

# 18DS115

**8Ω****LF Drivers - 18.0 Inches**

- 3400 W continuous program power capacity
- 116 mm (4.5 in) split winding four layer aluminum voice coil
- 30 - 500 Hz response
- 98 dB sensitivity
- 60 mm peak-to-peak excursion before damage
- Neodymium magnet allows a very high force factor and linear excursion
- Double silicone spider with optimized compliance
- Ventilated voice coil gap for reduced power compression
- Aluminium demodulating ring for very low distortion



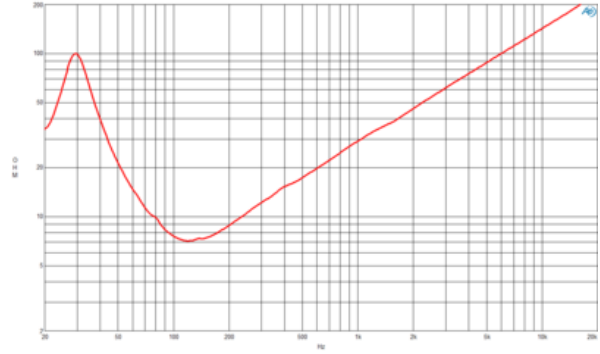
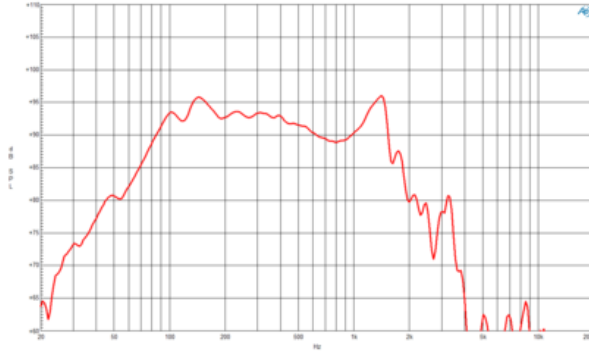
## DESCRIPTION

\*\* Preliminary Data \*\*

This next evolution subwoofer uses a new, longer, four layer aluminum voice coil. The result is more energy in the gap, higher sensitivity, lower distortion and better overall performance. The 18DS115 features a 40mm long, 4.5 inch diameter (116mm) Copper Clad Aluminum Wire voice coil. With a 1700watt AES power rating, 99db sensitivity, and over 14.0mm of Xvar, this high energy subwoofer is a significant step forward from similar models in the B&C range.

# 18DS115

## LF Drivers- 18.0 Inches



### SPECIFICATIONS

Nominal Diameter	460 mm (18.0 in)
Nominal Impedance	8 $\Omega$
Minimum Impedance	7.0 $\Omega$
Nominal Power Handling <sup>1</sup>	1700 W
Continuous Power Handling <sup>2</sup>	3400 W
Sensitivity <sup>3</sup>	98.0 dB
Frequency Range	30 - 500 Hz
Voice Coil Diameter	116 mm (4.5 in)
Winding Material	Aluminium
Former Material	Glass Fibre
Winding Depth	40.0 mm (1.57 in)
Magnetic Gap Depth	14.0 mm (0.55 in)
Flux Density	0.8 T

### DESIGN

Surround Shape	Triple Roll
Cone Shape	Radial
Magnet Material	Neodymium Inside Slug
Spider	Double Silicone
Pole Design	T-Pole
Woofer Cone Treatment	TWP Waterproof Both Sides
Recommended Enclosure	80.0 dm <sup>3</sup> (2.83 ft <sup>3</sup> )
Recommended Tuning	40 Hz

### PARAMETERS<sup>4</sup>

Resonance Frequency	30 Hz
Re	5.0 $\Omega$
Qes	0.21
Qms	4.3
Qts	0.2
Vas	168.0 dm <sup>3</sup> (5.93 ft <sup>3</sup> )
Sd	1210.0 cm <sup>2</sup> (187.55 in <sup>2</sup> )
$\eta^{\circ}$	2.2 %
Xmax	16.5 mm
Xvar	14.0 mm
Mms	330.0 g
Bl	39.0 Txm
Le	3.85 mH
EBP	142 Hz

### MOUNTING AND SHIPPING INFO

Overall Diameter	460 mm (18.11 in)
Bolt Circle Diameter	440 mm (17.32 in)
Baffle Cutout Diameter	422.0 mm (16.61 in)
Depth	242 mm (9.53 in)
Flange and Gasket Thickness	16 mm (0.63 in)
Air Volume Occupied by Driver	10.0 dm <sup>3</sup> (0.35 ft <sup>3</sup> )
Net Weight	12.0 kg (26.46 lb)
Shipping Units	1
Shipping Weight	13.6 kg (29.98 lb)
Shipping Box	500x495x275 mm (19.69x19.49x10.83 in)

### SERVICE KIT

RCK18DS1158

- 2 hours test made with continuous pink noise signal (6 dB crest factor) within the range Fs-10Fs. Power calculated on rated minimum impedance. Loudspeaker in free air.
- Power on Continuous Program is defined as 3 dB greater than the Nominal rating.
- Applied RMS Voltage is set to 2.83 V for 8 ohms Nominal Impedance.
- Thiele-Small parameters are measured after a high level 20 Hz sine wave preconditioning test.