

Model Number: PLS-65F25AL02-08  
 Product Line: Peerless Gold

Revision: Rev 2\_0  
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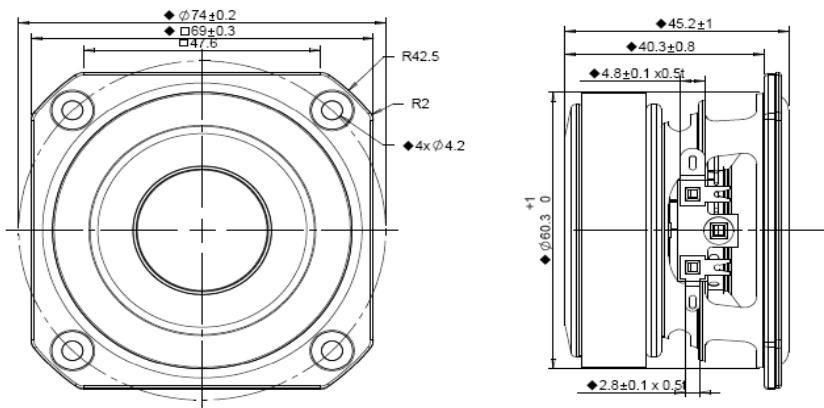


### Product Description:

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 stiff steel basket with venting under the spider to aid cooling of the motor, a ferrite 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	$R_{\text{evc}}$	$\Omega$	6.1	$\pm 7.5\%$	Energy Bandwidth Product	EBP	$(1/Q_{\text{es}}) \cdot f_s$	128
Minimum Impedance	$Z_{\text{min}}$	$\Omega$	7.3	$\pm 7.5\%$	Moving Mass	$M_{\text{ms}}$	g	2.07
Voice Coil Inductance	$L_e$	mH	0.05		Suspension Compliance	$C_{\text{ms}}$	um/N	1124.7
Resonant Frequency	$f_s$	Hz	104	$\pm 15\%$	Effective Cone Diameter	D	cm	5.3
Mechanical Q Factor	$Q_{\text{ms}}$	-	4.8		Effective Piston Area	$S_D$	cm <sup>2</sup>	22.1
Electrical Q Factor	$Q_{\text{es}}$	-	0.81		Equivalent Volume	$V_{\text{as}}$	L	0.769
Total Q Factor	$Q_{\text{ts}}$	-	0.70		Motor Force Factor	BL	T-m	3.19
Ratio $f_s / Q_{\text{es}}$	F	$f_s / Q_{\text{es}}$	150		Motor Efficiency Factor	$\beta$	$(T \cdot m^2) / \Omega$	1.67
Half Space Sensitivity @ 2.83V	dB@2.83V/1m	dB	83.3	$\pm 1.0^1$	Voice Coil Former Material	$VC_{\text{fm}}$	-	ASV
Sensitivity @ 1W/1m	1W/1m	dB	82.1	$\pm 1.0^1$	Voice Coil Inner Diameter	$VC_{\text{id}}$	mm	25.73
Rated Noise Power (IEC 2685 18.1)	P	W	10		Gap Height	Gh	mm	3.00
Test Spectrum Bandwidth	100Hz-20KHz	12 dB/Oct			Maximum Linear Excursion	$X_{\text{max}}$	mm	2.55
					Ferrofluid Type	FF	-	N/A
					Transducer Size	-	-	2.5 inch
					Transducer Mass	-	Kg	0.34

1 - Piston Band Sensitivity Tolerance

### Frequency and Impedance Response:

