

15WR400

LOW FREQUENCY TRANSDUCER
WR Series

KEY FEATURES

- High power handling: 800 W program power
- 3" copper wire voice coil
- High sensitivity: 99 dB (1W / 1m)
- FEA optimized ceramic magnetic circuit
- Weatherproof cone treatment for both sides of the cone
- Extended controlled displacement: X_{max} ± 6,3 mm
- 30 mm peak-to-peak excursion before damage
- · Low harmonic distortion and linear response
- Wide range of applications of low and mid-low frequencies





TECHNICAL SPECIFICATIONS

Nominal diameter	380 mm	15 in
Rated impedance		8 Ω
Minimum impedance		6,4 Ω
Power capacity ¹	4	400 W _{AES}
Program power ²		800 W
Sensitivity	99 dB 1W /	1m @ Z _N
Frequency range	40 -	4.000 Hz
Recom. enclosure vol.	70 / 150 2,45	5 / 5,25 ft ³
Voice coil diameter	76,2 mm	3 in
BI factor		19,2 N/A
Moving mass		0,091 kg
Voice coil length		16 mm
Air gap height		8 mm
X _{damage} (peak to peak)		30 mm

THIELE-SMALL PARAMETERS³

Resonant frequency, f _s	36 Hz
D.C. Voice coil resistance, R _e	5,6 Ω
Mechanical Quality Factor, Q _{ms}	8,2
Electrical Quality Factor, Q _{es}	0,31
Total Quality Factor, Qts	0,30
Equivalent Air Volume to C _{ms} , V _{as}	236 I
Mechanical Compliance, C _{ms}	$215~\mu m / N$
Mechanical Resistance, R _{ms}	2,5 kg/s
Efficiency, η ₀	3,4 %
Effective Surface Area, S _d	$0,088 \text{ m}^2$
Maximum Displacement, X _{max} ⁴	6,3 mm
Displacement Volume, V _d	$555 cm^3$
Voice Coil Inductance, Le	1 mH

Notes:

¹ The power capaticty is determined according to AES2-1984 (r2003) standard.

² Program power is defined as power capacity + 3 dB.

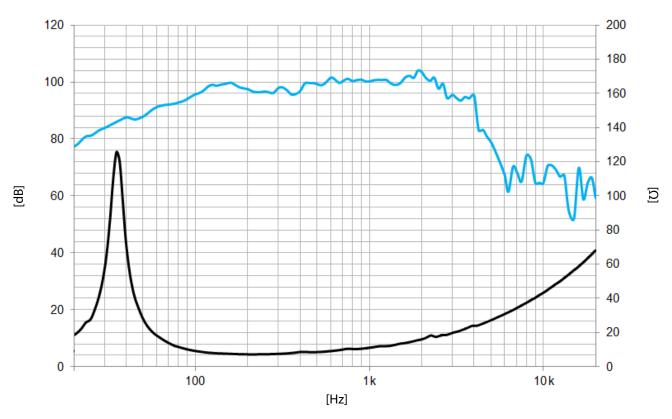
³ T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

 $^{^4}$ The X_{max} is calculated as $(L_{VC}$ - $H_{aq})/2$ + $(H_{aq}/3,5)$, where L_{VC} is the voice coil length and H_{aq} is the air gap height.



15WR400

LOW FREQUENCY TRANSDUCER
WR Series



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

MOUNTING INFORMATION

Overall diameter	388 mm	15,3 in
Bolt circle diameter	370 mm	14,6 in
Baffle cutout diameter:		
- Front mount	350 mm	13,8 in
Depth	163 mm	6,4 in
Net weight	6,1 kg	13,4 lb
Shipping weight	7,1 kg	15,6 lb

DIMENSION DRAWING

