

Model Number: XLS-P835028 Revision: Rev 2\_0
Product Line: Peerless Gold Date: 7-May-10

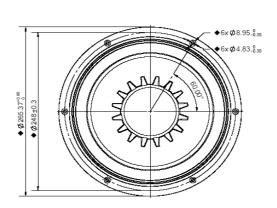


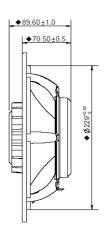
## **Product Description:**

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 <sub>evc</sub>	Ω	3.1	5.0%	Energy Bandwidth Product	EBP	$(1/Q_{es}) \cdot f_s$	61
Minimum Impedance	$Z_{min}$	Ω	4.3	7.5%	Moving Mass	M <sub>ms</sub>	g	106.5
Voice Coil Inductance	L <sub>e</sub>	mH	0.91		Suspension Compliance	$C_{ms}$	um/N	204
Resonant Frequency	fs	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 <sub>as</sub>	L	28.336
Total Q Factor	$Q_{ts}$	-	0.51		Motor Force Factor	BL	T·m	11.33
Ratio f <sub>s</sub> / Q <sub>ts</sub>	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	+/-1.0 <sup>1</sup>	Voice Coil Former Material	$VC_{\text{fm}}$	-	TIL
Sensitivity @ 1W/1m	1W/1m	dB	81.3	+/-1.0 <sup>1</sup>	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	$X_{\text{max}}$	mm	9.00
Test Spectrum Bandwidth 20Hz - 5		Hz	12 (	dB/Oct	Ferrofluid Type	FF		N/A
					Transducer Size	-	inch	10
ston Band Sensitivity Tolerance					Transducer Mass	-	kg	2.34

## Frequency and Impedance Response:

