

Emergi-Lite® Emergency Lighting

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Emergi-Lite® Emergency Lighting

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Overview

Emergi-Lite® Emergency Lighting

Vertically-integrated manufacturing and production capabilities in North America give the Thomas & Betts Emergi-Lite® brand complete control over lead time, service and quality down to the smallest detail. We produce exactly what we need when we need it, without waiting for large production runs or overseas shipping. With everything under one roof, we can ensure that our stringent quality standards are met at every step in the process, from design to production to order fulfillment.



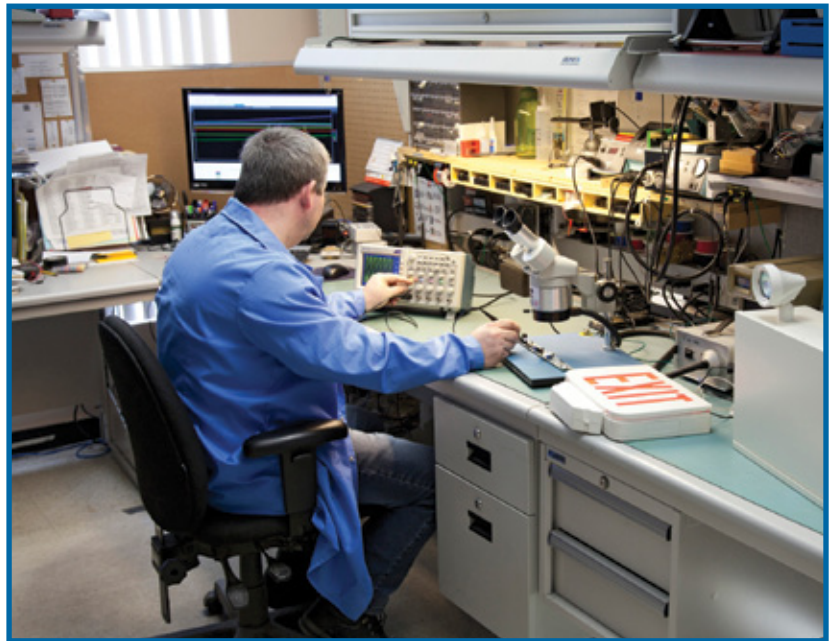
Fuelled by the creativity, innovation and commitment of every employee, the Thomas & Betts Emergi-Lite® facility is a center of excellence in emergency lighting.

Innovative

The in-house research and development team of highly skilled professional electrical and mechanical engineers, designers and technicians at Thomas & Betts includes specialists with over 25 years of experience in the emergency lighting industry. This multi-disciplinary group uses advanced technology in all specialties from mechanical design to operating system software, RF and power electronic design, lighting design and LED drivers to continuously create innovative emergency lighting solutions.

Comprehensive engineering services are provided to meet special requests from customers for unique applications.

Quality and safety are designed into each product at conception, and customized testing equipment is created to ensure that each unit meets code and conforms to internal quality control standards, including ease of installation and reliability over time.



Overview

Frequent investments in new equipment improve lead time and enforce the high quality and reliability standards of Thomas & Betts. The new AOI (automated optical inspection) machine added to the printed circuit board operation in 2012 is one of the first of its kind in use in North America.



Lighting — Emergi-Lite® Emergency Lighting

Reliable

Technologically advanced printed circuit board production lines at the Thomas & Betts Emergi-Lite® manufacturing facility produce thousands of circuit boards daily. Skilled production personnel are trained according to IPC standards and use board traceability and tracking software to ensure quality. Universal SMT (surface mount technology) boards and TH (through-hole) insertion boards are produced in house on multiple lines. Every station is ESD (electro-static discharge) protected to eliminate static hazards, and our RoHS-compliant wave soldering machine meets lead-free criteria. Automatic insertion equipment and automatic silicone coating application ensure high productivity and quality.

Highly efficient electro-mechanical assembly lines are optimized for low-volume, high-mix production runs with thousands of final assemblies produced each day. Customizations such as specific punching, exact wording and color matching can be completed quickly using our in-house machine shop and painting capabilities.

All orders undergo functional testing and quality inspection, with high-voltage, high-amperage power outage simulations available to test all central power systems for each customer's specific requirements. Specialized facilities include a dark room for color-contrast measurement; temperature- and humidity-controlled environments; wall, ceiling and suspended ceiling installation simulations; and cycle-testing automation.



The Thomas & Betts Emergi-Lite® manufacturing facility has been ISO 9001 compliant since 2001.

Efficient

Large inventories are ready to ship from warehouses across the United States for fast delivery.

To reduce the carbon footprint and minimize the environmental impact of operations, a Sustainable Development policy is in effect at the Thomas & Betts Emergi-Lite® manufacturing facility. Through a series of initiatives, reductions in usage of water, water bottles, electricity and natural gas, packaging and pallets have already been realized. Forward-looking initiatives include reductions in paper, further recycling of pallets and implementation of an eco-delivery schedule.



Overview

Technological Development

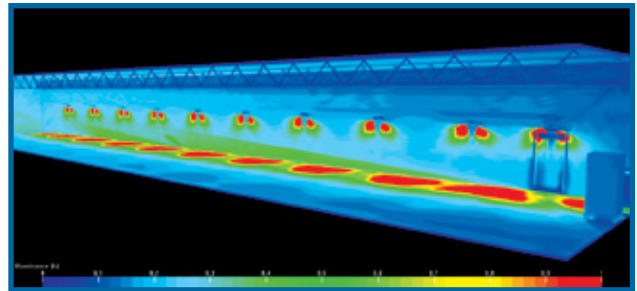
Thomas & Betts MR-16 LED now available for use in emergency lighting

Features

- UL® listed to UL1993 and UL8750 standards
- Ideal for indoor and outdoor use
- Energy-efficient 4-watt LED lamp provides equivalent lighting performance to a 16-watt halogen MR-16 lamp
- Reduces required battery capacity by 75%, providing necessary illumination with fewer remote heads and battery units for project cost savings
- Compact, small-profile, white lighting is ideal for architectural applications
- Vibration-resistant LED stands up to industrial environments

Compare

On a 150' x 9' x 9' corridor with an egress door at one end, a 7.5' unit mounting height and a 150' x 6' path of egress where the building code requires a minimum average of 1 foot-candle and a minimum of .1 foot-candle at floor level along the path of egress.

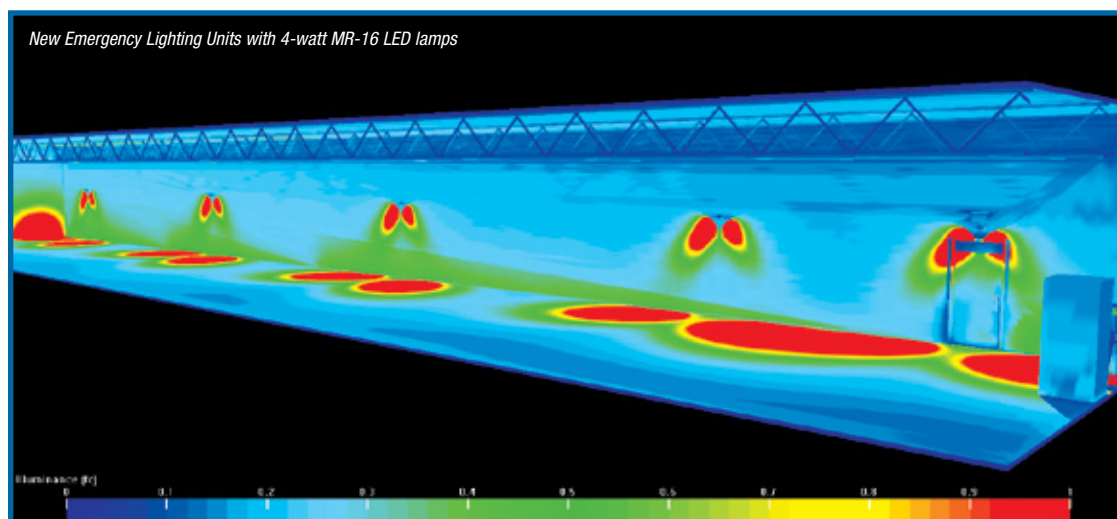


Standard Emergency Lighting Units with 9-watt wedge-base T5 incandescent lamps

Savings add up

Emergency lighting units with MR-16 LED lamps provide the same lighting at floor level using five fewer double-lamp units.

- Reduces the carbon footprint of the installation by eliminating the 24-hour power consumption of the battery charger unit
- Saves approximately 34 lbs. of material, reducing the environmental impact throughout the entire product life cycle, from raw material extraction to processing, transportation, manufacturing, assembly and use



A twin emergency light head with MR-16 LED lamps illuminates up to a 40' long path of egress, in accordance with Life Safety Code® NFPA101.

Overview

nexus®

Emergency Lighting Management System



Are you prepared for an emergency?

In the Interest of public safety, Building & Life Safety Codes outline the obligations of building owners/managers in relation to exit signs and emergency lighting to ensure the safe evacuation of a building to:

- Conduct a discharge test every month
- Conduct functional tests annually
- Keep a log book of maintenance information

Complying with these requirements can be very expensive and labor intensive, especially in larger buildings where testing requires many labor hours spent manually inspecting every emergency light. In addition, the disruption of the power supply during inspection can put public safety at risk.

What Nexus® can do for you

Nexus® has been designed to enable maintenance personnel to easily maintain and monitor the emergency lighting system without having to manually check each unit, which saves countless hours of labor and disruption of power supply. Nexus® performs monthly tests and reports on the status of all emergency lights and exit signs either individually, grouped or all together.

There are many advantages to the Nexus® system. These include labor savings; maximizing system availability by testing units in groups and stages rather than setting all units in recovery mode, and the convenience of self monitoring, which indicates the location of a faulty unit and reports instantly without initiating a manual search.

How does Nexus® work?

Nexus® communicates between the emergency lights and a centrally located server, usually a computer or Area Controller, passing messages both to and from the emergency units to instruct the units to perform all mandatory testing.

Supported by a five-year warranty, Nexus® is a proven system that can contribute to LEED certification and support green building initiatives.

What is Nexus®?

Nexus® is a real-time monitoring system that manages the status of your entire emergency lighting and exit sign system, runs diagnostics, performs required monthly and annual functional tests, generates maintenance logs and runs compliance reports.

All of this is carried out from a central control unit with the ability to monitor systems in one or a group of properties under the same management. Available in wired or wireless (RF) versions, most Nexus® installations will pay for themselves in less than two years in operational savings, while helping to increase system reliability and performance and eliminate the risk of failed inspections.



Spec-Grade Architectural

Now available with white LED normally on and photo-cell activated.

Lux-Ray™ Series

Designed to meet the needs of architects and designers without sacrificing safety and performance, the Lux-Ray™ Series has a low-profile, slim look and is offered in a range of colors to blend in with the most sophisticated interior design. With sealed die-cast aluminum housing, the unit is also designed for extreme outdoor environments.

An optional dual-mode illumination feature enables the Lux-Ray™ Series to provide lighting not only during power outages, but also in normal conditions with a dedicated 5-watt LED lamp. The normal lighting can be turned on and off from a remote switch or from an optional photo-cell included in the equipment.



NEW!



Standard Features

- Die-cast aluminum housing available in four finishes: off-white, black, platinum gray and dark bronze
- Clear polycarbonate lens, shock-absorbent and UV-resistant
- Two high-output Xenon lamps installed in a vacuum-plated die-cast reflector
- Indoor/outdoor applications, suitable for wet locations
- Wall-mount installation on various junction boxes or via rigid conduit
- Integrated test button and LED pilot light with optical pipe
- Lead-calcium battery monitored by a PulsePlus charger circuitry
- Nickel-metal hydride battery with Advanced Diagnostics charger and bi-color diagnostic LED display
- Three-year full warranty (not applicable to high-output Xenon lamps)
- Five-year warranty for nickel-metal hydride models
- UL® Listed to the UL® 924 standard

Main Models

- **LUXL** — Regular interior package; cost-efficient lead-calcium battery; 68° F to 86° F (20° C to 30° C)
- **LUXN** — Exterior package; UL Listed for wet and cold location; -4° F to 104° F (-20° C to 40° C)
- **LUXN2** — High-output package; for interior applications requiring premium lighting with 10W Xenon lamps; equipped with NiMH battery, 68° F to 86° F (20° C to 30° C)

The Lux-Ray™ Series is also available as a DC-remote fixture, rated 6 or 12VDC, with two Xenon lamps of 6W or 10W each.

Controls or Electrical

- Lead-calcium models: Red LED indicates AC power is on
- Nickel-metal hydride models: Bi-color LED indicates battery state of charge, test activation and four-state diagnostic status
- Test switch allows for quick operational check of the entire system

Options

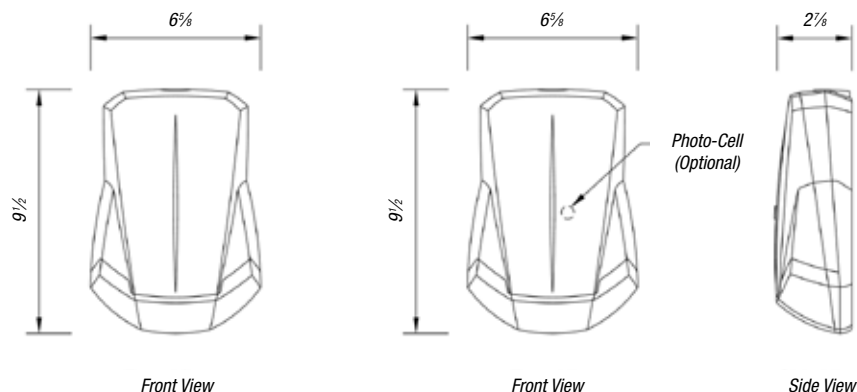
The Lux-Ray™ Series is offered in three configurations. Also available as remote. It can be used in a wide range of applications and environments with the following options:

- Time delay: 5, 10 or 15 minutes (factory set)
- Dual-mode lighting: Separate AC-input for LED-based normally on illumination; 120/277VAC, .040A, 5W
- Photo-cell (for normal lighting): Automatically activates the LED lamp only from dusk until dawn for additional energy savings; typical ambient illumination for switch: one foot-candle (turn-on) and three foot-candles (turn-off)

Spec-Grade Architectural

Dimensions

Dimensions are approximate and subject to change.



Power Consumption

MODEL NO.	AC SPECS			DC SPECS	
LUXL, LUXN	120/277VAC	.11/.05A	Less than 10.5W	6V 12W	Min. 90 Minutes
LUXN2	120/277VAC	.11/.05A	Less than 10.5W	6V 12W	Min. 90 Minutes
LUX-2, LUX-P	120/277VAC	.04A	5W	LED Normal Lighting	

Replacement Batteries

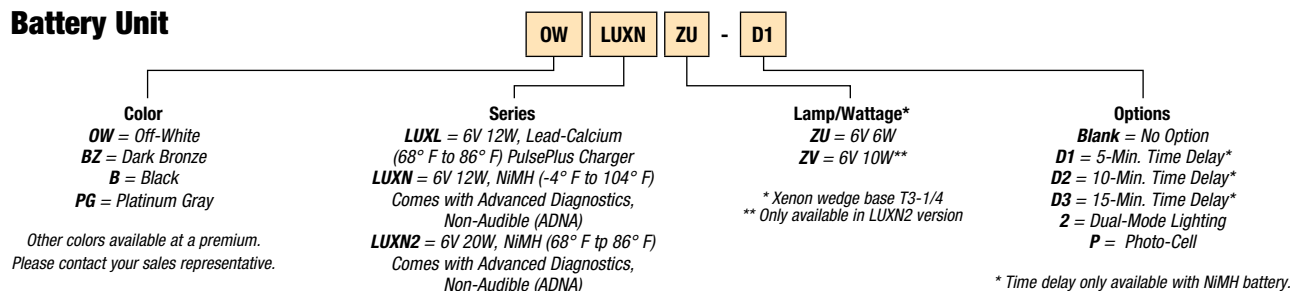
MODEL NO.	SPECIFICATIONS
840.0004-E	6V 12W Lead Calcium
850.0086-E	6V 12W, 20W NiMH

Replacement Lamps

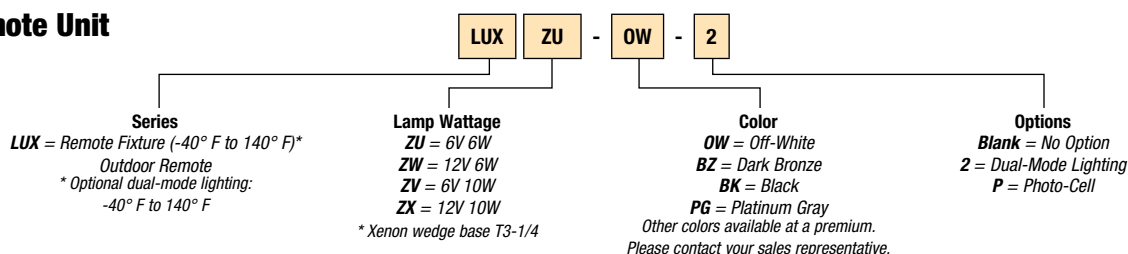
MODEL NO.	SPECIFICATIONS
570.0213-E	ZU = 6V 6W Xenon
570.0214-E	ZV = 6V 10W Xenon
570.0215-E	ZW = 12V 6W Xenon
570.0216-E	ZX = 12V 10W Xenon

Catalog Numbering System

Battery Unit



Remote Unit



Spec-Grade Architectural

6- and 12-volt square shooter.

PS Series

Surface-mount, semi-recessed mount and fully recessed mount units are available in the PS Series to harmonize with a variety of interiors for architectural unity. The square shooter has a 172 x 172 beam distribution pattern.

Standard Features

- Each unit comes standard with one halogen lamp (6V 6W or 12V 8W)
- Surface-mount, semi-recessed units and fully recessed kits are constructed of an off-white, impact-resistant, flame-retardant, polymeric material; fully recessed "FRM" option units have an all-metal back box
- Available with sealed, maintenance-free nickel-cadmium, long-life lead or lead-calcium batteries
- PulsePlus Charger circuitry offers 120/277VAC, 60 Hz, .3/.15 amp (other inputs available), fused output circuit(s), temperature-compensated charger, sealed relay, low-voltage battery disconnect, brownout protection and lockout (automatic battery connect)
- All models are supplied with a specular reflector and are designed to mount directly to a standard octagonal electric box
- UL® Listed; complies with NEC®, Life Safety Code® and OSHA and is approved for use in the Commonwealth of Pennsylvania
- Three-year full warranty, excluding lamps, pilot lights and fuses



Accessories (Order as a separate item)

- Semi-Recessed Kit (converts a surface-mount unit to semi-recessed) **PS-SRKIT***
- Fully Recessed Kit (converts a surface-mount unit to fully recessed) **PS-FRKIT***
- Wire Guard (surface or semi-recessed) **WG1-E**
- Wire Guard (fully recessed)..... **WG11-E**

* Bar hangers included.

Unit Ratings

6-volt unit furnished with 6-watt halogen lamp(s).
12-volt unit furnished with 8-watt halogen lamp(s).

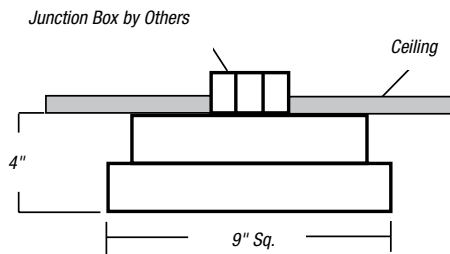
SEALED MAINTENANCE-FREE BATTERY TYPES			DC VOLTAGE	MODEL NO.	WATTS TO 87.5% OF RATED BATTERY VOLTAGE*			
					1½ HRS.	2 HRS.	3 HRS.	4 HRS.
Unit Equipment — NO REMOTE Capability								
Long-Life Lead	6	PSE9	9	7	—	—		
Lead-Calcium	6	PSM9	9	6	—	—		
Unit Equipment — WITH REMOTE Capability								
Nickel-Cadmium	6	PSC18	18	12	9	6		
	6	PSC18-2**	18	12	9	6		
	6	PSC25	25	18	12	9		
	6	PSC25-2**	25	18	12	9		
	12	12PSC36	36	21	15	12		
	12	12PSC36-2**	36	21	15	12		
Long-Life Lead	6	PSE18	18	11	8	6		
	6	PSE18-2**	18	11	8	6		

* National Electrical Code® specification. ** -2 indicates two-lamp version.

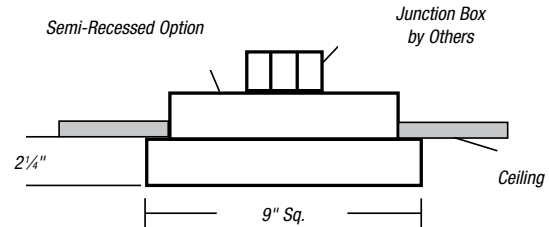
Spec-Grade Architectural

Dimensions

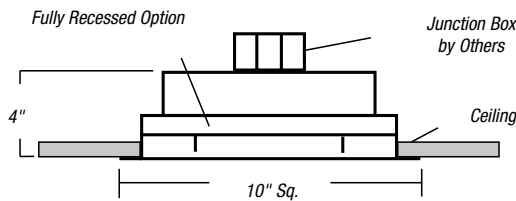
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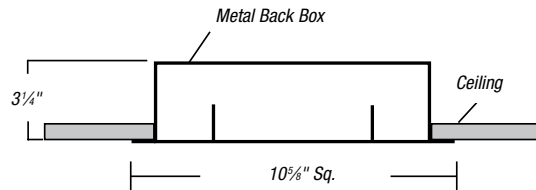
Surface-Mount Plastic Square



Semi-Recessed Plastic Square
(Requires Optional Mounting Kit)



Fully Recessed Plastic Square
(Requires Optional Mounting Kit)

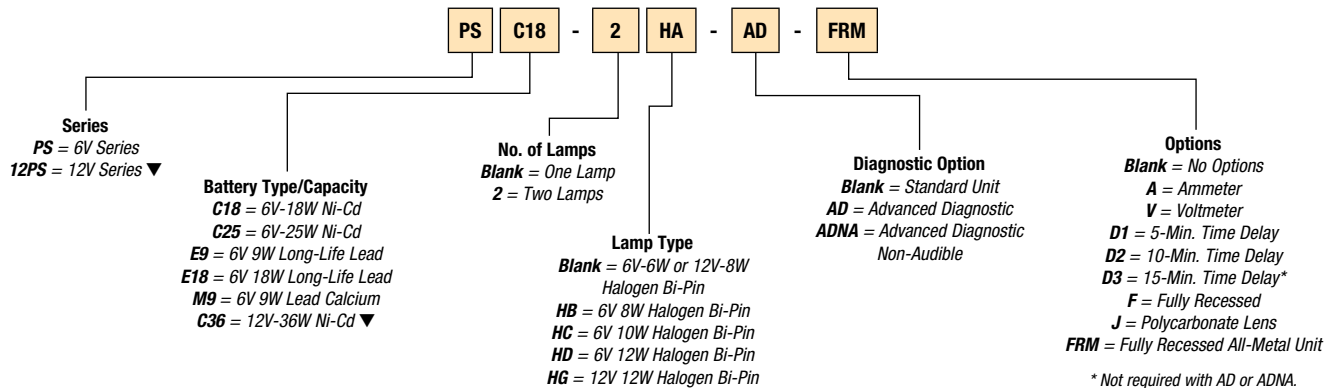


Fully Recessed Metal Square
(Optional)

Catalog Numbering System

For standard units without options, order only Model Number.

Options are added to units by listing suffix at end of Model Number.



Note: See lamp data on
pages I-311-I-312.

* Not required with AD or ADNA.
Time delay standard at 15 minutes.

▼ 12PS Series must be ordered with C36 battery option. C36 battery option is only available with 12PS Series.

Spec-Grade Architectural

6- and 12-volt decorator recessed.

RS Series

For low-profile, unobtrusive use in finished ceilings or walls, the RS Series is designed for architectural unity. Decorative EF-9 lamp heads are standard, and a variety of cylinder and decorative lamp heads are available as options to accommodate any decor.

Standard Features

- Each unit comes with two 6- or 12-volt 9-watt high-intensity incandescent EF-9 lamp heads (standard); EF-10, EF-18, EF-32 and EF-150 lamp heads are optional
- Constructed of 20-gauge steel with an off-white baked enamel finish
- Available with sealed, maintenance-free nickel-cadmium, long-life lead or lead-calcium batteries
- PulsePlus Charger circuitry offers 120/277-volt input, 60 Hz, .3/.15 amp (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature-compensated charger, sealed relay, low-voltage battery disconnect, brownout protection and lockout (automatic battery connect)
- Fully recessed assembly for ceiling or wall mount, includes adjustable bar hangers for grid ceilings; can be framed into studs/joists
- UL® 924 Listed, complies with NEC®, Life Safety Code® and OSHA and is approved for use in the Commonwealth of Pennsylvania and New York City
- Three-year full warranty, excluding lamps and fuses

Options

Description	Suffix
New York City (EF-18 12-watt lamps)	-NYC

Accessories (Order as a separate item)

Wire Guard (units with EF-9, EF-10, EF-18 or EF-150 heads)	WG6
Remote Test Switch (metal face plate)	RTS
Remote Test Switch (plastic face plate)	RTS-1



Ceiling mounted with
EF-150 decorative heads

Unit Ratings

Each unit is furnished standard with two 9-watt high-intensity incandescent lamps.
EF-9 lamp heads: 6- or 12-volt 9-watt high-intensity incandescent lamps.

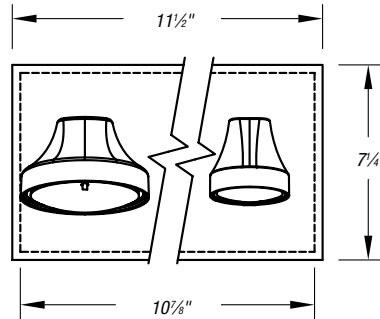
SEALED MAINTENANCE- FREE BATTERY TYPES	MODEL NO.			WATTS TO 87.5% OF RATED BATTERY VOLTAGE*			
	DC	EF-150	EF-9	1½	2	3	4
	VOLTAGE	DECO	LAMP HEADS	HRS.	HRS.	HRS.	HRS.
Unit Equipment — NO REMOTE Capability							
Nickel-Cadmium	6	RSC18-2150	RSC18-2	18	12	10	—
Long-Life Lead	6	RSE18-2150	RSE18-2	18	11	8	—
Lead-Calcium	6	RSM18-2150	RSM18-2	18	12	9	—
Unit Equipment — WITH REMOTE Capability							
Nickel- Cadmium	6	RSC25-2150	RSC25-2	25	18	12	9
	12	12RSC36-2150	12RSC36-2	36	21	15	12
	12	12RSC50-2150	12RSC50-2	50	36	25	18
Long-Life Lead	6	RSE27-2150	RSE27-2	27	19	14	10
	6	RSE36-2150	RSE36-2	36	24	17	13
	12	12RSE36-2150	12RSE36-2	36	24	17	13
Lead-Calcium	6	RSM27-2150	RSM27-2	27	18	14	10
	6	RSM36-2150	RSM36-2	36	25	20	14
	12	12RSM36-2150	12RSM36-2	36	25	20	14

* National Electrical Code® specification. = New York City Approved.

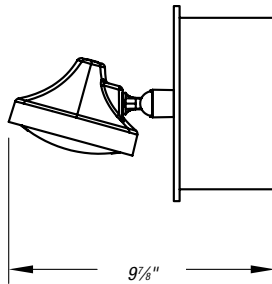
Spec-Grade Architectural

Dimensions

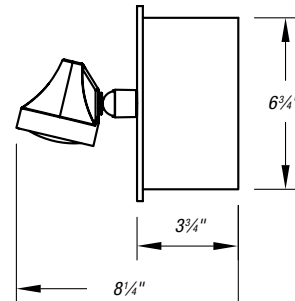
Dimensions are approximate and subject to change.



Back Box



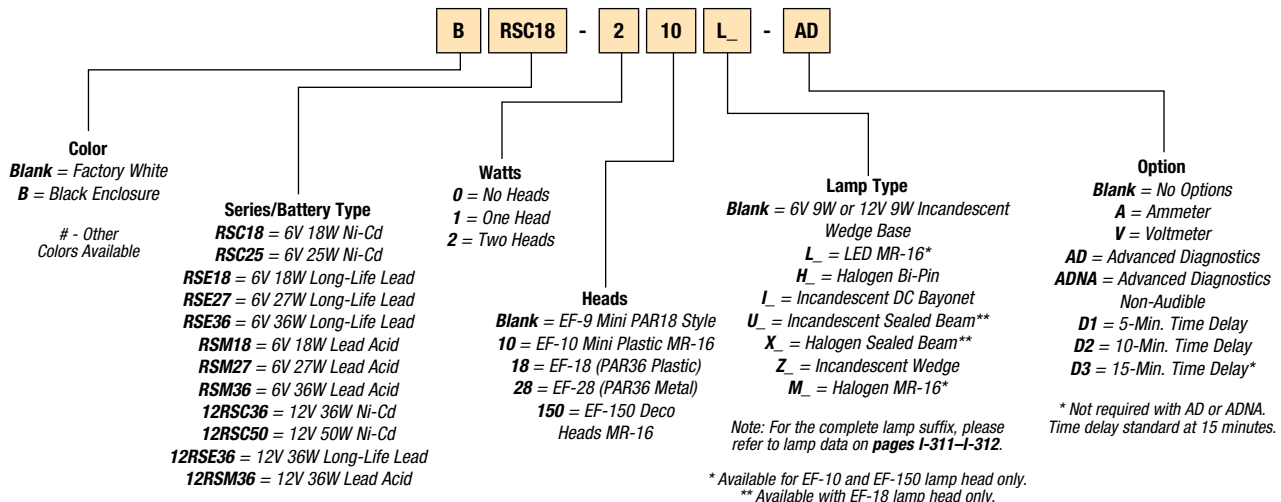
EF-18



EF-9

Catalog Numbering System

For standard units without options, order only Series, Battery, Watts and Heads.
Options are added to units by listing suffix at end of Model Number.



Spec-Grade Architectural

6-, 12- and 24-volt T-bar units.

TS Series

For unobtrusive use in T-bar ceilings, the TS Series is designed for architectural unity. The off-white, fully recessed housing harmonizes with ceiling designs.

Standard Features

- Each unit comes with two off-white EF-18 lamp heads (standard) with one 9-watt wedge-based lamp per head and provision for mounting three heads
- Constructed of 20-gauge steel with an off-white baked enamel finish
- Available with sealed, maintenance-free nickel-cadmium, long-life lead or lead-calcium batteries
- PulsePlus Charger circuitry offers 120/277-volt input, 60 Hz, .3/.15 amps (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature-compensated charger, sealed relay, low-voltage battery disconnect, brownout protection and lockout (automatic battery connect)
- Fully recessed housing for unobtrusive use in T-bar ceilings; a removable cover on the back box allows for ease of installation and full access to the battery and charger
- UL® Listed; complies with NEC®, Life Safety Code® and OSHA and approved for use in the Commonwealth of Pennsylvania and New York City
- Three-year full warranty, excluding lamps, pilot lights and fuses



nexus®



Unit Ratings

Furnished standard with two 9-watt high-intensity incandescent lamps.

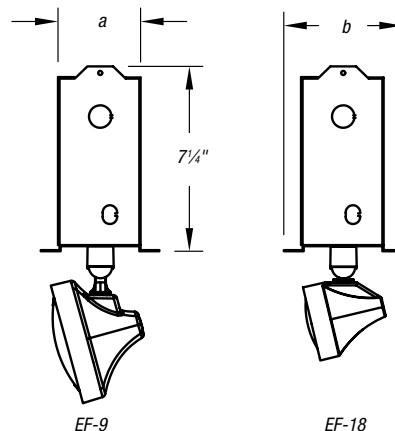
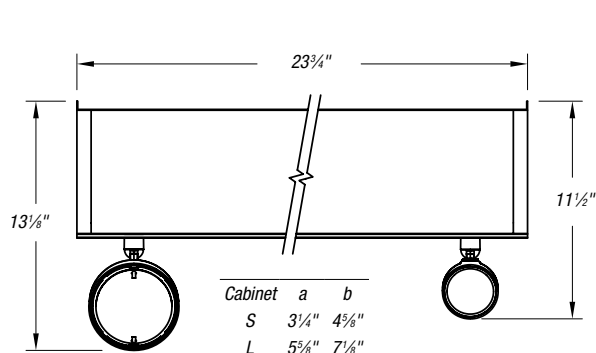
SEALED MAINTENANCE- FREE BATTERY TYPES	DC VOLTAGE	MODEL NO.	WATTS TO 87.5% OF RATED BATTERY VOLTAGE*					CABINET SIZE
			1½ HRS.	2 HRS.	3 HRS.	4 HRS.		
Unit Equipment — No Remote Capability								
Nickel-Cadmium	6	TSC18-2	18	12	9	6	S	
Long-Life Lead	6	TSE18-2	18	11	8	6	S	
Lead-Calcium	6	TSM18-2	18	12	10	7	S	
Unit Equipment — With Remote Capability								
Nickel-Cadmium	6	TSC25-2**	25	18	12	9	S	
	12	12TSC36-2**	36	21	15	12	S	
	12	12TSC50-2**	50	36	25	18	S	
	24	24TSC100-2	100	73	50	37	S	
Long-Life Lead	6	TSE27-2	27	19	14	10	S	
	6	TSE36-2	36	24	17	13	S	
	6	TSE50-2	50	32	22	16	S	
	6	TSE110-2	110	74	57	43	L	
	12	12TSE36-2	36	24	17	13	S	
	12	12TSE54-2	54	37	28	21	S	
	12	12TSE72-2	72	62	43	33	L	
	12	12TSE110-2	110	74	57	43	L	
	24	24TSE72-2	72	48	34	26	L	
	24	24TSE110-2	110	74	57	43	L	
Lead-Calcium	6	TSM27-2	27	18	14	10	S	
	6	TSM36-2	36	25	20	14	S	
	6	TSM54-2	54	37	28	21	S	
	6	TSM81-2	81	54	42	30	L	
	6	TSM110-2	110	72	56	40	L	
	12	12TSM36-2	36	25	20	14	S	
	12	12TSM54-2	54	37	28	21	S	
	12	12TSM110-2	110	72	56	40	L	
	24	24TSM110-2	110	72	56	40	L	

* National Electrical Code® specification. = New York City Approved.

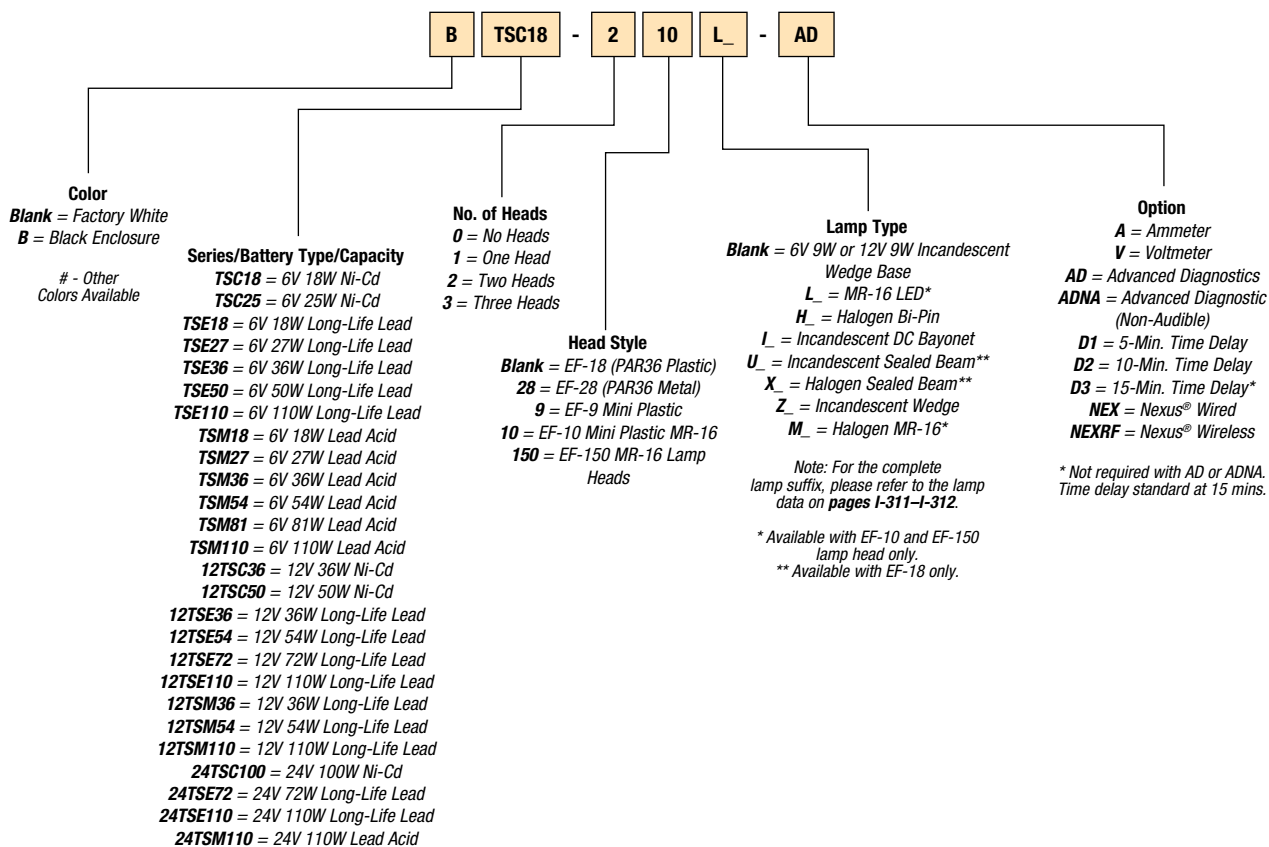
Spec-Grade Architectural

Dimensions

Dimensions are approximate and subject to change.



Catalog Numbering System



Spec-Grade Architectural

Self-powered recessed down light.

EFR2 Distinction™ Series

Safe and simple, the EFR2 Distinction™ Series is perfect for any commercial or high-end interior application that needs both performance and style. With self-powered recessed down lights that use state-of-the-art MR-16 halogen lamps and industry-leading battery and wiring technology, the EFR2 Distinction™ Series is robust with industrial-strength qualities in a decorative, easy-to-install fixture.

Operation is completely automatic. A brownout-sensitive transfer circuit automatically connects the emergency lamp upon either complete loss of normal AC power or when the AC voltage drops down to a point where normal AC lighting will not function. The unit also monitors DC battery voltage and disconnects the lamps before the battery can go into deep discharge (in conditions of extended power failures). When the AC power is restored, the charger automatically returns the battery to full charge in 24 hours and monitors the battery to maintain full charge.

The recessed gimbal is constructed of a durable, powder-coated, die-cast aluminum and is furnished with an MR-16 lamp source powered by a sealed nickel-cadmium battery. The unit is furnished with a metal, fully recessed backbox to house the electronics, battery and all associated wiring. It is furnished standard with bar hanger kit.

The light source is adjusted by rotating the gimbal through 359° in azimuth and/or positioning the lamp through 90° in pitch.

The light source is a 6V 6W MR-16 halogen lamp. The emergency lighting fixture provides illumination in the emergency mode directly from the internally mounted nickel-cadmium battery. The duration of operation provided by the battery is no less than 90 minutes, as required by NFPA 101® Life Safety Code®.

Standard Features

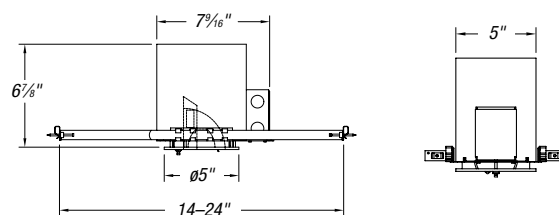
- One 6-volt, 6-watt MR-16 halogen lamp can be adjusted by rotating the gimbal through 359° in azimuth and/or positioning the lamp through 90° in pitch
- The recessed gimbal is constructed of durable, powder-coated, die-cast aluminum; a metal, fully recessed back box houses the electronics, battery and wiring
- Self-powered; sealed long-life nickel-cadmium battery for operation of at least 90 minutes as required by NFPA 101® Life Safety Code®
- Includes bar hanger kit; quick-disconnect feature allows the contractor to easily install the trim to the housing
- Easy to access for maintenance personnel
- Evaluated to UL® 924 standards

NFPA 101 and Life Safety Code are registered trademarks of the National Fire Protection Association, Inc.



Dimensions

Dimensions are approximate and subject to change.



EFR2 Series including back box

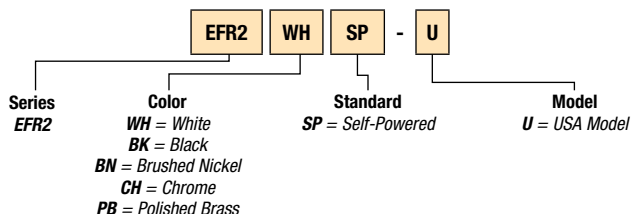
Charger

- Power requirements: 120V, 60 Hz, .046A, 4.17W; 277V, 60 Hz, .024A, 4.76W
- Transfer: Dust-tight relay automatically and instantly energizes lamp load upon failure of AC supply
- Battery protection circuit automatically shuts down lamp load when battery reaches 87.5% of its rated voltage
- Charger is 100% solid state, includes auto-equalize, temperature compensation and is controlled by a 1% Zener reference

Accessories (Order as a separate item)

Remote Test Switch (metal face plate)	RTS
Remote Text Switch (plastic face plate)	RTS-1
Replacement Lamp (6V 6W)	580.0074-E

Catalog Numbering System



Spec-Grade Architectural

6-volt recessed down light.

GS Series

Recessed down lights combine the function of an emergency lighting fixture with stylish design.

Several GS Series models and lamp choices provide flexibility in any emergency lighting layout and an aesthetically pleasing look.

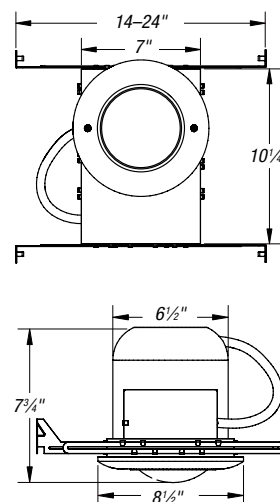
Standard Features

- An adjustable gimbal directs the light from one 6-volt 10-watt wedge-base PAR36 lamp head
- The low-profile trim ring is molded in tough polycarbonate with a semi-gloss white finish to complement a variety of ceilings
- The fully recessed backbox is constructed of 20-gauge steel
- Available with sealed, maintenance-free nickel-cadmium, long-life lead or lead-calcium batteries
- PulsePlus Charger circuitry offers 120/277VAC, 60 Hz, .3/.15 amp, fused output circuit(s), long-life LED pilot indicator, temperature compensation, sealed relay, low-voltage battery disconnect, brownout protection and lockout (automatic battery connect)
- Inconspicuously mounted and easily accessed, the test switch and LED pilot light are located on the side of the lamp ring (standard)
- A slide-out chassis and two quick-connect plugs make installation and servicing easy, and adjustable bar hangers are included
- UL® Listed; complies with NEC®, Life Safety Code® and OSHA
- Three-year full warranty, excluding lamps, pilot lights and fuses



Dimensions

Dimensions are approximate and subject to change.



Accessories (Order as a separate item)

Remote Test Switch (metal face plate).....**RTS**

Remote Text Switch (plastic face plate).....**RTS-1**

Unit Ratings

The GSM10 unit is furnished with one 6-volt 10-watt wedge-base lamp. Other wattages available; see Lamp Data for selection of PAR lamps.

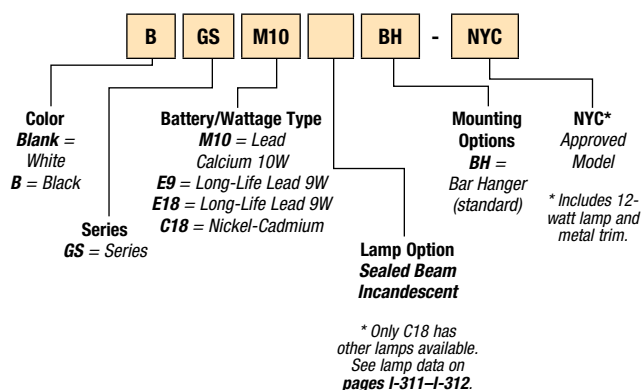
SEALED MAINTENANCE- FREE BATTERY TYPES	DC VOLTAGE	MODEL NO.	WATTS TO 87.5% OF RATED BATTERY VOLTAGE*			
			1½ HRS.	2 HRS.	3 HRS.	4 HRS.
Unit Equipment — No Remote Capability						
Lead-Calcium	6	GSM10-BH	10	8	—	—
Long-Life Lead	6	GSE9-BH	8	—	—	—
Unit Equipment — With Remote Capability						
Nickel-Cadmium	6	GSC18-BH	18	12	9	—

* National Electrical Code® specification. = New York City Approved.

NEC, National Electrical Code and Life Safety Code are registered trademarks of the National Fire Protection Association, Inc.

Catalog Numbering System

For standard units without options, only order Series, Battery and Watts. Options are added to units by listing suffix at end of the Model Number. Note: Includes standard lamp (570.0016).



Spec-Grade Architectural

Virtually invisible emergency lighting.

Revelation™ Series

NEW and improved design — the unseen solution. Designed for unobtrusive use in walls with a cavity (drywall with 4-inch studs) or uninsulated ceilings with horizontal beams or T-bar structures, the Revelation™ Series is completely concealed in the wall or ceiling during normal conditions (on standby).

In the event of a power failure, the door of the unit rotates open 180° to expose the emergency lights (two high-efficiency MR-16 lamps) to illuminate the path of egress. Once AC power returns or at the end of the discharge period, the lights turn off and the door automatically rotates to a closed position, driven by an energy storage circuit. If needed, the back box can be shipped separately.

Standard Features

- Each unit comes with two MR-16 halogen lamps ranging from 12 to 50 watts each or two MR-16 style LED lamps
- The self-powered unit is contained in a heavy-duty galvanized steel backbox that can be concealed in the wall or ceiling and includes a combined test switch and pilot light that is accessible through the frame
- The normally exposed parts of the unit (flat door and frame) are covered with a high-quality powder-coated textured off-white finish that integrates well with most wall and ceiling paints; the surface finish can also be customized on site with paint, wallpaper or other coverings
- Power requirements: 120/277VAC, 60 Hz, .25/.12 amp
- PulsePlus Charger circuitry offers 120/277VAC, 60 Hz, .25/.12 amp, automatic charger, built around a micro-controller integrated circuit; circuit standard features include current limiting, temperature-compensated cut-off voltage, brown-out transfer, low-voltage battery disconnect and battery lockout (prevents activation in DC mode until initial AC activation)
- Special bar hangers for installation in sheet rock or T-bar ceilings are included
- The included electrical junction box can be installed on a wall stud or ceiling beam with a simple U-shape bracket
- Five-year warranty on electrical parts (motor, electronic circuitry)
- Each unit is fully computer-tested and aligned mechanically for optimum operation



Accessories (Order as a separate item)

- Remote Test Switch (metal faceplate) **RTS**
 Remote Test Switch (plastic faceplate)..... **RTS-1**

Diagnostic/Self-Test Feature (optional)

Diagnostic/Self-Test circuitry is optional on all self-powered models. This circuitry is programmed to ensure the equipment readiness and reliability by continuously monitoring every critical function of the unit. If a problem occurs, the pilot light located on the front of the unit will change color from solid green to a flashing red light, indicating a fault. A detailed diagnostic legend is available on the door back side and provides fault identification (battery, charger circuitry, lamps) for the maintenance personnel. The self-test feature will simulate a power loss for minimum 30 seconds every 30 days, 30 minutes every 6 months and 90 minutes annually.

Power Consumption

MODEL	MAXIMUM		STANDBY*	
	INPUT CURRENT	INPUT POWER	INPUT CURRENT	INPUT POWER
120V	.25A	30W	.1A	11W
277V	.12A	30W	.05A	11W

* Standby power consumption is 50% lower for lead-calcium batteries.

Unit Ratings

MODEL NO.	WATTS TO 87.5% OF RATED BATTERY VOLTAGE*			
	1½ HRS.	2 HRS.	4 HRS.	8 HRS.
RTM40 RTN40	40	30	24	—
RTM70 RTN70	70	50	40	24
RTM100 RTN100	100	70	50	40

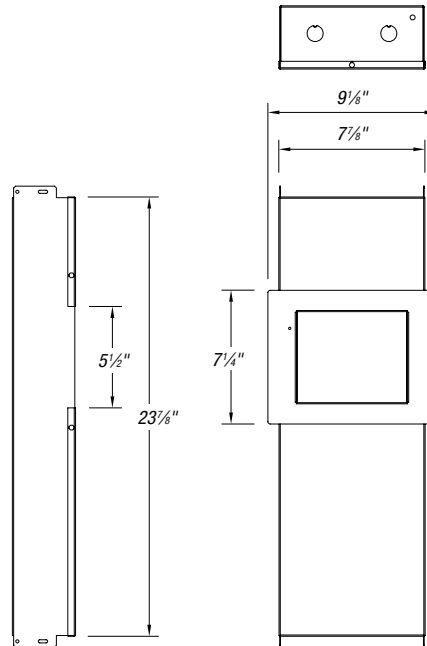
* National Electrical Code® specification.

Spec-Grade Architectural

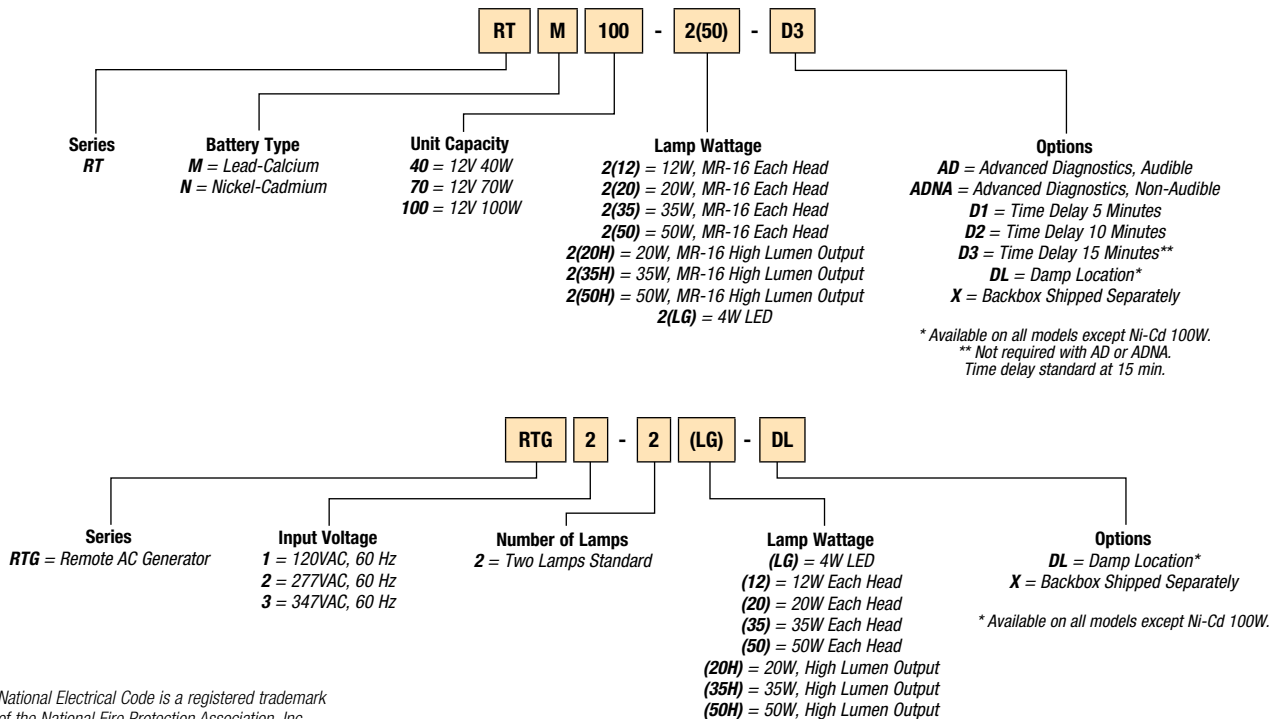
Dimensions

Dimensions are approximate and subject to change.
Unit supplied with T-bar hanger kit package.

Charger & Battery Compartment:
For use in walls or ceilings with a cavity,
not for use in block walls or solid ceilings.



Catalog Numbering System



National Electrical Code is a registered trademark
of the National Fire Protection Association, Inc.

Spec-Grade Architectural

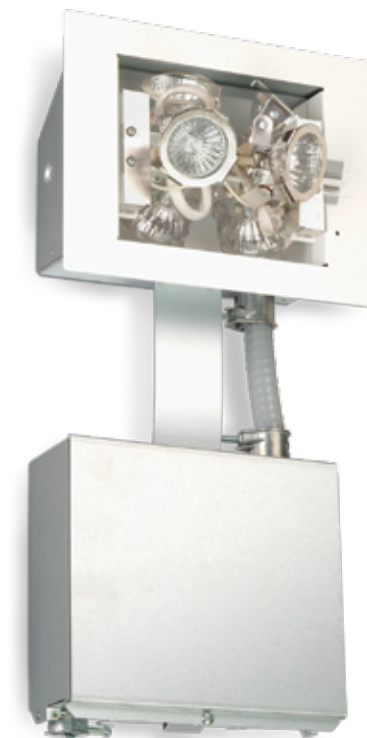
The unseen solution: Virtually invisible emergency lighting.

Mini Revelation™ Series

Specially designed for retrofitting in finished walls with a cavity (drywall with 4-inch studs), the Mini Revelation™ Series concealed emergency lighting equipment provides impressive illumination. In normal conditions (standby), the unit is completely concealed in the wall.

Standard Features

- Each unit comes with two MR-16 halogen lamps (standard)
- The self-powered battery unit is contained in a heavy-duty galvanized steel backbox that can be concealed in the wall or ceiling and includes a combined test switch and pilot light that is accessible through the frame
- The normally exposed parts of the unit (flat door and frame) are covered with a high-quality powder-coated textured off-white finish that integrates well with most wall and ceiling paints; the surface finish can also be customized on site with paint, wallpaper or other coverings
- Power requirements: 120/277VAC, 60 Hz, .25/.12 amp
- PulsePlus Charger automatic charger is built around a micro-controller integrated circuit that includes standard features such as current limiting, temperature-compensated cut-off voltage, brown-out transfer, low-voltage battery disconnect and battery lockout (prevents activation in DC mode until initial AC activation)
- The equipment includes the electrical junction box and can be installed on a wall stud or ceiling beam with a simple U-shape bracket
- Evaluated to UL® 924 standard
- Five-year warranty on electrical parts (motor, electronic circuitry)
- Each unit is fully computer-tested and aligned mechanically for optimum operation
- AD or ADNA includes a time-delay function; if needed, it can be enabled/disabled in the field or it can be preset at the factory by including the suffix -AD-D_ or -ADNA-D_



Power Consumption

MODEL NO.	AC INPUT	MAXIMUM		STANDBY (NI-CD, NIMH)*	
		INPUT CURRENT	INPUT POWER	INPUT CURRENT	INPUT POWER
MRT40	120VAC	.25A	30W	.1A	11W
	277VAC	.12A	30W	.05A	11W
MRTG	120VAC	.95A	110W**	—	—
	277VAC	.45A	110W**	—	—

* Standby power consumption is 50% lower for lead-calcium batteries.

** Maximum power when equipped with 2 x 50W lamps (generator unit).

Unit Ratings

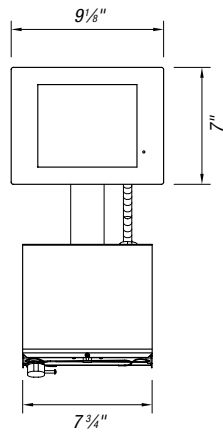
MODEL NO.	WATTS TO 87.5% OF RATED BATTERY VOLTAGE			
	1½ HRS.	2 HRS.	3 HRS.	4 HRS.
MRT_40	40	30	24	—

* National Electrical Code® specification.

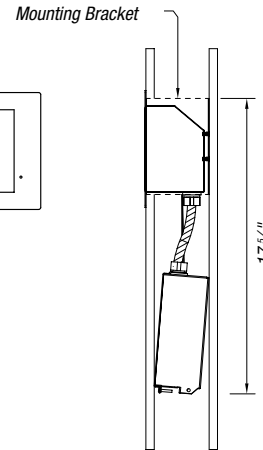
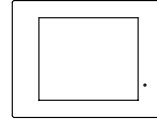
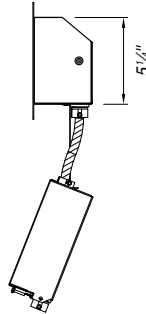
Spec-Grade Architectural

Dimensions

Dimensions are approximate and subject to change.



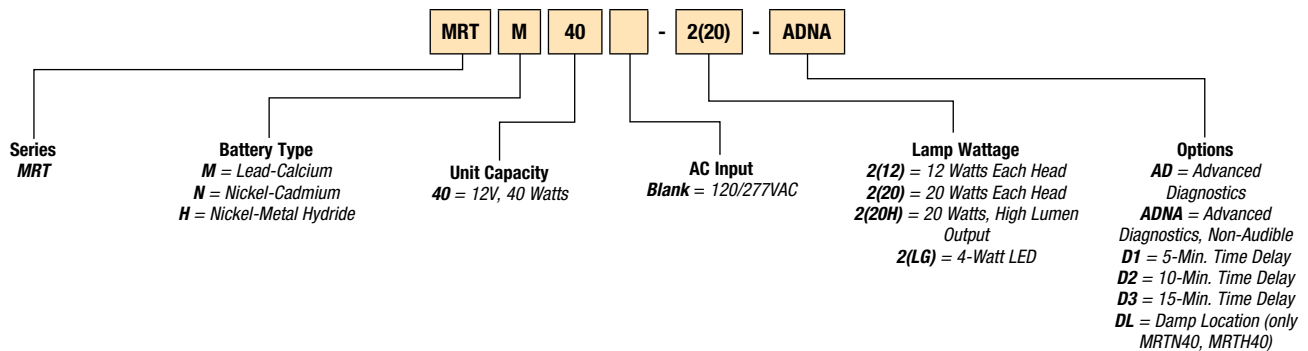
Complete Unit



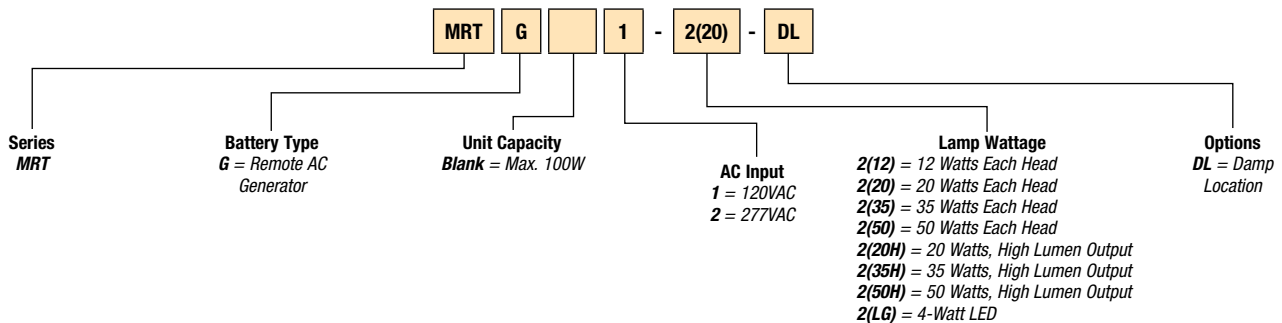
Installed Unit

Catalog Numbering System

Battery Unit



Generator Unit



Spec-Grade Architectural

Recessed ceiling-mount only.

Prestige™ X40 Edge-Lit Series

The Prestige™ X40 Edge-Lit Series is designed for recessed ceiling-mounting applications requiring a flat trim plate. For recessed wall-mounted signs, see pages I-204–I-205.

New Features

- Easier installation: Component-free backbox can be installed in advance, like a regular junction box
- 20–30% less power consumption: Max. 1.4W (AC-only) and max. 2.3W (self-powered)
- Bi-color LED pilot light allows visual diagnostic without the need to open the unit (self-test and diagnostic option)
- UL® Listed
- Also available with white LEDs for custom-design legends: pictograms, special wording, etc. (ask your sales representative)

Standard Features

- Designed to achieve superior visual clarity and performance with an LED light source; high-brightness red or green LEDs transmit light directly into both ends of a unique U-shaped panel; LED-sensitive inks are formulated to provide a rich color in red or green
- Virgin acrylic panel provides optimum light transmission; illumination is 100% in both AC and emergency mode
- Clear acrylic panel is silk screened and computer engraved; computer engraving is used to crisply define each letter and chevron; LED-sensitive inks are formulated to provide a rich color in red or green; choice of legend background includes: Clear (for single face), White or Mirror (for single- or double-face signs)
- Rugged cast brushed aluminum trim plate (optional colors available)
- Low-energy consumption LED lamps consume less than 2.3 watts per sign, single or double face, AC-only or self-powered; long-life LEDs eliminate the twice-a-year re-lamping typical of incandescent lamps
- Available with sealed maintenance-free nickel-cadmium batteries
- Fully automatic charger circuitry offers two-wire universal 120 to 277VAC input, temperature-compensated charger, solid-state transfer, low-voltage battery disconnect and brown-out protection
- Self-test and silent diagnostic is optional on all self-powered models; it is programmed to ensure product readiness and reliability by continuously monitoring every critical function of the unit; the unit is self-tested for one minute every 30 days, 30 minutes every 60 days and 90 minutes annually; when a fault is detected, the pilot light changes color from green to red and flashes following a particular code, identifying the cause: battery, charger circuitry or LED lamps
- Designed to fit integrally with a 20-gauge steel backbox; each unit includes a bar hanger kit
- UL® Listed to UL® 924 Standard
- Prestige™ LED Series signs are unaffected by the vibrations, ambient temperature swings and typical power surges detrimental to standard exit light sources
- Five-year full warranty



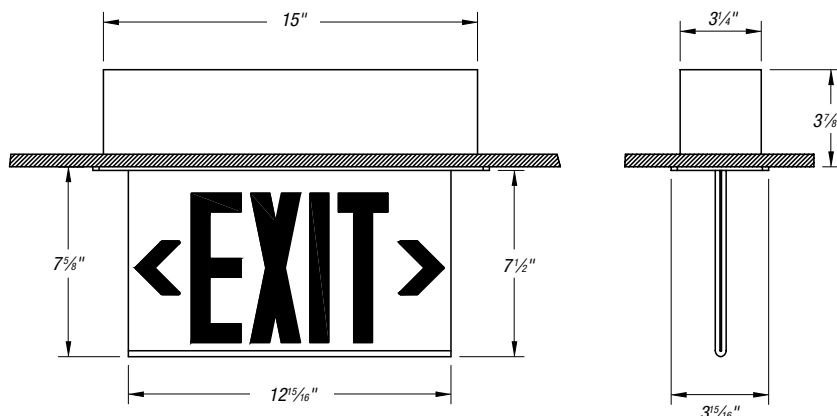
nexus®



Spec-Grade Architectural

Dimensions

Dimensions are approximate and subject to change.



Options

Description

Special wording **Contact your sales representative**

Accessories (Order as a separate item)

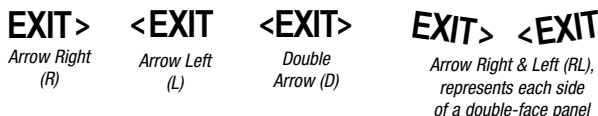
Two 27-inch adjustable bar hangers* **TBH**

* Bar hangers supplied with unit, order as replacement only.

Power Consumption

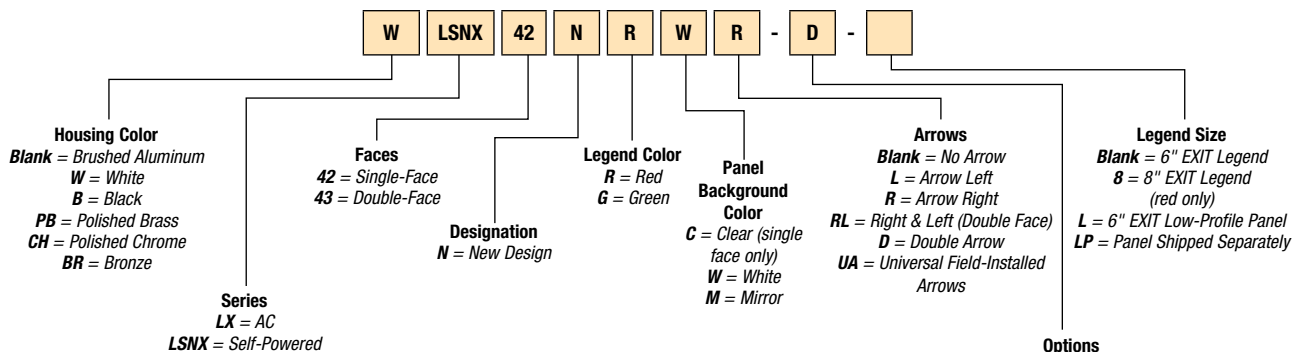
MODEL	AC SPECS		DC SPECS	
AC-only	120 to 277VAC	Less than 1.4W	—	
AC/DC-remote	120 to 277VAC	Less than 1.4W	6 to 24VDC	Less than 1.4W
Self-powered	120 to 277VAC	Less than 2.3W	Ni-Cd battery	Min. 90 minutes
Self-powered diagnostic	120 to 277VAC	Less than 2.3W	Ni-Cd battery	Min. 90 minutes

Arrow (Chevron) Designation



* Wording and chevrons not to scale. For illustration purposes only.

Catalog Numbering System



* Self-powered only.

Spec-Grade Architectural

Die-cast aluminum edge-lit sign. Prestige™ Edge-Lit Series

The efficiency of an LED light source combined with an elegant die-cast design adds high performance and style to your next exit sign application.

Universal Prestige™ Edge-Lit Series models include all the components for recessed or surface mounting. A choice of models and options provides specification flexibility to accommodate a variety of application requirements.

Computer engraving is used to crisply define each letter and chevron. LED-sensitive inks are formulated to provide a rich color in red or green. Choice of legend background includes Clear (for single face), White or Mirror (for single- or double-face signs).

A clean circular or angular trim plate design eliminates visible fasteners. Standard finish is brushed aluminum for the housing, trim plate, trim ring and canopy.

AC-only signs consume maximum 1.4 watts. Self-powered signs use 2.3 watts maximum while recharging batteries. Solid-state transfer automatically and instantly supplies the LED lamps from the back-up battery upon failure of AC supply. Close tolerance electronic circuit activates emergency unit when utility power dips below nominal voltage for brownout protection. Units also feature a current-limited and short-circuit proof charger, full battery recharge is made in compliance with UL® 924 specifications, and a test switch incorporates a green LED AC pilot light.

A self-test and silent diagnostic is optional on all self-powered models. It is programmed to ensure product readiness and reliability by continuously monitoring every critical function of the unit. The unit is self-tested for one minute every 30 days, 30 minutes every 60 days and 90 minutes annually. When a fault is detected, the pilot light will change color from green to red and flash following a particular code, identifying the cause: battery, charger circuitry or LED lamps.

The modular design allows for several mounting configurations. A trim ring and two 27-inch bar hangers are used for recessed mounting on walls or ceilings. A canopy allows for surface mounting on ceilings or walls as back- or end-mount. Face panels snap securely into trim plate on all mounting configurations.

Standard Features

- Designed to achieve superior visual clarity and performance with a red and green LED light source
- Virgin acrylic panel provides optimum light transmission, and illumination is 100% in both AC and emergency mode
- Self-powered models contain a sealed maintenance-free nickel-cadmium battery that provides 90 minutes of emergency illumination
- 2-wire universal 120 through 277VAC, 50/60 Hz for AC-only and self-powered models
- UL® 924 Listed
- Five-year full warranty

Accessories (Order as a separate item)

White Pendant **P-WT***
Black Pendant **P-BK***

* Custom pendant lengths and colors available. Specify 12", 24", 36", etc.



nexus®



New Features

- Easier installation: component-free backbox housing and canopy can be installed in advance, like a regular junction box
- 20–30% less power consumption: max. 1.4W (AC-only models) and max. 2.3W (self-powered models)
- Bi-color LED pilot light allows visual diagnostic without the need to open the unit (self-test and diagnostic option)
- UL® Listed
- Also available with white LEDs for custom-design legends: pictograms, special wording, etc.

Electrical

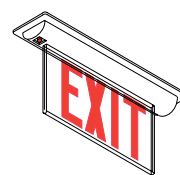
Power requirements: 120 to 277VAC, 50/60 Hz; AC-only signs use 1.4 watts max.; self-powered signs use 2.3 watts max. while recharging batteries.

Available Models

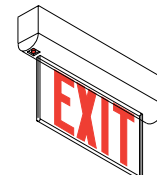
Circular trim plate models shown.
Optional angular trim plate available.



Recessed Wall Mount



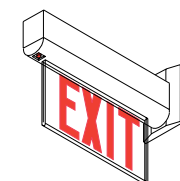
Recessed Ceiling Mount



Surface Wall Mount



Surface Ceiling Mount



Surface End Mount

Power Consumption

MODEL	AC SPECS		DC SPECS	
AC-Only	120 to 277VAC	Less than 1.4W	—	—
AC/DC-Remote	120 to 277VAC	Less than 1.4W	6 to 24VDC	Less than 1.4W
Self-Powered	120 to 277VAC	Less than 2.3W	Ni-Cd Battery	Min. 90 Minutes
Self-Powered Diagnostic	120/277VAC	Less than 2.3W	Ni-Cd Battery	Min. 90 Minutes

Spec-Grade Architectural



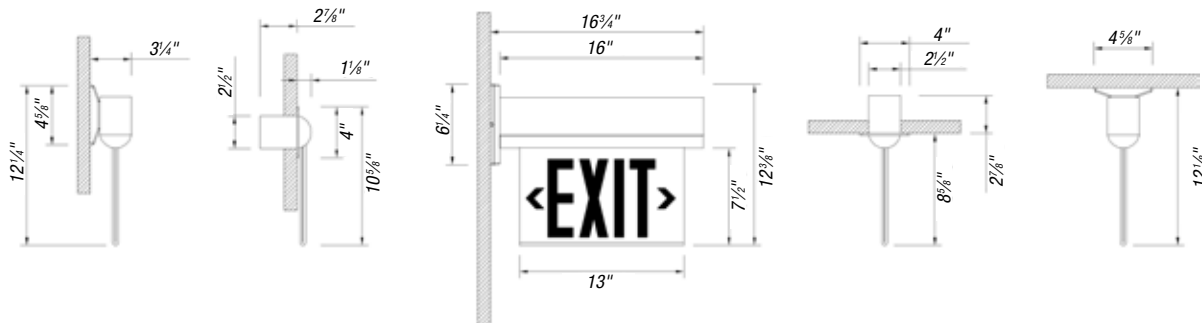
Standard
Circular Trim Plate



Optional
Angular Trim Plate

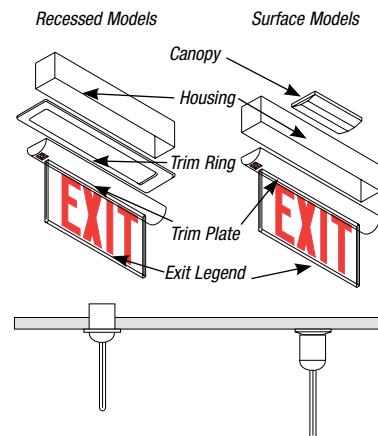
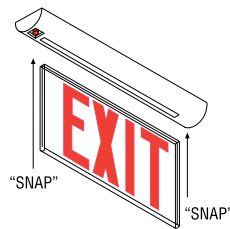
Dimensions

Dimensions are approximate and subject to change.

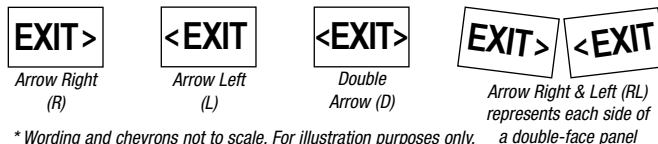


Mounting Configurations

All mounting configurations use the same basic components. Inserting a trim ring allows for recessed mounting on walls or ceilings. Applying a canopy allows for surface mounting on ceilings or walls as back or end mount.

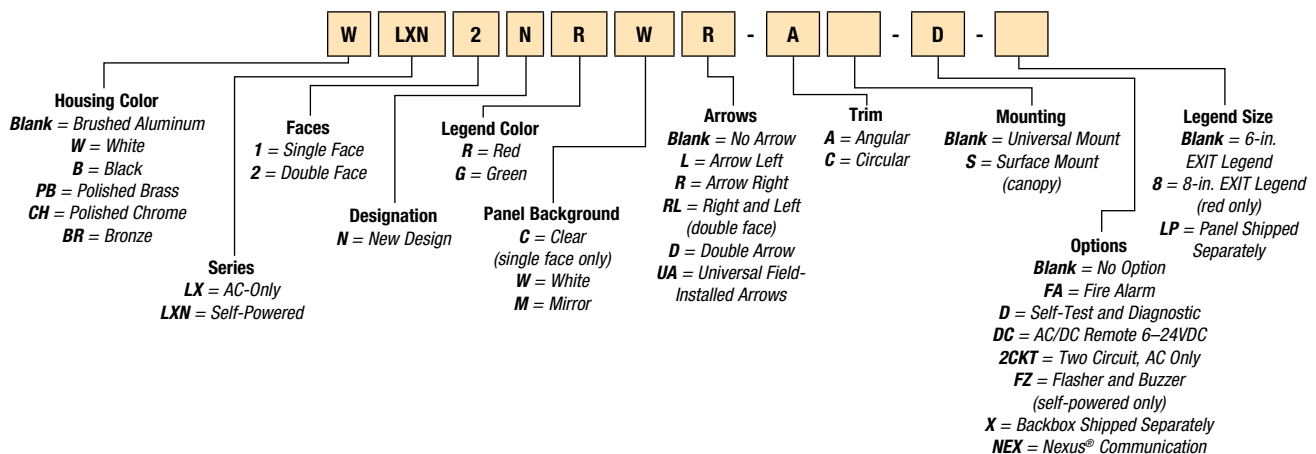


Arrow (Chevron) Designation



* Wording and chevrons not to scale. For illustration purposes only.

Catalog Numbering System



Spec-Grade Architectural

Master with remote floor proximity exit sign.

Prestige™ Floor Proximity Series

For surface or recessed mounting at the floor level, the Prestige™ LED Floor Proximity Series is available as AC-only, AC-dual circuit and as a DC-remote fixture supplied by a "master" exit sign of the Prestige™ DX Series.

The unique design of the Prestige™ LED Floor Proximity Series promises bold visual performance that will enhance safety.

The master exit sign comes standard with the self-test/diagnostic feature. Its circuitry also monitors and supplies diagnostics to the Remote Floor Proximity Exit Sign. The self-test/diagnostic feature continuously monitors the charger assembly, battery and LED assembly current. If a fault is indicated, the external service-required indicator will illuminate. The internal fault indicators will then indicate the nature of the fault. The self-test/diagnostic will self test for a minimum 30 seconds every 30 days, 30 minutes every 60 days and 90 minutes annually and meets NFPA 101® Life Safety Code® requirements for periodic testing.

Standard Features

- Low energy consumption red and green LEDs provide excellent visual performance, high reliability and low maintenance costs
- Self-powered master units have self-contained batteries and circuitry inside the housing
- Available with sealed maintenance-free nickel-cadmium batteries for superior performance and long life
- Batteries provide 90 minutes of emergency operation and remote power for proximity exit sign
- Remote Floor Proximity Exit Signs have power and diagnostics supplied from the DX/DXN Series master units only
- Standalone AC-only and self-powered units: 120/277VAC dual voltage
- Available for surface or recessed mounting at the floor level
- Evaluated to UL® 924 for floor proximity applications
- Five-year full warranty; each unit is fully tested

Options

Description..... Suffix
Vandal-Resistant Shield and Screws-VR1



Dimensions

Dimensions are approximate and subject to change.

Self-Powered/AC-Only Master

DXN1G-M-N

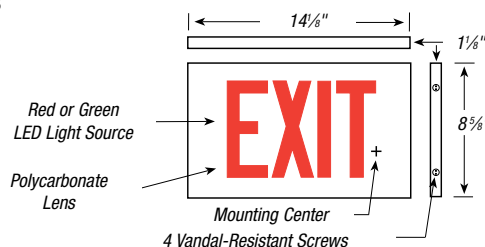
DX1G-M-N



Floor Proximity Slave Surface Mount

LLGS

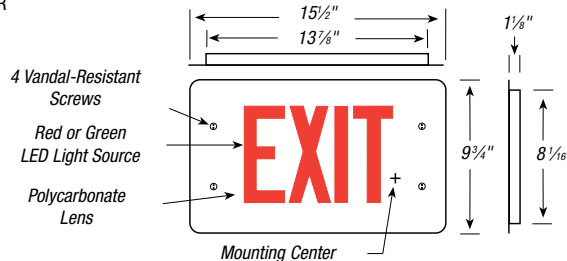
LLRS



Floor Proximity Slave Recessed Mount

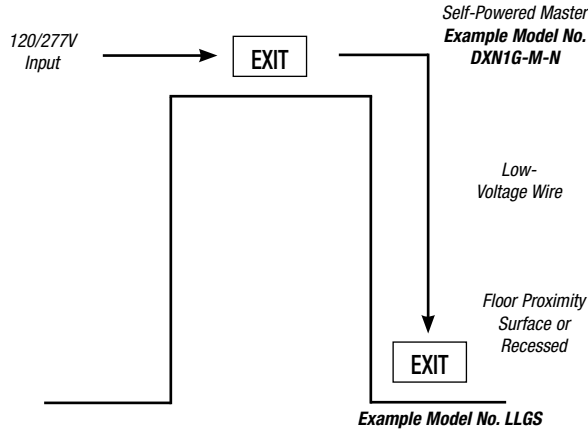
LLGR

LLRR

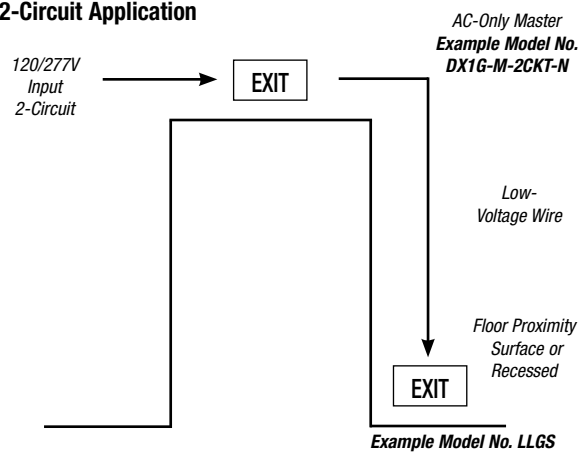


Spec-Grade Architectural

Self-Powered Master with Floor Proximity Unit

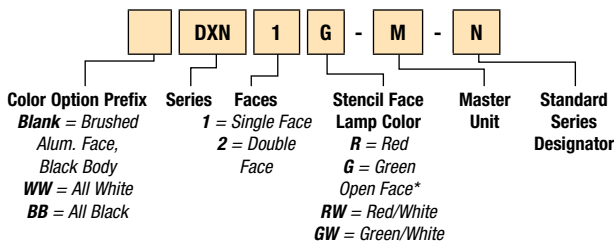


AC-Only Master with Floor Proximity Unit — 2-Circuit Application



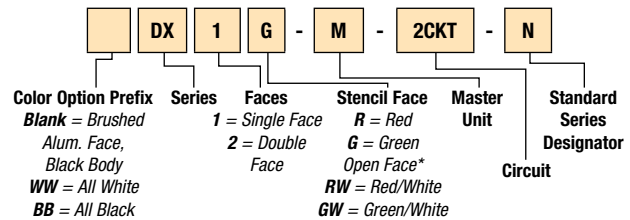
Catalog Numbering System

Self-Powered Master (unit for above door)



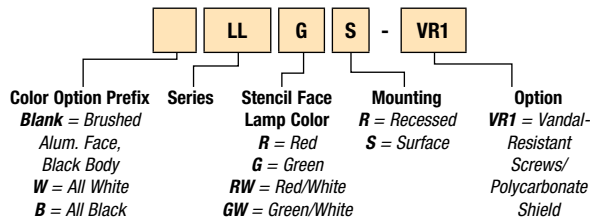
Catalog Numbering System

AC-Only Master (unit for above door)



Catalog Numbering System

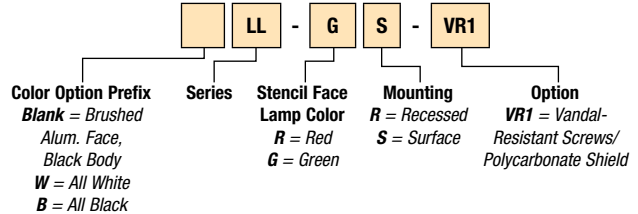
Floor Proximity Unit (unit on side of door)



* Open face required for special wording. Contact your Thomas & Betts sales representative.

Catalog Numbering System

Floor Proximity Unit (unit on side of door)



* Open face required for special wording. Contact your Thomas & Betts sales representative.

Power Consumption

COLOR	MODEL	AC SPECS		DC SPECS	
Red	AC-Only	120/277VAC	1.3W	—	—
	AC-2 Circuit	120/277 and 277/277VAC	2.6W	—	—
	Self-Powered	120/277VAC	3.8W	Ni-Cd Battery	Min. 90 Minutes
Green	AC-Only	120/277VAC	1W	—	—
	AC-2 Circuit	120/277 and 277/277VAC	3.3W	—	—
	Self-Powered	120/277VAC	5W	Ni-Cd Battery	Min. 90 Minutes

Spec-Grade Architectural

Die-cast exit series.

Prestige™ DX Series

A unique design that promises bold visual performance, the Prestige™ DX Series enhances safety while providing an elegant design to complement a variety of interiors.

The Prestige™ DX Series uses today's best technology to provide a long-lasting, high-performance exit sign. With durable powder-coated die-cast construction, a long-life LED light source and standard self-diagnostic circuitry, the Prestige™ DX Series has more to offer in an exit sign.

Diagnostic/self-test circuitry is standard on all self-powered models. This circuitry is programmed to ensure the exit's readiness and reliability by continuously monitoring every critical function of the unit. If a problem occurs, a single service-required indicator illuminates immediately. A detailed diagnostic display that will further indicate the nature of the fault is located on the inside of the exit sign, out of sight from the general public. The self test will test the unit for minimum 30 seconds every 30 days, 30 minutes every 60 days and 90 minutes annually.

Standard Features

- Red and green LED light source
- Constructed of die-cast aluminum, finished with a deep brushed face and black body; optional finishes available
- Self contained — batteries and circuitry are located inside the exit housing
- Available with sealed maintenance-free nickel-cadmium batteries that provide 90 minutes of emergency operation and recharge per UL® 924 requirements
- Fully automatic charger is solid state; all models are universal 2-wire, 120 through 277VAC, 50/60 Hz
- Continuous self-diagnostic monitoring and self-testing per Life Safety Code® requirements
- Can be wall, end or ceiling mounted
- Evaluated to UL® 924 Standard; AC-only signs are listed for use in damp locations
- Unaffected by the vibrations, ambient temperature swings and typical power surges detrimental to standard exit light sources
- Five-year full warranty



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Accessories (Order as a separate item)

Description	Add Suffix
White Pendant	PDW*
Black Pendant	PDB*

** Specify pendant length (12", 24", 36", etc).*

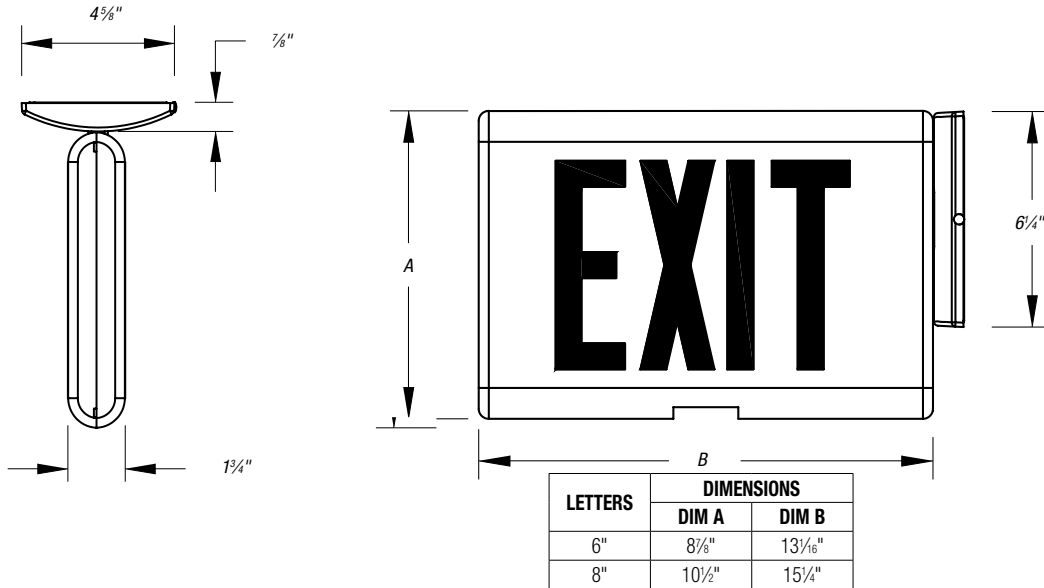
Power Consumption

MODEL (6")	AC SPECS		DC SPECS	
AC-only	120 to 277VAC	1.25W	—	—
AC/DC	120 to 277VAC	1.25W	6 to 24VDC	Less than 1.5W
Self-powered	120 to 277VAC	1.6W	Ni-Cd battery	Min. 90 minutes
MODEL (8")	AC SPECS		DC SPECS	
AC-only	120 to 277VAC	2.5W	—	—
AC/DC	120 to 277VAC	2.5W	6 to 24VDC	1.6W
Self-powered	120 to 277VAC	2.9W	Ni-Cd battery	Min. 90 minutes

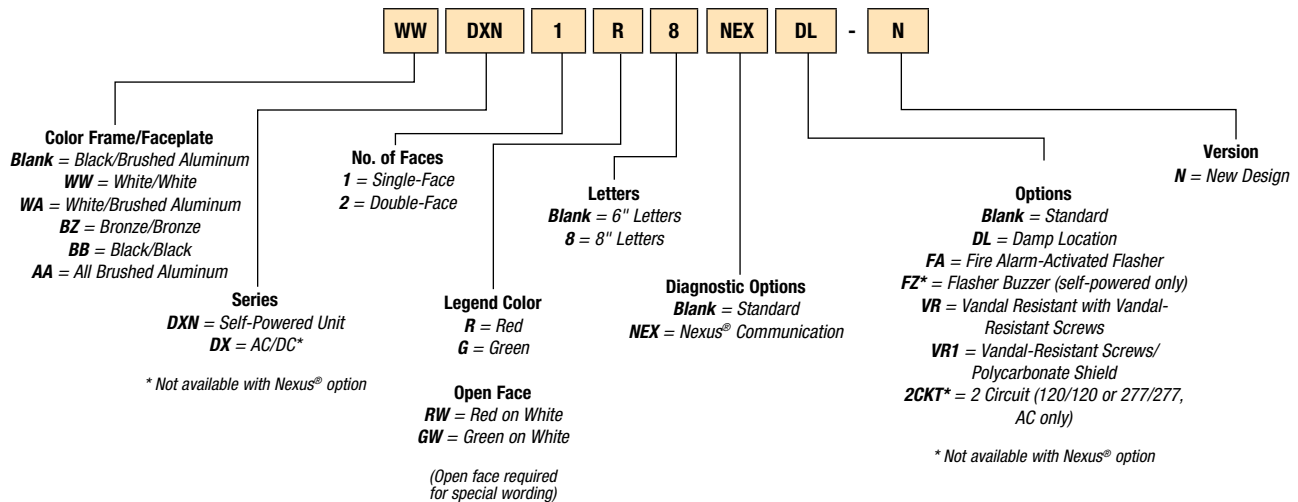
Spec-Grade Architectural

Dimensions

Dimensions are approximate and subject to change.



Catalog Numbering System



Spec-Grade Commercial

These battery units are designed with aesthetics, ease of installation and performance in mind.

Premier™ Series Thermoplastic Battery Unit

Standard Features

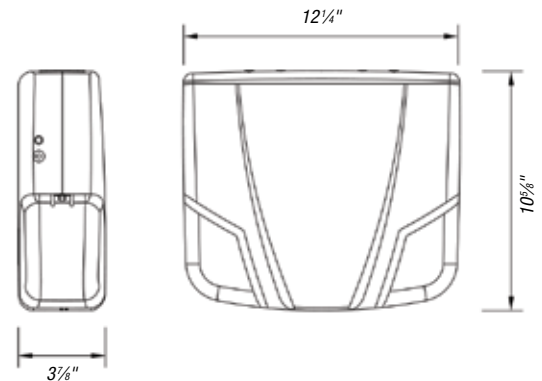
- Simple, compact and contemporary design
- Wall-mount or ceiling-mount installation (specify)
- Two-piece housing of injection-molded thermoplastic
- MR-16 or LED halogen lamps, shielded by clear polycarbonate covers
- Sealed, maintenance-free, lead-calcium or nickel-cadmium batteries
- Dual voltage input: 120/277VAC
- Total load capacity up to 72W
- UL® 924 Listed
- Advanced Diagnostic (audible) optional
- Certified for damp locations (optional)
- Nexus® interface (optional)



Dimensions

Dimensions are approximate and subject to change.

nexus®



Wire Guard

WG1-E	Wall or Flat Ceiling Mount
--------------	----------------------------

Flat Ceiling Mount

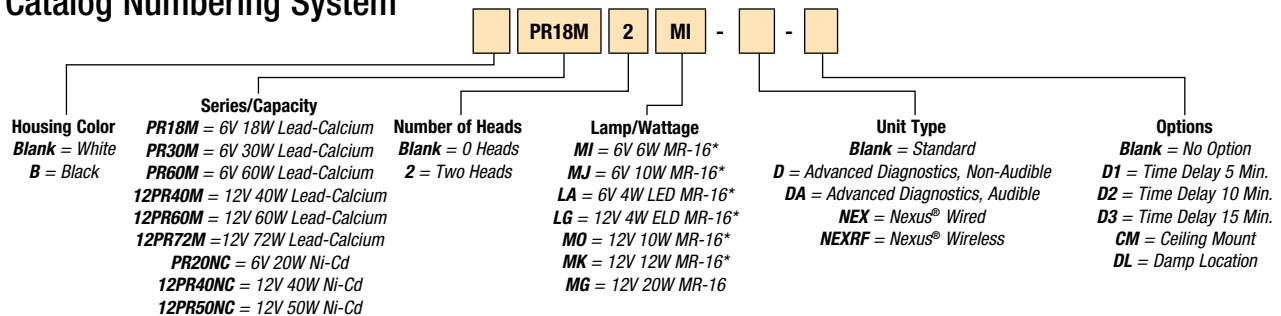


Power Consumption and Unit Ratings

MODEL NO.	AC SPECS		WATTS TO 87.5% OF RATED BATTERY VOLTAGE*			
			1½ HOURS	2 HOURS	3 HOURS	4 HOURS
18M	6V	120/277VAC	18	14	9	—
30M	6V		30	20	15	10
40M	6V		40	30	20	15
60M	6/12V		60	40	30	20
72M	12V		72	54	36	27
20NC	6V	120/277VAC	20	15	10	8
40NC	12V		40	30	20	15
50NC	12V		50	36	24	18

* National Electrical Code® specification.

Catalog Numbering System



* Available for damp locations.

Spec-Grade Commercial

Specification-grade, LED thermoplastic, universal-mount, snap-fit exit sign.

Premier™ Series Exit Sign

A compact exit sign with an all-in-one, snap-fit design, the Premier™ Series is affordable and easy to install. It's ideally suited for commercial and spec-grade applications.

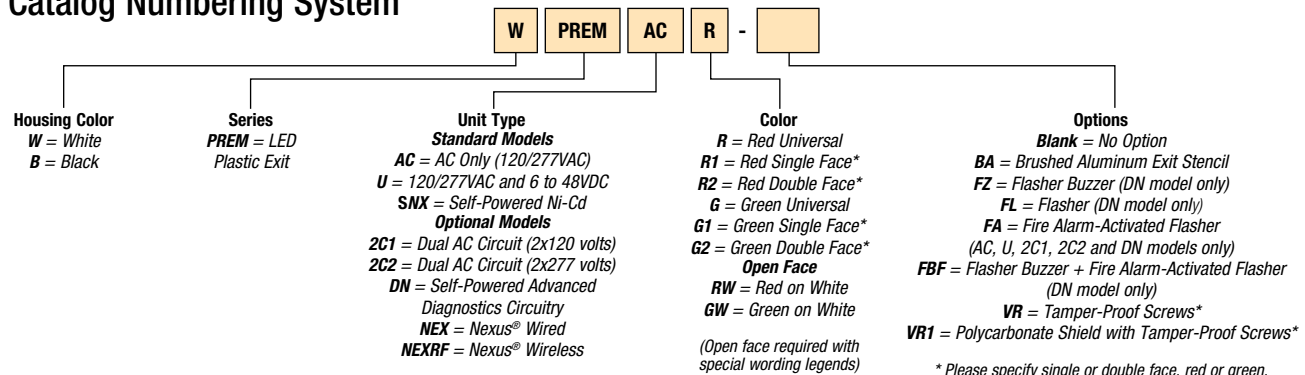
Standard Features

- Indirect reflective technology provides bright, even illumination
- Long-life LED light source assures low maintenance costs and superior illumination
- Durable, injection-molded, thermoplastic housing; optional vandal-resistant shield with tamper-proof screws
- Energy-efficient power consumption: less than 3.5 watts for self-powered version and less than 3 watts for AC-only single or double face
- Available with a sealed, maintenance-free nickel-cadmium battery
- Dual-voltage input: 120/277VAC; optional advanced diagnostic circuitry, flasher/buzzer and fire alarm-activated flasher
- Standard universal supplied with two faceplates, backplate for wall mount, easy-install canopy for end and ceiling mounting, and universal, field-selectable snap-in/out chevrons
- UL® 924 Listed; all models are UL® Listed for damp locations
- Five-year full warranty

Optional Self-Test/Self-Diagnostic

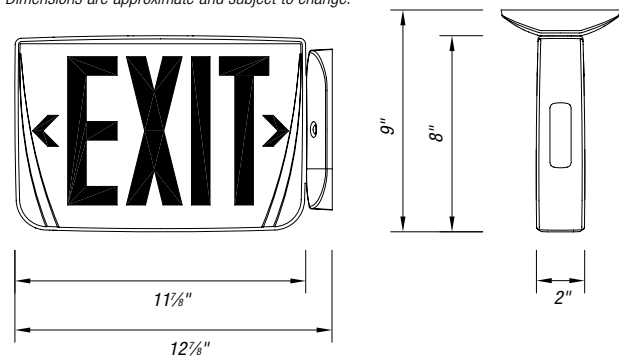
Continuous self-testing per Life Safety Code® requirements is available. This circuitry is programmed to ensure the exit sign's readiness and reliability by continuously monitoring every critical function of the unit. If a problem occurs, a single "Service Required" indicator illuminates immediately. A detailed diagnostic display that will further indicate the nature of the fault is located on the inside of the exit sign, out of sight from the general public. The self-test will test the unit for a minimum 30 seconds every 30 days, 30 minutes every 60 days and 90 minutes annually.

Catalog Numbering System



Dimensions

Dimensions are approximate and subject to change.



Accessories (Order as a separate item)

White Pendant.....PRE-P-WT*
Black Pendant.....PRE-P-BK*

* Specify pendant length.

Wire Guard

WALL	CEILING	END
WG1-E	WG5-E	WG5-E

Spec-Grade Commercial

Thermoplastic combination battery unit and exit sign.

Premier™ Series Combo

Designed with aesthetics, ease of installation and performance in mind, the Premier™ Series Thermoplastic Combination Battery Unit and Exit Sign provides outstanding performance in a cost-competitive package. One housing combines a battery unit and exit sign in a compact and contemporary design.



nexus® 

Standard Features

- Indirect refractive technology provides bright, even illumination
- Choice of MR-16 halogen lamps, shielded by a clear polycarbonate cover; optional MR-16 LED lamps with life expectancy of more than 50,000 hours
- Exit sign long-life LED light source assures low maintenance costs and superior illumination
- Durable injection-molded thermoplastic housing with push-to-snap design; optional vandal-resistant shield with tamper-proof screws
- Available with sealed, maintenance-free, lead-calcium or nickel-metal hydride batteries
- Dual-voltage input: 120/277VAC; optional advanced diagnostic circuitry, flasher/buzzer and fire alarm-activated flasher
- Remote load capacity up to 50 watts when supplied with no heads
- Available in single- or double-face configurations, both with means for ceiling mounting
- Easy-to-install canopy and field-selectable snap-in/out chevrons for quick and easy installation
- UL® 924 Listed
- Five-year full warranty (excluding lamps and fuses)

Accessories (Order as a separate item)

Wire Guard (wall mount)	WG2-E
White Pendant	PRE-P-WH*
Black Pendant	PRE-P-B*

* Specify pendant length.

Convert Single Face to Double Face

Red/White	005715-E
Red/Black	005716-E
Green/White	005717-E
Green/Black	005718-E

Replacement Batteries

860.0004-E	Lead-Calcium
022318-E	NiMH 6V 12W
022319-E	NiMH 12V 24W
022320-E	NiMH 12V 40W, 50W

Replacement Lamps

580.0074-E	MR-16, 6V 6W
580.0079-E	MR-16, 6V 10W
580.0097-E	MR-16, LED 6V 4W
580.0099-E	MR-16, 12V 10W
580.0080-E	MR-16, 12V 12W
580.0075-E	MR-16, LED 12V 20W
580.0093-E	MR-16, LED 12V 4W

Power Consumption and Unit Rating

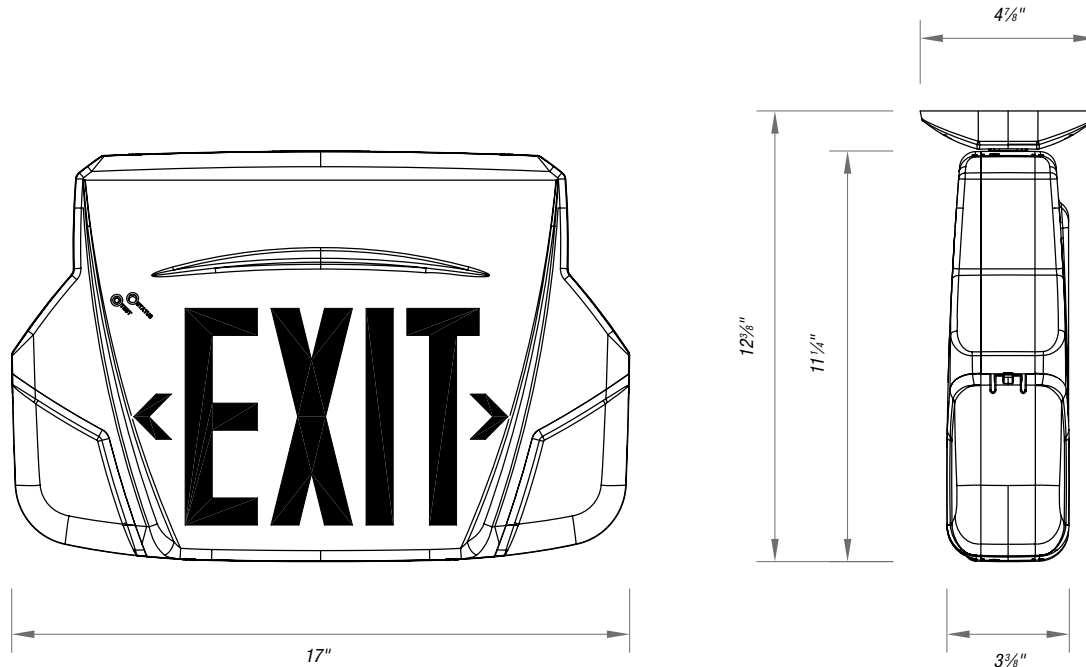
MODEL NO.	AC SPECS			WATTS TO 87.5% OF RATED BATTERY VOLTAGE*			
				1½ HRS.	2 HRS.	3 HRS.	4 HRS.
EXIT SIGN MODULE	Battery Type	120/277VAC	Less than 2W	—	—	—	—
612M	Lead-Calcium	120/277VAC	.11/.05A	12	8	—	—
612H	NiMH	120/277VAC	.11/.05A	12	9	—	—
624M	Lead-Calcium	120/277VAC	.11/.05A	24	16	12	9
1224M	Lead-Calcium	120/277VAC	.22/.08A	24	16	12	9
1224H	NiMH	120/277VAC	.22/.08A	24	18	12	9
1240H	NiMH	120/277VAC	.22/.08A	40	30	20	15
1250H	NiMH	120/277VAC	.22/.08A	50	36	24	18

* National Electrical Code® specification.

Spec-Grade Commercial

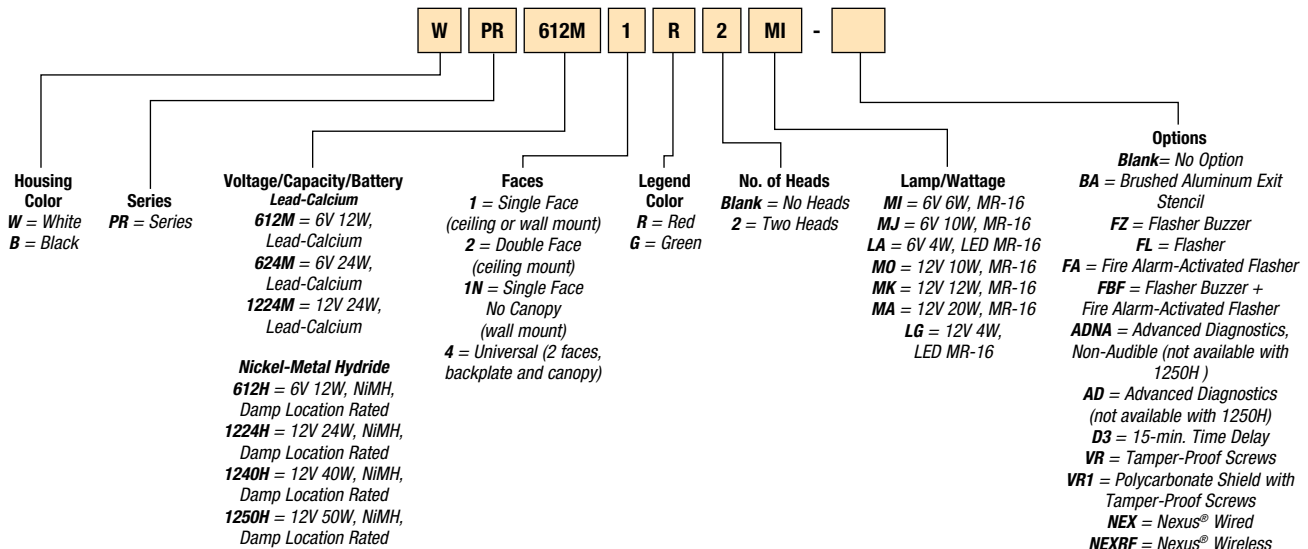
Dimensions

Dimensions are approximate and subject to change.



Lighting — Emergi-Lite® Emergency Lighting

Catalog Numbering System



Spec-Grade Commercial

Ideal for offices, entertainment facilities and retail locations.

Provider™ PRO-2/PRO-3 Series — 6-Volt Thermoplastic Housing

A sleek, low-profile thermoplastic body combined with a transparent polycarbonate lamp shield creates a contemporary style that's just right for today's aesthetic demands.

The proven look in emergency lighting design, the Provider™ Series has a standard white finish to complement a variety of interiors including offices, theaters, restaurants and shopping malls. With a body measuring only 11" x 5", the versatile Provider™ Series can be mounted in any orientation on a wall or ceiling.

Standard Features

- 6-volt high-intensity tungsten (HIT) lamps and mirrored reflectors supply generous amounts of emergency lighting
- Completely self-contained; thermoplastic construction with a polycarbonate shield protects the fully adjustable self-locking heads
- Available with sealed, maintenance-free lead-calcium batteries
- Integrated circuitry offers 120/277VAC, 60 Hz standard operation, LED pilot light, rocker-type test switch, temperature-compensated, low-voltage battery disconnect, brownout protection and lockout (automatic battery connect)
- Optional Advanced Diagnostics circuitry monitors every critical function of the unit and provides an audible and visual indicator when a fault is detected (non-audible versions available)
- Universal mounting pattern keyhole slots and a conduit knockout provide alternate mounting methods
- UL® Listed; complies with NEC®, Life Safety Code® and OSHA; UL® Listed for use in damp locations
- Three-year full warranty, excluding lamps, pilot lights and fuses

Accessories (Order as a separate item)

Replacement Lamps 570.0012-E

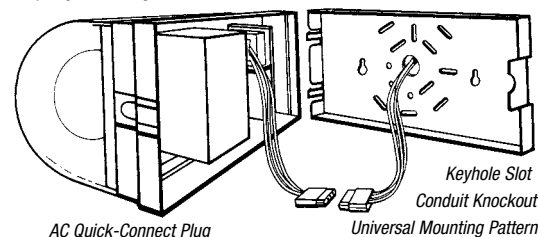
Provider™ Remote Lighting Fixtures (Requires an external DC source)

6-Volt 10.8-Total Unit Wattage.....6PRO-10
12-Volt 18-Total Unit Wattage.....12PRO-2(ZF)
24-Volt 18-Total Unit Wattage.....24PRO-2(ZN)



Fast and Easy Installation

Snap-together design eliminates screws.



The Provider™ Series' quick-connect plug, battery lockout feature and snap-together design make installation fast and easy.

With the AC quick-connect plug, contractors simply make the AC connection to the plug, mount the backplate and plug in the unit.

The battery lockout feature is an AC-activated load switch that prevents the batteries from discharging until the unit is energized with AC power. This allows the contractor to install the Provider™ and connect the batteries in one convenient operation.

Universal mounting pattern keyhole slots and a conduit knockout provide alternate mounting methods.

Unit Ratings

Each unit furnished with one HIT lamp per head.

SEALED MAINTENANCE- FREE BATTERY TYPES	DC VOLTAGE	MODEL NUMBER	WATTS TO 87.5% OF RATED BATTERY VOLTAGE*			
			1½ HRS.	2 HRS.	3 HRS.	4 HRS.
			PROVIDER™ Battery Unit			
Lead-Calcium	6	PRO-2	12	9.5	—	—
	6	PRO-3	18	12	10	7

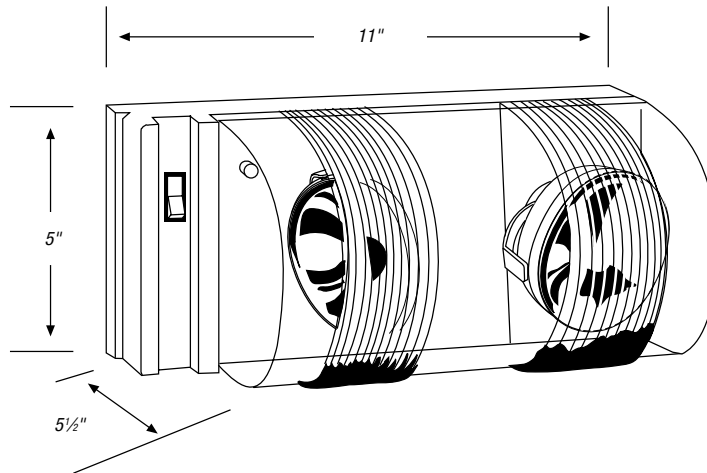
* National Electrical Code specification.

NEC and Life Safety Code are registered trademarks of the National Fire Protection Association, Inc.

Spec-Grade Commercial

Dimensions

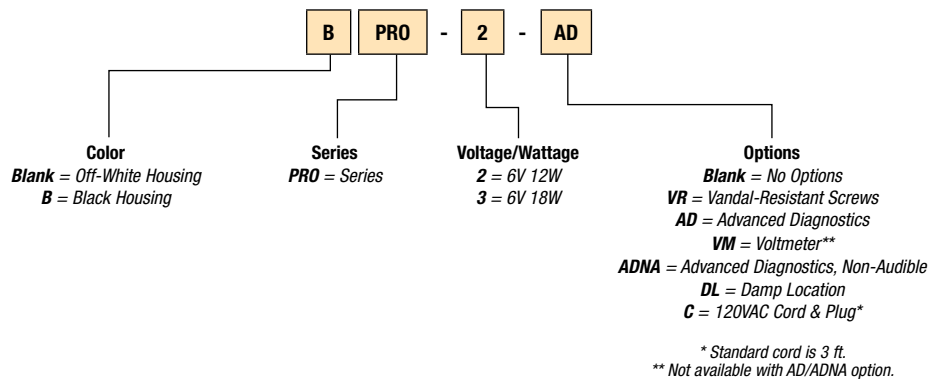
Dimensions are approximate and subject to change.



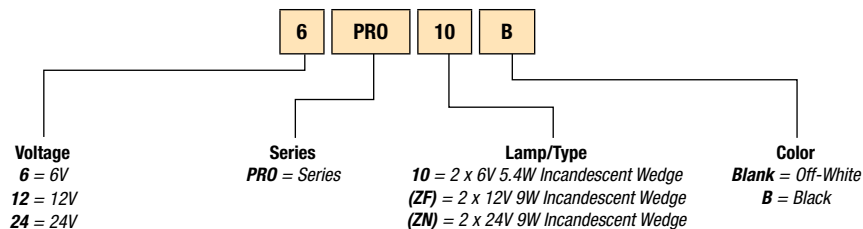
Lighting — Emergi-Lite® Emergency Lighting

Catalog Numbering System

Battery Unit



Remote Unit



Spec-Grade Commercial

A contemporary family of decorative emergency light units.

EC-2/ECX-2 Series — 6-Volt Thermoplastic Unit

The universal mounting pattern, keyhole slots and conduit entry in the EC-2 and ECX-2 Series provide alternate mounting and complete flexibility in an emergency lighting unit. On the shelf and on a specification, the EC Series gives you a contemporary family of decorative emergency light units, matching exit signs and remotes to coordinate for aesthetic appeal. On the job, the modular design allows field-upgrading the basic model to a master unit for powering matching remote lighting heads or AC/DC exit signs, including the new LED models.

Standard Features

- Each self-contained unit comes with two 5.4-watt high-intensity incandescent lamps mounted in polished reflectors
- Housing and heads are constructed of high-impact UL® 94, 5VA flame classification, off-white thermoplastic that resists denting, peeling, scratching and corrosion
- Available with sealed, maintenance-free lead-calcium batteries
- Integrated circuitry offers 120/277VAC, 60 Hz, .3/.15 amp standard operation, LED pilot light, automatic charging, instantaneous transfer, temperature-compensated charger, low-voltage battery disconnect, brownout protection, lockout (automatic battery connect) and reverse-polarity protection
- Universal mounting pattern, keyhole slots and conduit entry provide alternate mounting capability, and the housing and back plate snap together for ease of installation
- UL® Listed; complies with NEC®, Life Safety Code® and OSHA; UL® Listed for use in damp locations
- The EC-2 (12W max.) and ECX-2 (24W max.) Series have a three-year full warranty, excluding lamps and fuses

Unit Ratings

Furnished with two 5.4-watt high-intensity incandescent lamps.

SEALED MAINTENANCE-FREE BATTERY TYPES	DC VOLTAGE	MODEL NO.	WATTS TO 90 MINUTES	REMOTE WATTS
Unit Equipment				
Lead-Calcium	6	EC-2	12	—
	6	ECX-2	12	12
	6	EC-2-AD	12	—
	6	ECX-2-AD	12	12
Nickel-Cadmium	6	EC-2-AD-N	12	—
	6	ECX-2-AD-N	12	12
WATTS TO 87.5% OF RATED BATTERY VOLTAGE*				
SEALED MAINTENANCE-FREE BATTERY TYPES	1½ HRS.	2 HRS.	3 HRS.	4 HRS.
ECX-2 Series Unit Equipment — With Remote Capability				
Lead-Calcium	24	15	—	—
Nickel-Cadmium**	24	18	12	—

* National Electrical Code® specification.

** Only available with Advanced Diagnostics.



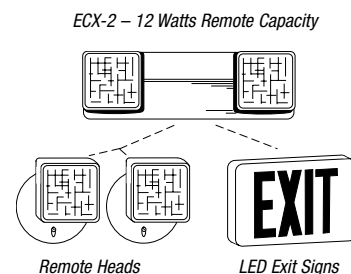
Flexibility in an Emergency Light Unit

• On the specification

Its contemporary design allows you to coordinate the aesthetics of emergency specifications with matching models: an emergency unit and a remote head.

• On the job

Changes on the job are never a problem with the EC Series. Its modular design allows you to field-upgrade the basic model to a master unit for powering matching remote lighting heads or AC/DC exit signs, including the new LED illumination models.



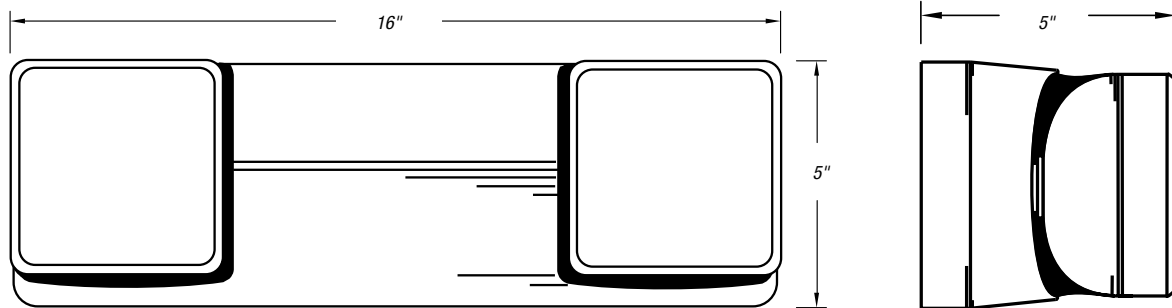
• On the shelf

The modular design of the EC Series gives you a contemporary family of decorative emergency light units, matching exit signs and remotes.

Spec-Grade Commercial

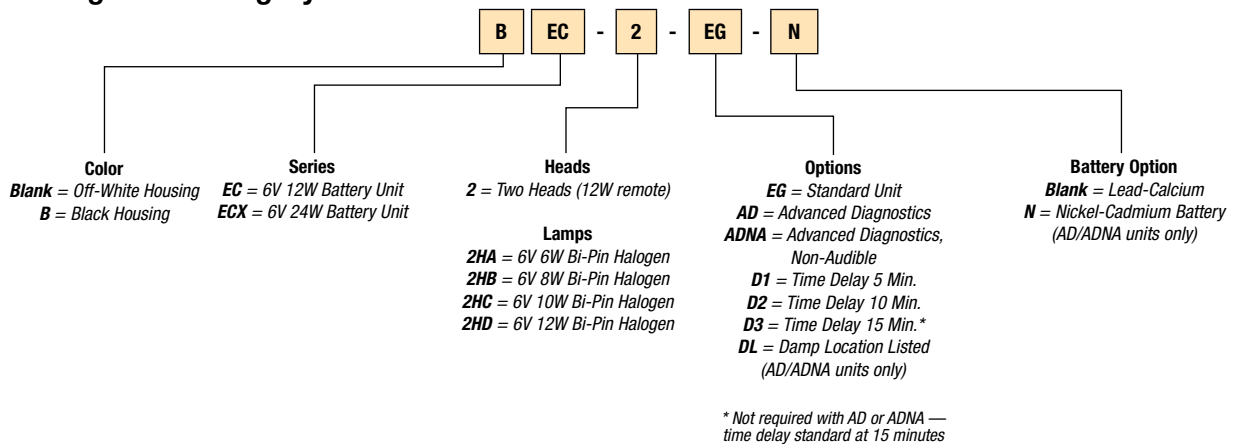
Dimensions

Dimensions are approximate and subject to change.



Lighting — Emergi-Lite® Emergency Lighting

Catalog Numbering System



Spec-Grade Commercial

Contemporary metal housing with decorative front-mounted heads.

ECC and ECM Series — 6- and 12-Volt Steel Units

Featuring a contemporary metal housing with decorative front-mounted heads, the ECC and ECM Series offers several design options. The ECC and ECM Series is available in 6- or 12-volt units from 18 to 54 watts with either lead-calcium or nickel-cadmium sealed maintenance-free batteries. See the entire line of matching Escort products, including a decorative thermoplastic exit sign and matching remote heads.

Standard Features

- Each unit comes with two front-mounted EF-23 heads with 9-watt high-intensity incandescent lamps (standard)
- Constructed of 20-gauge steel with an off-white baked enamel finish
- Available with sealed, maintenance-free nickel-cadmium or lead-calcium batteries
- PulsePlus Charger circuitry offers 120/277VAC, 60 Hz, .3/.15 amps (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature compensation, sealed relay, low-voltage battery disconnect, brownout protection and lockout (automatic battery connect)
- Hinged front door
- UL® Listed; complies with NEC®, Life Safety Code® and OSHA and approved for use in the Commonwealth of Pennsylvania and New York City
- Three-year full warranty, excluding lamps and fuses

Accessories (Order as a separate item)

Mounting Bracket (S cabinet only) **BJ**
 Wire Guard..... **WG10-E**
 Clear Polycarbonate Vandal-Resistant Shield..... **VRS-BB***
 Clear NEMA 4X Polycarbonate Vandal-Resistant Shield..... **VRSBB-4X***

* S cabinet only, order on separate line.



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Unit Ratings

Furnished standard with two 9-watt high-intensity incandescent lamps.

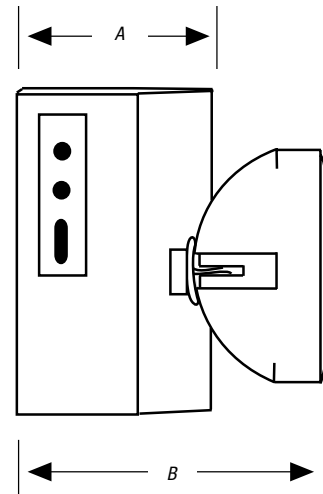
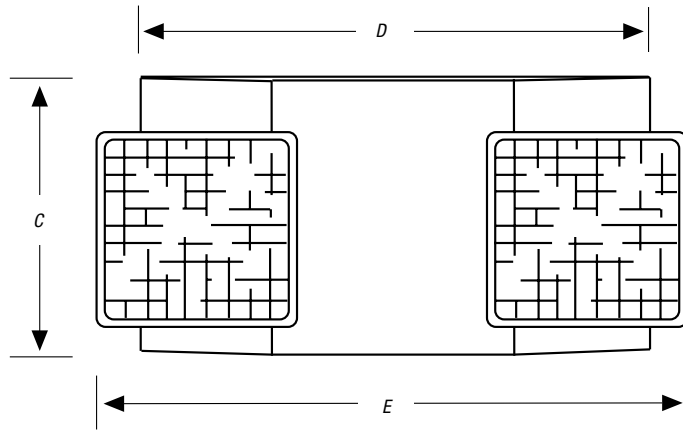
SEALED MAINTENANCE- FREE BATTERY TYPES	DC VOLTAGE	MODEL NO.	WATTS TO 87.5% OF RATED BATTERY VOLTAGE*				CABINET SIZE
			1½ HRS.	2 HRS.	3 HRS.	4 HRS.	
Nickel-Cadmium	6	ECC18-2	18	12	—	—	S
	6	ECC25-2	25	18	12	9	S
	12	12ECC36-2	36	21	15	12	S
	12	12ECC50-2	50	36	25	18	S
Lead-Calcium	6	ECM18-2	18	12	10	7	S
	6	ECM27-2	27	18	14	10	S
	6	ECM36-2	36	24	20	14	S
	6	ECM54-2	54	37	28	21	L
	12	12ECM36-2	36	25	20	14	S
	12	12ECM54-2	54	37	28	21	L

* National Electrical Code® specification.

Spec-Grade Commercial

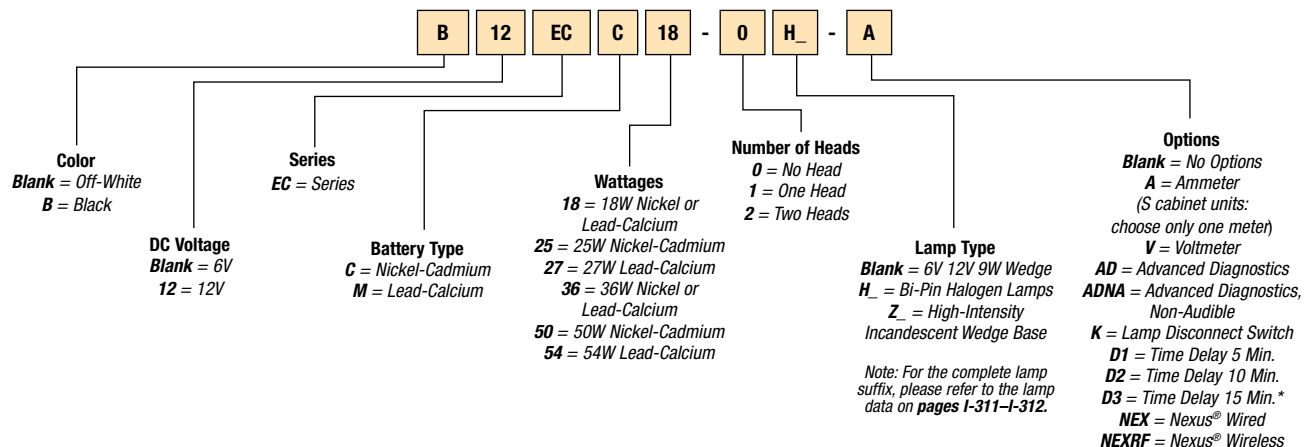
Dimensions

Dimensions are approximate and subject to change.



	CABINET	
	S	L
A	3½"	4"
B	6⅝"	6¾"
C	5¼"	6¼"
D	11"	12½"
E	15¼"	16½"

Catalog Numbering System



* Not required with AD or ADNA.
Time delay standard at 15 minutes.

Spec-Grade Commercial

6- or 12-volt emergency unit.

JC Series

The economical, compact housing design of the JC Series is ideally suited for commercial applications where space, performance and ease of installation are required. The JC Series emergency battery unit incorporates performance and labor-saving features normally found only in higher-capacity units.

Standard Features

- Each unit comes with two impact-resistant, flame-retardant thermoplastic EF-10 heads with 6-watt MR-16 halogen lamps (standard); available with up to 20-watt high-output illumination
- Compact steel cabinet with corrosion-resistant undercoating
- Available with sealed, maintenance-free nickel-cadmium or lead-calcium batteries
- Power requirements: 120/277VAC, 60 Hz, .3/.15 amp
- Automatic, temperature-compensated solid-state charger with a high-capacity, automatic, dust-tight instantaneous-transfer relay
- Low-voltage disconnect prevents over discharge of battery
- Automatic brownout protection
- Labor-saving AC line latch prevents battery discharge during installation to a non-energized circuit
- Fused output circuit
- Optional Advanced Diagnostics comes with a microcontroller-based pulse-type charger
- Rear keyhole mounting slots enable unit to mount directly to any standard 4" junction box
- UL® Listed
- Three-year full warranty, excluding lamps and fuses

Power Consumption

MODEL NO.	AC INPUT	MAXIMUM	
		INPUT CURRENT	INPUT POWER
JC	120VAC	.20A	24W
	277VAC	.08A	24W
12JC	120VAC	.24A	30W
	277VAC	.12A	30W

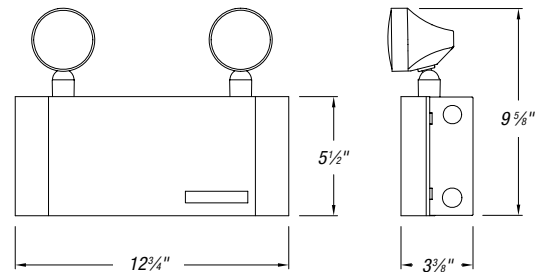


nexus®



Dimensions

Dimensions are approximate and subject to change.



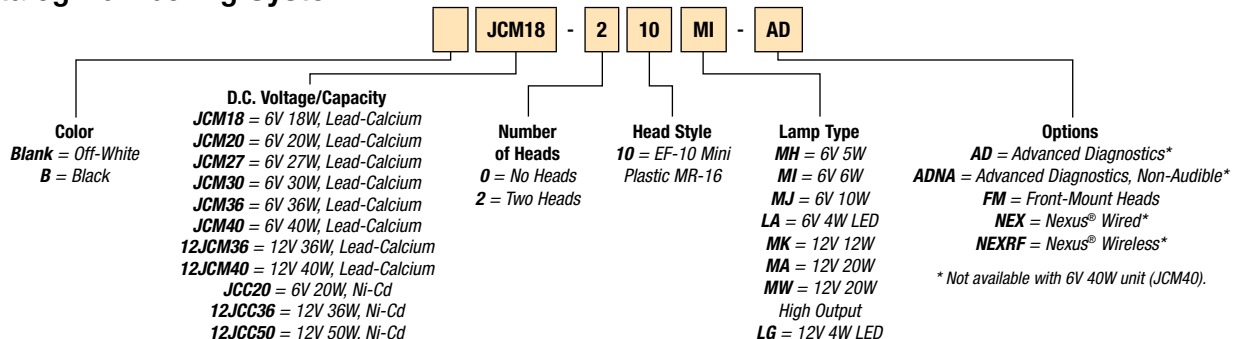
Unit Ratings

Furnished standard with two 6V 6W MR-16 lamps.

SEALED MAINTENANCE- FREE BATTERY TYPES	VOLTAGE	MODEL NUMBER	WATTS TO 87.5% OF RATED BATTERY VOLTAGE*			
			1 1/2 HRS.	2 HRS.	3 HRS.	4 HRS.
Lead-Calcium	6	JCM	18	12	—	—
		JCM20	20	15	12	—
		JCM27	27	18	15	—
		JCM30	30	20	18	—
		JCM36	36	27	20	12
		JCM40	40	30	24	15
	12	12JCM36	36	27	20	12
		12JCM40	40	30	24	15
Nickel-Cadmium	6	JCC20	20	18	12	—
	12	12JCC36	36	24	15	12
		12JCC50	50	36	24	18

* National Electrical Code® specification.

Catalog Numbering System



Spec-Grade Commercial

6- and 12-volt steel emergency unit.

JA Series

Impressive performance in a decorative compact housing! The JA Series is designed to meet the needs of interior design professionals. Contemporary design is combined with state-of-the-art path of egress illumination in the decorative JA Series.

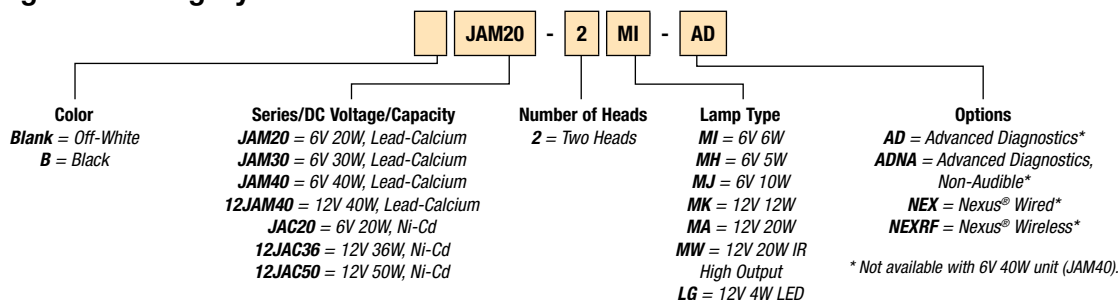
Standard Features

- Each unit comes with two emergency heads with adjustable swivels and long-life MR-16 halogen or LED lamps, 6V or 12V (standard), available with up to 20W high-output illumination
- Steel cabinet features anti-corrosion undercoating, and the emergency heads are protected by a shock-absorbent, transparent polycarbonate cover that is attached to the cabinet with two vertical screws
- Available with sealed, maintenance-free nickel-cadmium or lead-calcium batteries
- Power requirements: 120/277VAC, 60 Hz, .3/.15 amp
- Solid-state charger is an automatic, temperature-compensated type charger with high-capacity, automatic, dust-tight instantaneous-transfer relay and automatic brownout protection
- Low-voltage disconnect prevents over discharge of battery
- Labor-saving AC line latch prevents battery discharge during installation to a non-energized circuit
- Fused output circuit
- Optional Advanced Diagnostics comes with a microcontrolled-based pulse-type charge
- Emergency heads are installed at the bottom of the unit, providing illumination in any downward direction and do not require a tool for adjusting or aiming
- UL® Listed
- Three-year full warranty, excluding lamps and fuses

Power Consumption

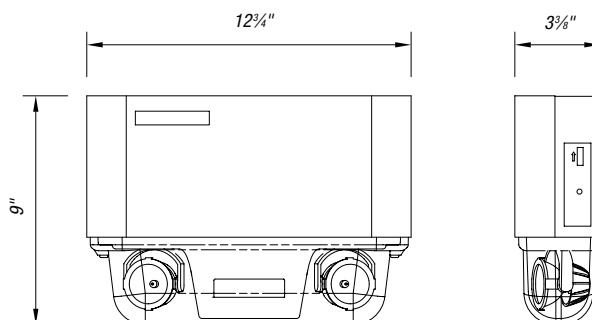
MODEL NO.	AC INPUT	MAXIMUM	
		INPUT CURRENT	INPUT POWER
JA	120VAC	.20A	24W
	277VAC	.08A	24W
12JA	120VAC	.24A	30W
	277VAC	.12A	30W

Catalog Numbering System



Dimensions

Dimensions are approximate and subject to change.



Unit Ratings

Furnished standard with two 6V 10W MR-16 lamps.

SEALED MAINTENANCE-FREE BATTERY TYPES	VOLTAGE	MODEL NO.	WATTS TO 87.5% OF RATED BATTERY VOLTAGE*			
			1 1/2 HRS.	2 HRS.	3 HRS.	4 HRS.
Lead-Calcium	6	JAM20	20	—	—	—
		JAM30	30	20	—	—
		JAM40	40	30	24	—
	12	12JAM40	40	30	24	—
Nickel-Cadmium	6	JAC20	20	—	—	—
	12	12JAC36	36	24	—	—
		12JAC50	50	36	24	—

* National Electrical Code® specification.

Spec-Grade Commercial

6- and 12-volt steel enclosure.

JS Series

Furnished with the highly reliable PulsePlus charger, the JS Series offers excellent value, quality and versatility. The compact, all-metal housing is available in a wide variety of battery options and wattages.

Standard Features

- Each unit comes with two EF-18 heads with 9-watt high-intensity incandescent lamps (standard)
- Constructed of 20-gauge steel with an off-white baked enamel finish
- Available with sealed, maintenance-free nickel-cadmium, long-life lead or lead-calcium batteries
- PulsePlus Charger circuitry offers 120/277VAC, 60 Hz, .3/.15 amps (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature compensation, sealed relay, low-voltage battery disconnect, brownout protection and lockout (automatic battery connect)
- Hinged cabinet door for easy access
- UL® Listed; complies with NEC®, Life Safety Code® and OSHA and is approved for use in the Commonwealth of Pennsylvania and New York City
- Three-year full warranty, excluding lamps and fuses

Accessories (Order as a separate item)

Mounting Bracket (S cabinet)	BJ-E
Wire Guard (S cabinet)	WG1-E
Wire Guard (L cabinet)	WG2-E
Wire Guard (front-mounted heads)	WG10-E
Polycarbonate Vandal-Resistant Shield (S cabinet)	VRS-BB
NEMA 4X Polycarbonate Vandal-Resistant Shield (S cabinet)	VRS-BB4X



Optional Front-Mounted Heads (FM suffix)
for low ceiling applications.



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Unit Ratings

Furnished standard with two 9-watt high-intensity incandescent lamps.

SEALED MAINTENANCE- FREE BATTERY TYPES	DC VOLTAGE	MODEL NO.	WATTS TO 87.5% OF RATED BATTERY VOLTAGE*				CABINET SIZE
			1½ HRS.	2 HRS.	3 HRS.	4 HRS.	
Unit Equipment — No Remote Capability							
Nickel-Cadmium	6	JSC18-2	18	12	—	—	S
	6	JSE9-1	9	7	—	—	S
Long-Life Lead	6	JSE18-2	18	11	8	6	S
	6	JSM9-1	9	6	—	—	S
Lead-Calcium	6	JSM18-2	18	12	10	—	S
Unit Equipment — With Remote Capability							
Nickel-Cadmium	6	JSC25-2	25	18	12	9	S
	12	12JSC36-2	36	21	15	12	S
	12	12JSC50-2	50	36	25	18	S
Long-Life Lead	6	JSE27-2	27	16	12	10	S
	6	JSE36-2	36	24	17	13	S
	6	JSE54-2	54	37	28	21	L
	12	12JSE36-2	36	24	17	13	S
	12	12JSE54-2	54	37	28	21	L
Lead-Calcium	6	JSM27-2	27	18	14	10	S
	6	JSM36-2	36	25	20	14	S
	6	JSM54-2	54	37	28	21	L
	12	12JSM36-2	36	25	20	14	S
	12	12JSM54-2	54	37	28	21	L

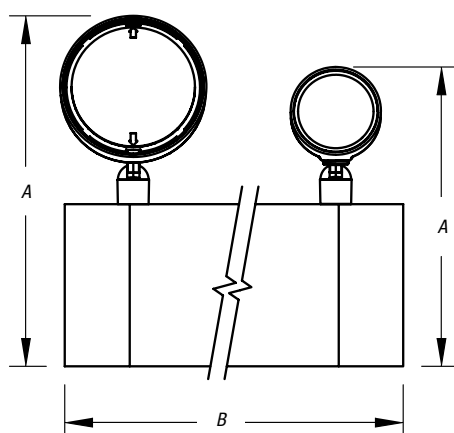
* National Electrical Code® specification. = New York City Approved.

Spec-Grade Commercial

Dimensions

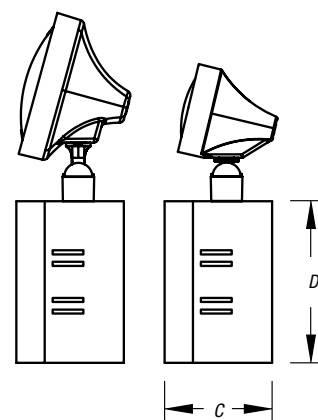
Dimensions are approximate and subject to change.

CABINET	A	B	C	D
S	11 $\frac{1}{8}$ "/9 $\frac{3}{4}$ "	11 $\frac{1}{4}$ "	3 $\frac{1}{2}$ "	5 $\frac{1}{4}$ "
L	12 $\frac{3}{8}$ "/10 $\frac{3}{4}$ "	12 $\frac{3}{4}$ "	4"	6 $\frac{1}{4}$ "

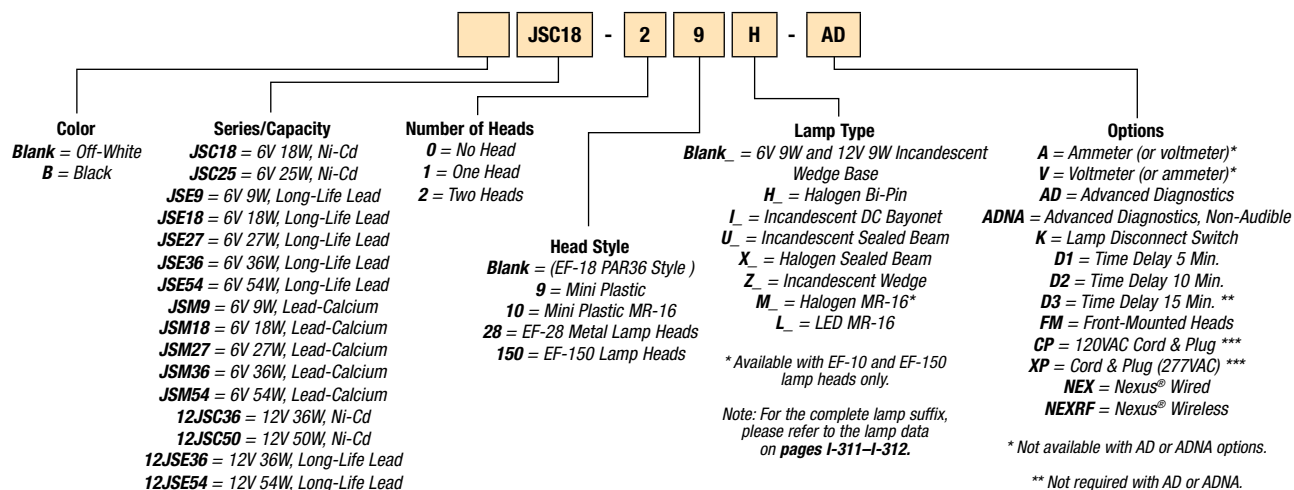


EF-18

EF-9



Catalog Numbering System



Spec-Grade Commercial

6- and 12-volt steel enclosure.

LSE Series

An attractive conventional emergency lighting unit, the LSE Series is available in a wide selection of battery capacities for use where many remote fixtures are required.

Standard Features

- Each unit comes with two EF-18 heads with 9-watt high-intensity incandescent lamps (standard); one or three heads available as options
- All-steel construction with an off-white baked enamel finish
- Available with sealed, maintenance-free long-life lead batteries
- PulsePlus Charger circuitry offers 120/277VAC, 60 Hz input, .3/.15 amps (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature compensation, sealed relay, low-voltage battery disconnect, brownout protection and lockout (automatic battery connect)
- Removable front panel
- UL® Listed; complies with NEC®, Life Safety Code® and OSHA and is approved for use in the Commonwealth of Pennsylvania and New York City
- Three-year full warranty, excluding lamps and fuses

Options

Description	Suffix
Cord Set, 120V.....	-C*
Special-Voltage CP (TL 277V).....	-E*

* Standard cord is 3 ft. Custom lengths available.

Accessories (Order as a separate item)

Mounting Bracket (cabinet A)	B1
Mounting Bracket (cabinet B)	B2
Mounting Shelves (cabinet B)	MP3
Mounting Shelves (cabinet C)	MP6
Mounting Shelves (cabinet D)	MP12
Wire Guard (cabinet A)	WG2-E
Wire Guard (cabinets B and C)	WG3-E
Wire Guard (cabinet D)	WG4-E



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Unit Ratings

Furnished standard with two 9-watt high-intensity incandescent lamps.

SEALED MAINTENANCE- FREE BATTERY TYPES	DC VOLT	MODEL NO.	WATTS TO 87.5% OF RATED BATTERY VOLTAGE*				NO. OF LOAD FUSES	CABINET SIZE
			1½	2	3	4		
			HRS.	HRS.	HRS.	HRS.		
Unit Equipment — No Remote Capability								
Long-Life Lead	6	LSE18-2	18	11	8	6	1	A
Unit Equipment — With Remote Capability								
Long-Life Lead	6	LSE27-2	27	19	10	5	1	A
	6	LSE36-2	36	24	13	7	1	A
	6	LSE54-2	54	36	20	11	1	A
	6	LSE80-2	80	65	35	19	2	B
	6	LSE110-2	110	74	43	21	2	B
	12	12LSE36-2	36	24	13	7	1	A
	12	12LSE54-2	54	37	21	10	2	A
	12	12LSE72-2	72	48	26	14	2	B
	12	12LSE110-2	110	74	43	21	2	B
	12	12LSE320-2	320	210	120	60	2	D

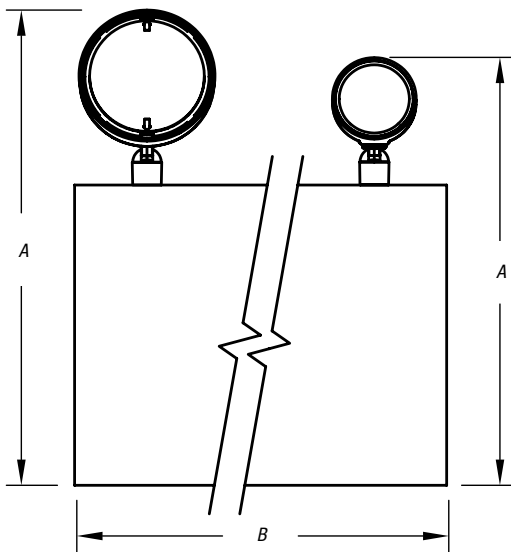
* National Electrical Code® specification. = New York City Approved.

Spec-Grade Commercial

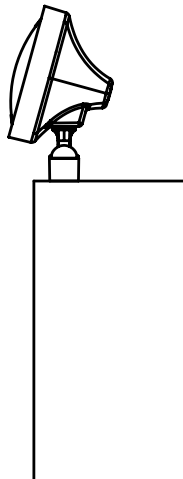
Dimensions

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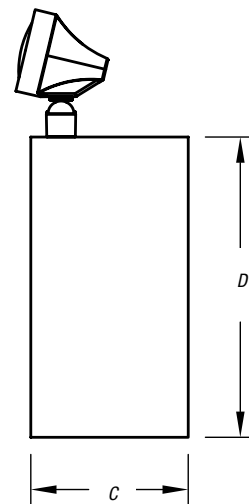
CABINET SIZE	DIMENSIONS			
	A	B	C	D
A	14 1/4" / 13"	13 3/4"	3 1/4"	8 1/2"
B	16 3/8" / 14 3/4"	16 1/8"	5 1/8"	10 1/4"
C	18 3/8" / 16 3/4"	16 1/2"	7 1/4"	12 1/4"
D	18 3/8" / 16 3/4"	27"	7 1/4"	12 1/4"



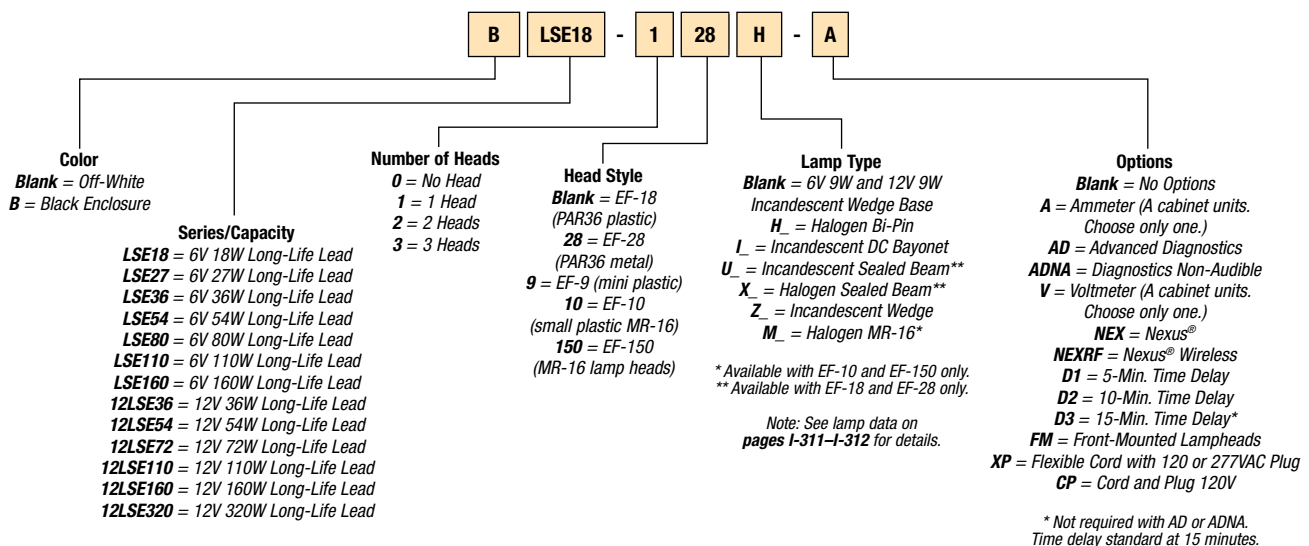
EF-18



EF-9



Catalog Numbering System



Spec-Grade Commercial

6- and 12-volt steel enclosure.

LC Series

An attractive conventional emergency lighting unit, the LC Series is available in a wide selection of battery capacities for use where many remote fixtures are required.

Standard Features

- Each unit comes with two EF-18 heads with 9-watt high-intensity incandescent lamps (standard); one or three heads available as options
- All-steel construction with an off-white baked enamel finish
- Available with sealed, maintenance-free lead-calcium (immobilized electrolyte) batteries
- PulsePlus Charger circuitry offers 120/277VAC, 60 Hz input, .3/.15 amps (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature compensation, sealed relay, low-voltage battery disconnect, brownout protection and lockout (automatic battery connect)
- Removable front panel
- UL® Listed; complies with NEC®, Life Safety Code® and OSHA and is approved for use in the Commonwealth of Pennsylvania and New York City
- Three-year full warranty, excluding lamps and fuses

Accessories (Order as a separate item)

Mounting Bracket (cabinet A)	B1
Mounting Bracket (cabinet B)	B2
Mounting Shelves (cabinet B)	MP3
Mounting Shelves (cabinet C)	MP6
Mounting Shelves (cabinet D)	MP12
Wire Guard (cabinet A)	WG2-E
Wire Guard (cabinets B and C)	WG3-E
Wire Guard (cabinet D)	WG4-E



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Unit Ratings

Furnished standard with two 9-watt high-intensity incandescent lamps.

SEALED MAINTENANCE- FREE BATTERY TYPES	DC VOLT	MODEL NO.	WATTS TO 87.5% OF RATED BATTERY VOLTAGE*				NO. OF LOAD FUSES	CABINET SIZE
			1½	2	3	4		
			HRS.	HRS.	HRS.	HRS.		
<i>Unit Equipment — With Remote Capability</i>								
Lead-Calcium (Immobilized Electrolyte)	6	LC87-2	87	70	41	24	2	B
	6	LC100-2	100	77	47	24	2	C
	6	LC175-2	175	140	82	48	2	C
	6	LC200-2	200	168	96	48	2	C
	12	12LC150-2	150	120	66	36	2	C
	12	12LC175-2	175	140	85	48	2	C
	12	12LC200-2	200	168	96	48	2	C
	12	12LC300-2	300	240	132	72	2	D
	12	12LC350-2	350	280	170	96	2	D
	12	12LC400-2	400	336	192	95	2	D

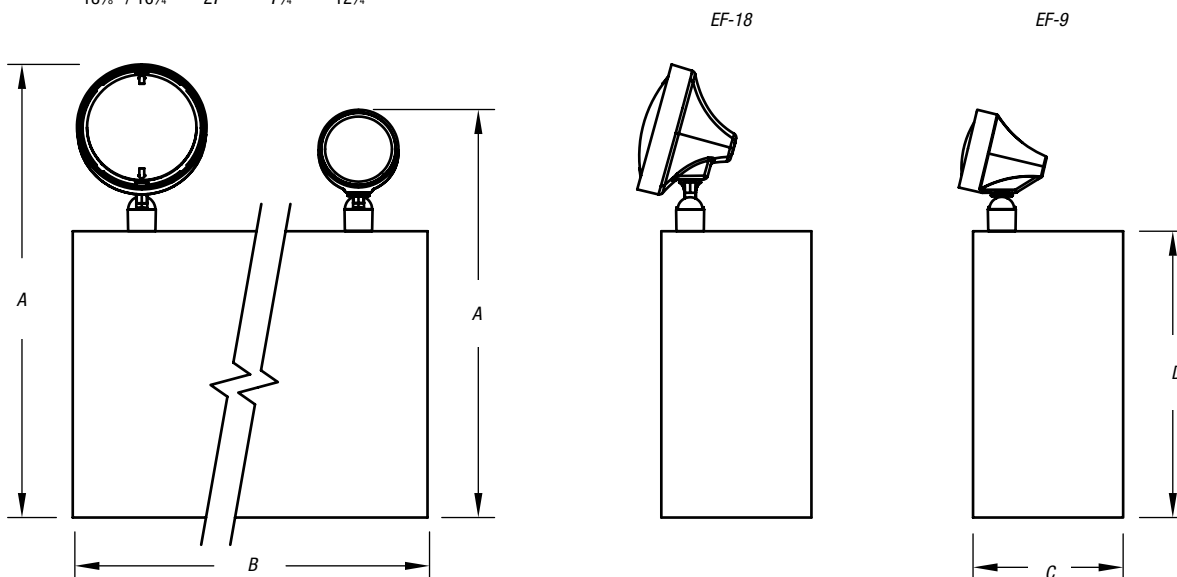
* National Electrical Code® specification. = New York City Approved.

Spec-Grade Commercial

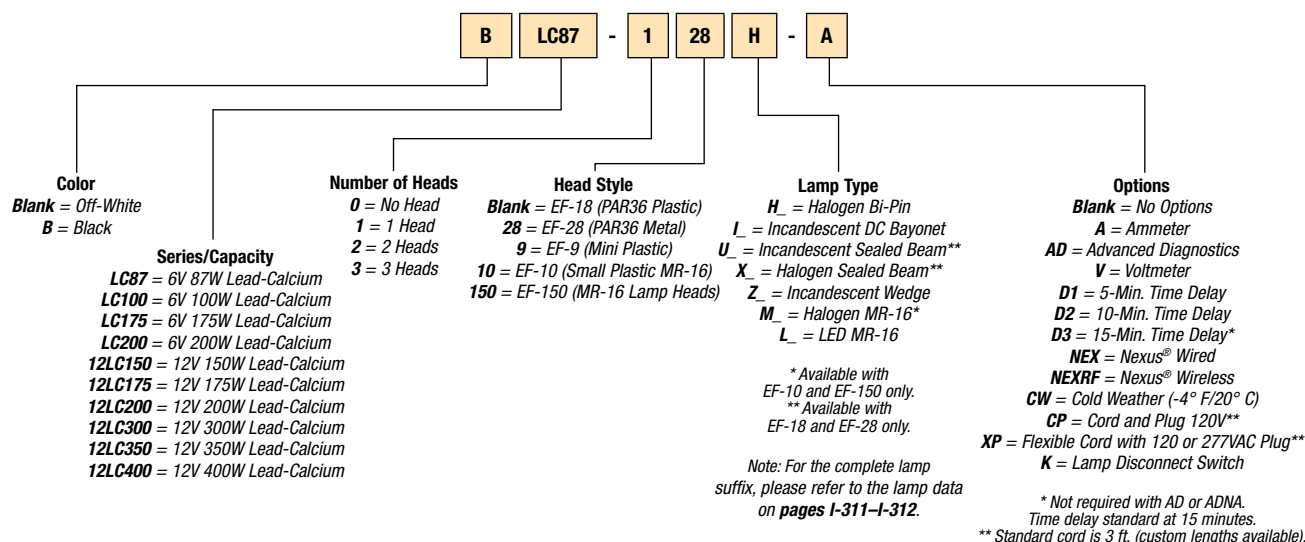
Dimensions

Dimensions are approximate and subject to change.

CABINET SIZE	DIMENSIONS			
	A	B	C	D
A	14 1/2" / 13"	13 3/4"	3 1/4"	8 1/2"
B	16 3/8" / 14 3/4"	16 1/8"	5 1/16"	10 1/4"
C	18 3/8" / 16 3/4"	16 1/2"	7 1/4"	12 1/4"
D	18 3/8" / 16 3/4"	27"	7 1/4"	12 1/4"



Catalog Numbering System



Spec-Grade Commercial

6- and 12-volt steel enclosure.

LS Series

An attractive conventional emergency lighting unit, the LS Series is available in a wide selection of battery capacities for use where many remote fixtures are required.

Standard Features

- Each unit comes with two EF-18 heads with 9-watt high-intensity incandescent lamps (standard); one and three heads available as options
- Constructed of 20-gauge steel with an off-white baked enamel finish
- Available with sealed, maintenance-free nickel-cadmium or lead-calcium batteries
- Power requirements: 120/277VAC 60 Hz, .3/.15 amp
- PulsePlus Charger circuitry offers 120/277VAC, 60 Hz, .3/.15 amps (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature compensation, sealed relay, low-voltage battery disconnect, brownout protection and lockout (automatic battery connect)
- Removable front panel
- UL® Listed; complies with NEC®, Life Safety Code® and OSHA and is approved for use in the Commonwealth of Pennsylvania and New York City
- Three-year full warranty, excluding lamps and fuses

Accessories (Order as a separate item)

Mounting Bracket (cabinet A)	B1
Mounting Bracket (cabinet B)	B2
Mounting Shelves (cabinet B)	MP3
Mounting Shelves (cabinet C)	MP6
Wire Guard (cabinets A and B)	WG2-E
Wire Guard (cabinets B and C)	WG3-E



nexus®



Unit Ratings

Furnished standard with two 9-watt high-intensity incandescent lamps.

SEALED MAINTENANCE- FREE BATTERY TYPES	DC VOLT	MODEL NO.	WATTS TO 87.5% OF RATED BATTERY VOLTAGE*				NO. OF LOAD FUSES	CABINET SIZE
			1½ HRS.	2 HRS.	3 HRS.	4 HRS.		
<i>Unit Equipment — No Remote Capability</i>								
Nickel-Cadmium	6	LSC18-2	18	12	9	6	1	A
Lead-Calcium	6	LSM18-2	12	12	10	7	1	A
<i>Unit Equipment — With Remote Capability</i>								
Nickel-Cadmium	6	LSC25-2	25	18	9	—	1	A
	12	12LSC36-2	36	21	12	6	1	A
	12	12LSC50-2	50	36	18	10	1	A
Lead-Calcium	6	LSM27-2	27	18	10	6	1	A
	6	LSM36-2	36	25	14	7	1	A
	6	LSM54-2	54	37	21	12	1	A
	6	LSM81-2	81	54	36	18	2	B
	6	LSM110-2	110	72	40	24	2	B
	6	LSM162-2	162	108	60	48	2	C
	6	LSM200-2	200	144	80	48	2	C
	12	12LSM36-2	36	25	14	7	1	A
	12	12LSM54-2	54	37	21	12	1	A
	12	12LSM110-2	110	72	40	24	2	B
	12	12LSM162-2	162	108	60	36	2	C
	12	12LSM220-2	220	144	80	48	2	C

* National Electrical Code® specification.

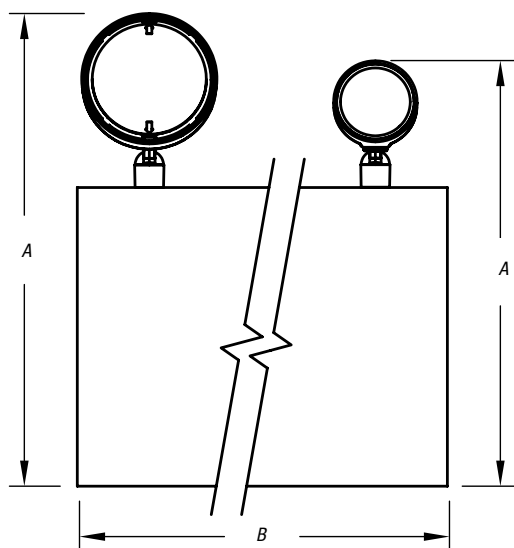
 = New York City Approved.

Spec-Grade Commercial

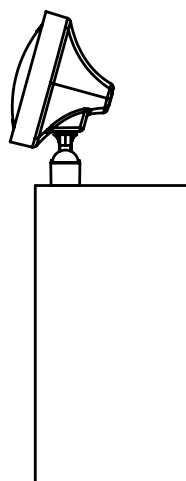
Dimensions

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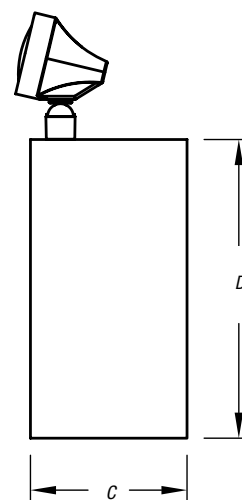
CABINET SIZE	DIMENSIONS			
	A	B	C	D
A	14 $\frac{1}{8}$ " / 13"	12 $\frac{1}{4}$ "	3 $\frac{1}{4}$ "	8 $\frac{1}{2}$ "
B	16 $\frac{3}{8}$ " / 14 $\frac{3}{4}$ "	16 $\frac{1}{8}$ "	5 $\frac{1}{16}$ "	10 $\frac{1}{4}$ "
C	18 $\frac{3}{8}$ " / 16 $\frac{3}{4}$ "	16 $\frac{1}{2}$ "	7 $\frac{1}{4}$ "	12 $\frac{1}{4}$ "



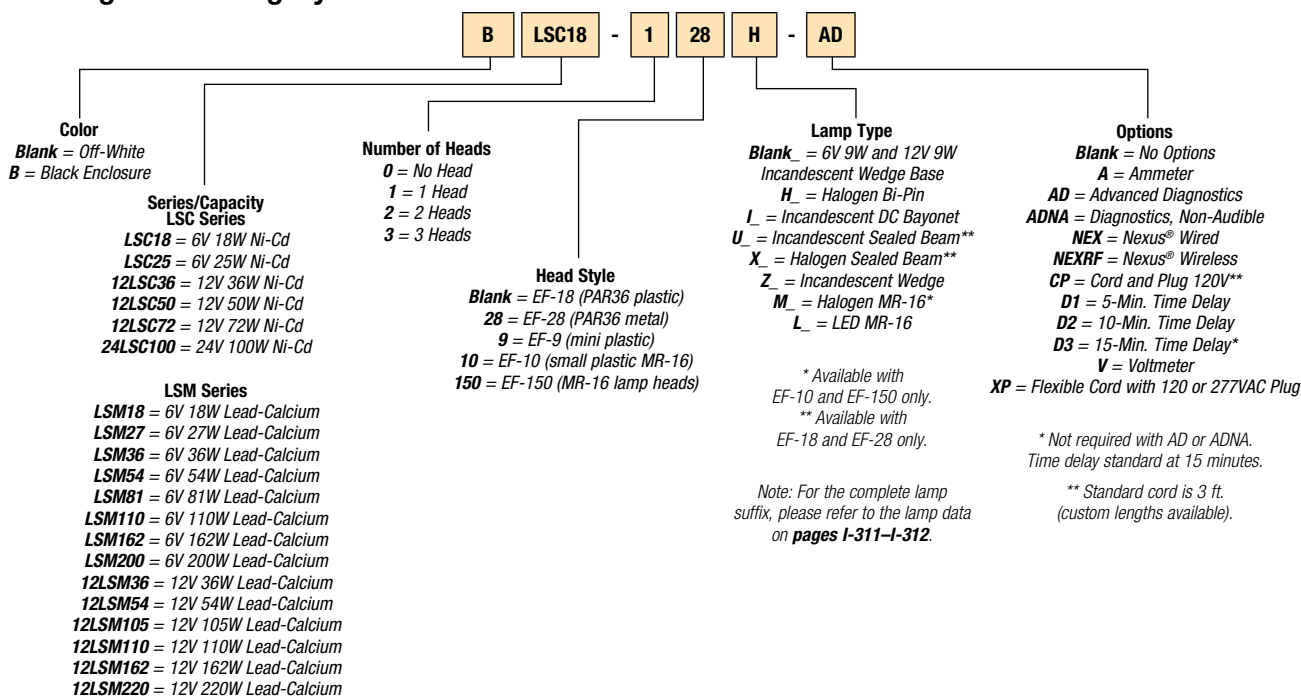
EF-18



EF-9



Catalog Numbering System



Spec-Grade Commercial

24-volt steel enclosure.

24 LS and 24 LC Series

Available in a wide selection of battery capacities for use where many remote fixtures are required, the 24 LS and 24 LC Series are ideal in areas where an attractive conventional emergency lighting unit is required.

Standard Features

- Each unit comes with two EF-18 heads with 9-watt high-intensity incandescent lamps (standard)
- All-steel construction with an off-white baked enamel finish
- Available with sealed, maintenance-free nickel-cadmium, long-life lead, lead-calcium (immobilized electrolyte) or lead-calcium batteries
- PulsePlus Charger circuitry offers 120/277VAC, 60 Hz, .3/.15 amps (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature compensation, sealed relay, low-voltage battery disconnect, brownout protection and lockout (automatic battery connect)
- Removable front panel
- UL® Listed; complies with NEC®, Life Safety Code® and OSHA and is approved for use in the Commonwealth of Pennsylvania
- Three-year full warranty, excluding lamps and fuses

Accessories (Order as a separate item)

Mounting Bracket (cabinet B)	B2
Mounting Shelves (cabinet B)	MP3
Mounting Shelves (cabinet C)	MP6
Mounting Shelves (cabinet D)	MP12
Wire Guard (cabinet B)	WG2-E
Wire Guard (cabinet C)	WG3-E
Wire Guard (cabinet D)	WG4-E



Unit Ratings

Furnished standard with two 9-watt high-intensity incandescent lamps.

SEALED MAINTENANCE- FREE BATTERY TYPES	DC VOLT	MODEL NO.	WATTS TO 87.5% OF RATED BATTERY VOLTAGE*				NO. OF LOAD FUSES	CABINET SIZE
			1½	2	3	4		
			HRS.	HRS.	HRS.	HRS.		
Unit Equipment — With Remote Capability								
Nickel-Cadmium	24	24LSC72-2	72	42	24	12	2	B
	24	24LSC100-2	100	73	37	20	2	B
Long-Life Lead	24	24LSE72-2	72	48	26	14	2	B
	24	24LSE110-2	110	74	43	21	2	B
	24	24LSE320-2	320	300	148	76	2	D
Lead-Calcium (Immobilized Electrolyte)	24	24LC300-2	300	240	132	72	2	D
	24	24LC350-2	350	280	168	96	2	D
	24	24LC400-2	400	336	192	96	2	D
Lead-Calcium	24	24LSM110-2	110	72	40	24	2	B
	24	24LSM220-2	220	144	80	48	2	C

* National Electrical Code® specification.

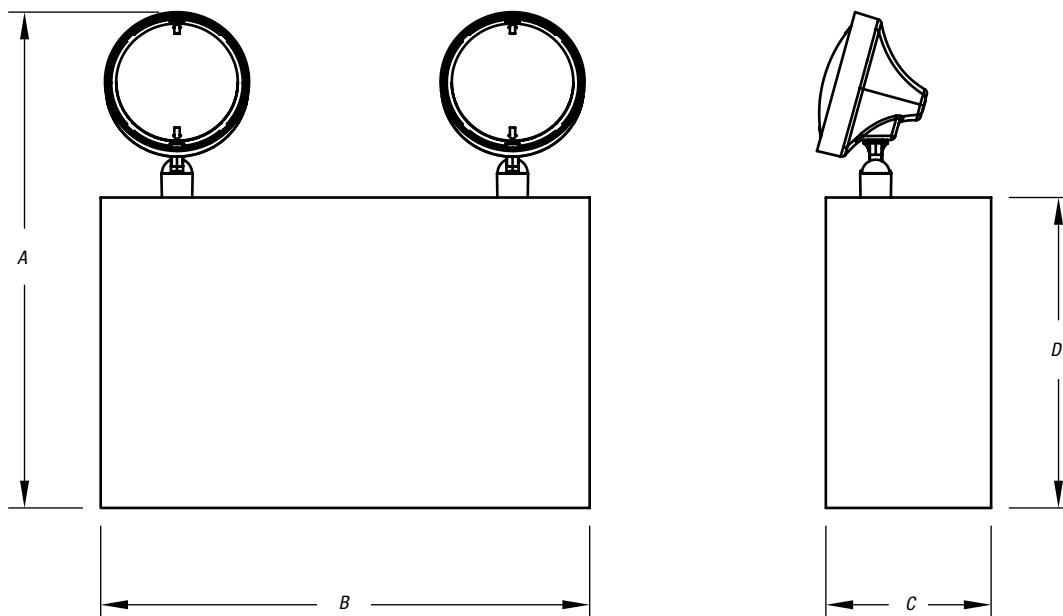
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Spec-Grade Commercial

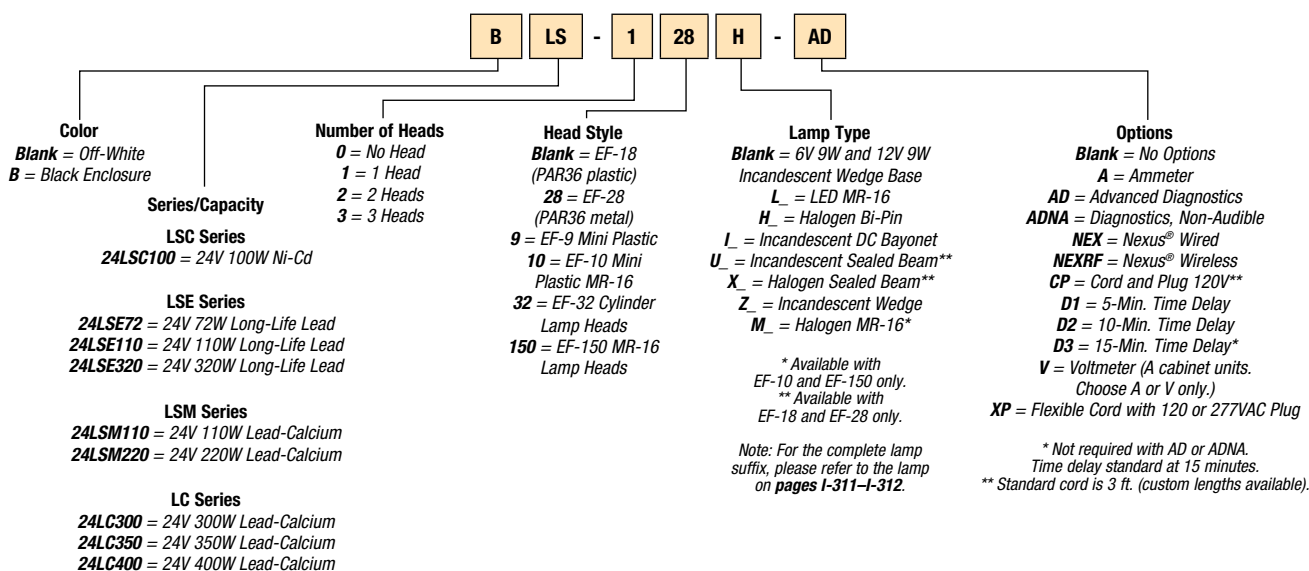
Dimensions

Dimensions are approximate and subject to change.

CABINET SIZE	DIMENSIONS			
	A	B	C	D
B	16 $\frac{3}{8}$ "	16 $\frac{1}{8}$ "	5 $\frac{1}{8}$ "	10 $\frac{1}{4}$ "
C	18 $\frac{3}{8}$ "	16 $\frac{1}{2}$ "	7 $\frac{1}{4}$ "	12 $\frac{1}{4}$ "
D	18 $\frac{3}{8}$ "	27"	7 $\frac{1}{4}$ "	12 $\frac{1}{4}$ "



Catalog Numbering System



Spec-Grade Commercial

Steel LED exit sign and combination unit.

X10 LED Series

A rugged steel sign designed for ease of installation, the X10 Series is a fully universal exit sign.

The removable side panel allows the exit faces to be changed as required. Made of 20-gauge steel, the X10 Series is available with an off-white or black finish.

Standard Features

- Red or green LED light sources
- Constructed of rugged 20-gauge steel with off-white or black epoxy powder finish
- Available with sealed, maintenance-free nickel-cadmium, long-life lead or lead-calcium batteries
- PulsePlus charger circuitry offers 120/277VAC, 60 Hz, .3/.15 amp (other inputs available), fused output circuit, pilot and charge indicator lights, temperature compensation, sealed relay, low-voltage battery disconnect, brownout protection and lockout (automatic battery connect)
- Universal mounting, downlight, single or double face, stencil or open face and removable side panel are available
- UL® Listed and exceeds UL® Exit Visibility Requirement
- Three-year full warranty

Accessories (Order as a separate item)

White Pendant	P-WT*
Black Pendant	P-BK*
Wire Guard Ceiling Mount (exit signs only).....	WG5-E
Wire Guard End Mount (exit signs only).....	WG5-E
Wire Guard For Wall Mount (AC-only, AC/DC and self-powered exit signs).....	WG12-E
Wire Guard for Wall Mount (mini system or combo)	WG6-E

* Specify pendant length (12", 24", 36", etc.).

Power Consumption (LED Exit Signs)

MODEL	AC SPECS		DC SPECS	
AC-Only: L-X14	120 to 277VAC	Less than 1.5W	—	—
AC/DC: DCL-X14	120 to 277VAC	Less than 1.5W	6 to 24VDC	Less than 1.5W
Self-Powered: L-SNX14	120 to 277VAC	Less than 3W	Nickel-Cadmium	Min. 90 Minutes



nexus® 

Choice of Models

Exit Signs

AC Input: Universal 2-wire, 120 to 277VAC, 50/60 Hz

AC/DC Models: Universal 2-wire, 6 to 24VDC

Self-Powered Models: Long-life, sealed nickel-cadmium battery

Mini-Systems

Remote-Capacity L-SBX Models:

No EF-9 mounted heads = 30 watts remote capacity

Two 5.4-watt EF-9 mounted heads = 19 watts remote capacity

Remote-Capacity L-SRX Models:

No EF-9 mounted heads = 20 watts remote capacity

Two 5.4-watt EF-9 mounted heads = 9 watts remote capacity

Remote-Capacity L-STX Models:

No EF-9 mounted heads = 24 watts remote capacity

Two 5.4-watt EF-9 mounted heads = 13 watts remote capacity

Remote-Capacity SRX and STX Models:

No EF-9 mounted heads = 18 watts remote capacity

Two EF-9 mounted heads = 6 watts remote capacity

LED exit lamp configuration same as self-powered models.

Remote-Capacity SRX and STX Models:

No EF-9 mounted heads = 21 watts remote capacity

Two EF-9 mounted heads = 9 watts remote capacity

Power Consumption (Mini-Systems): 120/277VAC, 60 Hz, .3/.15 amp Unit Ratings

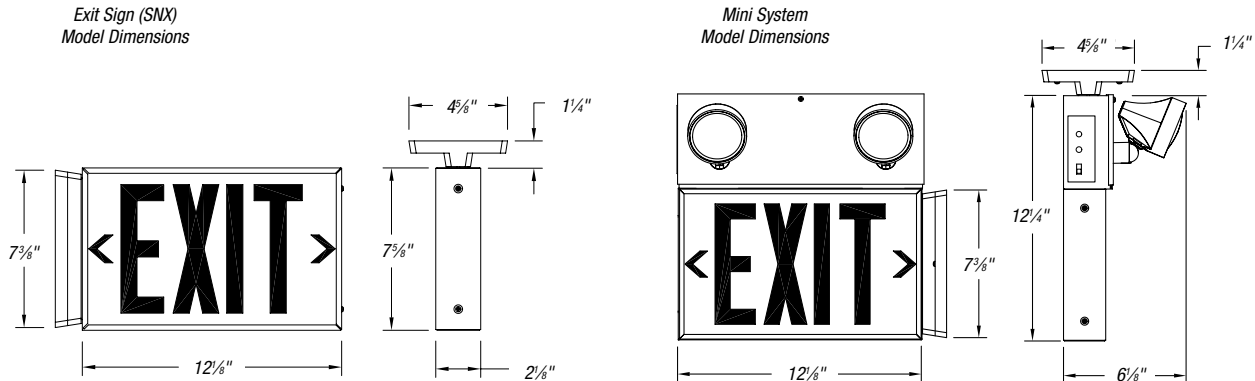
Total DC power available for local and remote emergency lights.

BATTERY TYPES	DC VOLTAGE	MODEL NO.	WATTS TO 87.5% OF RATED BATTERY VOLTAGE			
			1½ HRS.	2 HRS.	3 HRS.	4 HRS.
Lead-Calcium	6	SBX14	30	20	15	10
Nickel-Cadmium	6	STX14	24	18	12	9

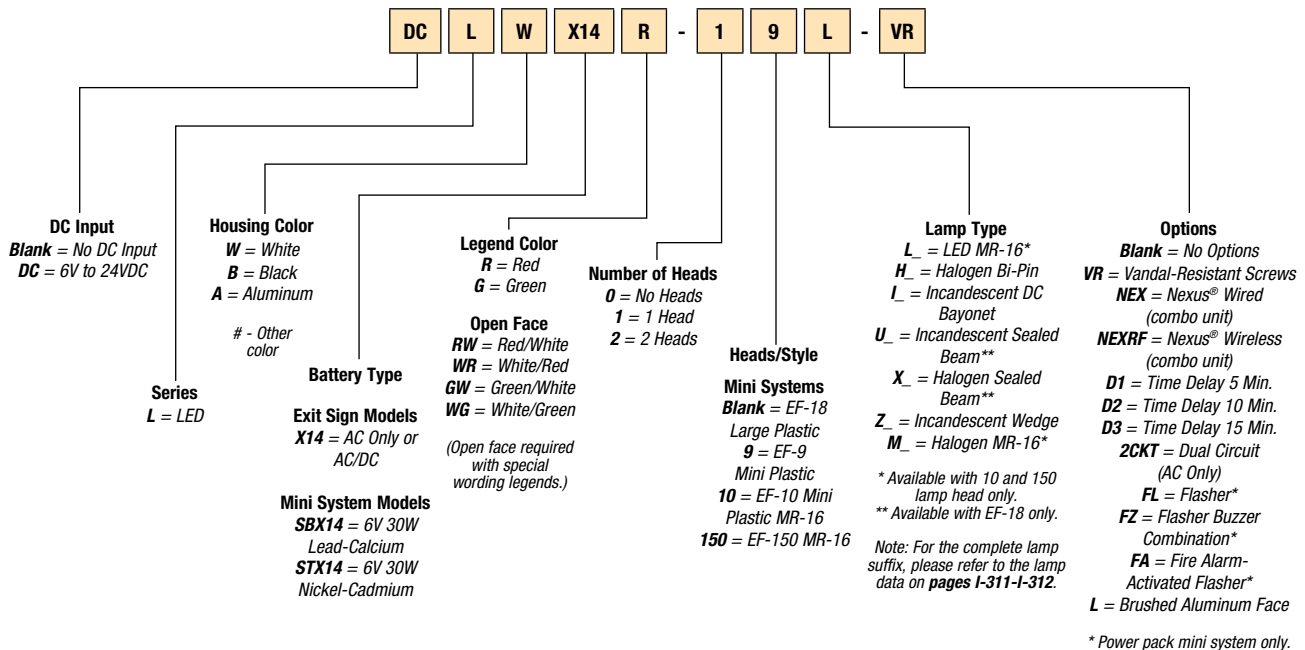
Spec-Grade Commercial

Dimensions

Dimensions are approximate and subject to change.



