

ENA 165-X

165 mm COAXIAL SPEAKER



The **ENA 165-X** is the 165 mm coaxial speaker of the ENA entry series. Midwoofer and tweeter share one chassis, the tweeter is connected through a built-in capacitor. With 53 mm mounting depth and a 141 mm cut-out it is intended for factory locations without modification. Its total Q of 1.92 reflects the design for operation without an enclosure.

MEASURED DATA AND SPECIFICATIONS

Electrical

DC resistance	R_{dc}	3.27	Ω
Nominal impedance	Z_N	4	Ω
Resonance frequency	f_s	84.1	Hz
Impedance at resonance	Z_{max}	8.06	Ω
Minimum impedance	Z_{min}	3.4	Ω
Power handling RMS		30	W
Power handling max.		60	W

Q factors

Mechanical Q factor	Q_{ms}	4.73	
Electrical Q factor	Q_{es}	3.23	
Total Q factor	Q_{ts}	1.92	

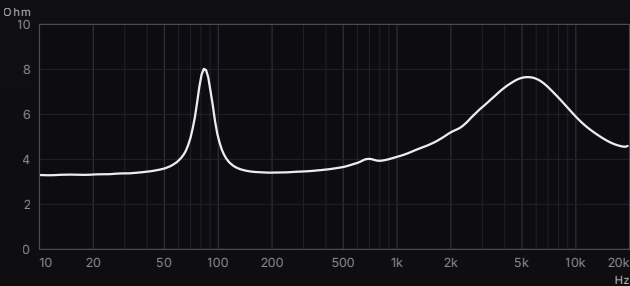
Mechanical

Moving mass	M_{ms}	9.87	g
Effective piston area	S_d	136.8	cm ²
Compliance	C_{ms}	0.363	mm/N
Force factor	BL	2.30	Tm
Equivalent air volume	V_{as}	9.55	l

Acoustics

Sensitivity 1 W / 1 m	SPL	84.3	dB
Sensitivity 2.83 V / 1 m	SPL	87.3	dB
Frequency range		70 Hz – 20 kHz	

IMPEDANCE free air, tweeter connected



Tweeter

Connection	Capacitor
Slope	6 dB/octave
Magnet	Neodymium
Front diameter	Ø 47.8 mm

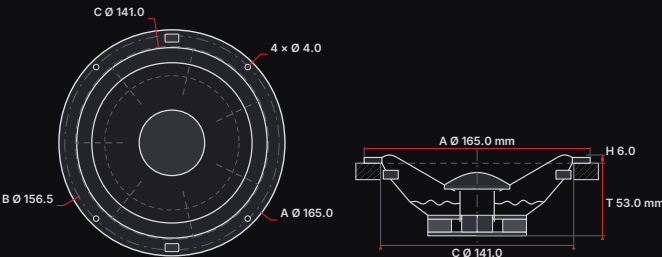
Construction, woofer section

Cone	Polypropylene
Surround	Rubber
Basket	Pressed steel
Basket spokes	7
Magnet	Ferrite
Voice coil diameter	25 mm
Weight	485 g

Mounting dimensions

Outer diameter	A	165	mm
Bolt circle	B	156.5	mm
Mounting holes		4 × Ø 4	mm
Cut-out	C	141	mm
Mounting depth	T	53	mm
Build-out height	H	6	mm
Overall height		59	mm
Flange thickness		4.2	mm

DIMENSIONS dimensions in mm



▪ Thiele - Small parameters measured in free air, small signal, tweeter connected.