

15WRS400

LOW FREQUENCY TRANSDUCER

WRS Series

KEY FEATURES

- High power handling: 800 W program power
- 3" copper wire voice coil
- High sensitivity: 98,5 dB (1W / 1m)
- Optimized pressed steel frame

- FEA optimized ceramic magnetic circuit
- Waterproof cone treatment for both sides of the cone
- Low harmonic distortion and linear response
- Wide range of applications of low and mid-low frequencies





TECHNICAL SPECIFICATIONS

Nominal diameter	380 mr	n 15 in
Rated impedance		8 Ω
Minimum impedance		7 Ω
Power capacity ¹		400 W _{AES}
Program power ²		800 W
Sensitivity	98,5 dB 1V	V / 1m @ Z _N
Frequency range	4	0 - 4.000 Hz
Recom. enclosure vol.	70 / 150 I	2,5 / 5,2 ft ³
Voice coil diameter	76,2 mr	n 3 in
BI factor		18,2 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}	9,1
Electrical Quality Factor, Q _{es}	0,35
Total Quality Factor, Q _{ts}	0,33
Equivalent Air Volume to C _{ms} , V _{as}	236 I
Mechanical Compliance, C _{ms}	215 μm / N
Mechanical Resistance, R _{ms}	2,3 kg / s
Efficiency, η ₀	3 %
Effective Surface Area, S _d	0,088 m ²
Maximum Displacement, X _{max} ⁴	6,3 mm
Displacement Volume, V _d	555 cm ³
Voice Coil Inductance, L _e	1,1 mH

Notes

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).

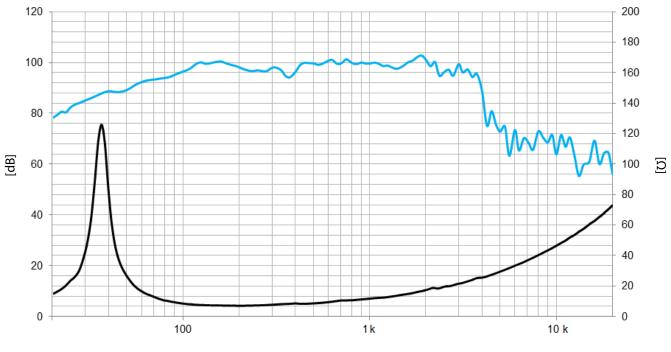
⁴ The X_{max} is calculated as (L_{vc} - H_{ac})/2 + (H_{ac}/3,5), where L_{vc} is the voice coil length and H_{ac} is the air gap height.



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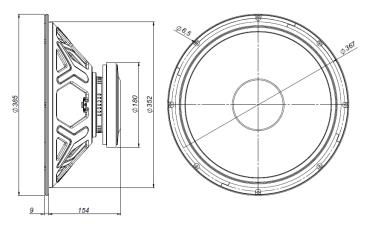
[Hz]

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

005	45.0 %	
385 mm	15,2 in	
367 mm	14,4 in	
353 mm	13,9 in	
163 mm	6,4 in	
6,2 kg	13,7 lb	
7,2 kg	15,9 lb	
	385 mm 367 mm 353 mm 163 mm 6,2 kg	

MOUNTING INFORMATION

DIMENSION DRAWING



09/19