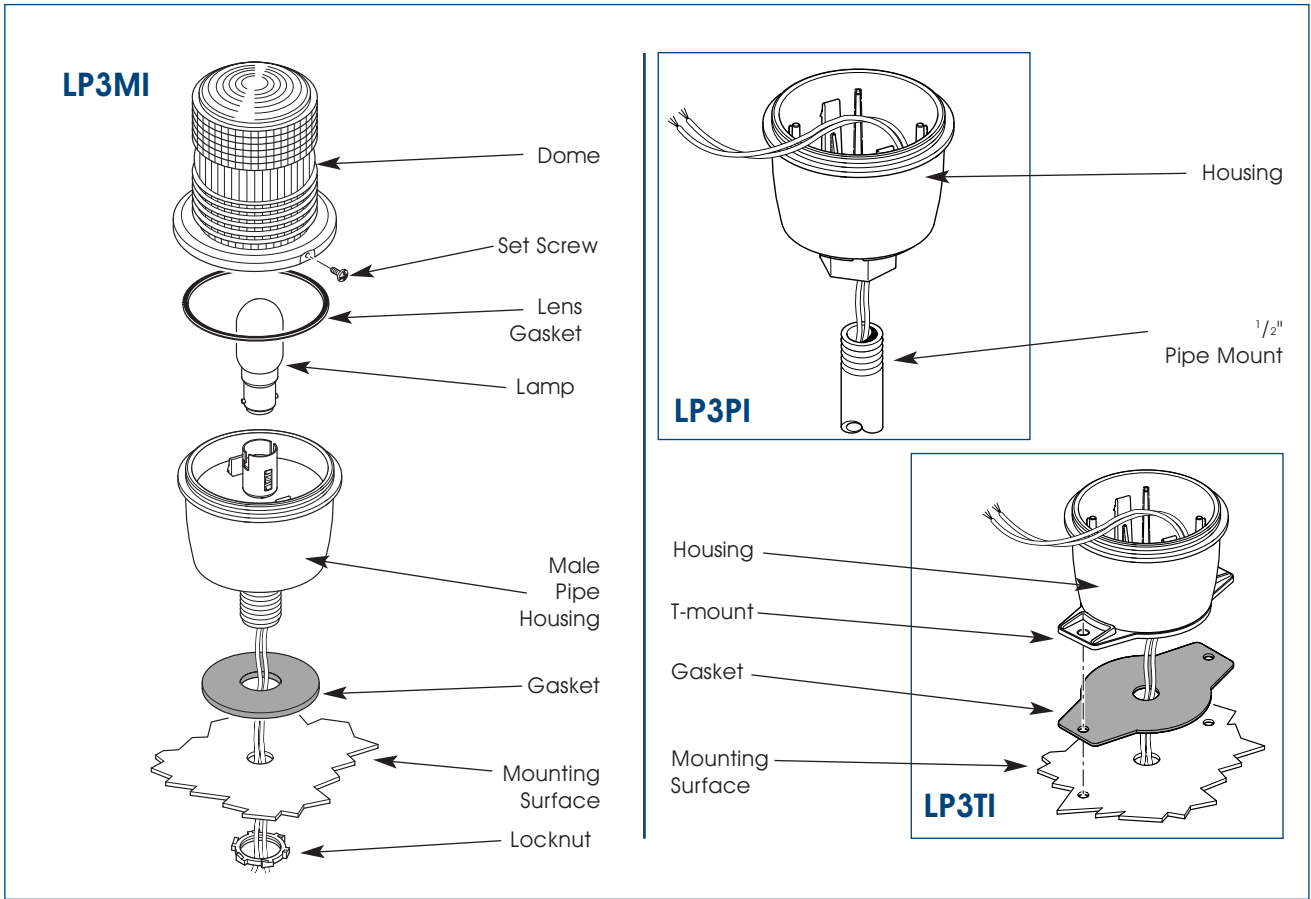
Like all Streamline® products, the LP3I is designed with OEM applications in mind. It is economical, easy to install and attractive. Careful consideration has been given to the relationship between lamp shape and lens design for maximum light output.

When your application calls for a compact signal with unparalleled reliability, Federal Signal's Streamline products are the clear choice.

COMPACT, ECONOMICAL AND FLEXIBLE

- Available in 24VDC and 120VAC

- T-mount, integrated $1/2$ - inch pipe mount or $1/2$ - inch male pipe mount

- Incandescent lamp included

- Five dome colors

- Screw-on lens

- Type 4X enclosure

- Optional wire guard

- UL and cUL Listed and CSA Certified

Model	Voltage	Power	Operating Current
LP3I	24VDC	15-watts	0.67 amps
LP3I	120VAC	15-watts	0.13 amps

STREAMLINE® LOW PROFILE STEADY BURN LIGHT (LP3MI/LP3PI/LP3TI)

LP3MI

- Dome
- Set Screw
- Lens
- Gasket
- Lamp
- Male Pipe Housing
- Gasket
- Mounting Surface
- Locknut

LP3PI

- Housing
- ¹/₂" Pipe Mount

LP3TI

- Housing
- T-mount
- Gasket
- Mounting Surface

SPECIFICATIONS

Operating Temperature:	-31°F to 150°F	-35°C to 65°C
Net Weight:	7.3 oz.	206.96 g
Shipping Weight:	8.5 oz.	240.98 g
Diameter:	3.13"	7.95 cm
Height (from bottom):		
LP3PI	5.7"	14.48 cm
LP3MI	5.8"	14.7 cm
LP3TI	5.1"	12.95 cm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Specify options (wire guard - LP3G)
- Please refer to Model Number Index LP3I beginning on page 373

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Lens, Amber	K8589063A	Lamp, 120VAC	K8107194A
Lens Blue	K8589063A-01	Lamp, 24VDC	K8107227A
Lens, Clear	K8589063A-02	Gasket, LP3TI	K8589012A
Lens, Green	K8589063A-03	Gasket, Lens	K8589013A
Lens, Red	K8589063A-04		

StreamLine®
Low Profile LED Light

Model LP3SL, LP3PL, LP3TL, LP3ML

ECONOMICAL
AUDIBLE/VISUAL SIGNAL

- Available in 24VDC and 120VAC

- T-mount, integrated $\frac{1}{2}$ - inch pipe mount, $\frac{1}{2}$ - inch male pipe mount or surface mount

- Five dome/lens colors available

- 100,000 LED lamp life*

- Screw on lens

- Type 4X enclosure

- Optional wire lens guad

- UL and cUL Listed and CSA Certified

Federal Signal introduces the Model LP3L low profile LED light. The Type 4X light is available in five LED/lens color combinations; amber, blue, clear, green and red. All LP3 models feature the easy access screw on lens.

The LP3L is offered in four mounting configurations; LP3PL with an integrated $\frac{1}{2}$-inch NPT pipe mount, LP3ML features an integrated $\frac{1}{2}$-inch male pipe mount, LP3TL features a T formation base with 2 mounting holes for wall or flush mounting and the LP2SL features a three hole surface mounting configuration. The T-mount and Surface mount units include surface gaskets to maintain the 4X installation.

The LP3L series is available in 24VDC and 120VAC. All models include the vibration resistant, double contact bayonet style 100,000 hour LED module.

Like all StreamLine® products, the LP3L is designed with OEM applications in mind. It is economical, easy to install and attractive. Careful consideration has been given to the relationship between the LED light source and the lens design for maximum light output.
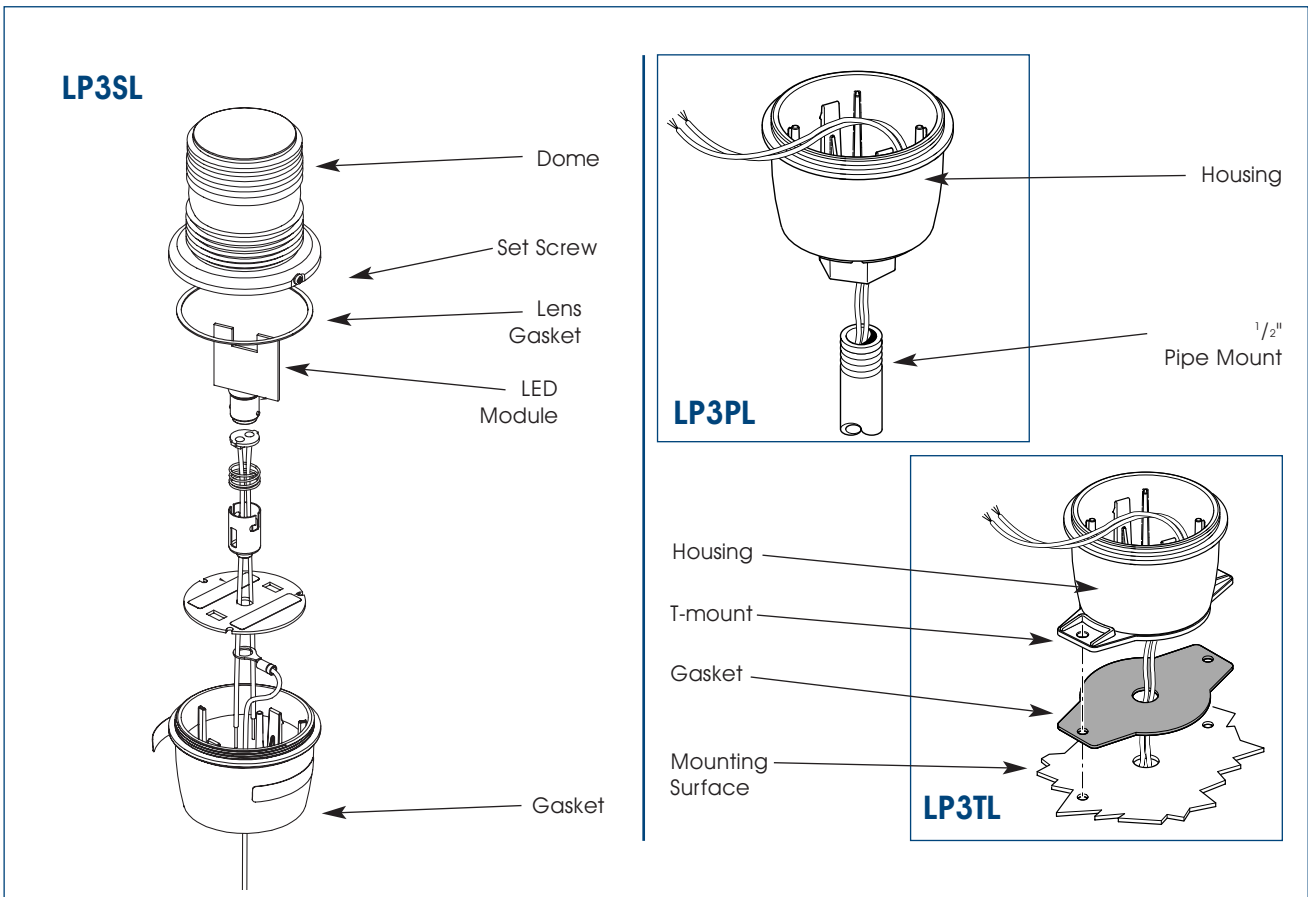
When your application calls for a compact signal with unparalleled reliability, Federal Signal's StreamLine products are the clear choice.

Model	Voltage	Operating Current
LP3L	24VDC	0.08 amps
LP3L	120VAC	0.13 amps

* Optimal hours under ideal conditions.

STREAMLINE® LOW PROFILE LED LIGHT (LP3SL/LP3PL/LP3TL)

LP3SL

Dome

Set Screw

Lens
Gasket

LED
Module

Gasket

LP3PL

Housing

$^{1}/_{2}$"
Pipe Mount

Housing

T-mount

Gasket

Mounting
Surface

LP3TL

SPECIFICATIONS

Lamp Life*:	100,000 hours	100,000 hours
Operating Temperature:	-31°F to 150°F	-35°C to 65°C
Net Weight:	0.46 lbs.	206.96 g
Shipping Weight:	0.53 lbs.	240.98 g
Diameter:	3.13"	7.95 cm
Height (from bottom):		
LP3PL	5.7"	14.48 cm
LP3ML	5.8"	14.7 cm
LP3TL	5.1"	12.95 cm
LP3SL	5.0"	12.7 cm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Specify options (wire guard - LP3G)
- Please refer to Model Number Index LP3L beginning on page 374

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Lens, Amber	K8589063A	LED, 24V Amber	K8107199A
Lens Blue	K8589063A-01	LED, 24V Blue	K8107199A-03
Lens, Clear	K8589063A-02	LED, 24V Clear	K8107199A-04
Lens, Green	K8589063A-03	LED, 24V Green	K8107199A-02
Lens, Red	K8589063A-04	LED, 24V Red	K8107199A-01
Gasket, LP3TL	K8589012A	LED, 120V Amber	K8107200A
Gasket, LP3SL	K8589011A	LED, 120V Blue	K8107200A-03
Gasket, Lens	K8589013A	LED, 120V Clear	K8107200A-04
		LED, 120V Green	K8107200A-02
		LED, 120V Red	K8107200A-01

StreamLine®
Low Profile
Strobe Light

Models LP3P, LP3S, LP3T

PERFECT SIZE MEETS SUPERIOR PERFORMANCE

- Available in 12-48VDC, 120VAC and 240VAC

- Surface mount, T-mount, or integrated $1/2$ - inch pipe mount

- Five dome colors

- Screw-on lens

- Low profile — Model LP3S is only 5" high

- Type 4X, IP66 enclosure

- PLC and triac compatible

- Optional dome guard

- UL and cUL Listed, CSA Certified and CE Approved*

   * CE Approval for P, S models only.

Federal Signal introduces the Model LP3 low profile strobe light. This Type 4X strobe is available in five colors: amber, blue, clear, green and red. An optional dome wire guard is available for the LP3S and LP3T.

The LP3 is offered in three mounting configurations. LP3P features an integrated $1/2$-inch NPT pipe mount. LP3S features a three-hole surface mount — ideal for control panels and other flat or flush surfaces. The "T-mount" LP3T has a popular 2-hole design for wall or flush mounting.

Both the LP3S and LP3T include a surface gasket to complete the Type 4X installation. An optional dome guard is available for use with the LP3S and LP3T. All LP3 units feature a threaded screw-on lens that provides tool-free wiring and strobe tube replacement. The strobe tube is rated for 7,000 hours.

The LP3 comes in three voltage variations: 12-48VDC, 120VAC and 240VAC. The state-of-the-art strobe mechanism produces 2.2 joules of energy, while drawing relatively low level amperage.

StreamLine® strobes feature high-quality, long-life strobe lamps which are designed to reduce tungsten build-up for longer lamp maintenance cycles. Careful consideration is given to the relationship between lamp shape and lens design for maximum light output. StreamLine products make use of surface mount technology, which provides a more powerful light in a much smaller package. The dry-electrolyte capacitor used in StreamLine products runs cooler than those used in many competitive strobes, resulting in a more reliable product that won't fail due to overheating.
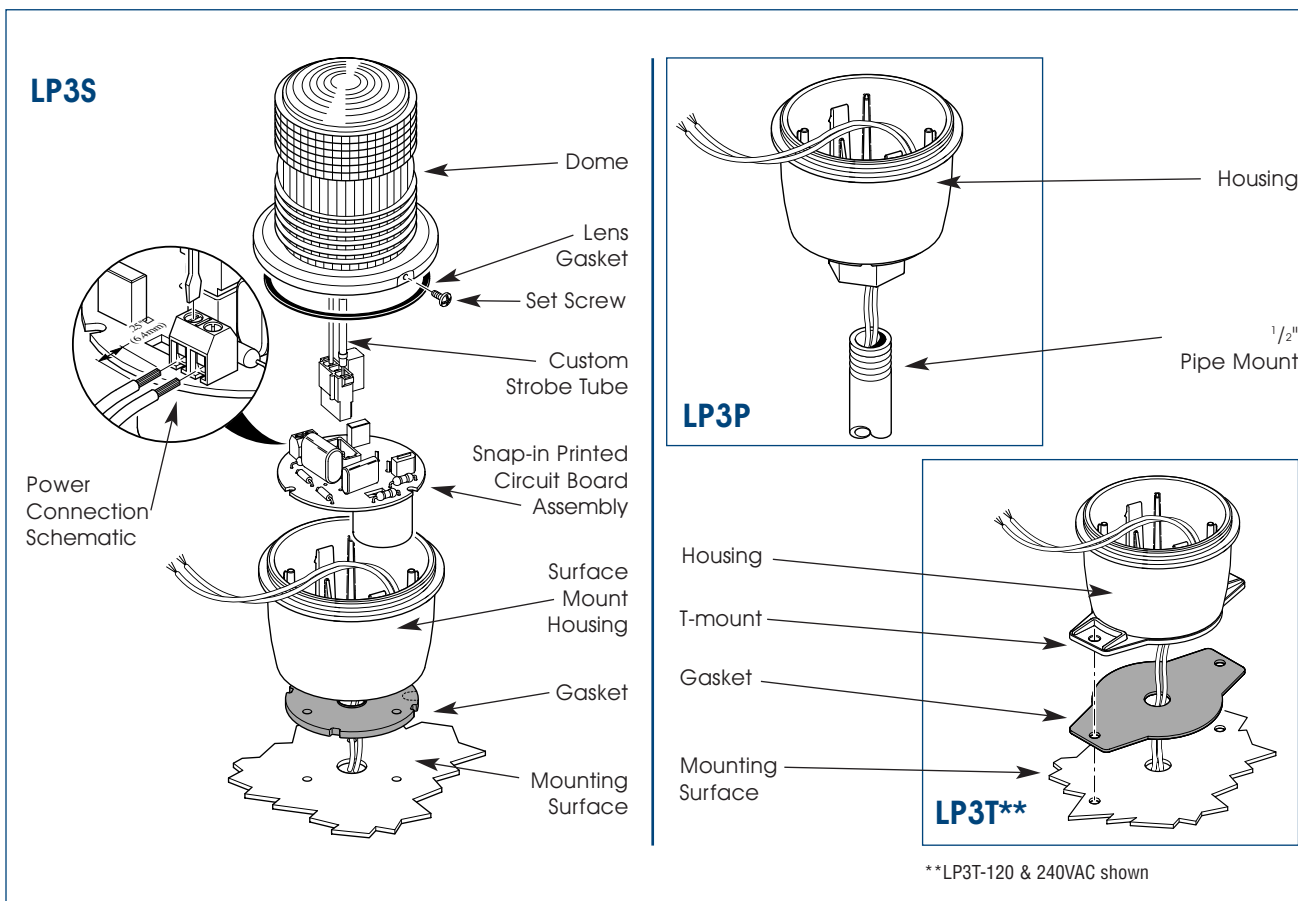
Model	Voltage	Operating Current	Flash Rate/ Minute	Joule Output	Candela Peak[1]	ECP[2]
LP3	12-48VDC	0.44-0.10 amps	65-95	2.2	175,000	51.5
LP3	120VAC	0.10 amps	65-95	2.2	175,000	51.5
LP3	240VAC	0.07 amps	65-95	2.2	175,000	51.5

[1] Peak candela is the maximum light intensity generated by a flashing light during its light pulse
[2] ECP (Effective Candela) is the intensity that would appear to an observer if the light were burning steadily

STREAMLINE® LOW PROFILE STROBE LIGHT (LP3S/LP3P/LP3T)

LP3S
- Dome
- Lens Gasket
- Set Screw
- Custom Strobe Tube
- Power Connection Schematic
- Snap-in Printed Circuit Board Assembly
- Surface Mount Housing
- Gasket
- Mounting Surface

LP3P
- Housing
- 1/2" Pipe Mount

LP3T**
- Housing
- T-mount
- Gasket
- Mounting Surface

**LP3T-120 & 240VAC shown

SPECIFICATIONS

Lamp Life:*	7,000 hours	7,000 hours
Lamp Style:	Strobe	Strobe
Operating Temperature:	-31°F to 150°F	-35°C to 66°C
Net Weight:	7.3 oz.	206.96 g
Shipping Weight:	8.5 oz.	240.98 g
Diameter:	3.125"	7.94 cm
Height (from bottom):		
LP3P	5.7"	14.48 cm
LP3S	5.0"	12.7 cm
LP3T	5.1"	12.95 cm

*Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Specify options
  Wire/Dome guard for LP3S, LP3T (LP3G)
- Please refer to Model Number Index LP3 (P,S,T) beginning on page 374

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Dome, Amber	K8589063A	PC Assembly, 12-48VDC	K2001316B
Dome, Blue	K8589063A-01	PC Assembly, 120VAC	K2001317A
Dome, Clear	K8589063A-02	PC Assembly, 240VAC	K2001317A-01
Dome, Green	K8589063A-03	Gasket, Lens	K8589013A
Dome, Red	K8589063A-04	Gasket, LP3S	K8589011A
Strobe Tube	K149130A	Gasket, LP3T	K8589012A

Streamline®
Low Profile
Mini Strobe

Model LP6

The Model LP6 is a very compact, high power strobe light designed for applications where space is critical. At 3⅝" high, this strobe light is ideal for fork lift applications where head room is important. The LP6 also mounts easily to small control panels.

The LP6 features a two joule power supply that works in multiple voltages from 12-48VDC to 120VAC. Modular construction incorporates a powerful flash tube and vibration resistant circuit board.

The LP6 housing utilizes a unique screw-on dome for easy relamping and service. The polycarbonate base and lens combination gives this strobe excellent impact and corrosion resistance and meets Type 4X requirements. The LP6 is also UL Listed, cUL Listed and CSA Certified.

The LP6 is available in five colors — amber, blue, clear, green and red.

This economical light does not sacrifice power for price or size.

COMPACT, ECONOMICAL STROBE LIGHT

- Available in 12-48VDC and 120VAC
- Screw-on dome available in five colors
- Surface mount
- Low profile — only 3⅝" high
- Type 4X enclosure
- UL and cUL Listed and CSA Certified

Model	Voltage	Operating Current	Flash Rate/ Minute	Joule Output	Candela Peak[1]	ECP[2]
LP6	12-48VDC	0.44-0.10 amps	65-95	2.2	175,000	51.5
LP6	120VAC	0.10 amps	65-95	2.2	175,000	51.5

[1] Peak candela is the maximum light intensity generated by a flashing light during its light pulse
[2] ECP (Effective Candela) is the intensity that would appear to an observer if the light were burning steadily

STREAMLINE® LOW PROFILE MINI STROBE (LP6)
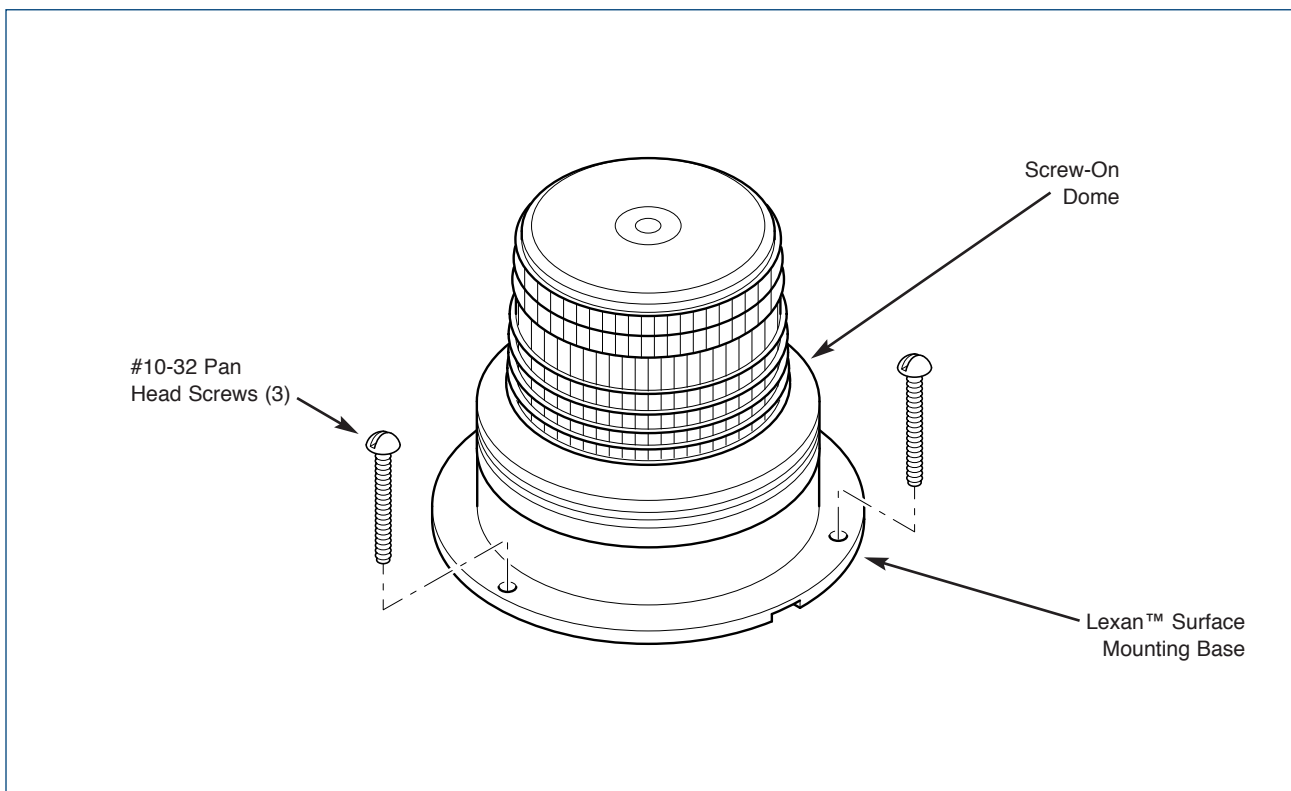
Screw-On Dome

#10-32 Pan Head Screws (3)

Lexan™ Surface Mounting Base

SPECIFICATIONS

Lamp Life*:	7,000 hours	7,000 hours
Lamp Style:	Strobe	Strobe
Operating Temperature:	-31˚F to 150˚F	-35˚C to 65˚C
Net Weight:	0.65 lbs.	0.29 kg
Shipping Weight:	0.85 lbs.	0.39 kg
Height:	3.63"	9.2 cm
Diameter:	5.0"	12.7 cm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Please refer to Model Number Index LP6 beginning on page 375

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Dome, Amber	K8589037A	PC Assembly, 012-048VDC	K2005083A-01
Dome, Blue	K8589037A-01	PC Assembly, 120VAC	K2001887A-02
Dome, Clear	K8589037A-02	O-Ring	K8589038A
Dome, Green	K8589037A-03	Base Gasket	K8589039A
Dome, Red	K8589037A-04	Strobe Tube	K149130A

StreamLine® Low Profile Combination Sounder/Strobe

Model LP7

Providing an audible/visual warning, the LP7 sounder/strobe combines the features of a mini sounder with a fully integrated xenon strobe circuit. The result is an attractive unit suitable for internal or external locations where a combination of high sound output and visual signal is required.

The strobe color choices include amber, clear, green, blue or red. The unit comes with a standard shallow base. An optional deeper base allows 20mm diameter conduit entry.

Operating voltage ranges from 18-30VDC with an average of only 68mA current consumption.

The LP7 has two switchable tone patterns - "Sweeping" and "Continuous".

The LP7 has a range of 82dB–100dB @ 10' (92–110dB @ 1m), dependent upon tone selected. Volume control allows for 20dB of adjustment.
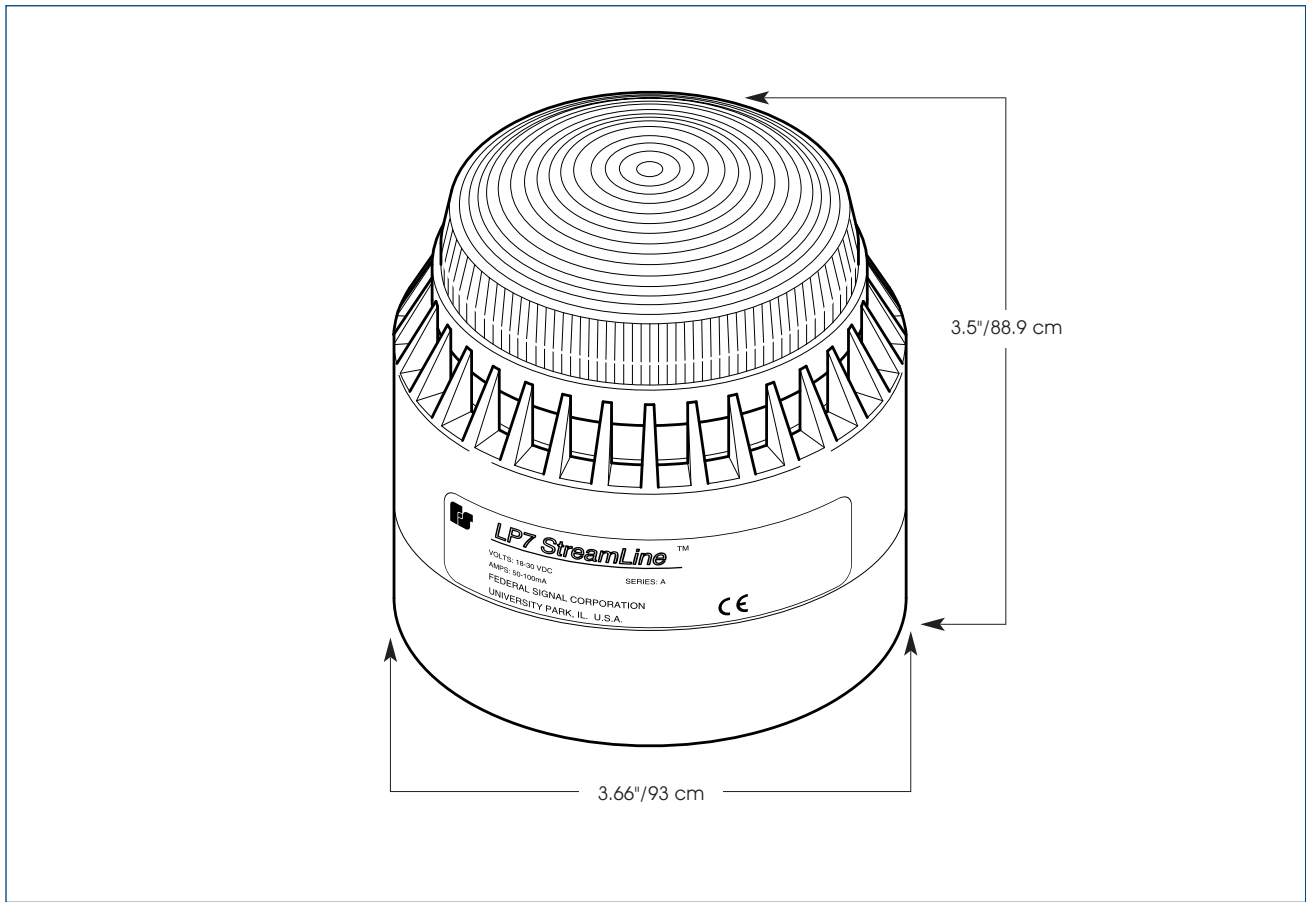
The LP7 features a bright xenon strobe that produces 0.7 Joules of flash energy with a flash frequency of 60 flashes per minute. The beacon will operate with any tone selected.

The Federal Signal Model LP7 sounder/strobe is PLC compatible. It is ideal for wall or panel mount applications where low voltage is required.

PERFECT SIZE MEETS SUPERIOR PERFORMANCE

- Available in 18–30VDC

- Fully integrated xenon strobe circuit

- Five dome colors — Amber, Blue, Clear, Green, Red

- Heavy duty ABS plastic body

- Type 4X, IP54 (IP65 with optional deep base)

- 82–100dB @ 10'
  (92–110dB @ 1m)

- Type 4X, IP54 (IP65 with optional deep base)

- CE Compliant

Model	Voltage	Operating Current	Flash Rate/ Minute	Joule Output	Decibels @ 10'	1m
LP7	18-30VDC	0.068 amps	60	0.7	82-100	92-110

STREAMLINE® LOW PROFILE SOUNDER/STROBE (LP7)

3.5"/88.9 cm

3.66"/93 cm

LP7 StreamLine ™
VOLTS: 18-30 VDC
AMPS: 50-100mA   SERIES: A
FEDERAL SIGNAL CORPORATION
UNIVERSITY PARK, IL. U.S.A.
CE

SPECIFICATIONS

Operating Temperature:	-40°F to 176°F	-40°C to 80°C
Net Weight:	11.1 oz.	315.0 kg
Shipping Weight:	13.5 oz.	383.0 kg
Height:	3.5"	88.9 cm
Diameter:	3.66"	93.0 cm

HOW TO ORDER

- Specify model, voltage and color
- Specify options:
  Deep Base (DBLP)
- Please refer to Model Number Index
  LP7 beginning on page 377

Litestak® Status Indicator

Models LSB and LSL

Federal Signal's Litestak® status indicator is a column of signal lights that indicate the status of a process or machine. The units may include up to five Light Modules (Model LSL) available in amber, blue, clear, green and red; or four light modules plus an optional Sound Module (Models LSS or LSH) to create a dual purpose audible/visual status indicator. The Sound Module always occupies the top position of a Litestak unit.

Litestak's lensing provides a 360° visual signal. Individual light modules may be set to either flash or burn steadily. The flasher is included with the 120VAC LSB model and sold separately for other voltages.

Each light module consists of two impact-resistant polycarbonate lens halves that snap apart to provide easy maintenance and interchangeability of colors.

Litestak units can be installed on a ³/₄" pipe mount or surface mounted with the Model LSB Base. If low profile surface mounting is required, Model LSBS is available.

Litestak is UL and cUL Listed, and CSA Certified for indoor use.