Catalog Numbering System



Spec-Grade Commercial

Recessed ceiling-mount edge-lit exit sign.

Prestige™ Economizer Series — Recessed Ceiling Mount

The Prestige™ Economizer Recessed Series combines a modular design with state-of-the-art technology and ease of installation, including field-installed directional arrows.

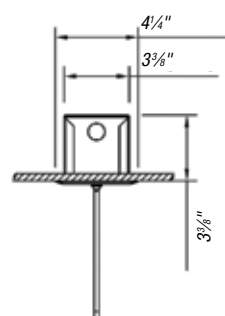
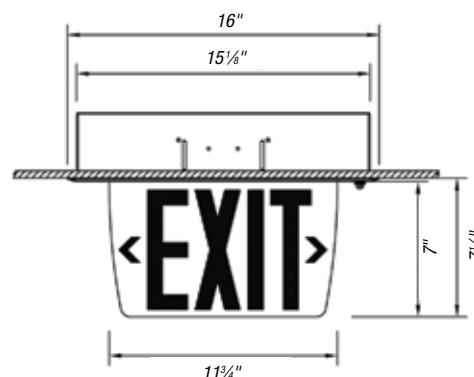
Standard Features

- Rugged, 20-gauge steel backbox
- Equipped with bar hanger kit for easy installation
- Formed steel flat trim plate
- Choice of finishes: textured aluminum or off-white
- Acrylic panel with curved contour provides superior clarity and illumination
- Legend with a choice of red or green letters
- Choice of legend background: clear, white (red legend only) or mirror
- Stick-on translucent directional chevrons for field installation
- Sealed nickel-cadmium batteries provide 90 minutes of emergency lighting
- Simple, 2-wire universal AC input (120 to 277VAC, 50/60 Hz) prevents installation errors
- 2-wire universal DC input: 6 to 24VDC
- Long-life LED light assures low maintenance costs and superior illumination
- Energy-efficient power consumption: less than 2.5 watts for single- or double-face legends
- UL® 924 Listed



Dimensions

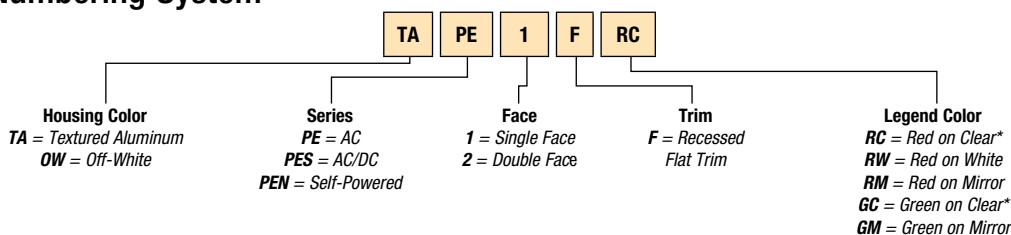
Dimensions are approximate and subject to change.



Power Consumption

MODEL	AC SPECS		DC SPECS	
AC-Only	120 to 277VAC	Less than 1.5W	—	
AC/DC-Remote	120 to 277VAC	Less than 1.5W	6 to 24VDC	Less than 1.5W
Self-Powered	120 to 277VAC	Less than 2.5W	Ni-Cd Battery	Min. 90 Minutes

Catalog Numbering System



* Single face only.

Spec-Grade Commercial

Slim-profile surface-mount LED edge-lit exit sign.

Prestige™ Economizer Series — Slim-Profile Surface Mount

Thanks to its slim profile and easy installation, the Prestige™ Economizer Series is sure to be a favorite for both specifiers and contractors. Elegant and economical, the Prestige™ Economizer Series complements any interior design while providing mounting versatility and energy efficiency. The Prestige™ Economizer Series combines a slim, modular design with state-of-the-art technology and ease of installation, including field-installed directional arrows.

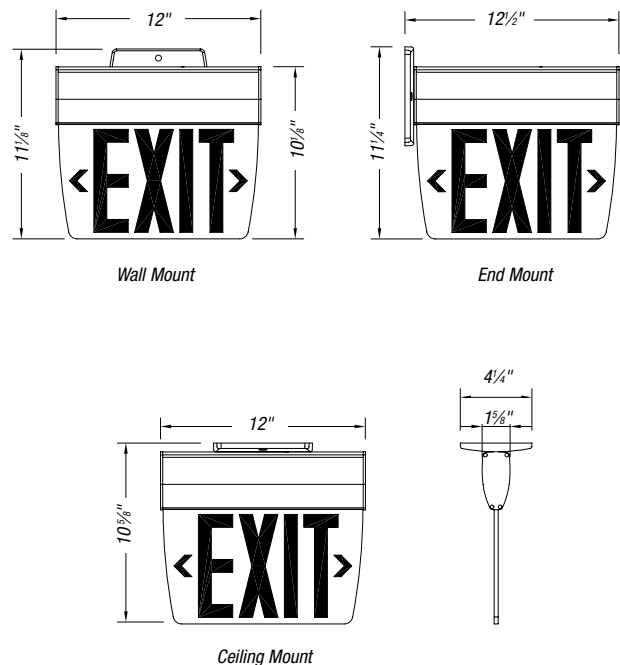
Standard Features

- Acrylic panel with curved contour provides superior clarity and illumination, and long-life LED light assures low maintenance costs and superior illumination
- Legend with a choice of red or green six-inch letters and easy-to-add field-installed stick-on translucent directional arrows
- Choice of legend background: clear, white or mirror
- Slim-profile extruded aluminum housing with slim-profile die-cast aluminum canopy in your choice of finishes: textured aluminum or off-white
- Energy-efficient power consumption: less than 3 watts for self-powered version and less than 2 watts for AC-only version, single or double face
- Available with sealed nickel-cadmium batteries that provide 90 minutes of emergency lighting
- Simple, 2-wire universal AC input (120V to 277VAC, 60 Hz) prevents installation errors
- Simple 2-wire universal DC input: 6 to 24VDC
- Universal surface mounting: wall, ceiling or end mount
- Click-to-open housing door allows easy access to the panel and electrical wiring
- UL® 924 Listed
- Three-year full warranty, subject to proper installation and maintenance



Dimensions

Dimensions are approximate and subject to change.



Accessories (Order as a separate item)

White Pendant..... **PE-P-WH***

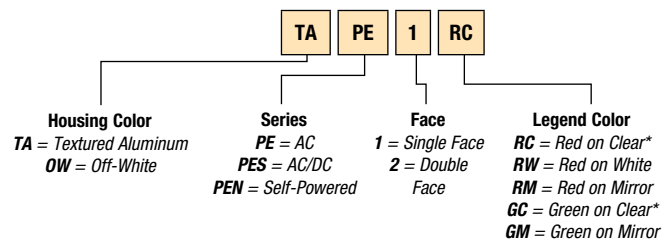
Black Pendant **PE-P-BK***

* Specify pendant length.

Power Consumption

MODEL	AC SPECS		DC SPECS	
AC-Only	120 to 277VAC	Less than 2W	—	—
AC/DC	120 to 277VAC	Less than 2W	6 to 24VDC	Less than 1.5W
Self-Powered	120 to 277VAC	Less than 3W	Ni-Cd Battery	Min. 90 Minutes

Catalog Numbering System



* Single face only.

Spec-Grade Commercial

Die-cast LED exit sign.

Preceptor™ Series

Stylishly built in die-cast aluminum, the new Preceptor™ Die-Cast Series offers workmanship, versatile mounting capability and economical, long-lasting LED performance.

Standard Features

- Housing of die-cast aluminum in a variety of finishes
- Slim-line canopy for top and end mounting
- Universal mounting for wall, end or ceiling
- Universal, field-selectable knock-out chevrons
- Long-life red or green LED light source
- Dual-voltage input: 120/277VAC, 60 Hz
- Low power consumption: less than 3 watts in any configuration
- Self-powered models with sealed, maintenance-free nickel-cadmium batteries
- UL® 924 Listed
- Five-year full warranty

Power Consumption

MODEL	AC SPECS		DC SPECS	
AC-Only	120/277VAC	Less than 2.5W	—	
AC/DC-Remote	120/277VAC	Less than 2W	6 to 48VDC	Less than 1.5W
Self-Powered	120/277VAC	Less than 3W	Ni-Cd Battery	Min. 90 Minutes
Self-Powered with Diagnostics	120/277VAC	Less than 2.8W	Ni-Cd Battery	Min. 90 Minutes

NEW!

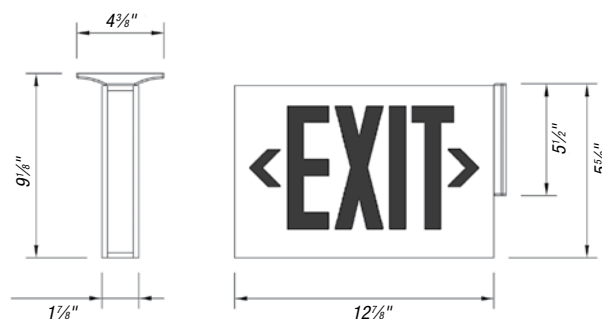


nexus®

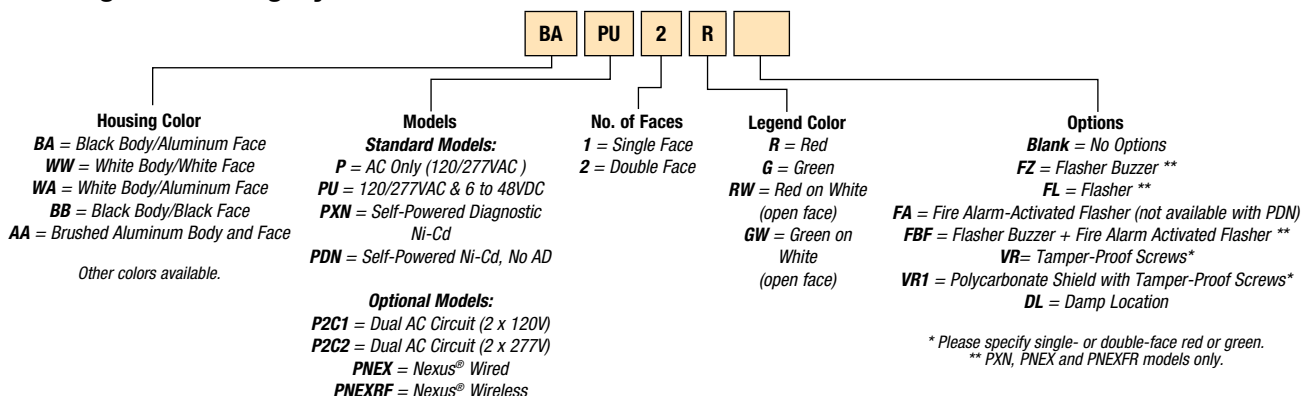


Dimensions

Dimensions are approximate and subject to change.



Catalog Numbering System



* Please specify single- or double-face red or green.
 ** PXN, PNEX and PNEXRF models only.

Spec-Grade Commercial

Die-cast LED exit signs.

Preceptor™ Recessed Series

Save energy while providing excellent visual performance with Preceptor™ LED exit signs. Distinctively styled in die-cast aluminum, Preceptor™ LED exit signs offer blemish-free workmanship, versatile mounting capability and economical, long-lasting LED performance.

Diagnostic/self-test circuitry is standard on all self-powered models. This circuitry is programmed to ensure the exit sign's readiness and reliability by continuously monitoring every critical function of the unit. If a problem occurs, a single service-required indicator illuminates immediately. A detailed diagnostic display sign that will further indicate the nature of the fault is located on the inside of the exit sign, out of sight from the general public. The self test will test the unit for 30 seconds every 30 days, 30 minutes every 60 days and 90 minutes annually.

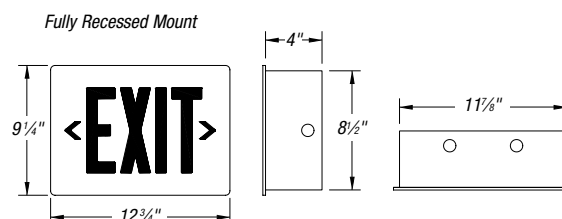
Standard Features

- Long-life LEDs eliminate the twice-a-year re-lamping typical of incandescent lamps
- Self-powered models are self contained; batteries and circuitry are located inside the exit housing
- Available with sealed maintenance-free nickel-cadmium batteries to provide 90 minutes of emergency illumination
- 2-wire universal input 120 through 277VAC, 50/60 Hz
- Unaffected by the vibrations, ambient temperature swings and typical power surges detrimental to standard exit light sources
- Five-year full warranty
- UL® Listed



Dimensions

Dimensions are approximate and subject to change.



Choice of Models

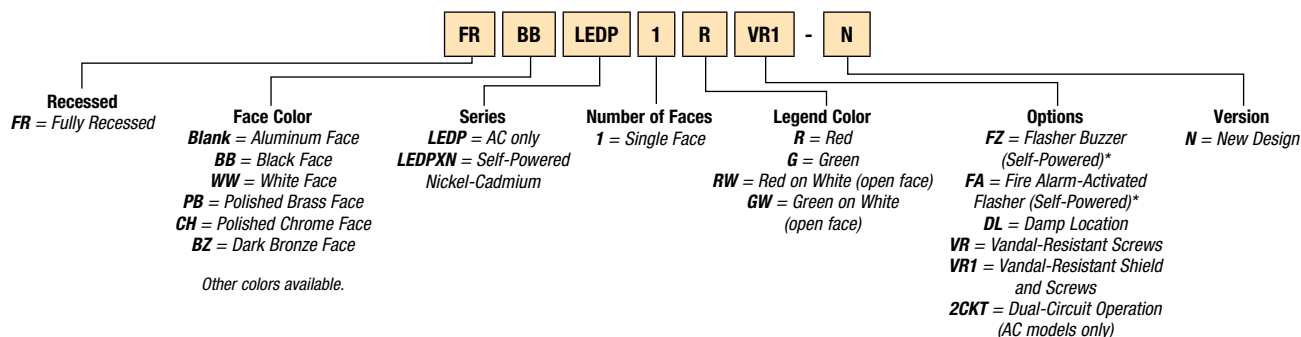
AC-Only Models: 120 through 277VAC, 50/60 Hz universal input.

Self-Powered Models: Self contained, their batteries and circuitry are located inside the exit housing. 120 through 277VAC, 50/60 Hz universal input. Sealed maintenance-free nickel-cadmium battery provides 90 minutes of emergency illumination.

Power Consumption

MODEL	AC SPECS		DC SPECS	
AC-Only	120 to 277VAC	1.4W	—	—
Self-Powered	120 to 277VAC	1.7W	Ni-Cd Battery	Min. 90 Minutes

Catalog Numbering System



* Available with self-powered models only.

Spec-Grade Commercial

Die-cast exit signs.

Preceptor™ Remote Capacity Series

Power your required outdoor emergency lighting remote head from the remote-capable Preceptor™ Series exit sign immediately inside the egress-discharge location. The Preceptor™ Series combines visual performance, enduring construction and elegant design while satisfying code requirements.

Standard Features

- Long-life, high-performance, low-power consumption red or green LEDs provide even illumination in normal and emergency modes
- Constructed of die-cast aluminum with a power canopy that houses the battery, input transformer and printed circuit board
- Standard unit color is a black frame with brushed aluminum face; specify single or double face
- Available with sealed maintenance-free lead-calcium or nickel-metal hydride (cadmium-free, environmentally friendly) batteries
- Can be ceiling, end or back mounted to the power canopy, which surface mounts directly to the junction box (supplied by others)
- UL® Listed; complies with NEC®, Life Safety Code® and OSHA
- Five-year full warranty

Electrical

RCL — 120/277VAC, 60 Hz, .02A max.

RCN — 120/277VAC, 60 Hz, .03A max.

RCX — 120/277VAC, 60 Hz, .03A max.

Application Flexibility

Lead-Calcium Models (RCL): Sealed, maintenance-free lead-calcium batteries power the exit sign for an estimated period of 20+ hours minimum with no remote load or 90-minutes run time with 9-watts remote load.

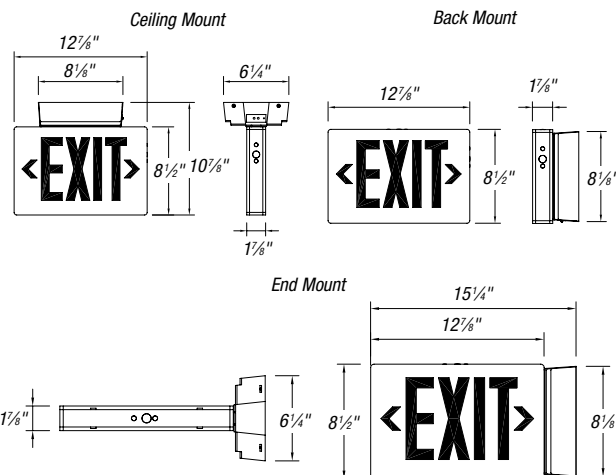
Nickel-Metal Hydride Models (RCN): Sealed, maintenance-free nickel-metal hydride batteries power the exit sign for an estimated period of 20+ hours minimum with no remote load or 90-minutes run time with 12-watts remote load.

Nickel-Metal Hydride Models (RCX): Sealed, maintenance-free nickel-metal hydride batteries power the exit sign for an estimated period of 40+ hours minimum with no remote load or 90-minutes run time with 24-watts remote load.



Dimensions

Dimensions are approximate and subject to change.



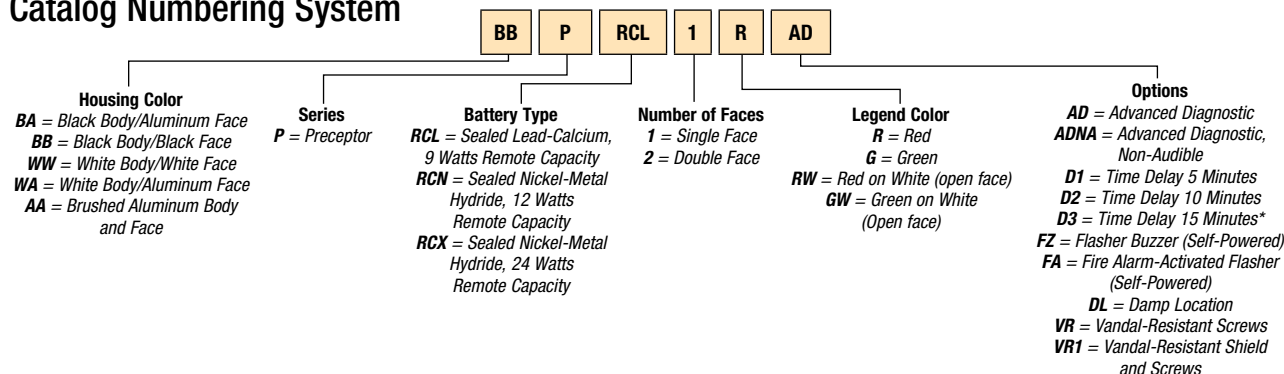
Unit Ratings

Total power available for emergency lights.

SEALED MAINTENANCE-FREE BATTERY TYPES	WATTS TO 87.5% OF RATED BATTERY VOLTAGE*			
	1½ HRS.	2 HRS.	3 HRS.	4 HRS.
Unit Equipment — With Remote Capability				
Lead-Cadmium	9	—	—	—
Nickel-Metal Hydride	12	9	—	—
	24	18	12	9

* National Electrical Code® specification.

Catalog Numbering System



*Not required with AD or ADNA options.
Time delay standard at 15 minutes.

Spec-Grade Commercial

Custom-worded, illuminated signage.

Special Wording Configurations

Illuminated Signage

Custom-worded, illuminated signage is available using the same sturdy construction and electrical design as Emergi-Lite® exit signage. A wide range of sign body options and color choices are available to suit any application.

Standard Features

- Sign bodies — steel, extruded and die-cast aluminum, weatherproof, flame-retardant polycarbonate, high-impact thermoplastic, recessed housing
- Also available with combination units
- Custom wording — any style of lettering, any language, any alphabet, any special characters
- Graphics — logos, standard symbols, custom art
- Color choices — sign bodies, message, faceplate panel
- Illumination — LED (light-emitting diodes); other light sources available
- Contact your local Thomas & Betts representative to discuss your specific requirements



FIRE DO NOT ENTER

IN USE



DANGER

**X-RAY
IN USE**

**DARKROOM
IN USE**

**NO
SMOKING**

**NOT AN
EXIT**

STAIRS

LADIES



Spec-Grade Industrial

Hazardous Locations

Hazardous areas are those in which a potential for explosion or fire exists due to the presence of certain gases, liquid vapors, combustible dusts or fiber particles suspended in the air. The National Electrical Code®, NEMA, OSHA, UL® and NFPA Life Safety Code® standards, as well as state and local codes, prescribe the use of emergency lighting equipment. This equipment itself must not contribute to the ignition of flammable or explosive substances present in the location. Emergi-Lite® offers a complete line of emergency lighting equipment for use in hazardous locations.

Hazardous Location Classifications

Class I
(NEC-500-5) Areas in which flammable gases or vapors may be present in sufficient quantities to be explosive or ignitable.

Class II
(NEC-500-6) Areas made hazardous by the presence of combustible dust.

Class III
(NEC-500-7) Areas in which there are easily ignitable fibers or flyings present due to the type of material being handled, stored or processed, but in which such fibers or flyings are not likely to be in suspension in the air in quantities sufficient to produce ignitable mixtures.

Division 1
(NEC-500-5, 6 & 7) **Normal Situation:** A hazard is present in the everyday normal production operation or during frequent repair and/or maintenance activity.

Division 2
(NEC-500-5, 6 & 7) **Abnormal Situation:** Potentially hazardous material is expected to be safely confined within closed containers or closed systems, and will be present in the atmosphere only through accidental rupture, breakage or abnormal operation.

Groups A, B, C & D
(NEC-500-3) Gases and vapors in Class I locations are classified into four groups, by the code A, B, C, and D. These materials are grouped according to the ignition temperature of the substance, its explosion pressure and other flammability characteristics.

Groups E, F & G
(NEC-500-3) Combustible dusts in Class II locations are classified according to ignition temperature and the conductivity of the hazardous substance.

Typical Class I Locations:

- Petroleum refineries and gasoline storage and dispensing areas
- Industrial firms that use flammable liquids in dip tanks for cleaning parts or other operations
- Petrochemical companies that manufacture chemicals from gas and oil
- Dry cleaning plants where vapors from cleaning fluids can be present
- Companies that have areas dedicated for spraying products with paint or plastics



- Aircraft hangars and fuel servicing areas
- Utility gas plants and operations involving storage and handling of liquified petroleum gas or natural gas

Typical Class II Locations:

- Grain elevators, flour and feed mills
- Plants that manufacture, use or store magnesium or aluminum powders
- Plants that have chemical or metallurgical processes, such as producers of plastics, medicines, fireworks, etc.
- Producers of starch or candies
- Spice grinding plants, sugar plants and cocoa plants
- Coal preparation plants and other carbon handling or processing areas

Typical Class III Locations:

- Textile mills, cotton gins, cotton seed mills and flax processing plants
- Clothing manufacturing plants
- Any plant that shapes, pulverizes or cuts wood and creates sawdust or shavings

For more information, consult NEC®.

NEC, National Electrical Code and Life Safety Code are registered trademarks of the National Fire Protection Association, Inc.

Spec-Grade Industrial

NEMA Enclosures

NEMA Enclosures

Type 1

Intended for use indoors primarily to prevent accidental contact of personnel with the enclosed equipment.

Type 2

Intended for use indoors to protect the enclosed equipment against falling non-corrosive liquids and falling dirt.

Type 3

Intended for use outdoors to protect the enclosed equipment against rain, windblown dust, sleet and external ice formation.

Type 3R

Intended for use outdoors to protect the enclosed equipment against falling rain, sleet and external ice formation.

Type 4

Intended for use indoors and outdoors to protect the enclosed equipment against windblown dust, rain, splashing water and hose-directed water.

Type 5

Intended for indoor use primarily to protect against dust and falling dirt.

Type 6

Intended for indoor or outdoor use primarily to provide a degree of protection against the entry of water during occasional temporary submersion at a limited depth.

Type 6P

Intended for indoor or outdoor use primarily to provide a degree of protection against the entry of water during prolonged submersion at a limited depth.

Type 7

Intended for use indoors in locations classified as Class I, Groups A, B, C or D as defined in the National Electrical Code®.

Type 8

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

Type 9

Intended for indoor locations classified as Class II, Groups E, F & G, as defined in the National Electrical Code®.

Type 10

Enclosures are constructed to meet the applicable requirements of the Mine Safety and Health Administration.



Type 11

Intended for indoor use primarily to provide, by oil immersion, a degree of protection to enclosed equipment against the corrosive effects of liquids and gases.

Type 12

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

Type 12K

Enclosure with knockouts intended for indoor use primarily to provide a degree of protection against dust, falling dirt and dripping non-corrosive liquids other than at knockouts.

Type 13

Intended for indoor use primarily to provide a degree of protection against dust, spraying of water, oil and non-corrosive coolant.

National Electrical Code is a registered trademark of the National Fire Protection Association, Inc.

Spec-Grade Industrial

6- and 12-volt NEMA 4X battery unit.

Survive-All™ SV Series

NEMA 4X Certified! Where humidity, dust, water infiltration and the risk of vandalism are specification criteria, the Survive-All™ SV Series is ideally suited to perform in a wide range of commercial and industrial environments. The Survive-All™ SV Series battery units combine state-of-the art illumination with a visually appealing package.

Standard Features

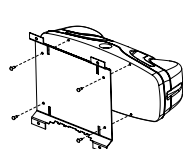
- Equipped with a tool-less MR-16 swivel lamp assembly to provide precise beam control plus a choice of MR-16 halogen lamps from 6V to 12V and 6-watt to 20-watt IR
- Fully gasketed cast aluminum back plate with clear, UV-resistant polycarbonate cover, tamper-proof screws and bit are included; available in black, white or gray
- Standard temperature: 50° F to 104° F (10° C to 40° C)
- Available with sealed, maintenance-free nickel-cadmium (UL® Listed for damp and wet locations) or lead-calcium batteries
- Standard 120/277VAC .3/.15 amp input, non-audible advanced diagnostic charger board, 15-minute time delay and lamp disconnect, audible warning and time-delay functions that can be enabled or disabled during installation, a non-obtrusive magnetic test switch and a micro controller diagnostic system that tests, detects and indicates battery, charger circuitry or MR-16 lamp failures
- Wall, strut or beam mounting
- UL® Listed; certified to meet UL® 924 standards, 90 minutes of emergency operation; NEMA 4X rated for high-abuse areas, wet locations and cold weather (-40° F/-40° C) applications; NSF Certified for use in food processing plants
- Three-year full warranty, excluding lamps and fuses

Accessories (Order as a separate item)

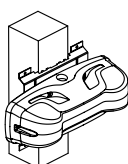
Additional Special Bit For Tamperproof Screws.....690.0454-E

Universal Bracket (for mounting on poles, I-beams or strut metal framing)..... PMK-E

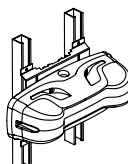
Universal Bracket



PMK Kit
(screws included)



Beam Mounting



Strut Mounting



NEMA 4X **ADVANCED DIAGNOSTICS** **nexus®** NSF UL

Applications

- Hosedown areas/ car washes
- Food processing/ preparation facilities
- Marine locations
- Chemical plants
- Schools and other public facilities
- Parking garages
- Transit platforms
- Sports arenas/swimming pools
- Security areas/prisons
- Warehouse and cold storage facilities
- Heavy industrial facilities

Note: Units with lead-calcium batteries that are installed outdoors must be located in a shaded area.

Unit Ratings

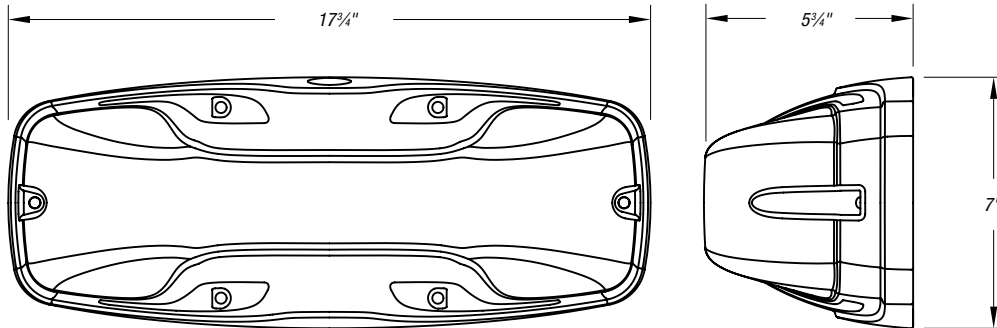
SEALED MAINTENANCE-FREE		WATTS TO 87.5% OF RATED BATTERY VOLTAGE*			
BATTERY TYPES	1½ HRS.	2 HRS.	3 HRS.	4 HRS.	
Unit Equipment — With Remote Capability					
Lead-Calcium	18	12	8	—	
	24	16	12	8	
	36	24	20	14	
	54	36	27	20	
Nickel-Cadmium	24	18	12	8	
	40	27	20	14	
Nickel-Metal Hydride	60	40	30	20	

* National Electrical Code® specification.

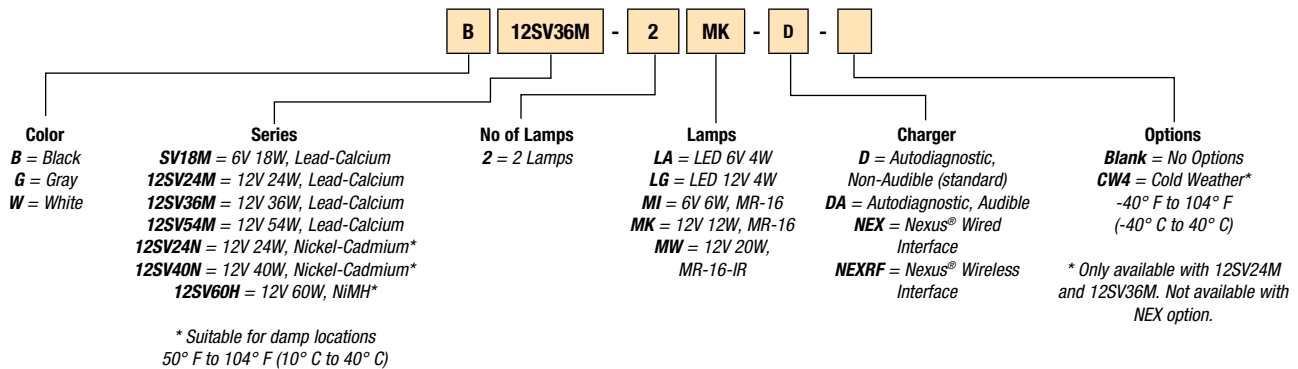
Spec-Grade Industrial

Dimensions

Dimensions are approximate and subject to change.



Catalog Numbering System



Spec-Grade Industrial

NEMA 4X certified for wall or ceiling mounting.

Survive-All™ SVX Combo Series — 6 and 12 Volt

The Survive-All™ SVX Series combo unit delivers impressive, state-of-the-art illumination in a visually appealing package. It is designed for use in a wide range of commercial and industrial environments where resistance to humidity, dust, water infiltration and vandalism are specification criteria.

Each unit comes with two MR-16 high-intensity lamps (standard). The fully field-adjustable lamp head assembly offers the option of selecting either a halogen lamp or a high-efficiency 4-watt, white LED light source for optimum illumination over the path of egress. The exit light source is LED.

Advanced Diagnostics circuitry is standard on all self-powered models. This circuitry is programmed to ensure the exit sign's readiness and reliability by continuously monitoring every critical function of the unit. If a problem occurs, a single "Service Required" indicator illuminates immediately. A detailed diagnostic display that will further indicate the nature of the fault is located on the inside of the exit sign, out of sight from the general public. The self test will test the unit for a minimum of 30 seconds every 30 days, 30 minutes every 60 days and 90 minutes annually.

Standard Features

- Rugged PVC body will not dent, peel or corrode, and the sealed faceplate is constructed with a heavy-duty, vandal-resistant polycarbonate cover fastened with stainless steel tamper-resistant screws
- Available with sealed, maintenance-free nickel-cadmium batteries
- PulsePlus Charger circuitry offers 120/277VAC input 60 Hz, .3/.15 amps (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature-compensated charger, sealed relay, low-voltage battery disconnect, brownout protection and lockout (automatic battery connect)
- Magnetically operated test switch
- Can be wall, end or ceiling mounted
- NEMA 4X rated, UL® Listed for wet and damp locations 50° F to 104° F (10° C to 40° C)
- Five-year full warranty, excluding lamps and fuses

Accessories (Order as a separate item)

Additional Special Bit for Tamper-Proof Screws **690.0454-E**
 Additional Test Magnet **199.0133-E**



Power Consumption

UNIT	AC SPECS	DC SPECS (90 MINUTES)
SVX12N	120/277VAC .12/.06A 13W	6V 12W
SVX24N	120/277VAC .17/.08A 19W	12V 24W

Unit Ratings

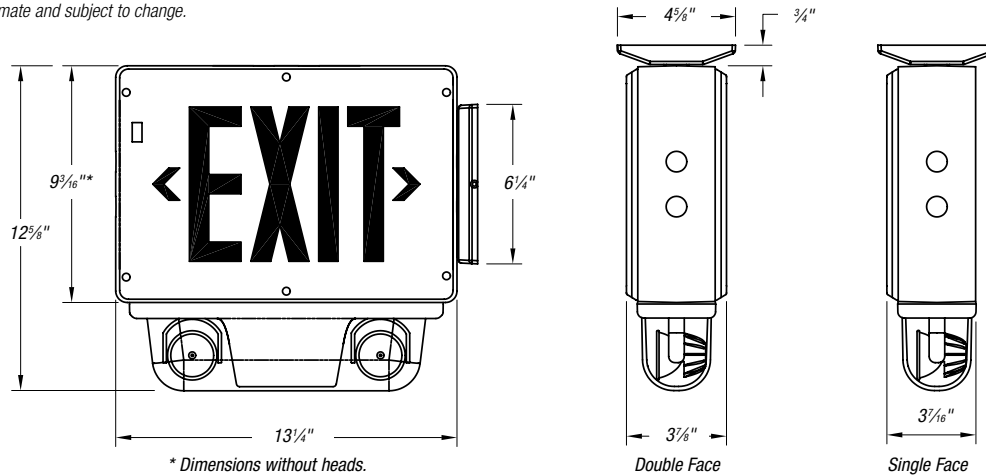
SEALED	WATTS TO 87.5% OF RATED BATTERY VOLTAGE*			
MAINTENANCE-FREE				
BATTERY TYPES	1½ HRS.	2 HRS.	3 HRS.	4 HRS.
Unit Equipment — With Remote Capability				
Nickel-Cadmium	12	9	—	—
	24	18	12	9

* National Electrical Code® specification.

Spec-Grade Industrial

Dimensions

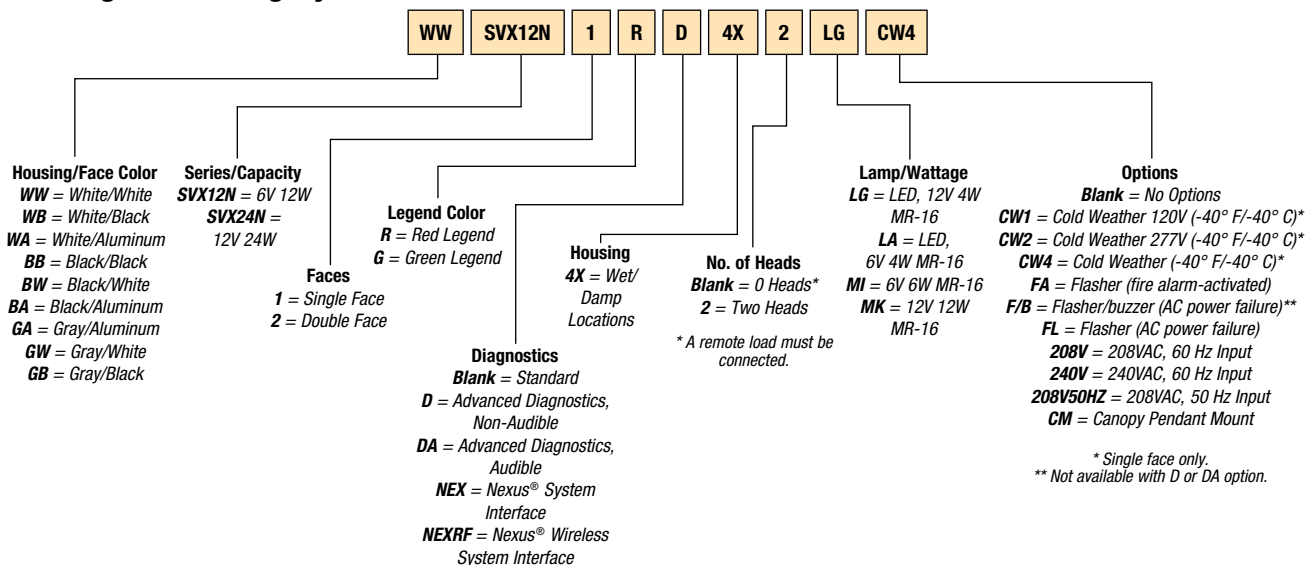
Dimensions are approximate and subject to change.



Applications

- Hosedown areas/car washes
- Food processing/prep facilities
- Marine locations
- Chemical plants
- Schools and other public facilities
- Parking garages
- Transit platforms
- Sports arenas/swimming pools
- Security areas/prisons
- Warehouse and cold storage facilities
- Heavy industrial facilities

Catalog Numbering System



Spec-Grade Industrial

NEMA 4X rated and UL® Listed for wet and damp locations (-40° F to 104° F).

Survive-All™ SVX Exit Series

NEMA 4X rated for wall or ceiling mounting, the Survive-All™ Exit SVX Series delivers impressive, state-of-the-art illumination in a visually appealing package.

The Survive-All™ Exit SVX Series is designed for use in a wide range of commercial and industrial environments where resistance to humidity, dust, water infiltration and vandalism are specification criteria.

Standard Features

Reliability

The Survive-All™ SVX Series has a five-year full warranty.

Unit Data — NEMA 4X Rated

Rugged polyvinyl chloride body will not dent, peel, rust or corrode. The sealed faceplate is constructed of heavy-duty, vandal-resistant polycarbonate and features an evenly illuminated legend. The fully gasketed faceplate is fastened with stainless steel tamper-resistant screws. Models can be wall, end or ceiling mounted. Legend and chevron comply with UL® and CSA requirements. A magnetically operated test switch is also included.

Survive-All™ SVX Series signs are unaffected by the vibrations, ambient temperature swings and typical power surges detrimental to standard exit light sources.

High-Performance Circuitry

- Self contained — batteries and circuitry located inside the exit housing
- Continuous self-diagnostic monitoring and monthly self testing
- Fully automatic charger is solid state
- AC, AC/DC and Self-Powered models have universal, 2-wire input, 120V to 277VAC, 50/60 Hz
- Sealed, maintenance-free nickel-cadmium battery provides 90 minutes of emergency operation
- Battery recharges per UL® 924 requirements
- Each unit comes standard with one tamper-proof driver bit

Accessories (Order as a separate item)

Extra Tamper-Proof Bit.....**690.0454-E**
 Convert Single Face to Double Face, Red.....**DFKR**
 Convert Single Face to Double Face, Green.....**DFKG**



NEMA 4X nexus®



Power Consumption

MODEL	AC SPECS		DC SPECS	
AC-Only	120 to 277VAC	1.2W	—	—
AC/DC	120 to 277VAC	1.2W	6 to 24VDC	Less than 1.5W
Self-Powered	120 to 277VAC	3.7W	Ni-Cd Battery	Min. 90 Minutes

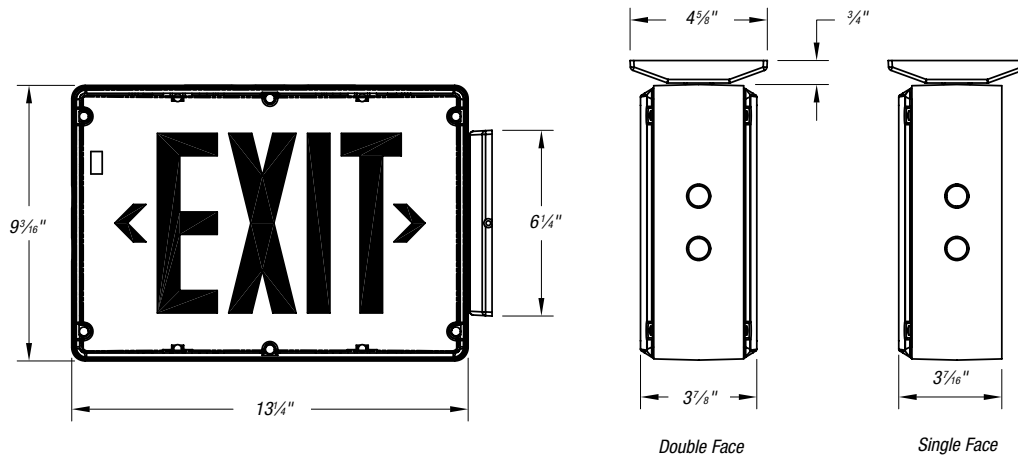
Applications

- Hosedown areas/car washes
- Food processing/prep facilities
- Marine locations
- Chemical plants
- Schools and other public facilities
- Parking garages
- Transit platforms
- Sports arenas/swimming pools
- Security areas/prisons
- Warehouse and cold storage facilities
- Heavy industrial facilities

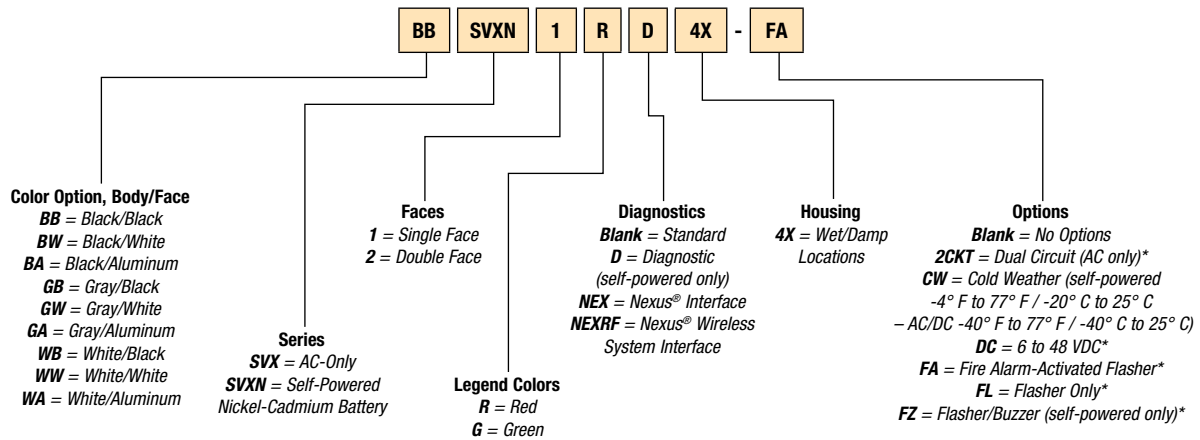
Spec-Grade Industrial

Dimensions

Dimensions are approximate and subject to change.



Catalog Numbering System



* Not available with Nexus® option.

Spec-Grade Industrial

NEMA 4X rated and UL® Listed for wet and damp locations.

Survive-All™ EF39 Series

NEMA-4X certified, the Survive-All™ EF39 Series delivers impressive, state-of-the-art illumination in a visually appealing package. It is designed for use in a wide range of commercial and industrial environments where resistance to humidity, dust, water infiltration and vandalism are specification criteria.

Standard Features

- Available in single- or double-lamp configurations with the option of highly efficient MR-16 lamps or the 4-watt MR-16 white LED lamp
- Delivers unsurpassed path-of-egress illumination — up to 70 feet, center-to-center when using two 20W MR-16-IR lamps
- Fully gasketed cast-aluminum back plate with a clear UV- and impact-resistant cover
- Choice of three colors: off-white, black or gray
- Comes standard with tamper-proof screws and bit
- Easy installation on a four-inch octagonal box
- NEMA 4X rated, NSF Certified for food processing plants

Accessories (Order as a separate item)

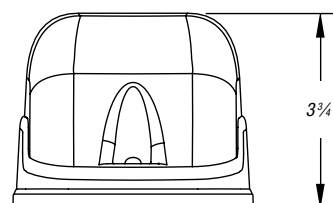
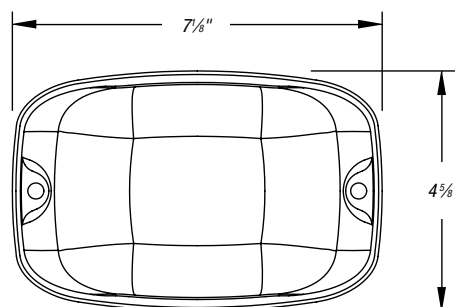
Additional Special Bit for Tamper-Proof Screws **690.0454-E**



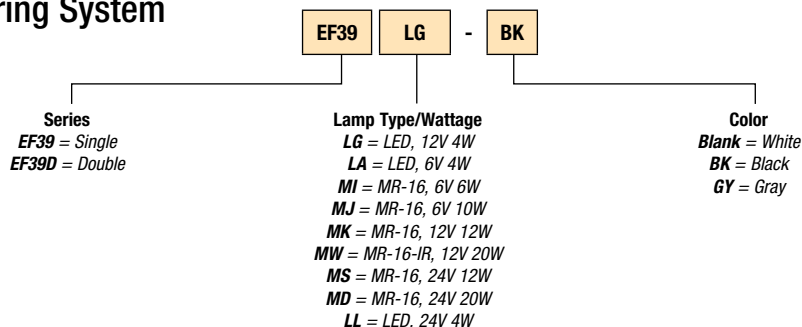
NEMA 4X NSF UL

Dimensions

Dimensions are approximate and subject to change.



Catalog Numbering System



Spec-Grade Industrial

6- and 12-volt, Class I Division 2.

HZM Series

For use in Class I, Division 2, Groups A, B, C and D hazardous locations, the HZM Series is designed to prevent ignition of hazardous materials in locations where flammable materials are stored and handled.

The water- and corrosion-resistant gray industrial cabinet is made of fiberglass-reinforced polyester and is fully gasketed around the cover. The battery compartment is vented with a breather vent designed to permit exhaust of battery gases without admitting external moisture or corrosives.

Standard self-diagnostic circuitry continuously monitors every critical function of the unit. If a problem occurs, a single fault indicator on the outside of the fixture flashes immediately. A detailed diagnostic display is located internally. The detailed display will further indicate the nature of the fault as either a battery fault, load fault or charger fault.

Standard Features

- Each unit comes with two weather-resistant, impact-resistant, flame-retardant thermoplastic EF-11 lamp heads with 12-watt high-intensity sealed-beam tungsten lamps
- Temperature code: T4A (max. 248° F/120° C)
- Available with sealed, maintenance-free lead-calcium batteries
- Fully automatic pulse charger offers 120/277VAC, 60 Hz, .43/2 amp., limited-current temperature compensation, short-circuit protection, reverse-polarity protection, low-voltage battery disconnect, brownout protection and standard solid-state transfer feature
- PAR36 sealed-beam halogen lamps
- UL® Listed; complies with NEC®, Life Safety Code® and OSHA
- The test switch and AC pilot light are explosion proof in design and exceed requirements for Class I, Division 2, Groups A, B, C and D
- Three-year full warranty, excluding lamps, pilot lights and fuses

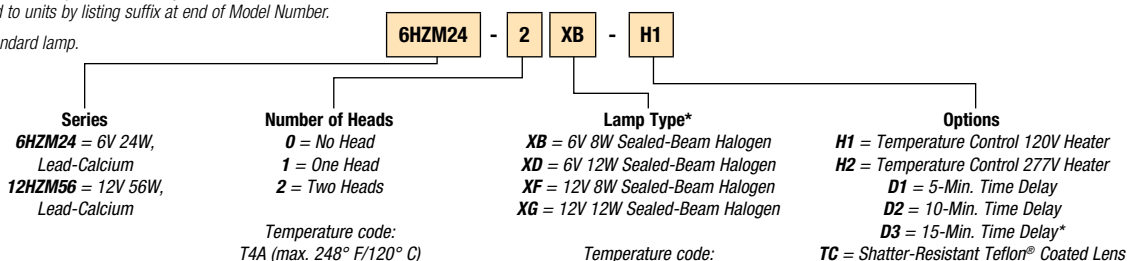
Accessories (Order as a separate item)

Wire GuardWG3-E

Catalog Numbering System

For standard units without options, order only Model Number.
Options are added to units by listing suffix at end of Model Number.

Note: Includes standard lamp.

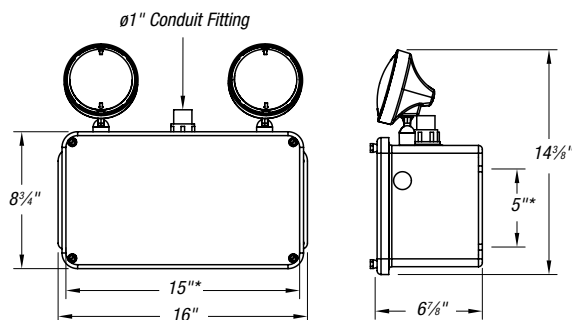


Teflon is a registered trademark of E.I. duPont de Nemours and Company.



Dimensions

Dimensions are approximate and subject to change.



* Mounting Lugs Center-to-Center Dimensions

Unit Ratings

Furnished standard with two 12-watt high-intensity sealed-beam halogen lamps.

SEALED MAINTENANCE- FREE BATTERY TYPES	DC VOLTAGE	MODEL NO.	WATTS TO 87.5% OF RATED BATTERY VOLTAGE*			
			1½ HRS.	2 HRS.	3 HRS.	4 HRS.
Unit Equipment — With Remote Capability						
Lead-Calcium	6	6HZM24-2	24	18	10	6
	12	12HZM56-2	56	37	21	6

* National Electrical Code® specification.

Spec-Grade Industrial

Hazardous location combination exit sign and emergency battery unit.

Survive-All™ SVXH Series

Class I, Division 2, Groups A, B, C and D compliant, the SVXH Series Combination Exit Sign and Battery Unit has been designed specifically for installation in hazardous locations and other high-abuse industrial environments.

The weather-resistant SVXH Series can withstand high impact, vibrations and variations in temperature. It is ideally suited for areas where the presence of flammable gases, vapors or liquids can create an explosive gas atmosphere.

The exit sign module is illuminated by long-life, energy-efficient LEDs. A fully field adjustable lamp head assembly comes standard with a selection of two MR-16 halogen lamps for optimum illumination over the path of egress. Lamps are shielded by a cast aluminum housing and a polycarbonate cover.

The rugged PVC body will not dent, peel or corrode. The sealed faceplate has a heavy-duty, vandal-resistant polycarbonate cover fastened with stainless steel tamper-resistant screws. The polyvinyl chloride frame has a built-in gasket to prevent water infiltration. The heavy-duty 1/8"-thick aluminum back plate has keyholes for secure wall-mount installation.

Advanced Diagnostics circuitry is standard on all self-powered models. This circuitry is programmed to ensure readiness and reliability by continuously monitoring every critical function of the unit. If a problem occurs, a single "Service Required" indicator illuminates immediately. A detailed diagnostic display that will further indicate the nature of the fault is located on the inside of the exit sign, out of sight from the general public. The self test will test the unit for a minimum of 30 seconds every 30 days, 30 minutes every 60 days and 90 minutes annually.

Standard Features

- Available with sealed, maintenance-free nickel-cadmium or nickel-metal hydride batteries
- Fully automatic pulse charger offers 120/277VAC, 60 Hz, current-limiting temperature compensation, short-circuit protection, low-voltage battery disconnect, brownout protection and standard solid-state transfer feature
- The test switch is magnetically operated
- Designed for wall-mount installation only, with a 1/2" electrical conduit entry on both sides and at the top
- Evaluated to UL® 924 standard and to UL® 844 standard for hazardous locations: Class I, Division 2, Groups A, B, C and D; temperature codes evaluated for several types of emergency lamps
- Five-year full warranty, excluding lamps and fuses

Accessories (Order as a separate item)

Additional Special Bit for Tamper-Proof Screws **690.0454-E**



nexus®



Applications

- Manufacturing plants
- Chemical plants
- Paint shops
- Moisture, dirt or dust concerns
- Oil refineries
- Wet or corrosive conditions
- Gas stations

Power Consumption

MODEL NO.	AC INPUT	MAXIMUM		STAND-BY		UNIT RATING*			
		CURRENT	POWER	CURRENT	POWER	1.5 HRS.	2 HRS.	3 HRS.	4 HRS.
SVXH	120/277VAC	.15/.07A	16W	.09/.03A	8W	20	15	—	—
SVXH12N	120/277VAC	.30/.08A	29W	.13/.05A	10W	24	18	12	—
SVXH12H	120/277VAC	.30/.08A	29W	.13/.05A	10W	40	30	20	12

* Watts to 87.5% of rated battery voltage.

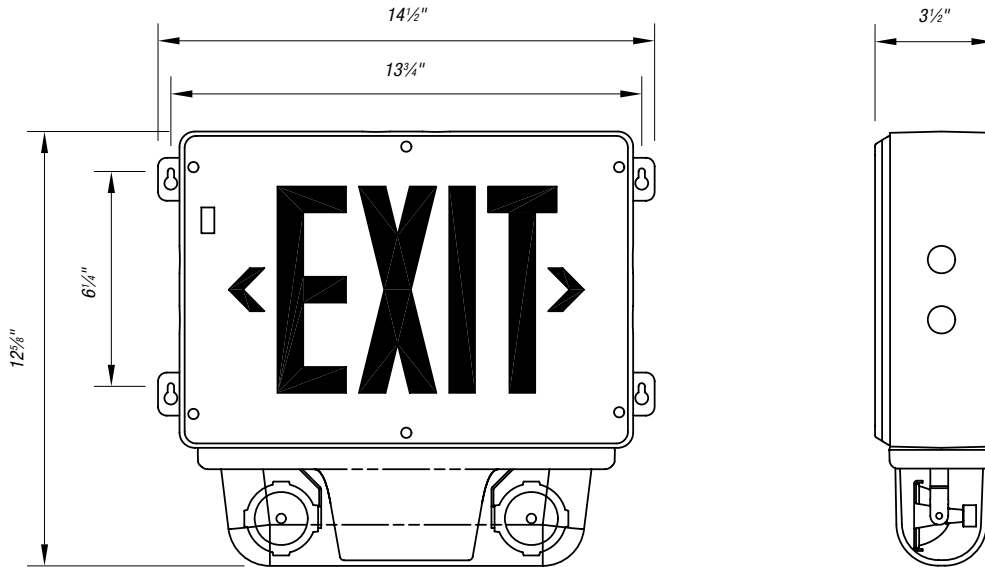
Temperature Codes

LAMP RATING	TEMPERATURE CODE	MAX. TEMPERATURE	REPLACEMENT PART NO.
6V 10W	T3C	328° F/160° C	580.0079-E
12V 12W	T3A	356° F/180° C	580.0080-E
12V 20W	T2D	419° F/215° C	580.0068-E

Spec-Grade Industrial

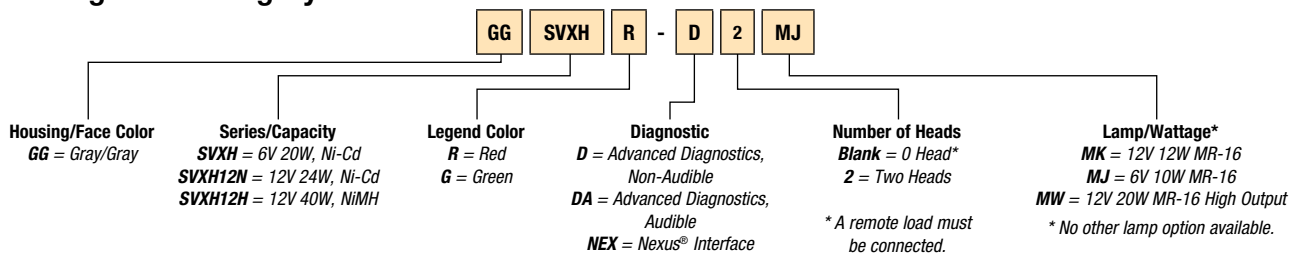
Dimensions

Dimensions are approximate and subject to change.



Lighting — Emergi-Lite® Emergency Lighting

Catalog Numbering System



Spec-Grade Industrial

Hazardous location exit sign. Survive-All™ SVX-HZ Series

A Class I, Division 2, Groups A, B, C and D compliant exit sign, the SVX-HZ Series has been designed specifically for installation in hazardous locations and other high-abuse industrial environments. The weather-resistant SVX-HZ Series can withstand high impact and is ideally suited for areas where the presence of flammable gases, vapors or liquids can create an explosive gas atmosphere. Survive-All™ SVX-HZ Series signs are unaffected by the vibrations, ambient temperature swings and typical power surges detrimental to standard exit light sources.

The SVX-HZ Series comes with a single-face heavy-duty 1/8"-thick aluminum back plate. A polyvinyl chloride frame, with built-in gasket to prevent water infiltration, will not dent, peel, rust or corrode. The sealed, heavy-duty, vandal-resistant polycarbonate faceplate features an evenly illuminated legend. The fully gasketed faceplate is fastened with stainless steel tamper-resistant screws. Self contained, the batteries and circuitry are located inside the exit housing.

