

6CN38LT6

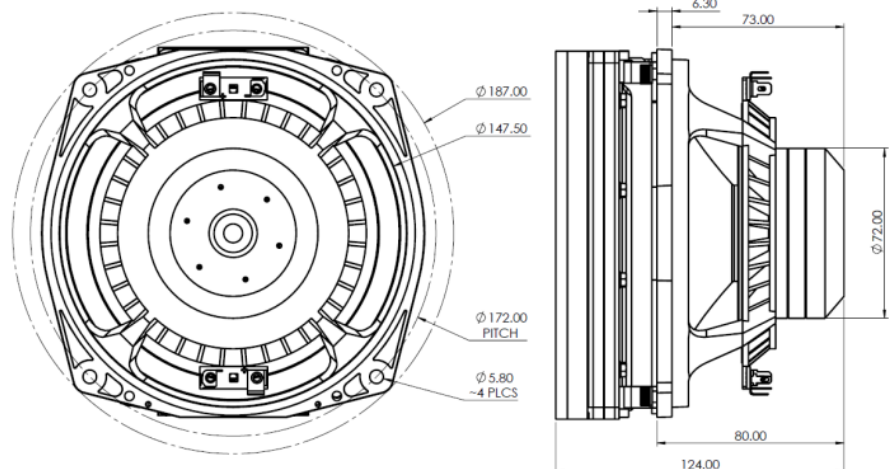
Coaxial transducer with planar ribbon HF driver

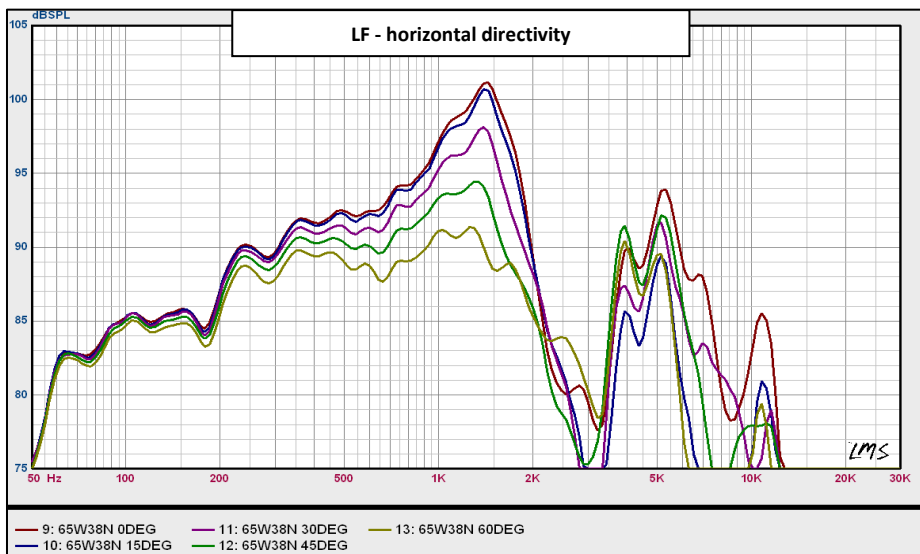
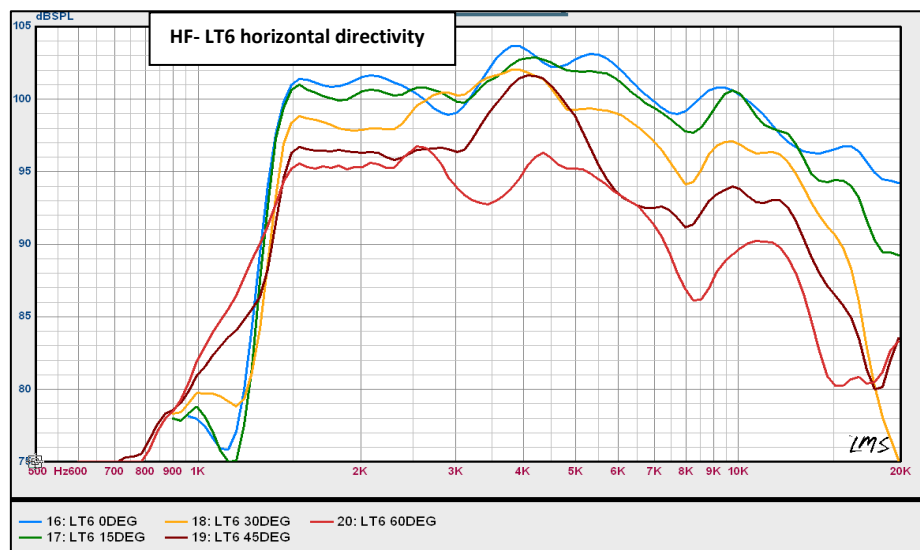
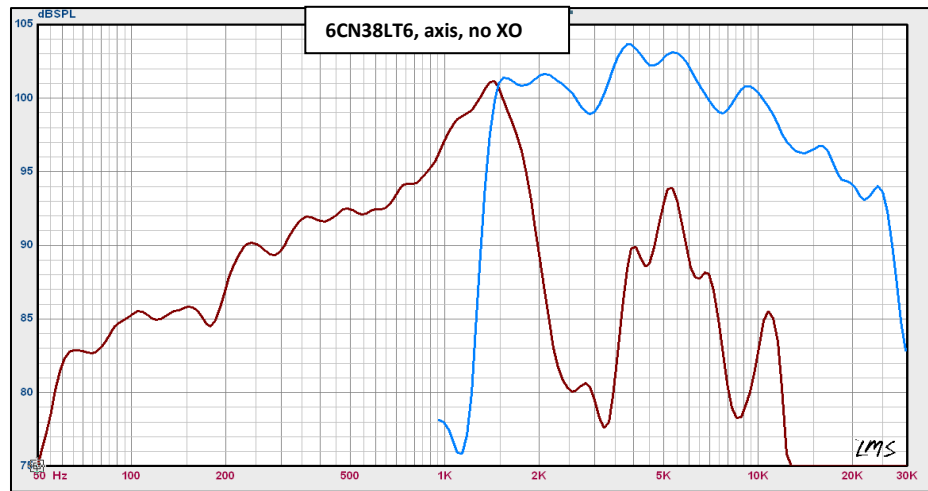


