



# 4041NdS

## 12 inches bass driver

Nominal Diameter	<b>12" / 30cm</b>
Rated Impedance	<b>8 Ω</b>
Half space sensitivity (1W@1m)	<b>98 dB SPL</b>
Power Handling Capacity	<b>400 W AES</b>
SPL max (continuous)	<b>121 dB SPL</b>
Usable frequency range	<b>50 - 2500 Hz</b>
Speaker net mass	<b>6.2 kg</b>



### Architecture Highlights

- Noiseless Natural Convection Intercooling System
- Front side coated curvilinear cone designed for 2 way systems operation
- Neodymium magnet System with symmetric BL(x) and Le(x)
- High compliance double half-roll Fabric Surround

### Motor architecture

Magnet material	-	<b>Nd</b>
Voice coil diameter	mm	<b>77</b>
Voice coil length	mm	<b>18</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>98.0</b>
Usable freq. range	-	HZ	<b>50 - 2500</b>
Power handling capacity (AES)	-	W	<b>400</b>
Max Sound Pressure Level	SPLmax	dB SPL	<b>121</b>
Min. impedance modulus	Zmin	Ω@Hz	<b>6.3@280</b>
Voice-coil inductance @ 1kHz	Le1k	mH	<b>1.031</b>
Voice-coil inductance @ 10kHz	Le10k	mH	<b>0.590</b>
BL product	BL	N/A	<b>25.0</b>
Moving mass	Mms	kg	<b>0.068</b>

### Thiele-Small parameters

Resonance frequency	Fs	Hz	<b>47 (±6)</b>
DC Resistance	Re	Ω	<b>5.5 (±0.6)</b>
Mechanical quality factor	Qms	1	<b>4.02</b>
Electrical quality factor	Qes	1	<b>0.18</b>
Total quality factor	Qts	1	<b>0.17</b>
Suspension compliance	Cms	10 <sup>-6</sup> .m/N	<b>170</b>
Effective piston area	Sd	m <sup>2</sup>	<b>0.0531</b>
Equivalent Cas air load	Vas	m <sup>3</sup>	<b>0.0665</b>
Max linear excursion	Xmax	mm	<b>± 6.5</b>
Linear displacement volume	Vd	10 <sup>-3</sup> .m <sup>3</sup>	<b>0.3451</b>
Reference efficiency	H	%	<b>3.8</b>
Unity load volume	Vas.Qts <sup>2</sup>	10 <sup>-3</sup> .m <sup>3</sup>	<b>1.9</b>

### Absolute maximum ratings

Short term max. input voltage	Vmax	V	<b>115</b>
Max.excursion before damage	Xdam	mm	<b>± 16</b>
Ambient operating temperature	Ta	°C	<b>-10 to +50</b>
Storage temperature		°C	<b>-20 to +70</b>
Environmental withstanding		<b>Humidity proof</b>	



### Application information

Air volume occupied by the driver	10 <sup>-3</sup> .m <sup>3</sup>	<b>2.1</b>
Speaker net mass	kg	<b>6.2</b>
Baffle cut-out diameter (front mounting)	mm	<b>282.0</b>
Bolt number & Metric diameter	-	<b>8x M6</b>
Bolt circle diameter	mm	<b>300 to 308</b>
Max overall dimension (on ears)	mm	<b>326.5</b>
Max overall dimension (out of ears)	mm	<b>307.0</b>
Flange height	mm	<b>12.8</b>
Max magnet diameter	mm	<b>140.0</b>
Max depth (front mounting)	mm	<b>142.5</b>
Recommended reflex box	Lts / Hz	<b>35L / 65Hz</b>
Electrical connection	-	<b>Ø4 mm Push buttons</b>