



## 970Nd

## 5 inches low-mid coaxial driver

|                         |                |
|-------------------------|----------------|
| Nominal Diameter        | 5" / 13 cm     |
| Rated Impedance         | 8              |
| Sensitivity             | 90 dB SPL      |
| Power Handling Capacity | 120 W AES      |
| SPL max (continuous)    | 108 dB SPL     |
| Usable frequency range  | 60 - 16 000 Hz |
| Speaker net mass        | 1.04 kg        |



### Architecture highlights :

- Time aligned coaxial HF driver
- Noiseless natural convection Intercooling System
- Neodymium magnet system with symmetric BL(x) and Le(x)
- Long excursion suspension with linear behavior for large signal
- Lightweight basket

### Motor architecture

|                     |    |    |
|---------------------|----|----|
| Magnet material     | -  | Nd |
| Voice coil diameter | mm | 38 |
| Voice coil length   | mm | 16 |
| Air gap height      | mm | 6  |

### Typical characteristics

|                                  |                    |              |           |
|----------------------------------|--------------------|--------------|-----------|
| Rated impedance                  | Z                  | $\Omega$     | 8         |
| Half space sensitivity (1W@1m) - |                    | dB SPL       | 90.0      |
| Usable freq. range               | -                  | Hz           | 60 - 3000 |
| Power handling capacity (AES) -  |                    | W            | 120       |
| Max Sound Pressure Level         | SPL <sub>max</sub> | dB SPL       | 108       |
| Min. impedance modulus           | Z <sub>min</sub>   | $\Omega$ @Hz | 6.2@550   |
| Voice-coil inductance @ 1kHz     | Le <sub>1k</sub>   | mH           | 0.346     |
| Voice-coil inductance @ 10kHz    | Le <sub>10k</sub>  | mH           | 0.212     |
| BL product                       | BL                 | N/A          | 8.1       |
| Moving mass                      | Mms                | kg           | 0.0107    |

### Thiele-Small parameters

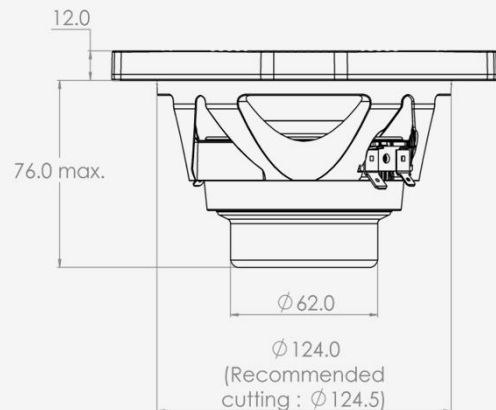
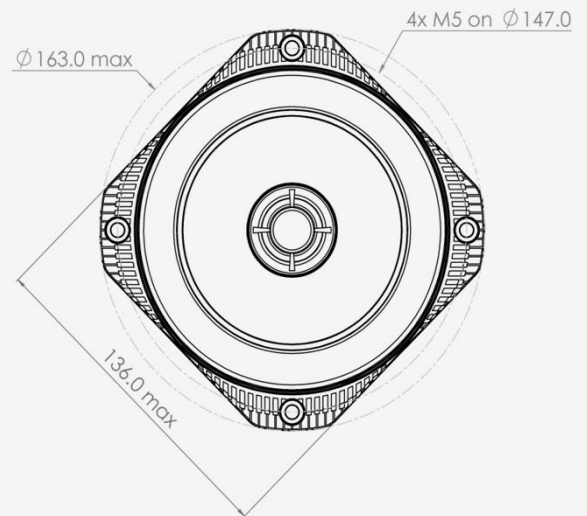
|                            |                      |                           |                   |
|----------------------------|----------------------|---------------------------|-------------------|
| Resonance frequency        | Fs                   | Hz                        | 67 ( $\pm 10$ )   |
| DC Resistance              | Re                   | $\Omega$                  | 5.7 ( $\pm 0.6$ ) |
| Mechanical quality factor  | Qms                  | 1                         | 3.75              |
| Electrical quality factor  | Qes                  | 1                         | 0.39              |
| Total quality factor       | Qts                  | 1                         | 0.35              |
| Suspension compliance      | Cms                  | $10^{-6}$ .m/N            | 530               |
| Effective piston area      | Sd                   | m <sup>2</sup>            | 0.0092            |
| Equivalent Cas air load    | Vas                  | m <sup>3</sup>            | 0.0062            |
| Max linear excursion       | Xmax                 | mm                        | $\pm 6.5$         |
| Linear displacement volume | Vd                   | $10^{-3}$ .m <sup>3</sup> | 0.0595            |
| Reference efficiency       | $\eta_0$             | %                         | 0.5               |
| Unity load volume          | Vas.Qts <sup>2</sup> | $10^{-3}$ .m <sup>3</sup> | 0.8               |

### Absolute maximum ratings

|                               |      |                    |            |
|-------------------------------|------|--------------------|------------|
| Short term max. input voltage | Vmax | V                  | 60         |
| Max.excursion before damage   | Xdam | mm                 | $\pm 12.0$ |
| Ambient operating temperature | Ta   | $^{\circ}\text{C}$ | -10 to +50 |
| Storage temperature           |      | $^{\circ}\text{C}$ | -20 to +70 |
| Environmental withstanding    |      |                    | Tropical   |

### Coaxially mounted HF Unit

|                                  |   |        |                |
|----------------------------------|---|--------|----------------|
| Rated impedance                  | Z | W      | 4              |
| Half space sensitivity (1W@1m) - |   | dB SPL | 97.0           |
| Usable freq. range               | - | Hz     | 2 000 - 16 000 |
| Power handling capacity (AES) -  |   | W      | 30             |



### Mounting information

|  |                           |                           |
|--|---------------------------|---------------------------|
| Air volume occupied by the driver        | $10^{-3}$ .m <sup>3</sup> | 0.18                      |
| Speaker net mass                         | kg                        | 1.0                       |
| Baffle cut-out diameter (front mounting) | mm                        | 124.5                     |
| Bolt number & Metric diameter            | -                         | 4x M5                     |
| Bolt circle diameter                     | mm                        | 147.0                     |
| Max overall dimension (on ears)          | mm                        | 163.0                     |
| Max overall dimension (out of ears)      | mm                        | 136.0                     |
| Flange height                            | mm                        | 12.0                      |
| Max magnet diameter                      | mm                        | -                         |
| Max depth (front mounting)               | mm                        | 76.0                      |
| Recommended reflex box                   | Lts / Hz                  | 8L / 60Hz                 |
| Electrical connection                    |                           | 6.35x0.8 + 4.8x0.5 FASTON |