

# 12LW1400

## Extended LF Ferrite Transducer

- 96 dB SPL 1W / 1m average sensitivity
- 100 mm (4 in) Interleaved Sandwich Voice coil (ISV)
- 900 W AES power handling
- Double Silicon Spider (DSS) for improved excursion control and linearity
- Double Demodulating Ring (DDR) for lower distortion
- Improved heat dissipation via unique basket design
- Weather protected cone and plates for outdoor usage
- Specially designed for high loading compact subwoofers



### GENERAL SPECIFICATIONS

Nominal Diameter	300 mm (12 in)
Rated Impedance	8 Ohm
AES Power (1)	900W
Program Power (2)	1400 W
Peak Power	6000 W
Sensitivity (3)	96 dB
Frequency Range (4)	51 - 4000 Hz
Power Compression @-10dB	0,5 dB
Power Compression @-3dB	2,2 dB
Power Compression @Full power	3 dB
Max Recomm. Frequency	1000 Hz
Recomm. Enclosure Volume	30 - 60 lt. (1,06 - 2,12 cuft)
Minimum Impedance	6,8 Ohm at 25°C
Max Peak To Peak Excursion	36 mm (1,4 in)

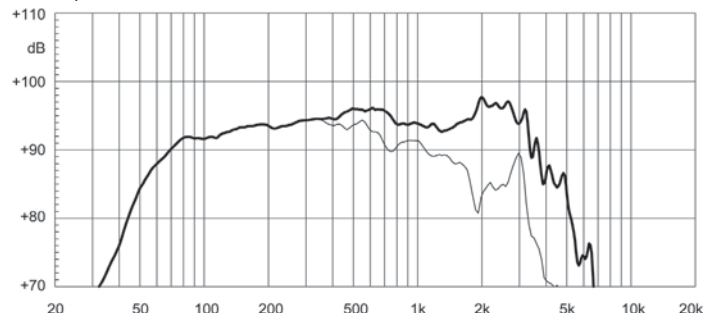
### THIELE SMALL PARAMETERS (5)

Fs	45 Hz
Re	5,2 Ohm
Sd	0,053 sq.mt. (82,15 sq.in.)
Qms	5
Qes	0,32
Qts	0,3
Vas	55 lt. (1,94 cuft)
Mms	88 gr. (0,19 lb)
BL	20 Tm
Linear Mathematical Xmax (6)	± 8,25 mm (± 0,32 in)
le (1kHz)	1,5 mH
Ref. Efficiency 1W@1m (half space)	1,5% (94 dB)

### MOUNTING INFORMATION

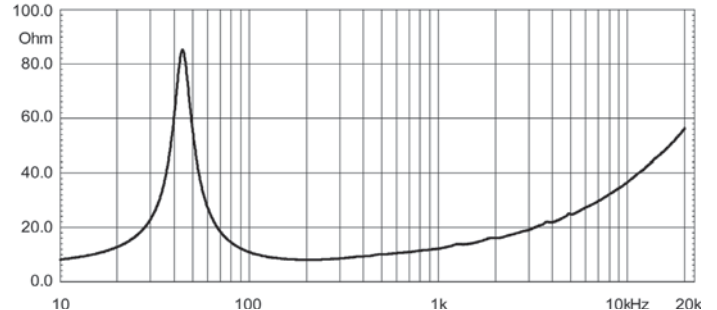
Overall diameter	315 mm (12,4 in)
N. of mounting holes and bolt	8
Mounting holes diameter	7,15 mm (0,28 in)
Bolt circle diameter	296 - 300 mm (11,65 - 11,8 in)
Front mount baffle cutout Ø	282 mm (11,1 in)
Rear mount baffle cutout Ø	282 mm (11,1 in)
Total depth	141 mm (5,55 in)
Flange and gasket thickness	17,5 mm (0,69 in)
Net weight	10,9 kg (26,5 lb)
Shipping weight	11,5 kg (27,8 lb)
CardBoard Packaging dimensions	332 x 332 x 184 mm (13,07 x 13,07 x 7,24 in)

### FREQUENCY RESPONSE CURVE



FREQUENCY RESPONSE CURVE OF 12LW1400 MADE ON 50 LIT. ENCLOSURE TUNED 60 HZ IN FREE FIELD (4P) ENVIRONMENT. ENCLOSURE CLOSES THE REAR OF THE DRIVER. THE THIN LINE REPRESENTS 45 DEG. OFF AXIS FREQUENCY RESPONSE

### FREE AIR IMPEDANCE MAGNITUDE CURVE



FREE AIR IMPEDANCE MAGNITUDE CURVE

### NOTES

- (1) AES power is determined according to AES2-1984 (r2003) standard
- (2) Program power rating is measured in 50 lit enclosure tuned 60Hz 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 2,83 V sine wave test signal swept between 100Hz and 500Hz with the test specimen mounted in the same enclosure as given for (1) above.
- (4) Frequency range is given as the band of frequencies delineated by the lower and upperlimits where the output level drops by 10 dB below the rated sensitivity in half spaceenvironment.
- (5) Thiele - Small parameters are measured after the test specimen has been conditioned by 900 W AES power and represent the expected long term parameters after a short period of use.
- (6) Linear Math. Xmax is calculated as  $(HvcHg)/2Hg/4$  where Hvc is the coil depth and Hg is the gap depth.