



# 970

# 5 inches low-mid coaxial driver

Nominal Diameter	<b>5" / 13cm</b>
Rated Impedance	<b>8 Ω</b>
Half space sensitivity (1W@1m)	<b>90 dB SPL</b>
Power Handling Capacity	<b>120 W AES</b>
SPL max (continuous)	<b>107 dB SPL</b>
Usable frequency range	<b>60 - 16000 Hz</b>
Speaker net mass	<b>2.08 kg</b>



### Architecture Highlights

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

### Motor architecture

Magnet material	-	<b>Fe</b>
Voice coil diameter	mm	<b>38</b>
Voice coil length	mm	<b>16</b>
Air gap height	mm	<b>6</b>

### Typical characteristics

Rated impedance	Z	Ω	<b>8</b>
Half space sensitivity (1W@1m)	-	dB SPL	<b>90.0</b>
Usable freq. range	-	Hz	<b>60 - 3000</b>
Power handling capacity (AES)	-	W	<b>120</b>
Max Sound Pressure Level	SPLmax	dB SPL	<b>107</b>
Min. impedance modulus	Zmin	Ω@Hz	<b>6.2@550</b>
Voice-coil inductance @ 1kHz	Le1k	mH	<b>0.346</b>
Voice-coil inductance @ 10kHz	Le10k	mH	<b>0.212</b>
BL product	BL	N/A	<b>8.0</b>
Moving mass	Mms	kg	<b>0.011</b>

### Thiele-Small parameters

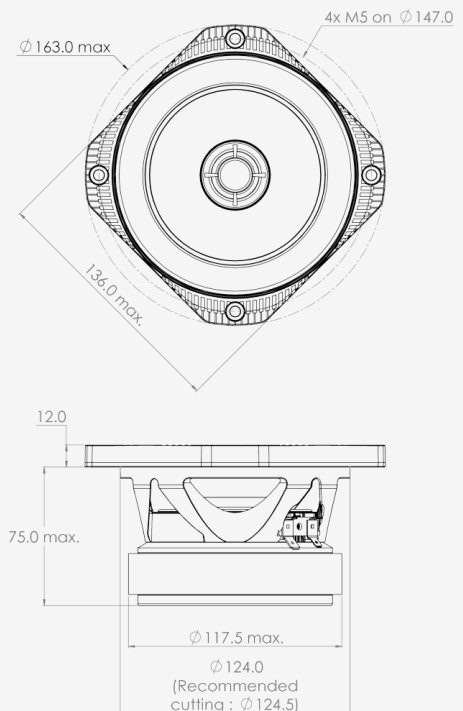
Resonance frequency	Fs	Hz	<b>67 (±10)</b>
DC Resistance	Re	Ω	<b>5.7 (±0.6)</b>
Mechanical quality factor	Qms	1	<b>3.75</b>
Electrical quality factor	Qes	1	<b>0.40</b>
Total quality factor	Qts	1	<b>0.36</b>
Suspension compliance	Cms	10 <sup>-6</sup> .m/N	<b>530</b>
Effective piston area	Sd	m <sup>2</sup>	<b>0.0092</b>
Equivalent Cas air load	Vas	m <sup>3</sup>	<b>0.0062</b>
Max linear excursion	Xmax	mm	<b>± 6.5</b>
Linear displacement volume	Vd	10 <sup>-3</sup> .m <sup>3</sup>	<b>0.0595</b>
Reference efficiency	H	%	<b>0.45</b>
Unity load volume	Vas.Qts <sup>2</sup>	10 <sup>-3</sup> .m <sup>3</sup>	<b>0.8</b>

### Absolute maximum ratings

Short term max. input voltage	Vmax	V	<b>60</b>
Max.excursion before damage	Xdam	mm	<b>± 12</b>
Ambient operating temperature	Ta	°C	<b>-10 to +50</b>
Storage temperature		°C	<b>-20 to +70</b>
Environmental withstanding			<b>Tropical</b>

### Coaxially mounted HF Unit

HF Rated impedance	Z	W	<b>4</b>
HF Half space sensitivity (1W@1m)	-	dB SPL	<b>97</b>
HF Usable freq. range	-	Hz	<b>2000 - 16000</b>
HF Power handling capacity (AES)	-	W	<b>30</b>



### Application information

Air volume occupied by the driver	10 <sup>-3</sup> .m <sup>3</sup>	<b>0.18</b>
Speaker net mass	kg	<b>2.08</b>
Baffle cut-out diameter (front mounting)	mm	<b>124.5</b>
Bolt number & Metric diameter	-	<b>4x M5</b>
Bolt circle diameter	mm	<b>147.0</b>
Max overall dimension (on ears)	mm	<b>163.0</b>
Max overall dimension (out of ears)	mm	<b>136.0</b>
Flange height	mm	<b>12.5</b>
Max magnet diameter	mm	<b>-</b>
Max depth (front mounting)	mm	<b>76.0</b>
Recommended reflex box	Lts / Hz	<b>8L / 60Hz</b>
Electrical connection	-	<b>6.35x0.8 + 4.8x0.5</b>

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