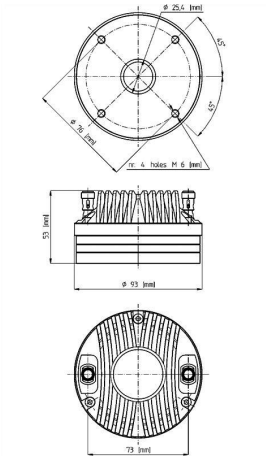
ND1085 8Ω

HF Drivers - 1.0 Inches



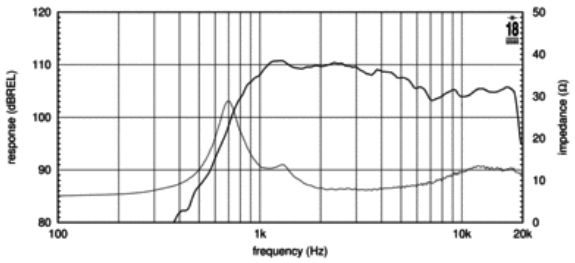
- 1 inch exit throat
- 109 dB 1W / 1m average sensitivity
- 80 Watt program power handling
- 44 mm (1 3/4 inch) edgewound aluminum voice coil
- PEN diaphragm for extended frequency response
- Proprietary phase plug design
- Neodymium ring magnet for excellent transient response
- Excellent thermal exchange

Eighteen Sound Srl
Via Botticelli 8 - 42124 Mancasale (RE) - ITALY - Ph. +39 0522 1861800 - Fax +39 0522 1861801 - info@eighteensound.it

ND1085 8Ω

HF Drivers - 1.0 Inches

The ND1085 1 inch exit neodymium high frequency compression driver has been designed for situations where the highest quality is required. Equipped with proprietary Phase Plug architecture, the ND1085 has been designed to give high level manufacturing consistency and a smooth coherent wavefront at the horn entrance across the whole working frequency range. The phase plug short openings and high flare rate value assure low distortion, showing remarkable improvements in mid-high frequency reproduction. The diaphragm is made with a proprietary treated Polyethylene material (PEN). Thanks to its superior dimensional stability up to 160°C, PEN is able to maintain constant behavior during its whole working life. Moreover, thanks to its high value of elasticity modulus (50% higher than Mylar and 100% higher than polyimide), it is capable of superior transient and intermodulation distortion response. The flat suspension shape has been designed to maintain low stiffness and low mid band distortion and response. The edge-wound aluminum voice coil, wound on custom treated Nomex, completes the diaphragm assembly. Nomex shows a 30% higher value of tensile elongation at a working operative temperature (200°C) when compared to Kapton. Moreover, this proprietary treated former material is also suitable for use in high moisture content environments. The powerful neodymium magnet assembly has been designed to obtain 20 KGauss in the gap giving major benefits in transient response. A copper ring on the pole piece reduces inductance above 10 kHz, improving phase and impedance linearization. The custom designed O-ring creates a tight seal between the plate and the cover assuring air chamber loading. Excellent heat dissipation and thermal exchange are guaranteed by the direct contact between the magnetic structure and the aluminum cover which leads to a lower power compression value. The ability to perform properly under inclement weather conditions is a key feature of the Eighteen Sound philosophy. Hence, in addition, a special treatment has been applied to the magnet and the top and back plates of the magnetic structure making the ND1085 driver more resistant to the corrosive effects of salts and oxidization.



ND1085 8Ω

HF Drivers - 1.0 Inches

SPECIFICATIONS[1]

Throat Diameter	25 mm (1.0 in)
Nominal Impedance	8 Ω
Minimum Impedance	7.8 Ω
Nominal Power Handling[2]	40 W
Continuous Power Handling[3]	80 W
Sensitivity[4]	109.0 dB
Frequency Range	1.6 - 20.0 kHz
Recommended Crossover[5]	1.6 kHz
Voice Coil Diameter	44 mm (1.75 in)
Winding Material	Aluminum
Diaphragm Material	Treated polyethylene
Flux Density	2.0 T
Magnet Material	Neodymium

MOUNTING AND SHIPPING INFO

Overall Diameter	92 mm (3.62 in)
Depth	53 mm (2.09 in)
Net Weight	1.1 kg (2.43 lb)
Shipping Weight	1.3 kg (2.87 lb)
Shipping Box	140x121x64 mm (5.51x4.76x2.52 in)

1. Driver mounted on Eighteen Sound XR1064 horn
2. 2 hour test made with continuous pink noise signal within the range from the recommended crossover frequency to 20 kHz. Power calculated on rated nominal impedance.
3. Power on Continuous Program is defined as 3 dB greater than the Nominal rating.
4. Applied RMS Voltage is set to 2.83 V for 8 ohms Nominal Impedance.
5. 12 dB/oct. or higher slope high-pass filter.

Eighteen Sound Srl
Via Botticelli 8 - 42124 Mancasale (RE) - ITALY - Ph. +39 0522 1861800 - Fax +39 0522 1861801 - info@eighteensound.it