Turbosonic
PRO SPEAKERS

WWW.TURBOSONICSPEAKERS.COM

PROFESSIONAL LOUDSPEAKERS

TURBOSONIC
20Hz 20kHz
CATALOGUE

Our mission: satisfying customers' needs, organizational and production flexibility, continuous aim towards research and innovation. To achieve this difficult target, we are constantly challenging ourselves.

Company Profile

公司简介

Our company TurboSonic was founded in Guangzhou of China in 2004.

With seventeen years of experience, we are specialized in the field of professional loudspeakers design and production.

Our mission: satisfying customers' needs, organizationaland production flexibility, continuous aim towards research and innovation. To achieve this difficult target, we are constantly challenging ourselves.

TurboSonic has a complete line of professional transducers for the most critical professional people. In TurboSonic, every driver is designed through using latest CAD, 3D and FEA modeling techniques. Every electro-acoustic and mechanical performance is simulated and then carefully engineered by a team of engineers who have years of experience in the design and manufacture of power speakers. After prototype finish, Thiele-Small parameter will be measured by advanced laser system and frequency response curve will be tested in the anechoic chamber.

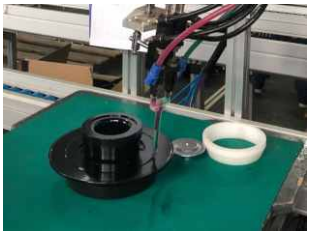
As already mentioned above, our company's growth is the result of an ongoing commitment to achieve complete understanding of client requirements. Design, manufacturing and product quality control systems are all proactively geared towards Customer Satisfaction. The company's mission is to ensure that the five basic features of TurboSonic products are met: Innovation, Technology, Quality, Service and Competitiveness.

Our resolve has never changed. As TurboSonic Team, we are proud to make our contribution in raising your product performances to a higher level.

广州德韵（TurboSonic）音响设备有限公司是一家以PA扬声器制造为主业，技术开发为核心，集研发、生产、销售、进出口贸易为一体的创新型电声企业。

公司成立至今十余年，一直秉承“惟专注，故专业”的企业精神，依靠科技求发展，在充分引进吸收国外新材料、先进技术的基础上，不断与多个科研机构、协力厂商和业内资深人士交流合作，共同参与新材料的研发，使得公司的技术能力不断提高，以一流的产品质量和精湛的技术服务深受客户好评。

公司奉行“科学管理、精心制造、优质服务、追求卓越”的质量方针，以“真诚合作、互助互利、共同发展”为宗旨，不断开拓创新，建立全面质量管理体系，竭诚为您提供高质量、高性价比的产品及无微不至的售后服务。



PRODUCT DESIGN

A Design Philosophy

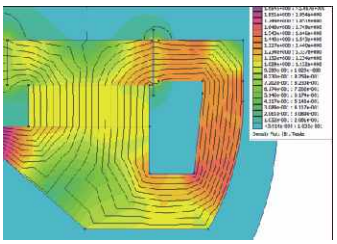
Continuous research into all aspects of speaker component design ensures that our professional loudspeakers will always provide state-of-the-art performance to satisfy customers' needs.

B Understanding customers' needs

The major component of an audio system is the enjoyment that it transmits to the end-user. For this reason, our R&D team will work with our OEM customers to define the parameters and basic requirements, then to identify the most suitable guidelines of the specific project, either by upgrading an existing prototype or developing a new product.

C Design

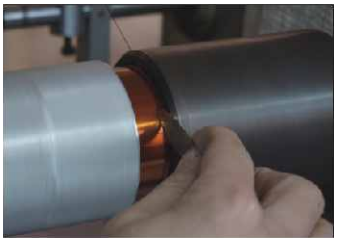
A loudspeaker is composed of many individual and specific components. In order toensure an efficient loudspeaker development, our R&D center is equipped with the advanced Finite Element Analysis (FEA) modeling, Simulation and Design software, as well as design tools such as 3-D CAD for technical drawing.



By using of FEA and Simulation software, electro-acoustic and magnetic performances can be predicted before components and physical prototype are built. At the same time, this step lowers the cost and performance risks associated with prototypes and testing.

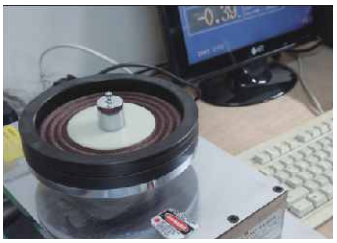
D Prototyping

Upon completion of the loudspeaker design and simulation phase and verified against the project requirement, the project goes into prototyping phase for real world testing of our technical solutions implemented. The prototypes are made with rapid prototyping techniques, such as laser sintering, to minimize the timing required to acquire the necessary parts, so that parts very similar to the final ones can be quickly assembled. At this stage, our R&D team also works closely with our approved suppliers to optimize parts.



E Analysis, Acoustic Testing and Listening

The first 'production-like' prototype can then be measured to verify that all electrical and acoustic parameters are comply met the initial design specifications. Reliability problems in the final product can be predicted by the work-group assigned to the project. In addition, pro-production testing also includes any documented test methods and standards that may exist for the product type. These tests would be repeated for production articles.



In addition to analysis and acoustic testing, sound is evaluated by using instruments and through a series of listening sessions carried out by specially trained engineers and customers. Carefully selected pieces of music are used in order to highlight specific features of the audio system's acoustic performance. Sometimes, the listening tests are also compared with an existing prototype.

F Validation Testing

The validation testing is conducted throughout the development process. It is finalized before the product is in production. The goal of the validation testing is to verity the reliability and performance of loudspeakers that may be presented by the product.

TurboSonic has for some time implemented series of routine activities for the validation process of products; these activities include salt fog tests, life tests, power tests, temperature shock, humidity and vibration tests either carried out singularly or combined together.

To further ensure the loudspeaker mechanical design, we apply a series of drop tests according to the unique mechanical properties specific to each project, with various height points for a real-world reflection of product usage simulations. The same drop test techniques are used to verify the adequacy of product packaging materials, which is essential in protecting the products from potential damages during transportation. Only after successful completion of all project tests and validation, the project receives its green light for final design approval.

Manufacturing and Quality Control

The final part of the development process is placing the product into production. For an in-house manufacture, this includes a product assembly plan.

Production processes are verified and optimized through continuous quality control on the production line. All loudspeakers zmanufactured by TurboSonic are fully checked at the end of the assembly line. Loudspeakers are tested individually also using proprietary computerized equipments. Additionally, customer response from use may also point to ways to improve product performance. As long as a product remains in the market, the Product Development Process remains open.

Understanding THIELE-SMALL parameters

The ability to choose the most appropriate loudspeaker for a particular enclosure is directly related to your understanding of the performance data that manufacturers provide with their products. In the early seventies, several technical papers were presented to the AES(Audio Engineering society) that resulted in the development of what we know today as "Thiele-Small Parameters". These papers were authored by A.N. Thiele and Richard H.Small.

Fs	Resonance frequency of the driver's moving mass (in free air).
Re	DC resistance of the voice coil, measured in ohms.
Qms	Mechanical Q of the driver at Fs.
Qes	Electrical Q of the driver at Fs.
Qts	Total Q of the driver at Fs.
Vas	Volume of air equal to the compliance of the driver's suspension.
Vd	Volume displaced by the driver's cone.
Cms	Compliance of the driver's suspension, in meters per Newton (the reciprocal of the units stiffness).
BL	The product of magnetic field strength in the voice coil gap (Motor unit strength).
Mms	Moving mass of the diaphragm including air load.
Xmax	Maximum linear peak excursion of voice coil travel.
Sd	Effective surface area of the diaphragm.

Power Handling

The specified Nominal Power Handling on our data sheets is measured according to AES2-2012 standard, which calls for a pink noise signal having a 6dB crest factor and band pass filtering to a decade in the working range of the loudspeaker (for instance, a 50~500 Hz range is typical for woofer testing). The duration of the test is 2 hours, after which the loudspeaker must not have any permanent change in characteristics greater than 10%. The Rated RMS Power is calculated using the minimum electrical impedance value over the operating range of the speaker.

The cone speakers are tested in free air, the compression drivers are tested while coupled to the recommended horn.

Due to the transient character of most musical programs, whose crest factor is commonly above 8-10 dB, it is customary to specify a "Continuous Program Power", double of the Nominal Power Handling, as a recommended amplifier power in order to fully exploit the thermal and mechanical capabilities of the loudspeaker without any clipping in the amplifier stage.

Rated RMS Power is very important to loudspeaker selection. Obviously, you need to choose a loudspeaker that is capable of handling the input power you are going to provide. By the same token, you can destroy a loudspeaker by using too little power. Generally speaking, the number one contributor to a transducer's ability to handle power is its ability to release thermal energy. Those louds-peaker characteristics are affected by several design choices, but most notably voice coil size, magnet size, venting, and the adhesives used in voice coil construction.

Large coil and magnet size provide more area for heat dissipation, while venting allows thermal energy to escape and cooler air to enter the motor structure. Equally important is the ability of the voice coil to handle thermal energy.

Mechanical factors must also be considered when determining power handling. A transducer might be able to handle 1,000 Watts from a thermal perspective, but would fail long before that level was reached from a mechanical issue such as the coil hitting the back-plate, the coil coming out of the gap, the cone buckling from too much outward movement, or the spider bottoming on the top plate. Be sure to consider the suggested usable frequency range and the Xlim parameter in conjunction with the power rating and enclosure design to avoid such failures.

Products Index >>>

Neodymium Subwoofers, Woofers, Mid-basses and Midranges

Ferrite Subwoofers, Woofers, Mid-basses and Midranges

Ferrite Subwoofers, Woofers, Mid-basses and Midranges

Model	Size	Rated Power	Voice Coil Diameter	Sens.	Freq.Range	EBP	Page
RS12-76/4	30cm/12"	450W	76mm/3"	94dB	55~3000Hz	123	40
J6012	30cm/12"	550W	86mm/3.5"	97dB	45~3000Hz	180	41
S7012	30cm/12"	450W	76mm/3"	97dB	41~2700Hz	128	42
M5012	30cm/12"	450W	76mm/3"	98dB	50~2700Hz	192	43
M5212	30cm/12"	500W	76mm/3"	97.5dB	45~3000Hz	153	44
BL12-65	30cm/12"	350W	65mm/2.5"	96dB	50~2800Hz	128	45
PS12-65	30cm/12"	250W	65mm/2.5"	95dB	53~3000Hz	95	46
J6010	25cm/10"	400W	76mm/3"	97dB	55~3500Hz	187	47
M5410	25cm/10"	100W	65mm/2.5"	94.5dB	54~3600Hz	172	48
BL10-65	25cm/10"	300W	65mm/2.5"	94dB	61~4000Hz	162	49
M5010	25cm/10"	550W	50mm/2"	95dB	55~2800Hz	148	50
V3010m/8	25cm/10"	300W	65mm/2.5"	97dB	60~4800Hz	212	51
V3010m/16II	25cm/10"	300W	65mm/2.5"	96dB	70~4800Hz	139	52
PS10-50	25cm/10"	150W	50mm/2"	94dB	52~2800Hz	122	53
V3208m/16	20cm/8"	150W	50mm/2"	95dB	90~6000Hz	144	54
V3008m/8	20cm/8"	200W	50mm/2"	96dB	72~5800Hz	196	55
PS08-38	20cm/8"	150W	38mm/1.5"	92dB	75~6300Hz	99	56
MB06-38	17cm/6.5"	100W	38mm/1.5"	92dB	125~9000Hz	127	57

Ferrite & Neodymium Fullranges

Model	Size	Rated Power	Voice Coil Diameter	Sens.	Freq.Range	EBP	Page
FR421	100mm/4"	45W	20mm/0.8"	87dB	91~17k Hz	83	58
FR421nd	100mm/4"	45W	20mm/0.8"	88dB	90~17kHz	118	59
FR321nd	80mm/3"	40W	20mm/0.8"	89dB	115~15k Hz	214	60
FR321	80mm/3"	40W	20mm/0.8"	88dB	110~15k Hz	133	61

Coaxials

Model	Size	Rated Power	Voice Coil Diameter	Sens.	Freq.Range	EBP(LF) Diaphragm(HF)	Page
CX12441	LF:30cm/12"	450W	76mm/3"	97dB	50~3000Hz	179	
	HF:44mm/1.7"	60W	44mm/1.7"	106dB	700~19K Hz	Polyimide	62
CX10442	LF:25cm/10"	250W	65mm/2.5"	95dB	50~3500Hz	174	
	HF:44mm/1.7"	50W	44mm/1.7"	102dB	700~19K Hz	PEEK	63
CX6342	LF:17cm/6.5"	150W	50mm/2"	89dB	108~7.8K Hz	113	
	HF:34mm/1.4"	45W	34mm/1.7"	102dB	2.1K~18K Hz	Polyimide	64

Ferrite HF Drivers

Model	Rated Power	Voice Coil Diameter	Exit Throat Diameter	Sens.	Freq.Range	Diaphragm Material	Page
CDi7401	90W	75mm/3"	38mm/1.7"	108dB	500Hz~17KHz	Titanium	65
CDi4401	60W	44mm/1.7"	25.4mm/1"	106dB	900Hz~19KHz	Polyimide	66
CDi4402	50W	44mm/1.7"	25.4mm/1"	105dB	900Hz~19KHz	PEEK	67
CD3401	40W	34mm/1.3"	25.4mm/1"	104dB	1000Hz~20KHz	Titanium	68

Neodymium HF Drivers

Model	Rated Power	Voice Coil Diameter	Exit Throat Diameter	Sens.	Freq.Range	Diaphragm Material	Page
NDi7409	90W	75mm/3"	38mm/1.7"	109dB	700Hz~18KHz	Titanium	69
NDi6509	75W	65mm/2.5"	38mm/1.5"	108dB	750Hz~18KHz	Titanium	70
NDi4409	50W	44mm/1.7"	25.4mm/1"	106dB	800Hz~19KHz	Polyimide	71

J652Ind

☀ *21 inch* ☀ *1800 Watts*
☀ *98 dB* ☀ *31 ~ 1000 Hz*

KEY FEATURES:

① 3600 W continuous program power capacity
② 98dB Sensitivity 1w/1m
③ 31Hz ~1000Hz frequency response range
④ 6" inside/outside voice coil for improved power-handling and durability
⑤ Forced air ventilation on U-yoke for minimum power compressoin
⑥ Optimized winding length for extended Xmax
⑦ Double spider for improved excursion control and linearithy
⑧ Ideal for compact horn-loaded subwoofer application

GENERAL SPECIFICATIONS

Nominal Diameter	530mm / 21inch
Rated Impedance	8 ohm
Nominal Power handling[1]	1800 Watts
Program Power[2]	3600 Watts
Sensitivity(1w/1m)[3]	98 dB
Frequency Range[4]	31 ~ 1000Hz
Minimum Impedance(Zmin)	7.9 ohm
Voice Coil Diameter	150mm / 6inch
Voice Coil Material	Copper
Former Material	Glass Fiber
Voice Coil Winding Depth	35 mm
Number of layers	2(inside/outside)
Magnet gap depth	14 mm
Basket	Cast Aluminum
Flux Density	1.2 T
Magnet material	Neodymium

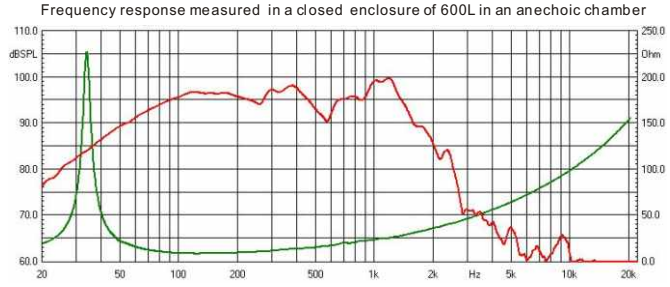
THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	34 Hz
DC resistance	Re	6.2 ohm
Mechanical factor	Qms	12.6
Electrical factor	Qes	0.35
Total factor	Qts	0.34
Mechanical compliance	Cms	0.047 m/N
Mechanical resistance of suspension losses	Rms	7.8mech-ohm
Effective Moving Mass	Mms	461 g
Half-space efficiency	Eff	1.99%
BL Factor	BL	41.6 T.m
Equivalent Cas air load	Vas	186 liters
Effective piston area	Sd	0.1676 m^2
Max. linear excursion[6]	Xmax	13 mm
Voice coil inductance	Le1K	2.7 mH
Efficiency Bandwidth Product	EBP	97

MOUNTING INFORMATION

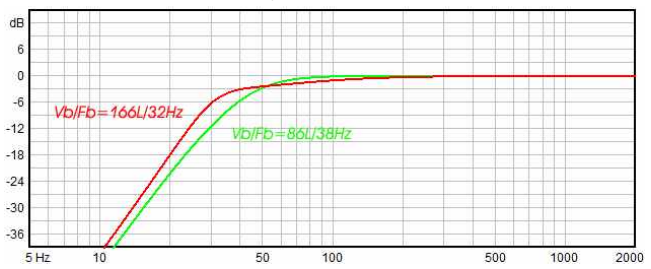
Overall Diameter	556 mm
Bolt Circle Diameter	528 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	493 mm
Overall Depth	250 mm
Net Weight	20.8 kg
Shipping Weight	23 kg
Shipping Box	585x585x2 70mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

J6318nd

☀ *18 inch* ☀ *1600 Watts*
☀ *98 dB* ☀ *32 ~ 1000 Hz*

KEY FEATURES:

① 3200 W continuous program power capacity
② 98dB Sensitivity 1w/1m
③ 32Hz ~1000Hz frequency response range
④ 5" inside/outside voice coil for improved power-handling and durability
⑤ Forced air ventilation on U-yoke for minimum power compressoin
⑥ Neodymium magnet allows a vrey light yet powerful motor assembly
⑦ Double silicone spider with optimized compliance
⑧ Ideal for compact subwoofer application

GENERAL SPECIFICATIONS

Nominal Diameter	460mm / 18inch
Rated Impedance	8 ohm
Nominal Power handling[1]	1600 Watts
Program Power[2]	3200 Watts
Sensitivity(1w/1m)[3]	98 dB
Frequency Range[4]	32 ~ 1000Hz
Minimum Impedance(Zmin)	7.5 ohm
Voice Coil Diameter	125mm / 5inch
Voice Coil Material	Copper
Former Material	Glass Fiber
Voice Coil Winding Depth	26 mm
Number of layers	2(inside/outside)
Magnet gap depth	14 mm
Basket	Cast Aluminum
Flux Density	1.1 T
Magnet material	Neodymium

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	35 Hz
DC resistance	Re	5.5 ohm
Mechanical factor	Qms	10
Electrical factor	Qes	0.23
Total factor	Qts	0.22
Mechanical compliance	Cms	0.09 m/N
Mechanical resistance of suspension losses	Rms	5.1mech-ohm
Effective Moving Mass	Mms	234 g
Half-space efficiency	Eff	3.5%
BL Factor	BL	35.6 T.m
Equivalent Cas air load	Vas	188 liters
Effective piston area	Sd	0.1250 m^2
Max. linear excursion[6]	Xmax	9.5 mm
Voice coil inductance	Le1K	2.2 mH
Efficiency Bandwidth Product	EBP	152

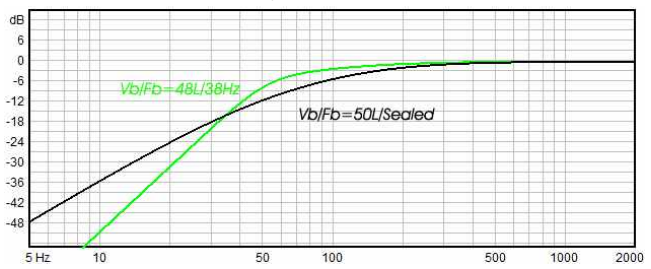
MOUNTING INFORMATION

Overall Diameter	461 mm
Bolt Circle Diameter	439 mm
Bolt Hole Diameter	6.5x9.5 mm
Baffle Cutout Diameter	424 mm
Overall Depth	228 mm
Net Weight	14 kg
Shipping Weight	15 kg
Shipping Box	500x500x2 50mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

J6118nd/2 Code:19092

☀ 18 inch ☀ 1400 Watts
☀ 97 dB ☀ 39 ~ 1000 Hz

KEY FEATURES:

① 2800 W continuous program power capacity
② 97dB Sensitivity 1w/1m
③ 39Hz ~1000Hz frequency response range
④ 4.5" inside/outside voice coil for improved power-handling and durability
⑤ Forced air ventilation on U-yoke for minimum power compressoin
⑥ Neodymium magnet allows a vrey light yet powerful motor assembly
⑦ Double silicone spider with optimized compliance
⑧ Ideal for compact subwoofer application

GENERAL SPECIFICATIONS

Nominal Diameter	460mm / 18inch
Rated Impedance	8 ohm
Nominal Power handling[1]	1400 Watts
Program Power[2]	2800 Watts
Sensitivity(1w/1m)[3]	97 dB
Frequency Range[4]	39 ~ 1000Hz
Minimum Impedance(Zmin)	7.0 ohm
Voice Coil Diameter	115mm / 4.5inch
Voice Coil Material	Copper
Former Material	Glass Fiber
Voice Coil Winding Depth	31 mm
Number of layers	2(inside/outside)
Magnet gap depth	14 mm
Basket	Cast Aluminum
Flux Density	1.1 T
Magnet material	Neodymium

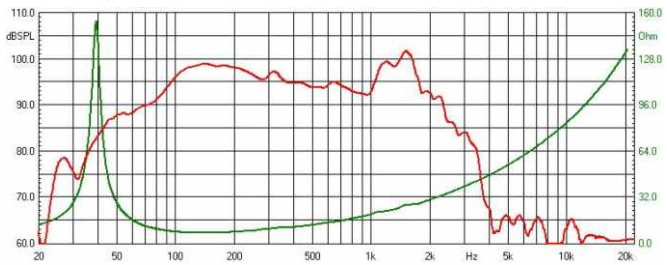
THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	39 Hz
DC resistance	Re	5.4 ohm
Mechanical factor	Qms	11
Electrical factor	Qes	0.41
Total factor	Qts	0.39
Mechanical compliance	Cms	0.06 m/N
Mechanical resistance of suspension losses	Rms	5.5mech-ohm
Effective Moving Mass	Mms	253 g
Half-space efficiency	Eff	2.0%
BL Factor	BL	28.8 T.m
Equivalent Cas air load	Vas	137 liters
Effective piston area	Sd	0.1238 m^2
Max. linear excursion[6]	Xmax	11 mm
Voice coil inductance	Le1K	2.4 mH
Efficiency Bandwidth Product	EBP	95

MOUNTING INFORMATION

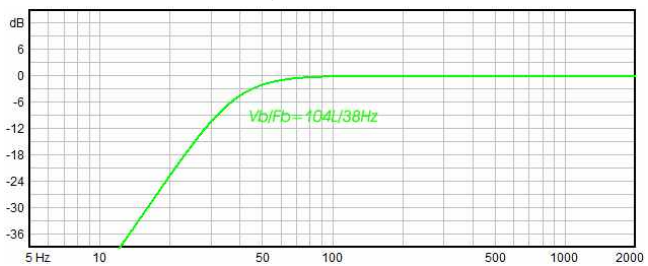
Overall Diameter	461 mm
Bolt Circle Diameter	439 mm
Bolt Hole Diameter	6.5x9.5 mm
Baffle Cutout Diameter	424 mm
Overall Depth	220 mm
Net Weight	11.6 kg
Shipping Weight	12.6 kg
Shipping Box	500x500x2 50mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 104L/38Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system with a high level 25Hz sine wave preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

ND9118s

☀ 18 inch ☀ 900 Watts
☀ 96 dB ☀ 31 ~ 1000 Hz

KEY FEATURES:

① 1800 W continuous program power capacity
② 96dB Sensitivity 1w/1m
③ 31Hz ~1000Hz frequency response range
④ 4" inside/outside voice coil
⑤ Double silicone spider with optimized compliance
⑥ Neodymium magnet allows a vrey light yet powerful motor assembly
⑦ Ventilated voice coil gap for reduced power compression
⑧ Ideal for subwoofer application

GENERAL SPECIFICATIONS

Nominal Diameter	460mm / 18inch
Rated Impedance	8 ohm
Nominal Power handling[1]	750 Watts
Program Power[2]	1500 Watts
Sensitivity(1w/1m)[3]	96 dB
Frequency Range[4]	31 ~ 1000Hz
Minimum Impedance(Zmin)	6.7 ohm
Voice Coil Diameter	100mm / 4inch
Voice Coil Material	Copper
Former Material	Glass Fiber
Voice Coil Winding Depth	30 mm
Number of layers	2(inside/outside)
Magnet gap depth	12 mm
Basket	Cast Aluminum
Flux Density	1.15 T
Magnet material	Neodymium

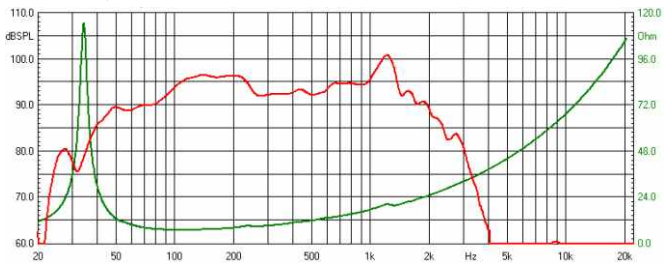
THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	34 Hz
DC resistance	Re	5.3 ohm
Mechanical factor	Qms	12
Electrical factor	Qes	0.58
Total factor	Qts	0.55
Mechanical compliance	Cms	0.08 m/N
Mechanical resistance of suspension losses	Rms	4.6mech-ohm
Effective Moving Mass	Mms	252 g
Half-space efficiency	Eff	1.2%
BL Factor	BL	22.3 T.m
Equivalent Cas air load	Vas	175 liters
Effective piston area	Sd	0.1219 m^2
Max. linear excursion[6]	Xmax	11 mm
Voice coil inductance	Le1K	2 mH
Efficiency Bandwidth Product	EBP	58

MOUNTING INFORMATION

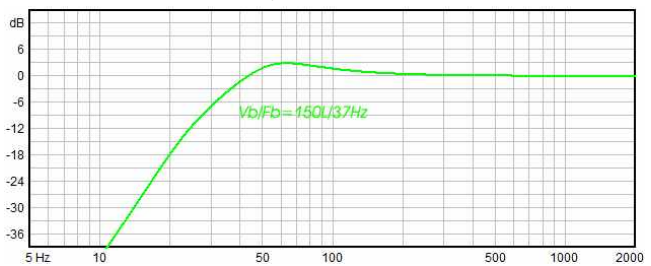
Overall Diameter	461 mm
Bolt Circle Diameter	439 mm
Bolt Hole Diameter	6.5x9.5 mm
Baffle Cutout Diameter	424 mm
Overall Depth	212 mm
Net Weight	9.6 kg
Shipping Weight	10.6 kg
Shipping Box	500x500x2 50mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 150L/37Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

ND9115s

☀ 15 inch ☀ 700 Watts
☀ 97 dB ☀ 34 ~ 1500 Hz

KEY FEATURES:

① 1400 W continuous program power capacity
② 97dB sensitivity 1w/1m
③ 100mm(4") inside/outside winding copper voice coil
⑤ Neodymium magnet allows a vrey light yet powerful motor assembly
⑥ Ventilated voice coil gap for reduced power compression
⑦ Ideal for compact subwoofer application

GENERAL SPECIFICATIONS

Nominal Diameter	380mm /15inch
Rated Impedance	8 ohm
Nominal Power handling[1]	700 Watts
Program Power[2]	1400 Watts
Sensitivity(1w/1m)[3]	97 dB
Frequency Range[4]	44 ~ 1500Hz
Minimum Impedance(Zmin)	7.5 ohm
Voice Coil Diameter	100mm /4inch
Voice Coil Material	Copper
Former Material	Glassfiber
Voice Coil Winding Depth	24 mm
Number of layers	2(inside/outside)
Magnet gap depth	12 mm
Basket	Cast Aluminum
Flux Density	1.15 T
Magnet material	Neodymium

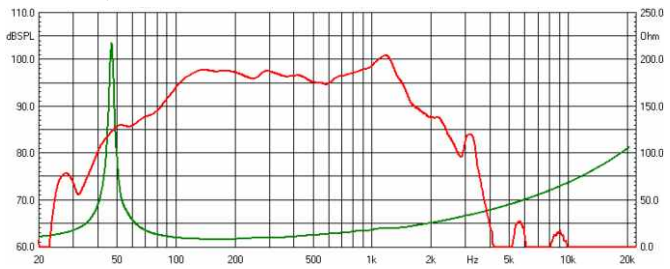
THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	47 Hz
DC resistance	Re	5.4 ohm
Mechanical factor	Qms	15.7
Electrical factor	Qes	0.4
Total factor	Qts	0.39
Mechanical compliance	Cms	0.07 mm/N
Mechanical resistance of suspension losses	Rms	3 mech-ohm
Effective Moving Mass	Mms	162 g
Half-space efficiency	Eff	1.9%
BL Factor	BL	25.4 T.m
Equivalent Cas air load	Vas	77 liters
Effective piston area	Sd	0.0881 m^2
Max. linear excursion[6]	Xmax	9.5 mm
Voice coil inductance	Le1K	1.9 mH
Efficiency Bandwidth Product	EBP	117

