

# DSP 15 EExmNT (IIB+H2)

## Explosion-proof Horn Speaker



### Features and Functions

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

The explosion-proof horn loudspeakers of the DSP 15 EExmNT (IIB+H2) series are used together with the INDUSTRONIC communication and public address system. They are especially designed for use in hazardous and noisy areas. Due to the light weight, the loudspeaker is suitable for use in offshore applications.

The connection cable is inserted via an Ex e cable gland. The power adjustment is carried out via different tapings on the primary side of the 100 V transformer.

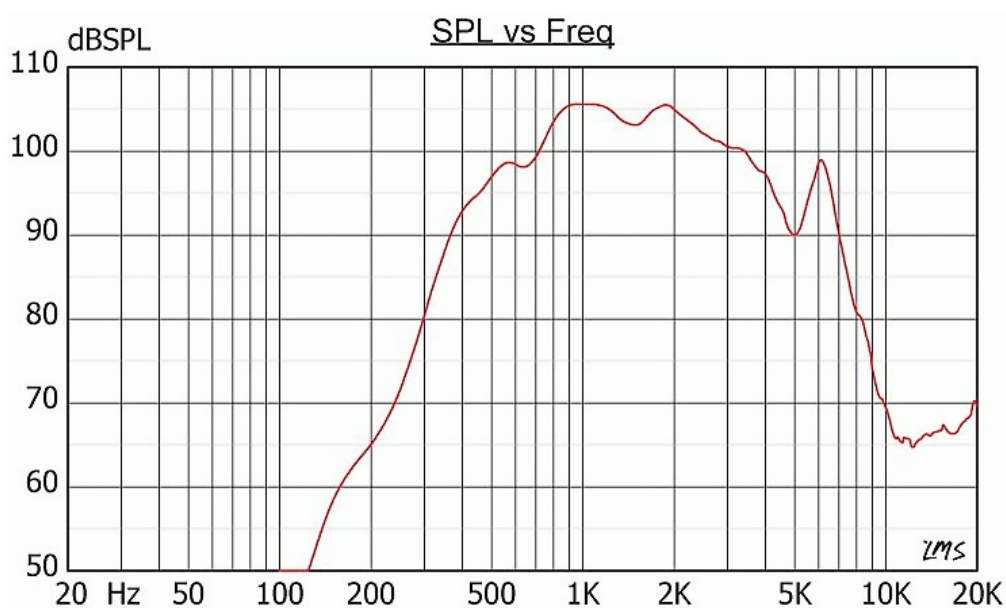
### Mechanical Data

• Housing	Anti-static plastic
• Dimensions width x height x length	186 mm x 144 mm x 207 mm (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 (5 lbs)
• Color	Black
• Mounting	Stainless steel bracket

### Electrical Data

• Nominal load	15 W
• Transformer	100 V; 15 W / 8 W / 4 W / 3 W / 1.5 W / 0.8 W
• Sound pressure level 1 W, 1 m	105 dB +/- 3 dB
• Sound pressure level 15 W, 1 m	116 dB +/- 3 dB
• Frequency range	380 Hz to 7000 Hz
• Dispersion -6 dB	1 kHz / 4 kHz: 200° / 50°

### Frequency Diagram



### Measurement Conditions

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

Pink noise: 1/3 octave filter

### Output Level Related to Distance

P <sub>max</sub> :	Level (dB) at	(-6dB)	(-14dB)	(-20dB)	(-23dB)	(-26dB)	(-28dB)	(-29dB)	(-36dB)	
	15 W	1 m (3,3 ft)	2 m (6,6 ft)	5 m (16,4 ft)	10 m (32,8 ft)	15 m (49,2 ft)	20 m (65,6 ft)	25 m (82 ft)	30 m (98,4 ft)	65 m (213,3 ft)
		116	110	102	96	93	90	88	87	80

## Polar Diagram

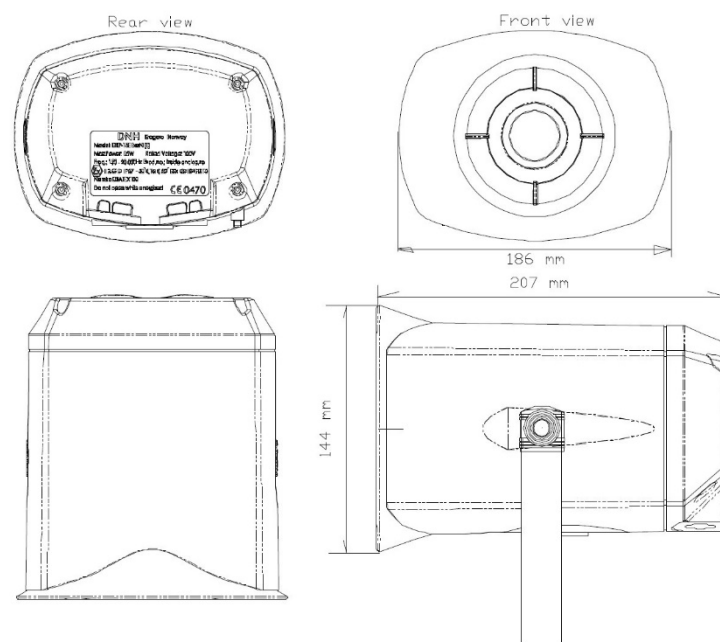
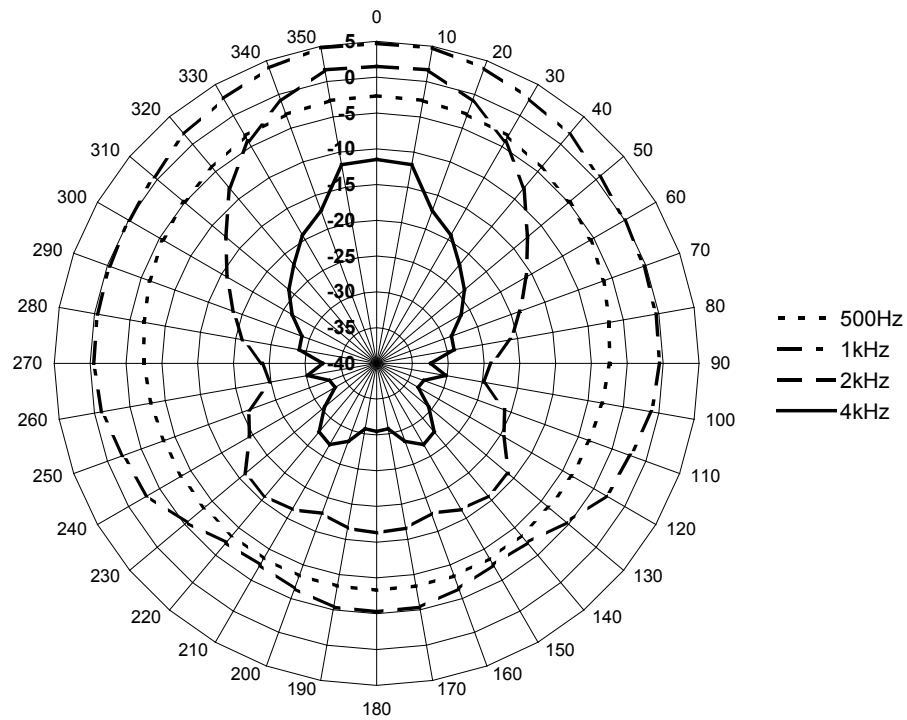


Figure 1: Dimensional Drawing DSP 15 EExmNT (IIB+H2)

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**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 IIB+H2 T4 Gb Ex II 2D, Ex tb IIIC T105°

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**Order Data**
**Type Number**


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001-215-022

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Subject to technical modifications