



# 7221Nd

Nominal Diameter	<b>18" / 46cm</b>
Rated Impedance	<b>8 Ω</b>
Half space sensitivity (1W@1m)	<b>96.5 dB SPL</b>
Power Handling Capacity	<b>1000 W AES</b>
SPL max (continuous)	<b>124 dB SPL</b>
Usable frequency range	<b>25 - 800 Hz</b>
Speaker net mass	<b>7.4 kg</b>

## 18 inches bass driver



### Architecture Highlights

- Natural convection Intercooling system for noiseless sound reproduction
- Neodymium magnet system with symmetric BL(x) and Le(x) characteristics
- Both sides coated curvilinear cone (Tropical withstanding)
- Heavy duty long excursion suspension with linear behavior for large signal

### Motor architecture

Magnet material	-	<b>Nd</b>
Voice coil diameter	mm	<b>101</b>
Voice coil length	mm	<b>25</b>
Air gap height	mm	<b>10</b>

### Typical characteristics

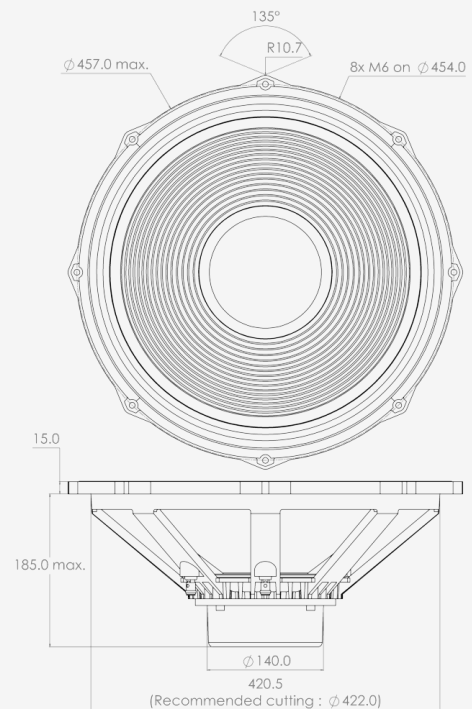
Rated impedance	Z	Ω	<b>8</b>
Half space sensitivity (1W@1m)	-	dB SPL	<b>96.5</b>
Usable freq. range	-	HZ	<b>25 - 800</b>
Power handling capacity (AES)	-	W	<b>1000</b>
Max Sound Pressure Level	SPLmax	dB SPL	<b>124</b>
Min. impedance modulus	Zmin	Ω@Hz	<b>6.6@190</b>
Voice-coil inductance @ 1kHz	Le1k	mH	<b>1.686</b>
Voice-coil inductance @ 10kHz	Le10k	mH	<b>0.729</b>
BL product	BL	N/A	<b>28.0</b>
Moving mass	Mms	kg	<b>0.217</b>

### Thiele-Small parameters

Resonance frequency	Fs	Hz	<b>34 (±5)</b>
DC Resistance	Re	Ω	<b>5.2 (±0.5)</b>
Mechanical quality factor	Qms	1	<b>5.79</b>
Electrical quality factor	Qes	1	<b>0.31</b>
Total quality factor	Qts	1	<b>0.29</b>
Suspension compliance	Cms	10 <sup>-6</sup> .m/N	<b>100</b>
Effective piston area	Sd	m <sup>2</sup>	<b>0.1250</b>
Equivalent Cas air load	Vas	m <sup>3</sup>	<b>0.2210</b>
Max linear excursion	Xmax	mm	<b>± 10.0</b>
Linear displacement volume	Vd	10 <sup>-3</sup> .m <sup>3</sup>	<b>1.2504</b>
Reference efficiency	H	%	<b>2.7</b>
Unity load volume	Vas.Qts <sup>2</sup>	10 <sup>-3</sup> .m <sup>3</sup>	<b>18.8</b>

### Absolute maximum ratings

Short term max. input voltage	Vmax	V	<b>180</b>
Max.excursion before damage	Xdam	mm	<b>± 21</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>6.2</b>
Speaker net mass	kg	<b>7.4</b>
Baffle cut-out diameter (front mounting)	mm	<b>422</b>
Bolt number & Metric diameter	-	<b>8x M6</b>
Bolt circle diameter	mm	<b>454</b>
Max overall dimension (on ears)	mm	<b>476</b>
Max overall dimension (out of ears)	mm	<b>457</b>
Flange height	mm	<b>15</b>
Max magnet diameter	mm	<b>140</b>
Max depth (front mounting)	mm	<b>185</b>
Recommended reflex box	Lts / Hz	<b>200L / 33Hz</b>
Electrical connection	-	<b>Ø4 mm Push buttons</b>