

# 18NLW9600 4 OHM (022184N000)

FERRITE LF TRANSDUCER

## GENERAL SPECIFICATIONS

|                               |                                    |
|-------------------------------|------------------------------------|
| NOMINAL DIAMETER              | 462 mm (18 in)                     |
| RATED IMPEDANCE               | 4 Ω                                |
| AES POWER (1)                 | 1800 W                             |
| PROGRAM POWER (2)             | 3600 W                             |
| PEAK POWER (3)                | 10000 W                            |
| SENSITIVITY (4)               | 96 dB                              |
| FREQUENCY RANGE (5)           | 32 + 2500 Hz                       |
| POWER COMPRESSION @-10 dB (6) | (180W) 0,7 dB                      |
| POWER COMPRESSION @-3 dB      | (900W) 1,3 dB                      |
| POWER COMPRESSION @FULL POWER | (1800W) 2,2 dB                     |
| MAX RECOMM. FREQUENCY         | 300 Hz                             |
| RECOMM. ENCLOSURE VOLUME      | 110 + 350 lt. (3,89 + 12,36 cu.ft) |
| MINIMUM IMPEDANCE             | 03 Ω at 25°                        |
| MAX PEAK TO PEAK EXCURSION    | 70 mm (2,76 in)                    |
| VOICE COIL DIAMETER           | 135 mm (5,31 in)                   |
| VOICE COIL WINDING MATERIAL   | Aluminum                           |
| SUSPENSION                    | Triple Roll , Polycotton           |
| CONE                          | Straight Ribbed , Treated Paper    |

## THIELE SMALL PARAMETERS (7)

|                                    |                            |
|------------------------------------|----------------------------|
| Fs                                 | 33 Hz                      |
| Re                                 | 2,5 Ω                      |
| Sd                                 | 0,1134 sq.m (175,77 sq.in) |
| Qms                                | 6,00                       |
| Qes                                | 0,28                       |
| Qts                                | 0,27                       |
| Vas                                | 170 lt. (6,00 cu.ft)       |
| Mms                                | 274 gr. (0,60 lb)          |
| BL                                 | 23 Tm                      |
| Linear Mathematical Xmax (8)       | ±14 mm (±0,55 in)          |
| Le (1kHz)                          | 1,25 mH                    |
| Ref. Efficiency 1W@1m (half space) | 95,6 dB                    |

## MOUNTING INFORMATION

|                                |                                       |
|--------------------------------|---------------------------------------|
| Overall diameter               | 462 mm (18,19 in)                     |
| N. of mounting holes           | 8                                     |
| Mounting holes diameter        | 8,5 mm (0,33 in)                      |
| Bolt circle diameter           | 440 mm (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                    | 237,5 mm (9,35 in)                    |
| Flange and gasket thickness    | 26 mm (1,02 in)                       |
| Net weight                     | 12,5 kg (27,56 lb)                    |
| Shipping weight                | 14 kg (30,86 lb)                      |
| CardBoard Packaging dimensions | 482x482x257 mm (18,98x18,98x10,12 in) |

## TECHNOLOGIES

SDR Single Demodulating Ring, DSS Double Silicon Spider, ISV Interleaved Sandwich Voice Coil

(1) AES standard.

(2) Program power rating is measured in 180 lit. enclosure tuned at 35 Hz using a 40-400 band limited pink noise test signal applied for 2 hours and with 50% duty cycle.

(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 2V sine wave test signal swept between 100Hz and 500Hz with the test specimen mounted in the same enclosure as given for 2 above.

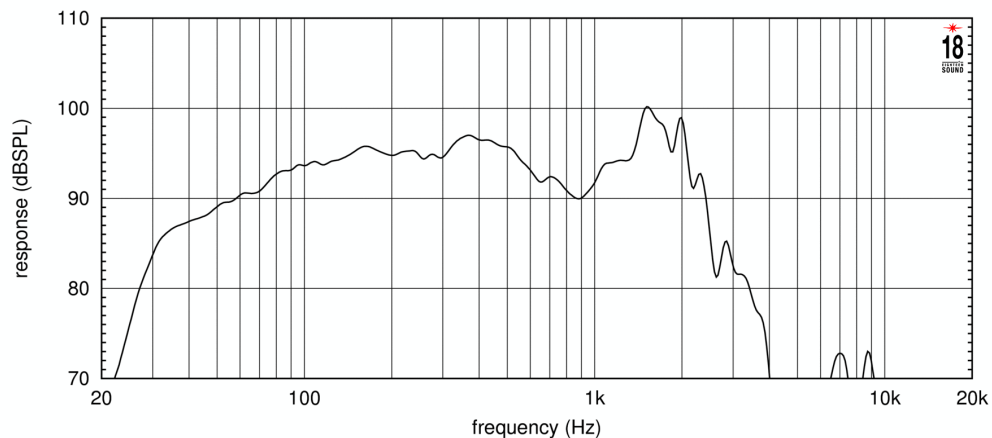
(5) Frequency range is given as the band of frequencies delineated by the lower and upper limits where the output level drops by 10 dB below the rated sensitivity in half space environment.

(6) Power compression represents the loss of sensitivity for the specified power, measured from 40 to 400Hz after a 5 min pink noise preconditioning test at the specified power.

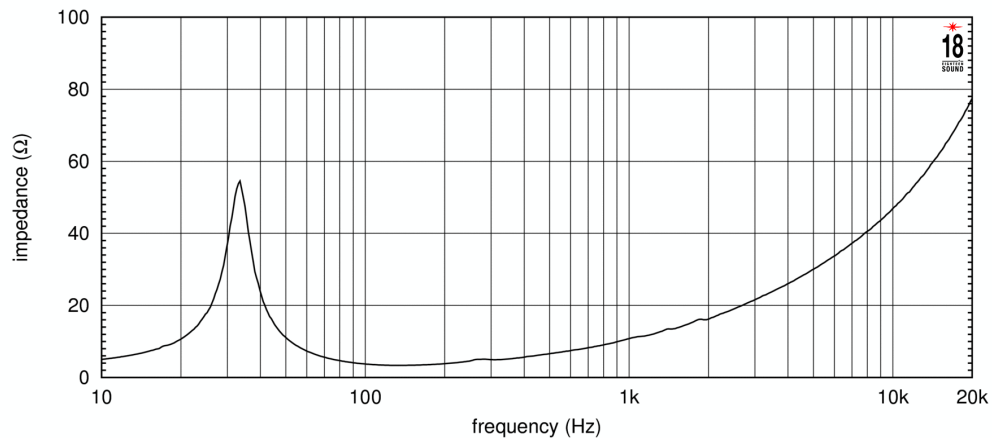
(7) Thiele - Small parameters are measured after the test specimen has been conditioned by 1 hour 20 Hz sine and represent the expected long term parameters after a short period of use.

(9) Linear Mat. Xmax is calculated as:  $(Hvc-Hg)/2 + Hg/4$  where Hvc is the coil depth and Hg is gap depth.

FREQUENCY RESPONSE MADE IN 180 LT. ENCLOSURE TUNED AT 35 Hz IN FREE FIELD (4π) ENVIRONMENT. ENCLOSURE CLOSES THE REAR OF THE DRIVER, THE THIN LINE REPRESENTS 45° OFF AXIS FREQUENCY RESPONSE



## FREE AIR IMPEDANCE CURVE



Versione: 21/05/2010

