

Model Number: PLS-P830986  
Product Line: Peerless Gold

Revision: Rev 3\_0  
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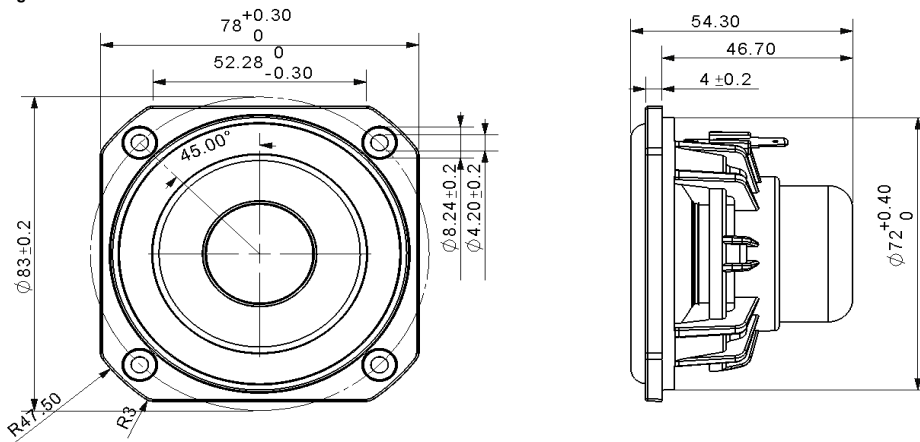


**Product Description:**

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	$R_{evc}$	$\Omega$	6.2	5.0%	Energy Bandwidth Product	EBP	$(1/Q_{es})f_s$	117
Minimum Impedance	$Z_{min}$	$\Omega$	6.6	7.5%	Moving Mass	$M_{ms}$	g	2.56
Voice Coil Inductance	$L_e$	mH	0.05		Suspension Compliance	$C_{ms}$	um/N	897.1
Resonant Frequency	$f_s$	Hz	105	15.0%	Effective Cone Diameter	D	cm	5.9
Mechanical Q Factor	$Q_{ms}$	-	5.1		Effective Piston Area	$S_D$	cm <sup>2</sup>	27.3
Electrical Q Factor	$Q_{es}$	-	0.89		Equivalent Volume	$V_{as}$	L	0.94
Total Q Factor	$Q_{ts}$	-	0.76		Motor Force Factor	BL	T·m	3.43
Ratio $f_s / Q_{ts}$	F	$f_s / Q_{ts}$	138		Motor Efficiency Factor	$\beta$	$(T \cdot m^2) / \Omega$	1.89
Half Space Sensitivity @ 2.83V	$dB @ 2.83V/1m$	dB	83.6	$\pm 1.0^1$	Voice Coil Former Material	$VC_m$	-	Aluminum
Sensitivity @ 1W/1m	$1W/1m$	dB	82.7	$\pm 1.0^1$	Voice Coil Inner Diameter	$VC_d$	mm	25.7
					Gap Height	Gh	mm	4.0
Rated Noise Power (IEC 2685 18.1)	P	W	12		Maximum Linear Excursion	$X_{max}$	mm	2.05
Test Spectrum Bandwidth	100Hz - 8kHz	12 dB/Oct			Ferrofluid Type	FF	N/A	
					Transducer Size	-	inch	3
					Transducer Mass	-	kg	0.208

1 - Piston Band Sensitivity Tolerance

**Frequency and Impedance Response:**

