12DM450

VERIFIED WITH
KLIPPEL

☀ **12 inch** ☀ **450 Watts**
☀ **98.5 dB** ☀ **56 ~ 3200 Hz**

KEY FEATURES:

① 900 W continuous program power capacity
② High sensitivity 98.5dB 1w/1m
③ 56~3200Hz frequency response ragne
④ 3" inside/outside copper clad aluminum voice coil

⑤ Peak to Peak maximum excursion of 44mm
⑥ Aluminum dust cap guarantees great voice coil heat dissipation
⑦ Double magnets allows a very high force factor and long driver displacement
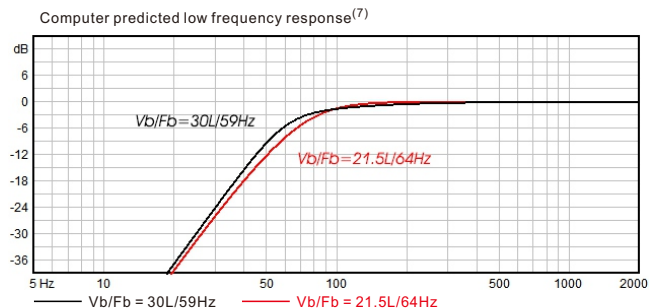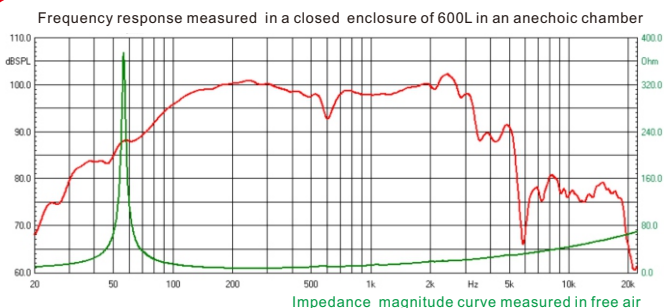⑧ Ideal for very compact 2−ways systems

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	8 ohm
Nominal Power handling[1]	450 Watts
Program Power[2]	900 Watts
Sensitivity(1w/1m)[3]	98.5 dB
Frequency Range[4]	56 ~ 3200Hz
Minimum Impedance(Zmin)	6.6 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	CCAW
Former Material	Fiber Glass
Voice Coil Winding Depth	18.7 mm
Number of layers	2(inside/outside)
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.3 T
Magnet Out Diameter/Wgt	180mm / 136 oz

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	56 Hz
DC resistance	Re	5.4 ohm
Mechanical factor	Qms	15.5
Electrical factor	Qes	0.34
Total factor	Qts	0.33
Mechanical compliance	Cms	0.12 mm/N
Mechanical resistance of total-driver losses	Rms	1.1 kg/s
Effective Moving Mass	Mms	67.1 g
Half-space efficiency	Eff	2.6%
BL Factor	BL	19.6 T.m
Equivalent Cas air load	Vas	50.6 liters
Effective piston area	Sd	0.0551 m^2
Max. linear excursion[6]	Xmax	±6.8 mm
Max. excursion before damage	Xdam	± 22 mm
Voice coil inductance(1kHz)	Le	0.89 mH
Efficiency Bandwidth Product	EBP	165

MOUNTING INFORMATION

Overall Diameter	316 mm
Bolt Circle Diameter	297 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	283 mm
Overall Depth	165 mm
Air volume occupied by driver	3.6 liters
Net Weight	9.5 kg
Shipping Weight	10.5 kg
Shipping Box	345x345x200mm

Turbosonic PRO SPEAKERS

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]

Vb/Fb=30L/59Hz
Vb/Fb=21.5L/64Hz

Vb/Fb = 30L/59Hz   Vb/Fb = 21.5L/64Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.

5. Thiele-Small parameters are measured with Klippel DA LPM module BEFORE preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.