

# 18ND930 Low Frequency Neodymium Driver

022188N220 8 ohm



## Key features

- 99 dB SPL 1W / 1m average sensitivity
- 75mm ( 3" ) interleaved sandwich voicecoil (ISV)
- 500 W continuous pink noise
- Neodymium magnet assembly
- Twin spider (T/S) for improved linearity
- Demodulating Ring for lower distortion
- Humidity resistant cone
- Ideal for very compact high loading enclosures.

## GENERAL SPECIFICATIONS

NOMINAL DIAMETER	460mm	( 18 in )
RATED IMPEDANCE	8 ohms	
CONTINUOUS PINK NOISE	500 W	(1)
CONT. POWER	400 W	(2)
PROGRAM POWER	800 W	(3)
PEAK POWER	1600 W	(4)
SENSITIVITY	99 dB	(5)
FREQUENCY RANGE	35 - 3800 Hz	(6)
POWER COMPRESSION		(7)
@-10 dB (40 W)	0,6 dB	
@-3 dB (200 W)	1,9 dB	
@FULL POWER (400 W)	2,8 dB	
MAX RECOMM. FREQUENCY	500 Hz	
RECOMM. ENCLOSURE VOLUME	90 - 200 lt.	( 3,18 - 7,06 cuft )
MINIMUM IMPEDANCE	6,7 ohms at 25 deg.	
MAX EXCURSION PEAK TO PEAK	34 mm	( 1,34 in )
VOICE COIL DIAMETER	75 mm	( 2,95 in )
VOICE COIL WINDING MATERIAL	copper	

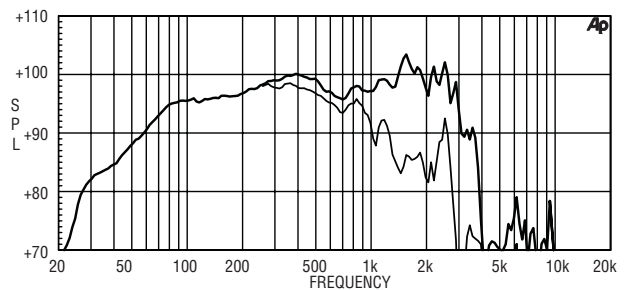
## THIELE-SMALL PARAMETERS (8)

Fs	33 Hz	
Re	5,5 ohms	
Sd	0,1133 sq.mt.	( 175,7 sq.in. )
Qms	7,65	
Qes	0,29	
Qts	0,28	
Vas	316 lt.	( 11,16 cuft )
Mms	133 gr.	( 0,29 lb )
BL	22 Tm	
Linear Mathematical Xmax	±7,5 mm	( ±0,3 in ) (9)
Le (1kHz)	1,7 mH	
Ref. Efficiency		
dB / 1W / 1m ( half space)	97,8 dB	

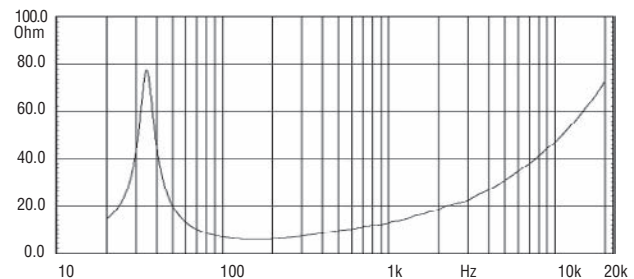
## MOUNTING INFORMATION

Overall diameter	462 mm	( 18,19 in )
N. of mounting holes	8	
Mounting holes diameter	8,5 mm	( 0,33 in )
Bolt circle diameter	438-440 mm	( 17,24-17,32 in )
Front mount baffle cutout diameter	416 mm	( 16,38 in )
Rear mount baffle cutout diameter	412 mm	( 16,22 in )
Total depth	19 mm	( 0,75 in )
Flange and gasket thickness	206 mm	( 8,11 in )
Net weight	5,9 kg	( 13,02 lb )
Shipping weight	7,3 kg	( 16,1 lb )
CardBoard packing dimensions	482 x 482 x 257 mm	( 18,98 x 18,98 x 10,12 in )

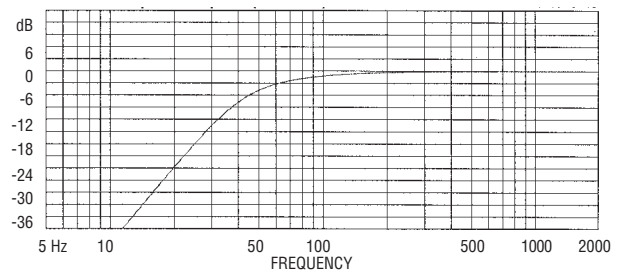
FREQUENCY RESPONSE CURVE OF 18ND930 MADE ON 180 Lit. ENCLOSURE 35 Hz IN FREE FIELD (4pi) ENVIRONMENT. ENCLOSURE CLOSE THE REAR OF THE DRIVER . THE THIN LINE REPRESENTS 45 DEG. OFF AXIS FREQUENCY RESPONSE



FREE AIR IMPEDANCE MAGNITUDE CURVE



NORMALIZED AMPLITUDE RESPONSE (dB/Hz)



## Box Parameters

### Custom Vented Box

<b>Vb</b>	= 110Lt.	<b>Fill</b>	= normal
<b>Fb</b>	= 38 Hz	<b>Dv</b>	= 18,00 cm
<b>QL</b>	= 7.0	<b>Lv</b>	= 30,20 cm

(1) AES standard

(2) Continuous power rating is measured in 180 lit enclosure tuned 35Hz using a 40-400Hz band limited pink noise test signal applied continuously for 2 hours.

(3) "Program power rating is measured as for "2" above but 50% duty cycle."

(4) The peak power rating is based on a 6dB crest factor above the continuous power rating and represents the maximum permitted instantaneous peak power level over a maximum period of 10ms which will be withstood by the loudspeaker without damage.

(5) 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 2. above.

(6) 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.

(7) 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.

(8) Thiele - small parameters are measured after the test specimen has been conditioned by 500W AES power and represent the expected long term parameters after ashort 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.