

HD2020

HIGH FREQUENCY DRIVER

KeyFeatures

- Best performance to price 2" exit driver on the market
- 108 dB 1W / 1m average sensitivity
- 2 inch throat exit
- 2.4 inch edge-wound CCAW aluminum voice coil
- 140 W program power handling
- Pure Titanium diaphragm assembly
- Proprietary phase plug design
- HF copper sleeve for reduced distortion and increased output

Description

The HD2020 2 inch exit high frequency compression driver has been designed for use in high quality audio systems.

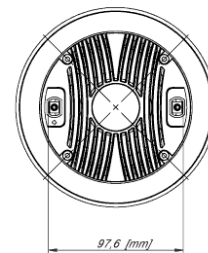
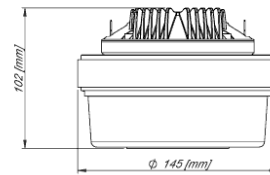
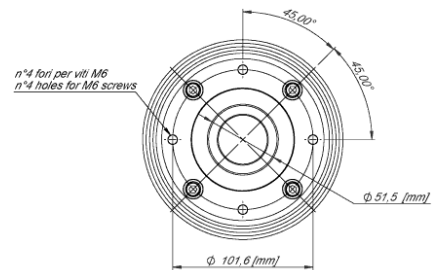
The titanium diaphragm is produced in-house and has been developed to assure unmatched transient response. A proprietary treated Nomex former with edge-wound copper-clad aluminum wire (CCA) 60mm voice coil completes diaphragm assembly. It has been made by joining the proprietary-treated Nomex former directly to the titanium dome through its upper bend edge. In comparison with a usual straight former joint, the driver design assures extended frequency energy transfer for improved response linearity and unparalleled reliability. This feature maintains proper motion control of the dome in real working conditions. Due to its physical properties, the proprietary-treated Nomex former shows a 30% higher value of tensile elongation at working operative temperatures (200°C) when compared to Kapton. Moreover, this material is suitable to work also in higher moisture-content environments.

Equipped with Proprietary Phase Plug 3P architecture, the HD2020 has been designed to give a smooth coherent wave front at the horn entrance in all working frequency ranges with a high level manufacturing consistency. The phase plug with its short openings and high flare rate, assures low distortion with excellent mid-high frequency reproduction.

The HD2020 powerful ceramic magnet assembly has been designed to obtain 16 kGauss in the gap within a compact ferrite motor structure. The motor structure is equipped with copper ring on the pole piece, reducing inductance effect and distortion.

Models

| Model | Code | Info |
|--------|------------|------|
| HD2020 | 0423T8H220 | |



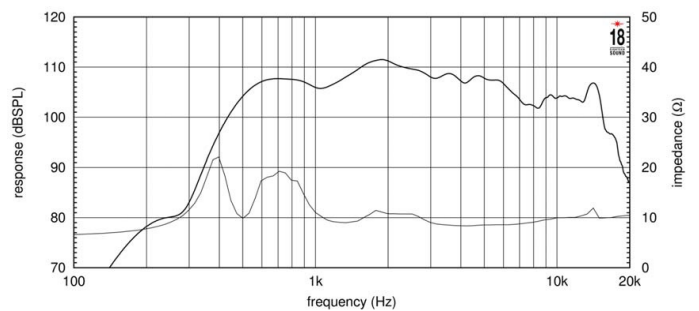
Mounting information

| | |
|-------------------------------|------------------------------------|
| Overall diameter | 145 mm (6 in) |
| N. of mounting holes and bolt | 4xM6 holes at 90° Ø 102 mm (4 in) |
| Bolt circle diameter | 102 mm (4,02 in) |
| Total depth | 100 mm (3.94 in) |
| Net weight | 3.2 kg (7.05 lb) |
| Shipping weight | 3 Kg (6.6 lb) |
| Packaging Dimensions | 188x170x120 mm (7.40x6.69x4.72 in) |

General Specifications HF

| | |
|-----------------------------|----------------------------|
| Throat Diameter | 35,5 mm (1,4 in) |
| Rated Impedance | 8 Ohm |
| D.C. Resistance | 5,9 Ohm |
| Minimum Impedance | 8,2 Ohm at 4000 Hz |
| Continuous Power | 70W |
| Program power (8) | 140W |
| Sensitivity (9) | 108 dB |
| Frequency Range | 1000 Hz - 20 kHz |
| Min. Xover Frequency | 1200 Hz |
| Diaphragm material | Titanium |
| Voice Coil Diameter | 61mm (2,4 in) |
| Voice Coil winding material | Edge-wound aluminum Ribbon |
| Magnet material | Ferrite |
| Flux Density | 1,6 T |

FREQUENCY RESPONSE CURVE



FREQUENCY RESPONSE MEASURED WITH 2.83 V INPUT ON AXIS AT 1 METER DISTANCE FROM THROAT OF XR2064 HORN. IMPEDENCE MEASURED ON SAME HORN.

Notes

- 1) Continuous Power is defined as a level that is 3 dB greater than the one measured with the new AES2-2012 standard, using continuous pink noise having 12 dB crest factor for 2 hours, mounted on XR2064 horn.

- 2) Sensitivity represent the averaged value of acoustic output as measured on the central forward axis of a XR2064 horn, at a distance 1 m from horn mouth, when connected to 3 V sine wave swept between 1000-4000 Hz.

- 3) Minimum crossover frequency suggested with 4 order high pass filter. By using a 2nd order filter (12 dB / oct) 1.5 kHz is minimum recommended crossover frequency.
