6ND430

LF Neodymium Transducer

Key Features

- 92.5 dB SPL 1W / 1m average sensitivity
- 45 mm (1.77 in) aluminum voice coil
- 200 W AES power handling
- Neodymium motor assembly
- Weather protected cone
- Improved heat dissipation via unique basket design
- Ideal for compact two way and multiway systems

Description

The 6ND430 is a 6 inch neodymium woofer designed for low frequency reproduction in 2-way systems or multiway systems where both low weight and high intelligibility are required. The speaker has been specifically designed for compact reflex enclosures where high quality low-bass and mid frequencies are required such as studio monitoring applications. It is also currently used in line array or multiway systems with excellent results. The extremely powerful external neodymium magnet assembly assures high flux concentration, low power compression and excellent heat exchange. The levels of force factor and power handling are, as a consequence, at a top professional level with an optimum power to weight ratio. A consistent heat transfer is guaranteed by the encapsulation of the magnetic structure in the interior of the basket, offering a large contact space between the back plate and the dissipating structure. Particular effort was given to the surround shape and material design in order to minimize the resonances on mid range frequencies. The new design, realised with specified rubber based material density, offers a consistent damping to typical bell modes. The 45 mm voice coil is made from a light-weight aluminum wire and assures linearity and high power handling. A proprietary humidity block cone treatment makes the transducer suitable for outdoor use in adverse weather conditions. In addition, a special coating applied to both the top and back plates makes the 6ND430 far more resistant to the corrosive effects of salts and oxidation.

Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Code</th>
<th>Information</th>
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<tbody>
<tr>
<td>022068N430</td>
<td>022068N430</td>
<td>8 Ohm</td>
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<tr>
<td>022066N430</td>
<td>022066N430</td>
<td>16 Ohm</td>
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<tr>
<td>022064N430</td>
<td>022064N430</td>
<td>4 Ohm</td>
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</table>
6ND430

**General Specifications**

- **Nominal Diameter**: 152mm (6 in)
- **Rated Impedance**: 8 Ohm
- **AES Power**: 200 W
- **Program Power**: 260 W
- **Peak Power**: 500 W
- **Sensitivity**: 92.5 dB
- **Frequency Range**: 63 ÷ 5500 Hz
- **Power Compression @-10dB**: 1.0 dB
- **Power Compression @-3dB**: 1.5 dB
- **Power Compression @Full Power**: 2.9 dB
- **Max Reamm, Frequency**: 3000 Hz
- **Enclosure Volume**: 10 ÷ 40 lt. (0,35 ÷ 1,41 cuft)
- **Minimum Impedance**: 6.1 Ohms at 25°C
- **Max Peak To Peak Excursion**: 22 mm (0,87 in)
- **Voice Coil Diameter**: 44 mm (1,75 in)
- **Voice Coil Material**: aluminum
- **Suspension**: Single roll, Rubber
- **Cone**: Curvilinear, Paper

**Thiele Small Parameters**

- **Fs**: 61 Hz
- **Re**: 5.5 Ohm
- **Sd**: 0.0133 sq.mt. (20.6 sq.in.)
- **Qms**: 6.5
- **Qes**: 0.28
- **Qts**: 0.27
- **Vas**: 12.6 lt. (0.4 cuft)
- **Mms**: 13.3 gr. (0.03 lb)
- **BL**: 10.0 Tm
- **Linear Math. Xmax**: ± 5 mm (±0.20 in)
- **Le (1kHz)**: 0.28 mH
- **Ref. Efficiency 1W@1m (half space)**: 92 dB

**Mounting Information**

- **Overall Diameter**: 162 mm (6.38 in)
- **N. of mounting holes and bolt**: 4
- **Mounting holes diameter**: 5,5 mm (0.22 in)
- **Bolt circle diameter**: 148 mm (5,88 in)
- **Front mount baffle cutout ø**: 148 mm (5,88 in)
- **Rear mount baffle cutout ø**: 148 mm (5,88 in)
- **Total depth**: 73 mm (2.87 in)
- **Flange and gasket thickness**: 9.5 mm (0.37 in)
- **Net weight**: 1.25 kg (2.76 lb)
- **Shipping weight**: 1.8 kg (3.97 lb)
- **Cardboard Packaging dimensions**: 170 x 170 x 80 mm (6.69 x 6.69 x 3.15 in)

**Notes**

1) AES power is determined according to AES2-1984 (2003) standard

2) Program power rating is measured in 18 lit enclosure tuned at 60 Hz using a 70 - 3000Hz 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 500Hz and 2500Hz with the test specimen mounted in the 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 100-1000 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.

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