



# 3411

## 10 inches bass driver

Nominal Diameter	<b>10" / 25cm</b>
Rated Impedance	<b>8 Ω</b>
Half space sensitivity (1W@1m)	<b>94 dB SPL</b>
Power Handling Capacity	<b>400 W AES</b>
SPL max (continuous)	<b>116 dB SPL</b>
Usable frequency range	<b>35 - 2000 Hz</b>
Speaker net mass	<b>6.8 kg</b>



### Architecture Highlights

- Noiseless natural convection Intercooling System
- Ferrite magnet system with symmetric BL(x) and Le(x)
- Dual side coated diaphragm
- High excursion 24.0 mm winding voice coil
- Linear BL(x) on +/-6mm

### Motor architecture

Magnet material	-	<b>Fe</b>
Voice coil diameter	mm	<b>64</b>
Voice coil length	mm	<b>24</b>
Air gap height	mm	<b>9</b>

### Typical characteristics

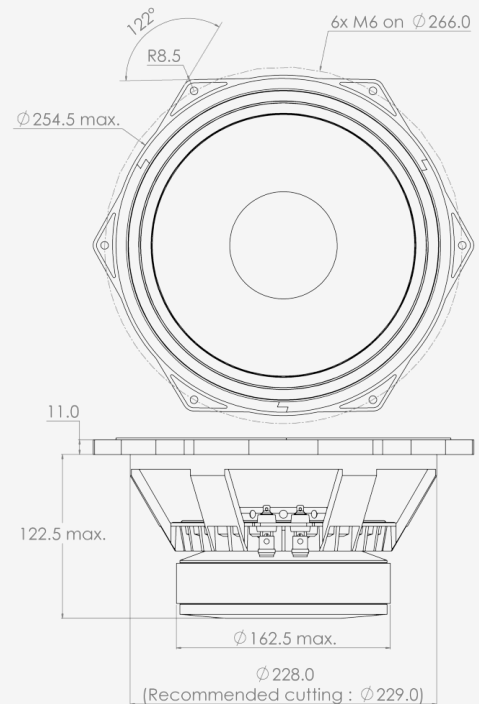
Rated impedance	Z	Ω	<b>8</b>
Half space sensitivity (1W@1m)	-	dB SPL	<b>94.0</b>
Usable freq. range	-	HZ	<b>35 - 2000</b>
Power handling capacity (AES)	-	W	<b>400</b>
Max Sound Pressure Level	SPLmax	dB SPL	<b>116</b>
Min. impedance modulus	Zmin	Ω@Hz	<b>7.0@230</b>
Voice-coil inductance @ 1kHz	Le1k	mH	<b>1.507</b>
Voice-coil inductance @ 10kHz	Le10k	mH	<b>0.638</b>
BL product	BL	N/A	<b>20.2</b>
Moving mass	Mms	kg	<b>0.058</b>

### Thiele-Small parameters

Resonance frequency	Fs	Hz	<b>47 (±7)</b>
DC Resistance	Re	Ω	<b>5.6 (±0.6)</b>
Mechanical quality factor	Qms	1	<b>5.53</b>
Electrical quality factor	Qes	1	<b>0.24</b>
Total quality factor	Qts	1	<b>0.23</b>
Suspension compliance	Cms	10 <sup>-6</sup> .m/N	<b>200</b>
Effective piston area	Sd	m <sup>2</sup>	<b>0.0356</b>
Equivalent Cas air load	Vas	m <sup>3</sup>	<b>0.0351</b>
Max linear excursion	Xmax	mm	<b>± 8.0</b>
Linear displacement volume	Vd	10 <sup>-3</sup> .m <sup>3</sup>	<b>0.2851</b>
Reference efficiency	H	%	<b>1.5</b>
Unity load volume	Vas.Qts <sup>2</sup>	10 <sup>-3</sup> .m <sup>3</sup>	<b>1.8</b>

### Absolute maximum ratings

Short term max. input voltage	Vmax	V	<b>115</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>



### Application information

Air volume occupied by the driver	10 <sup>-3</sup> .m <sup>3</sup>	<b>1.7</b>
Speaker net mass	kg	<b>6.8</b>
Baffle cut-out diameter (front mounting)	mm	<b>229.0</b>
Bolt number & Metric diameter	-	<b>6x M5</b>
Bolt circle diameter	mm	<b>266.0</b>
Max overall dimension (on ears)	mm	<b>283.5</b>
Max overall dimension (out of ears)	mm	<b>254.5</b>
Flange height	mm	<b>11.0</b>
Max magnet diameter	mm	<b>162.5</b>
Max depth (front mounting)	mm	<b>122.5</b>
Recommended reflex box	Lts / Hz	<b>15L / 50Hz</b>
Electrical connection	-	<b>Ø4 mm Push buttons</b>