

XLS 12" Subwoofer



Type Number: 830500

Features:

By introducing the 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.



Specs:

Electrical Data

| | | | |
|--------------------------------|------|------|-----|
| Nominal impedance | Zn | 8 | ohm |
| Minimum impedance | Zmin | 4.7 | ohm |
| Maximum impedance | Zo | 64.2 | ohm |
| DC resistance | Re | 3.5 | ohm |
| Voice coil inductance | Le | 4.2 | mH |
| Capacitor in series with x ohm | Cc | 38 | uF |

T-S Parameters

| | | | |
|-------------------------|-----|-------|-----------------|
| Resonance Frequency | fs | 18.1 | Hz |
| Mechanical Q factor | Qms | 3.7 | |
| Electrical Q factor | Qes | 0.21 | |
| Total Q factor | Qts | 0.2 | |
| Ratio fs/Qts | F | -- | |
| Force factor | Bl | 17.6 | Tm |
| Mechanical resistance | Rms | 5.12 | Kg/s |
| Moving mass | Mms | 166.3 | g |
| Suspension compliance | Cms | 0.46 | mm/N |
| Effective cone diameter | D | 24.4 | cm |
| Effective piston area | Sd | 466 | cm ² |
| Equivalent volume | Vas | 139.2 | ltrs |
| Sensitivity | | 90.6 | dB |
| Ratio BL/√(Re) | | 90 | |

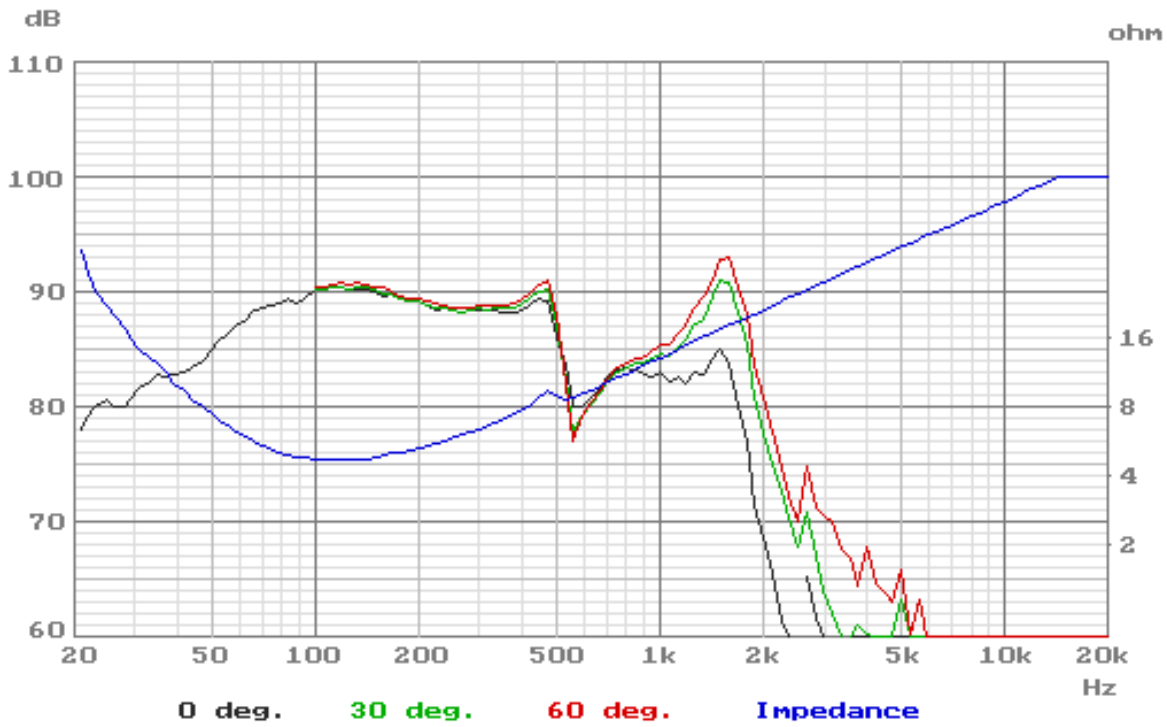
Power handling

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

Frequency:



Mechanical Dimensions:

