



### WE PROTECT THE MOST HAZARDOUS ENVIRONMENTS

## EXPLOSION-PROOF AND HAZARDOUS VISUAL & AUDIBLE SIGNALING





# 100+ YEARS

Federal Signal is recognized as one of the industry's leading suppliers of safety and security products since 1901. Today, our team remains committed to the demand for value-added products, incorporating innovative engineering with the intent to offer our customers cost-effective product solutions.

Federal Signal products come with our commitment to exceptional customer service and technical support. Working closely together with customers globally, our customer support team, engineers, and technicians provide a full range of products to assist with any application.

# CERTIFICATIONS

Our products have been designed to meet or exceed the uncompromising standards of UL, CSA, ATEX, IECEx and other global certifications. And with our ISO 9001 Certification, Federal Signal demonstrates its on-going commitment to quality. Achieving certification is just the beginning. Federal Signal's hazardous location products routinely prove themselves, performing reliably in even the toughest operating environments.



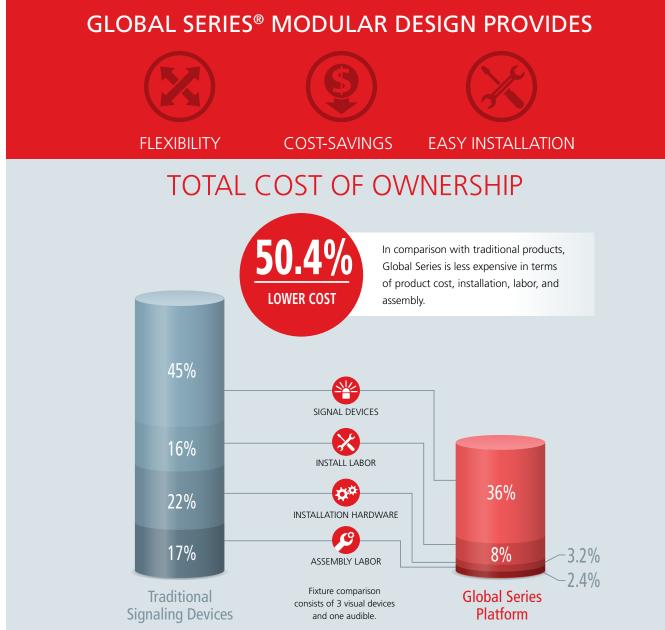
#### **GLOBAL SERIES®**

### GLOBAL SERIES<sup>®</sup> NON-METALLIC DESIGN WAS DEVELOPED FOR LOW MAINTENANCE AND CORROSION RESISTANCE.

Meeting stringent certifications, Global Series<sup>®</sup> is an innovative next generation product line of Glass Reinforced Polyester (GRP) signals that is modular, aesthetically appealing, and light weight in design.

The patented modular housing design allows individual signals to be combined into multi-signal fixtures, which reduce the customer's installation and wiring burden. Coupling kits allow installers in the field to create multi-unit configurations. Multi-signal fixtures with 2-6 signals can be combined into multiple configurations.





#### MODEL G-LED

### FLAMEPROOF & HAZARDOUS LOCATION LED BEACON

- Available in 24VDC and 120-240VAC 50/60Hz
- 50,000 hour LED array
- Corrosion resistant GRP design
- Operating Temperature Range: -67°F to 158°F; -55°C to 70°C
- Stainless steel dome guard included
- Two mounting style options: surface or U-bracket
- Two lens options: low- or high-profile
- Two M20 entries standard on Ex d models; Three M20 entries standard on Ex de models
- Standard M20 cable entries; 1/2" NPT and 3/4" NPT adapters available; M25 cable entry option
- Type 4X, IP67 enclosure, IP69K compliant
- UKEX certified
- 8 field selectable flash patterns including 60, 75 and 90 FPM
- Auto-sync available for AC flashing pattern products
- Zone 1, 21 Rated, IECEx, ATEX, Ex d IIC, Ex de IIC and Ex tb IIIC
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Gruops F and G; Class III
- UL and cUL Listed for Class I, Zone 1 AEx db IIC and Zone 21, AEx op is tb IIC T200°C (excludes 'Ex de' increased safety versions)



### MODEL G-STR

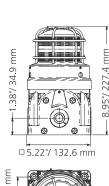
### FLAMEPROOF & HAZARDOUS LOCATION STROBE BEACON

- 15-Joule and 21-Joule models
- Available in 24VDC, 120VAC and 220-240VAC 50/60Hz
- 10,000 hour strobe tube
- Corrosion resistant GRP design
- Operating Temperature Range: -67°F to 158°F; -55°C to 70°C
- Stainless steel dome guard included
- Two mounting style options: surface or U-bracket
- Two lens options: low- or high-profile
- Two M20 entries standard on Ex d models; Three M20 entries standard on Ex de models
- Standard M20 cable entries; 1/2" NPT and 3/4" NPT adapters available; M25 cable entry option
- Type 4X, IP67 enclosure, IP69K compliant
- UKEX certified
- Zone 1, 21 Rated, IECEx, ATEX, Ex d IIC, Ex de IIC and Ex tb IIIC
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F and G; Class III, and UL Fire Listed (24VDC, Clear 21J only)
- UL and cUL Listed for Class I, Zone 1 AEx db IIC T3: Zone 21, AEx tb IIC T200°C (excludes 'Ex de' increased safety versions)

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• UL Fire Listed (24VDC, Clear model only)

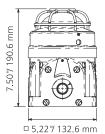
Shown with low-profile lens and Ex d Surface Mount







Shown with low-profile lens





4.17 // 105.9 mm

### MODEL G-SND

### FLAMEPROOF & HAZARDOUS LOCATION SOUNDER

- Available in 3 operational voltages: 24VDC,120VAC 50/60 Hz, and 230VAC 50/60 Hz
- 15 watt design with internal gain control
- 15 on-board tones produce 100dBa @ 10' (110dBa @ 1M)
- Corrosion resistant GRP design
- Operating Temperature Range: -67°F to 158°F; -55°C to 70°C
- Two M20 entries standard on Ex d models; Three M20 entries standard on Ex de models
- Standard M20 cable entries; 1/2" NPT and 3/4" NPT adapters available; M25 cable entry option
- IP66 enclosure
- UKEX certified
- Zone 1, 21 Rated, IECEx, ATEX, Ex d IIC, Ex de IIC and Ex tb IIIC
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F and G; Class III, and UL Fire Listed (24VDC only)
- UL and cUL Listed for Class 1, Zone 1 AEx db IIC T4: Zone 21, AEx tb IIIC T4/135°C (excluding 'Ex de' increased safety versions)
- UL Fire Listed (24VDC operating voltage only)



### MODEL G-SPK

### FLAMEPROOF & HAZARDOUS LOCATION LOUDSPEAKER

- Loudspeaker available in 70 Vrms or 100 Vrms
- Corrosion resistant GRP design
- Operating Temperature Range: -67°F to 158°F; -55°C to 70°C
- 15 watt design produces 98dBa @ 10' (108dBa @ 1M)
- Two M20 entries standard on Ex d models; Three M20 entries standard on Ex de models
- Standard M20 cable entries; 1/2" NPT and 3/4" NPT adapters available; M25 cable entry option
- IP66 enclosure
- UKEX certified
- Zone 1, 21 Rated, IECEx, ATEX, Ex d IIC, Ex de IIC and Ex tb IIIC
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F and G; Class III
- UL and cUL Listed for Class 1, Zone 1 AEx db IIC T4: Zone 21, AEx tb IIC T4/135°C (excludes Ex de increased safety versions)



Shown with Ex d Surface Mount





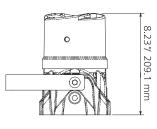


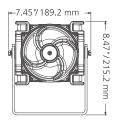
4.17 7 105.9 mm



Shown with stainless steel

mounting U-bracket (optional)





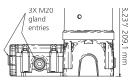
### MODEL G-SPA

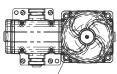
### FLAMEPROOF & HAZARDOUS LOCATION AMPLIFIED SPEAKER

- Corrosion resistant GRP design
- 98dBa @ 10' (108dBa @ 1M) with internal gain control
- Supports 3 operational voltages: 24VDC, 120VAC 50/60 Hz, and 230VAC 50/60 Hz
- Operating Temperature Range: -67°F to 158°F; -55°C to 70°C
- Two M20 entries standard on Ex d models; Three M20 entries standard on Ex de models
- Standard M20 cable entries; 1/2 " NPT and 3/4" NPT adapters available; M25 cable entry option
- IP66 enclosure
- UKEX certified
- Zone 1, 21 Rated, IECEx, ATEX, Ex d IIC, Ex de IIC and Ex tb IIIC
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F and G; Class III
- UL and cUL Listed for Class 1, Zone 1 AEx db IIC T4: Zone 21, AEx tb IIC T4/135°C (excludes Ex de increased safety versions)



Ex de Surface Mount shown





4X C'bored holes to fit M8 socket head cap screws

#### VISUAL SIGNALING

### MODELS WV450XD & WV450XE FLAMEPROOF STROBE MODEL

- Available in 10, 15 and 21 Joule Units
- 10,000 Hour Strobe Tube
- Available voltages (±15%): 24-48VDC 15J units, 110VAC – 10J/21J units, 220VAC – 10J/21J units
- Optional Ex de junction box
- Corrosion resistant GRP (Glass Reinforced Polyester)
- Operating Temperatures:

WV450XD "d" version without terminal chamber -67°F to 131°F; -55°C to 55°C

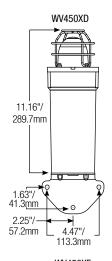
WV450XE "de" version with terminal chamber -4°F to 131°F; -20°C to 55°C

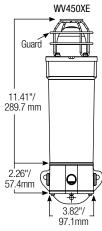
- 316 stainless steel dome guard and mounting bracket included
- M20 cable entries Ex d: 2 entries M20 x 1.5 Ex de: 3 entries M20 x 1.5
- IP66 enclosure
- Zone rated, IECEx, ATEX, Ex d IIB +H2 T3-T4, Ex de IIB +H2 T3-T4





Shown with optional Ex de junction box





#### **VISUAL SIGNALING**

### MODELS 2000 SERIES XEN1 & XEN4

### FLAMEPROOF STROBE WARNING LIGHTS

- Single and four strobe tube models
- Internal Fresnel lens
- 5,000 hour lamp life
- Operating Temperature: -40°F to 158°F; -40°C to 70°C
- Ex de terminal chamber available
- Available in 5 operating voltages: 24VDC, 48VDC, 110VDC, 110VAC and 240VAC
- IP66 enclosure
- Zone 1, 2, 21, 22 Ex d IIB T4 Gb, Ex tb IIIB Db; Ex de IIB T4 Gb, Ex tb IIIB Db



### MODEL 151XST HAZARDOUS LOCATION WARNING LIGHT

- Available in 12-24VDC, 120VAC and 240VAC
- 10,000 hour, high-intensity strobe produces 80FPM
- Operating Temperature: -67°F to 150°F; -55°C to 66°C
- Available in 3/4-inch NPT pipe mount or surface mount
- Dome guard included
- Indoor/outdoor use
- Type 4X, IP66 enclosure, IP69K compliant
- Marine Rated
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 1, Groups E, F and G; and Class III



### MODELS 154XST & 154XST-024C-CN HAZARDOUS LOCATION STROBE WARNING LIGHT

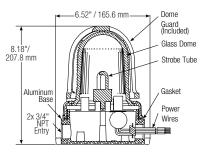
CSFM

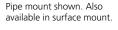
- Available in 24VDC
- 10,000 hour, high-intensity strobe tube produces 80FPM
- Operating Temperature: -67°F to 150°F; -55°C to 66°C
- Indoor/outdoor use
- Available in 3/4-inch NPT pipe mount or surface mount
- Type 4X, IP66 enclosure, IP69K compliant
- 4-wired supervised power circuit
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 1, Groups E, F and G; and Class III
- 154XST-024C-CN units are ULC Fire Listed

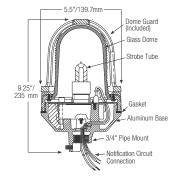




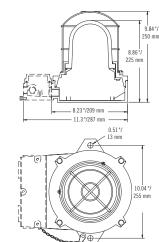
Surface mount shown. Also available in Pipe mount.











### MODEL 154XSTHI HAZARDOUS LOCATION SUPERVISED STROBE WARNING LIGHT

- Available in 24VDC
- 10,000 hour, high-intensity strobe tube produces 60FPM
- Operating Temperature: -67°F to 150°F; -55°C to 66°C
- 4-wired supervised power circuit
- Indoor/outdoor use
- Available in 3/4-inch NPT pipe mount or surface mount
- Type 4X, IP66 enclosure, IP69K compliant
- Marine Rated
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 1, Groups E, F and G; Class III, and UL Fire Listed



### MODELS 191XL & 191XL-CN HAZARDOUS LOCATION LED WARNING LIGHT

- Flashing mode standard, configurable to steady-burn
- Available in 24VAC/DC, 120-240VAC and 277VAC
- 50,000 hour, vibration resistant LED lamp
- Operating Temperature: -58°F to 150°F; -50°C to 66°C
- Available in 3/4-inch NPT pipe mount or surface mount
- Dome guard included
- Type 4X, IP66 enclosure, IP69K compliant
- Marine Rated
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 1, Groups E, F and G; and Class III
- 191XL-CN units are UL and cUL Listed for Class I, Zone 2, AEx nA IIC Gc; Zone 22 AEx tc IIIC Dc



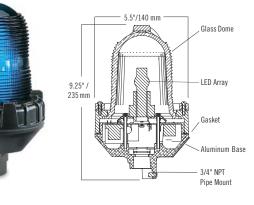
### FB2LEDX, FB2LEDX-CN & FB2LEDX-QC

### FIREBALL® HAZARDOUS LOCATION LED WARNING LIGHTS

- Available in 12-24VDC or 120-240VAC
- Quad-color models are available with a clear lens and four colors (Amber, Blue, Green, and Red) in one unit
- Single color models are available with Amber, Blue, Clear, Green or Red LEDs/lens
- Stainless steel lens guard included
- 50,000 hour LED
- Three flash pattern options: 60 (default), 120, or steady
- Integrated 1/2-inch NPT pipe and surface mount
- Indoor/outdoor use
- Conformal coated PCBA
- Type 4X, IP66 enclosure, IP69K compliant
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F and G; and Class III
- UL and cUL Listed for Class I, Zone 2, AEx nA IIC Gc; Class II, Zone 22 AEx tc IIIC Dc (-CN Models)

480'/ 121.9 mm resnel Lens resnel Lens LED PCBA Black Stainless Steel Wire Guard 1/2" NPT Pipe Mount and 3-hole Surface Mount

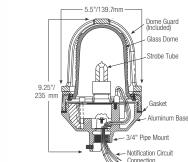
Pipe mount shown. Also available in surface mount.







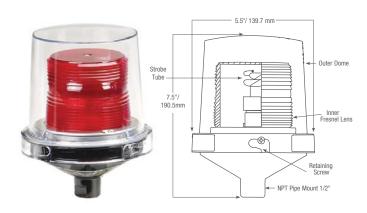
Pipe mount shown. Also available in surface mount.



### MODELS 224XST HAZARDOUS LOCATION SUPERVISED STROBE WARNING LIGHT

- Available in 24VDC
- 10,000 hour, high-intensity strobe tube produces 80FPM
- Operating Temperature: -40°F to 104°F; -40°C to 40°C
- Indoor/outdoor use
- 4-wired supervised power circuit
- Type 4X, IP66 enclosure, IP69K compliant
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F and G; and Class III

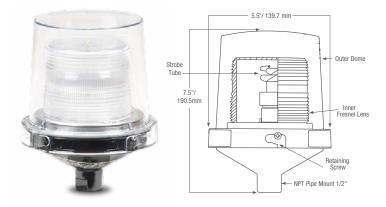




### MODEL 224XSTHI HAZARDOUS LOCATION HEARING IMPAIRED STROBE WARNING LIGHT

- Available in 24VDC
- 10,000 hour, high-intensity strobe tube produces 80FPM
- Operating Temperature: -40°F to 104°F; -40°C to 40°C
- Indoor/outdoor use
- 4-wired supervised power circuit
- Type 4X, IP66 enclosure, IP69K compliant
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F and G; and Class III





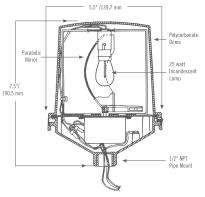
#### **VISUAL SIGNALING**

### MODEL 225X HAZARDOUS LOCATION ROTATING WARNING LIGHT

- Available in 120VAC
- 25 watt incandescent lamp
- Operating Temperature: -40°F to 104°F; -40°C to 40°C
- 1/2-inch pipe mount
- Indoor/outdoor use
- Type 4X, IP66 enclosure, IP69K compliant
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F and G; and Class III





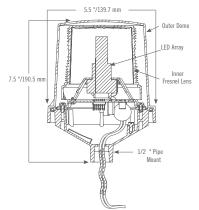


### MODEL 225XL HAZARDOUS LOCATION LED WARNING LIGHT

- Flashing mode standard, field configurable to steady-burn
- Available in 24VAC/DC and 120-240VAC
- 50,000 hour, vibration-resistant LED lamp
- Operating Temperature: -58°F to 150°F; -50°C to 66°C
- Type 4X, IP66 enclosure, IP69K compliant
- Marine Rated
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division Groups F and G; and Class I





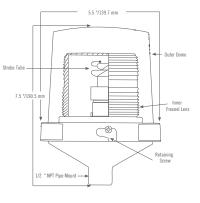


### MODELS 225XST & 225XST-I HAZARDOUS LOCATION STROBE WARNING LIGHT

- Available in 12-24VDC, 24VDC, 120VAC and 240VAC
- 10,000 hour, high-intensity strobe tube produces 80FPM
- Operating Temperature: -40°F to 104°F; -40°C to 40°C
- Model 225XST-I features a voltage in-rush limiting PCB design
- Type 4X, IP66 enclosure, IP69K compliant
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F and G; and Class III







#### **VISUAL SIGNALING**

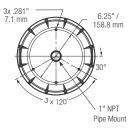
### MODEL 371DST HAZARDOUS LOCATION DOUBLE STROBE WARNING LIGHT

- Available in 12-24VDC, 120VAC and 240VAC
- 10,000 hour strobe tube
- Operating Temperature: -31°F to 104°F; -35°C to 40°C
- Surface mount and integrated 1" NPT pipe mount
- Type 4X, IP66 enclosure, IP69K compliant
- UL and cUL Listed for Class I, Division 2, Groups A, B, C, D; Class II, Division 2, Groups F, G and Class III







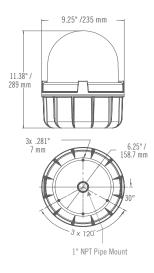


### MODEL 371LEDX HAZARDOUS LOCATION ROTATING LED WARNING LIGHT

- Available in 120VAC
- 50,000 hour LED
- Operating Temperature: -31°F to 104°F; -35°C to 40°C
- Surface mount and integrated 1" NPT pipe mount
- Type 4X, IP66 enclosure, IP69K compliant
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F and G; and Class III







### MODEL 27XL EXPLOSION-PROOF LED WARNING LIGHT

- Available in 24VAC/DC and 120-240VAC
- Flashing or steady-burn mode
- 50,000 hour LED
- Operating Temperature Range: -67°F to 150°F; -55°C to 65°C
- 3/4" NPT pendant, ceiling and wall mount options available
- Dome guard optional
- Type 4X, IP66 enclosure, IP69K compliant
- Marine Rated
- UL and cUL Listed for Class I, Division 1 Groups C and D; Class I, Division 2, Groups A and B; Class II Division 1, Groups E, F and G; and Class III



### MODEL 27XST EXPLOSION-PROOF STROBE LIGHT

- Available in 24VDC, 120VAC and 240VAC
- 10,000 hour strobe tube produces 80FPM
- Operating Temperature Range: -67°F to 150°F; -55°C to 65°C
- 3/4" NPT pendant, ceiling and wall mount options available
- Dome guard optional
- Type 4X, IP66 enclosure, IP69K compliant
- Marine Rated
- UL and cUL Listed for Class I, Division 1 and 2, Groups C and D; Class I, Division 2, Groups A and B; Class II Division 1, Groups E, F and G; and Class III



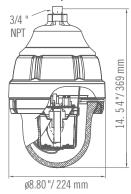
### MODEL 27XST-024\*-4-MOD EXPLOSION-PROOF STROBE WARNING LIGHT

- Available in 24VDC
- 10,000 hour, high-intensity strobe tube produces 80FPM
- Operating Temperature Range: -67°F to 150°F; -55°C to 65°C
- Indoor/outdoor use
- Type 4X, IP66 enclosure, IP69K compliant
- 3/4" NPT pendant, ceiling and wall mount options available
- 4-wired supervised power circuit
- UL and cUL Listed for Class I, Division 1 and 2, Groups C and D; Class I, Division 2, Groups A and B; Class II, Division 1, Groups E, F and G; and Class III



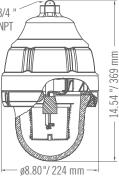


Shown with pendant mount



#### Shown with pendant mount

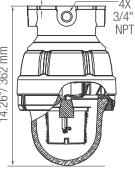




#### Shown with ceiling mount



0.30"/ 7.6 mm



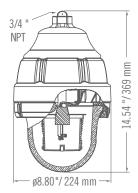
### MODEL 121X EXPLOSION-PROOF LED ROTATING LIGHT

- Available in 24VDC
- 25,00 hour LED light produces 60 rotations per minute
- Operating Temperature Range: -67F° to 150F°; -55°C to 65°C
- Indoor/outdoor use
- Type 4X, IP66 enclosure, IP69K compliant
- 3/4" NPT pendant, ceiling and wall mount options available
- Marine Rated
- UL and cUL Listed for Class I, Division 1 and 2, Groups C and D; Class II, Division 1, Groups E, F and G; and Class III





Shown with pendant mount



### MODEL 24XST EXPLOSION-PROOF SUPERVISED STROBE LIGHT

- Available in 24VDC
- 10,000 hour, high-intensity strobe tube produces 60FPM
- Operating Temperature Range: -67°F to 150°F; -55°C to 65°C
- Indoor/outdoor use
- Type 4X, IP66 enclosure, IP69K compliant
- 4-wired supervised power circuit
- 3/4" NPT pendant, ceiling and wall mount options available
- Marine Rated
- UL and cUL Listed for Class I, Division 1 and 2, Groups C and D; Class I, Division 2, Groups A and B; Class II, Division 1, Groups E, F and G; and Class III



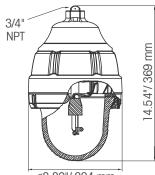
### MODELS 24XSTHI & 24XSTHI-CN

### **EXPLOSION-PROOF HEARING IMPAIRED SUPERVISED STROBE LIGHT**

- Available in 24VDC
- 10,000 hour strobe tube produces 80FPM
- Operating Temperature Range: -67°F to 150°F; -55°C to 66°C
- Indoor/outdoor use
- Type 4X, IP66 enclosure, IP69K compliant
- 3/4" NPT pendant, ceiling and wall mount options available
- Marine Rated
- UL and cUL Listed for Class I, Division 1 and 2, Groups C and D; Class II, Division 1, Groups E, F and G; and Class III
- 24XSTHI is UL Fire Listed and 24XSTHI is ULC Fire Listed

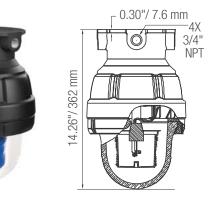


Shown with pendant mount



ø8.80"/ 224 mm

#### Shown with ceiling mount



#### VISUAL SIGNALING

### MODELS FSEX & FSEXHI EXPLOSION-PROOF STROBE LIGHT

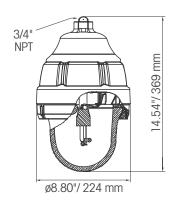
- Available in 24VDC
- 10,000 hour strobe tube
- Operating Temperature: -67°F to 50°F; -55°C to 65°C
- Type 4X, IP66 enclosure, IP69K compliant
- 3/4" NPT pendant, ceiling and wall mount options
- FSEX-HI is rated for UL 1971 (hearing-impaired)
- UL and cUL for Class I, Division 1, Groups C and D; Class II, Division 1, Groups E, F and G; Class I, Division 2, Groups A, B; and Class III



### **RANGE CERTIFICATIONS**

BEACONS, LIGHTS, and STROBES





Shown with pendant mount

CERTIFICATIONS ► PRODUCTS ▼	Æx>	<b>IECE</b> x	c (UL) us	(III)	€+ମ୍ଟ	() ()	INMETRO	EAC	ABS	CSFM	UKEK	IP RATING
G-LED	-	-	-								-	67/69K
G-STR	-		-		-						-	67/69K
WV450XD & WV450XE	-	•			-							66
XEN1 & XEN4	-	•			-							66
151XST			-			-						66/69K
154XST			-									66/69K
154XSTHI & 154XSTHI-CN												66/69K

#### 14

### **RANGE CERTIFICATIONS**

BEACONS, LIGHTS, and STROBES

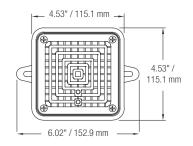
CERTIFICATIONS ► PRODUCTS ▼	Æx>	TECEx	cŲLus	(III)	C€+₽₽	<b>()</b>	IMMETRO	EAC	ABS	CSFM	IP RATING
191XL & 191XL-CN											66/69K
FB2LEDX, FB2LEDX-CN & FB2LEDX-QC											66/69K
224XST			-			•				-	66/69K
224XSTHI			-							-	66/69K
225x			-								66/69K
225XL			-								66/69K
225XST & 225XST-I											66/69K
371DST			-								66/69K
371LEDX			-								66/69K
27XL			-								66/69K
27XST & 27XST-024*-4-MOD										-	
121X			-								66/69 <del>K</del>
24XST										-	66/69K
24XSTHI & 24XSTHI-CN			-	•							66/69 <b>K</b>
FSEX & FSEX-HI											66/69K

### MODEL 350WBX HAZARDOUS LOCATION ELETRO-MECHANICAL HORN

- Available in 120VAC and 240VAC
- Operating Temperature: -65°F to 104°F; -54°C to 40°C
- Produces 100 dBa @ 10' (110 dBa @ 1m)
- Surface, flush or semi-flush mounting
- Type 4X, IP66 enclosure, IP69K compliant
- UL and cUL Listed for Class I, Division 2; Class II, Division 2; Class III



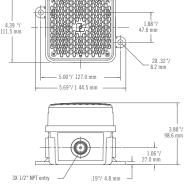




### MODEL 450EWBX HAZARDOUS LOCATION ELECTRONIC HORN

- Corrosion resistant non-metallic housing
- Available in 12-24VDC
- Operating Temperature: -65°F to 150°F; -54°C to 66°C
- 94-99 dBa @ 10' (104-109 dBa @ 1m) depending on operating voltage, no duty cycle
- Four wire terminal block and supervisory diode
- Type 4X, IP66 enclosure, IP69K compliant
- Marine Rated
- UL and cUL Listed for Class I, Division 2, Groups A, B, C, and D; Class II, Division 2, Groups F and G; Class III
- 450E horn is UL and ULC Canadian Listed for Fire Alarm use





6.5"/ 165.1 m

6.5" 165.1mr

3/4" / 19 mm

7.625 ' 193.68 mi

3/4 " / 19



### MODELS 31X & 41X EXPLOSION-PROOF VIBRATING HORN

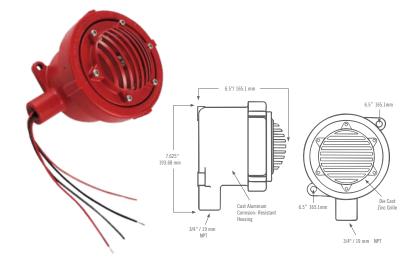
- 31X is available in 120VAC and 240VAC; 41X is available in 24VDC
- Operating Temperature: -31°F to 150°F; -35°C to 66°C
- Corrosion resistant cast aluminum housings
- 3/4-inch pipe or surface mount
- Produces 100 dBa @ 10' (110 dBa @ 1m)
- UL and cUL Listed for Class I, Division 1, Groups C and D; Class II, Division 1, Groups E, F and G; and Class III



### MODEL FHEX EXPLOSION-PROOF VIBRATING HORN

- Available in 24VDC
- Produces 99 dBa @ 10' (109 dBa @ 1m)
- Operating Temperature: -31°F to 150°F; -35°C to 66°C
- UL and cUL Listed for Class I, Division 1, Groups C & D; Class II, Division 1, Groups E, F, and G; and Class III

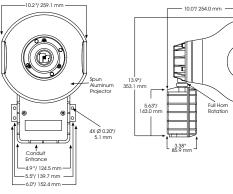




### MODEL SST3GCX-MV HAZARDOUS LOCATION ELECTRONIC SIREN

- Multi-voltage design accepts 24VDC or 120/240VAC
- Operating Temperature:-67°F to 150°F; -55°C to 66°C
- Produces up to 110.5 dBa at 10' (120 dBa at 1M)
- Produces three tones: Wail, Yelp, and Horn
- Type 4X, IP66 enclosure, IP69K compliant
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F & G; Class III



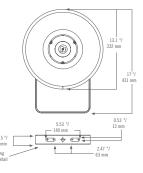


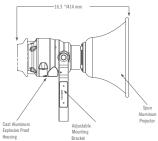


### MODEL SSTX3-MV EXPLOSION-PROOF ELECTRONIC SIREN

- Multi-voltage design accepts 24VDC, 120VAC or 240VAC
- Operating Temperature: -67°F to 151°F; -55°C to 66°C
- Produces three remotely selectable tones: Wail, Yelp and Horn
- 101-108 dBa @ 10' (111-118 dBa @ 1m) depending on tone
- Type 4X, IP66 enclosure
- UL and cUL Listed for Class I, Division 1, Groups B, C and D; Class I, Division 2, Group A; Class II, Division 2, Groups F and G; and Class III







### MODELS ES & MS SERIES HAZARDOUS AREA MARINE AND INDUSTRIAL LOUDSPEAKERS

- 25 watt versions produce 116-125dBa @ 1m (model dependent)
- IP66 enclosure
- ES4, ES5 are IECEx, INMETRO and EAC only
- Zone 1 IIB approved

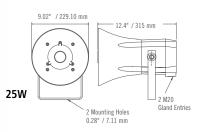


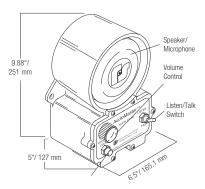
### MODEL 310X-MV HAZARDOUS LOCATION TWO-WAY INTERCOM

- Multi-voltage design accepts 24VDC, 120VAC and 240VAC
- Heavy-duty industrial intercom for indoor or outdoor applications
- Type 4X, IP65 enclosure
- UL and cUL Listed for Class I, Division 2, Group A, B, C and D; Class II, Division 2, Groups F and G. Class III







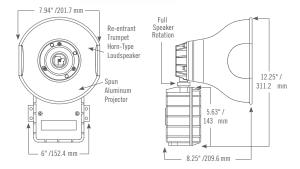


### MODELS 300GCX, 300GCX-CN, 302GCX & 302GCX-CN HAZARDOUS LOCATION SPEAKER AMPLIFIER

- Available in 24VAC/DC, 120VAC and 240VAC
- Operating Temperature: -67°F to 150°F; -55°C to 66°C
- Built-in gain control (volume)
- 300GCX produces 0-110 dBa @ 10 feet (0-120 dBa @ 1m)
- 302GCX produces 0-114 dBa @ 10 feet (0-124 dBa @ 1m)
- Type 4X, IP69K enclosure
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F and G ; and Class III
- CN models are UL and cUL Listed for Class I, Zone 2, AEx nA IIC Gc; Class II, Zone 22 AEx tc IIIC Dc



MODEL SHOWN 300GCX, 304GCX AND AM300GCX



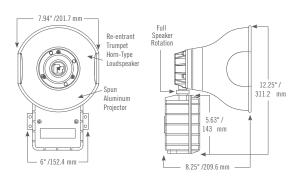
### MODELS 304GCX & 314GCX PUBLIC ADDRESS HAZARDOUS LOCATION AMPLIFIED SPEAKER

- Available in 24VDC
- Operating Temperature: -40°F to 150°F; -40°C to 66°C
- Built-in gain control (volume)
- 304GCX produces 0-108 dBa @ 10' (0-118 dBa @ 1m) on axis 314GCX produces 0-112 dBa @ 10' (0-122 dBa @ 1m) on axis
- Type 4X, IP69K enclosure
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F and G; and Class III
- ULC Canadian Fire Listed models available (-CN)





MODEL SHOWN 300GCX, 304GCX AND AM300GCX



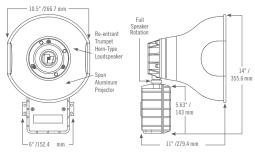
# MODELS AM300GCX & AM302GCX PUBLIC ADDRESS HAZARDOUS LOCATION SPEAKER

- Transformer coupled
- 25 or 70 Vrms
- Operating Temperature: -40°F to 150°F; -40°C to 66°C
- Re-entrant horn design
- Type 4X, IP69K enclosure
- UL Fire Listed
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F and G ; and Class III





MODEL SHOWN 302GCX, 314GCX AND AM302GCX

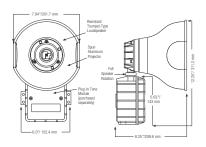


### MODEL AM15XD2 HAZARDOUS LOCATION PUBLIC ADDRESS SPEAKER

- 8 Ohm, 15 watt
- 1/2" conduit openings
- Type 4X, IP66, IP69K enclosure
- UL and cUL Listed for Class 1, Division 2, Groups A,B,C, and D; Class II, Division 2, Groups F & G; and Class III







MODEL SHOWN 300X, 304X AND

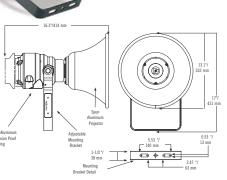
AM300X

MODEL SHOWN AM15XD2

### MODELS 300X & 302X EXPLOSION-PROOF AMPLIFIED SPEAKER

- Available in 24VAC/DC and 120/240VAC
- Operating Temperature: -67°F to 151°F; -55°C to 66°C
- Digital Signal Amplification
- Fused input and output
- Built-in gain control
- 300X produces 0-110 dBa @ 10' (0-120 dBa @ 1m)
- 302X produces 0-114 dBa @ 10' (0-124 dBa @ 1m)
- Type 4X, IP66 enclosure
- UL and cUL Listed for Class I, Division 1, Groups B, C, and D; Class I, Division 2, Groups A, B, C, and D; Class II, Division 2, Groups F and G; and Class III





### MODELS 304X & 314X EXPLOSION-PROOF AMPLIFIED SPEAKER

- Available in 24VDC
- Operating Temperature: -40°F to 150°F; -40°C to 66°C
- Digital signal amplification
- Fused input and output
- 304X produces 0-108 dBa @ 10' (0-118 dBa @ 1m) on axis
- 314X produces 0-112 dBa @ 10' (0-122 dBa @ 1m) on axis
- 4-wire supervised power circuit
- Type 4X, IP66 enclosure
- UL and cUL Listed for Class I, Division 1, Groups B, C and D; Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F and G; and Class III
- UL Fire Listed and ULC Canadian Fire Listed models



### MODELS AM300X EXPLOSION-PROOF PUBLIC ADDRESS SPEAKER

- 25 or 70 Vrms
- Transformer coupled
- Re-entrant horn design
- AM300X produces 106dBa @ 10' (116dBa @ 1m) on axis
- AM302X produces 112dBa @ 10' (122dBa @ 1m) on axis
- Type 4X, IP65 enclosure
- UL and cUL Listed for Class I, Division 1, Groups B, C and D; Class 1, Division 2 Groups A, B, C and D; Class II, Division 2, Groups F and G; Class III, and UL Fire Listed





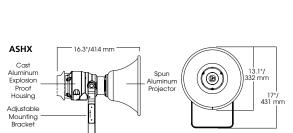
- 24VDC
- Built-in gain control
- Four wire supervisable power circuit
- Swivel mount bracket
- Type 4X, IP65 enclosure
- UL Listed for Class I, Division 1, Groups B, C & D; Class I, Division 2, Group A; Class II, Division 2, Groups F and G; Class III, and UL Fire Listed

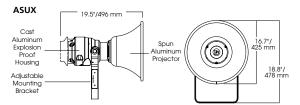




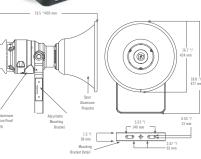


MODEL SHOWN ASHX AND ASUX





MODEL SHOWN 302X, 314X AND AM302X



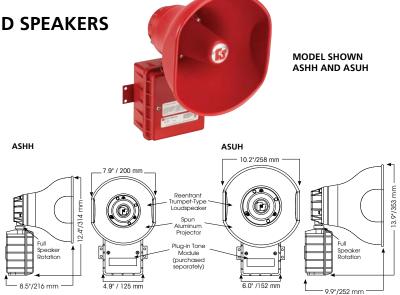
MODELS 304X / 314X AND AM300X/AM302X



### MODELS ASHH & ASUH HAZARDOUS LOCATION AMPLIFIED SPEAKERS

- 24VDC
- Four wire supervisable power circuit
- Reliable, solid-state circuitry
- Digital signal amplification
- Fused input and output
- Built-in gain control
- External mounting tabs
- Type 4X enclosure
- UL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F & G; and Class III





#### INITIATING DEVICES

### MODELS CP-BG AND CP-PB FLAMEPROOF & HAZARDOUS LOCATION BREAK GLASS AND PUSH BUTTON CALL POINTS

- High visibility, antistatic GRP enclosure, faceplate available in Red and Yellow
- Optional lift flap for two-step operation prevents accidental activation
- (3) x M20 or ½ NPT entries: (2) top and (1) side entry with 180 degrees rotatable mounting orientation
- Integrated tool reset with removable key for tamper resistant reset
- Single and dual switch activation
- IP66 enclosure, IP69K compliant
- UL/cUL rated for Zone 1, 21, Gas Group IIC
- UL/cUL rated for Class I, Division 2, Groups A, B, C, and D
- UL/ULC Fire, UL/cUL Signaling, SIL2, EN54-11







#### **INITIATING DEVICES**

### MODEL MPEX EXPLOSION-PROOF FIRE ALARM PULL STATION

- Available in 120VAC
- Highly visible red enclosure
- Two step process: Lift cover and pull down ring to activate
- 2 3/4" NPT conduit entries
- Type 7 for Groups C and D; Type 9 for Groups E, F and G
- UL Listed for Class I, Division 1, Groups C & D; Class II, Division 1, Groups E, F and G; and Class III





