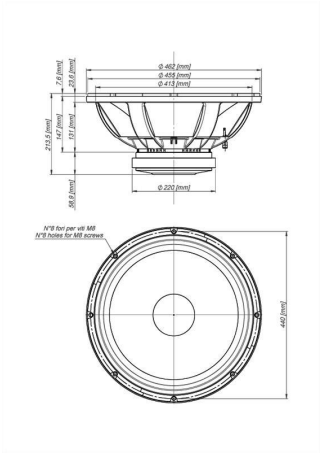
18LW1251 8Ω

LF drivers - 18.0 Inches



- 98 dB SPL 1W / 1m average sensitivity
- 100 mm (4 in) Interleaved Sandwich Voice coil (ISV)
- 1000 W AES power handling
- Double Silicon Spider (DSS) for improved excursion control and linearity
- Weather protected cone and plates for outdoor usage
- Improved heat dissipation via unique basket design and backplate vents
- Suitable for high SPL subwoofer design

The 18LW1251 is the updated version of the 18LW1250, an 18 inch (460 mm) high performance extended low frequency transducer. It has been designed for use as a low bass or sub-woofer component, in either a reflex, bandpass or horn loaded configuration, in high power loudspeaker systems. The 18LW1251 design has evolved from extensive research carried out at our own R&D and Engineering facilities. It provides clean, undistorted low frequency reproduction at very high levels and is able to withstand high power without damage. The transducer design features include a large displacement suspension system which in conjunction with a high quality cone and the Eighteen Sound Double Silicon Spider (DSS), assure a very linear piston action and provide full control across the entire working range. This is further improved by a inside outside copper voice coil, based on our Interleaved Sandwich Voice coil (ISV) technology. This provides high levels of thermal stability and durability. The ISV technology is based on a high strength fiberglas former with half the coil wound on the outside and half on the inside, bonded together using unique high temperature resin adhesives. The result is a balanced linear motor exerting a very high force factor. Excellent heat dissipation is derived from a basket design which incorporates air channels between the basket and the magnetic top plate. In addition, eight air vents in the back plate, aligned with the voice coil, force the air into the lower part of the gap. Maximum flux density in the gap is assured by the special top and back plate design, resulting in a high BL factor. Due to the increasing use of audio systems at outdoor events, the ability to perform in adverse weather conditions or in areas of high humidity is a key feature of the 18LW1251. This has been achieved using exclusive cone treatment and magnetic plate processes which increase resistance to corrosion and render the cone water repellent.

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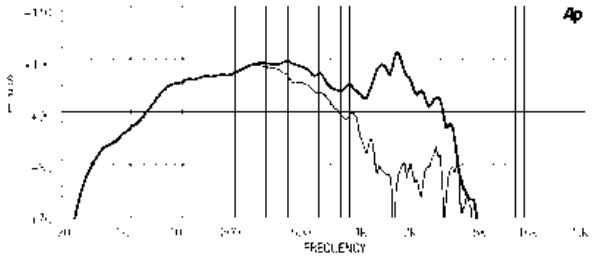

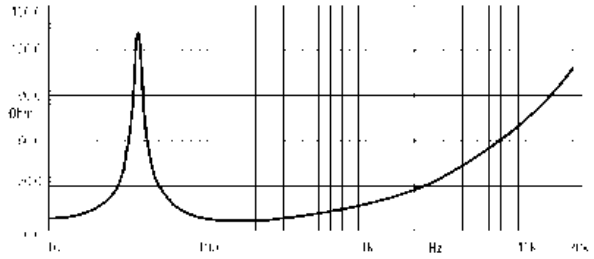

SPECIFICATIONS

Nominal Diameter	460 mm (in)
Nominal Impedance	8 Ω
Minimum Impedance	6.4 Ω
Nominal Power Handling[1]	1000 W
Continuous Power Handling[2]	1400 W
Sensitivity[3]	98.0 dB
Frequency Range	35 - 3500 Hz
Voice Coil Diameter	100 mm (4.0 in)

DESIGN

Surround Shape	M-roll
Cone Shape	Curvilinear
Magnet Material	Ferrite
Spider	Double Silicon Spider
Woofer Cone Treatment	Weather protected
Recommended Enclosure	230.0 dm^3 (8.12 ft^3)
Recommended Tuning	40 Hz

PARAMETERS[4]

Resonance Frequency	35 Hz
Re	5.0 Ω
Qes	0.28
Qms	8.0
Qts	0.27
Vas	268.0 dm^3 (ft^3)
Sd	1134.0 cm^2 (175.77 in^2)
Xmax	9.0 mm
Mms	142.0 g
Bl	23.6 Txm
Le	2.73 mH
EBP	125 Hz

MOUNTING AND SHIPPING INFO

Overall Diameter	462 mm (in)
Bolt Circle Diameter	438 mm (in)
Baffle Cutout Diameter	416.0 mm (in)
Depth	207 mm (in)
Flange and Gasket Thickness	19 mm (in)
Net Weight	13.0 kg (lb)
Shipping Weight	14.7 kg (lb)
Shipping Box	
482 x 482 x 257 mm (19 x 19 x 10,1 in) mm (in)	

SERVICE KIT

0271881250

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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