

# 18LW1400

### **Extended LF Ferrite Transducer**

98 dB SPL 1W / 1m average sensitivity 100 mm (4 in) Interleaved Sandwich Voice coil (ISV) 1000W AES power handling

Carbon fiber reinforced straight ribbed cone

Double Silicon Spider (DSS) for improved excursion control and linearity

Double Demodulating Rings (DDR) for lower distortion

Improved heat dissipation via unique basket design and multiple backplate

Weather protected cone and plates for outdoor usage Ideal for high SPL subwoofer designs



#### GENERAL SPECIFICATIONS

Nominal Diameter	460 mm (18 in)
Rated Impedance	8 Ohm
AES Power (1)	1000 W
Program Power (2)	1400 W
Peak Power	7000 W
Sensitivity (3)	98 dB
Frequency Range (4)	28 - 2500 Hz
Power Compression @-1 OdB	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)

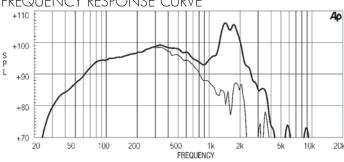
## THIELE SMALL PARAMETERS (5)

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 (6)	± 9 mm (± 0,35 in)
Le (1kHz)	2,3 mH
Ref. Efficiency 1W@1m (half space)	96,5 dB

#### MOUNTING INFORMATION

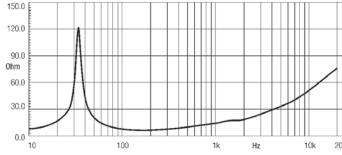
Overall diameter	462 mm (18,18 in)
N. of mounting holes and bolt	8
Mounting holes diameter	8,5 mm (0,33 in)
Bolt circle diameter	438-440 mm (17,24-17,32 in)
Front mount baffle cutout $\varnothing$	416 mm (16,38 in)
Rear mount baffle cutout ∅	422 mm (16,61 in)
Total depth	215,4 mm (8,48 in)
Flange and 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



FREQUENCY RESPONSE CURVE OF 181W1400 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

#### FREE AIR IMPEDANCE MAGNITUDE CURVE



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#### NOTES

(1) AES power is determined according to AES2-1984 (r2003) standard

(1) ALS power is determined according to ALSZ=1984 (12003) 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) 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

(4) 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 (5) Thiele - Small parameters are measured after the test specimen has been conditioned by 1000 W AES power and represent the expected long term parameters after a short period of use.

(6) Linear Math. Xmax is calculated as (HvcHg)/2 + Hg/4 where Hvc is the coil depth and Hg is the gap depth.