MOUNTING INFORMATION

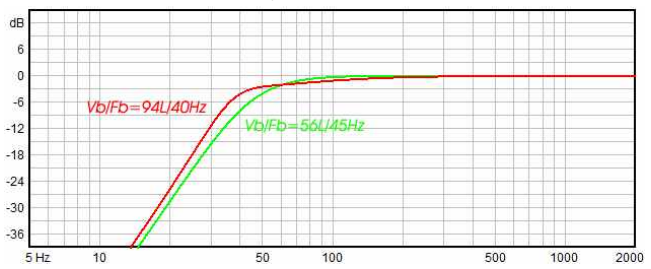
Overall Diameter	393 mm
Bolt Circle Diameter	275 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	355 mm
Overall Depth	182 mm
Net Weight	8.3 kg
Shipping Weight	9 kg
Shipping Box	425x425x2 15mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

ND9415w

☀ 15 inch ☀ 700 Watts
☀ 97 dB ☀ 40 ~ 2500 Hz

KEY FEATURES:

① 1400 W continuous program power capacity
② 97dB sensitivity 1w/1m
③ 100mm(4") high temperature inside/outside voice coil with copper clad aluminum wire
④ Ventilated voice coil gap for reduced power compression
⑤ Neodymium magnet allows a very light yet powerful motor assembly
⑥ Aluminum demodulating ring for low distortion
⑦ Weather protected cone for outdoor usage
⑧ Ideal for compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	380mm /15inch
Rated Impedance	8 ohm
Nominal Power handling[1]	700 Watts
Program Power[2]	1400 Watts
Sensitivity(1w/1m)[3]	97 dB
Frequency Range[4]	40 ~ 2500Hz
Minimum Impedance(Zmin)	7.3 ohm
Voice Coil Diameter	100mm /4inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	22 mm
Number of layers	2(inside/outside)
Magnet gap depth	12 mm
Basket	Cast Aluminum
Flux Density	1.2T
Magnet material	Neodymium

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	40.5 Hz
DC resistance	Re	5.7 ohm
Mechanical factor	Qms	9.3
Electrical factor	Qes	0.33
Total factor	Qts	0.32
Mechanical compliance	Cms	0.11 mm/N
Mechanical resistance of suspension losses	Rms	3.9 mech-ohm
Effective Moving Mass	Mms	142 g
Half-space efficiency	Eff	2.0%
BL Factor	BL	25 T.m
Equivalent Cas air load	Vas	104 liters
Effective piston area	Sd	0.0830 m^2
Max. linear excursion[6]	Xmax	7 mm
Voice coil inductance	Le1K	1.35 mH
Efficiency Bandwidth Product	EBP	122

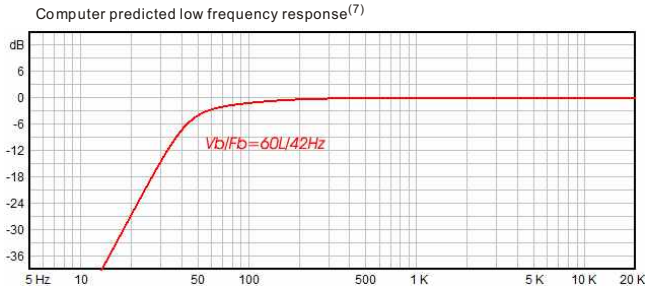
MOUNTING INFORMATION

Overall Diameter	393 mm
Bolt Circle Diameter	375 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	355 mm
Overall Depth	182 mm
Net Weight	8.3 kg
Shipping Weight	9.3 kg
Shipping Box	420x420x2 05mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system with a high level 25Hz sine wave preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

J6115nd

☀ 15 inch ☀ 600 Watts
☀ 99 dB ☀ 37 ~ 2800 Hz

KEY FEATURES:

① 1200 W continuous program power capacity
② 99dB sensitivity 1w/1m
③ 86mm(3.5") inside/outside winding copper clad aluminum voice coil
④ Forced air ventilation on U-yoke for minimum power compressoin
⑤ Neodymium magnet allows a vrey light yet powerful motor assembly
⑥ Paper cone made in the U.S.A
⑦ Ideal for high quality compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	380mm /15inch
Rated Impedance	8 ohm
Nominal Power handling[1]	600 Watts
Program Power[2]	1200 Watts
Sensitivity(1w/1m)[3]	99 dB
Frequency Range[4]	37 ~ 2800Hz
Minimum Impedance(Zmin)	6.6 ohm
Voice Coil Diameter	86mm /3.5inch
Voice Coil Material	CCAW
Former Material	Polyimide
Voice Coil Winding Depth	16.5 mm
Number of layers	2(inside/outside)
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.2 T
Magnet material	Neodymium

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	38 Hz
DC resistance	Re	5.6 ohm
Mechanical factor	Qms	7.8
Electrical factor	Qes	0.31
Total factor	Qts	0.3
Mechanical compliance	Cms	0.18 mm/N
Mechanical resistance of suspension losses	Rms	3 mech-ohm
Effective Moving Mass	Mms	98 g
Half-space efficiency	Eff	3.1%
BL Factor	BL	20.4 T.m
Equivalent Cas air load	Vas	187 liters
Effective piston area	Sd	0.0866 m^2
Max. linear excursion[6]	Xmax	6 mm
Voice coil inductance	Le1K	1.4 mH
Efficiency Bandwidth Product	EBP	122

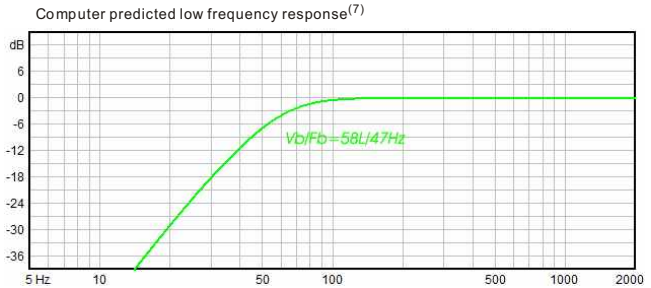
MOUNTING INFORMATION

Overall Diameter	393 mm
Bolt Circle Diameter	275 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	355 mm
Overall Depth	172 mm
Net Weight	6.1 kg
Shipping Weight	6.8 kg
Shipping Box	425x425x2 15mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 58L/47Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

ND9015w

☀ 15 inch ☀ 500 Watts
☀ 99 dB ☀ 45 ~ 2900 Hz

KEY FEATURES:

① 1000 W continuous program power capacity
② 99dB sensitivity 1w/1m
③ 76mm(3") inside/outside winding copper clad aluminum voice coil
④ FEA optimized neodymium magnet assembly allows the highest force factor and excursion capability
⑤ Paper cone made in the U.S.A
⑥ Optimized for the use in compact bass reflex enclosure or line array systems

GENERAL SPECIFICATIONS

Nominal Diameter	380mm /15inch
Rated Impedance	8 ohm
Nominal Power handling[1]	500 Watts
Program Power[2]	1000 Watts
Sensitivity(1w/1m)[3]	99 dB
Frequency Range[4]	45 ~ 2900Hz
Minimum Impedance(Zmin)	6.7 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	CCAW
Former Material	Glassfiber
Voice Coil Winding Depth	17 mm
Number of layers	2(inside/outside)
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.2 T
Magnet material	Neodymium

THIELE – SMALL PARAMETERS[5]

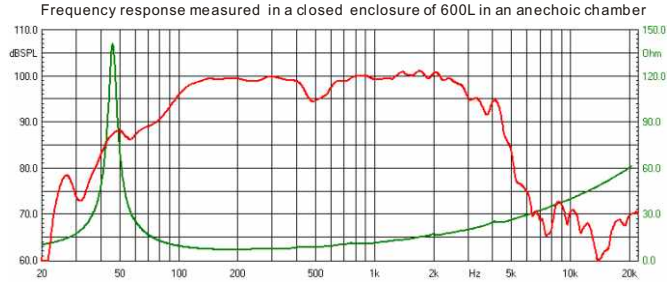
Resonance frequency	Fs	46 Hz
DC resistance	Re	5.3 ohm
Mechanical factor	Qms	10.4
Electrical factor	Qes	0.41
Total factor	Qts	0.39
Mechanical compliance	Cms	0.13 mm/N
Mechanical resistance of suspension losses	Rms	2.6 mech-ohm
Effective Moving Mass	Mms	92 g
Half-space efficiency	Eff	3.4%
BL Factor	BL	18.7 T.m
Equivalent Cas air load	Vas	145 liters
Effective piston area	Sd	0.0903 m^2
Max. linear excursion[6]	Xmax	6 mm
Voice coil inductance	Le1K	0.99 mH
Efficiency Bandwidth Product	EBP	112

MOUNTING INFORMATION

Overall Diameter	393 mm
Bolt Circle Diameter	275 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	355 mm
Overall Depth	166 mm
Net Weight	5.5 kg
Shipping Weight	6.2 kg
Shipping Box	425x425x2 15mm

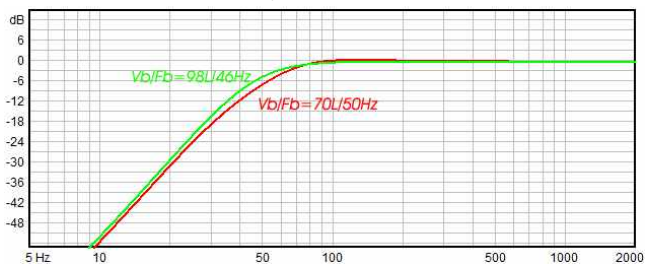
Also available in 16ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response(7)



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test at 23 Celsius degree environment.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

ND9412w

☀ *12 inch* ☀ *550 Watts*
☀ *96 dB* ☀ *61 ~ 2800 Hz*

KEY FEATURES:

① 1100 W continuous program power capacity
② Sensitivity: 96dB 1w/1m
③ 100mm(4") edgewound aluminum voice coil
④ Special treatment on cone in house for excellent performance
⑤ Neodymium magnet allows a light yet powerful motor assembly
⑥ Optimized for the use in line array systems or compact bass reflex enclosure

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	16 ohm
Nominal Power handling[1]	550 Watts
Program Power[2]	1100 Watts
Sensitivity(1w/1m)[3]	96 dB
Frequency Range[4]	61 ~ 2800Hz
Minimum Impedance(Zmin)	12.7 ohm
Voice Coil Diameter	100mm /4inch
Voice Coil Material	Flat Aluminum
Former Material	Fiberglass
Voice Coil Winding Depth	23 mm
Number of layers	1
Magnet gap depth	12 mm
Basket	Cast Aluminum
Flux Density	1.2 T
Magnet material	Neodymium

THIELE – SMALL PARAMETERS[5]

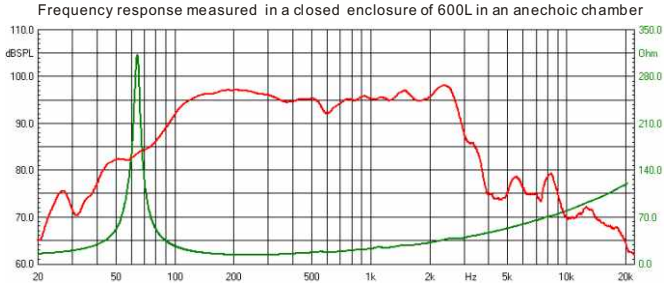
Resonance frequency	Fs	64 Hz
DC resistance	Re	11 ohm
Mechanical factor	Qms	14
Electrical factor	Qes	0.51
Total factor	Qts	0.49
Mechanical compliance	Cms	0.07 mm/N
Mechanical resistance of suspension losses	Rms	2.39 mech-ohm
Effective Moving Mass	Mms	82 g
Half-space efficiency	Eff	1.6%
BL Factor	BL	26.9 T.m
Equivalent Cas air load	Vas	31 liters
Effective piston area	Sd	0.0552 m^2
Max. linear excursion[6]	Xmax	8 mm
Voice coil inductance	Le1K	2.1 mH
Efficiency Bandwidth Product	EBP	125

MOUNTING INFORMATION

Overall Diameter	313 mm
Bolt Circle Diameter	294 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	285 mm
Overall Depth	133 mm
Net Weight	7.6 kg
Shipping Weight	8.3 kg
Shipping Box	345x345x1 80mm

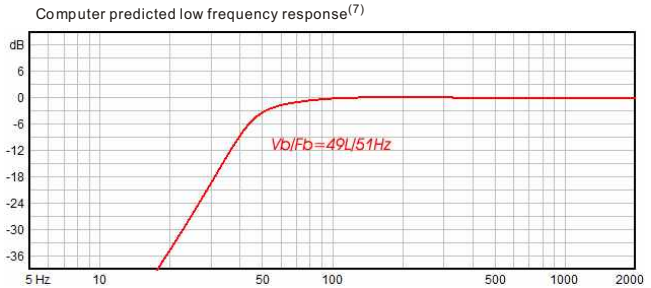
Also available in 8ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 49L/51Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

J6112nd

☀ 12 inch ☀ 500 Watts
☀ 97 dB ☀ 45 ~ 3000 Hz

KEY FEATURES:

① 1000 W continuous program power capacity
② 97dB sensitivity 1w/1m
③ 86mm(3.5") inside/outside winding copper clad aluminum voice coil
④ Forced air ventilation on U-yoke for minimum power compressoin
⑤ Neodymium magnet allows a vrey light yet powerful motor assembly
⑥ Paper cone made in the U.S.A
⑦ Ideal for high quality compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	8 ohm
Nominal Power handling[1]	500 Watts
Program Power[2]	1000 Watts
Sensitivity(1w/1m)[3]	97 dB
Frequency Range[4]	45 ~ 3000Hz
Minimum Impedance(Zmin)	6.8 ohm
Voice Coil Diameter	86mm /3.5inch
Voice Coil Material	CCAW
Former Material	Polyimide
Voice Coil Winding Depth	16.5 mm
Number of layers	2(inside/outside)
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.2 T
Magnet material	Neodymium

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	47 Hz
DC resistance	Re	5.6 ohm
Mechanical factor	Qms	10.4
Electrical factor	Qes	0.28
Total factor	Qts	0.27
Mechanical compliance	Cms	0.17 mm/N
Mechanical resistance of suspension losses	Rms	1.96 mech-ohm
Effective Moving Mass	Mms	69 g
Half-space efficiency	Eff	2.4%
BL Factor	BL	20.3 T.m
Equivalent Cas air load	Vas	65 liters
Effective piston area	Sd	0.0531 m^2
Max. linear excursion[6]	Xmax	6 mm
Voice coil inductance	Le1K	1.3 mH
Efficiency Bandwidth Product	EBP	167

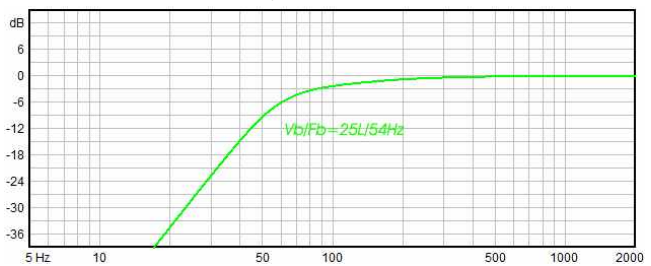
MOUNTING INFORMATION

Overall Diameter	316 mm
Bolt Circle Diameter	297 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	283 mm
Overall Depth	153 mm
Net Weight	5.1 kg
Shipping Weight	5.8 kg
Shipping Box	345x345x1 80mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 25L/54Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

ND9012w

☀ *12 inch* ☀ *400 Watts*
☀ *98.5 dB* ☀ *44 ~ 3500 Hz*

KEY FEATURES:

① 800 W continuous program power capacity
② High efficiency: 98.5dB 1w/1m
③ 76mm(3") aluminum voice coil wounded on Kapton former
④ Vented on former, dual-forced air ventilation magnet system for heat dispersion and minimum power compression
⑤ FEA optimized neodymium magnet assembly allows the highest force factor and excursion capability
⑥ Special treatment on cone in house for excellent performance
⑦ UKM paper cone
⑧ Optimized for the use in line array systems or compact bass reflex enclosure

GENERAL SPECIFICATIONS	
Nominal Diameter	300mm /12inch
Rated Impedance	8 ohm
Nominal Power handling[1]	400 Watts
Program Power[2]	800 Watts
Sensitivity(1w/1m)[3]	98.5 dB
Frequency Range[4]	44 ~ 3500Hz
Minimum Impedance(Zmin)	7.2 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	Aluminum
Former Material	Polyimide
Voice Coil Winding Depth	17.5 mm
Number of layers	2
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.2 T
Magnet material	Neodymium

THIELE – SMALL PARAMETERS[5]		
Resonance frequency	Fs	46 Hz
DC resistance	Re	5.6 ohm
Mechanical factor	Qms	7.9
Electrical factor	Qes	0.26
Total factor	Qts	0.25
Mechanical compliance	Cms	0.19 mm/N
Mechanical resistance of suspension losses	Rms	2.26 mech-ohm
Effective Moving Mass	Mms	62 g
Half-space efficiency	Eff	3.1%
BL Factor	BL	19.8 T.m
Equivalent Cas air load	Vas	81 liters
Effective piston area	Sd	0.0552 m^2
Max. linear excursion[6]	Xmax	6.5 mm
Voice coil inductance	Le1K	0.88 mH
Efficiency Bandwidth Product	EBP	177

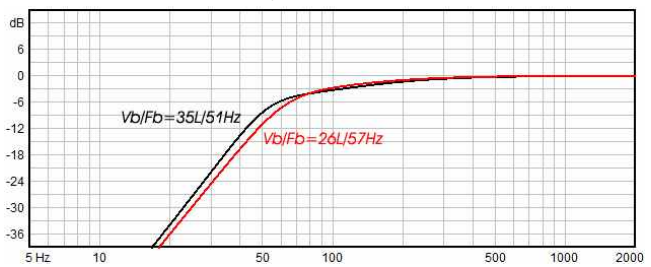
MOUNTING INFORMATION	
Overall Diameter	316 mm
Bolt Circle Diameter	297 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	283 mm
Overall Depth	144 mm
Net Weight	4.4 kg
Shipping Weight	5.1 kg
Shipping Box	345x345x1 80mm

Also available in 16ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test at 23 Celsius degree environment.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

ND9512m/16

☀ 12 inch ☀ 400 Watts
☀ 100 dB ☀ 58 ~ 3100 Hz

KEY FEATURES:

① 800 W continuous program power capacity
② High efficiency: 100dB 1w/1m
③ Smooth frequency response up to 3.1kHz
④ 76mm(3") inside/outside aluminum voice coil wounded on fiberglass former
⑤ High grade neodymium magnet allows a very light yet powerful motor assembly
⑥ Special treatment on cone in house for excellent perfromance
⑦ UKM paper cone
⑧ Optimized for the use in line array systems or compact bass reflex enclosure

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	8 ohm
Nominal Power handling[1]	400 Watts
Program Power[2]	800 Watts
Sensitivity(1w/1m)[3]	100dB
Frequency Range[4]	58 ~ 3100Hz
Minimum Impedance(Zmin)	13.2 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	Aluminum
Former Material	Fiber glass
Voice Coil Winding Depth	16 mm
Number of layers	2(inside/outside)
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.45 T
Magnet material	Neodymium

THIELE – SMALL PARAMETERS[5]

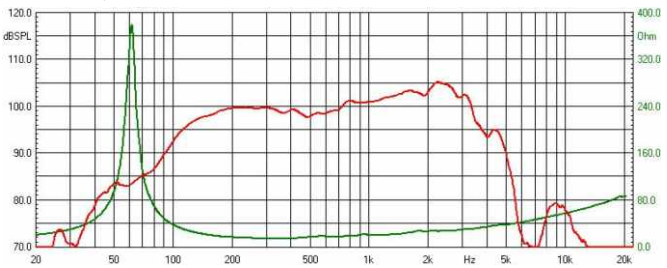
Resonance frequency	Fs	62 Hz
DC resistance	Re	11.6 ohm
Mechanical factor	Qms	10
Electrical factor	Qes	0.32
Total factor	Qts	0.31
Mechanical compliance	Cms	0.13 mm/N
Mechanical resistance of suspension losses	Rms	1.93 mech-ohm
Effective Moving Mass	Mms	51 g
Half-space efficiency	Eff	3.9%
BL Factor	BL	26.7 T.m
Equivalent Cas air load	Vas	55 liters
Effective piston area	Sd	0.0552 m^2
Max. linear excursion[6]	Xmax	5.5 mm
Voice coil inductance	Le1K	0.93 mH
Efficiency Bandwidth Product	EBP	193

MOUNTING INFORMATION

Overall Diameter	316 mm
Bolt Circle Diameter	297 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	283 mm
Overall Depth	140 mm
Net Weight	5 kg
Shipping Weight	5.7 kg
Shipping Box	345x345x1 80mm

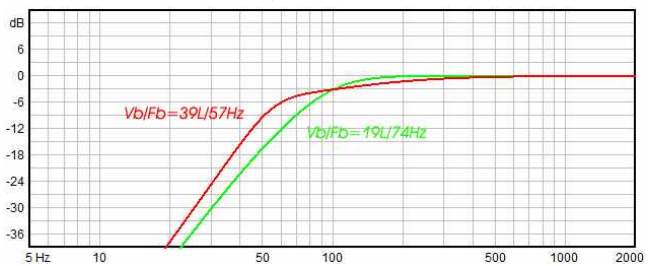
Also available in 8ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system after a high level 25Hz sine wave preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

ND9512m

☀ 12 inch ☀ 400 Watts
☀ 101 dB ☀ 43 ~ 3000 Hz

KEY FEATURES:

① 800 W continuous program power capacity
② High efficiency: 101dB 1w/1m
③ Smooth frequency response up to 3kHz
④ 76mm(3") aluminum voice coil wounded on Kapton former
⑤ High grade neodymium magnet allows a very light yet powerful motor assembly
⑥ Special treated cloth edge for reducing distortion
⑦ Optimized for the use in line array systems or compact reflex enclosure

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	8 ohm
Nominal Power handling[1]	400 Watts
Program Power[2]	800 Watts
Sensitivity(1w/1m)[3]	101dB
Frequency Range[4]	43 ~ 3000Hz
Minimum Impedance(Zmin)	7.6 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	Aluminum
Former Material	Polyimide
Voice Coil Winding Depth	18 mm
Number of layers	2
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.45 T
Magnet material	Neodymium

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	55 Hz
DC resistance	Re	5.6 ohm
Mechanical factor	Qms	8.1
Electrical factor	Qes	0.17
Total factor	Qts	0.15
Mechanical compliance	Cms	0.24 mm/N
Mechanical resistance of suspension losses	Rms	1.84 mech-ohm
Effective Moving Mass	Mms	53 g
Half-space efficiency	Eff	5.12%
BL Factor	BL	23 T.m
Equivalent Cas air load	Vas	94 liters
Effective piston area	Sd	0.0531 m^2
Max. linear excursion[6]	Xmax	6.5 mm
Voice coil inductance	Le1K	0.68 mH
Efficiency Bandwidth Product	EBP	343

MOUNTING INFORMATION

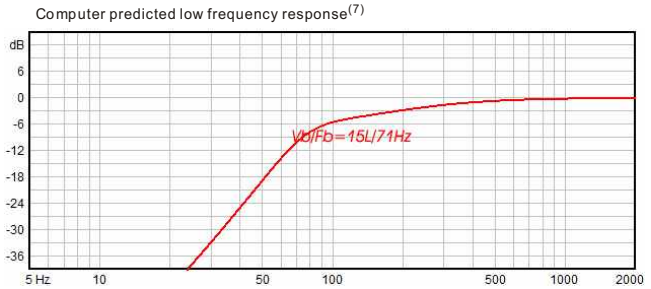
Overall Diameter	316 mm
Bolt Circle Diameter	297 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	283 mm
Overall Depth	140 mm
Net Weight	5 kg
Shipping Weight	5.7 kg
Shipping Box	345x345x1 80mm

Also available in 16ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 15L/71Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test at 23 Celsius degree environment.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

ND9510m

☀ 10 inch ☀ 350 Watts
☀ 99 dB ☀ 60 ~ 4300 Hz

KEY FEATURES:

① 700 W continuous program power capacity
② High efficiency: 99dB 1w/1m
③ Smooth frequency response up to 4.3kHz
④ 76mm(3") aluminum voice coil wounded on Kapton former
⑤ High grade neodymium magnet allows a very light yet powerful motor assembly
⑥ Special treated cloth edge for reducing distortion
⑦ Optimized for the use in line array systems or compact reflex enclosure

GENERAL SPECIFICATIONS

Nominal Diameter	250mm /10inch
Rated Impedance	8 ohm
Nominal Power handling[1]	350 Watts
Program Power[2]	700 Watts
Sensitivity(1w/1m)[3]	99 dB
Frequency Range[4]	60 ~ 4300Hz
Minimum Impedance(Zmin)	7.8 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	Aluminum
Former Material	Polyimide
Voice Coil Winding Depth	18 mm
Number of layers	2
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.45 T
Magnet material	Neodymium

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	61.5 Hz
DC resistance	Re	5.6 ohm
Mechanical factor	Qms	9.3
Electrical factor	Qes	0.17
Total factor	Qts	0.16
Mechanical compliance	Cms	0.16 mm/N
Mechanical resistance of suspension losses	Rms	1.7 mech-ohm
Effective Moving Mass	Mms	42 g
Half-space efficiency	Eff	3.7%
BL Factor	BL	23 T.m
Equivalent Cas air load	Vas	28 liters
Effective piston area	Sd	0.0353 m^2
Max. linear excursion[6]	Xmax	6.5 mm
Voice coil inductance	Le1K	0.6 mH
Efficiency Bandwidth Product	EBP	360

MOUNTING INFORMATION

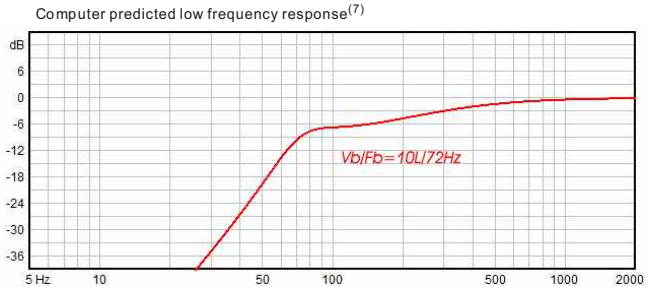
Overall Diameter	261 mm
Bolt Circle Diameter	246 mm
Bolt Hole Diameter	5.5 mm
Baffle Cutout Diameter	228 mm
Overall Depth	121 mm
Net Weight	4.6 kg
Shipping Weight	5.1 kg
Shipping Box	295x295x1 55mm

Also available in 16ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 10L/72Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test at 23 Celsius degree environment.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

ND9010w

☀ 10 inch ☀ 350 Watts
☀ 96 dB ☀ 62 ~ 3500 Hz

KEY FEATURES:

① 700 W continuous program power capacity
② Sensitivity: 96dB 1w/1m
③ 76mm(3") aluminum voice coil wounded on Kapton former
④ Vented on former, dual-forced air ventilation magnet system for heat dispersion and minimum power compression
⑤ FEA optimized neodymium magnet assembly allows the highest force factor and excursion capability
⑥ Optimized for the use in line array systems or compact bass reflex enclosure

GENERAL SPECIFICATIONS

Nominal Diameter	250mm /10inch
Rated Impedance	8 ohm
Nominal Power handling[1]	350 Watts
Program Power[2]	700 Watts
Sensitivity(1w/1m)[3]	96 dB
Frequency Range[4]	62 ~ 3500Hz
Minimum Impedance(Zmin)	7.8 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	Aluminum
Former Material	Polyimide
Voice Coil Winding Depth	17.5 mm
Number of layers	2
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.2 T
Magnet material	Neodymium

THIELE – SMALL PARAMETERS[5]

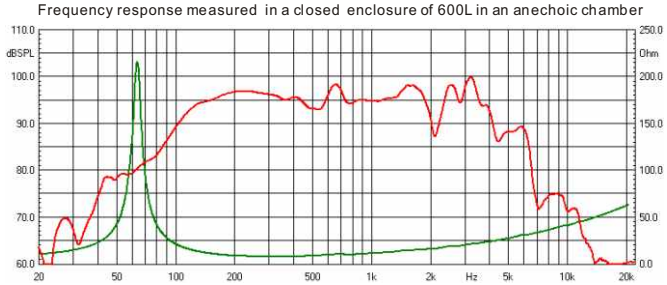
Resonance frequency	Fs	64 Hz
DC resistance	Re	5.6 ohm
Mechanical factor	Qms	11
Electrical factor	Qes	0.3
Total factor	Qts	0.29
Mechanical compliance	Cms	0.15 mm/N
Mechanical resistance of suspension losses	Rms	1.5 mech-ohm
Effective Moving Mass	Mms	43 g
Half-space efficiency	Eff	2.1%
BL Factor	BL	18 T.m
Equivalent Cas air load	Vas	28 liters
Effective piston area	Sd	0.0353 m^2
Max. linear excursion[6]	Xmax	6.5 mm
Voice coil inductance	Le1K	0.9 mH
Efficiency Bandwidth Product	EBP	213

MOUNTING INFORMATION

Overall Diameter	261 mm
Bolt Circle Diameter	246 mm
Bolt Hole Diameter	5.5 mm
Baffle Cutout Diameter	228 mm
Overall Depth	121 mm
Net Weight	3.7 kg
Shipping Weight	4.2 kg
Shipping Box	295x295x1 55mm

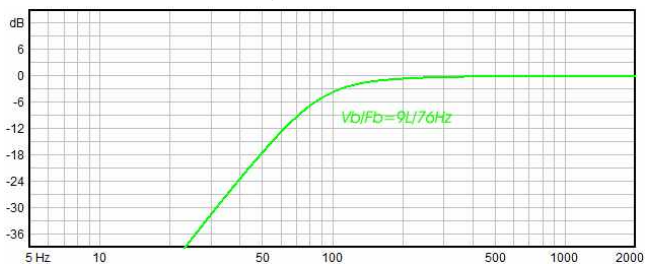
Also available in 16ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 9L/76Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

ND9410m/16II

☀ *10 inch* ☀ *300 Watts*
☀ *95 dB* ☀ *65 ~ 4500 Hz*

KEY FEATURES:

① 600 W continuous program power capacity
② High SPL, superb quality sound
③ 2.5" pure aluminum voice coi wounded on polyimide former
④ High grade neodymium magnet system, a very light weight
⑤ Aluminum demodulating ring for low distortion
⑥ Ideal for mid-bass or line array applications

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	8 ohm
Nominal Power handling[1]	300 Watts
Program Power[2]	600 Watts
Sensitivity(1w/1m)[3]	95 dB
Frequency Range[4]	65 ~ 4500Hz
Minimum Impedance(Zmin)	14.6 ohm
Voice Coil Diameter	65mm /2.5inch
Voice Coil Material	Pure Aluminum
Former Material	Polyimide
Voice Coil Winding Depth	15 mm
Number of layers	2(inside/outside)
Magnet gap depth	8 mm
Basket	Cast Aluminum
Flux Density	1.3 T
Magnet material	Neodymium

THIELE – SMALL PARAMETERS[5]

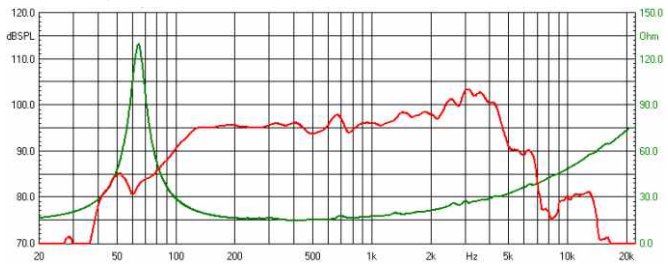
Resonance frequency	Fs	65 Hz
DC resistance	Re	12.6 ohm
Mechanical factor	Qms	5.4
Electrical factor	Qes	0.58
Total factor	Qts	0.52
Mechanical compliance	Cms	0.16 mm/N
Mechanical resistance of suspension losses	Rms	2.9 mech-ohm
Effective Moving Mass	Mms	38 g
Half-space efficiency	Eff	1.2%
BL Factor	BL	18.4 T.m
Equivalent Cas air load	Vas	27 liters
Effective piston area	Sd	0.0353 m^2
Max. linear excursion[6]	Xmax	6 mm
Voice coil inductance	Le1K	0.84 mH
Efficiency Bandwidth Product	EBP	112

MOUNTING INFORMATION

Overall Diameter	261 mm
Bolt Circle Diameter	246 mm
Bolt Hole Diameter	5.5 mm
Baffle Cutout Diameter	228 mm
Overall Depth	115 mm
Net Weight	2.3 kg
Shipping Weight	2.8 kg
Shipping Box	275x275x1 30mm

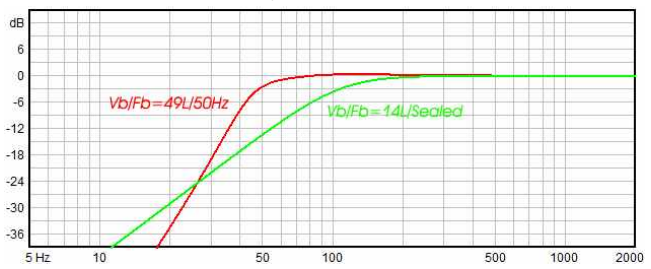
Also available in 8ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system with a high level 25Hz sine wave preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

ND9608m/16

- 8 inch
- 300 Watts
- 94.5 dB
- 70 ~ 5000 Hz

KEY FEATURES:

① 600 W continuous program power capacity
② 94.5dB Sensitivity 1w/1m
③ Inverted dust cup for better coupling to a phase plug
④ 2.5" inside/outside high temperature aluminum voice coil
⑤ High grade neodymium magnet system, a very light weight
⑥ Aluminum demodulating ring for low distortion
⑦ Ventilated voice coil gap for reduced power compression
⑧ Optimized for the use in line array systems

GENERAL SPECIFICATIONS

Nominal Diameter	200mm /8inch
Rated Impedance	16 ohm
Nominal Power handling[1]	300 Watts
Program Power[2]	600 Watts
Sensitivity(1w/1m)[3]	94.5 dB
Frequency Range[4]	70 ~ 5000Hz
Minimum Impedance(Zmin)	15.2 ohm
Voice Coil Diameter	65mm /2.5inch
Voice Coil Material	Pure Aluminum
Former Material	Polyimide
Voice Coil Winding Depth	15 mm
Number of layers	2(Inside/Outside)
Magnet gap depth	8 mm
Basket	Cast Aluminum
Flux Density	1.2T
Magnet material	Neodymium

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	70 Hz
DC resistance	Re	12.6 ohm
Mechanical factor	Qms	2.9
Electrical factor	Qes	0.41
Total factor	Qts	0.36
Mechanical compliance	Cms	0.22 mm/N
Mechanical resistance of suspension losses	Rms	3.7 mech-ohm
Effective Moving Mass	Mms	24.1 g
Half-space efficiency	Eff	1.4 %
BL Factor	BL	18 T.m
Equivalent Cas air load	Vas	17 liters
Effective piston area	Sd	0.0238 m^2
Max. linear excursion[6]	Xmax	6 mm
Voice coil inductance	Le1K	0.63 mH
Efficiency Bandwidth Product	EBP	170

MOUNTING INFORMATION

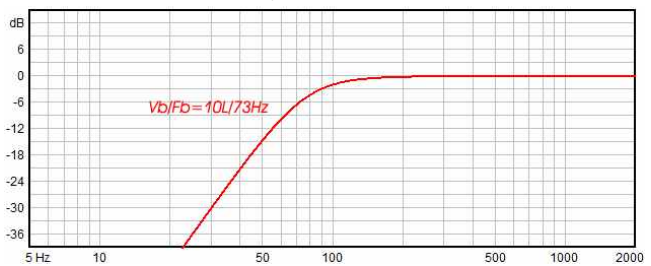
Overall Diameter	208.5 mm
Bolt Circle Diameter	196 mm
Bolt Hole Diameter	5.5 mm
Baffle Cutout Diameter	187 mm
Overall Depth	102 mm
Net Weight	2 kg
Shipping Weight	2.3 kg
Shipping Box	220x220x110mm

Also available in 8ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 10L/73Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system with a high level 25Hz sine wave preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

ND9408m/16

- 8 inch
- 250 Watts
- 94 dB
- 86 ~ 6000 Hz

KEY FEATURES:

① 500 W continuous program power capacity
② High SPL, superb quality sound
③ Inverted dust cup for better coupling to a phase plug
④ 2" copper clad aluminum voice coi wounded on polyimide former
⑤ High grade neodymium magnet system, a very light weight
⑥ Aluminum demodulating ring for low distortion
⑦ Ideal for mid-bass or line array applications

GENERAL SPECIFICATIONS

Nominal Diameter	200mm /8inch
Rated Impedance	16 ohm
Nominal Power handling[1]	250 Watts
Program Power[2]	500 Watts
Sensitivity(1w/1m)[3]	94 dB
Frequency Range[4]	80 ~ 6000Hz
Minimum Impedance(Zmin)	14.6 ohm
Voice Coil Diameter	50mm /2inch
Voice Coil Material	CCAW
Former Material	Polyimide
Voice Coil Winding Depth	14 mm
Number of layers	2(Inside/Outside)
Magnet gap depth	8 mm
Basket	Cast Aluminum
Flux Density	1.2T
Magnet material	Neodymium

THIELE – SMALL PARAMETERS[5]

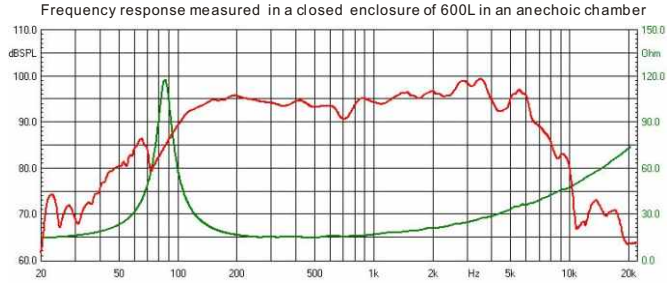
Resonance frequency	Fs	86 Hz
DC resistance	Re	12.6 ohm
Mechanical factor	Qms	5.7
Electrical factor	Qes	0.69
Total factor	Qts	0.61
Mechanical compliance	Cms	0.14 mm/N
Mechanical resistance of suspension losses	Rms	2.3 mech-ohm
Effective Moving Mass	Mms	24.3 g
Half-space efficiency	Eff	1 %
BL Factor	BL	15.5 T.m
Equivalent Cas air load	Vas	9.2 liters
Effective piston area	Sd	0.0216 m^2
Max. linear excursion[6]	Xmax	6 mm
Voice coil inductance	Le1K	0.87 mH
Efficiency Bandwidth Product	EBP	124

MOUNTING INFORMATION

Overall Diameter	200 mm
Bolt Circle Diameter	212 mm
Bolt Hole Diameter	6.2 mm
Baffle Cutout Diameter	180 mm
Overall Depth	95 mm
Net Weight	1.5 kg
Shipping Weight	1.8 kg
Shipping Box	220x220x110mm

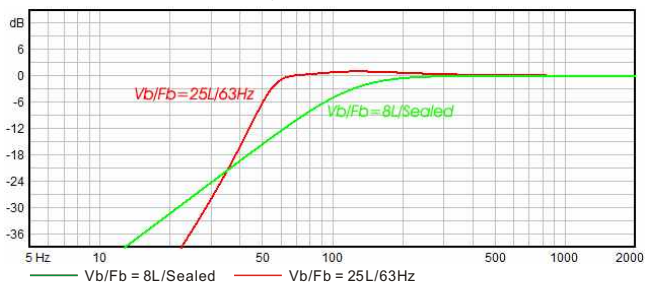
Also available in 8ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

ND9208w Code:19102

- 8 inch
- 250 Watts
- 95 dB
- 63 ~ 4000 Hz

KEY FEATURES:

① 500 W continuous program power capacity
② High sensitivity 95dB/1w/1m
③ Extended smooth response up to 4000Hz
④ 2" high temperature voice coil
⑤ Neodymium magnet system
⑥ Ideal for line array or 2–way fullrange systems.

GENERAL SPECIFICATIONS

Nominal Diameter	200mm /8inch
Rated Impedance	8 ohm
Nominal Power handling[1]	250 Watts
Program Power[2]	500 Watts
Sensitivity(1w/1m)[3]	95 dB
Frequency Range[4]	63 ~ 4000Hz
Minimum Impedance(Zmin)	6.7 ohm
Voice Coil Diameter	50mm /2inch
Voice Coil Material	Copper
Former Material	Polyimide
Voice Coil Winding Depth	18 mm
Number of layers	2(inside/outside)
Magnet gap depth	8 mm
Basket	Cast Aluminum
Flux Density	1.6T
Magnet material	Neodymium

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	69 Hz
DC resistance	Re	5.3 ohm
Mechanical factor	Qms	5.55
Electrical factor	Qes	0.29
Total factor	Qts	0.27
Mechanical compliance	Cms	0.2 mm/N
Mechanical resistance of suspension losses	Rms	2.06 mech-ohm
Effective Moving Mass	Mms	26.3 g
Half-space efficiency	Eff	1.5%
BL Factor	BL	14.5 T.m
Equivalent Cas air load	Vas	13.4 liters
Effective piston area	Sd	0.0219 m^2
Max. linear excursion[6]	Xmax	6.5 mm
Voice coil inductance	Le1K	0.54 mH
Efficiency Bandwidth Product	EBP	237

MOUNTING INFORMATION

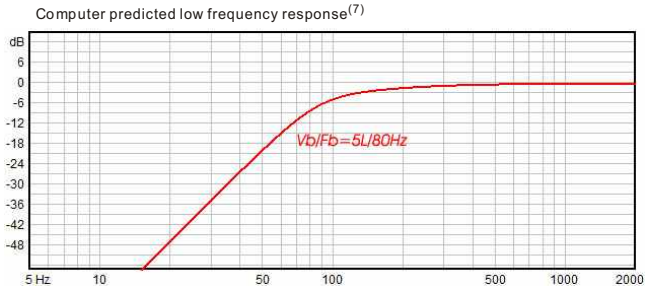
Overall Diameter	200 mm
Bolt Circle Diameter	212 mm
Bolt Hole Diameter	5.5 mm
Baffle Cutout Diameter	180 mm
Overall Depth	100 mm
Net Weight	2.4 kg
Shipping Weight	2.6 kg
Shipping Box	220x220x110mm

Also available in 16ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 5L/80Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test at 23 Celsius degree environment.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

AIOO8nd

- 8 inch
- 250 Watts
- 94 dB
- 85 ~ 4500 Hz

KEY FEATURES:

① 500 W continuous program power capacity
② 94dB Sensitivity 1w/1m
③ 2.5" copper clad aluminum voice coil
④ High grade neodymium magnet system, a very light weight
⑤ Ventilated voice coil gap for reduced power compression
⑥ Optimized for compact multi-way systems or mid-bass application

GENERAL SPECIFICATIONS

Nominal Diameter	200mm /8inch
Rated Impedance	8 ohm
Nominal Power handling[1]	250 Watts
Program Power[2]	500 Watts
Sensitivity(1w/1m)[3]	94 dB
Frequency Range[4]	85 ~ 4500Hz
Minimum Impedance(Zmin)	6.1 ohm
Voice Coil Diameter	65mm /2.5inch
Voice Coil Material	CCAW
Former Material	Fiber Glass
Voice Coil Winding Depth	11 mm
Number of layers	2
Magnet gap depth	8 mm
Basket	Pressed Steel
Flux Density	1.1T
Magnet material	Neodymium

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	88 Hz
DC resistance	Re	5.0 ohm
Mechanical factor	Qms	3.2
Electrical factor	Qes	0.47
Total factor	Qts	0.41
Mechanical compliance	Cms	0.11 mm/N
Mechanical resistance of suspension losses	Rms	5.3 mech-ohm
Effective Moving Mass	Mms	30 g
Half-space efficiency	Eff	1.2 %
BL Factor	BL	13.4 T.m
Equivalent Cas air load	Vas	8.5 liters
Effective piston area	Sd	0.0238 m^2
Max. linear excursion[6]	Xmax	3.5 mm
Voice coil inductance	Le1K	0.56 mH
Efficiency Bandwidth Product	EBP	187

MOUNTING INFORMATION

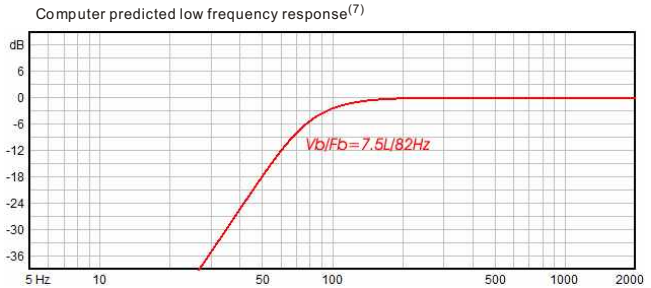
Overall Diameter	210 mm
Bolt Circle Diameter	197 mm
Bolt Hole Diameter	5.5 mm
Baffle Cutout Diameter	180 mm
Overall Depth	94 mm
Net Weight	1.7 kg
Shipping Weight	2.0 kg
Shipping Box	220x220x110mm

Also available in 16ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 7.5L/82Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system with a high level 25Hz sine wave preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

J6021

☀ 21 inch ☀ 1500 Watts
☀ 97 dB ☀ 29 ~ 1000 Hz

KEY FEATURES:

① 1500 W continuous program power capacity
② 97dB Sensitivity 1w/1m
③ 29Hz ~1000Hz frequency response range
④ 4.5" inside/outside voice coil for improved power-handling and durability
⑤ Forced air ventilation onback plate and 15mm top plate for minimum power compressoin
⑥ Double spider for improved excursion control and linearithy
⑦ Ideal for compact subwoofer application

GENERAL SPECIFICATIONS

Nominal Diameter	530mm / 21inch
Rated Impedance	8 ohm
Nominal Power handling[1]	1500 Watts
Program Power[2]	3000 Watts
Sensitivity(1w/1m)[3]	97 dB
Frequency Range[4]	29 ~ 1000Hz
Minimum Impedance(Zmin)	6.4 ohm
Voice Coil Diameter	115mm / 4.5inch
Voice Coil Material	Copper
Former Material	Glass Fiber
Voice Coil Winding Depth	34 mm
Number of layers	2(inside/outside)
Magnet gap depth	15 mm
Basket	Cast Aluminum
Flux Density	1.0 T
Magnet out diameter/Wgt	245mm/190 oz

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	32 Hz
DC resistance	Re	4.8 ohm
Mechanical factor	Qms	15.3
Electrical factor	Qes	0.44
Total factor	Qts	0.43
Mechanical compliance	Cms	0.064 m/N
Mechanical resistance of suspension losses	Rms	3.6mech-ohm
Effective Moving Mass	Mms	373 g
Half-space efficiency	Eff	1.9%
BL Factor	BL	28.8 T.m
Equivalent Cas air load	Vas	260 liters
Effective piston area	Sd	0.1706 m^2
Max. linear excursion[6]	Xmax	13 mm
Voice coil inductance	Le1K	2.7 mH
Efficiency Bandwidth Product	EBP	72

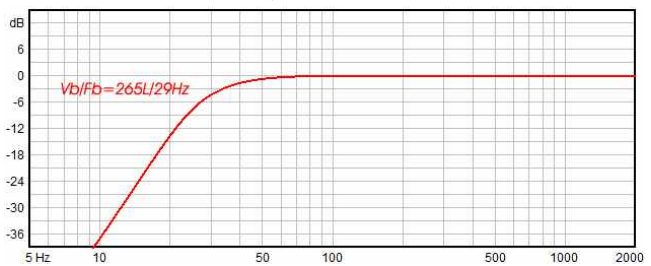
MOUNTING INFORMATION

Overall Diameter	550 mm
Bolt Circle Diameter	530 mm
Bolt Hole Diameter	9 mm
Baffle Cutout Diameter	508 mm
Overall Depth	252 mm
Net Weight	16.5 kg
Shipping Weight	18.7 kg
Shipping Box	585x585x2 70mm

Frequency response measured in free field and loudspeaker mounted in a reflex box with an internal volume of 340 Lites and turned at 40Hz

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 265L/29Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system with a high level 25Hz sine wave preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

I8DMI500

☀ *18 inch* ☀ *1500 Watts*
☀ *96 dB* ☀ *30 ~ 270 Hz*

KEY FEATURES:

① 3000 W continuous program power capacity
② 96dB Sensitivity 1w/1m
③ 30Hz ~270Hz frequency response range
④ 100mm(4") inside/outside copper voice coil
⑤ Aluinium core heat sink for reduce power compression
⑥ Peak to Peak maximum excursion of 54mm
⑦ Double magnets allows a very high force factor and long driver excursion
⑧ Dual spiders design with silicon based dampening control
⑨ Ideal for compact vented or bandpass subwoofer usage

GENERAL SPECIFICATIONS	
Nominal Diameter	460mm / 18inch
Rated Impedance	8 ohm
Nominal Power handling[1]	1500 Watts
Program Power[2]	3000 Watts
Sensitivity(1w/1m)[3]	96 dB
Frequency Range[4]	30 ~ 270Hz
Minimum Impedance(Zmin)	7.5 ohm
Voice Coil Diameter	100mm / 4inch
Voice Coil Material	Copper
Former Material	Glass Fiber
Voice Coil Winding Depth	36 mm
Number of layers	2(inside/outside)
Magnet gap depth	14 mm
Basket	Cast Aluminum
Flux Density	1.1 T
Magnet Out Diameter/Wgt	220mm / 200 oz

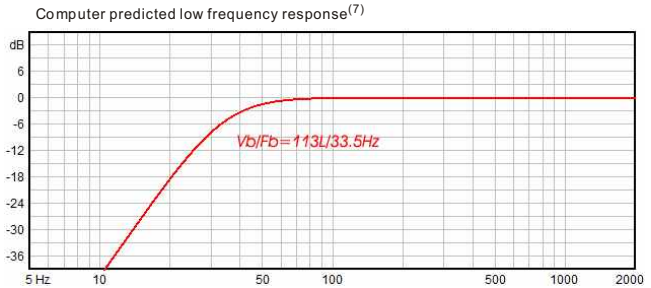
THIELE – SMALL PARAMETERS[5]		
Resonance frequency	Fs	33 Hz
DC resistance	Re	5.1 ohm
Mechanical factor	Qms	10.7
Electrical factor	Qes	0.39
Total factor	Qts	0.38
Mechanical compliance	Cms	0.0838 m/N
Mechanical resistance of suspension losses	Rms	5.4mech-ohm
Effective Moving Mass	Mms	273 g
Half-space efficiency	Eff	1.6%
BL Factor	BL	27 T.m
Equivalent Cas air load	Vas	176 liters
Effective piston area	Sd	0.1225 m^2
Max. linear excursion[6]	Xmax	12 mm
Voice coil inductance	Le1K	14 mH
Efficiency Bandwidth Product	EBP	84

MOUNTING INFORMATION	
Overall Diameter	466.5 mm
Bolt Circle Diameter	442 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	423 mm
Overall Depth	220 mm
Net Weight	15.6 kg
Shipping Weight	17.1 kg
Shipping Box	500x500x2 40mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 113L/33.5Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters are measured with laser system with a high level 25Hz sine wave precondiationing test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.
8. Total internal volume of empty box.

J6218/2 Code:19122

☀ 18 inch ☀ 1600 Watts
☀ 98 dB ☀ 31 ~ 300 Hz

KEY FEATURES:

① 3200 W continuous program power capacity
② 98dB Sensitivity 1w/1m
③ 38Hz ~1000Hz frequency response range
④ 125mm(5") inside/outside voice coil for improved power-handling and durability
⑤ Separated dual spiders assembly has a stronger structure and high linearity of movement
⑥ FEA optimized magnetic circuit
⑦ Increased excursion and power handling over J6218
⑧ Ideal for high quality horn-loaded subwoofer systems

GENERAL SPECIFICATIONS	
Nominal Diameter	460mm / 18inch
Rated Impedance	8 ohm
Nominal Power handling[1]	1600 Watts
Program Power[2]	3200 Watts
Sensitivity(1w/1m)[3]	98 dB
Frequency Range[4]	38 ~ 1000Hz
Minimum Impedance(Zmin)	6.9 ohm
Voice Coil Diameter	125mm / 5inch
Voice Coil Material	Copper
Former Material	Glass Fiber
Voice Coil Winding Depth	30 mm
Number of layers	2(inside/outside)
Magnet gap depth	14 mm
Basket	Cast Aluminum
Flux Density	1.16 T
Magnet Out Diameter/Wgt	280mm / 205 oz

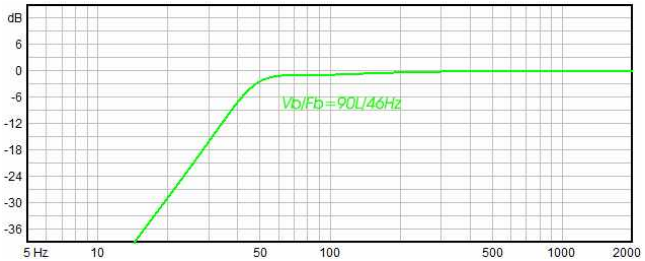
THIELE – SMALL PARAMETERS[5]		
Resonance frequency	Fs	41 Hz
DC resistance	Re	5.2 ohm
Mechanical factor	Qms	12.7
Electrical factor	Qes	0.33
Total factor	Qts	0.32
Mechanical compliance	Cms	0.057 m/N
Mechanical resistance of suspension losses	Rms	5.3 mech-ohm
Effective Moving Mass	Mms	260 g
Half-space efficiency	Eff	2.5 %
BL Factor	BL	32.6 T.m
Equivalent Cas air load	Vas	121 liters
Effective piston area	Sd	0.1232 m^2
Max. linear excursion[6]	Xmax	11.5 mm
Voice coil inductance	Le1K	2.2 mH
Efficiency Bandwidth Product	EBP	124

MOUNTING INFORMATION	
Overall Diameter	461 mm
Bolt Circle Diameter	439 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	424 mm
Overall Depth	217 mm
Net Weight	19 kg
Shipping Weight	20.5 kg
Shipping Box	500x500x2 40mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 90L/46Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters are measured with laser system after a high level 25Hz sine ware preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

J6418

☀ 18 inch ☀ 1500 Watts
☀ 96 dB ☀ 38 ~ 1000 Hz

KEY FEATURES:

① 3000 W continuous program power capacity
② 96dB Sensitivity 1w/1m
③ 38Hz ~1000Hz frequency response range
④ 125mm(5") inside/outside voice coil for improved power-handling and durability
⑤ Double silicone spider with optimized compliance
⑥ Waterproof cone treatment
⑦ Ideal for compact bass-reflex subwoofer or horn-loaded application

GENERAL SPECIFICATIONS

Nominal Diameter	460mm / 18inch
Rated Impedance	8 ohm
Nominal Power handling[1]	1500 Watts
Program Power[2]	3000 Watts
Sensitivity(1w/1m)[3]	96 dB
Frequency Range[4]	38 ~ 1000Hz
Minimum Impedance(Zmin)	7.5 ohm
Voice Coil Diameter	125mm / 5inch
Voice Coil Material	Copper
Former Material	Glass Fiber
Voice Coil Winding Depth	29 mm
Number of layers	2(inside/outside)
Magnet gap depth	12 mm
Basket	Cast Aluminum
Flux Density	1.0 T
Magnet Out Diameter/Wgt	253mm / 155 oz

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	41 Hz
DC resistance	Re	6.0 ohm
Mechanical factor	Qms	13.2
Electrical factor	Qes	0.59
Total factor	Qts	0.56
Mechanical compliance	Cms	0.055 m/N
Mechanical resistance of suspension losses	Rms	5.3 mech-ohm
Effective Moving Mass	Mms	275 g
Half-space efficiency	Eff	1.3 %
BL Factor	BL	27 T.m
Equivalent Cas air load	Vas	117 liters
Effective piston area	Sd	0.1238 m^2
Max. linear excursion[6]	Xmax	11.5 mm
Voice coil inductance	Le1K	2.3 mH
Efficiency Bandwidth Product	EBP	69

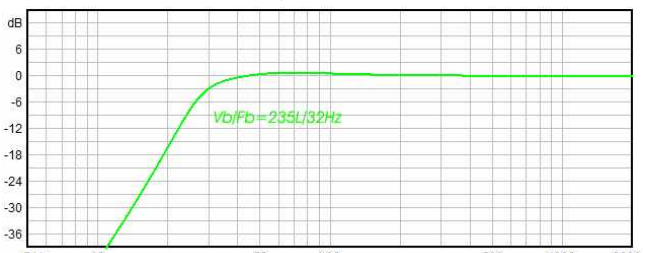
MOUNTING INFORMATION

Overall Diameter	461 mm
Bolt Circle Diameter	439 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	424 mm
Overall Depth	212 mm
Net Weight	15.3 kg
Shipping Weight	16.8 kg
Shipping Box	500x500x2 40mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 235L/32Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters are measured with laser system after a high level 25Hz sine ware preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

J6018/2 Code:19082

☀ 18 inch ☀ 1400 Watts
☀ 97 dB ☀ 31 ~ 300 Hz

KEY FEATURES:

① 2800 W continuous program power capacity
② 97dB Sensitivity 1w/1m
③ 31Hz ~300Hz frequency response range
④ 115mm(4.5") inside/outside copper voice coil
⑤ 29 T.m BL
⑥ UKM paper cone, special treated cone for water protection
⑦ Dual spiders design with silicon based dampening control
⑧ Ideal for 80 to 190 Litres subwoofer cabinets(8)

GENERAL SPECIFICATIONS

Nominal Diameter	460mm / 18inch
Rated Impedance	8 ohm
Nominal Power handling[1]	1400 Watts
Program Power[2]	2800 Watts
Sensitivity(1w/1m)[3]	97 dB
Frequency Range[4]	31 ~ 300Hz
Minimum Impedance(Zmin)	7.3 ohm
Voice Coil Diameter	115mm / 4.5inch
Voice Coil Material	Copper
Former Material	Glass Fiber
Voice Coil Winding Depth	32 mm
Number of layers	2(inside/outside)
Magnet gap depth	15 mm
Basket	Cast Aluminum
Flux Density	1.0 T
Magnet Out Diameter/Wgt	245mm / 190 oz

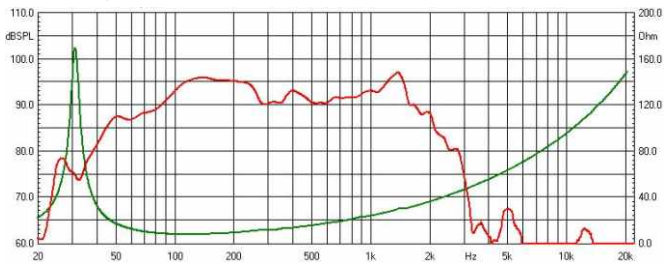
THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	31 Hz
DC resistance	Re	5.4 ohm
Mechanical factor	Qms	10
Electrical factor	Qes	0.33
Total factor	Qts	0.32
Mechanical compliance	Cms	0.1045 m/N
Mechanical resistance of suspension losses	Rms	4.89mech-ohm
Effective Moving Mass	Mms	252 g
Half-space efficiency	Eff	1.94%
BL Factor	BL	29 T.m
Equivalent Cas air load	Vas	223 liters
Effective piston area	Sd	0.1238 m^2
Max. linear excursion[6]	Xmax	12 mm
Voice coil inductance	Le1K	1.9 mH
Efficiency Bandwidth Product	EBP	94

MOUNTING INFORMATION

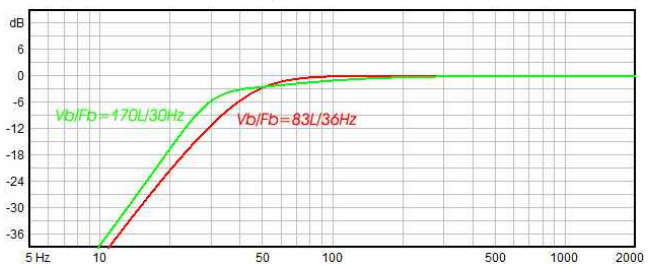
Overall Diameter	466.5 mm
Bolt Circle Diameter	442 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	423 mm
Overall Depth	215 mm
Net Weight	16 kg
Shipping Weight	17.5 kg
Shipping Box	500x500x2 40mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response(7)



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters are measured with laser system after 1000W AES power preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.
8. Total internal volume of empty box.

S7118

☀ 18 inch ☀ 800 Watts
☀ 97 dB ☀ 32 ~ 1500 Hz

KEY FEATURES:

① 1600 W continuous program power capacity
② 97dB Sensitivity 1w/1m
③ 32Hz ~1500Hz frequency response range
④ 4" inside/outside voice coil for improved power-handling and durability
⑤ Double silicone spider with optimized compliance
⑥ Ventilated voice coil gap for reduced power compression
⑦ Ideal for compact bass-reflex subwoofer application

GENERAL SPECIFICATIONS

Nominal Diameter	460mm / 18inch
Rated Impedance	8 ohm
Nominal Power handling[1]	800 Watts
Program Power[2]	1600 Watts
Sensitivity(1w/1m)[3]	97 dB
Frequency Range[4]	32 ~ 1500Hz
Minimum Impedance(Zmin)	6.6 ohm
Voice Coil Diameter	100mm / 4inch
Voice Coil Material	Copper
Former Material	Glass Fiber
Voice Coil Winding Depth	25 mm
Number of layers	2(inside/outside)
Magnet gap depth	12 mm
Basket	Cast Aluminum
Flux Density	1.1 T
Magnet Out Diameter/Wgt	220mm / 125 oz

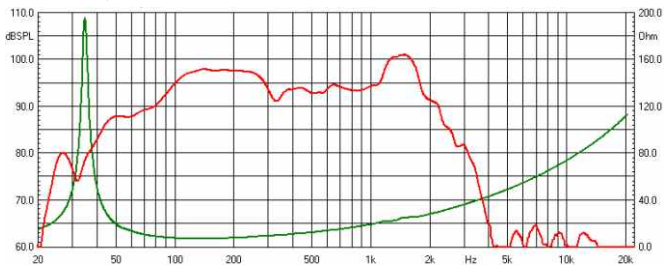
THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	35 Hz
DC resistance	Re	5.2 ohm
Mechanical factor	Qms	13
Electrical factor	Qes	0.37
Total factor	Qts	0.36
Mechanical compliance	Cms	0.1 m/N
Mechanical resistance of suspension losses	Rms	3.54mech-ohm
Effective Moving Mass	Mms	217 g
Half-space efficiency	Eff	2.2%
BL Factor	BL	26 T.m
Equivalent Cas air load	Vas	202 liters
Effective piston area	Sd	0.1225 m^2
Max. linear excursion[6]	Xmax	9 mm
Voice coil inductance	Le1K	2.3 mH
Efficiency Bandwidth Product	EBP	94

MOUNTING INFORMATION

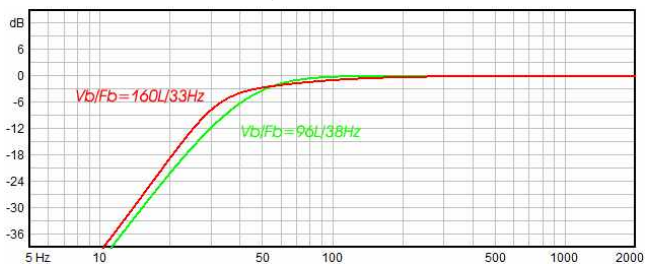
Overall Diameter	461 mm
Bolt Circle Diameter	439 mm
Bolt Hole Diameter	6.5x9.5 mm
Baffle Cutout Diameter	424 mm
Overall Depth	197 mm
Net Weight	13 kg
Shipping Weight	14 kg
Shipping Box	500x500x2 50mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. /S parameters measured with laser system without preconditioning test at 23 Celsius degree environment.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

M5118/2

Code:19122

- 18 inch
- 750 Watts
- 97 dB
- 36 ~ 1000 Hz

KEY FEATURES:

① 1500 W continuous program power capacity
② 97dB Sensitivity 1w/1m
③ 36Hz ~1000Hz frequency response range
④ 4" high temperature inside/outside copper voice coil
⑤ Vented back plate increases airflow to provide enhanced cooling
⑥ Both side waterproof cone treamment
⑦ Ideal for compact bass-reflex subwoofer application

GENERAL SPECIFICATIONS

Nominal Diameter	460mm / 18inch
Rated Impedance	8 ohm
Nominal Power handling[1]	750 Watts
Program Power[2]	1500 Watts
Sensitivity(1w/1m)[3]	97 dB
Frequency Range[4]	36 ~ 1000Hz
Minimum Impedance(Zmin)	7.4 ohm
Voice Coil Diameter	100mm / 4inch
Voice Coil Material	Copper
Former Material	Glass Fiber
Voice Coil Winding Depth	25 mm
Number of layers	2(inside/outside)
Magnet gap depth	10.7 mm
Basket	Cast Aluminum
Flux Density	1.1 T
Magnet Out Diameter/Wgt	220mm / 125 oz

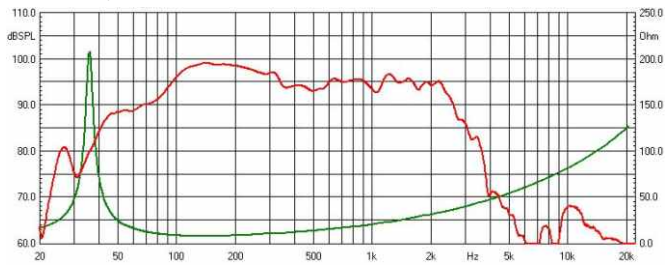
THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	36 Hz
DC resistance	Re	5.4 ohm
Mechanical factor	Qms	12.5
Electrical factor	Qes	0.33
Total factor	Qts	0.33
Mechanical compliance	Cms	0.09 m/N
Mechanical resistance of suspension losses	Rms	3.76 mech-ohm
Effective Moving Mass	Mms	208 g
Half-space efficiency	Eff	2.4%
BL Factor	BL	27.6 T.m
Equivalent Cas air load	Vas	180 liters
Effective piston area	Sd	0.1170 m^2
Max. linear excursion[6]	Xmax	9.6 mm
Voice coil inductance	Le1K	2.3 mH
Efficiency Bandwidth Product	EBP	109

MOUNTING INFORMATION

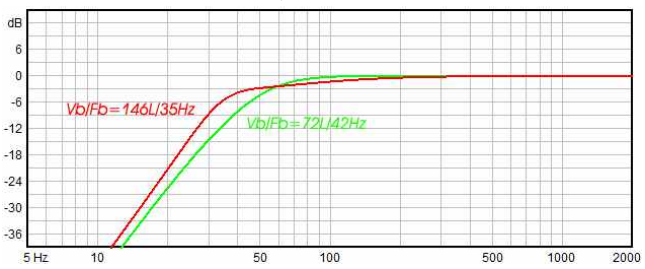
Overall Diameter	461 mm
Bolt Circle Diameter	439 mm
Bolt Hole Diameter	6.5x9.5 mm
Baffle Cutout Diameter	424 mm
Overall Depth	200 mm
Net Weight	12.8 kg
Shipping Weight	14.3 kg
Shipping Box	500x500x2 40mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters are measured with laser system after a high level 25Hz sine ware preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

S7115s

☀ 15 inch ☀ 700 Watts
☀ 97 dB ☀ 40 ~ 1500 Hz

KEY FEATURES:

① 1400 W continuous program power capacity
② 97dB Sensitivity 1w/1m
③ 40Hz ~1500Hz frequency response range
④ 4" inside/outside voice coil for improved power-handling and durability
⑤ Ventilated voice coil gap for reduced power compression
⑥ Kevlar impregnated cone to provide outstanding reliability, and performance
⑦ Ideal for compact bass-reflex woofer or subwoofer applications

GENERAL SPECIFICATIONS

Nominal Diameter	380mm / 15inch
Rated Impedance	8 ohm
Nominal Power handling[1]	700 Watts
Program Power[2]	1400 Watts
Sensitivity(1w/1m)[3]	97 dB
Frequency Range[4]	40 ~ 1500Hz
Minimum Impedance(Zmin)	7.6 ohm
Voice Coil Diameter	100mm / 4inch
Voice Coil Material	Copper
Former Material	Glass Fiber
Voice Coil Winding Depth	24 mm
Number of layers	2(inside/outside)
Magnet gap depth	14 mm
Basket	Cast Aluminum
Flux Density	1.0 T
Magnet Out Diameter/Wgt	220mm / 125 oz

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	43 Hz
DC resistance	Re	5.4 ohm
Mechanical factor	Qms	18
Electrical factor	Qes	0.30
Total factor	Qts	0.29
Mechanical compliance	Cms	0.094 m/N
Mechanical resistance of suspension losses	Rms	2.2 mech-ohm
Effective Moving Mass	Mms	143 g
Half-space efficiency	Eff	2.65%
BL Factor	BL	26.6 T.m
Equivalent Cas air load	Vas	100 liters
Effective piston area	Sd	0.0876 m^2
Max. linear excursion[6]	Xmax	9.5 mm
Voice coil inductance	Le1K	2.6 mH
Efficiency Bandwidth Product	EBP	145

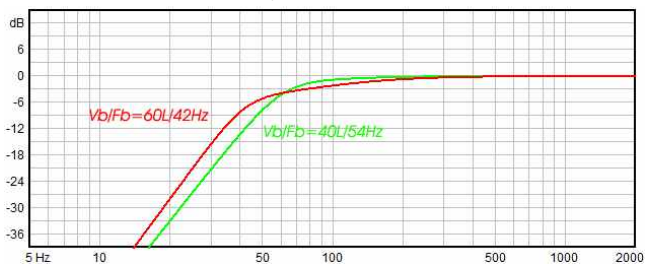
MOUNTING INFORMATION

Overall Diameter	393 mm
Bolt Circle Diameter	375 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	356 mm
Overall Depth	179 mm
Net Weight	12.4 kg
Shipping Weight	13.1 kg
Shipping Box	425x425x2 15mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system with a high level 25Hz sine wave preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

M5315s

☀ 15 inch ☀ 800 Watts
☀ 97 dB ☀ 40 ~ 350 Hz

KEY FEATURES:

① 1600 W continuous program power capacity
② 97dB Sensitivity 1w/1m
③ 40Hz ~350Hz frequency response range
④ 100mm(4") inside/outside copper voice coil
⑤ Double silicone spider with optimized compliance
⑥ Triple-roll cloth edge with deep corrugations for extended Xmax
⑦ Corrugated cone geometry
⑧ Ideal for compact bass-reflex subwoofer application

GENERAL SPECIFICATIONS

Nominal Diameter	380mm / 15inch
Rated Impedance	8 ohm
Nominal Power handling[1]	800 Watts
Program Power[2]	1600 Watts
Sensitivity(1w/1m)[3]	97 dB
Frequency Range[4]	40 ~ 350Hz
Minimum Impedance(Zmin)	7.5 ohm
Voice Coil Diameter	100mm / 4inch
Voice Coil Material	Copper
Former Material	Glass Fiber
Voice Coil Winding Depth	25 mm
Number of layers	2(inside/outside)
Magnet gap depth	12 mm
Basket	Cast Aluminum
Flux Density	1.1 T
Magnet Out Diameter/Wgt	220mm / 125 oz

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	40 Hz
DC resistance	Re	5.2 ohm
Mechanical factor	Qms	8.7
Electrical factor	Qes	0.33
Total factor	Qts	0.32
Mechanical compliance	Cms	0.095 m/N
Mechanical resistance of suspension losses	Rms	4.74mech-ohm
Effective Moving Mass	Mms	163 g
Half-space efficiency	Eff	1.81%
BL Factor	BL	25.4 T.m
Equivalent Cas air load	Vas	95 liters
Effective piston area	Sd	0.0845 m^2
Max. linear excursion[6]	Xmax	9 mm
Voice coil inductance	Le1K	2.0 mH
Efficiency Bandwidth Product	EBP	121

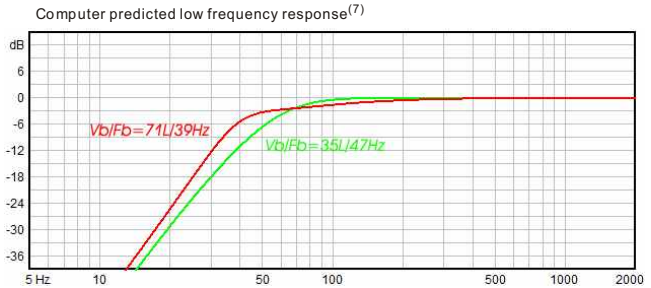
MOUNTING INFORMATION

Overall Diameter	393 mm
Bolt Circle Diameter	375 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	356 mm
Overall Depth	179 mm
Net Weight	11.7 kg
Shipping Weight	12.7 kg
Shipping Box	420x420x2 05mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system with a high level 25Hz sine wave preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

M5115

- 15 inch
- 700 Watts
- 98 dB
- 42 ~ 2100 Hz

KEY FEATURES:

① 1400 W continuous program power capacity
② Sensitivity: 98dB 1w/1m
③ 100mm(4") with OFC(Oxygen-free Copper) wire for improved power-handling
④ Coating paper cone to improve the optical and acoustic properties
⑤ Reinforced CONEX® spider for improved linearity control
⑥ Ideal for compact woofer or subwoofer application

GENERAL SPECIFICATIONS

Nominal Diameter	380mm /15inch
Rated Impedance	8 ohm
Nominal Power handling[1]	700 Watts
Program Power[2]	1400 Watts
Sensitivity(1w/1m)[3]	98 dB
Frequency Range[4]	42 ~ 2100Hz
Minimum Impedance(Zmin)	7.5 ohm
Voice Coil Diameter	100mm /4inch
Voice Coil Material	Copper
Former Material	Glass Fiber
Voice Coil Winding Depth	21 mm
Number of layers	2
Magnet gap depth	10.7 mm
Basket	Cast Aluminum
Flux Density	1.05 T
Magnet Outer Diameter / Wgt	220mm / 125 oz

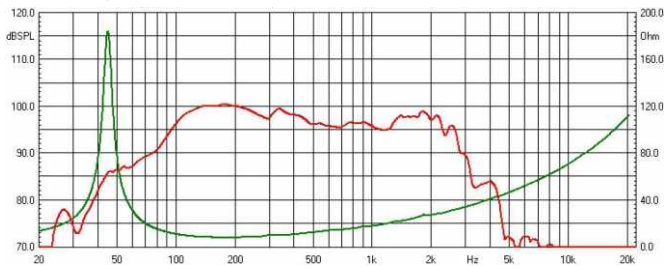
THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	45 Hz
DC resistance	Re	5.3 ohm
Mechanical factor	Qms	10
Electrical factor	Qes	0.30
Total factor	Qts	0.29
Mechanical compliance	Cms	0.095 mm/N
Mechanical resistance of suspension losses	Rms	3.7 mech-ohm
Effective Moving Mass	Mms	132 g
Half-space efficiency	Eff	3.2%
BL Factor	BL	25.8 T.m
Equivalent Cas air load	Vas	109 liters
Effective piston area	Sd	0.0908 m^2
Max. linear excursion[6]	Xmax	8.5 mm
Voice coil inductance	Le1K	1.9 mH
Efficiency Bandwidth Product	EBP	150

MOUNTING INFORMATION

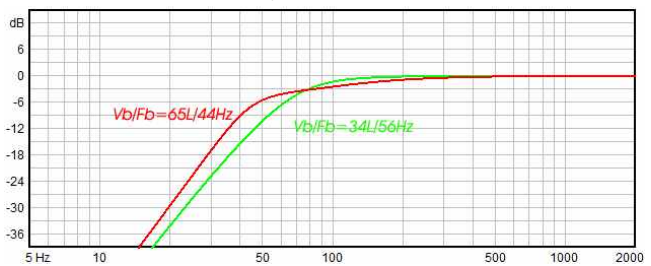
Overall Diameter	393 mm
Bolt Circle Diameter	375 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	355 mm
Overall Depth	171 mm
Net Weight	11.6 kg
Shipping Weight	12.6 kg
Shipping Box	425x425x2 15 mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system after a high level 25Hz sine wave preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

M5415/2

Code:19012

- 15 inch
- 800 Watts
- 99 dB
- 40 ~ 2800 Hz

KEY FEATURES:

① 1600 W continuous program power capacity
② Sensitivity: 99dB 1w/1m
③ 100mm(4") high temperature inside/outsdie voice coil with copper clad aluminum wire
④ FEM designed ferrite magnetics
⑤ Vented back plate increases airflow to provide enhanced cooling
⑥ Aluminum demodulating ring reduces distortion and extends high frequency response to 2.8kHz
⑦ Ideal for compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	380mm /15inch
Rated Impedance	8 ohm
Nominal Power handling[1]	800 Watts
Program Power[2]	1600 Watts
Sensitivity(1w/1m)[3]	99 dB
Frequency Range[4]	40 ~ 2800Hz
Minimum Impedance(Zmin)	7.0 ohm
Voice Coil Diameter	100mm /4inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	22 mm
Number of layers	2(inside/outside)
Magnet gap depth	12 mm
Basket	Cast Aluminum
Flux Density	1.1 T
Magnet Outer Diameter / Wgt	220mm / 125 oz

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	40 Hz
DC resistance	Re	5.7 ohm
Mechanical factor	Qms	11.5
Electrical factor	Qes	0.31
Total factor	Qts	0.30
Mechanical compliance	Cms	0.14 mm/N
Mechanical resistance of suspension losses	Rms	2.4 mech-ohm
Effective Moving Mass	Mms	107 g
Half-space efficiency	Eff	3.3%
BL Factor	BL	22.4 T.m
Equivalent Cas air load	Vas	156 liters
Effective piston area	Sd	0.0887 m^2
Max. linear excursion[6]	Xmax	7 mm
Voice coil inductance	Le1K	1.5 mH
Efficiency Bandwidth Product	EBP	129

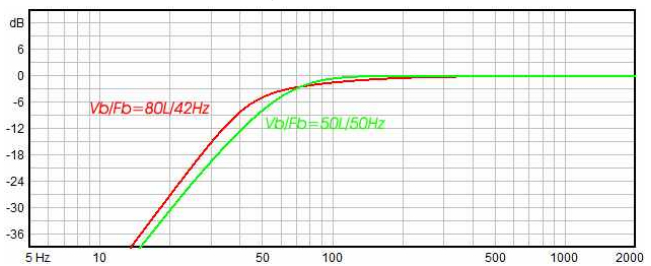
MOUNTING INFORMATION

Overall Diameter	393 mm
Bolt Circle Diameter	375 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	355 mm
Overall Depth	170 mm
Net Weight	11 kg
Shipping Weight	11.7 kg
Shipping Box	425x425x2 15 mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test at 23 Celsius degree environment.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

GMI5-88

☀ 15 inch ☀ 700 Watts
☀ 98 dB ☀ 44 ~ 3000 Hz

KEY FEATURES:

① 1400 W continuous program power capacity
② Sensitivity: 98dB 1w/1m
③ 88mm(3.5") high temperature inside/outsdie voice coil with copper clad aluminum wire
④ FEM designed ferrite magnetics
⑤ Triple aluminum demodulating rings
⑥ Idea for high quality compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	380mm /15inch
Rated Impedance	8 ohm
Nominal Power handling[1]	700 Watts
Program Power[2]	1400 Watts
Sensitivity(1w/1m)[3]	98 dB
Frequency Range[4]	44 ~ 3000Hz
Minimum Impedance(Zmin)	6.7 ohm
Voice Coil Diameter	88mm /3.5inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	20 mm
Number of layers	2(inside/outside)
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.2 T
Magnet Outer Diameter / Wgt	200mm / 98 oz

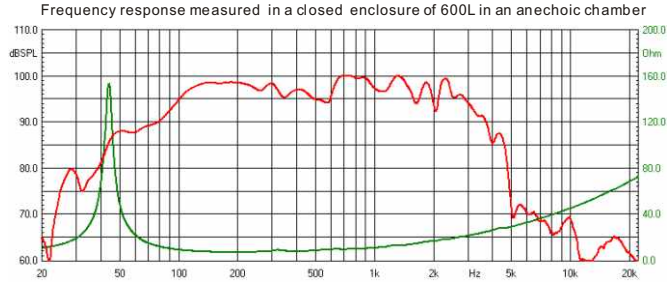
THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	44 Hz
DC resistance	Re	5.6 ohm
Mechanical factor	Qms	11.5
Electrical factor	Qes	0.43
Total factor	Qts	0.42
Mechanical compliance	Cms	0.11 mm/N
Mechanical resistance of suspension losses	Rms	2.71 mech-ohm
Effective Moving Mass	Mms	112 g
Half-space efficiency	Eff	2.25%
BL Factor	BL	20 T.m
Equivalent Cas air load	Vas	118 liters
Effective piston area	Sd	0.0855 m^2
Max. linear excursion[6]	Xmax	7 mm
Voice coil inductance	Le1K	1.0 mH
Efficiency Bandwidth Product	EBP	102

MOUNTING INFORMATION

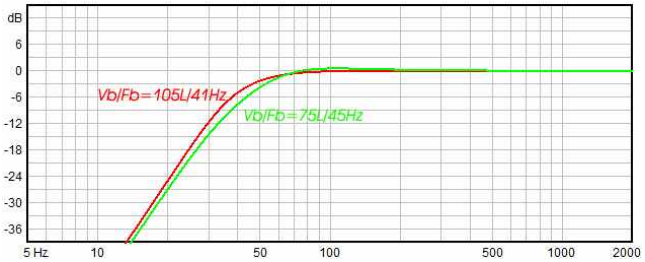
Overall Diameter	388 mm
Bolt Circle Diameter	370 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	355 mm
Overall Depth	164 mm
Net Weight	10 kg
Shipping Weight	10.7 kg
Shipping Box	425x425x2 15 mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

J6015

☀ 15 inch ☀ 650 Watts
☀ 99 dB ☀ 43 ~ 2800 Hz

KEY FEATURES:

① 1300 W continuous program power capacity
② Sensitivity: 99dB 1w/1m
③ 86mm(3.5") high temperature inside/outsdie voice coil with copper clad aluminum wire
④ Paper cone imported from U.S.A
⑤ Dual-forced hyper-venting and 10mm top plate for minimum power compression
⑥ M-roll surround and curved cone geometry
⑦ Ideal for high quality compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	380mm /15inch
Rated Impedance	8 ohm
Nominal Power handling[1]	650 Watts
Program Power[2]	1300 Watts
Sensitivity(1w/1m)[3]	99 dB
Frequency Range[4]	43 ~ 2800Hz
Minimum Impedance(Zmin)	6.8 ohm
Voice Coil Diameter	86mm /3.5inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	16.5 mm
Number of layers	2(inside/outside)
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.15 T
Magnet Outer Diameter / Wgt	190mm / 95 oz

THIELE - SMALL PARAMETERS[5]

Resonance frequency	Fs	43 Hz
DC resistance	Re	5.6 ohm
Mechanical factor	Qms	7.0
Electrical factor	Qes	0.3
Total factor	Qts	0.29
Mechanical compliance	Cms	0.14 mm/N
Mechanical resistance of suspension losses	Rms	3.8 mech-ohm
Effective Moving Mass	Mms	99 g
Half-space efficiency	Eff	3.65%
BL Factor	BL	22 T.m
Equivalent Cas air load	Vas	145 liters
Effective piston area	Sd	0.0866 m^2
Max. linear excursion[6]	Xmax	6 mm
Voice coil inductance	Le1K	1.5 mH
Efficiency Bandwidth Product	EBP	143

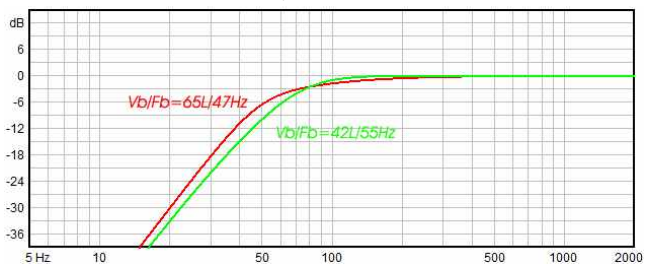
MOUNTING INFORMATION

Overall Diameter	393 mm
Bolt Circle Diameter	375 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	355 mm
Overall Depth	172 mm
Net Weight	7.9 kg
Shipping Weight	8.6 kg
Shipping Box	425x425x2 15 mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

M5215

- 15 inch
- 500 Watts
- 99 dB
- 45 ~ 2800 Hz

KEY FEATURES:

① 1000 W continuous program power capacity
② Sensitivity: 99dB 1w/1m
③ 76mm(3") high temperature inside/outsdie voice coil with copper clad aluminum wire
④ Paper cone imported from U.S.A
⑤ M-roll surround and curved cone geometry
⑥ Ideal for high quality compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	380mm /15inch
Rated Impedance	8 ohm
Nominal Power handling[1]	500 Watts
Program Power[2]	1000 Watts
Sensitivity(1w/1m)[3]	99 dB
Frequency Range[4]	45 ~ 2800Hz
Minimum Impedance(Zmin)	7 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	18 mm
Number of layers	2(inside/outside)
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.2 T
Magnet Outer Diameter / Wgt	190mm / 78 oz

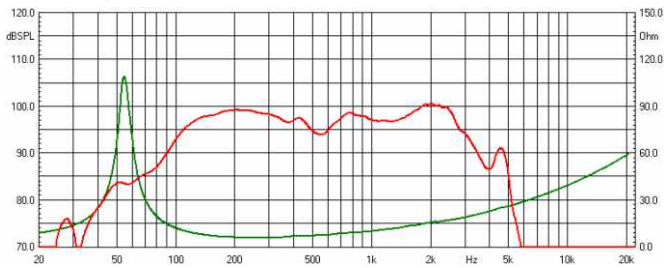
THIELE - SMALL PARAMETERS[5]

Resonance frequency	Fs	47 Hz
DC resistance	Re	5.6 ohm
Mechanical factor	Qms	9.5
Electrical factor	Qes	0.43
Total factor	Qts	0.41
Mechanical compliance	Cms	0.12 mm/N
Mechanical resistance of suspension losses	Rms	1.7 mech-ohm
Effective Moving Mass	Mms	90 g
Half-space efficiency	Eff	3.3%
BL Factor	BL	19 T.m
Equivalent Cas air load	Vas	136 liters
Effective piston area	Sd	0.0892 m^2
Max. linear excursion[6]	Xmax	6.5 mm
Voice coil inductance	Le1K	1.05 mH
Efficiency Bandwidth Product	EBP	109

MOUNTING INFORMATION

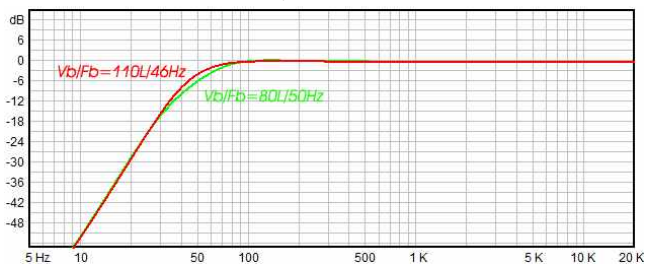
Overall Diameter	393 mm
Bolt Circle Diameter	375 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	355 mm
Overall Depth	168 mm
Net Weight	8.1 kg
Shipping Weight	8.8 kg
Shipping Box	425x425x2 15 mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

CI5-500

☀ *15 inch* ☀ *500 Watts*
☀ *98 dB* ☀ *43 ~ 3000 Hz*

KEY FEATURES:

① 1000 W continuous program power capacity
② Sensitivity: 98dB 1w/1m
③ 76mm(3") high temperature inside/outsdie voice coil with copper clad aluminum wire
④ Vented back plate increases airflow to provide enhanced cooling
⑤ Treated cone for water protection
⑥ Increased power handling and more mid-high over C15-400
⑦ Ideal for compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	380mm /15inch
Rated Impedance	8 ohm
Nominal Power handling[1]	500 Watts
Program Power[2]	1000 Watts
Sensitivity(1w/1m)[3]	98 dB
Frequency Range[4]	43 ~ 3000Hz
Minimum Impedance(Zmin)	6.6 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	19 mm
Number of layers	2(inside/outside)
Magnet gap depth	10.5 mm
Basket	Cast Aluminum
Flux Density	1.2 T
Magnet Outer Diameter / Wgt	200mm / 100 oz

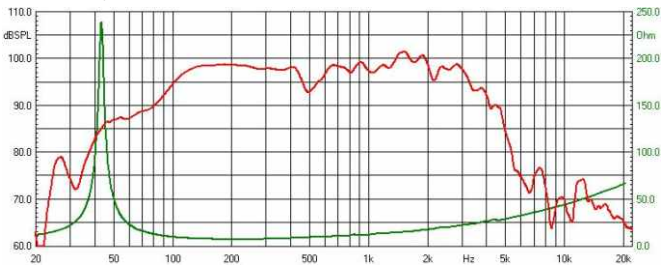
THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	43 Hz
DC resistance	Re	5.3 ohm
Mechanical factor	Qms	9.5
Electrical factor	Qes	0.36
Total factor	Qts	0.35
Mechanical compliance	Cms	0.14 mm/N
Mechanical resistance of suspension losses	Rms	1.6 mech-ohm
Effective Moving Mass	Mms	96 g
Half-space efficiency	Eff	3.1%
BL Factor	BL	19.6 T.m
Equivalent Cas air load	Vas	143 liters
Effective piston area	Sd	0.0855 m^2
Max. linear excursion[6]	Xmax	7 mm
Voice coil inductance	Le1K	1.1 mH
Efficiency Bandwidth Product	EBP	119

MOUNTING INFORMATION

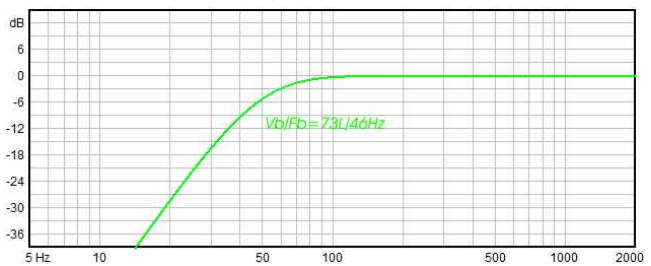
Overall Diameter	393 mm
Bolt Circle Diameter	375 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	355 mm
Overall Depth	169 mm
Net Weight	8.7 kg
Shipping Weight	9.4 kg
Shipping Box	425x425x2 15 mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 73L/46Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system with a high level 25Hz sine wave preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

CI5-400

☀ *15 inch* ☀ *400 Watts*
☀ *97 dB* ☀ *39 ~ 3000 Hz*

KEY FEATURES:

① 800 W continuous program power capacity
② Sensitivity: 97dB 1w/1m
③ 76mm(3") inside/outsdie voice coil with SV-W(copper round wire)
④ Vented back plate increases airflow to provide enhanced cooling
⑤ Treated cone for water protection
⑥ Ideal for compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	380mm /15inch
Rated Impedance	8 ohm
Nominal Power handling[1]	400 Watts
Program Power[2]	800 Watts
Sensitivity(1w/1m)[3]	97 dB
Frequency Range[4]	39 ~ 3000Hz
Minimum Impedance(Zmin)	6.9 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	SV-W(Copper)
Former Material	Glass Fiber
Voice Coil Winding Depth	17.5 mm
Number of layers	2(inside/outside)
Magnet gap depth	9.5 mm
Basket	Cast Aluminum
Flux Density	1.15 T
Magnet Outer Diameter / Wgt	190mm / 78 oz

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	39 Hz
DC resistance	Re	5.6 ohm
Mechanical factor	Qms	12.5
Electrical factor	Qes	0.42
Total factor	Qts	0.40
Mechanical compliance	Cms	0.15 mm/N
Mechanical resistance of suspension losses	Rms	1.9 mech-ohm
Effective Moving Mass	Mms	106 g
Half-space efficiency	Eff	2.2%
BL Factor	BL	18.8 T.m
Equivalent Cas air load	Vas	158 liters
Effective piston area	Sd	0.0855 m^2
Max. linear excursion[6]	Xmax	6.5 mm
Voice coil inductance	Le1K	1.4 mH
Efficiency Bandwidth Product	EBP	93

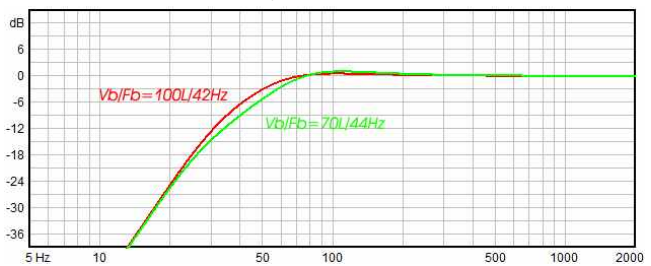
MOUNTING INFORMATION

Overall Diameter	393 mm
Bolt Circle Diameter	375 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	355 mm
Overall Depth	167 mm
Net Weight	7.3 kg
Shipping Weight	8 kg
Shipping Box	425x425x2 15 mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system with a high level 25Hz sine wave preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

15BM350

☀ 15 inch ☀ 350 Watts
☀ 97.5 dB ☀ 38 ~ 3000 Hz

KEY FEATURES:

① 700 W continuous program power capacity
② Sensitivity: 97.5dB 1w/1m
③ 38Hz ~ 3000Hz frequency response range
④ 76mm(3") voice coil with SV-W(copper round wire)
⑤ Kevlar® impregnated cone with sealed cloth edge to provide outstanding reliability and performance
⑥ Ideal for compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	380mm /15inch
Rated Impedance	8 ohm
Nominal Power handling[1]	350 Watts
Program Power[2]	700 Watts
Sensitivity(1w/1m)[3]	97.5 dB
Frequency Range[4]	38 ~ 3000Hz
Minimum Impedance(Zmin)	6.2 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	SV-W(Copper)
Former Material	Aluminum
Voice Coil Winding Depth	16 mm
Number of layers	2
Magnet gap depth	9.5 mm
Basket	Cast Aluminum
Flux Density	1.1 T
Magnet Outer Diameter / Wgt	180mm / 68 oz

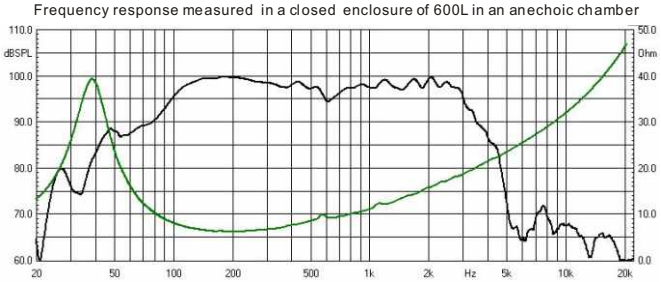
THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	38 Hz
DC resistance	Re	5.0 ohm
Mechanical factor	Qms	2.6
Electrical factor	Qes	0.37
Total factor	Qts	0.32
Mechanical compliance	Cms	0.16 mm/N
Mechanical resistance of suspension losses	Rms	10.2 mech-ohm
Effective Moving Mass	Mms	108 g
Half-space efficiency	Eff	2.4%
BL Factor	BL	18.8 T.m
Equivalent Cas air load	Vas	166 liters
Effective piston area	Sd	0.0866 m^2
Max. linear excursion[6]	Xmax	6 mm
Voice coil inductance	Le1K	1.0 mH
Efficiency Bandwidth Product	EBP	103

MOUNTING INFORMATION

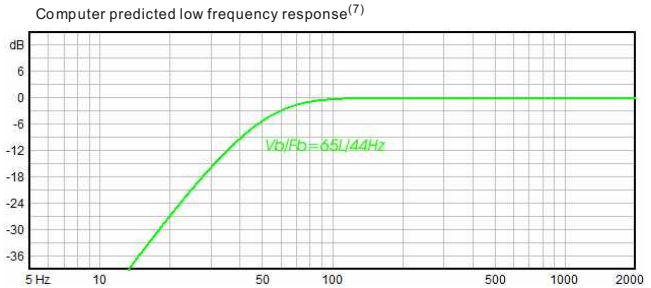
Overall Diameter	389.5 mm
Bolt Circle Diameter	369 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	350 mm
Overall Depth	155 mm
Net Weight	6.8 kg
Shipping Weight	7.5 kg
Shipping Box	425x425x2 15 mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system with a high level 25Hz sine wave preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

PSI5-76

☀ 15 inch ☀ 350 Watts
☀ 96 dB ☀ 37 ~ 3000 Hz

KEY FEATURES:

① 700 W continuous program power capacity
② 96dB Sensitivity 1w/1m
③ 37 ~ 3000Hz frequency response range
④ 3" high temperature voice coi
⑤ Superb price/performance ration
⑥ Ideal for compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	380mm /15inch
Rated Impedance	8 ohm
Nominal Power handling[1]	350 Watts
Program Power[2]	700 Watts
Sensitivity(1w/1m)[3]	96 dB
Frequency Range[4]	37 ~ 3000Hz
Minimum Impedance(Zmin)	5.8 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	Copper
Former Material	Aluminum
Voice Coil Winding Depth	16 mm
Number of layers	2
Magnet gap depth	10 mm
Basket	Pressed Steel
Flux Density	1.0T
Magnet Outer Diameter / Wgt	170mm / 60 oz

THIELE – SMALL PARAMETERS[5]

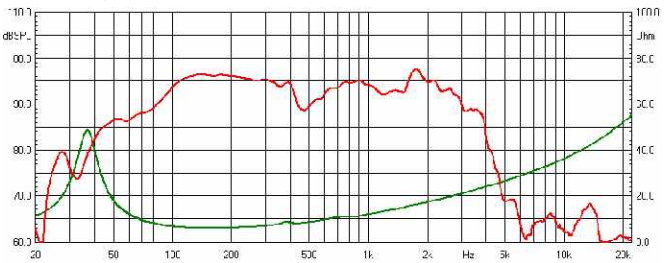
Resonance frequency	Fs	37 Hz
DC resistance	Re	5.0 ohm
Mechanical factor	Qms	4.1
Electrical factor	Qes	0.47
Total factor	Qts	0.42
Mechanical compliance	Cms	0.18 mm/N
Mechanical resistance of suspension losses	Rms	5.58 mech-ohm
Effective Moving Mass	Mms	100 g
Half-space efficiency	Eff	1.8%
BL Factor	BL	15.6 T.m
Equivalent Cas air load	Vas	180 liters
Effective piston area	Sd	0.0830 m^2
Max. linear excursion[6]	Xmax	6.5 mm
Voice coil inductance	Le1K	1.17 mH
Efficiency Bandwidth Product	EBP	79

MOUNTING INFORMATION

Overall Diameter	387 mm
Bolt Circle Diameter	373 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	355 mm
Overall Depth	154 mm
Net Weight	5.8 kg
Shipping Weight	6.8 kg
Shipping Box	420x420x2 05mm

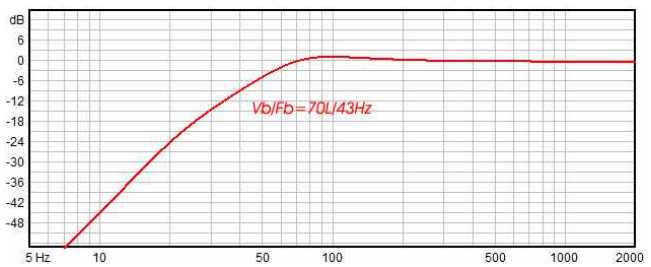
Also available in 4ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response(7)



Vb/Fb = 70L/43Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

RS12-100

☀ 12 inch ☀ 500 Watts
☀ 94 dB ☀ 39 ~ 450 Hz

KEY FEATURES:

① 1000W continuous program power capacity
② 94dB sensitivity, 1w/1m
③ 39~450Hz frequency response range
④ 100mm(4") high temperature inside/outside copper voice coil
⑤ Heavy duty magnet
⑥ Rubber edge
⑦ Non-pressed paper cone
⑧ Ideal for bass-reflex subwoofer application

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	8 ohm
Nominal Power handling[1]	500 Watts
Program Power[2]	1000 Watts
Sensitivity(1w/1m)[3]	94 dB
Frequency Range[4]	39 ~ 450 Hz
Minimum Impedance(Zmin)	7.5 ohm
Voice Coil Diameter	100mm /4inch
Voice Coil Material	Copper
Former Material	Fiber glass
Voice Coil Winding Depth	30 mm
Number of layers	2(Inside/outside)
Magnet gap depth	12 mm
Basket	Cast Aluminum
Flux Density	1.0T
Magnet Out Diameter/Wgt	220mm / 125 oz

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	43 Hz
DC resistance	Re	5.4 ohm
Mechanical factor	Qms	5.8
Electrical factor	Qes	0.26
Total factor	Qts	0.25
Mechanical compliance	Cms	0.11 mm/N
Mechanical resistance of suspension losses	Rms	6.1mech-ohm
Effective Moving Mass	Mms	132 g
Half-space efficiency	Eff	1.0%
BL Factor	BL	26.8 T.m
Equivalent Cas air load	Vas	37 liters
Effective piston area	Sd	0.0499 m
Max. linear excursion[6]	Xmax	11 mm
Voice coil inductance	Le1K	2.5 mH
Efficiency Bandwidth Product	EBP	164

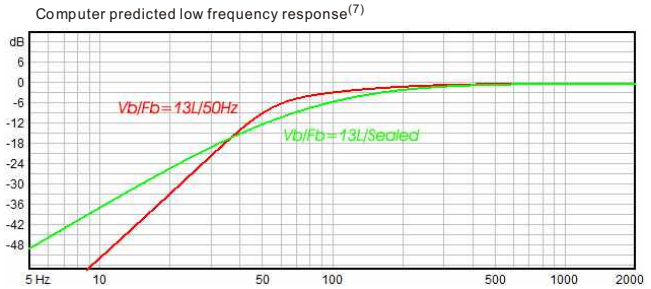
MOUNTING INFORMATION

Overall Diameter	313 mm
Bolt Circle Diameter	294 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	285 mm
Overall Depth	130 mm
Net Weight	11.2 kg
Shipping Weight	12 kg
Shipping Box	345x345x170mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

RS12-76/4

☀ 12 inch ☀ 450 Watts
☀ 94 dB ☀ 55 ~ 3000 Hz

KEY FEATURES:

① 900W continuous program power capacity
② 94dB sensitivity, 1w/1m
③ 55~3000Hz frequency response range
④ 76mm(3") high temperature copper voice coil
⑤ Heavy duty magnet
⑥ Single roll rubber edge
⑦ Double silicon spiders
⑧ Ideal for compact subwoofer or woofer application

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	4 ohm
Nominal Power handling[1]	450 Watts
Program Power[2]	900 Watts
Sensitivity(1w/1m)[3]	94 dB
Frequency Range[4]	55 ~ 3000 Hz
Minimum Impedance(Zmin)	4 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	Copper
Former Material	Fiber glass
Voice Coil Winding Depth	18 mm
Number of layers	2
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.2T
Magnet Out Diameter/Wgt	190mm / 95 oz

THIELE – SMALL PARAMETERS[5]

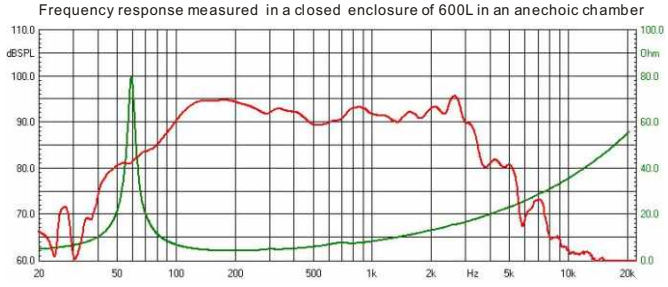
Resonance frequency	Fs	59 Hz
DC resistance	Re	3.2 ohm
Mechanical factor	Qms	11.5
Electrical factor	Qes	0.48
Total factor	Qts	0.46
Mechanical compliance	Cms	0.0682 mm/N
Mechanical resistance of suspension losses	Rms	3.4mech-ohm
Effective Moving Mass	Mms	105 g
Half-space efficiency	Eff	1.1%
BL Factor	BL	16.2 T.m
Equivalent Cas air load	Vas	26 liters
Effective piston area	Sd	0.0519 m
Max. linear excursion[6]	Xmax	7 mm
Voice coil inductance	Le1K	0.89 mH
Efficiency Bandwidth Product	EBP	123

MOUNTING INFORMATION

Overall Diameter	316 mm
Bolt Circle Diameter	297 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	283 mm
Overall Depth	149 mm
Net Weight	8.2 kg
Shipping Weight	9 kg
Shipping Box	345x345x170mm

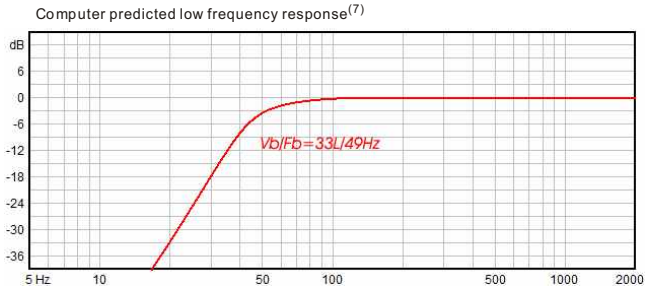
Also available in 8ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 33L/49Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system with a high level 25Hz sine wave preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

J6012

☀ 12 inch ☀ 550 Watts
☀ 97 dB ☀ 45 ~ 3000 Hz

KEY FEATURES:

① 1100 W continuous program power capacity
② Sensitivity: 97dB 1w/1m
③ 45~3000Hz frequency response range
④ 3.5" inside/outside winding voice coil with CCAW wire
⑤ M-roll cloth edge with deep corrugations for extended Xmax.
⑥ Paper cone made in the U.S.A
⑦ Idea for high quality compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	8 ohm
Nominal Power handling[1]	550 Watts
Program Power[2]	1100 Watts
Sensitivity(1w/1m)[3]	97 dB
Frequency Range[4]	45 ~ 3000Hz
Minimum Impedance(Zmin)	7.3 ohm
Voice Coil Diameter	86mm /3.5inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	18.5 mm
Number of layers	2(inside/outside)
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.15 T
Magnet Outer Diameter / Wgt	190mm / 95 oz

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	45 Hz
DC resistance	Re	5.6 ohm
Mechanical factor	Qms	9.5
Electrical factor	Qes	0.26
Total factor	Qts	0.25
Mechanical compliance	Cms	0.16 mm/N
Mechanical resistance of suspension losses	Rms	2.1 mech-ohm
Effective Moving Mass	Mms	77 g
Half-space efficiency	Eff	2.2%
BL Factor	BL	22 T.m
Equivalent Cas air load	Vas	62 liters
Effective piston area	Sd	0.0531 m^2
Max. linear excursion[6]	Xmax	6.7 mm
Voice coil inductance	Le1K	1.4 mH
Efficiency Bandwidth Product	EBP	180

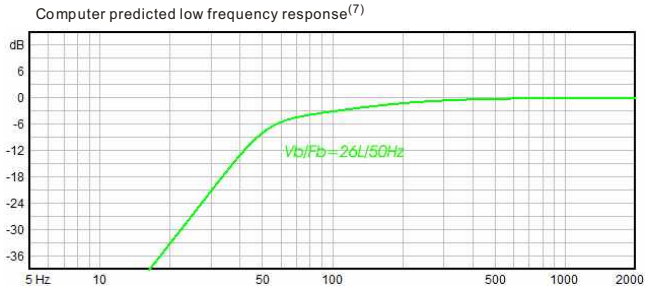
MOUNTING INFORMATION

Overall Diameter	316 mm
Bolt Circle Diameter	297 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	283 mm
Overall Depth	145 mm
Net Weight	7.4 kg
Shipping Weight	8.1 kg
Shipping Box	345x345x180mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 26L/50Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

S7012

☀ 12 inch ☀ 450 Watts
☀ 97 dB ☀ 41 ~ 2700 Hz

KEY FEATURES:

① 900 W continuous program power capacity
② Sensitivity: 97dB 1w/1m
③ 3" inside/outside winding voice coil with aluminum wire
④ Improved heat dissipation via unique basket design and multiple backplate vents
⑤ FEA optimized magnet system design for low distortion and minimum power compression
⑥ Special treatment on cone in house for excellent performance
⑦ UK manufactured cone offers increased strength, durability and performance
⑧ Idea for high quality compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	8 ohm
Nominal Power handling[1]	450 Watts
Program Power[2]	900 Watts
Sensitivity(1w/1m)[3]	97 dB
Frequency Range[4]	41 ~ 2700Hz
Minimum Impedance(Zmin)	6.7 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	Aluminum
Former Material	Glass Fiber
Voice Coil Winding Depth	19 mm
Number of layers	2(inside/outside)
Magnet gap depth	10.5 mm
Basket	Cast Aluminum
Flux Density	1.15 T
Magnet Outer Diameter / Wgt	200mm / 76 oz

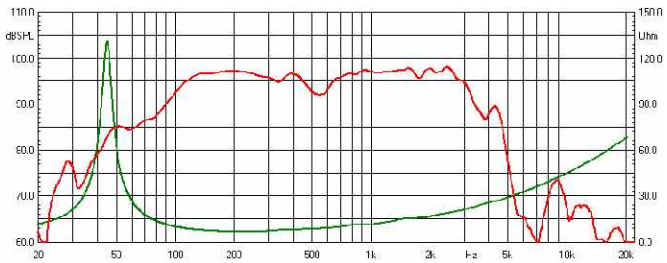
THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	45 Hz
DC resistance	Re	5.4 ohm
Mechanical factor	Qms	8.2
Electrical factor	Qes	0.35
Total factor	Qts	0.34
Mechanical compliance	Cms	0.20 mm/N
Mechanical resistance of suspension losses	Rms	2.11 mech-ohm
Effective Moving Mass	Mms	61.8 g
Half-space efficiency	Eff	2.11%
BL Factor	BL	16.3 T.m
Equivalent Cas air load	Vas	86 liters
Effective piston area	Sd	0.0552 m^2
Max. linear excursion[6]	Xmax	7 mm
Voice coil inductance	Le1K	1.1 mH
Efficiency Bandwidth Product	EBP	128

MOUNTING INFORMATION

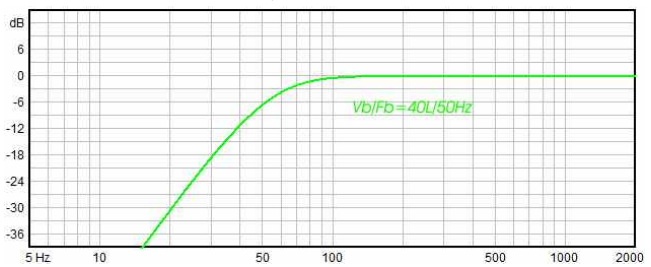
Overall Diameter	316 mm
Bolt Circle Diameter	297 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	283 mm
Overall Depth	145 mm
Net Weight	7.7 kg
Shipping Weight	8.4 kg
Shipping Box	345x345x1 80mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 40L/50Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test at 23 Celsius degree environment.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

M5012

☀ 12 inch ☀ 450 Watts
☀ 98 dB ☀ 50 ~ 2700 Hz

KEY FEATURES:

① 900 W continuous program power capacity
② Sensitivity: 98dB 1w/1m
③ 76mm(3") high temperature voice coil with flat aluminum wire
④ Improved heat dissipation via unique basket design and multiple backplate vents
⑤ USA manufactured cone offers increased strength, durability and performance
⑥ Idea for high quality compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	6 ohm
Nominal Power handling[1]	450 Watts
Program Power[2]	900 Watts
Sensitivity(1w/1m)[3]	98dB
Frequency Range[4]	50 ~ 2700Hz
Minimum Impedance(Zmin)	5.4 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	Flat Aluminum
Former Material	Glass Fiber
Voice Coil Winding Depth	17 mm
Number of layers	1
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.2 T
Magnet Outer Diameter / Wgt	190mm / 78 oz

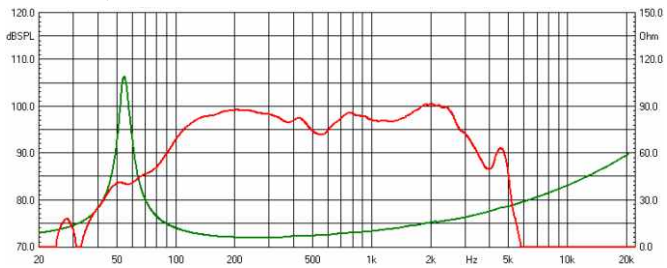
THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	54 Hz
DC resistance	Re	4.2 ohm
Mechanical factor	Qms	7.1
Electrical factor	Qes	0.28
Total factor	Qts	0.27
Mechanical compliance	Cms	0.14 mm/N
Mechanical resistance of suspension losses	Rms	2.92 mech-ohm
Effective Moving Mass	Mms	61 g
Half-space efficiency	Eff	3.24%
BL Factor	BL	17.5 T.m
Equivalent Cas air load	Vas	59 liters
Effective piston area	Sd	0.0552 m^2
Max. linear excursion[6]	Xmax	6 mm
Voice coil inductance	Le1K	1.1 mH
Efficiency Bandwidth Product	EBP	192

MOUNTING INFORMATION

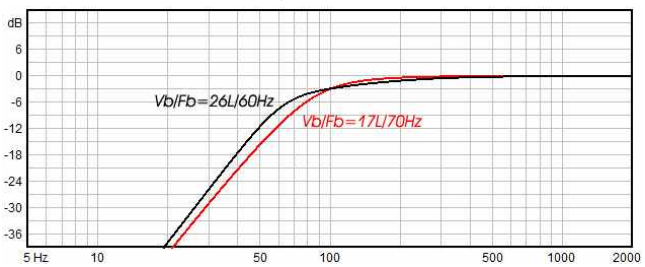
Overall Diameter	316 mm
Bolt Circle Diameter	297 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	283 mm
Overall Depth	145 mm
Net Weight	7.5 kg
Shipping Weight	8.2 kg
Shipping Box	345x345x1 80mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

M5212

☀ 12 inch ☀ 500 Watts
☀ 97.5 dB ☀ 45 ~ 3000 Hz

KEY FEATURES:

① 1000 W continuous program power capacity
② Sensitivity: 97.5dB 1w/1m
③ 3" inside/outside winding voice coil with CCAW wire
④ Low background noise and flexible white damper
⑤ FEA optimized magnet system design for low distortion and minimum power compression
⑥ M-roll cloth edge with deep corrugations for extended Xmax.
⑦ Paper cone made in the U.S.A
⑧ Idea for high quality compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	8 ohm
Nominal Power handling[1]	500 Watts
Program Power[2]	1000 Watts
Sensitivity(1w/1m)[3]	97.5 dB
Frequency Range[4]	45 ~ 3000Hz
Minimum Impedance(Zmin)	6.9 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	19 mm
Number of layers	2(inside/outside)
Magnet gap depth	10.5 mm
Basket	Cast Aluminum
Flux Density	1.2 T
Magnet Outer Diameter / Wgt	190mm / 78 oz

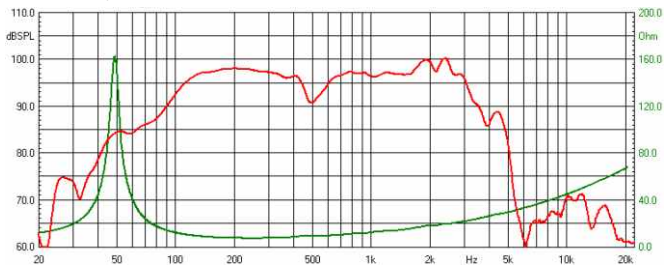
THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	49 Hz
DC resistance	Re	5.3 ohm
Mechanical factor	Qms	9.4
Electrical factor	Qes	0.32
Total factor	Qts	0.31
Mechanical compliance	Cms	0.16 mm/N
Mechanical resistance of suspension losses	Rms	2.2 mech-ohm
Effective Moving Mass	Mms	66 g
Half-space efficiency	Eff	2.3%
BL Factor	BL	18.4 T.m
Equivalent Cas air load	Vas	65 liters
Effective piston area	Sd	0.0539 m^2
Max. linear excursion[6]	Xmax	7 mm
Voice coil inductance	Le1K	1.1 mH
Efficiency Bandwidth Product	EBP	153

