

Ferrite Magnet

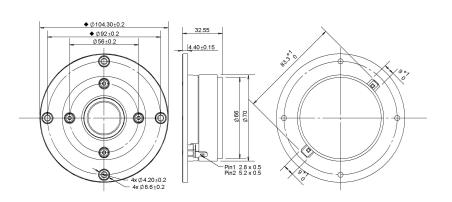
Ferrofluid Filled Motor

Fabric Diaphragm

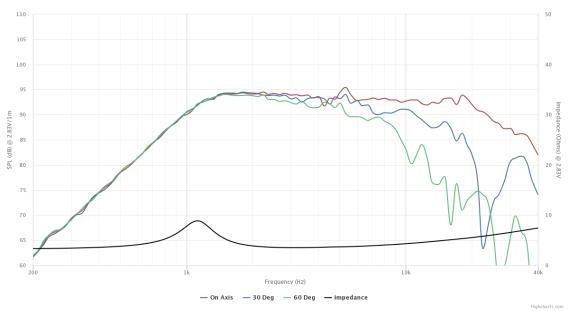
High Sensitivity

Faceplate





SPECIFICATIONS			
Transducer Size		1	in
Impedance		4	Ω
Frequency Range ¹		2000 - 20000	Hz
Sensitivity ² (2.83V 1W @ 1m)		93.9 90.9	dB
Power Rating (IEC 268-5)		50	W
Voice Coil Size		25.4	mm
Air Gap Winding Height	H _{ag} H _{vc}	3 2	mm
Net Weight		0.51	kg
PARAMETERS ³			
Eff. Piston Area	S _d	6.16	cm ²
DC Resistance	R _e	3.2	Ω
Minimum Impedance	Z _{min}	3.5	Ω
Inductance	L _e	0.029	mH
Resonance Frequency ⁴	F _s	1100	Hz
Mechanical Q Factor	Q _{ms}	2.75	-
Electrical Q Factor	Q _{es}	1.53	-
Total Q Factor	Q_{ts}	0.98	-
Moving Mass	M _{ms}	0.347	g
Compliance	C _{ms}	58	μm/N
Equivalent Volume	V as	0.003	L
Motor Force Factor	ВІ	2.24	Tm
Motor Efficiency	β	1.59	$(BI)^2/R_e$
Linear Excursion ⁵	X _{max}	1.17	mm



Details on this spec sheet are for reference only and should not be used for setting production limits. Specifications and product cosmetics are subject to change without notice. Peerless is a registered trademark of Tymphany Enterprises. All measurements conducted in test lab at 25°C ±10°C, 50%RH ±10%. ¹ Specified by Engineering as linear working range of transducer. ² Measured at 2.83V at 1m and normalized to 1W with respect to nominal impedance. ³ Measured in Free Air without preconditioning, therefore subject to some deviation. ⁴ Impedance and Fs value measured under different conditions. ⁵ Equal/Overhung: $(H_{vc} - H_{ag})/2 + H_{ag}/3$. Underhung: $(H_{ag} - H_{vc})/2 + H_{vc}/3$. ⁶ Mechanically limited excursion (e.g. bottoming, spider crash).