

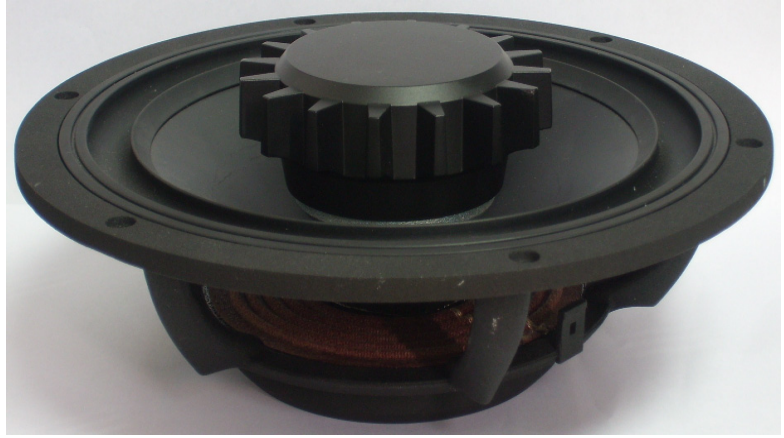
Model Number: XLS-P835028  
Product Line: Peerless Gold

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

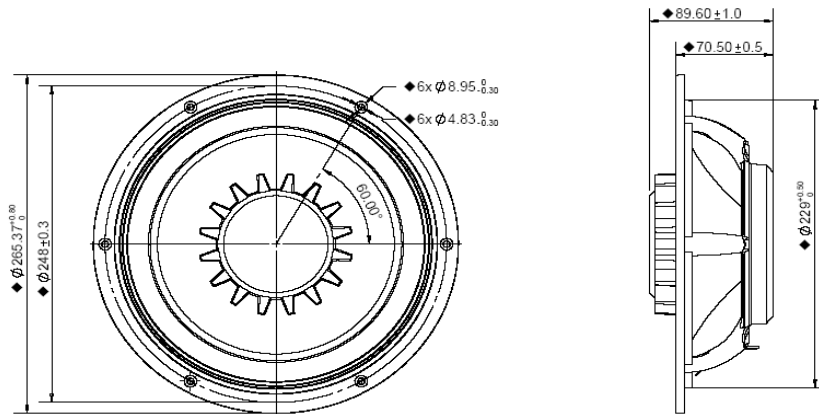


**Product Description:**

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	$R_{evc}$	$\Omega$	3.1	5.0%	Energy Bandwidth Product	EBP	$(1/Q_{es})f_s$	61
Minimum Impedance	$Z_{min}$	$\Omega$	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 <sup>2</sup>	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	$\beta$	$(T \cdot m^2) / \Omega$	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	$VC_d$	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:**

