

# Oberton 15 XL 400



## KEY FEATURES:

- 102 db 1W / 1m average sensitivity
- 77 mm high temperature aluminium voice coil
- 800 W AES program power
- Powerful, ferrite 180 mm magnet structure
- Silicone spider

## Application : Midbass with extended midrange

The **15XL400** speaker combining very good linearity and efficiency with high power handling capabilities, with use of 77 mm aluminium voice coil. It features aluminium die cast frame, 180 mm magnet structure. **15XL400** is suitable for application as the LF driver in compact 15" 2-way boxes.

### SPECIFICATIONS

Nominal Diameter	15"/388 inch/mm
Impedance	8 Ohm
Minimum Impedance	6.39 Ohm
Power Capacity AES <sup>1</sup>	400 W
Program Power <sup>2</sup>	800 W
Sensitivity	(200-2000 Hz) 102 dB/W/m
Frequency Range	50 - 3500 Hz
Voice Coil Diameter	77 mm
Voice Coil Material	Aluminium
Voice Coil Former	Kapton™
Voice Coil Winding Depth	15 mm
Magnet Gap Depth	9 mm
Cone Material	Paper with glassfiber
Basket	Die cast aluminium
Magnet	Ferrite
Flux Density	1.33 T

### THIELE-SMALL PARAMETERS

Resonance Frequency	48.78 Hz
Mechanical Efficiency Factor (Qms)	9.30
Electrical Efficiency Factor (Qes)	0.350
Total Q (Qts)	0.337
Equivalent Air Volume (Vas)	140.00 Litres
Diaphragm mass ind. airload (Mms)	73.05 grams
Voice Coil Resistance Re	5.6 Ohms
Effective Diaphragm Area (Sd)	829.6 cm <sup>2</sup>
Peak Linear Displacement of Diaphragm (Xmax)*	± 5.25 mm
Mechanical Compliance of Suspension (Cms)	0.146 mm/N
BL Product (BL)	18.92 T.m
V.C. Inductance at 1 kHz (Le)	0.76 mH

1. AES standard. Power is calculated on rated minimum impedance. Measurement is in 120 L box enclosure tuned 56 Hz using a 40-400 Hz band limited pink noise test signal applied continuously for 2 hours.

2. Program power is defined as 3db greater than AES Power Capacity.

\* Linear Mathematical Xmax is calculated as:  $(Hvc - Hg)/2 + Hg/4$  where Hvc is the voice coil depth and Hg is the gap depth.

### MOUNTING INFORMATION

Overall Diameter	388 mm
Baffle Hole Diameter	352 mm
Number of Mounting Holes	8 elliptic 7x8 mm
Bolt Circle Diameter	370/372 mm
Overall Depth	162.5 mm
Net Weight	7.5 kg

# Frequency Response