Diagnostic/self-test circuitry is standard on all self-powered models. This circuitry is programmed to ensure the exit sign's readiness and reliability by continuously monitoring every critical function of the unit. If a problem occurs, a single "Service Required" indicator illuminates immediately. A detailed diagnostic display that will further indicate the nature of the fault is located on the inside of the exit sign, out of sight from the general public. The self test will test the unit for minimum 30 seconds every 30 days, 30 minutes every 60 days and 90 minutes annually.

Units can be wall, end or ceiling mounted. They come standard with an industrial-grade, die-cast aluminum electrical box, and there are 1/2" electrical conduit entries on both sides and at the top. Each unit comes standard with one tamper-proof driver bit.

Standard Features

- Energy efficient, consumes less than 2.5 watts in any configuration, and exit sign module is illuminated by long-life, energy-efficient LEDs
- Available with sealed, maintenance-free nickel-cadmium batteries that provide 90 minutes of emergency operation and recharge per UL® 924 requirements
- AC and self-powered models have universal, 2-wire input: 120 to 277VAC, 50/60 Hz
- Tamper-resistant, hermetically sealed magnetic test switch for self-powered models
- Legend and chevron comply with UL® requirements; evaluated to the UL® 844 standard for Class I, Division 2, Groups A, B, C and D, temperature code: T6 (maximum 185° F/85° C)
- Evaluated to UL® 924 and UL® 1598 standards; suitable for cold weather (-4° F/-20° C for self-powered model [CW option] and -40° F/-40° C for AC-only model)
- Five-year full warranty

Accessories (Order as a separate item)

Extra Tamper-Proof Bit..... **690.0454-E**
Convert Single to Double Face, Red*..... **DFKR**
Convert Single to Double Face, Green*..... **DFKG**

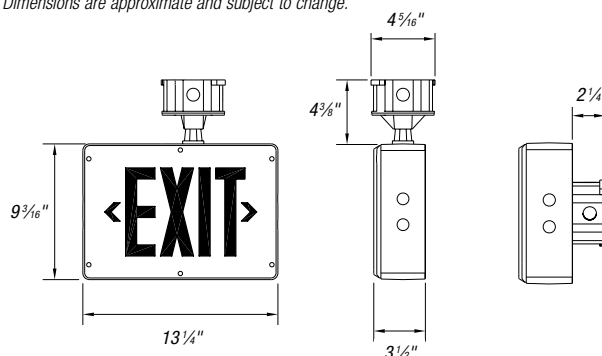
* In the field.



nexus® 
US

Dimensions

Dimensions are approximate and subject to change.



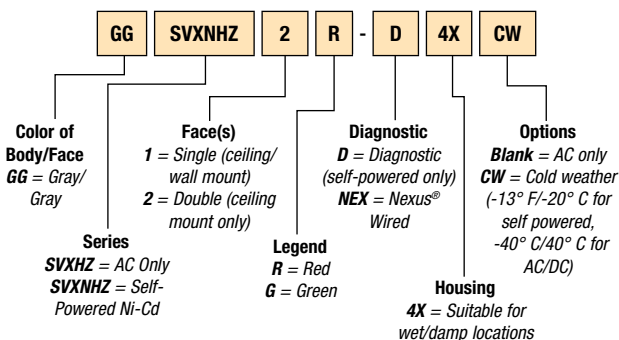
Applications

- Manufacturing plants
- Chemical plants
- Paint shops
- Moisture, dirt or dust concerns
- Oil refineries
- Wet or corrosive conditions
- Gas stations

Power Consumption

MODEL	AC SPECS		DC SPECS	
AC-Only Red	120 to 277VAC	Less than 2W	—	—
AC-Only Green	120 to 277VAC	Less than 1.5W	—	—
Self-Powered Red	120 to 277VAC	Less than 2W	Ni-Cd Battery	Min. 90 Minutes
Self-Powered Green	120 to 277VAC	Less than 2.5W	Ni-Cd Battery	Min. 90 Minutes

Catalog Numbering System



Spec-Grade Industrial

Remote fixture for hazardous locations.

Survive-All™ EF41 Series

This Class I, Division 2, Groups A, B, C and D compliant remote fixture is specifically designed for installation in hazardous locations and other high-abuse industrial environments. It is highly weather and temperature resistant and stands up to impact and vibrations. The EF41 Series is ideally suited for environments where flammable gases, vapors or liquids can create an explosive gas atmosphere.

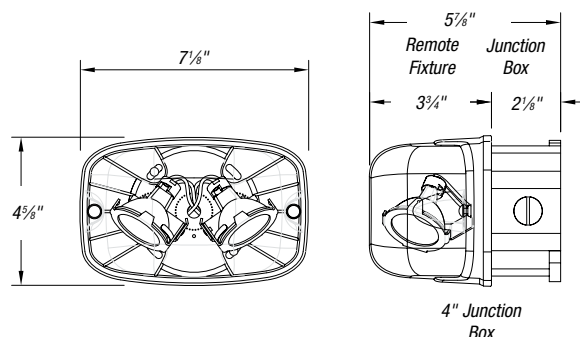
Standard Features

- Available with single or double lamp heads with high-efficiency MR-16 halogen lamps of 10, 12 or 20 watts
- Die-cast aluminum back plate with gasket
- Clear polycarbonate cover is UV and impact resistant
- Input voltage: 6V, 12V, 24V or 120V
- Easy installation on a 4" octagonal box (included) — also comes standard with tamper-proof screws and bit
- Evaluated to UL® 844 Standard for Class I, Division 2, Groups A, B, C and D
- Temperature codes: T3B (10W and 12W MR-16 lamps) and T2C (20W MR-16 lamps)
- Extreme operational temperature range: -40° F to 104° F (-40° C to 40° C)



Dimensions

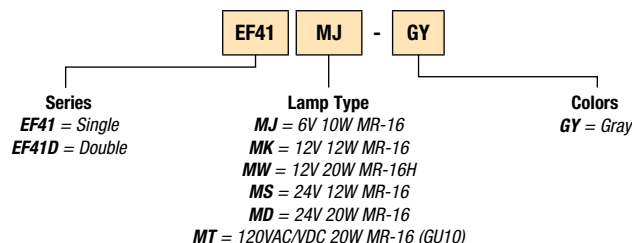
Dimensions are approximate and subject to change.



Power Consumption

LAMP TYPE	INPUT VOLTAGE	POWER (EACH OF 2 LAMPS)	TEMPERATURE CODE
MR-16	6 Volts	10 Watts	T3B (max. 329° F/165° C)
MR-16	12, 24 Volts	12 Watts	T3B (max. 329° F/165° C)
MR-16	12, 24, 120 Volts	20 Watts	T2C (max. 446° F/230° C)

Catalog Numbering System



Spec-Grade Industrial

6-, 12- and 24-volt heavy-duty industrial emergency unit.

IL Series

A heavy-duty conventional emergency lighting unit for industrial applications, the IL Series is designed to provide ample battery capacity for use when remote fixtures are required.

Standard Features

- Each unit comes with two impact-resistant, flame-retardant thermoplastic EF-18 lamp heads with 9-watt high-intensity incandescent lamps (standard)
- All steel construction with gray baked enamel finish
- Available with sealed, maintenance-free nickel-cadmium, long-life lead, lead-calcium (free electrolyte) or lead-calcium batteries
- PulsePlus Charger circuitry offers 120/277VAC, 60 Hz, .3/.15 amps (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature compensation, sealed relay, low-voltage battery disconnect, brownout protection and lockout (automatic battery connect)
- Provision for mounting to any standard 4" octagonal electrical box; the hinged and lockable front door allows easy access for maintenance and provides security against unauthorized access and vandalism
- UL® Listed; complies with NEC®, Life Safety Code® and OSHA and is approved for use in the Commonwealth of Pennsylvania
- Three-year full warranty, excluding lamps and fuses

Accessories (Order as a separate item)

Mounting Bracket **B2**
 Mounting Shelves (gray) **MP3-GY**
 Wire Guard **WG3-E**



nexus® **AD** **UL**
 DIAGNOSTICS

Unit Ratings

Furnished standard with two 9-watt high-intensity incandescent lamps.

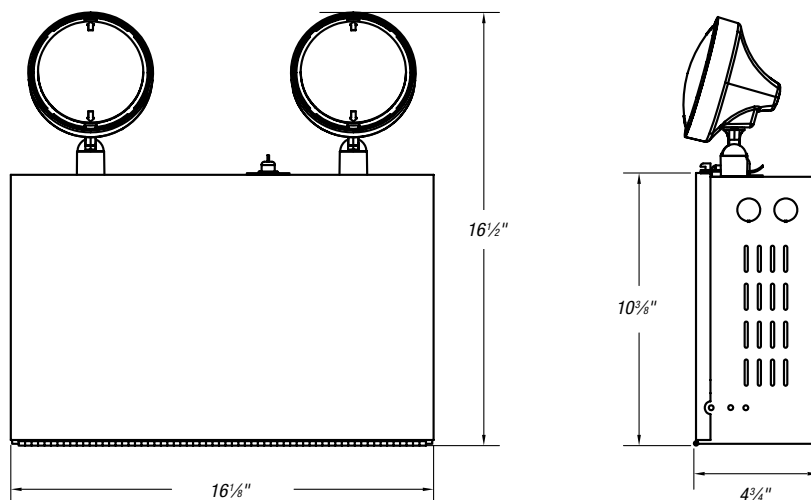
SEALED MAINTENANCE-FREE BATTERY TYPES	DC VOLTAGE	MODEL NO.	WATTS TO 87.5% OF RATED BATTERY VOLTAGE*				NO. OF LOAD FUSES
			1½ HRS.	2 HRS.	4 HRS.	8 HRS.	
Unit Equipment — No Remote Capability							
Nickel-Cadmium	6	ILSC18-2	18	12	6	—	—
Long-Life Lead	6	ILSE18-2	18	11	6	—	—
Lead-Calcium	6	ILSM18-2	18	12	7	—	—
Unit Equipment — With Remote Capability							
Nickel-Cadmium	6	ILSC25-2	25	18	9	—	—
	12	12ILSC36-2	36	21	12	6	1
	12	12ILSC50-2	50	36	18	10	1
	24	24ILSC72-2	72	42	24	12	2
	24	24ILSC100-2	100	73	36	20	2
Long-Life Lead	6	ILSE27-2	27	16	10	6	—
	6	ILSE36-2	36	24	13	7	—
	6	ILSE54-2	54	36	20	11	—
	6	ILSE80-2	80	65	35	19	—
	6	ILSE110-2	110	72	40	24	—
	12	12ILSE36-2	36	24	13	7	1
	12	12ILSE54-2	54	37	21	10	1
	12	12ILSE72-2	72	48	26	14	2
	12	12ILSE110-2	110	74	43	21	2
	24	24ILSE72-2	72	48	26	14	2
24	24ILSE110-2	110	74	43	21	2	
Lead-Calcium (Immobilized Electrolyte)	6	ILC87-2	87	70	41	24	—
	6	ILC100-2	100	77	47	24	—
Lead-Calcium	6	ILSM27-2	27	18	10	6	—
	6	ILSM36-2	36	25	14	7	—
	6	ILSM54-2	54	37	21	12	—
	6	ILSM81-2	81	54	36	18	—
	6	ILSM110-2	110	72	40	24	—
	12	12ILSM36-2	36	25	14	7	1
	12	12ILSM54-2	54	37	21	12	1
	12	12ILSM110-2	110	72	40	24	2
	24	12ILSM110-2	110	72	40	24	2

* National Electrical Code® specification.

Spec-Grade Industrial

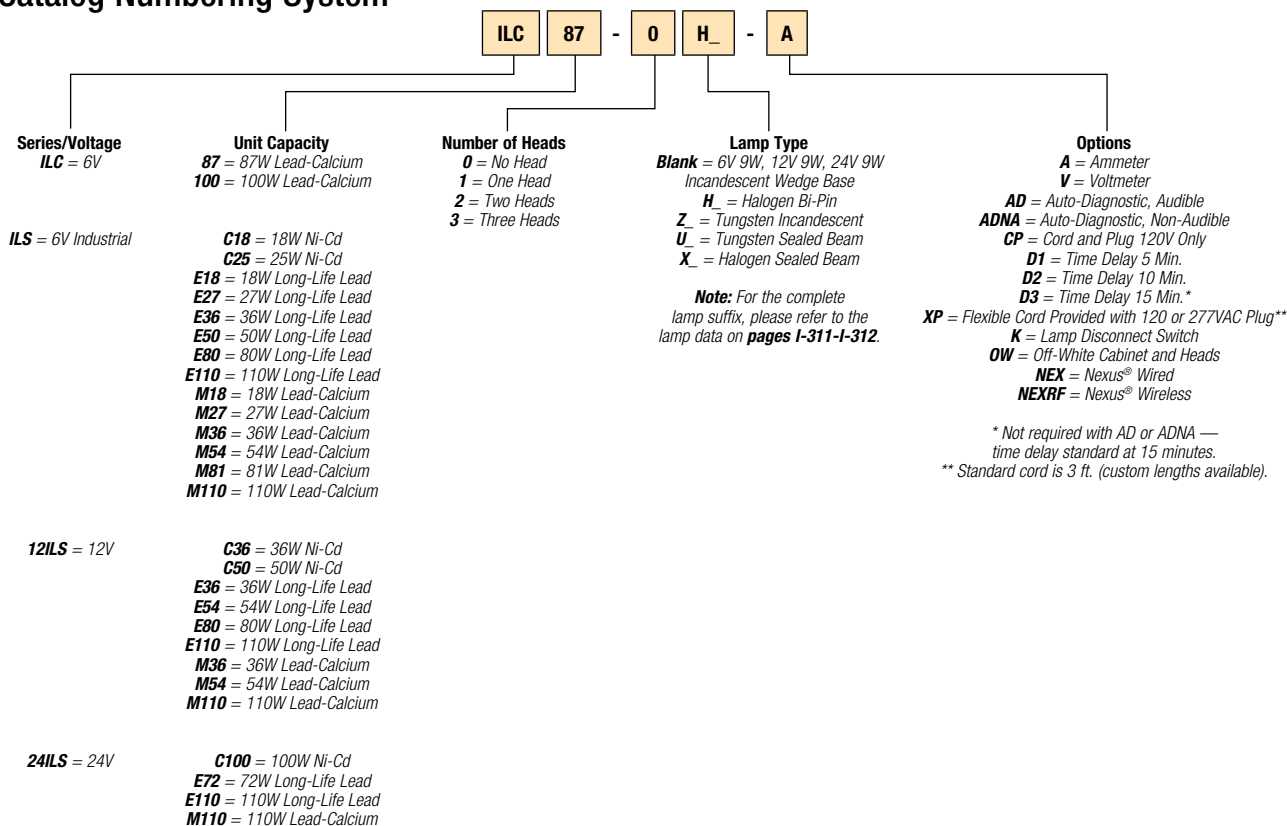
Dimensions

Dimensions are approximate and subject to change.



Knockouts for 1/2" conduit: 2 each side, 1 rear (7/8" dia.) KO

Catalog Numbering System



Spec-Grade Industrial

6-, 12- and 24-volt harsh environment enclosures.

KS Steel Series

For areas where dust, liquids and atmospheric contaminants may be present, the KS Steel Series industrial emergency lighting units are designed to protect the circuitry and connections.

Standard Features

- Up to three weather-resistant thermoplastic heads can be mounted on the enclosure, and each unit comes with two 9-watt high-intensity incandescent lamps (standard)
- Constructed of 14-gauge steel with a fully gasketed hinged door and separate battery compartment
- Gray baked epoxy enamel finish
- Available with sealed, maintenance-free nickel-cadmium, long-life lead, lead-calcium (free electrolyte) or lead-calcium batteries
- PulsePlus Charger circuitry offers 120/277VAC, 60 Hz, .3/.15 amps (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature compensation, sealed relay, low-voltage battery disconnect, brownout protection and lockout (automatic battery connect)
- UL® Listed; complies with NEC®, Life Safety Code® and OSHA
- Three-year full warranty, excluding lamps and fuses



Unit Ratings

Furnished standard with two 9-watt high-intensity incandescent lamps.

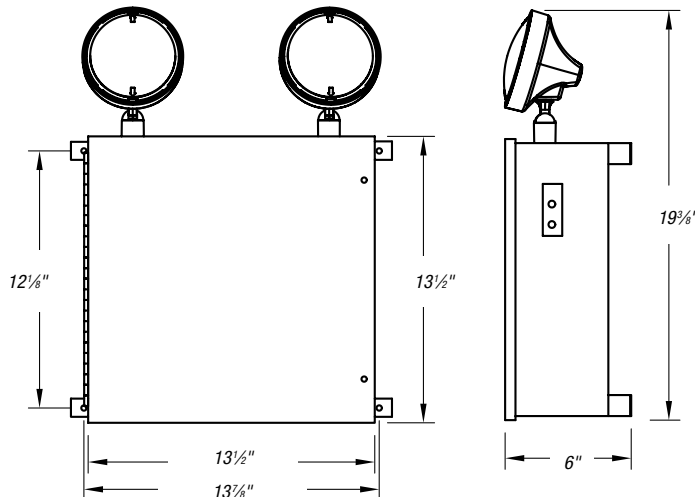
SEALED MAINTENANCE-FREE		WATTS TO 87.5% OF RATED BATTERY VOLTAGE*				
BATTERY TYPES	DC VOLTAGE	MODEL NO.	1½ HRS.	2 HRS.	3 HRS.	4 HRS.
Unit Equipment — No Remote Capability						
Nickel-Cadmium	6	KSC18-2	18	12	10	7
Long-Life Lead	6	KSE18-2	18	11	8	6
Unit Equipment — With Remote Capability						
Nickel-Cadmium	6	KSC25-2	25	18	9	5
	12	12KSC36-2	36	21	21	6
	12	12KSC50-2	50	36	18	10
	24	24KSC100-2	100	73	37	20
Long-Life Lead	6	KSE27-2	27	19	10	5
	6	KSE36-2	36	24	13	7
	6	KSE54-2	54	36	20	11
	6	KSE80-2	80	65	35	19
	6	KSE110-2	110	74	43	21
	6	KSE160-2	160	130	70	38
	12	12KSE36-2	36	24	13	7
	12	12KSE54-2	54	37	21	10
	12	12KSE110-2	110	74	43	21
	12	12KSE160-2	160	130	70	38
	24	24KSE110-2	110	74	43	21
Lead-Calcium (Free Electrolyte)	6	KC87-2	87	70	41	24
	6	KC100-2	100	77	47	24
	6	KC175-2	175	140	85	48
	12	12KC175-2	175	140	85	48
Lead-Calcium	6	KSM27-2	27	18	10	6
	6	KSM54-2	54	37	21	12
	6	KSM81-2	81	54	30	18
	6	KSM110-2	110	72	40	24
	12	12KSM54-2	54	37	21	12
	12	12KSM110-2	110	72	40	24
	24	24KSM110-2	110	72	40	24

* National Electrical Code® specification.

Spec-Grade Industrial

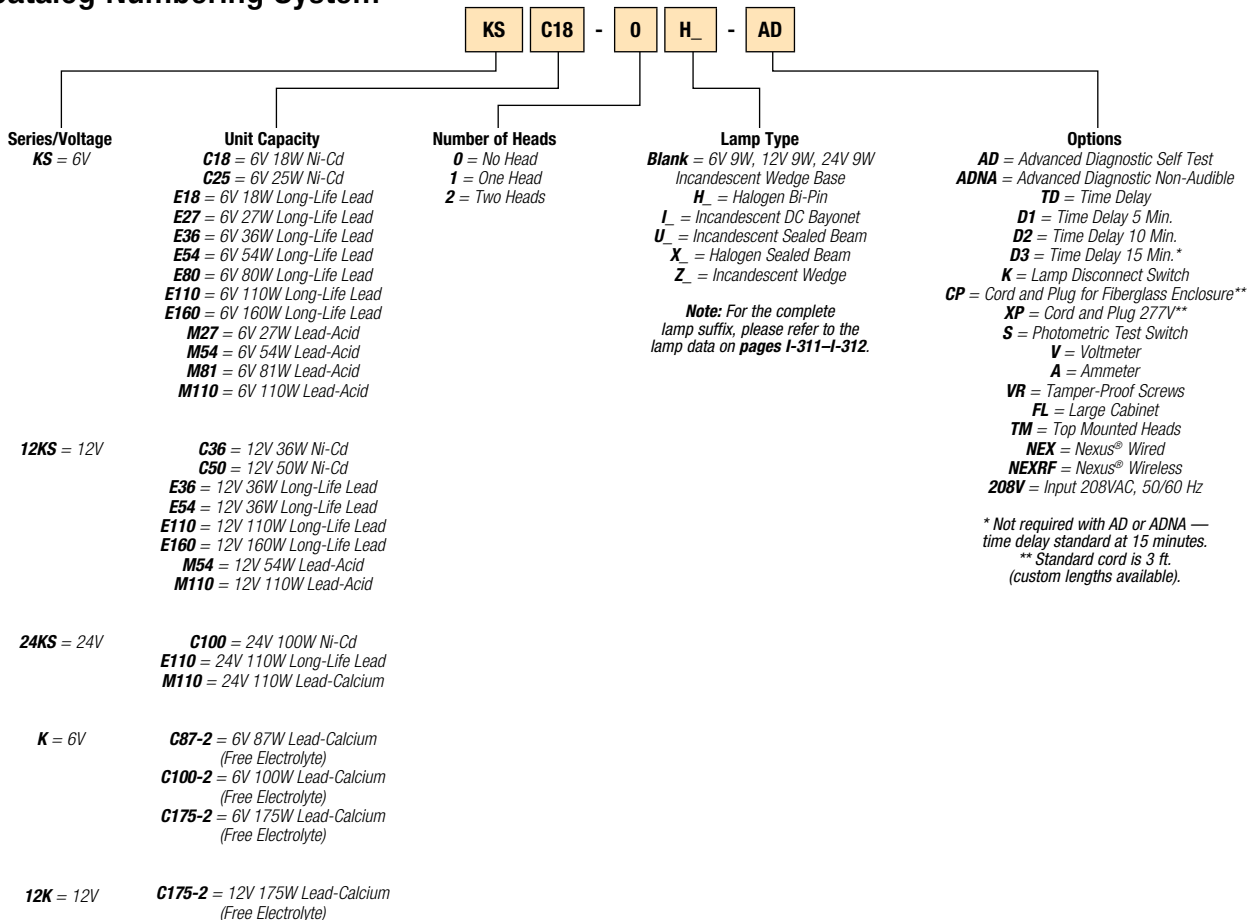
Dimensions

Dimensions are approximate and subject to change.



Lighting — Emergi-Lite® Emergency Lighting

Catalog Numbering System



Spec-Grade Industrial

6-, 12- and 24-volt high-impact enclosures.

KS Series

With chemical-resistant, fully gasketed enclosures that come with stainless steel hardware, the KS Series is designed specifically for industrial applications involving severely corrosive or damp environments.

The KS Series is ideally suited for areas such as food processing plants.

Standard Features

- Each unit comes with two 9-watt high-intensity incandescent lamps (standard)
- Both the “S” and “L” enclosure are corrosion resistant and include separate battery compartments, a fully gasketed door and stainless steel hardware
- The “S” enclosure is constructed of high-impact thermoplastic
- The “L” enclosure is constructed of fiberglass
- Available with sealed, maintenance-free nickel-cadmium, long-life lead, lead-calcium (free electrolyte) or lead-calcium batteries
- PulsePlus Charger circuitry offers 120/277VAC, 60 Hz, .3/.15 amps (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature compensation, sealed relay, low-voltage battery disconnect, brownout protection and lockout (automatic battery connect)
- UL® Listed; complies with NEC®, Life Safety Code® and OSHA
- Three-year full warranty, excluding lamps and fuses



Large “L” Enclosure
Fiberglass Housing
UL® Listed NEMA 3R
Enclosure, 160 and 175
Watts, 6 and 12 Volts



Small “S” Enclosure
High-Impact Thermoplastic Housing
18 to 110 Watts,
6, 12 and 24 Volts

NEMA 3R nexus®



Unit Ratings

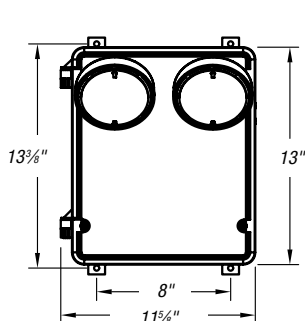
SEALED		WATTS TO 87.5% OF RATED						
MAINTENANCE-FREE		BATTERY VOLTAGE*				UNIT		
BATTERY TYPES	DC	VOLTAGE	MODEL NO.	1½ HRS.	2 HRS.	3 HRS.	4 HRS.	HOUSING
Unit Equipment — No Remote Capability								
Nickel-Cadmium	6	KSC18-2-F	18	12	10	7	S	
Long-Life Lead	6	KSE18-2-F	18	11	8	6	S	
Unit Equipment — With Remote Capability								
Nickel-Cadmium	6	KSC25-2-F	25	18	9	5	S	
	12	12KSC36-2-F	36	21	12	6	S	
	12	12KSC50-2-F	50	36	18	10	S	
	24	24KSC100-2-F	100	73	37	20	S	
Long-Life Lead	6	KSE27-2-F	27	19	10	5	S	
	6	KSE36-2-F	36	24	13	7	S	
	6	KSE54-2-F	54	36	20	11	S	
	6	KSE80-2-F	80	65	35	19	S	
	6	KSE110-2-F	110	74	43	21	S	
	6	KSE160-2-F	160	130	70	38	L	
	12	12KSE36-2-F	36	24	13	7	S	
	12	12KSE54-2-F	54	37	21	10	S	
	12	12KSE110-2-F	110	74	43	21	S	
	12	12KSE160-2-F	160	130	70	38	L	
Lead-Calcium (Free Electrolyte)	24	24KSE110-2-F	110	74	43	21	S	
	6	KC87-2-F	87	70	41	24	S	
	6	KC100-2-F	100	77	47	24	L	
	6	KC175-2-F	175	140	82	48	L	
Lead-Calcium	12	12KC175-2-F	175	140	85	48	L	
	6	KSM27-2-F	27	18	10	6	S	
	6	KSM54-2-F	54	37	21	12	S	
	6	KSM81-2-F	81	54	30	18	S	
	6	KSM110-2-F	110	72	40	24	S	
	12	12KSM54-2-F	54	37	21	12	S	
	12	12KSM110-2-F	110	72	40	24	S	
	24	24KSM110-2-F	110	72	40	24	S	

* National Electrical Code® specification.

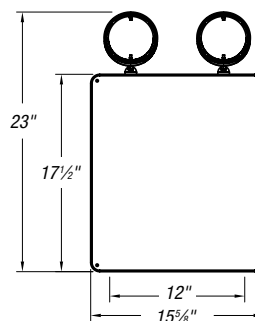
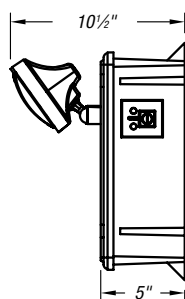
Spec-Grade Industrial

Dimensions

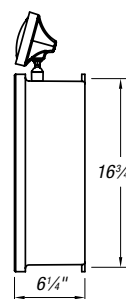
Dimensions are approximate and subject to change.



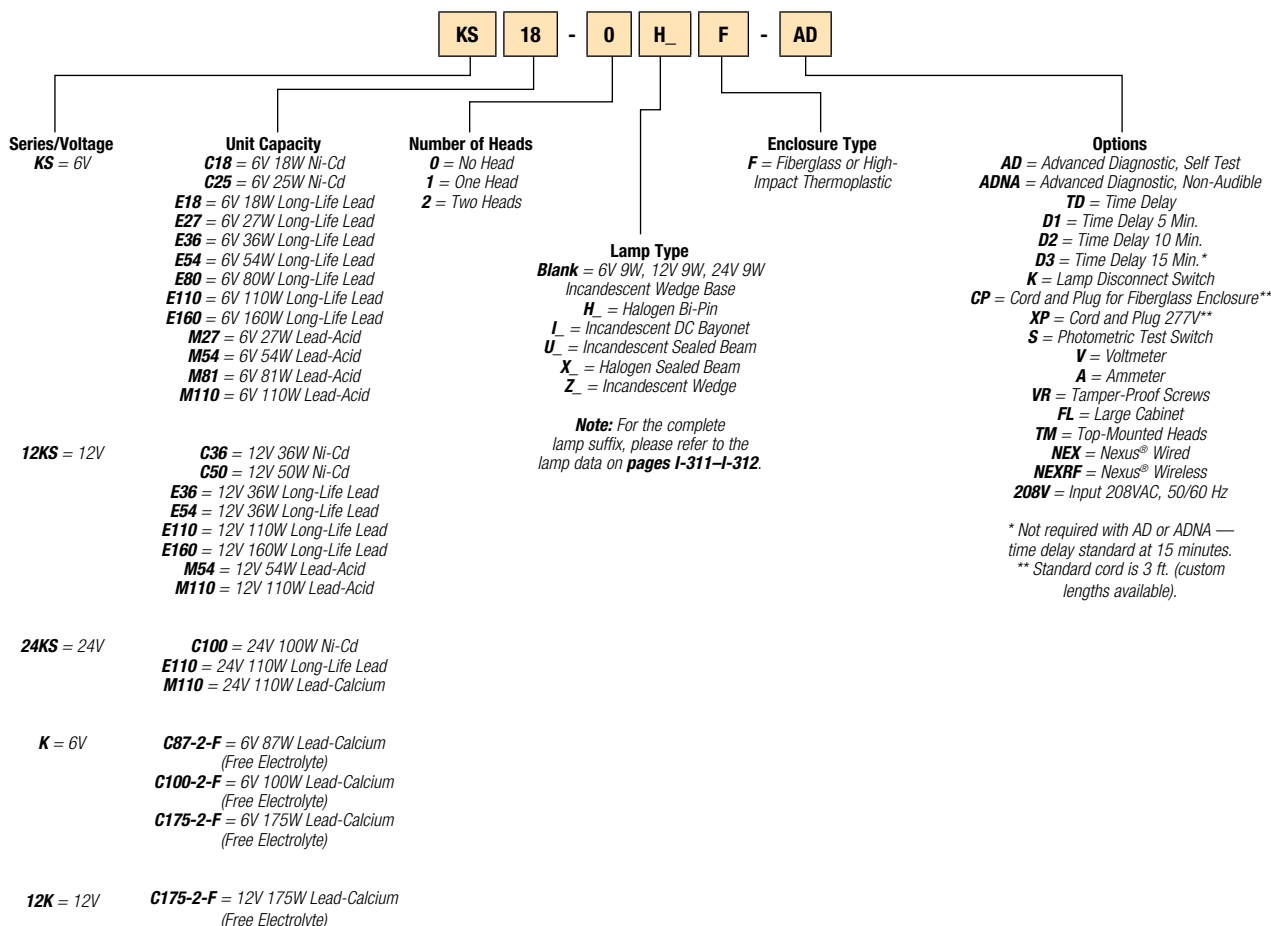
Small "S" Enclosure
High-Impact Thermoplastic Construction



Large "L" Enclosure
Fiberglass Construction



Catalog Numbering System



Spec-Grade Industrial

6 and 12 Volt — Class I Div. 1 and 2, Groups C and D, Class II Div. 1 and 2, Groups E, F and G.

EXC Series

Completely self-contained and weather resistant, the EXC Series is a maintenance-free nickel-cadmium power system that provides safe emergency lighting in hazardous areas.

The copper-free cast aluminum housing features a gasketed cover that spins off for easy access to the battery and electronics. A variety of fixtures and exit signs are available for mounting either directly to the housing or remotely for complete job flexibility.

Standard Features

- Allows mounting up to three hazardous area fixtures directly on the power unit or remotely
- Corrosion-resistant, copper-free cast aluminum construction
- A weatherproof gasketed spin-off cover, UL® Listed stainless steel vent/drain and silicone conformal coating on the circuit board protect the electronics against humidity
- Comes standard with epoxy finish for added corrosion protection in harsh environments
- Available with sealed, maintenance-free nickel-cadmium batteries
- Charger offers 120/277VAC, 60 Hz, .3/15 amp, 36 watt (other inputs available), fused DC output circuit, AC pilot light supervision, temperature compensation, sealed relay, low-voltage battery disconnect, brownout protection, lockout (automatic battery connect), solid-state and current-limited design, constant-current short-circuit and reverse-polarity protection
- Meets hazardous location requirements: Class I Division 1 and 2 (Groups C and D); Class II, Division 1 and 2 (Groups E, F and G)
- Three-year full warranty, excluding lamps, pilot lights and fuses

Fixtures

The EXC Series may be supplied with one or two hazardous fixtures mounted directly on the power unit and/or remotely as the application dictates. (For remote fixtures, consult hazardous area fixture data sheet.)

Lamp Fixtures (EP Series, see pages I-262–I-263): Fully directional UL® Listed copper-free cast aluminum construction, swivel-mounted, Pyrex® lens, complete with either 9-, 18-, or 25-watt HIT lamps (halogen optional). Available with optional guard or reflectors.

Pyrex® is a registered trademark of Corning Glass.

Exit Sign Fixtures (XP Series, see pages I-264–I-265): Mounted to the power unit, these exit signs are supplied standard with our unique integral transfer switch (TS) and utilize either a 6-volt 15-watt XX6 lamp or 12-volt 25-watt XX12 lamp. This enables the exit sign to operate in both the normal AC mode as well as the DC mode. The exit sign consists of an EP fixture coupled with a heavy-duty steel and baked enamel finish exit shroud with ample downlight. Supplied standard as a single-face sign, red stencil faceplate; double face and green stencil also available. For other legends, consult your Thomas & Betts sales representative.



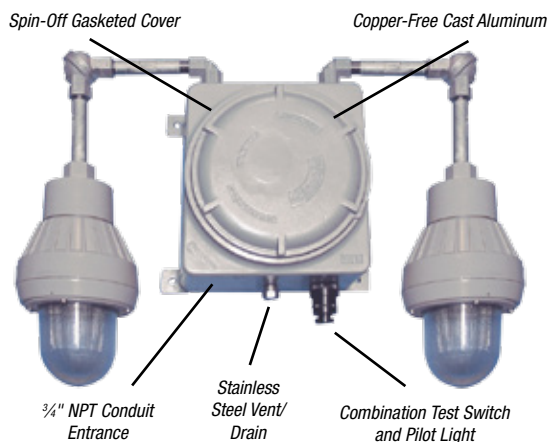
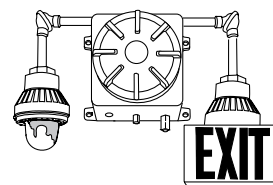
Unit Ratings

SEALED MAINTENANCE- FREE BATTERY TYPES	DC VOLTAGE	MODEL NO.	WATTS TO 87.5% OF RATED BATTERY VOLTAGE*			
			1½ HRS.	2 HRS.	4 HRS.	8 HRS.
<i>Unit Equipment — With Remote Capability</i>						
Nickel-Cadmium	6	EXC1	18	12	—	—
	6	EXC2	25	18	9	—
	6	EXC3	36	21	12	6
	6	EXC5	50	36	18	10
	12	1EXC3	36	21	12	6
	12	1EXC5	50	36	18	10
	12	1EXC7	72	42	24	12

* National Electrical Code® specification.

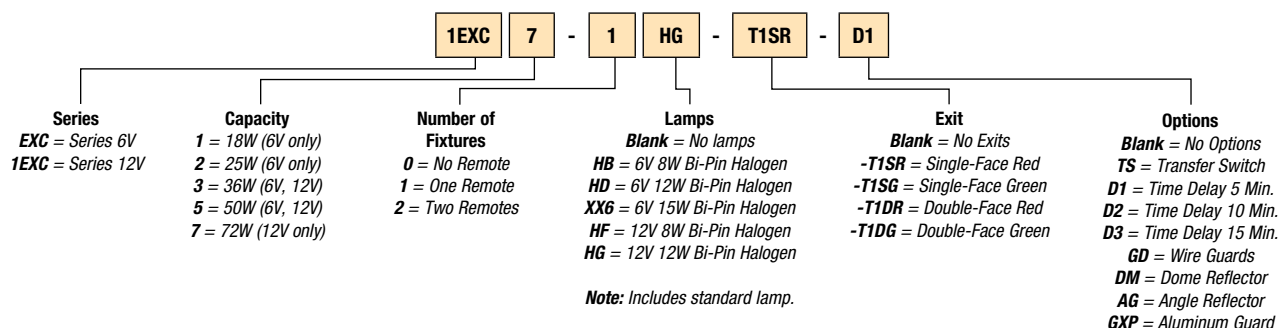
Dimensions

Housing:
12" x 12" x 9½"
(4) Mounting Lugs:
10" and 13½" on center;
Overall Dimensions
(including fixtures):
38" x 38" x 10"
Note: Dimensions are
approximate and are
subject to change.

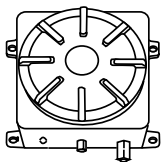
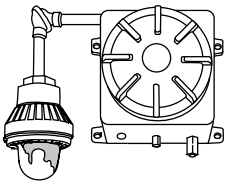
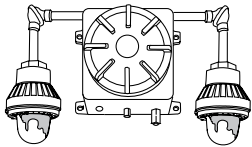
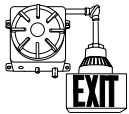
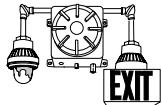


Spec-Grade Industrial

Catalog Numbering System



Standard Configurations for EXC Series

UNIT	CATALOG NO.	DESCRIPTION
 (Remote capability)	1EXC5-0	12-volt, 50-watt self-contained hazardous area emergency lighting power unit complete with battery and charger.
	1EXC5-TS	12-volt, 50-watt self-contained hazardous area emergency lighting power unit complete with battery, charger and transfer switch.
	1EXC5-11G	12-volt, 50-watt, single-head unit with 12-volt, 25-watt HIT lamp.
	1EXC5-11G-TS	12-volt, 50-watt, single-head unit with built-in transfer switch and 12-volt, 25-watt HIT lamp.
	EXC3-2IB	6-volt, 36-watt, self-contained hazardous area emergency lighting power unit complete with battery and charger. Fixture supplied with one IB 18-watt HIT lamp.
	EXC5-2IB-TS	6-volt, 50-watt, double-head unit with built-in transfer switch and 12-volt 25-watt HIT lamp.
	EXC2-T1SR	6-volt, 25-watt, self-contained unit with integral low-voltage transfer switch (TS) to operate exit lamp in both normal and emergency modes. Suggested Catalog Number shown indicates single-face exit with red stencil faceplate. For green, substitute G for R. For double face, substitute D for S.
	EXC5-11C-T1SR	6-volt, 50-watt unit. In addition to the exit lamp, which operates in both normal and emergency modes, emergency lighting can be achieved with one additional emergency lighting head. Example: IC = 25 watts.

Note: Above units are supplied with appropriate wattage high-intensity tungsten (HIT) lamps (unless otherwise specified). Alternate wattage lamps or halogen lamps may be substituted as required. Exit sign provided with 25-watt lamps only.

Spec-Grade Industrial

Remote explosion-proof lighting fixtures.

EFEP Series

Designed for mounting in locations remote from the power source, the EFEP Series is offered with 6-, 12- and 24-volt lamps for DC operation or 120VAC fixtures.



If the power source is installed outside hazardous areas, the length of connection wires should be carefully considered to ensure that the voltage of the emergency power unit and the wire size of the connecting circuit are adequate to offset the voltage drop in the circuit.

Standard Features

- Manufactured of heavy cast aluminum with an epoxy finish and a Pyrex® lens; all attached hardware has been designed for explosion-proof applications
- EFEP1, 2 and 3 fixtures include elbow swivels, conduit extension pipe (6" increments) and combination explosion-proof junction box/mounting plate (4" box, 6 1/4" mounting center)
- Complies with NEC®, OSHA and NEMA specifications for the following Classes and Groups:
 - Class I, Division 1 & 2, Groups C & D (300W PS-25 max.)
 - Class II, Division 1 & 2, Groups E, F & G (60W max.)
 - Class III, Division 1 & 2 (150W max.)
 - UL® Listed for use in Paint Spray Areas (75W max.)
 - Suitable for Wet Locations

Pyrex® is a registered trademark of Corning Glass.

Options

	Description	Suffix
	Guard..... One-piece aluminum casting construction, attaches to globe holder ring with four screws.	-GXP
	Description	Suffix
	Dome Reflector..... Highly reflective white finish inside and out, attaches to globe holder ring with four screws.	-RD
	Description	Suffix
	Angle Reflector..... Highly reflective white finish inside and out, attaches to globe holder ring with four screws.	-RA



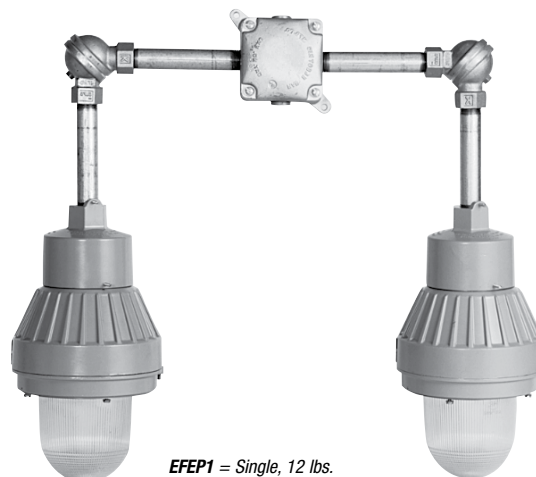
EFEPW = Wall Bracket Mount, 14 lbs.



EFEPP = Pendant Mount with Hanger Box and Pendant, 14 lbs.



EFEPC = Ceiling Mount, 11 lbs.

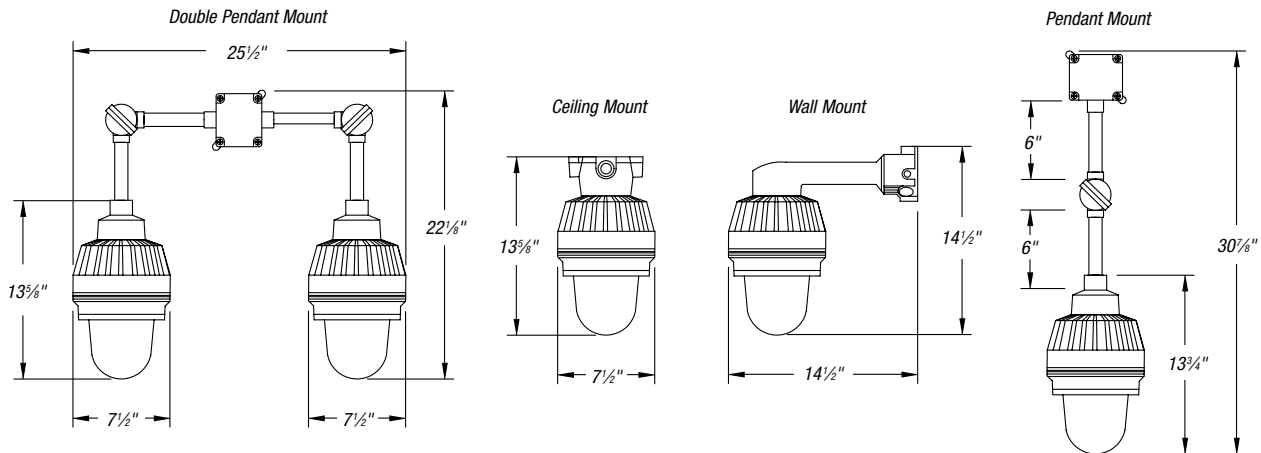


EFEP1 = Single, 12 lbs.
EFEP2 = Double, 21 lbs.
EFEP3 = Triple, 30 lbs.

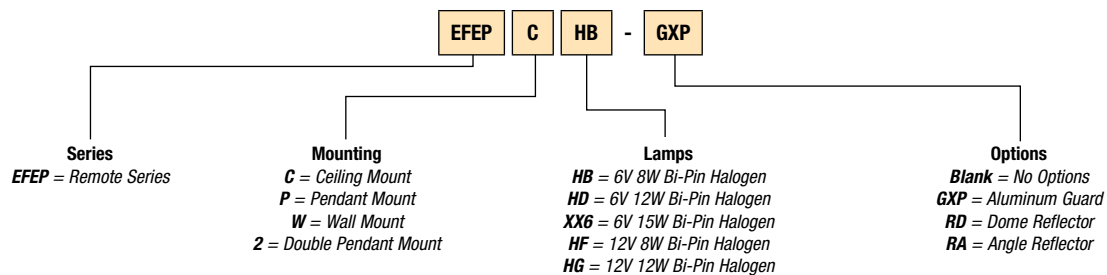
Spec-Grade Industrial

Dimensions

Dimensions are approximate and subject to change.



Catalog Numbering System



Spec-Grade Industrial

Explosion-proof remote exit signs.

EFXP Series

Available with an explosion-proof housing (Class I, Division 1) or a NEMA 1 housing, the EFXP Series is designed for mounting in locations that are remote from the power source.

Exit signs shown are explosion-proof fixtures of heavy cast aluminum construction with Pyrex® lenses. The housing is an 18-gauge fabricated steel box with a baked enamel finish. Stenciled exit lettering is available on one or two faces. All EFXP Series have extra-large downlight openings.

If the power source is installed outside hazardous areas, the length of the connection wires should be carefully considered to ensure that the voltage of the emergency power unit and the wire size of the connecting circuit are adequate to offset the voltage drop in the circuit.

Standard Features

- Available with 6-, 12- and 24-volt lamps for DC operation or 120VAC fixtures
- Complies with NEC®, OSHA and NEMA specifications for the following Classes and Groups:
 - Class I, Division 1 & 2, Groups C & D (300W PS-25 max.)
 - Class II, Division 1 & 2, Groups E, F & G (60W max.)
 - Class III, Division 1 & 2 (150W max.)
 - UL® Listed for use in Paint Spray Areas (75W max.)
 - Suitable for Wet Locations

Pyrex® is a registered trademark of Corning Glass.

Lamp Selection (exit signs)

LAMP TYPE	VOLTAGE	POWER	LAMP TYPE	AVERAGE LIFE (HOURS)	SUFFIX
Quartz Bi-Pin	6V	15W	JC-6V15W	2,000	-XX6
	6V	25W	25A-12	1,000	-XX12
Medium Base	24V	25W	143A	1,000	-XX24
	120V	25W	A19	2,500	-AC
LED Lamp, Red	120V	5W	—	100,000	-XX120

Mounting

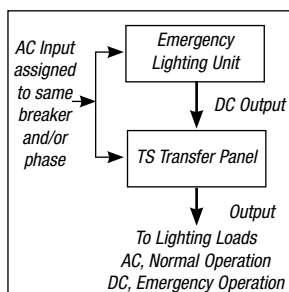
The transfer circuit is not designed for use in hazardous or explosive areas. The transfer circuit is to be mounted remotely from hazardous areas.

Electrical Specifications for Transfer Panel

Input Voltage: From AC: 120 Volt, 60 Hz, 1-Phase (other voltages available)
From DC: 6, 12, 24 or 120 Volt (select)

Output Voltage: Must be identical to DC Input Voltage

Wattage: Panel oversized 10–20% greater than total connected load



EFXPW = Wall Bracket Mount



EFXPP = Adjustable Pendant Mount



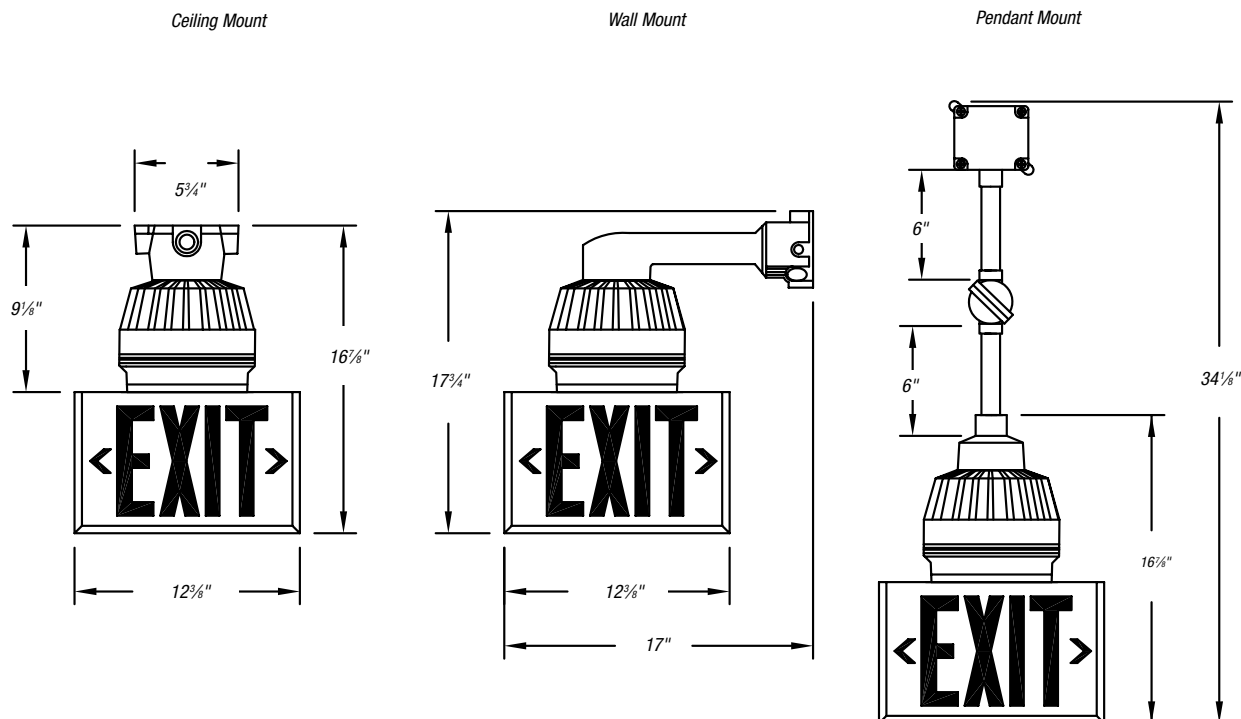
EFXPC = Ceiling Mount

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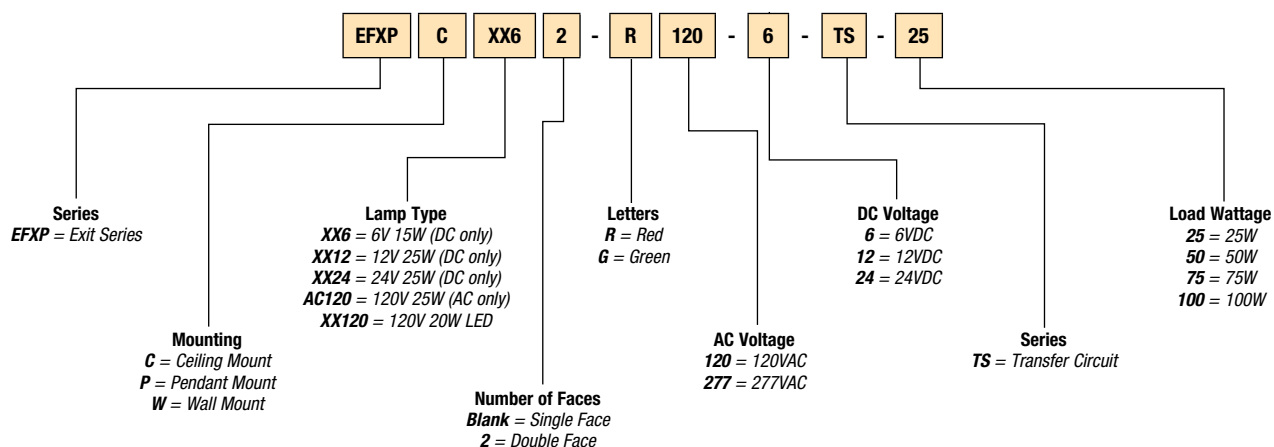
Spec-Grade Industrial

Dimensions

Dimensions are approximate and subject to change.



Catalog Numbering System



Spec-Grade Industrial

X61-X62 self-luminous exit signs.

EverLite Self-Luminous Series

Non-electric — no wiring or energy required. For use in hazardous, explosive, corrosive, humid or any other harsh environments. EverLite exit signs will not cause or contribute to the ignition of any hazardous or explosive atmospheres. Ideal for any distinguished exit sign application, the EverLite Series is of rugged thermoplastic construction with a contemporary design, smooth rounded corners and a vibrant faceplate color.

Standard Features

- Legend is constructed of non-glare polycarbonate with .015"-thick, open letters, field-programmable arrows and white letters with background colors of red or green; contrast ratio for both colors exceeds .5 and meets requirements of UL® 924 and NFPA 101®
- Frame finishes include off-white or designer black, and the entire unit is tamper-proof and completely self-contained
- Tritium gas energizes the phosphor-coated borosilicate tubes, and the low-energy beta emission of tritium striking the phosphor coating inside the Pyrex® glass tubes causes illumination to be generated
- Signs mount flush to wall or ceiling surfaces; a canopy is not required
- UL® Listed; complies with NFPA, Life Safety Code® and OSHA
- EverLite signs are spark-free and suitable for use in hazardous, explosive, corrosive, humid or any other harsh environment
- Emergi-Lite® will replace free of charge any product in which the luminosity is found to be defective during its specified luminous life, or which falls below specified luminous life

Pyrex® is a registered trademark of Corning Glass.

Accessories (Order as a separate item)

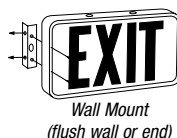
White Pendant..... P-WT*

* Specify pendant length (12", 24", 36", etc.).

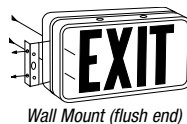


Mounting

Single-Face Signs



Double-Face Signs



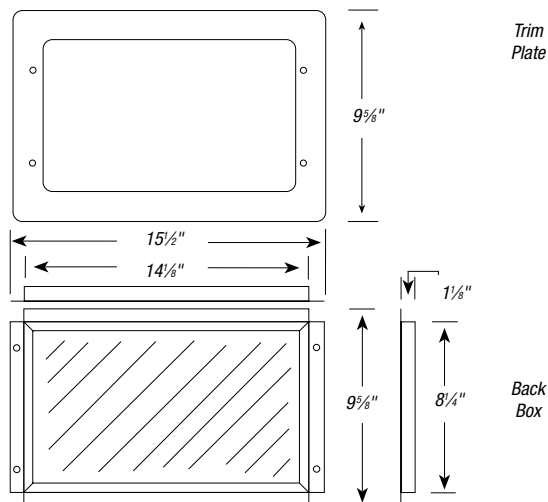
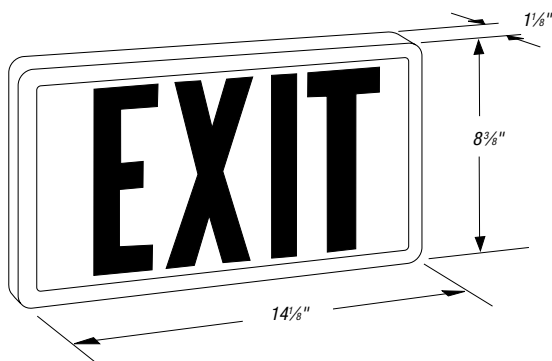
National Electrical Code, Life Safety Code and NFPA 101 are registered trademarks of the National Fire Protection Association, Inc.

Spec-Grade Industrial

Dimensions

Dimensions are approximate and subject to change.

Fully Recessed FR Option



Applications (for use in harsh or dangerous environments)

- Meet full test specifications of ANSI (American National Standards Institute)
- Meet requirements of National Electrical Code®, Class I and II conditions
- Licensed for distribution by U.S. Nuclear Regulatory Commission

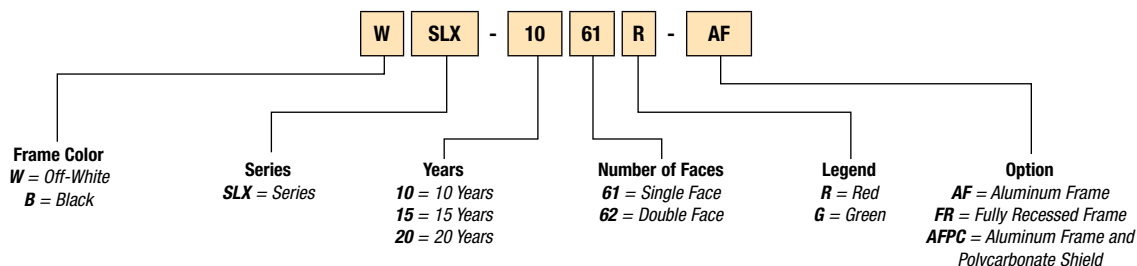
Harsh Environments

- Mines • Spray booth areas • Refineries • Off-shore rigs • Paper mills
- Chemical plants • Food processing plants • Grain elevators

Licenses and Codes

- UL® — Underwriters Laboratories
- OSHA — Occupational Safety and Health Association
- NFPA — National Fire Protection Association
- BOCA, ICBO, SBCCI — American Building Officials
- MSHA — Mine Safety and Health Administration
- NRC — Nuclear Regulatory Commission
- Uniform, Basic and Standard Building Codes
- City of Los Angeles Approved

Catalog Numbering System



Distributor Select

Die-cast exit sign.

Prestige™ Thin Series

Ideal for applications requiring attractive, thin-profile, die-cast aluminum signage, superior illumination and low energy consumption, the THIN exit provides a sleek, thin architectural profile, which allows for an alternative to the traditional die-cast exit. The THIN exit is ideal for today's contemporary applications, where style and design are needed.

