

(Bild von Firma)

Firma / Company name:

HKM HandelsKontorMeindl

Sitz / location:

Industriestraße 38
D-89423 Gundelfingen

Geschäftsführer / Managing director:

Wolfgang Meindl
Betriebswirt (VWA)

Handelsregister / Commercial register No:

Augsburg, HRA 13294

Kontakt / contact :

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e-mail:

info@hkm-group.de

Internet:

www.hkm-group.de

Was steckt hinter HKM?

HKM wurde 1999 von Wolfgang Meindl gegründet.

HKM übernahm den Zweig "WESTRA LAUTSPRECHER" und den eingetragenen und geschützten Markennamen.

Bei WESTRA ELECTRONIC GMBH war Wolfgang Meindl 22 Jahre lang als Vertriebsleiter tätig.

HKM Lautsprecher

Die Entwicklung von Lautsprechern aller Art, die Fertigungssteuerung und Teilebeschaffung, sowie die Produktion an günstigen, modernst ausgerüsteten Fertigungsstätten in Europa und Fernost ist ein Geschäftszweig von **HKM**.

Mit Einzug in das neue Gebäude in Gundelfingen wurde der Forschungs- und Entwicklungsbereich erweitert und der Geschäftsbereich Ingenieurbüro für Testzwecke, Produktservice, sowie Akustik- und Elektroniklabor aufgebaut.

Unser Unternehmen ist nach ISO 9001:2000 zertifiziert.

Im Auftrag und nach Vorgabe unserer Kunden entwickeln wir Soundkonzepte für den Konsumer- und Industriebereich, marktgerecht, mit optimal aufeinander abgestimmten HKM-Lautsprecherchassis. Dabei betreuen wir die Projekte von der Idee bis zur Dokumentation, und natürlich bis zur Umsetzung in die Serienproduktion.

Im PA-Bereich ist unser Labor permanent an der Entwicklung aktiver und passiver Soundkonzepte erfolgreich tätig.

Das Ergebnis: Spitzenprodukte, die erfolgreich am Markt bestehen!

Wir entwickeln unsere Standard-Lautsprecherchassis, aber auch Chassis speziell nach den Wünschen unserer Kunden.

Die Entwicklung und Produktion von Elektronik, insbesondere von Verstärkern für Subwoofer, Soundsysteme und für den PA-Bereich ist unsere neue Herausforderung.

Unsere Leitlinie ist gute Qualität und zufriedene Kunden!

Who is HKM?

HKM HandelsKontor Meindl was founded by Wolfgang Meindl in 1999.

HKM took over the division "WESTRA Loudspeaker" with the registered brandname "WESTRA-LOUDSPEAKER".

At the former "WESTRA ELECTRONIC GMBH" company Wolfgang Meindl was working 22 years as sales manager.

HKM has its own laboratories to develop the original custom-made **HKM**-loudspeakers and loudspeaker cabinets. The development of industrial loudspeakers for every purpose, taking care for research of new speakerparts and taking care for sourcing for the production is one of the main duties. Skilled personell and an new building with modern furnishings helps to make HKM a well-known industry-supplier.

From the mid of the year 2000 the Research Division was enhanced with the Elektro-Akustik-Laboratories supplementing HKM product lineup.

The HKM-Amplifier for Subwoofers is the first electronical development to set new standards. Following will electronic development for PA-Use.

Founding the HKM testingeniurlaboratories was the step to up a new division of service industries.

Willingness to innovate, modern technology and a solid reputation in doing business indicate future success.

The facilities:

HKM, as a bavarian company, is located in Gundelfingen, a small town in the vicinity of Augsburg und Ulm, between München and Stuttgart.

The plant is located in the scenic area of bavaria on the country side, with excellent infrastructure and a comfortable traffic situation (60 min. to the next airport, within a net of motorways and mainrailways in the nearest vicinity).

It includes office, laboratotries and a warehouse.

HKM industrial speaker units are being produced at various production facilities in center of europe and certain far east countries.

The R & D labs :

Certification after the new ISO 9001:2000

All HKM products are developed inhouse. Herefore HKM is running 3 well equipped state of the art electronic and acoustic laboratories and 2 anechoic chambers for every acoustic service.

All electronical and acousticalmeasurement equipment is frequently checked and calibrated.

The stock :

HKM is currently able to deliver all standard products (more than 100 different types of loudspeakers) from stock, and amplifiers. The warehouse at Gundelfingen includes also a quality control department and a small production workshop with 3 workers. With this facility HKM is able to produce special customized speakers on clients request. 2 printing machines, a high power magnetizer , 2 glueing machines and a roundtable assembler, and a vacuum forming machine is available in this workshop.

The Q/C System :

HKM's Q/C system is in accordance to ISO 9001:2000.

Our certification is well done in mid of 2001.

Every HKM products is checked acording to HKM technical data and test procedures, which are in accordance to the relevant international standards. If required, also customer standards and test procedures can be installed and followed up for exclusive products.

Corporate Philosophy: "Our Success is depending on our customers satisfaction"

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HiFi Hochton-Lautsprecher / HiFi tweeter units

HiFi Tiefton-Lautsprecher / HiFi woofer units

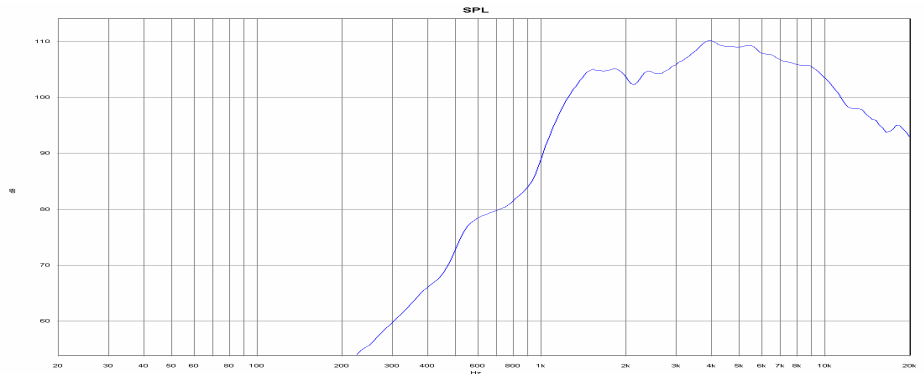
HiFi Breitband-Lautsprecher / HiFi fullrange units

Surround und TV-Lautsprecher / Surround and TV-units

PA - Bässe / PA – woofer

Zubehör / Accessories

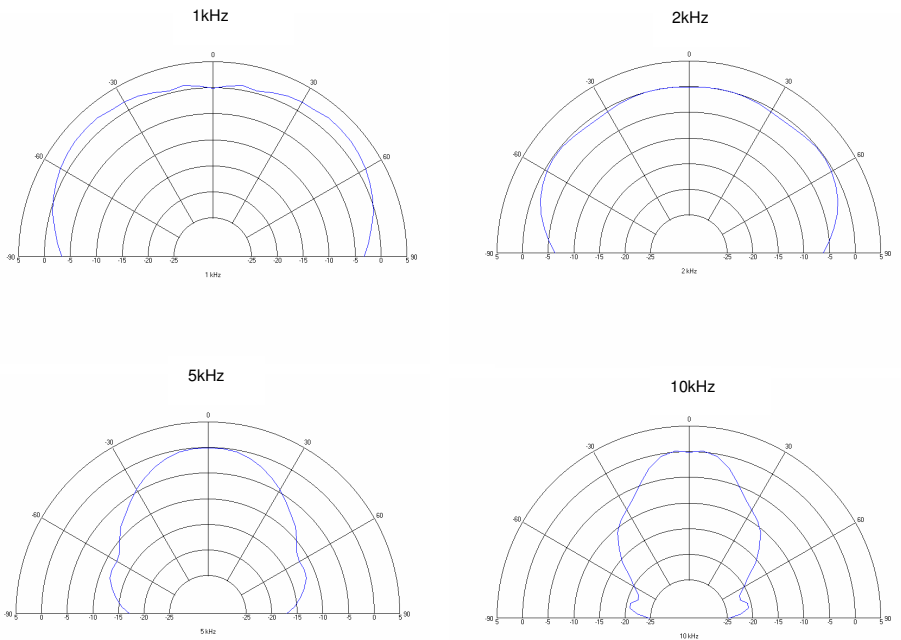
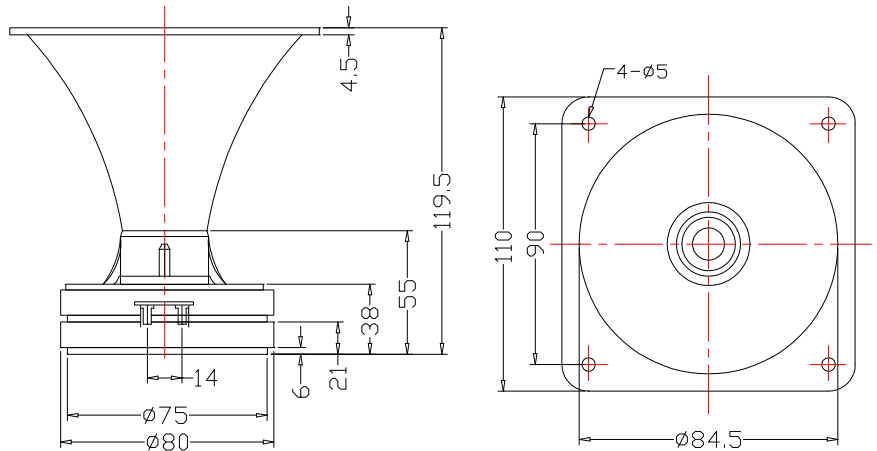
Verstärker / Amplifier



Notes:

PA – horn tweeter,
square horn,
dimension:
110 x 110 x 120 mm,
outcut Ø 88 mm

impedance:	8 Ω
nom. power:	20 watts*
SPL 1W/1m:	105 dB
fs:	1900 Hz
Re:	6.9 Ω
Le:	0.1 mH
Qms:	2.8
Qes:	2.4
Qts:	1.3
VAS :	-- l
Mms :	-- g
Rms :	-- kg/s
Cms:	-- mm/N
B*I:	-- Tm
Sd:	6.0 cm ²
Xmax:	-- mm
weight:	1.4 kg
magnet:	9 oz
voice coil Ø:	25 mm



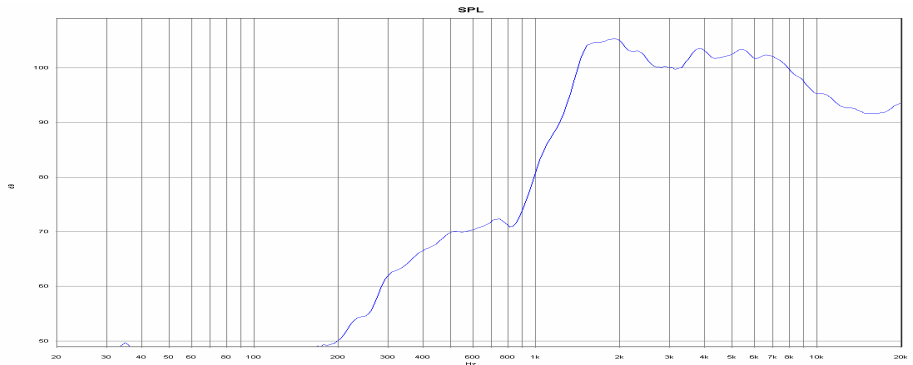
*crossover 12dB/Oct, 4000 Hz

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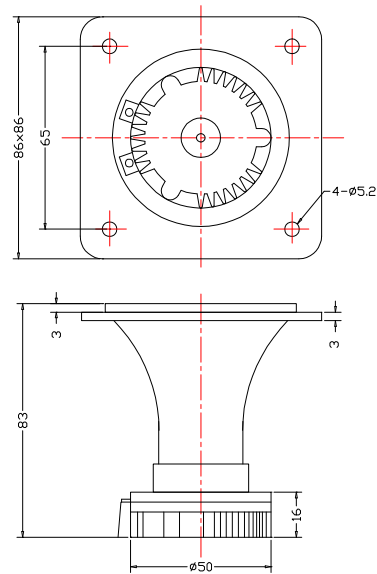
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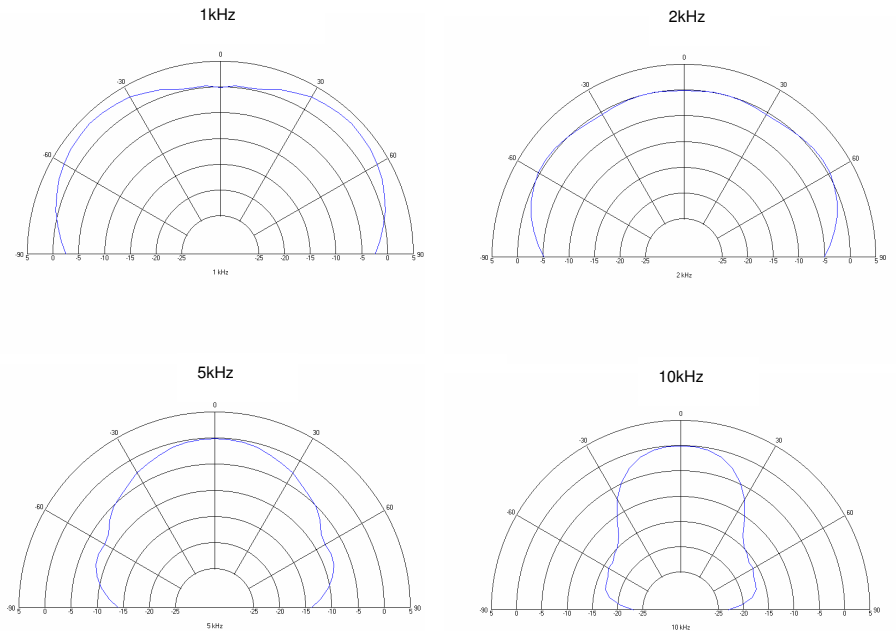


Notes:

Hifi horn tweeter,
neodym magnet,
plastic horn,
high sensitivity,
terminals:
“+” 4.8 x 0.5 mm
“-” 4.8 x 0.5 mm



impedance:	8 Ω
nom. power:	100 watts*
SPL 1W/1m:	102 dB
fs:	1500 Hz
Re:	7.2 Ω
Le:	0.4 mH
Qms:	2.9
Qes:	2.5
Qts:	1.35
VAS :	-- l
Mms :	-- g
Rms :	-- kg/s
Cms:	-- mm/N
B*I:	-- Tm
Sd:	5 cm ²
Xmax:	-- mm
weight:	0.135 kg
magnet:	1 oz
voice coil \varnothing :	25 mm



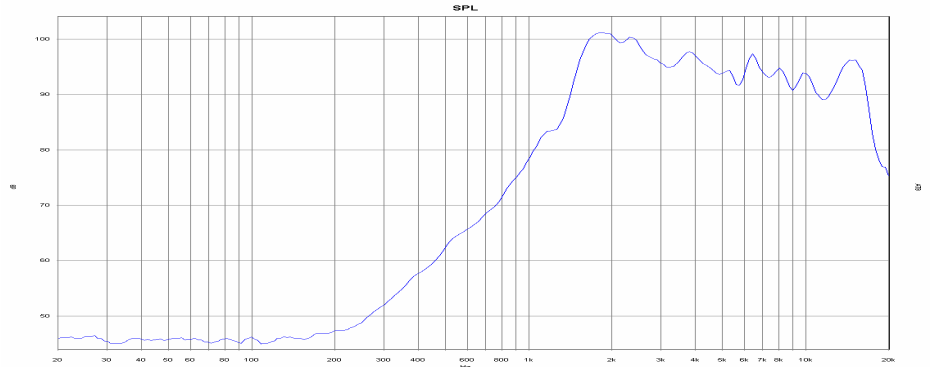
* crossover highpass 6000 Hz

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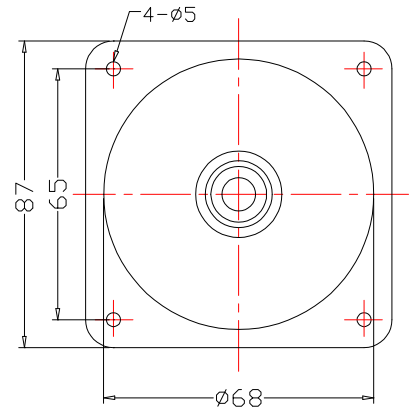
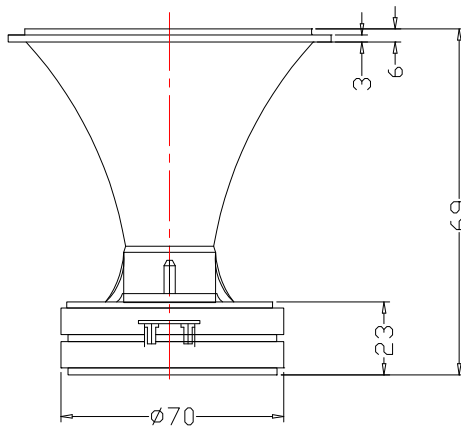
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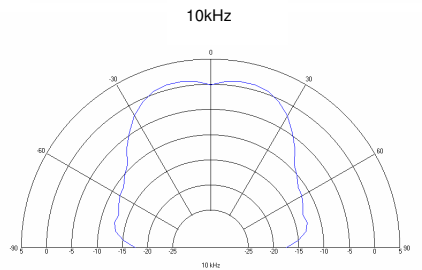
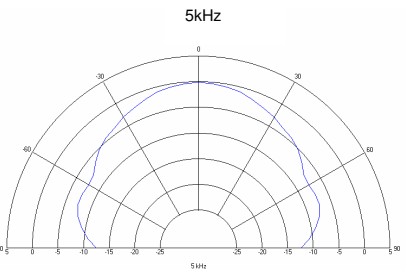
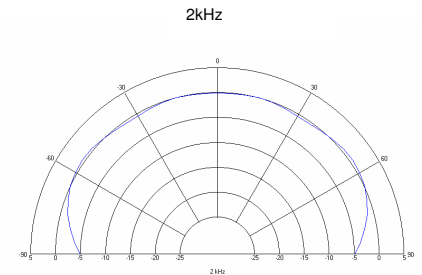
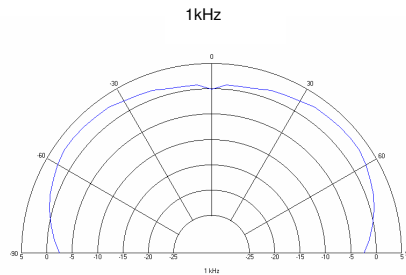


Notes:

86 x 86 mm,
Hifi horn tweeter,
plastic horn,
high sensitivity,
terminals:
“+” 2.8 x 0.5 mm
“-” 2.8 x 0.5 mm



impedance:	8 Ω
nom. power:	100 watts*
SPL 1W/1m:	100 dB
fs:	1500 Hz
Re:	6.2 Ω
Le:	0.4 mH
Qms:	13
Qes:	4
Qts:	3
VAS :	-- l
Mms :	-- g
Rms :	-- kg/s
Cms:	-- mm/N
B*I:	-- Tm
Sd:	5 cm ²
Xmax:	-- mm
weight:	0.386 kg
magnet:	4 oz
voice coil Ø:	25 mm



*crossover 12dB/Oct, 4000 Hz

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Notes:

1" - PA horn,
standard 1 3/8" screw
coupling

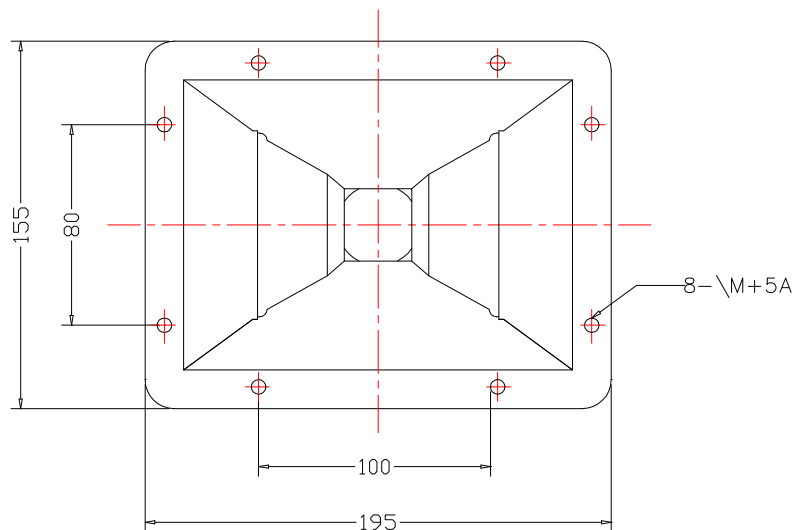
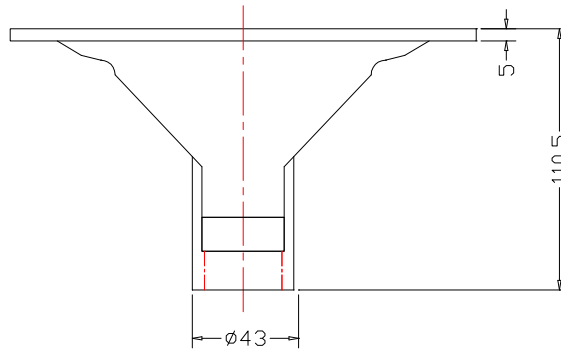
Coverage:

60 x 40 degrees

For drivers:

XD - 44 - 108

XD - 34 - 108



Notes:

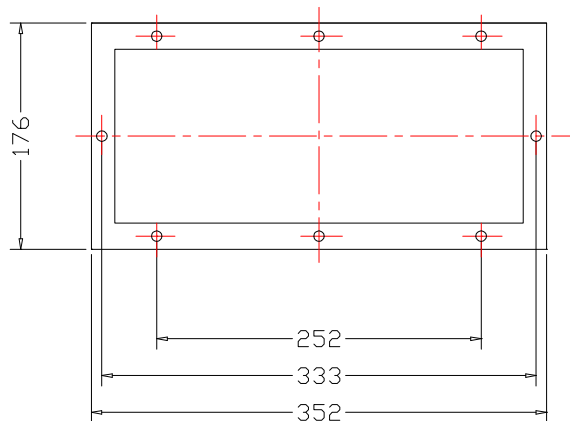
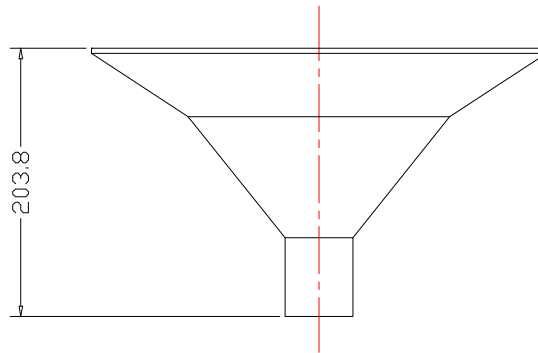
1" - PA horn,
standard 1 3/8" screw
coupling

Coverage:

90 x 40 degrees

For drivers:

XD - 44 - 108
XD - 34 - 108



Notes:

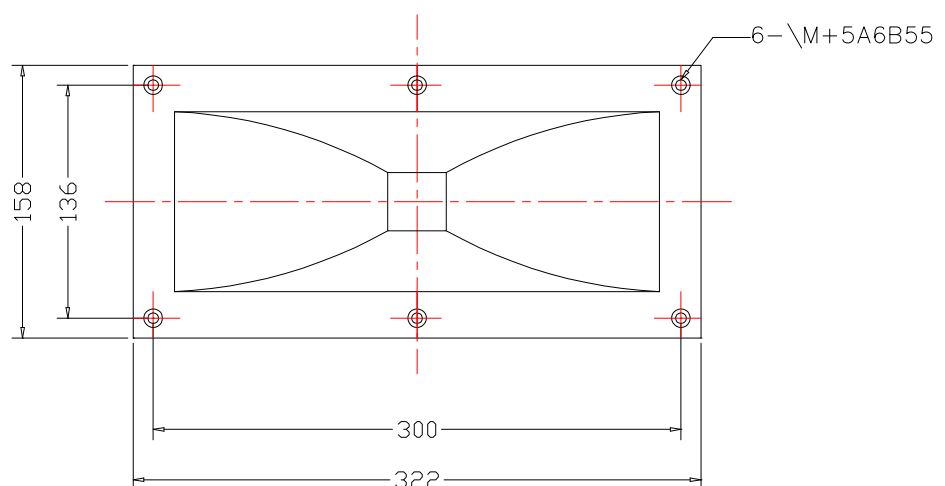
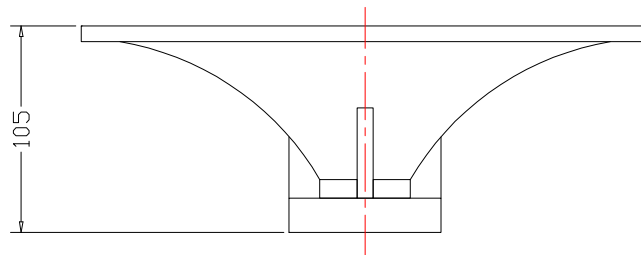
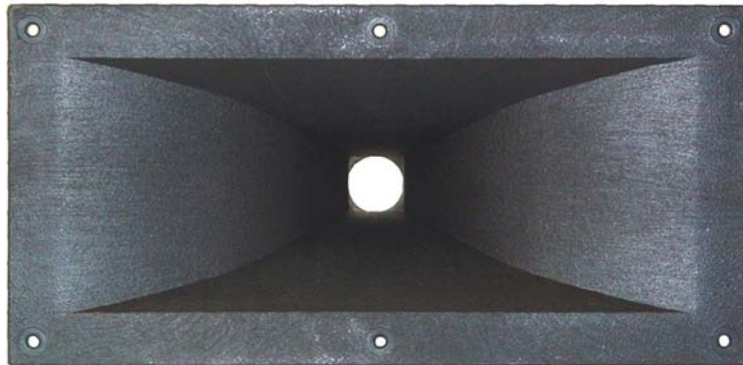
1" - PA horn,
standard 1 3/8" screw
coupling

Coverage:

120 x 40 degrees

For drivers:

XD - 44 - 108
XD - 34 - 108

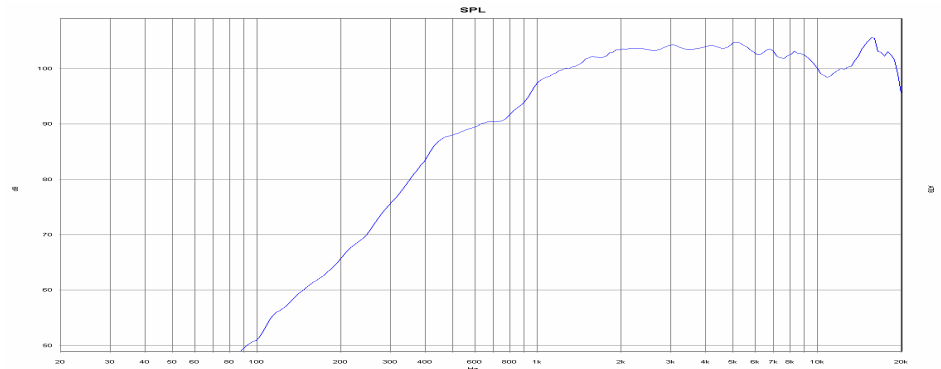


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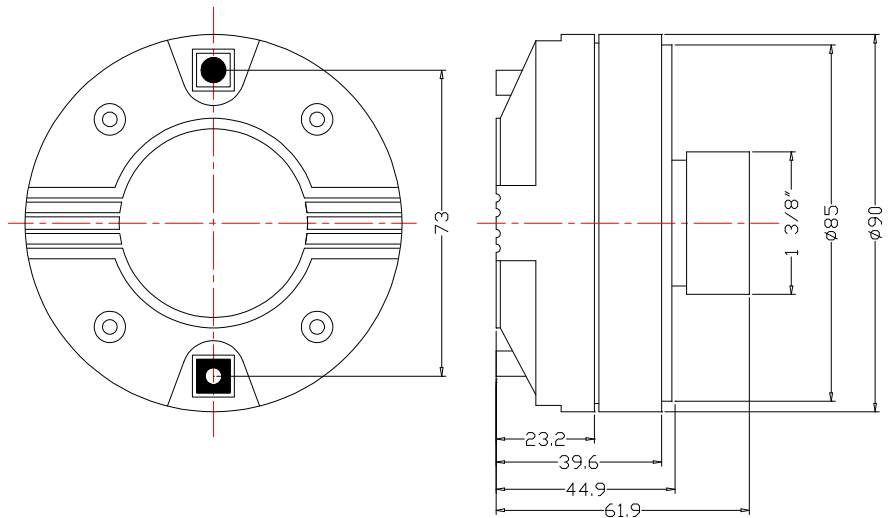
WWW.HKM-GROUP.DE



Notes:

1" – PA horndriver,
titanium diaphragm,
standard 1 3/8" screw
coupling

impedance:	8 Ω
nom. power:	40 watts
SPL 1W/1m:	104 dB
fs:	1100 Hz
Re:	6.8 Ω
Le:	1.4 mH
Qms:	7.3
Qes:	2.1
Qts:	1.6
VAS :	-- l
Mms :	-- g
Rms :	-- kg/s
Cms:	-- mm/N
B*I:	-- Tm
Sd:	-- cm ²
Xmax:	-- mm
weight:	0.95 kg
magnet:	-- oz
voice coil \varnothing :	34.5 mm

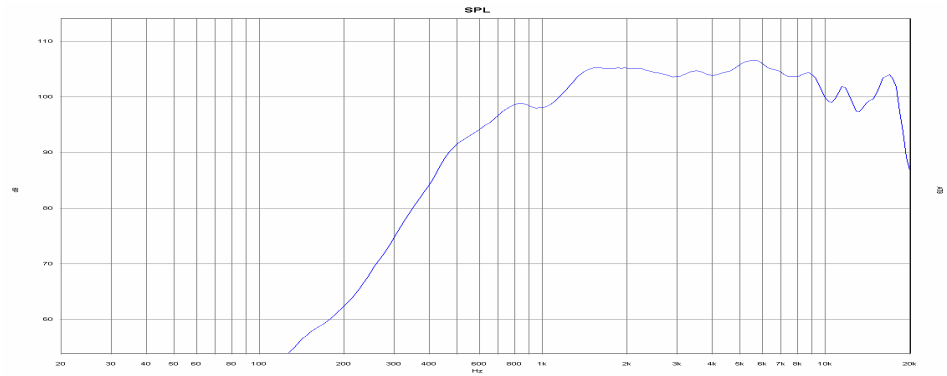


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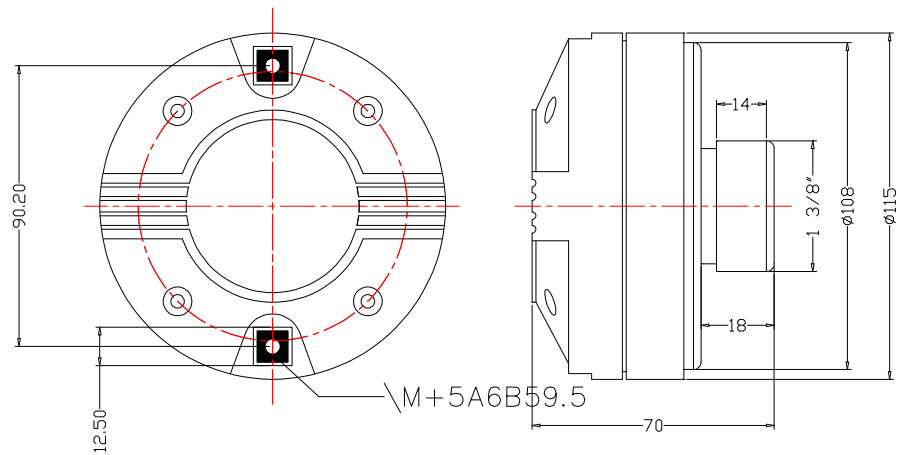
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Notes:

1" – PA horndriver,
titanium diaphragm,
standard 1 3/8" screw
coupling

impedance:	8 Ω
nom. power:	60 watts
SPL 1W/1m:	107 dB
fs:	800 Hz
Re:	6.0 Ω
Le:	0.1 mH
Qms:	3.1
Qes:	1.8
Qts:	1.1
VAS :	-- l
Mms :	-- g
Rms :	-- kg/s
Cms:	-- mm/N
B*I:	-- Tm
Sd:	-- cm ²
Xmax:	-- mm
weight:	1.7 kg
magnet:	-- oz
voice coil \varnothing :	44.4 mm

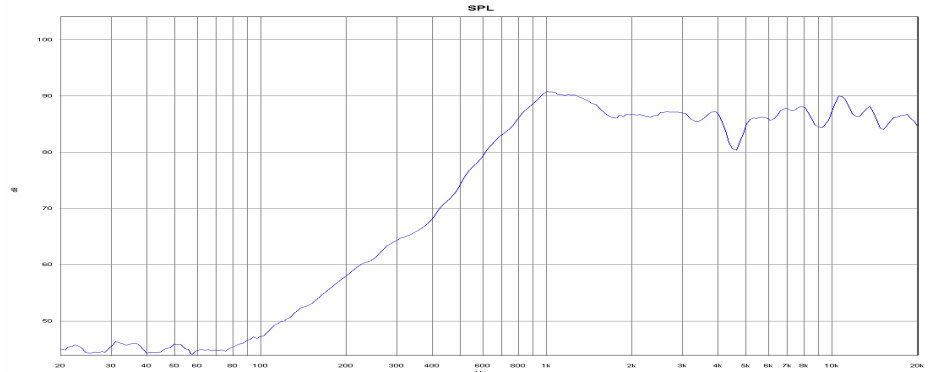


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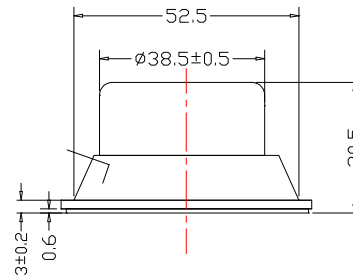
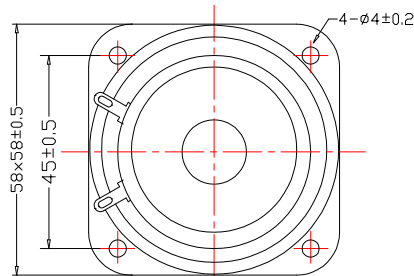
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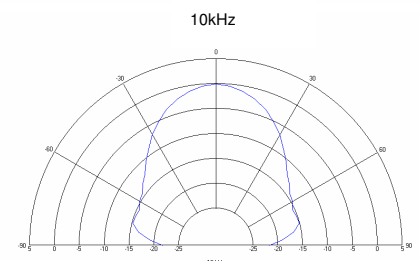
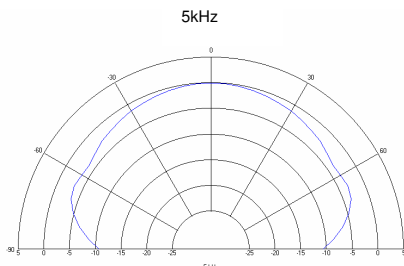
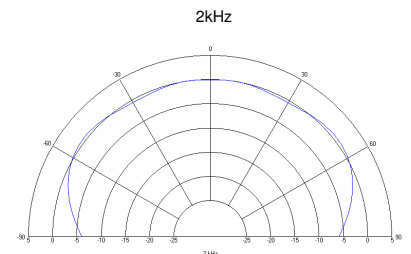
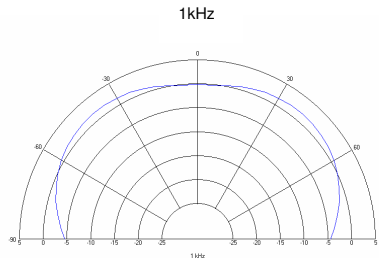
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Notes:
57 mm TV – tweeter,
paper cone,
mylar dustcap,
paper edge,
paper gasket,
terminals:
2.8 x 0.5 mm



impedance:	4/8 Ω
nom. power:	80 watts*
SPL 1W/1m	88 dB
fs:	1000 Hz
Re:	2.7/6.7 Ω
Le:	0.2 mH
Qms:	4.6
Qes:	6.4
Qts:	2.6
VAS :	-- l
Mms :	-- g
Rms :	-- kg/s
Cms:	-- mm/N
B*I:	-- Tm
Sd:	16.6 cm ²
Xmax:	-- mm
weight:	0.100 kg
magnet:	1 oz
voice coil Ø:	13 mm



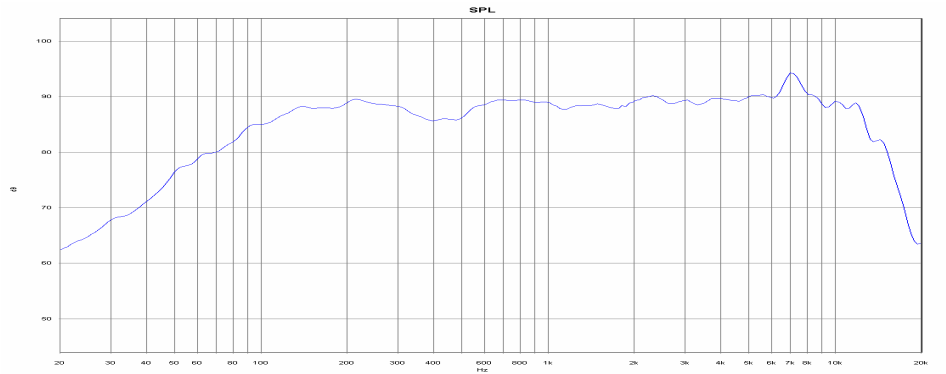
* crossover highpass 6000 Hz

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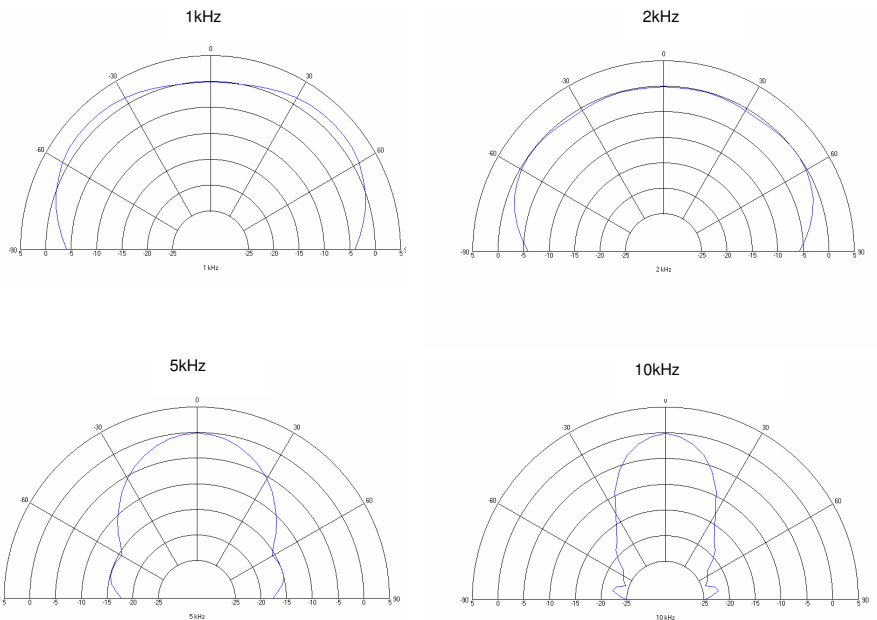
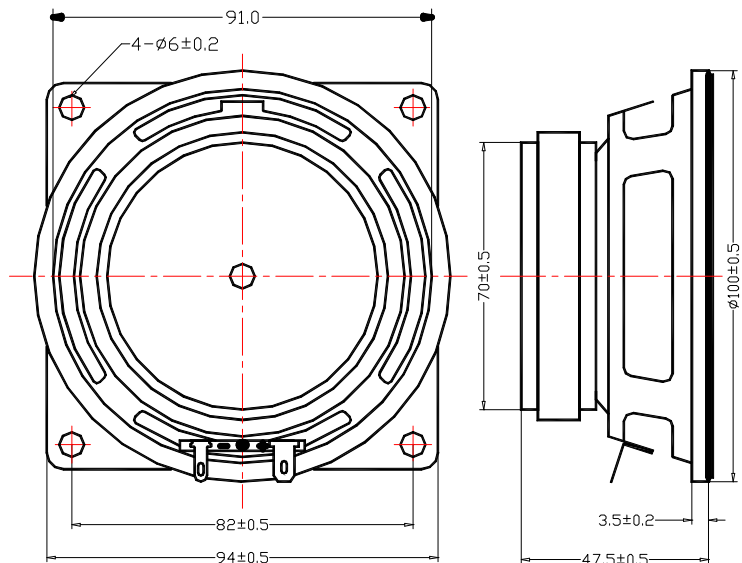


Notes:

100 mm woofer,
oil coated cone,
oil coated dustcap,
rubber edge,
paper gasket,
terminals:

“+” 4.8 x 0.8 mm
“-” 2.8 x 0.8 mm

impedance:	4 Ω
nom. power:	30 watts
SPL 1W/1m:	86 dB
fs:	110 Hz
Re:	3.4 Ω
Le:	0.16 mH
Qms:	2.0
Qes:	0.9
Qts:	0.6
VAS :	2.4 l
Mms :	3.8 g
Rms :	1.3 kg/s
Cms:	0.6 mm/N
B*I:	3 Tm
Sd:	54 cm ²
Xmax:	+/- 2 mm
weight:	0.456 kg
magnet:	9 oz
voice coil Ø:	25 mm

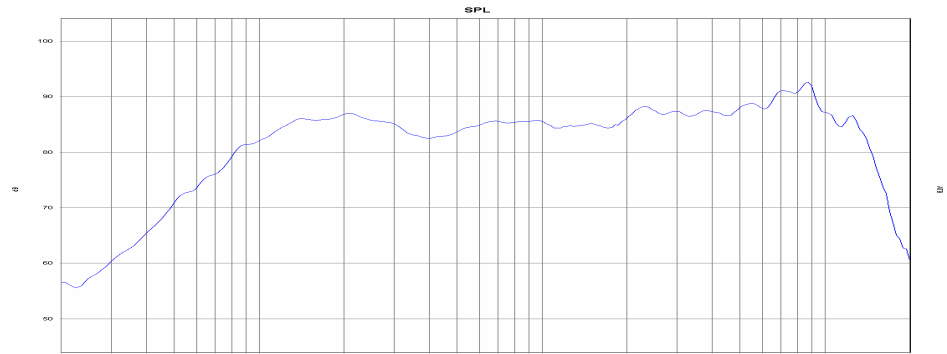


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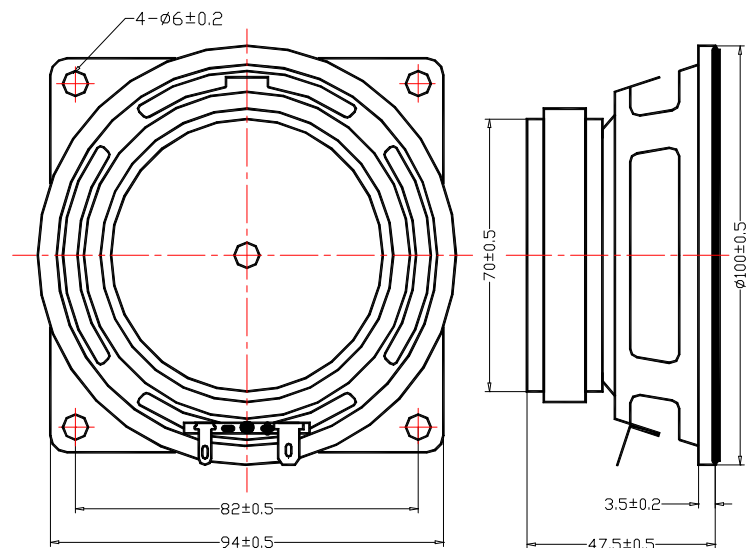
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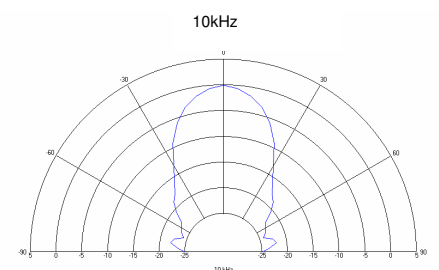
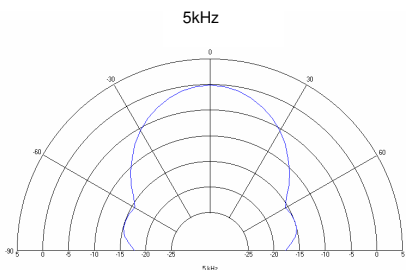
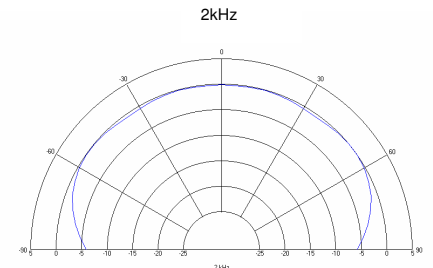
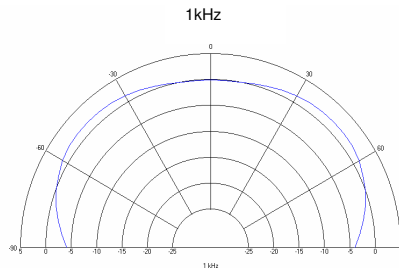
Notes:

100 mm woofer,
oil coated cone,
oil coated dustcap,
rubber edge,
rubber gasket,
terminals:

“+” 4.8 x 0.8 mm
“-” 2.8 x 0.8 mm



impedance:	8 Ω
nom. power:	30 watts
SPL 1W/1m:	86 dB
fs:	110 Hz
Re:	7.2 Ω
Le:	0.24 mH
Qms:	2.3
Qes:	1.1
Qts:	0.75
VAS :	2.4 l
Mms :	3.7 g
Rms :	1.2 kg/s
Cms:	0.6 mm/N
B*I:	4 Tm
Sd:	54 cm ²
Xmax:	+/- 2 mm
weight:	0.456 kg
magnet:	9 oz
voice coil Ø:	25 mm

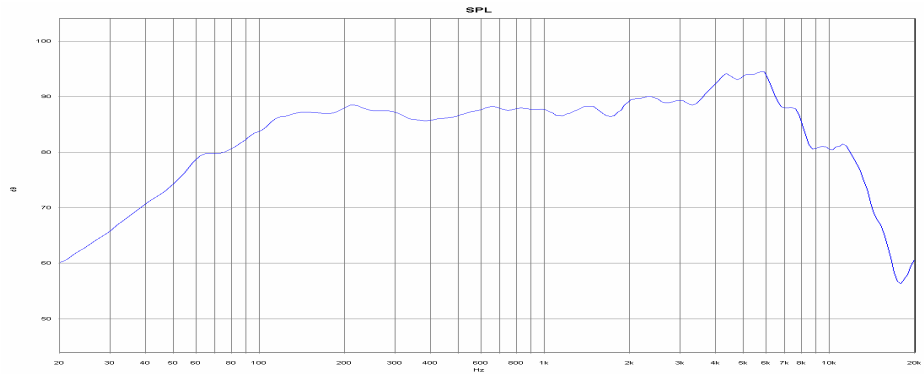


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

FOR TOLERANCES OF TECHNICAL DATA REFER TO HKM 'S MANUAL OF TECHNICAL DATA

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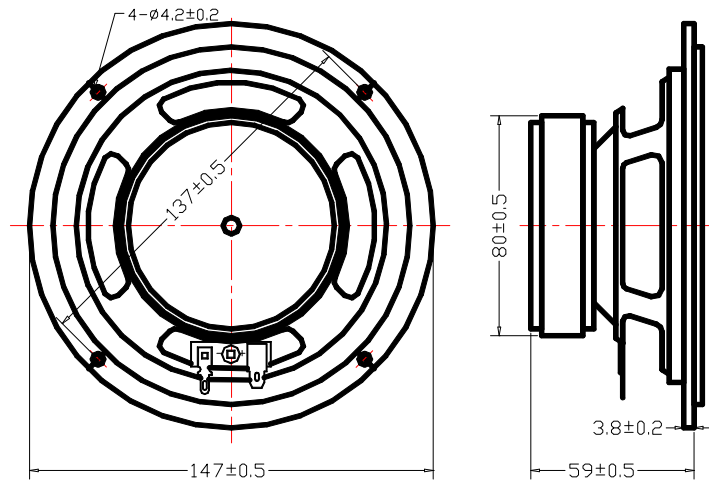


Notes:

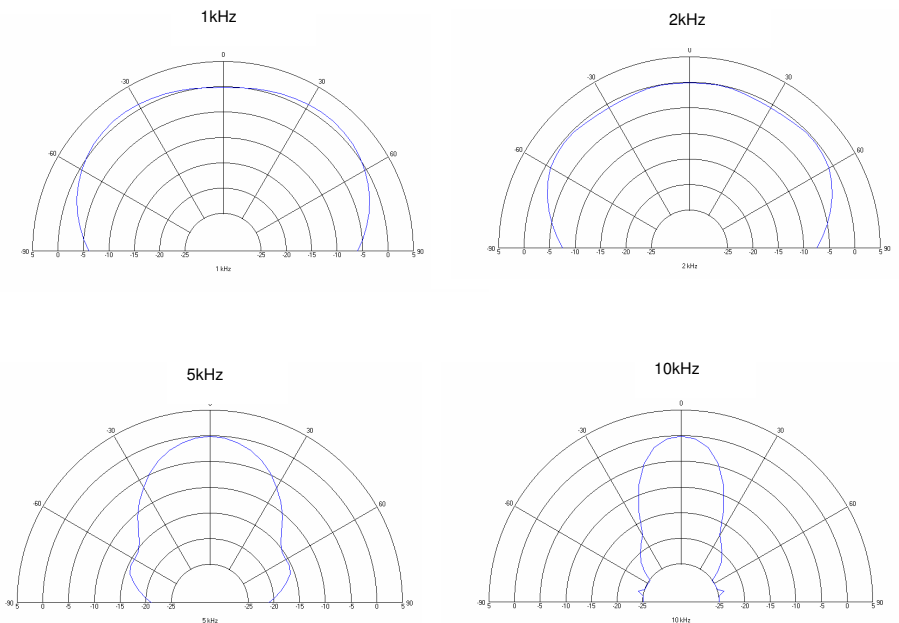
130 mm Hifi woofer,
metal powdered paper
cone and dustcap,
rubber edge,
terminals:

“+” 4.8 x 0.8 mm

“-” 2.8 x 0.8 mm



impedance:	4 Ω
nom. power:	40 watts
SPL 1W/1m:	89 dB
fs:	75 Hz
Re:	3.7 Ω
Le:	0.4 mH
Qms:	2.2
Qes:	0.6
Qts:	0.5
VAS :	7 l
Mms :	7 g
Rms :	1.6 kg/s
Cms:	0.7 mm/N
B*I:	4.2 Tm
Sd:	88 cm ²
Xmax:	+/- 3 mm
weight:	0.735 kg
magnet:	13 oz
voice coil Ø:	25 mm

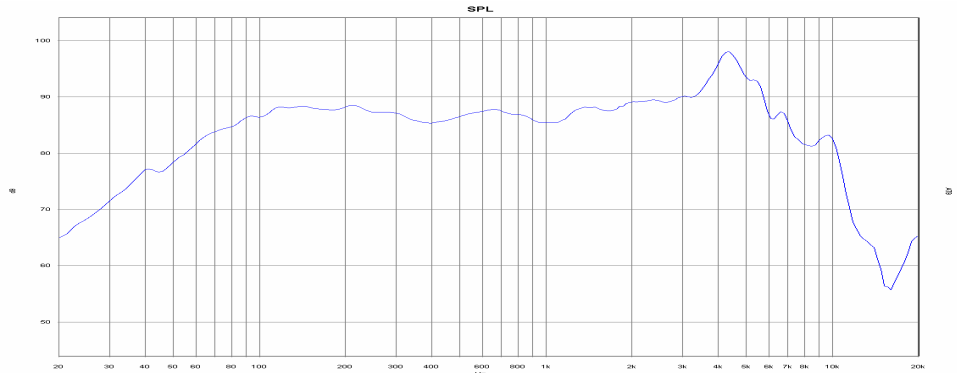


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

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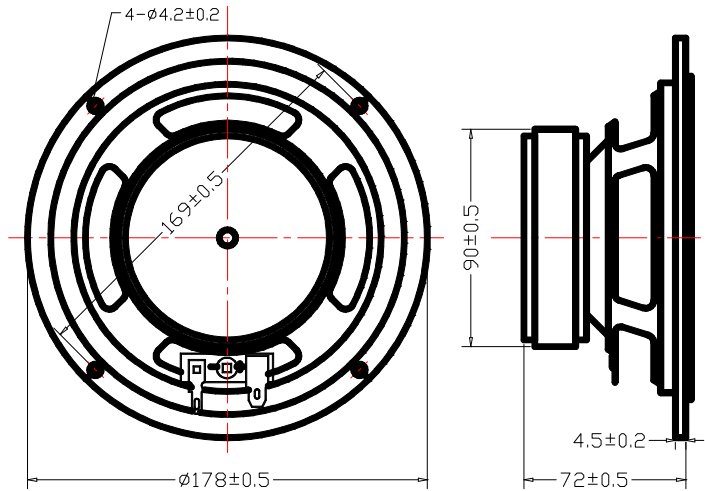
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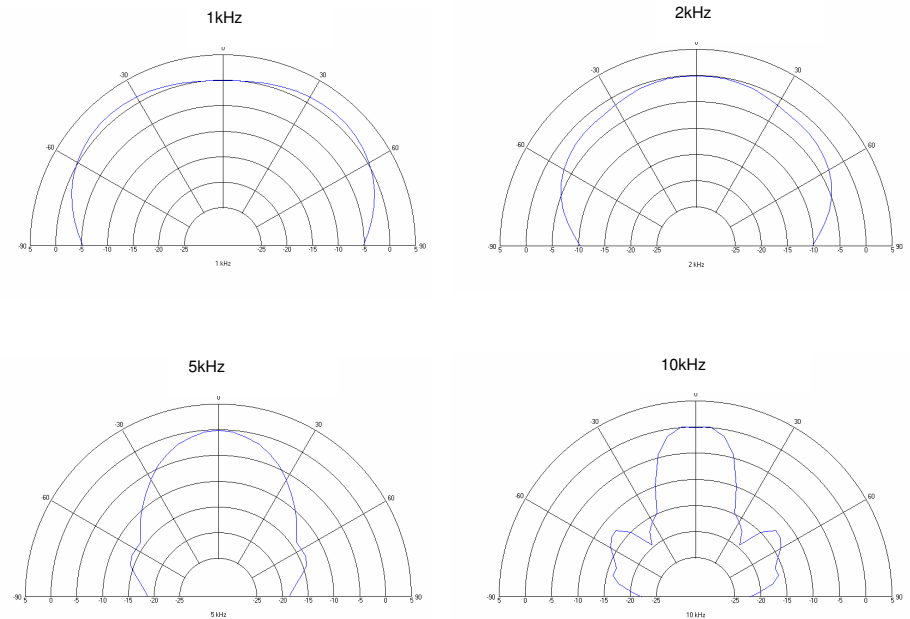
Notes:

165 mm Hifi woofer,
metal powdered paper
cone and dustcap,
rubber edge,
terminals:

“+” 4.8 x 0.8 mm
“-” 2.8 x 0.8 mm



impedance:	8 Ω
nom. power:	60 watts
SPL 1W/1m:	88 dB
fs:	50 Hz
Re:	6.9 Ω
Le:	0.66 mH
Qms:	2.7
Qes:	0.7
Qts:	0.5
VAS :	21 l
Mms :	12 g
Rms :	1.6 kg/s
Cms:	0.8 mm/N
B*I:	6.1 Tm
Sd:	135 cm ²
Xmax:	+/-3 mm
weight:	1.0 kg
magnet:	13 oz
voice coil Ø:	25 mm

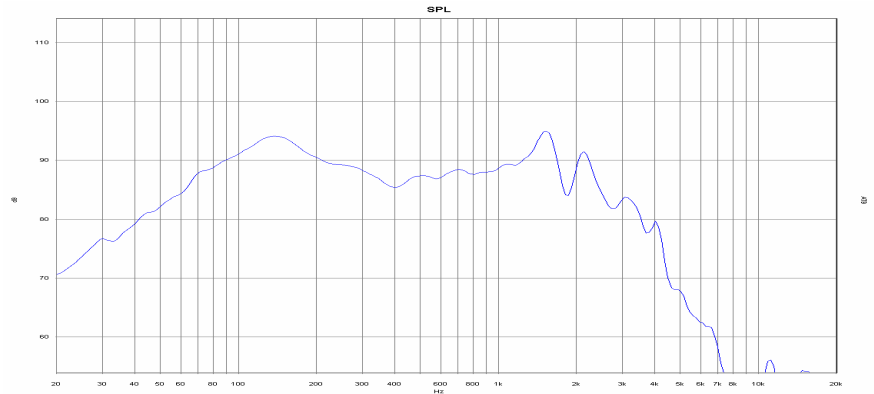


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

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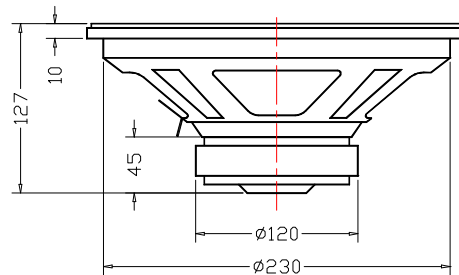
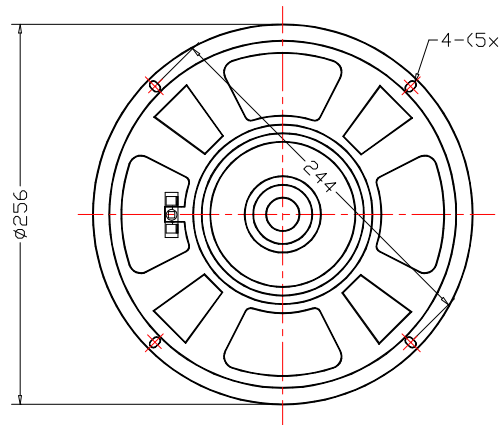
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Notes:

250 mm Hifi – Subwoofer,
oil coated air dried paper cone,
oil coated paper dustcap,
rubber edge,
foam gasket,
vented voice coil,
terminals:
“+” 4.8mm
“-“ 2.8mm

impedance:	8 Ω
nom. power:	120 watts
SPL 1W/1m:	89 dB
fs:	34.5 Hz
Re:	5.85 Ω
Le:	1.2 mH
Qms:	3.3
Qes:	0.48
Qts:	0.42
VAS :	62.82 l
Mms :	55.95 g
Rms :	3.99 kg/s
Cms:	0.38 mm/N
B*I:	11.66 Tm
Sd:	343 cm ²
Xmax:	3.5 mm
weight:	3.6 kg
magnet:	40 oz
voice coil Ø:	49 mm

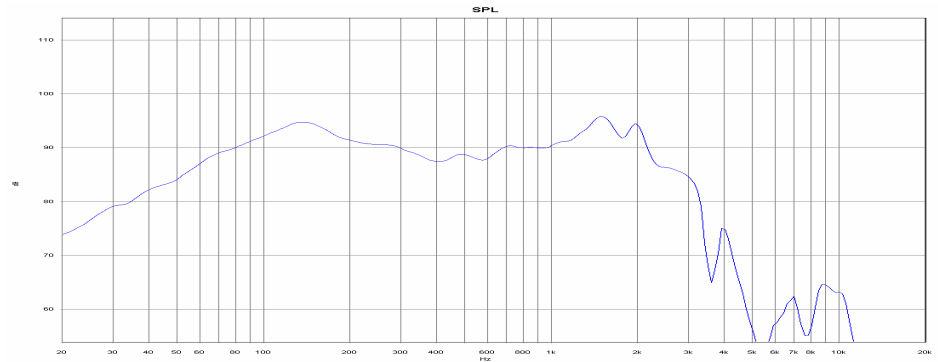


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

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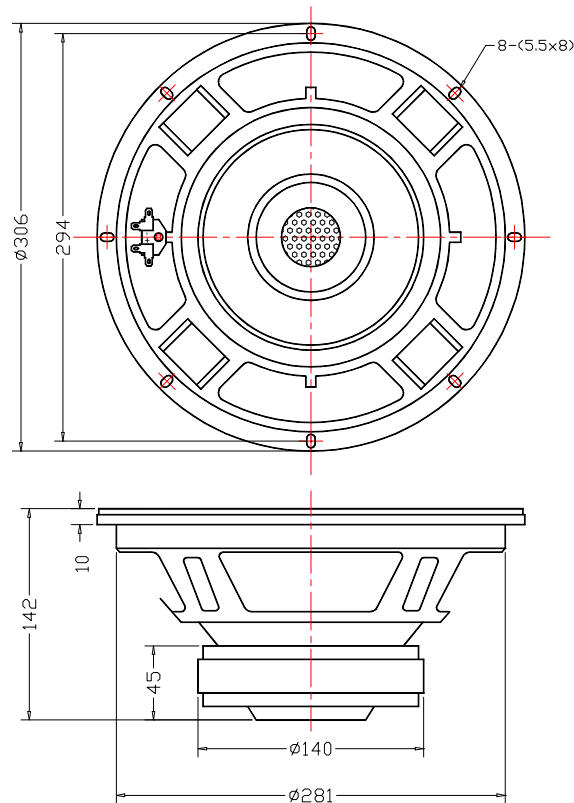
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Notes:

300 mm Hifi – Subwoofer,
oil coated air dried paper
cone,
oil coated paper dustcap,
rubber edge,
foam gasket,
vented voice coil,
terminals:
“+” 4.8mm
“-” 4.8mm

impedance:	8 Ω
nom. power:	120 watts
SPL 1W/1m:	91 dB
fs:	29.64 Hz
Re:	5.88 Ω
Le:	1.2 mH
Qms:	2.67
Qes:	0.51
Qts:	0.43
VAS :	130.6 l
Mms :	82.12 g
Rms :	6.22 kg/s
Cms:	0.35 mm/N
B*I:	12.74 Tm
Sd:	515 cm ²
Xmax:	4 mm
weight:	3.8 kg
magnet:	40 oz
voice coil \varnothing :	49 mm

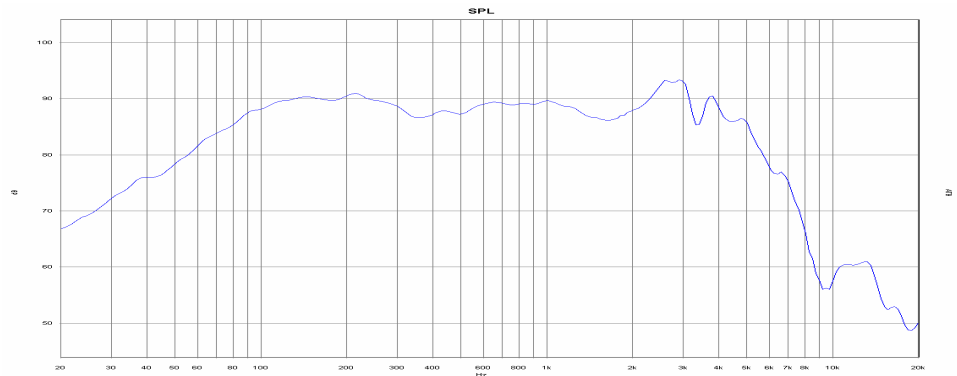


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

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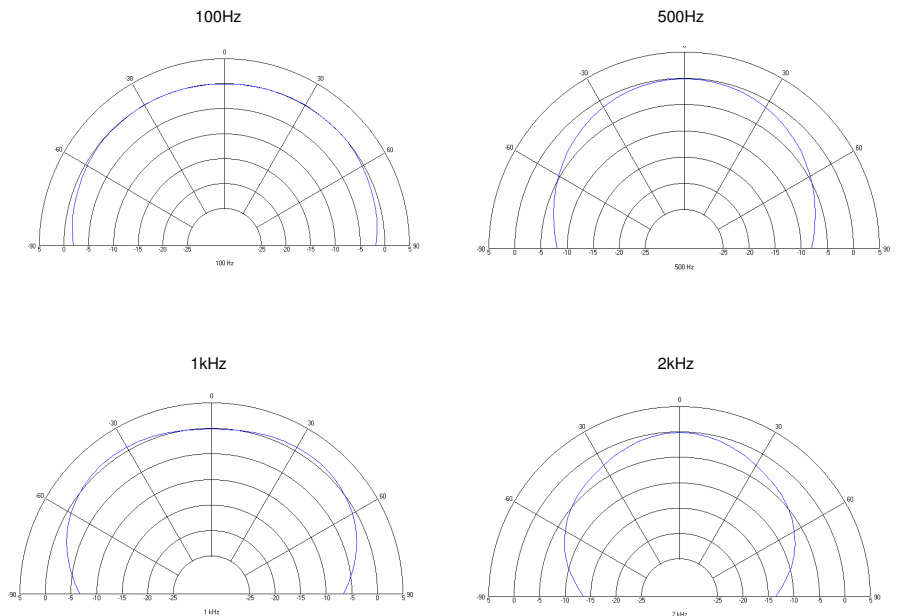
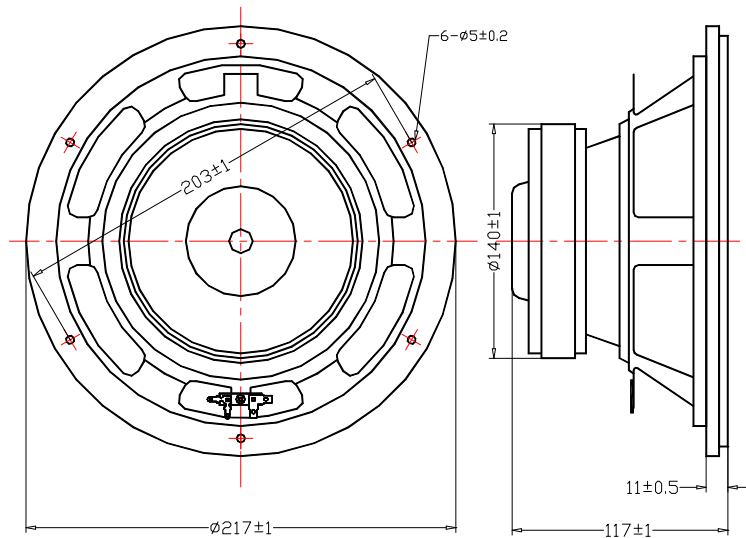
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Notes:

200 mm high power woofer,
oil coated paper cone and dustcap,
rubber edge,
foam gasket,
outcut Ø 183 mm,
terminals:
“+” 4.8 x 0.8 mm
“-” 2.8 x 0.8 mm

impedance: 4/8 Ω
nom. power: 100 watts
SPL 1W/1m 90 dB
fs: 40 Hz
Re: 3.2/7.0 Ω
Le: 0.6 mH
Qms: 5.8
Qes: 0.31
Qts: 0.3
VAS: 27 l
Mms: 40 g
Rms: 1.85 kg/s
2Cms: 0.41 mm/N
B*I: 9.7 Tm
Sd: 216 cm²
Xmax: +/- 4 mm
weight: 3.6 kg
magnet: 30 oz
voice coil Ø: 50 mm

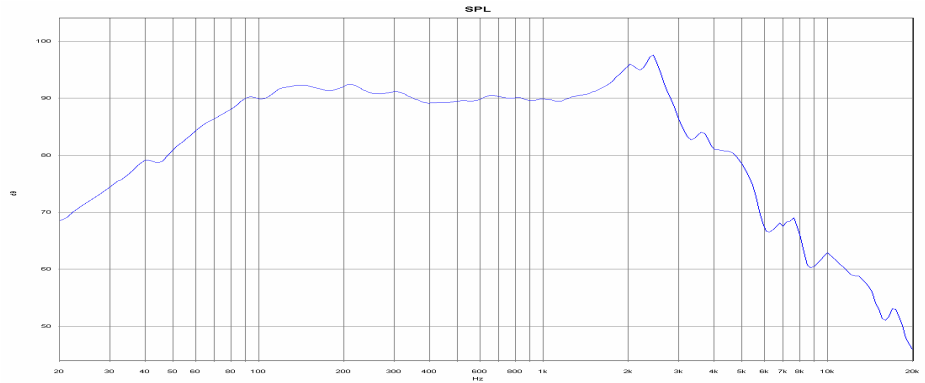


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

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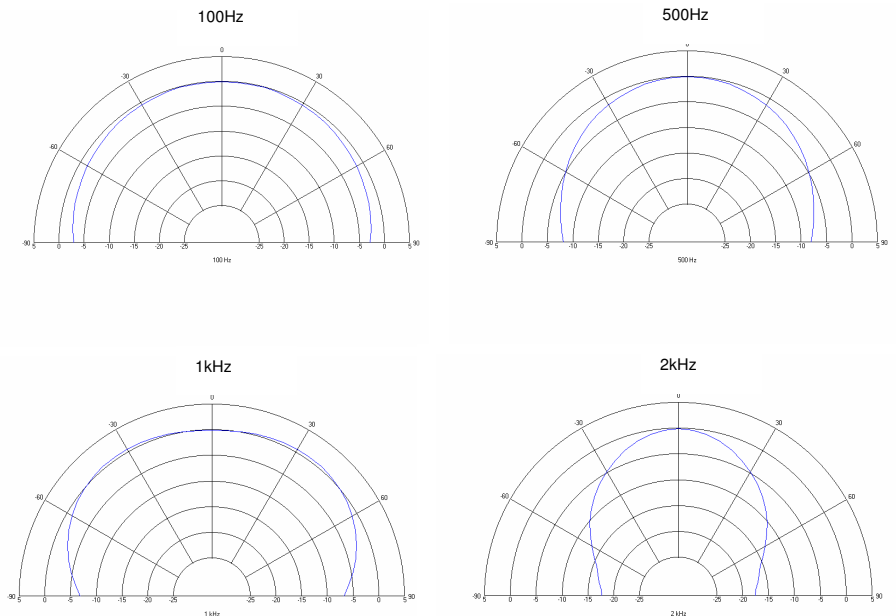
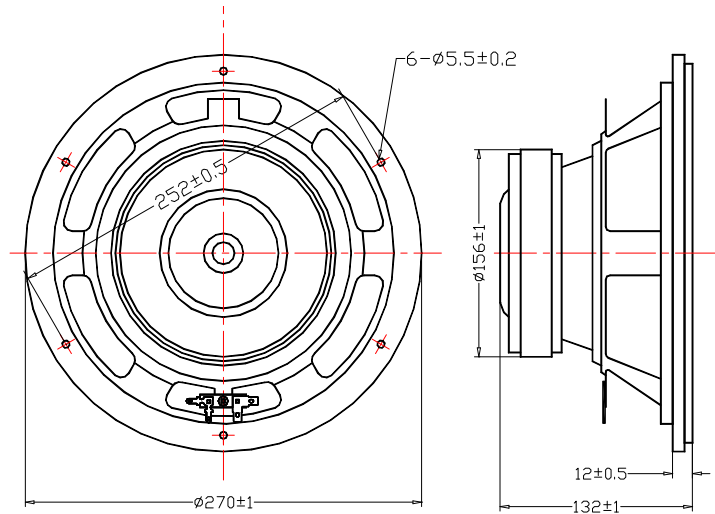
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Notes:

250 mm high power woofer,
oil coated paper cone
and dustcap,
rubber edge,
foam gasket,
outcut Ø 230 mm,
terminals:
“+” 4.8 x 0.8 mm
“-” 2.8 x 0.8 mm

impedance: 4/8 Ω
nom. power: 150 watts
SPL 1W/1m 91.5 dB
fs: 40 Hz
Re: 3.3/7.4 Ω
Le: 0.9 mH
Qms: 5.4
Qes: 0.36
Qts: 0.33
VAS : 50 l
Mms : 52 g
Rms : 2.66 kg/s
Cms: 0.3 mm/N
B*I: 10.6 Tm
Sd: 346 cm²
Xmax: +/- 4 mm
weight: 4.55 kg
magnet: 40 oz
voice coil Ø: 66 mm

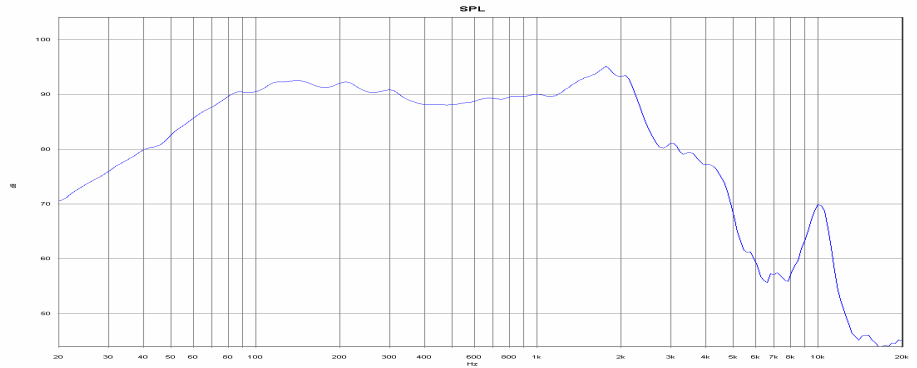


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

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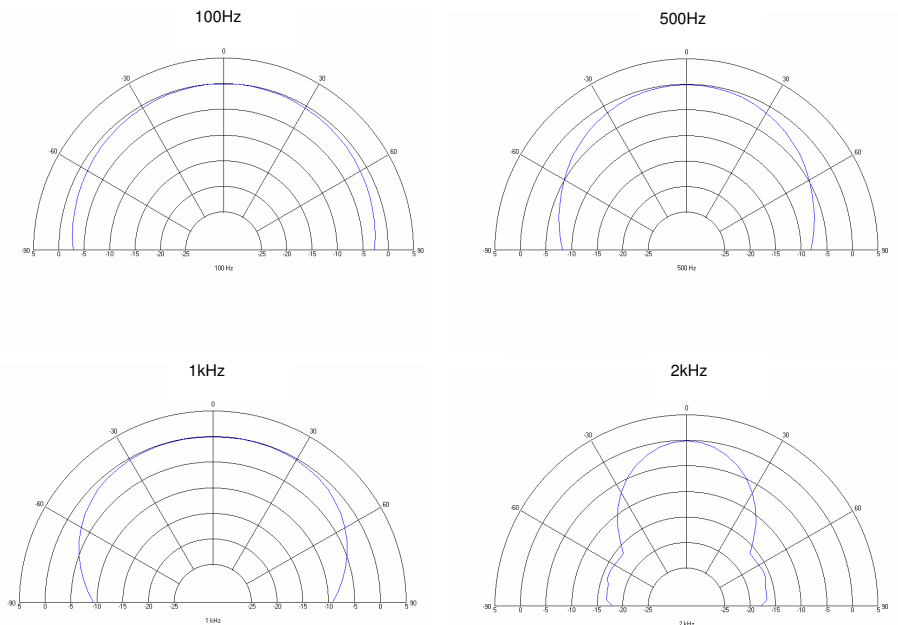
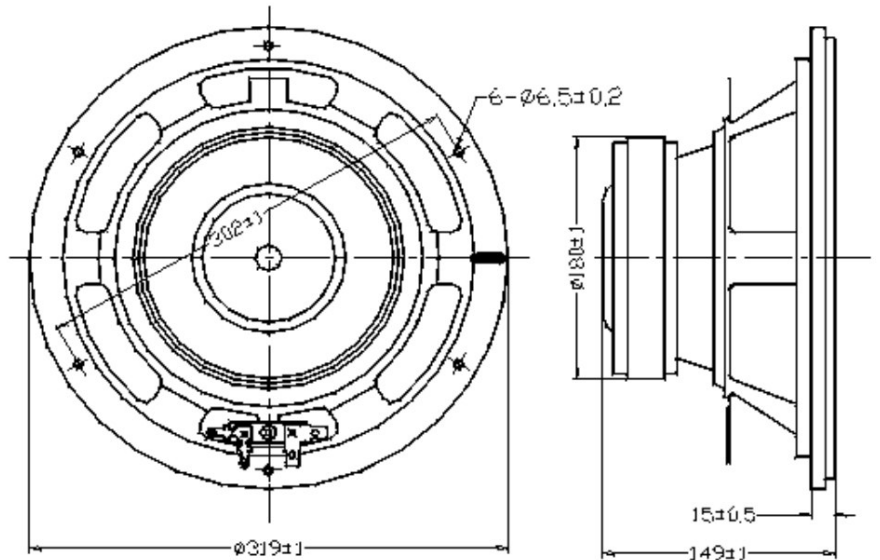
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Notes:

300 mm high power
woofer,
oil coated cone
and dustcap,
rubber edge,
foam gasket,
outcut Ø 280 mm,
terminals:
“+” 4.8 x 0.8 mm
“-” 2.8 x 0.8 mm

impedance: 4/8 Ω
nom. power: 200 watts
SPL 1W/1m 93 dB
fs: 32 Hz
Re: 3.3/6.6 Ω
Le: 1.1 mH
Qms: 3.7
Qes: 0.25
Qts: 0.23
VAS: 99 l
Mms: 85 g
Rms: 5.06 kg/s
Cms: 0.3 mm/N
B*I: 14.3 Tm
Sd: 491 cm²
Xmax: +/- 4 mm
weight: 7.35 kg
magnet: 50 oz
voice coil Ø: 76 mm

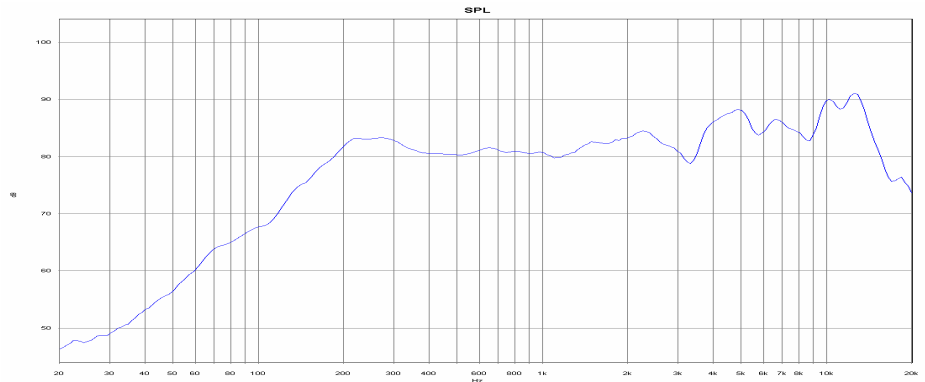


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

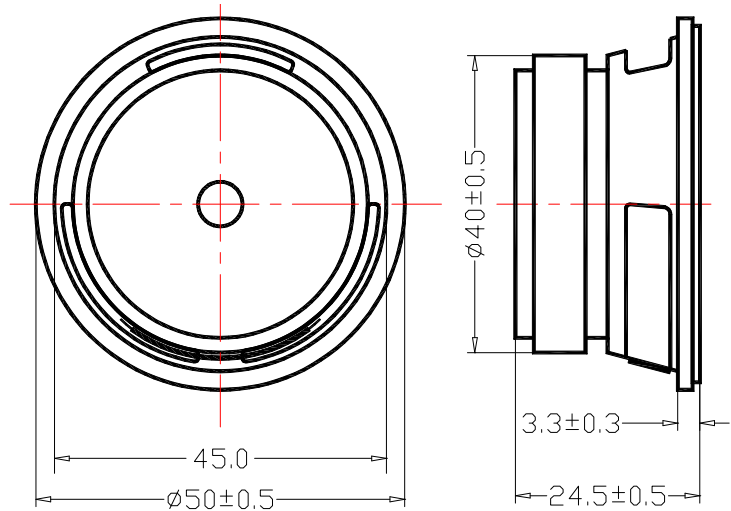
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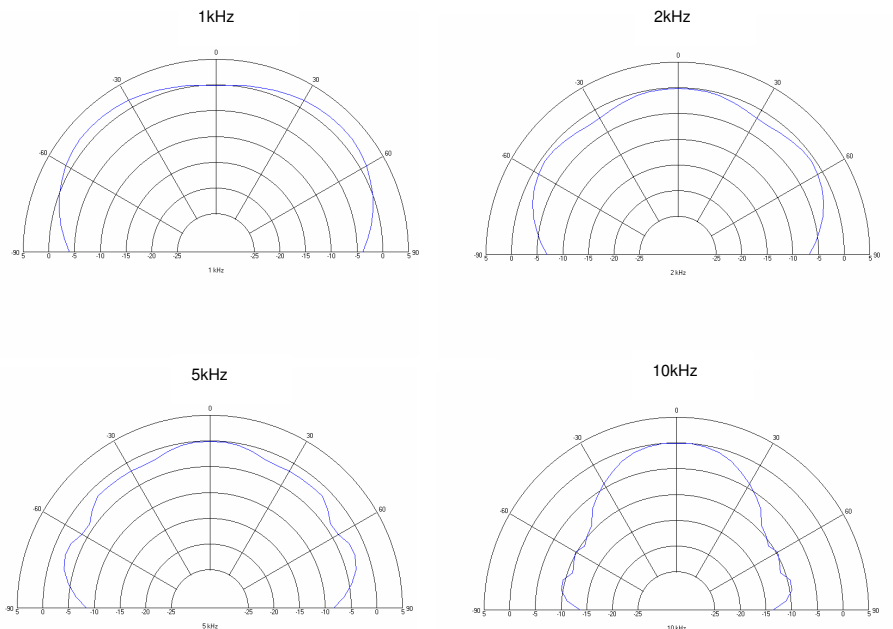
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Notes:
50 mm fullrange speaker,
paper cone,
paper dustcap,
treated cloth edge,
paper gasket,
terminals:
soldering eyes



impedance:	8 Ω
nom. power:	3 watts
SPL 1W/1m:	83 dB
fs:	274 Hz
Re:	7 Ω
Le:	0.1 mH
Qms:	2.8
Qes:	2.4
Qts:	1.3
VAS :	0.13 l
Mms :	0.54 g
Rms :	0.36 kg/s
Cms:	0.62 mm/N
B*I:	1.6 Tm
Sd:	12 cm ²
Xmax:	1 mm
weight:	0.087 kg
magnet:	1 oz
voice coil \varnothing :	13 mm



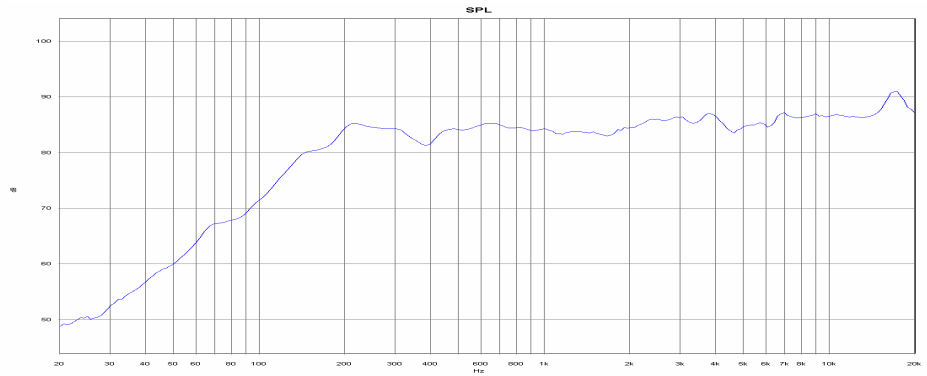
TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

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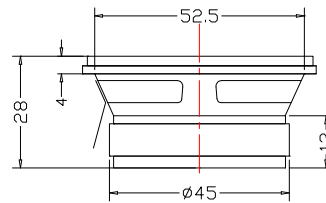
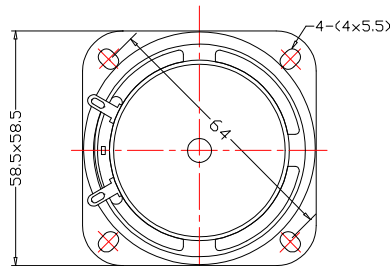
WWW.HKM-GROUP.DE



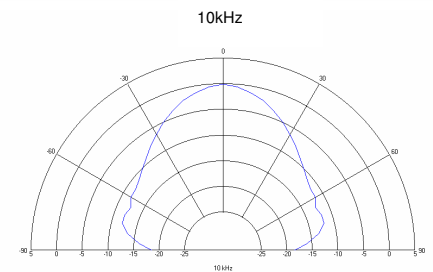
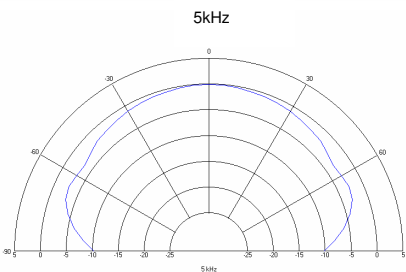
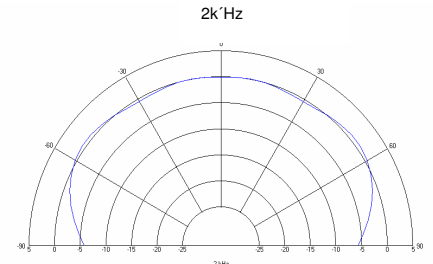
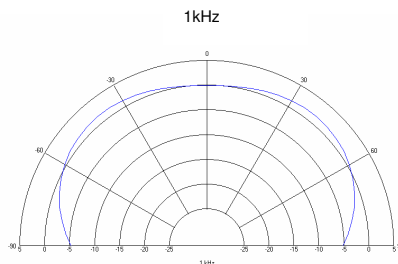
Notes:

58 x 58 mm fullrange speaker,
treated paper cone,
mylar dustcap,
rubber edge,
rubber gasket,
terminals:

„+“ 2.8 x 0.5 mm
„-“ 2.8 x 0.5 mm



impedance:	4/8 Ω
nom. power:	5 watts
SPL 1W/1m	82 dB
fs:	203 Hz
Re:	3.77.5 Ω
Le:	0.1 mH
Qms:	3.07
Qes:	1.51
Qts:	1.01
VAS :	0.18 l
Mms :	0.82 g
Rms :	0.37 kg/s
Cms:	0.74 mm/N
B*I:	2.19 Tm
Sd:	13.2 cm ²
Xmax:	1 mm
weight:	0.124 kg
magnet:	2 oz
voice coil Ø:	14 mm

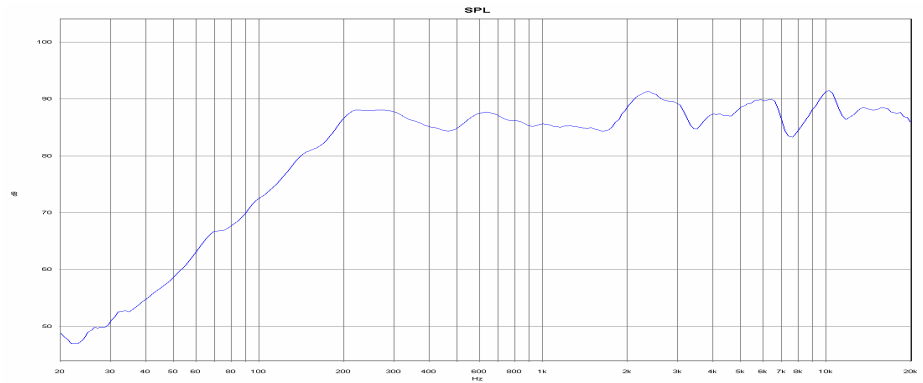


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

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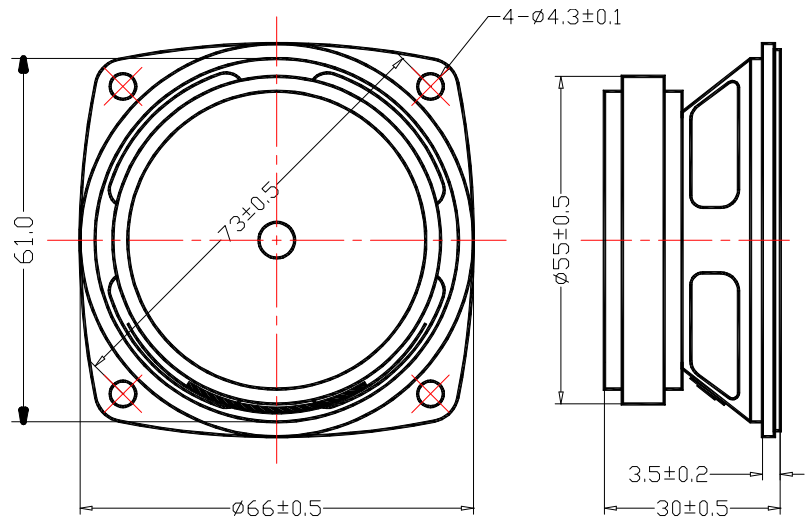
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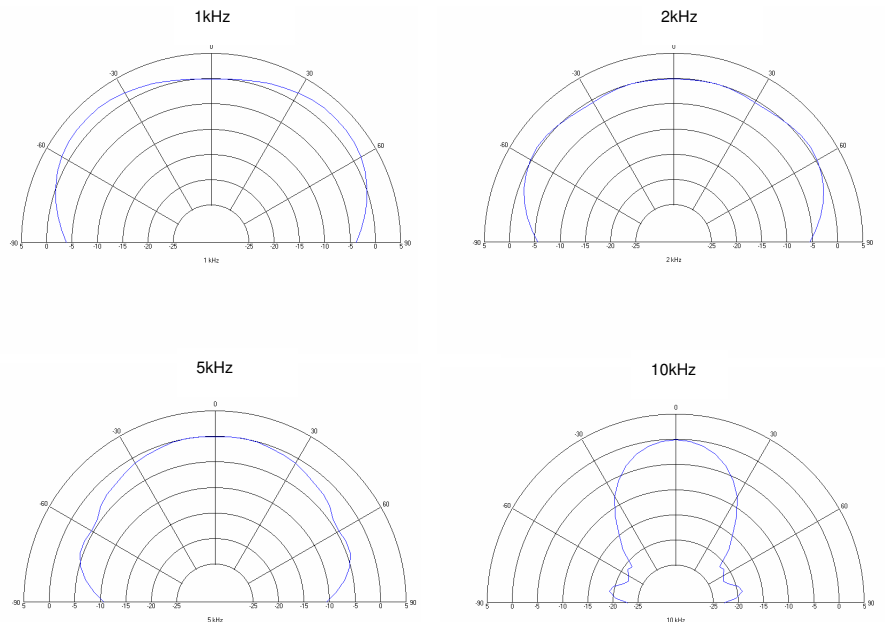
Notes:

66 mm fullrange speaker,
paper cone,
paper dustcap,
treated cloth edge,
paper gasket,
terminals:

“+” 2.8 x 0.5 mm
“-” 2.8 x 0.5 mm



impedance:	4/8 Ω
nom. power:	6 watts
SPL 1W/1m	90 dB
SPL 6W/1m	96 dB
fs:	280 Hz
Re:	3.6/7.3 Ω
Le:	0.01 mH
Qms:	3.3
Qes:	1.2
Qts:	0.9
VAS :	0.3 l
Mms :	0.7 g
Rms :	0.4 kg/s
Cms:	0.45 mm/N
B*I:	2.0 Tm
Sd:	23 cm ²
Xmax:	+/- 0.7 mm
weight:	0.185 kg
magnet:	2 oz
voice coil Ø:	13 mm

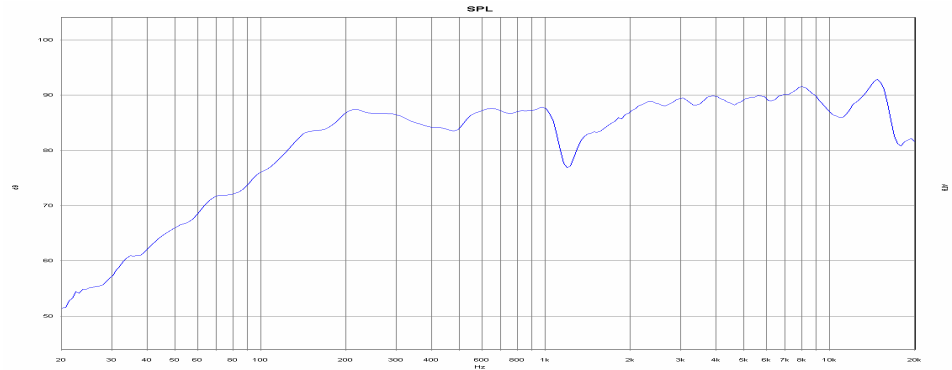


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FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

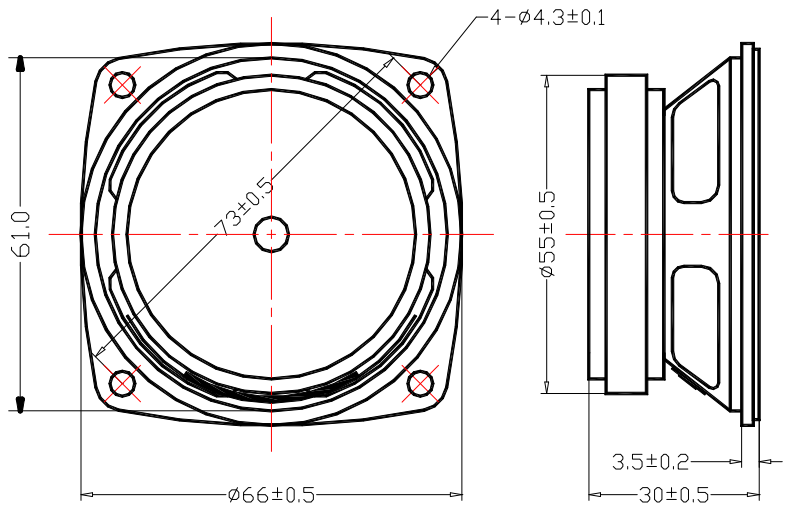
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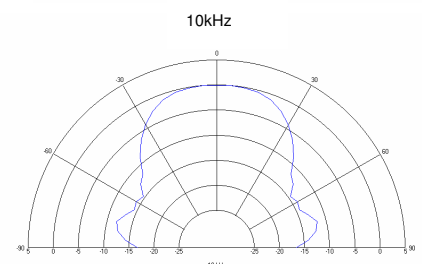
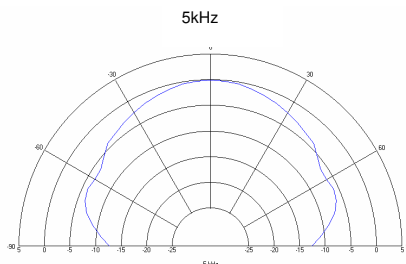
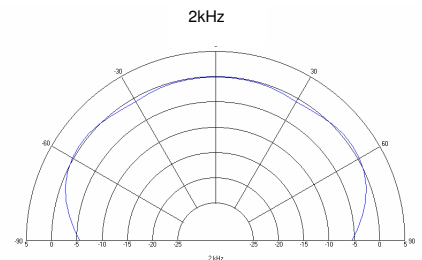
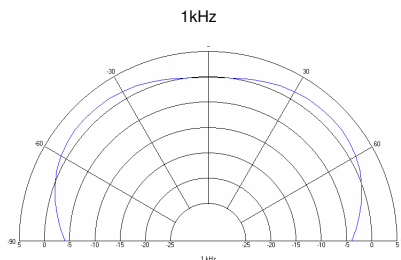


Notes:

66 mm fullrange speaker,
paper cone,
mylar dustcap,
treated paper edge,
paper gasket
terminals:
“+” 2.8 x 0.5 mm
“-” 2.8 x 0.5 mm



impedance:	4 Ω
nom. power:	6 watts
SPL 1W/1m:	90 dB
SPL 6W/1m:	97 dB
fs:	330 Hz
Re:	3.6 Ω
Le:	0.02 mH
Qms:	7.0
Qes:	1.5
Qts:	1.2
VAS :	0.2 l
Mms :	0.8 g
Rms :	0.3 kg/s
Cms:	0.3 mm/N
B*I:	1.9 Tm
Sd:	22 cm ²
Xmax:	0.7 mm
weight:	0.183 kg
magnet:	2 oz
voice coil Ø:	13 mm

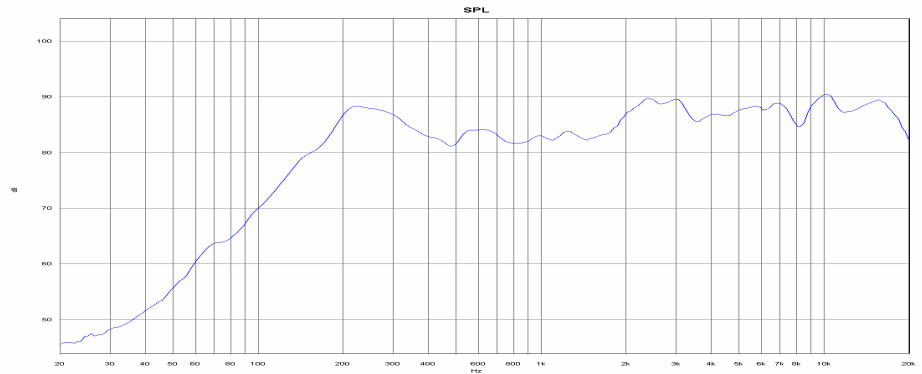


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

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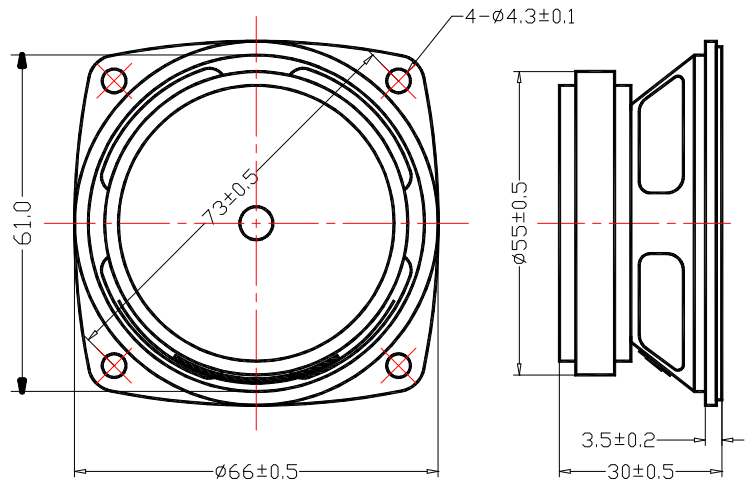
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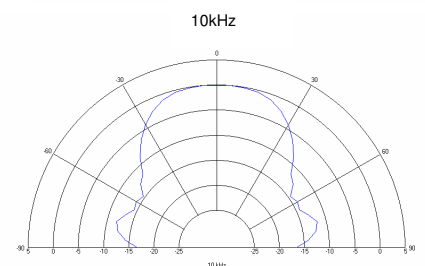
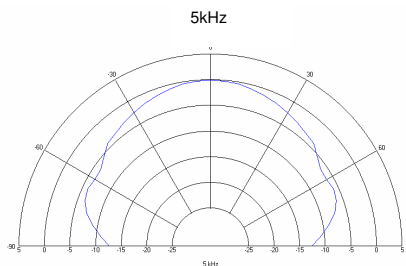
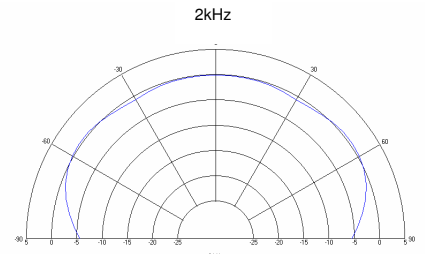
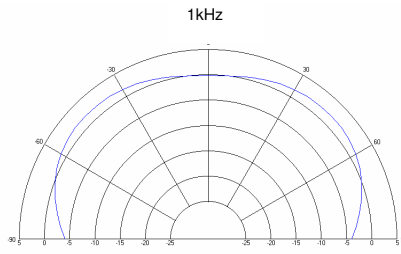


Notes:

66 mm fullrange speaker,
paper cone,
paper dustcap,
treated cloth edge,
paper gasket
terminals:
“+” 2.8 x 0.5 mm
“-” 2.8 x 0.5 mm



impedance:	32 Ω
nom. power:	6 watts
SPL 1W/1m:	88 dB
SPL 6W/1m:	94 dB
fs:	270 Hz
Re:	29 Ω
Le:	0.02 mH
Qms:	3.3
Qes:	2.4
Qts:	1.4
VAS :	0.4 l
Mms :	0.7 g
Rms :	0.4 kg/s
Cms:	0.45 mm/N
B*I:	3.7 Tm
Sd:	23 cm ²
Xmax:	+/-0.7 mm
weight:	0.183 kg
magnet:	2 oz
voice coil Ø:	13 mm

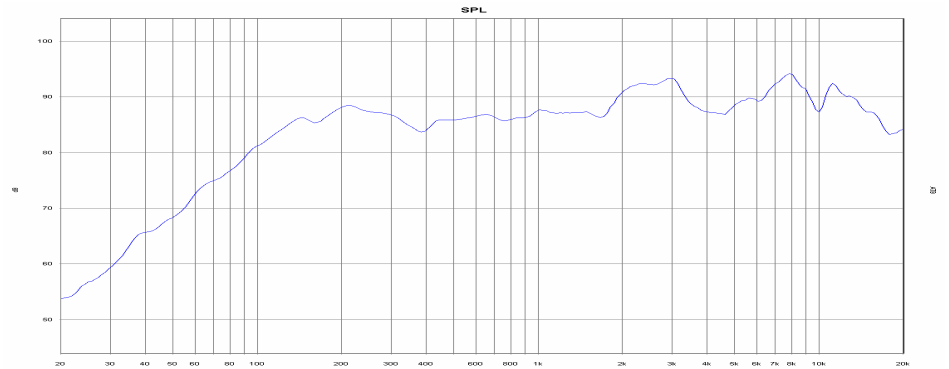


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

FOR TOLERANCES OF TECHNICAL DATA REFER TO HKM 'S MANUAL OF TECHNICAL DATA

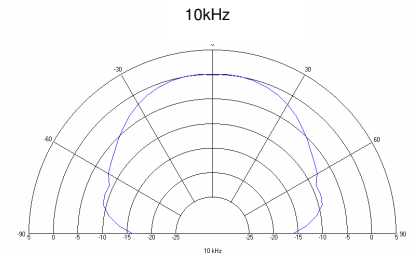
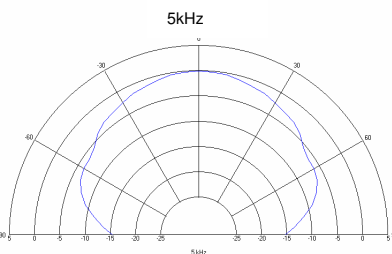
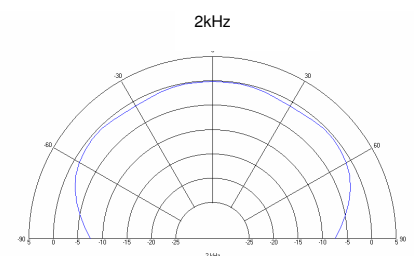
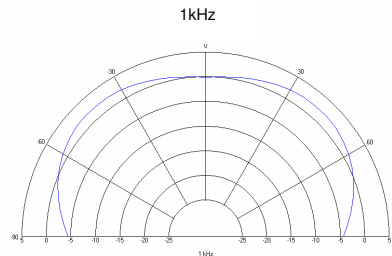
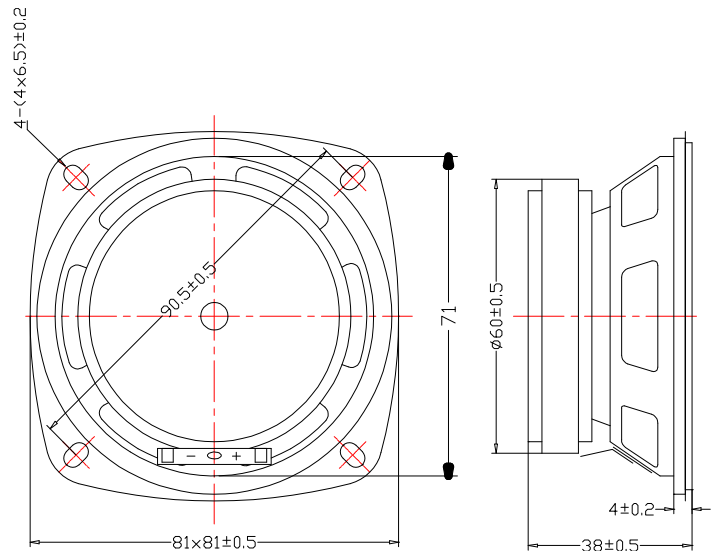
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Notes:

77 mm fullrange speaker,
paper cone,
mylar dustcap,
treated cloth edge,
paper gasket,
terminals:
“+” 4.8 x 0.8 mm
“-” 2.8 x 0.8 mm

impedance: 4 Ω
nom. power: 10 watts
SPL 1W/1m: 87 dB
SPL 6W/1m: 94 dB
fs: 260 Hz
Re: 3.5 Ω
Le: 0.1 mH
Qms: 4.2
Qes: 4
Qts: 2.0
VAS : 0.3 l
Mms : 1.5 g
Rms : 0.6 kg/s
Cms: 0.23 mm/N
B*I: 1.5 Tm
Sd: 32 cm²
Xmax: +/- 1 mm
weight: 0.237 kg
magnet: 3 oz
voice coil Ø: 20 mm

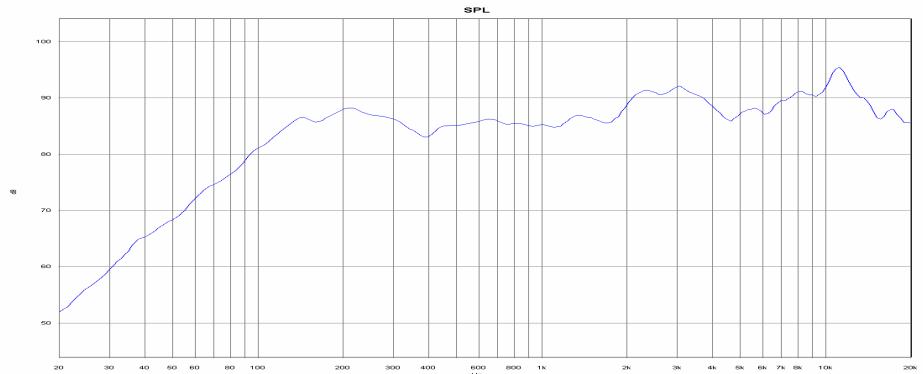


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

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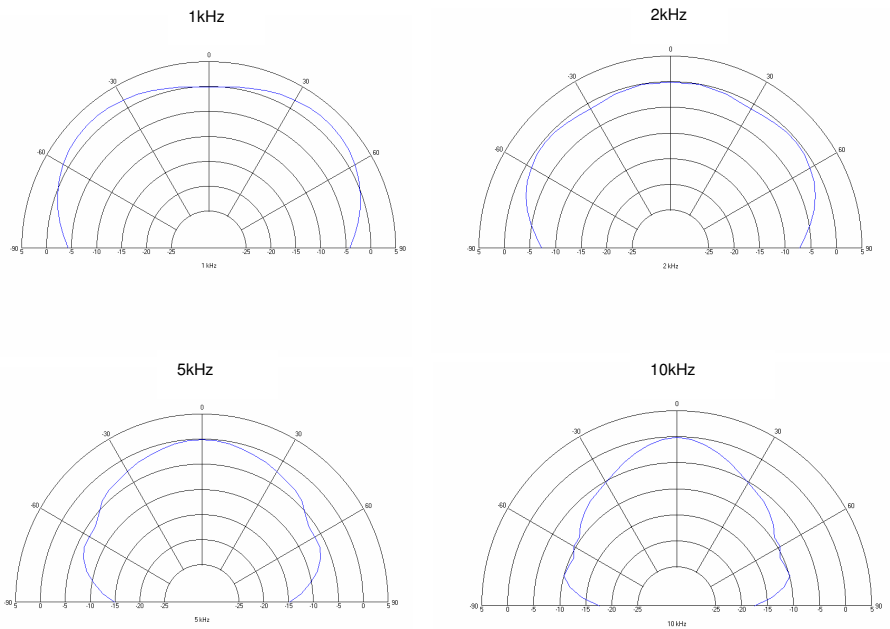
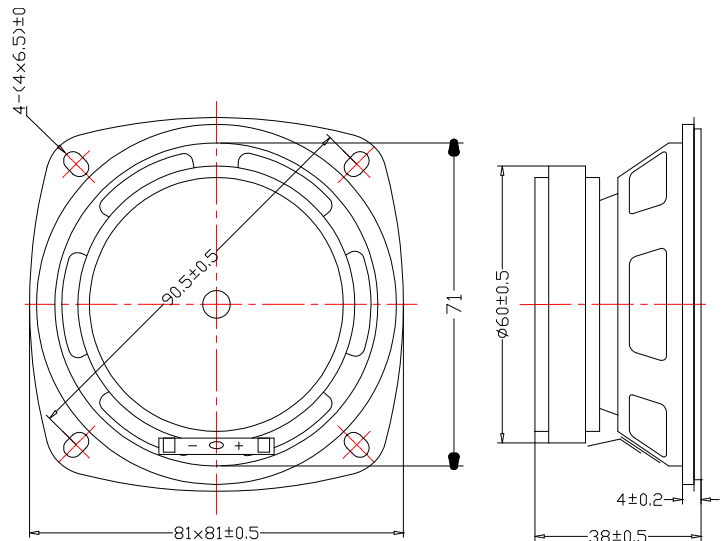
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Notes:

77 mm fullrange speaker,
paper cone,
black mylar dustcap,
treated cloth edge,
paper gasket,
terminals:
“+” 4.8 x 0.8 mm
“-” 2.8 x 0.8 mm

impedance: 8 Ω
nom. power: 10 watts
SPL 1W/1m: 89 dB
SPL 6W/1m: 95 dB
fs: 180 Hz
Re: 7.1 Ω
Le: 0.06 mH
Qms: 2.8
Qes: 1.2
Qts: 0.85
VAS: 0.9 l
Mms: 1.1 g
Rms: 0.5 kg/s
Cms: 0.7 mm/N
B*I: 2.8 Tm
Sd: 31 cm²
Xmax: +/- 1 mm
weight: 0.244 kg
magnet: 3.25 oz
voice coil \varnothing : 16 mm

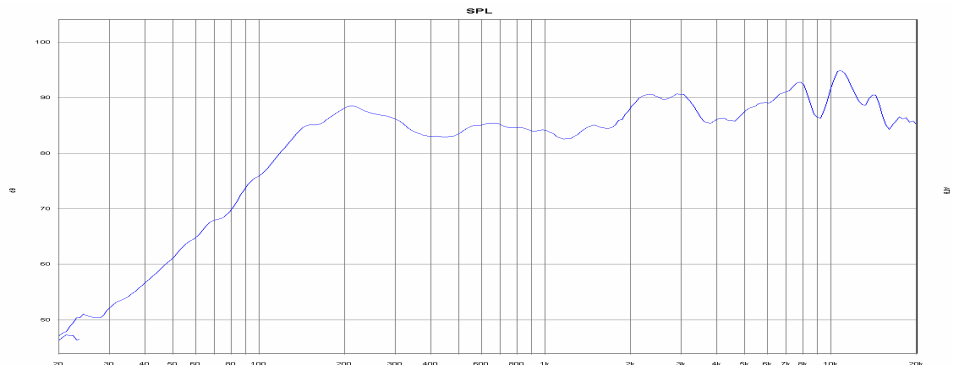


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

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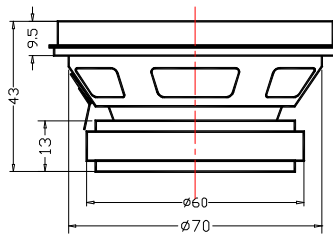
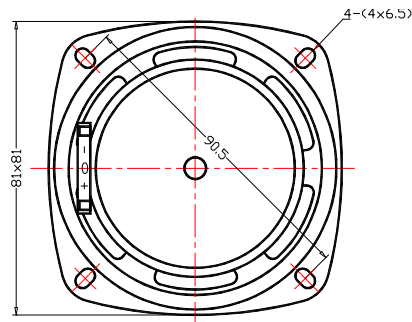
FOR INFORMATION CONTACT: TEL.: +49 9073 / 9585 0, FAX.: +49 9073 / 9585 55, E-MAIL: INFO@HKM-GROUP.DE



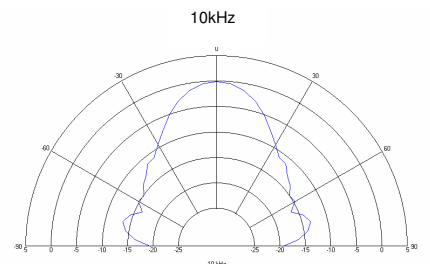
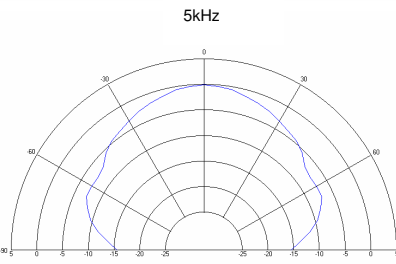
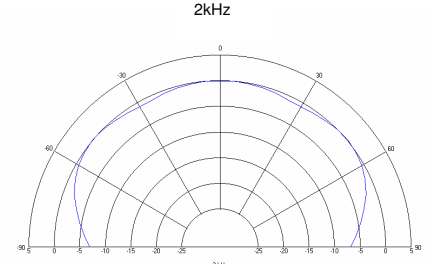
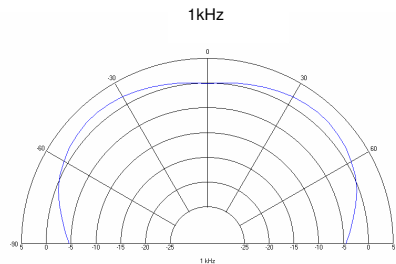
Notes:

77 mm fullrange speaker,
treated paper cone,
black mylar dustcap,
treated cloth edge,
5 mm high rubber gasket,
terminals:

“+” 4.8 x 0.8 mm
“-” 2.8 x 0.8 mm



impedance:	8 Ω
nom. power:	10 watts
SPL 1W/1m:	87 dB
SPL 6W/1m:	94 dB
fs:	187 Hz
Re:	7.2 Ω
Le:	0.06 mH
Qms:	3.2
Qes:	1.8
Qts:	1.17
VAS :	0.83 l
Mms :	1.2 g
Rms :	0.5 kg/s
Cms:	0.6 mm/N
B*I:	2.2 Tm
Sd:	31 cm ²
Xmax:	+/- 1 mm
weight:	0.244 kg
magnet:	3.25 oz
voice coil \varnothing :	16 mm

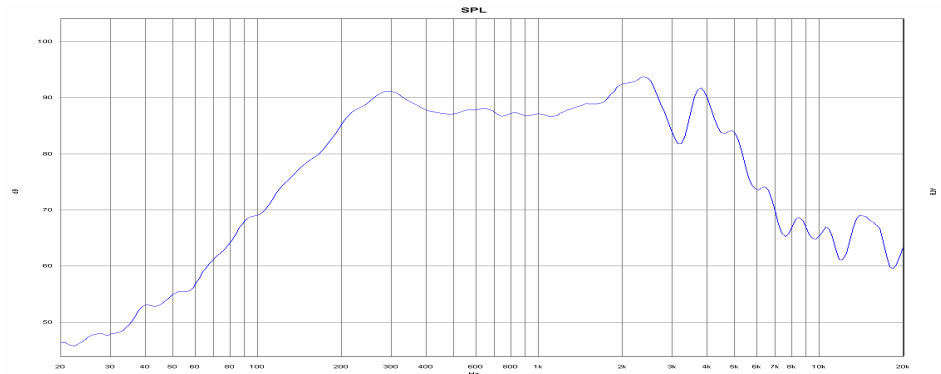


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

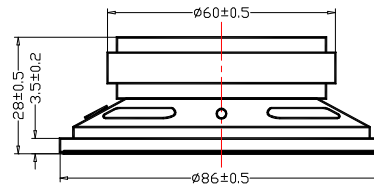
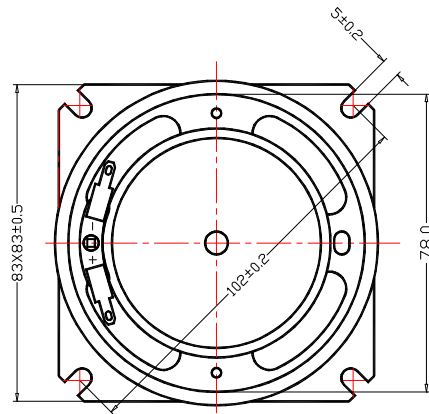
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Notes:

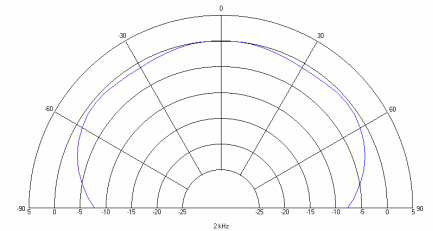
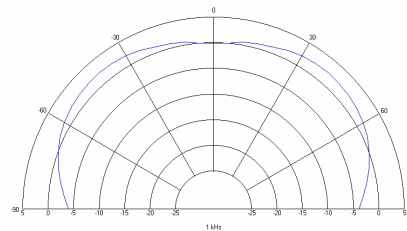
86 x 86 mm fullrange speaker,
mylar cone,
mylar dustcap, mylar edge,
rubber gasket,
waterproof design
terminals:
“+” 2.8 x 0.5 mm
“-“ 2.8 x 0.5 mm



impedance:	8 Ω
nom. power:	12 watts
SPL 1W/1m:	89 dB
fs:	275 Hz
Re:	6.9 Ω
Le:	0.24 mH
Qms:	6.5
Qes:	3.1
Qts:	2.1
VAS :	0.5 l
Mms :	1.5 g
Rms :	0.4 kg/s
Cms:	0.22 mm/N
B*I:	2.3 Tm
Sd:	41.3 cm ²
Xmax:	+/-1.3 mm
weight:	0.248 kg
magnet:	3 oz
voice coil Ø:	20.4 mm

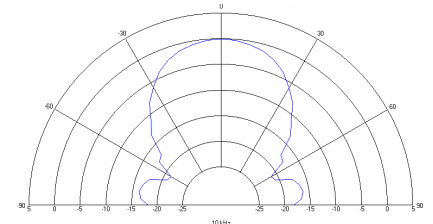
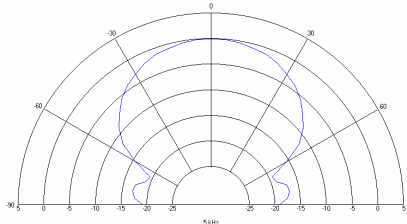
1kHz

2kHz



5kHz

10kHz

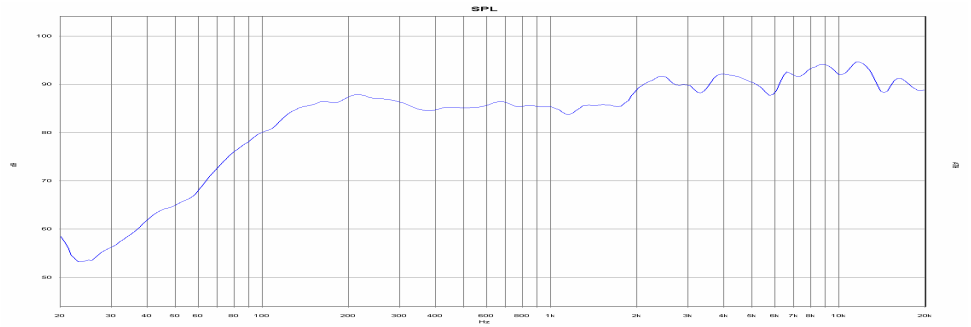


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

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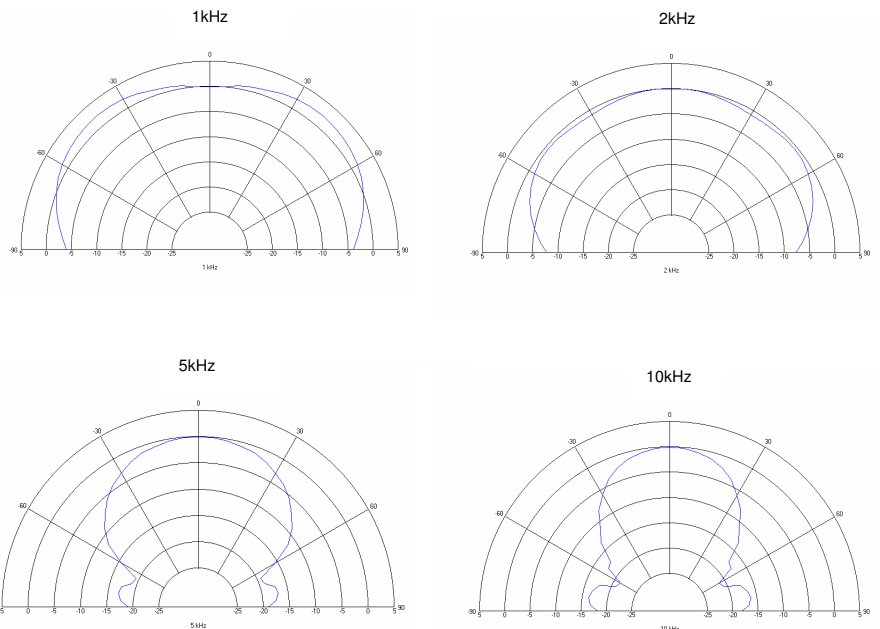
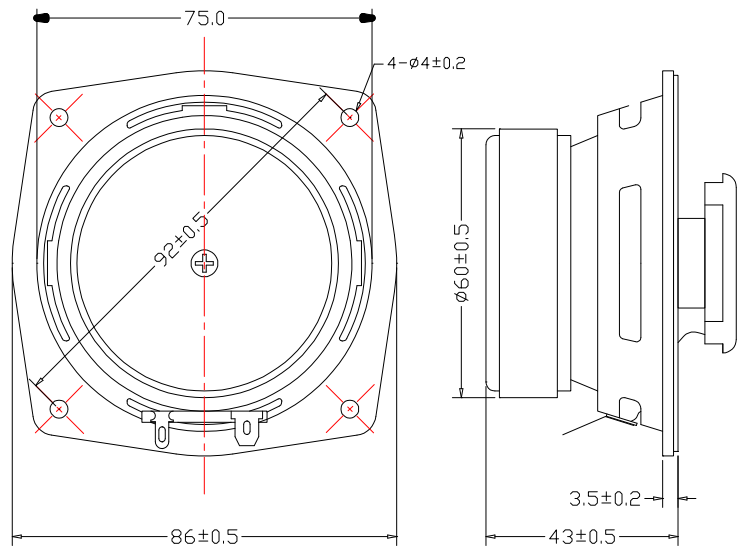
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Notes:

87 mm coaxial speaker,
paper cone,
treated cloth edge,
paper gasket,
13 mm dome tweeter,
vented voice coil
terminals:
“+” 4.8 x 0.8 mm
“-” 2.8 x 0.8 mm

impedance:	8 Ω
nom. power:	15 watts
SPL 1W/1m:	90 dB
fs:	245 Hz
Re:	7.3 Ω
Le:	0.1 mH
Qms:	3.3
Qes:	1.9
Qts:	1.2
VAS :	0.7 l
Mms :	1.5 g
Rms :	0.7 kg/s
Cms:	0.3 mm/N
B*I:	2.8 Tm
Sd:	42 cm ²
Xmax:	+/- 1 mm
weight:	0.35 kg
magnet:	5.3 oz
voice coil Ø:	19 mm

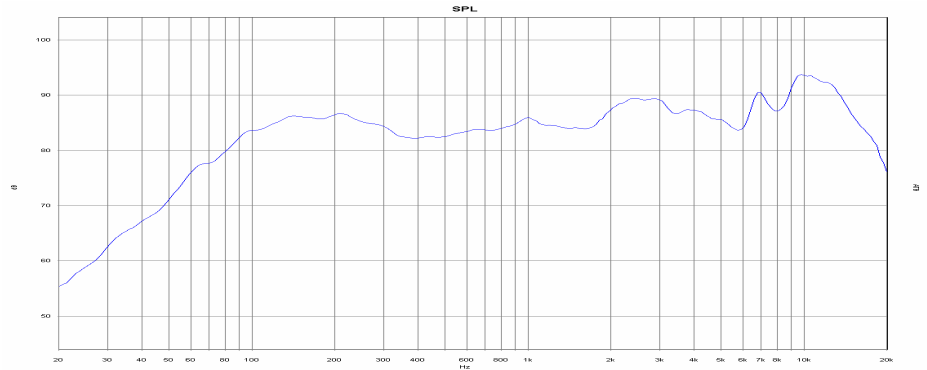


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

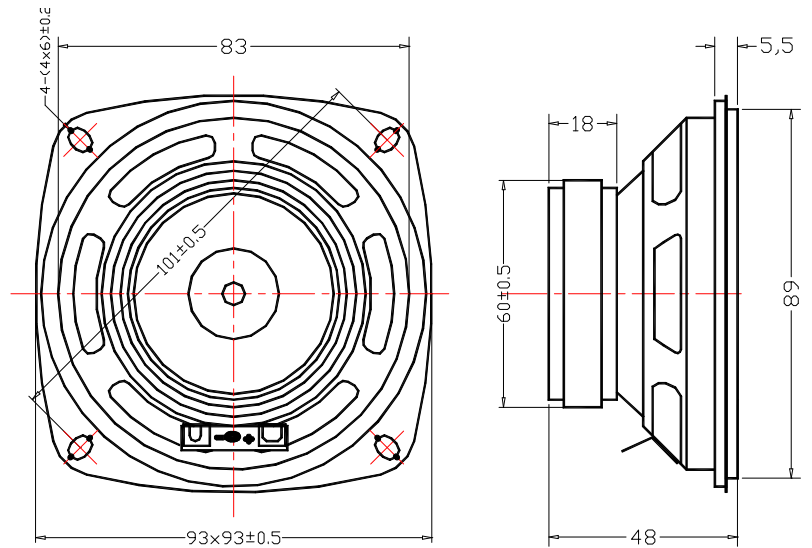
FOR TOLERANCES OF TECHNICAL DATA REFER TO HKM 'S MANUAL OF TECHNICAL DATA

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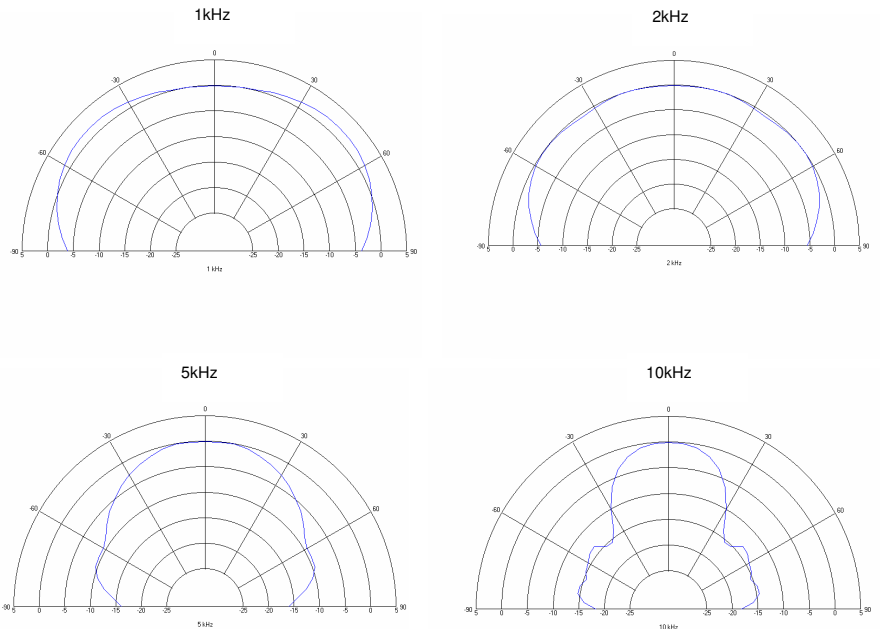


Notes:

90 mm fullrange speaker,
paper cone,
paper dustcap,
treated cloth edge,
paper gasket
terminals:
“+” 4.8 x 0.8 mm
“-” 2.8 x 0.8 mm



impedance:	8 Ω
nom. power:	10 watts
SPL 1W/1m:	86 dB
fs:	108 Hz
Re:	6.8 Ω
Le:	0.2 mH
Qms:	2.7
Qes:	1.3
Qts:	0.88
VAS :	2.7 l
Mms :	2.09 g
Rms :	0.58 kg/s
Cms:	1.04 mm/N
B*I:	2.6 Tm
Sd:	43 cm ²
weight:	0.394 kg
magnet:	6 oz
voice coil Ø:	20 mm

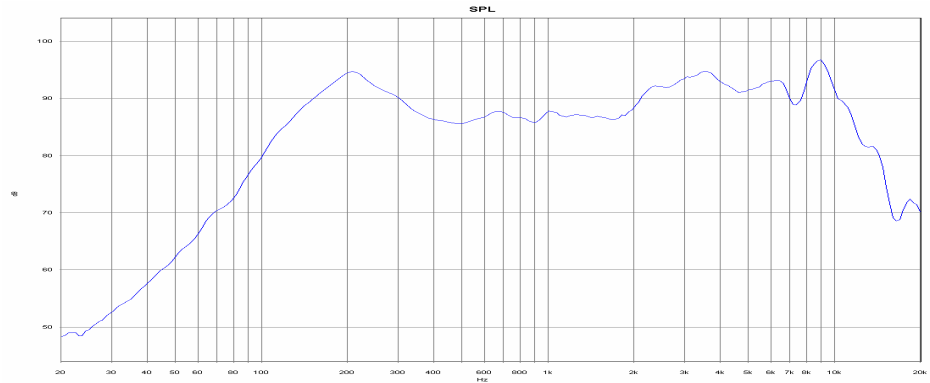


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

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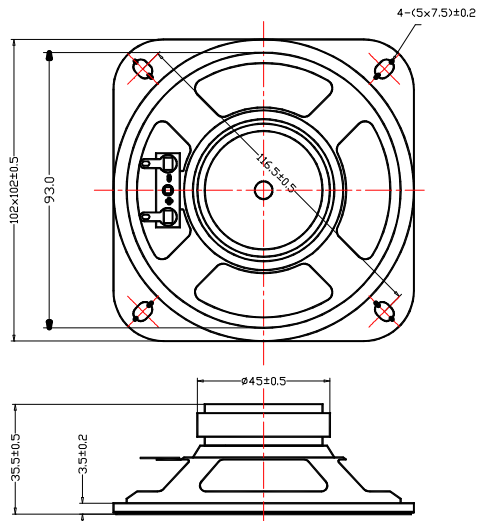
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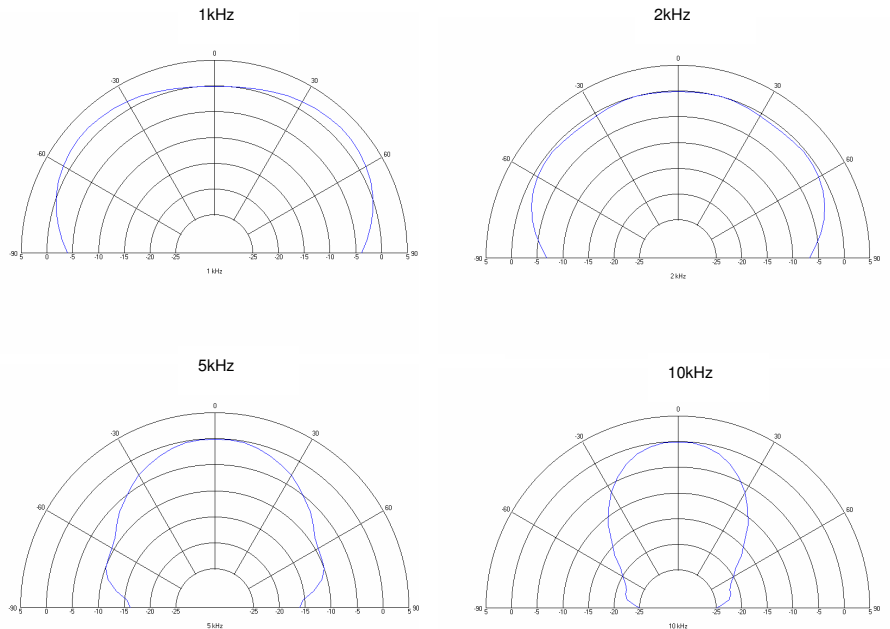
Notes:

102 x 102 mm
fullrange speaker,
paper cone,
silver dustcap,
treated paper edge,
paper gasket,
terminals:

“+” 2.8 x 0.5 mm
“-” 2.8 x 0.5 mm



impedance:	4 Ω
nom. power:	6 watts
SPL 1W/1m:	91 dB
fs:	215 Hz
Re:	3.2 Ω
Le:	0.1 mH
Qms:	5.8
Qes:	2.8
Qts:	1.9
VAS :	1.6 l
Mms :	1.6 g
Rms :	0.4 kg/s
Cms:	0.35 mm/N
B*I:	1.5 Tm
Sd:	58 cm ²
weight:	0.156 kg
magnet:	2 oz
voice coil Ø:	14 mm

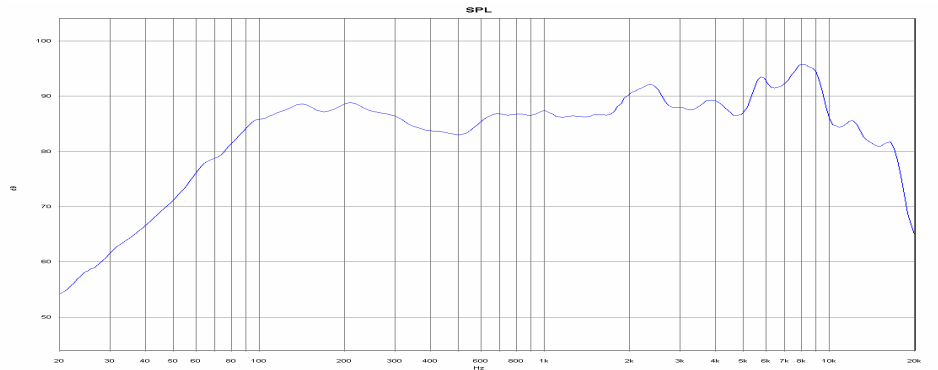


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

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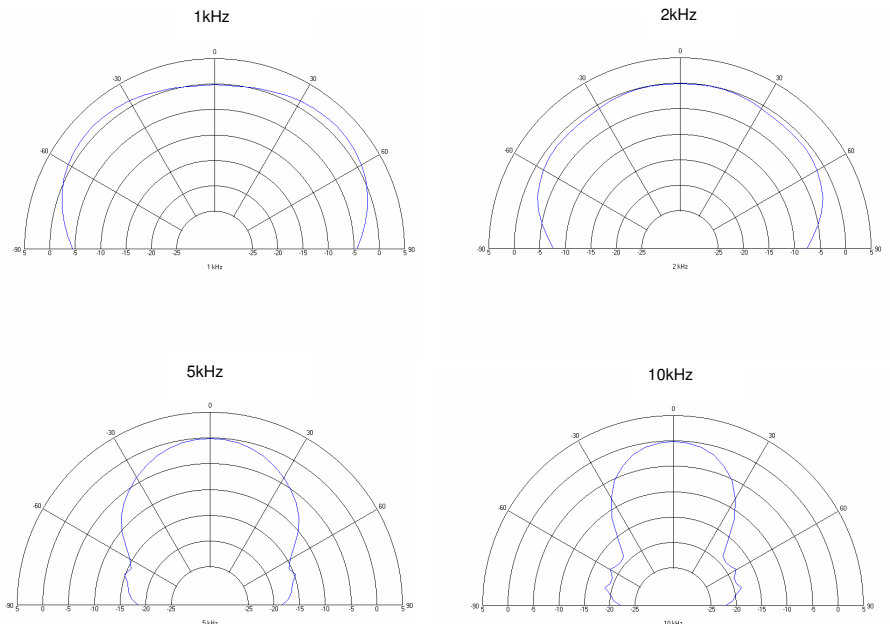
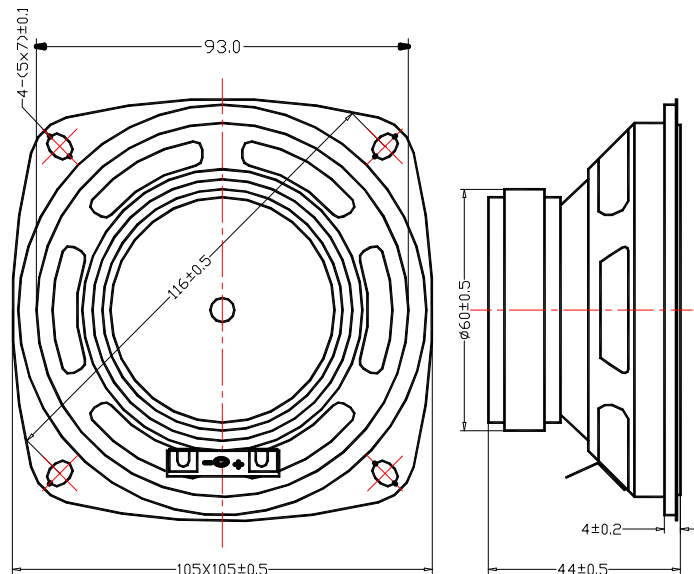


Notes:

100 mm fullrange speaker,
paper cone,
paper dustcap,
inverse treated cloth edge,
paper gasket,
terminals:

“+” 4.8 x 0.8 mm
“-” 2.8 x 0.8 mm

impedance:	8 Ω
nom. power:	12 watts
SPL 1W/1m:	86 dB
SPL 6W/1m:	93 dB
fs:	120 Hz
Re:	7.3 Ω
Le:	0.26 mH
Qms:	3.5
Qes:	2.0
Qts:	1.2
VAS :	2.5 l
Mms :	2.6 g
Rms :	0.6 kg/s
Cms:	0.6 mm/N
B*I:	2.6 Tm
Sd:	51 cm ²
Xmax:	+/- 1 mm
weight:	0.254 kg
magnet:	3 oz
voice coil Ø:	20 mm

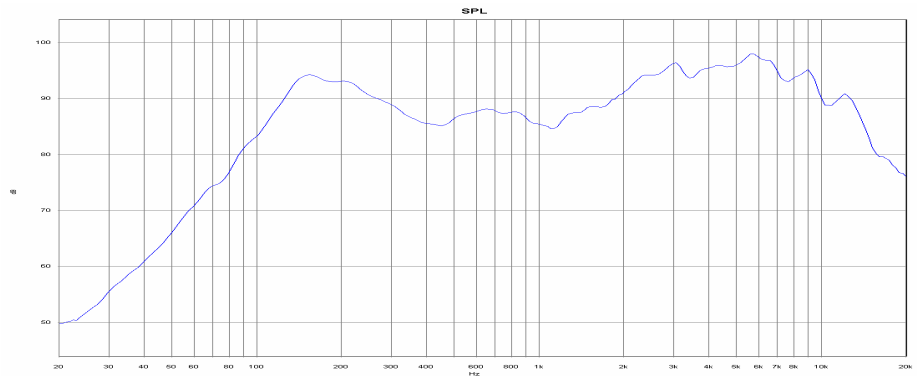


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT FOR

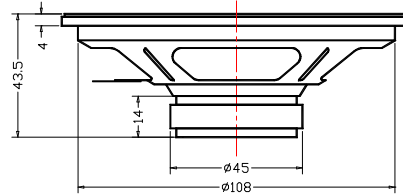
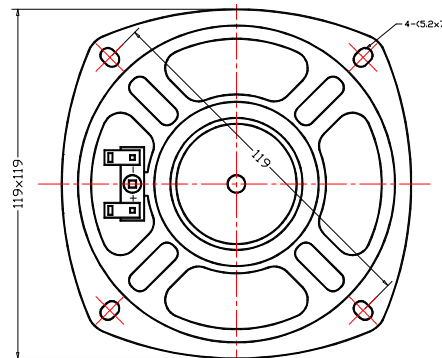
TOLERANCES OF TECHNICAL DATA REFER TO HKM 'S MANUAL OF TECHNICAL DATA

FOR INFORMATION CONTACT: TEL.: +49 9073 / 9585 0, FAX.: +49 9073 / 9585 55, E-MAIL: INFO@HKM-GROUP.DE

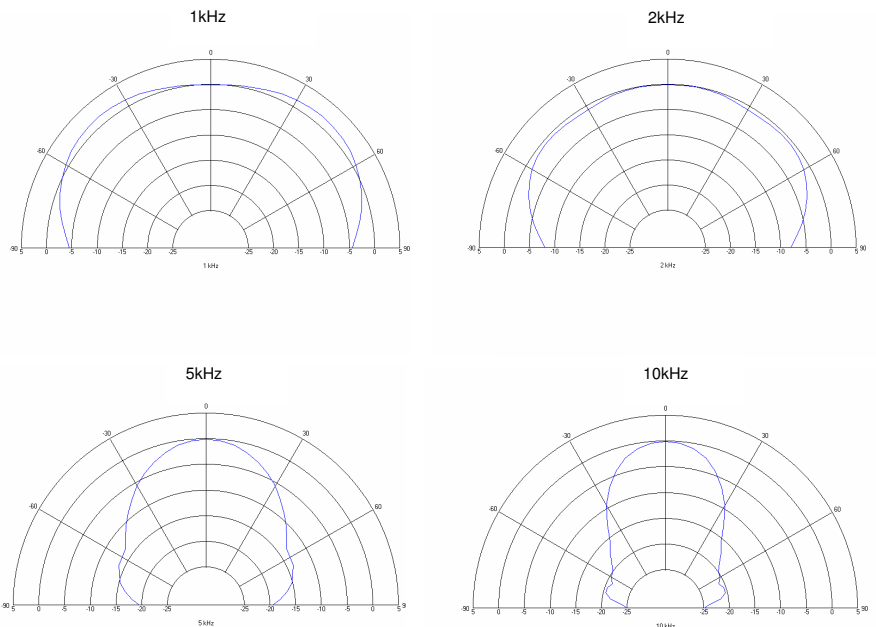


Notes:

119 x 119 mm
fullrange speaker,
paper cone,
silver mylar dustcap,
treated paper edge,
paper gasket,
terminals:
“+” 4.8 x 0.5 mm
“-” 4.8 x 0.5 mm



impedance:	8 Ω
nom. power:	10 watts
SPL 1W/1m:	90 dB
fs:	145 Hz
Re:	7.2 Ω
Le:	0.13 mH
Qms:	5.8
Qes:	3
Qts:	2
VAS :	4.8 l
Mms :	2.1 g
Rms :	0.4 kg/s
Cms:	0.6 mm/N
B*I:	2.1 Tm
Sd:	78 cm ²
Xmax:	+/-1 mm
weight:	0.170 kg
magnet:	2 oz
voice coil \varnothing :	14 mm



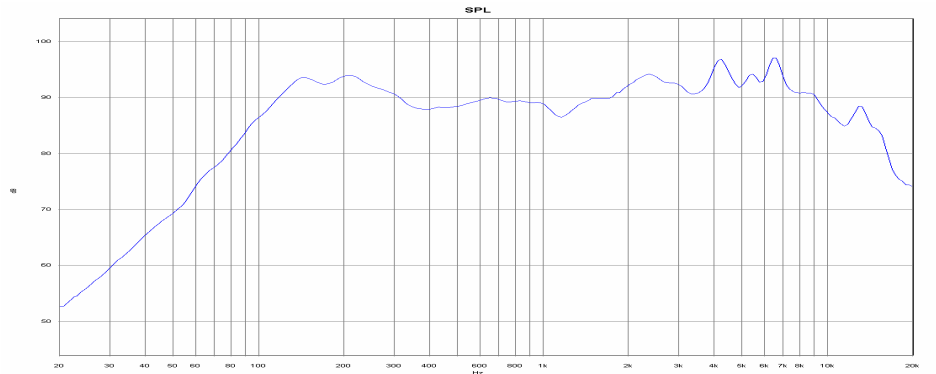
ALL TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

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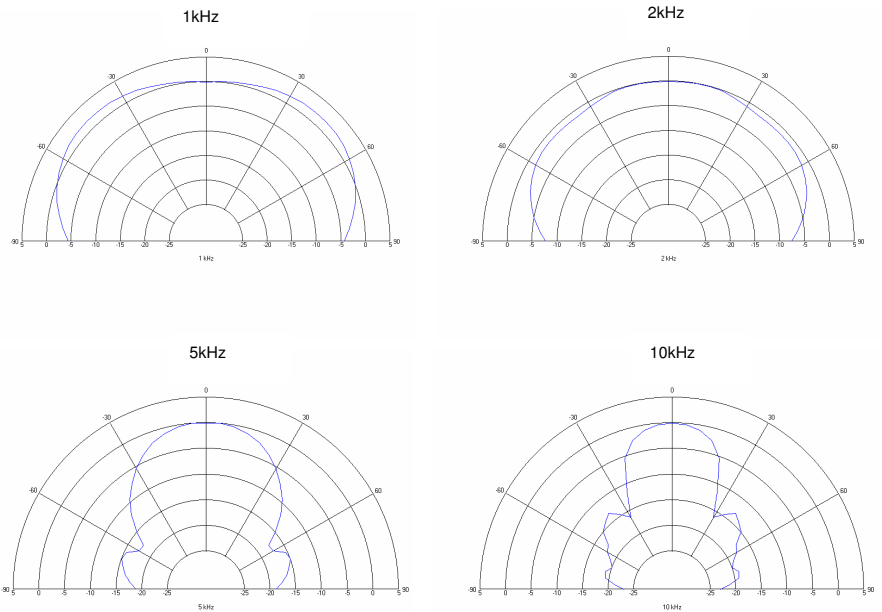
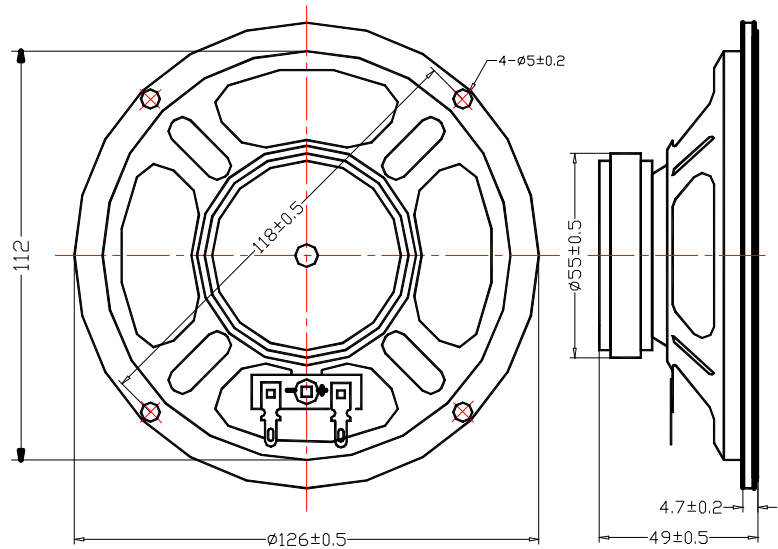
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Notes:

120 mm fullrange speaker,
paper cone,
paper dustcap,
treated paper edge,
foam gasket,
terminals:
“+” 2.8 x 0.8 mm
“-” 2.8 x 0.8 mm

impedance:	4/8 Ω
nom. power:	10 watts
SPL 1W/1m	91 dB
SPL 6W/1m	98 dB
fs:	142 Hz
Re:	3.5/7.3 Ω
Le:	0.13 mH
Qms:	6.35
Qes:	2.1
Qts:	1.6
VAS :	3.55 l
Mms :	3.0 g
Rms :	0.4 kg/s
Cms:	0.4 mm/N
B*I:	2.0 Tm
Sd:	78.5 cm ²
weight:	0.256 kg
magnet:	3 oz
voice coil Ø:	20 mm

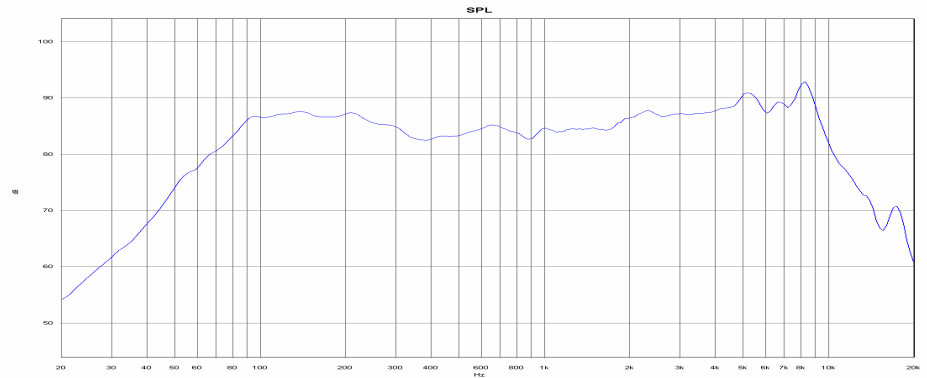


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

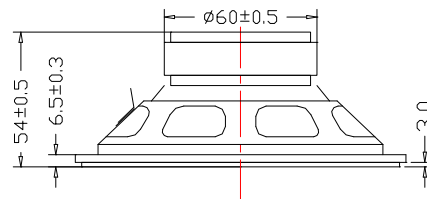
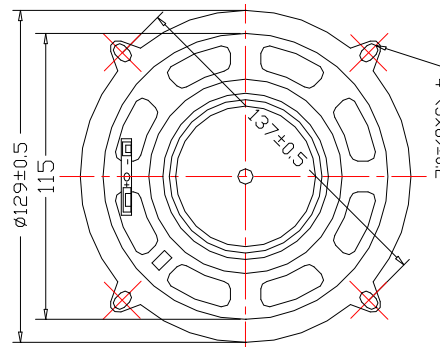
FOR TOLERANCES OF TECHNICAL DATA REFER TO HKM 'S MANUAL OF TECHNICAL DATA

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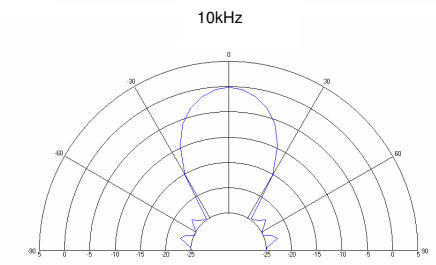
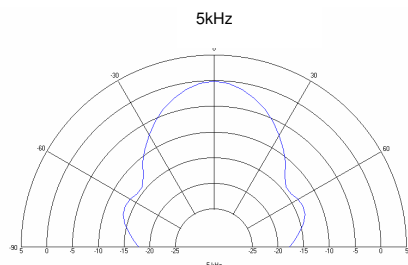
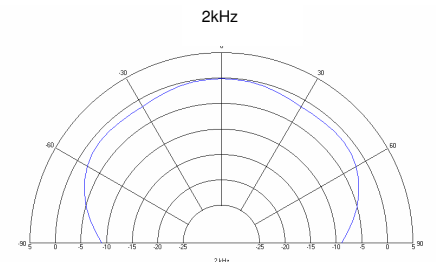
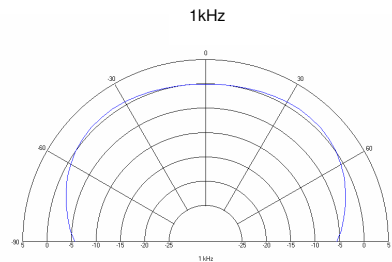


Notes:

130 mm fullrange speaker,
paper cone,
paper dustcap,
rubber edge,
rubber gasket,
frame with ears
terminals:
“+” 4.8 x 0.8 mm
“-” 2.8 x 0.8 mm



impedance:	4 Ω
nom. power:	30 watts
SPL 1W/1m:	86 dB
fs:	75 Hz
Re:	3.7 Ω
Le:	0.2 mH
Qms:	2.4
Qes:	1.3
Qts:	0.9
VAS :	8 l
Mms :	5.2 g
Rms :	1.1 kg/s
Cms:	0.85 mm/N
B*I:	2.5 Tm
Sd:	82 cm ²
Xmax:	+/- 2 mm
weight:	0.35 kg
magnet:	3.5 oz
voice coil Ø:	20 mm

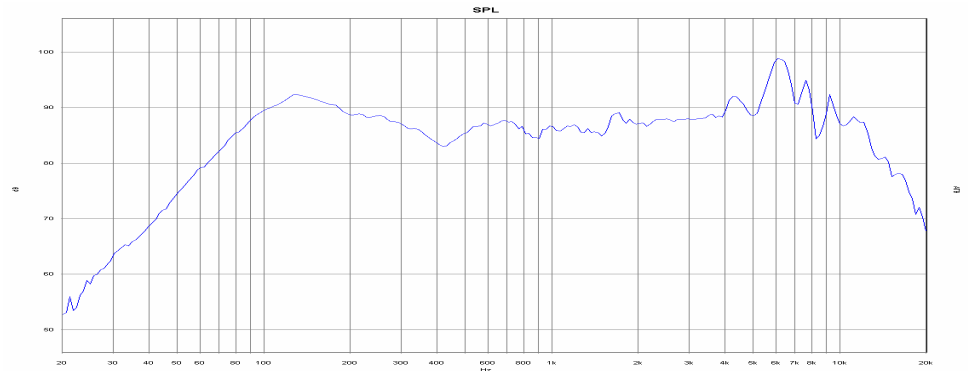


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

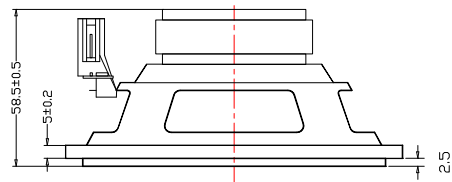
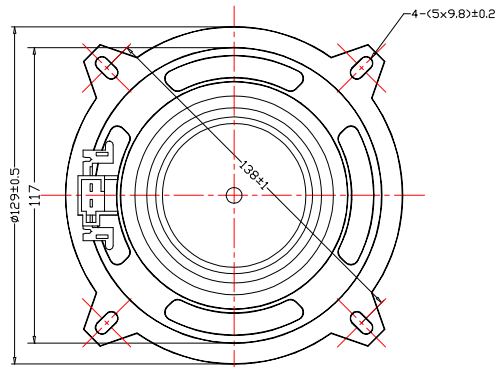
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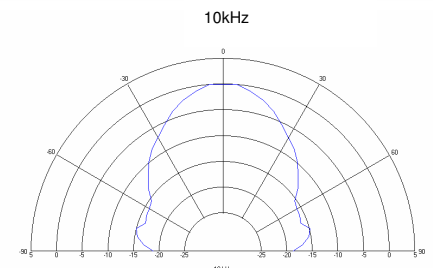
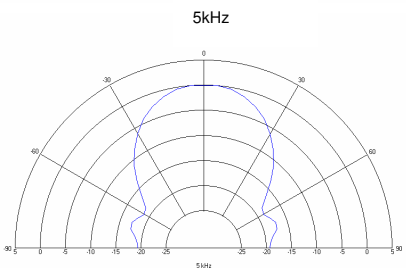
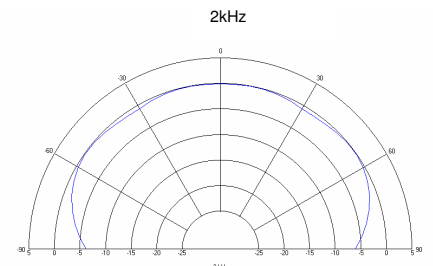
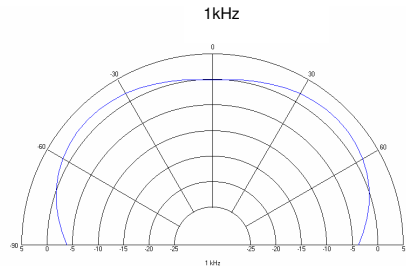


Notes:

130 mm fullrange car speaker,
paper cone,
black mylar dustcap,
foam edge,
foam gasket,
special plug for connection to
car loom



impedance:	4 Ω
nom. power:	15 watts
SPL 1W/1m:	90 dB
fs:	95 Hz
Re:	3.2 Ω
Le:	0.2 mH
Qms:	5.5
Qes:	1.2
Qts:	1
VAS :	5.2 l
Mms :	4.8 g
Rms :	0.6 kg/s
Cms:	0.6 mm/N
B*I:	2.7 Tm
Sd:	80 cm ²
Xmax:	1.5 mm
weight:	0.42 kg
magnet:	5 oz
voice coil Ø:	20.4 mm

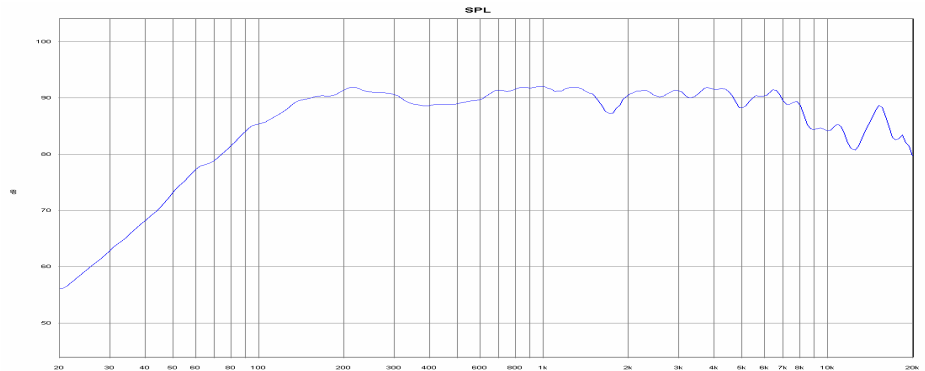


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

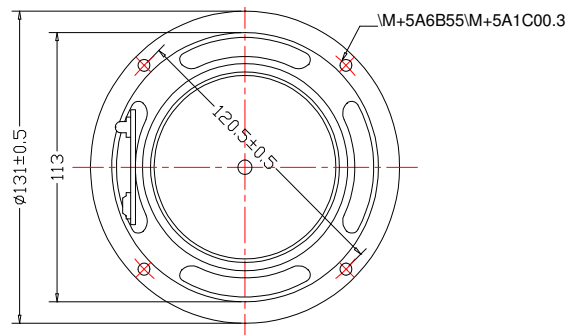
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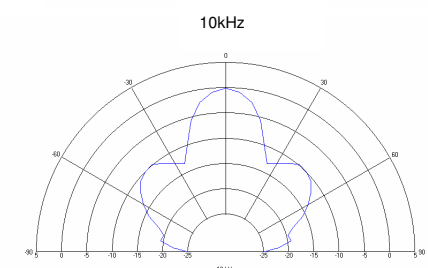
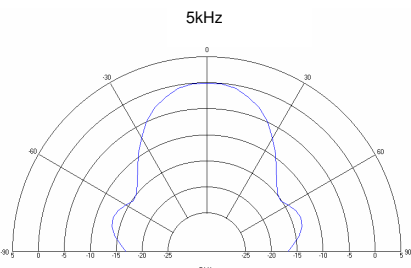
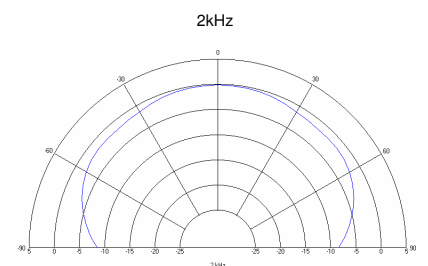
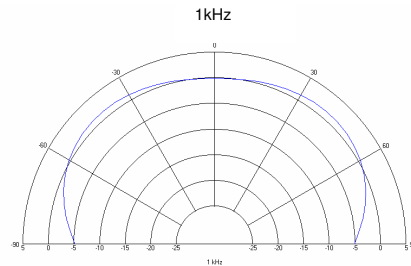
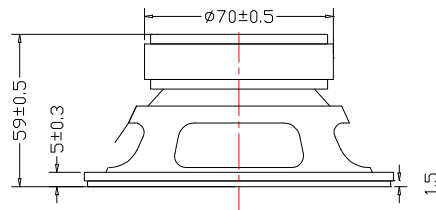


Notes:

133 mm fullrange speaker,
paper cone,
paper subcone,
treated cloth edge,
foam gasket
terminals:
“+” 4.8 x 0.8 mm
“-” 2.8 x 0.8 mm



impedance:	4 Ω
nom. power:	30 watts
SPL 1W/1m:	92 dB
fs:	112 Hz
Re:	2.8 Ω
Le:	0.2 mH
Qms:	3.6
Qes:	0.6
Qts:	0.51
VAS :	4.2 l
Mms :	4 g
Rms :	0.9 kg/s
Cms:	0.5 mm/N
B*I:	3.6 Tm
Sd:	78.5 cm ²
Xmax:	+/-1.5 mm
weight:	0.7 kg
magnet:	11 oz
voice coil Ø:	20 mm

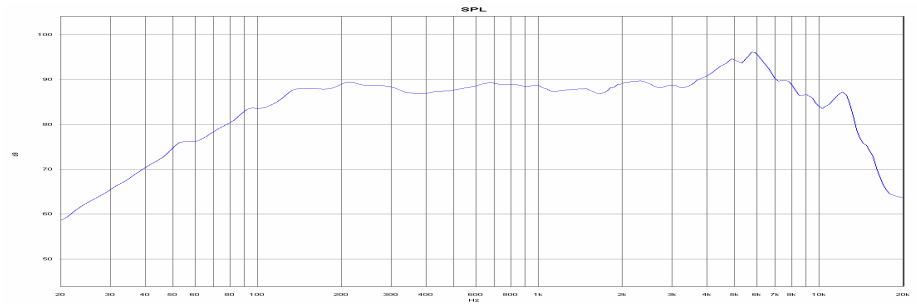


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

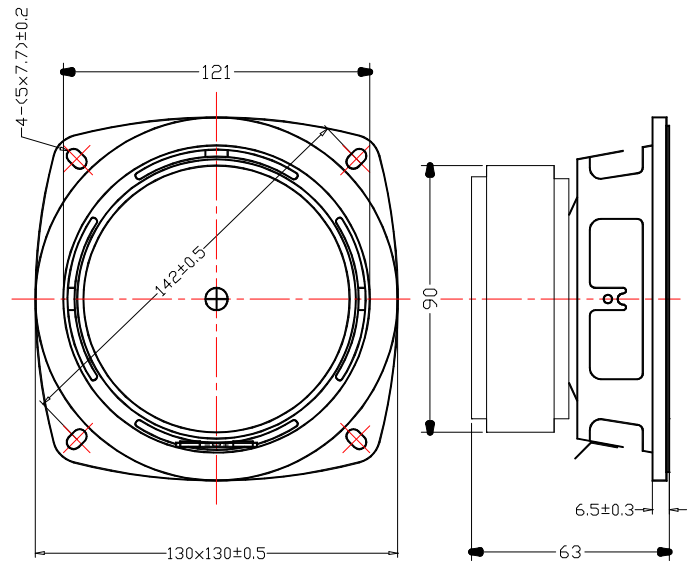
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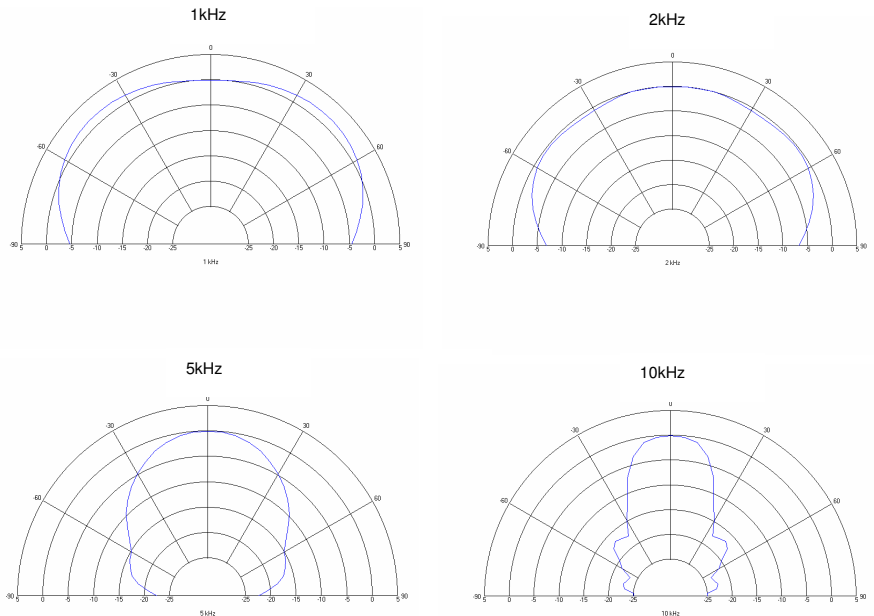


Notes:

130 mm fullrange speaker,
paper cone,
paper dustcap,
rubber edge,
rubber gasket,
Terminals:
„+“ 4.8 x 0.8 mm
„-“ 4.8 x 0.8 mm



impedance:	4/8 Ω
nom. power:	40 watts
SPL 1W/1m	89 dB
fs:	70 Hz
Re:	3.6/7.2 Ω
Le:	0.5 mH
Qms:	1.6
Qes:	0.5
Qts:	0.4
VAS :	7 l
Mms :	6.6 g
Rms :	2.0 kg/s
Cms:	0.8 mm/N
B*I:	6.2 Tm
Sd:	79 cm ²
Xmax:	+/- 2 mm
weight:	0.98 kg
magnet:	13 oz
voice coil Ø:	25 mm

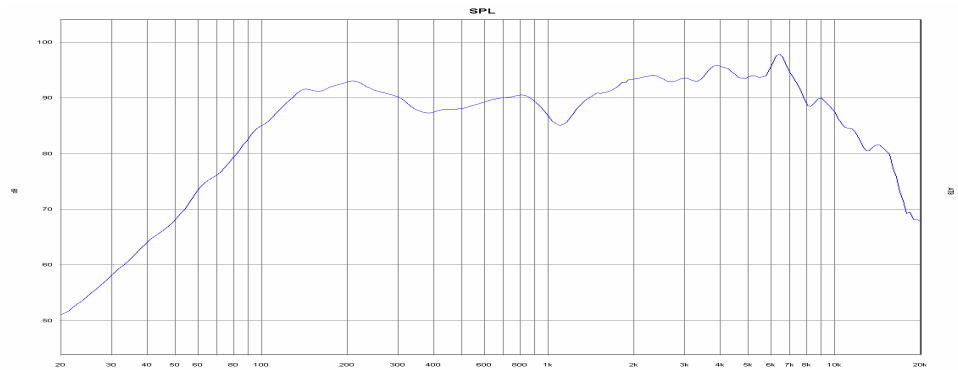


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

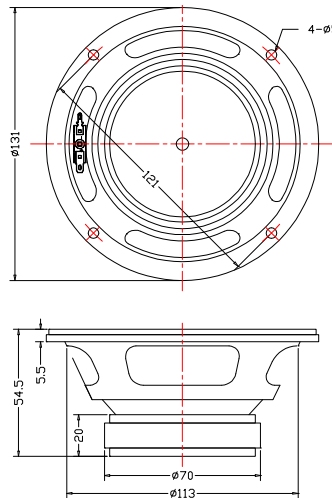
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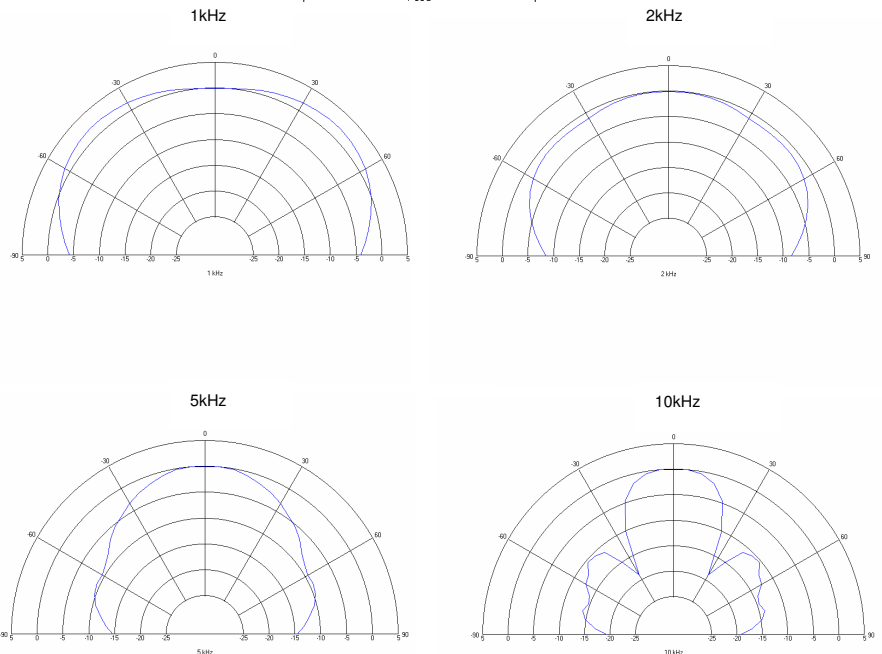


Notes:

131 mm fullrange speaker,
paper cone,
paper dustcap,
treated paper edge,
foam gasket
terminals:
“+” 4.8 x 0.8 mm
“-” 2.8 x 0.8 mm



impedance:	8 Ω
nom. power:	15 watts
SPL 1W/1m:	91 dB
fs:	160 Hz
Re:	7.6 Ω
Le:	0.2 mH
Qms:	5.5
Qes:	1.4
Qts:	1.1
VAS :	2.5 l
Mms :	3.2 g
Rms :	0.65 kg/s
Cms:	0.3 mm/N
B*I:	4 Tm
Sd:	78 cm ²
weight:	0.48 kg
magnet:	5 oz
voice coil \varnothing :	19 mm

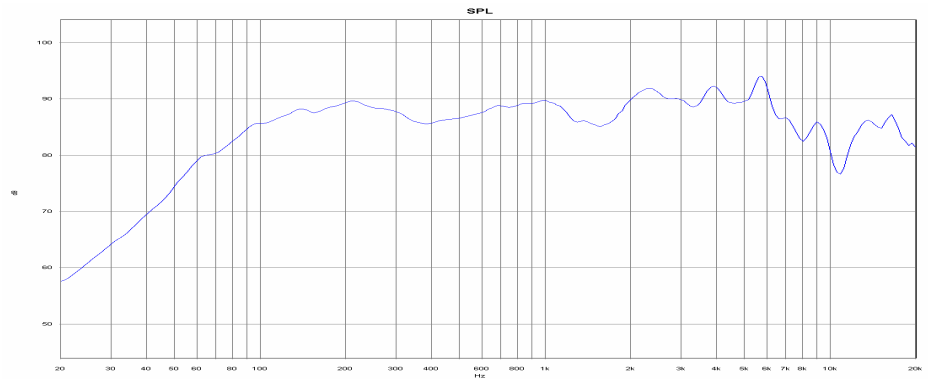


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FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

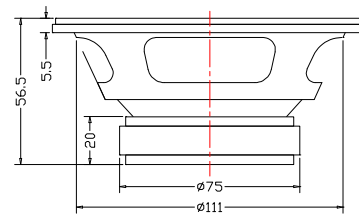
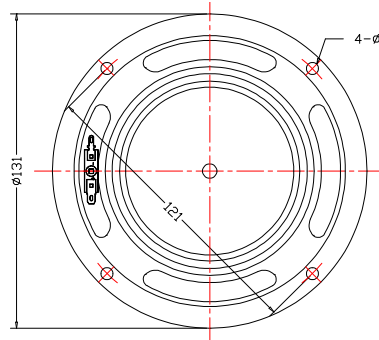
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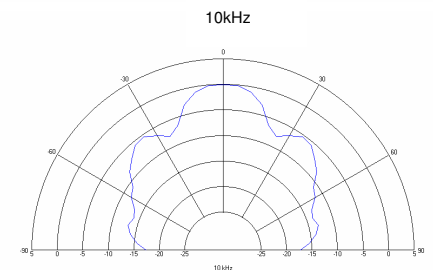
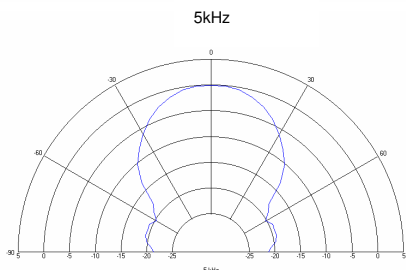
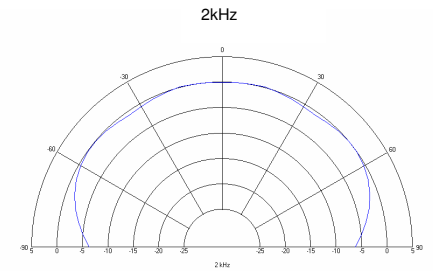
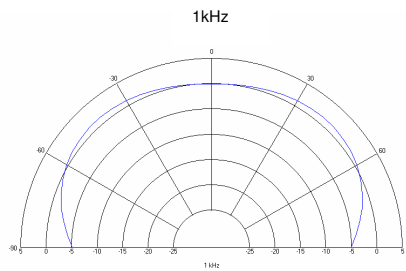


Notes:

131 mm fullrange speaker,
paper cone,
black mylar subcone,
foam edge,
foam gasket
terminals:
“+” 4.8 x 0.8 mm
“-” 2.8 x 0.8 mm



impedance:	8 Ω
nom. power:	25 watts
SPL 1W/1m:	89 dB
fs:	90 Hz
Re:	7.6 Ω
Le:	0.3 mH
Qms:	2.4
Qes:	0.8
Qts:	0.6
VAS :	5 l
Mms :	4.5 g
Rms :	1.2 kg/s
Cms:	0.7 mm/N
B*I:	4.8 Tm
Sd:	75 cm ²
weight:	0.57 kg
magnet:	8 oz
voice coil \varnothing :	20 mm

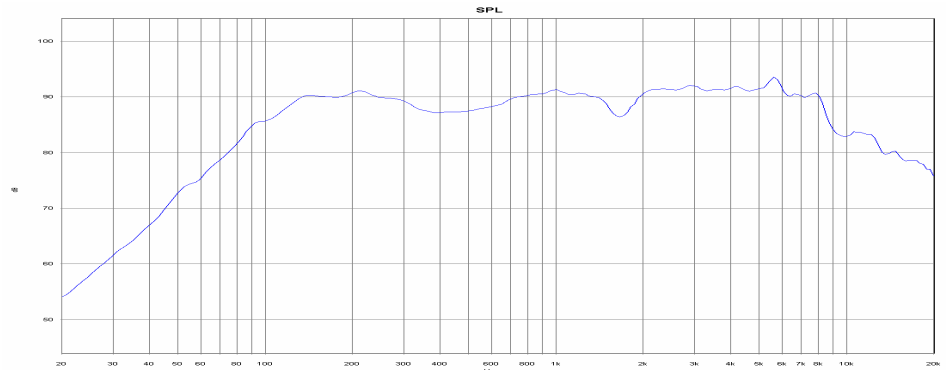


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

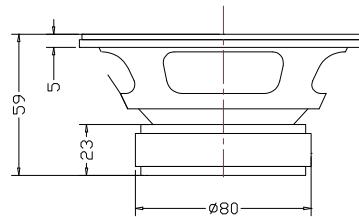
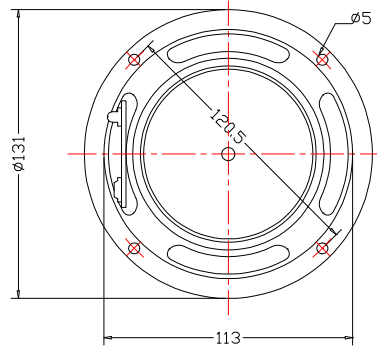
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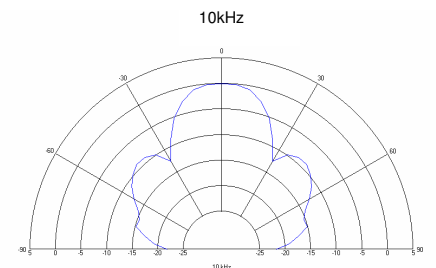
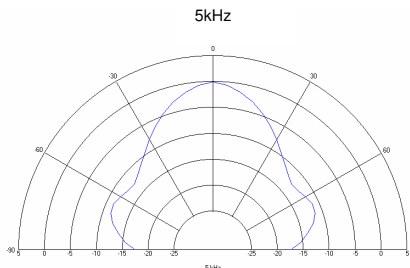
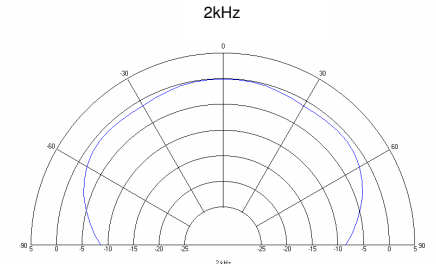
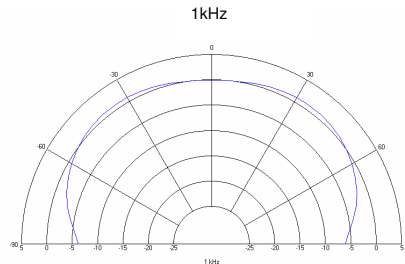


Notes:

130 mm fullrange speaker,
paper cone,
paper subcone,
treated cone
treated cloth edge,
foam gasket
terminals:
“+” 4.8 x 0.8 mm
“-” 2.8 x 0.8 mm



impedance:	8 Ω
nom. power:	30 watts
SPL 1W/1m:	90 dB
fs:	123 Hz
Re:	7.2 Ω
Le:	0.24 mH
Qms:	2.95
Qes:	0.95
Qts:	0.72
VAS :	3.88 l
Mms :	4.42 g
Rms :	1.2 kg/s
Cms:	0.40 mm/N
B*I:	4.75 Tm
Sd:	83 cm ²
Xmax:	+/-1.5 mm
weight:	0.78 kg
magnet:	11 oz
voice coil Ø:	20 mm

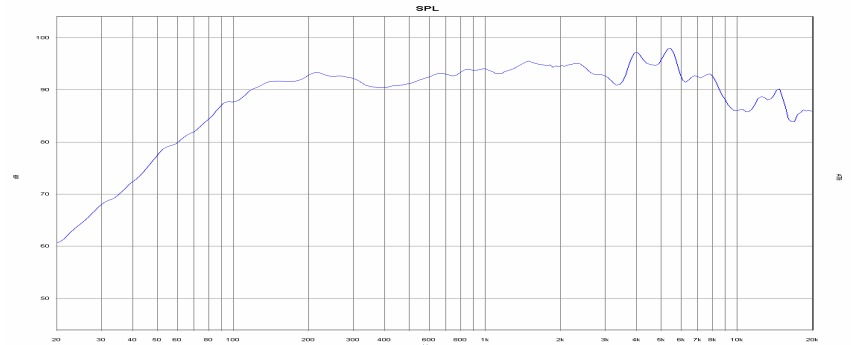


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT FOR

TOLERANCES OF TECHNICAL DATA REFER TO HKM 'S MANUAL OF TECHNICAL DATA

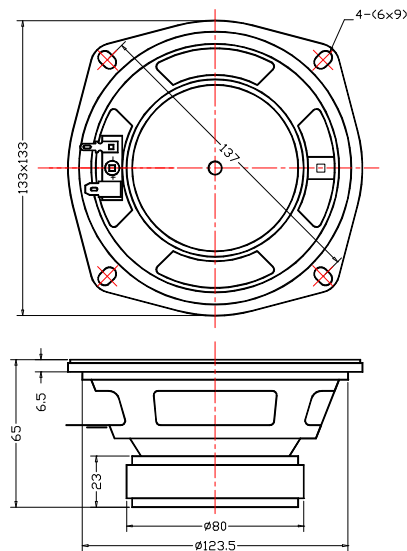
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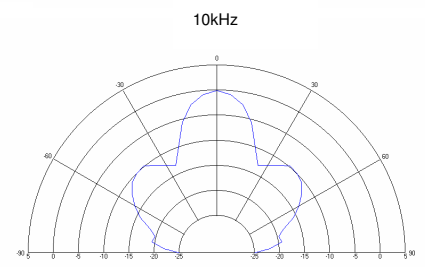
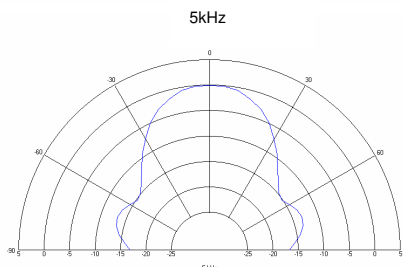
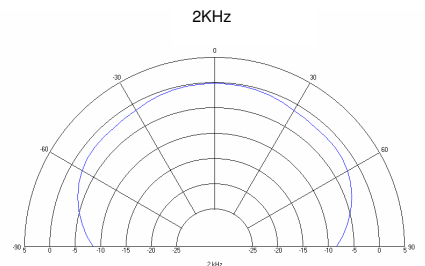
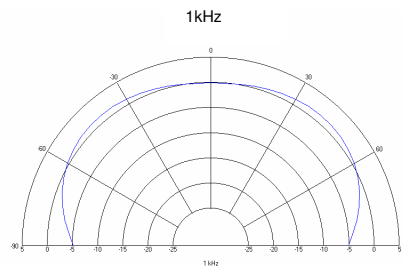
Notes:

133 mm fullrange speaker,
paper cone,
paper subcone,
treated roll out cloth edge,
paper gasket
terminals:

“+” 4.8 x 0.8 mm
“-“ 2.8 x 0.8 mm



impedance:	4 Ω
nom. power:	30 watts
SPL 1W/1m:	93 dB
fs:	105 Hz
Re:	3.1 Ω
Le:	0.14 mH
Qms:	3.1
Qes:	0.7
Qts:	0.55
VAS :	6.5 l
Mms :	4.5 g
Rms :	1.0 kg/s
Cms:	0.5 mm/N
B*I:	3.5 Tm
Sd:	95 cm ²
weight:	0.72 kg
magnet:	11 oz
voice coil Ø:	20 mm

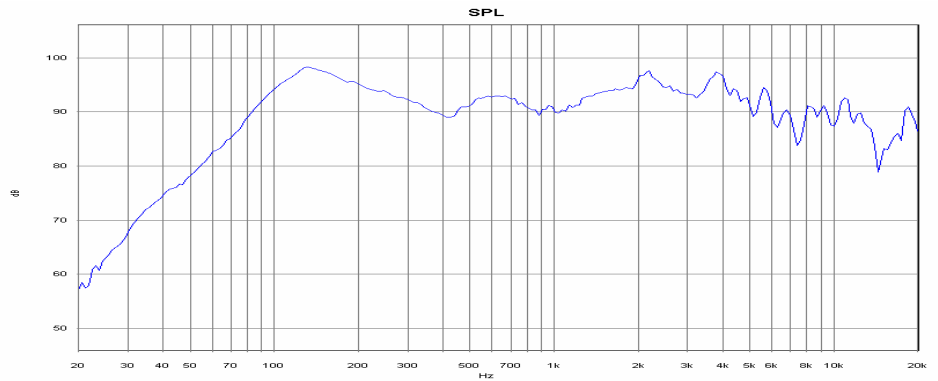


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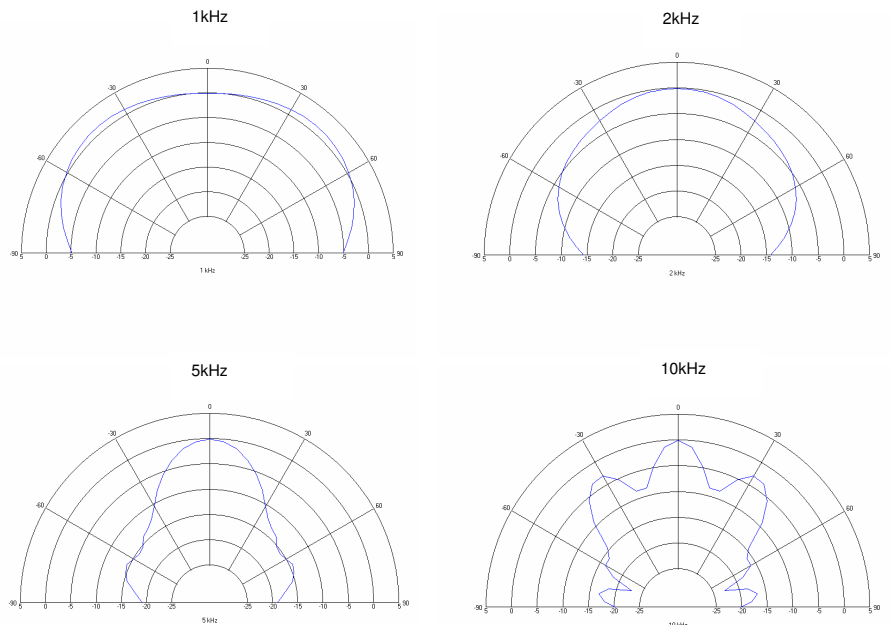
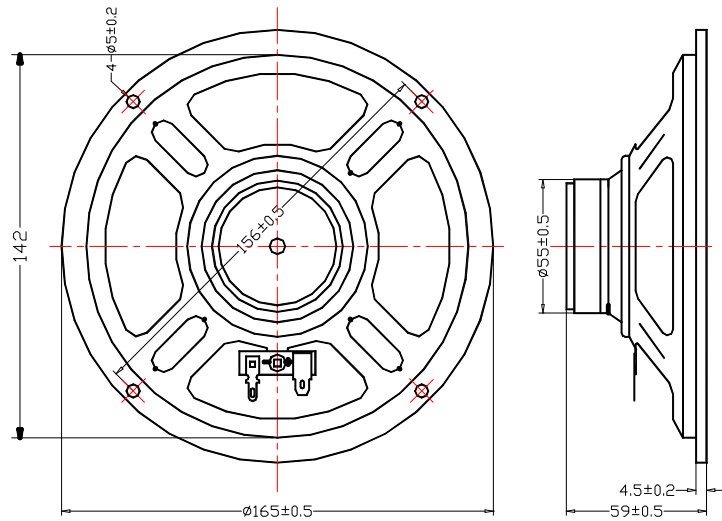
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Notes:

160 mm fullrange speaker,
paper cone,
paper subcone,
treated paper edge,
paper gasket,
terminals:
“+” 4.8 x 0.8 mm
“-” 2.8 x 0.8 mm

impedance: 4/8 Ω
nom.power: 15 watts
SPL 1W/1m 92 dB
SPL 6W/1m 98 dB
fs: 100 Hz
Re: 3.3/7.2 Ω
Le: 0.2 mH
Qms: 6.3
Qes: 1.2
Qts: 1.0
VAS : 13 l
Mms : 4.8 g
Rms : 0.5 kg/s
Cms: 0.5 mm/N
B*I: 2.7 Tm
Sd: 137 cm²
Xmax: +/-1.5 mm
weight: 0.41 kg
magnet: 5 oz
voice coil Ø: 20 mm

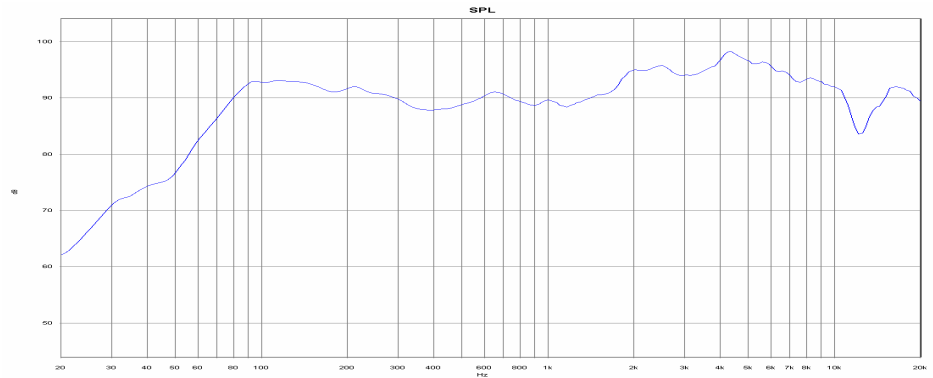


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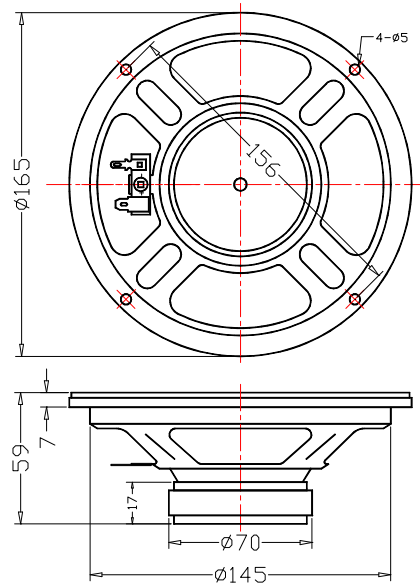
FOR TOLERANCES OF TECHNICAL DATA REFER TO HKM 'S MANUAL OF TECHNICAL DATA

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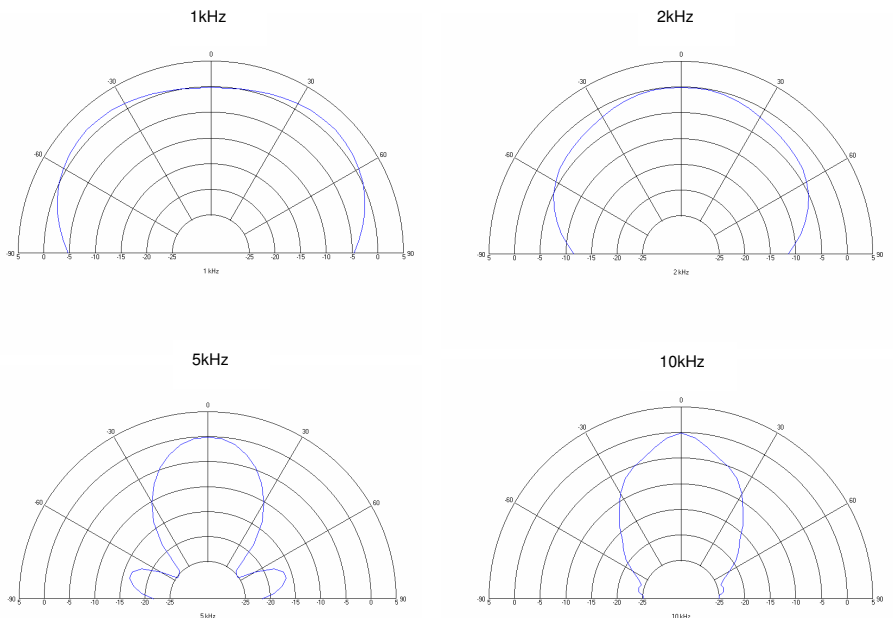


Notes:

160 mm coaxial speaker,
paper cone,
treated paper edge,
paper gasket,
13 mm dome tweeter
terminals:
“+” 4.8 x 0.8 mm
“-” 2.8 x 0.8 mm



impedance:	4 Ω
nom. power:	18 watts
SPL 1W/1m:	93 dB
fs:	100 Hz
Re:	3.6 Ω
Le:	0.06 mH
Qms:	8.0
Qes:	1.7
Qts:	1.4
VAS :	18 l
Mms :	3.8 g
Rms :	0.3 kg/s
Cms:	0.7 mm/N
B*I:	2.1 Tm
Sd:	135 cm ²
Xmax:	+/- 1 mm
weight:	0.51 kg
magnet:	5 oz
voice coil \varnothing :	20 mm

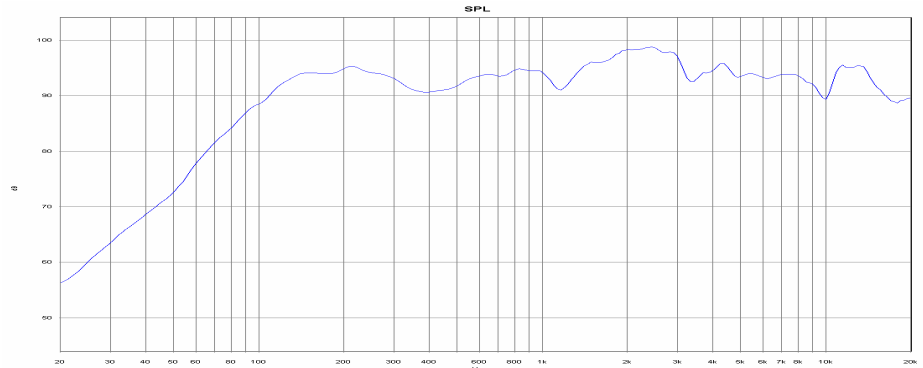


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

FOR TOLERANCES OF TECHNICAL DATA REFER TO HKM 'S MANUAL OF TECHNICAL DATA

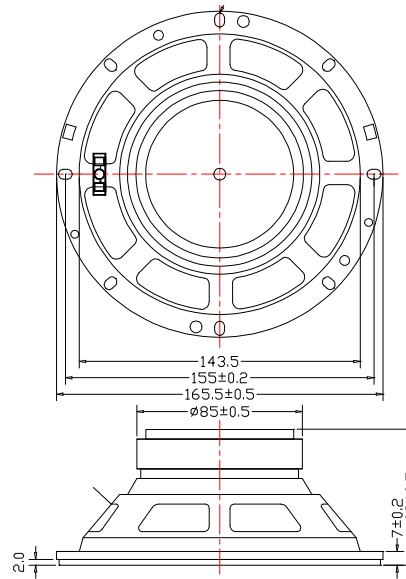
FOR INFORMATION CONTACT: TEL.: +49 9073 / 9585 0, FAX.: +49 9073 / 9585 55, E-MAIL: INFO@HKM-GROUP.DE



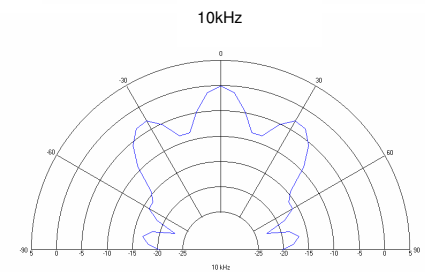
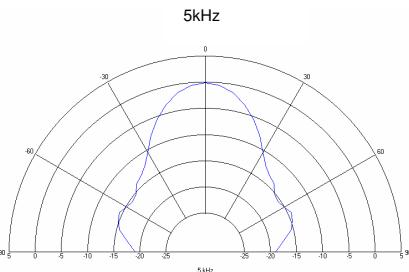
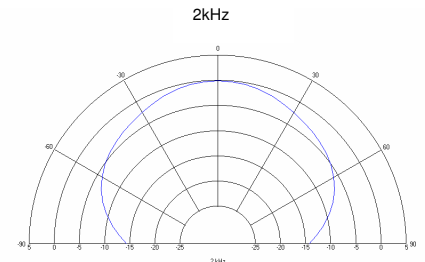
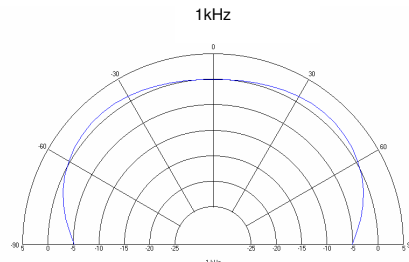
Notes:

165 mm fullrange speaker,
treated paper cone,
paper subcone,
treated double paper edge,
foam gasket,
kapton voice coil,
terminals:

“+” 4.8 x 0.8 mm
“-” 2.8 x 0.8 mm



impedance:	8 Ω
nom. power:	40 watts
SPL 1W/1m:	96 dB
fs:	100 Hz
Re:	5.5 Ω
Le:	0.23 mH
Qms:	4.0
Qes:	0.7
Qts:	0.6
VAS :	12 l
Mms :	5.7 g
Rms :	1.0 kg/s
Cms:	0.4 mm/N
B*I:	5.3 Tm
Sd:	139 cm ²
Xmax:	+/-1 mm
weight:	0.9 kg
magnet:	13 oz
voice coil Ø:	25 mm

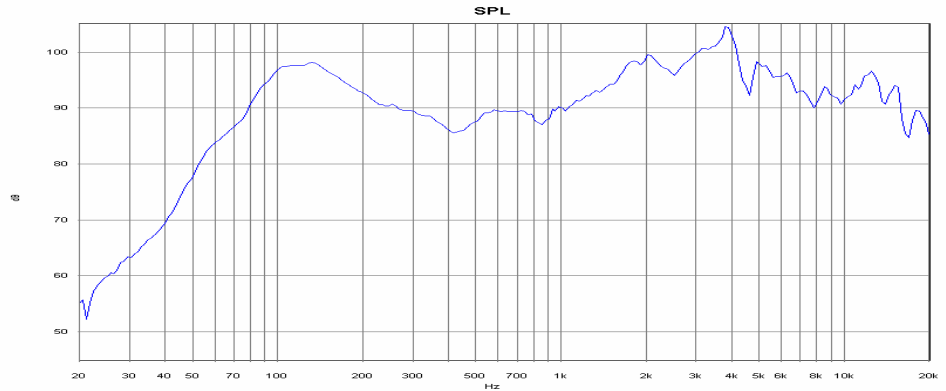


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

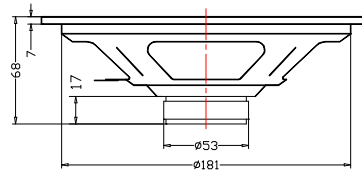
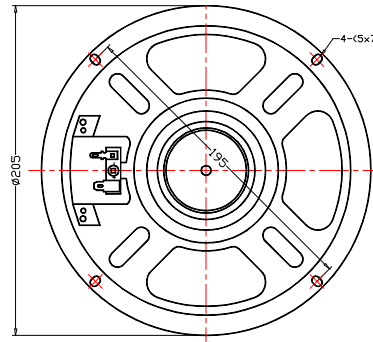
FOR TOLERANCES OF TECHNICAL DATA REFER TO HKM 'S MANUAL OF TECHNICAL DATA

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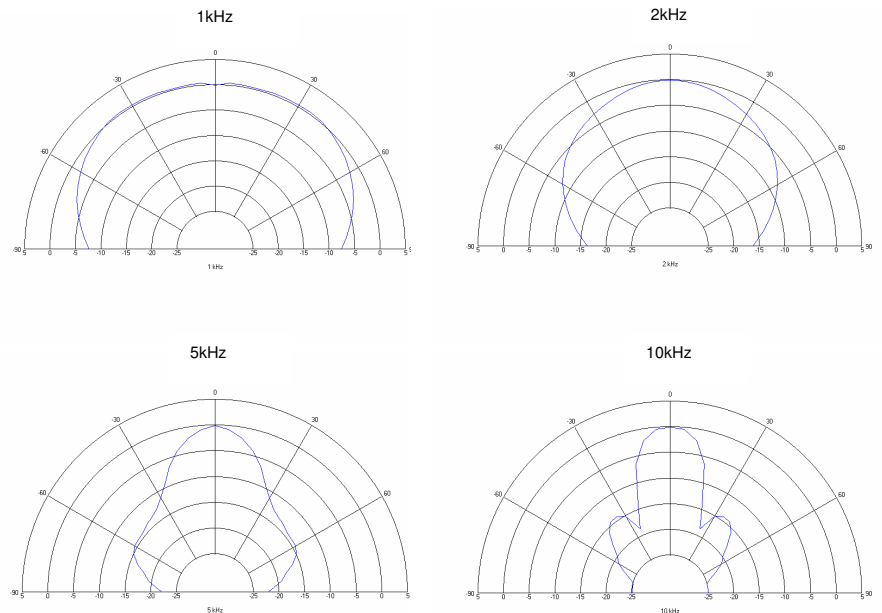


Notes:

200 mm fullrange speaker,
paper cone,
paper subcone,
treated paper edge,
paper gasket,
100 V equipment with
6 W – 3 W – 1.5 W



impedance:	8 Ω
nom. power:	15 watts
SPL 1W/1m:	91 dB
fs:	105 Hz
Re:	7.2 Ω
Le:	0.1 mH
Qms:	7.5
Qes:	3
Qts:	2.1
VAS :	22 l
Mms :	7 g
Rms :	0.7 kg/s
Cms:	0.3 mm/N
B*I:	3.2 Tm
Sd:	219 cm ²
weight:	0.59 kg
magnet:	4 oz
voice coil Ø:	20 mm

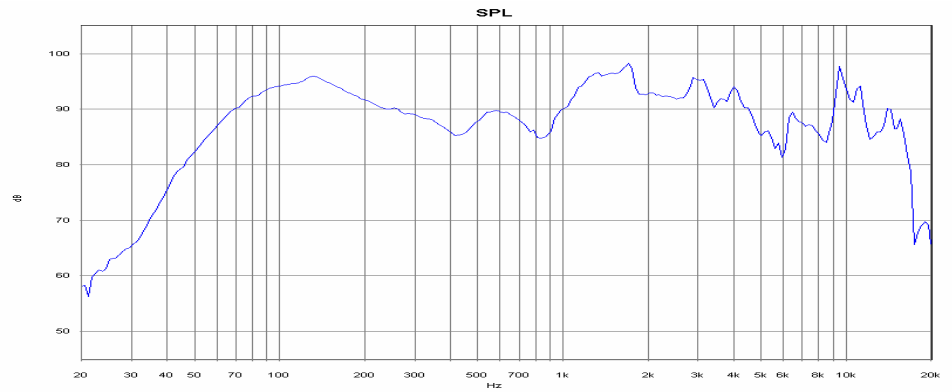


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

FOR TOLERANCES OF TECHNICAL DATA REFER TO HKM 'S MANUAL OF TECHNICAL DATA

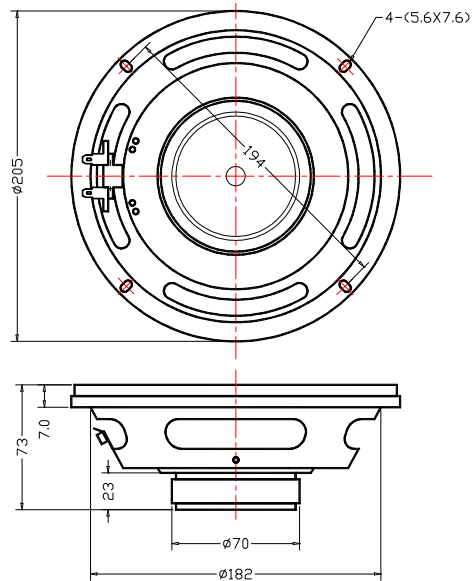
FOR INFORMATION CONTACT: TEL.: +49 9073 / 9585 0, FAX.: +49 9073 / 9585 55, E-MAIL: INFO@HKM-GROUP.DE



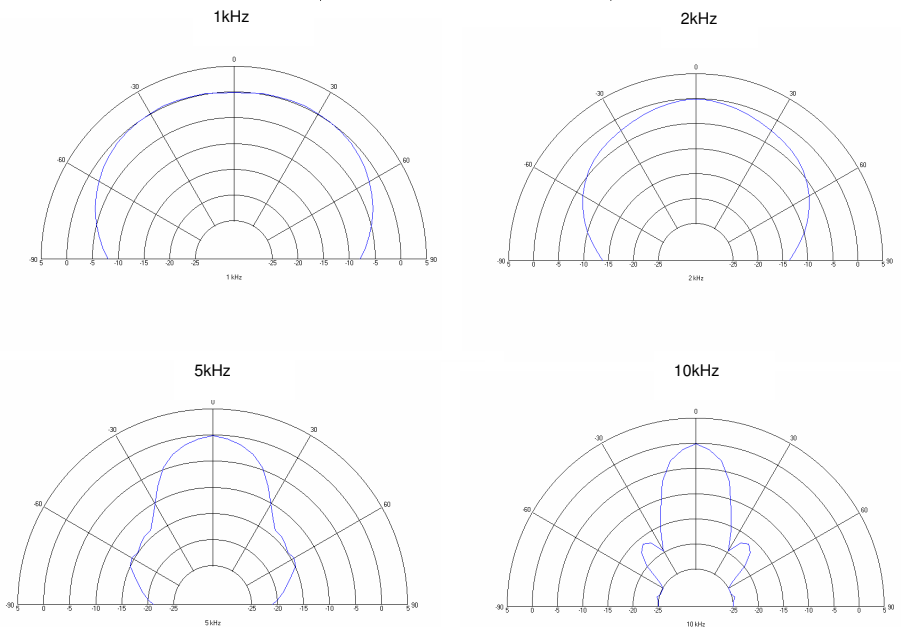
Notes:

200 mm fullrange speaker,
paper cone,
special paper subcone,
treated paper edge,
paper gasket,
terminals:

“+” 4.8 x 0.8 mm
“-” 4.8 x 0.8 mm



impedance:	8 Ω
nom. power:	25 watts
SPL 1W/1m:	91 dB
fs:	90 Hz
Re:	7.5 Ω
Le:	0.1 mH
Qms:	4.5
Qes:	1.8
Qts:	1.3
VAS :	22 l
Mms :	10 g
Rms :	1.3 kg/s
Cms:	0.3 mm/N
B*I:	4.6 Tm
Sd:	219 cm ²
weight:	0.98 kg
magnet:	8 oz
voice coil \varnothing :	25 mm

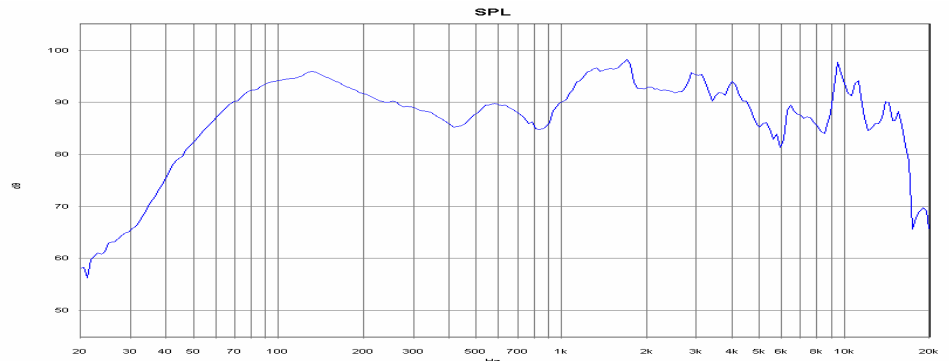


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

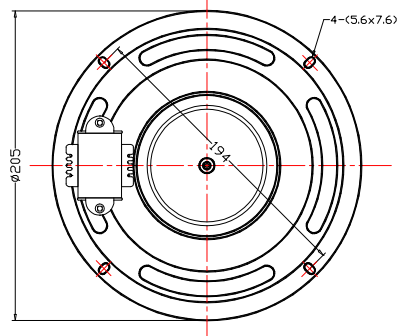
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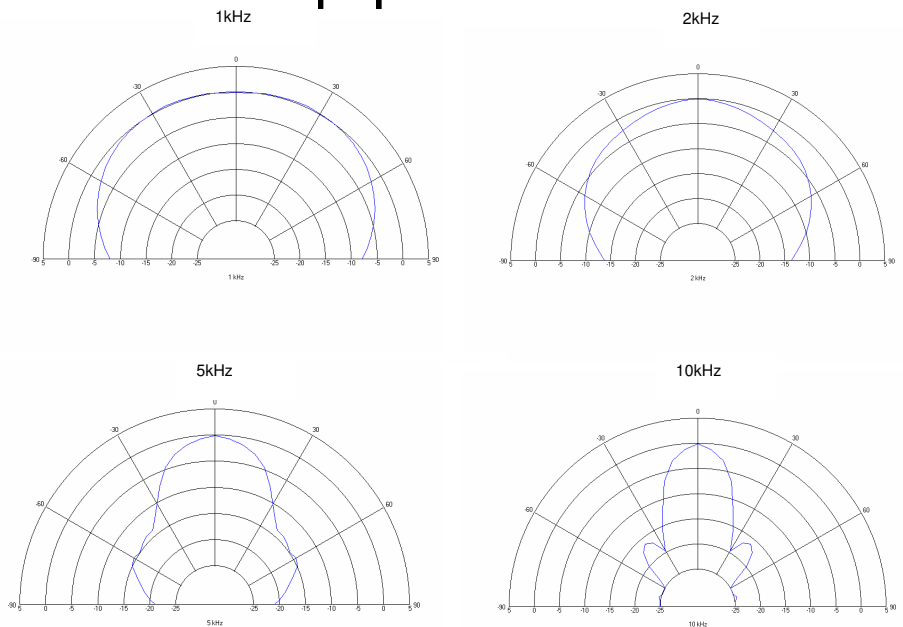
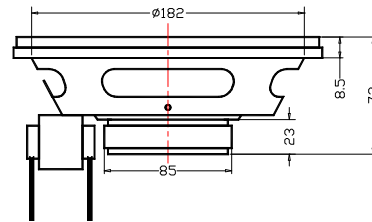


Notes:

200 mm fullrange speaker,
paper cone,
special paper subcone,
treated paper edge,
paper gasket,
100 V equipment with
6 W – 3 W – 1.5 W



impedance:	8 Ω
nom. power:	25 watts
SPL 1W/1m:	91 dB
fs:	90 Hz
Re:	7.5 Ω
Le:	0.1 mH
Qms:	4.5
Qes:	1.8
Qts:	1.3
VAS :	22 l
Mms :	10 g
Rms :	1.3 kg/s
Cms:	0.3 mm/N
B*I:	4.6 Tm
Sd:	219 cm ²
weight:	0.98 kg
magnet:	8 oz
voice coil \varnothing :	25 mm

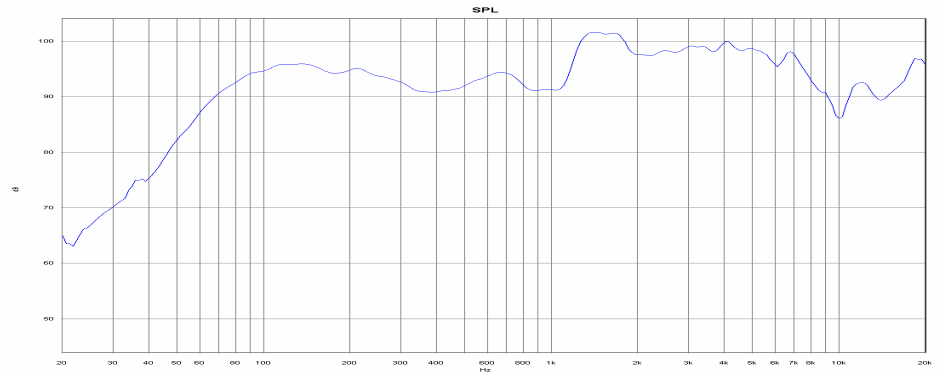
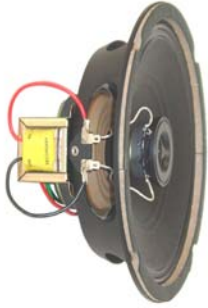


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

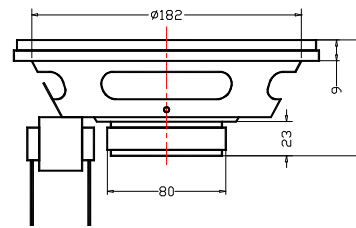
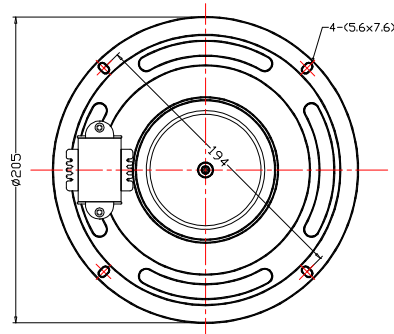
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Notes:

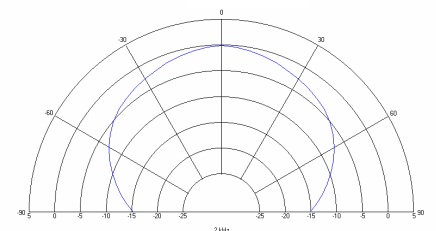
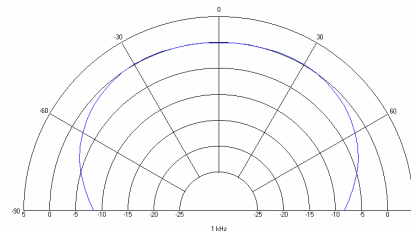
200 mm coaxial speaker,
treated paper cone,
13 mm mylar dome
tweeter,
treated paper edge,
paper gasket
100 V equipment with
25 W – 12.5 W – 6 W



impedance:	8 Ω
nom. power:	25 watts
SPL 1W/1m:	97 dB
fs:	100 Hz
Re:	7.1 Ω
Le:	0.13 mH
Qms:	4.7
Qes:	1.2
Qts:	0.9
VAS :	32 l
Mms :	5 g
Rms :	0.7 kg/s
Cms:	0.5 mm/N
B*I:	4.2 Tm
Sd:	219 cm ²
weight:	1.3 kg
magnet:	11 oz
voice coil Ø:	25 mm

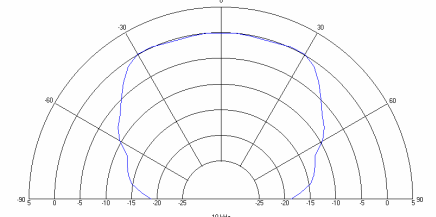
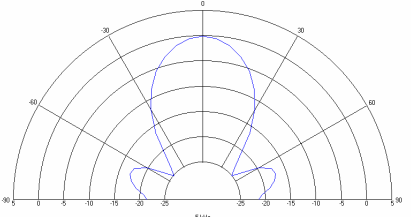
1kHz

2kHz



5kHz

10kHz



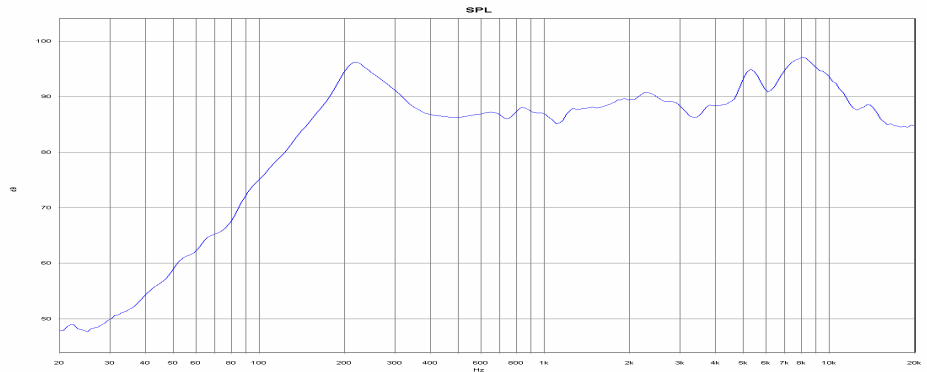
TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

FOR TOLERANCES OF TECHNICAL DATA REFER TO HKM 'S MANUAL OF TECHNICAL DATA

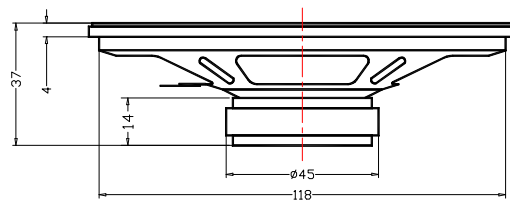
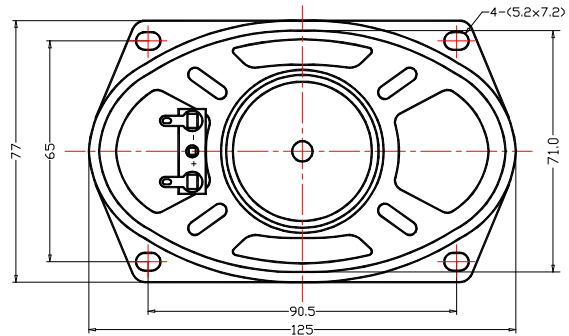
FOR INFORMATION CONTACT: TEL.: +49 9073 / 9585 0, FAX.: +49 9073 / 9585 55, E-MAIL: INFO@HKM-GROUP.DE

WWW.HKM-GROUP.DE

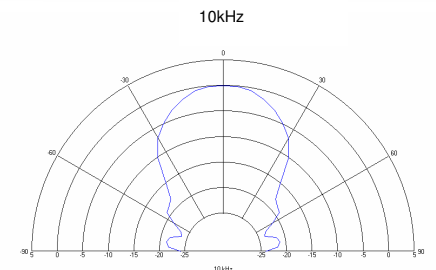
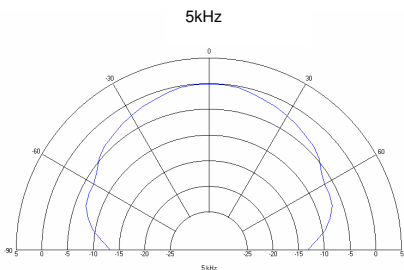
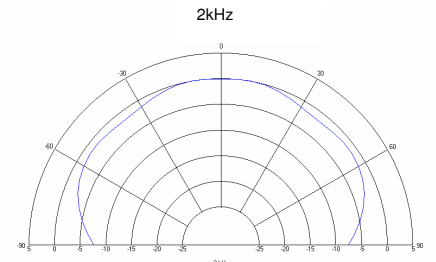
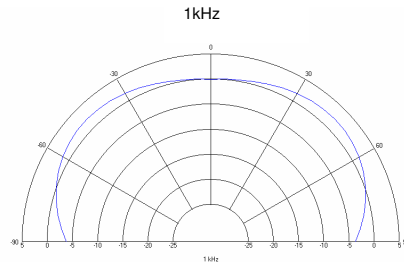


Notes:

77 x 125 mm
oval fullrange speaker,
paper cone,
paper dustcap,
paper edge,
paper gasket,
terminals:
“+” 2.8 x 0.5 mm
“-” 2.8 x 0.5 mm



impedance:	8 Ω
nom. power:	8 watts
SPL 1W/1m:	89 dB
fs:	200 Hz
Re:	7.1 Ω
Le:	0.1 mH
Qms:	8.5
Qes:	3.2
Qts:	2.3
VAS :	2 l
Mms :	1.3 g
Rms :	0.2 kg/s
Cms:	0.5 mm/N
B*I:	1.9 Tm
Sd:	54 cm ²
Xmax:	+/-1 mm
weight:	0.155 kg
magnet:	2 oz
voice coil Ø:	14 mm

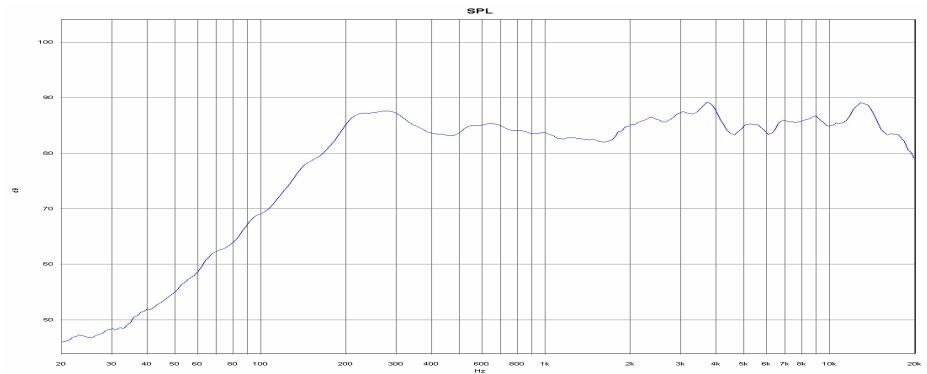


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

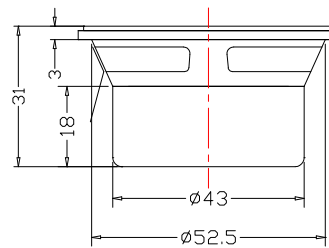
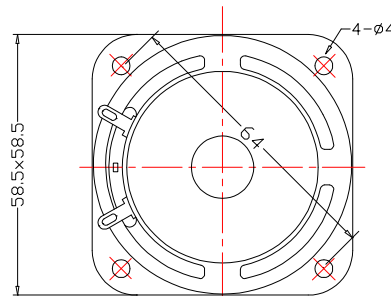
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Notes:

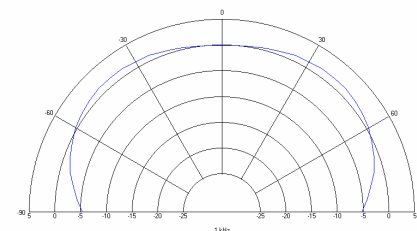
57 mm TV fullrange speaker,
paper cone,
mylar dustcap,
treated cloth edge,
paper gasket,
shielded with double magnet and
metal cap
terminals:
“+” 2.8 x 0.5 mm
“-” 2.8 x 0.5 mm



impedance: 4 Ω
nom. power: 5 watts
SPL 1W/1m: 85 dB
fs: 280 Hz
Re: 3.5 Ω
Le: 0.03 mH
Qms: 4.7
Qes: 2.5
Qts: 1.6
VAS : 0.2 l
Mms : 0.55 g
Rms : 0.25 kg/s
Cms: 0.5 mm/N
B*I: 1.2 Tm
Sd: 15.2 cm²
Xmax: +/-1 mm
weight: 0.115 kg
magnet: 1.5 oz
voice coil Ø: 14 mm

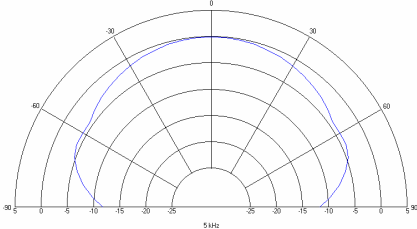
1kHz

2kHz



5kHz

10kHz

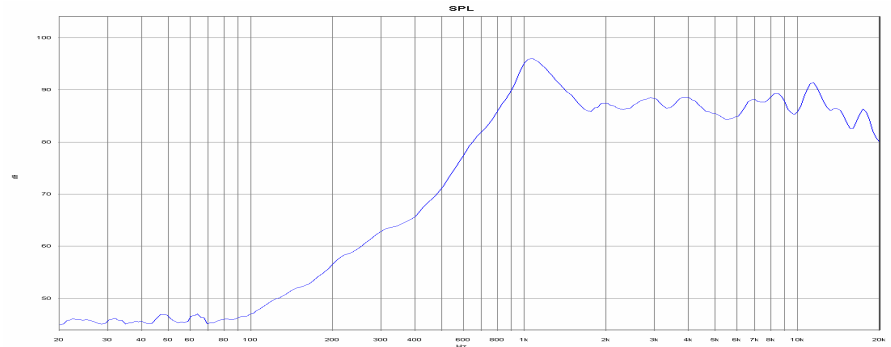


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

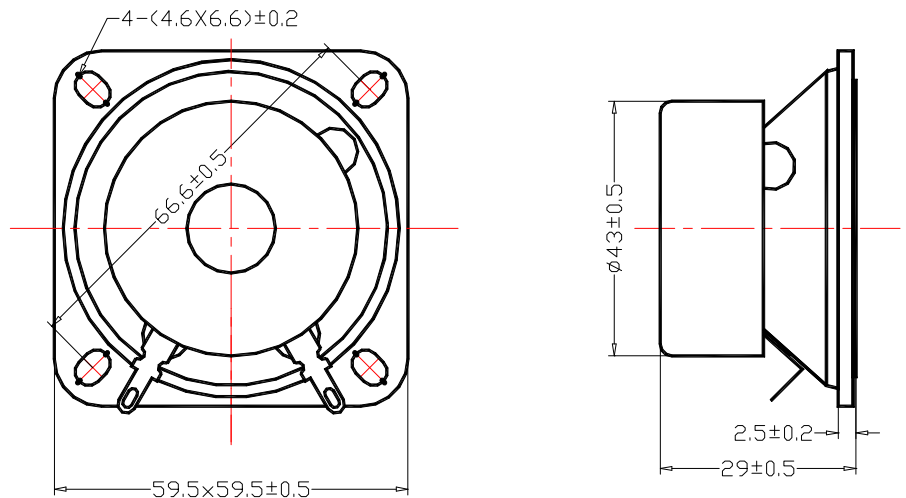
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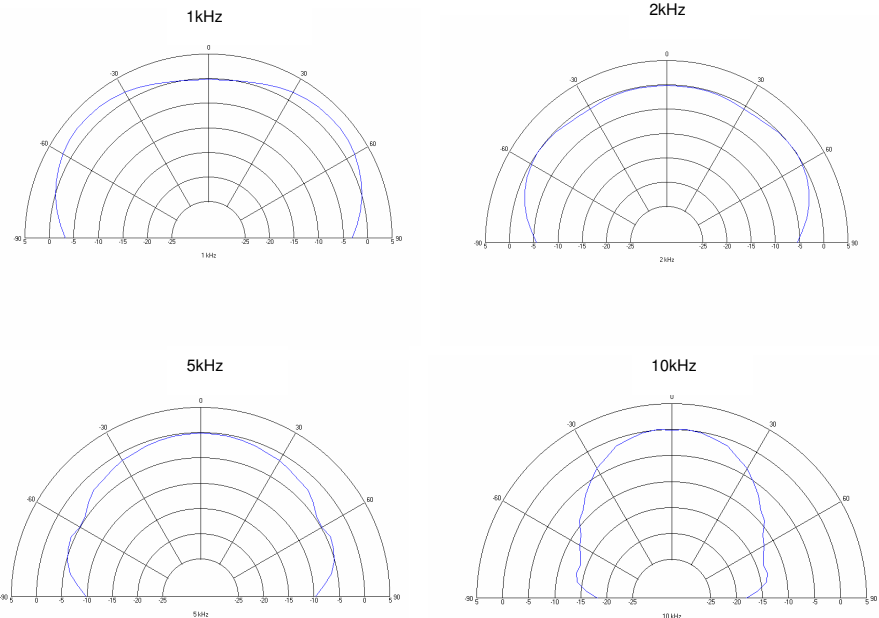
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Notes:
57 mm TV – tweeter,
paper cone,
paper dustcap,
paper edge,
paper gasket,
terminals:
“+” 2.8 x 0.5 mm
“-” 2.8 x 0.5 mm

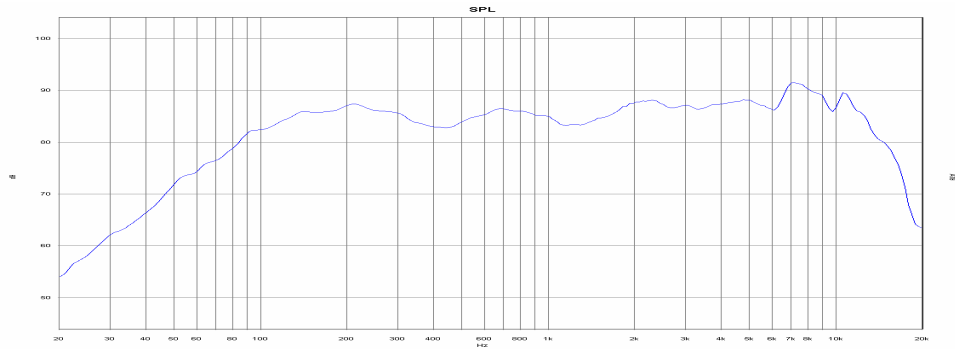


impedance 8 Ω
nom. power: 80 watts*
SPL 1W/1m: 88 dB
fs: 1000 Hz
Re: 6.8 Ω
Le: 0.2 mH
Qms: 4.6
Qes: 6.4
Qts: 2.6
VAS : -- l
Mms : -- g
Rms : -- kg/s
Cms: -- mm/N
B*I: -- Tm
Sd: 16.6 cm²
Xmax: -- mm
weight: 0.100 kg
magnet: 1 oz
voice coil Ø: 13 mm



* crossover highpass 6000 Hz

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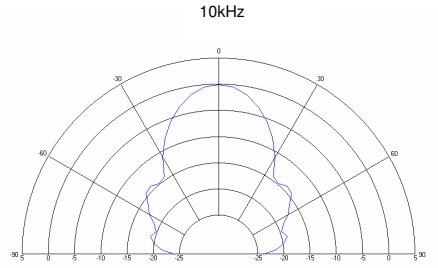
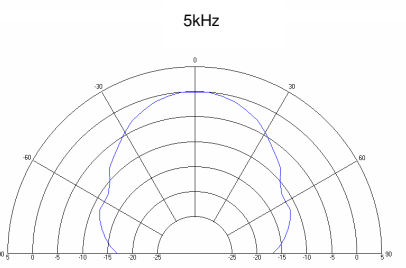
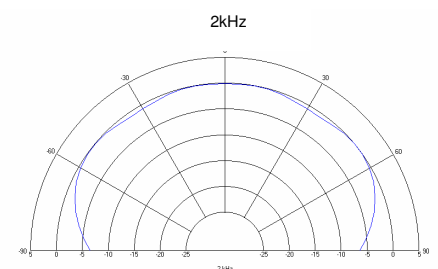
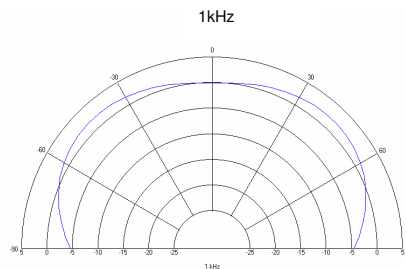
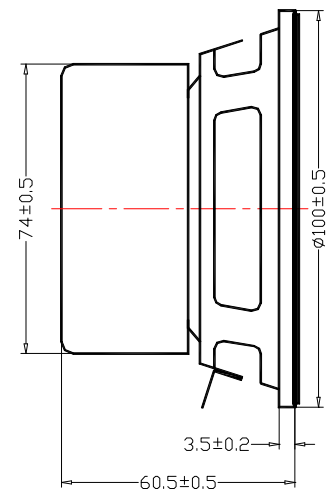
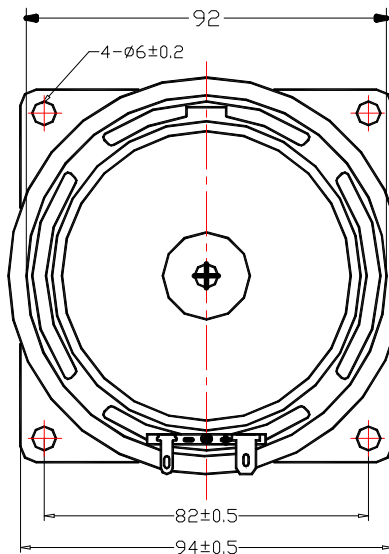


Notes:

100 mm TV – woofer,
paper cone,
paper dustcap,
rubber edge,
rubber gasket,
shielded with double
magnet and metal cap,
terminals:

“+” 4.8 x 0.8mm
“-” 2.8 x 0.8mm

impedance:	8 Ω
nom. power:	30 watts
SPL 1W/1m:	87 dB
fs:	98 Hz
Re:	7.4 Ω
Le:	0.4 mH
Qms:	2.0
Qes:	0.85
Qts:	0.6
VAS :	3 l
Mms :	3.7 g
Rms :	1.2 kg/s
Cms:	0.7 mm/N
B*I:	4.2 Tm
Sd:	54 cm ²
Xmax:	+/- 2 mm
weight:	0.6 kg
magnet:	8 oz
voice coil Ø:	25 mm



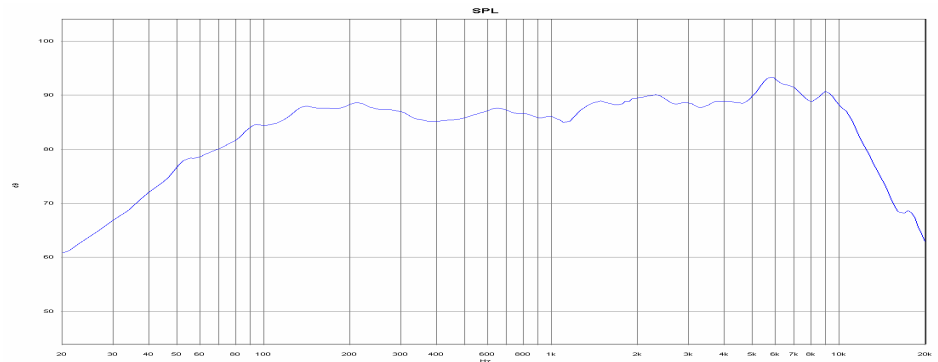
TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

FOR TOLERANCES OF TECHNICAL DATA REFER TO HKM 'S MANUAL OF TECHNICAL DATA

FOR INFORMATION CONTACT: TEL.: +49 9073 / 9585 0, FAX.: +49 9073 / 9585 55, E-MAIL: INFO@HKM-GROUP.DE

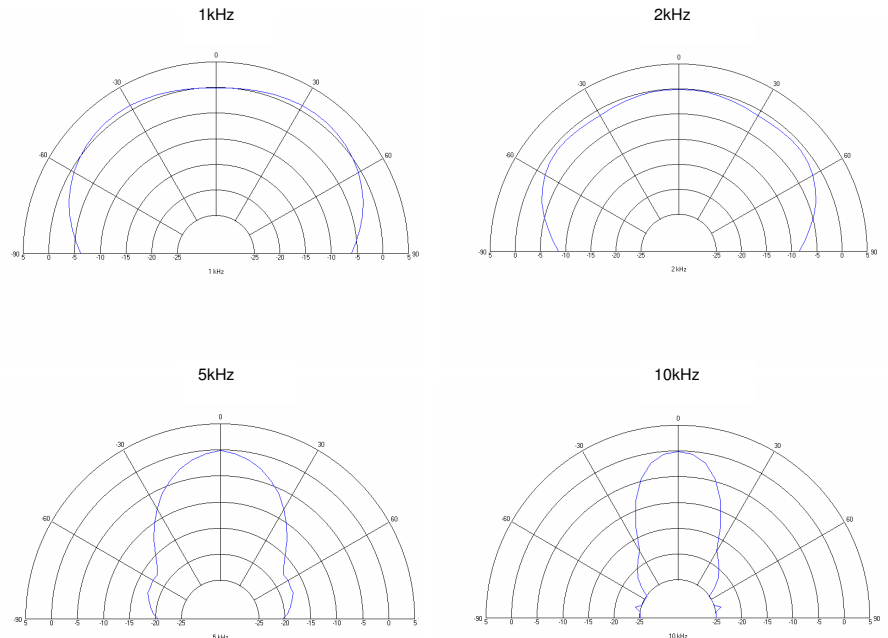
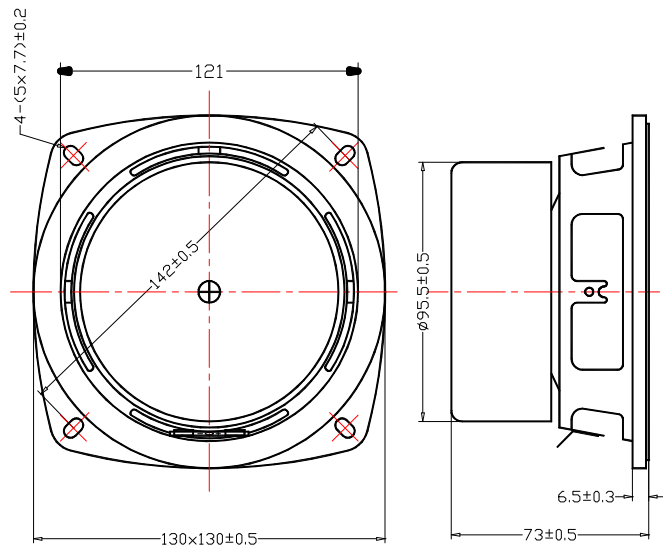
WWW.HKM-GROUP.DE



Notes:

130 mm TV – woofer,
paper cone,
rubber edge,
rubber gasket,
shielded with double
magnet and metal cap,
terminals:
„+“ 4.8 x 0.8 mm
„-“ 2.8 x 0.8 mm

impedance:	4/8 Ω
nom. power:	25 watts
SPL 1W/1m	88 dB
fs:	78 Hz
Re:	3.3/6.5 Ω
Le:	0.3 mH
Qms:	2.0
Qes:	0.9
Qts:	0.6
VAS :	7 l
Mms :	5.2 g
Rms :	1.4 kg/s
Cms:	0.8 mm/N
B*I:	4.1 Tm
Sd:	80 cm ²
Xmax:	+/- 2 mm
weight:	0.695 kg
magnet:	9 oz
voice coil Ø:	19 mm

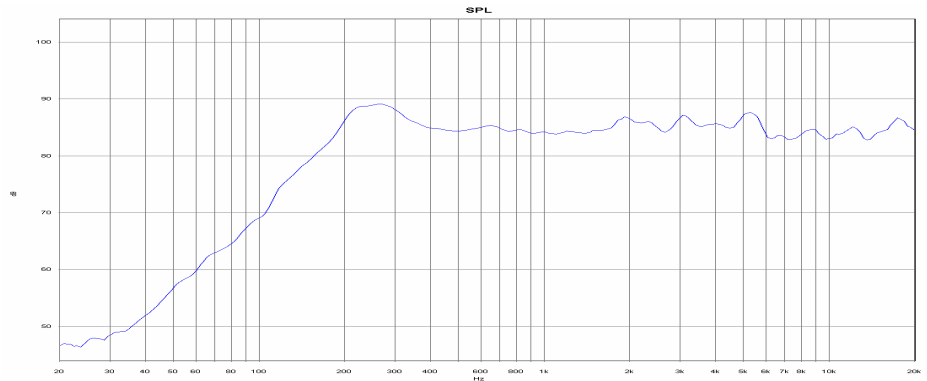


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

FOR TOLERANCES OF TECHNICAL DATA REFER TO HKM 'S MANUAL OF TECHNICAL DATA

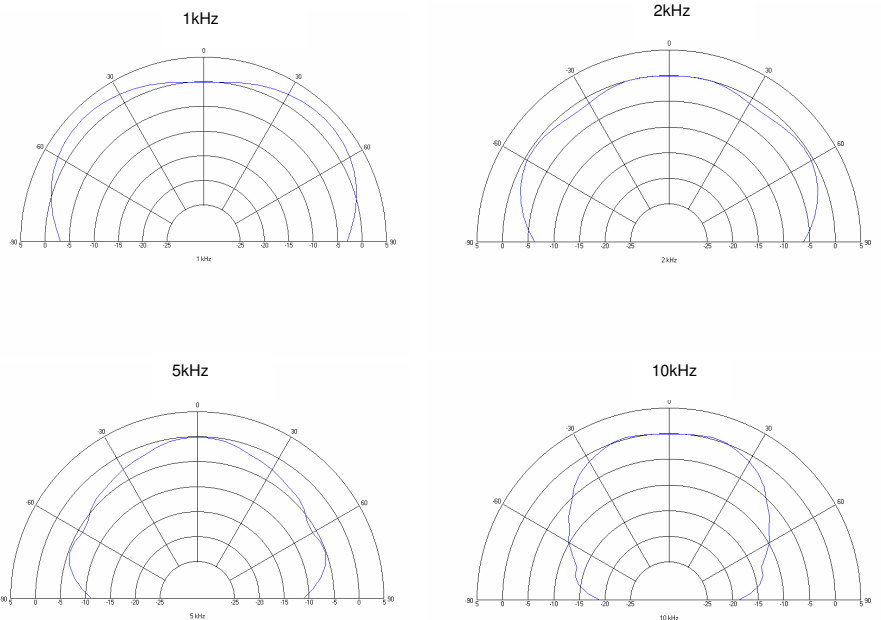
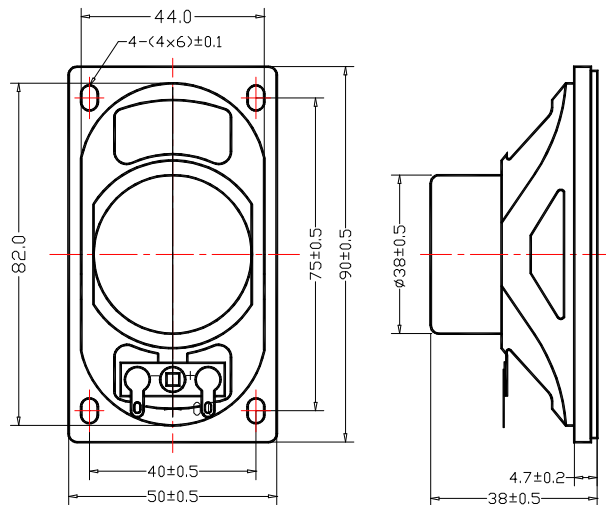
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Notes:

90 mm x 50 mm
TV – fullrange speaker,
paper cone,
paper dustcap,
treated cloth edge,
paper gasket,
shielded with double
magnet and metal cap,
terminals:
“+” 4.8 x 0.5 mm
“-“ 2.8 x 0.5 mm

impedance: 4/8 Ω
nom. power: 5 watts
SPL 1W/1m: 85 dB
fs: 220 Hz
Re: 3/7.2 Ω
Le: 0.1 mH
Qms: 3.5
Qes: 3
Qts: 1.7
VAS : 0.6 l
Mms : 0.8 g
Rms : 0.3 kg/s
Cms: 0.8 mm/N
B*I: 0.9 Tm
Sd: 24 cm²
Xmax: +/-0.5 mm
weight: 0.11 kg
magnet: 1.5 oz
voice coil Ø: 14 mm

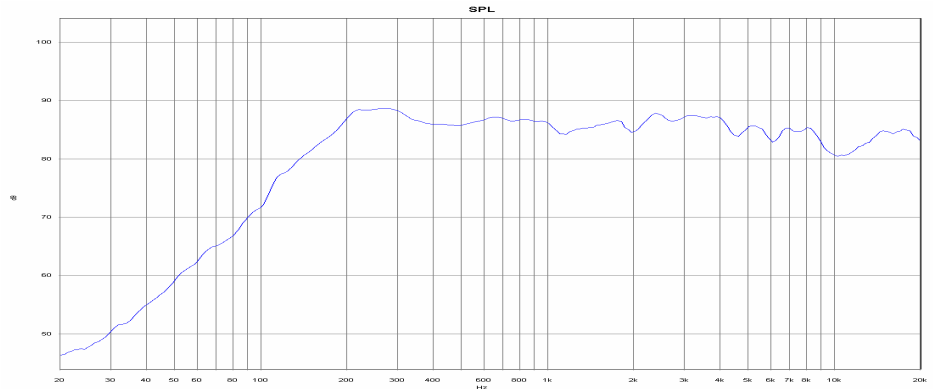


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

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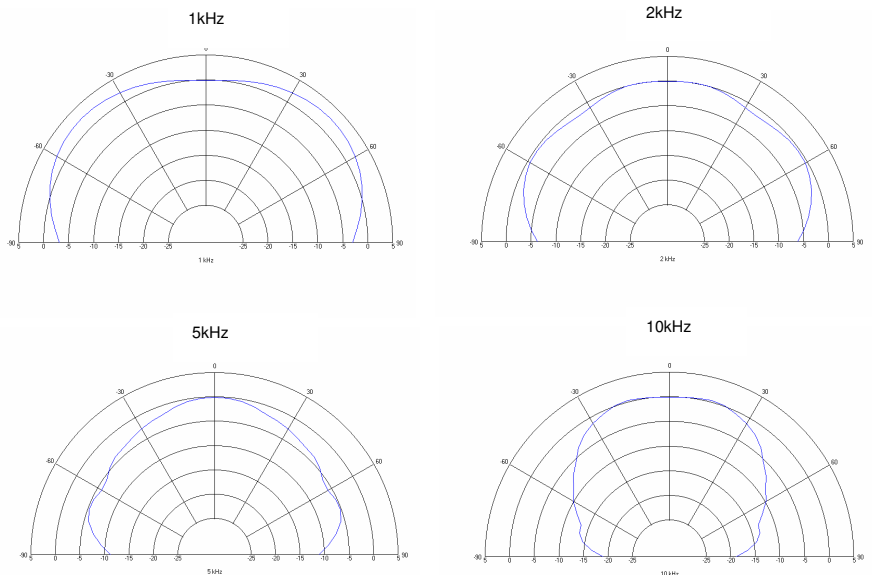
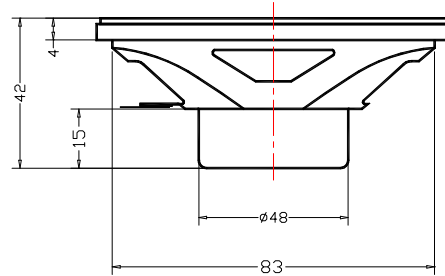
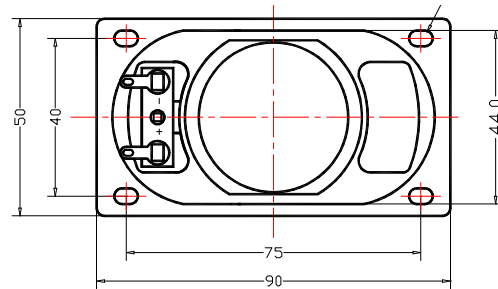


Notes:

90 mm x 50 mm
TV – fullrange speaker,
paper cone,
paper dustcap,
treated cloth edge,
paper gasket,
shielded with double
magnet and metal cap,
terminals:

“+” 4.8 x 0.5 mm
“-“ 2.8 x 0.5 mm

impedance: 8 Ω
nom. power: 7 watts
SPL 1W/1m 87 dB
fs: 248 Hz
Re: 7.4 Ω
Le: 0.06 mH
Qms: 3.5
Qes: 1.9
Qts: 1.22
VAS : 0.4 l
Mms : 0.8 g
Rms : 0.4 kg/s
Cms: 0.5 mm/N
B*I: 2.2 Tm
Sd: 24 cm²
Xmax: +/- 0.5 mm
weight: 0.17 kg
magnet: 2 oz
voice coil Ø: 14 mm

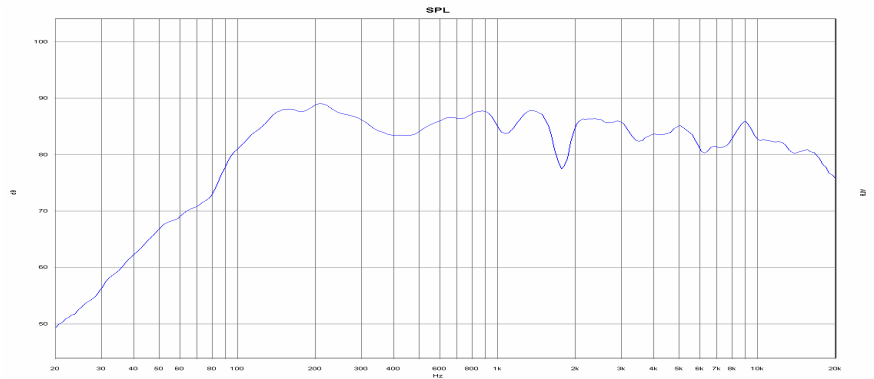


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

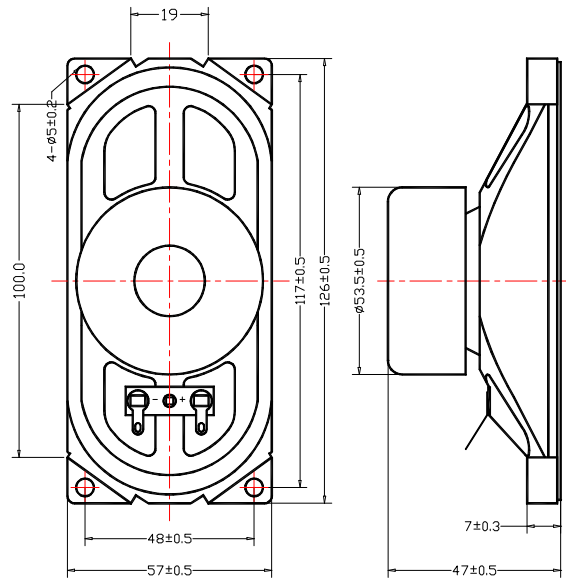
FOR TOLERANCES OF TECHNICAL DATA REFER TO HKM 'S MANUAL OF TECHNICAL DATA

FOR INFORMATION CONTACT: TEL.: +49 9073 / 9585 0, FAX.: +49 9073 / 9585 55, E-MAIL: INFO@HKM-GROUP.DE

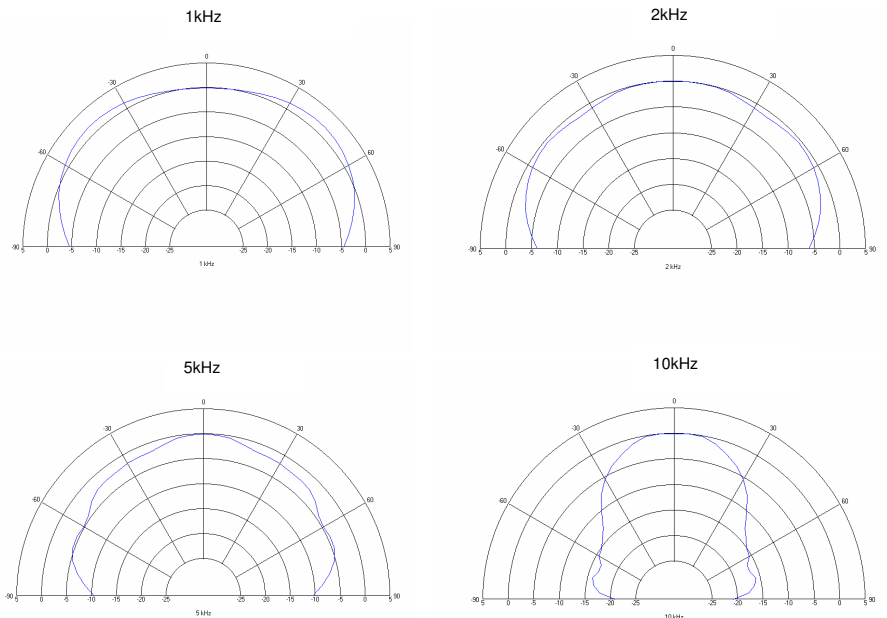


Notes:

127 x 57 mm TV fullrange speaker,
paper cone,
paper dustcap,
foam edge,
paper gasket,
shielded with metal cap and double
magnet,
terminals:
“+” 2.8 x 0.5 mm
“-“ 2.8 x 0.5 mm



impedance:	4 Ω
nom. power:	10 watts
SPL 1W/1m:	90 dB
fs:	165 Hz
Re:	3.5 Ω
Le:	0.2 mH
Qms:	4.3
Qes:	1.8
Qts:	1.2
VAS :	1.1 l
Mms :	2 g
Rms :	0.5 kg/s
Cms:	0.5 mm/N
B*I:	2 Tm
Sd:	41 cm ²
Xmax:	+/- 1 mm
weight:	0.25 kg
magnet:	3 oz
voice coil Ø:	14 mm

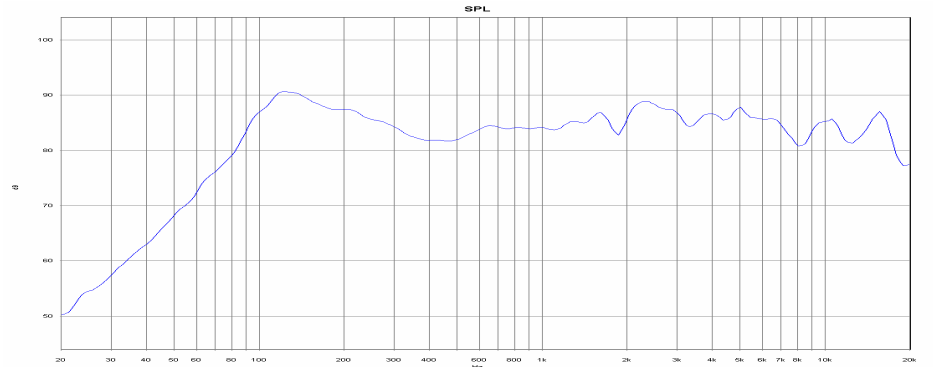


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

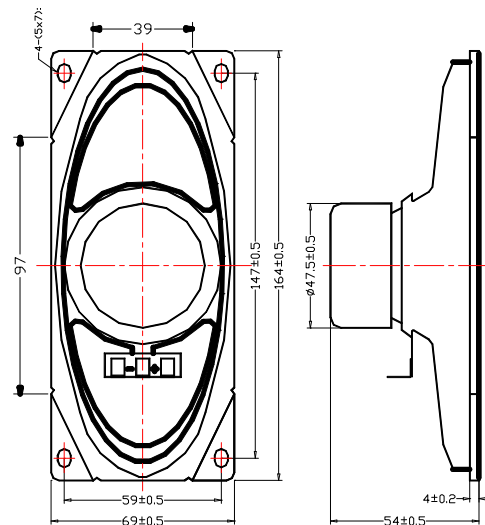
FOR TOLERANCES OF TECHNICAL DATA REFER TO HKM 'S MANUAL OF TECHNICAL DATA

FOR INFORMATION CONTACT: TEL.: +49 9073 / 9585 0, FAX.: +49 9073 / 9585 55, E-MAIL: INFO@HKM-GROUP.DE

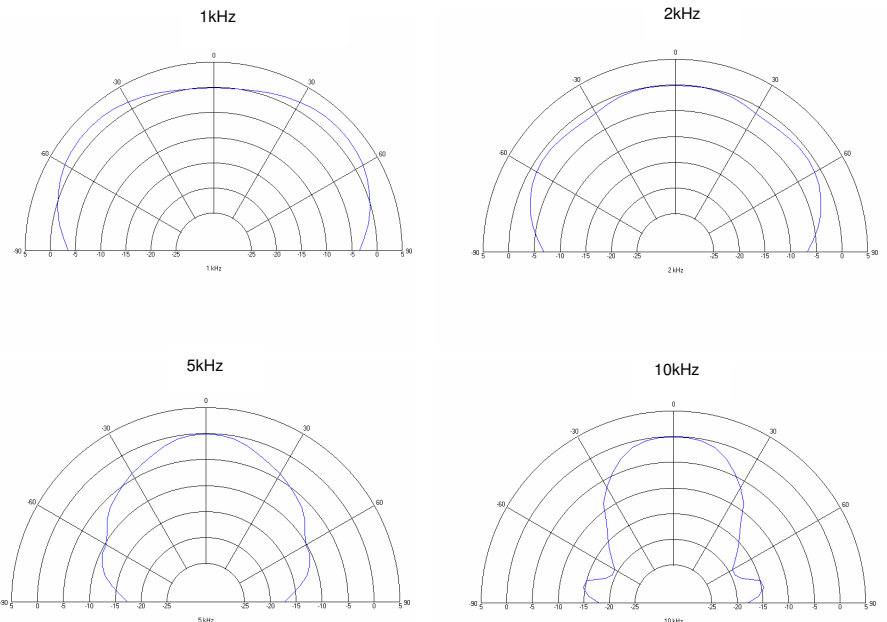


Notes:

164 x 70 mm TV fullrange speaker,
paper cone,
paper dustcap,
foam edge,
foam gasket,
shielded with double magnet and
metal cap,
terminals:
“+” 2.8 x 0.8 mm
“-” 2.8 x 0.8 mm



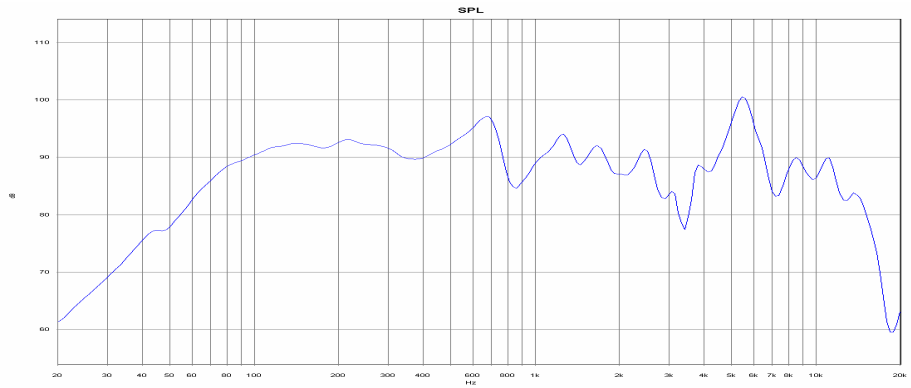
Impedance:	4/8 Ω
nom. power:	15 watts
SPL 1W/1m	88 dB
fs:	115 Hz
Re:	3.777.4 Ω
Le:	0.15 mH
Qms:	6
Qes:	2.0
Qts:	1.5
VAS :	5.5 l
Mms :	2.5 g
Rms :	0.3 kg/s
Cms:	0.8 mm/N
B*I:	1.7 Tm
Sd:	71 cm ²
Xmax:	+/- 1 mm
weight:	0.25 kg
magnet:	5 oz
voice coil Ø:	13 mm



TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT FOR TOLERANCES OF TECHNICAL DATA REFER TO HKM 'S MANUAL OF TECHNICAL DATA

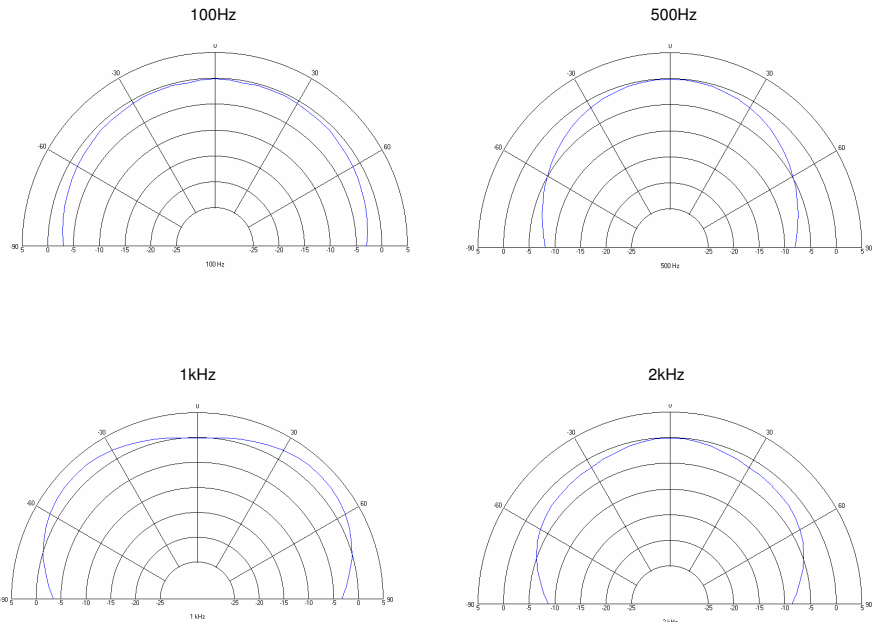
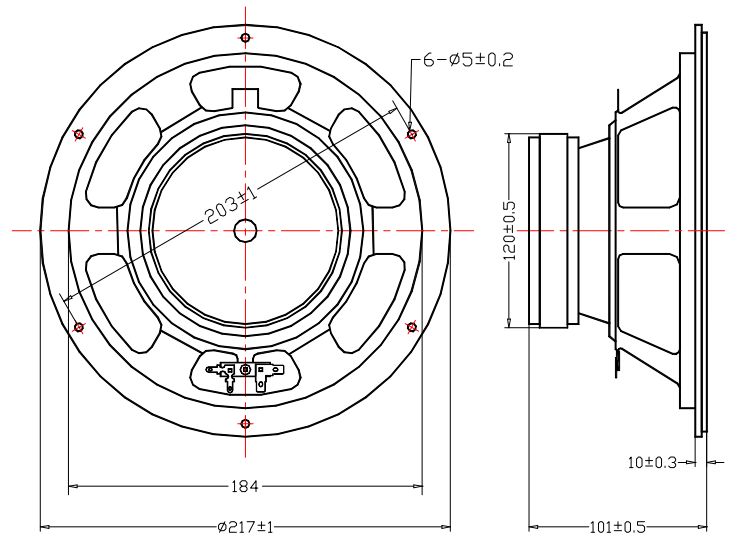
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Notes:

8" – PA midrange,
oil coated cone
and dustcap,
treated cloth edge,
foam gasket,
terminals:
„+“ 4.8 x 0.8 mm
„-“ 2.8 x 0.8 mm

impedance:	8 Ω
nom. power:	100 watts
SPL 1W/1m:	93 dB
fs:	77 Hz
Re:	7.1 Ω
Le:	0.5 mH
Qms:	6.55
Qes:	0.63
Qts:	0.57
VAS :	16.5 l
Mms :	17 g
Rms :	1.4 kg/s
Cms:	0.24 mm/N
B*I:	9.33 Tm
Sd:	219 cm ²
Xmax:	+/- 2 mm
weight:	2.3 kg
magnet:	30 oz
voice coil Ø:	50 mm

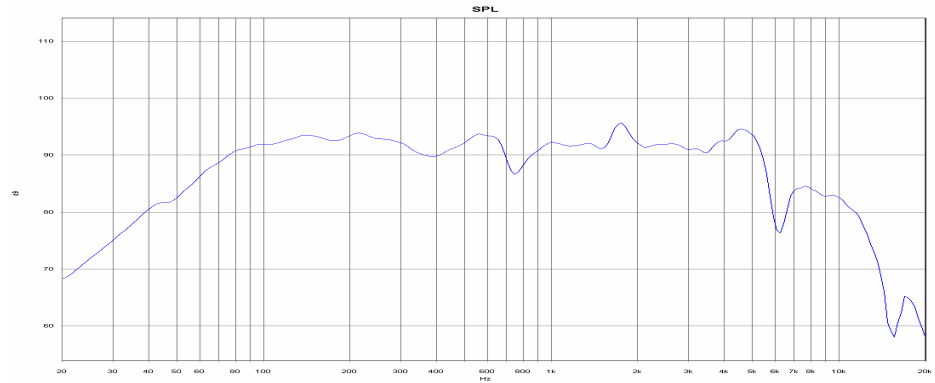


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

FOR TOLERANCES OF TECHNICAL DATA REFER TO HKM 'S MANUAL OF TECHNICAL DATA

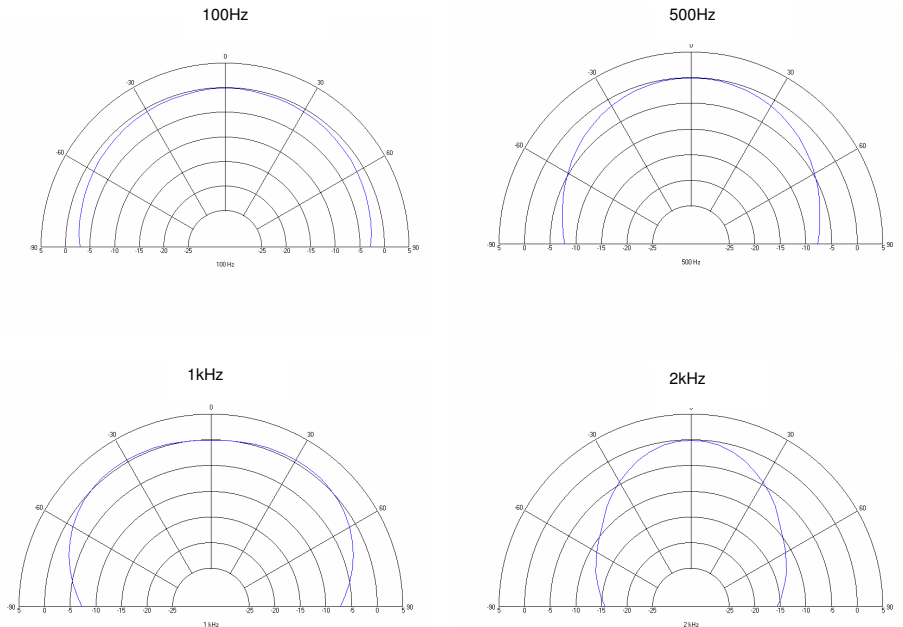
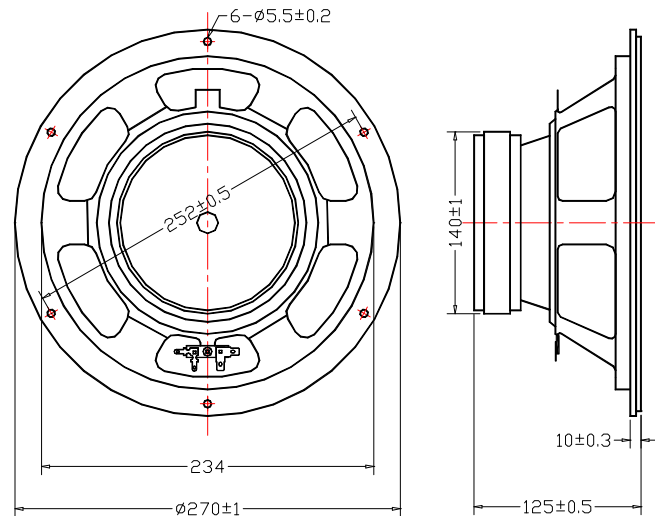
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Notes:

10" PA – woofer/midrange,
oil coated cone
and dustcap,
treated cloth edge,
foam gasket,
terminals:
„+“ 4.8 x 0.8 mm
„-“ 2.8 x 0.8 mm

impedance:	8 Ω
nom. power:	150 watts
SPL 1W/1m:	92 dB
fs:	58 Hz
Re:	6.8 Ω
Le:	1,18 mH
Qms:	3.8
Qes:	0.6
Qts:	0.5
VAS :	32 l
Mms :	38 g
Rms :	4.0 kg/s
Cms:	0,2 mm/N
B*I:	12 Tm
Sd:	346 cm ²
Xmax:	+/- 2 mm
weight:	3.65 kg
magnet:	30 oz
voice coil Ø:	50 mm

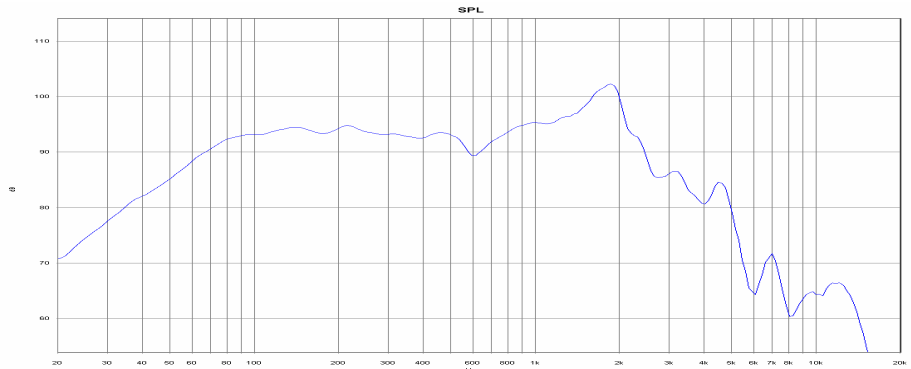


TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

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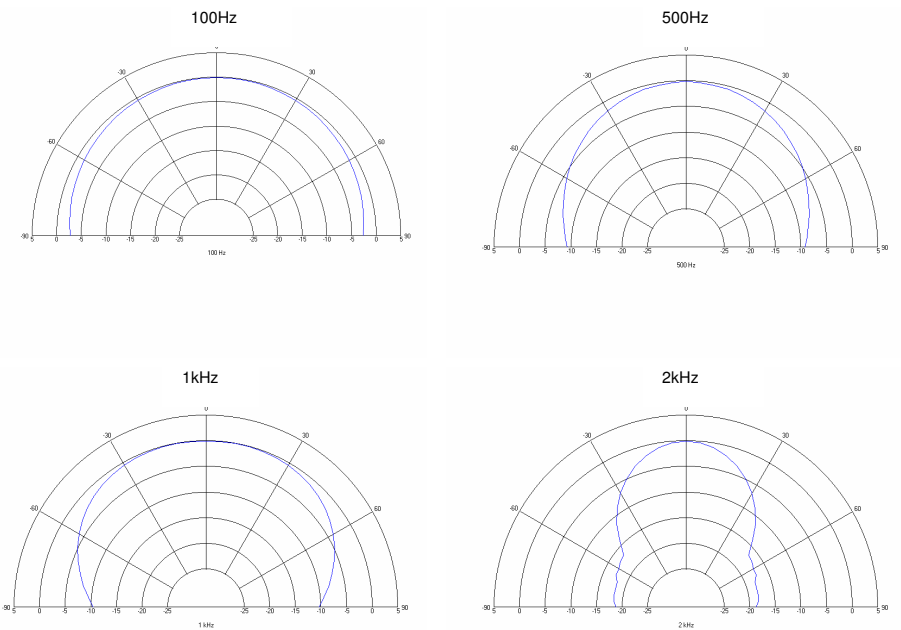
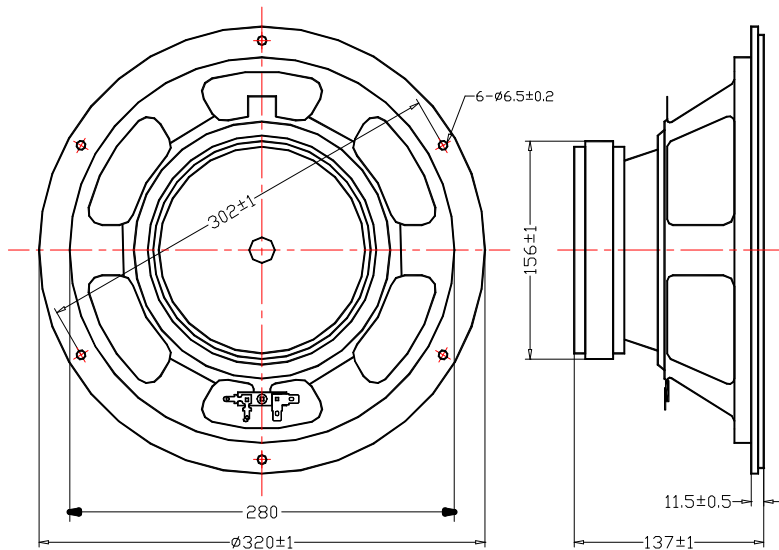
Notes:

12" PA – woofer,
oil coated paper cone
and dustcap,
treated cloth edge,
foam gasket,

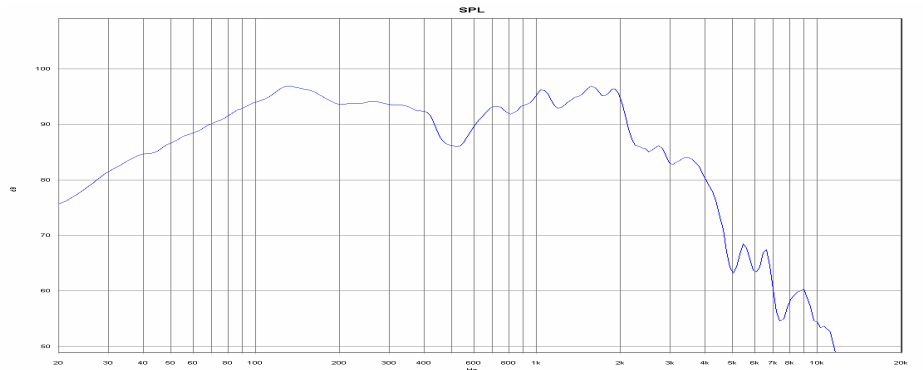
terminals:

„+“ 4.8 x 0.8 mm
„-“ 2.8 x 0.8 mm

- impedance: 8 Ω
- nom. power: 200 watts
- SPL 1W/1m: 93 dB
- fs: 42 Hz
- Re: 6.8 Ω
- Le: 1.35 mH
- Qms: 3.1
- Qes: 0.45
- Qts: 0.4
- VAS : 82 l
- Mms : 58 g
- Rms : 5.4 kg/s
- Cms: 0.24 mm/N
- B*I: 15 Tm
- Sd: 491 cm²
- Xmax: +/- 3 mm
- weight: 4.65 kg
- magnet: 50 oz
- voice coil Ø: 66 mm



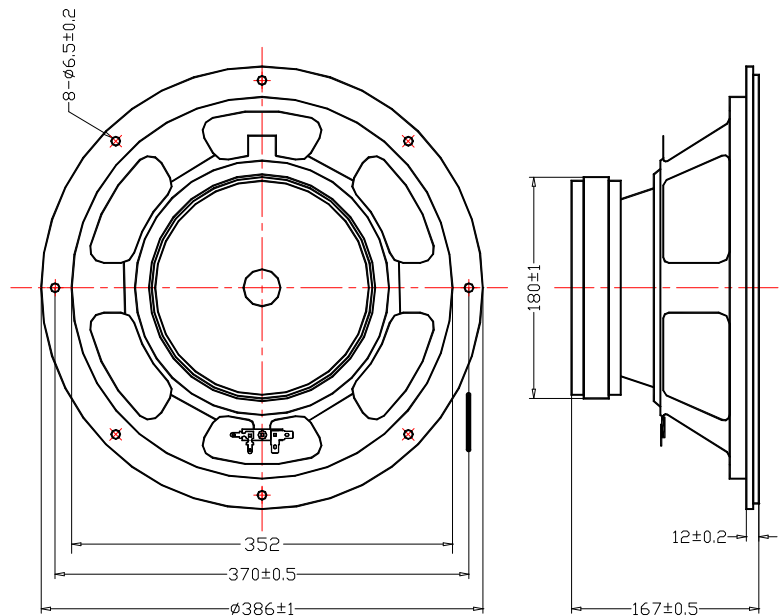
TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.
FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT
FOR TOLERANCES OF TECHNICAL DATA REFER TO HKM 'S MANUAL OF TECHNICAL DATA
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Notes:

15" – PA woofer,
oil coated cone
and dustcap,
treated cloth edge,
foam gasket,
terminals:
„+“ 4.8 x 0.8 mm
..-“ 2.8 x 0.8 mm

impedance:	8 Ω
nom. power:	300 watts
SPL 1W/1m:	95 dB
fs:	32 Hz
Re:	7.0 Ω
Le:	2.0 mH
Qms:	3.8
Qes:	0.4
Qts:	0.4
VAS :	208 l
Mms :	117 g
Rms :	6.8 kg/s
Cms:	0.2 mm/N
B*I:	19 Tm
Sd:	835 cm ²
Xmax:	+/- 4 mm
weight:	6.8 kg
magnet:	50 oz
voice coil Ø:	76 mm



TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

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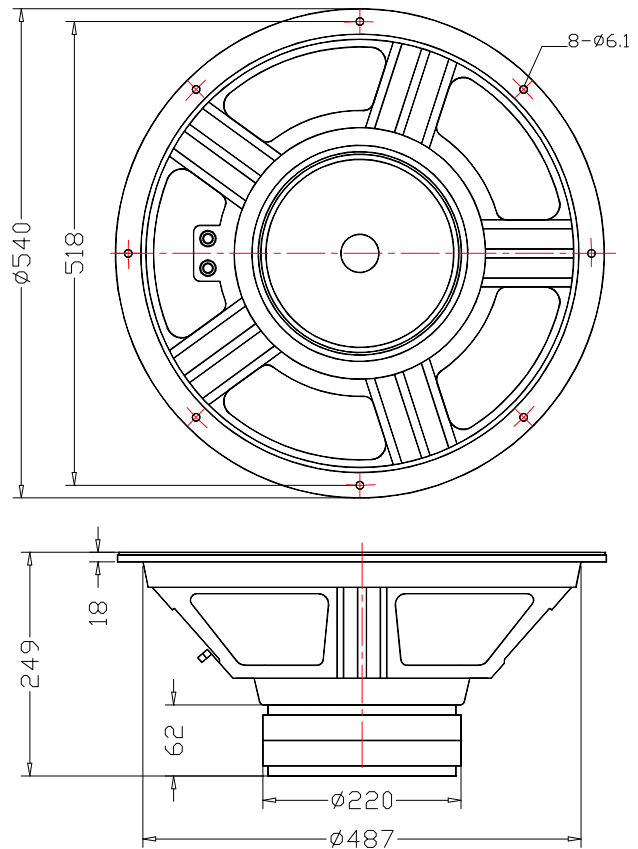
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Notes:

21" – PA woofer,
oil coated paper cone,
air dried oil coated paper
dustcap, treated roll out
cloth edge, foam gasket,
vented voice coil,
aluminium flat wire VC,
diecast frame,
terminals:
„+“ 4.8 x 0.8 mm
„-“ 2.8 x 0.8 mm

impedance:	8 Ω
nom. power:	600 watts
SPL 1W/1m:	97 dB
fs:	24.3 Hz
Re:	6.7 Ω
Le:	2.8 mH
Qms:	11.3
Qes:	0.3
Qts:	0.3
VAS :	547 l
Mms :	298 g
Rms :	4.4 kg/s
Cms:	0.14 mm/N
B*I:	30 Tm
Sd:	1640 cm ²
Xmax:	+/- 8 mm
weight:	-- kg
magnet:	-- oz
voice coil Ø:	100 mm



TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 60268 –5.

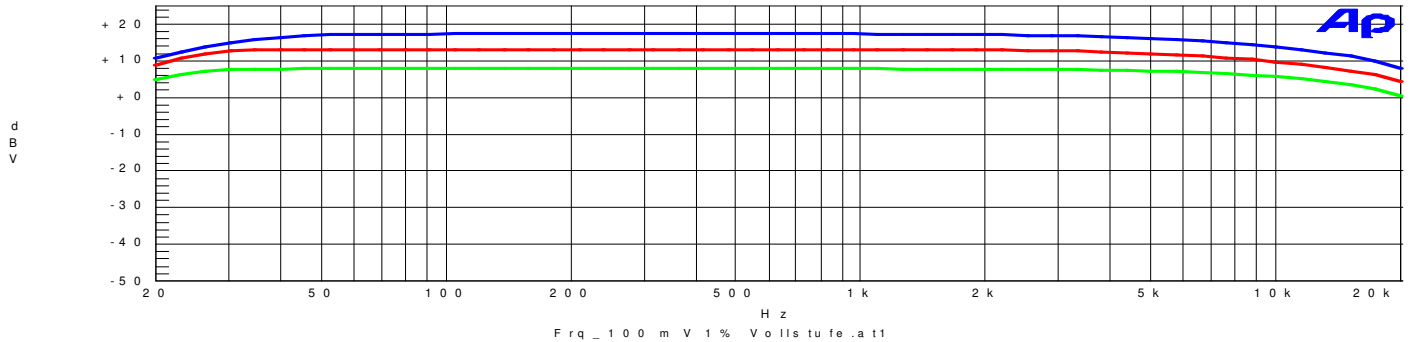
FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

FOR TOLERANCES OF TECHNICAL DATA REFER TO HKM 'S MANUAL OF TECHNICAL DATA

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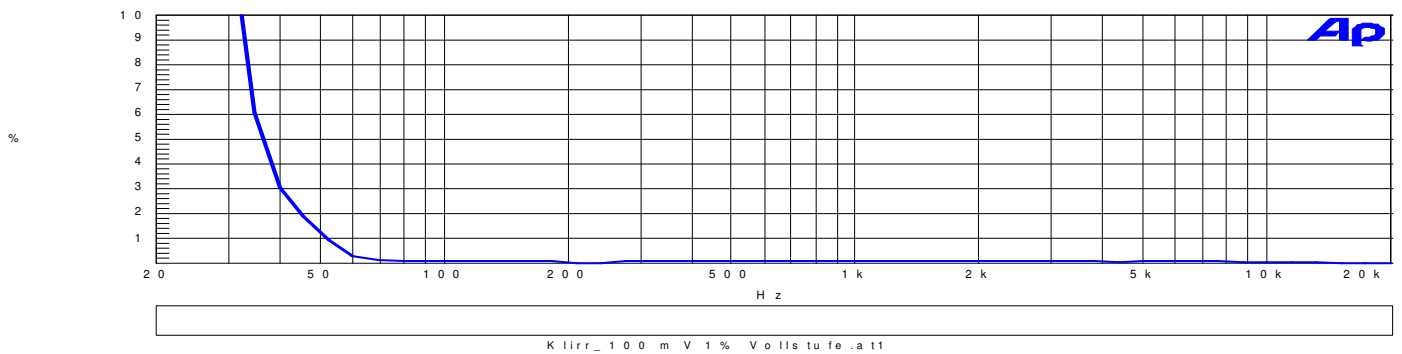
1. Frequency response 6W / 3W / 1.5W

H K M E l e k t r o A k u s t i k L a b o r



2. THD, 6W

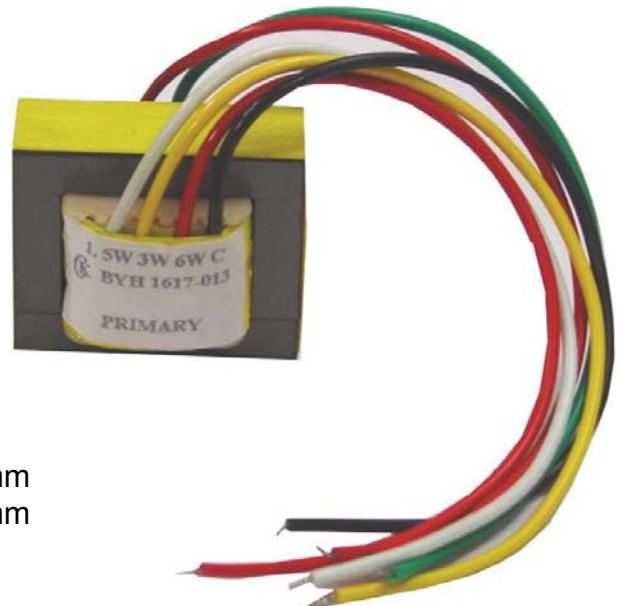
H K M E l e k t r o A k u s t i k l a b o r



Technical data:

Primary: 100V
Secondary: 4 Ohms

Output 1 (6 W) : 14.0 dBV; 6W
Output 2 (3 W) : 10.9 dBV; 3 W
Output 3 (1.5 W) : 9.9 dBV; 1.5 W



Dimensions:

Ferrit core: 48.5 x 40.5 x 17 mm
Complete transformer: 48.5 x 40.5 x 39 mm

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Grill 57

Art. No. 16121057

**Silver metal grill,
with plastic frame,
4 mounting holes,
for speakers with
57 mm**

**dimensions:
64 x 64 x 10 mm**

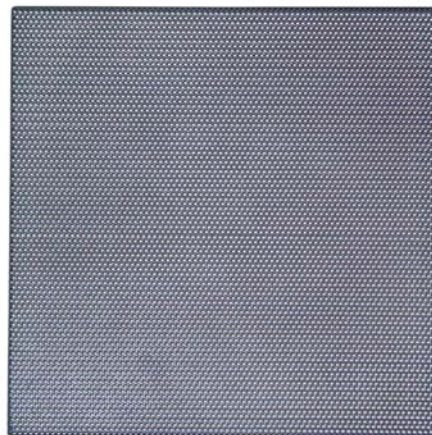


Grill 130 x 130

Art. No. 16121130

**Black metal grill,
bended edges,
for speakers with
130 mm**

**dimensions:
136 x 136 x 10 mm**



Grill 100

Art. No. 16121100

**Black metal grill,
Round plastic frame
With 4 mounting holes,
for speakers with
100 mm**

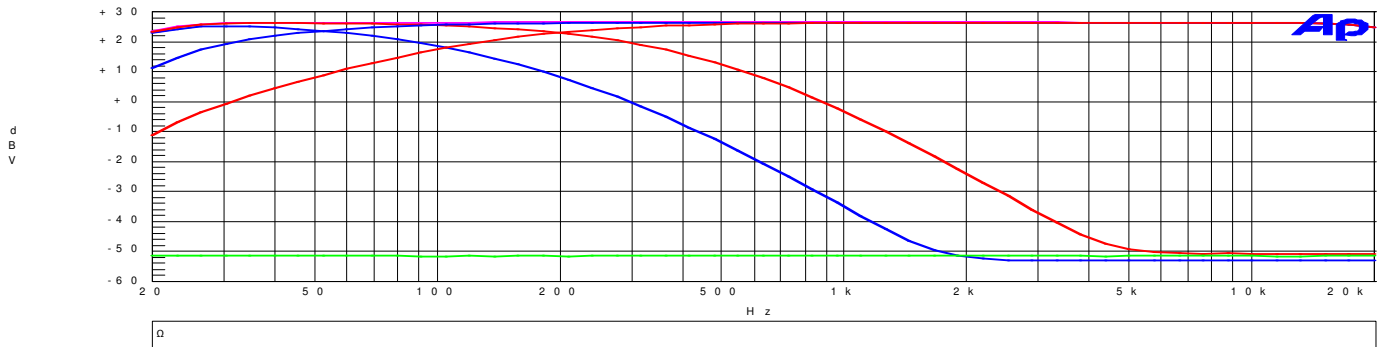
**dimensions:
ø 137 x 18 mm**



glueing strips included

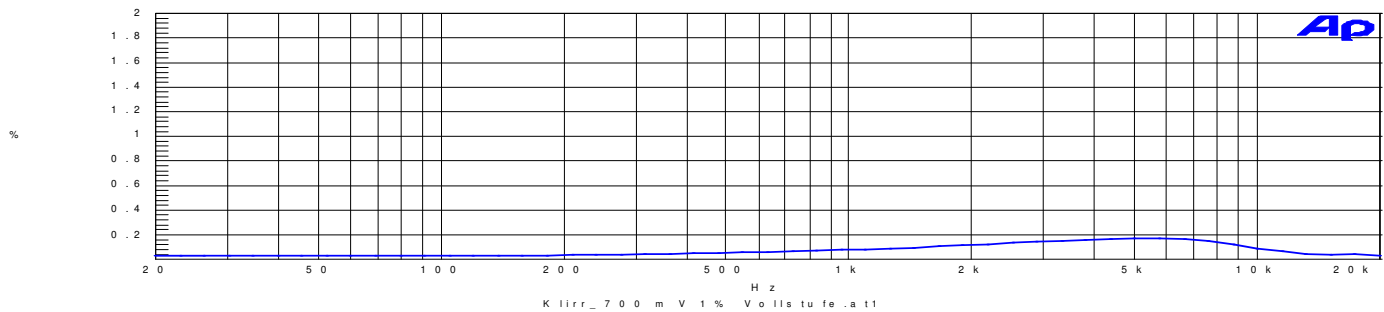
1. Frequency response and SNR

H K M E l e k t r o A k u s t i k L a b o r



2. THD

H K M E l e k t r o A k u s t i k l a b o r



Technical data: (EN 61305 - 3)

power output (1 % THD)	118 W rms / 8Ω
	150 W rms / 4Ω
frequency response (- 3 dB)	20 – 20000 Hz
Crossover (HP, LP, Full) adjustable	50 – 200 Hz
THD	0.07 %
Input sensitivity (RCA mono)	100 mV
Input impedance (RCA unsymmetr.)	12 kΩ
Switch on sensitivity	< 4 mV
Signal-to-noise ratio (SNR)	> 85 dB
Standby	3 min.
Net weight	3.7 kg
Dimensions (W x H x D)	210 X 300 X 125 mm
Power consumption	300 VA



TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 61305 –3.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

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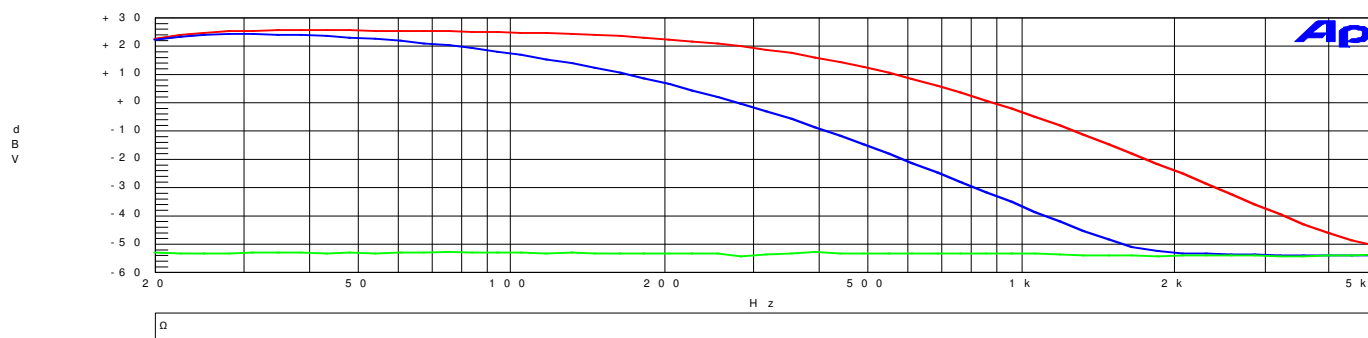
Amplifier 150 / 300 SUB

Amplifier with active Lowpass

Art. Nr. 17600300

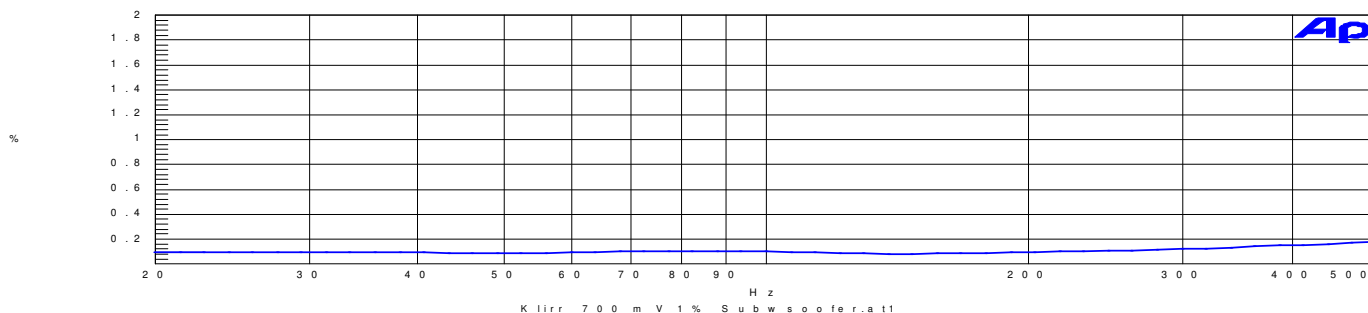
1. Frequency response and SNR

H K M E l e k t r o A k u s t i k L a b o r



2. THD

H K M E l e k t r o A k u s t i k l a b o r



Technical data: (EN 61305 - 3)

power output (1 % THD)	118 W rms / 8Ω 150 W rms / 4Ω
frequency response (- 3 dB)	20 – 200 Hz
Crossover (HP, LP, Full) adjustable	50 – 200 Hz
THD	0.08 %
Input sensitivity (RCA mono)	145 mV
Input impedance (RCA unsymmetr.)	12 kΩ
Switch on sensitivity	< 5 mV
Signal-to-noise ratio (SNR)	> 85 dB
Standby	3 min.
Net weight	3.68 kg
Dimensions (W x H x D)	210 X 300 X 125 mm
Power consumption	300 VA



TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 61305 –3.

FOR PRODUCT IMPROVEMENT HKM RESERVES ALTERATIONS IN SPECIFICATIONS AND DESIGN WITHOUT FURTHER ANNOUNCEMENT

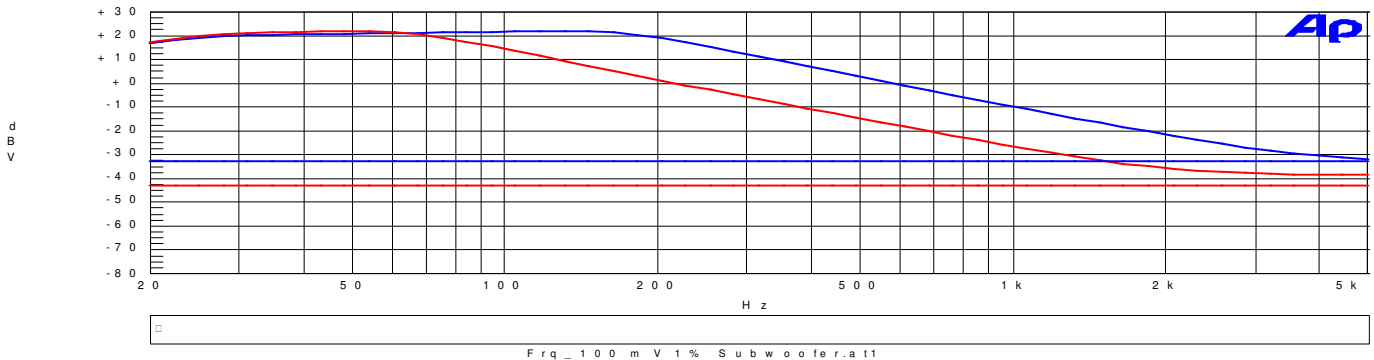
FOR TOLERANCES OF TECHNICAL DATA REFER TO HKM 'S MANUAL OF TECHNICAL DATA

FOR INFORMATION CONTACT: TEL.: +49 9073 / 9585 0, FAX.: +49 9073 / 9585 55, E-MAIL:INFO@HKM-GROUP.DE

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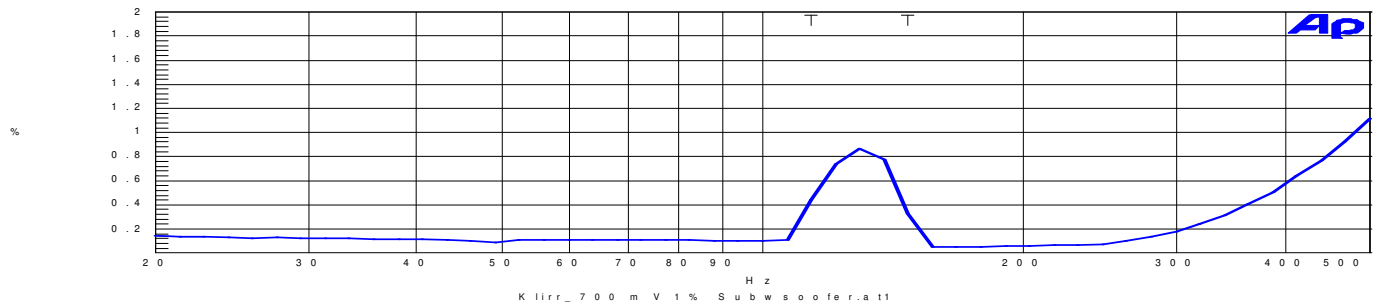
1. Frequency response and SNR Subwoofer

H K M E l e k t r o A k u s t i k L a b o r



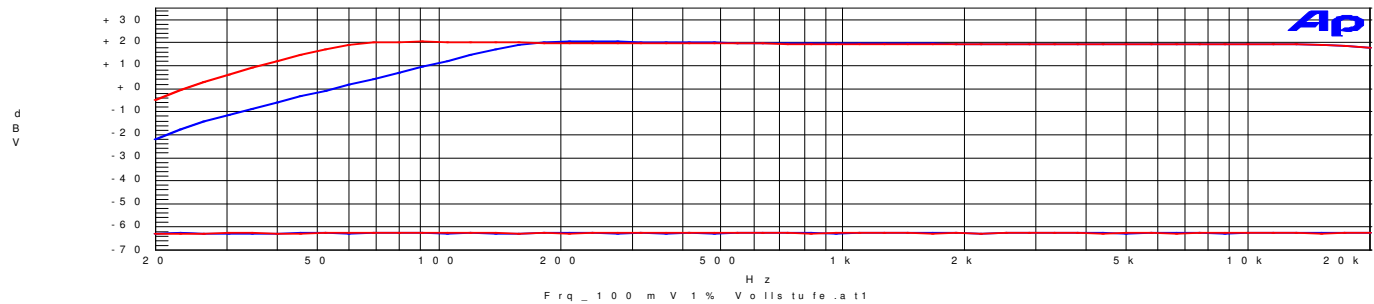
2. THD Subwoofer

H K M E l e k t r o A k u s t i k l a b o r



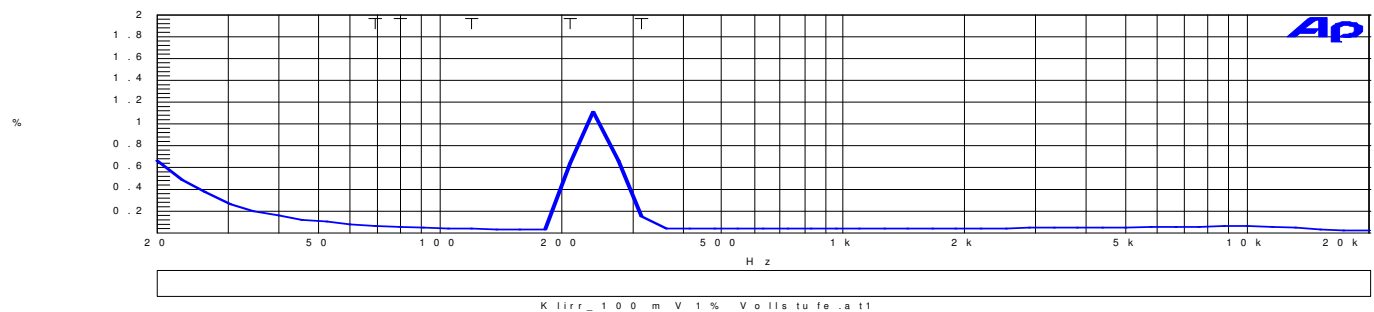
3. Frequency response and SNR Satellites

H K M E l e k t r o A k u s t i k L a b o r



4. THD Satellites:

H K M E l e k t r o A k u s t i k l a b o r



TECHNICAL DATA ARE MEASURED WITH APWIN – EQUIPMENT ACCORDING EN – 61305 – 3.

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Technical data:
(EN 61305 - 3)

power output (1 % THD) / 8 Ω	1 x 29 W rms 2 x 17 W rms
power output (1 % THD) / 4 Ω	1 x 40 W rms 2 x 23 W rms
frequency response (- 3 dB)	20 – 20000 Hz
Crossover	70 Hz –200 Hz, HP / LP 12 dB / Oct
THD Subwoofer	0.07 %
THD Satellites	0.04 %
Input sensitivity (RCA mono) Sub	55 mV
Input sensitivity stereo Satellites	270 mV
Input impedance (RCA unsymmetr.)	47 kΩ
Switch on sensitivity	< 4 mV
Signal-to-noise ratio (SNR) Sub	> 50 dB
Signal-to-noise ratio (SNR) Sat	> 85 dB
Standby	5 min.
Net weight	2.35 kg
Dimensions (H x W)	190 X 250 mm
Power consumption	150 VA



TECHNICAL DATA ARE MEASURED WITH APWIN – EQUIPMENT ACCORDING EN – 61305 – 3.

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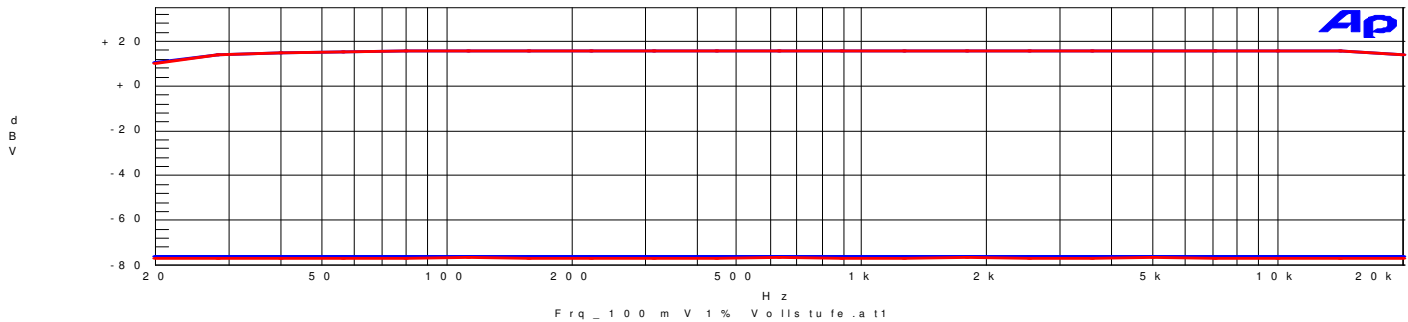
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2-Channel Car-Amplifier CA-150

Art. No. 17500151

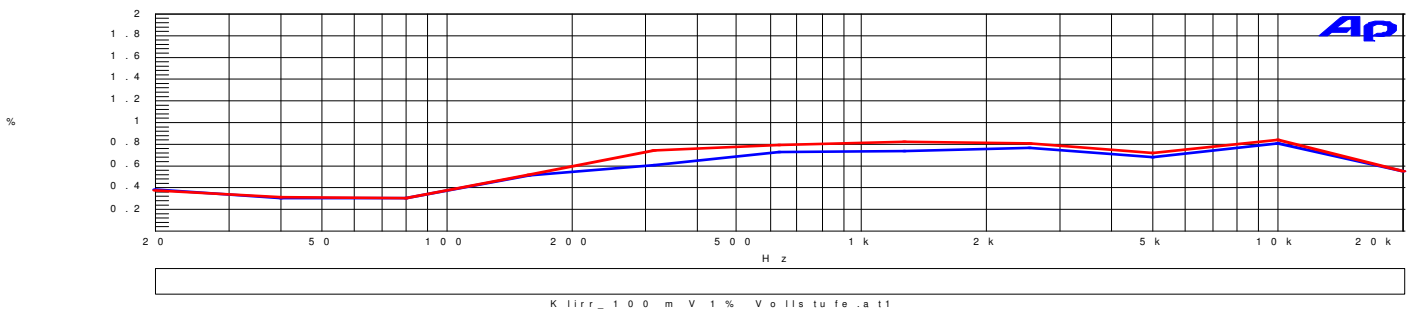
1. Frequency response and SNR

H K M E l e k t r o A k u s t i k L a b o r



2. THD

H K M E l e k t r o A k u s t i k l a b o r



Technical data: (according EN 61305 – 3)

power output (1 % THD)	2 X 9,6 W rms (6,2 V / 4Ω)
power output (10 % THD)	2 X 12,9 W rms (7,2 V / 4Ω)
power output (20 % THD)	2 X 15,2 W rms (7,8 V / 4Ω)
frequency response (- 3 dB)	20 Hz to 20 kHz
THD	0,3 % at 9 W rms
Input sensitivity (RCA mono)	-23 dBV (70 mV)
Input impedance (RCA unsymmetr.)	6 kΩ
Input voltage	12 – 14.4 V
Max. Power consumption	48 VA
Signal-to-noise ratio (SNR)	> 85 dB
Net weight	0,6 kg
Dimensions (L X W X D)	160 X 130 X 46 mm



TECHNICAL DATA ARE MEASURED WITH ATB – EQUIPMENT ACCORDING EN – 61305 –3.

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Terms and Definitions

nominal power

the nominal power handling is in accordance with EN 60 268 - 5. the nominal power handling for each loudspeaker unit is dependent on frequency. According to EN 60 268 - 5 the specified data must refer to a specific frequency range. this frequency range is determined in a crossover network connected to the unit, and the specified volume of the closed box, in which the power handling test is made.

for the standard power handling test the speaker has to withstand 100hrs of a test pink noise (refer to EN 60 268 - 5) the applied electrical power is calculated as follows:

$$Z_n \times P_n (V_{rms})$$

at the end of the test the unit has to have the same frequency response and resonant frequency as those prior to the test.

nominal impedance Z_n

the impedance is dependent on frequency and measured with ATB equipment.

free air resonant frequency

the resonant frequency of the unit without being mounted in a compartment.

the resonant frequency is the lowest frequency, at which the impedance reaches a maximum.

sensitivity SPL

sound pressure level averaged over frequency range.

Measurement Conditions

„warming up“ procedure

each unit has to pass 6 hours of pink noise (75% of its nominal power) for warming up before being measured.

measurement of thiele small parameters

thiele small parameters are measured with ATB equipment by additional weight.

frequency response

polar diagram

frequency response is measured with the B&K microphone 4190, B&K nexus preamplifier and the ATB equipment according to EN 60 268 - 5.

Tolerances

mechanical data

for product improvement HKM reserves alterations in specifications and design without further announcement.

electrical data

precision is in accordance to the precision of the measurement equipment mentioned above.

all tolerances are in accordance to EN 61305 - 3.

characteristic tolerances are shown in the data sheets together with the data they concern.

Sampling Procedures

sampling procedures for inspection is in accordance with DIN ISO 2859-1.

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