

# 12ND830

## High Output MB Neodymium Transducer

99 dB SPL 1W / 1m average sensitivity  
 75 mm (3 in) Interleaved Sandwich Voice coil (ISV)  
 450 W AES power handling  
 Neodymium magnet assembly  
 Ideal for compact reflex enclosures and two-way systems



### GENERAL SPECIFICATIONS

Nominal Diameter	300mm (12 in)
Rated Impedance	8 Ohm
AES Power	450W
Program Power	700W
Peak Power	1500W
Sensitivity	99dB
Frequency Range	53 - 5000 Hz
Power Compression @-10dB	0,6 dB
Power Compression @-3dB	2,0 dB
Power Compression @@Full Power	3,1 dB
Max Recomm. Frequency	2000 Hz
Recomm. Enclosure Volume	40 - 100 lt. (1,41 - 3,53 cuft)
Minimum Impedance	7,0 Ohm at 25°C
Max Peak To Peak Excursion	30 mm (1,18 in)
Voice Coil Diameter	75 mm (3 in)
Voice Coil winding material	aluminum
Suspension	M-Roll, Polycotton
Cone	Curvilinear, Paper

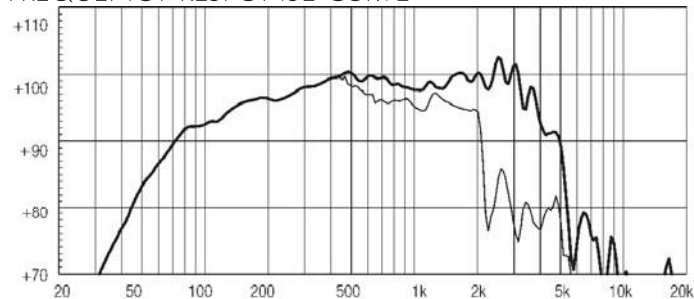
### THIELE SMALL PARAMETERS

Fs	55 Hz
Re	5,7 Ohm
Sd	0,0531 sq.mt. (82,31 sq.in.)
Qms	5,15
Qes	0,296
Qts	0,28
Vas	72 lt. (2,54cuft)
Mms	46 gr. (0,10 lb)
Bl	17,6 Tm
Linear Mathematical Xmax	± 6,5 mm (± 0,26 in)
le (1kHz)	1,5 mH
Ref. Efficiency 1W@1m (half space)	98,3 dB

### MOUNTING INFORMATION

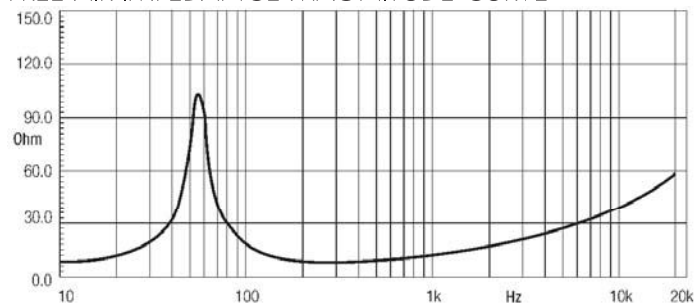
Overall diameter	315 mm (12,4 in)
N. of mounting holes and bolt	8
Mounting holes diameter	7,15 mm (0,28 in)
Bolt circle diameter	296-300 mm (11,65-11,8 in)
Front mount baffle cutout diameter	282 mm (11,1 in)
Rear mount baffle cutout diameter	282 mm (11,1 in)
Total depth	140 mm (5,52 in)
Flange and gasket thickness	11,5 mm (0,45 in)
Net weight	4 kg (8,83 lb)
Shipping weight	5 kg (11,02 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 12ND830 MADE ON 50 LIT. ENCLOSURE TUNED 60HZ IN FREE FIELD (4#) 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 at 60Hz using a 40-400Hz band limited pink noise test signal with 50% duty cycle, applied 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 this same enclosure as given for (1) 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) Linear Math. Xmax is calculated as  $(Hvc+Hg)/2 + Hg/4$  where Hvc is the coil depth and Hg is the gap depth.