

XLS 12" Automotive



Type Number: 830515

Features:

This new series of state-of-the-art subwoofers continue to enhance Peerless' reputation for delivering the highest quality components for bass in the world. Called the XLS - for "Extra Long Stroke" - these new audio transducers add even more excursion, and completely eliminate distortion. See architecture notes for [XLS Platform](#)

Driver Highlights: Thick Nomex cone, 51 mm voice coil, ALP

See application notes for [XLS car subwoofer](#)

[Go to Architecture Notes](#)



Specs:

Electrical Data

Nominal impedance	Zn	4	ohm
Minimum impedance	Zmin	2.2	ohm
Maximum impedance	Zo	28.9	ohm
DC resistance	Re	1.8	ohm
Voice coil inductance	Le	1.9	mH
Capacitor in series with x ohm	Cc	34	uF

T-S Parameters

Resonance Frequency	fs	28.2	Hz
Mechanical Q factor	Qms	4.81	
Electrical Q factor	Qes	0.32	
Total Q factor	Qts	0.3	
Force factor	Bl	10.9	Tm
Mechanical resistance	Rms	4.37	Kg/s
Moving mass	Mms	118.5	g
Suspension compliance	Cms	0.27	mm/N
Effective cone diameter	D	24.4	cm
Effective piston area	Sd	466	cm ²
Equivalent volume	Vas	80.5	ltrs
Sensitivity (2.83V/1m)		93.5	dB
Ratio BL/√(Re)		94	
Ratio fs/Qts	F	--	

Power handling

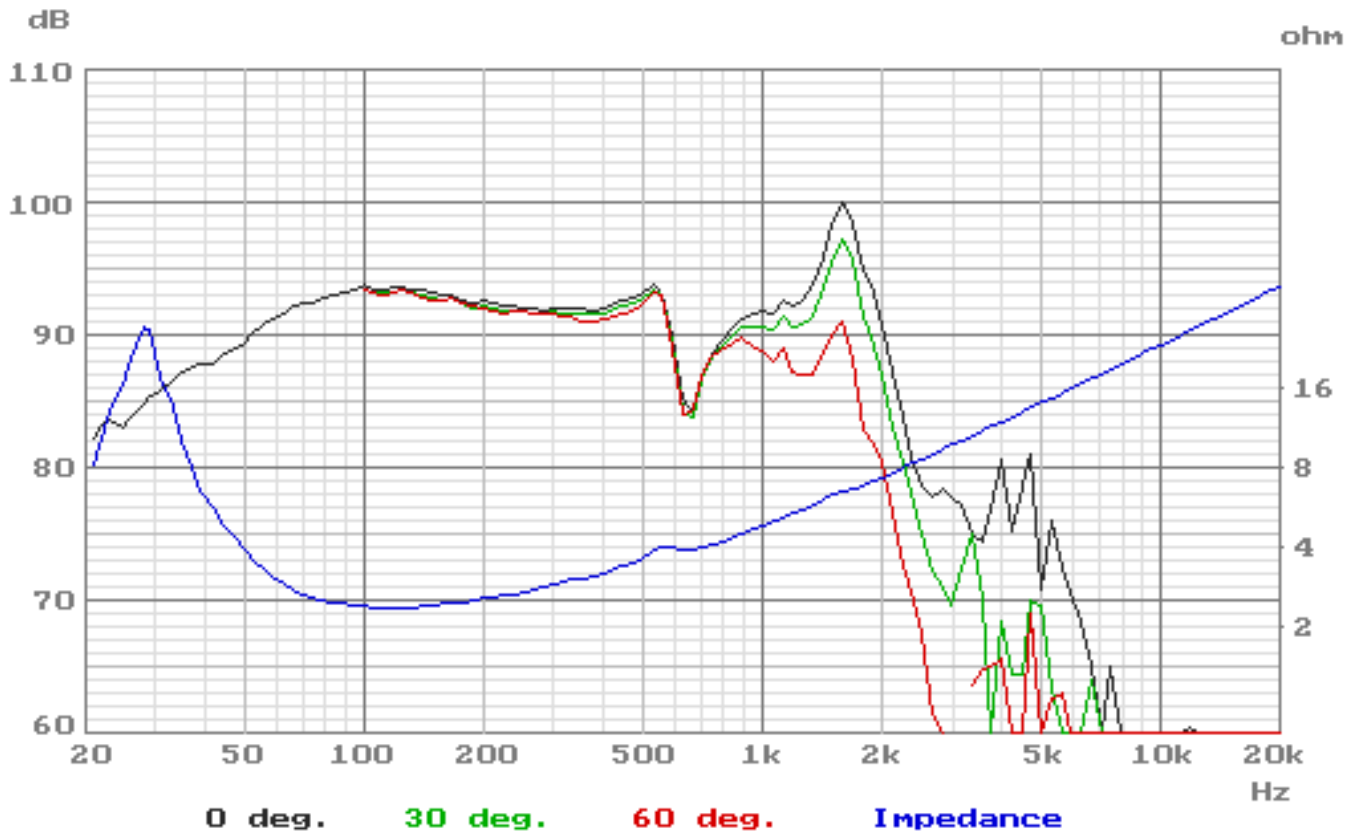
100h RMS noise test (IEC)	--	W
Long-term Max Power (IEC 18.3)	--	W
Max linear SPL (rms) @ power	--	dB/W
Short Term Max power (IEC 18.2)	--	W

Voice Coil and Magnet Parameters

Voice coil diameter	51	mm
Voice coil height	33	mm
Voice coil layers	4	
Height of the gap	8	mm
Linear excursion +/-	--	mm
Max mech. excursion +/-	--	mm
Flux density of gap	1.04	mWb
Total useful flux	2.5	mWb
Diameter of magnet	147	mm
Height of magnet	35	mm
Weight of magnet	2.42	Kg

Notes:
IEC specs refer to IEC 60268-5 third edition.
All Tympany products are RoHS compliant.

Frequency: 830515



Mechanical Dimensions:830515

