Industrial
signaling products

Leading the Way

TOMAR industrial signaling products increase productivity
and make the workplace safer!

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TOMAR Electronics, Inc.

For over 30 years, TOMAR Electronics, located in Gilbert, Arizona, has engineered, designed, and manufactured the highest quality, most reliable and extremely efficient audible and visual warning signals. Tomar Electronics is dedicated to perfecting strobe and LED technology and continues to define the standard for warning light performance into the twenty-first century.

From assemblers to administration, TOMAR is continually improving manufacturing efficiencies while preserving the consistent quality of our work. We take great pride in our efforts toward providing innovative products that save lives.

Research and Development
The cornerstone of innovation.

The performance and reliability of TOMAR products evolves from over a quarter century of intensive research and development of high efficiency electronic circuit designs and innovative optics.

TOMAR's staff of highly specialized engineers employ state-of-the-art electronic design and testing equipment to create the most advanced warning signals available. TOMAR's testing and research equipment includes:

- An advanced computerized circuit simulator that defines critical tolerance parameters and troubleshoots for potential design weaknesses.
- Surface Mount Technology Computer Automated (SMT) Component Pick and Place Assembly
- A 100 foot automated light measurement tunnel which uses photometers calibrated to display measurements in candelas effective in accordance with FAA, and IES standards. High speed photodiodes are used to measure and display light pulse wave shapes to insure accuracy in light intensity output specifications.
- A fully equipped and certified test lab, capable of making all tests and measurements.
- A fast scanning spectroradiometer for color measurements.

Manufacturing and Quality Control
Striving to produce high quality products.

Rigorous quality control standards and detailed inspections are implemented at various stages in the production process. Fixture "burn-in" provides for an unprecedented 100% testing of all TOMAR products to ensure accurate and trouble free performance for the life of the strobe. Statistical Process Control is used to monitor production quality with detailed precision. TOMAR's warranties are among the longest in the industry, made possible by the dedication to quality in both the design and manufacturing processes. A computerized system integrating order entry, inventory, and production control helps to facilitate rapid order fulfillment.

Tomar Online
www.tomar.com

Visit our web site for the latest product up-dates, documentation and many other helpful information. At www.tomar.com you can:

- Order additional copies of our catalogs
- Download any page of our catalogs in PDF format
- Download technical information and installation instructions for Tomar products
- Request an RMA number
- Find up-to-date information on new and current products
- Find local distributors and much more

How we measure Light Intensity

The NBS (National Bureau of Standards) and the IES (Illumination Engineering Society) use candela Effective or Effective Candlepower (ECP) in specifying intensities of a flashing light source. This rating is the most meaningful when it becomes necessary to predict the visible range of flashing warning lights versus steady burning light sources.

Peak Candela or Peak Candlepower is defined as "the maximum light intensity generated by a flashing light during its light pulse. This is NOT a measurement of visible light, and therefore indicates nothing about how bright the light appears to the human eye.

Visual Signaling Product photometric tests are performed using FAA and IES standard methods using visible light only. The photometer used is an integrating photometer with photopic response detector. Photometer calibration is traceable to NBS standards.

micro*LERT*
Mini LED Warning Light

- 5-year warranty
- High power LED
- NEMA 4X
- UL Listed
- Wide AC and DC input voltage
- Lexan lens
- Steady-on or Flashing
- Surface, Pipe, or Thread mounts
- Sealed construction - NEMA 6P capable
- 5 LED colors

Tomar introduces a totally new LED warning light. The MicroLert offers unique features not before seen in industrial signaling devices. It is the first such light designed from the ground up to take full advantage of LED lighting technology.

The MicroLert features an integral inverted cone design to provide full 360 degree coverage. The MicroLert lens is engineered for maximum light output and color clarity, and allows more of the LED light to be projected out than do conventional Fresnel lenses.

The tough Lexan lens is spun welded to the base to completely seal out moisture. The MicroLert is UL listed and manufactured to NEMA 4X specifications. It is available in five LED colors (amber, blue, green, red, and white); and in steady-burn or flashing models.

The MicroLert will operate over a wide AC and DC input voltage ranges. The DC version is designed to operate from 10-100 VDC and 16-36 VAC; the AC version from 85-265 VAC. The MicroLert is guaranteed against factory defects for a full 5 years.
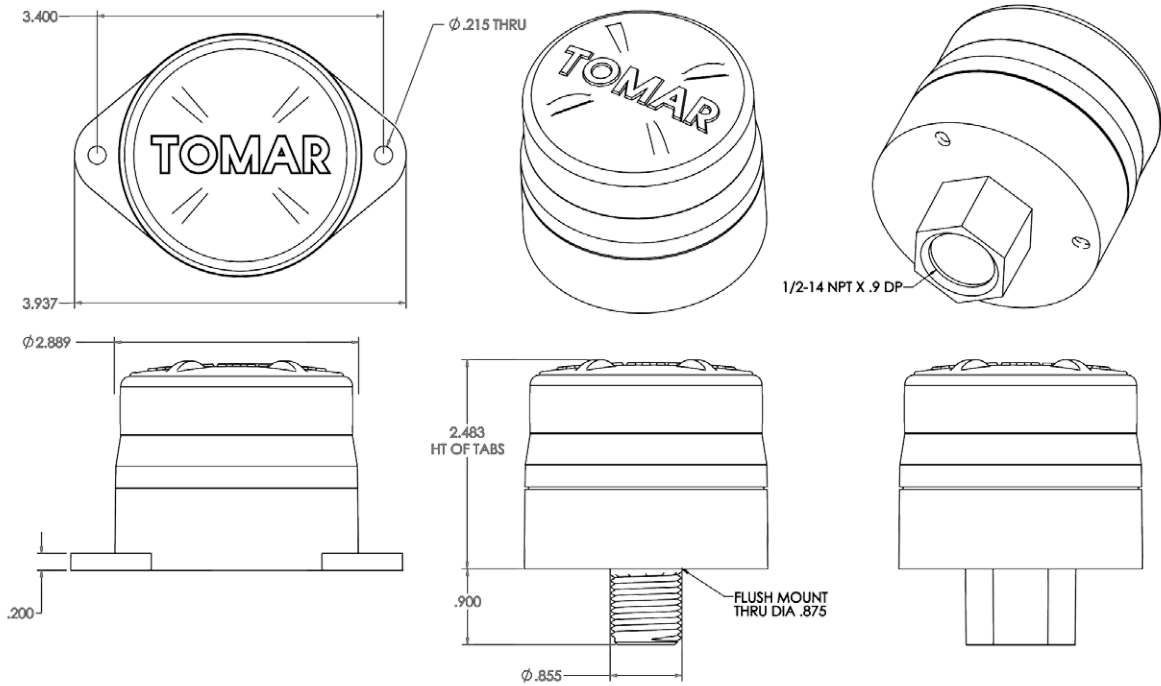
Microlert Models

Item	Description	Voltage
270LF-12-80-A	Flashing Flange Mount	12-80 VDC
270LS-12-80-A	Steady-On Flange Mount	12-80 VDC
290LF-12-80-A	Flashing ½" Pipe Mount	12-80 VDC
290LF-120-240-A	Flashing ½" Pipe Mount	120-240 VAC
290LS-12-80-A	Steady-On ½" Pipe Mount	12-80 VDC
290LS-120-240-A	Steady-On ½" Pipe Mount	120-240 VAC
295LF-12-80-A	Flashing ½" Thread Mount	12-80 VDC
295LF-120-240-A	Flashing ½" Thread Mount	120-240 VAC
295LS-12-80-A	Steady-On ½" Thread Mount	12-80 VDC
295LS-120-240-A	Steady-On ½" Thread Mount	120-240 VAC

Specifications

Item	Description
Lamp Type	LED
Flash Rate	75 NEOBE® flashes per minute - each flash containing 7 rapid bursts of light (approximately 560 ms "on-time" and 240 ms "off-time")
Voltage and Amperage	198 mA @ 24 VDC for Single Flash 040 mA @ 120 VAC for Single Flash 020 mA @ 240 VAC for Single Flash
Operating Temperature	-40 to 85 C.

LED MICROSTACK™
 Stackable Modules

The Tomar model PRE-F Microstack is a flashing or steady burning modular light tower. It is ideally suited for machine-status or process control signaling applications. Consisting of a long life, high-output, and vibration resistant LED lamp cluster, the PRE-F is designed to increase productivity and greatly reduce maintenance costs. The unique prism-cut lens design assures superior light diffusion and greater lens fill. All components, including the LED's, are warranted for a full 5 years.

The model PRE-F is available from one to five-high configuration and in 24 VDC/AC, 120 VAC, and 240 VAC versions.

With the built-in Flasher, each light module can be individually controlled for Flashing or Steady-on mode. An optional 80 dB Sounder is available which can be Factory installed or easily added later.

Pre-wired and pre-assembled, each unit is ready for installation right out of the box. If required, the lenses can be separated without tools by simply twisting and pulling them apart.

• 5-year warranty

• High power LED cluster

• Built-in Flasher

• 80 FPM

• CE Compliant

• 24 VDC/AC, 120 VAC, and 240 VAC

• 100,000 hour lamp life

• 56 mm (2.2″) diameter

• IP 56

• Factory assembled

• 80 db Optional Sounder

Lens Colors

Amber   Blue   Clear   Green   Red
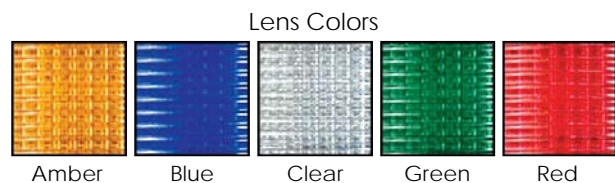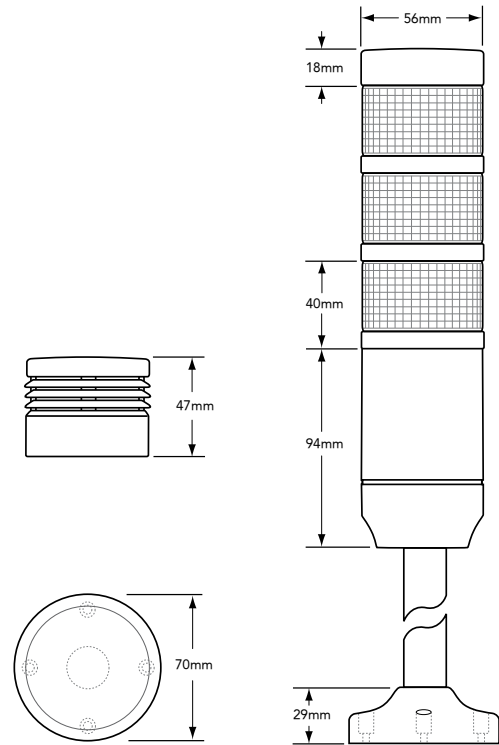
Ordering Information

Model Description	Voltage	Amp Draw
PRE-F-1-024 LED Microstack, 1-High	24 VCD/AC	28 mA
PRE-F-1-120 LED Microstack, 1-High	120 VAC	25 mA
PRE-F-1-240 LED Microstack, 1-High	240 VAC	25 mA
PRE-F-2-024 LED Microstack, 2-High	24 VCD/AC	62 mA
PRE-F-2-120 LED Microstack, 2-High	120 VAC	57 mA
PRE-F-2-240 LED Microstack, 2-High	240 VAC	57 mA
PRE-F-3-024 LED Microstack, 3-High	24 VCD/AC	102 mA
PRE-F-3-120 LED Microstack, 3-High	120 VAC	91 mA
PRE-F-3-240 LED Microstack, 3-High	240 VAC	91 mA
PRE-F-4-024 LED Microstack, 4-High	24 VCD/AC	136 mA
PRE-F-4-120 LED Microstack, 4-High	120 VAC	124 mA
PRE-F-4-240 LED Microstack, 4-High	240 VAC	124 mA
PRE-F-5-024 LED Microstack, 5-High	24 VCD/AC	169 mA
PRE-F-5-120 LED Microstack, 5-High	120 VAC	155 mA
PRE-F-5-240 LED Microstack, 5-High	240 VAC	155 mA

Specifications

Item	Description
Lamp Type	LED
Lamp Life	100,000 hours
Flash Rate	80 flashes per minute
Sounder	80 db @ 1m
Net weight	1 high - .9 lbs. 2 high - 1.1 lbs 3 high - 1.3 lbs 4 high - 1.5 lbs 5 high - 1.7 lbs

Accessories

Item	Description
MAP-0022	Pole, 22 mm
MAP-N033	Pole, 33 mm with 1/2" NPT threads
MAP-M043	Pole, 43 mm with M20 nuts
MAP-0240	Pole, 240 mm
MAP-M240	Pole, 240 mm with (2) M20 nuts
MAP-0750	Pole, 750 mm
MAP-M750	Pole, 750 mm with (2) M20 nuts
MAM-B070	Tulip base, 70 mm (2.75") diameter
MAM-DS25	Wall mount "L" bracket for M20 pole and nut
MAM-DS30	Wall mount bracket
MPZ56E	Sounder, 24 VDC/AC to 240 VAC

440 MICROSTACK™
Strobe or NEOBE® Stackable Modules

The model 440 MICROSTACK™ features multi-color and multi-format optical signaling using strobes and/or steady burning and/or flashing NEOBE® lamps in any combination. NEOBE® lamps are gas discharge lamps which have no filament to wear out or break. All MICROSTACK modules operate over a worldwide AC input voltage range of 85–264VAC 50/60 Hz. They all use the same type of lamp and maintain a constant brightness and flash rate over the entire range. MICROSTACK modules separate at any level by removing two screws. All MICROSTACK modules are sealed with o-rings so they may be used outdoors and in dusty indoor conditions. Lamp colors available in Amber, Blue, Clear, Green and Red.

- components or preassembled units
- **steady burn or flashing**
- outdoor or indoor use
- xenon strobe lamp
- two year warranty on power supply
- one year warranty on lamp
- **available in five lens colors**

Specifications

Item	Description
Voltage and Amperage	85–264VAC 50/60 Hz, 0.06 A average 7 watts per module
Flash Rate	60 to 80 FPM
Size	3.32″ dia. (84mm)
Height (including base and stand)	7.7″ (196mm) (model 440–1) 10.0″ (254mm) (model 440–2) 12.3″ (312mm) (model 440–3) 14.6″ (371mm) (model 440–4) 16.9″ (429mm) (model 440–5)
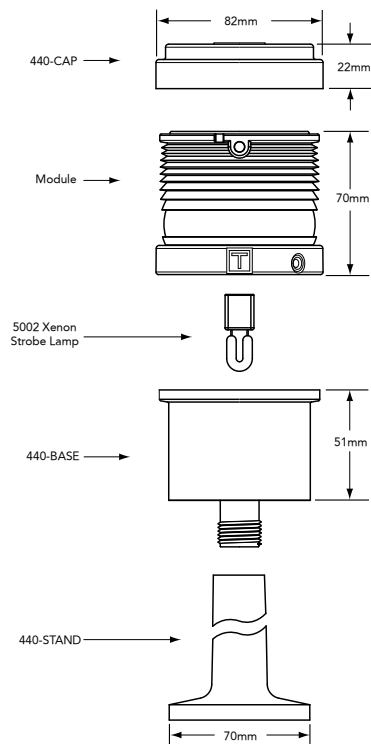
Ordering Information

The MICROSTACK can be ordered as a preassembled unit or as components or modules.

Preassembled MICROSTACKS

Model No.	Description
440–1	One module MICROSTACK
440–2	Two module MICROSTACK
440–3	Three module MICROSTACK
440–4	Four module MICROSTACK
440–5	Five module MICROSTACK

Module Options

Module type
Steady Burn NEOBE®
Strobe
Flashing NEOBE®

Available Colors

Color
Amber
Blue
Clear
Green
Red

Replacement Parts

Model No.	Description
440–BASE	Base and cover, less stand
440–STAND	Stand for base including gasket
440–CAP	Cap for MICROSTACK™ module
440S	Strobe module including lamp (please specify color — Amber, Blue, Clear, Green or Red)
440SB	Steady burn NEOBE® including lamp (please specify color — Amber, Blue, Clear, Green or Red)
440FN	Flashing NEOBE® including lamp (please specify color — Amber, Blue, Clear, Green or Red)
5002	Spare lamp for MICROSTACK™ module
440–T16	16" extension tube
440–T32	32" extension tube
440–DEMOBASE	Demonstrator with switch base

TOMAR Electronics, Inc.

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MICROSTROBE®
Low Profile - Single Flash Strobe

The MICROSTROBE® family is a low profile, single flash, low cost strobe light which features a plug-in replaceable lamp and Lexan® lens. The high efficiency, solid state, power supply is fully potted in polyurethane for the ultimate in protection from moisture, vibration and exposure tohigh voltage. All units are polarity protected and have built-in filters to protect against radio interference and spike voltages.

- built-in RFI filters
- lens has hermetic o-ring seal
- solid state power supply
- 10,000 hour strobe lamp
- two year warranty on power supply
- one year warranty on lamp
- available in six lens colors
- UL listed
- NEMA 4X

Lens Colors

Amber   Blue   Clear   Green   Purple   Red

Ordering Information
Please specify lens colors and model number when ordering. Available colors are Amber, Blue, Clear, Green, Purple, and Red.

Model No.	Description	Voltage/Frequency
470SSGP–120	AC strobe, wall plate mount	120VAC, 50/60Hz
480S–120	AC strobe, surface mount, AC cord set	120VAC, 50/60Hz
480SMB–120	AC strobe, magnetic mount	120VAC, 50/60Hz
485S-120	AC strobe, screw-in light bulb base	120VAC, 50/60Hz
485S-240	AC strobe, screw-in light bulb base	240VAC, 50/60Hz
490S–120	AC strobe, 1/2" female pipe mount	120VAC, 50/60Hz
490S–240	AC strobe, 1/2" female pipe mount	240VAC, 50/60Hz
492S–120	AC strobe, 3/4" IPS slip mount	120VAC, 50/60Hz
495S–120	AC strobe, 1/2" male thread mount	120VAC, 50/60Hz
495S–240	AC strobe, 1/2" male thread mount	240VAC, 50/60Hz
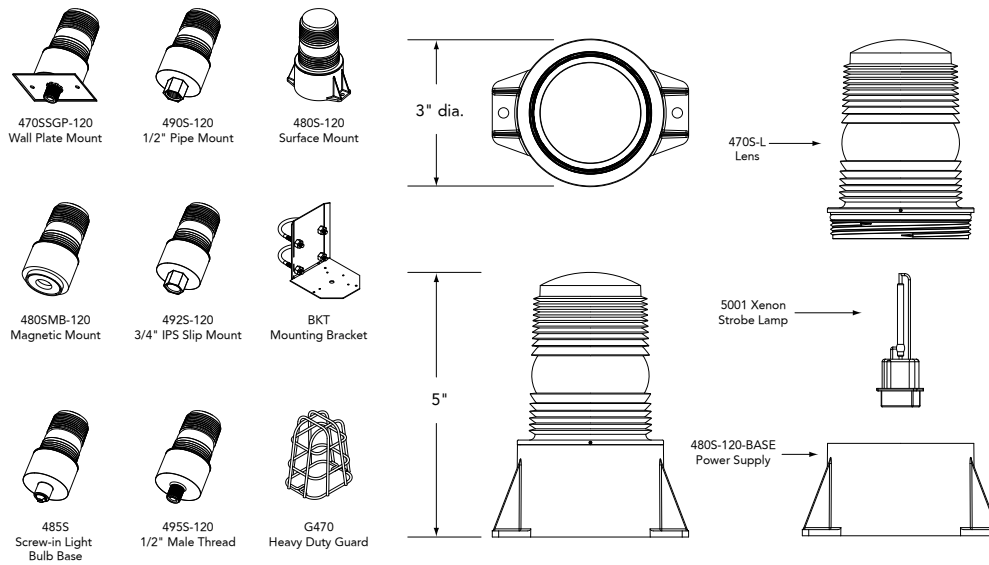
470SSGP-120
Wall Plate Mount

490S-120
1/2" Pipe Mount

480S-120
Surface Mount

480SMB-120
Magnetic Mount

492S-120
3/4" IPS Slip Mount

BKT
Mounting Bracket

485S
Screw-in Light
Bulb Base

495S-120
1/2" Male Thread

G470
Heavy Duty Guard

3" dia.

5"

470S-L
Lens

5001 Xenon
Strobe Lamp

480S-120-BASE
Power Supply

Specifications

Item	Description
Flash Rate	60 to 80 flashes per minute
Light Output	50 effective candlepower
Voltage and Amperage	120VAC and 240VAC draw 0.07A average
Power Supply Output 2.7 Watts	1.9 joules per flash
Size and Weight	5" tall x 3" dia. x 0.5 lbs (127mm x 76mm x 0.23kg)
Encapsulation	Fully potted in urethane material with no exposure to High Voltage possible

Available Options
NOTE: All "/" options are factory installed only.

Model No.	Description
G470	Heavy duty guard
BKT	Mounting bracket
LBO–MINI	Lens blackout segment 180°
MICROSHIELD	Vinyl, 180° lens blackout
/TRIAC–SW	Solid state relay option

Replacement Parts

Model No.	Description
5001	Xenon strobe lamp
470S–L	Colored lens (please specify color)
480S–120–PSA	120VAC power supply, surface mount
480SMB–120–PSA	120VAC power supply, magnetic mount
485S–120–PSA	120VAC power supply, screw-in light bulb base
485S–240–PSA	240VAC power supply, screw-in light bulb base
490S–120–PSA	120VAC power supply, 1/2" female pipe mount
490S–240–PSA	240VAC power supply, 1/2" female pipe mount
492S–120–PSA	120VAC power supply, 3/4" IPS slip mount
495S–120–PSA	120VAC power supply, 1/2" male thread mount
495S–240–PSA	240VAC power supply, 1/2" male thread mount

Architect and Engineer Specifications
The strobe light shall be Tomar model number series 470, 480, 485, 490,492, 495 or approved equal. The light source shall be a plug-in field replaceable single-flash xenon strobe tube. The strobe light must have built-in RFI filters to protect against radio interference and spike voltages. It shall be polarity protected, and have a power supply fully potted in polyurethane. Voltage ranges shall be 12-80VDC or 16-24VAC, 120 VAC, and 240VAC. The strobe light shall be UL listed and of NEMA 4X type weatherproof design with screw-on Lexan® lens.

MICRO IV™
Low Profile - Single Flash Strobe

The MICRO IV strobe family is an enhanced version of the MICROSTROBE featuring a power supply which operates over a wide input voltage range of 12–80VDC or 16–24VAC. The supply has a regulated output so that the lamp brightness and flash remain constant when operated over the rated input voltage range. The power supply is potted in polyurethane for the ultimate in protection from moisture, vibration and exposure to high voltage. The enclosure is all Lexan®, and the plug-in lamp is field replaceable. All units are polarity protected and have built-in filters to protect against radio interference and spike voltages. The MICRO IV is covered by a 10 year warranty. The MICRO IV and its guard are UL component recognized for type E, EE, and ES electric industrial trucks covered by UL standard #583.

• wide input voltage range

• universal mounting

• built-in RFI filters

• 10,000 hour strobe lamp

• ten year warranty on power supply

• one year warranty on lamp

• available in six lens colors

• UL recognized (all models)

• lens has hermetic o-ring seal

• NEMA 4X

Lens Colors
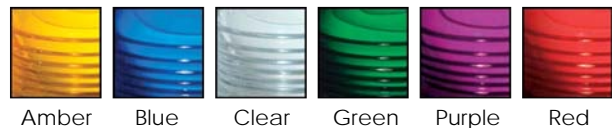
| Amber | Blue | Clear | Green | Purple | Red |

Ordering Information
Please specify lens colors and model number when ordering. Available colors are Amber, Blue, Clear, Green, Purple and Red.

Model No.	Description	Voltage
470SSGP–1280	DC strobe, wall plate mount	12 – 80VDC
470S–1280	DC strobe, surface mount	12 – 80VDC
470SMB–1280	DC strobe, magnetic mount and 6' straight cord	12 – 80VDC
470SMB–1280/CC	DC strobe, magnetic mount and coil cord	12 – 80VDC
485S–1280	DC strobe, screw-in light bulb base	12 – 80VDC
490S–1280	DC strobe, 1/2" female pipe mount	12 – 80VDC
492S–1280	DC strobe, 3/4" IPS slip mount	12 – 80VDC
495S–1280	DC strobe, 1/2" male thread mount	12 – 80VDC
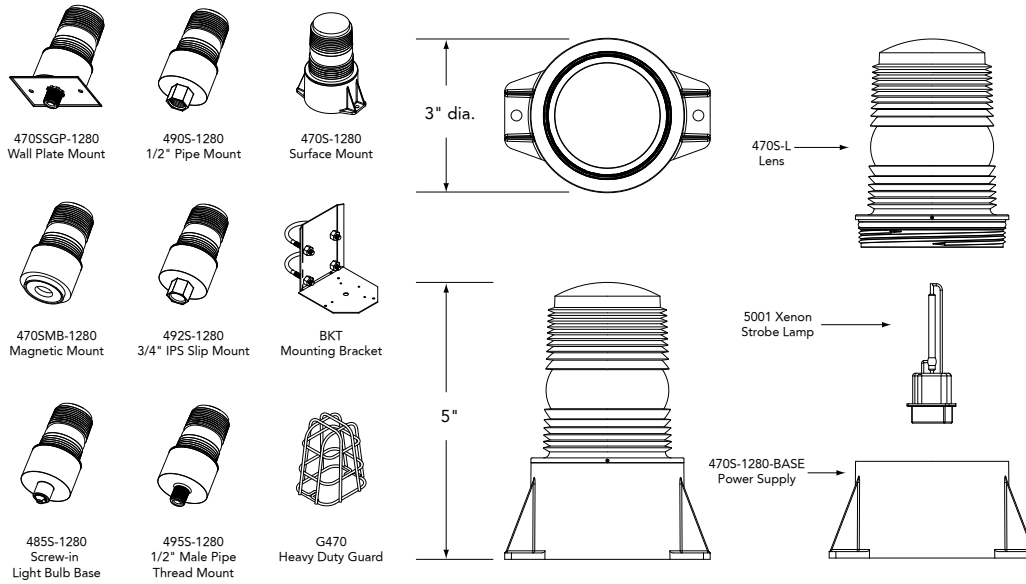
470SSGP-1280
Wall Plate Mount

490S-1280
1/2" Pipe Mount

470S-1280
Surface Mount

3" dia.

470S-L
Lens

470SMB-1280
Magnetic Mount

492S-1280
3/4" IPS Slip Mount

BKT
Mounting Bracket

5001 Xenon
Strobe Lamp

485S-1280
Screw-in
Light Bulb Base

495S-1280
1/2" Male Pipe
Thread Mount

G470
Heavy Duty Guard

5"

470S-1280-BASE
Power Supply

Specifications

Item	Description
Flash Rate	60 to 80 flashes per minute
Light Output	50 effective candlepower
Voltage and Amperage	12-80VDC draws 0.4A average @ 12VDC tapering to 0.05A average @ 80VDC 16-24VAC draws 0.35A average
Power Supply Output 2.7 Watts	1.9 joules per flash
Size and Weight	5" tall x 3" dia. x 0.6 lbs (127mm x 76mm x 0.27kg)
Encapsulation	Fully potted in urethane material with no exposure to High Voltage possible

Available Options
NOTE: All "/" options are factory installed only.

Model No.	Description
G470	Heavy duty guard
BKT	Mounting bracket
LBO–MINI	Lens blackout segment 180°
MICROSHIELD	Vinyl, 180° lens blackout

Replacement Parts

Model No.	Description
5001	Xenon strobe lamp
470S–L	Colored lens (please specify color)
470S–1280–PSA	12 – 80VDC power supply, surface mount
470SMB–1280–PSA	12 – 80VDC power supply, magnetic mount and 6' straight cord
470SMB–1280/CCB	12 – 80VDC power supply, magnetic mount and coil cord
485S–1280–PSA	12 – 80VDC power supply, screw-in light bulb base
490S–1280–PSA	12 – 80VDC power supply, 1/2" female pipe mount
492S–1280–PSA	12 – 80VDC power supply, 3/4" IPS slip mount
495S–1280–PSA	12 – 80VDC power supply, 1/2" male thread mount

Architect and Engineer Specifications
The strobe light shall be Tomar model number series 470, 480, 485, 490, 492, 495 or approved equal. The light source shall be a plug-in field replaceable single-flash xenon strobe tube. The strobe light must have built-in RFI filters to protect against radio interference and spike voltages. It shall be polarity protected, and have a power supply fully potted in polyurethane. Voltage ranges shall be 12-80VDC or 16-24VAC, 120 VAC, and 240VAC. The strobe light shall be UL listed and of NEMA 4X type weatherproof design with screw-on Lexan® lens.

500P MICRO LITE™
Low Profile - Single Flash Strobe

The model 500P family is a low profile single flash strobe light featuring a wide input voltage range of 12–28VDC, universal mounting, Lexan® lens, high efficiency regulated solid state potted power supply, and heavy duty xenon strobe lamp. All units are polarity protected and have built-in filters to protect against radio interference and spike voltages. The model 500P features a fully potted, Lexan®, multi-purpose mounting base which is vibration and water resistant, and a field replaceable plug-in strobe lamp.

- 12 – 28VDC

- universal mounting

- built-in RFI filters

- solid state power supply

- 10,000 hour strobe lamp

- two year warranty on power supply

- one year warranty on lamp

- available in six lens colors

- NEMA 4X

Lens Colors
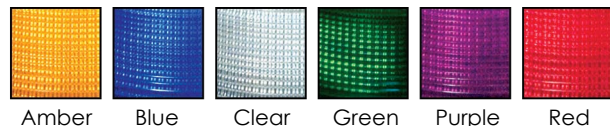
| Amber | Blue | Clear | Green | Purple | Red |

Ordering Information
Please specify lens colors and model number when ordering. Available colors are Amber, Blue, Clear, Green, Purple and Red.

Model No.	Description	Voltage
500P–1228	DC strobe, 1/2" female pipe mount	12 – 28VDC
500PMB–1228	DC strobe, magnetic base with 10' coil cord	12 – 28VDC
500PMBSC–1228	DC strobe, magnetic base with 10' straight cord	12 – 28VDC

800-FLG
Flange Mounting Ring

Magnetic Base Mount

5.5" dia.

801-L
Lens

2001 Xenon
Strobe Lamp

800-FLG
(optional)

Base

5.25"

G802
Heavy Duty Guard

BKT
Mounting Bracket
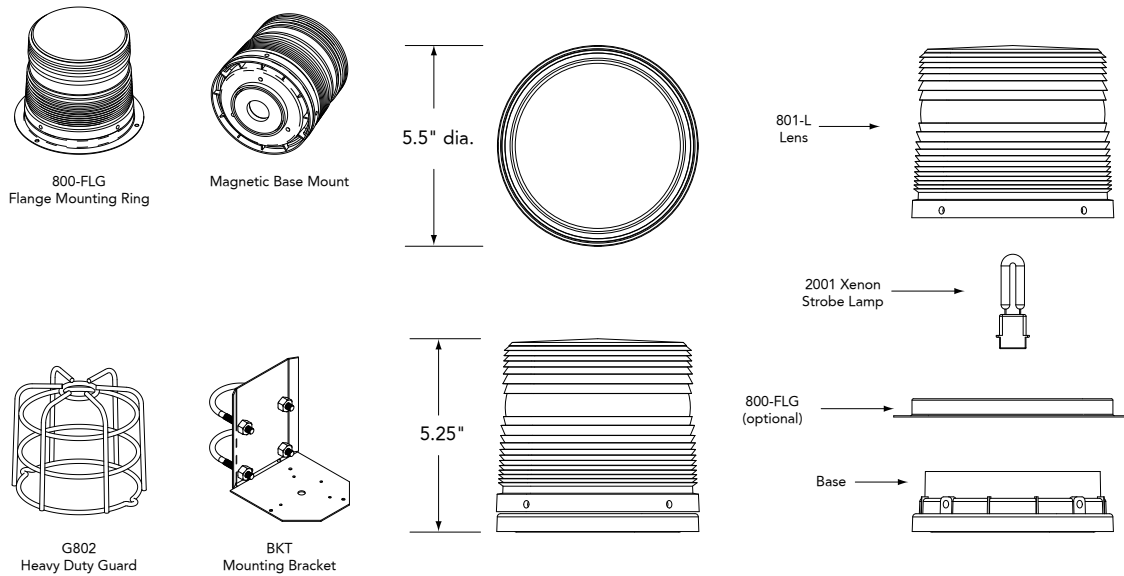
Specifications

Item	Description
Flash Rate	70 to 90 flashes per minute
Light Output	200 effective candlepower
Voltage and Amperage	12-28VDC draws 0.8A average @ 12VDC tapering to 0.4A average @ 24VDC
Power Supply Output 8 Watts	6 joules per flash
Size and Weight	5.25" tall x 5.5" dia. x 2.0 lbs (133mm x 140mm x 0.9kg)
Encapsulation	Fully potted in urethane material with no exposure to High Voltage possible

Available Options
NOTE: All "/" options are factory installed only.

Model No.	Description
BKT	Mounting bracket
/LBO–MINILITE	Lens blackout segment 180°
802–03	Lens dust cover
G802	Guard
TBO–MAXI	Top lens blackout
800–FLG	Flange mounting ring
MINILITE SHIELD	Vinyl, 180° shield

Replacement Parts

Model No.	Description
2001	Xenon strobe lamp
801–L	Color lens (please specify color)
500P–1228–BASE	12–28VDC power supply
500PMB–BASE	12–28VDC power supply with magnetic base and coil cord
500PMBSC–BASE	12–28VDC power supply with magnetic base and straight cord

Architect and Engineer Specifications
The visual warning signaling device shall be Tomar model 500P or approved equal. The light source shall be a plug-in field replaceable single-flash xenon strobe tube. The strobe light shall have a Lexan® lens and universal mount base. The warning signal must have built-in RFI filters to protect against radio interference and spike voltages. It shall be polarity protected, and have a power supply fully potted in polyurethane. The power supply output shall be 8 watts and generate 6 joules per flash. Voltage shall be multiple input of 12-28VDC. Strobe light shall be designed to accept a dome guard, 180 degree lens blackout, and straight or coiled cigar plug.

550P MICRO LITE II™
Low Profile - High Output - Single Flash Strobe

The model 550P family is a low profile single flash strobe light featuring a multiple input voltage rating of 12–74VDC, universal mounting, Lexan® lens, high efficiency regulated solid state potted power supply, and heavy duty xenon strobe lamp. All units are polarity protected and have built-in filters to protect against radio interference and spike voltages. The model 550P features a field replaceable plug-in strobe lamp and is UL component recognized for use on type E, EE, and ES electric industrial trucks covered by UL standard #583.

- 12 – 74 VDC
- universal mounting
- built-in RFI filters
- solid state power supply
- 10,000 hour strobe lamp
- two year warranty on power supply
- one year warranty on lamp
- available in six lens colors
- UL recognized (all models)
- NEMA 4X

Lens Colors

Amber   Blue   Clear   Green   Purple   Red
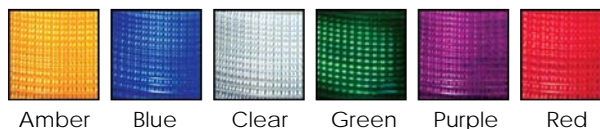
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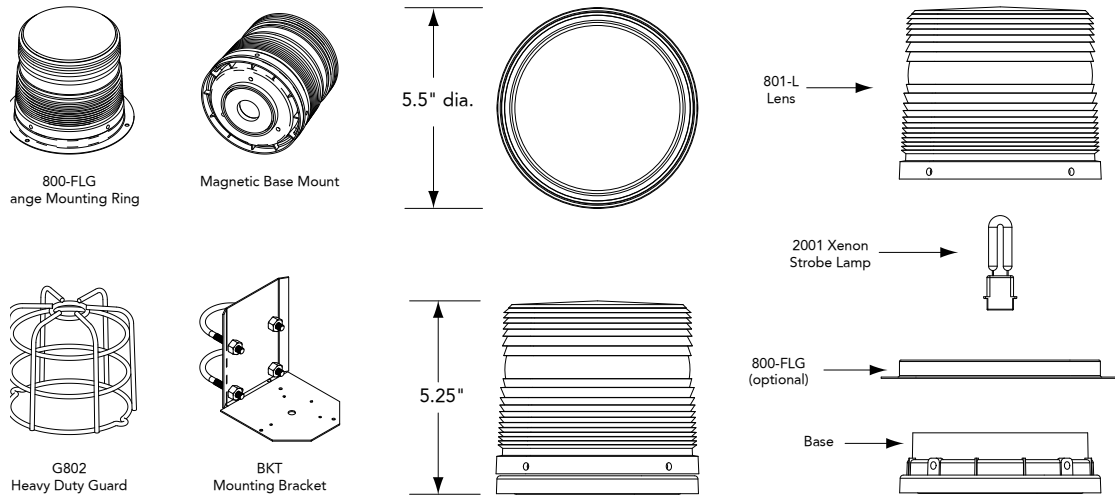Please specify lens colors and model number when ordering. Available colors are Amber, Blue, Clear, Green, Purple and Red.

Model No.	Description	Voltage
550P–1274	DC strobe, 1/2" female pipe mount	12 – 74VDC
550PMB–1274	DC strobe, magnetic base with 10' coil cord	12 – 74VDC
550PMBSC–1274	DC strobe, magnetic base with 10' straight cord	12 – 74VDC

800-FLG
ange Mounting Ring

Magnetic Base Mount

5.5" dia.

801-L
Lens

2001 Xenon
Strobe Lamp

800-FLG
(optional)

Base

G802
Heavy Duty Guard

BKT
Mounting Bracket

5.25"

Specifications

Item	Description
Flash Rate	70 to 90 flashes per minute
Light Output	270 effective candlepower
Voltage and Amperage	12-74VDC draws 1.25A average @ 12VDC tapering to 0.2A average @ 74VDC
Power Supply Output 11 Watts	12 joules per flash
Size and Weight	5.25" tall x 5.5" dia. x 2.0 lbs (133mm x 140mm x 0.9kg)
Encapsulation	Fully potted in urethane material with no exposure to High Voltage possible

Available Options
NOTE: All "/" options are factory installed only.

Model No.	Description
BKT	Mounting bracket
/LBO–MINILITE	Lens blackout segment 180°
802–03	Lens dust cover
G802	Guard
TBO–MAXI	Top lens blackout
800–FLG	Flange mounting ring
MINILITE SHIELD	Vinyl, 180° shield

Replacement Parts

Model No.	Description
2001	Xenon strobe lamp
801–L	Color lens (please specify color)
550P–BASE	12–74VDC power supply
550PMB–BASE	12–74VDC power supply with magnetic base and coiled cord
550PMBSC–BASE	12–74VDC power supply with magnetic base and straight cord

Architect and Engineer Specifications
The visual signaling beacon shall be Tomar model 550P or approved equal. The light source shall be a plug-in field replaceable single-flash xenon strobe lamp. The warning beacon shall have a Lexan® lens and universal mount base. The warning signal must have built-in RFI filters to protect against radio interference and spike voltages. It shall be polarity protected, and have a power supply fully potted in polyurethane. The power supply output shall be11 watts and generate 12 joules per flash. Voltage shall be multiple input of 12-74VDC. Strobe light shall be designed to accept a dome guard, 180 degree lens blackout, and straight or coiled cigar plug. The warning beacon shall be UL component recognized for use on type E, EE, and ES electrical industrial trucks covered by UL standard # 583.

700 MINI STROBE®
Single Flash Warning Light

- aluminum housing
- heavy duty construction
- solid state power supply
- 10,000 hour strobe lamp
- two year warranty on power supply
- one year warranty on lamp
- available in six lens colors
- UL recognized (DC models only)
- NEMA 3R
- available in 120 VDC

The model 700 MINI STROBE family is a single flash heavy duty strobe light featuring an all aluminum housing, flange mounting, 360° Lexan® lens, high efficiency regulated solid state power supply and a plug-in field replaceable heavy duty xenon strobe lamp. The 700–1274 will operate over 12–74VDC without making any changes or adjustments. DC models are UL component recognized for use on type E, EE, and ES electric industrial trucks covered by UL standard #583.

Lens Colors
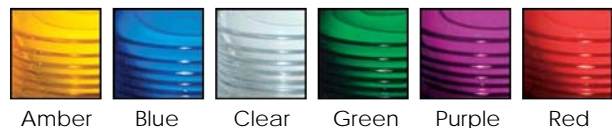
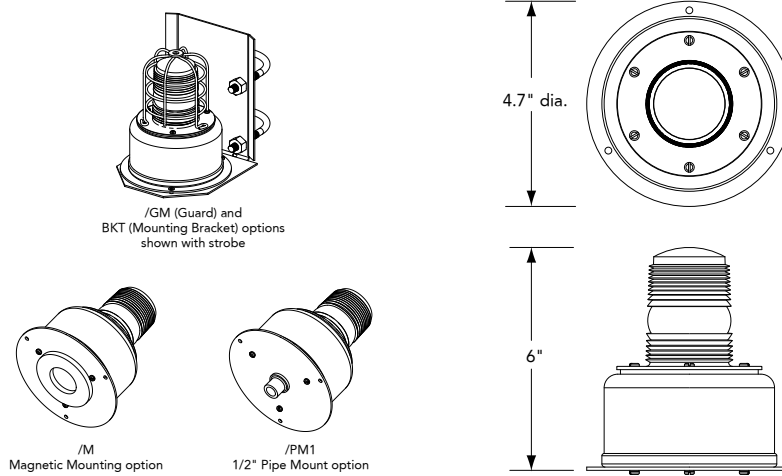| Amber | Blue | Clear | Green | Purple | Red |

Ordering Information
Please specify lens colors and model number when ordering. Available colors are Amber, Blue, Clear, Green, Purple and Red.

Model No.	Description	Voltage/Frequency
700–110	AC strobe	120VAC, 50/60HZ
700–240	AC strobe	240VAC, 50/60HZ
700–1274	DC strobe, UL recognized	12 – 74VDC
700–120DC	DC strobe, UL recognized	120VDC

Mounting Options
NOTE: All "/" options are factory installed only.

Model No.	Description
/PM1	1/2" pipe mount
/M	Magnetic mount #90 magnet

/GM (Guard) and
BKT (Mounting Bracket) options
shown with strobe

/M
Magnetic Mounting option

/PM1
1/2" Pipe Mount option

4.7" dia.

6"

Specifications

Item	Description
Flash Rate	80 to 95 flashes per minute
Light Output	185 effective candlepower (8 joules)
Voltage and Amperage	12-74VDC draws 1.25 A average @ 12VDC tapering to draws 0.2A average @ 74VDC 120VAC draws 0.17A average 120VDC draws 0.1A average 240VAC draws 0.12A average
Power Supply Output 11 Watts	8 joules per flash
Size and Weight	6" tall x 4.7" dia. x 1.3 lbs (152mm x 119mm x 0.58kg)

Available Options
NOTE: All "/" options are factory installed only.

Model No.	Description
/GM	Guard
/CP	10' straight cord and cigar plug
/LBO–MINI	Lens blackout segment 180°
/CC	10' coil cord with cigar plug
BKT	Bracket
/DEMO	Demo prep with battery clamps
MICROSHIELD	Vinyl, 180° lens blackout
700–DC	Clear lens dust cover

Architect and Engineer Specifications
The visual signaling beacon shall be Tomar model 700 or approved equal. The light source shall be a plug-in field replaceable single flash xenon strobe lamp and having a flash rate of 80 to 90 flashes per minute. Housing material shall be aluminum with a 360 degree Lexan® lens, and either flange, magnetic, or pipe mount. Voltage ranges shall be 12-74VDC, 120VAC, 120VDC, and 240VAC. Power supply output shall be 11 watts and generating either 8 or 15 joules per flash depending on the model. Strobe light shall be designed to accept a dome guard, 180 degree lens blackout, and straight or coiled cigar plug.

Replacement Parts

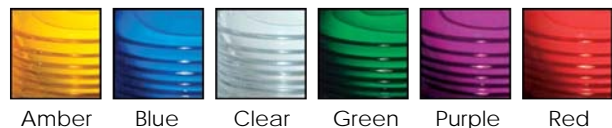| Model No.	Description
3001	Xenon strobe lamp (700 family)
700-L	Color lens (please specify color)
700–PCB–110	110–120 VAC power supply
700–PCB–120DC	120VDC power supply
700–PCB–1274	12–74 VDC power supply
700–110–15J–PCB	110–120 VAC 15 joule power supply

TOMAR Electronics, Inc.

700-15J MINI STROBE®

High Output Single Flash Warning Light

The model 700-15J High Output Mini Strobe is similar to the Model 700 Mini Strobe, but features a high power 15 joule power supply which generates 360 Effective Candlepower.

- aluminum housing
- heavy duty construction
- solid state power supply
- 10,000 hour strobe lamp
- two year warranty on power supply
- one year warranty on lamp
- available in six lens colors
- NEMA 3R
- 360 ECP

Lens Colors

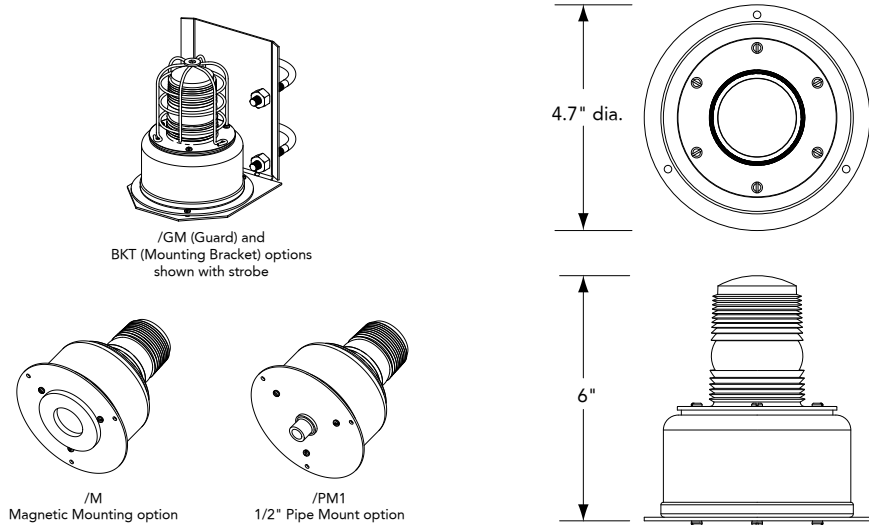| Amber | Blue | Clear | Green | Purple | Red |

Ordering Information

Please specify lens colors and model number when ordering. Available colors are Amber, Blue, Clear, Green, Purple and Red.

Model No.	Description	Voltage/Frequency
700–110-15J	AC strobe, 15 joule	120VAC, 50/60HZ

Mounting Options

NOTE: All "/" options are factory installed only.

Model No.	Description
/PM1	1/2" pipe mount
/M	Magnetic mount #90 magnet

/GM (Guard) and
BKT (Mounting Bracket) options
shown with strobe

/M
Magnetic Mounting option

/PM1
1/2" Pipe Mount option

4.7" dia.

6"

Specifications

Item	Description
Flash Rate	80 to 95 flashes per minute
Light Output	360 effective candlepower
Voltage and Amperage	0.17 @ 120VAC
Power Supply Output 11 Watts	15 joules per flash
Size and Weight	6" tall x 4.7" dia. x 1.3 lbs (152mm x 119mm x 0.58kg)

Available Options
NOTE: All "/" options are factory installed only.

Model No.	Description
/GM	Guard
/LBO–MINI	Lens blackout segment 180°
BKT	Bracket

Replacement Parts

Model No.	Description
6001	Xenon strobe lamp (700–110–15J)
700-L	Color lens (please specify color)
700–110–15J–PCB	110–120 VAC 15 joule power supply

Architect and Engineer Specifications

The visual signaling beacon shall be Tomar model 700 or approved equal. The light source shall be a plug-in field replaceable single flash xenon strobe lamp and having a flash rate of 80 to 90 flashes per minute. Housing material shall be aluminum with a 360 degree Lexan® lens, and either flange, magnetic, or pipe mount. Voltage ranges shall be 12-74VDC, 120VAC, 120VDC, and 240VAC. Power supply output shall be 11 watts and generating either 8 or 15 joules per flash depending on the model. Strobe light shall be designed to accept a dome guard, 180 degree lens blackout, and straight or coiled cigar plug.
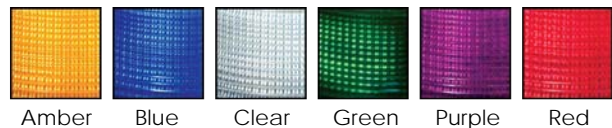
801 MINI I™ STROBE
Low Profile - Single Flash
Warning Light

The model 801 family is a low profile, single flash strobe light featuring universal mounting, low profile 360° Lexan® lens, high efficiency regulated solid state power supply, and heavy duty xenon strobe lamp. All units are polarity protected and have built-in filters to protect against radio interference and spike voltages. The model 801 features a fully potted, Lexan®, multi-purpose mounting base which is vibration and water resistant. The 801 also features a field replaceable plug-in strobe lamp and a state of the art energy storage capacitor for increased intensity.
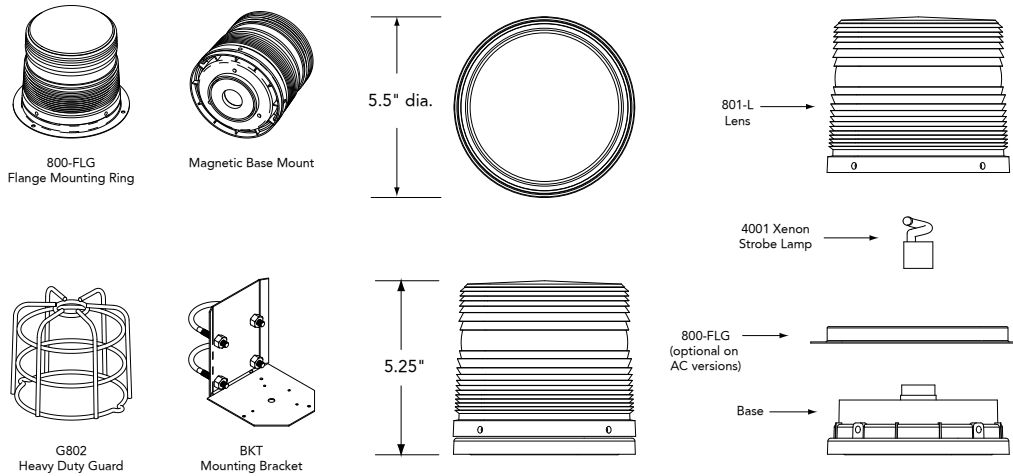
• universal mounting

• built-in RFI filters

• solid state power supply

• 10,000 hour strobe lamp

• five year warranty on power supply

• one year warranty on lamp

• available in six lens colors

• UL listed (where noted below)

• NEMA 4X

• 400 ECP

Lens Colors

| Amber | Blue | Clear | Green | Purple | Red |

Ordering Information
Please specify lens colors and model number when ordering. Available colors are Amber, Blue, Clear, Green, Purple and Red.

Model No.	Description	Voltage/Frequency
801–110	AC strobe with 10" leads, UL listed	120VAC, 50/60Hz
801LC–110	AC strobe with AC cord set, UL listed	120VAC, 50/60Hz
801LCMB–110	AC strobe, magnetic mount and cord	120VAC, 50/60Hz
801–240	AC strobe with 10" leads, UL listed	240VAC, 50/60Hz
801–1274	DC strobe with 10" leads, 800–FLG	12 – 74VDC
801MB–1274	DC strobe, magnetic mount and 10' coil cord	12 – 74VDC
801MBSC–1274	DC strobe, magnetic mount and 10' straight cord	12 – 74VDC

800-FLG
Flange Mounting Ring

Magnetic Base Mount

5.5" dia.

801-L
Lens

4001 Xenon
Strobe Lamp

800-FLG
(optional on
AC versions)

Base

G802
Heavy Duty Guard

BKT
Mounting Bracket

5.25"

Specifications

Item	Description
Flash Rate	80 to 95 flashes per minute
Light Output	400 effective candlepower
Voltage and Amperage	12-74VDC draws 1.25A @ 12V tapering to 0.2A average @ 74V 120VAC draws 0.3A average 240VAC draws 0.3A average
Power Supply Output 11 Watts	8 joules per flash
Size and Weight	5.25" tall x 5.5" dia. x 2.0 lbs (133mm x 140mm x 0.9kg)
Encapsulation	Fully potted in urethane material with no exposure to High Voltage possible

Available Options
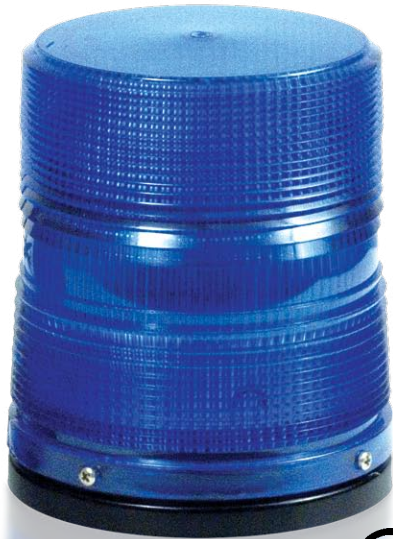NOTE: All "/" options are factory installed only.

Model No.	Description
BKT	Mounting bracket
/LBO—MINILITE	Lens blackout segment 180°
802–03	Lens dust cover
G802	Heavy duty guard
TBO–MAXI	Top lens blackout
800–FLG	Chrome flange mounting ring (standard on DC versions, optional on AC versions)
MINILITE SHIELD	Vinyl, 180° shield

Replacement Parts

Model No.	Description
4001	Xenon strobe lamp
801–L	Color lens (please specify color)
801–110–BASE	120VAC power supply
801LC–BASE	120VAC power supply with AC cord set
801LCMB–BASE	120VAC power supply with magnetic mount and AC cord
801–240–BASE	240VAC power supply
801–1274–BASE	12–74VDC power supply
801MB–BASE	12–74VDC power supply with magnetic mount and coil cord
801MB-SCBASE	12–74VDC power supply with magnetic mount and straight cord

Architect and Engineer Specifications
The visual signaling beacon shall be Tomar model 801 or approved equal. The light source shall be a plug-in field replaceable single-flash xenon strobe lamp. The warning beacon shall have a Lexan® lens and universal mount base. The warning signal must have built-in RFI filters to protect against radio interference and spike voltages. It shall be polarity protected, and have a power supply fully potted in polyurethane. The beacon shall have an 11 watt power supply, and generate 8 joules per flash at 80 to 95 flashes per minute. Light intensity is to be 400 effective candlepower, and voltage ranges shall be 12-74VDC, 120 VAC, and 240VAC. Strobe light shall be designed to accept a dome guard and mounting bracket.
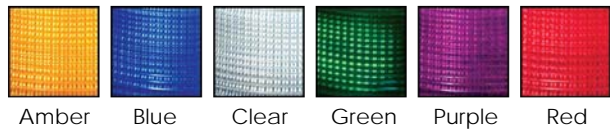
TOMAR Electronics, Inc.

804 MAXI I™ STROBE
Medium Profile - Single Flash Warning Light

The model 804 family is a medium profile, single flash strobe light featuring universal mounting, full size 360° Lexan® lens, high efficiency regulated solid state power supply, and heavy duty xenon strobe lamp. All units are polarity protected and have built-in filters to protect against radio interference and spike voltages. The model 804 features a fully potted Lexan®, multi-purpose mounting base which is vibration and water resistant. The 804 also features a field replaceable plug-in strobe lamp and state of the art energy storage capacitor for increased intensity.
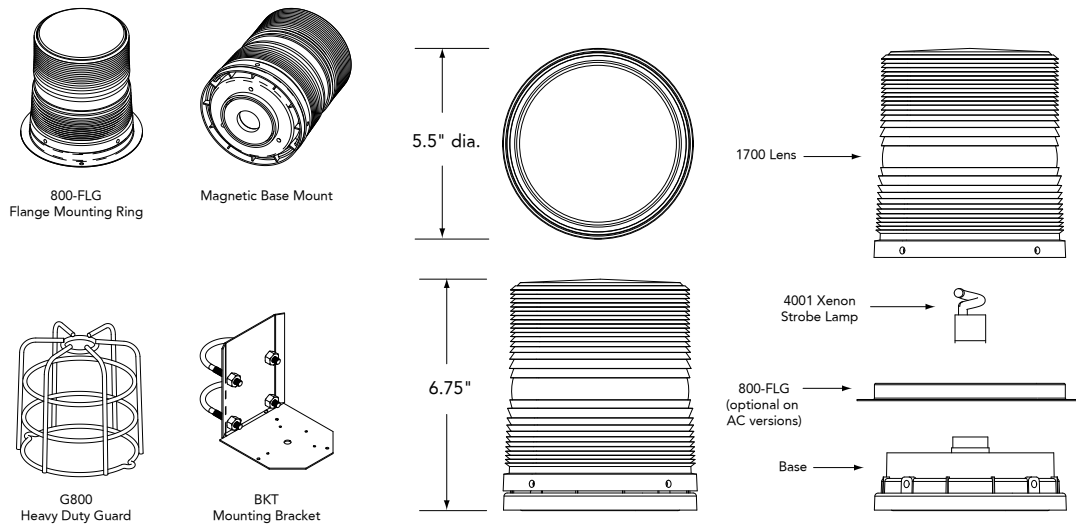
• universal mounting

• built-in RFI filters

• solid state power supply

• 10,000 hour strobe lamp

• five year warranty on power supply

• one year warranty on lamp

• available in six lens colors

• UL listed (AC models only)

• NEMA 4X

• 400 ECP

Lens Colors

Amber   Blue   Clear   Green   Purple   Red

Ordering Information
Please specify lens colors and model number when ordering. Available colors are Amber, Blue, Clear, Green, Purple and Red.

Model No.	Description	Voltage, Frequency
804–110	AC strobe with 10" leads, UL listed	120VAC, 50/60Hz
804LC–110	AC strobe with AC cord set, UL listed	120VAC, 50/60Hz
804–240	AC strobe with 10" leads, UL listed	240VAC, 50/60Hz
804–1274	DC strobe with 10" leads	12 – 74VDC
804MB–1274	DC strobe, magnetic mount and 10' coil cord	12 – 74VDC
804MBSC–1274	DC strobe, magnetic mount and 10' straight cord	12 – 74VDC

800-FLG
Flange Mounting Ring

Magnetic Base Mount

5.5" dia.

6.75"

1700 Lens

4001 Xenon
Strobe Lamp

800-FLG
(optional on
AC versions)

Base

G800
Heavy Duty Guard

BKT
Mounting Bracket

Specifications

Item	Description
Flash Rate	80 to 95 flashes per minute
Light Output	480 effective candlepower
Voltage and Amperage	12-74VDC draws 1.25A @ 12V tapering to 0.2A average @ 74V 120VAC draws 0.3A average 240VAC draws 0.3A average
Power Supply Output 11 Watts	8 joules per flash
Size and Weight	6.75" tall x 5.5" dia. x 2.2 lbs (171mm x 140mm x 1.0kg)
Encapsulation	Fully potted in urethane material with no exposure to High Voltage possible

Available Options
NOTE: All "/" options are factory installed only.

Model No.	Description
BKT	Mounting bracket
/LBO–MAXI	Lens blackout segment 180°
800/1250–DC	Clear lens dust cover
G800	Heavy duty guard
TBO–MAXI	Top lens blackout
800–FLG	Chrome flange mounting ring (standard on DC versions, optional on AC versions)

Replacement Parts

Model No.	Description
4001	Xenon strobe lamp
1700	Color lens (please specify color)
801–110–BASE	120VAC power supply
801LC–BASE	120VAC power supply with AC cord set
801MBSC–BASE	120VAC power supply with magnetic mount and straight cord
801–240–BASE	240VAC power supply
801–1274–BASE	12–74VDC power supply
801MB–BASE	12–74VDC power supply with magnetic mount and coil cord

Architect and Engineer Specifications
The visual signaling beacon shall be Tomar model 804 or approved equal. The light source shall be a plug-in field replaceable single-flash xenon strobe lamp. The warning beacon shall have a Lexan® lens and universal mount base. The warning signal must have built-in RFI filters to protect against radio interference and spike voltages. It shall be polarity protected, and have a power supply fully potted in polyurethane. The beacon shall have an 11 watt power supply, and generate 8 joules per flash at 80 to 95 flashes per minute. Light intensity is to be 480 effective candlepower. Voltage ranges shall be 12-74VDC, 120 VAC, and 240VAC. Strobe light shall be designed to accept a dome guard and mounting bracket.

8024 MINI LITE I™
Low Profile - Double or Quad Flash Multi - Strobe

The model 8024 family is a low profile, multi-flash strobe light which can be changed by the customer from double flash to quad flash operation. It features universal mounting, full size 360° Lexan® lens, high efficiency regulated solid state power supply, and heavy duty xenon strobe lamp. DC units have polarity protection and built-in filters to protect against radio interference and spike voltages. AC units are designed to withstand multiple line transient spikes of 6000V without damage. The model 8024 strobe features a fully potted, Lexan®, multi-purpose mounting base which is vibration and water resistant, and has a plug-in strobe lamp and photocell which can be activated to automatically reduce intensity during nighttime operation.
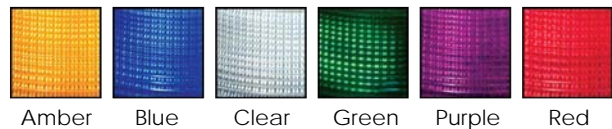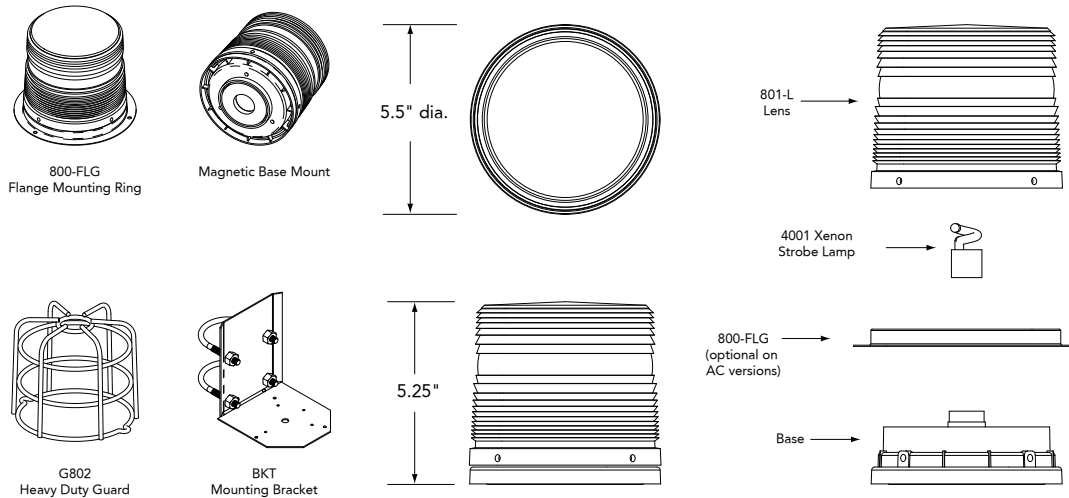
- universal mounting
- built-in RFI filters
- solid state power supply
- 10,000 hour strobe lamp
- five year warranty on power supply
- one year warranty on lamp
- available in six lens colors
- UL listed (AC models only)
- NEMA 4X
- 750 ECP

Lens Colors

Amber   Blue   Clear   Green   Purple   Red

Ordering Information
Please specify lens colors and model number when ordering. Available colors are Amber, Blue, Clear, Green, Purple and Red.

Model No.	Description	Voltage/Frequency
8024–110	AC strobe with 10" leads, UL listed	120VAC, 50/60Hz
8024LC–110	AC strobe with AC cord set, UL listed	120VAC, 50/60Hz
8024–240	AC strobe with 10" leads, UL listed	240VAC, 50/60Hz
8024–1228	DC strobe with 10" leads	12 – 28VDC
8024MB–1228	DC strobe, magnetic mount and 10' coil cord	12 – 28VDC
8024MBSC–1228	DC strobe, magnetic mount and 10' straight cord	12 – 28VDC

800-FLG
Flange Mounting Ring

Magnetic Base Mount

5.5" dia.

801-L
Lens

4001 Xenon
Strobe Lamp

800-FLG
(optional on
AC versions)

Base

G802
Heavy Duty Guard

BKT
Mounting Bracket

5.25"

Specifications

Item	Description
Flash Rate	68 to 72 double flashes per minute 58 to 62 quad multi-flashes per minute
Light Output	750 effective candlepower
Voltage and Amperage	12-28VDC draws 2.2 to 2.4A @ 12V tapering to 1.2 to 1.4A @ 28V at hi intensity 120VAC draws 0.8A peak, 0.5 to 0.6A average 240VAC draws 0.8A peak, 0.5 to 0.6A average
Power Supply Output @ 240V Input	17 joules per double flash 25 joules per quad multi-flash
Size and Weight	5.25" tall x 5.5" dia. x 2.0 lbs (133mm x 140mm x 0.9kg)
Encapsulation	Fully potted in urethane material with no exposure to High Voltage possible

Available Options

NOTE: All "/" options are factory installed only.

Model No.	Description
BKT	Mounting bracket
/LBO–MINILITE	Lens blackout segment 180°
802–03	Clear lens dust cover
G802	Heavy duty guard
TBO–MAXI	Top lens blackout
800–FLG	Chrome flange mounting ring (standard on DC versions, optional on AC versions)
MINILITESHIELD	Vinyl, 180° shield

Replacement Parts

Model No.	Description
4001	Xenon strobe lamp
801–L	Color lens (please specify color)
824–110–BASE	120VAC power supply
824LC–110–BASE	120VAC power supply with AC cord set
824–240–BASE	240VAC power supply
824–1228–BASE	12-28VDC power supply
824MB–BASE	12–28VDC power supply with magnetic mount and coil cord
824MB–SCBASE	12-28VDC power supply with magnetic mount and straight cord

Architect and Engineer Specifications

The visual signaling beacon shall be Tomar model 8024 or approved equal. The light source shall be a plug-in field replaceable xenon strobe lamp. The beacon shall have a field selectable double or quad flash rate of 68 to 72 double flashes per minute, or 58 to 62 quad flashes per minute. The warning beacon shall have a Lexan® lens and universal mount base. The DC voltage units are to have polarity protection, and must have built-in RFI filters to protect against radio interference and spike voltages. All beacons must have fully potted power supply and base. The AC units shall be designed to withstand multiple line transient spikes of 6000V without damage. The double flash beacon shall generate 17 joules, and the quad-flash beacon shall generate 25 joules. Light intensity is to be 750 effective candlepower. Voltage ranges shall be 12-28VDC, 120 VAC, and 240VAC. Strobe light shall be designed to accept a dome guard and mounting bracket.
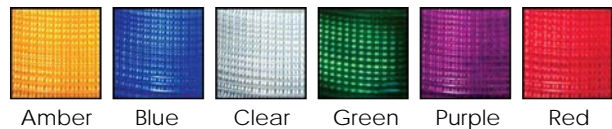
TOMAR Electronics, Inc.

824 MULTI STROBE
Medium Profile - Double or Quad Flash Warning Light

The model 824 family is a medium profile, multi-flash strobe light which can be changed by the customer from double flash to quad flash operation. It features universal mounting, full size 360° Lexan® lens, high efficiency regulated solid state power supply, and heavy duty xenon strobe lamp. DC units have polarity protection and built-in filters to protect against radio interference and spike voltages. AC units are designed to withstand multiple line transient spikes of 6000V without damage. The model 824 strobe features a fully potted, Lexan®, multi-purpose mounting base which is vibration and water resistant, and has a plug-in strobe lamp and photocell which can be activated to automatically reduce intensity during nighttime operation.
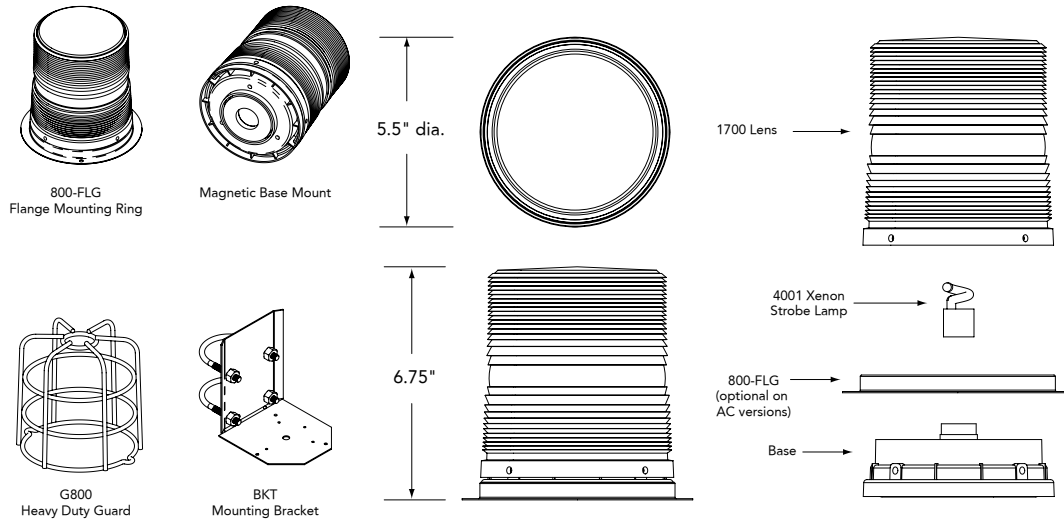
- universal mounting
- built-in RFI filters
- solid state power supply
- 10,000 hour strobe lamp
- five year warranty on power supply
- one year warranty on lamp
- available in six lens colors
- UL listed (AC models only)
- NEMA 4X
- 1200 ECP

Lens Colors

| Amber | Blue | Clear | Green | Purple | Red |

Ordering Information
Please specify lens colors and model number when ordering. Available colors are Amber, Blue, Clear, Green, Purple and Red.

Model No.	Description	Voltage/Frequency
824–110	AC strobe with 10" leads, UL listed	120VAC, 50/60Hz
824LC–110	AC strobe with AC cord set, UL listed	120VAC, 50/60Hz
824–240	AC strobe with 10" leads, UL listed	240VAC, 50/60Hz
824–1228	DC strobe with 10" leads	12 – 28VDC
824MB–1228	DC strobe with magnetic mount and 10' coil cord	12 – 28VDC
824MBSC–1228	DC strobe with magnetic mount and 10' straight cord	12 – 28VDC

800-FLG
Flange Mounting Ring

Magnetic Base Mount

5.5" dia.

6.75"

G800
Heavy Duty Guard

BKT
Mounting Bracket

1700 Lens

4001 Xenon
Strobe Lamp

800-FLG
(optional on
AC versions)

Base

Specifications

Item	Description
Flash Rate	68 to 72 double flashes per minute 58 to 62 quad multi-flashes per minute
Light Output	1020 effective candlepower (Double flash) 1200 effective candlepower (Quad flash)
Voltage and Amperage	12-28VDC draws 2.2 to 2.4A @ 12V tapering to 1.2 to 1.4A @ 28V at hi intensity 120VAC draws 0.8A peak, 0.5 to 0.6A average 240VAC draws 0.8A peak, 0.5 to 0.6A average
Power Supply Output @ 240V Input	17 joules per double flash 25 joules per quad multi-flash
Size and Weight	6.75" tall x 5.5" dia. x 2.2 lbs (171mm x 140mm x 1.06kg)
Temperature Rating	–40°c to +71°c
Encapsulation	Fully potted in urethane material with no exposure to High Voltage possible

Available Options
NOTE: All "/" options are factory installed only.

Model No.	Description
BKT	Mounting bracket
/LBO–MAXI	Lens blackout segment 180°
800/1250–DC	Clear lens dust cover
G800	Heavy duty guard
TBO–MAXI	Top lens blackout
800–FLG	Chrome flange mounting ring (standard on DC versions, optional on AC versions)

Replacement Parts

Model No.	Description
4001	Xenon strobe lamp
1700	Color lens (please specify color)
824–110–BASE	120VAC power supply
824LC–BASE	120VAC power supply with AC cord set
824–240–BASE	208/240VAC power supply
824–1228–BASE	12-28VDC power supply
824MB–BASE	12-28VDC power supply with magnetic mount and coil cord
824MB–SCBASE	12-28VDC power supply with magnetic mount and straight cord

Architect and Engineer Specifications
The visual signaling beacon shall be Tomar model 824 or approved equal. The light source shall be a plug-in field replaceable xenon strobe lamp. The beacon shall have a field selectable double or quad flash rate of 68 to 72 double flashes per minute, or 58 to 62 quad flashes per minute. The warning beacon shall have a Lexan® lens and universal mount base. The DC voltage units are to have polarity protection, and must have built-in RFI filters to protect against radio interference and spike voltages. All beacons must have fully potted power supply and base. The AC units shall be designed to withstand multiple line transient spikes of 6000V without damage. Light intensity is to be 1020 effective candelas in double-flash mode, and 1200 effective candelas in quad-flash mode. Voltage ranges shall be 12-28VDC, 120 VAC, and 240VAC. Strobe light shall be designed to accept a dome guard and mounting bracket.

3000 ML/RML
POWER STROBE®
Industrial Heavy Duty Warning Light

The model 3000 family of single flash strobe lights is designed for heavy duty industrial use in steel mills and large manufacturing plants. The ML version is a 360° self contained unit consisting of a strobe lamp and Lexan® lens assembly mounted on a NEMA 4 enclosed power supply. The RML version consists of a lamp assembly and remote power supply mounted in a NEMA 3R rain tight enclosure.

The 250VDC 3000 series strobe has a flash rate of 60 flashes per minute and light intensity of 425 effective candlepower. It is available in six lens colors (amber, blue, clear, green, purple, and red). Each strobe contains a built-in RFI filter to protect against harmful electrical interference.

• 250 VDC

• NEMA 4X enclosure

• optional stainless steel enclosure

• built-in RFI filters

• 10,000 hour strobe lamp

• polarity protected

• solid state power supply

• optional dome guard

• optional lens dust cover

Lens Colors
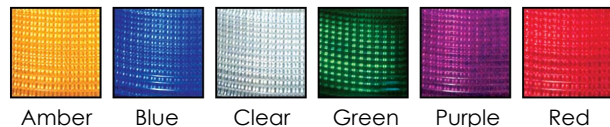
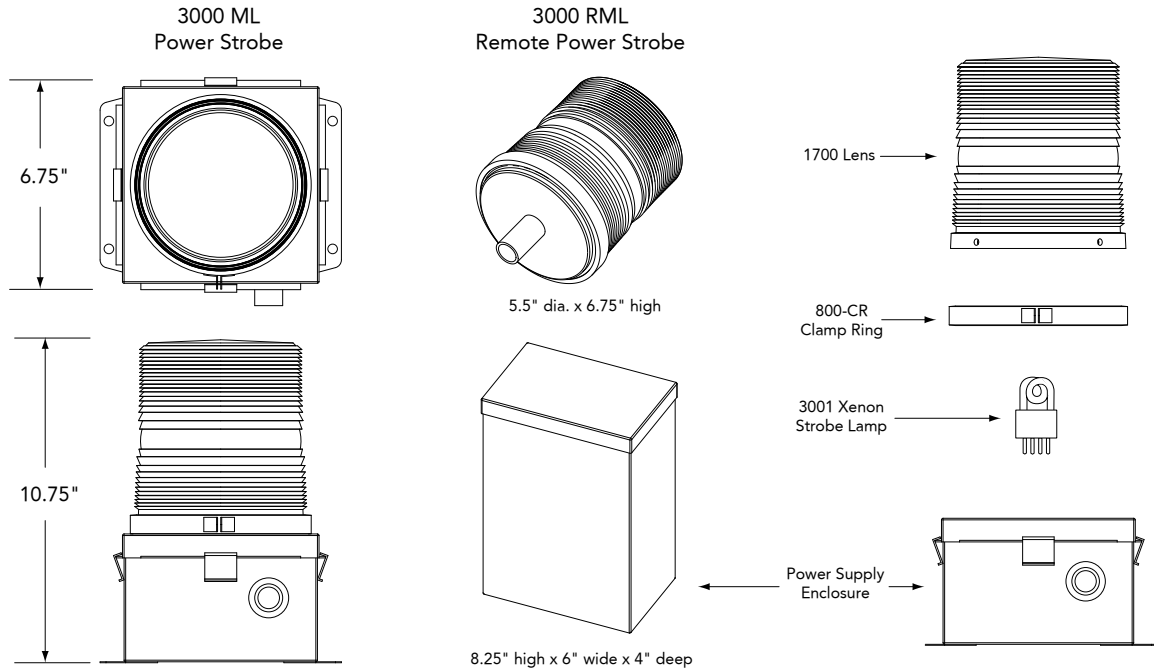| Amber | Blue | Clear | Green | Purple | Red |

Ordering Information

Please specify lens colors and model number when ordering. Available colors are Amber, Blue, Clear, Green, Purple and Red.

Model No.	Description	Voltage/Frequency
3000ML	Power strobe NEMA 4X	250VDC
3000/RML	Remote strobe NEMA 3R	250VDC

3000 ML
Power Strobe

6.75"

10.75"

3000 RML
Remote Power Strobe

5.5" dia. x 6.75" high

8.25" high x 6" wide x 4" deep

1700 Lens

800-CR
Clamp Ring

3001 Xenon
Strobe Lamp

Power Supply
Enclosure

Specifications

Item	Description
Flash Rate	60 FPM
Light Output	425 effective candlepower
Voltage and Amperage	250VDC -- draws 0.07A average
Power Supply Output	15 Watts -- 10 joules per flash
Size and Weight	ML -- 10.75" tall x 6.75"sq (228mm x 171mm) -- weight = 6.5 lbs. (2.94kg) RML -- Power Supply Enclosure -- 8.25" tall x 6" wide x 4" deep (209mm x 153mm) Remote beacon = 5.5"dia. x 6.75"tall (139mm x 171mm) Total weight = 7lbs. (3.17kg)
Operating Temperature	-25°c to 70°c

Available Options
NOTE: All "/" options are factory installed only.

Model No.	Description
/SS	Stainless steel enclosure
/GP	Heavy duty guard (for ML version only)
800/1250-DC	Lens dust cover

Replacement Parts

Model No.	Description
3001	Xenon strobe lamp
1700	Color lens (please specify color)
3002B	Power supply for 3000 series

Architect and Engineer Specifications
The visual signaling beacon shall be Tomar model 3000 series or approved equal. The light source shall be a plug-in field replaceable single-flash xenon strobe lamp. The warning beacon shall have a Lexan® lens and be designed to accept a dome guard. Light intensity is to be 425 effective candlepower. The beacon must have the option to be mounted remotely from the power base, and the strobe tube is to be rated at 10,000 hours lamp life. Voltage shall be 250VDC. Strobe light shall be designed to accept a dome guard, lens dust cover, and stainless steel enclosure.

TOMAR Electronics, Inc.

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Caption: 3200 ML with stainless steel enclosure

3200/3300 ML/RML POWER STROBE®

Industrial Heavy Duty Warning Light

The model 3200 and 3300 family of single flash strobe lights is designed for heavy duty industrial use in steel mills and large manufacturing plants. The ML version is a 360° self contained unit consisting of a strobe lamp and Lexan® lens assembly mounted on a NEMA 4 enclosed power supply. The RML version consists of a lamp assembly and remote power supply mounted in a NEMA 3R rain tight enclosure.

The 120 VAC 3200 and 240 VAC 3300 series strobes have a flash rate of 85 flashes per minute and light intensity of 425 effective candlepower. They are available in six lens colors (amber, blue, clear, green, purple, and red). Each strobe contains a built-in RFI filter to protect against harmful electrical interference.

- NEMA 4X enclosure
- optional stainless steel enclosure
- built-in RFI filters
- 10,000 hour strobe lamp
- polarity protected
- solid state power supply
- optional dome guard
- optional lens dust cover
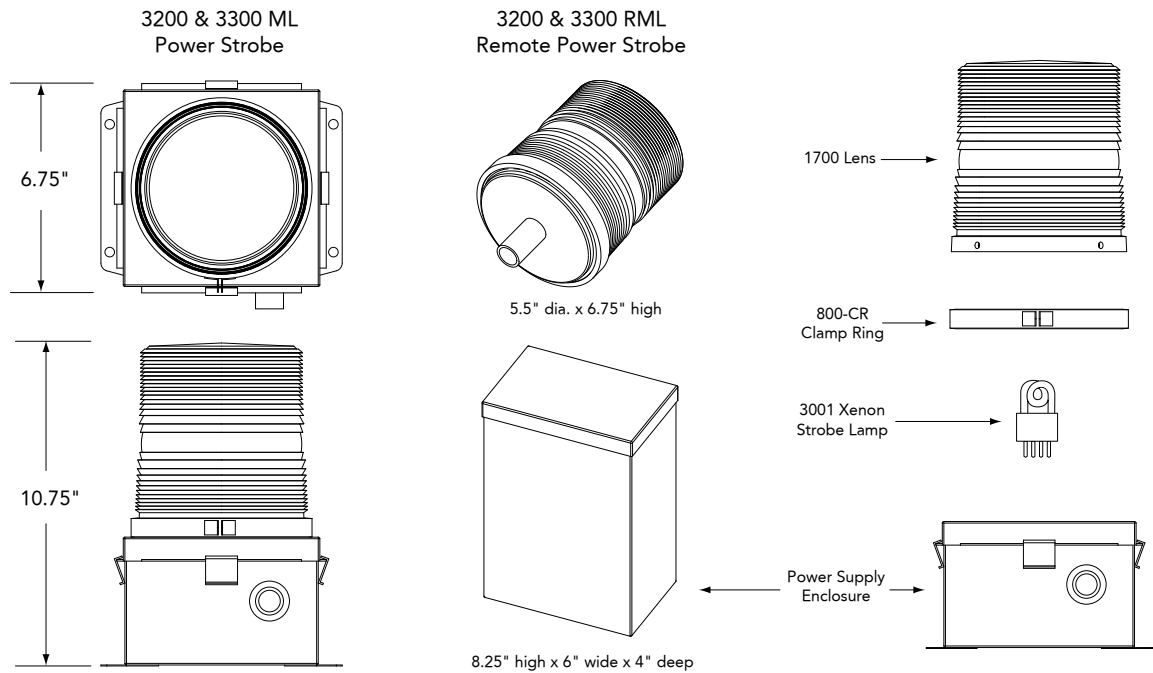
Available Lens Colors
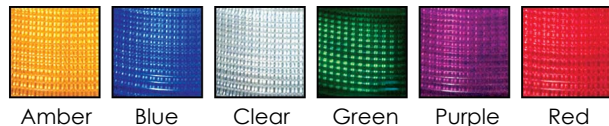
| Amber | Blue | Clear | Green | Purple | Red |

Ordering Information

Please specify lens colors and model number when ordering. Available colors are Amber, Blue, Clear, Green, Purple and Red.

Model No.	Description	Voltage/Frequency
3200ML	Power strobe NEMA 4X	120VAC
3200/RML	Remote strobe NEMA 3R	120VAC
3300ML	Power strobe NEMA 4	240VAC
3300/RML	Remote strobe NEMA 3R	240VAC

3200 & 3300 ML
Power Strobe

6.75"

10.75"

3200 & 3300 RML
Remote Power Strobe

5.5" dia. x 6.75" high

8.25" high x 6" wide x 4" deep

1700 Lens

800-CR
Clamp Ring

3001 Xenon
Strobe Lamp

Power Supply
Enclosure

Specifications

Item	Description
Light Output	424 effective candlepower
Flash Rate	85 flashes per minute @ nominal line volts to 60 FPM @ low line volts
Voltage and Amperage	120VAC -- draws 0.17A average
Power Supply Output	15 Watts -- 10 joules per flash
Size and Weight	ML -- 10.75" tall x 6.75"sq (228mm x 171mm) -- weight = 6.5 lbs. (2.94kg) RML -- Power Supply Enclosure -- 8.25" tall x 6" wide x 4" deep (209mm x 153mm) Remote beacon = 5.5"dia. x 6.75"tall (139mm x 171mm) Total weight = 7lbs. (3.17kg)
Operating Temperature	-25°c to 70°c

Available Options
NOTE: All "/" options are factory installed only.

Model No.	Description
/SS	Stainless steel enclosure
/GP	Heavy duty guard (for ML version only)
800/1250-DC	Lens dust cover

Replacement Parts

Model No.	Description
3001	Xenon strobe lamp for 3200 series
4001	Xenon strobe lamp for 3300 series
1700	Color lens (please specify color)
3004B	Power supply for 3200 series
3009A	Power supply for 3300 series

Architect and Engineer Specifications
The visual signaling beacon shall be Tomar model number 3200 or 3300 series or approved equal. The light source shall be a plug-in field replaceable single-flash xenon strobe lamp. The warning beacon shall have a Lexan® lens and be designed to accept a dome guard. The beacon shall be in 10 joules configuration. Light intensity is to be 425 effective candlepower. The beacon must have the option to be mounted remotely from the power base, and the strobe tube is to be rated at 10,000 hours lamp life. Voltage shall be 120VAC, or 240VAC. Strobe light shall be designed to accept a dome guard, lens dust cover, and stainless steel enclosure.
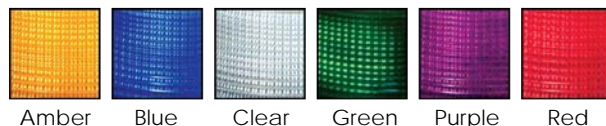
3200HP & 3200HP/RML POWER STROBE®

Industrial Heavy Duty Warning Light

The model 3200HP family of single flash strobe lights is designed for heavy duty industrial use in steel mills and large manufacturing plants where higher light output is required. The 3200HP version is a 360° self contained unit consisting of a strobe lamp and Lexan® lens assembly mounted on a NEMA 4X enclosed power supply. The RML version consists of a lamp assembly and remote power supply mounted in a NEMA 3R rain tight enclosure.

The 120 VAC 3200HP and 3200HP/RML series strobes have a flash rate of 85 flashes per minute and a high output light intensity of 600 effective candlepower. Each strobe contains a built-in RFI filter to protect against harmful electrical interference.

• NEMA 4X enclosure

• optional stainless steel enclosure

• built-in RFI filters

• 24,000 hour strobe lamp

• polarity protected

• solid state power supply

• optional dome guard

• optional lens dust cover

• available in six lens colors

• 600 ECP

Lens Colors

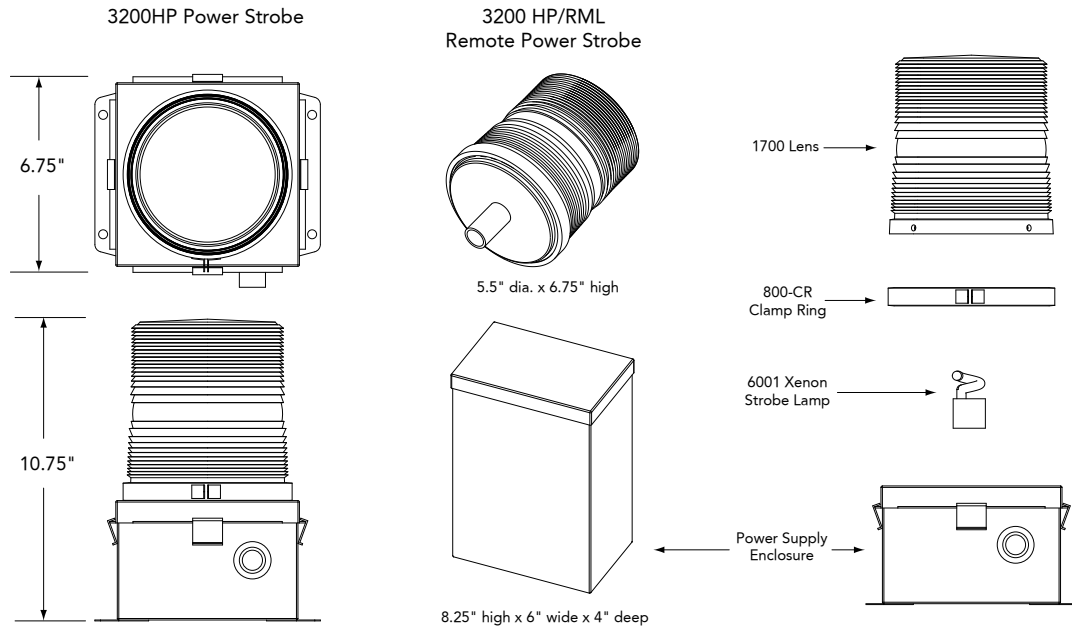Amber Blue Clear Green Purple Red

Ordering Information

Please specify lens colors and model number when ordering. Available colors are Amber, Blue, Clear, Green, Purple and Red.

Model No.	Description	Voltage/Frequency
3200HP	15 joule strobe NEMA 4X	120VAC
3200HP/RML	Remote 15 joule strobe NEMA 3R	120VAC

3200HP Power Strobe

3200 HP/RML
Remote Power Strobe

6.75"

10.75"

5.5" dia. x 6.75" high

8.25" high x 6" wide x 4" deep

1700 Lens

800-CR
Clamp Ring

6001 Xenon
Strobe Lamp

Power Supply
Enclosure

Specifications

Item	Description
Light Output	600 effective candlepower
Flash Rate	85 flashes per minute
Voltage and Amperage	120VAC -- draws 0.17A average
Power Supply Output	15 Watts -- 15 joules per flash (HP units)
Size and Weight	HP -- 10.75" tall x 6.75"sq (228mm x 171mm) -- weight = 6.5 lbs. (2.94kg) HP/RML -- Power Supply Enclosure -- 8.25" tall x 6" wide x 4" deep (209mm x 153mm) Remote beacon = 5.5"dia. x 6.75"tall (139mm x 171mm) Total weight = 7lbs. (3.17kg)
Operating Temperature	-25°c to 70°c

Available Options
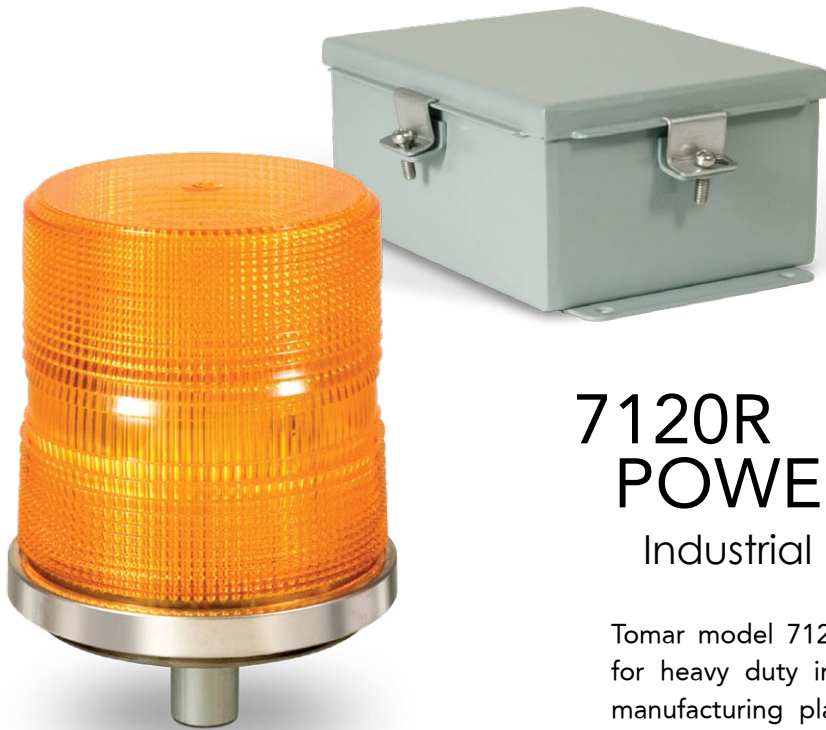NOTE: All "/" options are factory installed only.

Model No.	Description
/SS	Stainless steel enclosure
/GP	Heavy duty guard (for ML version only)
800/1250-DC	Lens dust cover

Replacement Parts

Model No.	Description
6001	Xenon strobe lamp
1700	Color lens (please specify color)
3200HP–PSA	Power supply for 3200HP & 3200HP/RML

Architect and Engineer Specifications
The visual signaling beacon shall be Tomar model number 3200 or 3300 series or approved equal. The light source shall be a plug-in field replaceable single-flash xenon strobe lamp. The warning beacon shall have a Lexan® lens and be designed to accept a dome guard. The beacon shall be in 10 joules configuration. Light intensity is to be 425 effective candlepower. The beacon must have the option to be mounted remotely from the power base, and the strobe tube is to be rated at 24,000 hours lamp life. Voltage shall be 120VAC. Strobe light shall be designed to accept a dome guard, lens dust cover, and stainless steel enclosure.
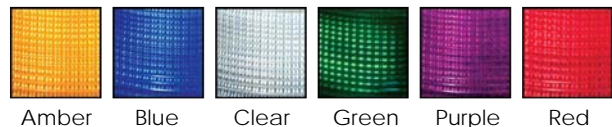
7120R
POWER STROBE®
Industrial Heavy Duty Warning Light

Tomar model 7120R is a double-flash strobe designed for heavy duty industrial use in steel mills and large manufacturing plants where very high light output is required. At 40 flashes per minute and 2000 effective candlepower it is Tomar's brightest industrial visual signaling device. It features a remote mounted solid state power supply in a NEMA 4 JIC box and a 1/2" pipe mounted hi-output strobe light head with a 360° Lexan® lens and a long life (24,000 hour) strobe tube.

The 7120R features a built-in synchronizing flash circuit Each unit contains a built-in RFI filter to protect against harmful electrical interference.

- NEMA 4X enclosure
- 2000 effective candle power
- 24000 hour strobe tube
- built-in synchronizing flash circuit
- built-in RFI filters
- solid state power supply
- two year warranty on power supply
- one year warranty on lamp

Lens Colors

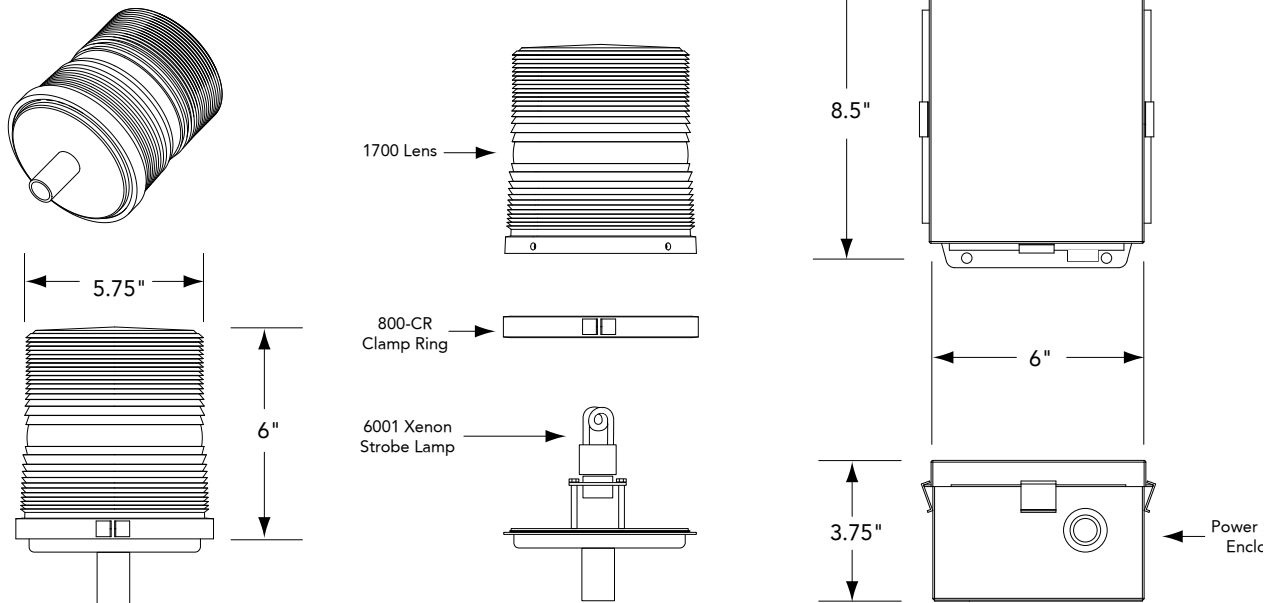Amber   Blue   Clear   Green   Purple   Red

Ordering Information

Please specify lens colors and model number when ordering. Available colors are Amber, Blue, Clear, Green, Purple and Red.

Model No.	Description	Voltage/Frequency
7120R	High power remote strobe NEMA 4X	120VAC

Remote Power Strobe

1700 Lens

800-CR
Clamp Ring

6001 Xenon
Strobe Lamp

5.75"

6"

8.5"

6"

3.75"

Power
Encl

Specifications

Item	Description
Light Output	2000 effective candlepower
Flash Rate	40 DFPM double flashes per minute
Voltage and Amperage	120VAC -- draws 0.4A average
Power Supply Output	26 Watts -- 20 joules per flash
Size and Weight	Power Supply Enclosure = 8.25" tall x 6" wide x 4" deep (209mm x 153mm) Remote beacon = 5.5"dia. x 6.75"tall (139mm x 171mm) Total weight = 7lbs. (3.17kg)
Operating Temperature	-25°c to 70°c

Available Options
NOTE: All "/" options are factory installed only.

Model No.	Description
800/1250-DC	Lens dust cover

Replacement Parts

Model No	Description
6001	Xenon strobe lamp (models 3200HP & 7120R)
1700	Color lens (please specify color)

Architect and Engineer Specifications

The visual signaling beacon shall be Tomar model number 7120R series or approved equal. The light source shall be a plug-in field replaceable single-flash xenon strobe lamp. The warning beacon shall have a Lexan® lens and be designed to accept a dome guard. Light intensity is to be 2000 effective candlepower. The beacon must be able to be mounted remotely from the power base, and the strobe tube is to be rated at 24,000 hours lamp life. Voltage shall be 120VAC. Strobe light shall be designed to accept a dome guard and lens dust cover.
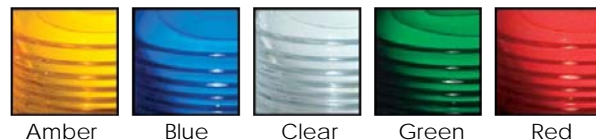
490S-T STROBE
Hazardous Location Warning Light

The model 490S-1280T and 490S-120T strobe lights are UL listed for use in Class I & II, Division 2 hazardous locations. Division 2 locations are defined by the NFPA as shown below. These units have a Lexan® lens and base and are suitable for use in NEMA 4X outdoor locations. They may be operated in any position and feature a 1/2" pipe mount hub.
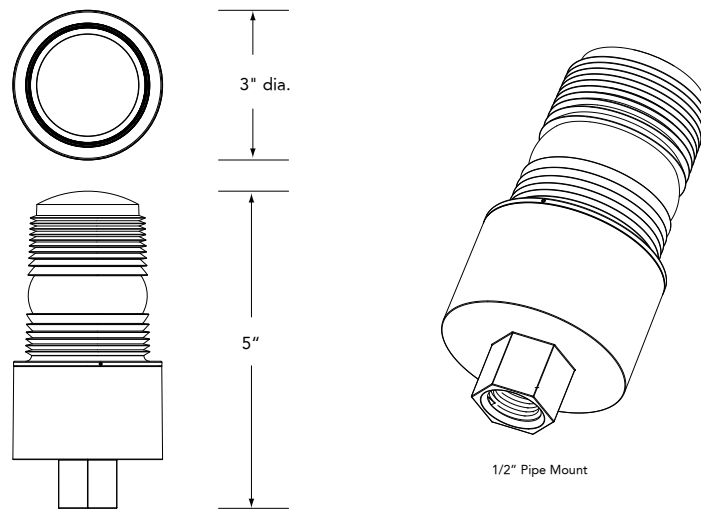
- Class I, Div. 2 Groups A, B, C, & D
- Class II, Div 2 Groups F & G
- Class III
- NEMA 4X
- 10,000 hour strobe lamp
- ten year warranty on power supply
- available in five lens colors
- UL listed

Lens Colors

Amber   Blue   Clear   Green   Red

Ordering Information
Please specify lens colors and model number when ordering. Available colors are Amber, Blue, Clear, Green and Red.

Model No.	Description	Voltage
490S–1280T	Hazardous location strobe	12 – 80VDC
490S–120T	Hazardous location strobe	120VAC

3" dia.

5"

1/2" Pipe Mount

NFPA Definitions

Class I, Division 2.
A location (1) in which volatile flammable liquids or flammable gases are handled, processed or used, but in which the liquids, vapors or gases will normally be confined within closed containers or closed systems from which they can escape only in case of accidental rupture or breakdown of such containers or systems, or in case of abnormal operation of equipment; or (2) in which ignitable concentrations of gases or vapors are normally prevented by positive mechanical ventilation, and which might become hazardous through failure or abnormal operation of the ventilating equipment; or (3) that is adjacent to a Class I Division 1 location, and to which ignitable concentrations of gases or vapors might occasionally be communicated unless such communication is prevented by adequate positive–pressure ventilation from a source of clean air and effective safeguards against ventilation failure are provided.   [See Section 500–4(b) of NFPA 70, National Electrical Code.]

Class II, Division 2.
A location in which (1) combustible dust will not normally be in suspension in the air in quantities sufficient to produce explosive or ignitable mixtures and dust accumulations are normally insufficient to interfere with the normal operation of electrical equipment or other apparatus; or (2) dust may be in suspension in the air as a result of infrequent malfunctioning of handling or processing equipment and dust accumulations resulting therefrom may be ignitable by abnormal operation or failure of electrical equipment or other apparatus.
[See Section 500–5 (b) of NFPA 70, National Electrical Code.]

Specifications

Item	Description
Lamp Type	5001 Xenon strobe lamp
Lens Type	470S–L–Color (please specify lens color)
Voltage and Amperage	12–80VDC draws 0.4A average @ 12VDC draws tapering to 0.05A average @ 80VDC 16–24VAC draws 0.35A average 120VAC draws 0.04A average
Temperature Code	Class I T2C 230° C Do not install where the operating temperature exceeds the ignition temperature of the hazardous atmosphere.
Temperature Rating	–40° C to +65° C
Power Supply Output 2.7 Watts (single flash)	2.3 joules per flash
Flash Rate	60 to 80 flashes per minute
Size and Weight	5" tall x 3" dia. x 0.6 lbs (127mm x 76mm x 0.27kg)
Encapsulation	Fully potted in urethane material with no exposure to High Voltage possible

Architect and Engineer Specifications
Hazardous Location visual signaling beacon shall be Tomar model number series 490S-1280T, 490S-120T or approved equal. The beacon shall be UL Listed Class I, Division II, Groups A,B,C, and D; Class II, Division II, Groups F and G; and Class III for use in specified hazardous locations as classified by the National Electric Code. The light source shall be a plug-in field replaceable single-flash xenon strobe lamp. The warning signal must have built-in RFI filters to protect against radio interference and spike voltages. It shall be polarity protected, and have a power supply fully potted in polyurethane. Voltage ranges shall be 12-80VDC or 120 VAC. The warning light shall be rated NEMA 4X and have a screw-on Lexan® lens.
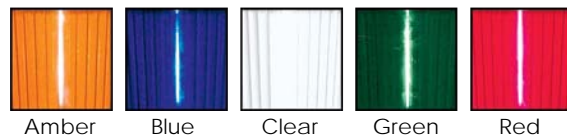
4375 STROBE
Hazardous Location Warning Light

The model 4375 strobe light is UL listed for use in Class I, II & III, Division 2 hazardous locations. Division 2 locations are defined by the NFPA as described to right. The model 4375 strobe lights have a tempered glass lens and are suitable for use in outdoor locations. These units may be operated in any position and feature a 3/4" IPS pendant mount.
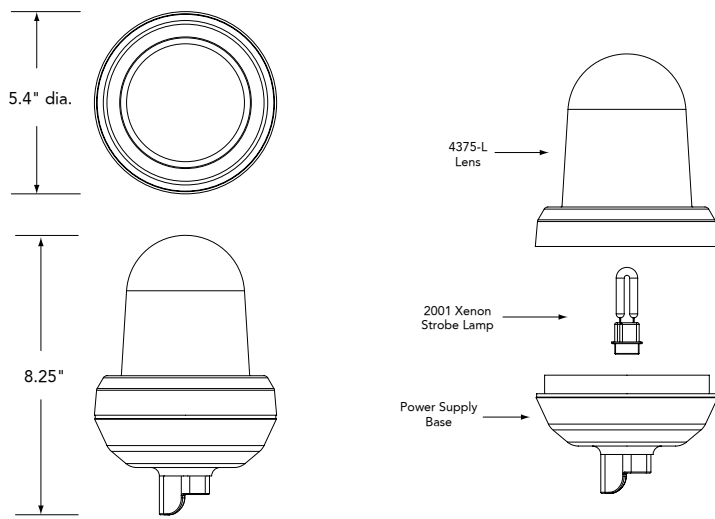
- Class I, Div. 2 Groups A, B, C, & D
- Class II, Div 2 Groups F & G
- Class III
- 10,000 hour strobe lamp
- two year warranty on power supply
- one year warranty on lamp
- **available in five lens colors**
- UL listed
- CSA approved
- NEMA 4X

Lens Colors

| Amber | Blue | Clear | Green | Red |

Ordering Information
Please specify lens colors and model number when ordering. Available colors are Amber, Blue, Clear, Green and Red.

Model No.	Description	Voltage
4375–120	Hazardous location AC strobe	120 – 240VAC
4375–1274	Hazardous location DC strobe	12 – 74VDC

5.4" dia.

8.25"

4375-L Lens

2001 Xenon Strobe Lamp

Power Supply Base

NFPA Definitions

Class I, Division 2.
A location (1) in which volatile flammable liquids or flammable gases are handled, processed or used, but in which the liquids, vapors or gases will normally be confined within closed containers or closed systems from which they can escape only in case of accidental rupture or breakdown of such containers or systems, or in case of abnormal operation of equipment; or (2) in which ignitable concentrations of gases or vapors are normally prevented by positive mechanical ventilation, and which might become hazardous through failure or abnormal operation of the ventilating equipment; or (3) that is adjacent to a Class I Division 1 location, and to which ignitable concentrations of gases or vapors might occasionally be communicated unless such communication is prevented by adequate positive–pressure ventilation from a source of clean air and effective safeguards against ventilation failure are provided.
[See Section 500–4(b) of NFPA 70, National Electrical Code.]

Class II, Division 2.
A location in which (1) combustible dust will not normally be in suspension in the air in quantities sufficient to produce explosive or ignitable mixtures and dust accumulations are normally insufficient to interfere with the normal operation of electrical equipment or other apparatus; or (2) dust may be in suspension in the air as a result of infrequent malfunctioning of handling or processing equipment and dust accumulations resulting therefrom may be ignitable by abnormal operation or failure of electrical equipment or other apparatus.
[See Section 500–5 (b) of NFPA 70, National Electrical Code.]

Specifications

Item	Description
Lamp Type	2001 Xenon strobe lamp
Lens Type	4375–L–Color (please specify lens color)
Voltage and Amperage	12–74VDC draws 1.2A @ 12VDC draws 0.33A @ 74VDC 120/240VAC draws 0.2A @ 120VAC (50/60Hz) draws 0.6A @ 240VAC (50/60Hz)
Temperature Code	Class I T2A 280° C Class II T6 85° C Do not install where the operating temperature exceeds the ignition temperature of the hazardous atmosphere.
Temperature Rating	–40° C to +55° C
Power Supply Output 15 Watts (single flash)	8 joules per flash
Flash Rate	75 flashes per minute ± 10%
Size and Weight	8.5" tall x 5.4" dia. x 3.2 lbs (215mm x 137mm x 1.45kg)

Architect and Engineer Specifications
Hazardous Location visual signaling beacon shall be Tomar model number series 4375 or approved equal. The beacon shall be UL Listed Class I, Division II, Groups A,B,C, and D; Class II, Division II, Groups F and G; and Class III for use in specified hazardous locations as classified by the National Electric Code. The light source shall be a plug-in field replaceable single-flash xenon strobe lamp. The warning signal must have built-in RFI filters to protect against radio interference and spike voltages. Voltage ranges shall be 12-74VDC and 120-240VAC. The warning light shall be rated NEMA 4X and have a tempered glass lens.

3150/3200/3300 BEP
Explosion Proof Warning Lights

- **single flash**
- UL listed
- meets UL 1203 & 1638
- two year warranty on power supply
- one year warranty on lamp
- 10,000 hour strobe lamp
- available in six lens colors
- marine rated
- NEMA 4X
- Order just the mounting style you need
  – Pendant, Flange (Ceiling), or
  Wall mount

The model 3200BEP family of single flash explosion proof UL listed strobe lights is designed for operation in hazardous areas rated Class I Group C & D (gas hazards) and Class II Group E, F, & G (dust hazards). Design features include a housing made of die cast high strength copper-free aluminum alloy with a baked powder epoxy finish, stainless steel hardware, o-ring sealed prestressed glass globe with double pitch acme threads for smooth assembly and ease of maintenance, and an optional guard which need not be removed for relamping. 3/4" conduit hubs are standard.
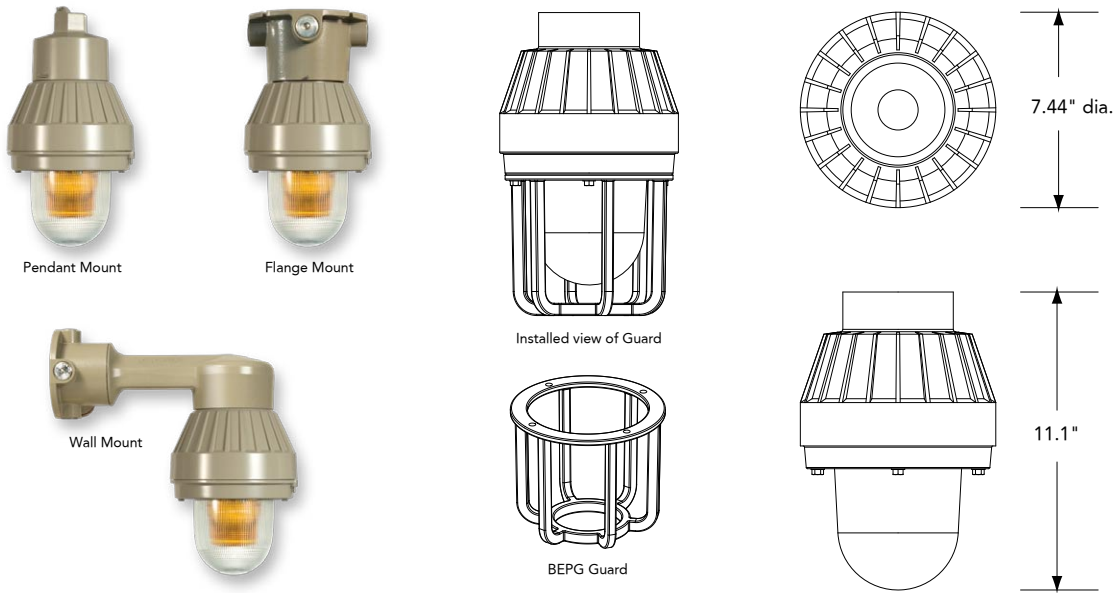
Lens Colors
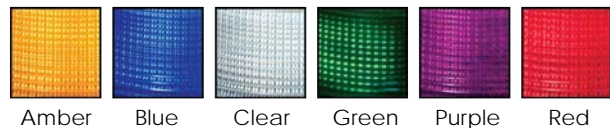
Amber Blue Clear Green Purple Red

Ordering Information
Please specify lens colors and model number when ordering. Available colors are Amber, Blue, Clear, Green and Red.

Model No.	Description	Voltage
3150BEP–FM	3/4" flange mount	12 – 74VDC
3200BEP–FM	3/4" flange mount	120VAC
3300BEP–FM	3/4" flange mount	240VAC
3150BEP–PM	3/4" pendant mount	12 – 74VDC
3200BEP–PM	3/4" pendant mount	120VAC
3300BEP–PM	3/4" pendant mount	240VAC
3150BEP–WM	3/4" wall mount	12 – 74VDC
3200BEP–WM	3/4" wall mount	120VAC
3300BEP–WM	3/4" wall mount	240VAC

Pendant Mount

Flange Mount

Wall Mount

Installed view of Guard

BEPG Guard

7.44" dia.

11.1"

Specifications

Item	Description
Lamp Type	700–R1–COLOR (please specify lens color)
Flash Rate	85 flashes per minute
Light Output	425 effective candlepower
Voltage and Amperage	12–74VDC draws 1.25A @ 12VDC tampering to 0.2A @ 74VDC 120/240VAC draws 0.17A @ 120VAC (50/60Hz) draws 0.075A @ 240VAC
Power Supply Output	13 watts standard, 11 watts for model 3150 9 joules per flash standard, 8 joules per flash for model 3150
Temperature Range	–40° C to +55° C
Temperature Code	T6–Class I Groups C and D T4A–Class II Groups E, F, & G
Size and Weight	13.69" tall x 7.44" dia. x 10.6 lbs (347mm x 188mm x 4.7kg)

Available Options

Item	Description
EP–FM–1	Splice box with 1" hubs
EP–PM–1	Splice box with 1" hubs
EP–WM–1	Splice box with 1" hubs
BEPG	Guard

Architect and Engineer Specifications

Visual signaling beacon shall be Tomar model number series 3150, 3200, 3300 or approved equal. The beacon shall be UL Listed Class I, Division I, Groups C and D; Class II, Division I, Groups E, F and G; and Class III for use in specified hazardous locations and /or combustible atmospheres as classified by the National Electric Code. The light source shall be a field replaceable single-flash xenon strobe lamp. The warning signal must have built-in RFI filters to protect against radio interference and spike voltages. Voltage ranges shall be 12-74VDC, 120VAC, and 240VAC. Beacon must be rated NEMA 4X, with housing made of die cast high-strength copper-free aluminum alloy with baked powder epoxy finish, stainless steel hardware, O-ring sealed pre-stressed globe with double pitch acme threads for smooth assembly and ease of maintenance. Must include a Lexan® inner lens and tempered glass outer dome. The housing must be designed to accommodate a dome guard.

7120BEP STROBE
Super Explosion Proof Warning Lights

- 2000 ECP
- **double flash high intensity**
- NEMA 4X
- meets UL1203 & UL1638
- built in synchronizing circuit
- 24,000 hour strobe lamp
- xenon strobe lamp
- available in six lens colors
- UL listed
- marine rated
- Order just the mounting style you need – Pendant, Flange (Ceiling), or Wall mount

The model 7120BEP family is designed, tested, and certified for use in hazardous locations and hostile environments classified by the NEC as Class I, Div. 1 & 2, Groups C & D, Class II, Div. 1 & 2, Groups E, F, G, and Class III, Div. 1 & 2. They also meet NEMA standards 3, 4, 4X, 7CD, and 9EFG and are marine rated for use in salt water environments. Design features include housing made of die cast high strength copper-free aluminum alloy with a baked powder epoxy finish, stainless steel hardware, o-ring sealed prestressed glass globe with double pitch acme threads for smooth assembly and ease of maintenance, a flash synchronizing circuit, and an optional guard which need not be removed for relamping.

Lens Colors
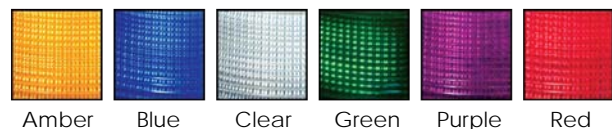
| Amber | Blue | Clear | Green | Purple | Red |

Ordering Information

Please specify lens colors and model number when ordering. Available colors are Amber, Blue, Clear, Green, Purple and Red.

Model No.	Description	Voltage
7120BEP–FM	flange mount, 3/4" hubs	120VAC
7024BEP–FM	flange mount, 3/4" hubs	12/24VDC
7120BEP–PM	pendant mount, 3/4" hubs	120VAC
7024BEP–PM	pendant mount, 3/4" hubs	12/24VDC
7120BEP–WM	wall mount, 3/4" hubs	120VAC
7024BEP–WM	wall mount, 3/4" hubs	12/24VDC

Pendant Mount

Flange Mount

Installed view of Guard

8.75" dia.

Wall Mount

EPG Guard

12"
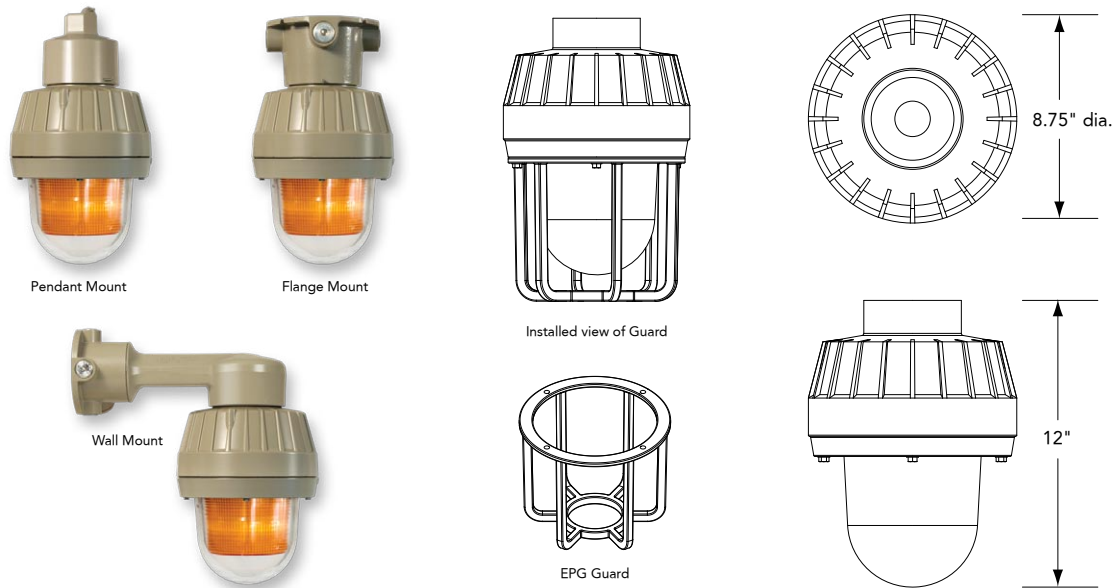
Synchronizing Specifications

Synchronizing Circuit Connection:
This is a low voltage, low power customer connection which requires one 22ga twisted pair run between each light. Max length between furthest lights 3000 feet. Up to 100 lights of different voltages can be synchronized.

Synchronizing Circuit Features:
Each light contains its own flash rate timing circuit which operates the lamp automatically and a bi-directional synchronizing circuit which overrides the internal timing circuit when connected to another light. When two or more lamps are synchronized together, failure of any lamp will not prevent other lamps from operating. Lights may be operated from different power sources, that is, a 120VAC unit may be synchronized with a 12VDC unit.

Specifications

Item	Description
Lamp Type	6001 Xenon strobe lamp
Light Output	2000 effective candlepower
Flash Rate	40 double flashes per minute
Voltage and Amperage	120VAC 60 Hz draws 1.0A (1.7A max) 12/24VDC draws 2.5/1.2A average (8.0/4.0A max)
Power Supply Output 26 Watts	-- AC and DC Units -- 20 joules 1st flash 20 joules 2nd flash
Maximum Operating Temperature Code at 65° C Ambient	Class I Groups C and D = 85° C（T6） Class II Groups E, F, & G = 85° C（T6） Simultaneous Exposure to Class I and Class II = 85° C（T6）
Size and Weight	14.5" tall x 8.75" dia. x 13 lbs (368mm x 222mm x 5.9kg)

Available Options

Model No.	Description
EPG	Guard

## Architect and Engineer Specifications

Visual signaling beacon shall be Tomar model number series 7024, 7120 or approved equal. The beacon shall be UL Listed Class I, Division I, Groups C and D; Class II, Division I, Groups E, F and G; and Class III for use in specified hazardous locations and /or combustible atmospheres as classified by the National Electric Code. The warning beacon shall have a 26 watt power supply and generate 20 joules per flash. Light intensity shall be 2000 effective candlepower, and the light source shall be a plug-in field replaceable double-flash xenon strobe lamp operating at 40 double flashes per minute. The warning signal must have built-in RFI filters to protect against radio interference and spike voltages. Beacon must have a built-in flash synchronizing circuit, and voltage ranges shall be 12-74VDC and 120VAC. Strobe beacon must meet UL 1203, UL 1638 standards. Beacon must be rated NEMA 4X, with housing made of die cast high-strength copper-free aluminum alloy with baked powder epoxy finish, stainless steel hardware, O-ring sealed pre-stressed globe with double pitch acme threads for smooth assembly and ease of maintenance. Must include a Lexan® inner lens and tempered glass outer dome. The housing must be designed to accommodate a dome guard.

3000 Series

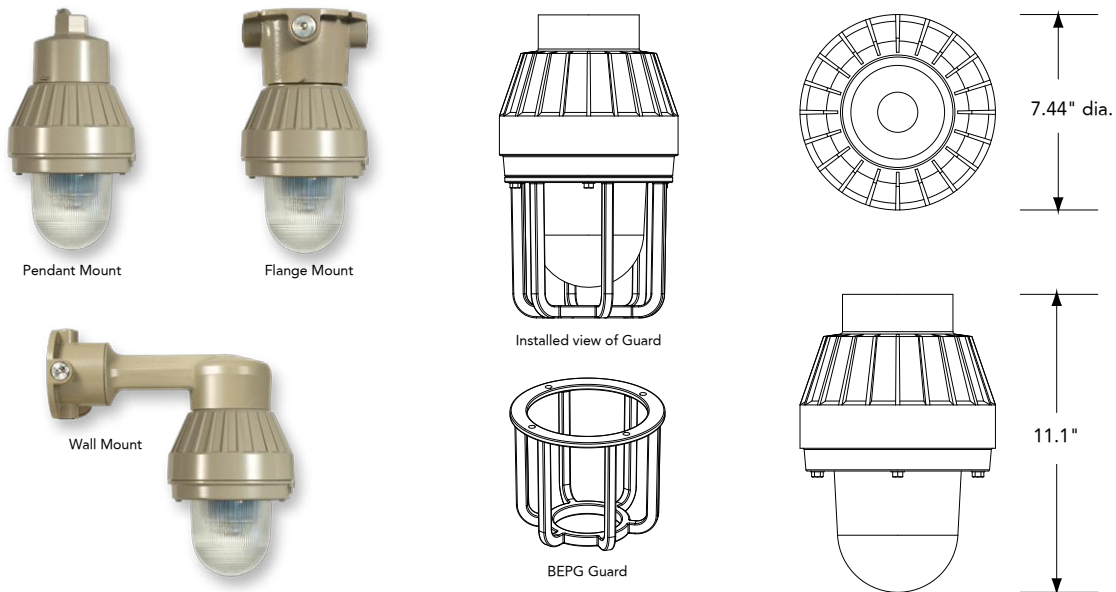## Explosion-Proof LED Warning Light
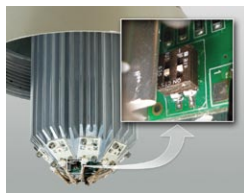
Tomar Electronics introduces the Model 3000 family of LED explosion proof lights. These warning lights are UL listed for Class 1, Division 1, Groups C & D; Class 2, Division 1, Groups E, F & G; Class 1, Division 2, Groups A, B; and Class 3. They are available in six LED colors (Amber, Blue, Green, Magenta, Red, and White).

Tomar's explosion proof LED lights feature a unique thermal management system that utilizes internal cooling fins to draw heat away from the LED's. This allows for longer lamp life and more consistent light output. All electronics and LED's are guaranteed against manufacturing defects for a full 5 years.

An internal switch allows for easy selection among steady-burning, single or double flash mode. Each light will operate over a wide AC and DC input voltage range. The DC version is designed to operate from 10-36 VDC; the AC version from 85-265 VAC.

The compact 3000 family series are constructed to NEMA 4X standards and are marine-rated for use in salt water environments. Design features include housing made of die cast high strength copper-free aluminum alloy with baked powder epoxy finish, stainless steel hardware, o-ring sealed prestressed glass dome with double pitch acme threads for smooth assembly and ease of maintenance.

- Super-Bright, high-power LED cluster for superior light output and greater lens fill

- Unique Thermal Management System utilizes internal cooling fins to draw heat away from the LED's. This allows for longer LED life and more consistent light output

- DIP switch selectable single-flash, double-flash, or steady-burn mode

- Order just the mounting style you need – Pendant, Flange (Ceiling), or Wall mount

- 5 year warranty

- NEMA 4X

- Marine Rated

- Low in-rush current

Pendant Mount   Flange Mount

Wall Mount

Installed view of Guard

BEPG Guard

7.44" dia.

11.1"

Ordering Information

Please specify LED colors and model number when ordering. Available colors are Amber, Blue, Green, Magenta, Red, and White.

Model No.	Description	Voltage
3024XLF	flange mount, 3/4" hubs	12-36 VDC
3124XLF	flange mount, 3/4" hubs	120-240 VAC
3024XLP	pendant mount, 3/4" hubs	12-36 VDC
3124XLP	pendant mount, 3/4" hubs	120-240 VAC
3024XLW	wall mount, 3/4" hubs	12-36 VDC
3124XLW	wall mount, 3/4" hubs	120-240 VAC

Specifications

Item	Description
Lamp Type	LED
Flash Rate	80 Single Flash per minute 40 Double Flash per minute
Voltage and Amperage	167 mA @ 24 VDC for Single Flash - 1.5 Amp in-rush 033 mA @ 120 VAC for Single Flash - 65 mA in-rush 017 mA @ 240 VAC for Single Flash - 125 mA in-rush
Operating Temperature	-55 C to 85 C
Temperature Code	T6 - All voltage and temperature ranges
Size and Weight	13.69" tall x 7.44" dia. x 10.6 lbs (347mm x 188mm x 4.7kg)

Available Options

Model No.	Description
BEPG	Guard

Architect and Engineer Specifications

LED visual signaling beacon shall be Tomar model number series 3024 or 3124 or approved equal. The beacon shall be UL Listed Class I, Division I, Groups C and D; Class II, Division I, Groups E, F and G; and Class III for use in specified hazardous locations and /or combustible atmospheres as classified by the National Electric Code.

Operating voltage ranges shall be 10-36 VDC or 85-265 VAC. Operating temperature range shall be from -40 C to 85 C. Beacon shall have built-in selector switch to allow operation in Steady On, Single Flash, or Double Flash modes. Beacon must be rated NEMA 4X, with housing made of die cast high-strength copper-free aluminum alloy with baked powder epoxy finish, stainless steel hardware, O-ring sealed pre-stressed globe with double pitch acme threads for smooth assembly and ease of maintenance. The housing must be designed to accommodate a dome guard.

7000 Series

Explosion-Proof LED Warning Lights

- Super-Bright, high-power LED cluster for superior light output and greater lens fill

- Unique Thermal Management System utilizes internal cooling fins to draw heat away from the LED's. This allows for longer LED life and more consistent light output

- DIP switch selectable single-flash, double-flash, or steady-burn mode

- Order just the mounting style you need – Pendant, Flange (Ceiling), or Wall mount

- 5 year warranty

- NEMA 4X

- Marine Rated

- Low in-rush current

Tomar Electronics introduces the Model 7000 family of LED explosion proof lights. These warning lights are UL listed for Class 1, Division 1, Groups C & D; Class 2, Division 1, Groups E, F & G; Class 1, Division 2, Groups A, B; and Class 3. They are available in six LED colors (Amber, Blue, Green, Magenta, Red, and White).

Tomar's explosion proof LED lights feature a unique thermal management system that utilizes internal cooling fins to draw heat away from the LED's. This allows for longer lamp life and more consistent light output. All electronics and LED's are guaranteed against manufacturing defects for a full 5 years.

An internal switch allows for easy selection among steady-burning, single or double flash mode. Each light will operate over a wide AC and DC input voltage range. The DC version is designed to operate from 10-36 VDC; the AC version from 85-265 VAC.

The full size 7000 family series are constructed to NEMA 4X standards and are marine-rated for use in salt water environments. Design features include housing made of die cast high strength copper-free aluminum alloy with baked powder epoxy finish, stainless steel hardware, o-ring sealed prestressed glass dome with double pitch acme threads for smooth assembly and ease of maintenance.

Pendant Mount

Flange Mount

Wall Mount

Installed view of Guard

EPG Guard

8.75" dia.

12"
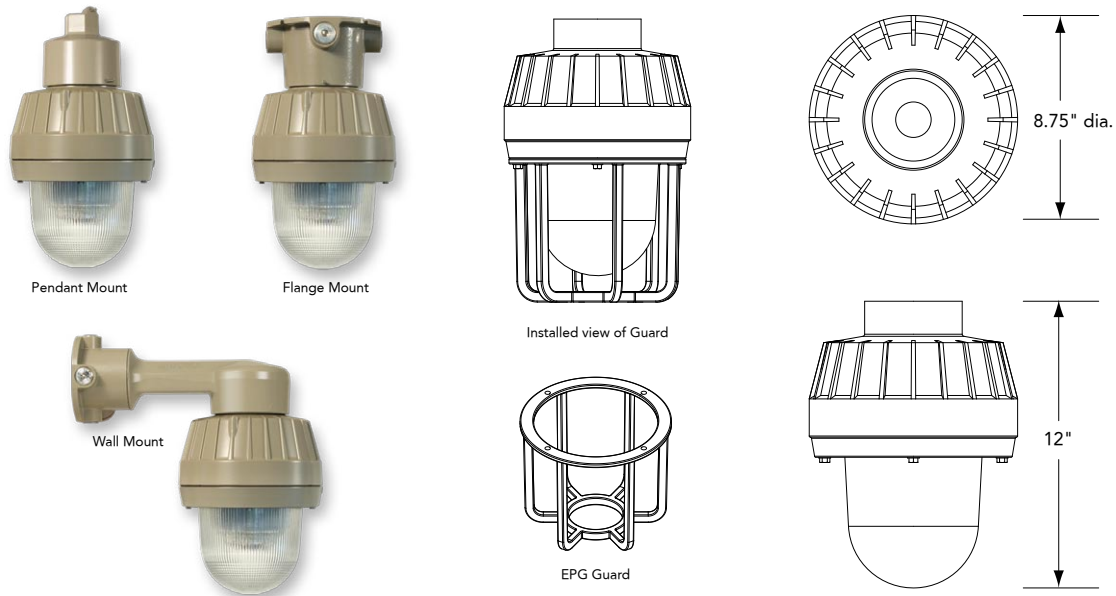
Ordering Information

Please specify LED colors and model number when ordering. Available colors are Amber, Blue, Green, Magenta, Red, and White.

Model No.	Description	Voltage
7024XLF	flange mount, 3/4" hubs	12-36 VDC
7124XLF	flange mount, 3/4" hubs	120-240 VAC
7024XLP	pendant mount, 3/4" hubs	12-36 VDC
7124XLP	pendant mount, 3/4" hubs	120-240 VAC
7024XLW	wall mount, 3/4" hubs	12-36 VDC
7124XLW	wall mount, 3/4" hubs	120-240 VAC

Specifications

Item	Description
Lamp Type	LED
Flash Rate	80 Single Flash per minute 40 Double Flash per minute
Voltage and Amperage	167 mA @ 24 VDC for Single Flash - 1.5 Amp in-rush 033 mA @ 120 VAC for Single Flash - 65 mA in-rush 017 mA @ 240 VAC for Single Flash - 125 mA in-rush
Operating Temperature	-55 C to 85 C
Temperature Code	T6 - All voltage and temperature ranges
Size and Weight	14.5" tall x 8.75" dia. x 13 lbs (368mm x 222mm x 5.9kg)

Available Options

Model No.	Description
EPG	Guard

Architect and Engineer Specifications

LED visual signaling beacon shall be Tomar model number series 7024 or 7124 or approved equal. The beacon shall be UL Listed Class I, Division I, Groups C and D; Class II, Division I, Groups E, F and G; and Class III for use in specified hazardous locations and /or combustible atmospheres as classified by the National Electric Code.