MOUNTING INFORMATION

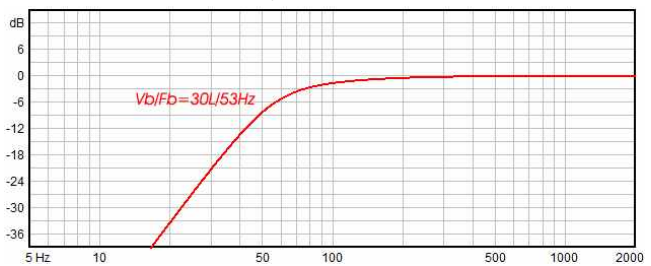
Overall Diameter	316 mm
Bolt Circle Diameter	297 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	283 mm
Overall Depth	145 mm
Net Weight	7.7 kg
Shipping Weight	8.4 kg
Shipping Box	345x345x1 80mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 40L/50Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

BL12-65

☀ 12 inch ☀ 350 Watts
☀ 96 dB ☀ 50 ~ 2800 Hz

KEY FEATURES:

① 700W continuous program power capacity
② 96dB sensitivity, 1w/1m
③ 65mm(2.5") copper clad aluminum voice coil with fiberglass former
④ FEA optimized magnet system design for lower distortion and minimum power compression
⑤ Aluminum demodulating ring for lower distortion
⑥ Ideal for high quality compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	8 ohm
Nominal Power handling[1]	350 Watts
Program Power[2]	700 Watts
Sensitivity(1w/1m)[3]	96 dB
Frequency Range[4]	50 ~ 2800 Hz
Minimum Impedance(Zmin)	6.7 ohm
Voice Coil Diameter	65mm /2.5inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	17 mm
Number of layers	4
Magnet gap depth	9.5 mm
Basket	Cast Aluminum
Flux Density	0.9T
Magnet Outer Diameter / Wgt	170mm / 65 oz

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	51 Hz
DC resistance	Re	5.3 ohm
Mechanical factor	Qms	10.5
Electrical factor	Qes	0.4
Total factor	Qts	0.39
Mechanical compliance	Cms	0.14 mm/N
Mechanical resistance of suspension losses	Rms	2.17mech-ohm
Effective Moving Mass	Mms	71 g
Half-space efficiency	Eff	1.7%
BL Factor	BL	17.4 T.m
Equivalent Cas air load	Vas	54 liters
Effective piston area	Sd	0.0531 m^2
Max. linear excursion[6]	Xmax	6.3 mm
Voice coil inductance	Le1K	1.1 mH
Efficiency Bandwidth Product	EBP	128

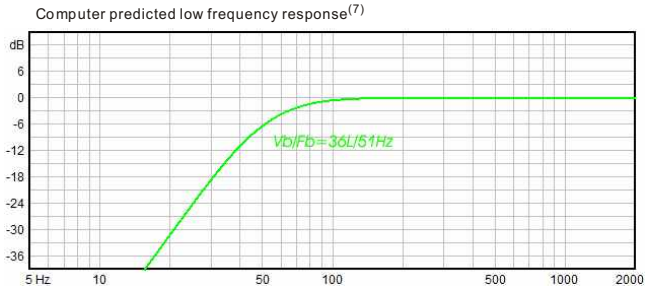
MOUNTING INFORMATION

Overall Diameter	322 mm
Bolt Circle Diameter	303 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	288 mm
Overall Depth	152 mm
Net Weight	6 kg
Shipping Weight	6.7 kg
Shipping Box	335x335x1 65mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 36L/51Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

PS12-65

- 12 inch
- 250 Watts
- 95 dB
- 53 ~ 3000 Hz

KEY FEATURES:

① 500 W continuous program power capacity
② 95dB Sensitivity 1w/1m
③ 53 ~ 3000Hz frequency response range
④ 2.5" high temperature voice coil wounded on polyimide former
⑤ Pressed paper cone to improve the high frequency response
⑥ Ideal for compact two-way system or midbass application

GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	8 ohm
Nominal Power handling[1]	250 Watts
Program Power[2]	500 Watts
Sensitivity(1w/1m)[3]	95 dB
Frequency Range[4]	53 ~ 3000Hz
Minimum Impedance(Zmin)	6.3 ohm
Voice Coil Diameter	65mm /2.5inch
Voice Coil Material	Copper
Former Material	Polyimide
Voice Coil Winding Depth	16 mm
Number of layers	2
Magnet gap depth	8 mm
Basket	Pressed Steel
Flux Density	1.0T
Magnet Outer Diameter / Wgt	156mm / 50 oz

THIELE – SMALL PARAMETERS[5]

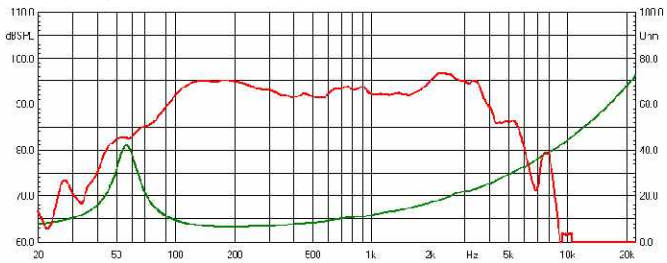
Resonance frequency	Fs	56 Hz
DC resistance	Re	5.3 ohm
Mechanical factor	Qms	4.1
Electrical factor	Qes	0.59
Total factor	Qts	0.51
Mechanical compliance	Cms	0.11 mm/N
Mechanical resistance of suspension losses	Rms	6.13 mech-ohm
Effective Moving Mass	Mms	70 g
Half-space efficiency	Eff	1.3%
BL Factor	BL	15 T.m
Equivalent Cas air load	Vas	46 liters
Effective piston area	Sd	0.0539 m^2
Max. linear excursion[6]	Xmax	6 mm
Voice coil inductance	Le1K	1.2 mH
Efficiency Bandwidth Product	EBP	95

MOUNTING INFORMATION

Overall Diameter	311 mm
Bolt Circle Diameter	294 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	279 mm
Overall Depth	125 mm
Net Weight	4.3 kg
Shipping Weight	5 kg
Shipping Box	345x345x180mm

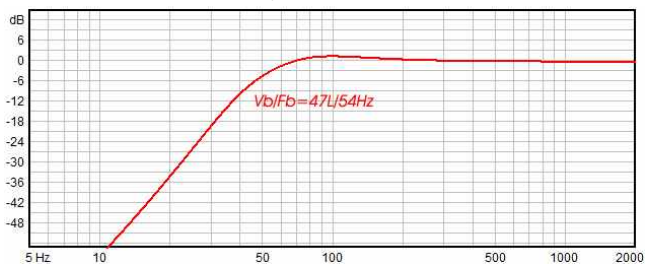
Also available in 4ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 47L/54Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

J6010

- 10 inch
- 400 Watts
- 97 dB
- 55 ~ 3500 Hz

KEY FEATURES:

① 800 W continuous program power capacity
② 97 dB Sensitivity 1w/1m
③ 55Hz ~3500Hz frequency response range
④ 3" inside/outside copper clad aluminum voice coi
⑤ Heavy duty magnet structure
⑥ Ideal for high quality 2-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	250mm /10inch
Rated Impedance	8 ohm
Nominal Power handling[1]	400 Watts
Program Power[2]	800 Watts
Sensitivity(1w/1m)[3]	97 dB
Frequency Range[4]	55 ~ 3500 Hz
Minimum Impedance(Zmin)	6.4 ohm
Voice Coil Diameter	76mm /3inch
Voice Coil Material	CCAW
Former Material	Fiberglass
Voice Coil Winding Depth	15 mm
Number of layers	2(inside/outside)
Magnet gap depth	10 mm
Basket	Cast Aluminum
Flux Density	1.2 T
Magnet Outer Diameter / Wgt	180mm / 80 oz

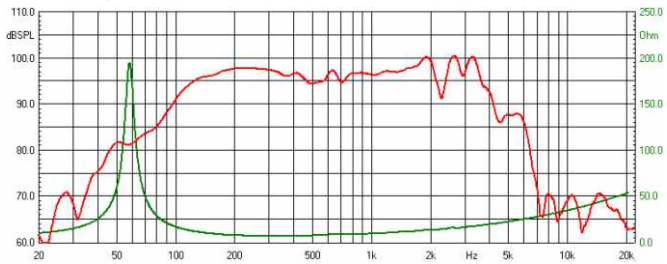
THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	58 Hz
DC resistance	Re	5.6 ohm
Mechanical factor	Qms	10
Electrical factor	Qes	0.31
Total factor	Qts	0.30
Mechanical compliance	Cms	0.18 mm/N
Mechanical resistance of suspension losses	Rms	1.4mech-ohm
Effective Moving Mass	Mms	41 g
Half-space efficiency	Eff	1.98%
BL Factor	BL	16.5 T.m
Equivalent Cas air load	Vas	32 liters
Effective piston area	Sd	0.0356 m^2
Max. linear excursion[6]	Xmax	5 mm
Voice coil inductance	Le1K	0.7 mH
Efficiency Bandwidth Product	EBP	187

MOUNTING INFORMATION

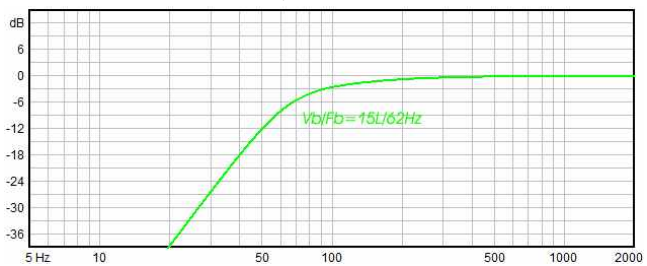
Overall Diameter	261 mm
Bolt Circle Diameter	246 mm
Bolt Hole Diameter	5.5 mm
Baffle Cutout Diameter	228 mm
Overall Depth	128 mm
Net Weight	6.5 kg
Shipping Weight	7.1 kg
Shipping Box	295x295x1 55mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 15L/62Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

M5410

☀ 10 inch ☀ 300 Watts
☀ 94.5 dB ☀ 54 ~ 3600 Hz

KEY FEATURES:

① 600 W continuous program power capacity
② 94.5 dB Sensitivity 1w/1m
③ 54Hz ~3600Hz frequency response range
④ 2.5" voice coil with Kapton former
⑤ Improved heat dissipation via unique basket design and multiple backplate vents
⑥ Ideal for high quality compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	250mm /10inch
Rated Impedance	8 ohm
Nominal Power handling[1]	300 Watts
Program Power[2]	600 Watts
Sensitivity(1w/1m)[3]	94.5 dB
Frequency Range[4]	54 ~ 3600 Hz
Minimum Impedance(Zmin)	6.7 ohm
Voice Coil Diameter	65mm /2.5inch
Voice Coil Material	Copper
Former Material	Polyimide
Voice Coil Winding Depth	16 mm
Number of layers	2
Magnet gap depth	8 mm
Basket	Cast Aluminum
Flux Density	1.1T
Magnet Outer Diameter / Wgt	156mm / 50 oz

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	54 Hz
DC resistance	Re	5.3 ohm
Mechanical factor	Qms	16.4
Electrical factor	Qes	0.32
Total factor	Qts	0.31
Mechanical compliance	Cms	0.2 mm/N
Mechanical resistance of suspension losses	Rms	0.9 mech-ohm
Effective Moving Mass	Mms	43 g
Half-space efficiency	Eff	1.7%
BL Factor	BL	15.7 T.m
Equivalent Cas air load	Vas	35 liters
Effective piston area	Sd	0.0356 m^2
Max. linear excursion[6]	Xmax	6 mm
Voice coil inductance	Le1K	1.2 mH
Efficiency Bandwidth Product	EBP	172

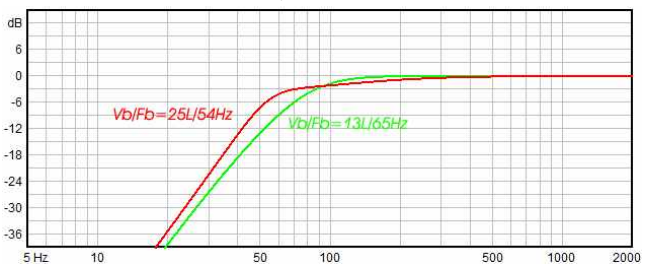
MOUNTING INFORMATION

Overall Diameter	261 mm
Bolt Circle Diameter	246 mm
Bolt Hole Diameter	5.5 mm
Baffle Cutout Diameter	228 mm
Overall Depth	114 mm
Net Weight	4.2 kg
Shipping Weight	5 kg
Shipping Box	300x300x175mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 25L/54Hz Vb/Fb = 13L/65Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

BLIO-65

☀ 10 inch ☀ 300 Watts
☀ 94 dB ☀ 61 ~ 4000 Hz

KEY FEATURES:

① 600W continuous program power capacity
② 94dB sensitivity, 1w/1m
③ 65mm(2.5") copper clad aluminum voice coil with fiberglass former
④ FEA optimized magnet system design for lower distortion and minimum power compression
⑤ Aluminum demodulating ring for lower distortion
⑥ Ideal for high quality compact 2 or 3-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	250mm /10inch
Rated Impedance	8 ohm
Nominal Power handling[1]	300 Watts
Program Power[2]	600 Watts
Sensitivity(1w/1m)[3]	94 dB
Frequency Range[4]	61 ~ 4000 Hz
Minimum Impedance(Zmin)	6.6 ohm
Voice Coil Diameter	65mm /2.5inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	15 mm
Number of layers	4
Magnet gap depth	9.5 mm
Basket	Cast Aluminum
Flux Density	0.8T
Magnet Outer Diameter / Wgt	156mm / 52 oz

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	61 Hz
DC resistance	Re	5.3 ohm
Mechanical factor	Qms	10.7
Electrical factor	Qes	0.38
Total factor	Qts	0.36
Mechanical compliance	Cms	0.16 mm/N
Mechanical resistance of suspension losses	Rms	1.5mech-ohm
Effective Moving Mass	Mms	41 g
Half-space efficiency	Eff	1.68%
BL Factor	BL	15 T.m
Equivalent Cas air load	Vas	29 liters
Effective piston area	Sd	0.0356 m^2
Max. linear excursion[6]	Xmax	5.5 mm
Voice coil inductance	Le1K	1.03 mH
Efficiency Bandwidth Product	EBP	162

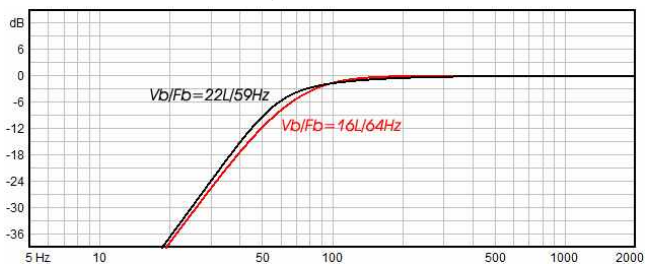
MOUNTING INFORMATION

Overall Diameter	266 mm
Bolt Circle Diameter	252 mm
Bolt Hole Diameter	6.5 mm
Baffle Cutout Diameter	232 mm
Overall Depth	117 mm
Net Weight	4.9 kg
Shipping Weight	5.5 kg
Shipping Box	275x275x145mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

M5010

☀ 10 inch ☀ 180 Watts
☀ 95 dB ☀ 55 ~ 2800 Hz

KEY FEATURES:

① 360 W continuous program power capacity
② High sensitivity: 95dB/1w/1m
③ 55 ~ 2800Hz frequency response range
④ 2" copper voice coil wounded on fiberglass former
⑤ Semi-pressed paper cone with pressed dust cap
⑥ Ideal for compact multi-way systems or woofer application

GENERAL SPECIFICATIONS

Nominal Diameter	250mm /10inch
Rated Impedance	8 ohm
Nominal Power handling[1]	180 Watts
Program Power[2]	360 Watts
Sensitivity(1w/1m)[3]	95 dB
Frequency Range[4]	55 ~ 2800Hz
Minimum Impedance(Zmin)	6.5 ohm
Voice Coil Diameter	50mm /2inch
Voice Coil Material	Copper
Former Material	Fiberglass
Voice Coil Winding Depth	18 mm
Number of layers	2
Magnet gap depth	8 mm
Basket	Cast Aluminum
Flux Density	1.1T
Magnet Outer Diameter / Wgt	140mm / 45 oz

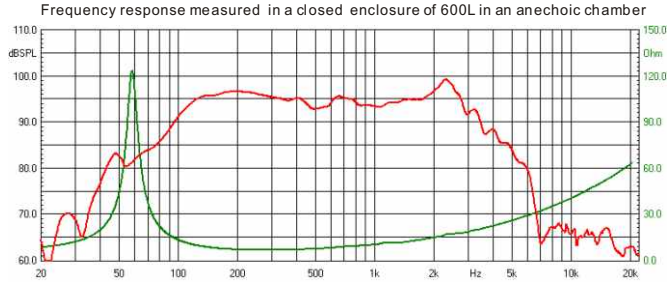
THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	58 Hz
DC resistance	Re	5.3 ohm
Mechanical factor	Qms	8.6
Electrical factor	Qes	0.39
Total factor	Qts	0.37
Mechanical compliance	Cms	0.20 mm/N
Mechanical resistance of suspension losses	Rms	1.5 mech-ohm
Effective Moving Mass	Mms	36.5 g
Half-space efficiency	Eff	1.7%
BL Factor	BL	13.5 T.m
Equivalent Cas air load	Vas	35 liters
Effective piston area	Sd	0.0350 m^2
Max. linear excursion[6]	Xmax	6.5 mm
Voice coil inductance	Le1K	0.91 mH
Efficiency Bandwidth Product	EBP	148

MOUNTING INFORMATION

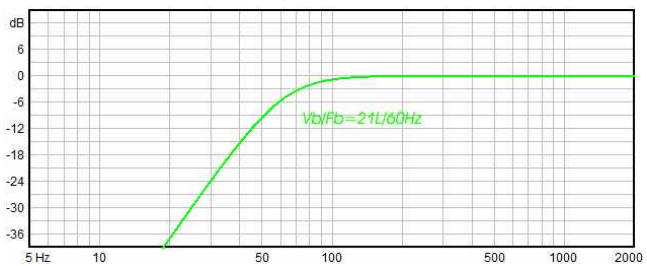
Overall Diameter	261 mm
Bolt Circle Diameter	246 mm
Bolt Hole Diameter	5.5 mm
Baffle Cutout Diameter	228 mm
Overall Depth	113 mm
Net Weight	3.5 kg
Shipping Weight	4 kg
Shipping Box	295x295x1 55mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 21L/60Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

V3010m/8

☀ 10 inch ☀ 300 Watts
☀ 97 dB ☀ 60 ~ 4800 Hz

KEY FEATURES:

① 600 W continuous program power capacity
② High sensitivity 97dB/1w/1m
③ Very smooth response up to 4.8k Hz
④ 2.5" inside/outside copper clad aluminum voice coil
⑤ Aluminum demodulating ring for very low distortion
⑥ Ideal for mid and mid-bass high loading systems

GENERAL SPECIFICATIONS

Nominal Diameter	250mm /10inch
Rated Impedance	8 ohm
Nominal Power handling[1]	300 Watts
Program Power[2]	600 Watts
Sensitivity(1w/1m)[3]	97 dB
Frequency Range[4]	60 ~ 4800Hz
Minimum Impedance(Zmin)	6.2 ohm
Voice Coil Diameter	65mm /2.5inch
Voice Coil Material	CCAW
Former Material	Fiberglass
Voice Coil Winding Depth	11 mm
Number of layers	2(inside/outside)
Magnet gap depth	8 mm
Basket	Cast Aluminum
Flux Density	1.3T
Magnet Outer Diameter / Wgt	170mm / 62 oz

THIELE – SMALL PARAMETERS[5]

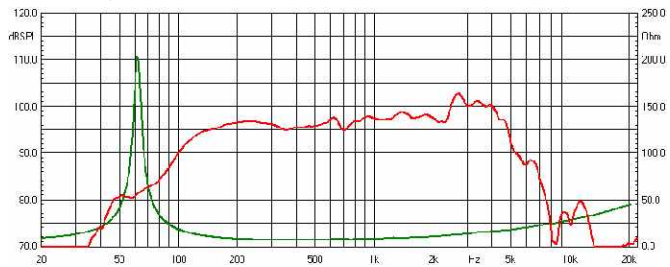
Resonance frequency	Fs	61.7 Hz
DC resistance	Re	5.0 ohm
Mechanical factor	Qms	11.5
Electrical factor	Qes	0.29
Total factor	Qts	0.29
Mechanical compliance	Cms	0.20 mm/N
Mechanical resistance of suspension losses	Rms	1.13 mech-ohm
Effective Moving Mass	Mms	33.5 g
Half-space efficiency	Eff	2.7%
BL Factor	BL	14.9 T.m
Equivalent Cas air load	Vas	34.5 liters
Effective piston area	Sd	0.0353 m^2
Max. linear excursion[6]	Xmax	4 mm
Voice coil inductance	Le1K	0.42 mH
Efficiency Bandwidth Product	EBP	212

MOUNTING INFORMATION

Overall Diameter	261 mm
Bolt Circle Diameter	246 mm
Bolt Hole Diameter	5.5 mm
Baffle Cutout Diameter	228 mm
Overall Depth	115 mm
Net Weight	5.0 kg
Shipping Weight	5.4 kg
Shipping Box	275x275x1 30mm

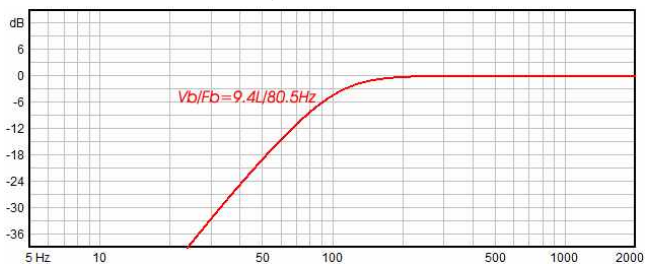
Also available in 16ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 9.4L/80.5Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system with a high level 25Hz sine wave preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

V3010m/16II

- 10 inch
- 300 Watts
- 96 dB
- 70 ~ 4800 Hz

KEY FEATURES:

① 600 W continuous program power capacity
② High sensitivity 96dB/1w/1m
③ Very smooth response up to 4.8k Hz
④ 2.5" inside/outside high temperature aluminum voice coil
⑤ Weather protected cone for outdoor usage
⑥ Aluminum demodulating ring for very low distortion
⑦ Optimized for the use in line array systems

GENERAL SPECIFICATIONS

Nominal Diameter	250mm /10inch
Rated Impedance	16 ohm
Nominal Power handling[1]	300 Watts
Program Power[2]	600 Watts
Sensitivity(1w/1m)[3]	96 dB
Frequency Range[4]	70 ~ 4800Hz
Minimum Impedance(Zmin)	14.2 ohm
Voice Coil Diameter	65mm /2.5inch
Voice Coil Material	Pure Aluminum
Former Material	Polyimide
Voice Coil Winding Depth	15 mm
Number of layers	2(inside/outside)
Magnet gap depth	8 mm
Basket	Cast Aluminum
Flux Density	1.3T
Magnet Outer Diameter / Wgt	170mm / 62 oz

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	72.5 Hz
DC resistance	Re	12.6 ohm
Mechanical factor	Qms	14.1
Electrical factor	Qes	0.52
Total factor	Qts	0.51
Mechanical compliance	Cms	0.12 mm/N
Mechanical resistance of suspension losses	Rms	1.32 mech-ohm
Effective Moving Mass	Mms	41 g
Half-space efficiency	Eff	1.4%
BL Factor	BL	19 T.m
Equivalent Cas air load	Vas	20 liters
Effective piston area	Sd	0.0353 m^2
Max. linear excursion[6]	Xmax	6 mm
Voice coil inductance	Le1K	0.84 mH
Efficiency Bandwidth Product	EBP	139

MOUNTING INFORMATION

Overall Diameter	261 mm
Bolt Circle Diameter	246 mm
Bolt Hole Diameter	5.5 mm
Baffle Cutout Diameter	228 mm
Overall Depth	115 mm
Net Weight	5.0 kg
Shipping Weight	5.4 kg
Shipping Box	275x275x1 30mm

Also available in 8ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[(7)]

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system with a high level 25Hz sine wave preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

PS10-50

- 10 inch
- 150 Watts
- 94 dB
- 52 ~ 2800 Hz

KEY FEATURES:

① 300 W continuous program power capacity
② 94dB Sensitivity 1w/1m
③ 52 ~ 2800Hz frequency response range
④ 2" copper voice coil wounded on fiberglass former
⑤ Semi-pressed paper cone with pressed dust cap
⑥ Ideal for compact multi-way systems or woofer application

GENERAL SPECIFICATIONS

Nominal Diameter	250mm /10inch
Rated Impedance	8 ohm
Nominal Power handling[1]	150 Watts
Program Power[2]	300 Watts
Sensitivity(1w/1m)[3]	94 dB
Frequency Range[4]	52 ~ 2800Hz
Minimum Impedance(Zmin)	6.3 ohm
Voice Coil Diameter	50mm /2inch
Voice Coil Material	Copper
Former Material	Fiberglass
Voice Coil Winding Depth	18 mm
Number of layers	2
Magnet gap depth	8 mm
Basket	Pressed Steel
Flux Density	1.1T
Magnet Outer Diameter / Wgt	145mm / 42 oz

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	55 Hz
DC resistance	Re	5.3 ohm
Mechanical factor	Qms	9.9
Electrical factor	Qes	0.45
Total factor	Qts	0.43
Mechanical compliance	Cms	0.24 mm/N
Mechanical resistance of suspension losses	Rms	1.22 mech-ohm
Effective Moving Mass	Mms	34.9 g
Half-space efficiency	Eff	1.5%
BL Factor	BL	11.9 T.m
Equivalent Cas air load	Vas	42 liters
Effective piston area	Sd	0.0353 m^2
Max. linear excursion[6]	Xmax	6.5 mm
Voice coil inductance	Le1K	1.0 mH
Efficiency Bandwidth Product	EBP	122

MOUNTING INFORMATION

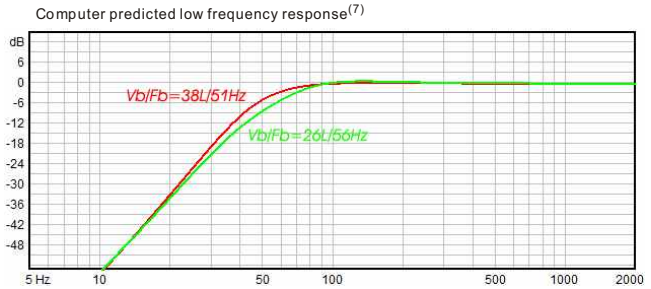
Overall Diameter	256.5 mm
Bolt Circle Diameter	242 mm
Bolt Hole Diameter	4.8 mm
Baffle Cutout Diameter	235 mm
Overall Depth	110 mm
Net Weight	3.5 kg
Shipping Weight	4 kg
Shipping Box	295x295x1 55mm

Also available in 4ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

V3208m/16

- 8 inch
- 150 Watts
- 95 dB
- 90 ~ 6000 Hz

KEY FEATURES:

① 300 W continuous program power capacity
② High sensitivity 95dB/1w/1m
③ Very smooth response up to 6k Hz
④ 2" inside/outside copper clad aluminum voice coil wounded on polyimide former
⑤ Weather protected cone for outdoor usage
⑥ Aluminum demodulating ring for very low distortion
⑦ Inverted dust cap to minimize the cone distortion and for better coupling to a phase plug
⑧ Optimized for the use in line array or multi-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	200mm /8inch
Rated Impedance	16 ohm
Nominal Power handling[1]	150 Watts
Program Power[2]	300 Watts
Sensitivity(1w/1m)[3]	95 dB
Frequency Range[4]	90 ~ 6000Hz
Minimum Impedance(Zmin)	14.5 ohm
Voice Coil Diameter	50mm /2inch
Voice Coil Material	CCAW
Former Material	Polyimide
Voice Coil Winding Depth	14 mm
Number of layers	2(inside/outside)
Magnet gap depth	8 mm
Basket	Cast Aluminum
Flux Density	1.3T
Magnet Outer Diameter / Wgt	140mm / 45 oz

THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	92 Hz
DC resistance	Re	12.6 ohm
Mechanical factor	Qms	7.3
Electrical factor	Qes	0.64
Total factor	Qts	0.59
Mechanical compliance	Cms	0.15 mm/N
Mechanical resistance of suspension losses	Rms	1.62 mech-ohm
Effective Moving Mass	Mms	20 g
Half-space efficiency	Eff	1.2%
BL Factor	BL	15.2 T.m
Equivalent Cas air load	Vas	10 liters
Effective piston area	Sd	0.0222 m^2
Max. linear excursion[6]	Xmax	6 mm
Voice coil inductance	Le1K	0.98 mH
Efficiency Bandwidth Product	EBP	144

MOUNTING INFORMATION

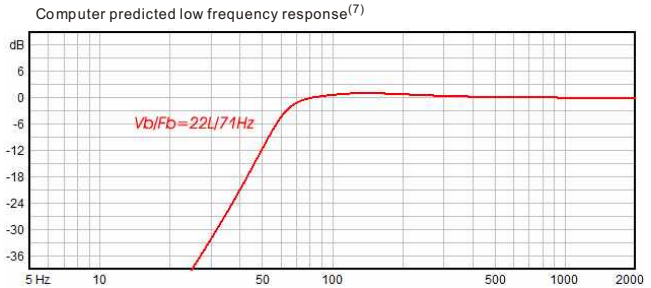
Overall Diameter	200 mm
Bolt Circle Diameter	212 mm
Bolt Hole Diameter	5.5 mm
Baffle Cutout Diameter	180 mm
Overall Depth	100 mm
Net Weight	3.2 kg
Shipping Weight	3.6 kg
Shipping Box	220x220x110mm

Also available in 8ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber

Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 33L/57Hz

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system with a high level 25Hz sine wave preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

V3008m/8

- 8 inch
- 200 Watts
- 96 dB
- 72 ~ 5800 Hz

KEY FEATURES:

① 400 W continuous program power capacity
② High sensitivity 96dB/1w/1m
③ Very smooth response up to 5.8k Hz
④ 2" copper clad aluminum voice coil wounded on polyimide former
⑤ Aluminum demodulating ring for very low distortion
⑥ Ideal for the use in line array or multi-way systems

GENERAL SPECIFICATIONS

Nominal Diameter	200mm /8inch
Rated Impedance	8 ohm
Nominal Power handling[1]	200 Watts
Program Power[2]	400 Watts
Sensitivity(1w/1m)[3]	96 dB
Frequency Range[4]	70 ~ 5800Hz
Minimum Impedance(Zmin)	6.6 ohm
Voice Coil Diameter	50mm /2inch
Voice Coil Material	CCAW
Former Material	Polyimide
Voice Coil Winding Depth	14 mm
Number of layers	2
Magnet gap depth	8 mm
Basket	Cast Aluminum
Flux Density	1.3T
Magnet Outer Diameter / Wgt	140mm / 45 oz

THIELE – SMALL PARAMETERS[5]

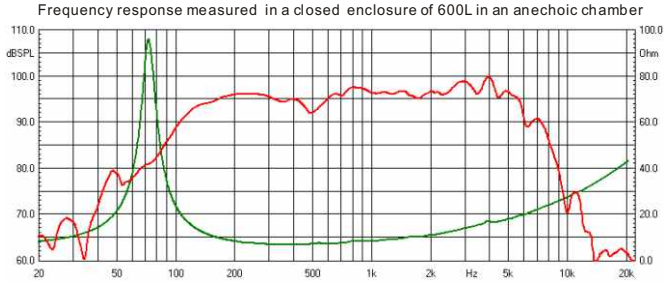
Resonance frequency	Fs	72.7 Hz
DC resistance	Re	5.4 ohm
Mechanical factor	Qms	6.2
Electrical factor	Qes	0.37
Total factor	Qts	0.35
Mechanical compliance	Cms	0.24 mm/N
Mechanical resistance of suspension losses	Rms	1.46 mech-ohm
Effective Moving Mass	Mms	20 g
Half-space efficiency	Eff	1.7%
BL Factor	BL	11.5 T.m
Equivalent Cas air load	Vas	17 liters
Effective piston area	Sd	0.0227 m^2
Max. linear excursion[6]	Xmax	5 mm
Voice coil inductance	Le1K	0.48 mH
Efficiency Bandwidth Product	EBP	196

MOUNTING INFORMATION

Overall Diameter	208.5 mm
Bolt Circle Diameter	196 mm
Bolt Hole Diameter	5.5 mm
Baffle Cutout Diameter	187 mm
Overall Depth	100 mm
Net Weight	3.2 kg
Shipping Weight	3.6 kg
Shipping Box	220x220x110mm

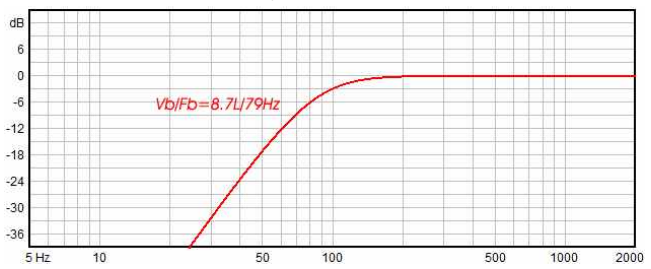
Also available in 16ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system with a high level 25Hz sine wave preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

PS08-38

- 8 inch
- 150 Watts
- 92 dB
- 75 ~ 6300 Hz

KEY FEATURES:

① 300 W continuous program power capacity
② High efficiency: 92dB 1w/1m
③ Extended mid range response up to 6300Hz
④ 1.5" copper clad aluminum voice coil, vented on fiberglass former for heat dispersion
⑤ Ideal for the use in trolly, conference systems

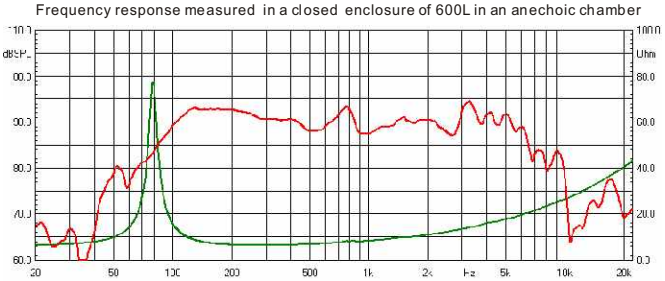
GENERAL SPECIFICATIONS	
Nominal Diameter	200mm /8inch
Rated Impedance	8 ohm
Nominal Power handling[1]	150 Watts
Program Power[2]	300 Watts
Sensitivity(1w/1m)[3]	92 dB
Frequency Range[4]	75 ~ 6300Hz
Minimum Impedance(Zmin)	6.2 ohm
Voice Coil Diameter	38mm /1.5inch
Voice Coil Material	CCAW
Former Material	Fiberglass
Voice Coil Winding Depth	12 mm
Number of layers	2
Magnet gap depth	6 mm
Basket	Pressed Steel
Flux Density	1.0T
Magnet Material	120mm / 30 oz

THIELE – SMALL PARAMETERS[5]		
Resonance frequency	Fs	79 Hz
DC resistance	Re	5.4 ohm
Mechanical factor	Qms	10.9
Electrical factor	Qes	0.84
Total factor	Qts	0.75
Mechanical compliance	Cms	0.17 mm/N
Mechanical resistance of suspension losses	Rms	1.04 mech-ohm
Effective Moving Mass	Mms	22.6 g
Half-space efficiency	Eff	0.7%
BL Factor	BL	8.7 T.m
Equivalent Cas air load	Vas	11 liters
Effective piston area	Sd	0.0214 m^2
Max. linear excursion[6]	Xmax	4.5 mm
Voice coil inductance	Le1K	0.56 mH
Efficiency Bandwidth Product	EBP	99

MOUNTING INFORMATION	
Overall Diameter	210.5 mm
Bolt Circle Diameter	197.5 mm
Bolt Hole Diameter	5.2 mm
Baffle Cutout Diameter	184 mm
Overall Depth	92 mm
Net Weight	2 kg
Shipping Weight	2.4 kg
Shipping Box	220x220x110mm

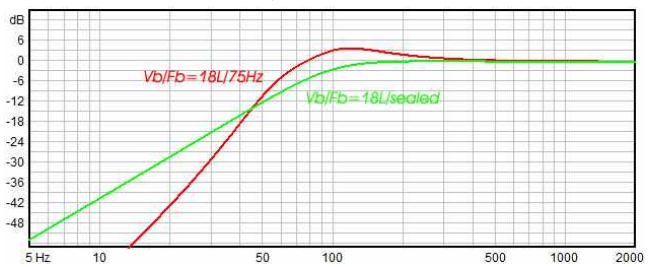
Also available in 4ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

MB06-38

☀ 6.5 inch ☀ 100 Watts
☀ 92 dB ☀ 125 ~ 9000 Hz

KEY FEATURES:

① 200 W continuous program power capacity
② High efficiency: 92dB 1w/1m
③ Extended mid response up to 9kHz
④ 1.5" flat copper clad aluminum voice coil
⑤ Copper shorting ring ensures extremely linear impedance and reduced distortion figure
⑥ Ideal for the use in array systems, midrange application

GENERAL SPECIFICATIONS

Nominal Diameter	200mm /6.5inch
Rated Impedance	8 ohm
Nominal Power handling[1]	100 Watts
Program Power[2]	200 Watts
Sensitivity(1w/1m)[3]	92 dB
Frequency Range[4]	125 ~ 9000Hz
Minimum Impedance(Zmin)	6.4 ohm
Voice Coil Diameter	38mm /1.5inch
Voice Coil Material	Edgewound CCAW
Former Material	Fiberglass
Voice Coil Winding Depth	8 mm
Number of layers	1
Magnet gap depth	6 mm
Basket	Cast Aluminum
Flux Density	1.05 T
Magnet Outer Diameter/Wgt	120mm/30 oz

THIELE – SMALL PARAMETERS[5]

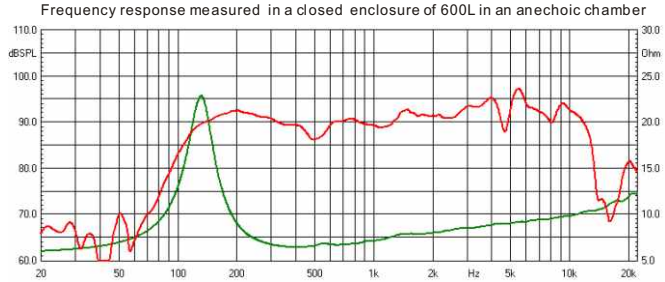
Resonance frequency	Fs	131 Hz
DC resistance	Re	5.4 ohm
Mechanical factor	Qms	3.3
Electrical factor	Qes	1.03
Total factor	Qts	0.78
Mechanical compliance	Cms	0.11 mm/N
Mechanical resistance of suspension losses	Rms	3.36 mech-ohm
Effective Moving Mass	Mms	13.5 g
Half-space efficiency	Eff	0.62%
BL Factor	BL	7.65 T.m
Equivalent Cas air load	Vas	2.9 liters
Effective piston area	Sd	0.0139 m^2
Max. linear excursion[6]	Xmax	2.5 mm
Voice coil inductance	Le1K	0.16 mH
Efficiency Bandwidth Product	EBP	127

MOUNTING INFORMATION

Overall Diameter	162 mm
Bolt Circle Diameter	172 mm
Bolt Hole Diameter	5 mm
Baffle Cutout Diameter	147 mm
Overall Depth	78 mm
Net Weight	2.1 kg
Shipping Weight	2.3 kg
Shipping Box	172x172x9 5mm

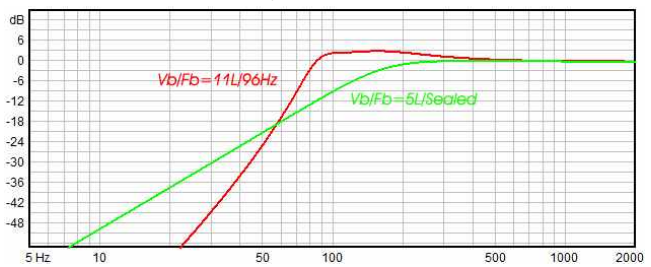
Also available in 16ohm, data upon request.

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test at 23 Celsius degree environment.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

FR421

- 4 inch
- 45 Watts
- 87 dB
- 91 ~ 17k Hz

KEY FEATURES:

① 90W continuous program power capacity
② 87dB sensitivity, 1w/1m
③ 20mm(0.8") high temperature copper clad aluminum voice coil
④ Vented voice coil former increases airflow to provide enhanced cooling
⑤ Shorting copper ring for extended HF response
⑥ Y35 Barium ferrite magnet
⑦ Strong and light fiberglass cone remains rigid to higher frequencies
⑧ Ideal for mini array systems, full range application.

GENERAL SPECIFICATIONS

Nominal Diameter	100mm /4inch
Rated Impedance	8 ohm
Nominal Power handling[1]	45 Watts
Program Power[2]	90 Watts
Sensitivity(1w/1m)[3]	87 dB
Frequency Range[4]	91 ~ 17k Hz
Minimum Impedance(Zmin)	7.2 ohm
Voice Coil Diameter	20mm /0.8inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	6 mm
Number of layers	2
Magnet gap depth	4 mm
Basket	Pressed Cast
Flux Density	1.2 T
Magnet Outer Diameter / Wgt	70mm / 8 oz

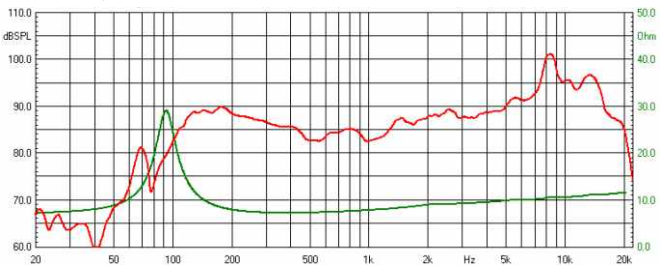
THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	92 Hz
DC resistance	Re	6.4 ohm
Mechanical factor	Qms	4.0
Electrical factor	Qes	1.1
Total factor	Qts	0.88
Mechanical compliance	Cms	0.65 mm/N
Mechanical resistance of suspension losses	Rms	0.66 mech-ohm
Effective Moving Mass	Mms	4.5 g
Half-space efficiency	Eff	0.18%
BL Factor	BL	3.9 T.m
Equivalent Cas air load	Vas	2.5 liters
Effective piston area	Sd	0.0053 m^2
Max. linear excursion[6]	Xmax	2 mm
Voice coil inductance	Le1K	0.3 mH
Efficiency Bandwidth Product	EBP	83

MOUNTING INFORMATION

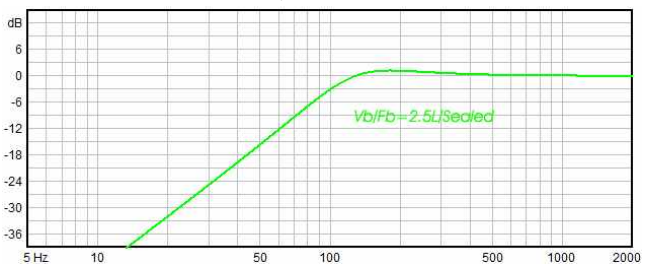
Overall Diameter	127 mm
Bolt Circle Diameter	115 mm
Bolt Hole Diameter	5 mm
Baffle Cutout Diameter	103 mm
Overall Depth	55 mm
Net Weight	0.5 kg / pc
Shipping Weight	14 kg / 24pcs
Shipping Box (24pcs)	430*340*225m m

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 2.5L / Sealed

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test at 23 Celsius degree environment.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

FR42Ind

- 4 inch
- 45 Watts
- 88 dB
- 90 ~ 17k Hz

KEY FEATURES:

① 90W continuous program power capacity
② 88dB sensitivity, 1w/1m
③ 20mm(0.8") high temperature copper clad aluminum voice coil
④ Vented voice coil former increases airflow to provide enhanced cooling
⑤ Strong and light fiberglass cone remains rigid to higher frequencies
⑥ High grade neodymium magnet to lower weight
⑦ Ideal for mini array systems, full range application.

GENERAL SPECIFICATIONS

Nominal Diameter	100mm /4inch
Rated Impedance	8 ohm
Nominal Power handling[1]	45 Watts
Program Power[2]	90 Watts
Sensitivity(1w/1m)[3]	88 dB
Frequency Range[4]	90 ~ 16k Hz
Minimum Impedance(Zmin)	6.8 ohm
Voice Coil Diameter	20mm /0.8inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	6 mm
Number of layers	2
Magnet gap depth	4 mm
Basket	Pressed Cast
Flux Density	1.2 T
Magnet Material	Neodymium

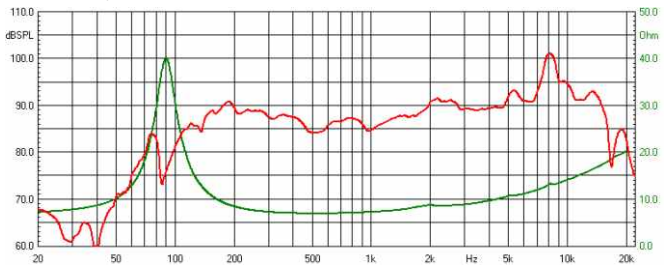
THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	90 Hz
DC resistance	Re	6.4 ohm
Mechanical factor	Qms	4.0
Electrical factor	Qes	0.76
Total factor	Qts	0.64
Mechanical compliance	Cms	0.69 mm/N
Mechanical resistance of suspension losses	Rms	0637 mech-ohm
Effective Moving Mass	Mms	4.5 g
Half-space efficiency	Eff	0.25%
BL Factor	BL	4.6 T.m
Equivalent Cas air load	Vas	2.7 liters
Effective piston area	Sd	0.0053 m^2
Max. linear excursion[6]	Xmax	2 mm
Voice coil inductance	Le1K	0.16 mH
Efficiency Bandwidth Product	EBP	118

MOUNTING INFORMATION

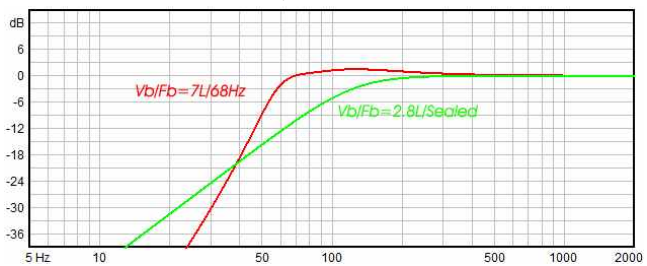
Overall Diameter	127 mm
Bolt Circle Diameter	115 mm
Bolt Hole Diameter	5 mm
Baffle Cutout Diameter	103 mm
Overall Depth	55 mm
Net Weight	0.22 kg / pc
Shipping Weight	6 kg / 24pcs
Shipping Box (24pcs)	430*340*225m m

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test at 23 Celsius degree environment.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

FR32Ind

- 3 inch
- 40 Watts
- 89 dB
- 115 ~ 15k Hz

KEY FEATURES:

① 80W continuous program power capacity
② 89dB sensitivity, 1w/1m
③ 20mm(0.8") high temperature copper clad aluminum voice coil
④ Vented voice coil former increases airflow to provide enhanced cooling
⑤ Strong and light fiberglass cone remains rigid to higher frequencies
⑥ High grade Neodymium magnet to lower weight
⑦ Ideal for mini array systems, full range application.

GENERAL SPECIFICATIONS

Nominal Diameter	80mm /3inch
Rated Impedance	8 ohm
Nominal Power handling[1]	40 Watts
Program Power[2]	80 Watts
Sensitivity(1w/1m)[3]	89 dB
Frequency Range[4]	115 ~ 15k Hz
Minimum Impedance(Zmin)	7.3 ohm
Voice Coil Diameter	20mm /0.8inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	6 mm
Number of layers	2
Magnet gap depth	4 mm
Basket	Pressed Cast
Flux Density	1.4T
Magnet Material	Neodymium

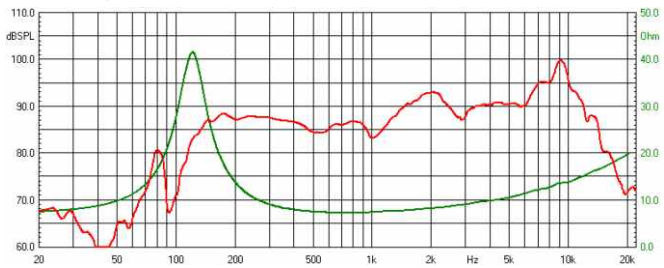
THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	118 Hz
DC resistance	Re	6.4 ohm
Mechanical factor	Qms	3.1
Electrical factor	Qes	0.56
Total factor	Qts	0.47
Mechanical compliance	Cms	0.61 mm/N
Mechanical resistance of suspension losses	Rms	0.7 mech-ohm
Effective Moving Mass	Mms	2.9 g
Half-space efficiency	Eff	0.3%
BL Factor	BL	5 T.m
Equivalent Cas air load	Vas	1.0 liters
Effective piston area	Sd	0.0033 m^2
Max. linear excursion[6]	Xmax	2 mm
Voice coil inductance	Le1K	0.05 mH
Efficiency Bandwidth Product	EBP	214

MOUNTING INFORMATION

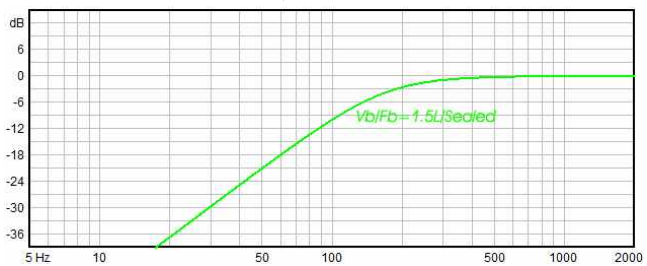
Overall Diameter	93 mm
Bolt Circle Diameter	84 mm
Bolt Hole Diameter	5 mm
Baffle Cutout Diameter	71 mm
Overall Depth	47 mm
Net Weight	0.22 kg / pc
Shipping Weight	8.7 kg / 32pcs
Shipping Box (32pcs)	400*400*145m m

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 1L / Sealed

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test at 23 Celsius degree environment.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

FR321

- 3 inch
- 40 Watts
- 88 dB
- 110 ~ 15k Hz

KEY FEATURES:

① 80W continuous program power capacity
② 88dB sensitivity, 1w/1m
③ 20mm(0.8") high temperature copper clad aluminum voice coil
④ Vented voice coil former increases airflow to provide enhanced cooling
⑤ Shorting copper ring for extended HF response
⑥ Y35 Barium ferrite magnet
⑦ Strong and light fiberglass cone remains rigid to higher frequencies
⑧ Ideal for mini array systems, full range application.

GENERAL SPECIFICATIONS

Nominal Diameter	80mm /3inch
Rated Impedance	8 ohm
Nominal Power handling[1]	40 Watts
Program Power[2]	80 Watts
Sensitivity(1w/1m)[3]	88 dB
Frequency Range[4]	110 ~ 15k Hz
Minimum Impedance(Zmin)	7.3 ohm
Voice Coil Diameter	20mm /0.8inch
Voice Coil Material	CCAW
Former Material	Glass Fiber
Voice Coil Winding Depth	6 mm
Number of layers	2
Magnet gap depth	4 mm
Basket	Pressed Cast
Flux Density	1.2T
Magnet Outer Diameter / Wgt	70mm / 8 oz

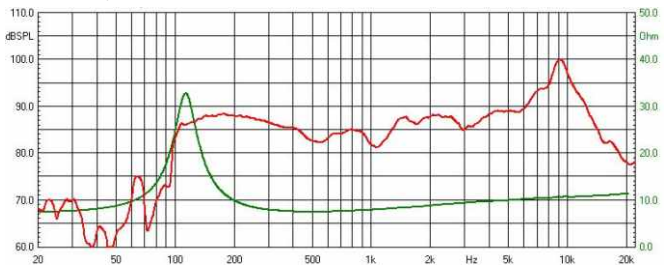
THIELE – SMALL PARAMETERS[5]

Resonance frequency	Fs	113 Hz
DC resistance	Re	6.4 ohm
Mechanical factor	Qms	3.5
Electrical factor	Qes	0.85
Total factor	Qts	0.68
Mechanical compliance	Cms	0.67 mm/N
Mechanical resistance of suspension losses	Rms	0.59 mech-ohm
Effective Moving Mass	Mms	2.9 g
Half-space efficiency	Eff	0.17%
BL Factor	BL	4 T.m
Equivalent Cas air load	Vas	1.03 liters
Effective piston area	Sd	0.0033 m^2
Max. linear excursion[6]	Xmax	2 mm
Voice coil inductance	Le1K	0.1 mH
Efficiency Bandwidth Product	EBP	133

MOUNTING INFORMATION

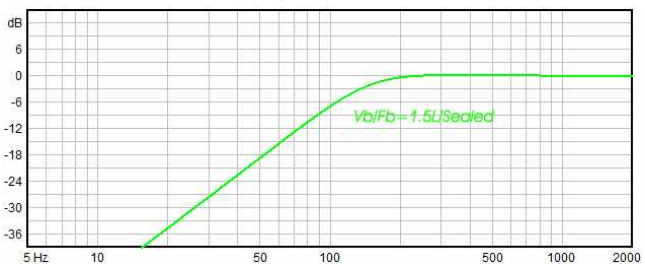
Overall Diameter	93 mm
Bolt Circle Diameter	84 mm
Bolt Hole Diameter	5 mm
Baffle Cutout Diameter	71 mm
Overall Depth	51 mm
Net Weight	0.48 kg / pc
Shipping Weight	17 kg / 32pcs
Shipping Box (32pcs)	400*400*145m m

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response[7]



Vb/Fb = 1.5L / Sealed

NOTES:

1. AES standard
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test at 23 Celsius degree environment.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

CX1244I

☀ 12" / 1.75" ☀ 450w / 60w
☀ 97 / 106 dB ☀ 50 ~ 19k Hz

KEY FEATURES:

① 900W(LF) +120W(HF) continuous program power capacity
② 97dB(LF)+106dB(HF) sensitivity 1w/1m
③ 76mm(3") LF inside/outside copper clad aluminum voice coil
④ 44mm(1.75") HF edgewound aluminum voice coil
⑤ 1" polyimide HF driver directly coupled to the pole piece of the woofer provides excellent response in the mid to high frequencies
⑥ Designed for use as stage monitors or as compact bass reflex systems

LF GENERAL SPECIFICATIONS

Nominal Diameter	300mm /12inch
Rated Impedance	8 ohm
Nominal Power handling[1]	450 Watts
Program Power[2]	900 Watts
Sensitivity(1w/1m)[3]	97 dB
Frequency Range[4]	50 - 3000Hz
Voice Coil Diameter	76mm /3inch
Voice Coil Material	CCAW
Voice Coil Winding Depth	18 mm
Number of layers	2(inside/outside)
Magnet Outer Diameter/Wgt	190mm / 78 oz

HF GENERAL SPECIFICATIONS

Throat Diameter	25.4mm /1inch
Rated Impedance	8 ohm
Power handling(2k~18kHz)	
Nominal[1]	60 Watts
Porgram[2]	120 Watts
Sensitivity[3]	
(1w/1m, on axis)	106 dB
Frequency Range[4]	700~19k Hz
Voice Coil Diameter	44mm /1.7inch
Voice Coil Material	Edgewound Aluminum
Diaphragm Material	Polyimide
Magnet Outer Diamter/Wgt	120mm / 30 oz

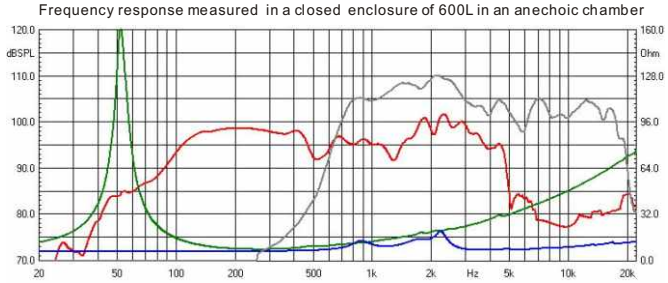
LF THIELE – SMALL PARAMETERS

Resonance frequency	Fs	53 Hz
DC resistance	Re	5.6 ohm
Mechanical factor	Qms	8.8
Electrical factor	Qes	0.32
Total factor	Qts	0.31
Mechanical compliance	Cms	0.17 mm/N
Mechanical resistance of suspension losses	Rms	2.1 mech-ohm
Effective Moving Mass	Mms	54 g
Half-space efficiency	Eff	3.1%
BL Factor	BL	17.7 T.m
Equivalent Cas air load	Vas	68 liters
Effective piston area	Sd	0.0543 m^2
Max. linear excursion[5]	Xmax	7.5 mm
Voice coil inductance	Le1K	0.96 mH
Efficiency Bandwidth Product	EBP	165

MOUNTING INFORMATION

Overall Diameter	316 mm	Overall Depth	210 mm
Bolt Circle Diameter	297 mm	Net Weight	10 kg
Bolt Hole Diameter	6.5 mm	Shipping Weight	11 kg
Baffle Cutout Diameter	283 mm	Shipping Box	275x275x2 30mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response(7)

NOTES:

1. AES standard.
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system with a high level 25Hz sine wave preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

CX10442

☀ 10" / 1.75" ☀ 250w / 50w
☀ 95 / 102 dB ☀ 50 ~ 19k Hz

KEY FEATURES:

① 500W(LF) +100W(HF) continuous program power capacity
② 95dB(LF)+102dB(HF) sensitivity 1w/1m
③ 65mm(2.5") LF inside/outside copper clad aluminum voice coil
④ 44mm(1.75") HF edgewound aluminum voice coil
⑤ 1" PEEK HF driver directly coupled to the pole piece of the woofer provides excellent response in the mid to high frequencies
⑥ Designed for use as stage monitors or as compact bass reflex systems

LF GENERAL SPECIFICATIONS

Nominal Diameter	250mm /10inch
Rated Impedance	8 ohm
Nominal Power handling[1]	250 Watts
Program Power[2]	500 Watts
Sensitivity(1w/1m)[3]	95 dB
Frequency Range[4]	50 - 3500Hz
Voice Coil Diameter	65mm /2.5inch
Voice Coil Material	CCAW
Voice Coil Winding Depth	16 mm
Number of layers	2(inside/outside)
Magnet Outer Diameter/Wgt	156mm / 50 oz

HF GENERAL SPECIFICATIONS

Throat Diameter	25.4mm /1inch
Rated Impedance	8 ohm
Power handling(2k~18kHz)	
Nominal[1]	50 Watts
Porgram[2]	100 Watts
Sensitivity[3]	
(1w/1m, on axis)	102 dB
Frequency Range[4]	700~19k Hz
Voice Coil Diameter	44mm /1.7inch
Voice Coil Material	Edgewound Aluminum
Diaphragm Material	PEEK
Magnet Outer Diamter/Wgt	102mm / 20 oz

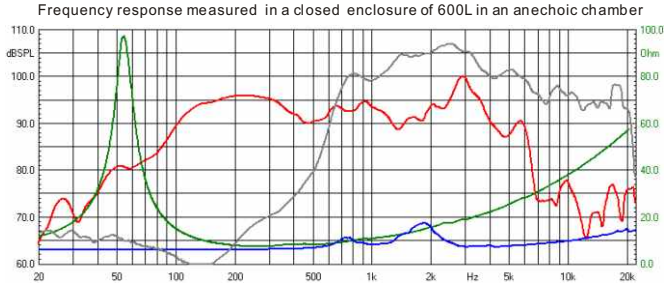
LF THIELE – SMALL PARAMETERS

Resonance frequency	Fs	54Hz
DC resistance	Re	5.6 ohm
Mechanical factor	Qms	5.0
Electrical factor	Qes	0.31
Total factor	Qts	0.29
Mechanical compliance	Cms	0.23 mm/N
Mechanical resistance of suspension losses	Rms	2.54 mech-ohm
Effective Moving Mass	Mms	37.6 g
Half-space efficiency	Eff	1.9%
BL Factor	BL	15.2 T.m
Equivalent Cas air load	Vas	38.4 liters
Effective piston area	Sd	0.0346 m^2
Max. linear excursion[5]	Xmax	6 mm
Voice coil inductance	Le1K	0.85 mH
Efficiency Bandwidth Product	EBP	174

MOUNTING INFORMATION

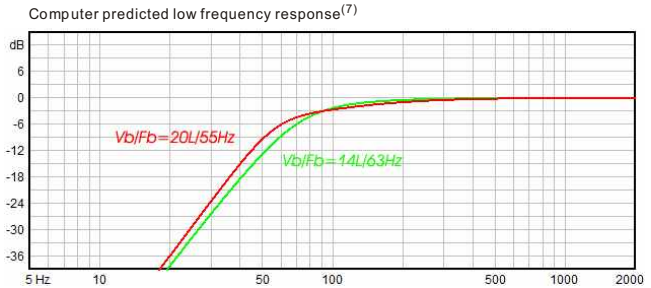
Overall Diameter	261 mm	Overall Depth	185 mm
Bolt Circle Diameter	246 mm	Net Weight	6.8 kg
Bolt Hole Diameter	5.5 mm	Shipping Weight	7.3 kg
Baffle Cutout Diameter	228 mm	Shipping Box	275x275x2 00mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response(7)



NOTES:

1. AES standard.
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

CX6342

☀ 6.5" / 1.4" ☀ 150w / 45w
☀ 89 / 102 dB ☀ 108 ~ 18k Hz

KEY FEATURES:

① 6.5" coaxial speaker
② 300W(LF) +90W(HF) continuous program power capacity
③ 89dB(LF)+102dB(HF) sensitivity 1w/1m
④ 50mm(2") LF flat copper clad aluminum voice coil
⑤ 34mm(1.4") HF aluminum voice coil
⑥ Demodulating ring reduces flux modulation, minimizing electromagnetic distortion

LF GENERAL SPECIFICATIONS

Nominal Diameter	170mm /6.5inch
Rated Impedance	8 ohm
Nominal Power handling[1]	150 Watts
Program Power[2]	300 Watts
Sensitivity(1w/1m)[3]	89 dB
Frequency Range[4]	108 - 7800Hz
Voice Coil Diameter	50mm /2inch
Voice Coil Material	Edgewound CCAW
Voice Coil Winding Depth	10 mm
Number of layers	1
Magnet Outer Diameter/Wgt	140mm / 45 oz

HF GENERAL SPECIFICATIONS

Throat Diameter	25.4mm /1inch
Rated Impedance	8 ohm
Power handling(2k~18kHz)	
Nominal[1]	45 Watts
Porgram[2]	90 Watts
Sensitivity[3]	
(1w/1m, on axis)	102 dB
Frequency Range[4]	2.1k~18k Hz
Voice Coil Diameter	34mm /1.4inch
Voice Coil Material	Edgewound Aluminum
Diaphragm Material	Polyimide
Magnet Outer Diamter/Wgt	140mm / 45 oz

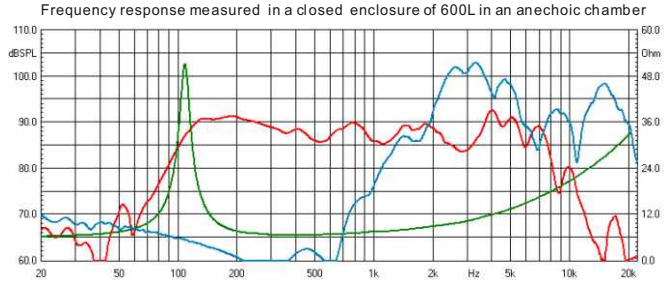
LF THIELE – SMALL PARAMETERS

Resonance frequency	Fs	108 Hz
DC resistance	Re	5.5 ohm
Mechanical factor	Qms	8
Electrical factor	Qes	0.96
Total factor	Qts	0.86
Mechanical compliance	Cms	0.14 mm/N
Mechanical resistance of suspension losses	Rms	1.32 mech-ohm
Effective Moving Mass	Mms	15.4 g
Half-space efficiency	Eff	0.4%
BL Factor	BL	7.8 T.m
Equivalent Cas air load	Vas	3.2 liters
Effective piston area	Sd	0.0129 m^2
Max. linear excursion[5]	Xmax	2 mm
Voice coil inductance	Le1K	0.32 mH
Efficiency Bandwidth Product	EBP	113

MOUNTING INFORMATION

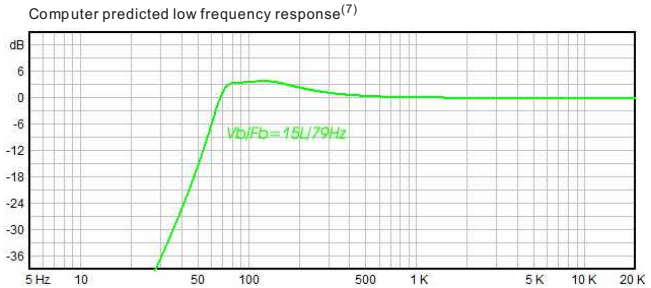
Overall Diameter	162 mm	Overall Depth	101 mm
Bolt Circle Diameter	172 mm	Net Weight	3 kg
Bolt Hole Diameter	5 mm	Shipping Weight	3.2 kg
Baffle Cutout Diameter	147 mm	Shipping Box	175x175x1 20mm

Frequency response measured in a closed enclosure of 600L in an anechoic chamber



Impedance magnitude curve measured in free air

Computer predicted low frequency response(7)



Vb/Fb = 15L/79Hz

NOTES:

1. AES standard.
2. Program Power is defined as 3 dB greater than the nominal power handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.
5. T/S parameters measured with laser system without preconditioning test.
6. The maximum linear excursion is calculated as: (Hvc-Hg)/2+Hg/4 where Hvc is the voice coil depth and Hg is the gap depth.
7. Vb: Net internal volume of box after subtracting the volume of internal objects.

CDi7401

- 3 inch
- 90 Watts
- 108dB
- 500 ~ 17k Hz

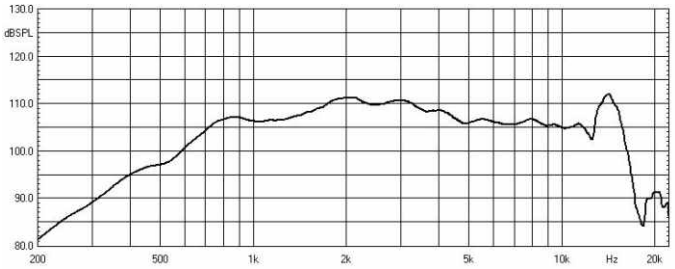
KEY FEATURES:

① 1.5" exit throat
② 180 W continuous program power handling
③ 108 dB sensitivity 1w/1m
④ 500Hz~17kHz frequency range
⑤ Titanium diaphragm
⑥ 75mm(3") edgewound aluminum voice coil
⑦ Aluminum rear cover
⑧ optimized geometry phase plug

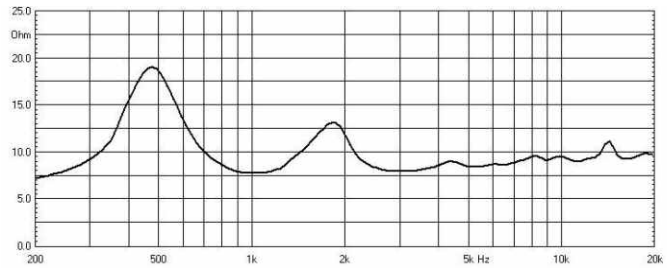
GENERAL SPECIFICATIONS[1]	
Throat Diameter	38mm /1.5inch
Rated Impedance	8ohm
Power handling(1k~18kHz)	
Nominal[2]	90 Watts
Continuous Porgram[3]	180 Watts
Sensitivity[4]	
(1w/1m, on axis, on horn)	108 dB
Frequency Range	500~17k Hz
Minimum Lmpedance(Zmin)	7.9ohm
Voice Coil Diameter	75mm /3inch
Voice Coil Material	Edgewound Aluminum
Voice Coil Former	Kapton
Phase Plug Material	Composite
Diaphragm Material	Titanium
Flux Density	1.7 T
Magnet Material/Outer Diameter	Ferrite

MOUNTING INFORMATION	
Overall Diameter	170 mm
Overall Depth	64 mm
Net Weight	4.5 kg
4xM6 holes, 90°on 102mm diameter	

Frequency response curve measured in an anechoic chamber, the driver is mounted to an 80°x50° exponential horn.



Impedance magnitude curve measured in free air



NOTES:

1. 2 hours test made with continuous pink noise signal(6dB creast factor) within the specified range.
2. Continuous Program Power is defined as 3dB greater than the nominal power Handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis from the mouth of a horn and averaged within the specified range.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.

CDi4401

☀ 1.7 inch ☀ 60 Watts
☀ 106 dB ☀ 900 ~ 19k Hz

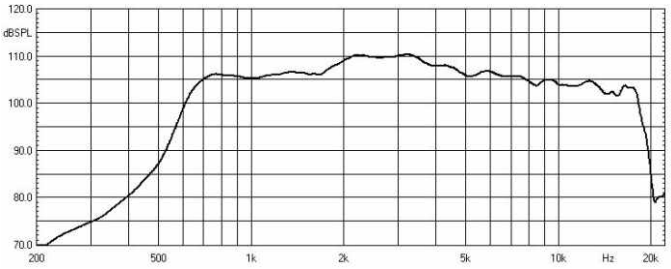
KEY FEATURES:

① 1" exit throat
② 120 W continuous program power handling
③ 106 dB sensitivity 1w/1m
④ 900Hz~19kHz frequency range
⑤ Polyimide diaphragm
⑥ 44mm(1.7") edgewound Aluminum voice coil
⑦ Aluminum heat sink cover for improved thermal dissipation
⑧ Optimized phase plug helps prevent phase cancellations

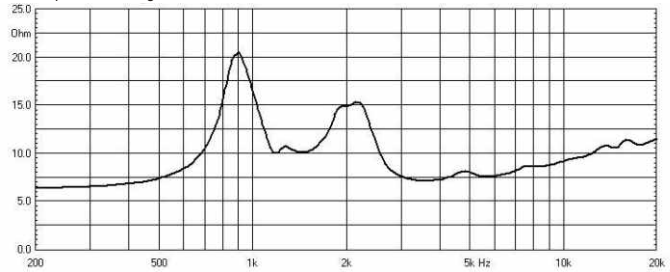
GENERAL SPECIFICATIONS[1]	
Throat Diameter	25.4mm /1inch
Rated Impedance	8ohm
Power handling(1k~18kHz)	
Nominal[2]	60Watts
Continuous Porgram[3]	120Watts
Sensitivity[4]	
(1w/1m, on axis, on horn)	106dB
Frequency Range	900~19k Hz
Minimum Lmpedance(Zm in)	7.6ohm
Voice Coil Diameter	44mm /1.7inch
Voice Coil Material	Edgewound Aluminum
Voice Coil Former	Kapton
Phase Plug Material	Composite
Diaphragm Material	Polyimide
Flux Density	1.7 T
Magnet Material/Outer Diameter	Ferrite/120mm

MOUNTING INFORMATION	
Overall Diameter	120mm
Overall Depth	60mm
Net Weight	2.1Kg
2xM6 holes, 180°on 76mm diameter	
3xM6 holes, 120°on 57mm diameter	

Frequency response curve measured in an anechoic chamber, the driver is mounted to an 80°x50° exponential horn.



Impedance magnitude curve measured in free air



NOTES:

1. 2 hours test made with continuous pink noise signal(6dB creast factor) within the specified range.
2. Continuous Program Power is defined as 3dB greater than the nominal power Handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis from the mouth of a horn and averaged within the specified range.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.

CDi4402

☀ *1.3 inch* ☀ *55 Watts*
☀ *105 dB* ☀ *900 ~ 19k Hz*

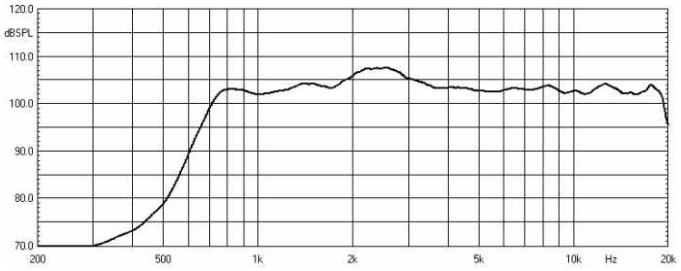
KEY FEATURES:

① 1" exit throat
② 110 W continuous program power handling
③ 105 dB sensitivity 1w/1m
④ 900Hz~19kHz frequency range
⑤ PEEK diaphragm
⑥ 44mm(1.7") edgewound Aluminum voice coil
⑦ Aluminum heat sink cover for improved thermal dissipation
⑧ Optimized phase plug helps prevent phase cancellations

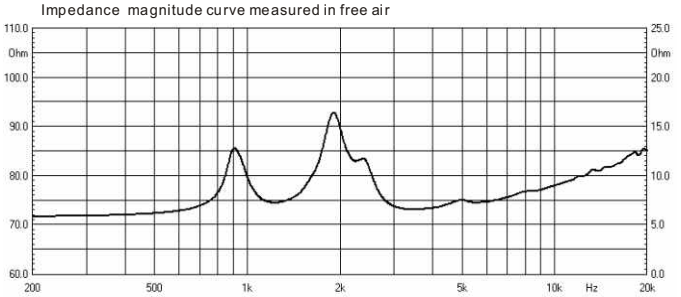
GENERAL SPECIFICATIONS[1]	
Throat Diameter	25.4mm /1inch
Rated Impedance	8ohm
Power handling(1k~18kHz)	
Nominal[2]	55Watts
Continuous Porgram[3]	110Watts
Sensitivity[4]	
(1w/1m, on axis, on horn)	105dB
Frequency Range	900~19k Hz
Minimum Lmpedance(Zm in)	7.6ohm
Voice Coil Diameter	44mm /1.7inch
Voice Coil Material	Edgewound Aluminum
Voice Coil Former	Kapton
Phase Plug Material	Composite
Diaphragm Material	PEEK
Flux Density	1.5 T
Magnet Material/Outer Diameter	Ferrite/102mm

MOUNTING INFORMATION	
Overall Diameter	102 mm
Overall Depth	64 mm
Net Weight	1.7Kg
4xM6 holes, 90° on 76mm diameter	

Frequency response curve measured in an anechoic chamber, the driver is mounted to an 80°x50° exponential horn.



Impedance magnitude curve measured in free air



NOTES:

1. 2 hours test made with continuous pink noise signal(6dB creast factor) within the specified range.
2. Continuous Program Power is defined as 3dB greater than the nominal power Handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis from the mouth of a horn and averaged within the specified range.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.

CD3401

☀ *1.3 inch* ☀ *40 Watts*
☀ *104 dB* ☀ *1000 ~ 20k Hz*

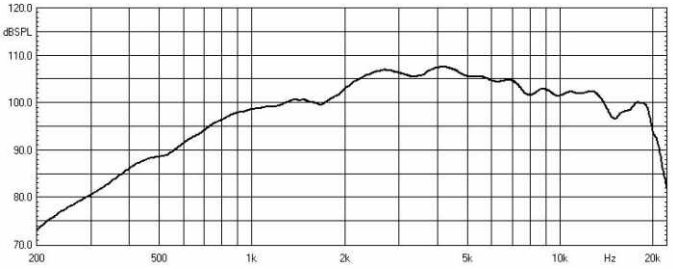
KEY FEATURES:

① 1" exit throat
② 80 W continuous program power handling
③ 104 dB sensitivity 1w/1m
④ 1000Hz~20kHz frequency range
⑤ Titanium diaphragm
⑥ 34mm(37") CCAW voice coil

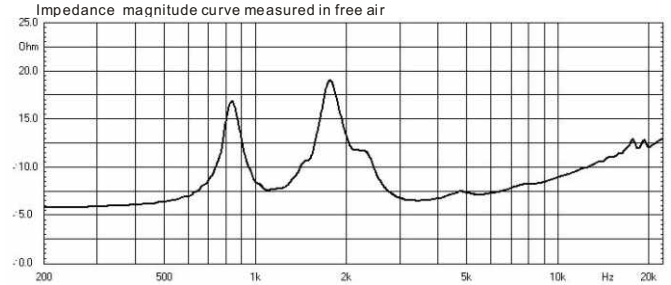
Throat Diameter	25.4mm /1inch
Rated Impedance	8ohm
Power handling(1k~18kHz)	
Nominal[2]	40Watts
Continuous Porgram[3]	80Watts
Sensitivity[4]	
(1w/1m, on axis, on horn)	104dB
Frequency Range	1000~20k Hz
Minimum Lmpedance(Zmin)	7.0ohm
Voice Coil Diameter	34mm /1.3inch
Voice Coil Material	Aluminum
Voice Coil Former	Kapton
Phase Plug Material	Composite
Diaphragm Material	Titanium
Flux Density	1.4 T
Magnet Material/Outer Diameter	Ferrite/100mm

Overall Diameter	100mm
Overall Depth	53mm
Net Weight	1.2kg
2xM6 holes, 180°on 76mm diameter	

Frequency response curve measured in an anechoic chamber, the driver is mounted to an 80°x50° exponential horn.



Impedance magnitude curve measured in free air



NOTES:

1. 2 hours test made with continuous pink noise signal(6dB creast factor) within the specified range.
2. Continuous Program Power is defined as 3dB greater than the nominal power Handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis from the mouth of a horn and averaged within the specified range.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated sensitivity.

NDi7409

- 3 inch
- 90 Watts
- 109 dB
- 700 ~ 18k Hz

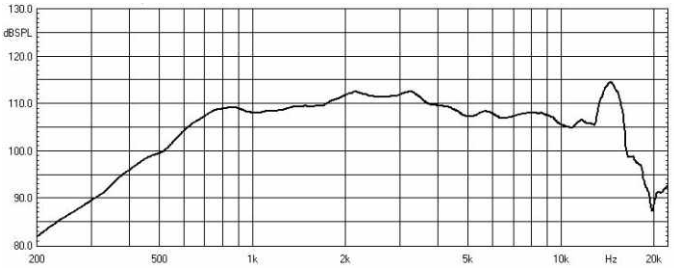
KEY FEATURES:

① 1.5" exit throat
② 180 W continuous program power handling
③ 109 dB sensitivity 1w/1m
④ 700Hz~18kHz frequency range
⑤ Titanium diaphragm
⑥ 75mm(3") edgewound aluminum voice coi
⑦ Copper inductance ring for extended HF responsel
⑧ Neodymium magnet structure

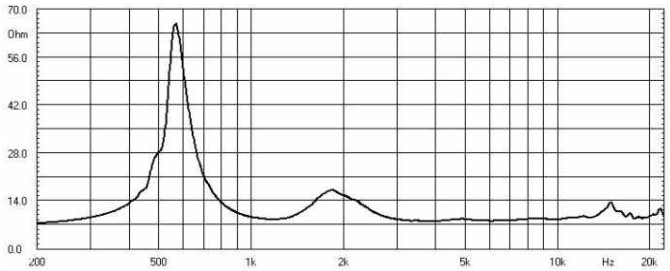
GENERAL SPECIFICATIONS[1]	
Throat Diameter	38mm /1.5inch
Rated Impedance	8ohm
Power handling(1k~18kHz)	
Nominal[2]	90 Watts
Continuous Porgram[3]	180 Watts
Sensitivity[4]	
(1w/1m, on axis, on horn)	109 dB
Frequency Range	700~18k Hz
Minimum Lmpedance(Zm in)	7.8ohm
Voice Coil Diameter	75mm /3inch
Voice Coil Material	Edgewound Aluminum
Voice Coil Former	Kapton
Phase Plug Material	Composite
Diaphragm Material	Titanium
Flux Density	1.9 T
Magnet Material	Neodymium

MOUNTING INFORMATION	
Overall Diameter	124 mm
Overall Depth	56 mm
Net Weight	2.1 kg
4xM6 holes, 90°on 102mm diameter	

Frequency response curve measured in an anechoic chamber, the driver is mounted to an 80°x50° exponential horn.



Impedance magnitude curve measured in free air



NOTES:

1. 2 hours test made with continuous pink noise signal(6dB creast factor) within the specified range.
2. Continuous Program Power is defined as 3dB greater than the nominal power Handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis from the mouth of a horn and averaged within the specified range.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated. Sensitivity.

NDi6509

☀ *2.5 inch* ☀ *75 Watts*
☀ *108dB* ☀ *750 ~ 18k Hz*

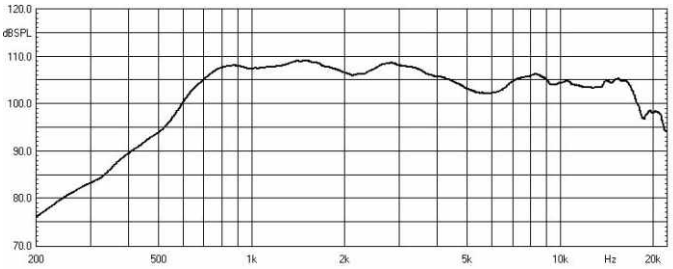
KEY FEATURES:

① 1.5" exit throat
② 150 W continuous program power handling
③ 108 dB sensitivity 1w/1m
④ 750Hz~18kHz frequency range
⑤ Titanium diaphragm
⑥ 65mm(2.5") edgewound aluminum voice coi
⑦ Copper inductance ring for extended HF responsel
⑧ Neodymium magnet structure

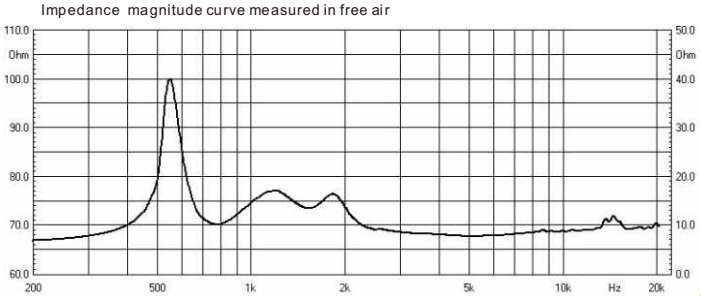
GENERAL SPECIFICATIONS[1]	
Throat Diameter	38mm /1.5inch
Rated Impedance	8ohm
Power handling(1k~18kHz)	
Nominal[2]	75 Watts
Continuous Porgram[3]	150 Watts
Sensitivity[4]	
(1w/1m, on axis, on horn)	108 dB
Frequency Range	750~18k Hz
Minimum Lmpedance(Zm in)	7.7 ohm
Voice Coil Diameter	65mm /2.5inch
Voice Coil Material	Edgewound Aluminum
Voice Coil Former	Kapton
Phase Plug Material	Composite
Diaphragm Material	Titanium
Flux Density	2 T
Magnet Material	Neodymium

MOUNTING INFORMATION	
Overall Diameter	115 mm
Overall Depth	45 mm
Net Weight	1.8 kg
4xM6 holes, 90°on 102mm diameter	

Frequency response curve measured in an anechoic chamber, the driver is mounted to an 80°x50° exponential horn.



Impedance magnitude curve measured in free air



NOTES:

1. 2 hours test made with continuous pink noise signal(6dB creast factor) within the specified range.
2. Continuous Program Power is defined as 3dB greater than the nominal power Handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis from the mouth of a horn and averaged within the specified range.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated. Sensitivity.

NDi4409

☀ *1.7 inch* ☀ *50 Watts*
☀ *106dB* ☀ *800 ~ 19k Hz*

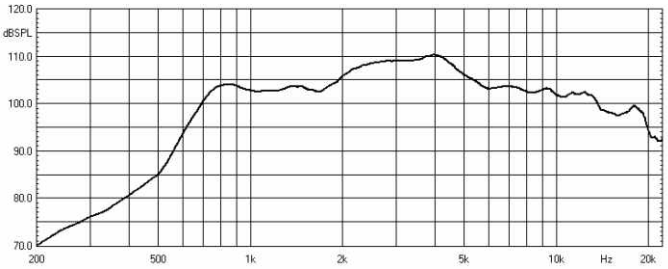
KEY FEATURES:

① 1" exit throat
② 100 W continuous program power handling
③ 106 dB sensitivity 1w/1m
④ 800Hz~19kHz frequency range
⑤ Polyimide diaphragm
⑥ 44mm(1.7") edgewound aluminum voice coi
⑦ Neodymium magnet structure

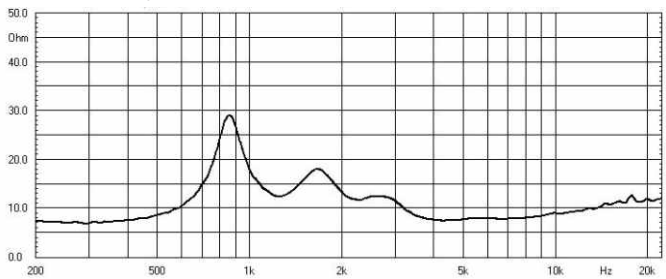
GENERAL SPECIFICATIONS[1]	
Throat Diameter	25.4mm /1inch
Rated Impedance	8ohm
Power handling(1k~18kHz)	
Nominal[2]	50 Watts
Continuous Porgram[3]	100 Watts
Sensitivity[4]	
(1w/1m, on axis, on horn)	106 dB
Frequency Range	800~19k Hz
Minimum Lmpedance(Zmin)	7.5ohm
Voice Coil Diameter	44mm /1.7inch
Voice Coil Material	Edgewound Aluminum
Voice Coil Former	Kapton
Phase Plug Material	Composite
Diaphragm Material	Polyimide
Flux Density	1.7 T
Magnet Material	Neodymium

MOUNTING INFORMATION	
Overall Diameter	85 mm
Overall Depth	46 mm
Net Weight	0.9 kg
2xM6 holes, 180°on 76mm diameter	

Frequency response curve measured in an anechoic chamber, the driver is mounted to an 80°x50° exponential horn.



Impedance magnitude curve measured in free air



NOTES:

1. 2 hours test made with continuous pink noise signal(6dB creast factor) within the specified range.
2. Continuous Program Power is defined as 3dB greater than the nominal power Handling.
3. Sensitivity is measured at 1W input on rated impedance at 1m on axis from the mouth of a horn and averaged within the specified range.
4. Frequency range is defined as the band of frequencies delineated by the lower and upper limits where the output level drops by 10dB below the rated. Sensitivity.

NOTES

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SCAN ME!

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