# CELESTION

# LF Cast Chassis / Ferrite

# CF18VJD



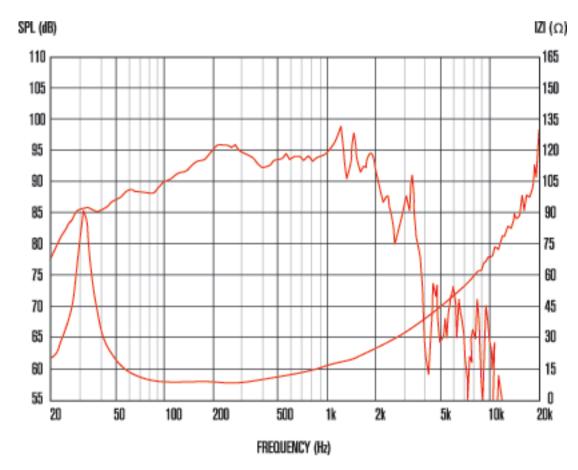




#### Features

- 18" ferrite magnet, cast aluminium chassis LF driver delivering 1600Wrms (AES Standard) power handling and 97dB sensitivity
- 5" high temperature, dual layer, Inside/Outside voice coil for higher efficiency, preventing sensitivity loss through thermal compression
- FEA optimized magnet assembly delivers highly symmetrical cone movement, leading to exceptionally low harmonic distortion
- · Vented front plate increases airflow to provide enhanced cooling
- Twin demodulation rings reduce flux modulation, minimizing electromagnetic distortion
- Double suspension and "multi-roll" surround provide exceptional linearity at extremes of cone excursion

#### 8 Frequency Response



### **General Specifications**

Nominal diameter	460mm/18in
Power rating1	1600Wrms
Nominal impedance	8
Sensitivity2	97dB
Frequency range	25Hz-1500Hz
Voice coil diameter	125mm/5in
Chassis type	Cast aluminium
Magnet type	Ferrite
Coil material	Round copper
Former material	Glass fibre
Cone material	
Surround material	Cloth sealed
Suspension	Double
Xmax <sup>3</sup>	9mm/0.35in
Gap depth	12mm/0.47in
Voice coil winding width	30mm/1.18in

## **Small Signal Parameters**

D	0.38m/14.96in
Fs	34.3Hz
Mms	259.72g/9.16oz
Mmd	238.11g/8.39oz
Qms	5.152
Qes	0.360
Qts	0.336
Re	5.98
Vas	150.58lt/5.32ft3
BI	30.52Tm
Cms	0.083mm/N
Rms	10.88kg/s
Le (at 1kHz)	1.48mH

## **Mounting Information**

Diameter	462mm/18.19in
Overall depth	233mm/9.17in
Cut-out diameter	416mm/16.38in
Mounting slot dimensions	11mm x 7mm/0.43in x 0.28in

Number of mounting slots	
Mounting PCD range	432-44
Unit weight	

2-441mm/17.0-17.36in 23kg/50.6lb

1. Tested for two hours using a continuous, band-limited pink noise signal as per AES standard. Power calculated on minimum impedance. Loudspeaker tested in free air.

- 2. Measured on axis at 1W, 1m in 2 anechoic environment.
- 3. Xmax derived from: (voice coil winding width-gap depth)/2.



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