

# XXLS 10" Subwoofer



Type Number: 835016

#### 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 XXLS - for "Xpanded Extra Long Stroke" - these new audio transducers add even more excursion to the Peerless XLS line, and completely eliminate distortion.

See architecture notes for XXLS Platform

Driver features: Alu. Cone, 51mm Voice Coil, ALP

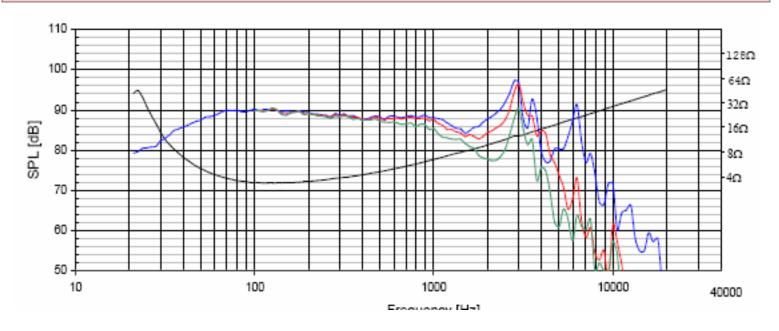
Go to Architecture Notes



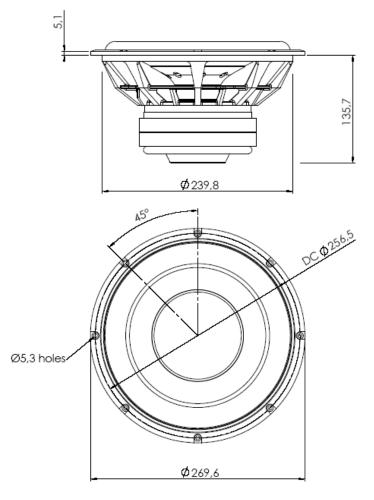
# Specs: Preliminary

| Electrical Data                |      |                           |                 | Power handling  |      |      |
|--------------------------------|------|---------------------------|-----------------|---|------|------|
| Nominal impedance              | Zn   | 4                         | ohm             | 100h RMS noise test (IEC)   | 100  | W    |
| Minimum impedance              | Zmin | 3.1                       | ohm             | Long-term Max Power (IEC 18.3)  | 300  | W    |
| Maximum impedance              | Zo   | 58.6                      | ohm             | Max linear SPL (rms) @ power  |      | dB/W |
| DC resistance                  | Re   | 2.6                       | ohm             | Short Term Max power (IEC 18.2)   | -    | W    |
| Voice coil inductance          | Le   | 1.9                       | mΗ              | Voice Coil and Magnet Parameters  |      |      |
| Capacitor in series with x ohm | Cc   |                           | uF              | Voice coil diameter   | 51   | mm   |
| T-S Parameters                 |      | $\mathcal{L}(\mathbf{c})$ | 5               | Voice coil height   | 33   | mm   |
| Resonance Frequency            | fs   | 22.4                      | Hz              | Voice coil layers   | 4    |      |
| Mechanical Q factor            | Qms  | 7.1                       |                 | Height of the gap   | 8    | mm   |
| Electrical Q factor            | Qes  | 0.33                      |                 | Linear excursion +/-  | 12.5 | mm   |
| Total Q factor                 | Qts  | 0.32                      |                 | Max mech. excursion +/-   | 77   | mm   |
| Force factor                   | BI   | 10.1                      | Tm              | Flux density of gap   |      | mWb  |
| Mechanical resistance          | Rms  | 1.82                      | Kg/s            | Total useful flux   | 2.3  | mWb  |
| Moving mass                    | Mms  | 92.2                      | g               | Diameter of magnet  | 147  | mm   |
| Suspension compliance          | Cms  | 0.55                      | mm/N            | Height of magnet  | 35   | mm   |
| Effective cone diameter        | D    | 21.2                      | cm              | Weight of magnet  | 2.2  | Kg   |
| Effective piston area          | Sd   | 352                       | cm <sup>2</sup> |   |      |      |
| Equivalent volume              | Vas  | 94.1                      | Itrs            |   |      |      |
| Sensitivity (2.83V/1m)         |      | 90.5                      | dB              | <b>(6)</b>  |      |      |
| Ratio BL/√(Re)                 |      | 6.2                       |                 | Notes:  |      |      |
| Ratio fs/Qts                   | F    | 70                        |                 | IEC specs refer to IEC 60268-5 third edition. All Tymphany products are RoHS compliant. |      |      |

# Frequency: Preliminary 835016



### **Mechanical Dimensions:835016**



## **Drawing Dimensions**

Outside Diameter Flange Thickness Magnet Diameter **Cutout Diameter** 

Interior Depth Hole Diameter Screw Circle Diameter