

# 15LX60V2

LOW FREQUENCY TRANSDUCER
LX60 Series

### **KEY FEATURES**

- High power handling: 700 W<sub>AES</sub>
- High sensitivity: 98 dB
- FEA optimized magnetic circuit
- Designed with MMSS technology for high control, linearity and low harmonic distortion.
- CONEX spider for higher resistance and consistency.
- Waterproof treatment for both sides of the cone.
- 4" DUO double layer inner/outer voice coil.
- Extended controlled displacement: X<sub>max</sub> ± 9 mm
- Massive mechanical displacement capability:
   X<sub>damage</sub> ± 47 mm



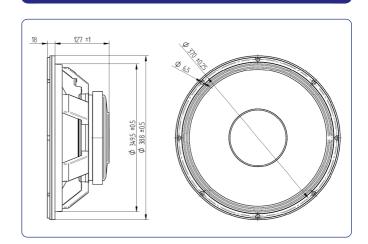
Nominal diameter	380 mm 15 in
Rated impedance	8 Ω
Minimum impedance	7,2 Ω
Power capacity*	700 W <sub>AES</sub>
Program power	1400 W
Sensitivity	98 dB 1W @ 1m @ 2π
Frequency range	30 - 1.500 Hz
Recom. enclosure vol.	60 / 150 I 2,24 / 6 ft <sup>3</sup>
Voice coil diameter	100 mm 4 in
Magnetic assembly weight	9 kg 19,84 lb
BI factor	21,1 N/A
Moving mass	0,147 kg
Voice coil length	20 mm
Air gap height	10 mm
X <sub>damage</sub> (peak to peak)	47 mm

# THIELE-SMALL PARAMETERS\*\*

Resonant frequency, f <sub>s</sub>	42 Hz
D.C. Voice coil resistance, R <sub>e</sub>	5,1 Ω
Mechanical Quality Factor, Q <sub>ms</sub>	21,23
Electrical Quality Factor, Q <sub>es</sub>	0,45
Total Quality Factor, Q <sub>ts</sub>	0,44
Equivalent Air Volume to C <sub>ms</sub> , V <sub>as</sub>	105 I
Mechanical Compliance, C <sub>ms</sub>	92,4 μm / N
Mechanical Resistance, R <sub>ms</sub>	1,9 kg / s
Efficiency, η <sub>0</sub>	1,67 %
Effective Surface Area, S <sub>d</sub>	0,091 m <sup>2</sup>
Maximum Displacement, X <sub>max</sub> ***	9 mm
Displacement Volume, V <sub>d</sub>	812 cm <sup>3</sup>
Voice Coil Inductance, L <sub>e</sub> @ 1 kHz	2,1 mH



# **DIMENSION DRAWINGS**



## **MOUNTING INFORMATION**

Overall diameter Bolt circle diameter Baffle cutout diameter:	388 mm 370 mm	15,28 in 14,57 in
- Front mount - Rear mount	352 mm 355 mm	13,86 in 13,98 in
Depth	145 mm	5,70 in
Volume displaced by driver	7 I	0,14 ft <sup>3</sup>
Net weight	10,2 kg	21,4 lb
Shipping weight	11,3 kg	22,9 lb

#### Notes:

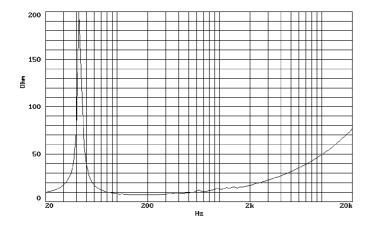
- \* The power capaticty is determined according to AES2-1984 (r2003) standard. Program power is defined as the transducer's ability to handle normal music program material.
- \*\* T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).
- \*\*\* The  $X_{max}$  is calculated as  $(L_{vc} H_{ag})/2 + (H_{ag}/3,5)$ , where  $L_{vc}$  is the voice coil length and  $H_{ag}$  is the air gap height.



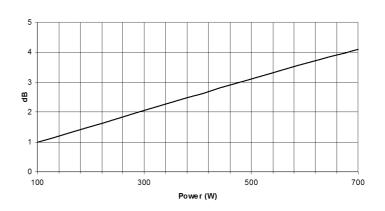
# 15LX60V2

LOW FREQUENCY TRANSDUCER
LX60 Series

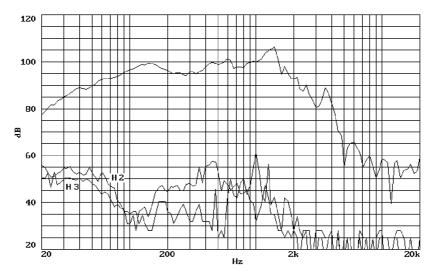
## FREE AIR IMPEDANCE CURVE



## **POWER COMPRESSION LOSSES**



## FREQUENCY RESPONSE AND DISTORTION



Note: On axis frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m

beyma //

Polígono Industrial Moncada II • C/. Pont Sec, 1c • 46113 MONCADA - Valencia (Spain)

- Tel.: (34) 96 130 13 75 - Fax: (34) 96 130 15 07 - http://www.beyma.com - E-mail: beyma@beyma.com -