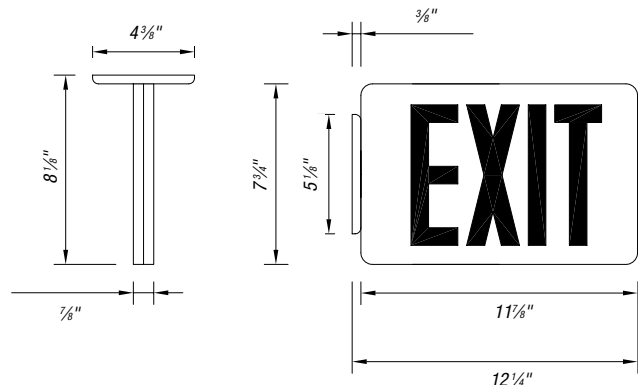
Standard Features

- Easy to install
- Thin-profile, die-cast aluminum housing
- Clear lacquer, brushed aluminum inhibits fingerprints and other surface contaminants; also available with white finish
- Universal directional chevron knockouts are completely concealed and easily removed from faceplate
- Letters are 6" high with $\frac{3}{4}$ " stroke and 100 ft. viewing distance rating
- Low power consumption
- Dual-voltage input capability 120/277VAC
- Self-powered models are provided with test switch, LED pilot light and rechargeable nickel-cadmium battery
- Sealed, maintenance-free, nickel-cadmium battery delivers 90 minutes of emergency power on all self-powered models
- Universal mounting — top, back or end
- Mounting knockout and hole plugs are easily removed
- Die-cast aluminum canopy is provided (white canopy with white frame and black canopy with black frame)
- UL® Listed; damp location listing 32° F to 122° F (0° C to 50° C); meets UL® 924, NFPA 101® (Life Safety Code®), NEC®, NFPA 70 and OSHA illumination standards
- Five-year full warranty



Dimensions

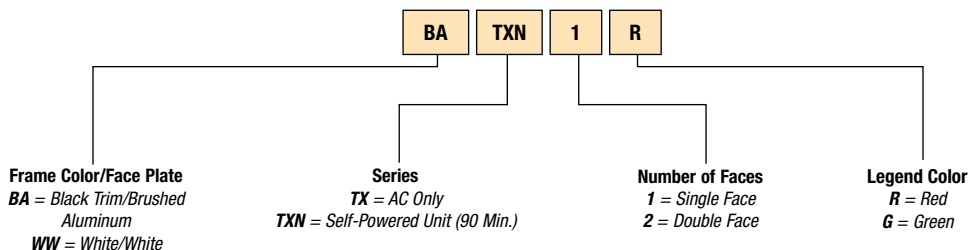
Dimensions are approximate and subject to change.



Power Consumption

MODEL	AC SPECS		DC SPECS	
AC-only	120/277VAC 60 Hz	Typical 1W Less than 1.5W	—	—
Self-powered	120/277VAC 60 Hz	Typical 1W Less than 1.5W	Ni-Cd Battery	90 min.

Catalog Numbering System



Distributor Select

6-volt thermoplastic unit.

DLM-2 Series

A molded-in strut style test switch and two flush-mounted fresnel lenses add a contemporary elegant style to the DLM-2 Series. Its compact design, measuring only 5" x 12", has a lightly textured, off-white finish that blends well with a variety of architectural surfaces. No screws or other mounting hardware are visible. The DLM-2 Series can be mounted in any orientation on walls or ceilings.

Standard Features

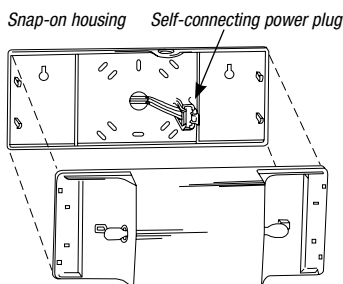
- Each self-contained unit comes with two 6V high-intensity glass wedge-based incandescent lamps
- Constructed of high-impact UL® Recognized 94V 5VA thermoplastic, the DLM-2 Series resists denting, peeling, scratching and corrosion and features a transparent polycarbonate lens
- Sealed, maintenance-free lead-calcium batteries
- Integrated circuitry offers 120/277VAC, .08/.04 amp standard, automatic charging, instantaneous transfer, test switch, long-life LED AC charge monitor light, temperature-compensated charger, short-circuit proof and reverse-polarity protection, low-battery voltage disconnect, brownout protection and lockout (automatic battery connection)
- Can be mounted in any orientation on walls or ceilings, and no screws or other mounting hardware are visible
- Listed to UL® 924 Standard and complies with NEC®, Life Safety Code® and OSHA
- Three-year full warranty, excluding lamps, pilot lamps and fuses
- Damp location standard

Performance

In both mechanical and electrical performance, the DLM-2 is a superior value in its class.

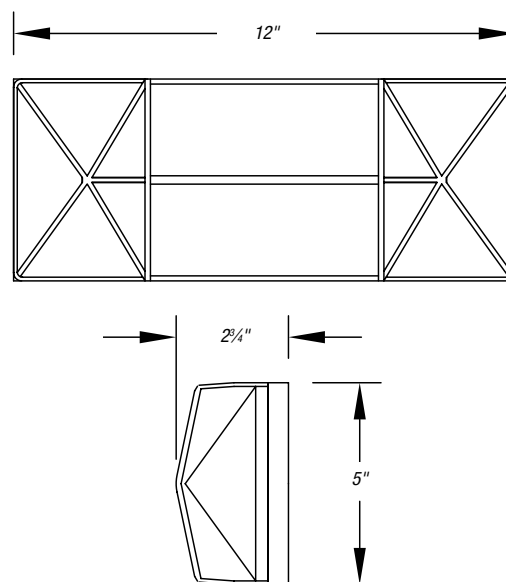
Its tough thermoplastic body and flush-mounted heads will not dent, peel or corrode. Snap-together lens and body and self-connecting power plug make installation quick and easy.

Electrical performance is assured by a 6-volt maintenance-free lead-calcium battery and a solid-state charger that includes premium features such as lockout, temperature compensation and low-voltage disconnect. Selectable 120/277V operation is standard.



Dimensions

Dimensions are approximate and subject to change.



Accessories (Order as a separate item)

Wire Guard.....WG13-E

Ordering Information

Standard DLM-2 Unit.....DLM-2

NEC and Life Safety Code are registered trademarks of the National Fire Protection Association, Inc.

Distributor Select

6-volt recessed down light.

GS Series

The GS Series recessed down light combines the function of an emergency lighting fixture with stylish design.

Standard Features

- An adjustable gimbal directs the light from one 6-volt 10-watt wedge-base PAR36 lamp head
- The low-profile trim ring is molded in polycarbonate with a semi-gloss white finish to complement a variety of ceilings
- The fully recessed backbox is constructed of 20-gauge steel
- Contains a sealed, maintenance-free lead-calcium battery
- A slide-out chassis and two quick-connect plugs make installation and servicing easy; adjustable bar hangers are included
- UL® Listed; complies with NEC®, Life Safety Code® and OSHA
- 3-year full warranty, excluding lamps, pilot lights and fuses

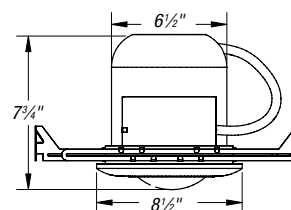
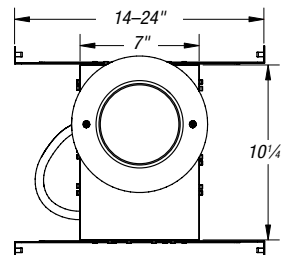
Accessories (Order as a separate item)

Remote Test Switch (metal face plate)..... **RTS**
Remote Text Switch (plastic face plate)..... **RTS-1**



Dimensions

Dimensions are approximate and subject to change.

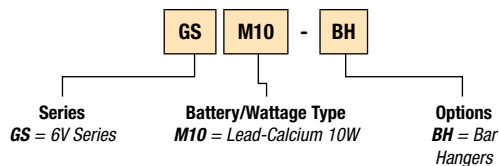


Unit Ratings

SEALED MAINTENANCE- FREE BATTERY TYPES	DC VOLTAGE	MODEL NO.	WATTS TO 87.5% OF RATED BATTERY VOLTAGE*			
			1 1/2 HRS.	2 HRS.	3 HRS.	4 HRS.
Lead-Calcium	6	GSM10-BH	10	8	—	—

* National Electrical Code® Specification

Catalog Numbering System



NEC, National Electrical Code and Life Safety Code are registered trademarks of the National Fire Protection Association, Inc.

Distributor Select

Thermoplastic unit with adjustable lighting heads.

EL-2SQ Series

For wall or ceiling mounting, the EL-2SQ Series comes standard with an 11-watt remote capacity and is damp location listed. The unit can be installed in minutes, giving you a versatile emergency lighting solution for the job site.

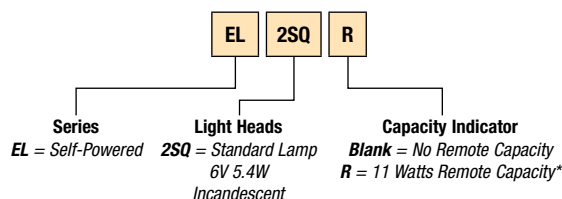
Standard Features

- Two fully adjustable glare-free 6V 5.4W DC T5 wedge-base lamps for emergency mode egress light
- Injection-molded UV-stabilized thermoplastic housing and back plate; UL® 94, 5VA flame rated
- Sealed, maintenance-free lead-calcium batteries are designed to power 11 watts remote load or extended unit run time
- 120/277VAC dual-voltage operation, LED indicator light and push-button test switch and low-voltage battery disconnect
- Remote capacity may power additional remote heads (up to 6V 11W)
- Innovative, snap-together design allows for faster wall or ceiling mounting, and universal knock-out pattern on the back plate allows for junction box mounting
- UL® Listed for damp locations and complies with NEC®, Life Safety Code® and OSHA
- Three-year full warranty, excluding lamps and fuses

Accessories (Order as a separate item)

Replacement Battery.....	860.0018-E
Replacement Lamp (standard)	570.0012-E
Vandal Shield.....	VRS.BB
Vandal Shield (NEMA 4X).....	VRSBB.4X
Wire Guard (heads in any position).....	WG10-E

Catalog Numbering System

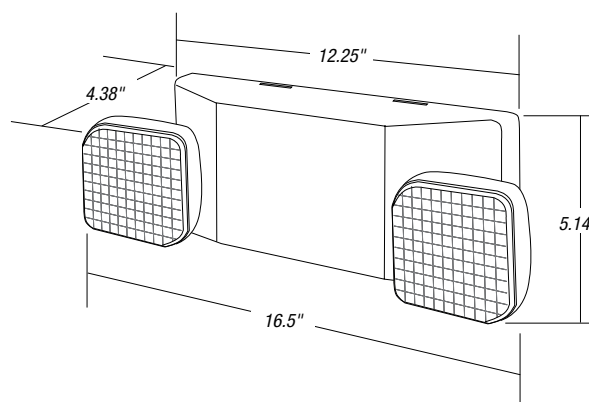


* Do not exceed rated unit capacity.



Dimensions

Dimensions are approximate and subject to change.



NEC and Life Safety Code are registered trademarks of the National Fire Protection Association, Inc.

Distributor Select

Thermoplastic LED exit signs and combination units.

ELXN400 SQ Series

Fully adjustable SQ heads can be configured for top mounting, side mounting or anywhere in between without disassembly or rewiring. The ELXN400 SQ Programmable Series confronts job-site mounting situations "head-on."

The ELXN400 SQ Series features 120/277VAC dual-voltage operation, an LED indicator light and push-button test switch. Remote-capacity exit signs with two heads may power additional remote heads up to 6 volts, 12 watts. Remote-capacity exit sign with no heads may power additional remote heads up to 6 volts, 22 watts. Low-voltage battery disconnect is another feature.

An innovative, snap-together design allows for fast installation for wall or ceiling mounting. The canopy snaps to the housing with a twist-lock feature, tightly securing the canopy to the housing. Replaceable directional chevron inserts are easily removed and reinserted.

NEW!



ESCORT II

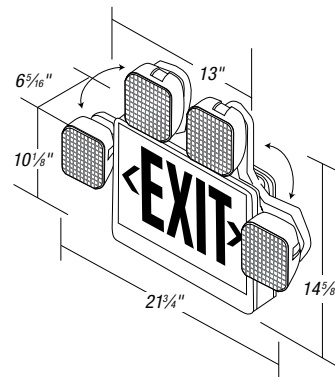


Standard Features

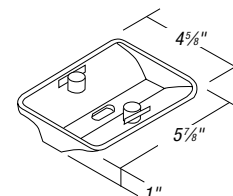
- Come with two fully adjustable, glare-free SQ light heads for egress lighting, with two 6-volt 5.4W DC T5 wedge-base lamps
- Low power consumption — LED lamps are operated in normal (AC input) and emergency (DC input) modes
- Injection-molded UV-stabilized thermoplastic housing, faceplates and canopy
- UL® 94, 5VA flame rating
- Includes two faces, back plate and canopy
- Available with a sealed, maintenance-free lead-calcium battery
- Additional battery available for 12-watt remote load* or extended unit run time
- UL® Listed; complies with NEC®, Life Safety Code® and OSHA, and damp location listing is standard on all models
- Three-year full warranty, excluding lamps, pilot lights and fuses

Dimensions

Dimensions are approximate and subject to change.



Units with No Heads: 10 1/4" x 13"



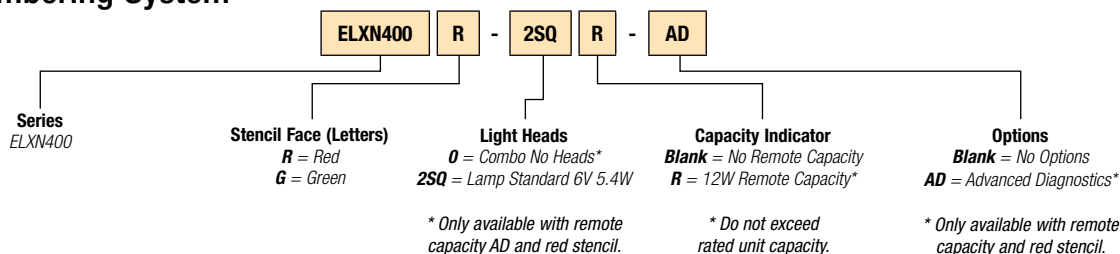
NEC and Life Safety Code are registered trademarks of the National Fire Protection Association, Inc.

Accessories (Order as a separate item)

Wire Guard (heads in any position).....	WG10-E
Replacement Battery.....	860.0004-E
Replacement Lamp	570.0012-E

* Do not exceed rated unit capacity.

Catalog Numbering System



Distributor Select

Completely self-contained thermoplastic unit.

EL-2MRS Series

A compact unit for mounting in any orientation, the EL-2MRS Series is perfect for use where style and design are required in an economical package. Measuring only 5½" x 12⅞", the compact size accommodates space restrictions.

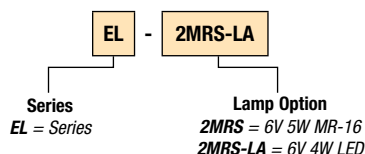
Standard Features

- Each self-contained unit comes with two 6V MR-16 halogen lamps housed in adjustable, gimbal-type assemblies to provide clean, adequate lighting
- High-impact thermoplastic construction is UL® Recognized 94, 5VA flame rated
- Sealed, maintenance-free lead-calcium batteries
- Reliable integrated circuitry offers 120/277VAC, .1/05 amps input standard, automatic charging, instantaneous transfer, test switch, long-life LED AC charge monitor, temperature-compensated charger, short-circuit protection, low battery voltage disconnect, brownout protection and lockout (automatic battery detection during installation)
- Snap-together thermoplastic housing facilitates mounting in any orientation
- UL® Listed and complies with NEC®, Life Safety Code® and OSHA; damp location listing is standard
- Three-year full warranty, excluding lamps and fuses

Accessories (Order as a separate item)

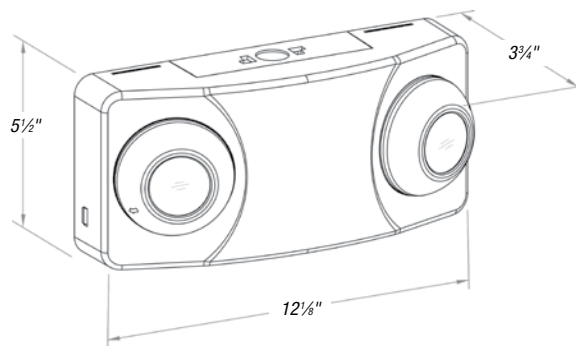
Replacement MR-16 Lamp, 6V 5W	580.0072-E
Wire Guard.....	WG13-E
Replacement Battery	860.0004-E

Catalog Numbering System



Dimensions

Dimensions are approximate and subject to change.



NEC and Life Safety Code are registered trademarks of the National Fire Protection Association, Inc.

Distributor Select

Thermoplastic exit sign and combination unit.

ELX-MRS Series

The ELX-MRS Series is perfect for use where an easy-to-install, economical combo unit is required. Long-life LEDs are used to light all exit sign models. The combo unit's 6-volt MR-16 lamps are powered by a maintenance-free, lead-calcium battery to provide a clean, adequate amount of light. The snap-together thermoplastic housing facilitates quick assembly, making the ELX-MRS the most affordable sign on the market.

Standard Features

- Rugged off-white thermoplastic construction
- Even illumination for excellent legibility
- Snap-together design for quick and easy installation
- Universal mounting, complete with two faces, backplate and canopy
- Replaceable knockout directional chevrons
- Energy-efficient, long-life red or green LEDs
- UL® 924 Listed
- Complies with NEC®, Life Safety Code® and OSHA
- Damp location listing is standard on all models
- 6-volt, sealed, maintenance-free lead-calcium battery
- Fully adjustable, glare-free, 6-volt MR-16 lamps

Charger

- 120/277VAC input
- Fully automatic charger
- Temperature compensated
- Brownout protection
- Short-circuit protected
- Low-voltage battery disconnect
- Push-to-test switch
- AC pilot light

Accessories (Order as a separate item)

Description

Replacement MR-16 Lamp, 6V 5W **580.0072-E**

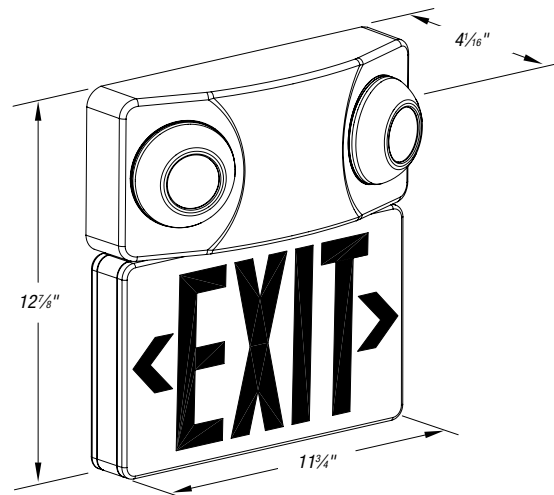
Wire Guard, Wall Mount..... **WG6-E**

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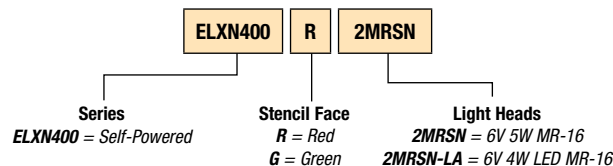


Dimensions

Dimensions are approximate and subject to change.



Catalog Numbering System



Distributor Select

Thermoplastic exit sign.

ELX Series

The ELX Series is perfect for use where an easy-to-install economical unit is required. Long-life LEDs are used to light all exit sign models. Nickel-cadmium batteries are used in the self-powered exit signs. The snap-together thermoplastic housing facilitates quick assembly, making the ELX the most affordable sign of its kind on the market.

Standard Features

- Rugged off-white thermoplastic construction
- Even illumination for excellent legibility
- Snap-together design for quick and easy installation
- Universal mounting, complete with two faces, backplate and canopy
- Replaceable knockout directional chevrons
- Energy-efficient, long-life red or green LEDs
- UL® 924 Listed
- Complies with NEC®, Life Safety Code® and OSHA
- Damp location listing is standard on all models

Emergency Models (Exit Signs)

- Replaceable, sealed nickel-cadmium battery
- Provide a minimum 90 minutes of continuous emergency illumination
- ENERGY STAR® compliant
- Batteries recharge per UL® 924 specifications
- All exit sign models consume less than 5 watts

Charger

- 120/277VAC input
- Fully automatic
- Temperature compensated
- Brownout protection
- Short-circuit protected
- Low-voltage battery disconnect
- Push-to-test switch
- AC pilot light

ELX Series Offered Models

- AC-only exit signs, red or green
- Self-powered exit signs, red or green

Accessories (Order as a separate item)

Description

Wire Guard, Wall Mount.....	WG1-E
Wire Guard, Ceiling or End Mount.....	WG5-E

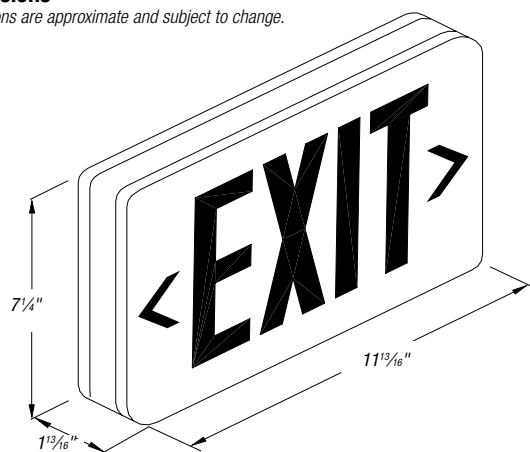


ESCORT II

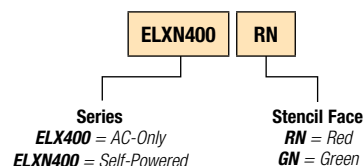


Dimensions

Dimensions are approximate and subject to change.



Catalog Numbering System

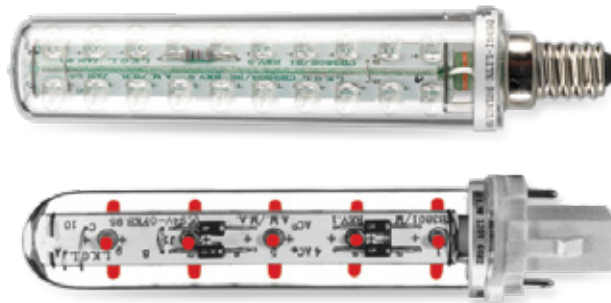


NEC and Life Safety Code are registered trademarks of the National Fire Protection Association, Inc.

Distributor Select

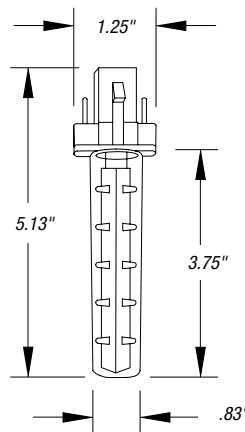
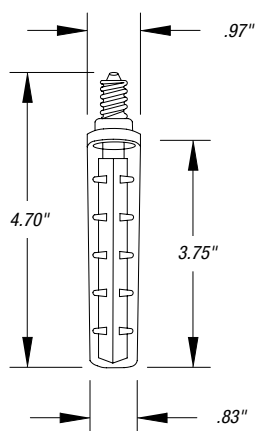
QuickSwitch LED Replacement Lamps

- Quick and easy to install
- Available with wide range of lamp bases for quick lamp-to-lamp replacement
- Available in high-brightness LEDs
- 120VAC

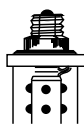


Dimensions

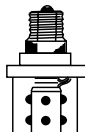
Dimensions are approximate and subject to change.



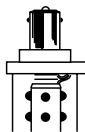
QS-C
Candelabra
Base



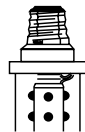
QS-I
Intermediate
Screw Base



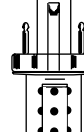
QS-B
DC Bayonet
Base



QS-M
Medium Screw
Base



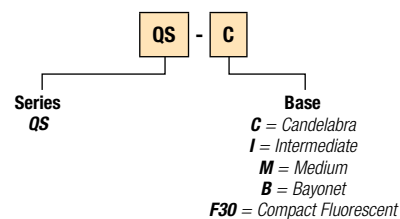
QS-F30
PL-5, -7 or -9W
Base



Power Consumption

MODEL NO.	AC SPECS	
QS	120VAC	.90W
QS-F	120VAC	1.6W

Catalog Numbering System



Distributor Select

QuickSwitch LED Retrofit Kits

- Easiest to install in its class
- Compact size makes it ideal for virtually all exit signs
- Can be retrofitted directly on fluorescent ballast
- Long-life, energy-efficient red LED technology
- Available with AC adapter for all types of lamp sockets

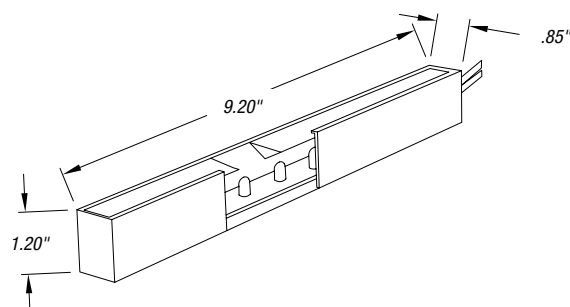


Why use QuickSwitch LED Replacement Lamps and Retrofit Kits?

- Convert high-consumption incandescent and fluorescent lamps to energy-efficient LED lamps
- Reduce energy consumption by up to 90%
- Improve visibility and reliability
- Reduce maintenance costs

Dimensions

Dimensions are approximate and subject to change.

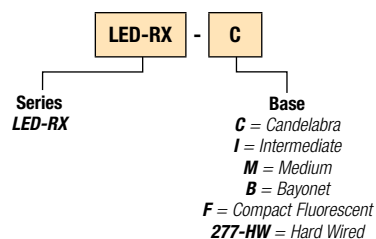


Power Consumption

MODEL NO.	AC SPECS
LED-RX	120VAC 1.7W

Catalog Numbering System

Note: Please consult factory for green LED option.



Fluorescent Ballasts

Fluorescent emergency lighting ballasts.

FPDL Series

Eliminating the cost and installation of separate, sometimes unsightly emergency lighting units, FPDL Series emergency ballasts can be used to convert new or existing fluorescent fixtures into emergency lighting units.

Six models satisfy different application requirements and lumen outputs:

- FPDL-32 500-lumen emergency ballast operates with most 2' to 4' T8 linear fluorescent lamps and also with 28W T5 lamps
- FPDL/U 1400-lumen emergency ballast operates with most 2' to 4' T8 and T5 linear fluorescent lamps and also with most 4-pin compact fluorescent lamps
- FPDL13-42 650-lumen emergency ballast operates with most 13-42W 4-pin quad and triple compact fluorescent lamps with one or two lamps (max. 18W)
- FPDL-28 700-lumen emergency ballast operates with most 2' to 4' T8 and T5 linear fluorescent lamps
- FPDL-10-26 650-lumen emergency ballast operates with most 10-26W 2-pin compact fluorescent lamps
- FPDL-HL is a high-output emergency ballast capable of producing up to 3,000 lumens

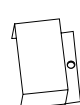
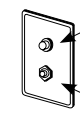
Standard Features

- Compatible with standard, energy-saving, dimming and electronic AC ballasts
- Can be wired to operate with switched, unswitched or normally-off fixtures without affecting normal operation
- Sealed, maintenance-free nickel-cadmium batteries.
- Upon failure of AC power, the FPDL-32 and FPDL10-26 models automatically switch to emergency mode, maintaining illumination of one lamp within the fixture; FPDL/U, FPDL13-42, FPDL-28 and FPDL-HL units will maintain operation of one or two lamps when switched to the emergency mode
- When AC power is restored, the FPDL Series automatically returns the fluorescent lamps to normal operating mode and the solid-state charger begins recharging the battery
- Self-contained in one compact housing for easy installation and maximum mounting flexibility
- UL® Listed for damp locations to UL® 924; complies with NEC®, Life Safety Code® and OSHA
- Three-year full warranty
- Each unit is fully computer tested



Accessories (Order as a separate item)

Description

	External Mounting Kit; Includes Wire Bundle Cover for External Mounting (not needed for FPDL13-42, FPDL10-26 and FPDL-HL).....	EC6
	Remote Test Switch; Comes with Single-Gang Plastic Mounting Plate (included in FPDL13-42 and FPDL10-26)	RTS-1

Catalog Numbering System

Note: Please consult factory for green LED option.

FPDL-32

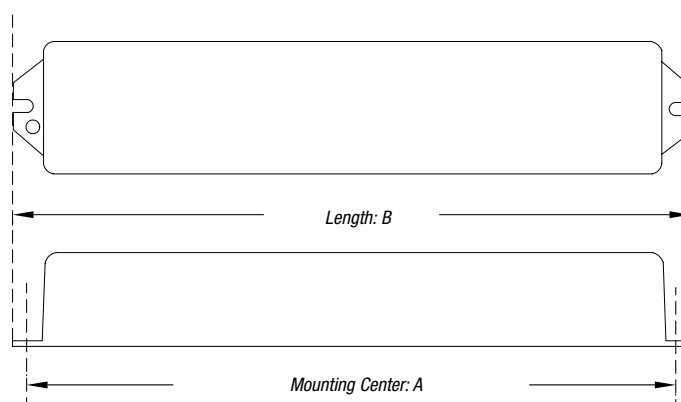
Series

FPDL-32
FPDL-U
FPDL13-42
FPDL-28
FPDL10-26
FPDL-HL

Fluorescent Ballasts

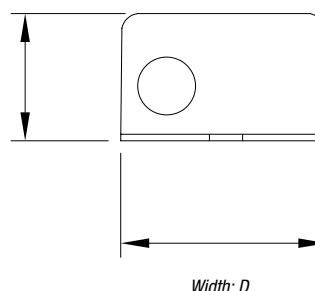
Dimensions

Dimensions are approximate and subject to change.



MODEL NO.	DIMENSIONS			
	A	B	C	D
FPDL-32	9½"	10⅞"	1⅞"	2⅞"
FPDL/U	13¾"	14¼"	1⅞"	2⅞"
FPDL13-42	8⅞"	9⅞"	1½"	2⅞"
FPDL-28	13¾"	14¼"	1⅞"	2⅞"
FPDL10-26	8⅞"	9⅞"	1½"	2⅞"
FPDL-HL	15¾"	16¼"	1¾"	5½"

Height: C



Width: D

Unit Selection

MODEL NO.	LAMP OPERATED IN EMERGENCY MODE*	EMERGENCY ILLUMINATION TIME	LUMENS
FPDL-32	1 lamp 2'-4' (20W-40W)	90 minutes	500
FPDL/U	1 lamp 2'-8' (20W-60W) or 2 lamps 2'-4' (20W-32W)	90 minutes	1400
FPDL13-42	1 compact 4-pin (13W-42W) or 2 compact 4-pin (13W-18W)	90 minutes	650
FPDL-28	1 lamp 2'-4' (20W-54W) or 2 lamps 2'-4' (20W-32W)	90 minutes	700
FPDL10-26	1 compact 2-pin (10W-26W)	90 minutes	650
FPDL-HL	1 lamp 2'-8' or 2 lamps 2'-4' or 1 compact 4-pin (18W-70W) or 2 compact 4-pin (18W-32W)	90 minutes	3000

* See ballast reference chart on pages I-288-I-289 for details.

Fluorescent Ballasts

Fluorescent emergency lighting ballasts.

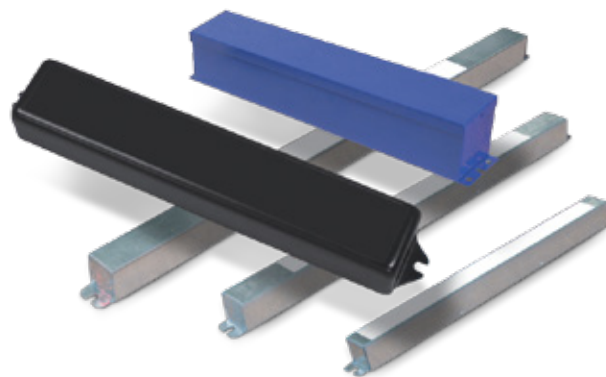
FPS Series

Eliminating the cost and installation of separate, sometimes unsightly emergency lighting units, FPS Series emergency ballasts can be used to convert new or existing fluorescent fixtures into emergency lighting units. Several models are offered to satisfy different application requirements and lumen output.

- FPS-500 and FPS-825 operate with most 2' to 4' T5 or T8 PL lamps; the FPS-825 also operates H0 and 4-pin long compact fluorescent lamps from 40 through 55 watts
- FPS-540 operates T5 or T8 lamps, including H0 and 4-pin long compact fluorescent lamps of 40 to 55 watts, with an initial output of up to 1300 lumens; testing the FPS-540 is made easy by using a one-piece indicator and test switch

Standard Features

- FPS-80 is offered with Nexus® wired and wireless monitoring system, which includes Nexus® fluorescent emergency ballast as well as Nexus® wired or wireless communication modem
- Compatible with standard, energy-saving, dimming and electronic AC ballasts
- Can be wired to operate with switched, unswitched or normally off fixtures without affecting normal operation
- Sealed, maintenance-free nickel-cadmium batteries
- Upon failure of AC power, the FPS-500, FPS-825 and FPS-540 models automatically switch to emergency mode, maintaining illumination of one lamp within the fixture
- FPS-80 units will maintain operation of one or two lamps when switched to the emergency mode
- When AC power is restored, the FPS Series automatically returns the fluorescent lamps to normal operating mode, and the solid-state charger begins recharging the battery
- Self-contained in one compact housing for easy installation and maximum mounting flexibility
- UL® Listed to UL® 924; complies with NEC®, Life Safety Code® and OSHA
- Three-year full warranty
- Each unit is fully computer tested

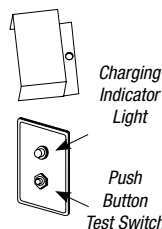


nexus® 

Options

Description **Suffix**
Nexus® **Consult your Thomas & Betts representative for more information**

External Mounting Kit; Includes Wire
Bundle Covers for External Mounting **-R**
Damp Location Listing..... **-DL**



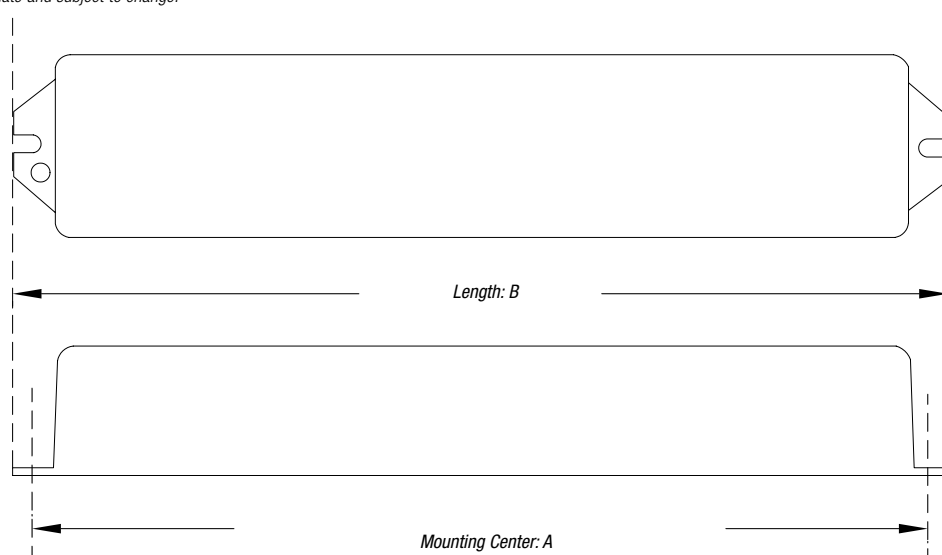
Accessories (Order as a separate item)

Remote Test Switch; Includes Single-Gang
Chrome-Finished Mounting Plate **RTS-1**
Test Switch Kit for Fluorescent Ballast..... **-TBTS**

Fluorescent Ballasts

Dimensions

Dimensions are approximate and subject to change.



MODEL NO.	DIMENSIONS			
	A	B	C	D
FPS-500	13 $\frac{3}{4}$ "	14 $\frac{1}{4}$ "	1 $\frac{1}{16}$ "	1 $\frac{1}{16}$ "
FPS-825	17"	17 $\frac{1}{2}$ "	1 $\frac{1}{16}$ "	1 $\frac{1}{16}$ "
FPS-540	12 $\frac{1}{2}$ "	13 $\frac{3}{8}$ "	1 $\frac{1}{2}$ "	2 $\frac{1}{4}$ "
FPS-80D	12 $\frac{3}{4}$ "	12 $\frac{3}{4}$ "	1 $\frac{1}{2}$ "	2 $\frac{3}{8}$ "
FPS-80NEXUS	12 $\frac{3}{4}$ "	12 $\frac{3}{4}$ "	1 $\frac{1}{2}$ "	2 $\frac{3}{8}$ "

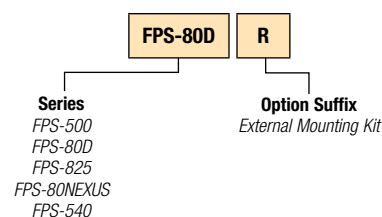
Height: C

Width: D

Unit Selection

MODEL NO.	LAMP OPERATED IN EMERGENCY MODE	EMERGENCY ILLUMINATION TIME	LUMENS	WIRE END CAPS
FPS-500	1 Lamp 2'-4'	90 Min.	500	Optional Order #EC54
FPS-825	1 Lamp 2'-4'	90 Min.	825	Optional Order #EC54
FPS-540	1 Lamp 2'-4' (40W-50W), Most 2'-4' T5 or T8 and 40-55W 4-Pin Compact Fluorescent Lamps	90 Min.	1300	Not Required
FPS-80D	Most 2'-8' Single, Bi-Pin T8-T12, Long Compact HO+HVO	90 Min.	1300	Not Required
FPS-80NEXUS	Most 2'-8' Single, Bi-Pin T8-T12, Long Compact HO+HVO Fluorescent Lamps	90 Min.	1300	Not Required

Catalog Numbering System



Fluorescent Ballasts

Fluorescent emergency packs.

FPS-R and FPS-T Series

Developed to eliminate unsightly conventional emergency lighting units, the FPS-R and FPS-T Series incorporate emergency lighting into the normal fluorescent lighting system. With the FPS-R and FPS-T Series, high lumen levels can be maintained during a power failure without interrupting the lighting design.

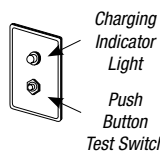
Standard Features

- All-metal construction with white baked enamel finish and 3" pre-wired fixture whip
- Sealed, maintenance-free nickel-cadmium, long-life lead or lead-calcium batteries.
- During normal operation, when the AC line voltage is present, the fixture will fully illuminate by means of the regular ballast, while the emergency ballast converts AC into a low DC voltage to recharge the battery and maintain it fully charged
- When the AC fails, a solid-state voltage sensor instantly turns on a high-frequency inverter which supplies one or two lamps in the fixture for a minimum of 90 minutes (only FPS-T can run two lamps in a two- or four-lamp fixture)
- At the end of the rated time, a low-voltage sensor disconnects the battery to prevent over-discharging
- When the AC returns, the inverter switches off and the battery begins to recharge
- Charger circuitry offers 120/277VAC, 60 Hz, .3/.15 amp (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature compensation, sealed relay, low-voltage battery disconnect, brownout protection and lockout (automatic battery connect)
- Three-year full warranty
- Each unit is fully computer tested



Accessories (Order as a separate item)

Description



Remote Test Switch **RTS-1**
Available for installation where routine testing via the units standard integral test switch would be difficult due to either fixture location or inaccessibility. This option consists of a push button test switch and pilot light, mounted on a single gang switch plate.

Test Switch and Charging Indicator
on a Single-Gang Chrome Mounting Plate..... **RTS**

Cabinets

Remote: External mounts on top or beside fixture. 18-gauge steel, white baked enamel finish and pre-wired 3" flexible conduit fixture whip.

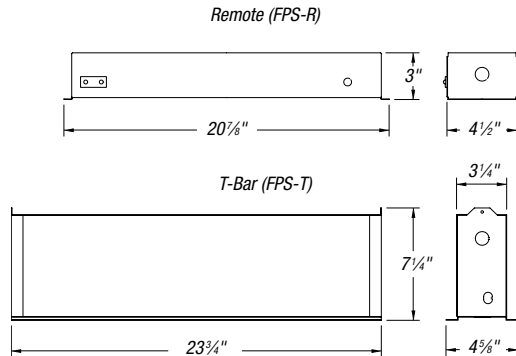
T-Bar: Mounts in T-bar struts beside fixture. 18-gauge steel, white baked enamel finish, mounting eyes for fixture suspension and a pre-wired 3" flexible conduit fixture whip.

Servicing: Backplate lifts off for full access to battery and input/output wires.

Fluorescent Ballasts

Outline and Dimensions

Dimensions are approximate and subject to change.

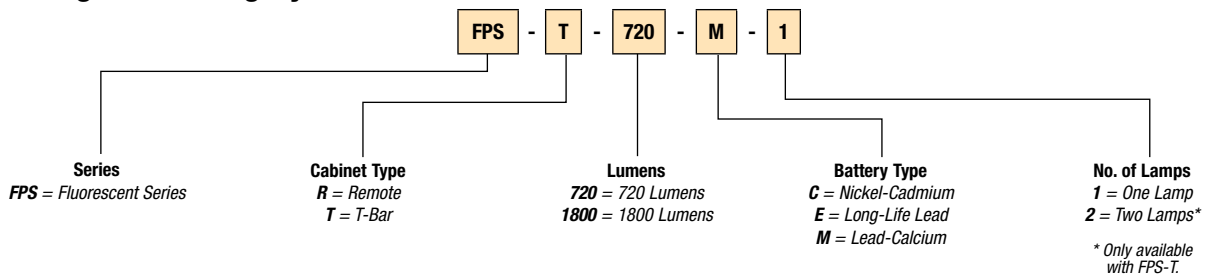


Unit Ratings

		SEALED		
UNIT TYPE	LUMENS*	BATTERY SUFFIX	MAINTENANCE-FREE BATTERY TYPES	NUMBER OF LAMPS
Remote Mounted (FPS-R)				
FPS-R	720	C	Nickel-Cadmium	1
FPS-R	720	E	Long-Life Lead	1
FPS-R	720	M	Lead-Calcium	1
FPS-R	1800	C	Nickel-Cadmium	1
FPS-R	1800	E	Long-Life Lead	1
FPS-R	1800	M	Lead-Calcium	1
T-Bar Mounted (FPS-T)				
FPS-T	720	C	Nickel-Cadmium	1
FPS-T	720	E	Long-Life Lead	1
FPS-T	720	M	Lead-Calcium	1
FPS-T	1800	C	Nickel-Cadmium	1
FPS-T	1800	E	Long-Life Lead	1
FPS-T	1800	M	Lead-Calcium	1
FPS-T	720	C	Nickel-Cadmium	2
FPS-T	720	E	Long-Life Lead	2
FPS-T	720	M	Lead-Calcium	2
FPS-T	1800	C	Nickel-Cadmium	2
FPS-T	1800	E	Long-Life Lead	2
FPS-T	1800	M	Lead-Calcium	2

* Lumens in emergency mode on typical F-40 type lamps.

Catalog Numbering System



Fluorescent Ballasts

Emergency transfer switch for generator supplies.

FTS Series

The Emergi-Lite® FTS Emergency Transfer Switch allows the use of auxiliary generator power on a switched fluorescent fixture in power failure situations. The FTS senses the loss of normal AC power and switches the AC ballast to the auxiliary generator supply. The FTS will operate the lamps at full light output for as long as the generator is able and will work in conjunction with any lamp type and fixture on the generator circuit. Dimming ballasts require one FTS for each hot lead.



Standard Features

- Compatible with standard, energy-saving, dimming and electronic AC ballasts
- UL® Listed
- Will cold start and operate all specified lamps
- Galvanized steel case
- Dual voltage 120/277V 60 Hz
- Available in flex or non-flex configuration
- Meets or exceeds all National Electrical Code® and Life Safety Code® emergency lighting requirements
- Five-year warranty (see warranty page for details)

Product Advantages

- Full light output
- Allows auxiliary generator power on a switched fixture

Technical Specifications

Input Voltage (Dual) 120/277V, 60 Hz
Input Current 250mA

Maximum Switching Voltage

- 3A @ 120V
- 3A @ 277V Circuit Protection
- 3A on Control Input
- 3A on Neutral and 120/277V Outputs

Emergency Operation

The FTS will operate any lamp type in the designated fixture for the duration of the generator supply

Initial Illumination

The FTS will operate the designated lamp at full light output

Weight 1.0 lbs.
Approval UL® Listed

Options

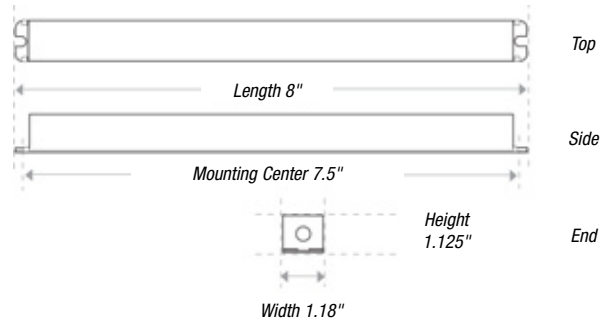
Configuration

- FTS (no flex)
- FTS-R (with flex)

Fluorescent Ballasts

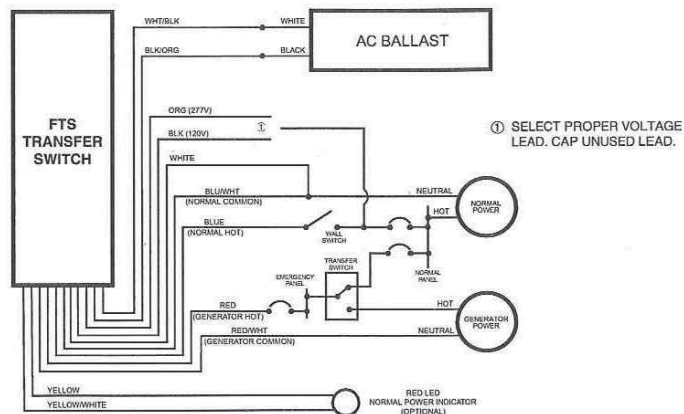
Dimensions

Dimensions are approximate and subject to change.

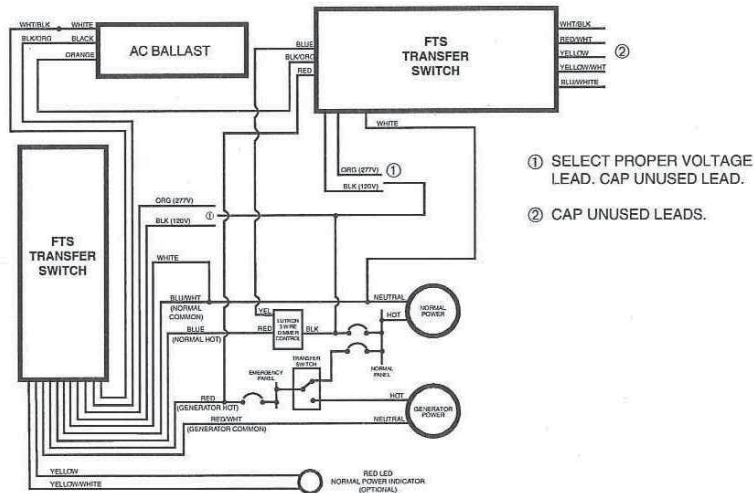


Wiring Diagrams

TYPICAL BALLAST/GENERATOR APPLICATION



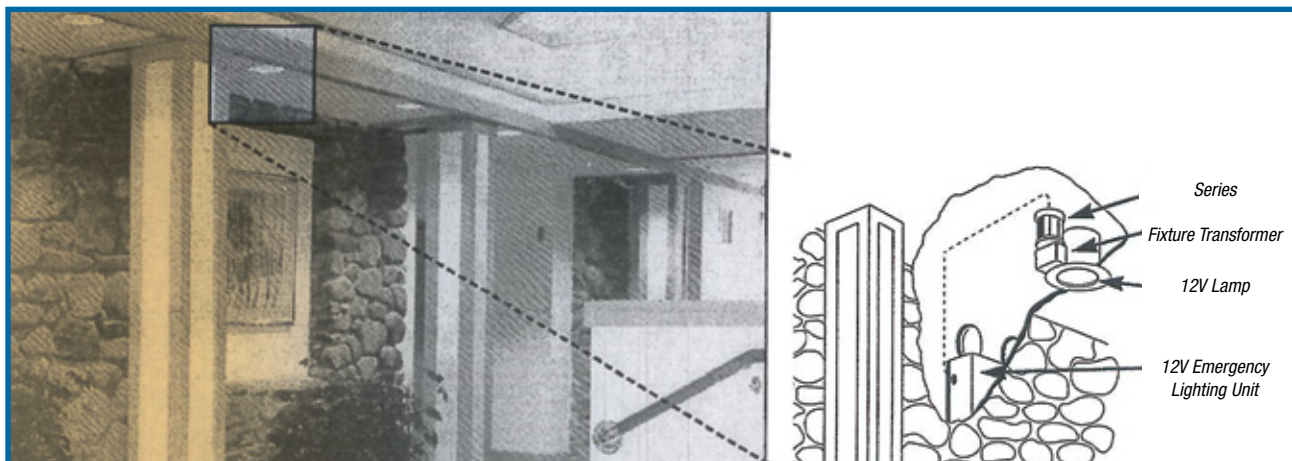
TYPICAL DIMMING BALLAST/GENERATOR APPLICATION



Fluorescent Ballasts

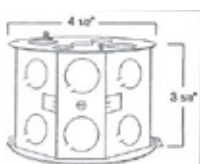
Enables normally on, low-voltage (12V) lamps to be used as emergency lighting.

ELMR-E Interface Module



To maintain the integrity of a lighting decor, the Emergi-Lite® ELMR-E interface module is designed to be incorporated with MR-16, PAR36, R12 or R14 low-voltage lighting fixtures that are selected to be used not only as normal lighting fixtures, but also as emergency lighting fixtures.

These fixtures are used in a variety of accent applications, especially in retail store lighting.



Module Information

The Emergi-Lite® ELMR-E interface module consists of a relay transfer panel enclosed in an octagonal electrical box which measures 4½" in diameter by 3⅝" deep. The module is designed to operate 12-volt lamps up to a total of 200 watts. A remotely located Emergi-Lite®

12-volt emergency lighting unit, in conjunction with the ELMR-E, supplies 12-volt power during an emergency situation regardless if the fixture is switched on or off.

Installation

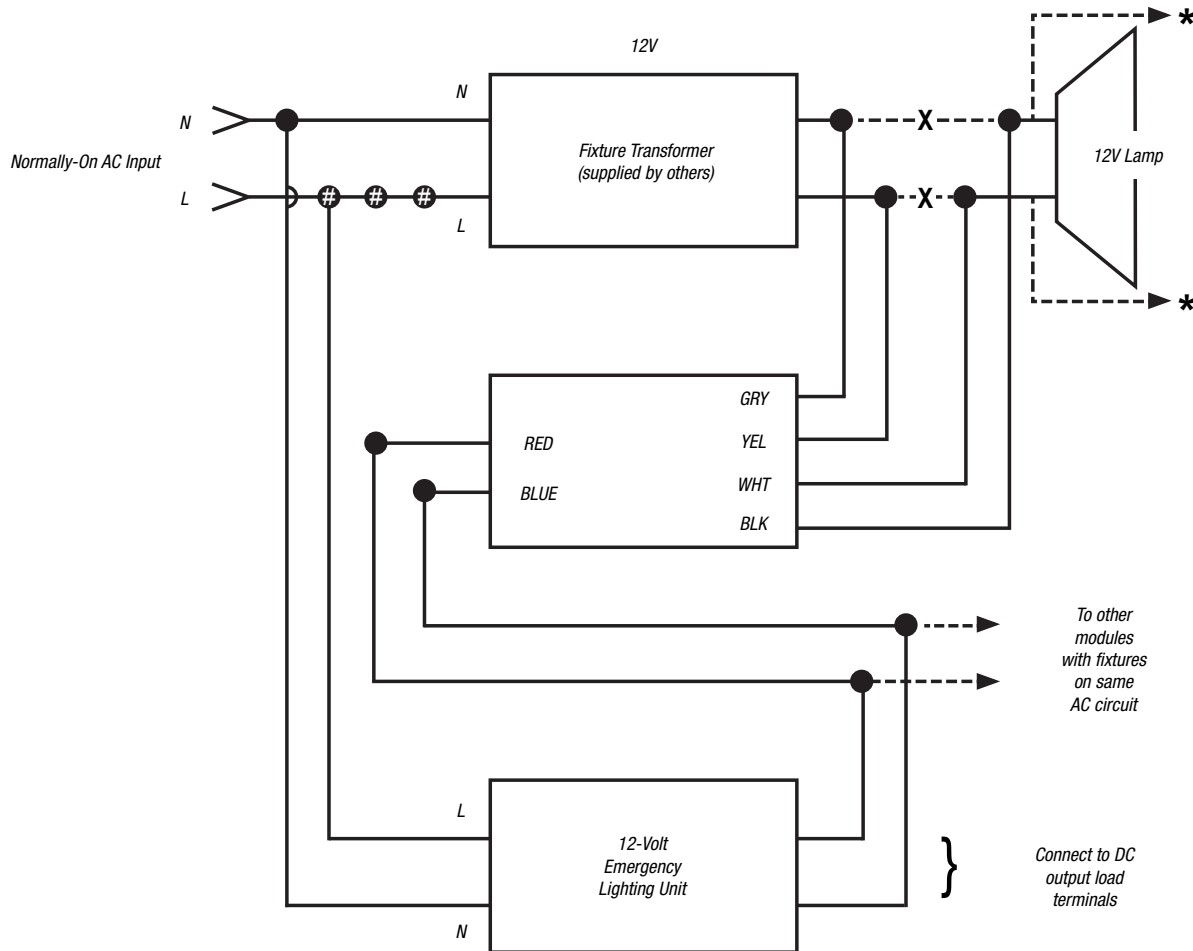
The ELMR-E interface module is provided with a ½" threaded conduit nipple for fast, easy field installation and mounts directly to the step-down transformer junction box of the low-voltage lighting fixture. For applications requiring remote mounting, not only is a fixture stud plate provided, but also two mounting tabs with ⅜" diameter holes on 4⅞" centers. Electrical connection is made by splicing to the secondary winding of the step-down transformer and connecting it and the remote feed from the 12-volt battery pack to the ELMR-E module. One ELMR-E is required for each fixture that contains an internally mounted step-down transformer. However, if several low-voltage lamps are assigned to a single, centrally located step-down transformer, only one ELMR-E is needed to operate all lamp fixtures, up to 200 watts.

Operation

In the event of a power failure, the 12-volt Emergi-Lite® battery unit will supply the ELMR-E module with 12-volt DC power. The ELMR-E module will then transfer the lighting fixture from its normal 12-volt AC source (transformer) to the 12-volt DC battery power. Upon restoration of the normal AC supply, the module will transfer the lighting fixture back to its normal operating mode.

Note: Remote battery pack should have sufficient capacity to support the connected load for a minimum of 90 minutes.

Fluorescent Ballasts



Notes: X Denotes "Cut Original Wiring"

*: "To other low-voltage lamps" (multiple-lamp, single transformer arrangements only)

#: Install wall switch here, (if required)

IMPORTANT: Emergency lighting units must be fed from same branch feeder circuit (normally on circuit)

Consult the Technical Information section for wire run length and wire size requirements. Emergency lighting unit must be capable of supplying total wattage lamp loads for a minimum of 90 minutes. Applications may require longer time durations. Consult NFPA Life Safety Code® and National Electrical Code® and National Electrical Code® Article 700 with regard to standard engineering practices. Local codes may vary.

National Electrical Code and Life Safety Code are registered trademarks of the National Fire Protection Association, Inc.

Fluorescent Ballasts

Emergency Ballast Reference — Linear Lamps

EMERGI-LITE® MODEL #	FPDL-32	FPDL/U	FPDL13-42	FPDL-28	FPDL10-26	FPDL-HL	FPS500	FPS80D	FPS825	FPS540
LUMENS	500	1400	650	700	650	3000	500	1300	825	1300
LAMP TYPE (# OF LAMPS)	LINEAR LAMPS									
2'-4' RAPID, INSTANT, ENERGY SAVING, T8-T12 (1)	X	X		X		X	X	X	X	X
2'-4' RAPID, INSTANT, ENERGY SAVING, T8-T12, HO & VHO (2)		X		X		X		X		
2'-8' RAPID, INSTANT, ENERGY SAVING, T8-T12, HO & VHO (1)		X				X		X		
F17 T8 (1)	X	X		X		X	X	X	X	X
F17 T8 (2)		X		X		X		X		
F25 T8 (1)	X	X		X		X	X	X	X	X
F25 T8 (2)		X		X		X		X		
F32 T8 (1)	X	X		X		X	X	X	X	X
F32 T8 (2)		X		X		X		X		
F40 T8 (1)		X		X		X			X	X
F096 T8 59W (1)		X				X		X		
14W T5 (1)	X	X		X			X		X	X
21W T5 (1)	X	X		X		X	X		X	X
24W T5 (1)	X	X		X		X	X		X	X
28W T5 (1)	X	X		X		X	X	X	X	X
39W T5 (1)		X		X		X		X	X	X
54W T5 HO (1)		X		X		X		X	X	X
F20 T12 (1)	X	X		X		X		X		
F20 T12 (2)		X		X		X				
F40 T12 (1)	X	X		X		X		X		
F40 T12 (2)		X				X				
F48 T12 (1)		X				X		X		
F96 T12 60W (1)		X				X		X		

Fluorescent Ballasts

Emergency Ballast Reference — Compact Lamps

EMERGI-LITE® MODEL #	FPDL-32	FPDL/U	FPDL13-42	FPDL-28	FPDL10-26	FPDL-HL	FPS500	FPS80D	FPS825	FPS540
LUMENS	500	1400	650	700	650	3000	500	1300	825	1300
LAMP TYPE (# OF LAMPS)	COMPACT LAMPS									
18W LONG COMPACT (1)	X	X		X		X				
24W LONG COMPACT (1)	X	X		X		X				
36W LONG COMPACT (1)	X	X		X		X		X	X	X
40W LONG COMPACT (1)	X	X		X		X		X	X	X
40W LONG COMPACT (2)						X				
50W LONG COMPACT (1)		X		X		X		X	X	X
55W LONG COMPACT (1)		X				X		X	X	X
7W PL CF 2-PIN (1)					X					
9W PL CF 2-PIN (1)					X					
13W PL CF 2-PIN (1)					X					
18W PL CF 2-PIN (1)					X					
26W PL CF 2-PIN (1)					X					
13W PL CF 4-PIN (1 OR 2)		X	X	X						
18W PL CF 4-PIN (1 OR 2)		X	X			X				
26W PL CF 4-PIN (1)		X	X	X		X				
26W PL CF 4-PIN (2)						X				
32W PL CF 4-PIN (1)		X	X	X		X				
32W PL CF 4-PIN (2)						X				
42W PL CF 4-PIN (1)		X	X			X				
42W PL CF 4-PIN (2)										
57W PL CF 4-PIN (1)		X				X		X		
57W PL CF 4-PIN (2)										
70W PL CF 4-PIN (1)		X				X		X		
20W CIRCLINE (1)	X	X	X	X		X		X	X	X
22W CIRCLINE T9 (1)		X	X	X		X		X		
22W CIRCLINE T5 (1)		X	X	X		X		X	X	X
40W CIRCLINE T8 (1)	X	X		X		X		X		
40W CIRCLINE T5 (1)		X		X		X				
55W CIRCLINE T5 (1)		X				X				
F28 2D (1)			X							
F28 2D (2)										
F38 2D (1)										
F38 2D (2)										

Central Systems

Operate loads during power failures or brownouts.

