

# DSP 15 25W EExmNT (IIC)

## Explosion-proof Horn Speaker



### Features and Functions

- Explosion-proof for Zone 1, 2, 21 & 22
- Robust industrial technology
- Sturdy design
- Stainless steel bracket
- Degree of protection IP67
- Light weight

The explosion-proof horn speakers of the DSP 15 25W EExmNT (IIC) series are used together with the INDUSTRONIC communication and public address system. They are especially designed for use in hazardous and noisy areas. The connection cable is inserted via an Ex e cable gland. The power adjustment is carried out via different tapplings on the primary side of the 100 V transformer.

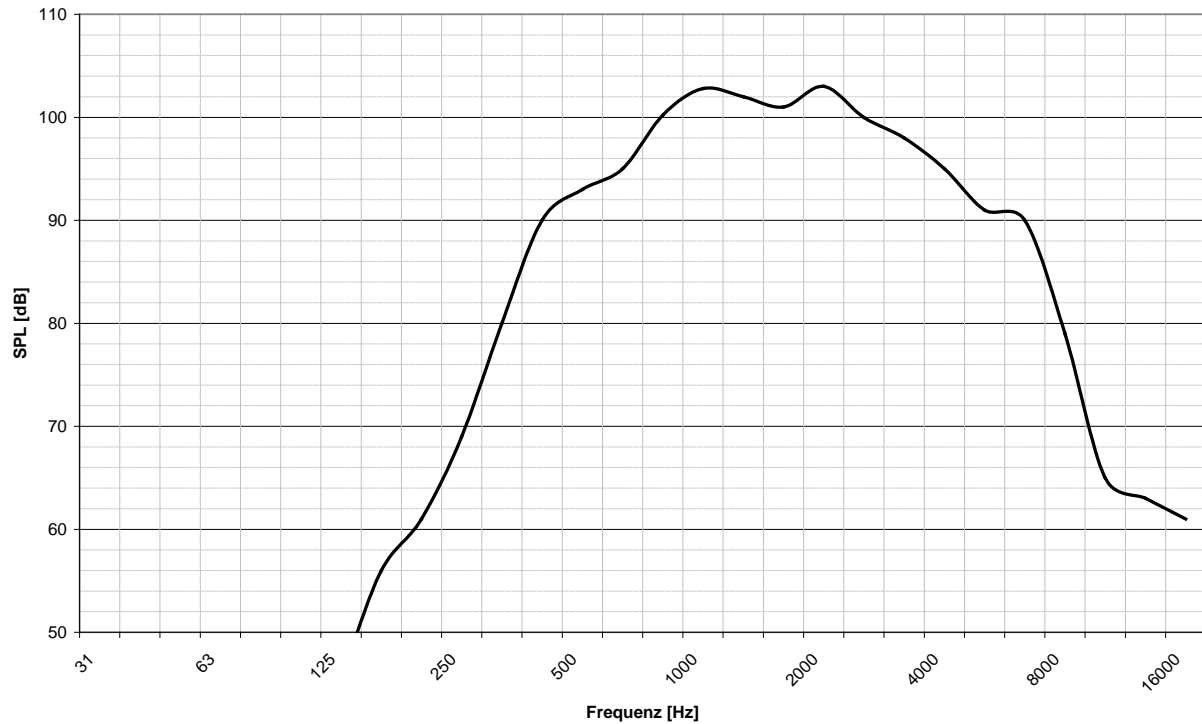
### Mechanical Data

|                                         |                                                  |
|-----------------------------------------|--------------------------------------------------|
| • Housing                               | Anti-static plastic                              |
| • Dimensions<br>width x height x length | 186 mm x 144 mm x 207 mm<br>(7.3" x 5.7" x 8.2") |
| • Cable entries                         | 2 x M20 x 1.5                                    |
| • Cable gland                           | 1 x M20                                          |
| • Connection                            | Terminals                                        |
| • Weight                                | Approx. 2.2 kg (approx. 4.9 lbs)                 |
| • Color                                 | Black                                            |
| • Mounting                              | Stainless steel bracket                          |

### Electrical Data

|                                  |                                                   |
|----------------------------------|---------------------------------------------------|
| • Nominal load                   | 25 W                                              |
| • Transformer                    | 100 V: 25 W / 15 W / 6.5 W / 5 W<br>2.5 W / 1.5 W |
| • Sound pressure level 1 W, 1 m  | 102 dB +/- 3 dB                                   |
| • Sound pressure level 25 W, 1 m | 115 dB +/- 3 dB                                   |
| • Frequency range                | 450 Hz to 6000 Hz                                 |
| • Dispersion -6 dB               | 1 kHz / 4 kHz: 105° / 35°                         |

### Frequency Diagram



### Measurement Conditions

Sound pressure level (SPL): 1 W / 1 m (3.3 ft)

Pink noise: 1/3 octave filter

### Sound Pressure Level Related to Distance

| P <sub>max</sub> : | Level (dB) at | (-6 dB)         | (-14 dB)        | (-20 dB)         | (-23 dB)          | (-26 dB)          | (-28 dB)          | (-29 dB)        | (-36 dB)          |
|--------------------|---------------|-----------------|-----------------|------------------|-------------------|-------------------|-------------------|-----------------|-------------------|
|                    | 25 W          | 1 m<br>(3.3 ft) | 2 m<br>(6.6 ft) | 5 m<br>(16.4 ft) | 10 m<br>(32.8 ft) | 15 m<br>(49.2 ft) | 20 m<br>(65.6 ft) | 25 m<br>(82 ft) | 30 m<br>(98.4 ft) |
|                    |               | 115             | 109             | 101              | 95                | 92                | 89                | 87              | 86                |

### Polar Diagram

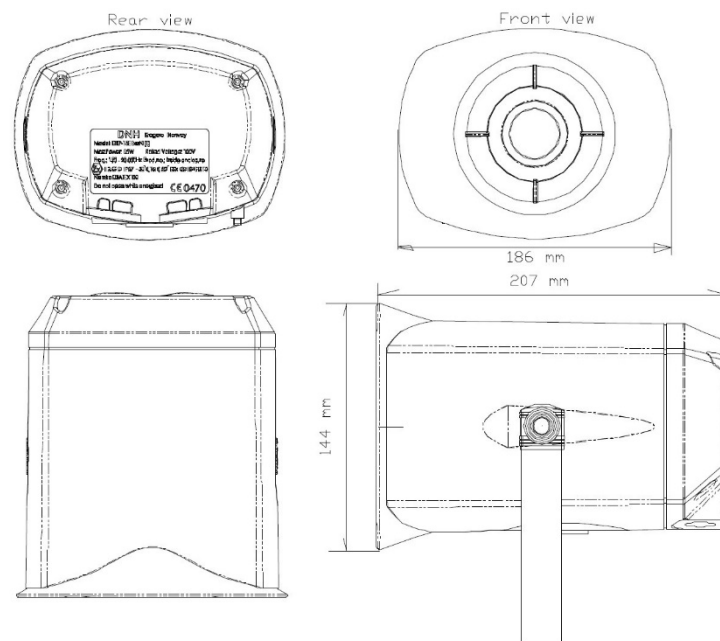
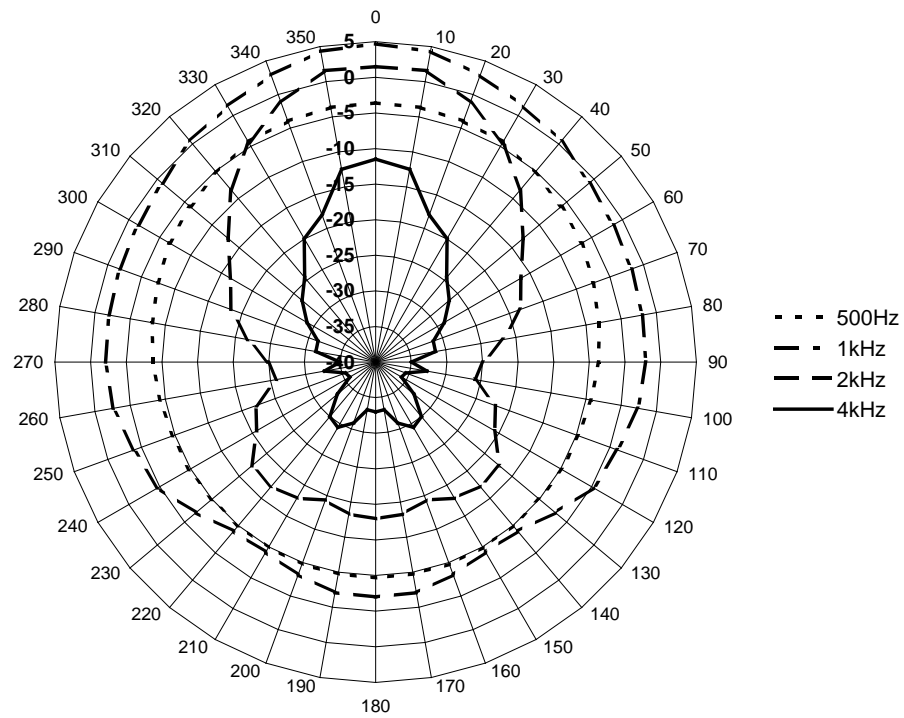


Fig. 1: Dimensional Drawing DSP 15 25W EExmNT (IIC)

| Environmental Requirements and Standards |  |                                                           |
|------------------------------------------|--|-----------------------------------------------------------|
| • Ambient temperature during operation   |  | -50°C to +60°C (-58 °F to +140 °F)                        |
| • Relative humidity (non-condensing)     |  | Max. 95 %                                                 |
| • Degree of Protection                   |  | IP67                                                      |
| • Approval                               |  | ATEX, GOST, CQST, IECEx, INMETRO                          |
| • Markings                               |  | Ex II 2G Ex d e mb IIC T4 Gb<br>Ex II 2D Ex tb IIIC T105° |

#### Order Data

#### Type Number

001-225-048

#### INDUSTRONIC®

Industrie-Electronic GmbH & Co. KG  
Carl-Jacob-Kolb-Weg 1  
97877 Wertheim / Germany

Tel.: +49 9342 871-0  
Fax: +49 9342 871-565

info@industronic.de  
www.industronic.com

Subject to technical modifications