



# CHALLENGER™ Series II C-12LF



## Applications

### C-12LF

The C-12LF is a very efficient full range transducer designed for use in two way and three way sound reinforcement and public address systems. The C-12LF is a 12 inch (315mm) diameter driver that features a large Ferrite based permanent magnet and a light weight die cast aluminum chassis. When used as the bass component in a multi way design the C-12LF will provide both high acoustic output and very high reliability. High reliability and high power handling are generated by a very effective coupling of the large format 4 inch (101.6mm) diameter voice coil and edge wound rectangular aluminum to the computer designed permanent magnetic system. The large cross sectional area of the C-12LF's voice coil insures low power compression and high thermal capacity.

The C-12LF has an operating bandwidth of 60Hz to 2000Hz. This bandwidth is the result of optimizing the mid band efficiency and the low frequency response. The rated bandwidth is ideal for modern two way designs where high efficiency horn and compression driver are used for the high end response.

The Challenger Series II uses a newly developed cone material designed for high internal damping and accurate vocal response. The C-12LF is ideal when high intelligibility is specified for vocal fundamentals.

## Specifications

### GENERAL SPECIFICATIONS

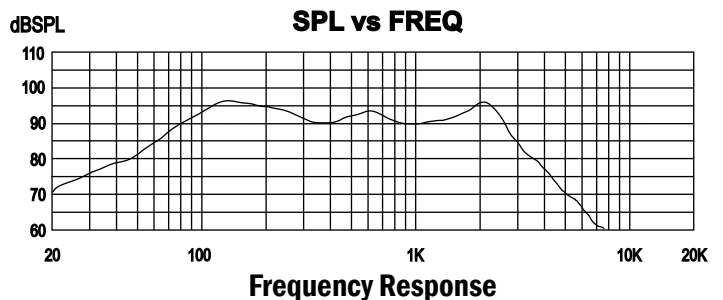
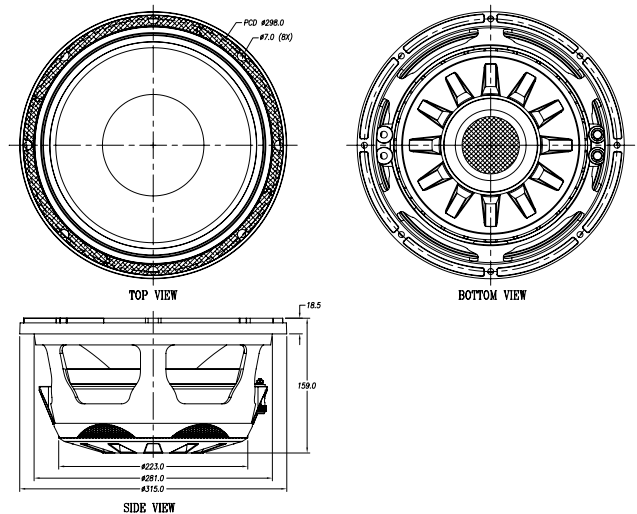
Nominal Impedance	8 Ω
Power	800 Watt (rms)
SPL 1W@1M average sensitivity	95 dB
Frequency Response	60Hz - 2000Hz
Dimension Ø x H (cm)	31.5 x 15.9
Net Weight	11.7 kg (25.7 lbs)
Shipping Weight	12.9 kg (28.4 lbs)
Packing Dimension H x W x D (cm)	34.5 x 34.5 x 21.0 (0.9cu.ft)
	13.6" x 13.6" x 8.3"

### PHYSICAL SPECIFICATIONS

Magnet type	Ferrite
Voice Coil Diameter	101.6 mm (4 inch)

### THIELE/SMALL PARAMETERS

Resonance Frequency	Fs	58 Hz
DC. Resistance	Re	6.2 Ω
Coil Inductance	Le	0.86 mH
Mechanical Q Factor	Qms	6.8
Electrical Q Factor	Qes	0.44
Total Q Factor	Qts	0.41
BL Product	BL	24.63 Tm
Effective Moving Mass	Mms	116.64 g
Equivalent Cas Air-Load	Vas	27.04 Liters
Effective Piston Area	Sd	0.0550 Sqm
Half-Space Efficiency	Eff	1.21 %
Airgap Height	Hag	10.0 mm
Voice Coil Height	Hvc	26.0 mm
Voice Coil Overhang	Xmax	8.0 mm



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