AC Central Systems

These battery-based power systems are self-contained and fully automatic.

Batteries offered:

- Sealed maintenance-free lead-calcium (AC and DC systems)
- Refillable nickel-cadmium (AC systems)

Single-Phase Standard-Transfer IPS

Single-phase power systems for incandescent, LED and fluorescent emergency lighting systems.

- 98% efficient — 50mS transfer time
- PWM/IGBT technology
- Microprocessor control
- User-programmable with password protection
- Tested to UL® 924
- Automatic event and alarm log
- RS-232 communications port
- Input circuit breaker
- Modular design
- Low audible noise
- Normally off output and normally on
- From 1.5kW/kVA to 16.7kW/kVA

Single-Phase UPS

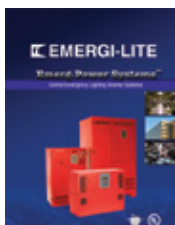
Single-phase power systems for HID, incandescent, LED and fluorescent emergency lighting systems.

- 90% efficient
- PWM/IGBT technology
- Microprocessor control
- User-programmable with password protection
- Tested to UL® 924
- Automatic event and alarm log
- RS-232 communications port
- Input circuit breaker
- Modular design
- Low audible noise
- Normally on output
- From .5kW/kVA to 16.7kW/kVA

Three-Phase UPS

Standby AC power systems for HID, incandescent, LED and fluorescent emergency lighting systems.

- 90% efficient
- PWM/IGBT technology
- Microprocessor control
- User-programmable with password protection
- Tested to UL® 924
- Automatic event and alarm log
- RS-232 communications port
- Input circuit breaker
- Modular design
- Low audible noise
- Internal battery circuit breaker/fuse
- From 4.8kW/kVA to 50kW/kVA



For more information on Emergi-Lite® Central Systems, visit our website at www.emergi-lite.com.

Note: All information and specifications contained on this page are subject to change without notice.

Central Systems

Provide power to designated emergency lighting fixtures in a power loss situation.

Mini-Inverters

MI125 and MI375 Interruptible 125-Watt and 375-Watt Unit Equipment

The MI125 and MI375 are UL® Listed standalone sine-wave output inverters designed to provide power to designated emergency lighting fixtures. In a power loss situation, they will supply 125W or 375W of power from the onboard battery supply. The MI125 and the MI375 work in conjunction with incandescent, LED and fluorescent lamp and fixture types and will automatically run switched, normally on or normally off designated emergency fixtures. They are ideal for applications requiring an emergency source for lighting arrangements that utilize multiple lamp and fixture types.

The MI125 is available in two mounting configurations (recessed wall or surface mount).

The MI125-CG Ceiling Grid model mounts across the 2-ft. T-bars of a grid ceiling. Support wires are then connected to the mounting tabs at the top of the unit.

The MI375 is available in a surface-mount housing.

All units come with a three-year warranty and seven-year pro-rata battery warranty.



MI350 Uninterruptible 350-Watt Unit Equipment

The Uninterruptible MI350 is a UL® Listed standalone sine-wave output inverter designed to provide power to designated emergency lighting fixtures. In a power loss situation, the MI350 will supply 350W of power from the onboard battery supply. The double-conversion design of the MI350 delivers power with no interruption to the load, allowing "no-break" operation of HID, incandescent, LED and fluorescent lamp and ballast combinations. The MI350 is available in a surface-mount housing and comes with a three-year warranty and seven-year pro rata battery warranty.



For more information, visit our website at www.emergi-lite.com or contact your Thomas & Betts sales representative.

Lighting — Emergi-Lite® Emergency Lighting

Remote Fixtures

Now with a white LED normally on option.

Lux-Ray™ Remote Series

The Lux-Ray™ Series combines photometric performance with a visually appealing design. Designed to meet the needs of architects and designers without sacrificing safety, the die-cast aluminum housing is offered in a wide range of colors to complement any interior and blend with the most sophisticated décor. An efficient reflector combined with two Xenon lamps delivers an incredible center-to-center spacing.

Standard Features

Reliability

The Lux-Ray™ Series comes complete with a three-year full warranty (excluding fuses and incandescent lamps).

Unit Data

The Lux-Ray™ units are made of durable cast aluminum housing, finished with textured polyester powder-coat paint. Four colors are available: off-white, black, platinum gray and dark bronze. The vacuum-plated die-cast reflector will last over time. The lens is made of an impact- and UV-resistant polycarbonate. The unit can be installed on various junction boxes with universal mounting pattern. It can also accept a surface-mount cable via the rigid conduit entry provision on the top of the unit.

Lamp Information

The Lux-Ray™ units are furnished with two high-output Xenon lamps for emergency lighting. These lamps deliver up to 34' center-to-center spacing. The reflector has been designed to provide an evenly distributed illumination pattern for corridors up to 6' wide.

White LED Accent Light Lux-Ray™ with Dual-Mode Illumination (optional)

The dual-mode illumination feature enables the Lux-Ray™ unit to provide lighting not only during power outages, but also in normal conditions. This is achieved with a secondary light source, a long-life, 5-watt power LED lamp dedicated to normal lighting.

When equipped with this feature, the equipment includes two independent circuits, electrically isolated from each other: the standard input for emergency lighting and a secondary input for normal lighting. The secondary input can be connected to a regular AC line that may include an electric switch. The dual-mode illumination option is available with any model of Lux-Ray™ unit.

The Lux-Ray™ lamp for normal lighting uses one 5-watt white LED supplied with a simple and robust ballast circuitry.

- AC input: dual-voltage 120/277VAC, .04A, 5W
- LED lamp operational life: 50,000 hours (to 70% of initial light level)

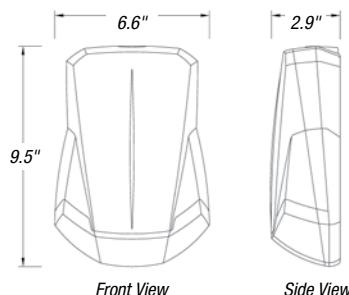


ADA compliant



Dimensions

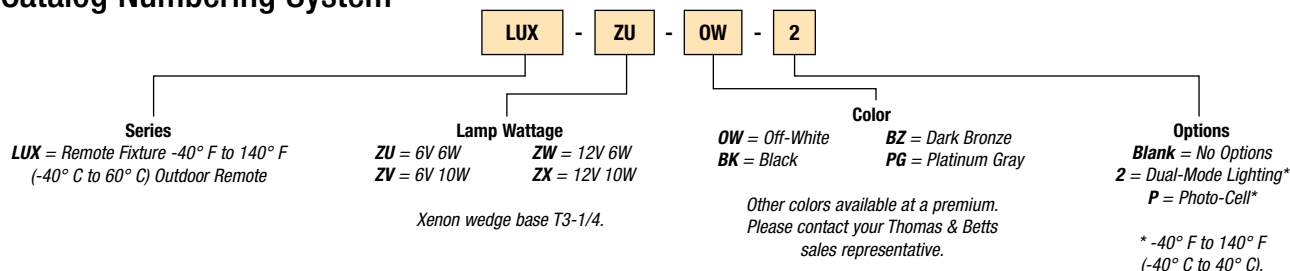
Dimensions are approximate and subject to change.



Replacement Lamps

MODEL NO.	SPECIFICATIONS
570.0213-E	ZU = 6V 6W Xenon
570.0214-E	ZV = 6V 10W Xenon
570.0215-E	ZW = 12V 6W Xenon
570.0216-E	ZX = 12V 10W Xenon

Catalog Numbering System



Remote Fixtures

PRO-2 Remote Series

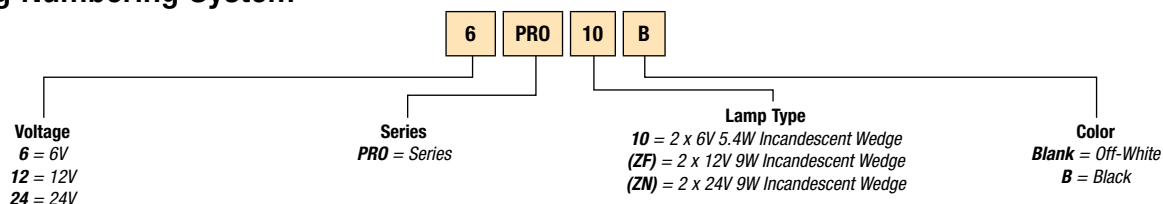
A sleek, low-profile body and transparent polycarbonate lamp shield combine for a contemporary style that's just right for today's aesthetic demands. The PRO-2 Remote Series complements a variety of interiors in stores, offices, theaters, restaurants and shopping malls.

Standard Features

- Off-white finish
- 11" x 5" thermoplastic body
- Can be mounted in any orientation on walls or ceilings



Catalog Numbering System



Revelation™ DC Remote Series

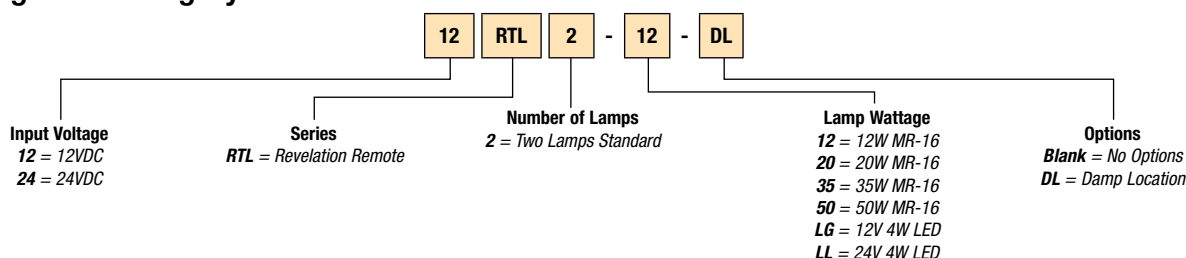
Ideal for walls with a cavity (drywall with 4-inch studs) or uninsulated ceilings with horizontal beams or T-bar structures, the Revelation™ Series is designed for unobtrusive architectural use. In normal conditions (standby), the Revelation™ Remote Series is completely concealed in the wall or ceiling. When supplied with remote power, the door of the unit rotates open 180° and exposes the emergency lights to illuminate the path of egress. After power disconnect, the lights turn off and the door rotates in to closed position automatically, driven by an energy storage circuit.

Standard Features

- Includes two high-efficiency MR-16 lamps
- Does not require any back box for pre-installation
- For remote AC generator applications, please contact your Thomas & Betts sales representative



Catalog Numbering System

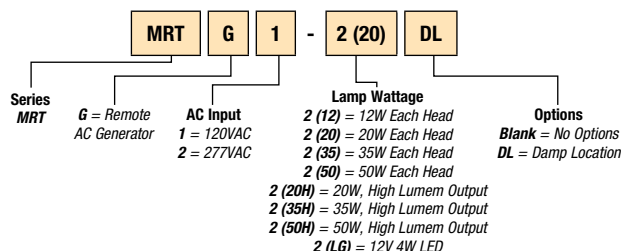


Remote Fixtures

Mini-Revelation™ AC Generator Remote Series

Specially designed for retrofitting in finished walls with a cavity (drywall with 4-inch studs), the Mini-Revelation™ Series concealed emergency lighting equipment provides impressive illumination. In normal conditions (standby), the unit is completely concealed in the wall.

Catalog Numbering System



Standard Features

- Includes two high-efficiency MR-16 lamps, maximum 2 x 50W, or LED lamps
- Does not require any back box for pre-installation



Literay™ Remote Series

Designed to withstand extreme weather conditions, the premium die-cast aluminum housing of this unique wall sconce is aesthetically pleasing with a compact footprint. Ideal for damp, wet and cold location specifications, the Literay™ Series has a fully gasketed cover with the option of vandal-resistant screws. With its robust polycarbonate lens, the Literay™ Series is the ideal choice for applications where impact- and tamper-resistant emergency lighting is specified.



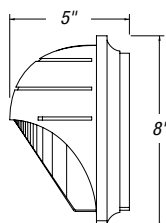
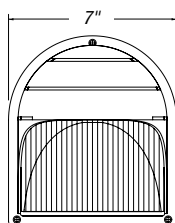
NEMA 3R

Standard Features

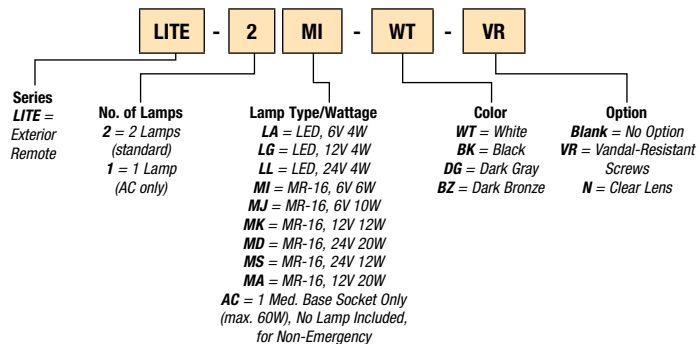
- Clear lens option available for high-efficiency lighting!
- Precise beam control is provided with two fully adjustable MR-16 halogen lamps secured in an attractive molded swivel assembly for maximum light output
- Can also be used with the premium option of the high-efficiency 4-watt MR-16 white LED lamp
- Provides an average of one foot-candle along the path of egress
- Specially manufactured polycarbonate diffuser maximizes light output and completes the wall sconce's decorative lines
- Available in four textured powder-coat paint finishes: white, black, dark bronze and dark gray

Dimensions

Dimensions are approximate and subject to change.



Catalog Numbering System



Remote Fixtures

Survive-All™ EF39 Series

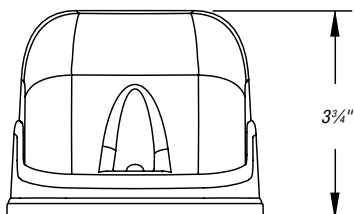
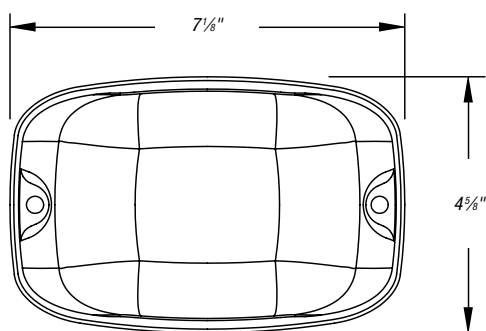
Specifically designed for high-abuse areas and wet and cold weather locations, EF39 remote fixtures are fully gasketed with a die-cast aluminum back plate and a clear heavy-duty UV-resistant polycarbonate light cover. Easy lamp replacement, tool-less lamp aiming and easy installation on a four-inch octagonal box make this remote the perfect choice for any environment. Also available as a battery unit — refer to SurviveAll™ SV Series (pages I-242-I-243).

Standard Features

- Available in single- or double-lamp configurations with the option of highly efficient MR-16 lamps or the 4-watt MR-16 white LED lamp
- Delivers unsurpassed path-of-egress illumination — up to 70 feet, center-to-center — when using two 20W MR-16-IR lamps
- Fully gasketed cast aluminum back plate with a clear UV- and impact-resistant cover
- Choice of three colors: off-white, black or gray
- Comes standard with tamper-proof screws and bit
- Easy installation on a 4" octagonal box
- NEMA 4X rated, NSF Certified for food processing plants

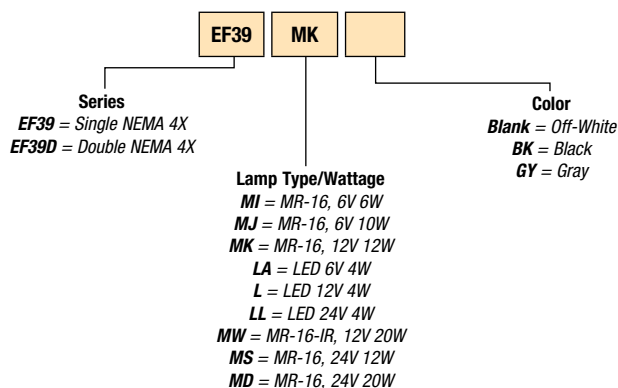
Dimensions

Dimensions are approximate and subject to change.



NEMA 4X **NSF** **UL**

Catalog Numbering System



Remote Fixtures

Remote fixture for hazardous locations.

EF41 Series

This Class I, Division 2 compliant remote fixture is specifically designed for installation in hazardous locations and other high-abuse industrial environments. Highly weather and temperature resistant and able to stand up to impact and vibrations, the EF41 Series is ideally suited for environments where flammable gases, vapors or liquids can create an explosive gas atmosphere.

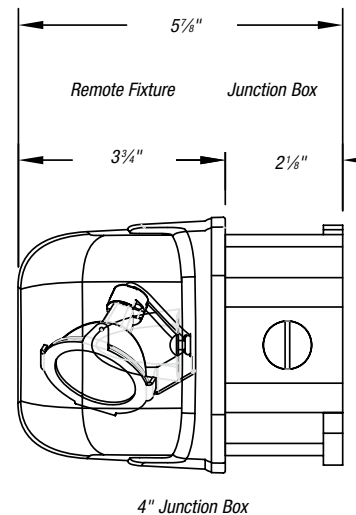
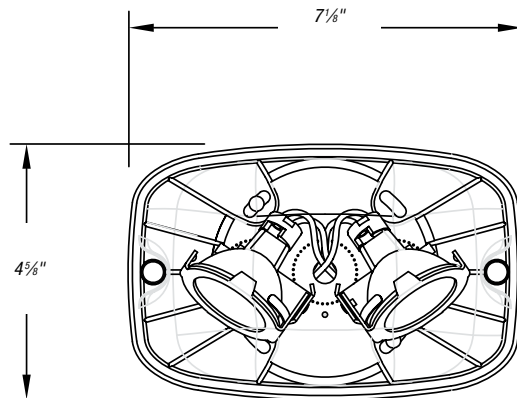
Standard Features

- Available with single or double lamp heads with high-efficiency MR-16 halogen lamps of 10W, 12W or 20W
- Die-cast aluminum back plate with gasket
- Clear polycarbonate cover, UV and impact resistant
- Input voltage: 6V, 12V, 24V or 120V
- Easy installation on a 4" octagonal box (included), and comes standard with tamper-proof screws and bit
- Evaluated to UL® 844 Standard for Class I, Division 2, Groups A, B, C & D
- Temperature Codes: T3B (10W and 12W MR-16 lamps) and T2C (20W MR-16 lamps)
- Extreme Operational Temperature Range: -40° F to 104° F (-40° C to 40° C)

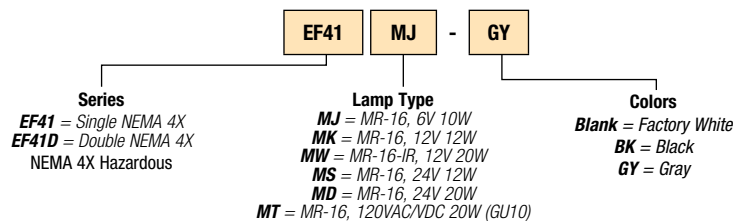


Dimensions

Dimensions are approximate and subject to change.



Catalog Numbering System



Remote Fixtures

Distinction™ Series Surface-Mounted Designer Fixtures

These Distinction™ Series emergency fixtures are specially built to meet the needs of contemporary décor professionals' applications. Distinction™ fixtures reach a new level in emergency lighting function and form.

Standard Features

- White or black finish available
- **EF150:** Single compact adjustable decorative lighting head
Dimensions: 4.48" diameter base, 5.2" height
- **EF150D:** Double compact adjustable decorative lighting heads
Dimensions: 4.48" diameter base, 4.0" height
- **EF150T:** Triple compact adjustable decorative lighting heads
Dimensions: 11.0" diameter base, 5.2" height

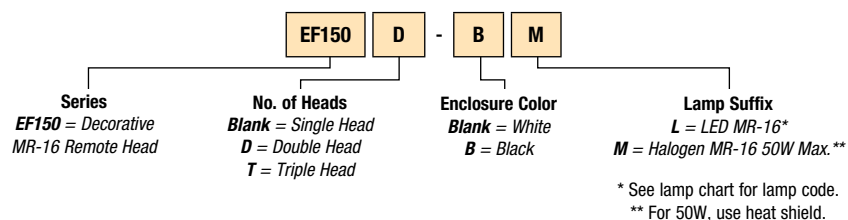


EF150/EF150D/EF150T



Lighting — Emergi-Lite® Emergency Lighting

Catalog Numbering System



Remote Fixtures

Distinction™ Series Remote Recessed Designer Fixtures

To meet the needs of contemporary décor professionals, the Distinction™ Remote Recessed Designer Collection emergency fixtures are specially built for recessed housing applications.

EFR2

Standard Features

- Decorative lighting trim
- 4.0" diameter base
- Requires recessed housing
- Available colors: WH-White, BK-Black, CH-Chrome, PB-Polished Brass, BN-Brushed Nickel



EFR8NB

Standard Features

- Decorative lighting trim
- 4.0" diameter base
- Requires recessed housing
- Available colors: WH-White, BK-Black, CH-Chrome, BN-Brushed Nickel



EFR8R

Standard Features

- Decorative lighting trim
- 4.0" diameter base
- Requires recessed housing
- Available colors: WH-White, BN-Brushed Nickel



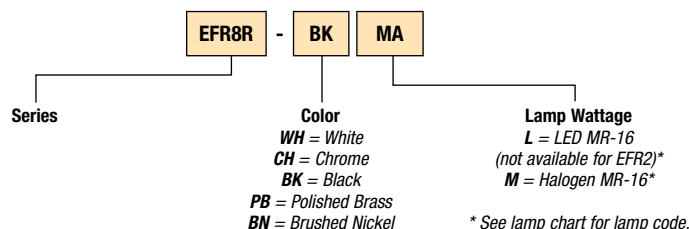
EFR9WH

Standard Features

- Decorative lighting trim
- 4.0" diameter base
- Requires recessed housing
- Available color: WH-White



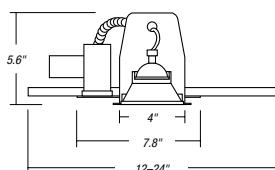
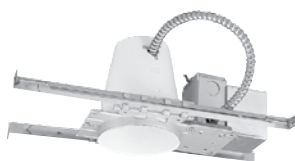
Catalog Numbering System for Trim



EL-GRHR03

Recessed Type Housing

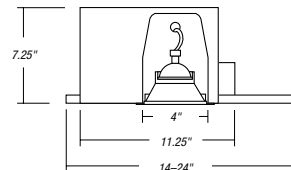
- New construction housing
- Total height: 5.6"



EL-GRHR06

Recessed Type Housing

- Insulated ceiling housing
- Total height: 7.25"



CAT. NO.	DESCRIPTION
EL-GRH03	Housing for New Construction

CAT. NO.	DESCRIPTION
EL-GRHR06	Housing for Insulated Ceilings

Remote Fixtures

A variety of remote, surface-mounted fixtures.

EF Surface-Mount Series

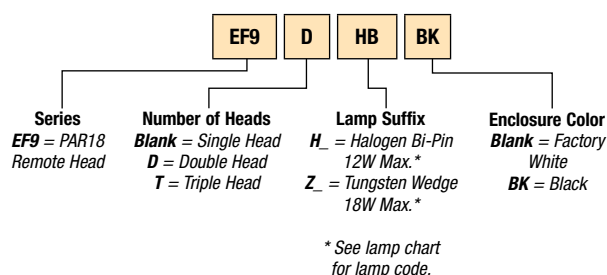
EF Series remote fixtures are furnished complete with lamps as specified. For alternate lamp selection, see lamp data sheet.

EF9/EF9D

- Single or double compact adjustable decorative lighting head
- Off-white (WT) finish; black (BK) optional
- Surface (wall or ceiling) mounting direct to 4" octagonal or single-gang box
- Accommodates Series H bi-pin halogen or Series Z high-intensity incandescent wedge base lamps
- Thermoplastic construction



Catalog Numbering System

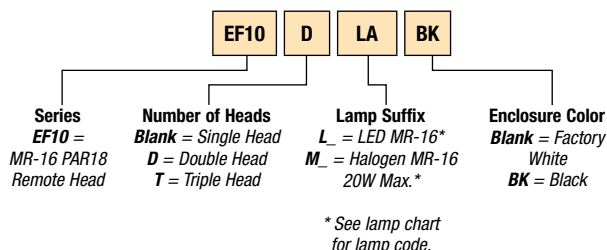


EF10/EF10D

- Single and double MR-16 indoor lighting head with fully adjustable swivel
- Thermoplastic construction with off-white (WT) or black (BK) finish
- Direct mounting to 4" octagonal electrical box
- Accommodates Series M MR-16 lamps



Catalog Numbering System

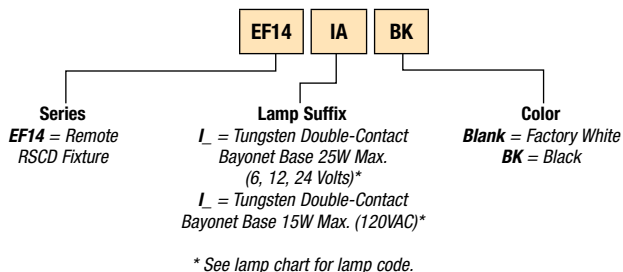


EF14

- Rectangular fixture with diffused polycarbonate lens
- White baked enamel finish (specify other)
- Surface (wall or ceiling) mounting
- 8 1/4"W x 4 1/2"H x 3"D
- Accommodates Series I high-intensity tungsten (HIT) double-contact bayonet-base lamps



Catalog Numbering System



Remote Fixtures

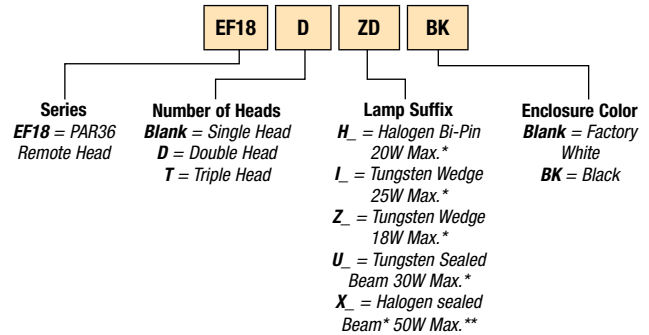
EF Surface-Mount Series (continued)

EF18/EF18D

- Single or double adjustable decorative lighting head
- Thermoplastic construction with off-white (WT) finish; black (BK) optional
- Direct mounting to 4" octagonal or single-gang box
- Accommodates Series H bi-pin halogen, Series I high-intensity tungsten (HIT) double-contact bayonet-base, Series U sealed-beam tungsten, Series X sealed-beam halogen or Series Z high-intensity incandescent wedge-base lamps



Catalog Numbering System



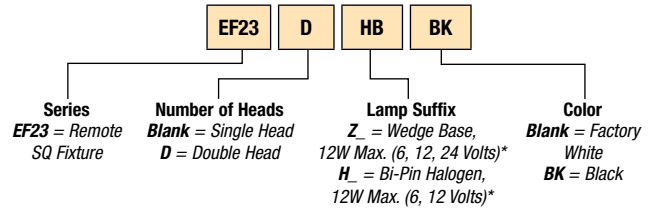
* See lamp chart for lamp code.
** Use high-temp enclosure.

EF23/EF23D

- Single adjustable decorative lighting head
- Thermoplastic construction with off-white (WT) or black (BK) finish
- Direct mounting to 4" octagonal or single-gang box
- Round mounting canopy standard
- Accommodates Series H bi-pin halogen 6-, 8- and 12-watt lamps and Series Z high-intensity incandescent wedge-base 5.4-, 9- and 12-watt lamps



Catalog Numbering System



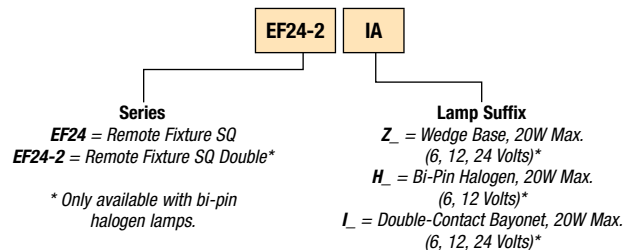
* See lamp chart for lamp code.

EF24/EF24-2

- Decorative square thermoplastic light with prismatic diffusing lens and metal reflector
- Off-white front trim; black back box
- Dimensions: 9"H x 9"W x 4"D
- Surface (wall or ceiling) mounting
- For semi-recessed mounting, order EF24R, which includes a semi-recessed deep mounting box (8½"H x 8½"W x 1¼"D)
- Accommodates Series H bi-pin halogen, Series I high-intensity tungsten (HIT) double-contact bayonet base or Series Z high-intensity incandescent wedge-base lamps



Catalog Numbering System



* Only available with bi-pin halogen lamps.

* See lamp chart for lamp code.

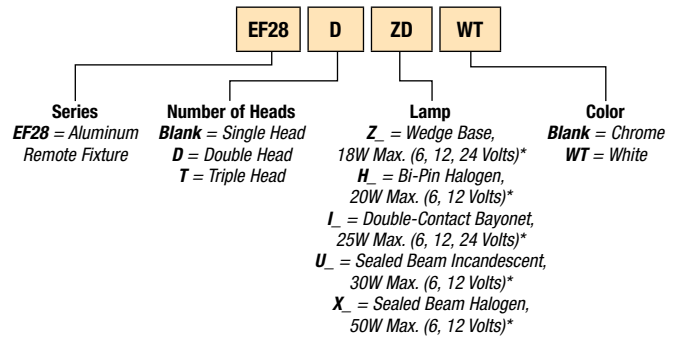
Remote Fixtures

EF28/EF28D/EF28T

- Single or double metal housing head with fully adjustable swivel
- Chrome-finish head (off-white optional)
- EF28: surface mounting; 1 MPC — one plate supplied
- EF28D: surface mounting; 3 MPC — two plates supplied
- EF28 mounting plate dimensions: 2½" x 4¼"
- EF28D mounting plate dimensions: 6⅞" x 4½"
- Accommodates Series H bi-pin halogen, Series I high-intensity tungsten (HIT) double-contact bayonet-base, Series U sealed-beam tungsten, Series X sealed-beam halogen or Series Z high-intensity incandescent wedge-base lamps



Catalog Numbering System



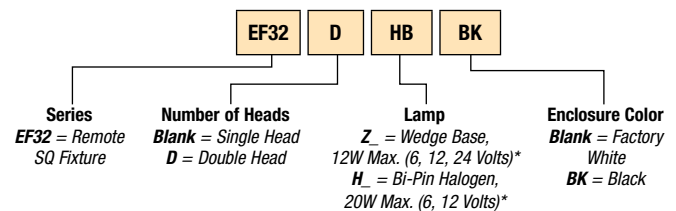
* See lamp chart for lamp code.

EF32/EF32D

- Single miniature, fully adjustable aluminum cylinder complete with matching round mounting plate
- Off-white baked enamel finish standard, black (BK) optional
- Cylinder dimensions: 3" diameter x 4¼"
- Direct mounting to 4" octagonal box
- Accommodates 6 or 12VDC Series H bi-pin halogen lamps



Catalog Numbering System



* See lamp chart for lamp code.

Remote Fixtures

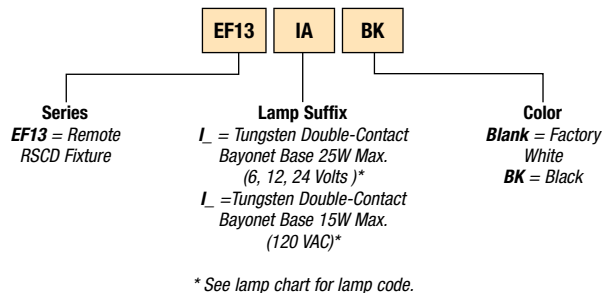
The widest variety of remote, recessed-mounted fixtures! EF Recessed-Mount Series

EF13

- Rectangular fixture with diffused polycarbonate lens
- White baked enamel finish (specify other)
- Recessed wall or ceiling mounting
- Trim plate dimensions: 8¼"W x 4½"H
- Back box dimensions: 6¾"W x 3"H x 2½"D
- Accommodates Series I high-intensity tungsten (HIT) double-contact bayonet-base lamps



Catalog Numbering System

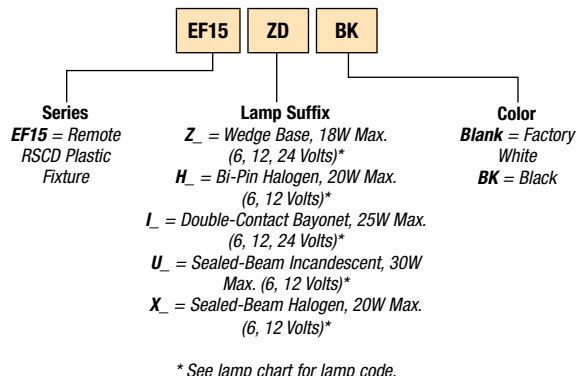


EF15

- Recessed gimbal ring fixture PAR36 — adjustable in two planes to 45°
- Off-white thermoplastic housing
- Recessed wall or ceiling mounting
- Trim ring dimensions: 8½" diameter
- Back box dimensions: 5¼" x 4¾" deep
- Plaster ring dimensions: 9" square (furnished standard)



Catalog Numbering System

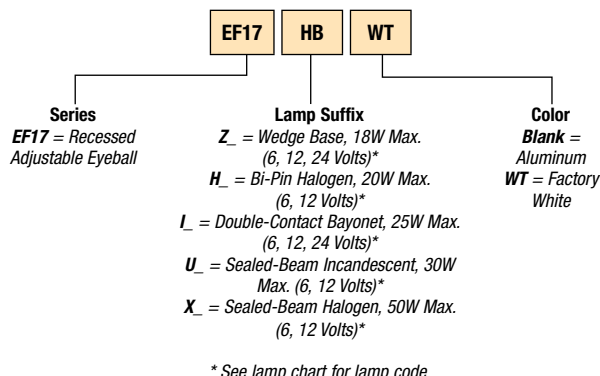


EF17

- Recessed adjustable eyeball PAR36
- Brushed aluminum finish (specify others)
- Recessed wall or ceiling mounting
- Trim ring dimensions: 8¾" diameter
- Back dimensions: 6¾" x 3½" deep



Catalog Numbering System



EF21R

- Fully recessed metal decorator square housing with prismatic diffusing lens and metal reflector
- Off-white baked enamel finish
- Recessed wall or ceiling mounting
- Trim plate dimensions:
10 $\frac{5}{8}$ "H x 10 $\frac{5}{8}$ "W
- Back box dimensions:
8 $\frac{3}{4}$ "H x 8 $\frac{3}{4}$ "W x 3 $\frac{1}{4}$ "D
- Accommodates Series H bi-pin halogen (available at additional cost), Series I high-intensity tungsten (HIT) double-contact bayonet-base or Series Z high-intensity incandescent wedge-base lamps



Series
EF21R = Remote Recessed Metal Square Decorator Fixture

Lamp Suffix
IA
Z = Wedge Base, 20W Max. (6, 12, 24 Volts)*
H = Bi-Pin Halogen, 20W Max. (6, 12 Volts)*
I = Double-Contact Bayonet, 20W Max. (6, 12, 24 Volts)*

* See lamp chart for lamp code.

- Gasketed, fully recessed, with fresnel lens
- Suitable for damp locations
- Off-white finish
- Fully recessed ceiling mounting
- Dimensions: 7¼" deep; 6⅝" diameter ceiling opening



EF35 **IA**

Series **Lamp Suffix**

EF35 = Remote
RSCD Metal Fixture

Z_ = Wedge Base, 18W Max. (6, 12, 24 Volts)*
H_ = Bi-Pin Halogen, 20W Max. (6, 12 Volts)*
L_ = Double-Contact Bayonet, 25W Max. (6, 12, 24 Volts)*

* See lamp chart for lamp code.

Remote Fixtures

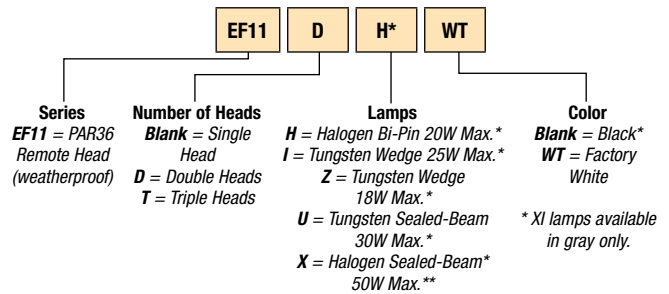
EF Series Weatherproof Harsh Environment Remote Fixtures

EF11/EF11D/EF11T

- Weather-resistant adjustable heads
- Gasketed aluminum canopy
- Black (BK) finish; off-white (WT) optional
- Metal head
- Direct mounting to 4" octagonal electrical box



Catalog Numbering System



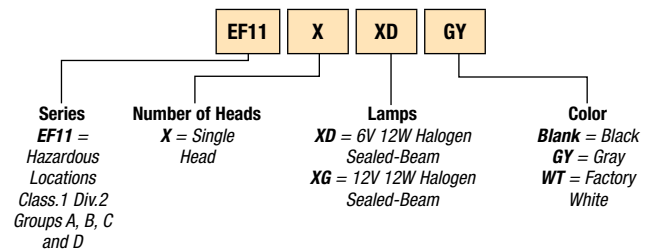
* See lamp chart for lamp code.
** Use high-temp enclosure.

EF11X

- Class I, Division 2, Groups A, B, C, D
- Single lighting head with fully adjustable swivel
- Gasketed aluminum canopy and junction box
- Round plate standard for mounting directly to 4" outlet box
- Lamps: PAR36 sealed beam (6 or 12VDC maximum 12W)



Catalog Numbering System

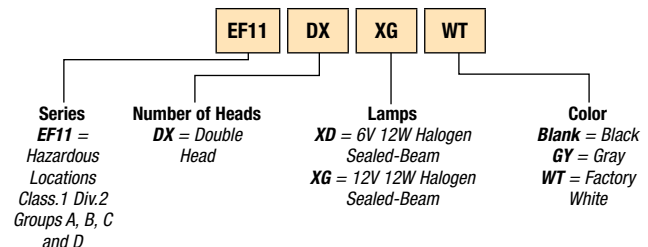


EF11DX

- Class I, Division 2, Groups A, B, C, D
- Double lighting heads with fully adjustable swivel
- Gasketed aluminum canopy and junction box
- Round plate standard for mounting directly to 4" outlet box
- Lamps: PAR36 sealed beam (6 or 12VDC maximum 12W)



Catalog Numbering System



Remote Fixtures

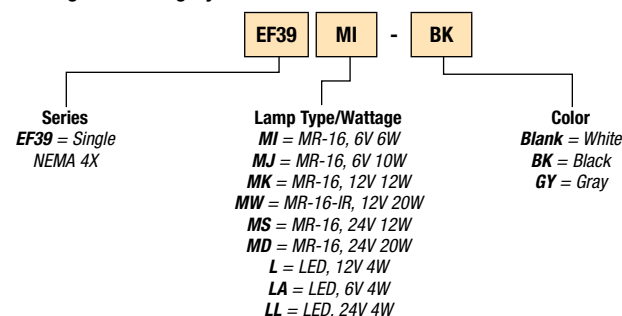
EF39

- NEMA 4X rated
- Single head
- Gasketed cast aluminum back plate and clear, UV- and impact-resistant case
- Direct mounting to 4" octagonal electric box
- Accommodates Series M MR-16 lamps



NEMA 4X NSF UL

Catalog Numbering System



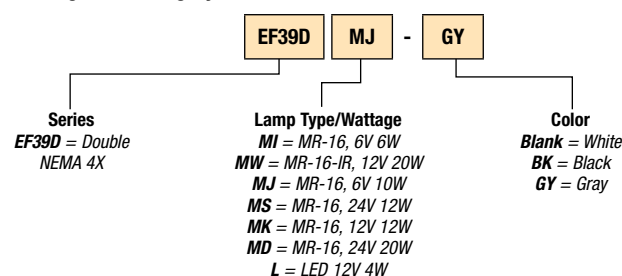
EF39D

- NEMA 4X rated
- Double head
- Gasketed cast aluminum back plate and clear, UV- and impact-resistant case
- Direct mounting to 4" octagonal electric box
- Accommodates Series M MR-16 lamps



NEMA 4X NSF UL

Catalog Numbering System



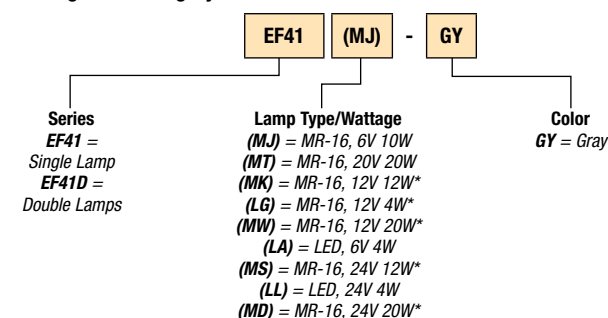
EF41

- Suitable for hazardous locations
- Single or double lamp heads
- Die-cast aluminum backplate with gasket
- Clear UV- and impact-resistant case
- Easy installation on a 4" octagonal box (included)
- Class I, Division 2; extreme operational temperature range: -40° F to 104° F (-40° C to 40° C)



SP[®]
US

Catalog Numbering System



* Wattage doubles for "D" 2-lamp version.

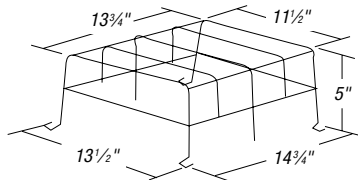
Accessories

Wire Guards

Catalog Number WG1-E

Applications

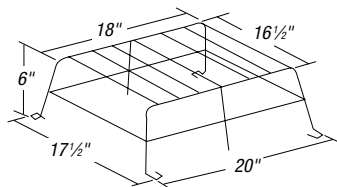
- JS Series (small cabinet)
- PS Series (surface or semi-recessed)
- EF24 or EF24R remote lighting fixtures
- Premier™ battery unit
- Premier™ exit sign (wall mount)



Catalog Number WG2-E

Applications

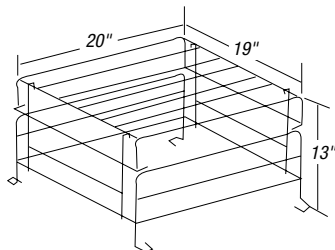
- JS Series (large cabinet)
- All A cabinets
- Premier™ Combo Series (wall mount)



Catalog Number WG3-E

Applications

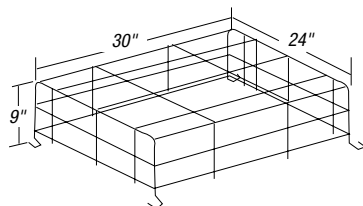
- IL Series
- All B and C cabinets



Catalog Number WG4-E

Applications

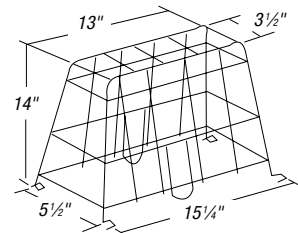
- All D cabinets
- KS Series (not for front-mounted heads)



Catalog Number WG5-E

Applications

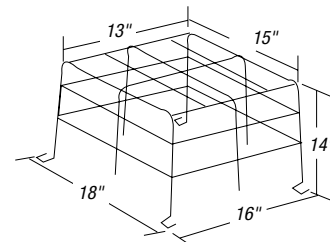
- X10 AC and AC/DC or self-powered exit sign with no mounted heads
- ECL and ECLXN Series LED (end or ceiling mounted) AC and AC/DC or self-powered
- Preceptor™ Series LED (AC and AC/DC or self-powered) (end or ceiling mounted)
- Prestige™ DX Series LED and Thin Die-Cast Series (end or ceiling mount)
- Premier™ exit sign (end or ceiling mount)



Catalog Number WG6-E

Applications

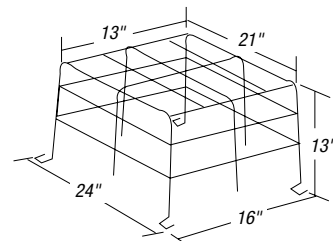
- Single EF22 head
- X10 mini systems (wall mounted), with front-mounted EF9 head(s) (wall mounted)
- KS Series with front-mounted heads



Catalog Number WG7-E

Applications

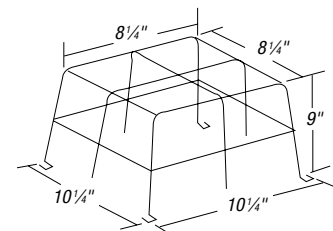
- EF22D heads
- RS Series with cylinder EF32 heads



Catalog Number WG8-E

Applications

- Single remote EF9, EF11, EF16, EF18, EF28 or EF32 lighting head

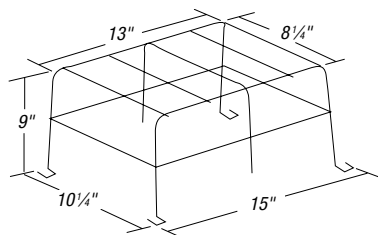


Accessories

Catalog Number WG9-E

Applications

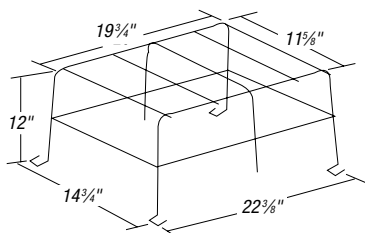
- Double or triple remote EF9, EF11, EF18, EF28 or EF32 lighting heads
- RS Series with EF9 or EF18 heads
- ECS-2 Series



Catalog Number WG10-E

Applications

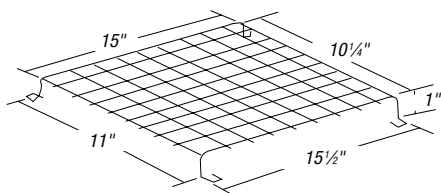
- JS Series with front-mounted heads



Catalog Number WG11-E

Applications

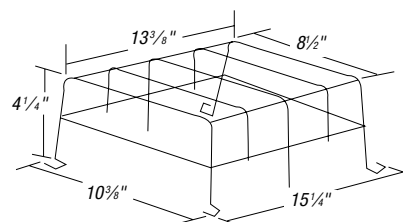
- Fully recessed PS Series
- GS Series
- EF15, EF20, EF21R, EF35 lighting fixtures
- Fully recessed Preceptor™ Series
- Prestige™ Thin Die-Cast exit sign (wall mounted)



Catalog Number WG12-E

Applications

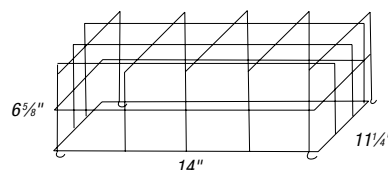
- X10 Series LED (AC and AC/DC or self-powered) (wall mount)
- ECL and ECLXN Series LED (AC and AC/DC or self-powered) (wall mount)
- Preceptor™ Series LED (AC and AC/DC or self-powered) (wall mount)
- Prestige™ DX Series LED (AC and AC/DC or self-powered) (wall mount)
- Remote EF13, EF14 or EF17 fixtures



Catalog Number WG13-E

Applications

- PRO-2 Series
- Preceptor™ Series self-powered (wall mount)



Accessories

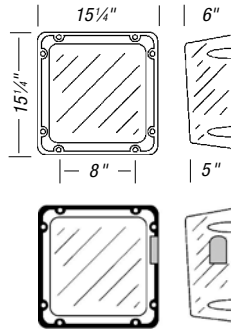
Unit Accessories

Catalog Number VRS or VRS-4X

Applications

- ME Series with top-mounted heads
- PS Series, all mountings
- X10 LED (wall mounted), AC and AC/DC or self-powered exit signs with no mounted heads
- ECL and ECLXN Series LED (wall mounted), AC and AC/DC or self-powered
- Preceptor™ Series LED (wall mounted) AC and AC/DC

NEMA 4X

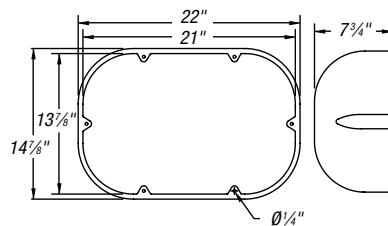


Catalog Number VRS-BB or VRSBB-4X

Applications

- JS Series (small cabinet), top- or front-mounted heads
- ECC and ECM Series (small cabinet)

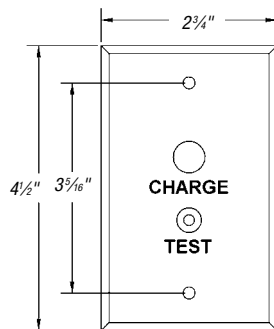
NEMA 4X



Remote Test Switch

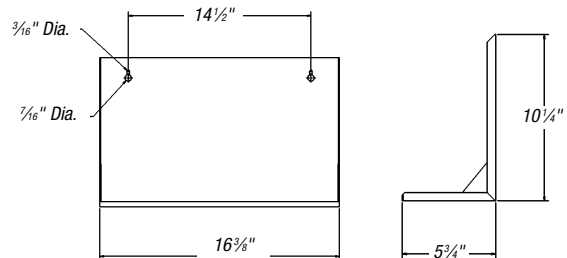
Make testing your ceiling-mounted equipment easier with the Remote Test Switch. Compatible with 120 or 277VAC circuits, the Remote Test Switch will interrupt the line voltage to your equipment by means of a momentary push-button switch. AC on/charge status indicator lamp assures that power is going to your emergency lighting.

CATALOG NO.	DESCRIPTION
RTS	Metal Faceplate, Chrome
RTS-1	Plastic Faceplate, Off-White



MP3 Mounting Platform

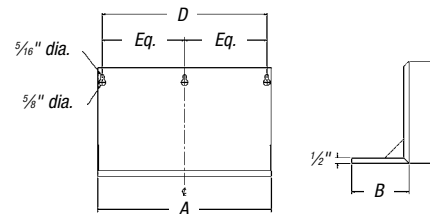
Constructed of 18-gauge steel, the MP3 Mounting Platform will accommodate all your unit equipment in our "B" cabinet.



CATALOG NO.	DESCRIPTION
MP3	Mounting Platform
MP3-GY	Mounting Platform, Gray

MP6, MP12, MP24 Mounting Platforms

Constructed of 18-gauge steel, the MP6, MP12 and MP24 Mounting Platforms will accommodate your unit equipment in our "C", "D" and "E" cabinets, respectively.

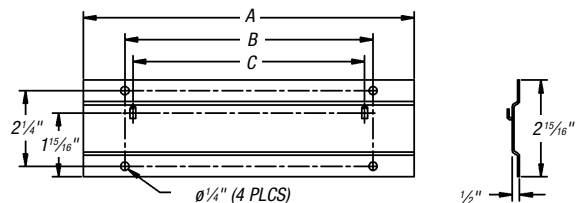


CATALOG NO.	DESCRIPTION	A	B	C	D
MP6	Mounting Platform (off-white)	17"	7.75"	12.25"	16"
MP12	Mounting Platform (off-white)	27.5"	7.75"	12.25"	16"
MP24	Mounting Platform (off-white)	27.5"	11.63"	12.25"	16"

Optional colors available; Contact your Thomas & Betts sales representative.

B1 and B2 Mounting Brackets

Constructed of 16-gauge steel, the B1 and B2 Mounting Brackets will accommodate your equipment in our "A" and "B" cabinets, respectively.



CATALOG NO.	DESCRIPTION	A	B	C
B1	Mounting Bracket (off-white)	10"	7"	7 1/2"
B2	Mounting Bracket (off-white)	14 1/4"	11 3/4"	12 5/8"

Accessories

Mounting Plates

Specify mounting plate designation as a suffix to fixture type model number.
For plates ordered separately, specify plate designation and fixture type.

230.1238-E and 230.1239-E

- Single, double or triple round
- Thermoplastic construction
- Off-white or black finish only
- Direct mounting to 4" octagonal box

Dimensions: 5" diameter with slotted mounting holes,
3" to 3 $\frac{3}{16}$ " mounting center

Standard: EF18, EF18D; EF9, EF9D



230.1238-E
Off-White



230.1239-E
Black

430.0765-E and 430.0766-E

- Single or double round
- Aluminum construction
- Matte white baked enamel finish
- Black finish optional
- Direct mounting to 4" octagonal box

Dimensions: 5 $\frac{1}{4}$ " diameter,
3 $\frac{3}{16}$ " mounting center

Standard: EF32, EF32D



430.0765-E
Off-White Single



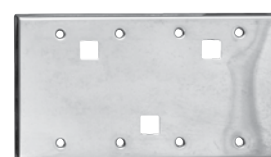
430.0766-E
Off-White Double

450.0129-E, 450.0397-E and 450.0398-E

- Single, double or triple rectangular
- Single-, 3- or 4-gang steel construction
- Chrome-plated finish only
- Direct mounting to standard outlet box

Dimensions: Single-Gang — 2 $\frac{3}{4}$ " x 4 $\frac{1}{2}$ " (for 1 fixture),
3-Gang — 6 $\frac{7}{16}$ " x 4 $\frac{1}{2}$ " (for 2 fixtures),
4-Gang — 8 $\frac{3}{16}$ " x 4 $\frac{1}{2}$ " (for 2 or 3 fixtures)

Standard: EF28, EF28D; EF18T, EF28T



450.0129-E — No Square Hole
450.1151-E — $\frac{1}{16}$ " Square Hole
450.0194-E — $\frac{1}{2}$ " Square Hole

450.0397-E — No Square Hole
450.1152-E — $\frac{1}{16}$ " Square Hole
450.1153-E — $\frac{1}{2}$ " Square Hole

450.0398-E — No Square Hole
450.1154-E — $\frac{1}{16}$ " Square Hole
450.1155-E — $\frac{1}{2}$ " Square Hole

Accessories

Mounting Plates (*continued*)

330.7583-E, 330.7577-E, 330.7584-E and 330.7578-E

- Single or double round
- Die-cast aluminum construction
- Gasketed and weatherproof
- Off-white or black powder-paint finish only
- Direct mounting to 4" octagonal box



330.7583-E
Off-White Single



330.7577-E
Black Single



330.7584-E
Off-White Double



330.7578-E
Black Double

Dimensions: 4 $\frac{1}{8}$ " diameter,
3 $\frac{3}{16}$ " mounting center

Standard: EF11, EF11D

245.0100-E
Gasket (not shown)

12804-E and 12805-E

- Single or double rectangular
- Die-cast aluminum construction
- Gasketed and weatherproof
- Silver-gray enamel finish only
- Direct mounting to standard outlet box



12804-E



12805-E

Dimensions: 4 $\frac{5}{16}$ " x 2 $\frac{5}{16}$ "
3 $\frac{3}{4}$ " mounting center

Standard: Non-standard mounting plate

Technical Information

Lamp Data — General Information

All Emergi-Lite® lighting fixtures are furnished complete with lamps; however, **all fixtures and unit catalog numbers must include a lamp designation.** Unless otherwise noted on the lighting fixture data sheet, the normal lamp furnished with each lighting fixture is a 9-watt high-intensity incandescent lamp of the designated voltage.

Example:

Fixture Battery units with two lighting heads

EF18(ZD) LSM 110-2ZD (6V 9W)

EF18(ZF) 12LSM 110-2ZF (12V 9W)

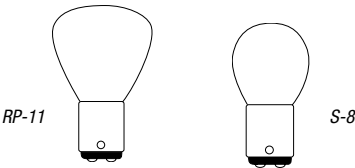
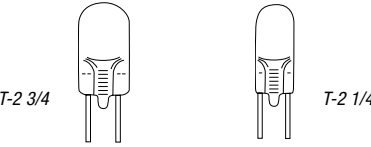
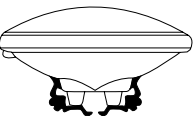
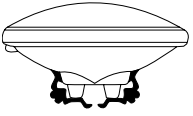
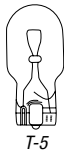
EF18(ZN) 24LSM 110-2ZN (24V 9W)

When an alternate lamp is required, refer to the lamp selection charts below, select the lamp type, the voltage and wattage required and add the symbol designation to the catalog number.

Not all lighting fixtures and lamp types are compatible — always check individual lighting fixture data sheets.

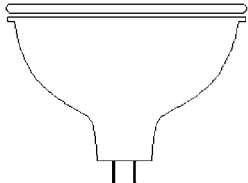

Example:

When an EF18(ZD) fixture, normally supplied with 6V 9W wedge-base incandescent is ordered with a 6V 25W sealed-beam lamp, the catalog number changes to EF18(UC).