- Neo magnets and Kapton diaphragm
- smooth response extended both in LF and HF range up to 25kHz
- superior sonic transparency and resolution
- unique complimentary acoustic filtering technology
- two aluminum demodulation rings for low distortion
- high output, optimized for line arrays

SPECIFICATIONS

Nominal diameter	6.5"/165mm
Rated impedance	12 Ω
Minimum impedance	9.5 Ω
Power handling, AES ¹	120 W
Long-term maximum power, IEC ¹	200 W
Short-term maximum power, IEC ¹	300 W
LF Sensitivity ²	94 dB
Effective frequency range ³	60 Hz – 25 kHz
Horizontal coverage angle ⁴	90°
Vertical coverage angle ⁴	40°
LF cone material	Paper/Kevlar composite
LF voice coil	Ø38mm, copper clad Aluminum
LF suspension	M-roll, Poly-cotton
Displacement limit for VC	13 mm
LF voice coil winding/magnetic gap height	12.5 mm/5 mm
Magnet material	Neodymium
HF driver	LT6, 6" Planar ribbon
HF Rated impedance	9 Ω (Re=7.3 Ω)
HF Sensitivity ²	102 dB
HF driver power handling AES ¹	40W
HF long term maximum power, IEC ¹	80W
HF short-term maximum power, IEC ¹	150W
Recommended XO frequency (min 12 dB/Oct.)	1.7- 2kHz
Thiele-Small parameters	
Fs	82 Hz
Sd	138.0 cm ²
Re	8.3 Ω
Qms	11
Qes	0.36
Qts	0.35
Vas	9.3 dm ³ (L)
Xmax ⁵	5.0 mm
Mms	11.5 g
BL	11.6 Tm
Le	0.6 mH
Mounting parameters	
Overall diameter	(refer to drawing)
Bolt circle diameter	172 mm (6.77 in)
Baffle cut-out diameter	149 mm (5.87 in)
Overall depth	124.0 mm (4.88 in)
Net weight	1.8 kg (3.96 lb.)





1. AES refers to AES2-1984 Rev.2003. IEC refers to IEC 60268-5. AES power handling tested using IEC60268-1 noise signal for duration of 2 hours in effective frequency range in free air.
2. Measured at 1m at 2.83V in simulated free field conditions in 15L vented test box, Fb=68Hz. Calculated based on response averaged in 300Hz-1kHz for LF and 1.5 kHz – 10 kHz for HF.
3. Specified for complete unit mounted in the test box with recommended XO. Measured in accordance with IEC 60268-5, defined at -10 dB below combined SPL averaged in 300 Hz- 5 kHz range.
4. Coverage angle is specified for complete unit with optimized XO at recommended frequency. Defined at -6dB averaged on octave band center points in 500-10000 Hz range. Vertical coverage angle is estimated within 2-10 kHz range. Refer to LT6 data sheet
5. Xmax is defined as $X_{max} = (H_{vc} - H_{gap}) / 2 + H_{gap} / 4$ and based on actual BL linearity data measured for each driver by laser based analyser with 82% BL reduction limit from normalized maximum at voice coil rest position. Hvc – voice coil height, Hgap – active magnetic gap height