#### HAZARDS LOCATION SIGNALING ACCESSORIES

### MODEL LHWB HAZARDOUS LOCATION LIGHT MOUNTING KIT

IDEAL FOR USE WITH MODELS 151XST, 154XST, 191XL, 224XST, 224XST-HI, 225X, 225XSL, 225XST, 225XST-I, 371LEDX

- Easy installation
- For wall mount applications
- Replaces unsightly and hazardous makeshift supports
- Provides 3/4" NPT standard pipe mount
- Adapter bushings available 3/4" 1/2" and 3/4" 1"
- Type 4X, IP66 enclosure
- UL and cUL Listed for Class I, Division 2, Groups A, B, C and D; Class II, Groups E, F and G; and Class III



### MODEL SSM SYNCHRONOUS STROBE MODULE

IDEAL FOR USE WITH MODELS 151XST, 154XST, 224XST, 224XST-II, 225XST, 225XST-I, 27XST, 24XST

- Synchronizes strobe lights to 72 flashes per minute
- 24VDC operating voltage
- Safe area installation only, but compatible with all hazardous and explosion proof strobe signals
- Mounts on double-gang electrical box
- UL1971 Approved for hearing impaired applications
- Polarized design allows for remote supervision
- Compatible with select Federal Signal strobe lights





## **RANGE CERTIFICATIONS**

AUDIBLE SIGNALS

CERTIFI PRODU	ICATIONS ► ICTS ▼	(Ex)	TEGEX	cŲLus	(UL)	C €+ 5₽	SP:	INMETRO	EAE	ABS	CSFM	UKEK	IP RATING
	G-SND			•		-				•	-	•	66
	G-SPK					-					-	-	66
	G-SPA												66
	350WBX						•						66/69K
- P	450EWBX												66/69K
	31X / 41X			•			-						
P	FHEX												
	SST3GCX-MV												66/69K
	SSTX3-MV												66
<b>K</b>	120 / ES4 / ES5 - 25W												66
	310X-MV												65

## **RANGE CERTIFICATIONS**

AUDIBLE SIGNALS

CERTIF PRODU	ICATIONS ► JCTS ▼	Æx>	TECEX	cULus	(UL)	C €+ 5₽	<b>(</b>	INMETRO	EAE	ABS	CSFM	IP RATING
	300GCX / 300GCX-CN / 302GCX / 302GCX-CN											66/69K
Ð	304GCX / 304GCX-CN / 314GCX / 314GCX-CN			-								66/69K
-20	AM300GCX / AM302GCX											66/69K
	AM15XD2			-								66/69K
	300X / 302X			-								66
	304X / 304X-CN / 314X / 314X-CN			-								66
-	AM300X / AM302X			-								66
1	ASHX / ASUX											66
	ASHH / ASUH											66

### **RANGE CERTIFICATIONS**

INITIATING DEVICES

CERTIFICATIONS ► PRODUCTS ▼	Æx>	TECEX	cULus	C €+ 5₽	۲. ۲	INMETRO	EAC	ABS	CSFM	IP RATING
мрех			-							
СР-ВС / СР-РВ										66/69K



#### NEMA Ratings - National Electrical Manufacturers Association

#### Type Indicates

- 1 General Purpose, Indoor To prevent accidental contact of personnel with the enclosed equipment in areas where unusual service conditions do not exist. Provides protection against falling dirt.
- 2 Drip-Proof, Indoor Similar to Type 1, but also protects against falling non-corrosive liquids and falling dirt. Drainage provisions provided.
- 3 Dust-Tight, Rain-Tight, Sleet-Resistant, Outdoor Protected against windblown dust and water.
- 3R Rainproof, Sleet-Resistant, Outdoor Protected against rain.
- 35 Dust-Tight, Rain-Tight and Sleet-Proof, Outdoor Protected against windblown dust and water, remains operable when covered by external ice or sleet. (Not protected against internal icing.)
- 4 Water-Tight and Dust-Tight, Indoor and Outdoor Protected against wind-blown dust and rain, splashing water, seepage water, falling or hose-directed water, and severe external condensation. Mountings are external to cavity.
- 4X Water-Tight, Dust-Tight, Indoor and Outdoor Same as Type 4 but also corrosion-resistant. Passes 200 hour salt spray (fog) test.

#### IP Ratings — Ingress Protection

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rrefix IP IP IP IP IP IP IP IP IP IP IP IP IP	First # 0 1 2 3 4 5 6 5 6 7 2 3 4 5 6 7 8 9 K	Solids No Protection Over 50mm Over 2.5mm Over 1.2mm Over 1.0mm Dust, limited ingress from all directions Total protection against dust Water No Protection Dripping Dripping when tilted up to 15° Spraying when tilted up to 60° Splashing Low pressure jets Strong jets Temporary immersion Prolonged immersion Close range high-pressure and temperature spray-down

