

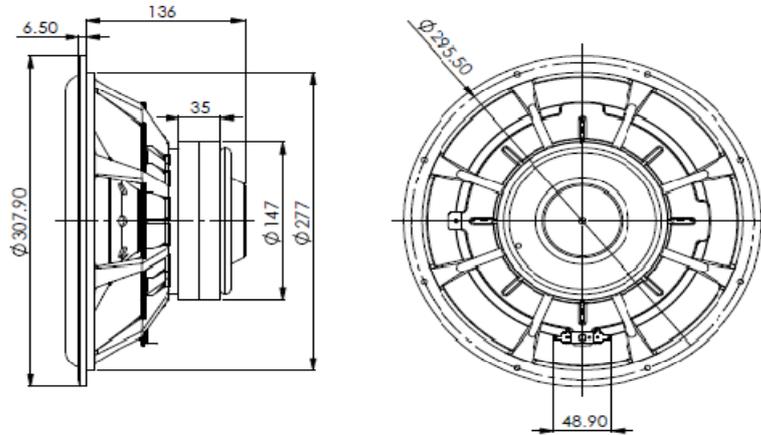


Product Description:

The 12 inch 8 ohm member XXLS product family has all the design features suitable for a high performance, high excursion subwoofer driver. The motor features a double ferrite magnet motor, supporting high excursion, and aluminium shorting rings and pole extenders, lowering and linearizing the inductance of the overhung voice coil. The light & stiff composite paper cone is vented under the dust cap, to reduce air compression. The suspension system features a low-creep rubber surround, and a nomex spider, ensuring long-term reliability under high power conditions. The product also features a rigid cast aluminium basket.



Mechanical 2D Drawing:



Specifications:

DC Resistance	R_{evc}	Ω	5.7	5.0%	Energy Bandwidth Product	EBP	$(1/Q_{es}) \cdot f_s$	49
Minimum Impedance	Z_{min}	Ω	7.1	7.5%	Moving Mass	M_{ms}	g	98.14
Voice Coil Inductance	L_e	mH	0.79		Suspension Compliance	C_{ms}	um/N	353.0
Resonant Frequency	f_s	Hz	27	15.0%	Effective Cone Diameter	D	cm	25.0
Mechanical Q Factor	Q_{ms}	-	8.5		Effective Piston Area	S_D	cm ²	490.9
Electrical Q Factor	Q_{es}	-	0.55		Equivalent Volume	V_{as}	L	119.47
Total Q Factor	Q_{ts}	-	0.52		Motor Force Factor	BL	T·m	13.06
Ratio f_s / Q_{ts}	F	f_s / Q_{ts}	52		Motor Efficiency Factor	β	$(T \cdot m^2) / \Omega$	30.13
Half Space Sensitivity @ 2.83V	dB@2.83V/1m	dB	87.5	+/-1.0 ¹	Voice Coil Former Material	VC _m	-	GSV
Sensitivity @ 1W/1m	1W/1m	dB	88.1	+/-1.0 ¹	Voice Coil Inner Diameter	VC _d	mm	51.0
					Gap Height	Gh	mm	8.0
Rated Noise Power (IEC 2685 18.1)	P	W	175		Maximum Linear Excursion	X_{max}	mm	12.50
Test Spectrum Bandwidth	20Hz - 2kHz		12 dB/Oct		Ferrofluid Type	FF	N/A	
					Transducer Size	-	inch	12
					Transducer Mass	-	kg	6.36

1 - Piston Band Sensitivity Tolerance

Frequency and Impedance Response:

