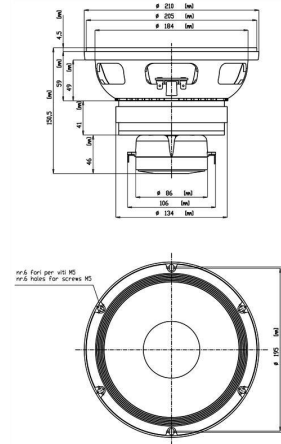




18
EIGHTEEN
SOUND
EighteenSound.com



- 95dB SPL 1W / 1m average sensitivity
- 280W LF - 50W HF power handling
- 51mm (2 inches) LF Interleaved Sandwich Voice coil (ISV)
- 25,4mm (1 inch) HF driver edgewound voice coil
- 90 degrees coverage pattern
- Ideal for compact reflex applications

The 8CX401F coaxial transducer is a 8 inch - 1 inch coaxial driver combining excellent linearity with good efficiency and power handling capabilities.

It is primarily intended for compact reflex enclosures and, because of its versatile characteristics, may also be used in multiway systems or ceiling applications. Its nominal dispersion is 90 degrees. The curvilinear, paper LF section cone is formed using a unique wood pulp composition designed to achieve the best possible rigidity and stiffness. A polycotton multiroll surround to provide increased excursion whilst controlling break up modes carries it.

The 51mm Ø state-of-the-art, aluminum wire voice coil employs same technology of that fitted to our top-of-the-range models using our Interleaved Sandwich Voice coil (ISV) technology. In essence, a high strength Fibreglas former is used to carry windings on both the outer and inner surfaces to achieve a mass balanced coil. This

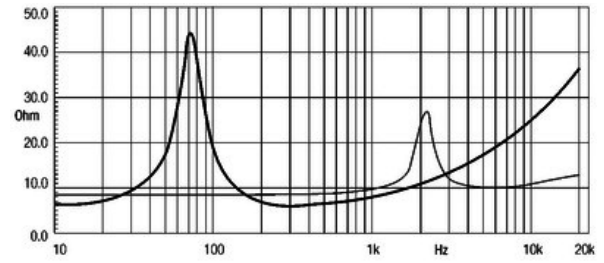
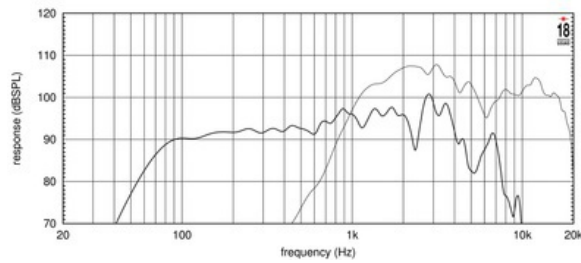
results in an extremely linear motor assembly, which, in conjunction with the highly advanced design of the magnetic structure, provides a high force factor or BL.

The high frequency driver incorporates a polyester material diaphragm for best movement and stress control; the special radial ribs increase stiffness avoiding uncontrolled vibration modes in the usable frequency range. An edge-wound copper clad aluminum voice coil wound on treated Nomex completes the diaphragm assembly.

A computer aided FEA has been used in order to maximize the cone profile coupling and to control the energy in the desired frequency range.

A dedicated high quality passive crossover network is available upon request.

With the increasing use of outdoor audio events, the ability to perform in humid environments is another feature of the 8CX400F. This is achieved by means of exclusively developed humidity repellent cone treatment.



SPECIFICATIONS

Nominal Diameter	200 mm (7.87 in)
Nominal Impedance	8 Ω
Minimum Impedance LF	6.1 Ω
Frequency Range	65 - 6100 Hz
Dispersion Angle ¹	90 °
Woofer Cone Treatment	Humidity repellent
Magnet Material	Ferrite

SPECIFICATIONS HF UNIT

HF Sensitivity ⁵	105.0 dB
HF Nominal Power Handling ⁶	25 W
HF Continuous Power Handling ⁷	50 W
HF Voice Coil Diameter	25 mm (1.0 in)
HF Winding Material	Edge wound Aluminum
Diaphragm Material	Polyester
Recommended Crossover ⁸	3.0 kHz

SPECIFICATIONS LF UNIT

LF Sensitivity ²	95.0 dB
LF Nominal Power Handling ³	280 W
LF Continuous Power Handling ⁴	400 W
LF Voice Coil Diameter	51 mm (2.0 in)
LF Winding Material	ISV Aluminum
Former Material	Fiberglas

PARAMETERS

Resonance Frequency	56 Hz
Re	5.0 Ω
Qes	0.38
Qms	3.23
Qts	0.34
Vas	23.9 dm ³ (0.84 ft ³)
Sd	227.0 cm ² (35.19 in ²)
Xmax	5.8 mm
Mms	18.0 g
Bl	9.3 Txm
Le	0.96 mH
EBP	147 Hz

MOUNTING AND SHIPPING INFO

Overall Diameter	210 mm (8.27 in)
Bolt Circle Diameter	195 mm (7.68 in)
Baffle Cutout Diameter	186 mm (7.32 in)
Depth	150 mm (5.91 in)
Flange and Gasket Thickness	14 mm (0.55 in)
Net Weight	4.4 kg (9.7 lb)
Shipping Weight	5.0 kg (11.02 lb)
Shipping Box	235x235x165 mm (9.25x9.25x6.50 in)

CROSSOVER

Model	03708XCR00
Nominal Impedance	8.0 Ω
Low-pass Slope	12.0 dB/oct
High-pass Slope	12.0 dB/oct

1. Included by -6 dB down points.
2. Applied RMS Voltage is set to 2.83V.
3. 2 hours test made with continuous pink noise signal within the range Fs-10Fs. Power calculated on rated minimum impedance. Loudspeaker in free air.
4. Power on Continuous Program is defined as 3 dB greater than the Nominal rating.
5. Applied RMS Voltage is set to 2.83V.
6. 2 hour test made with continuous pink noise signal within the range from the recommended crossover frequency to 20 kHz. Power calculated on rated nominal impedance. Loudspeaker in free air.
7. Power on Continuous Program is defined as 3 dB greater than the Nominal rating.
8. 12 dB/oct. or higher slope high-pass filter.