#### NEC Ratings For Federal Signal Products – National Electrical Code

CLASS	GROUP	ATMOSPHERES CONTAINING:	DIVISION 1	DIVISION 2
I	A	Acetylene		121X, 24XST, 24XSTHI, 27XST, 27XL, FSEX, FSEX-HI, 151XST, 154XST, 154XSTHI, 191XL, FB2LEDX, 224XST, 224XST-HI, 225X, 225XL, 225XST, 225XST-I, USIX, 371DST, 371LEDX, 300X, 302X, AM300X, AM302X, 304X, 314X, 31X, 41X, FHEX, SSTX3-MV, ASHX, ASUX, 300GCX, 302GCX, 304GCX, 314GCX, AM15XD2, AM300GCX, AM302GCX, SST3GCX-MV, ASHH, ASUH, 350WBX, 450EWBX, E1, E2, 310X-MV, G-LED, G-STR, G-SND, G-SPK, G-SPA
I	В	Butadiene, Ethylene Oxides, Hydrogen, manufactured gases containing more than 30% Hydrogen (by volume), or Propylene Oxide.	300X, 302X, 304X, 314X, AM300X, AM302X, SSTX3-MV, ASHX, ASUX	121X, 24XST, 24XSTHI, 27XST, 27XL, FSEX, FSEX-HI, 151XST, 154XST, 154XSTHI, 191XL, 224XST, 224XST-HI, 225X, 225XL, 225XST, 225XST-I, USIX, 371DST, 371LEDX, 300X, 302X, AM300X, AM302X, 304X, 314X, 31X, 41X, FHEX, SSTX3-MV, ASHX, ASUX, 300GCX, 302GCX, 304GCX, 314GCX, AM15XD2, AM300GCX, AM300GCX, SST3GCX-MV, ASHH, ASUH, 350WBX, 450EWBX, E1, E2, 310X-MV, G-LED, G-STR, G-SND, G-SPK, G-SPA
I	с	Acetaldehyde, Cyclopropane, Diethyl Ether, Ethylene or Unsymmetrical Dimethyl Hydrazine (UDMH)	121X, 24XST, 24XSTHI, 27XST, 27XL, 300X, 302X, 304X, 31X, 314X, 41X, AM300X, ASHX, ASUX, AM302X, FSEX, FSEX-HI, MPEX, E1, SSTX3-MV	121X, 24XST, 24XSTHI, 27XST, 27XL, FSEX, FSEX-HI, 151XST, 154XST, 154XSTHI, 191XL, 224XST, 224XST-HI, 225X, 225XL, 225XST, 225XST-I, USIX, 371DST, 371LEDX, 300X, 302X, AM300X, AM302X, 304X, 314X, 31X, 41X, FHEX, SSTX3-MV, ASHX, ASUX, 300GCX, 302GCX, 304GCX, 314GCX, AM15XD2, AM300GCX, AM302GCX, SST3GCX-MV, ASHH, ASUH, 350WBX, 450EWBX, E1, E2, 310X-MV, G-LED, G-STR, G-SND, G-SPK, G-SPA
I	D	Acetone, Acrylonitrile, Ammonia, Benzene, Butane Butanol (Butyl Alcohol), Butanol (Secondary Butyl Alcohol), N-Butyl Acetate, Isobutyl Acetate, Ethane, Ethanol (Ethyl Alcohol), E Ethylene Dichloride, Gasoline, Heptanes, Hexanes, Isoprene Methane (Natural Gas), Methanol Ethyl Ketone, Methyl Isobutyl Ketone, Methyl Propanol (Isobutyl Alcohol), Methyl Propanol (Certiary Butyl Alcohol), Petroleum Naphtha, Octanes, Pentanol (Amyl Alcohol), Propanol (Isopropyl Alcohol), Propylene, Styrene, Toluene, Vinyl Acetate, Vinyl Chloride or Xylenes.	121X, 24XST, 24XSTHI, 27XST, 27XL, 300X, 302X, 304X, 31X, 314X, 41X, AM300X, ASHX, ASUX, AM302X, FSEX, FSEX-HI, MPEX, E1, SSTX3-MV	121X, 24XST, 24XSTHI, 27XST, 27XL, FSEX, FSEX-HI, 151XST, 154XST, 154XSTHI, 191XL, 224XST, 224XST-HI, 225X, 225XL, 225XST, 225XST-I, USIX, 371DST, 371LEDX, 300X, 302X, AM300X, AM302X, 304X, 314X, 31X, 41X, FHEX, SSTX3-MV, ASHX, ASUX, 300GCX, 302GCX, 304GCX, 314GCX, AM15XD2, AM300GCX, AM302GCX, SST3GCX-MV, ASHH, ASUH, 350WBX, 450EWBX, E1, E2, 310X-MV, G-LED, G-STR, G-SND, G-SPK, G-SPA
II	E	Metal Dust including Aluminum, Magnesium and their commercial alloys, and other metals of similar hazardous characteristics	24XST, 24XSTHI, 121X, 151XST, 154XSTHI, 191XL, 27XST, 27XL, 31X, 41X, MPEX, E1, 154XST, FSEX, FSEX-HI, FHEX	
II	F	Carbon Black, Charcoal, Coal or Coke Dust	24XST, 24XSTHI, 121X, 151XST, 154XSTHI, 191XL, 27XST, 27XL, 31X, 41X, MPEX, E1, 154XST, FSEX, FSEX-HI, FHEX	121X, 24XST, 24XSTHI, 27XST, 27XL, FSEX, FSEX-HI, 151XST, 154XST, 154XSTHI, 191XL, 224XST, 224XST-HI, 225X, 225XL, 225XST, 225XST-I, USIX, 371DST, 371LEDX, 300X, 302X, AM300X, AM302X, 304X, 314X, 31X, 41X, FHEX, SSTX3-MV, ASHX, ASUX, 300GCX, 302GCX, 304GCX, 314GCX, AM15XD2, AM300GCX, AM302GCX, SST3GCX-MV, ASHH, ASUH, 350WBX, 450EWBX, E1, E2, 310X-MV, G-LED, G-STR, G-SND, G-SPK, G-SPA
II	G	Flour, Starch, Wood or Grain Dust	24XST, 24XSTHI, 121X, 151XST, 154XSTHI, 191XL, 27XST, 27XL, 31X, 41X, MPEX, E1, 154XST, FSEX, FSEX-HI, FHEX	121X, 24XST, 24XSTHI, 27XST, 27XL, FSEX, FSEX-HI, 151XST, 154XST, 154XSTHI, 191XL, 224XST, 224XST-HI, 225X, 225XL, 225XST, 225XST-I, USIX, 371DST, 371LEDX, 300X, 302X, AM300X, AM302X, 304X, 314X, 31X, 41X, FHEX, SSTX3-MV, ASHX, ASUX, 300GCX, 302GCX, 304GCX, 314GCX, AM15XD2, AM300GCX, AM302GCX, SST3GCX-MV, ASHH, ASUH, 350WBX, 450EWBX, E1, E2, 310X-MV, G-LED, G-STR, G-SND, G-SPK, G-SPA
Ш		All models approved for Class I and II are also approved for use in Class III		



### NEC Zone Ratings for Federal Signal Products – National Electrical Code

MODEL	ZONE 1 GAS GROUP	ZONE 21 DUST GROUP	ZONE 2 GAS GROUP	ZONE 22 DUST GROUP
G-STR	IIC	IIIC		
G-LED	IIC	IIIC		
G-SPK, G-SPA, G-SND	IIC	IIIC		
300GCX-CN			IIC	IIIC
302GCX-CN			IIC	IIIC
191XL-CN			IIC	IIIC

### ATEX / IECEx Ratings for Federal Signal Products

MODEL	ZONE 1 GAS GROUP	ZONE 21 DUST GROUP	ATEX	IECEX
CP-BG, CP-PB	IIC	IIC	Х	Х
G-STR	IIC	IC	Х	Х
G-LED	IIC	IC	Х	Х
G-SPK, G-SPA, G-SND	IIC	IC	Х	Х
120,x ES4, ES5	IIB		Х	Х
WV450X, WV450XL	IIB+H2		Х	Х
2000 Series	IIB	IB	Х	Х

Federal Signal's established sales network operates worldwide with an extensive network of authorized manufacturer's representatives and distributors to provide customers a seamless solution for all their safety and security needs. To locate a sales representative near you, visit www.fedsig.com/where-to-buy.





### FEDERAL SIGNAL

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