Operating voltage ranges shall be 10-36 VDC or 85-265 VAC. Operating temperature range shall be from -40 C to 85 C. Beacon shall have built-in selector switch to allow operation in Steady On, Single Flash, or Double Flash modes. Beacon must be rated NEMA 4X, with housing made of die cast high-strength copper-free aluminum alloy with baked powder epoxy finish, stainless steel hardware, O-ring sealed pre-stressed globe with double pitch acme threads for smooth assembly and ease of maintenance. The housing must be designed to accommodate a dome guard.

Strobe Tubes & Power Supply Bases

Model #	Description
5002	Xenon strobe tube- for Microstack strobes
5001	Xenon strobe tube - for Micro series strobes
2001	Xenon strobe tube - for 500 series strobes
3001	Xenon strobe tube - for 700 series strobes & 3000 series Power Strobes
4001	Xenon strobe tube - for 800 series strobes
6001	Xenon strobe tube - for 7120R & 3200 Power Strobes
500-BASE	Power supply for 500P Micro Lite (not shown)
550P-BASE	Power supply for 550P Micro Lite II (not shown)
801-BASE	Power supply for 801 Mini I & 804 Maxi I (not shown)
8024-BASE	Power supply for 8024 Mini Lite II (not shown)
824-BASE	Power supply for 824 Multi Strobe(not shown)

Strobe Lenses

Lens Colors

Amber   Blue   Clear   Green   Purple   Red

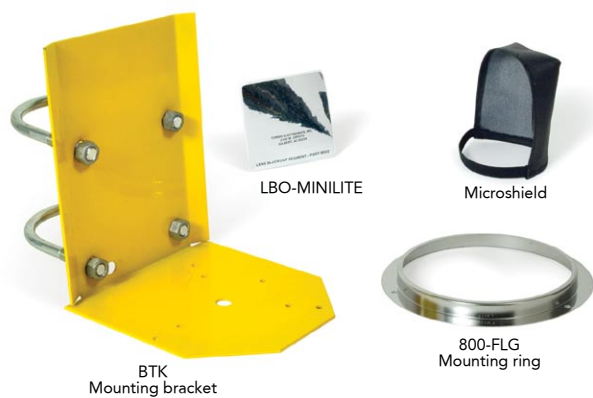| Model #	Description
470S-L-COLOR	Lens for Microstrobe & Micro IV strobes- (Please specify color)
801-L-COLOR	Lens for 500P, 550P, 801 MINI, and 8024 Mini strobes- (Please specify color)
1700-COLOR	Lens for 824, 804, 3000, 32000, and 7120R strobes - (Please specify color)
700-L-COLOR	Lens for 700 Mini strobes - (Please specify color)

G800

800/1250-DC

802-03

700-DC

GM
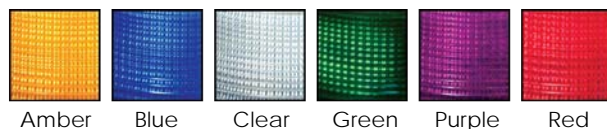
G470

Dust Covers & Guards

Model #	Description
800/1250-DC	Lens dust cover - for 800 Maxi series strobes
802-03	Lens dust cover - for 500 & 800 Mini series strobes
700-DC	Lens dust cover - for 700 series strobes
G470	Guard - for Microstrobe and Micro IV strobes
G800	Guard - for 800 series strobes
G802	Guard - for 500 series strobes (not shown)
GM	Guard - for 700 series strobes
BEPG	Guard - for 3000 series explosion-proof strobes and LEDs (not shown)
EPG	Guard - for 7000 series explosion-proof strobes and LEDs (not shown)

LBO-MINILITE

Microshield

BTK
Mounting bracket

800-FLG
Mounting ring

Mounting Systems & Accessories

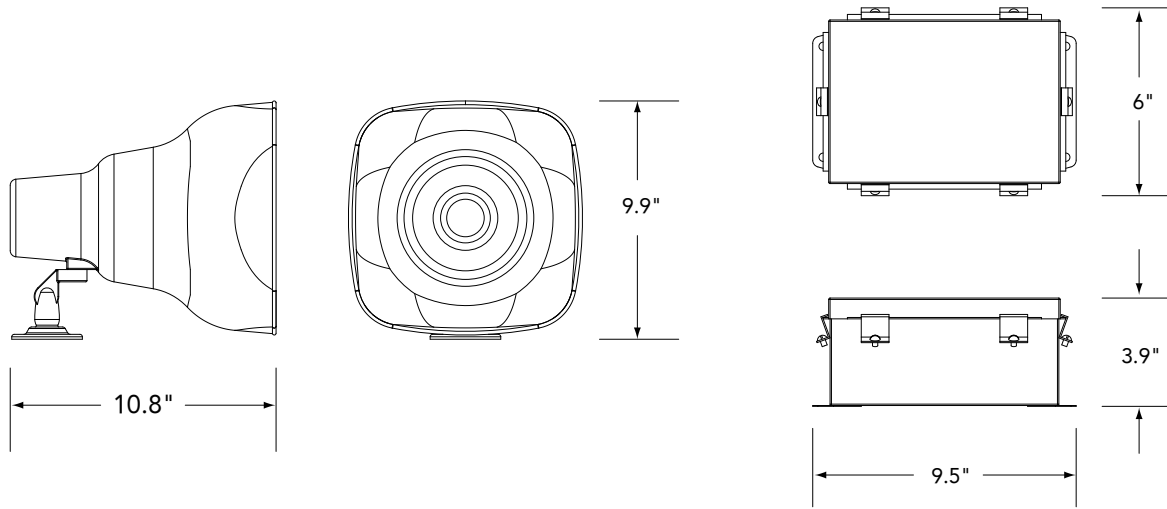| Model #	Description
BTK	Mounting bracket - pole mounting bracket for 500, 700, 800, 470 and Microstrobe series strobes
800-FLG	Mounting ring - for 500 and 800 series strobes
Microshield	180° shield for Micro series strobes LBO-MINI 180° Blackout reflector for Micro series strobes
LBO-MINILITE	Minilite 180° blackout (not shown) for 500 & 800 mini series strobes
LBO-MAXI	Maxilite 180° blackout for 800 series maxi strobes (not shown)
TBO-MAXI	Top lens blackout for 500 & 800 series strobes (not shown)

1000 and 1100
Power Alarm© Siren

TOMAR's POWER ALARM® SIREN is a heavy duty industrial audible alarm designed to operate under adverse industrial conditions such as shock, vibration, or transient voltage surges. The models 1000 and 1100 Power Alarms feature a choice of field selectable tones plus remote control selection of 4 tones with priority.

- weatherproof construction
- low power consumption
- choice of 9 sounds
- battery back-up option
- remote control with priority
- NEMA 4X / 3R

Ordering Information

Model No.	Description	Voltage
1000–120	Power alarm less speaker	120/240VAC
1100–250	Power alarm less speaker	250VDC
1100–1224	Power alarm less speaker	12-24 VDC

9.9"

10.8"

6"

3.9"
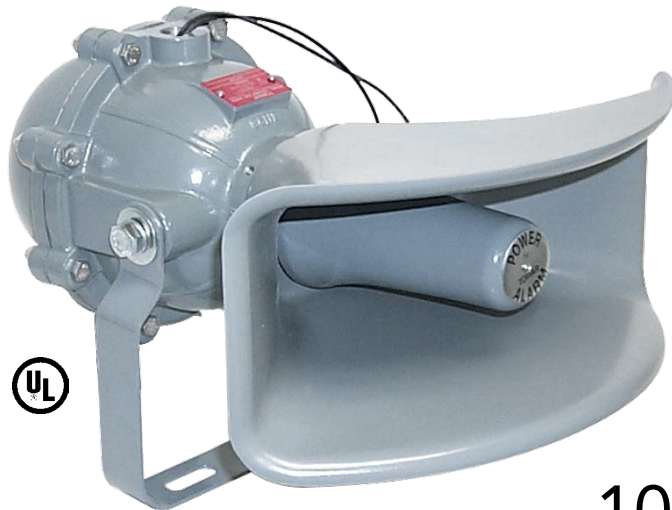
9.5"

Specifications

Item	Description
Sound Output	S7 SPL @ 10 feet = 112dB
Circuitry Enclosure	NEMA 4 weatherproof enclosure
Speaker/Driver	100% weatherproof, all metal
Ambient Temperature Range	–55° C to +85° C –67° F to +185° F
Power Requirements	model 1000–120 120/240VAC 0.5/0.25A model 1100–250 250VDC 0.25A Model 1100-1224 12/24 VDC 0.7A

Sounds	S1 Continuously running train of 8 sounds in sequence
	S2 Wail - conventional siren
	S3 Yelp - rapid siren
	S4 Two - tone
	S5 Whoop - ascending low-high
	S6 Yeow - descending high-low
	S7 Horn - steady
	S8 Beep - slow intermittent horn
	S9 Stutter - rapid intermittent horn
	S0 REMOTE - enables remote selection of:
	       S7 Horn - steady (priority 1) (highest priority)
	       S4 Two Tone - alternating (priority 2)
	       S3 Yelp - rapid siren (priority 3)
	       S1 Wail - manual siren (priority 4)

Available Options
NOTE: All "/" options are factory installed only.

Model No.	Description
MULTISOUND	Sound module with 9 sounds plus remote control
1001	Speaker only
RJ45–6	6 foot remote cable to control dual sounds
/1000BBU	12 or 24VDC backup battery input option
/1001	Speaker
/SSA	NEMA 4X stainless steel enclosure option

1002WEP
Explosion Proof Power Alarm© Siren

TOMAR's model 1002WEP EXPLOSION PROOF POWER ALARM® siren is a rain tight solid state audible alarm, that features a choice of 9 field selectable tones plus remote control selection of 4 tones with priority. All models of 1002WEP alarms are o-ring gasketed and are UL listed for Class I, Group C & D locations, NEMA Type 4X, and marine outside (salt water) use.
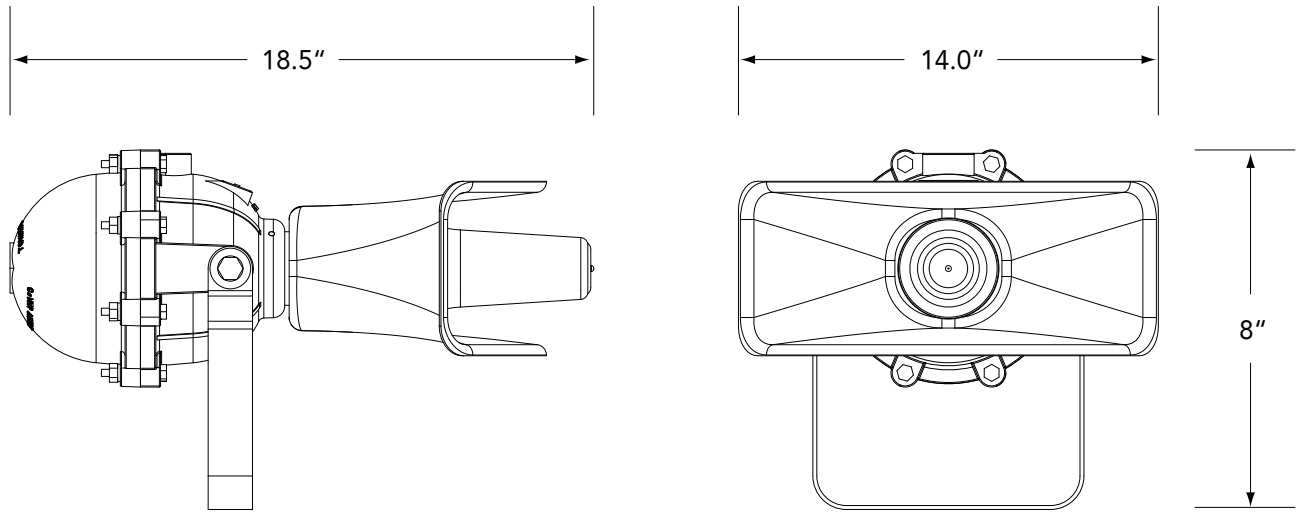
- weatherproof construction
- 9 selectable tones
- remote control with priority
- UL listed
- NEMA 4X
- Marine rated

Tones
Selectable by switch on sound module

S1 Continuously running train of 8 sounds in sequence
S2 Wail - conventional siren
S3 Yelp - rapid siren
S4 Two - tone
S5 Whoop - ascending low-high
S6 Yeow - descending high-low
S7 Horn - steady
S8 Beep - slow intermittent horn

* priority 1 is the highest

S9 Stutter - rapid intermittent horn
S0 REMOTE - enables remote selection of:
    S7 Horn - steady (priority 1*)
    S4 Two Tone - alternating (priority 2)
    S3 Yelp - rapid siren (priority 3)
    S1 Wail - manual siren (priority 4)

Ordering Information

Model No.	Description	Voltage
1002WEP–24	Explosion proof power alarm	24VDC
1002WEP–120	Explosion proof power alarm	120VAC
1002WEP–240	Explosion proof power alarm	240VAC

18.5"   14.0"   8"

Specifications

Item	Description
Volume	S7–110dbA @ 10 feet
Voltage and Amperage	24VDC draws 0.8A 50/60 Hz or DC 120VAC draws 0.2A 50/60 Hz 240VAC draws 0.1A 50/60 Hz
Enclosure Construction	Weatherproof construction, fiberglass horn, cast aluminum housing
Mounting	Omni directional mounting bracket, 1/2" conduit access
Ambient Temperature Range	–55° C to +85° C –67° F to +185° F
Size and Weight	14" wide x 8" high x 18.5" long (356mm x 152mm x 445mm)
Weight	19.5 lbs (8.9kg)

Available Options

Model No.	Description
1001–WEP	60 watt speaker only, less sound module
RJ45–6	Remote control cable and plug

Architect and Engineer Specifications

Explosion proof sounder shall be Tomar model 1002 WEP or approved equal. The loudspeaker shall be UL Listed Class I, Division I and II, Class II Division I and II, and Class III for use in specified hazardous locations and/or combustible atmospheres as classified by the National Electric Code. The explosion proof sounder shall have 9 integrated field selectable sounds plus remote control selection of 4 sounds with priority. Speaker housing must have O-ring gasket and be NEMA 4X and marine (salt water) rated. Projector horn shall be a reflex type with polycarbonate re-entrant section. Voice coils shall be field-replaceable, and the operating temperature rating is to be -55C to 85C; -67F to 185F.

RMS Series
Fire alarm pull stations

- Single or Dual Action
- Break Glass
- Lift and Pull
- Terminal strip or Pigtail connection
- 9 different colors
- Custom lettering available in any language
- Single or Double contact
- UL listed and FM Approved

Tomar manual pull stations are made entirely in the U.S.A. of the finest materials and workmanship available. The low profile design and smooth edges offer an attractive yet functional design. They are constructed of high-strength metal die-cast alloy, and will operate equally well in commercial, municipal, and industrial environments.

Tomar Single Action manual pull stations are activated quickly and easily by pulling down the T-handle. Dual Action Lift and Pull and Break Glass are available to minimize accidental or malicious alarm activations.

Electrically the Tomar pull station is unbeatable with 10 amp snap action switch offered in all possible contact arrangements (including gold contacts). Tomar pull stations can be used with or without the included glass rod, with replacement requiring no special tools.

RMS Ordering Information

Model	Description
RMS-1P	SPST with Pigtail connection
RMS-1T	SPST with Terminal strip connection
RMS-2T	DPST with Terminal strip connection.
RMS-LP	SPST with Terminal strip connection / Lift and Pull
RMS-BG	DPDT with Terminal strip connection / Break Glass

Options – please add at time of order
    KL   Key lock

Accessories
    GR   Replacement glass rods
    BB   Indoor back box, surface mount
    DBB   Deep indoor back box, surface mount
    GP   Replacement glass
    LP   Lift and Pull cover
    DAH   Break glass adapter

How to Order:
 • Specify model number
 • Specify options, special lettering, and color if other than Red

Architect and Engineer Specifications

The manual pull station shall be Tomar series RMS or approved equal. The pull station shall be UL listed, and made of high-strength metal die-cast alloy. Single action model activation shall be by T-handle pull-down function. Dual action model activation shall be by Lift and Pull cover, or Break Glass action. The pull station must be able to be activated either with or without a glass rod, which must be field-replaceable and requiring no special tools. The pull station must be available with either single or double pole switch, and with either pigtail or terminal block design.

Specifications

Item	Description
Contacts	D.P.D.T. (double pole double throw)
Contact Rating	10 amps @ 125/250 VAC.
Wire AWG	12 to 22 AWG
Wiring	Terminal block or pigtail
Construction	Metal
Mounting	Hardware & instructions included
Dimensions Single Action	Width - 3.2in Height - 4.75in Depth - .875in Weight - 1.0 lb
Dimensions Dual Action, Lift and Pull (LP)	Width - 3.2in Height - 4.75in Depth - 1.5in Weight - 1.2 lb
Dimensions Dual Action, Break Glass (BG)	Width - 3.2in Height - 4.75in Depth - 1.625in Weight - 1.6 lb
Available Colors	Red, Blue, Green, Yellow, White, Black, Gray, Purple, Orange

Break Glass Cover

The cover is made of heavy gage steel and offers the user the proven glass break deterrent. Two unique features include a glass slot which expels glass through the bottom, minimizing possible injury when activating the device. Optionally, the Break Glass Cover offers key-lock access allowing quick and convenient testing without removing screws or fasteners.

The Break Glass Cover mounts readily between device and wall without having to remove wires.

• Deters vandalism

• Key lock option

• Mounts readily to wall

• Automatically expels glass when broken

• Heavy gauge steel construction (14 gage)

• Available in red, blue, green, yellow, white, black, gray, purple, and orange

Specifications

Item	Description
Dimensions	Width -6.6in Height - 7.375in Depth - 2.25in)
Weight	1.42 lb
Available Colors	Red, Blue, Green, Yellow, White, Black, Gray, Purple, Orange

- Weather proof
- Single or Dual Action
- Break Glass
- Lift and Pull
- Terminal strip or Pigtail connection
- 9 different colors
- Custom lettering available in any language
- Single or Double contact
- UL listed and FM Approved

RMS-WP Series
Weather proof fire alarm pull stations

Tomar weatherproof, manual pull stations are made entirely in the U.S.A. of the finest materials and workmanship available. The low profile design and smooth edges offer an attractive yet functional design. The high-strength metal die-cast alloy will provide many years of dependable service in even the harshest industrial environments. All components are prepainted or have plated surfaces to inhibit corrosion.

Tomar Single Action manual pull stations are activated quickly and easily by pulling down the T-handle. Dual Action Lift and Pull and Break Glass are available to minimize accidental or malicious alarm activations.

Electrically the Tomar pull station is unbeatable with 10 amp snap action switch offered in all possible contact arrangements (including gold contacts). Tomar pull stations can be used with or without the included glass rod, with replacement requiring no special tools.

RMS-WP Ordering Information

Model	Description
RMS-PWP	SPST with Pigtail connection
RMS-TWP	SPST with Terminal strip connection
RMS-2WP	SPST with Terminal strip connection.
RMS-WP-LP	SPST with Terminal strip connection / Lift and Pull
RMS-WP-BG	DPDT with Terminal strip connection / Break Glass

Specifications

Item	Description
UL Rating	Weatherproof
Contacts	D.P.D.T. (double pole double throw)
Contact Rating	10 amps @ 125/250 VAC.
Wire AWG	12 to 22 AWG
Wiring	Terminal block or pigtail
Construction	Metal
Mounting	Hardware & instructions included
Dimensions Single Action	Width - 3.2in Height - 4.75in Depth - 3.25in Weight - 2.02 lb
Dimensions Dual Action, Lift and Pull (LP)	Width - 3.2in Height - 4.75in Depth - 3.25in Weight - 2.2 lb
Dimensions Dual Action, Break Glass (BG)	Width - 3.2in Height - 4.75in Depth - 3.95in Weight - 2.6 lb
Available Colors	Red, Blue, Green, Yellow, White, Black, Gray, Purple, Orange

Options – please add at time of order
KL   Key lock

Accessories
GR   Replacement glass rods
GP   Replacement glass
LP   Lift and Pull cover
DAH   Break glass adapter

How to Order:
· Specify model number
· Specify options, special lettering, and color if other than Red

Architect and Engineer Specifications

The manual pull station shall be Tomar series RMS or approved equal. The pull station shall be weatherproof and UL listed. The pull station must be made of high-strength metal die-cast alloy. Single action model activation shall be by T-handle pull-down function. Dual action model activation shall be by Lift and Pull cover, or Break Glass action. The pull station must be able to be activated either with or without a glass rod, which must be field-replaceable and requiring no special tools.   The pull station must be available with either single or double pole switch, and with either pigtail or terminal block design

RMS-EX-WP Series

Explosion and weather proof fire alarm pull stations

The Tomar RMS-EX-WP manual pull stations are designed to operate in hazardous locations and harsh environmental conditions. They are NEMA 4X rated, and UL listed for use in Class I, Division I, Groups B, C, and D; Class II, Division I, Groups E, F, and G; and Class III locations.

The RMS-EX-WP stations are made entirely in the U.S.A. of the finest materials and workmanship available. The high-strength metal die-cast alloy will provide many years of dependable service in even the harshest industrial environments. All components are prepainted or have plated surfaces to inhibit corrosion. The model RSM-EX-WP pull stations are suitable for hazardous areas due to the presence of flammable gases or vapors, combustible dust, or easily ignitable fibers or fillings. Installation at petroleum refineries, offshore oil and gas production and processing facilities, chemical and petrochemical plants, storage areas and other processing facilities where hazardous substances are handled or stored.

Tomar Single Action manual pull stations are activated quickly and easily by pulling down the T-handle. Dual Action Lift and Pull and Break Glass are available to minimize accidental or malicious alarm activations.

Electrically the Tomar pull station is unbeatable with 10 amp snap action switch offered in all possible contact arrangements (including gold contacts). Tomar pull stations can be used with or without the included glass rod, with replacement requiring no special tools.

