Peerless Data Sheet

SWR 308
308 SWR 51 147 NX ALP 4L 4 ohm - Order ID: 830515

By introducing the new range of Xtra Long Stroke (XLS) subwoofers, Peerless has pushed the performance limits for subwoofers. The 12" XLS/subwoofer will fulfill every demand for deep clean bass reproduction in sealed cabinets from 22 liters.

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 car subwoofer driver has been designed with a specially compounded strong rubber surround that has the strength to withstand the high pressures inside a small sealed box. The magnet is covered with a rubber cover engraved with the XLS logo. For reliable connection to the amplifier gold plated push terminals are fitted.

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**SWR 308**

**Theoretical small parameters:**

- **Nominal impedance (Zn)** (ohm): 4
- **Maximum impedance (Zmax)** (ohm/Hz): 2.2/115
- **Voice coil inductance (Le)** (mH): 1.9
- **Capacitor in series with 4 ohm (for impedance compensation)** (μF): 34
- **Resonance Frequency (fs)** (Hz): 28.2
- **Mechanical Q factor (Qms)**: 4.81
- **Electrical Q factor (Qes)**: 0.32
- **Total Q factor (Qts)**: 0.30
- **F (Ratio fs/Qms)**: 94
- **Mechanical resonance (Rms)** (Kg/s): 118.5
- **Moving mass (Mms)** (g): 4.37
- **Suspension compliance (Cms)** (cm/N): 0.27
- **Effective cone diameter (D)** (cm): 24.4
- **Effective piston area (Sd)** (cm²): 466
- **Equivalent volume (Vas)** (litr): 80.5
- **Force factor (Bl)** (N/A): 10.9
- **Reference voltage sensitivity (Rs 2.83V 1m at 115 Hz (Measured))** (dB): 93.5

**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 (Φw0)** (Wb): 2.50
- **Height of the gap (hg)** (mm): 8
- **Diameter of magnet (dm)** (mm): 147
- **Height of magnet (lm)** (mm): 35
- **Weight of magnet** (kg): 2.42

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**Graphs:**

- **Impedance vs Frequency**
  - 0 deg.
  - 30 deg.
  - 60 deg.

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