



5TR5A

Selenium Flex System consists on a three-way 5" 1/4 pair of speakers developed to reproduce the whole range of audio frequencies: low, midbass and high frequencies. Whenever used with the right adaptor (if necessary), the three-way is the most indicated loudspeaker to be used in the original car places, avoiding any further work to assemble it. It presents the followings features:

- Polypropylene injected cones provide a bold appearance.
- The rubber surround, without a mechanical break, allowing a linear displacement in both directions assuring low distortion.
- Copper voice coil, with the copper bobbin for a better heat sink and dumping action, as well as special resins to support high temperatures.
- Steel stamped frame/basket, with a reinforced design and black epoxy finishing.
- Dynamic tweeter with PEI (Polyeter imida) diaphragm/dome and barium ferrite magnet assure a high performance product.
- The Piezoelectric tweeter has high efficiency at high frequency reproduction.
- 50W Musical program power is a big jump from the original low power speakers.

SPECIFICATIONS

Nominal diameter	133 (5 1/4)	mm (in)
Nominal impedance	4	
Minimum impedance @ 365 Hz.	3.9	
Power handling		
MAX ¹	50	W
AES ²	25	W
Sensitivity (2.0 V@1m) averaged from 90 to 20,000 Hz.	86	dB SPL
Power compression @ 0 dB (nom. power)	3.3	dB
Power compression @ -3 dB (nom. power)/2.	1.9	dB
Power compression @ -10 dB (nom. power)/10.	0.6	dB
Frequency response @ -10 dB	80 to 20,000	Hz

¹ Power handling specifications refer to normal speech and/or music program material, reproduced by an amplifier producing no more than 5% distortion. Power is calculated as true RMS voltage squared divided by the nominal impedance of the loudspeaker.
² AES Standard (100 - 1000 Hz).

THIELE-SMALL PARAMETERS

Fs	92	Hz
Vas	4.45 (0.157)	l (ft ³)
Qts	1.24	
Qes	1.63	
Qms	5.08	
o (half space)	0.21	%
Sd	0.0082 (12.71)	m ² (in ²)
Vd (Sd x Xmax)	12.30 (0.75)	cm ³ (in ³)
Xmax (max. excursion (peak) with 10% distortion)	1.5 (0.06)	mm (in)
Xlim (max. excursion (peak) before physical damage)	5.25 (0.20)	mm (in)

Atmospheric conditions at TS parameter measurements:

Temperature	24 (75.2)	°C (°F)
Atmospheric pressure	1,022	mb
Humidity	45	%

Thiele-Small parameters are measured after a 2-hour power test using half AES power. A variation of ± 17% is allowed.

ADDITIONAL PARAMETERS

L	3.35	Tm
Flux density	0.82	T
Voice coil diameter	25.5 (1.0)	mm (in)
Voice coil winding length	5.7 (18.70)	m (ft)
Wire temperature coefficient of resistance (25)	0.00372	1/°C
Maximum voice coil operation temperature	190 (374)	°C (°F)
vc (max. voice coil operation temp./max. power)	3.8 (7.48)	°C/W (°F/W)
Hvc (voice coil winding depth)	7.0 (0.27)	mm (in)
Hag (air gap height)	4.0 (0.16)	mm (in)
Re	3.7	
Mms	8.5 (0.019)	g (lb)
Cms	350.0	µm/N
Rms	0.97	kg/s

NON-LINEAR PARAMETERS

Le @ Fs (voice coil inductance @ Fs)	0.385	mH
Le @ 1 kHz (voice coil inductance @ 1 kHz)	0.213	mH
Le @ 20 kHz (voice coil inductance @ 20 kHz)	0.101	mH
Red @ Fs	0.077	
Red @ 1 kHz	0.891	
Red @ 20 kHz	20.09	
Krm	0.1	m
Kxm	1.9	mH
Erm	1.04	
Exm	0.75	

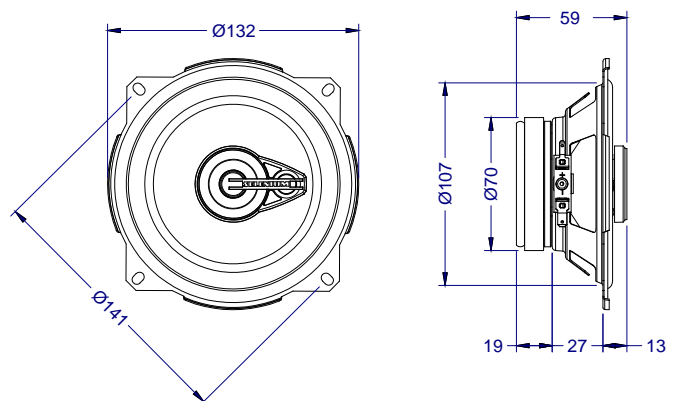


ADDITIONAL INFORMATION

Magnet material	Barium ferrite
Magnet weight	160 (5.64) g (oz)
Magnet diameter x depth	70 x 10 (2.75 x 0.39) mm (in)
Magnetic assembly weight	395 (0.87) g (lb)
Frame material	Steel
Frame finish	Black epoxy
Voice coil material	Copper
Voice coil former material	Aluminum
Cone material	Polypropylene
Volume displaced by woofer	0.31 (0.0109) l (ft ³)
Net weight	520 (1.14) g (lb)
Gross weight	940 (2.07) g (lb)
Carton dimensions (W x D x H)	39.5 x 29.5 x 16.3 (15.5 x 11.6 x 6.4) cm (in)

MOUNTING INFORMATION

Number of bolt-holes	4
Bolt-hole dimension	3.8 (0.15) and 5x7 (0.19x0.27) mm (in)
Bolt-circle diameter	120 (4.72) and 141(5.55) mm (in)
Baffle cutout diameter (front mount)	113 (4.44) mm (in)
Baffle cutout diameter (rear mount)	107 (4.21) mm (in)
Connectors	Push on terminals
Polarity	Positive voltage applied to the positive (+) terminal gives forward cone motion
Minimum clearance between the back of the magnetic assembly and the enclosure wall	N/A (-) mm (in)

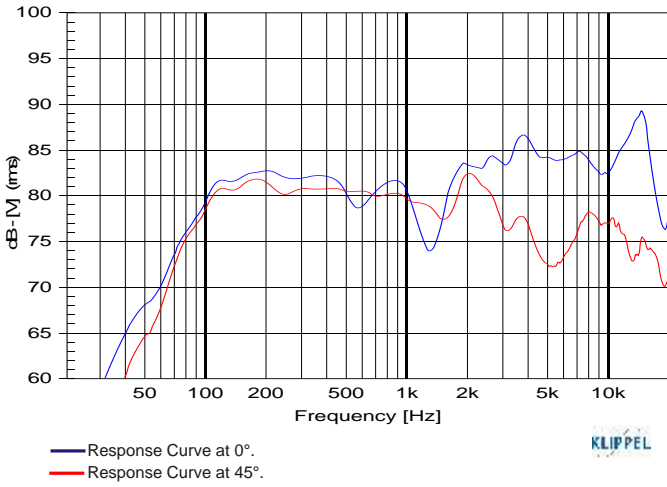


Dimensions in mm.



5TR5A

RESPONSE CURVE (0° AND 45°) IN A TEST ENCLOSURE INSIDE ANECHOIC CHAMBER, 1W/1 m



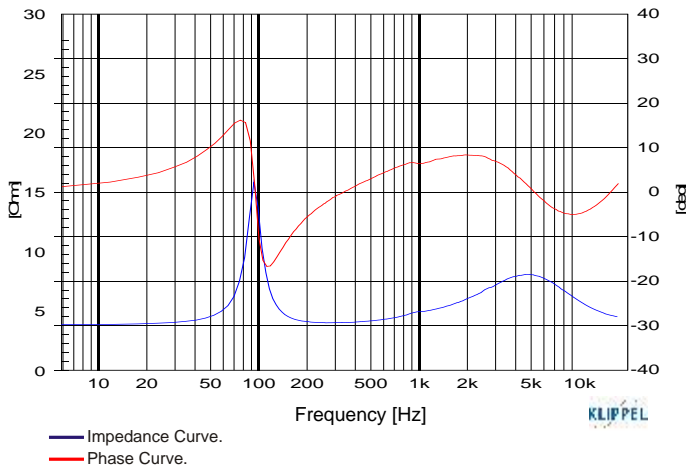
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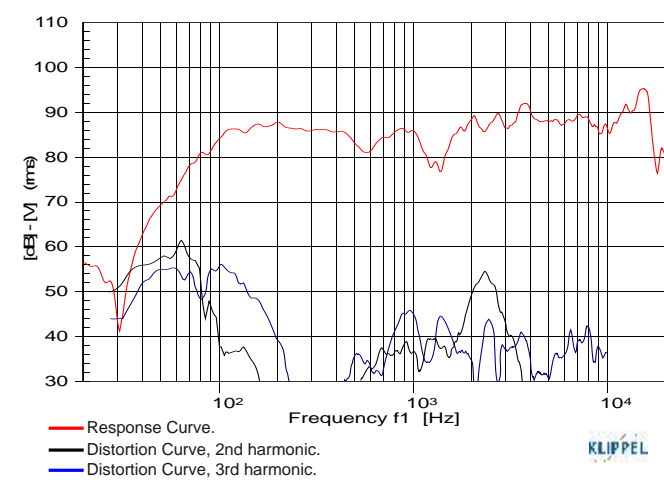
IMPEDANCE AND PHASE CURVE MEASURED IN FREE-AIR



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HARMONIC DISTORTION CURVES MEASURED AT 10% AES INPUT POWER , 1 m



TEST ENCLOSURE
 Closed box with 455 l .