



CF1830E

Ferrite magnet cast aluminium chassis driver

General Specifications

Nominal diameter	457mm/18in
Power rating ¹	700Wrms
Continuous power rating ²	1400W
Nominal impedance	8Ω
Sensitivity ³	95dB
Frequency range	30-2500Hz
Voice coil diameter	75mm/3in
Chassis type	Cast Aluminium
Magnet type	Ferrite
Magnet weight	1.84kg/64oz
Coil material	Round Copper
Former material	Glass Fibre
Cone material	Glass-Reinforced Paper
Surround material	Cloth-sealed
Suspension	Single
Xmax ⁴	5mm/0.2in
Gap depth	8mm/0.31in
Voice coil winding width	18mm/0.71in

Small Signal Parameters⁵

D	0.38m/14.96in
Fs	40.5Hz
Mms	167.47g/5.91oz
Qms	4.567
Qes	0.371
Qts	0.343
Re	5.27Ω
Vas	167.92lt/5.93ft ³
Bl	24.6Tm
Cms	0.092mm/N
Rms	9.33kg/s
Le (at 1kHz)	3.24mH

Mounting Information

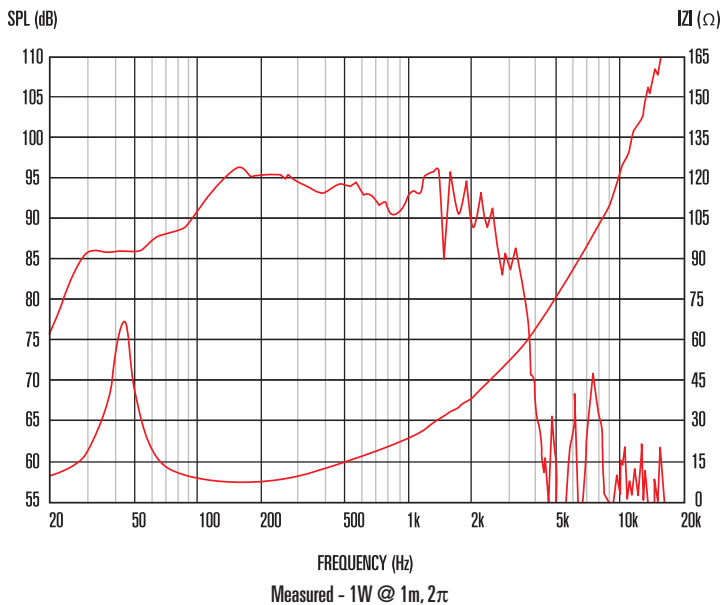
Diameter	460mm/18.11in
Overall depth	211.3mm/8.31in
Cut-out diameter	414mm/16.29in
Mounting slot dimensions	11mm x 7mm/0.43 x 0.28in
Number of mounting slots	8
Mounting slot PCD	441-432mm/17.36-17.0in
Unit weight	8.12kg/17.9lb



Features

- 18" ferrite magnet, cast aluminium chassis LF driver delivering 700Wrms (AES Standard) power handling and 95dB sensitivity
- 3" high temperature, multi-layer voice coil for greater motor force
- FEA optimized magnet assembly and suspension deliver highly symmetrical cone movement, leading to exceptionally low harmonic distortion
- Balanced Airflow Venting (BAV) on the front-plate increases airflow to provide enhanced cooling
- Dual Magnet Motor (DMM) incorporates a secondary magnet used to increase overall motor force (Bl) without the need for any additional increase in magnet size
- "Multi-roll" surround provides exceptional linearity at extremes of cone excursion

Frequency Response and Impedance Curves



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. Continuous Power Handling is defined as 3dB greater than the AES rating.
 3. Measured on axis at 1W, 1m in 2π anechoic environment.
 4. Xmax derived from: (voice coil winding width-gap depth)/2.
 5. Small signal parameters measured after unit subjected to pre-conditioning signal.