



C168-6-890 CELL CERAMIC BASS-MIDRANGE

The C168-6-890 is a 7 inch bass-midrange driver with **CERAMIC DOME**, being the first in an entirely new approach to accuton speaker design.

We pushed on speaker evolution again by inventing a completely new driver construction. The spider is mounted inside a 4.5 inch voicecoil, allowing for high spider excursion linearity. As the surround is not glued to the dome but to the voice coil former, it does not interact with the dome and serves for save excursion limitation.

This construction leads to a superior bass-midrange driver, providing high bandwidth and midrange performance as well as outstanding but save excursion capabilities. Its extremely low distortion serves for uncompromised resolution.

In conclusion, the C168-6-890 is the ideal choice for 2-way systems with unique bass performance and midrange quality.

An ideal acoustical center has been achieved, which is identical with our tweeters.

Its novel designed overhung motor does not cover the backside of the dome, eliminating the chance for reflections and energy storage.

We recommend our C168-6-890 for an application from 40 Hz - 3500 Hz.

CLOSED BOX DESIGN PARAMETERS

Vb: 8L, -10dB @ 40Hz, F-3dB: 69Hz, Q: 0.71 (typical)

Vb: 15L, -8.5dB @ 40Hz, F-3dB: 70Hz, Q: 0.60 (extended bass)

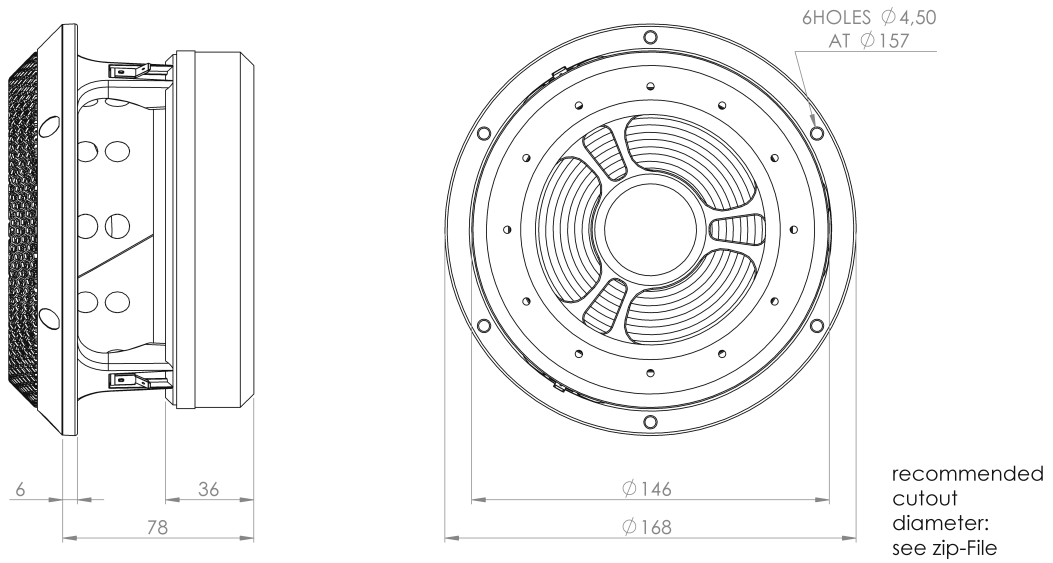
VENTED BOX DESIGN PARAMETERS

Vented box design parameters:

Vb: 17L, Port diameter: 50mm, Length 200mm, Fres 38Hz, F-3dB: 38Hz (optimal)

Vb: 25L, Port diameter: 50mm, Length 185mm, Fres 32Hz, F-3dB: 32Hz (extended bass)

Vb: 12L, Port diameter: 50mm, Length 270mm, Fres 40Hz, F-3dB: 43.5Hz (0.7dB Boost@ 100Hz)



DOMES MATERIAL	CERAMIC
APPLICATION	BASS-MIDRANGE
OVERALL DIAMETER	168 MM
CUTOUT DIAMETER	SEE CUTOUT PROFILE
OVERALL DEPTH	78 MM
MOTOR ASSEMBLY DEPTH	36 MM
MOTOR ASSEMBLY DIAMETER	146 MM
SENSITIVITY	87DB

MAIN FEATURES

- full featured cell concept
- ideal acoustical center
- no compression design
- proprietary motor system
- 40 HZ - 3500 HZ in vented Box

MECHANICAL DATA

Specification		Value	Unit
Overall diameter		168	mm
Cutout diameter		146	mm
Min. frontplate thickness		6	mm
Overall depth		78	mm
Motor assembly depth		36	mm
Motor assembly diameter		146	mm
Screwfitting		DIN 7984 / Ø 4.00	mm
Terminal		+: 6.3 x 0.8 / -: 4.8 x 0.8	mm
Shipping weight (pair)		--	Kg
Shipping box size (pair)		--	mm

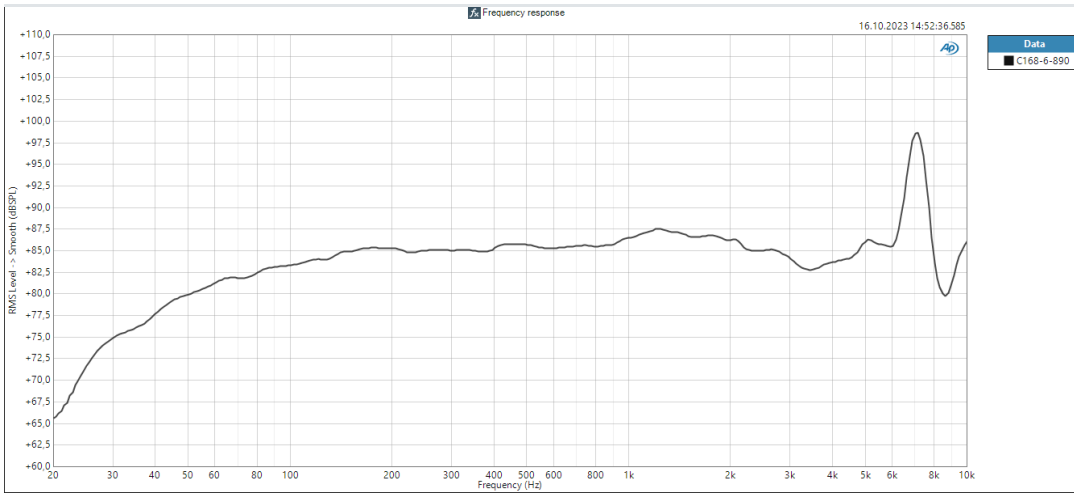
THIELE SMALL PARAMETERS

Specification		Value	Unit
Sensitivity (2.83V / 1m)	E	87*	dB
DC-resistance	Re	5.1	Ohm
Resonance frequency	Fs	41	Hz
Equivalent volume of air	Vas	15	ltr
Mechanical Q	Qms	4.42	
Electrical Q	Qes	0.49	
Total Q	Qts	0.44	
Effective piston area	Sd	123	Cm ²
Moving mass	Mms	21	g
Suspension compliance	CMs	0.71	mm/n
Mechanical resistance	Rms	1.2	Kg*s

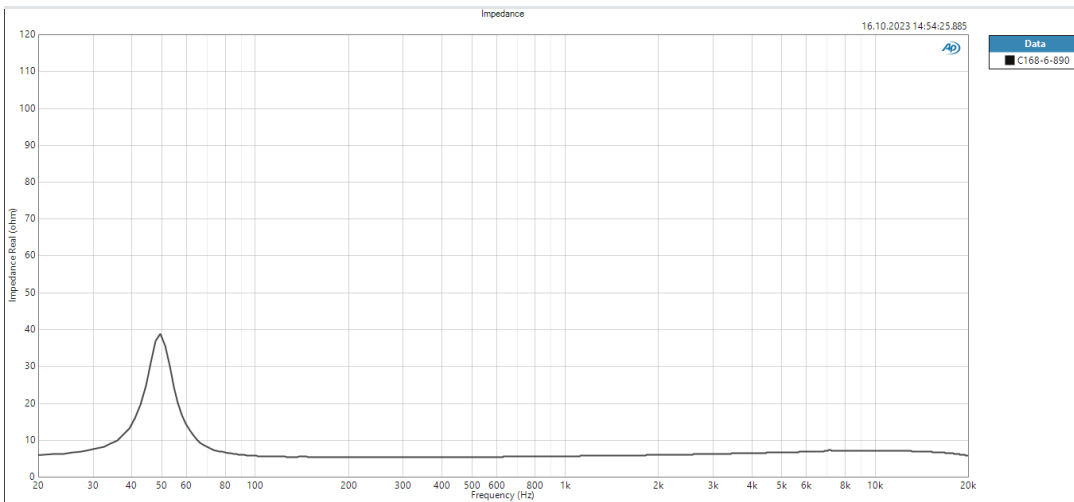
VOICE COIL PARAMETERS

Specification		Value	Unit
Power handling	P	120*	W
Linear excursion	Xmax	+/-5.0	mm
Voice coil diameter		114	mm
Voice coil former material		Ti	
Voice coil material		Cu	
Voice coil inductance	Le	0.2	mH
Force factor	Bl	7.5	N/A
Motor type		Underhung	
Ferrofluid filling		No	

FREQUENCY RESPONSE [DB]



IMPEDANCE [OHM]



DISTORTION [%]