LAMP TYPE	PART NO.	CATALOG SUFFIX	VOLTAGE (V)	POWER (W)	LUMEN AVERAGE	TOTAL CANDLE POWER (CP)	LAMP NO.	BULB TYPE
High-Intensity Tungsten (HIT) Lamps  Double-Contact Bayonet Base	570.0010	IA	6	9	126	10	135	S-8
	570.0020	IM	6	13	188	15	88	S-8
	570.0037	IB	6	18	300	24	1130	S-8
	570.0038	IC	6	25	400	32	1134	RP-11
	570.0011	IE	12	9	126	10	138	S-8
	570.0022	IN	12	13	188	15	94	S-8
	570.0030	IF	12	18	276	22	139	S-8
	570.0031	IG	12	25	400	32	1076	S-8
	570.0058	II	24	9	75	6	304	C-2F
	570.0040	IJ	24	18	250	20	142	S-8
	570.0061	IK	24	25	400	32	1638	S-8
Bi-Pin Halogen Lamps  T-2 3/4 T-2 1/4	580.0012	HA	6	6	113	9	784	T-2 1/4
	580.0013	HB	6	8	163	13	785	T-2 1/4
	580.0017	HC	6	10	200	16	787	T-2 1/4
	580.0011	HD	6	12	240	19	786	T-2 1/4
	580.0022	HE	6	20	400	32	788	T-2 1/4
	580.0014	HF	12	8	163	13	774	T-2 1/4
	580.0015	HG	12	12	276	22	783	T-2 1/4
	580.0016	HH	12	14	300	24	789	T-2 3/4
	580.0027	HI	12	20	314	25	782	T-2 3/4
LAMP TYPE	PART NO.	CATALOG SUFFIX	VOLTAGE (V)	WATTS (W)	LUMEN AVERAGE	CENTER-BEAM CANDLE POWER (CBCP)	LAMP NO.	BULB TYPE
Sealed-Beam Halogen Lamps  PAR36	550.0022	XA	6	6	107	400	H7556	PAR36
	550.0036	XB	6	8	155	550	H7551	PAR36
	550.0037	XC	6	10	190	650	H7552	PAR36
	550.0019	XD	6	12	225	850	H7553	PAR36
	550.0021	XE	6	20	380	1400	H7554	PAR36
	550.0024	XF	12	8	130	550	H7555	PAR36
	550.0025	XG	12	12	240	850	H7557	PAR36
	550.0047	XH	12	37	700	70,000	H7616	PAR36
	550.0012	XI	12	50	950	2000	H7614	PAR36
Sealed-Beam Incandescent Lamps  PAR36	550.0018	UA	6	8	130	400	7613	PAR36
	550.0030	UI	6	12	180	1100	4042	PAR36
	550.0016	UB	6	18	270	1500	4014	PAR36
	550.0017	UC	6	25	400	800	4510	PAR36
	550.0035	UD	6	30	460	5500	4515	PAR36
	550.0026	UE	12	12	190	1110	4044	PAR36
	550.0027	UF	12	18	210	1500	4414	PAR36
	550.0023	UG	12	25	395	400	4446	PAR36
	550.0034	UH	12	30	430	35,000	4416	PAR36
LAMP TYPE	PART NO.	CATALOG SUFFIX	VOLTAGE (V)	WATTS (W)	LUMEN AVERAGE	TOTAL CANDLE POWER (CP)	LAMP NO.	BULB TYPE
High-Intensity Incandescent, Wedge Base  T-5	570.0012	ZP	6	5.4	68	5.4	939	T-5
	570.0026	ZL	6	7.2	100	8	927	T-5
	570.0016	ZD	6	9	150	12	908	T-5
	570.0025	ZF	12	9	138	11	915	T-5
	570.0028	ZG	12	12	150	12	912	T-5
	570.0029	ZH	12	18	264	21	921	T-5
	570.0045	ZN	24	9	113	9	EMS2209W	T-5
	570.0046	ZO	24	18	240	19	EMS2218W	T-5
Xenon Gas, Wedge Base	570.0213	ZU	6	6	120	9.6	B0606XA	T-3 1/4
	570.0214	ZV	6	10	180	14.3	B610XWB	T-3 1/4
	570.0215	ZW	12	6	105	8.4	B126XWB	T-3 1/4
	570.0216	ZX	12	10	200	16	B1210XWB	T-3 1/4

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Lamp Data — General Information (continued)

LAMP TYPE	PART NO.	CATALOG SUFFIX	VOLTAGE (V)	WATTS (W)	LUMEN AVERAGE	CENTER-BEAM CANDLE POWER (CBCP)	BEAM ANGLE (DEGREES)	BULB TYPE
 MR-16 Halogen Lamps	580.0072	MH	6	5.4	34	73	36	MR-16
	580.0074	MI	6	6	40	130	24	MR-16
	580.0079	MJ	6	10	77	790	16	MR-16
	580.0099	MO	12	10	86	200	36	MR-16
	580.0080	MK	12	12	135	320	36	MR-16
	580.0064	MG	12	20	270	525	36	MR-16
	580.0075	MA	12	20-A	245	600	36	MR-16
	580.0068	MW	12	20-H	417	950	36	MR-16
	580.0083	MB	12	35	490	3300	24	MR-16
	580.0076	MC	12	50	785	2800	24	MR-16
	580.0089	MM	12	50-H	1550	5700	24	MR-16
	580.0070	MS	24	12	95	280	36	MR-16
	580.0077	MD	24	20	240	740	24	MR-16
	580.0094	MN	24	20-A	195	890	24	MR-16
	580.0084	ME	24	35	460	990	36	MR-16
	580.0078	MF	24	50	875	3200	24	MR-16
	580.0065	MT	120	20	100	240	36	MR-16
580.0066	MU	120	35	230	520	36	MR-16	
580.0067	MV	120	50	460	1100	36	MR-16	
 MR-16 LED Lamps	580.0097	LA	6	4	130	600	24	MR-16
	580.0093	LG	12	4	170	440	30	MR-16
	580.0096	LH	12	4	170	700	24	MR-16
	580.0098	LL	24	4	200	900	24	MR-16
	580.0095	LV	120	4	200	900	24	MR-16
LAMP TYPE	PART NO.	CATALOG SUFFIX	VOLTAGE (V)	WATTS (W)	LUMEN AVERAGE	TOTAL CANDLE POWER (CP)	LAMP NO.	BULB TYPE
Exit Signs, Hazardous Locations Incandescent Lamps	580.0086	XX6	6	15	210	17	JC6V-15W2K	Bi-Pin G4
	570.0071	XX12	12	25	220	18	13769	A19
	570.0118	XX24	24	25	220	18	24227-1	A19
	570.0136	AC	120	25	215	17	97478	A19
LAMP TYPE	PART NO.	VOLTAGE (V)	WATTS (W)	LUMEN AVERAGE	TOTAL CANDLE POWER (CP)	LAMP NO.	BASE TYPE	
Exit Signs, 120VAC Incandescent	570.0013	145	15	150	12	15T6145	Candelabra Screw Base	
	570.0024	120	20	90	7	20T61/2	Intermediate Screw Base	
	570.0035	145	15	150	12	15T6	Intermediate Screw E17	
	595.0010	120	7	330	26	PL7-T4	G23	

Important: Lumen rating and candle power values are only for general reference.

The data was obtained from the manufacturer's catalogs, calculations or third-party laboratory measurements.

Actual performance in the field may and will vary.

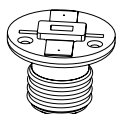
Explosion-Proof Incandescent Lamps

PART NO.	CATALOG SUFFIX	VOLTAGE	WATTS	LUMEN RATING	LAMP NO.
580.0086	XX6	6	15	225	JC-6V15W
570.0071	XX12	12	25	378	—
570.0118	XX24	24	25	345	—
570.0136	AC	120	25	215	—
540.0180	XX120	120	5	—	Red LED

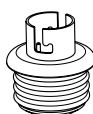
MSA Incandescent Lamp Adapter For HIT, DCBB or Bi-Pin Halogen Lamps

DC lamp plus adapter for medium Edison screw-base socket.

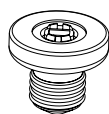
This device converts any incandescent fixture into an emergency fixture.



MSA Bi-Pin



MSA Double Contact

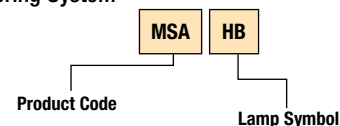


MSA Wedge Base

120VAC Exit Lamps

LAMP TYPE	CATALOG NO.	WATTS	LAMP NO.	BASE
Incandescent	570.0013	15	15T6145	Candelabra Screw Base
Incandescent	570.0024	20	20T61/2	Intermediate Screw Base
Incandescent	570.0035	15	15T6	Intermediate Screw Base
Fluorescent	595.0010	7	PL7-T4	G23

Catalog Numbering System



Note: Lumen figures based on information supplied by lamp manufacturers.

Lamp drawings shown are for shape comparison only, and are not actual size.

Technical Information

Wire Size Guide

Determining Wire Size

The following information is provided to assist in designing proper emergency lighting systems effectively and economically by using the smallest permissible wire size for load circuits. When remote lighting fixtures and/or exit signs are connected to emergency lighting units, circuit runs must be of sufficient size to maintain a proper operating voltage to all lamps. The National Electrical Code® limits voltage to drop to a maximum of 5% of nominal. The table below gives the maximum length or wire run based on system voltage, wire gauge and total wattage on the run. To determine the maximum length of a wire run not listed, divide the value of the load-in

watts into the constant listed at the bottom of each row. For example, the maximum wire run for #10 AWG wire on a 12-volt system with a 54-watt load is $3397 \div 54$, or 62 feet.

Conversely, to determine the maximum load on a run of known length, divide the length into the constant. For example, a 36-foot run of #12 AWG wire on a 6-volt system can be loaded to $534 \div 36$, or 14 watts; on #10 AWG wire, 23 watts.

Wiring Distance in Feet (Maximum Voltage Drop 5%)

TOTAL WATTS ON WIRE RUN	6-VOLT WIRE SIZE				12-VOLT WIRE SIZE					24-VOLT WIRE SIZE			
	#12 AWG	#10 AWG	#8 AWG	#6 AWG	#12 AWG	#10 AWG	#8 AWG	#6 AWG	#4 AWG	#12 AWG	#10 AWG	#8 AWG	#6 AWG
6	89	141	225	357	356	566	900	1431	+	1425	+	+	+
8	66	106	168	268	267	424	675	1073	1707	1068	1698	+	+
9	59	94	150	238	237	377	600	954	1517	949	1509	+	+
10	53	84	135	214	213	339	540	859	1366	854	1358	+	+
12	44	70	112	178	178	283	450	715	1138	712	1132	1801	+
16	33	53	84	134	133	212	337	536	853	534	849	1350	+
18	29	47	75	119	118	188	300	477	758	474	754	1200	1909
24	22	35	56	89	89	141	225	357	569	356	566	900	1431
25	21	33	54	85	85	135	216	343	546	341	543	864	1374
27	19	31	50	79	79	125	200	318	505	316	503	800	1272
30	17	28	45	71	71	113	180	286	455	284	452	720	1145
36	14	23	37	59	59	94	150	238	379	237	377	600	954
42	12	20	32	51	50	80	128	204	325	203	323	514	818
45	11	18	30	47	47	75	120	190	303	189	301	480	763
48	11	17	28	44	44	70	112	178	284	178	283	450	715
50	10	16	27	42	42	67	108	171	273	170	271	432	687
75	7	11	18	28	28	45	72	114	182	113	181	288	458
100	5	8	13	21	21	33	54	85	136	85	135	216	343
150	—	5	9	14	14	22	36	57	91	56	90	144	229
200	—	—	6	10	10	16	27	42	68	42	67	108	171
250	—	—	5	8	8	13	21	34	54	34	54	86	137
300	—	—	—	7	7	11	18	28	45	28	45	72	114
400	—	—	—	5	5	8	13	21	34	21	33	54	85
500	—	—	—	—	—	6	10	17	27	17	27	43	68
Constant	534	849	1350	2148	2137	3397	5403	8590	13,660	8548	13,588	21,613	34,363

Longer Wire Runs

The wiring distances give the maximum length of a battery circuit, assuming that the entire load is concentrated at the end of the circuit. If loads are uniformly spaced along the circuit path (equal watts, equal distances), the lengths in the table may be increased, based on number of fixtures on a given circuit, by means of the chart and formula below.

NUMBER OF FIXTURES	2	3	4	5	6	N
MULTIPLY BY FEET	1.33	1.5	1.6	1.67	1.71	$2N/(N+1)$

For example, a 36-foot long, 6-volt circuit has three 9-watt heads spaced 12 feet apart. According to the wire run table, #8 AWG wire must be used (at 50 feet for a 5% voltage drop), but by multiplying the 31 feet for #10 AWG wire by 1.5, a 46½-foot wire run is acceptable, so #10 AWG wire may be used and still meet the 5% voltage drop limitation.

NOTE: According to the National Electrical Code®, Article 720-Y, the smallest permissible wire size for systems under 50 volts is #12 AWG wire gauge.

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Technical Information

National Electrical Code®

ARTICLE 700 – EMERGENCY SYSTEMS

I. General

700.1. Scope. The provisions of this article apply to the electrical safety of the installation, operation, and maintenance of emergency systems consisting of circuits and equipment intended to supply, distribute, and control electricity for illumination or power, or both, to required facilities when the normal electrical supply or system is interrupted.

(FPN No. 1): For further information regarding wiring and installation of emergency systems in health care facilities, see Article 517.

(FPN No. 2): For further information regarding performance and maintenance of emergency systems in health care facilities, see Standard for Health Care Facilities, NFPA 99-1999.

(FPN No. 3): Emergency systems are generally installed in places of assembly where artificial illumination is required for safe exiting and for panic control in buildings subject to occupancy by large numbers of persons, such as hotels, theaters, sports arenas, health care facilities, and similar institutions. Emergency systems may also provide power for such functions as ventilation where essential to maintain life, fire detection and alarm systems, elevators, fire pumps, public safety communications systems, industrial processes where current interruption would produce serious life safety or health hazards, and similar functions.

(FPN No. 4): For specification of locations where emergency lighting is considered essential to life safety, see Life Safety Code, NFPA 101-2000.

(FPN No. 5): For further information regarding performance of emergency and standby power systems, see Standard for Emergency and Standby Power Systems, NFPA 110-1999.

700.2. Definitions

Emergency Systems. Those systems legally required and classed as emergency by municipal, state, federal or other codes, or by any governmental agency having jurisdiction. These systems are intended to automatically supply illumination, power or both, to designated areas and equipment in the event of failure of the normal supply or in the event of accident to elements of a system intended to supply, distribute, and control power and illumination essential for safety to human life.

Informational Note: Emergency systems are generally installed in places of assembly where artificial illumination is required for safe exiting and for panic control in buildings subject to occupancy by large numbers of persons, such as hotels, theatres, sports, arenas, health care facilities, and similar institutions. Emergency systems may also provide power for such functions as ventilation where essential to maintain life, fire detection and alarm systems, elevators, fire pumps, public safety communications systems, industrial processes where current interruption would produce serious life safety or health hazards, and similar functions.

Relay automatic Load Control. A device used to energize switched or normally-off lighting equipment from an emergency supply in the vent of loss of the normal supply, and to de-energize or return the equipment to normal status when the normal supply is restored.

Informational Note: For requirements covering automatic load control relays, see ANSI/UL 924, *Emergency Lighting and Power Equipment*

700.3. Tests and Maintenance.

(A) Conduct or Witness Test. The authority having jurisdiction shall conduct or witness a test of the complete system upon installation and periodically afterward.

(B) Tested Periodically. Systems shall be tested periodically on a schedule acceptable to the authority having jurisdiction to ensure the systems are

maintained in proper operating condition.

(C) Battery Systems Maintenance. Where battery systems or unit equipment are involved, including batteries used for starting, control, or ignition in auxiliary engines, the authority having jurisdiction shall require periodic maintenance.

(D) Written Record. A written record shall be kept of such tests and maintenance.

(E) Testing Under Load. Means for testing all emergency lighting and power systems during maximum anticipated load conditions shall be provided.

Informational Note: For requirements covering automatic load control relays, see ANSI/UL 924, *Emergency Lighting and Power Equipment*.

700.4. Capacity.

(A) Capacity and Rating. An emergency system shall have adequate capacity and rating for all loads to be operated simultaneously. The emergency system equipment shall be suitable for the maximum available fault current at its terminals.

(B) Selective Load Pickup, Load Shedding, and Peak Load Shaving. The alternate power source shall be permitted to supply emergency, legally required standby, and optional standby system loads where the source has adequate capacity or where automatic selective load pickup and load shedding is provided as needed to ensure adequate power to (1) the emergency circuits; (2) the legally required standby circuits; and (3) the optional standby circuits, in that order of priority. The alternate power source shall be permitted to be used for peak load shaving, provided the above conditions are met.

Peak load shaving operation shall be permitted for satisfying the test requirement of Section 700.3(B), provided all other conditions of Section 700.3 are met. A portable or temporary alternate source shall be available whenever the emergency generator is out of service for major maintenance or repair.

700.5. Transfer Equipment.

(A) General. Transfer equipment, including automatic transfer switches, shall be automatic and identified for emergency use and approved by the authority having jurisdiction. Transfer equipment shall be designed and installed to prevent the inadvertent interconnection of normal and emergency sources of supply in any operation of the transfer equipment. Transfer equipment and electric power production systems installed to permit operation in parallel with the normal source shall meet the requirements of article 705.

(B) Bypass Isolation Switches. Means shall be permitted to bypass and isolate the transfer equipment. Where bypass isolation switches are used, inadvertent parallel operation shall be avoided.

(C) Automatic transfer switches shall be electrically operated and mechanically held.

(D) Use. Transfer equipment shall supply only emergency loads.

700-6. Signals. Audible and visual signal devices shall be provided, where practicable, for the following purposes described in 700.6(A) through (D).

(A) Derangement. To indicate derangement of the emergency source.

(B) Carrying Load. To indicate that the battery is carrying load.

(C) Not Functioning. To indicate that the battery charger is not functioning.

(D) Ground Fault. To indicate a ground fault in solidly grounded wye emergency systems of more than 150 volts to ground and circuit protective devices rated 1000 amperes or more. The sensor for the ground-fault signal devices shall be located at, or ahead of, the main system disconnecting means for the emergency source, and the maximum setting of the signal devices shall be for a ground-fault current of 1200 amperes. Instructions on the course of action to be taken in

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event of indicated ground fault shall be located at or near the sensor location.

Informational Note: For signals for generator sets, see NFPA 110-2010, Standard for Emergency and Standby Power Systems

700.7. Signs.

(A) Emergency Sources. A sign shall be placed at the service entrance equipment indicating type and location of on-site emergency power sources.

Exception: A sign shall not be required for individual unit equipment as specified in Section 700-12(F).

(B) Grounding. Where removal of a grounding or bonding connection in the normal power source equipment interrupts the grounding electrode conductor connection to the alternate power source(s) grounded conductor, a warning sign shall be installed at the normal power source equipment stating:

WARNING

SHOCK HAZARD EXISTS IF GROUNDING ELECTRODE CONDUCTOR OR BONDING JUMPER CONNECTION IN THIS EQUIPMENT IS REMOVED WHILE ALTERNATE SOURCE(S) IS ENERGIZED.

II. Circuit Wiring

700-10. Wiring, Emergency System.

(A) identification. All boxes and enclosures (including transfer switches, generators, and power panels) for emergency circuits shall be permanently marked so they will be readily identified as a component of an emergency circuit or system.

(B) Wiring. Wiring of two or more emergency circuits supplied from the same source shall be permitted in the same raceway, cable, box, or cabinet. Wiring from an emergency source distribution overcurrent protection to emergency loads shall be kept entirely independent of all other wiring and equipment, unless otherwise permitted in (1) through (5):

(1) Wiring from the normal power source located in transfer equipment enclosures.

(2) Wiring supplied from two sources in exit or emergency luminaires

(3) Wiring from two sources in a listed load control relay supplying exit or emergency luminaires, or in a common junction box, attached to exit or emergency luminaires

(4) Wiring within a common junction box attached to unit equipment, containing only the branch circuit supplying the unit equipment and the emergency circuit supplied by the unit equipment.

(5) Wiring from an emergency source to supply any combination of emergency, legally required, or optional loads in accordance with (a), (b), (c) and (d):

a. From separate vertical switchboard sections, with or without a common bus, or from individual disconnects mounted in separate enclosures.

b. The common bus or separate sections of the switchboard or the individual enclosures shall be permitted to be supplied by single or multiple feeders without overcurrent protection at the source *Exception to (5)(b): Overcurrent protection shall be permitted at the source or for the equipment, provided the overcurrent protection complies with the requirements of 700.27*

c. Legally required and optional standby circuits shall not originate from the same vertical switchboard section, panel board enclosure, or individual disconnect enclosure as emergency circuits.

d. It shall be permissible to utilize single or multiple feeders to supply distribution equipment between an emergency source and the point where the combination of emergency, legally required, or optional loads are separated.

(C) Wiring Design and Location. Emergency wiring circuits shall be designed and located to minimize the hazards that might cause failure due to flooding, fire, icing, vandalism, and other adverse conditions.

(D) Fire Protection. Emergency systems shall meet the following additional requirements (D)(1) through (D)(3) in assembly occupancies for not less than 1000 persons or in buildings above 23 m (75 ft) in height with any of the following occupancy classes: assembly, educational, residential, detention and correctional, business, and mercantile.

Informational Note: For the definition of *Occupancy Classification*, see Section 6.1 of NFPA 101-2009, *Life Safety Code*

(1) Feeder-circuit wiring shall meet one of the following conditions:

(1) Be installed in spaces or areas that are fully protected by an approved automatic fire suppression system.

(2) Be listed electrical circuit protective system with a minimum 2-hour fire rating.

Informational note: UL guide information for electrical circuit protective systems (FHIT) contains information on proper installation requirements to maintain the fire rating

(3) Be protected by a listed thermal barrier system for electrical system components with a minimum 2-hour fire rating.

(4) Be protected by a listed fire-rated assembly that has a minimum fire rating of 2 hours and contains only emergency wiring circuits

(5) Be encased in a minimum of 50 mm (2 in) of concrete

(2) Feeder-Circuit Equipment. Equipment for feeder circuits (transfer switches, transformers, panel boards) shall be either located in spaces fully protected by approved automatic fire suppression systems (including sprinklers and carbon dioxide systems) or in spaces with a 2-hour fire resistance rating.

(3) Generator Control Wiring. Control conductors installed between the transfer equipment and the emergency generator shall be kept entirely independent of all other wiring and shall meet the conditions of 700.10(D)(1)

III. Sources of Power

700.12. General Requirements. Current supply shall be such that, in the event of failure of the normal supply to, or within, the building or group of buildings concerned, emergency lighting, emergency power, or both will be available within the time required for the application but not to exceed 10 seconds. The supply system for emergency purposes, in addition to the normal services to the building and meeting the general requirements of this section, shall be one or more of the types of systems described in 700.12(A) through (D) below. Unit equipment in accordance with Section 700.12(E) shall satisfy the applicable requirements of this article.

In selecting an emergency source of power, consideration shall be given to the occupancy and the type of service to be rendered, whether of minimum duration, as for evacuation of a theater, or longer duration, as for supplying emergency power and lighting due to an indefinite period of current failure from trouble either inside or outside the building.

Equipment shall be designed and located to minimize the hazards that might cause complete failure due to flooding, fires, icing, and vandalism.

Equipment for sources of power as described in Sections 700.12(A) through (E) where located within assembly occupancies for greater than 1000 persons or in buildings above 23 m (75 ft) in height with any of the following occupancy classes: assembly, educational, residential, detention and correctional, business, and mercantile, shall be installed either in spaces fully protected by approved automatic fire suppression systems (sprinklers, carbon dioxide systems, and so

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forth), or in spaces with a 1-hour fire rating.

Informational note No. 1: For definition of Occupancy Classification, see Section 6.1 of NFPA 101-2009, Life Safety Code.

Informational note No. 2: Assignment of degree of reliability of the recognized emergency supply system depends on the careful evaluation of the variables at each particular installation. For further information, see ANSI/IEEE 493-2007, Recommended Practice for the Design of Reliable Industrial and Commercial Power Systems.

(A) Storage Battery. Storage batteries used as source of power for emergency systems shall be of suitable rating and capacity to supply and maintain the total load for a period of 1 1/2 hours minimum, without the voltage applied to the load falling below 87 1/2 percent of normal.

Batteries, whether of the acid or alkali type, shall be designed and constructed to meet the requirements of emergency service and shall be compatible with the charger for that particular installation.

For a sealed battery, the container shall not be required to be transparent. However, for the lead acid battery that requires water additions, transparent or translucent jars shall be furnished.

Automotive-type batteries shall not be used.

An automatic battery charging means shall be provided.

(B) Generator Set.

(1) Prime Mover-Driven. For a generator set driven by a prime mover acceptable to the authority having jurisdiction and sized in accordance with Section 700-5. Means shall be provided for automatically starting the prime mover on failure of the normal service and for automatic transfer and operation of all required electrical circuits. A time-delay feature permitting a 15-minute setting shall be provided to avoid retransfer in case of short-time reestablishment of the normal source.

(2) Internal Combustion Engines as Prime Movers. Where internal combustion engines are used as the prime mover an on-site fuel supply shall be provided with an on-premise fuel supply sufficient for not less than 2 hours full-demand operation of the system. Where power is needed for the operation of the fuel transfer pumps to deliver fuel to a generator set dry tank, this pump shall be connected to the emergency power system.

(3) Dual Supplies. Prime movers shall not be solely dependent upon a public utility gas system for their fuel supply or municipal water supply for their cooling systems. Means shall be provided for automatically transferring from one fuel supply to another where dual fuel supplies are used.

Exception: Where acceptable to the authority having jurisdiction, the use of other than on-site fuels shall be permitted where there is a low probability of a simultaneous failure of both the off-site fuel delivery system and power from the outside electrical utility company.

(4) Where a storage battery is used for control or signal power, or as the means of starting the prime mover, it shall be suitable for the purpose and shall be equipped with an automatic charging means independent of the generator set. Where the battery charger is required for the operation of the generator set, it shall be connected to the emergency system. Where power is required for the operation of dampers used to ventilate the generator set, the dampers shall be connected to the emergency system.

(5) Auxiliary Power Supply. Generator sets that require more than 10 seconds to develop power shall be permitted to have an auxiliary power supply energizes the emergency system until the generator can pick up the load.

(6) Outdoor Generator Sets. Where an outdoor housed generator set is equipped with a readily accessible disconnecting means located within sight of

the building or structure supplied, an additional disconnecting means shall not be required where ungrounded conductors serve or pass through the building or structure. The disconnecting means shall meet the requirements of 225.36.

Exception: For installations under single management where conditions of maintenance and supervision ensure that only qualified persons will monitor and service the installation and where documented safe switching procedures are established and maintained for disconnection, the generator set disconnecting means shall not be required to be located within sight of the building of structure served.

(C) Uninterruptible Power Supplies. Uninterruptible power supplies used to provide power for emergency systems shall comply with the applicable provisions of Sections 700-12(A) and (B).

(D) Separate Service. Where acceptable to the authority having jurisdiction as suitable for use as an emergency source of power, an additional service shall be permitted. This service shall be in accordance with the applicable provisions of Article 230 and following additional requirements.

(1) Separate service drop or service lateral

(2) Service conductors sufficiently remote electrically and physically from any other service conductors to minimize the possibility of simultaneous interruption of supply

(E) Fuel Cell System. Fuel Cell Systems used as a source of power for emergency systems shall be of suitable rating and capacity to supply and maintain the total load for not less than 2 hours of full demand operation.

Installation of a fuel cell system shall meet the requirements of Parts II through VIII of Article 692. Where a single fuel cell system serves as the normal supply for the building or group of buildings concerned, it shall not serve as the sole source of power for the emergency standby system.

(F) Unit Equipment. Individual unit equipment for emergency illumination shall consist of the following:

(1) A rechargeable battery

(2) A battery charging means

(3) Provisions for one or more lamps mounted on the equipment, or shall be permitted to have terminals for remote lamps, or both and

(4) A relaying device arranged to energize the lamps automatically upon failure of the supply to the unit equipment.

The batteries shall be of suitable rating and capacity to supply and maintain at not less than

87 1/2 percent of the nominal battery voltage for the total lamp load associated with the unit for a period of at least 1 1/2 hours, or the unit equipment shall supply and maintain not less than 60 percent of the initial emergency illumination for a period of at least 1 1/2 hours. Storage batteries, whether of the acid or alkali type, shall be designed and constructed to meet the requirements of emergency service.

Unit equipment shall be permanently fixed in place (i.e., not portable) and shall have all wiring to each unit installed in accordance with the requirements of any of the wiring methods in Chapter 3.

Flexible cord and plug connection shall be permitted, provided that the cord does not exceed

3 ft (900 mm) in length. The branch circuit feeding the unit equipment shall be the same branch circuit as that serving the normal lighting in the area and connected ahead of any local switches. The branch circuit that feeds unit equipment shall be clearly identified at the distribution panel. Emergency

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luminaire's (illumination fixtures) that obtain power from a unit equipment and are not part of the unit equipment shall be wired to the unit equipment as required by Section 700-10 and by one of the wiring methods of Chapter 3.

Exception No. 1: In a separate and uninterrupted area supplied by a minimum of three normal lighting circuits, a separate branch circuit for unit equipment shall be permitted if it originates from the same panelboard as that of the normal lighting circuits and is provided with a lock-on feature.

Exception No. 2: Remote heads providing lighting for the exterior of an exit door shall be permitted to be supplied by the unit equipment serving the area immediately inside the exit door.

IV. Emergency System Circuits for Lighting and Power

700.15. Loads on Emergency Branch Circuits. No appliances and no lamps, other than those specified as required for emergency use, shall be supplied by emergency lighting circuits.

700.16. Emergency illumination. Emergency illumination shall include all required means of egress lighting, illuminated exit signs, and all other lights specified as necessary to provide required illumination.

Emergency lighting systems shall be designed and installed so that the failure of any individual lighting element, such as the burning out of a light bulb, cannot leave in total darkness any space that requires emergency illumination.

Where high-intensity discharge lighting such as high- and low-pressure sodium mercury vapor, and metal halide is used as the sole source of normal illumination, the emergency lighting system shall be required to operate until normal illumination has been restored.

Exception: Where alternative means that ensure the emergency lighting illumination level is maintained shall be permitted.

700.17. Branch Circuits for Emergency Lighting. Branch circuits that supply emergency lighting shall be installed to provide service from a source complying with Section 700-12 when the normal supply for lighting is interrupted. Such installations shall provide either one of the following:

- (1) An emergency lighting supply, independent of the normal lighting supply, with provisions for automatically transferring the emergency lights upon the event of failure of the normal lighting branch circuit
- (2) Two or more branch circuits supplied from separate and complete systems with independent power sources. One of the two power sources and systems shall be part of the emergency system and the other shall be permitted to be part of the normal power source and system. Each system shall provide sufficient power for emergency lighting purposes.

Unless both systems are used for regular lighting purposes and are both kept lighted, means shall be provided for automatically energizing either system upon failure of the other. Either or both systems shall be permitted to be a part of the general lighting of the protected occupancy if circuits supplying lights for emergency illumination are installed in accordance with other sections of this article.

700.18. Circuits for Emergency Power. For branch circuits that supply equipment classed as emergency, there shall be an emergency supply source to which the load will be transferred automatically upon the failure of the normal supply.

V. Control—Emergency Lighting Circuits

700.20. Switch Requirements. The switch or switches installed in emergency lighting circuits shall be arranged so that only authorized persons will have control

of emergency lighting.

Exception No. 1: Where two or more single-throw switches are connected in parallel to control a single circuit, at least one of these switches shall be accessible only to authorized persons.

Exception No. 2: Additional switches that act only to put emergency lights into operation but not disconnect them shall be permissible.

Switches connected in series or 3- and 4-way switches shall not be used.

700.21. Switch Location. All manual switches for controlling emergency circuits shall be in locations convenient to authorized persons responsible for their actuation. In facilities covered by Articles 518 and 520, a switch for controlling emergency lighting systems shall be located in the lobby or at a place conveniently accessible thereto. In no case shall a control switch for emergency lighting be placed in a motion-picture projection booth or on a stage or platform.

Exception: Where multiple switches are provided, one such switch shall be permitted in such locations where arranged so that it can energize the circuit only, but cannot deenergize the circuit.

700.22. Exterior Lights. Those lights on the exterior of a building that are not required for illumination when there is sufficient daylight shall be permitted to be controlled by an automatic light-actuated device.

700.23 Dimmer Systems. A dimmer system containing more than one dimmer and listed for use in emergency systems shall be permitted to be used as a control device for energizing emergency lighting circuits. Upon failure of normal power, the dimmer system shall be permitted to selectively energize only those branch circuits required to provide minimum emergency illumination. All branch circuits supplied by the dimmer system cabinet shall comply with the wiring methods of Article 700.

700.24 Automatic Load Control Relay. If an emergency lighting load is automatically energized upon loss of the normal supply, a listed automatic load control relay shall be permitted to energize the load. The load control relay shall not be used to transfer equipment.

VI. Overcurrent Protection

700-25. Accessibility. The branch-circuit overcurrent devices in emergency circuits shall be accessible to authorized persons only.

(FPN): Fuses and circuit breakers for emergency circuit overcurrent protection where coordinated to ensure selective clearing of fault currents, increase overall reliability of the system.

700-26. Ground-Fault Protection of Equipment. The alternate source for emergency systems shall not be required to have ground-fault protection of equipment with automatic disconnecting means. ground-fault indication of the emergency source shall be provided in accordance with Section 700.6(D).

700-27. Coordination. Emergency system(s) overcurrent devices shall be selectively coordinated with all supply side overcurrent protective devices.

Exception: Selective coordination shall not be required between two overcurrent devices located in series if no loads are connected in parallel with the downstream device.

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7.8 Illumination of Means of Egress.

7.8.1 General.

7.8.1.1* Illumination of means of egress shall be provided in accordance with Section 7.8 for every building and structure where required in Chapters 11 through 43. For the purposes of this requirement, exit access shall include only designated stairs, aisles, corridors, ramps, escalators, and passageways leading to an exit. For the purposes of this requirement, exit discharge shall include only designated stairs, aisles, corridors, ramps, escalators, walkways, and exit passageways leading to a public way.

7.8.1.2 Illumination of means of egress shall be continuous during the time that the conditions of occupancy require that the means of egress be available for use, unless otherwise provided in 7.8.1.2.2.

7.8.1.2.1 Artificial lighting shall be employed at such locations and for such periods of time as are necessary to maintain the illumination to the minimum criteria values herein specified.

7.8.1.2.2 Unless prohibited by Chapters 11 through 43, automatic, motion sensor-type lighting switches shall be permitted within the means of egress, provided that the switch controllers comply with all of the following:

- (1) The switch controllers are listed.
- (2) The switch controllers are equipped for fail-safe operation, the and evaluated for this purpose.
- (3) The illumination timers are set for a minimum 15-minute duration, and the duration.
- (4) The motion sensor is activated by any occupant movement in the area served by the lighting units.
- (5) The switch controller is activated by activation of the building fire alarm system, if provided.

7.8.1.2.3* Energy-saving sensors, switches, timers, or controllers shall be approved and shall not compromise the continuity of illumination of the means of egress required by 7.8.1.2.

7.8.1.3* The floors and other walking surfaces within an exit and within the portions of the exit access and exit discharge designated in 7.8.1.1 shall be illuminated as follows:

- (1) During conditions of stair use, the minimum illumination for new stairs shall be at least 10 ft-candle (108 lux), measured at the walking surfaces.
- (2) The minimum illumination for floors and walking surfaces, other than new stairs during conditions of stair use, shall be to values of at least 1 ft-candle (10.8 lux), measured at the floor.
- (3) In assembly occupancies, the illumination of the walking surfaces of exit access shall be at least 0.2 ft-candle (2.2 lux) during periods of performances or projections involving directed light.
- (4)*The minimum illumination requirements shall not apply where operations or processes require low lighting levels.

7.8.1.4* Required illumination shall be arranged so that the failure of any single lighting unit does not result in an illumination level of less than 0.2 ft-candle (2.2 lux) in any designated area.

7.8.1.5 The equipment or units installed to meet the requirements of Section 7.10 also shall be permitted to serve the function of illumination of means of egress, provided that all requirements of Section 7.8 for such illumination are met.

7.8.2 Sources of Illumination.

7.8.2.1* Illumination of means of egress shall be from a source considered reliable by the authority having jurisdiction.

7.8.2.2 Battery-operated electric lights and other types of portable lamps or lanterns shall not be used for primary illumination of means of egress. Battery-operated electric lights shall be permitted to be used as an emergency source to the extent permitted under Section 7.9.

7.9 Emergency Lighting.

7.9.1 General.

7.9.1.1* Emergency lighting facilities for means of egress shall be provided in accordance with Section 7.9 for the following:

- (1) Buildings or structures where required in Chapters 11 through 43
- (2) Underground and limited access structures as addressed in Section 11.7
- (3) High-rise buildings as required by other sections of this Code
- (4) Doors equipped with delayed-egress locks
- (5) Stair shafts and vestibules of smoke proof enclosures, for which the following also apply:
 - (a) The stair shaft and vestibule shall be permitted to include a standby generator that is installed for the smoke proof enclosure mechanical ventilation equipment.
 - (b) The standby generator shall be permitted to be used for the stair shaft and vestibule emergency lighting power supply.
- (6) New access-controlled egress doors in accordance with 7.2.1.6.2.

7.9.1.2 For the purposes of 7.9.1.1, exit access shall include only designated stairs, aisles, corridors, ramps, escalators, and passageways leading to an exit. For the purposes of 7.9.1.1, exit discharge shall include only designated stairs, ramps, aisles, walkways, and escalators leading to a public way.

7.9.1.3 Where maintenance of illumination depends on changing from one energy source to another, a delay of not more than 10 seconds shall be permitted.

7.9.2 Performance of System.

7.9.2.1* Emergency illumination shall be provided for a minimum of 1½ hours in the event of failure of normal lighting. Emergency lighting facilities shall be arranged to provide initial illumination that is not less than an average of 1 ft-candle (10.8 lux) and, at any point, not less than 0.1 ft-candle (1.1 lux), measured along the path of egress at floor level. Illumination levels shall be permitted to decline to not less than an average of 0.6 ft-candle (6.5 lux) and, at any point, not less than 0.06 ft-candle (0.65 lux) at the end of 1½ hours. A maximum-to-minimum illumination uniformity ratio of 40 to 1 shall not be exceeded.

7.9.2.2 New emergency power systems for emergency lighting shall be at least Type 10, Class 1.5, Level 1, in accordance with NFPA110, Standard for Emergency and Standby Power Systems.

7.9.2.3* The emergency lighting system shall be arranged to provide the required illumination automatically in the event of any interruption of normal lighting due to any of the following:

- (1) Failure of a public utility or other outside electrical power supply

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- (2) Opening of a circuit breaker or fuse
- (3) Manual act(s), including accidental opening of a switch controlling normal lighting facilities

7.9.2.4 Emergency generators providing power to emergency lighting systems shall be installed, tested, and maintained in accordance with NFPA 110, Standard for Emergency and Standby Power Systems. Stored electrical energy systems, where required in this Code, other than battery systems for emergency luminaires

in accordance with 7.9.2.5, shall be installed and tested in accordance with NFPA 111, *Standard on Stored Electrical Energy Emergency and Standby Power Systems*.

7.9.2.5 Unit equipment and battery systems for emergency luminaires shall be listed to ANSI/UL 924, Standard for Emergency Lighting and Power Equipment.

7.9.2.6* Existing battery-operated emergency lights shall use only reliable types of rechargeable batteries provided with suitable facilities for maintaining them in properly charged condition. Batteries used in such lights or units shall be approved for their intended use and shall comply with NFPA 70, National Electrical Code.

7.9.2.7 The emergency lighting system shall be either continuously in operation or shall be capable of repeated automatic operation without manual intervention.

7.9.3 Periodic Testing of Emergency Lighting Equipment.

7.9.3.1 Required emergency lighting systems shall be tested in accordance with one of the three options offered by 7.9.3.1.1, 7.9.3.1.2, or 7.9.3.1.3.

7.9.3.1.1 Testing of required emergency lighting systems shall be permitted to be conducted as follows:

- (1) Functional testing shall be conducted monthly, with a minimum of 3 weeks and a maximum of 5 weeks between tests, for not less than 30 seconds, except as otherwise permitted by 7.9.3.1.1(2).
- (2)* The test interval shall be permitted to be extended beyond 30 days with the approval of the authority having jurisdiction.
- (3) Functional testing shall be conducted annually for a minimum of 1½ hours if the emergency lighting system is battery powered.
- (4) The emergency lighting equipment shall be fully operational for the duration of the tests required by 7.9.3.1.1(1) and (3).
- (5) Written records of visual inspections and tests shall be kept by the owner for inspection by the authority having jurisdiction.

7.9.3.1.2 Testing of required emergency lighting systems shall be permitted to be conducted as follows:

- (1) Self-testing/self-diagnostic battery-operated emergency lighting equipment shall be provided.
- (2) Not less than once every 30 days, self-testing/self-diagnostic battery-operated emergency lighting equipment shall automatically perform a test with a duration of a minimum of 30 seconds and a diagnostic routine.
- (3) Self-testing/self-diagnostic battery-operated emergency lighting equipment shall indicate failures by a status indicator.
- (4) A visual inspection shall be performed at intervals not exceeding 30 days.
- (5) Functional testing shall be conducted annually for a minimum of 1½ hours.

- (6) Self-testing/self-diagnostic battery-operated emergency lighting equipment shall be fully operational for the duration of the 1½-hour test.
- (7) Written records of visual inspections and tests shall be kept by the owner for inspection by the authority having jurisdiction.

7.9.3.1.3 Testing of required emergency lighting systems shall be permitted to be conducted as follows:

- (1) Computer-based, self-testing/self-diagnostic battery-operated emergency lighting equipment shall be provided.
- (2) Not less than once every 30 days, emergency lighting equipment shall automatically perform a test with a duration of a minimum of 30 seconds and a diagnostic routine.
- (3) The emergency lighting equipment shall automatically perform annually a test for a minimum of 1½ hours.
- (4) The emergency lighting equipment shall be fully operational for the duration of the tests required by 7.9.3.1.3(2) and (3).
- (5) The computer-based system shall be capable of providing a report of the history of tests and failures at all times.

7.10 Marking of Means of Egress.

7.10.1 General.

7.10.1.1 Where Required. Means of egress shall be marked in accordance with Section 7.10 where required in Chapters 11 through 43.

7.10.1.2 Exits.

7.10.1.2.1* Exits, other than main exterior exit doors that obviously and clearly are identifiable as exits, shall be marked by an approved sign that is readily visible from any direction of exit access.

7.10.1.2.2* Horizontal components of the egress path within an exit enclosure shall be marked by approved exit or directional exit signs where the continuation of the egress path is not obvious.

7.10.1.3 Exit Door Tactile Signage. Tactile signage shall be provided to meet all of the following criteria, unless otherwise provided in 7.10.1.4:

- (1) Tactile signage shall be located at each exit door requiring an exit sign.
- (2) Tactile signage shall read as follows: EXIT.
- (3) Tactile signage shall comply with ICC/ANSI A117.1, American National Standard for Accessible and Usable Buildings and Facilities.

7.10.1.4 Existing Exemption. The requirements of 7.10.1.3 shall not apply to existing buildings, provided that the occupancy classification does not change.

7.10.1.5 Exit Access.

7.10.1.5.1 Access to exits shall be marked by approved, readily visible signs in all cases where the exit or way to reach the exit is not readily apparent to the occupants.

7.10.1.5.2* New sign placement shall be such that no point in an exit access corridor is in excess of the rated viewing distance or 100 ft (30 m), whichever is less, from the nearest sign.

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7.10.1.6* Floor Proximity Exit Signs. Where floor proximity exit signs are required in Chapters 11 through 43, such signs shall comply with 7.10.3, 7.10.4, 7.10.5, and 7.10.6 for externally illuminated signs and 7.10.7 for internally illuminated signs. Such signs shall be located near the floor level in addition to those signs required for doors or corridors. The bottom of the sign shall be not less than 6 in. (150 mm), but not more than 18 in. (455 mm), above the floor. For exit doors, the sign shall be mounted on the door or adjacent to the door, with the nearest edge of the sign within 4 in. (100 mm) of the door frame.

7.10.1.7* Floor Proximity Egress Path Marking. Where floor proximity egress path marking is required in Chapters 11 through 43, an approved floor proximity egress path marking system that is internally illuminated shall be installed within 18 in. (455 mm) of the floor. Floor proximity egress path marking systems shall be listed in accordance with ANSI/UL 1994, Standard for Luminous Egress Path Marking Systems. The system shall provide a visible delineation of the path of travel along the designated exit access and shall be essentially continuous, except as interrupted by doorways, hallways, corridors, or other such architectural features. The system shall operate continuously or at any time the building fire alarm system is activated. The activation, duration, and continuity of operation of the system shall be in accordance with 7.9.2. The system shall be maintained in accordance with the product manufacturing listing.

7.10.1.8* Visibility. Every sign required in Section 7.10 shall be located and of such size, distinctive color, and design that it is readily visible and shall provide contrast with decorations, interior finish, or other signs. No decorations, furnishings, or equipment that impairs visibility of a sign shall be permitted. No brightly illuminated sign (for other than exit purposes), display, or object in or near the line of vision of the required exit sign that could detract attention from the exit sign shall be permitted.

7.10.1.9 Mounting Location. The bottom of new egress markings shall be located at a vertical distance of not more than 6 ft 8 in. (2030 mm) above the top edge of the egress opening intended for designation by that marking. Egress markings shall be located at a horizontal distance of not more than the required width of the egress opening, as measured from the edge of the egress opening intended for designation by that marking to the nearest edge of the marking.

7.10.2 Directional Signs.

7.10.2.1* A sign complying with 7.10.3, with a directional indicator showing the direction of travel, shall be placed in every location where the direction of travel to reach the nearest exit is not apparent.

7.10.2.2 Directional exit signs shall be provided within horizontal components of the egress path within exit enclosures as required by 7.10.1.2.2.

7.10.3* Sign Legend.

7.10.3.1 Signs required by 7.10.1 and 7.10.2 shall read as follows in plainly legible letters, or other appropriate wording shall be used:

EXIT

7.10.3.2* Where approved by the authority having jurisdiction, pictograms in compliance with NFPA 170, *Standard for Fire Safety and Emergency Symbols*, shall be permitted.

7.10.4* Power Source. Where emergency lighting facilities are required by the applicable provisions of Chapters 11 through 43 for individual occupancies, the signs, other than approved self-luminous signs and listed photoluminescent signs in accordance with 7.10.7.2, shall be illuminated by the emergency lighting facilities. The level of illumination of the signs shall be in accordance with 7.10.6.3 or 7.10.7 for the required emergency lighting duration as specified in 7.9.2.1. However, the level of illumination shall be permitted to decline to 60 percent at the end of the emergency lighting duration.

7.10.5 Illumination of Signs.

7.10.5.1* General. Every sign required by 7.10.1.2, 7.10.1.5, or 7.10.8.1, other than where operations or processes require low lighting levels, shall be suitably illuminated by a reliable light source. Externally and internally illuminated signs shall be legible in both the normal and emergency lighting mode.

7.10.5.2* Continuous Illumination.

7.10.5.2.1 Every sign required to be illuminated by 7.10.6.3, 7.10.7, and 7.10.8.1 shall be continuously illuminated as required under the provisions of Section 7.8, unless otherwise provided in 7.10.5.2.2.

7.10.5.2.2* Illumination for signs shall be permitted to flash on and off upon activation of the fire alarm system. 7.10.6 Externally Illuminated Signs.

7.10.6.1* Size of Signs.

7.10.6.1.1 Externally illuminated signs required by 7.10.1 and 7.10.2, other than approved existing signs, unless otherwise provided in 7.10.6.1.2, shall read EXIT or shall use other appropriate wording in plainly legible letters sized as follows:

- (1) For new signs, the letters shall be not less than 6 in. (150 mm) high, with the principal strokes of letters not less than 3/4 in. (19 mm) wide.
- (2) For existing signs, the required wording shall be permitted to be in plainly legible letters not less than 4 in. (100 mm) high.
- (3) The word EXIT shall be in letters of a width not less than 2 in. (51 mm), except the letter I, and the minimum spacing between letters shall be not less than 3/8 in. (9.5 mm).
- (4) Sign legend elements larger than the minimum established in 7.10.6.1.1(1) through (3) shall use letter widths, strokes, and spacing in proportion to their height.

7.10.6.1.2 The requirements of 7.10.6.1.1 shall not apply to marking required by 7.10.1.3 and 7.10.1.7.

7.10.6.2* Size and Location of Directional Indicator.

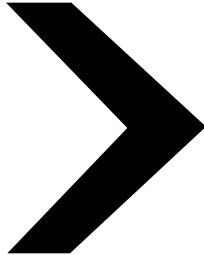
7.10.6.2.1 Directional indicators, unless otherwise provided in 7.10.6.2.2, shall comply with all of the following:

- (1) The directional indicator shall be located outside of the EXIT legend, not less than 3/8 in. (9.5 mm) from any letter.
- (2) The directional indicator shall be of a chevron type, as shown in Figure 7.10.6.2.1.
- (3) The directional indicator shall be identifiable as a directional indicator at a distance of 40 ft (12 m).
- (4) A directional indicator larger than the minimum established for compliance with 7.10.6.2.1(3) shall be proportionately increased in height, width, and stroke.

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(5) The directional indicator shall be located at the end of the sign for the direction indicated.



7.10.6.2.1 Chevron Type Indicator.

7.10.6.2.2 The requirements of 7.10.6.2.1 shall not apply to approved existing signs.

7.10.6.3* Level of Illumination. Externally illuminated signs shall be illuminated by not less than 5 ft-candles (54 lux) at the illuminated surface and shall have a contrast ratio of not less than 0.5.

7.10.7 Internally Illuminated Signs.

7.10.7.1 Listing. Internally illuminated signs shall be listed in accordance with ANSI/UL 924, Standard for Emergency Lighting and Power Equipment, unless they meet one of the following criteria:

- (1) They are approved existing signs.
- (2) They are existing signs having the required wording in legible letters not less than 4 in. (100 mm) high.
- (3) They are signs that are in accordance with 7.10.1.3 and 7.10.1.6.

7.10.7.2* Photoluminescent Signs. The face of a photoluminescent sign shall be continually illuminated while the building is occupied. The illumination levels on the face of the photoluminescent sign shall be in accordance with its listing. The charging illumination shall be a reliable light source, as determined by the authority having jurisdiction. The charging light source, shall be of a type specified in the product markings.

7.10.8 Special Signs.

7.10.8.1 Sign Illumination.

7.10.8.1.1 Where required by other provisions of this Code, special signs shall be illuminated in accordance with 7.10.5, 7.10.6.3, and 7.10.7.

7.10.8.1.2 Where emergency lighting facilities are required by the applicable provisions of Chapters 11 through 43, the required illumination of special signs shall additionally be provided under emergency lighting conditions.

7.10.8.2 Characters. Special signs, where required by other provisions of this Code, shall comply with the visual character requirements of ICC/ANSI A117.1, American National Standard for Accessible and Usable Buildings and Facilities.

7.10.8.3* No Exit.

7.10.8.3.1 Any door, passage, or stairway that is neither an exit nor a way of exit access and that is located or arranged so that it is likely to be mistaken for an exit shall be identified by a sign that reads as follows:

**NO
EXIT**

7.10.8.3.2 The NO EXIT sign shall have the word NO in letters 2 in. (51 mm) high, with a stroke width of $\frac{3}{8}$ in. (9.5 mm), and the word EXIT in letters 1 in. (25 mm) high, with the word EXIT below the word NO, unless such sign is an approved existing sign.

7.10.8.4 Elevator Signs. Elevators that are a part of a means of egress (see 7.2.13.1) shall have both of the following signs with a minimum letter height of $\frac{5}{8}$ in. (16 mm) posted in every elevator lobby:

- (1) *Signs that indicate that the elevator can be used for egress, including any restrictions on use
- (2) *Signs that indicate the operational status of elevators

7.10.8.5* Evacuation Diagram. Where a posted floor evacuation diagram is required in Chapters 11 through 43, floor evacuation diagrams reflecting the actual floor arrangement and exit locations shall be posted and oriented in a location and manner acceptable to the authority having jurisdiction.

7.10.9 Testing and Maintenance.

7.10.9.1 Inspection. Exit signs shall be visually inspected for operation of the illumination sources at intervals not to exceed 30 days or shall be periodically monitored in accordance with 7.9.3.1.3.

7.10.9.2 Testing. Exit signs connected to, or provided with, a battery-operated emergency illumination source, where required in 7.10.4, shall be tested and maintained in accordance with 7.9.3.

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Limited Warranty

- 1.0 **EMERGI-LITE®** 6, 12 and 24 volt Emergency Lighting Unit Equipment (excluding lamps and fuses) are fully warranted to be free of defects in material and workmanship under normal use for a period of three years from date of installation (see Paragraph 2.0).
- 1.1 **EMERGI-LITE®** 6, 12 and 24 volt Unit Equipment Batteries are warranted as follows (Warrant below includes the 3-year full warranty on entire unit as called out in Paragraph 1.0).
- 1.2 **EMERGI-LITE®** volt Emergency Lighting Unit Equipment (excluding lamps, and fuses) is fully warranted to be free of defects in material and workmanship under normal use for a period of one year from date of installation (see Paragraph 2.0).

BATTERY TYPE	LIFE EXPECTANCY	SHELF LIFE*	FULL WARRANTY	PRO RATA WARRANTY
Sealed Lead-Calcium	8 years	6 months	3 years	3 years
Sealed Lead-Calcium (Immobilized Electrolyte)	12 years	6 months	5 years	5 years
Sealed Long Life Lead	12 years	6 months	5 years	5 years
Sealed Nickel-Cadmium	15 years	1 year	5 years	7 years
Refillable Lead-Calcium	15 years	6 months	3 years	8 years
Refillable Nickel-Cadmium	15 years	2 years	5 years	7 years

***Maximum Storage life. Must Be Recharged If Not Placed in Service Or Battery Warranty Void**

- 2.0 The full warranty period begins on the date of installation or 90 days from date of shipment, whichever date is earlier.
- 2.1 Should a defect appear in the equipment or batteries listed in Paragraphs 1.0, 1.1 or 1.2 above within the specified full warranty period, Emergi-Lite® will repair or replace equipment without charge (see Paragraph 3.3). Such repair or replacement shall be the purchaser's exclusive remedy.
- 2.2 The Pro Rata Warranty Period for batteries begins on the date the full warranty period ends.
- 2.3 A battery determined to be defective during the Pro Rata Warranty Period shall be repaired or replaced at a cost equal to the net price in effect at the time, reduced by the percentage obtained in multiplying 10% by the number of full years remaining in the total warranty period. Such repair or replacement at this adjusted price shall be the purchaser's exclusive remedy.
- 3.0 All warranties are subject to proper installation and maintenance in accordance with the instructions supplied.
- 3.1 Any material deemed defective must be returned, freight prepaid, to the factory for evaluation (see Paragraph 5.0-5.3). Any changes in circuitry or components by other than authorized Emergi-Lite® personnel or its service companies will void the warranty.
- 3.2 All warranties are limited to the repair and/or replacement or parts or equipment, which, upon examination at our plant, are determined to be defective and in our judgement are subject to repair or replacement under warranty. Replacement of lamps and fuses is not included in the warranty.
- 3.3 If new replacement parts are shipped before defective goods are received for evaluation, the replacement parts will be invoiced at the net price in effect at that time. These charges will be credited if, upon receipt and evaluation of goods, a defect is determined. Only replacement parts will be shipped under these circumstances, if field replacement is possible. **EMERGI-LITE® FACTORY ONLY RESERVES THE RIGHT TO SHIP NEW UNIT EQUIPMENT FOR REPLACEMENT PURPOSES.** Units returned after installation cannot be restored to 100% saleable condition.

- 4.0 In no event shall Emergi-Lite® be liable for backcharges of any kind, including, without limitation, labor charges for field repair or late penalties.
- 4.1 This warranty does not cover damages caused by improper maintenance of installation or damage due to installation in areas with other than normal temperatures and environmental conditions per application specifications. Emergi-Lite® assumes no responsibility for any damage to people, property, apparatus or otherwise resulting from improper installation or maintenance of its Emergency Lighting Unit Equipment.
- 4.2 This warranty does not cover damages caused by abuse, fire or Act of God.
- 4.3 In no event shall Emergi-Lite® be liable for incidental or consequential damages.
- 4.4 The foregoing warranty is in lieu of all other warranties, expressed or implied, or merchantability, fitness for a particular purpose or any other thing. Except as stated in this warranty, Emergi-Lite® shall not be liable for any defects in, or breach of any contract relating to, the quality of performance of Emergi-Lite® Equipment under any theory of law including, without limitation, contract, negligence, strict liability or misrepresentation.
- 4.5 Emergi-Lite® warranty coverage shall not apply to any equipment of another manufacturer used in conjunction with Emergi-Lite® Equipment.
- 4.6 Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This written warranty gives you specific legal rights and you may also have other rights which vary from state to state.
- 5.0 No returned defective materials will be accepted without a Returned Goods Authorization issued in writing by an authorized Emergi-Lite® employee.
- 5.1 Purchaser is responsible for secure packing of returned materials to provide best possible assurance against damage in shipment.
- 5.2 Defective batteries of any kind must not be returned to Emergi-Lite's® factory without strict adherence to special instructions for handling and shipping. **WARNING** Never ship a refillable wet battery in any type of emergency lighting equipment. Failure to adhere to this policy will void warranty.
- 5.3 Defective goods returned to the factory must be shipped prepaid. **COLLECT RETURNED SHIPMENT WILL BE REFUSED.** Freight charges to return repaired equipment or ship replacement equipment to the purchaser to be paid by Emergi-Lite®. Factory will return repaired goods via same shipping method as received.

FAILURE TO COMPLY WITH ANY OF THE STIPULATIONS SET FORTH WILL VOID THE WARRANTY. ANY EXCEPTIONS TO THE FORGOING WARRANTY MUST BE REQUESTED AND ACCEPTED IN WRITING PRIOR TO SHIPMENT. EMERGI-LITE® EQUIPMENT NOT LISTED IN PARAGRAPHS 1.0, 1.1 OR 1.2 IS WARRANTED AS DESCRIBED ON ITS INDIVIDUAL DATA SHEET WITH THE STIPULATIONS AS STATED IN PARAGRAPHS 2.0-5.3.