

Model Number: PLS-P830987
Product Line: Peerless Gold

Revision: Rev 1_0
Date: 9-Sep-09

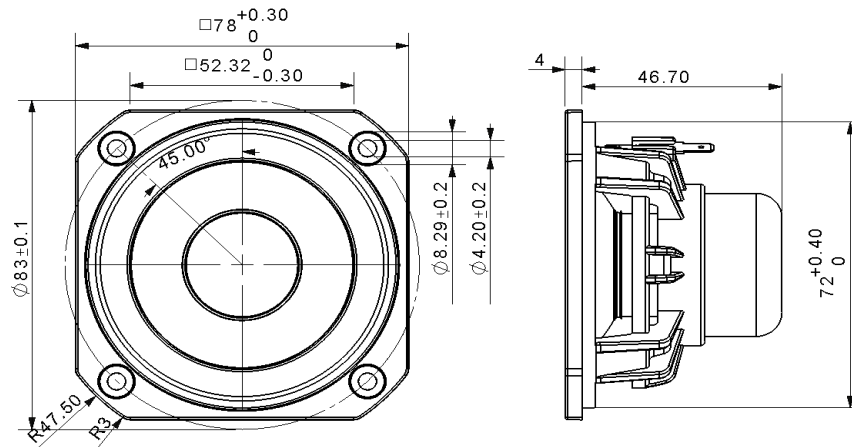


Product Description:

This 3 inch 8 ohm member of the PLS family sets a high standard, for compact full range drivers intended for applications such as television soundbars and compact music systems. Design features in this family include a damped plastic basket with venting under the spider to aid cooling of the motor, a neodymium magnet motor with copper cap to lower coil inductance, providing low distortion at low frequencies and extended high frequency response. A black anodized aluminium cone is employed on the driver, along with a black anodized aluminium dust cap coupled directly to the voice coil. Additionally, the cones come equipped with special-designed large roll rubber surrounds, which allow for a dynamic linear response to high excursion input signals.



Mechanical 2D Drawing:

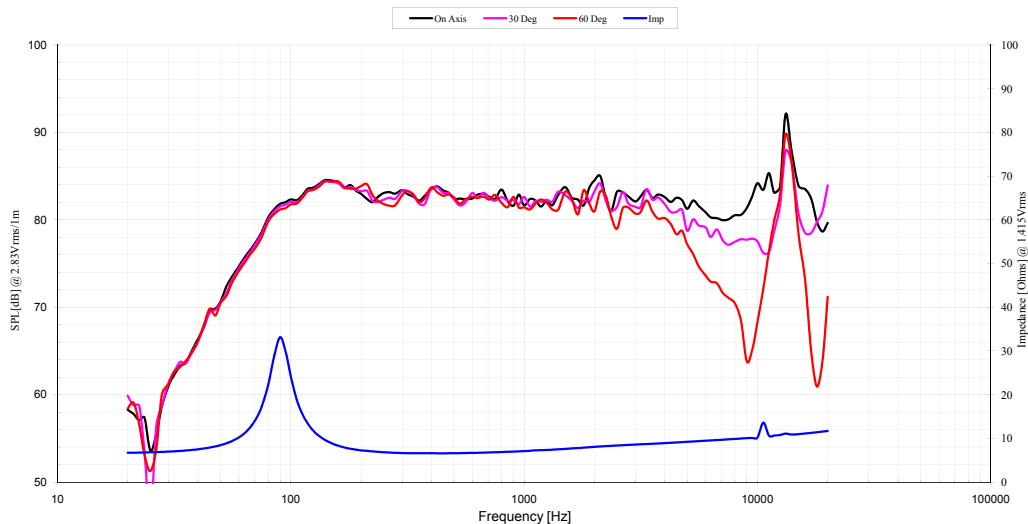


Specifications:

DC Resistance	R_{evc}	Ω	6.2	5.0%	Energy Bandwidth Product	EBP	$(1/Q_{es}) \cdot f_s$	90
Minimum Impedance	Z_{min}	Ω	6.6	7.5%	Moving Mass	M_{ms}	g	2.52
Voice Coil Inductance	L_e	mH	0.05		Suspension Compliance	C_{ms}	um/N	1000.3
Resonant Frequency	f_s	Hz	100	15.0%	Effective Cone Diameter	D	cm	5.9
Mechanical Q Factor	Q_{ms}	-	6.1		Effective Piston Area	S_D	cm ²	27.3
Electrical Q Factor	Q_{es}	-	1.11		Equivalent Volume	V_{as}	L	1.05
Total Q Factor	Q_{ts}	-	0.94		Motor Force Factor	BL	T·m	2.98
Ratio f_s / Q_{ts}	F	f_s / Q_{ts}	106		Motor Efficiency Factor	β	$(T \cdot m^2) / \Omega$	1.43
Half Space Sensitivity @ 2.83V	$dB @ 2.83V/1m$	dB	82.6	$\pm 1.0^1$	Voice Coil Former Material	VC_m	-	Aluminum
Sensitivity @ 1W/1m	$1W/1m$	dB	81.6	$\pm 1.0^1$	Voice Coil Inner Diameter	VC_d	mm	25.7
					Gap Height	Gh	mm	4.0
Rated Noise Power (IEC 2685 18.1)	P	W	15		Maximum Linear Excursion	X_{max}	mm	2.05
Test Spectrum Bandwidth	100Hz - 20kHz		12 dB/Oct		Ferrofluid Type	FF		N/A
					Transducer Size		inch	3
					Transducer Mass		kg	0.22

1 - Piston Band Sensitivity Tolerance

Frequency and Impedance Response:



F088-0713A