



ELECTRONIC SOUNDERS AND POWERED LOUDSPEAKERS FOR USE IN ATEX HAZARDOUS AREAS

- 8 watt, 104dBA output
- 15 watt, 107dBA output
- 25 watt, 116dBA output
- On-board choice of 15 tones
- Remote tone selection
- Dual cable entries
- Integrated DC and AC voltages
- Short horn version (8W)
- Approved for Zone 1 IIB and IIC
- Watertight to IP66/IP67

ATEX CE



Hazardous Area Sounder and Powered Loudspeaker

Model ES Series Sounders and Powered Loudspeakers

Federal Signal's Model ES Series Sounders and Powered Loudspeakers are designed for rugged industrial applications where ATEX certification is required. The ES Series is comprised of two separate products that serve a variety of applications. First is a sounder that includes fifteen standard tones with a common power input that accepts an AC or DC power source. Once power is applied, a single tone may be selected through the use of a remote contact input, or all fifteen tones may be accessed independently by providing a binary string of information, specific to each tone. This allows a certain sound to match a specific alarm condition.

The second version of the ES Series is a powered loudspeaker. Once an AC or DC power source is applied, the powered loudspeaker is capable of amplifying a low-level audio signal, and reproducing it at 8, 15 or 25 watts, depending on the model selected. ES Series powered loudspeakers are the perfect option for ECHO Intercom systems, where ATEX approval is required.

The Model ES Series sounders and powered loudspeakers are available in three different configurations, from 8 watt to 25 watt, to provide an appropriate amount of sound for the ambient environment. To fine tune the product for each application, an internal volume adjustment potentiometer is provided.

Mounting is provided by a stainless-steel ratcheted mounting bracket that locks the sounder in position at a specific angle without slipping. The bottom surface of the mounting bracket also contains three mounting holes, to adapt to a variety of surfaces.

The ES Series is rated for IP66/67 through the use of a neoprene "O" ring seal. All exterior cast aluminum surfaces are finished in red powder coat paint and external hardware is manufactured from stainless steel to resist corrosion.

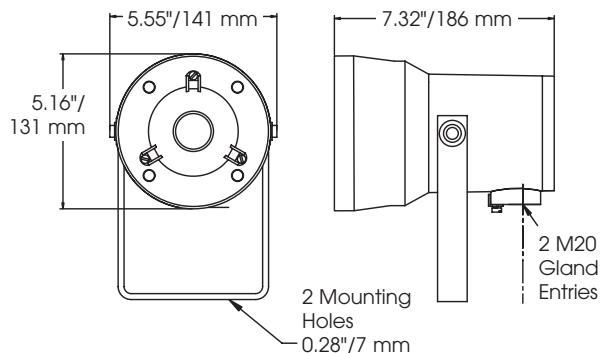
Model	Voltage	Operating Current	Equivalent Power
ES1-114 ¹	24VDC/120VAC/240VAC	950mA/210mA/125mA	8 watt
ES1-112 ¹	24VDC/120VAC/240VAC	950mA/210mA/125mA	15 watt
ES4-120 ¹	24VDC/120VAC/240VAC	950mA/210mA/125mA	25 watt
ES1-114 ²	24VDC/120VAC/240VAC	500mA/125mA/90mA	8 watt
ES1-112 ²	24VDC/120VAC/240VAC	500mA/125mA/90mA	15 watt
ES5-120 ²	24VDC	1200mA	25 watt
ES5-120 ²	120VAC	400mA	25 watt
ES5-120 ²	240VAC	210mA	25 watt

¹ ES-Series Sounder

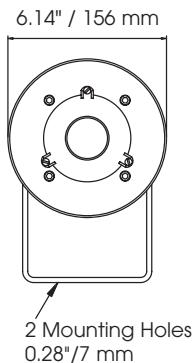
² ES-Series Powered Loudspeaker

HAZARDOUS AREA SOUNDERS AND POWERED LOUDSPEAKERS (ES)

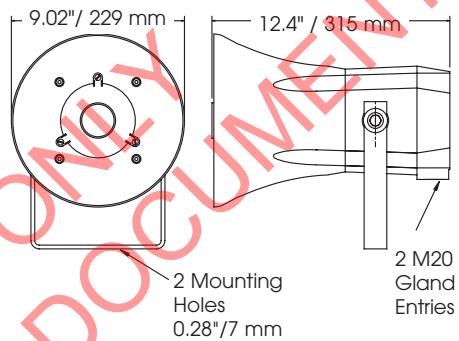
8W



15W



25W



SPECIFICATIONS

Operating Voltages:	24VDC, 110/120VAC, 220/240VAC	Termination:	For 1.5mm ² conductors
Factory Default Setting:	240VAC	Net Weight:	
Type:	8/15 Watt dual entry, 25 Watt dual entry	8W	3.0kg (6.6 lbs)
Material:	Aluminum Alloy LM6 (marine grade)	15W	3.2kg (7.1 lbs)
Colour:	Signal red 537 to BS381C (epoxy powder coated semi-gloss)	25W	6.4kg (14.1 lbs)
Mounting:	Stainless steel bracket (not painted)	Shipping Dimensions:	25 x 23 x x28cm ⁽¹⁾ 32 x 30 x 37cm ⁽²⁾
Output:		Certificate Number ¹ :	Baseefa03ATEX0688X, II 2 G EExd IIB T4...T6
8W Short Horn Series IIB	104dBA @ 1m (1kHz)	Baseefa03ATEX0689X, II 2 G EExd IIC T4...T6	
8W Short Horn Series IIC	100dBA @ 1m (1kHz)	Ingress Protection ¹ :	IP67
15W Series IIB	107dBA @ 1m (1kHz)	Ingress Protection ² :	IP66 and IP67
15W Series IIC	103dBA @ 1m (1kHz)	Certificate Number ² :	Nemko 05ATEX1036, II 2 G EExd IIB T4...T6
25W Series	116dBA @ 1m (1kHz)	¹ 8W/15W	
Cable Entries (bottom):	2 x M20	² 25W	
(Supplied with 1 x EEx stopping plug)		Notes:	Audio input user selectable. Available inputs are 0.8V, 1.5V and 2.7V.
Operating Temperature Range:	-20°C to +40°C (T6) -20°C to +55°C (T5) -20°C to +70°C (T4)		

HOW TO ORDER

- Contact Factory for Specification Assistance