Multiple lens colors can communicate machine shutdown, shortage of materials, supervisor attention, etc. Ideal applications for the Litestak include assembly lines, instrument panels, workcells, etc. Federal Signal's Litestak is an economical device for increasing productivity in any manufacturing environment.

NOTIFY STATUS CHANGES WITH COLOR AND SOUND

- Available in 24VDC, 120VAC and 240VAC

- Five lens colors

- Surface mount and integrated ³/₄- inch pipe mount

- Indoor use only

- Type 1 enclosure

- Optional sounder available

- UL and cUL Listed and CSA Certified

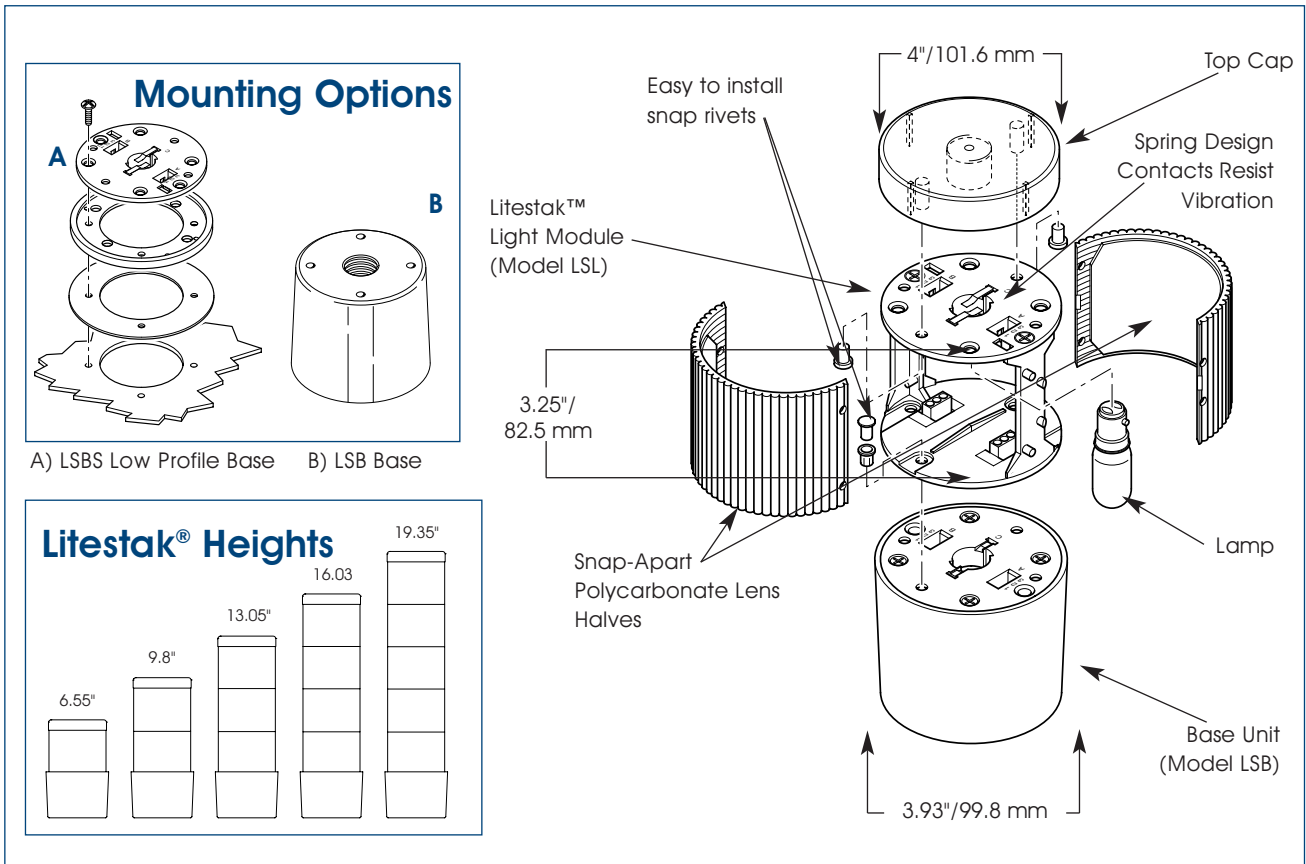| Model	Voltage	Operating Current	Flash Rate/ Minute	Candela	Mount
LSB[3]	24-240VAC/DC	N/A[1]	N/A[1]	N/A[1]	³/₄" Pipe/Surface
LSB[3]	120VAC 50/60Hz	N/A[1]	70	N/A[1]	³/₄" Pipe/Surface
LSBS[3]	24-240VAC/DC	N/A[1]	N/A[1]	N/A[1]	Low Profile Surface
LSL[2]	24VDC	0.76 amps	N/A[1]	123	N/A[1]
LSL[2]	120VAC 50/60Hz	0.13 amps	N/A[1]	123	N/A[1]
LSL[2]	240VAC 50/60Hz	0.11 amps	N/A[1]	123	N/A[1]

[1] Not Applicable

[2] Model LSL includes lens, lamp and light module.

[3] Cap kit included.

LITESTAK® LIGHT (LSL) AND BASE (LSB)

Mounting Options

A

B

A) LSBS Low Profile Base   B) LSB Base

Litestak® Heights

6.55"   9.8"   13.05"   16.03   19.35"

Easy to install snap rivets

Litestak™ Light Module (Model LSL)

4"/101.6 mm — Top Cap

Spring Design Contacts Resist Vibration

3.25"/ 82.5 mm

Snap-Apart Polycarbonate Lens Halves

Lamp

Base Unit (Model LSB)

3.93"/99.8 mm

SPECIFICATIONS

Lamp Life*:		7,000 Hours	7,000 Hours
Lamp Style:		Incandescent	Incandescent
Operating Temperature:		0°F to 120°F	-18°C to 49°C
Net Weight:	LSL	0.5 lbs.	0.2 kg
	LSB	0.75 lbs.	0.3 kg
Shipping Weight:	LSL	0.8 lbs.	0.4 kg
	LSB	1.0 lbs.	0.4 kg
Height:	LSL	3.25"	82.5 mm
	LSB	3.3"	82.8 mm
Diameter:	LSL	3.93"	99.8 mm
	LSB	3.93"	99.8 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Light modules and base modules are ordered separately
- Specify model and voltage of base unit
- Specify model, voltage and colors of light modules
- Specify optional sound module (page 24 & 26)
- Please refer to Model Number Index LSL/LSB beginning on page 372

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Lens Kit, Amber	K8447014A-02	Lamp, 24VDC	K8107210A
Lens Kit, Blue	K8447014A-04	Lamp, 120VAC	K8107194A
Lens Kit, Clear	K8447014A-05	Lamp, 240VAC	K8107A149A
Lens Kit, Green	K8447014A-01	Flasher, 24VDC	K8285237A
Lens Kit, Red	K8447014A-03	Flasher, 120VAC	K8285239A
Lens Kit, Blackout (1/2 lens)	K8447014A-06	Cap Kit-Snap Rivets included	K8447009E
Snap Rivets, 25 pieces	K7099A112A-01		

Litestak® Piezoelectric Horn

Model LSH

The Litestak® LSH Horn is a piezoelectric unit that employs a ceramic element which expands or bends when voltage is applied, generating a single tone. The Model LSH can be used as a stand-alone audible device (with the LSB pipe/surface mount base or LSBS surface mount base), or combined with the Federal Signal Litestak light modules to create a combination audible/visual signal.

The LSH Horn is a modular unit which mounts directly onto the top of any Litestak light or base (sound units must be positioned at the top module of the status indicator). A black speaker grille cover protects the horn. The volume can be adjusted by removing the grille covers and turning the volume control below the horn mechanism.

The 24VDC and 240VAC LSH units produce 75dB @ 10' (85dB @ 1m); the 120VAC unit produces 77dB @ 10' (87dB @ 1m). Litestak is UL Listed for indoor use and CSA Certified.
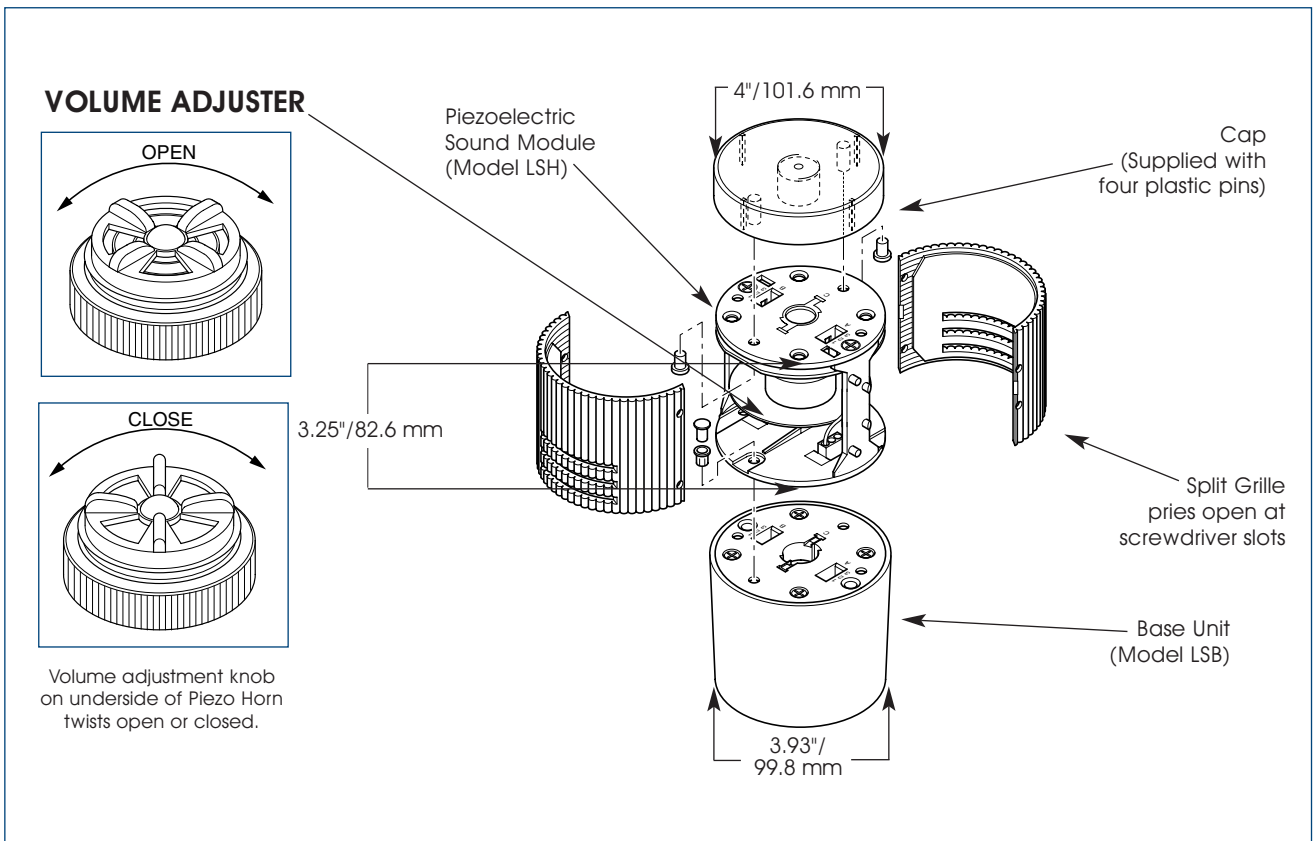
Ideal applications for Litestak audible/visual status indicators include assembly lines, conveyor systems, automated lines, instrument panels, workshops, etc.

Federal Signal's Piezoelectric Horn is an inexpensive way to add an audible signal to Litestak Status Indicators.

A SINGLE-TONE HORN FOR LITESTAK® STATUS INDICATORS

- Available in 24VDC, 120VAC and 240VAC
- Adjustable volume
- Capable of producing 75-77dB @ 10' (85-87dB @ 1m)
- Indoor use only
- Type 1 enclosure
- UL Listed and CSA Certified

Model	Voltage	Operating Current	Decibels @ 10'	1m
LSH	24VDC	70 mA	75	85
LSH	120VAC	40 mA	77	87
LSH	240VAC	40 mA	75	85

LITESTAK® PIEZOELECTRIC HORN (LSH)

VOLUME ADJUSTER

OPEN

CLOSE

Volume adjustment knob
on underside of Piezo Horn
twists open or closed.

Piezoelectric
Sound Module
(Model LSH)

4"/101.6 mm

Cap
(Supplied with
four plastic pins)

3.25"/82.6 mm

Split Grille
pries open at
screwdriver slots

Base Unit
(Model LSB)

3.93"/
99.8 mm

SPECIFICATIONS

Operating Temperature:	32°F to 120°F	0°C to 49°C
Net Weight:	0.45 lbs.	0.2 kg
Shipping Weight:	0.65 lbs.	0.3 kg
Height:	3.25"	82.6 mm
Diameter:	3.93"	99.8 mm

HOW TO ORDER

- Specify model and voltage of sound module (base required, page 18)
- Please refer to Model Number Index LSH beginning on page 372

REPLACEMENT PARTS

Description	Part Number
Grille Kit, Black	K8447014A-10
Piezo Horn, 24VDC	K8447040A
Piezo Horn, 120VAC	K8447040A-01
Piezo Horn, 240VAC	K8447040A-02

Litestak® Homeland Security Status Indicator

Model LSHLS

NOTIFY HOMELAND SECURITY STATUS CHANGES

- Available in 24VDC and 120VAC

- Five lens colors

- Surface mount and integrated $^3/_4$ - inch pipe mount

- Available with LED or Incandescent Lamps

- Indoor use only

- Type 1 enclosure

- Made in the USA

- UL and cUL Listed and CSA Certified

Federal Signal, the world's largest prime manufacturer of audible and visual signaling for industry has introduced a Homeland Security Advisory Status Indicator. The LiteStak® is an effective tool for communicating the Threat Conditions as outlined in the Homeland Security Presidential Directive; Low (Green), Guarded (Blue), Elevated (Yellow), High (Orange) and Severe (Red). The LiteStak is suitable for use in industrial, commercial and municipal environments.
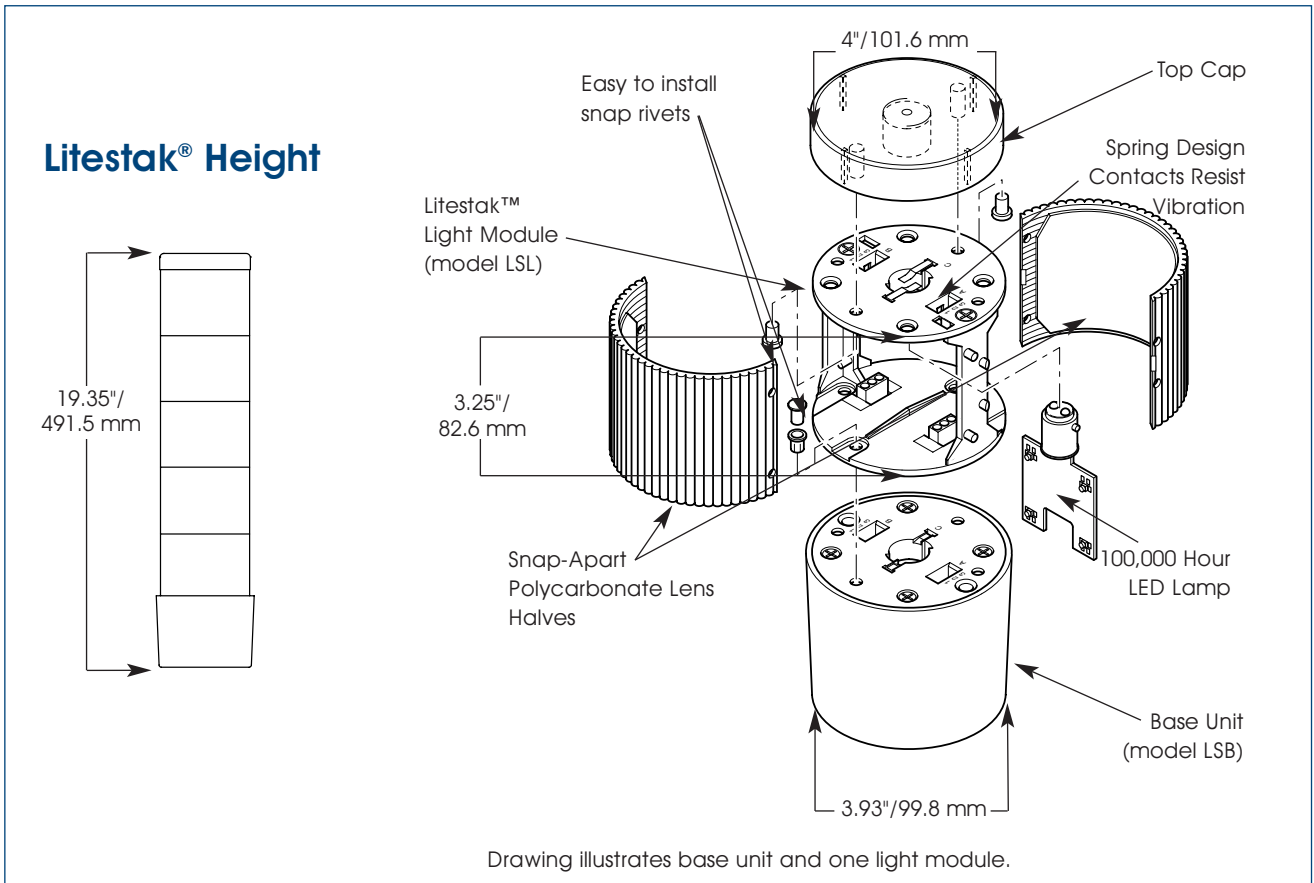
Each light module produces 360 degrees of light dispersion. Optical cross-hatching ensures a lens-filling distribution of light that is free of "hot spots". Each module of the LiteStak can be set up for either steady burning or flashing operation (with relays, flashers or PLCs). The lens of each module snaps on for quick and easy lamp maintenance.

