

# 18NLW9400

## Extended LF Neodymium Transducer

98 dB SPL 1W / 1m average sensitivity  
 100 mm (4 in) Interleaved Sandwich Voice coil (ISV)  
 2400 Watt program power handling  
 Fiberglass reinforced straight ribbed cone  
 Double Silicon Spider (DSS) for increased excursion control and linearity  
 High grade neodymium magnet assembly  
 Recommended for subwoofer usage in compact vented or bandpass enclosures  
 Weather protected cone and plates for outdoor usage



### GENERAL SPECIFICATIONS

Nominal Diameter	460mm (18 in)
Rated Impedance	8 Ohm
AES Power (1)	1200W
Program Power (2)	2400W
Peak Power	7000W
Sensitivity (3)	98 dB
Frequency Range (4)	30 - 2500 Hz
Power Compression @-10dB	0,7 dB
Power Compression @-3dB	1,5 dB
Power Compression @Full Power	2,2 dB
Max Recomm. Frequency	500 Hz
Recomm. Enclosure Volume	110 - 350 lt. (3.9 - 12.36 cuft)
Minimum Impedance	6,1 Ohm at 25°C
Max Peak To Peak Excursion	50 mm (2 in)

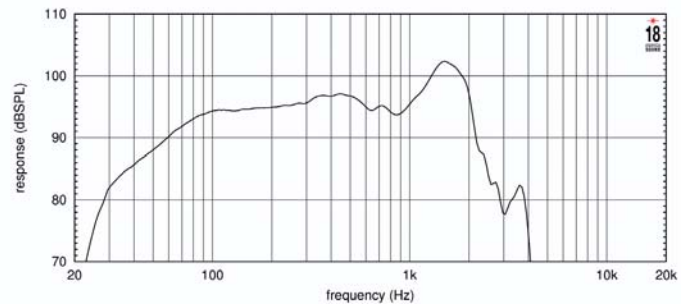
### THIELE SMALL PARAMETERS (5)

Fs	33 Hz
Re	5 Ohm
Sd	0,1225 sq.mt. (189,88 sq.in.)
Qms	6,1
Qes	0,28
Qts	0,26
Vas	268 lt. (9.47 cuft)
Mms	180 gr. (0.40 lb)
BL	26 Tm
Linear Mathematical Xmax (6)	±9,5 mm (±0,37 in)
le (1kHz)	1,90 mH
Ref. Efficiency 1W@1m (half space)	97,4 dB

### MOUNTING INFORMATION

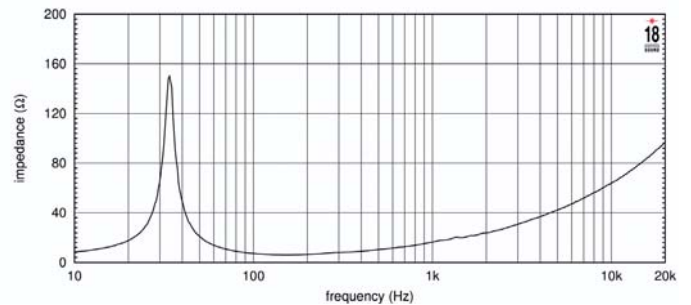
Overall diameter	462 mm (18,19 in)
N. of mounting holes and bolt	8
Mounting holes diameter	8,5 mm (0,33 in)
Bolt circle diameter	438-440 mm (17,24-17,32 in)
Front mount baffle cutout Ø	416 mm (16,38 in)
Rear mount baffle cutout Ø	422 mm (16,61 in)
Total depth	223,5 mm (8,8 in)
Flange and gasket thickness	26 mm (1,02 in)
Net weight	8,7 kg (19.2 lb)
Shipping weight	9,9 kg (21.8 lb)
CardBoard Packaging dimensions	482x482x257 mm (19x19x10,1 in)

### FREQUENCY RESPONSE CURVE



FREQUENCY RESPONSE CURVE OF 18NLW9400 MADE ON 180 LIT. ENCLOSURE TUNED AT 35HZ 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



### NOTES

- 1) AES power is determined according to AES2-1984 (r2003) standard
- 2) Program power rating is measured in 180lit enclosure tuned 35Hz using a 40-400Hz band limited pink noise test signal 50% duty cycle applied continuously 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 #2 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) Thiele - Small parameters are measured after the test specimen has been conditioned by AES power and represent the expected long term parameters after a short period of use.
- 8) linear Math. Xmax is calculated as  $(Hvc+Hg)/2 + Hg/4$  where Hvc is the coil depth and Hg is the gap depth.