

Model Number: PLS-P830984
Product Line: Peerless Gold

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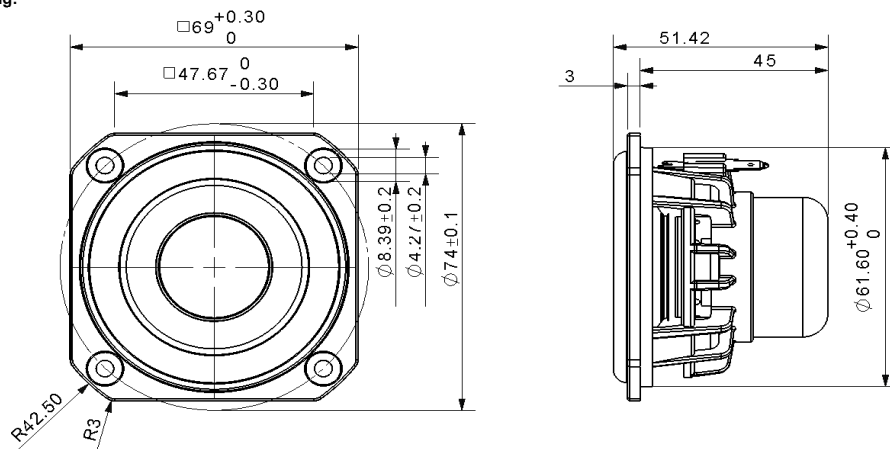


Product Description:

This 2.5 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	6.3	5.0%	Energy Bandwidth Product	EBP	$(1/Q_{es})f_s$	134
Minimum Impedance	Z_{min}	Ω	6.6	7.5%	Moving Mass	M_{ms}	g	2.03
Voice Coil Inductance	L_e	mH	0.05		Suspension Compliance	C_{ms}	um/N	1015.2
Resonant Frequency	f_s	Hz	111	15.0%	Effective Cone Diameter	D	cm	5.3
Mechanical Q Factor	Q_{ms}	-	5.4		Effective Piston Area	S_0	cm ²	22.2
Electrical Q Factor	Q_{es}	-	0.83		Equivalent Volume	V_{as}	L	0.71
Total Q Factor	Q_{ts}	-	0.72		Motor Force Factor	BL	T·m	3.27
Ratio f_s / Q_{ts}	F	f_s / Q_{ts}	155		Motor Efficiency Factor	β	$(T \cdot m^2) / \Omega$	1.71
Half Space Sensitivity @ 2.83V	dB@2.83V/1m	dB	82.1	$\pm 1.0^1$	Voice Coil Former Material	VC _{fm}	-	Aluminum
Sensitivity @ 1W/1m	1W/1m	dB	82.5	$\pm 1.0^1$	Voice Coil Inner Diameter	VC _d	mm	25.7
					Gap Height	Gh	mm	4.0
Rated Noise Power (IEC 2685 18.1)	P	W	10		Maximum Linear Excursion	X_{max}	mm	2.05
Test Spectrum Bandwidth	100Hz - 10kHz	12 dB/Oct			Ferrofluid Type	FF	N/A	
					Transducer Size	-	inch	2.5
					Transducer Mass	-	kg	0.145

1 - Piston Band Sensitivity Tolerance

Frequency and Impedance Response:

