

Model Number: TC9FD-18-08
Product Line: Peerless Silver

Revision: Rev 3_0
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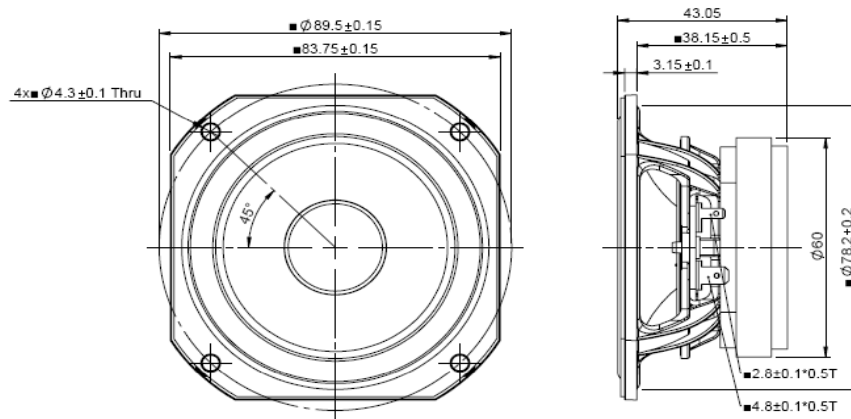


Product Description:

This TC family 3.5 inch 8 Ω full-range driver, with ferrite magnet, paper cone and rubber surround, and plastic basket, is designed to be a cost-effective high performance full range driver. The cone utilizes Tymphany-patented PentaCut NRSC cone technology to help dampen and control cone resonances, optimizing the listening experience. The motor contains a copper cap to lower inductance and distortion. The product was designed with television and other compact applications in mind.



Mechanical 2D Drawing:



Specifications:

DC Resistance	R_{evc}	Ω	6.3	$\pm 7.5\%$	Energy Bandwidth Product	EBP	$(1/Q_{es}) \cdot f_s$	94
Minimum Impedance	Z_{min}	Ω	7.8	$\pm 7.5\%$	Moving Mass	M_{ms}	g	2.43
Voice Coil Inductance	L_e	mH	0.05		Suspension Compliance	C_{ms}	um/N	669.6
Resonant Frequency	f_s	Hz	125	$\pm 15\%$	Effective Cone Diameter	D	cm	6.8
Mechanical Q Factor	Q_{ms}	-	2.7		Effective Piston Area	S_D	cm ²	36.3
Electrical Q Factor	Q_{es}	-	1.33		Equivalent Volume	V_{as}	L	1.241
Total Q Factor	Q_{ts}	-	0.89		Motor Force Factor	BL	T-m	3.01
Ratio f_s / Q_{es}	F	f_s / Q_{es}	140		Motor Efficiency Factor	β	$(T \cdot m^2) / \Omega$	1.43
Half Space Sensitivity @ 2.83V	dB@2.83V/1m	dB	84.6	$\pm 1.0^1$	Voice Coil Former Material	VC _m	-	ASV
Sensitivity @ 1W/1m	1W/1m	dB	83.5	$\pm 1.0^1$	Voice Coil Inner Diameter	VC _d	mm	19.43
					Gap Height	Gh	mm	4.00
Rated Noise Power (IEC 2685 18.1)	P	W	30		Maximum Linear Excursion	X_{max}	mm	2.55
Test Spectrum Bandwidth	100Hz-20KHz	12 dB/Oct			Ferrofluid Type	FF	-	N/A
					Transducer Size	-	-	3.5 inch
					Transducer Mass	-	Kg	0.30

1 - Piston Band Sensitivity Tolerance

Frequency and Impedance Response:

