

# 12WCX/D 8Ω

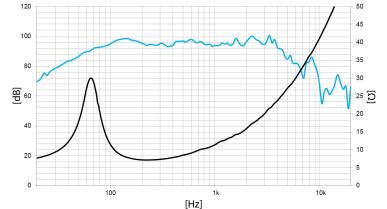
**CUSTOM TRANSDUCER** 

## TECHNICAL SPECIFICATIONS

Nominal diameter	300 mm	12 in
Rated impedance		8 Ω
Minimum impedance		7,1 Ω
Power capacity 1	T	BD W <sub>AES</sub>
Program power <sup>2</sup>		TBD W
Sensitivity	96 dB 1W /	1m @ Z <sub>N</sub>
Frequency range	70 -	5.000 Hz
Voice coil diameter	63,5 mm	2,5 in
BI factor		13,5 N/A
Moving mass		0,052 kg
Voice coil length		17 mm
Air gap height		7 mm
X <sub>damage</sub> (peak to peak)		29 mm

#### THIELE-SMALL PARAMETERS3

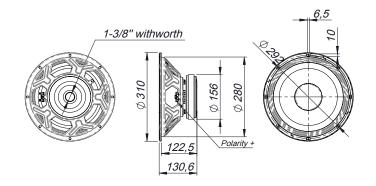
Resonant frequency, f <sub>s</sub>	67 Hz
D.C. Voice coil resistance, R <sub>e</sub>	5,9 Ω
Mechanical Quality Factor, Q <sub>ms</sub>	3
Electrical Quality Factor, Q <sub>es</sub>	0,71
Total Quality Factor, Q <sub>ts</sub>	0,58
Equivalent Air Volume to C <sub>ms</sub> , V <sub>as</sub>	46 I
Mechanical Compliance, C <sub>ms</sub>	109 μm / N
Mechanical Resistance, R <sub>ms</sub>	7,36 kg / s
Efficiency, η <sub>0</sub>	1,9 %
Effective Surface Area, S <sub>d</sub>	0,055 m <sup>2</sup>
Maximum Displacement, X <sub>max</sub> <sup>4</sup>	7 mm
Displacement Volume, V <sub>d</sub>	385 cm <sup>3</sup>
Voice Coil Inductance, Le	0,96 mH



Note: On axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

### **MOUNTING INFORMATION**

Overall diameter	310 mm	12,2 in
Bolt circle diameter	292 mm	11,5 in
Baffle cutout diameter:		
- Front mount	280 mm	11,0 in
Depth	130,6 mm	5,1 in
Net weight	4,7 kg	10,4 lb
Shipping weight	5,2 kg	11,4 lb



#### Notes

<sup>&</sup>lt;sup>1</sup> The power capaticty is determined according to AES2-1984 (r2003) standard.

<sup>&</sup>lt;sup>2</sup> Program power is defined as power capacity + 3 dB.

<sup>&</sup>lt;sup>3</sup> T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

 $<sup>^4</sup>$  The  $\rm X_{max}$  is calculated as  $\rm (L_{vc}$  -  $\rm H_{ag})/2$  +  $\rm (H_{ag}/3,5)$ , where  $\rm L_{vc}$  is the voice coil length and  $\rm H_{ag}$  is the air gap height.