



## 308 SWR 51 147 NX ALP 4L XLS 8/5Ω

By introducing the new range of Xtra Long Stroke (XLS) subwoofers, Peerless has pushed the performance limits for subwoofers. The XLS/subwoofer range will fulfil every demand for deep clean bass reproduction like active THX home theatre and Dolby Digital subwoofer applications.

In the design the emphasis has been put in achieving extreme deep bass, long time reliability, high power handling, and very low distortion - also under very large sound pressures.

The 12" XLS is available in several different configurations from small passive radiator assisted subwoofers to classical and car applications.

Type: 308 SWR 51 147 NX ALP 4L XLS 8/5Ω 830500

Thiele Small parameters:

		Free air	Common	Baffled
Nominal impedance	Za (Ω)		8	
Minimum impedance/at freq.	Zmin (Ω/Hz)		4.7 / 106	
Maximum impedance	Zo (Ω)		64.2	
DC resistance	Re (Ω)		3.5	
Voice coil inductance	Le (mH)		4.2	
Capacitor in series with 8 Ω (for impedance compensation)	Cc (μF)		38	
Resonance Frequency	fs (Hz)	18.1		17.8
Mechanical Q factor	Qms	3.70		3.76
Electrical Q factor	Qes	0.21		0.22
Total Q factor	Qts	0.20		0.21
F (Ratio fs/Qts)	F (Hz)			87
Mechanical resistance	Rms (Kg/s)		5.12	
Moving mass	Mms (g)	166.3		172.3
Suspension compliance	Cms (mm/N)		0.46	
Effective cone diameter	D (cm)		24.3	
Effective piston area	Sd (cm <sup>2</sup> )		462	
Equivalent volume	Vas (ltres)		136.8	
Force factor	Bl (N/A)		17.6	

Reference voltage sensitivity  
Re 2.83V 1m at 106 Hz (Measured)

Magnet and voice coil parameters:

Voice coil diameter	d (mm)	51
Voice coil length	h (mm)	33
Voice coil layers	n	4
Flux density in gap	B (T)	1.04
Total useful flux	(mWb)	2.50
Height of the gap	hg (mm)	8
Diameter of magnet	dm (mm)	147
Height of magnet	hm (mm)	35
Weight of magnet	(kg)	2.42

