



1660NdM

| | |
|-------------------------|---------------|
| Nominal Diameter | 6.5" / 17 cm |
| Rated Impedance | 8 Ω |
| Sensitivity | 96 dB SPL |
| Power Handling Capacity | 250 W AES |
| SPL max (continuous) | 117 dB SPL |
| Usable frequency range | 300 - 5000 Hz |
| Speaker net mass | 1.50 kg |

6.5" midrange driver



Architecture highlights :

- Midrange unit with critical damping diaphragm
- Ultra light vented CCAR voice coil
- Natural convection Intercooler System
- High efficiency ultra low THD neodymium magnet system
- Low profile with flat motor

Motor architecture

| | | |
|---------------------|----|----|
| Magnet material | - | Nd |
| Voice coil diameter | mm | 51 |
| Voice coil length | mm | 11 |
| Air gap height | mm | 8 |

Typical characteristics

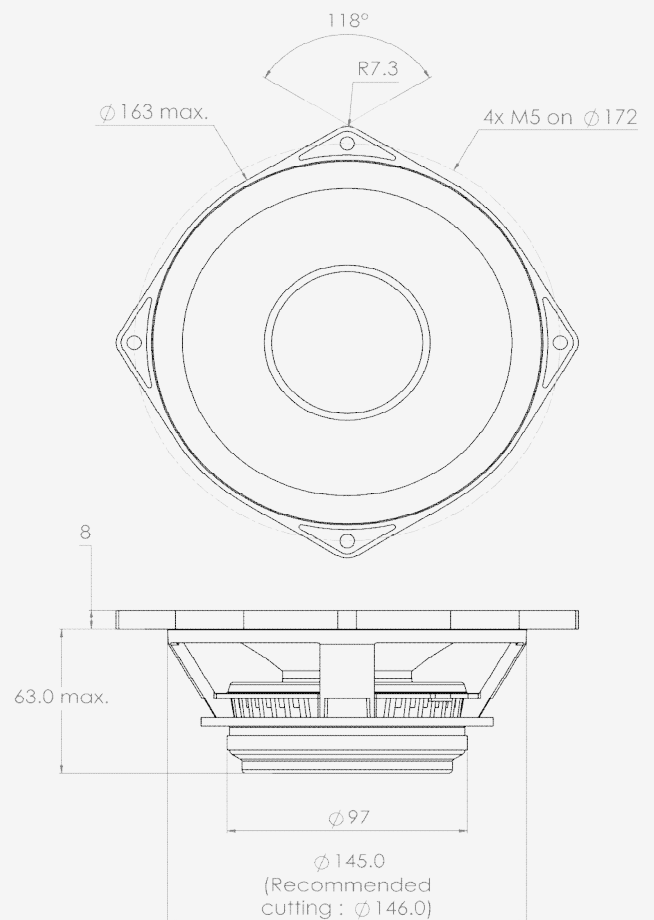
| | | | |
|--------------------------------|--------------------|--------|------------|
| Rated impedance | Z | Ω | 8 |
| Half space sensitivity (1W@1m) | - | dB SPL | 96.0 |
| Usable freq. range | - | Hz | 300 - 5000 |
| Power handling capacity (AES) | - | W | 250 |
| Max Sound Pressure Level | SPL _{max} | dB SPL | 117 |
| Min. impedance modulus | Z _{min} | Ω@Hz | 6.0@650 |
| Voice-coil inductance @ 1kHz | Le _{1k} | mH | 0.746 |
| Voice-coil inductance @ 10kHz | Le _{10k} | mH | 0.317 |
| BL product | BL | N/A | 12.5 |
| Moving mass | M _{ms} | kg | 0.0130 |

Thiele-Small parameters

| | | | |
|----------------------------|---|----------------------------------|------------|
| Resonance frequency | F _s | Hz | 125 (±25) |
| DC Resistance | Re | Ω | 5.2 (±0.5) |
| Mechanical quality factor | Q _{ms} | 1 | 4.08 |
| Electrical quality factor | Q _{es} | 1 | 0.34 |
| Total quality factor | Q _{ts} | 1 | 0.31 |
| Suspension compliance | C _{ms} | 10 ⁻⁶ .m/N | 120 |
| Effective piston area | S _d | m ² | 0.0150 |
| Equivalent Cas air load | V _{as} | m ³ | 0.0040 |
| Max linear excursion | X _{max} | mm | ± 2.5 |
| Linear displacement volume | V _d | 10 ⁻³ .m ³ | 0.0374 |
| Reference efficiency | η ₀ | % | 2.2 |
| Unity load volume | V _{as} .Q _{ts} ² | 10 ⁻³ .m ³ | 0.4 |

Absolute maximum ratings

| | | | |
|-------------------------------|------------------|----|------------|
| Short term max. input voltage | V _{max} | V | 90 |
| Max. excursion before damage | X _{dam} | mm | ± 3.0 |
| Ambient operating temperature | T _a | °C | -10 to +50 |
| Storage temperature | | °C | -20 to +70 |
| Environmental withstanding | | | tropical |



Mounting information

| | | |
|--|----------------------------------|-----------------|
| Air volume occupied by the driver | 10 ⁻³ .m ³ | 0.40 |
| Speaker net mass | kg | 1.50 |
| Baffle cut-out diameter (front mounting) | mm | 146.0 |
| Bolt number & Metric diameter | - | 4x M5 |
| Bolt circle diameter | mm | 172.0 |
| Max overall dimension (on ears) | mm | 187.5 |
| Max overall dimension (out of ears) | mm | 162.5 |
| Flange height | mm | 8.0 |
| Max magnet diameter | mm | 97.5 |
| Max depth (front mounting) | mm | 63.0 |
| Recommended reflex box | Lts / Hz | - |
| Electrical connection | | 6.35x0.8 FASTON |

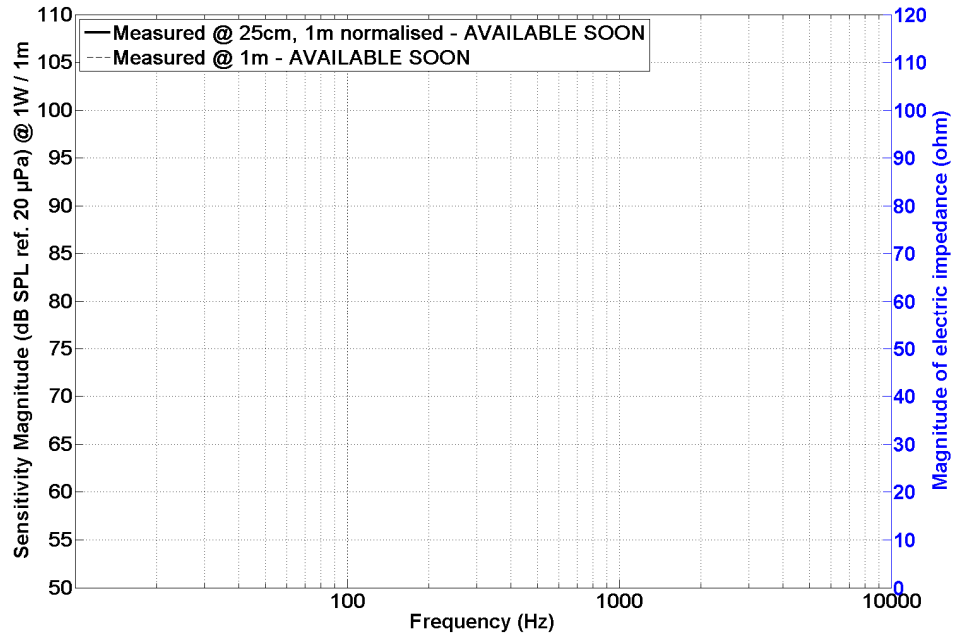


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6.5" midrange driver

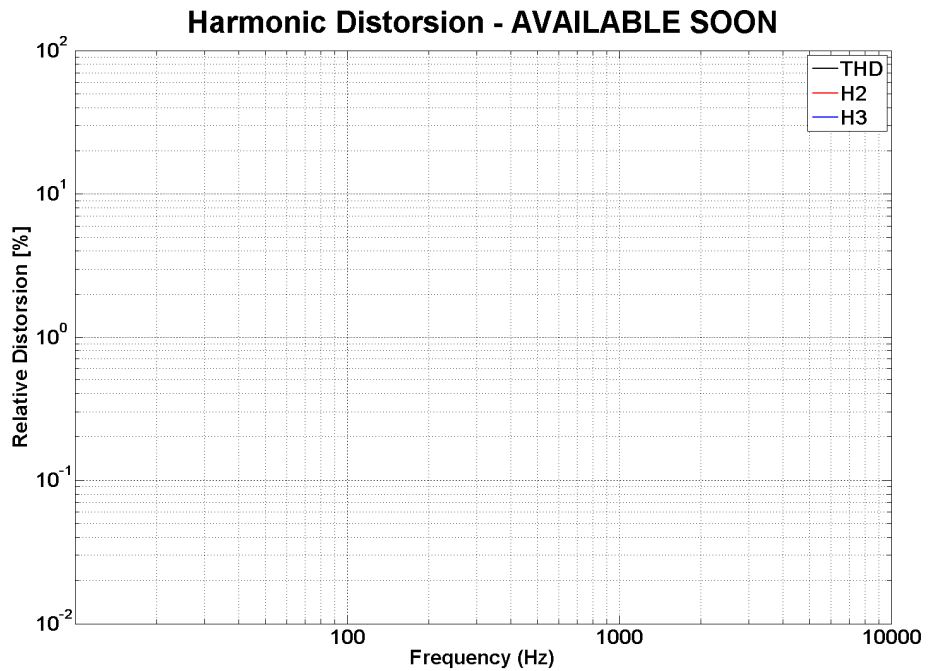
SPL curves measured on CEI standard baffle :

- . at 25 cm, normalised 1 m
- . at 1 m for reference
- . Graph amplitude = 60 dB (PHL Audio standard)



HD curve measured on CEI standard baffle :

- . at 1 meter
- . at power = $P_{AES} / 4$
- . Graph amplitude 0.01 % to 100 % (PHL Audio standard for $P_{AES}/4$)



Non linear curves measured thanks to Klippel software and hardware, in free air