- Explosion proof, Class 1, Division 1
- Weather proof (NEMA Type 4X)
- Single or Dual Action
- Break Glass
- Lift and Pull
- Terminal strip or Pigtail connection
- 9 different colors
- Custom lettering available in any language
- Single or Double contact
- UL listed and FM Approved

RMS-EX-WP Ordering Information

Model	Description
RMS-EX-WP	DPDT with Terminal strip connection
RMS-EX-WP-LP	DPDT with Terminal strip connection / Lift and Pull
RMS-EX-WP-BG	DPDT with Terminal strip connection / Break Glass

Specifications

Item	Description
UL Rating	NEMA Type 4X outdoor
Contacts	D.P.D.T. (double pole double throw)
Contact Rating	10 amps @ 125/250 VAC.
Wire AWG	12 to 22 AWG
Wiring	Terminal block or pigtail
Construction	Metal
Mounting	Hardware & instructions included
Dimensions Single Action	Width - 3.2in Height - 4.75in Depth - 5in Weight - 3 lb
Dimensions Dual Action, Lift and Pull (LP)	Width - 3.2in Height - 4.75in Depth - 5.3in Weight -3.1 lb
Dimensions Dual Action, Break Glass (BG)	Width - 3.2in Height - 4.75in Depth - 5.5in Weight - 3.6 lb
Available Colors	Red, Blue, Green, Yellow, White, Black, Gray, Purple, Orange

Options – please add at time of order
  KL   Key lock

Accessories
  GR   Replacement glass rods
  GP   Replacement glass
  LP   Lift and Pull cover
  DAH   Break glass adapter

How to Order:
• Specify model number
• Specify options, special lettering, and color if other than Red

Architect and Engineer Specifications

The manual pull station shall be Tomar series RMS-EX or approved equal. The pull station shall be NEMA 4X rated and UL listed for use in Class I, Division I, Groups B, C, and D; Class II, Division I, Groups E, F, and G; and Class III locations. The pull station must be made of high-strength metal die-cast alloy. Single action model activation shall be by T-handle pull-down function. Dual action model activation shall be by Lift and Pull cover, or Break Glass action. The pull station must be able to be activated either with or without a glass rod, which must be field-replaceable and requiring no special tools.   The pull station must include a double throw switch and terminal block design.

930 LIGHTBAR SERIES
Strobe, LED and Halogen Lightbars

TOMAR Lightbars are built to last and are proven to operate effectively in the most extreme temperatures. Our lightbars feature instantaneous activation with full light capability from -50° to +85° Celsius.

LED Lamps
TOMAR's LED lamps use TOMAR designed wide angle optic lenses along with LED collimators to produce the brightest, highest efficiency light beams the industry has ever seen. The LED lamps can directly replace any 12 or 24V RECT-37 halogen lamp applications.

Xenon Strobe Lamps
All strobe lamps are water-tight, Hermetically sealed Xenon lamps with chrome coated reflectors for maximum reflector efficiency and long life. Choice of lamp colors are Amber, Blue, Clear, Green, Purple, Red or any split color combination.

Halogen Lamps
TOMAR halogen lamps use twist-out automotive 12V halogen bulbs rated at 27 watts each, which can be upgraded to 35 watts. The lamp is molded from Lexan® and has been designed to fit all popular emergency vehicles.

Electrical Specification
12VDC draws 5 amps @ 12.8VDC (48" LED lightbar)
12VDC draws 14 amps @ 12.8VDC (48" Strobe lightbar)
12VDC draws 28 amps @ 12.8VDC (48" Halogen lightbar)

Available Options
Lightbars can be configured with optional Takedown, Alley lights, Work lights and Stop-Turn-Tail lights.

Available Lengths
Lightbars are available in lengths of:
17", 24", 32", 40", 48", 56", 64", 72", 80", 88", and 96"

Ordering Information and Lamp Colors

For customers requiring more than our standard features, we offer additional options to further enhance and customize each lightbar to meet their state or local regulations. Please call our sales department or distributors for ordering information of all available configurations and options. See product pages RECT–34 and RECT–37 for available lamp colors.

TSYS–I
Truck Strobe System
Warning Lights and Traffic Directing Arrows

The TSYS–I features "WP" waterproof lamps, power supply, and cabling system for lighting the rear of municipal trucks and snow plows. The model 772P–1228–WP strobe power supply is potted and has waterproof connectors, and will operate on both 12V and 28V automotive systems. The lamps are hermetically sealed and have chrome coated reflectors for long life. The RECT–37–BOX units are fabricated from heavy steel plate welded to form a watertight box, prime painted, and furnished with gasket.

Ordering Information

Model No.	Description
TSYS–1	TSYS–1 Truck System includes: 1 772–1228–WP power supply 2 RECT–37SWP-A lamps 2 RECT–37MG gaskets 2 RECT–37–BOX steel box 2 15C–WP2 waterproof cables
TSYS–1–25	Same as TSYS–1 except with 25' cables
TSYSN–1	Waterproof 2 head NEOBE® system

Specifications

Item	Description
Power Requirements	Draws 4.25A average @ 12VDC tapering to 2.0A average @ 28VDC
Flash Rate	70 DFPM/Head minimum
Warranty	Extended 5 years on power supply

Understanding Light Intensity Specifications for Flashing Signal Lights

GENERAL

The purpose of this reference section is to promote understanding of light intensity specifications for flashing signal lights.

The term "Effective Intensity" or "Candela Effective" is used by signal engineers to describe a flashing signal light which has the same signaling effectiveness as an equivalent steady burning light.

The method of calculating the Effective Intensity of flashing signal lights discussed herein has been taken from the IES Guide for "Calculating The Effective Intensity of Flashing Signal Lights, Section 4.3 Condenser–Discharge Lights" and is used by agencies of the Federal Government to specify strobe beacon Light requirements.

XENON STROBE FORMULAS

Electrical Relationships

P = Power in watts
J = Joules (Also known as wattseconds)
F = Flashes per second
  (flash frequency)
C = Capacitance in microfarads
V = Voltage in kilovolts

Basic Electrical Formulas

$$J = \frac{CV^2}{2}$$

$$P = J \times F$$

PHOTOMETRIC RELATIONSHIPS

^{I}eff   = Effective intensity (Also known as candela effective)

HCPS   = Horizontal Candlepower seconds

BCPS   = Beam Candlepower seconds

M   = Lens or reflector amplification factor

φ = Efficiency of flashtube in lumen seconds/watt seconds

Q   = Light output of flashtube in lumen seconds (empirically derived for helix flashtubes)

Lb   = Foot–Lamberts background illuminance

d   = Distance in feet that a light intensity can be seen

BASIC PHOTOMETRIC FORMULAS

Q = $J \times \varphi$ Lumen Seconds

$HCPS$ = $\dfrac{Q}{10}$

$BCPS$ = M x HCPS(candela)

^{I}eff   = 5 x BCPS (candela)

^{I}eff   = $(6.37Lb + 18.60)d^2 \times 10^{-7}$ (candela)

$$d = \sqrt{\frac{Ieff}{\sqrt{(6.37Lb + 18.60)\,10^{-7}}}}$$

PEAK CANDLEPOWER, CANDELA SECONDS AND CANDELA EFFECTIVE

When comparing two different warning lights, the first question usually asked is how bright are these lights and how do they compare to one another? This can be a complicated question when one is comparing very different light sources such as rotating incandescent lights and xenon strobe lights. Let's briefly discuss three different commonly specified "intensity" ratings:

1)   PEAK CANDELA or PEAK CANDLEPOWER –This quantity is the maximum light intensity generated by a flashing light during its light pulse. It indicates NOTHING ABOUT HOW BRIGHT THE LIGHT APPEARS TO THE HUMAN EYE. Peak candela alone **cannot** be used to directly compare two warning lights. In addition there is **no** set multiplication factor for converting peak candela, a unit of luminous intensity, to either candela seconds or effective candela, both units of luminous energy. Tomar Electronics Inc. strongly discourages the use of peak candela ratings when comparing warning lights.

2   CANDELA SECONDS or CANDLEPOWER SECONDS – This quantity is the actual light energy contained in a pulse of light. Candela seconds is used by the Society of Automotive Engineers and the California Highway Patrol to specify the minimum requirements for light output from a flashing light because flash energy has been shown to be a relatively accurate and fair way of comparing radically different types of lights such as incandescent rotators and xenon strobe lights. Candela seconds is merely a relative measure of how bright a flash of light will appear to a human eye. A light with a higher candela second rating will appear brighter than a light with a lower candela second rating even if the lower rated light has a much higher peak candela rating.

3)   CANDELA EFFECTIVE or EFFECTIVE CANDLEPOWER – Candela effective is based on candela seconds and attempts to equate the brightness of a flashing light source to the brightness of a steady burning source. If a flashing light has a candela effective rating of 100 then it will be visible at the same distance as a 100 candela steady burning source. The National Bureau of Standards, the FAA, and the Illuminating Engineering Society use candela effective in specifying intensities of flashing light source because this rating is the most meaningful when it becomes necessary to predict the visible range of flashing warning lights versus steady burning light sources.

Tomar Electronics uses only candela effective as measured using the technique outlined in the **IES GUIDE FOR CALCULATING THE EFFECTIVE INTENSITY OF FLASHING SIGNAL LIGHTS** using visible light only. We recommend only the use of candela effective or candela seconds when comparing any two flashing warning lights.

LENS PLASTIC TYPE AND COLOR

TOMAR uses only the finest optical grade plastics available. All lenses are molded from GE LEXAN® which is listed in the AAMVA publication entitled "Listing of Acceptable Plastics for Optical Lenses and Reflectors Used on Motor Vehicles" and meet SAE Color Specification J578d.

(LEXAN is a trademark of The General Electric Co.)

SAMPLE CALCULATION

OF STROBE LIGHT INTENSITY

Calculate the Effective Intensity of a typical Strobe Warning light as follows:

Suppose we consider a TOMAR Model 804 Single Flash Strobe Light which operates at a lamp voltage of 400 Volts with a 150 MFD capacitor. Let's also assume a flash rate of 85 flashes per minute.

The input energy of the flashlamp is…

$$J = \frac{CV^2}{2} = \frac{150 \times .4^2}{2} = 12 \text{ Joules per flash}$$

and the average power is…

P = J x F = 12 x 1.4 = 16.8 Watts input to lamp

Next, the total spherical light output "Q" of the flash tube can be estimated (by assuming a conversion efficiency of 35 Lumen seconds/watt seconds) to be…

Q = J x φ
Q = 12 x 35 lumen seconds/watt second
Q = 420 lumen seconds

Next, convert total spherical light output to "HCPS" Horizontal Candle Power Seconds to depict the intensity seen by a distant observer

$$HCPS = \frac{Q}{10} = \frac{420}{10} = 42 \text{ HCPS}$$

This is the intensity of the lamp without the outer lens. Next add the effect of the lens by computing the Beam Candlepower Seconds

BCPS = m x HCPS = 2.0 X 42
BCPS = 84

Last compute the Effective Intensity…

Ieff = 5 x BCPS = 5 x 84 = 420 Candela Effective

Please note that the actual light output of a typical commercial strobe warning light depends on a number of factors which can vary the light output by a factor of 10 or more for a given amount of Joules per flash, some of these factors are:
- •Color of lens
- •Size and efficiency of lens
- •Physical shape of strobe lamp and arrangement within lens (optical coupling)
- •Efficiency of strobelamp itself

Therefore, Tomar Electronics recommends that only certified light output in candelas effective, or candela seconds including visible radiation only, be used when comparing the intensity of various lights, and Joules per flash times flash frequency be used to determine the capability of the power supply only.

SIGNAL LIGHT
LUMINOUS RANGE CALCULATION

The fundamental quantative specifications needed for warning lights is intensity. This is not a simple matter. The brightness required for "adequate" warning depends upon the individual's physical and emotional characteristics, the ambient light level, and the entire visual context. This problem has been studied by others, and the results of studies by Cole and Brown for traffic signals in general are shown here to provide a useful guide to determine the viewing distance of a light with known intensity.

Their basic finding is that the source intensity I eff (candela) appropriate to a viewing distance d (ft), with ambient illuminance Lb (ft–Lamberts), is given by the expression

$$Ieff = (6.37 \text{ Lb} + 18.60)d^2 \times 10^{-7} \text{ (Candela)}$$

As an example, "Normal daytime conditions"

(Lb = 2919 ft – L) imply I eff ⊡ 200 candela to be necessary for a viewing distance of 330 feet . Background illuminance can, at times, reach three to four times this value. Further, the intensity required if one seeks to alert as well as inform can increase this value. However, this equation provides a useful starting point, and is readily modified if necessary.
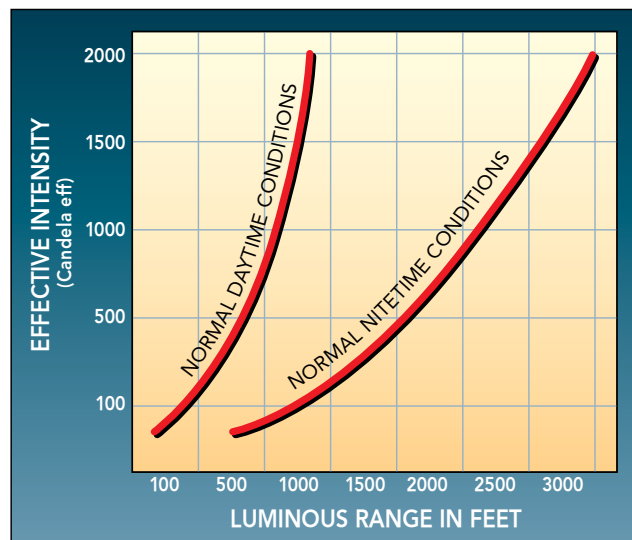
NOTE: *THESE CURVES ARE BASED ON NORMAL VISIBILITY*

Choosing the Right Signal

Most industrial plants today utilize a number of signaling alarm devices, both audible and visual. These alarms are used to alert employees to emergency conditions, such as a fire, noxious gas release, or chemical spills. They are also used to warn workers of moving objects, such as overhead cranes or forklift trucks, or to alert of automated machine or industrial robot start-up. Signaling devices are also used to notify of non-emergency conditions, such as sounding an alarm when goods get caught on a conveyor, or an automated process malfunctions. In all cases, and in order to ensure a quick response, the alarm signal should be simple and clearly understood.

When choosing an audible signal, there are three main points to consider:

1) What is its function? For example, will the alarm be used to provide a general emergency warning sound, or will it be used for non-emergency notification?

2) How large is the area which needs to be covered?

3) Ambient noise level: The alarm signal should be 6 db higher than the ambient noise level.

As a rule of thumb, consider that sound output drops by 6 decibels each time the distance between the human ear and the sound source is doubled. For example:

Source in dB	Feet from Source
114 dB	10
108 dB	20
102 dB	40
96 dB	80
90 dB	160

Assuming that the ambient noise level is 90 dB, then the alarm device in the above example will cover a distance of approximately 80'. Consider also that a 3 dB increase in sound output doubles the loudness. For example, if a signal is rated at 100 dB at 10', than a signal twice as loud would be rated at 113 dB at 10'.

Applicable UL Listings and Certifications

UL1638 Visual Signaling Appliance - Private-mode emergency and general utility signaling.

UL38 - Manual signaling boxes for fire alarm systems

UL464 - Audible signaling appliances

UL1604 - Electrical equipment for use in Class II Division 2, and ClassIII, hazardous locations

UL1203 - Explosion-proof and dust ignition proof for use in Class I locations

NEMA Ratings

National Electrical Manufacturers Association

A brief description of the more common types of enclosures used by the electrical industry relating to their environmental capabilities follows. Please refer to the appropriate sections of the latest revision of NEMA Standards Publication No. 250 for complete information regarding applications, features and design tests.

Type 1 Enclosures: Intended for use primarily to provide a degree of protection against limited amounts of falling dirt.

Type 3 Enclosures: Intended for outdoor use primarily to provide a degree of protection against rain, sleet, windblown dust, and damage from external ice formation.

Type 3R Enclosures: Intended for outdoor use primarily to provide a degree of protection against rain, sleet, and damage from external ice formation.

Type 3S Enclosures: Intended for outdoor use primarily to provide a degree of protection against rain, sleet, windblown dust, and to provide for operation of external mechanisms when ice laden.

Type 4 Enclosures: Intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust and rain, splashing water, hose-directed water, and damage from external ice formation.

Type 4X Enclosures: Intended for indoor or outdoor use primarily to provide a degree of protection against corrosion, windblown dust and rain, splashing water, hose-directed water, and damage from ice formation.

Type 6 Enclosures: Intended for indoor or outdoor use primarily to provide a degree of protection against hose-directed water, the entry of water during occasional temporary submersion at a limited depth, and damage from external ice formation.

Type 6P Enclosures: Intended for indoor or outdoor use primarily to provide a degree of protection against hose-directed water, the entry of water during prolonged submersion at a limited depth, and damage from external ice formation.

Type 12 Enclosures: Intended for indoor use primarily to provide a degree of protection against circulating dust, falling dirt, and dripping non-corrosive liquids.

Type 12K Enclosures: Type 12 with knockouts. Definitions Pertaining to Hazardous (Classified) Locations

Type 7 Enclosures: Intended for indoor use in locations classified as Class I, Groups A, B, C, or D, as defined in the National Electrical Code.

Type 8 Enclosures: Intended for indoor or outdoor use in locations classified as Class I, Groups A, B, C, or D, as defined in the National Electrical Code.

Type 9 Enclosures: Intended for indoor use in locations classified as Class II, Groups E, F, or G, as defined in the National Electrical Code.

Type 10 Enclosures: Constructed to meet the applicable requirements of the Mine Safety and Health Administration.

NEC Classifications

National Electric Code

Hazardous (Classified) Location Types

Class I Locations

According to the NEC, there are three types of hazardous locations. The first type of hazard is one which is created by the presence of flammable gases or vapors in the air, such as natural gas or gasoline vapor. When these materials are found in the atmosphere, a potential for explosion exists, which could be ignited if an electrical or other source of ignition is present. The Code writers have referred to this first type of hazard as Class I. So, a Class I Hazardous Location is one in which flammable gases or vapors may be present in the air in sufficient quantities to be explosive or ignitable. Some typical Class I locations are:

- Petroleum refineries, and gasoline storage and dispensing areas;

- Dry cleaning plants where vapors from cleaning fluids can be present;

- Spray finishing areas;

- Aircraft hangars and fuel servicing areas; and

- Utility gas plants and operations involving storage and handling of liquefied petroleum gas or natural gas.

- All of these are Class I . . . gas or vapor . . . hazardous locations. All require special Class I hazardous location equipment.

Class II Locations

The second type of hazard listed by the National Electrical Code are those areas made hazardous by the presence of combustible dust. These are referred to in the Code as "Class II Locations." Finely pulverized material, suspended in the atmosphere, can cause as powerful an explosion as one occurring at a petroleum refinery. Some typical Class II locations are:

- Grain elevators;

- Flour and feed mills;

- Plants that manufacture, use or store magnesium or aluminum powders;

- Producers of plastics, medicines and fireworks;

- Producers of starch or candies;

- Spice-grinding plants, sugar plants and cocoa plants; and

- Coal preparation plants and other carbon handling or processing areas.

Class III Locations

Class III hazardous locations, according to the NEC, are areas where there are easily-ignitable fibers or flyings present, due to the types of materials being handled, stored, or processed. The fibers and flyings are not likely to be suspended in the air, but can collect around machinery or on lighting fixtures and where heat, a spark or hot metal can ignite them. Some typical Class III locations are:

- Textile mills, cotton gins;

- Cotton seed mills, flax processing plants; and

- Plants that shape, pulverize or cut wood and create sawdust or flyings.

Hazardous Location Conditions

In addition to the types of hazardous locations, the National Electrical Code also concerns itself with the kinds of conditions under which these hazards are present. The Code specifies that hazardous material may exist in several different kinds of conditions which, for simplicity, can be described as, first, normal conditions, and, second, abnormal conditions.

In the normal condition, the hazard would be expected to be present in everyday production operations or during frequent repair and maintenance activity.

When the hazardous material is expected to be confined within closed containers or closed systems and will be present only through accidental rupture, breakage or unusual faulty operation, the situation could be called "abnormal."

The Code writers have designated these two kinds of conditions very simply, as Division 1 - normal and Division 2 - abnormal. Class I, Class II and Class III hazardous locations can be either Division 1 or Division 2.

Good examples of Class I, Division 1 locations would be the areas near open dome loading facilities or adjacent to relief valves in a petroleum refinery, because the hazardous material would be present during normal plant operations.

Closed storage drums containing flammable liquids in an inside storage room would not normally allow the hazardous vapors to escape into the atmosphere. But, what happens if one of the containers is leaking? You've got a Division 2 -abnormal - condition . . . a Class I, Division 2 hazardous location.

TOMAR WARRANTY

Except for Xenon strobe lamps and incandescent lamps, TOMAR Electronics, Inc. warranties most products described herein for a period of 2 years under normal use and service from the date of purchase as marked on the product, that the product will be free of defects in material and workmanship. This warranty does not cover ordinary wear and tear, abuse, misuse, overloading, altered products, or damage caused by the purchaser connecting the unit to wrong voltage or polarity. Xenon strobe lamps are warranted for 1 full year from date of purchase.

THERE IS NO WARRANTY OF MERCHANTABILITY. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION HEREIN. THERE ARE NO WARRANTIES EXPRESSED OR IMPLIED OR ANY AFFIRMATION OF FACT OR REPRESENTATION EXCEPT AS SET FORTH HEREIN.

REMEDY

TOMAR Electronics, Inc.'s sole responsibility and liability, and purchaser's exclusive remedy shall be limited to the repair or replacement at TOMAR Electronics, Inc.'s option, of a part or parts not conforming to the warranty. All products requiring warranty service shall be returned to TOMAR Electronics, Inc. within the warranted period, shipping prepaid. TOMAR Electronics, Inc. will return repaired or replaced products to the purchaser via prepaid ground transportation. In no event shall TOMAR Electronics, Inc. be liable for damages of any nature, including incidental or consequential damages, including but not limited to any damages resulting from non-conformity, defect in material or workmanship

All material being returned for service must have an RMA number shown on the shipping label. Please write or call 1 (800) 338-3133 to obtain the RMA number prior to sending the material for service.