

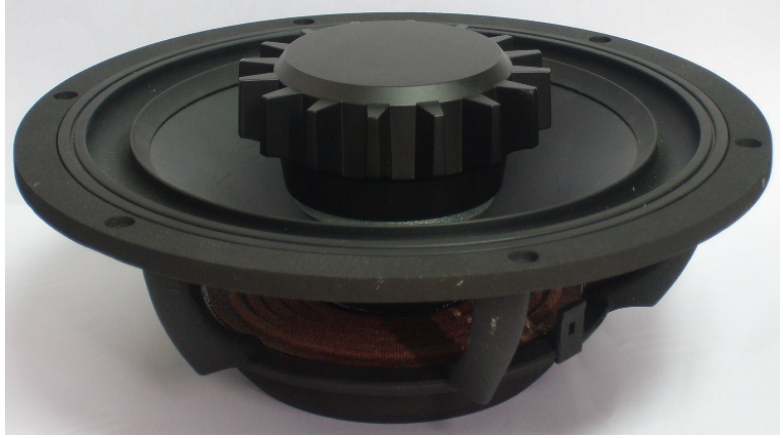
Model Number: XLS-P835028
Product Line: Peerless Gold

Revision: Rev 2_0
Date: 7-May-10

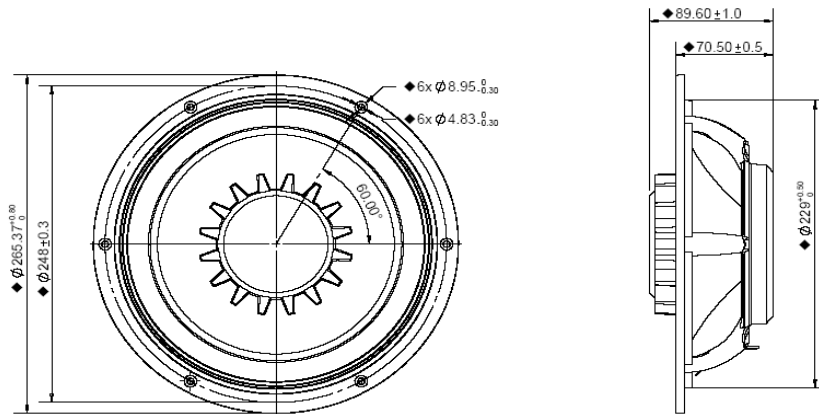


Product Description:

This 10 inch 4 ohm XLS family subwoofer driver has been designed as a shallow profile driver, ideal for in-wall applications and other shallow infinite baffle applications. The driver's motor is perched above the cone, reversing the usual design approach of placing the motor to the rear of the driver to create the shallow depth profile. The basket is cast aluminium, adding structural rigidity. The motor features a NdFeB magnet, and is heat-sinked (which could be optionally redesigned for a customer-specified "look"). The cone is coated paper, light and reliable.



Mechanical 2D Drawing:



Specifications:

DC Resistance	R_{evc}	Ω	3.1	5.0%	Energy Bandwidth Product	EBP	$(1/Q_{es})f_s$	61
Minimum Impedance	Z_{min}	Ω	4.3	7.5%	Moving Mass	M_{ms}	g	106.5
Voice Coil Inductance	L_e	mH	0.91		Suspension Compliance	C_{ms}	um/N	204
Resonant Frequency	f_s	Hz	34	15.0%	Effective Cone Diameter	D	cm	20.00
Mechanical Q Factor	Q_{ms}	-	6.80		Effective Piston Area	S_D	cm ²	314.2
Electrical Q Factor	Q_{es}	-	0.55		Equivalent Volume	V_{as}	L	28.336
Total Q Factor	Q_{ts}	-	0.51		Motor Force Factor	BL	T·m	11.33
Ratio f_s / Q_{ts}	F	f_s / Q_{ts}	66		Motor Efficiency Factor	β	$(T \cdot m^2) / \Omega$	41.23
Half Space Sensitivity @ 2.83V	$dB @ 2.83V/1m$	dB	85.4	$\pm 1.0^1$	Voice Coil Former Material	VC_{fm}	-	TIL
Sensitivity @ 1W/1m	$1W/1m$	dB	81.3	$\pm 1.0^1$	Voice Coil Inner Diameter	VC_{di}	mm	51.32
					Gap Height	Gh	mm	10.00
Rated Noise Power (IEC 2685 18.1)	P	W	160		Maximum Linear Excursion	X_{max}	mm	9.00
Test Spectrum Bandwidth	20Hz - 500Hz		12 dB/Oct		Ferrofluid Type	FF		N/A
					Transducer Size		inch	10
					Transducer Mass		kg	2.34

1 - Piston Band Sensitivity Tolerance

Frequency and Impedance Response:

