



ORDER ID

850467

6½" WOOFER

**HDS 182****182 WR 33 102 SD AL PH LS 8 ohm - Order ID: 850467**

A High End mid-woofer with rigid aerodynamic cast aluminium basket profile, and ventilated spider. The phaseplug eliminates compression under the dust cap and serves as heat sink for the coil to reduce power compression. The three or five layer sandwich cone improves accuracy and consistency of sound reproduction over the entire frequency range, creating a more "musical" driver. The doublebonded dustcap ensures that the dustcap will respond to every coil movement in a way never seen before. Another feature of the driver is its very low distortion magnet system with aluminium shortening ring and copper capped pole piece which both contribute as heatsinks for the voice coil, reducing power compression.

**HDS 182****HDS 182****Thiele Small parameters:**

Nominal impedance  
Minimum impedance/at freq.  
Maximum impedance  
DC resistance  
Voice coil inductance  
Capacitor in series with 8 ohm  
(for impedance compensation)  
Resonance Frequency  
Mechanical Q factor  
Electrical Q factor  
Total Q factor  
F (Ratio fs/Qts)  
Mechanical resistance  
Moving mass  
Suspension compliance  
Effective cone diameter  
Effective piston area  
Equivalent volume  
Force factor  
Reference voltage sensitivity  
Re 2.83V 1m at 259 Hz (Measured)

Zn (ohm)  
Zmin (ohm/Hz)  
Zo (ohm)  
Re (ohm)  
Le (mH)  
Cc (µF)  
fs (Hz)  
Qms  
Qes  
Qts  
F (Hz)  
Rms (Kg/s)  
Mms (g)  
Cms (mm/N)  
D (cm)  
Sd (cm<sup>2</sup>)  
VAS (ltrs)  
Bl (N/A)  
(dB)

|      | Free air | Common  | Baffled |
|------|----------|---------|---------|
| Zn   |          | 8       |         |
| Zmin |          | 6.8/259 |         |
| Zo   |          | 36.9    |         |
| Re   |          | 5.7     |         |
| Le   |          | 1.2     |         |
| Cc   |          | 6       |         |
| fs   | 46.8     |         | 45.4    |
| Qms  | 2.81     |         | 2.89    |
| Qes  | 0.51     |         | 0.53    |
| Qts  | 0.43     |         | 0.45    |
| F    |          |         | 102     |
| Rms  |          | 2.03    |         |
| Mms  | 19.4     |         | 20.6    |
| Cms  |          | 0.60    |         |
| D    |          | 13.1    |         |
| Sd   |          | 134     |         |
| VAS  |          | 14.8    |         |
| Bl   |          | 8.0     |         |
|      |          |         | 87.3    |

**Magnet and voice coil parameters:**

Voice coil diameter  
Voice coil length  
Voice coil layers  
Flux density in gap  
Total useful flux  
Height of the gap  
Diameter of magnet  
Height of magnet  
Weight of magnet

d (mm)  
h (mm)  
n  
B (T)  
(mWb)  
hg (mm)  
dm (mm)  
hm (mm)  
(kg)

|    |      |
|----|------|
| d  | 33   |
| h  | 17   |
| n  | 2    |
| B  | 1.18 |
|    | 1.04 |
| hg | 6    |
| dm | 102  |
| hm | 20   |
|    | 0.68 |