Lamps choices include a rugged 25-watt incandescent bulb or a lifetime guaranteed 100,000 hour LED lamp. The LiteStak can be installed easily in a surface mount or a $^3/_4$" NPT pipe mount configuration. The choice of operating voltages includes 24VDC and120VAC for incandescent models and 24VDC and 120VAC for LED models.

Model	Voltage	Operating Current	Mount
LSHLS	24VDC	760 mA	Pipe/Surface
LSHLS	120VAC	230 mA	Pipe/Surface
LSHLS-LED	24VDC	80 mA	Pipe/Surface
LSHLS-LED	120VAC	40 mA	Pipe/Surface

HOMELAND SECURITY STATUS INDICATOR (LSHLS)

Litestak® Height

19.35"/491.5 mm

4"/101.6 mm

Easy to install snap rivets

Top Cap

Spring Design Contacts Resist Vibration

Litestak™ Light Module (model LSL)

3.25"/82.6 mm

Snap-Apart Polycarbonate Lens Halves

100,000 Hour LED Lamp

Base Unit (model LSB)

3.93"/99.8 mm

Drawing illustrates base unit and one light module.

SPECIFICATIONS

Lamp Life, Incandescent*:	7,000 Hours	7,000 Hours
Lamp Life, L.E.D*:	100,000 Hours	100,000 Hours
Operating Temperature:	32°F to 120°F	0°C to 49°C
Net Weight:	3.0 lbs.	1.4 kg
Shipping Weight:	4.8 lbs.	2.2 kg
Height:	19.35"	491.5 mm
Diameter:	3.93"	99.8 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and lamp style (incandescent or LED)
- Please refer to Model Number Index LSL/LSB beginning on page 372

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Lens Kit, Amber	K8447014A-02	Incandescent Lamp, 24VDC	K8107210A
Lens Kit, Blue	K8447014A-04	Incandescent Lamp, 120VAC	K8107194A
Lens Kit, Green	K8447014A-01	LED Lamp, Amber	LED-024ASB
Lens Kit, Orange	K8447014A-08	LED Lamp, Blue	LED-024BSB
Lens Kit, Red	K8447014A-03	LED Lamp, Green	LED-024GSB
Snap Rivets, 25 pieces	K7099A112A-01	LED Lamp, Orange	LED-024ASB
Cap Kit-Snap Rivets included	K8447009E	LED Lamp, Red	LED-024RSB

Litestak®
Status Indicator
with LED Lamp

Model LSLD

LONG LIFE LIGHT SOURCE

- Available in 24VDC and 120VAC

- Five lens colors

- 100,000 hour, vibration-resistant LED lamp

- Surface mount and integrated $^3/_4$ - inch pipe mount

- Indoor use only

- Type 1 enclosure

- UL and cUL Listed and CSA Certified

Federal Signal's Litestak® status indicators are vertical columns of light that indicate the status of a machine's operating process in a full 360° radius.

The Litestak Model LSLD modular indicator light system allows the user to combine up to five interchangeable lamp units with a base power unit. Modules are sold separately for a truly customized indicator.

Light modules come complete with a 100,000-hour LED lamp; LED light output coordinates with the module's impact-resistant polycarbonate lensing. LED lamps consume less power, operate at a lower temperature, and are remarkably resistant to vibration — which makes them perfect for use in heavy-duty, high vibration applications.

LED lamps are available in five colors — amber, blue, clear, green or red. The standard double-contact bayonet base retrofits into any Federal Signal Litestak unit to replace original incandescent lamps.

An optional Sound Module (Models LSS or LSH) can be added to the top of the Litestak column to create a dual purpose audible/visual status indicating signal. The LSS sound module allows the user to select from 32 tones via a simple dip switch panel. In applications where a single loud tone is all that is necessary, the LSH piezo-electric horn is a perfect audible addition.

Litestak is a versatile system that allows the user to select either steady burn or flash. A flasher is included on the 120VAC LSB unit only but can be purchased separately for 24VDC models. The Litestak base unit can be either surface mount, or $^3/_4$" pipe mount.

Model	Voltage	Operating Current	Mount
LSB[3]	24-240VAC/DC	N/A[1]	$^3/_4$" Pipe/Surface
LSB[3]	120VAC 50/60Hz	N/A[1]	$^3/_4$" Pipe/Surface
LSBS[3]	24-240VAC/DC	N/A[1]	Surface
LSLD[2]	24VDC	80 mA	N/A[1]
LSLD[2]	120VAC 50/60Hz	45 mA	N/A[1]

[1] Not Applicable

[2] Includes lens, lamp and light module.

[3] Cap kit included.

LITESTAK® WITH LED LAMP (LSLD)

Mounting Options

A

B

A) LSBS Low Profile Base   B) LSB Base

Litestak® Heights

6.55"   9.8"   13.05"   16.3"   19.35"

4"/101.6 mm — Top Cap

Easy to install snap rivets

Spring Design Contacts Resist Vibration

Litestak™ Light Module (Model LSLD)

3.25"/82.5 mm

Snap-apart Polycarbonate Lens Halves

Polycarbonate Base Unit (Model LSB)

100,000 Hour LED Lamp
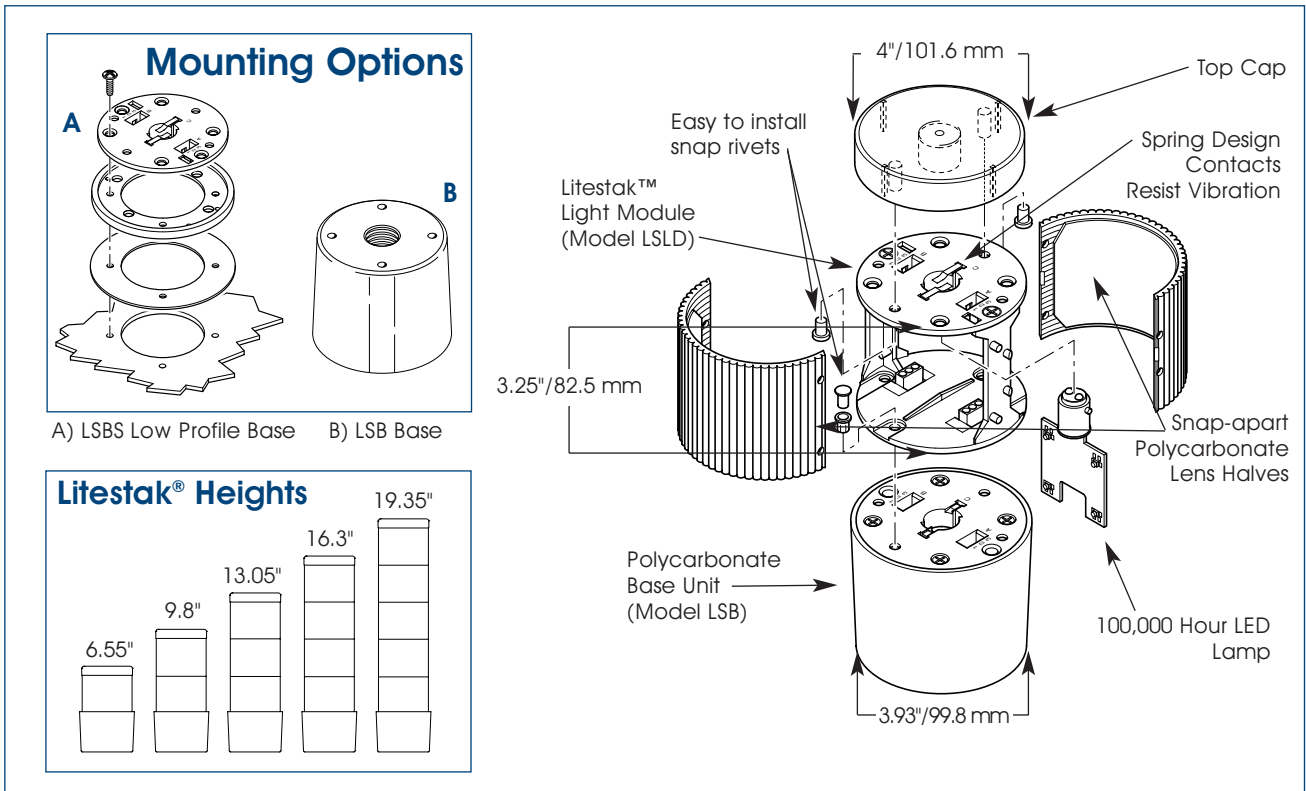
3.93"/99.8 mm

SPECIFICATIONS

Lamp Life*:	100,000 Hours	100,000 Hours
Lamp Style:	LED	LED
Operating Temperature:	0°F to 120°F	-18°C to 49°C
Net Weight, LSLD:	0.45 lbs.	0.2 kg
Shipping Weight, LSLD:	0.7 lbs.	0.32 kg
LSLD Height:	3.25"	82.5 mm
LSB Height:	3.3"	83.8 mm
LSLD Diameter:	3.93"	99.82 mm
LSB Diameter:	3.93"	99.82 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Light modules and base modules are ordered separately
- Specify model, voltage and color of light modules
- Specify model and voltage of base unit
- Specify optional sound module (page 24 & 26)
- Please refer to Model Number Index LSLD beginning on page 372

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Lens Kit, Amber	K8447014A-02	LED Lamp, Amber, 24VDC	LED-024ASB
Lens Kit, Blue	K8447014A-04	LED Lamp, Blue, 24VDC	LED-024BSB
Lens Kit, Clear	K8447014A-05	LED Lamp, Clear, 24VDC	LED-024CSB
Lens Kit, Green	K8447014A-01	LED Lamp, Green, 24VDC	LED-024GSB
Lens Kit, Red	K8447014A-03	LED Lamp, Red, 24VDC	LED-024RSB
Lens Kit, Black-out (1/2 lens)	K8447014A-06	LED Lamp, Amber, 120VAC	LED-120ASB
Flasher, 24VDC	K8285237A	LED Lamp, Blue, 120VAC	LED-120BSB
Flasher, 120VAC	K8285239A	LED Lamp, Clear, 120VAC	LED-120CSB
Cap Kit-Snap Rivets included	K8447009E	LED Lamp, Green, 120VAC	LED-120GSB
Snap Rivets, 25 pieces	K7099A112A-01	LED Lamp, Red, 120VAC	LED-120RSB

Litestak® Sound Module

Model LSS

The Federal Signal Litestak® Sound Module is a microprocessor-based audible signaling device. The model LSS can be used as a stand-alone audible device or combined with the Federal Signal Litestak light modules to create an audible/visual signal.

The sound module contains a microprocessor-based tone generator and an integrated speaker which produces one of 18 tones. Select tones by setting five, 2-position DIP-switches. The sound module can work as a stand-alone audible signal when plugged into the Model LSBS Low Profile Surface Mount Base or Model LSB Pipe Mount Base.

The Model LSS can be combined with any Litestak light module configuration of up to four colors. Controlling the sound module is done via the wires normally used for the clear light module. The sound module always occupies the top module position in a Litestak tower.

Ideal applications for the LSS include environments where the ambient noise is not extreme – assembly lines, conveyor systems, automated lines, instrument panels and workshops.

LSS is UL Listed and CSA Certified.

Federal Signal's Litestak Sound Module allows the user to add a distinctive audible signal to a Litestak Status Indicator.

ADD SOUND TO A FEDERAL SIGNAL LITESTAK®

- Available in 24VDC and 120VAC

- Modular unit fits on top of any Litestak® configuration

- Select one of 18 tones

- Capable of outputs between 59-69dB @ 10' (69-79dB @ 1m)

- Indoor use only

- Type 1 enclosure

- UL Listed and CSA Certified

Model	Voltage	Operating Current	dB Output
LSS	24VDC	180 mA	See Page 25
LSS	120VAC	70 mA	

5 yr FEDERAL SIGNAL WARRANTY

LITESTAK® SOUND MODULE (LSS)
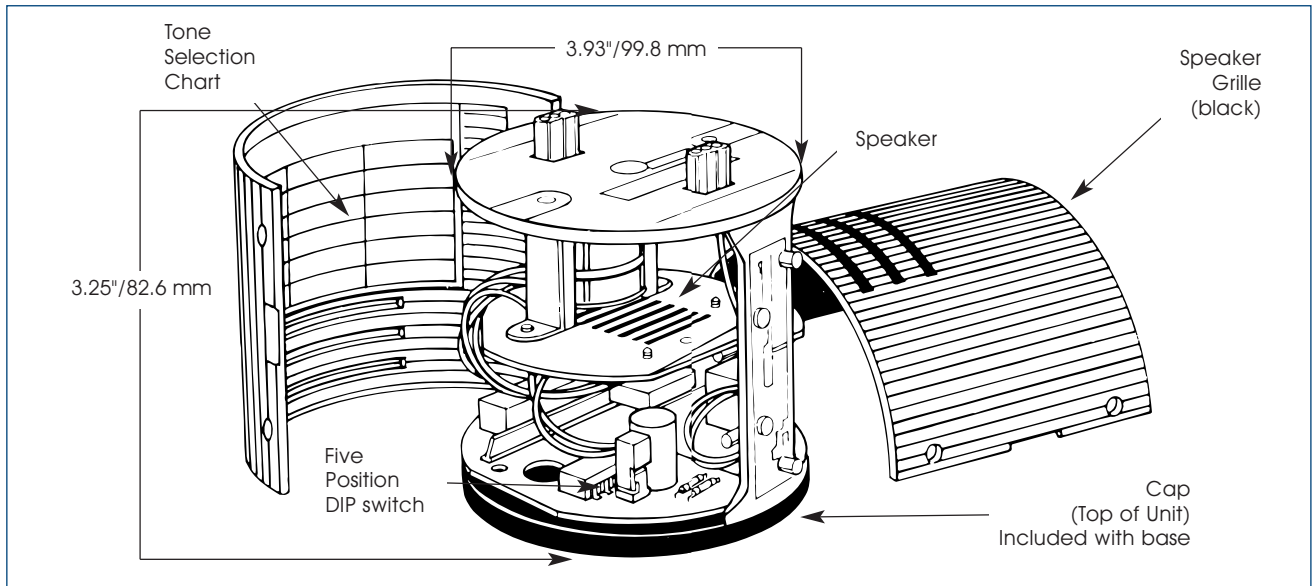
AVAILABLE TONES

Model	Name	Description	Frequency	Rep. Rate	dBA @ 10'/1m
TM1	Wail	Conventional Siren	560-1055Hz	11 cycles/min.	68.8 / 78.8
TM2	Yelp	Rapid Siren	560-1055Hz	3.3 cycles/min.	67.6 / 77.6
TM3	Hi-Lo	Alternating High & Low	Low: 561Hz High: 760Hz	50 cycles/min.	68.3 / 78.3
TM4	Bell	Bell, struck rapidly	801Hz	50 cycles/min.	59.0 / 69.0
TM5	Yeow	Descending high to low, repeated	Low: 545Hz High: 1295Hz	36 cycles/min.	67.8 / 77.8
TM6	Horn	Steady Horn	470Hz	Continuous	61.0 / 71.0
TM7	Beep	Slow intermittent horn	470Hz	50 cycles/min.	59.6 / 69.6
TM8	Stutter	Rapid intermittent horn	470Hz	5 cycles/sec.	59.4 / 69.4
TM9	Slow Whoop	Slow ascending low to high, repeated	Low: 424Hz High: 1164Hz	15 cycles/min.	66.5 / 76.5
TM10	Gradual Horn	Steady horn, gradually increasing volume	514Hz	Continuous	62.3 / 72.3
TM11	Temp. Slow Whoop	NFPA[1] coded slow whoop	Low: 424Hz High: 774Hz	15 cycles/min.	65.2 / 75.2
TM12	Westminster Chime	Westminster Chime	Musical tone	1 cycle; 8 notes	63.4 / 73.4
TM13	Evac./Radiation	Amplitude modulated horn	479Hz	4.3 cycles/sec.	61.7 / 71.7
TM14	Air Horn	Steady horn	Low: 400Hz High: 800Hz	Continuous	66.2 / 76.2
TM15	Chime	Single strike chime	Musical tone	49 cycles/min.	60.6 / 70.6
TM16	Phaser	Rapid siren	600-1200Hz	15 cycles/sec.	63.7 / 73.7
TM17	Alternating Hi-Lo	Alternating High & Low	Low: 363Hz High: 518Hz	60 cycles/min.	63.8 / 73.8
TM18	Warble	Extremely rapid siren	560-1055Hz	63 cycles/sec.	67.1 / 77.1

SPECIFICATIONS

Operating Temperature:		32°F to 120°F	0°C to 49°C
Net Weight:	24VDC	0.6 lbs.	0.3 kg
	120VAC	0.9 lbs.	0.4 kg
Shipping Weight:	24VDC	0.8 lbs.	0.4 kg
	120VAC	1.1 lbs.	0.5 kg
Height:		3.25"	82.6 mm
Diameter:		3.93"	99.8 mm

HOW TO ORDER

- Specify model and voltage of sound module (base required, page 18)
- Please refer to Model Number Index LSS beginning on page 372

REPLACEMENT PARTS

Description	Part Number
Grille Kit, Black	K8447014A-07
Snap Rivets, 25 pieces	K7099A112A-01

Mounting Kits

Models LWMB2 and LCMB2

CUSTOM MOUNTING BRACKETS

- Heavy-duty construction

- Easy installation

- For walls and outside corners

- Replaces unsightly and hazardous makeshift supports

- $\frac{1}{2}$ - inch, $\frac{3}{4}$ - inch and 1 - inch pipe mount

- Indoor and outdoor use

- Type 3R

Federal Signal's Models LWMB2 and LCMB2 mounting brackets are specifically designed for use with Federal Signal's stationary warning lights to provide an easy and consistent means of mounting lights throughout a facility.

Federal Signal's Models LWMB2 and LCMB2 are constructed of durable cast aluminum and sealed with gray powder coat paint. Easy to install, these units can be wired through the back of the bracket for electrical box mounting or through the threaded hole in the base for external $\frac{1}{2}$-inch conduit connection. Each kit includes a bracket, plate and mounting screws.

Easy installation, heavy-duty construction and a professional appearance make the brackets suitable for use in commercial, institution and industrial environments.

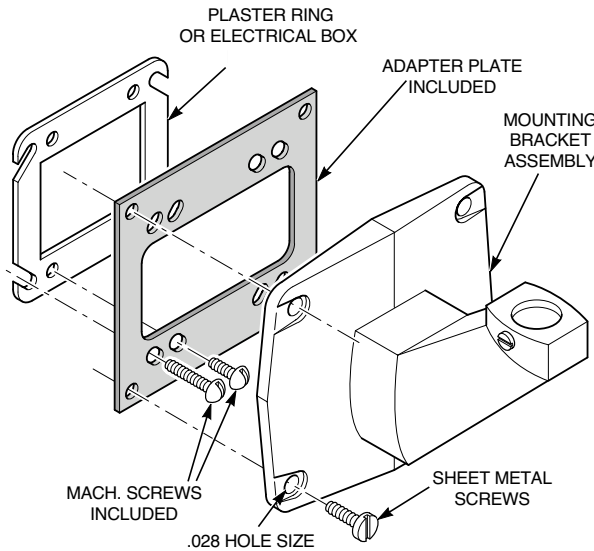These brackets are suitable for any Type 3R application in ordinary (non Division 1/Division 2) environments.

The LCMB2 and LWMB2 mounting kits may be used with the following Federal Signal models: 121S, 131ST, 131DST, 131C, 141(120V), 141ST, 225, 371, 371L, 371ST, 371DST, AV1, AV1ST, FB2PST and the FB24ST.

Model	Height	Width	Extension	Net Weight	Shipping Weight
LWMB2	6.0"	6.375"	5.875"	2.6 lbs.	2.95 lbs.
LCMB2	6.0"	5.000"	5.750"	2.3 lbs.	2.50 lbs.

MOUNTING KITS (LWMB2/LCMB2)

Installation of a wall bracket on a 4" electrical box

PLASTER RING
OR ELECTRICAL BOX

ADAPTER PLATE
INCLUDED

MOUNTING
BRACKET
ASSEMBLY

MACH. SCREWS
INCLUDED

.028 HOLE SIZE

SHEET METAL
SCREWS

Installation of a wall bracket with conduit wiring

ANCHORS
(NOT SUPPLIED)

WALL

MACH. SCREWS

SET SCREWS

BACKPLATE
INCLUDED

1/2" TAPPED HOLE

CONNECTOR

WALL
MOUNTING
BRACKET
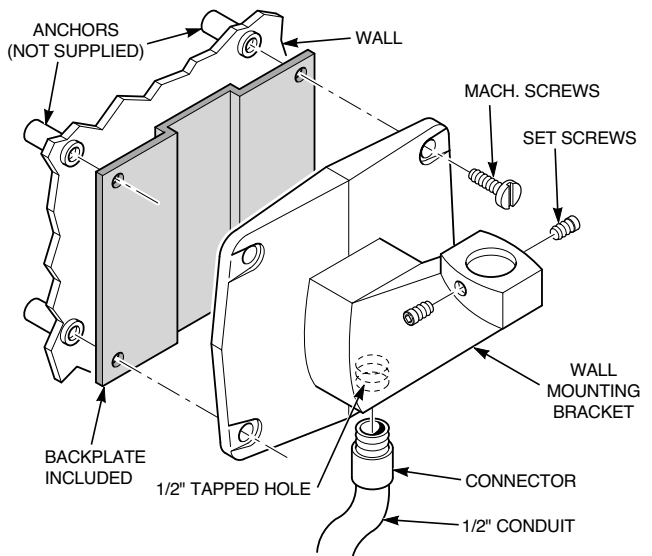
1/2" CONDUIT

Installation of an outside corner bracket with conduit

WALLS

ANCHORS
(NOT SUPPLIED)

BACKPLATE
INCLUDED

.028 HOLE SIZE

MACH. SCREWS
INCLUDED

SET SCREWS
INCLUDED

1/2" TAPPED HOLE

CORNER
MOUNTING
BRACKET

CONNECTOR

1/2" CONDUIT
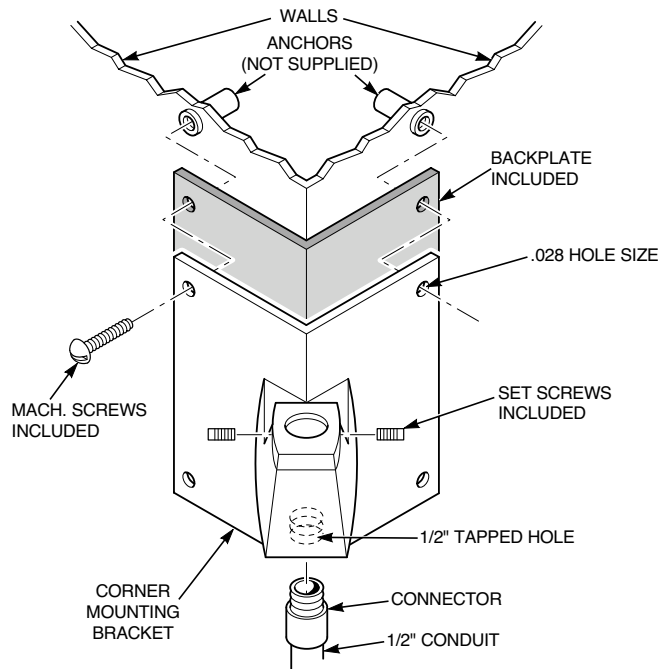
HOW TO ORDER

- Specify model

    LCMB2 – Corner Mount

    LWMB2 – Wall Mount

- Please refer to Model Number Index
  LCMB2/LWMB2 beginning on
  page 377

MicroStat®
Status Indicator

Model MSL

The Federal Signal MicroStat® is a compact, Type 4X status indicator, Type 1 with optional sounder. Ideal for OEM applications, the MicroStat comes pre-assembled as 1-, 2-, 3-, 4-, or 5-high light units. The user selects combinations from five colors; amber, blue, clear, green and red. O-rings between each segment provide a water-tight and dust-tight seal. The MSL1, MSL2, MSL3 are available in 24VAC/DC, 120VAC and 240VAC; the MSL4 and MSL5 are available in 24VAC/DC and 120VAC. The base of each light can be surface or pipe mounted ($^3/_4$-inch NPT).

The lenses lock together and snap apart with a simple twisting motion, allowing for easy lamp changes and quick lens resequencing. A rugged vibration-resistant, thick-filament wedge lamp fills each lens with light, providing excellent optical performance.

Wire connections are made through a 2-piece terminal block. The MicroStat is designed to work with PLC outputs including "Triacs".

An optional 100,000-hour LED light source is available in the five colors. This lamp, made of surface mounted LEDs, plugs directly into the same socket as the standard lamp.

An optional sound module can be installed in the top position of any MicroStat. The Sound Module Kit (MSS) consists of a slotted grille and board-mounted piezoelectric horn. The sounder plugs directly into the wedge socket.
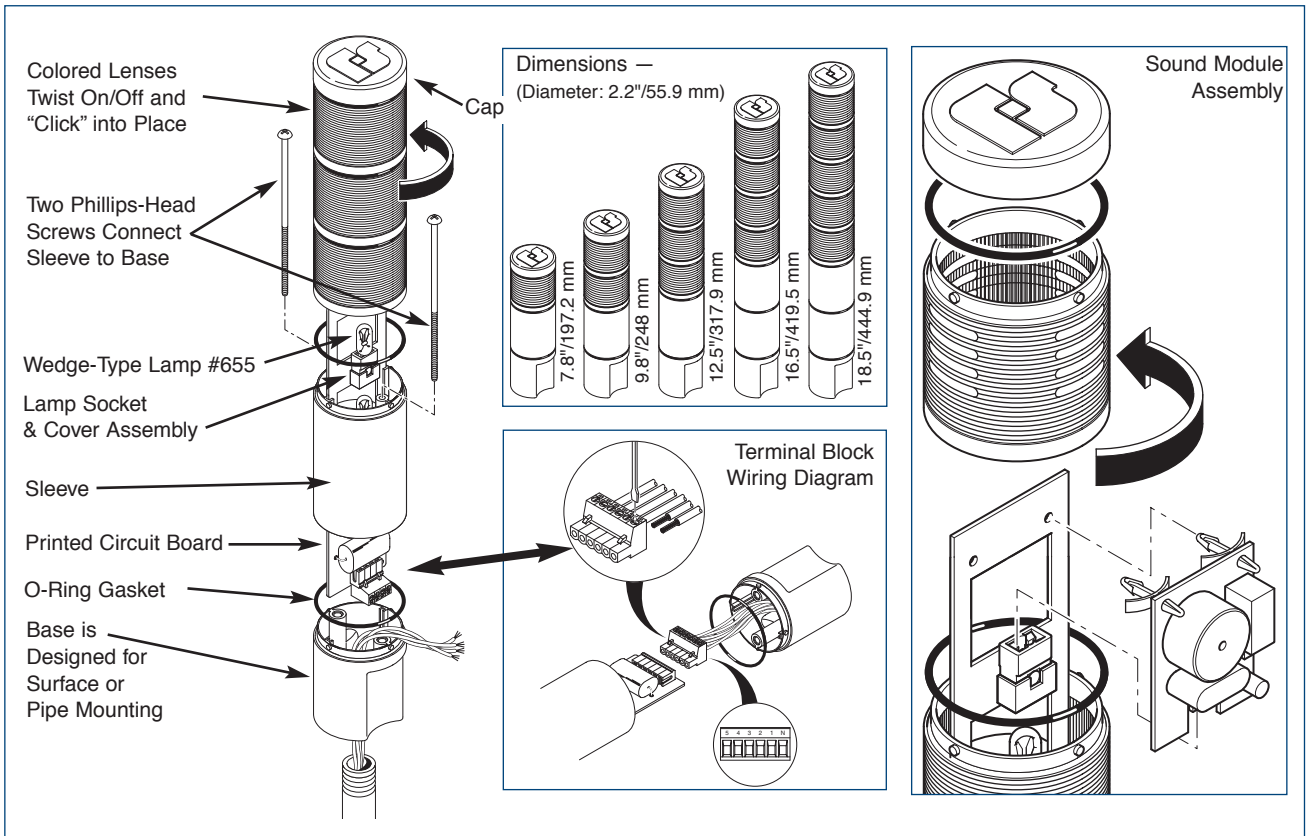
A pipe mount base, pipes and flashers are also available. See page 16 for a complete list of options.

COMPACT STATUS INDICATOR IN WATER-TIGHT ENCLOSURE

- MSL1, MSL2, MSL3 available in 24VAC/DC, 120VAC and 240VAC; MSL4 and MSL5 available in 24VAC/DC and 120VAC

- Factory assembled

- Small footprint — only 2.2" diameter (55.9 mm)

- Vibration-resistant 5.6W wedge lamp

- Surface mount and integrated $^3/_4$ - inch pipe mount

- Type 4X enclosure[1]

- Indoor Use only

- Optional Sound Module, LED Lamp, Pipe Mount Base and Flasher

- PLC Compatible

- UL and cUL Listed

Model	Description	Operating Current	Voltage
MSL1	One status segment	0.2 amps	MSL1, MSL2, MSL3
MSL2	Two status segments	0.4 amps	available in 24VAC/DC
MSL3	Three status segments	0.6 amps	120VAC, 240VAC
MSL4	Four status segments	0.8 amps	MSL4, MSL5
MSL5	Five status segments	1.0 amps	available in
			24VAC/DC, 120VAC

[1] MSL with optional sounder rated NEMA Type 1.

MICROSTAT® STATUS INDICATOR (MSL)

Colored Lenses Twist On/Off and "Click" into Place

Cap

Two Phillips-Head Screws Connect Sleeve to Base

Wedge-Type Lamp #655

Lamp Socket & Cover Assembly

Sleeve

Printed Circuit Board

O-Ring Gasket

Base is Designed for Surface or Pipe Mounting

Dimensions — (Diameter: 2.2"/55.9 mm)

7.8"/197.2 mm
9.8"/248 mm
12.5"/317.9 mm
16.5"/419.5 mm
18.5"/444.9 mm

Terminal Block Wiring Diagram

Sound Module Assembly

SPECIFICATIONS

Lamp Life*:		7,000 Hours	7,000 Hours
Lamp Style:		Wedge-Type Lamp #655	
Operating Temperature:		32°F to 104°F	0°C to 40°C
Net Weight:	1-high	0.4 lbs.	0.18 kg
	2-high	0.55 lbs.	0.25 kg
	3-high	0.65 lbs.	0.29 kg
	4-high	0.85 lbs.	0.39 kg
	5-high	1.0 lbs.	0.45 kg
Ship. Weight:	1-high	0.7 lbs.	0.32 kg
	2-high	0.85 lbs.	0.39 kg
	3-high	1.3 lbs.	0.59 kg
	4-high	1.5 lbs.	0.68 kg
	5-high	1.65 lbs.	0.75 kg

* Optimal hours under ideal conditions.

HOW TO ORDER

- Determine number of status segments required; one for each light segment and one for a sounder
- Specify Model MSL1, MSL2, MSL3, MSL4, MSL5.
- Specify colors for MSL1 and MSL2 (MSL3, MSL4 and MSL5 are packaged with one each of the colored lenses)
- Specify voltage
- Specify options (see page 16)
- Please refer to Model Number Index MSL beginning on page 372

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Lens, Amber	K8447042A	Terminal Block (3 position)	K140373A-03
Lens, Clear	K8447042A-02	Terminal Block (4 position)	K140373A-04
Lens, Red	K8447042A-04	Terminal Block (6 position)	K140373A-06
Lens, Blue	K8447042A-01	Light Barrier	K8447061A
Lens, Green	K8447042A-03	Cap	K8447044A
Wedge Lamp (#655), .28V	K8107185A	O-Ring	K8447054B
MSLED Lamp	Please refer to page 16		

2645 Federal Signal Dr., University Park, IL 60466 Tel: 708.534.4756 Fax: 708.534.4852 www.federalsignal-indust.com

MicroStat®
Status Indicator
Optional Equipment

Models MSLBRCKT, MSLED, MSP, MSS, MSTB

ADD THESE OPTIONS TO YOUR MICROSTAT®

- Plug-in sound module, 24VDC and 120VAC

- Flashers, 24VDC and 120VAC

- Wall mount bracket

- Plug-in LED's in five colors – amber, blue, clear, green, or red

- Pipe extensions

- Tulip-style pipe-mount base

- UL and cUL Listed (MSLED, MSS)

A variety of optional equipment is available for the MicroStat®.

MSLBRCKT

Wall mounting the MicroStat is simple with this basic bracket.

MSLED

Five plug-in LED's are available for the MicroStat; amber, blue, clear, green, or red. The MSLED replaces the lamp in any MSL light module. These surface mount printed circuit board lamp simulators represent the state of the art in LED technology. MSLED modules are UL Listed.

MSP

Some applications require that the status indicators be raised above the machine surface. Using powder coated steel pipe extensions helps improve the visibility of the MicroStat. Three different lengths are available for the MicroStat. They measure 4-inches (MSP-4), 16-inches (MSP-16) and 32-inches(MSP-32).

MSS

Adding sound to the MicroStat is simple with the plug-in Sound Module. The Sound Module produces 83-85dB @ 10'. This compact piezo device replaces the lamp in the top position of any MicroStat. A slotted opaque lens protects the sound module circuit and permits the sound to be heard at maximum levels. Adding the sound module to the MicroStat changes the Type rating from 4X to Type 1. Sound modules are available in 24VDC and 120VAC operating voltages.
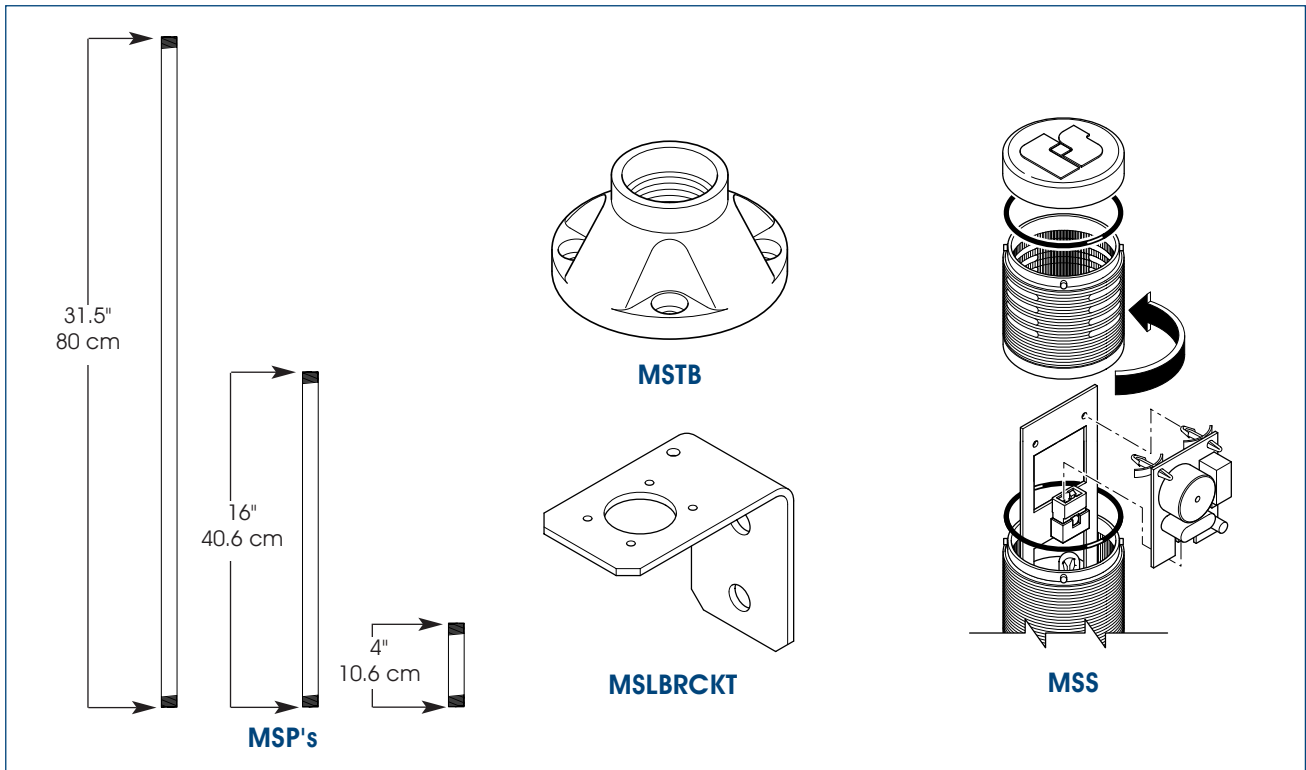
MSTB

The MicroStat base can be pipe-mounted or surface-mounted. When using the pipe extensions the Tulip Base is required for a true surface mount.

FLASHERS

Flashers for the MicroStat are available in 24VDC and 120VAC. Each flash at 75 fpm.

MICROSTAT® OPTIONAL EQUIPMENT

31.5"
80 cm

16"
40.6 cm

4"
10.6 cm

MSP's

MSTB

MSLBRCKT

MSS

SPECIFICATIONS

MSS

Operating Current:	24VDC	0.03 amps
	120VAC	0.04 amps
dB Output:	93-95dB @ 10'	83-85 @ 1m
Net Weight:	0.25 lbs.	0.11 kg
Shipping Weight:	0.75 lbs.	0.34 kg
Height:	2.0"	50.8 mm
Diameter:	2.2"	55.9 mm

MSLED

Operating Current:	24VDC	0.095 amps
	120VAC	0.095 amps
Net Weight:	0.05 lbs.	0.02 kg
Shipping Weight:	0.55 lbs.	0.25 kg
Height:	1.75"	44.45 mm
Width:	1.5"	38.1 mm

MSLBRCKT

Net Weight:	0.4 lbs.	0.18 kg
Shipping Weight:	0.9 lbs.	0.41 kg
Height:	3.45"	87.63 mm
Width:	2.0"	50.8 mm

MSTB

Net Weight:	0.3 lbs.	0.14 kg
Shipping Weight:	0.8 lbs.	0.36 kg
Height:	1.5"	38.1 mm
Diameter:	2.75"	1.25 mm

FLASHERS

Flasher, 24VDC	K8285237A
Flasher, 120VAC	K8285239A

REPLACEMENT PARTS

Description	Part Number
LED Lamp, Amber	MSLED-A
LED Lamp, Blue	MSLED-B
LED Lamp, Clear	MSLED-C
LED Lamp, Green	MSLED-G
LED Lamp, Red	MSLED-R

HOW TO ORDER

- Specify model
- Specify voltage for sound modules and flashers
- Specify color for LED lamps
- Please refer to Model Number Index Microstat Options beginning on page 372

SemiStat®
Status Indicator

Models SCB and SCC

OEM STATUS INDICATOR

- Available in 24VAC/VDC
- Tri or quad-color models
- Available in chrome or white finish
- 100,000 hour vibration resistant LED lamps
- Integrated sounder
- Surface mount
- Indoor use only

Federal Signal introduces the SemiStat® Status Indicator. Designed to meet the needs of the OEM market, the SemiStat is an attractive, easy-to-install and economical status indicator.

SemiStats operate on 24VAC or 24VDC. The snap fit housing cover and a standard terminal block make the installation and wiring of the SemiStat a quick job.

The attractive and durable ABS housing is available with either a white or "chrome" finish to complement the machine or location of installation.

SemiStat LED light modules utilize extremely bright light emitting diodes for the greatest attention-getting affect. Tri-Color SemiStat features red, amber and green light modules and Quad Color SemiStat features red, amber, green and blue light modules. Clear LED light modules are available separately. The sequence of the LED light modules can be easily changed to suit the application – just pop off the housing cover, disconnect the modules and then reconnect in the desired order. Light modules can be set to flashing or steady burning mode.

For further utility, each SemiStat is equipped with an integrated piezo sounder. SemiStat sounders produce 60dB at ten feet. A selection of two beep patterns is offered.

Model	Voltage	Operating Current	Decibels @ 10'	1m	Mount
Tri-color	24VAC/VDC	150 mA*	60	70	Surface
Quad color	24VAC/VDC	175 mA*	60	70	Surface

* Amp draw measured with all colors and sounder activated simultaneously.

SEMISTAT® STATUS INDICATOR (SCB/SCC)

Printed Circuit Board

LED Modules

Cover

Piezo Sounder

Volume Control
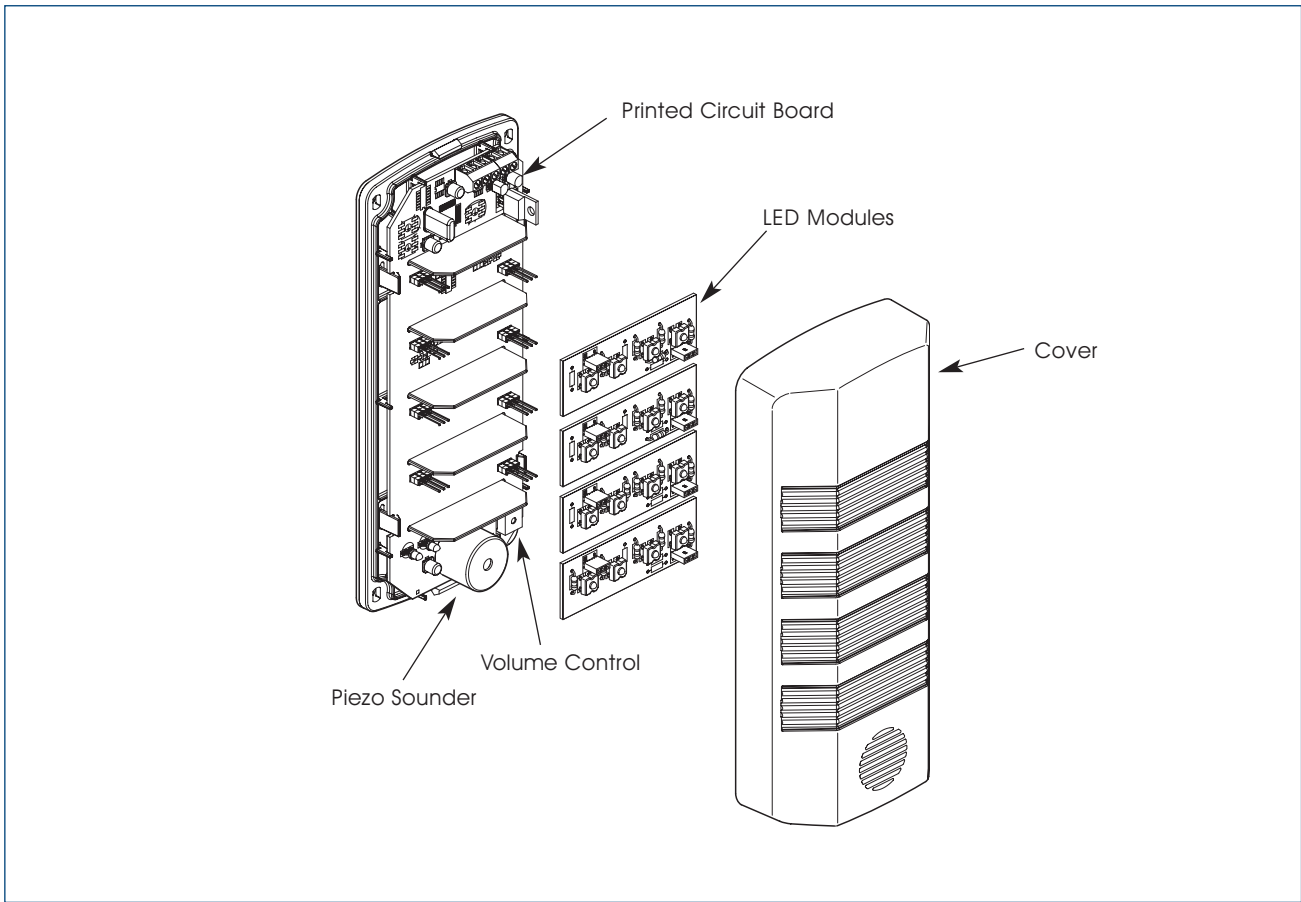
SPECIFICATIONS

Lamp Style:	LED Lamp	LED Lamp
Lamp Life:	100,000 hours	100,000 hours
Operating Temperature:	32°F to 140°F	0°C to 60°C
Net Weight:	0.7 lbs.	0.32 kg
Shipping Weight:	1.0 lbs.	0.45 kg
Height:	8.14"	207.0 mm
Width:	3.55"	90.0 mm
Depth:	1.55"	39.0 mm

HOW TO ORDER

- Specify model and tri- or quad color
- Specify finish
  White/Beige (B) or Chrome (C)
- Please refer to Model Number Index
  SCB/SCC beginning on page 372

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
PCB Assembly	K2001958A	LED Module, Red	K2001925A
LED Module, Amber	K2001925A-01	LED Module, Green	K2001925A-03
LED Module, Blue	K2001925A-02	LED Module, Clear	K2001925A-04

Synchronous Strobe Module

Model SSM

SYNCHRONIZE LOW IN-RUSH FEDERAL SIGNAL STROBES

- Synchronizes strobe lights to 72 flashes per minute

- Mounts on double-gang electrical box

- UL1971 Approved for hearing impaired applications

- Polarized design allows for remote supervision

- Compatible with select Federal Signal model strobe lights (see chart)

The Model SSM, Synchronous Strobe Module, is an electronic timing mechanism designed to energize select Federal Signal low in-rush 24VDC strobe lights simultaneously, while maintaining the ability to remotely supervise the strobe light circuit. This module is designed to synchronize a special series of Federal Signal strobe lights, which meet the requirement for Private-Mode Fire Alarm use, while maintaining the agency approval and environ-mental rating of the strobe light. The SSM is only compatible with Federal Signal brand strobe lights. See compatible models on the "How to Order" page.

The SSM enables the customer to meet local building codes through a visually appealing "single-flash" created by the simulta-neous control of strobe lights connected to it. Mixed signals are reduced to a minimum as reflection of many light pulses are now viewed as one single flash.

The SSM mounts to the plaster ring of a double-gang electrical box, and requires 24 VDC at all times to operate the timing circuit. Screw terminals are provided for field termination of control wiring and a maximum of three non-Explosion-proof strobe lights or two Explosion-proof strobe lights may be connected to each SSM. Electrically, the SSM should be mounted in the middle of the circuit, with a maximum cable distance of 100' from the SSM to each Strobe light. Supervision is accomplished the same as without the SSM, with a flash rate of 72 Flashes per minute in lieu of the advertised flash rate for each strobe light. The SSM is capable of switching 6 Amps of current. Please note: Not all strobe lights have the same in-rush current and therefore the SSM's circuit's switching potential may be reduced. Please see the application drawings on the second page.

Model	Operating Current	Voltage
SSM	0.95 amps	24VDC

SYNCHRONOUS STROBE MODULE (SSM)
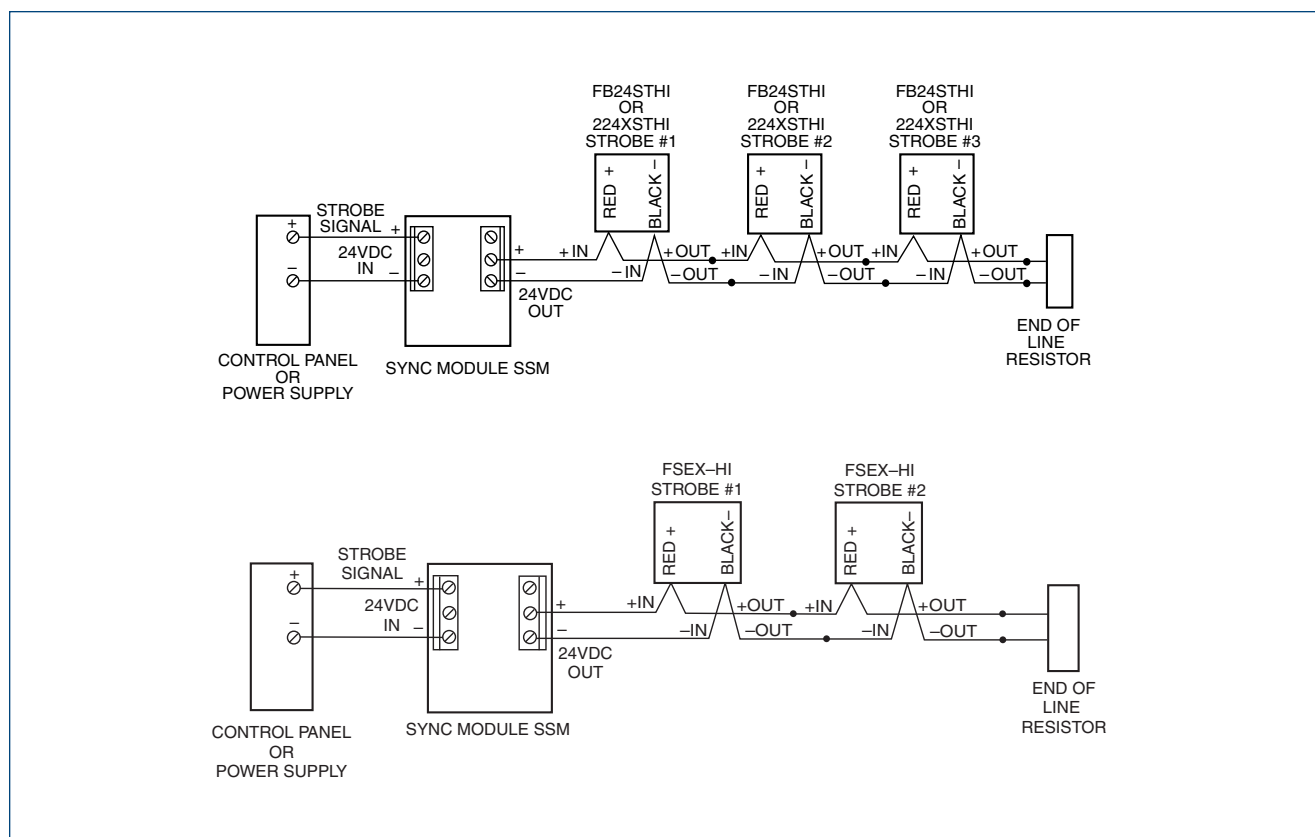
SPECIFICATIONS

Operating Temperature:	32°F to 120°F	0°C to 49°C
Net Weight:	0.53 lbs.	0.24 kg
Ship. Weight:	0.93 lbs.	0.42 kg
Height:	4.5"	114.3 mm
Width:	4.5"	114.3 mm
Depth:	1.12"	28.4 mm

COMPATIBLE STROBE LIGHTS

224XST-024, Series C	3 per circuit
225XST-I-024, Series B	3 per circuit
FB2PSTX-I-024, Series B	3 per circuit
FB2PST-I-024, Series B	3 per circuit
FB24ST-024, Series B	3 per circuit
FB24ST-HI-024, Series C	3 per circuit
224XST-HI-024, Series B	3 per circuit
FSEX-HI-024, Series D	2 per circuit
FSEX-024, Series D	2 per circuit
27XST-024, Series E	2 per circuit

REPLACEMENT PARTS

Description	*Part Number*
PC Board Assembly	K2001933A

HOW TO ORDER

• Specify model

2645 Federal Signal Dr., University Park, IL 60466   Tel: 708.534.4756   Fax: 708.534.4852   www.federalsignal-indust.com

UniStat™ Status Indicator

Model USI and USIS

MULTICOLOR LED TYPE 4X STATUS INDICATOR

- Available in 24VAC/DC and 120VAC

- Tri or quad-color models

- 100,000 hour, vibration-resistant LED light source

- Models available with built-in sounder

- Surface mount and integrated $^3/_4$ - inch pipe mount

- PLC compatible

- Indoor use only

- Type 4X, IP66 enclosure

- Type 1 with sounder

- UL and cUL Listed

The UniStat™ is an LED (light emitting diode) based, multi-color, single-high status indicator.

Using the latest die level LED technology, this unique status indicator can produce three colors (Amber, Green and Red) or four colors (amber, blue, green and red) from a single light source.

Ideal for OEM applications, the UniStat is compact, attractive, and easy to install. The low profile UniStat produces as much light as its much larger competitors.

The UniStat offers a choice of four integrated flash patterns – steady-burn, slow flash, strobe flash and SimuStrobe™. SimuStrobe simulates the attention-getting flash rate of a strobe light but with a much more color-rich output. The user can choose a total of 12 possible flash/color combinations in the tri-color models and 16 in the quad-color models.

When the application calls for an increased sense of urgency, specify the model USIS with an integrated piezo sounder. Producing 60dB @ 10 feet, the USIS is the ideal attention getter in process control applications.
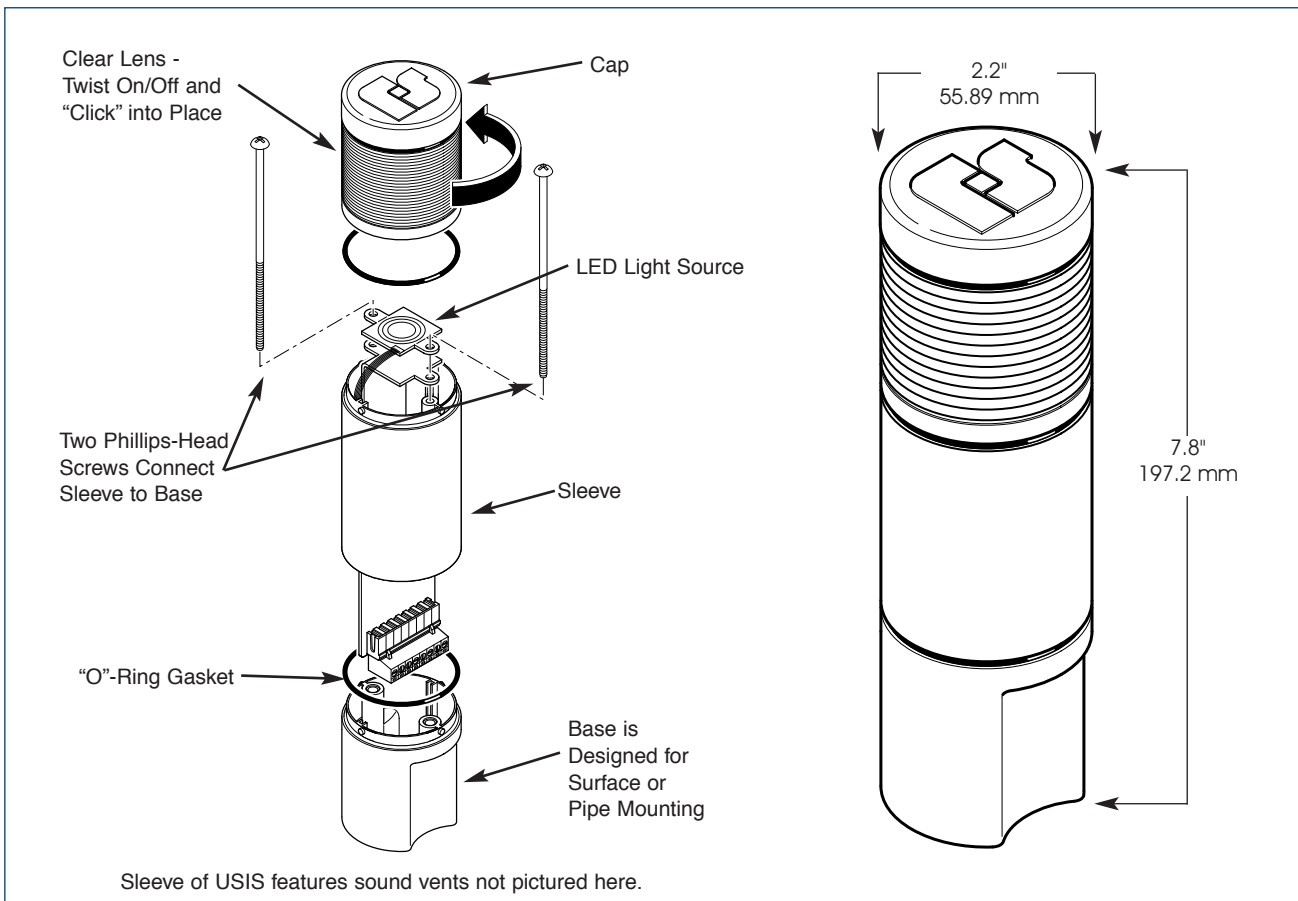
Like the multi-level, multi-color, multi-lamp Microstat™, the UniStat is rated Type 4X (models with sounder are rated Type1). Each model arrives pre-assembled and ready to surface mount or $^3/_4$-inch pipe mount. Options for the UniStat include pipe mount extensions (4",16", & 32"), a wall mount bracket and a tulip mount base (see page 16).

Model	Description	Voltage	Operating Current	Mount
USI/USIS-024TC	Tri-color	24VAC/DC	100 mA*	$^3/_4$" Pipe or Surface
USI/USIS-120TC	Tri-color	120VAC	60 mA*	$^3/_4$" Pipe or Surface
USI/USIS-024QC	Quad-color	24VAC/DC	100 mA*	$^3/_4$" Pipe or Surface
USI/USIS-120QC	Quad-color	120VAC	60 mA*	$^3/_4$" Pipe or Surface

* Sounder draws 100 mA on all models

5yr FEDERAL SIGNAL WARRANTY

UNISTAT™ WITH LED LAMP (USI/USIS)

Clear Lens - Twist On/Off and "Click" into Place

Cap

LED Light Source

Two Phillips-Head Screws Connect Sleeve to Base

Sleeve

"O"-Ring Gasket

Base is Designed for Surface or Pipe Mounting

Sleeve of USIS features sound vents not pictured here.

2.2"
55.89 mm

7.8"
197.2 mm

SPECIFICATIONS

Lamp Life*:	100,000 Hours	100,000 Hours
Light Source:	LED	LED
Operating Temperature:	32°F to 104°F	0°C to 40°C
Net Weight:	0.4 lbs.	0.18 kg
Shipping Weight:	0.7 lbs.	0.32 kg
Height:	7.8"	197.2 mm
Diameter:	2.2"	55.9 mm

* Optimal hours under ideal conditions.

REPLACEMENT PARTS

Description	Part Number
Lens, Clear	K8447042A-02
Cap, Clear	K8447044A
O-Ring	K8447054B
LED Array, Tricolor	K2005328A
LED Array, Quad Color	K2005328A-01
PCB, USI 24VDC	K2005347A
PCB, USI 120VAC	K2005347A-02
PCB, USIS 24VDC	K2005347A-01
PCB, USIS 120VAC	K2005347A-03

HOW TO ORDER

- Specify model number, voltage and tri-color or quad-color
- Specify optional sounder
- Specify options from page 16
- Please refer to Model Number Index USI/USIS beginning on page 372

Hazardous Location UniStat™ Status Indicator

Model USIX

The UniStat™ is an LED (light emitting diode) based, multi-color, single-high status indicator.

Using the latest die level LED technology, this unique status indicator can produce three colors (Amber, Green and Red) or four colors (Amber, Blue, Green and Red) from a single light source.

The UniStat offers a choice of four integrated flash patterns – steady-burn, slow flash, strobe flash and SimuStrobe™. SimuStrobe simulates the attention-getting flash rate of a strobe light but with a much more color-rich output. The user can choose a total of 12 possible flash/color combinations in the tri-color models and 16 in the quad-color models.

The USIX is protected in a durable polycarbonate housing utilizing four ¾ inch knockout conduit openings in the surface mount base. The outer glass globe is protected by a polycarbonate dome guard(included). Each model arrives pre-assembled and ready to surface mount.

The USIX has been designed for use in Class I, Division 2, Groups A, B, C, D; Class II, Division 2, Groups F and G; and Class III. The USIX is suitable for use in Type 4X applications.

MULTICOLOR LED STATUS INDICATOR FOR HAZARDOUS AREAS

- Available in 24VAC/DC and 120VAC
- Tri or quad-color models
- 100,000 hour, vibration-resistant LED light source
- Surface mount
- PLC compatible
- Type 4X, IP66 enclosure
- UL and cUL Listed

Model	Description	Voltage	Operating Current	Mount
USIX-024TC	Tri-color	24VAC/DC	0.087 amps	Surface
USIX-120TC	Tri-color	120VAC	0.058 amps	Surface
USIX-024QC	Quad-color	24VAC/DC	0.087 amps	Surface
USIX-120QC	Quad-color	120VAC	0.058 amps	Surface
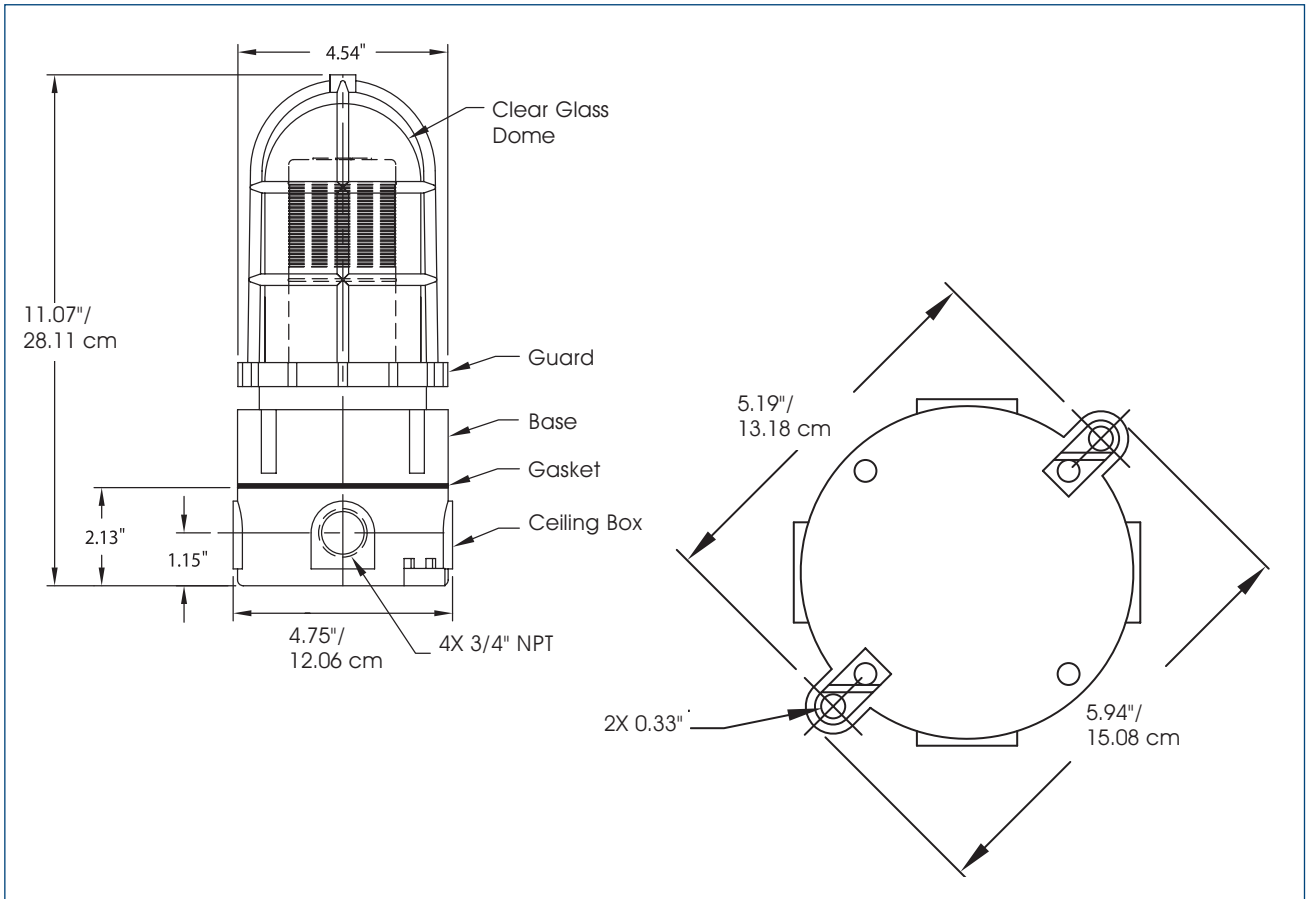
5 yr FEDERAL SIGNAL WARRANTY

HAZARDOUS LOCATION UNISTAT™ (USIX)

SPECIFICATIONS

Lamp Life*:	100,000 Hours	100,000 Hours
Light Source:	LED	LED
Operating Temperature:	-40°F to 150°F	-40°C to 66°C
Net Weight:	2.49 lbs.	1.13 kg
Shipping Weight:	2.53 lbs.	1.15 kg
Height:	11.07"	28.11 cm
Diameter:	4.75"	12.06 cm

* Optimal hours under ideal conditions.

REPLACEMENT PARTS

Description	Part Number
Lens, Clear	K8447042A-02
Cap, Clear	K8447044A
O-Ring	K8447054B
Clear Glass Globe	Call Factory
Polycarbonate Globe	Call Factory
Plastic Guard	Call Factory
PCB, USIX 24VAC/DC	K2005347A
PCB, USIX 120VAC	K2005347A-02
LED Array, TC	K2005328A
LED Array, QC	K2005328A-01

HOW TO ORDER

- Specify model number, voltage and tri-color
- Please refer to Model Number Index USIX beginning on page 372

2645 Federal Signal Dr., University Park, IL 60466   Tel: 708.534.4756   Fax: 708.534.4852   www.federalsignal-indust.com

Visalert® Strobe Light

Model VALS

STROBE WARNING LIGHT

- Available in 12VDC and 24VDC, 120VAC and 240VAC

- Five lens colors

- 4,000 hour strobe tube

- Flush or surface mounts on Federal Signal audible signaling devices or control panel

- Indoor use only

- Type 3R, IP44 enclosure

- UL Listed and CSA Certified

Federal Signal's Visalert® is a three dimensional, triangular warning light designed to be mated with Federal Signal's Model 350 Vibratone® horn and the Model 50GC SelecTone® speaker/amplifier. The Model VALS can also be used as a stand alone device. Visalert is available in five lens colors: amber, blue, clear, green and red.

Knockouts on the 50GC and the 350 audible devices ensure easy installation. The units can be either independently or simultaneously wired with the audible device. Model VALS uses a linear strobe tube and all the circuitry is contained within the lens.

Visalert units are recommended for use in industrial applications and situations where effective visual warning is needed. The Visalert can be flush or surface mounted on the Model 350 horn or Model 50GC speaker/amplifier.

Federal Signal's Visalert strobe light is an affordable, low-maintenance strobe light in a compact size that is perfect for control panel applications.

Model	Voltage	Operating Current	Flash Rate/ Minute	Candela Peak[1]	Mount
VALS	12VDC	0.18 amps	80	108,000	Surface
VALS	24VDC	0.08 amps	80	108,000	Surface
VALS	120VAC 50/60HZ	0.06 amps	80	108,000	Surface
VALS	240VAC 50/60HZ	0.03 amps	80	108,000	Surface

[1] Peak candela is the maximum light intensity generated by a flashing light during its light pulse
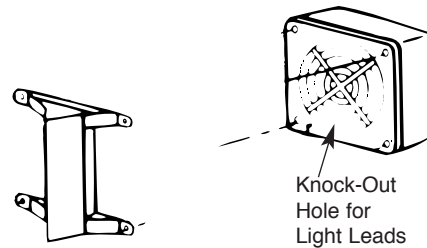
VISALERT® STROBE LIGHT (VALS)

Surface-Mounted Light

BCL Plate

NB Box
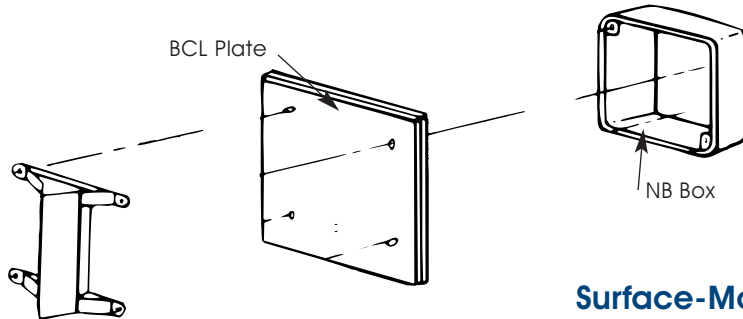
Surface-Mounted 50GC Speaker

Knock-Out
Hole for
Light Leads

SPECIFICATIONS

Lamp Life*:	4,000 Hours	4,000 hours
Lamp Style:	Strobe	Strobe
Operating Temperature:	-31°F to 150°F	-35°C to 66°C
Net Weight:	0.1 lbs.	0.057 kg
Shipping Weight:	0.25 lbs.	0.113 kg
Height:	3.95"	100.3 mm
Width:	3.94"	100.0 mm
Depth:	1.6	40.6 mm

* Optimal hours under ideal conditions.

HOW TO ORDER

- Specify model, voltage and color
- Specify options:
  Electrical Box (NB)
  Mounting Plate (BCL)
  Speaker (50GC, page 174)
- Please refer to Model Number Index VALS beginning on page 375

REPLACEMENT PARTS

Description	Part Number	Description	Part Number
Lens, Amber	K8435D539A	Lens, Green	K8435D539A-03
Lens, Blue	K8435D539A-08	Lens, Red	K8435D539A-07
Lens, Clear	K8435D539A-02	Strobe Tube	K149128A
		Gasket	K8435A225

Vehicular Light Bar

Model VLB

The Highlighter Strobe is designed for those who prefer the look of the traditional halogen light bar, but require strobe technology.

The Highlighter Strobe features 2 strobe heads and an integrated microprocessor controlled power supply that produces an alternating quad flash of 9-joules per head. The alternating flash tubes are positioned under onmi-directional Fresnel lens for maximum lens fill and off-axis visibility.

All Highlighter Strobe models meet SAE J1318 Class 2 requirements.
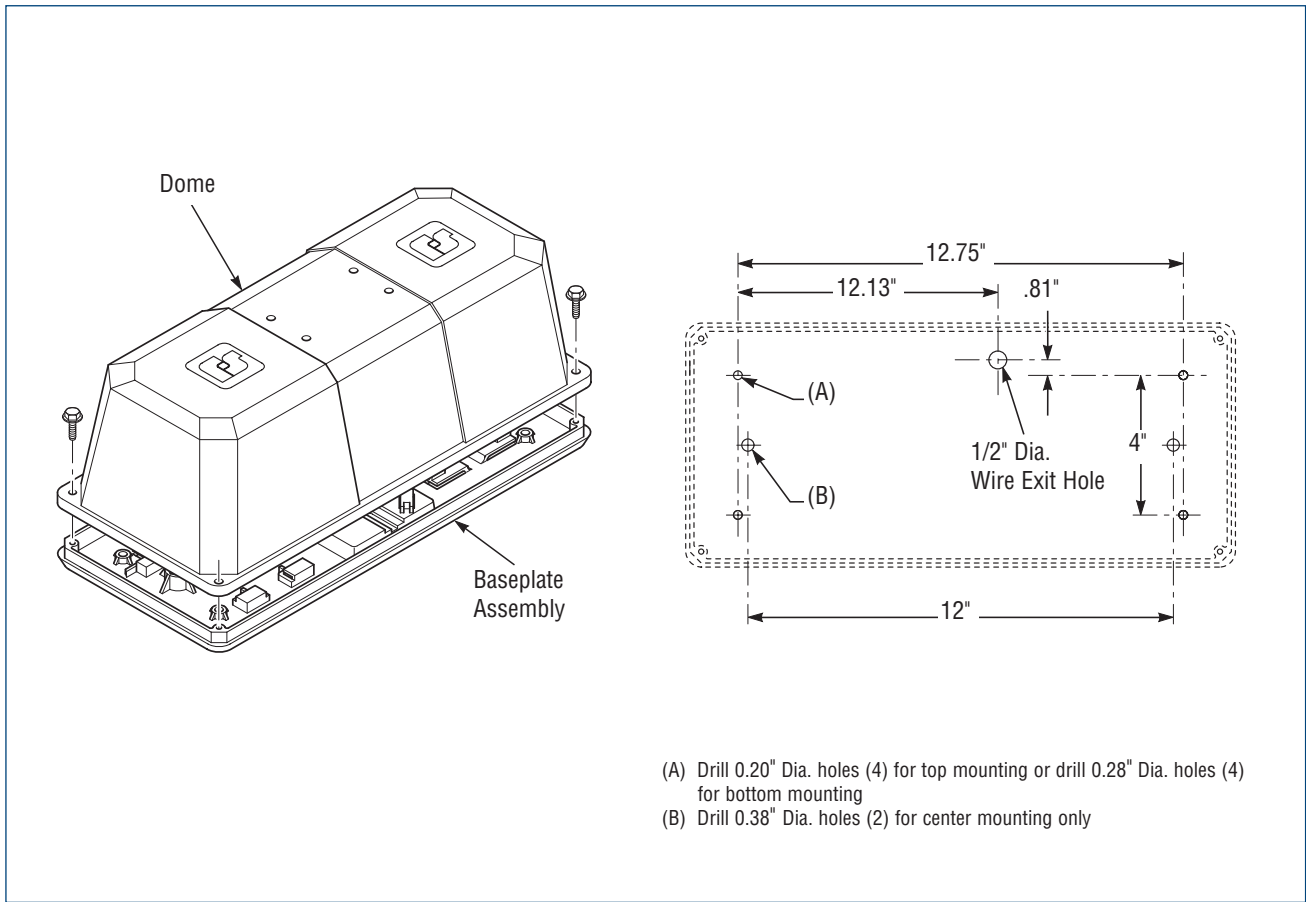
Mounting options include permanent mount or the flexibility of a suction cup/magnetic mounting. Magnetic mount unit come equipped with a cigarette lighter power plug with an integrated ON/OFF switch for easy operational control. Permanent mounting can be achieve with any of the available mounting kits[1]; FMK – Flat Mounting Kit, RMK – Riser Mounting Kit.

[1] Permanent mounting requires one of the available mounting kits for installation

MINI LIGHTBAR

- Modular system
- 360 degree light distribution
- Quad flash, 9 joule output
- Magnet mount or permanent mount
- Low current draw
- Weather resistant housing
- Meets, SAE J1318 Class II

Model	Operating Voltage	Operating Current	Mounting Configuration
VLB-012AP	12VDC	3.6 amps @ 12.8VDC	Permanent
VLB-012AM	12VDC	3.6 amps @ 12.8VDC	Magnetic

VEHICULAR LIGHT BAR (VLB)

Dome

Baseplate Assembly

12.75"
12.13"
.81"

(A)

(B)

1/2" Dia. Wire Exit Hole

4"

12"

(A) Drill 0.20" Dia. holes (4) for top mounting or drill 0.28" Dia. holes (4) for bottom mounting
(B) Drill 0.38" Dia. holes (2) for center mounting only

SPECIFICATIONS

Shipping Weight:
Permanent	5.0 lbs.	2.3 kg
Magnetic	5.0 lbs.	2.3 kg

Height:
Permanent	5.0"	127.0 mm
Magnetic	5.0"	127.0 mm
Width:	9.0"	229.0 mm
Length:	15.0"	381.0 mm

HOW TO ORDER

- Specify model, mounting, color and voltage
- Select option mounting bracket for Permanent Mounting;
  FMK – Flat mount kit
  RMK – Riser mount kit
- Please refer to Model Number Index VLB beginning on page 377

REPLACEMENT PARTS

Description	_Part Number_
Strobe tube assembly with connector	KZ8560082A
Power supply assembly	KZ8560081A
Clear internal lens	K208669
Outer dome, Amber	K452510-02

Hazardous Location GRP Strobe Light

Model WV450XD and WV450XE

The Federal Signal Model WV450X Hazardous Location GRP Strobe Light is designed to serve the needs of rugged land-based and offshore industrial applications that demand reliable, long life operation while complying with stringent International approval requirements.

The Federal Signal Model WV450X Hazardous Location GRP Strobe Light utilizes the latest technology in non-metallic housing construction. The housing of the WV450X is comprised entirely of Glass Reinforced Polyester (GRP) which makes the product corrosion free and lighter than a comparable metallic fixture. The fact that the WV450X is corrosion free also makes the product safer, and "maintenance-free" by eliminating the need to regularly inspect the flame path. An electro-polished stainless steel dome guard is also provided for protection of the glass lens in the event of accidental impact.

Two versions of the WV450X are available. The "D" version of the product (WV450XD) comes standard with a stainless steel mounting bracket for wall mounting or fastening to a vertical surface. Two holes are tapped for M20 thread in the bottom of the product allowing for field gland connection. The "E" version of the product (WV450XE) includes the same features as the WV450XD, but incorporates a terminal chamber with three M20 tapped holes on the very bottom of the fixture. This terminal chamber is designed to house field terminations and through going power supplies.
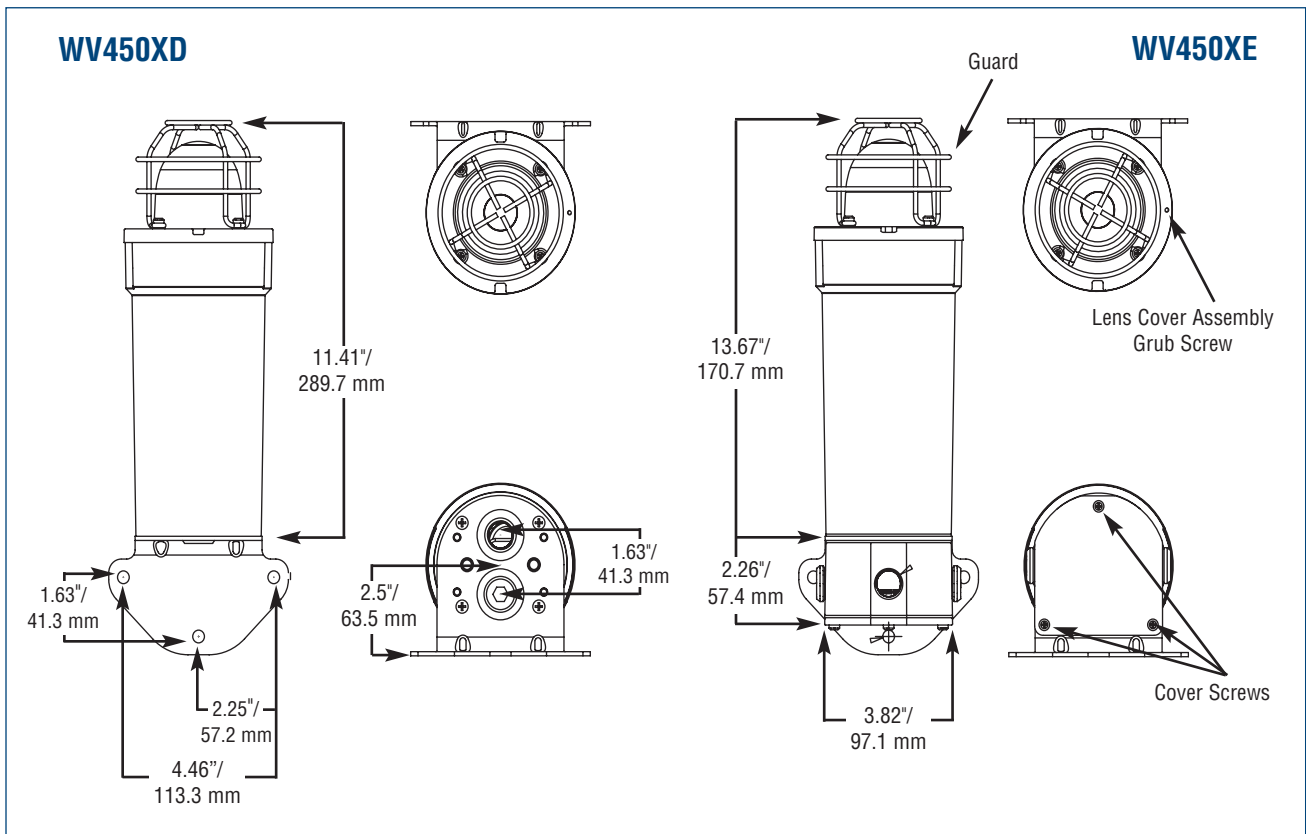
The WV450X is available in seven standard colors and three voltage ranges to satisfy most applications. There are also three different Joule output ratings available for each model and each voltage range, providing the ability to tailor the light output and current draw for a given area. The WV450X is ATEX, IECEx approved, making it ideal for applications that require International third party safety standards.

GLASS REINFORCED POLYESTER DESIGN FOR LOW MAINTENANCE AND CORROSION RESISTANCE

- Available in 24-48VDC, 110VAC, 220-248VAC

- Available in 5, 10 and 15 Joule Units

- Seven available lens colors: red, amber, yellow, blue, green, clear and magenta

- 316 Stainless steel mounting bracket included

- Toughened, impact resistant dome

- IP66

- Corrosion free GRP (glass reinforced polyester)

- Included dome guard

- Two M20 entries standard

- Zone rated, IECEx

    ATEX EExd IIB + H2 T4 + T3

Model	Operating Voltage	Max Operating Current	Temperature Code	Flash Rate	Lamp Life*
WV450	24-48VDC	0.94/0.48 A @ 24-48VDC	T4	60	10,000 hrs
	110VAC	0.57 A @ 110VAC 50/60Hz	T3	60	10,000 hrs
	220-248VAC	0.30 A @ 220-248VAC 50/60Hz	T3	60	10,000 hrs

* Optimal Hours under ideal conditions

HAZARDOUS GRP STROBE (WV450XD/WV450XE)

WV450XD

WV450XE

Guard

Lens Cover Assembly Grub Screw

Cover Screws

11.41"/ 289.7 mm

13.67"/ 170.7 mm

1.63"/ 41.3 mm

2.5"/ 63.5 mm

1.63"/ 41.3 mm

2.25"/ 57.2 mm

4.46"/ 113.3 mm

2.26"/ 57.4 mm

3.82"/ 97.1 mm

SPECIFICATIONS

Operating Temperatures:

"d" version without terminal chamber

ATEX -55°C to 55°C (-67°F to 131°F)	
IECEx -20°C to 55°C (-4°F to 131°F)	

"e" version with terminal chamber

ATEX -20°C to 55°C (-22°F to 131°F)	
IECEx -20°C to 55°C (-4°F to 131°F)	

WV450XD

NET Weight:	7.1 lbs.	3.23 kg
Shipping Weight:	8.6 lbs.	3.88 kg
Height:	11.41"	289.7 mm
Diameter:	4.46"	113.3 mm

WV450XE

NET Weight:	8.6 lbs.	3.9 kg
Shipping Weight:	10.0 lbs.	4.54 kg
Height:	13.67"	170.7 mm
Diameter:	3.82"	97.1 mm

Certificate Number:	IECEx UL	06.0010X
	06 UL DEMKO ATEX	0425693X

HOW TO ORDER

- Specify Model Number
- Specify Construction Series, "D" or "E"
- Specify Joule Output
- Specify Voltage Range
- Specify Lens Color
- Please contact factory for model selection