



# Hazardous Area Sounder and Powered Loudspeaker

## Model ES Series Sounders and Powered Loudspeakers

### 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

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 <sup>1</sup> | 24VDC/120VAC/240VAC | 950mA/210mA/125mA | 8 watt           |
| ES1-112 <sup>1</sup> | 24VDC/120VAC/240VAC | 950mA/210mA/125mA | 15 watt          |
| ES4-120 <sup>1</sup> | 24VDC/120VAC/240VAC | 950mA/210mA/125mA | 25 watt          |
| ES1-114 <sup>2</sup> | 24VDC/120VAC/240VAC | 500mA/125mA/90mA  | 8 watt           |
| ES1-112 <sup>2</sup> | 24VDC/120VAC/240VAC | 500mA/125mA/90mA  | 15 watt          |
| ES5-120 <sup>2</sup> | 24VDC               | 1200mA            | 25 watt          |
| ES5-120 <sup>2</sup> | 120VAC              | 400mA             | 25 watt          |
| ES5-120 <sup>2</sup> | 240VAC              | 210mA             | 25 watt          |

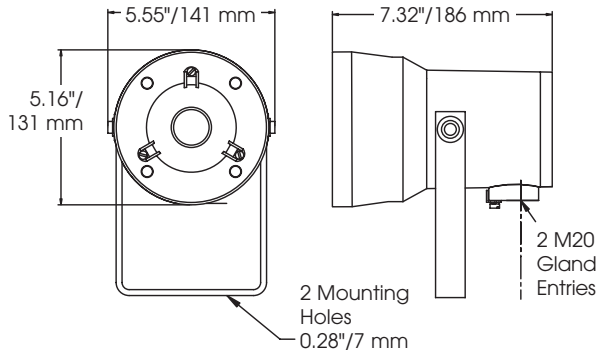
<sup>1</sup> ES-Series Sounder

<sup>2</sup> ES-Series Powered Loudspeaker

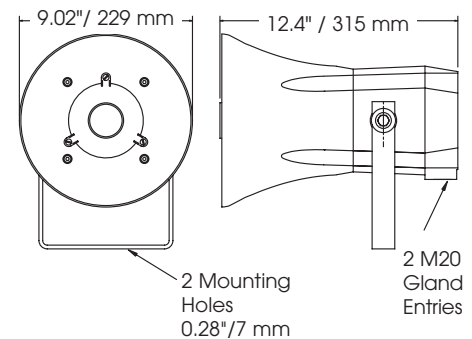


## HAZARDOUS AREA SOUNDERS AND POWERED LOUDSPEAKERS (ES)

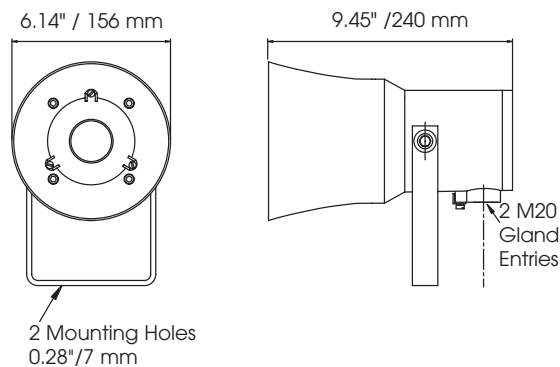
### 8W



### 25W



### 15W



## SPECIFICATIONS

|                                       |   |   |  |
|---------------------------------------|---|---|--|
| Operating Voltages:                   | 24VDC, 110/120VAC, 220/240VAC                                     | Termination:                                | For 1.5mm <sup>2</sup> 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<br>(epoxy powder coated semi-gloss)      | 25W   | 6.4kg (14.1 lbs)   |
| Mounting:                             | Stainless steel bracket (not painted)                             | Shipping Dimensions:                        | 25 x 23 x 28cm <sup>(1)</sup><br>32 x 30 x 37cm <sup>(2)</sup> |
| Output:                               |   | Certificate Number <sup>1</sup> :           |  |
| 8W Short Horn Series IIB              | 104dBa @ 1m (1kHz)  | Baseefa03ATEX0688X, II 2 G EExd IIB T4...T6 |  |
| 8W Short Horn Series IIC              | 100dBa @ 1m (1kHz)  | Baseefa03ATEX0689X, II 2 G EExd IIC T4...T6 |  |
| 15W Series IIB                        | 107dBa @ 1m (1kHz)  | Ingress Protection <sup>1</sup> :           | IP67   |
| 15W Series IIC                        | 103dBa @ 1m (1kHz)  | Ingress Protection <sup>2</sup> :           | IP66 and IP67  |
| 25W Series                            | 116dBa @ 1m (1kHz)  | Certificate Number <sup>2</sup> :           |  |
| Cable Entries (bottom):               | 2 x M20   | Nemko 05ATEX1036, II 2 G EExd IIB T4...T6   |  |
| (Supplied with 1 x EEx stopping plug) |   |   |  |
| Operating Temperature Range:          | -20°C to +40°C (T6)<br>-20°C to +55°C (T5)<br>-20°C to +70°C (T4) |   |  |

<sup>1</sup> 8W/15W

<sup>2</sup> 25W

**Notes:** Audio input user selectable.  
Available inputs are 0.8V, 1.5V and 2.7V.

## HOW TO ORDER

- Contact Factory for Specification Assistance