

15WRS400

LOW FREQUENCY TRANSDUCER
WRS Series

KEY FEATURES

- High power handling: 800 W program power
- 3" copper wire voice coil
- High sensitivity: 98 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 mm 15 ii
Rated impedance	2 8
Minimum impedance	7 (
Power capacity 1	400 W _{AE}
Program power ²	800 V
Sensitivity	98 dB 1W / 1m @ Z _I
Frequency range	40 - 4.000 H
Recom. enclosure vol.	70 / 150 I 2,5 / 5,2 ft
Voice coil diameter	76,2 mm 3 ii
BI factor	18,7 N/A
Moving mass	0,096 kg
Voice coil length	16 mm
Air gap height	8 mn
X _{damage} (peak to peak)	30 mn

THIELE-SMALL PARAMETERS 3

Resonant frequency, f _s	35 Hz
D.C. Voice coil resistance, Re	5,6 Ω
Mechanical Quality Factor, Q _{ms}	9,1
Electrical Quality Factor, Q _{es}	0,34
Total Quality Factor, Qts	0,33
Equivalent Air Volume to C _{ms} , V _{as}	233 I
Mechanical Compliance, C _{ms}	213 μ m / N
Mechanical Resistance, R _{ms}	2,3 kg / s
Efficiency, η ₀	2,8 %
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, L _e @ 1 kHz	1,1 mH

Notes

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

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

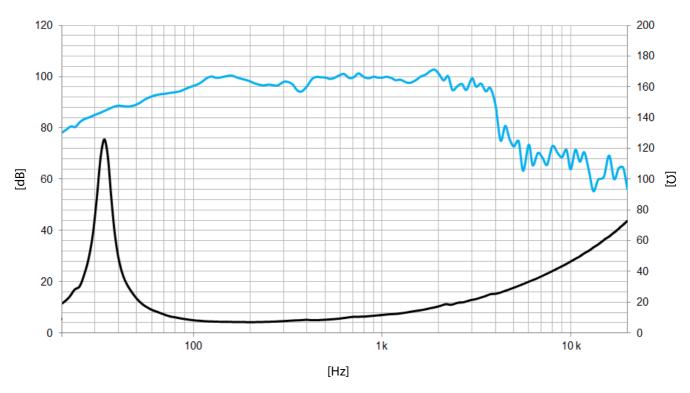
³ T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

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



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

MOUNTING INFORMATION

Overall diameter	385 mm	15,2 in
Bolt circle diameter	367 mm	14,4 in
Baffle cutout diameter:		
- Front mount	353 mm	13,9 in
Depth	163 mm	6,4 in
Net weight	6,2 kg	13,7 lb
Shipping weight	7,2 kg	15,9 lb

DIMENSION DRAWING

