

18LW1400

Extended LF Ferrite Transducer

General Specifications

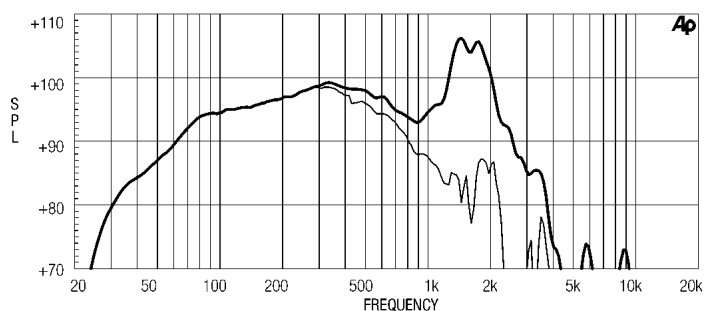
Nominal Diameter	460 mm (18 in)
Rated Impedance	8 Ohm
AES Power	1000 W
Program Power	1400 W
Peak Power	7000 W
Sensitivity	98 dB
Frequency Range	28 - 2500 Hz
Power Compression @-10dB	0,8 dB
Power Compression @-3dB	2,1 dB
Power Compression @Full Power	3,0 dB
Max Recomm. Frequency	500 Hz
Recomm. Enclosure Volume	130 ÷ 350 lt. (4,59 ÷ 12,36 cuft)
Minimum Impedance	6,4 Ohm at 25°C
Max Peak To Peak Excursion	50 mm (1,97 in)
Voice Coil Diameter	100 mm (4 in)
Voice Coil Winding Material	copper
Suspension	Triple roll, Polycotton
Cone	Straight Ribbed, carbon fiber reinforced paper

Thiele Small Parameters

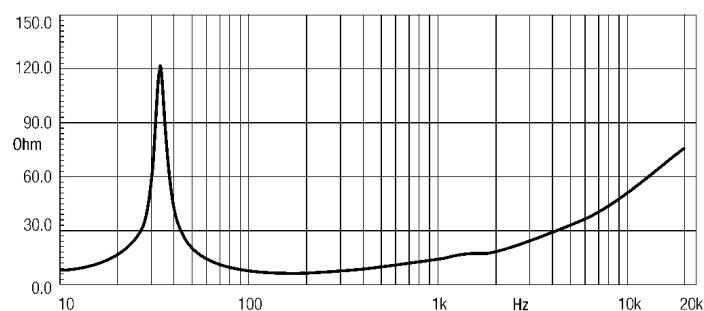
Fs	31 Hz
Re	5 Ohm
Sd	0,1225 sq. mt. (189,88 sq. in.)
Qms	7,2
Qes	0,31
Qts	0,29
Vas	297 lt. (10,49 cuft)
Mms	190 gr. (0,42 lb)
BL	24,7 Tm
Linear Mathematical Xmax	± 9 mm (± 0,35 in)
Le (1kHz)	2,3 mH
Ref. Efficiency 1W@1m (half space)	96,5 dB

Mounting information

Overall diameter	462 mm (18,18 in)
N. of mounting holes and bolt	8
Mounting holes diameter	8,5 mm (0,33 in)
Bolt circle diameter	438-440 mm (17,24-17,32 in)
Front mount baffle cutout ø	416 mm (16,38 in)
Rear mount baffle cutout ø	422 mm (16,61 in)
Total depth	215,4 mm (8,48 in)
Flange and gasket thickness	26 mm (1,02 in)
Net weight	13,3 kg (29,36 lb)
Shipping weight	14,9 kg (32,9 lb)
CardBoard Packaging dimensions	482 x 482 x 257 mm (19 x 19 x 10,1 in)



FREQUENCY RESPONSE CURVE OF 18LW1400 MADE ON 180 LIT. ENCLOSURE TUNED 35HZ IN FREE FIELD (4PI) ENVIRONMENT. ENCLOSURE CLOSES THE REAR OF THE DRIVER. THE THIN LINE REPRESENTS 45 DEG. OFF AXIS FREQUENCY RESPONSE.



FREE AIR IMPEDANCE MAGNITUDE CURVE

Notes

- 1) AES power is determined according to AES2-1984 (r2003) standard
- 2) Program power rating is measured in 180 lit enclosure tuned 35Hz using a 40 - 400Hz band limited pink noise test signal with 50% duty cycle, applied for 2 hours.
- 3) The peak power rating represents the maximum permitted instantaneous peak power level over a maximum period of 10ms which will be withstood by the loudspeaker without damage.
- 4) Sensitivity represents the averaged value of acoustic output as measured on the forward central axis of cone, at distance 1m from the baffle panel, when connected to 2,83V sine wave test signal swept between 100Hz and 500Hz with the test specimen mounted in the same enclosure as given for (1) above.
- 5) Frequency range is given as the band of frequencies delineated by the lower and upper limits where the output level drops by 10 dB below the rated sensitivity in half space environment.
- 6) Power compression represents the loss of sensitivity for the specified power, measured from 50-500 Hz, after a 5 min pink noise preconditioning test at the specified power.
- 7) Linear Math. Xmax is calculated as $(Hvc-Hg)/2 + Hg/4$ where Hvc is the coil depth and Hg is the gap depth.