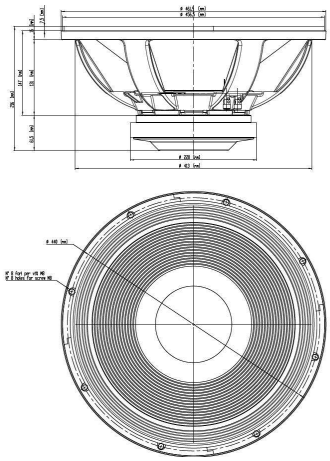
18LW2420 8Ω

LF drivers - 18.0 Inches





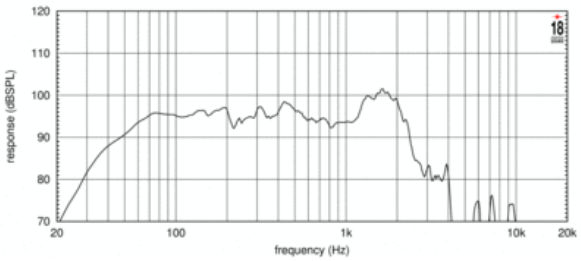
- 100mm (4in) Interleaved Sandwich Voice coil (ISV)
- Improved heat dissipation
- Improved suspension system
- Weather protected cone and plates
- Ideal for horn loaded and high spl subwoofer designs

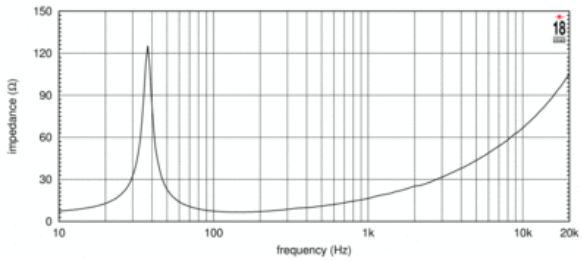
The 18LW2420 is an 18 inch extended low frequency loudspeaker designed for high SPL subwoofer applications in either a reflex, bandpass or horn loaded configuration. Compared to our industry standard 18LW2400, the 18LW2420 provides higher maximum SPL, increased program power handling and lower power compression. For optimum results we recommend amplifiers able to deliver 2600 Watt program power without clipping. Transducer design features include a large displacement suspension system which, in conjunction with a fiberglass reinforced, straight ribbed cone, allows an ultra-linear piston action and provides full mechanical control across the entire working range. The 100 mm (4 in) inside-outside copper voice coil based on Interleaved Sandwich Voice coil (ISV) technology provides high levels of thermal stability and durability. In order to furtherly increase power handling and reduce power compression figure, 18LW2420 uses the same voice coil ventilation technology developed for our flagship 9000 neodymium transducer series. A special low density material air diffractor has been placed into the backplate acting as a cooling system, increasing power handling capability and lowering the power compression figure. The low distortion and unmatched sound quality of the 18LW2420 has been significantly improved by Single Demodulating Ring (SDR) embedded in the pole piece of the magnetic structure. These have been designed to reduce the intermodulation and harmonic distortion while improving the transient response. The magnetic structure has been optimized through advanced FEA CAD simulation tools. 18LW2420 is able to perform properly under inclement weather conditions: the exclusive cone treatment improves pulp strength and gives water repellent properties to both sides of the cone. In addition, the special treatment applied to top and back plates of the magnetic structure is far more resistant to the corrosive effects of salts and oxidization.

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SPECIFICATIONS

Nominal Impedance	8 Ω
Minimum Impedance	6.7 Ω
Nominal Power Handling[1]	1300 W
Continuous Power Handling[2]	2600 W
Sensitivity[3]	98.0 dB
Frequency Range	35 - 2500 Hz
Voice Coil Diameter	100 mm (4.0 in)
Winding Material	copper

DESIGN

Surround Shape	Triple roll
Cone Shape	Curvilinear
Magnet Material	Ferrite
Woofer Cone Treatment	Water,UV repellent
Recommended Enclosure	220.0 dm^3 (7.77 ft^3)
Recommended Tuning	37 Hz

PARAMETERS[4]

Resonance Frequency	32 Hz
Re	5.3 Ω
Qes	0.35
Qms	10.48
Qts	0.33
Vas	252.0 dm^3 (8.9 ft^3)
Sd	1225.0 cm^2 (189.88 in^2)
η_0	2.3 %
Xmax	10.0 mm
Mms	206.0 g
Bl	25.3 Txm
Le	1.9 mH
EBP	91 Hz

MOUNTING AND SHIPPING INFO

Overall Diameter	462 mm (18.19 in)
Bolt Circle Diameter	440 mm (17.32 in)
Baffle Cutout Diameter	422.0 mm (16.61 in)
Depth	215 mm (8.46 in)
Flange and Gasket Thickness	24 mm (0.94 in)
Net Weight	12.4 kg (27.34 lb)
Shipping Weight	13.9 kg (30.64 lb)
Shipping Box	482 x 482 x 257 mm (18.98x18.98x10.12 in)

1. 2 hours test made with continuous pink noise signal within the range Fs-10Fs. Power calculated on rated minimum impedance. Loudspeaker in free air.
2. Power on Continuous Program is defined as 3 dB greater than the Nominal rating.
3. Applied RMS Voltage is set to 2.83 V for 8 ohms Nominal Impedance.
4. Thiele-Small parameters are measured after a high level 20 Hz sine wave preconditioning test.

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