

Peerless

HDS 182



ORDER ID
850439

6½" WOOFER



182 WR 33 102 SD AL LS 8Ω

A high End mid-woofer with rigid aerodynamic cast aluminium basket profile and ventilated spider. The cast basket provides the necessary sturdy base for the magnet structure and suspension and allows for long excursion of the cone. The spider is ventilated to achieve the lowest possible compression and to allow air to flow freely to create a cooling effect for the voice coil. The design of the basket front allows for very slim box designs and the edges are chamfered to reduce the necessary amount of counter sinking.

The three or five layer sandwich cone improves accuracy and consistency of sound reproduction over the entire frequency range, creating a more "musical" driver.

Thiele Small parameters:

		Free air	Common	Baffled
Nominal impedance	Zn (Ω)	8		
Minimum impedance/at freq.	Zmin (Ω/Hz)		7.1 / 282	
Maximum impedance	Zo (Ω)		40.2	
DC resistance	Re (Ω)		6.2	
Voice coil inductance	Le (mH)		1.3	
Capacitor in series with 8 Ω (for impedance compensation)	Cc (μF)		9	
Resonance Frequency	fs (Hz)	44.9		43.6
Mechanical Q factor	Qms	2.28		2.35
Electrical Q factor	Qes	0.42		0.43
Total Q factor	Qts	0.35		0.36
F (Ratio fs/Qts)	F (Hz)			120
Mechanical resistance	Rms (Kg/s)		2.34	
Moving mass	Mms (g)	18.9		20.1
Suspension compliance	Cms (mm/N)		0.66	
Effective cone diameter	D (cm)		13.5	
Effective piston area	Sd (cm²)		143	
Equivalent volume	Vas (ltrs)		18.7	
Force factor	Bl (N/A)		8.9	
Reference voltage sensitivity	(dB)			87.6
Re 2.83V 1m at 282 Hz (Calculated)				

Magnet and voice coil parameters:

Voice coil diameter	d (mm)	33
Voice coil length	h (mm)	17
Voice coil layers	n	2
Flux density in gap	B (T)	1.22
Total useful flux	(mWb)	1.06
Height of the gap	hg (mm)	6
Diameter of magnet	dm (mm)	102
Height of magnet	hm (mm)	20
Weight of magnet	(kg)	0.68

