

Model Number: TG9FD-10-08  
Product Line: Peerless Silver

Revision: Rev 1\_0  
Date: 1-Mar-10

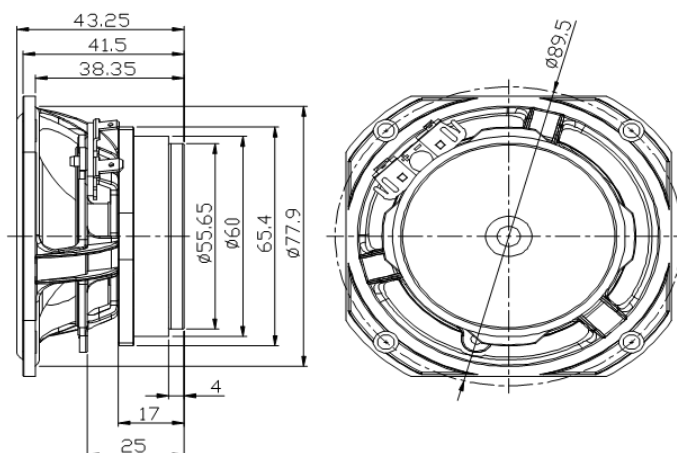


### Product Description:

This TG family 3.5 inch 8 ohm full-range driver, with shielded ferrite magnet, glass fiber 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:

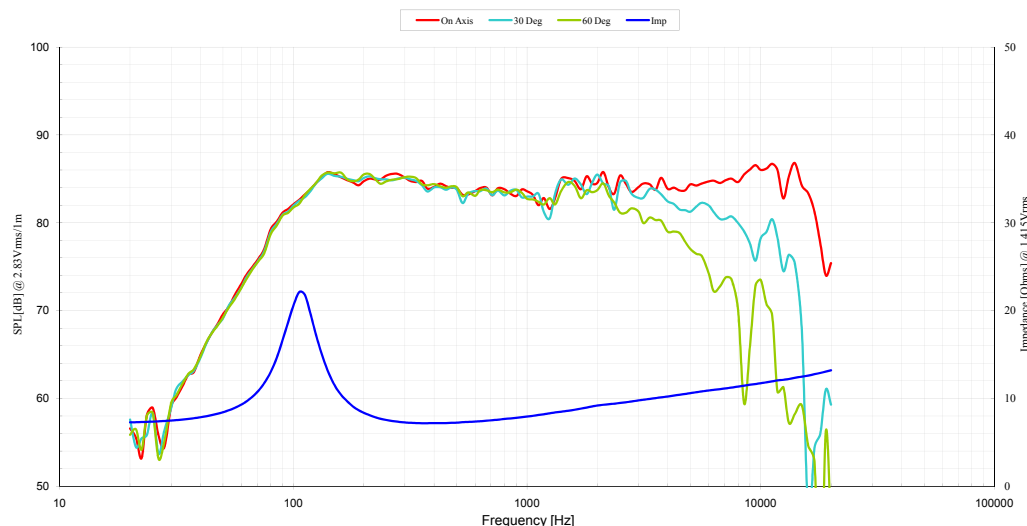


### Specifications:

DC Resistance	$R_{\text{evc}}$	$\Omega$	6.1	5.0%	Energy Bandwidth Product	EBP	$(1/Q_{\text{es}}) \cdot f_s$	86
Minimum Impedance	$Z_{\text{min}}$	$\Omega$	7.2	10.0%	Moving Mass	$M_{\text{ms}}$	g	2.5
Voice Coil Inductance	$L_e$	mH	0.11		Suspension Compliance	$C_{\text{ms}}$	um/N	503
Resonant Frequency	$f_s$	Hz	105	15.0%	Effective Cone Diameter	D	cm	6.90
Mechanical Q Factor	$Q_{\text{ms}}$	-	1.75		Effective Piston Area	$S_D$	cm <sup>2</sup>	37.4
Electrical Q Factor	$Q_{\text{es}}$	-	1.23		Equivalent Volume	$V_{\text{as}}$	L	0.987
Total Q Factor	$Q_{\text{ts}}$	-	0.72		Motor Force Factor	BL	T·m	3.32
Ratio $f_s / Q_{\text{ts}}$	F	$f_s / Q_{\text{ts}}$	145		Motor Efficiency Factor	$\beta$	$(T \cdot m^2) / \Omega$	1.81
Half Space Sensitivity @ 2.83V	dB@2.83V/1m	dB	84.1	+/-1.0 <sup>1</sup>	Voice Coil Former Material	VC <sub>fm</sub>	-	ASV
Sensitivity @ 1W/1m	1W/1m	dB	82.9	+/-1.0 <sup>1</sup>	Voice Coil Inner Diameter	VC <sub>d</sub>	mm	19.43
					Gap Height	Gh	mm	4.00
Rated Noise Power (IEC 2685 18.1)	P	W	10		Maximum Linear Excursion	$X_{\text{max}}$	mm	2.55
Test Spectrum Bandwidth	20Hz - 20kHz		12 dB/Oct		Ferrofluid Type	FF		N/A
					Transducer Size	-	inch	3.5
					Transducer Mass	-	kg	0.32

1 - Piston Band Sensitivity Tolerance

### Frequency and Impedance Response:



F088-0713A