



# 1240TWX

Speaker type B171-8 + HF UNIT\*  
Reference **1240TWX**



## TYPICAL CHARACTERISTICS

Rated impedance	Z	$\Omega$	16	6
Half space sensitivity (1W@1m)	-	dB SPL	93	95
Usable freq. range	-	Hz	50-4000	3k - 20k
Coverage angle	$\alpha$	$^{\circ}$	-	#100
Power handling capacity (AES)	-	W	100	60 <sup>(1)</sup>
Max Sound Pressure Level	SPLmax	dB SPL	109	109
Min. impedance modulus	Zmin	$\Omega$ @Hz	13.5@360	4.3@4500
Voice-coil inductance @ 1kHz	Le <sub>1k</sub>	mH	1.33	-
Voice-coil inductance @ 10kHz	Le <sub>10k</sub>	mH	0.46	0.1
Voice-coil inductance @ 20kHz	Le <sub>20k</sub>	$\mu$ H	100	-
BL product	BL	N/A	11.9	-
Moving mass	Mms	kg	0.011	-

(1) Ferrofluid cooled HF UNIT . Stated with a 2nd order passive high-pass filter set @ 3 kHz

## THIELE-SMALL PARAMETERS: TYPICAL (QC LIMITS)

Resonance frequency	Fs	Hz	42( $\pm$ 6)	1650( $\pm$ 250)
DC Resistance	Re	$\Omega$	12.1( $\pm$ 1.2)	3.9( $\pm$ 0.5)
Mechanical quality factor	Qms	1	2.6	-
Electrical quality factor	Qes	1	0.25	-
Total quality factor	Qts	1	0.23	-
Mechanical suspension compliance	Cms	10 <sup>-6</sup> .m/N	1300	-
Effective piston area	Sd	m <sup>2</sup>	0.0133	-
Equivalent Cas air load	Vas	m <sup>3</sup>	0.032	-
Max linear excursion	Xmax	$\pm$ mm	3.5	0,2
Linear displacement volume	Vd	10 <sup>-3</sup> .m <sup>3</sup>	0.047	-
Reference efficiency	$\eta_0$	%	0.9	-
Unity load volume	Vas.Qts <sup>2</sup>	10 <sup>-3</sup> .m <sup>3</sup>	1.7	-

## ABSOLUTE MAXIMUM RATINGS

Short term max. input voltage	Vmax	V	85	40
Max.excursion before damage	Xdam	$\pm$ mm	8	n.a.
Lowest recommended X-over frequency	-	Hz		
Ambient operating temperature	Ta	$^{\circ}$ C	-10 to +50	-10 to +50
Storage temperature	-	$^{\circ}$ C	-20 to +70	-20 to +70
Environmental withstanding **	-	-	Outdoor $\clubsuit$	Outdoor

## APPLICATION INFORMATION

Air volume occupied by the driver	-	10 <sup>-3</sup> .m <sup>3</sup>	0.5	-
Speaker net mass	-	kg	2.15	0.053
Recommended 2nd order passive X-over	C/L	$\mu$ F/mH	-	4.7 / 0.33
Recommended reflex box	Vb/Fb	Lts/Hz	12 L / 55Hz	n.a.

\* This HF UNIT is built according to PHL AUDIO's specifications and is mounted coaxially in 1.5" or 2" voice coil.

This HF UNIT has a 1" critically damped mid-soft diaphragm, a high energy double Neodymium magnets, an ultra-light aluminium voice-coil and is ferrofluid cooled.

\*\* Our products are classified in three categories : Indoor, Outdoor, and Outdoor  $\clubsuit$  for permanent outdoor use or severe conditions.

These specifications are representative of current production after packaging. Because of our continuous research they are subject to change without notice.

