

15WRS400

LOW FREQUENCY TRANSDUCER
Preliminary Data Sheet

KEY FEATURES

- High power handling: 800 W program power
- 3" copper wire voice coil
- High sensitivity: 99 dB (1W / 1m)
- · Optimized pressed steel frame
- FEA optimized ceramic magnetic circuit
- Designed with MMSS technology for high control, linearity and low harmonic distortion
- Waterproof cone treatment on 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 in
Rated impedance		8Ω
Minimum impedance		7 Ω
Power capacity*	400 V	VAES
Program power	80	00 W
Sensitivity	99 dB 1W / 1m @	2) Z _N
Frequency range	40 - 4.00	0 Hz
Voice coil diameter	76,2 mm	3 in
BI factor	18,3	N/A
Moving mass	0,09	2 kg
Voice coil length	16	mm
Air gap height	8	mm
X _{damage} (peak to peak)	30	mm

THIELE-SMALL PARAMETERS**

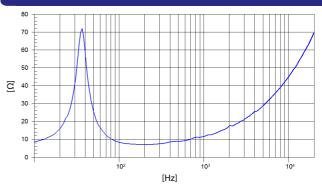
Resonant frequency, f _s	38 Hz
D.C. Voice coil resistance, R _e	5,5 Ω
Mechanical Quality Factor, Q _{ms}	5,2
Electrical Quality Factor, Qes	0,36
Total Quality Factor, Qts	0,34
Equivalent Air Volume to C _{ms} , V _{as}	205,4 I
Mechanical Compliance, C _{ms}	187 μm / N
Mechanical Resistance, R _{ms}	4,2 kg / s
Efficiency, η ₀	3 %
Effective Surface Area, S _d	0,088 m ²
Maximum Displacement, X _{max} ***	6,3 mm
Displacement Volume, V _d	555 cm ³
Voice Coil Inductance, Le @ 1 kHz	1 mH

Notes:

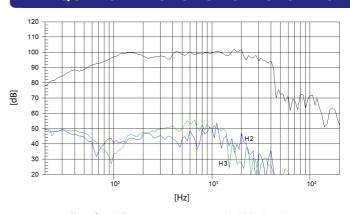
MOUNTING INFORMATION

Overall diameter	381 mm	15 in
Bolt circle diameter	367 mm	14,49 in
Baffle cutout diameter:		
- Front mount	353 mm	13,90 in
Depth	165 mm	6,50 in
Net weight	6,25 kg	13,78 lb
Shipping weight	7,25 kg	15,98 lb

FREE AIR IMPEDANCE CURVE



FREQUENCY RESPONSE & DISTORTION



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

^{*} The power capaticty is determined according to AES2-1984 (r2003) standard. Program power is defined as the transducer's ability to handle normal music program material.

^{**} 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).

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