## CELESTIOח

## LF Loudspeakers

## CF1840JD



- Balanced airflow venting provides enhanced cooling
- Twin demodulation rings
- Optimised double suspension


## Frequency Response and Impedance Curves



Topmost curve: Frequency response on axis | Secondary curve: Frequency
response at $45^{\circ}$ off axis response at $45^{\circ}$ off axis

Power rating: Tested for two hours using a continuous, band-limited pink
noise signal as per AES standard. Power calculated on minimum impedance.
Louaspeaker tested in tree air.
Continuous power rating: Defined as 3 dB greater than the AES rating.
Sensitivity: Measured on axis at $1 \mathrm{~W}, 1 \mathrm{~m}$ in 2 anechoic environment.
Parameters: Measured after unit subjected to pre-conditioning signal.
Xmax: $0.5^{*}(\mathrm{Hvc}-\mathrm{Hg})+0.25^{*} \mathrm{Hg}$

## General Specifications

| Nominal Diameter | $457 \mathrm{~mm} / 18 \mathrm{in}$ |
| :--- | :--- |
| Power Rating | 1200 W |
| Continuous power rating | 2400 W |
| Rated impedance | 8 |
| Sensitivity | 97 dB |
| Frequency range | $30-2500 \mathrm{~Hz}$ |
| Chassis type | Cast aluminium |
| Magnet type | Ferrite |
| Magnet weight | $3.18 \mathrm{~kg} / 112 \mathrm{oz}$ |
| Voice coil diameter | $100 \mathrm{~mm} / 4 \mathrm{in}$ |
| Voice coil material | Round copper |
| Former material | Glass fibre |
| Cone material | Kevlar loaded paper |
| Surround material | Cloth-sealed |
| Suspension | Double |
| Xmax | $12.5 \mathrm{~mm} / 0.49 \mathrm{in}$ |
| Gap height (Hg) | $10 \mathrm{~mm} / 0.39 \mathrm{in}$ |
| VC winding height (Hvc) | $30 \mathrm{~mm} / 1.18 \mathrm{in}$ |
| Additional impedances | 4 |

## Mounting Information

| Overall diameter | $460 \mathrm{~mm} / 18.11 \mathrm{in}$ |
| :--- | :--- |
| Overall depth | $220 \mathrm{~mm} / 8.7 \mathrm{in}$ |
| Cut-out diameter | $414 \mathrm{~mm} / 16.24 \mathrm{in}$ |
| Mounting hole dimensions | $11 \times 7 \mathrm{~mm} / 0.43 \times 0.28 \mathrm{in}$ |
| Number of mounting holes | 8 |
| Mounting hole PCD | $441-432 \mathrm{~mm} / 17.36-17.01 \mathrm{in}$ |
| Unit weight | $11.6 \mathrm{~kg} / 25.5 \mathrm{lb}$ |

## Parameters

| Sd | $1134.12 \mathrm{~cm} 2 / 175.79 \mathrm{in} 2$ |
| :--- | :--- |
| Fs | 37.00 Hz |
| Mms | $217.40 \mathrm{~g} / 7.67 \mathrm{oz}$ |
| Qms | 4.372 |
| Qes | 0.437 |
| Qts | 0.397 |
| Re | 5.29 |
| Vas | $1551 / 5.47 \mathrm{ft} 3$ |
| Bi | 24.76 Tm |
| Cms | $0.09 \mathrm{~mm} / \mathrm{N}$ |
| Rms | $11.56 \mathrm{~kg} / \mathrm{s}$ |
| Le (at 1 kHz$)$ | 1.16 mH |
| Xmax | $12.5 \mathrm{~mm} / 0.49 \mathrm{in}$ |

## Packed Dimensions \& Weight

| Single pack size $W \times \mathrm{D} \times$ H | $\begin{aligned} & 500 \mathrm{~mm} \times 500 \mathrm{~mm} \times 255 \mathrm{~mm} / 19.7 \mathrm{in} \\ & \times 19.7 \mathrm{in} \times 10 \mathrm{in} \end{aligned}$ |
| :---: | :---: |
| Single pack weight | 13kg / 28.6lb |
| Multi pack qty | 24 |
| Multi pack size W x $\mathrm{D} \times \mathrm{H}$ | $1210 \mathrm{~mm} \times 1050 \mathrm{~mm} \times 1070 \mathrm{~mm} / 47$. 6in $\times 41.3$ in $\times 42.1$ in |
| Multi pack weight | $305 \mathrm{~kg} / 670 \mathrm{lb}$ |

