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#### About BMS:

Founded 1994, BMS is a leading designer and manufacturer of highest quality transducers. BMS products are used by professional speaker and high-end companies globally.

The BMS advanced transducer technology offers significant advantage over conventional drivers in precision and reliability. We avoid the use of conventional technology like domes diaphragms which generate uncontrolled break-up modes with very audible sound coloration. Due to our unique, patented design, the BMS drivers are extremely transparent and detailed providing outstanding dynamic capabilities.

Almost all parts of the drivers are produced in Europe, in our own factories to ensure extensive control of the results. Voice coil winding, diaphragm forming, CNC machining etc. are all made intern by highly qualified professionals.

Every single driver is systematically tested to strict standards to ensure reliability and consistency. The fact that our entire manufacturing process takes place in our own factories has produced a substantial reduction in cost and a high degree of flexibility and efficiency.

The product range is designed to offer superior sound quality able to satisfy even the most critical requirements.



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The ULTRA LOW DISTORTION TECHNOLOGY (ULD) was developed by BMS after years of fundamental research and development focused on the science of transducers and represents our commitment to technological excellence. The study of certain physical relationships and interactions between different components together with incorporation of new technology to the cone, surround, voice coil, suspension and magnet system provides progressive control at excursion limits for ultra linear travel and extended low frequency. The innovative design improves transient response for exceptional attack resulting in outstanding tight bass performance.

#### Neodymium Ultra Low Distortion Series

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The neodymium ultra low distortion series low frequency drivers have some unique features for outstanding performance setting a new standard of performance for precision, exceptionally high power and resolution.

- Exceptional high power
- Ultra low distortion
- Low power compression
- Smooth frequency response
- Light weight
- Improved transient response
- Reliability
- Competitive prices

State of the art voice coil:

The sandwich copper voice coil wound inside and outside on a new developed glass polyimide former ensures superior mechanical stability at high temperatures.

Optimised magnet structure:

The triple demodulation aluminum rings placed near the voice coil not only minimise harmonic distortion, coil inductance variation and flux modulation but also extract the heat from the voice coil for significantly improving power handling and reliability while minimising power compression.

Reduced weight:

The use of high grade neodymium magnets provides improved performance while significantly reducing transducer weight. The cone is a composite carbon fiberglass-filled cellulose for smooth response and outstanding rigidity, double coated for weather resistance and optimized damping characteristics.

#### Ultra Low Distortion Series

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Utilizing the full advantages of the ultra low distortion technology this series incorporates ceramic magnets for applications where weight is not a key factor.

- Exceptional high power
- Ultra low distortion
- Low power compression
- Smooth frequency response
- Improved transient response
- Parameters are optimised for compact enclosure
- Reliability
- Competitive prices

#### Point Sources

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BMS developed a unique driver technology to radiate a coherent single point spherical wave front for superior dispersion control and high fidelity sound.


The advanced design aligns the acoustical centers of the transducers providing a coherent wave without hot spots. The precise directivity ensures uniform coverage.

# 5N155

Neodymium Ultra Low Distortion Low Midrange Driver

# Neodymium Series



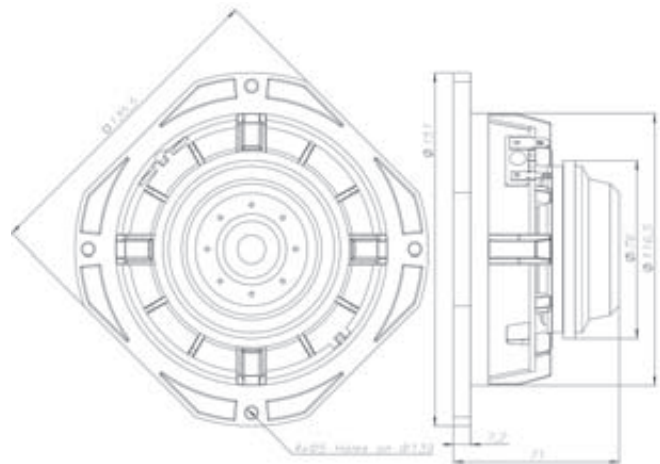


**Features:**

- 91dB sensitivity 1W/1m
- 130W Power handling
- 1.5" sandwich voice coil
- Double treated cone for water protection
- Neodymium magnet system
- Twin aluminium demodulating rings for ultra low distortion
- Optimal for compact 2- or 3-way systems

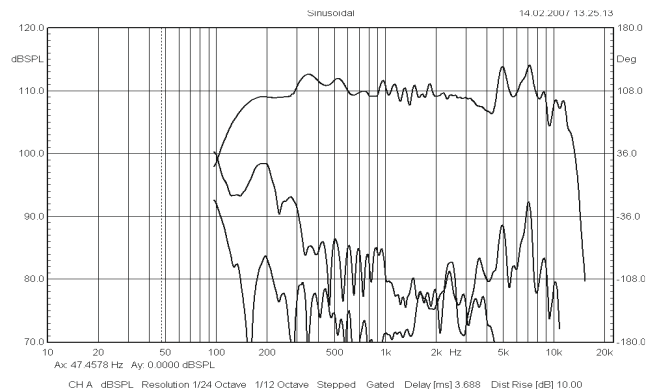
## SPECIFICATIONS

APPLICATION	Low-Middle	
Nominal impedance	Ohm	16
Power handling AES noise	W	130
Sensitivity ( 1W/1m )	dB	91
Frequency response	Hz	80 - 4000
Voive coil diameter	mm	38 (1.5")
Voice coil material		Cu
Voice coil winding depth	mm	15
Magnet gap depth	mm	5
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	105



THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	100.6
DC resistance	Re	Ohm	11.65
Mechanical Q factor	Qms		4.17
Electrical Q factor	Qes		0.49
Total Quality factor	Qts		0.44
Equivalent volume	Vas	L	2.63
Moving mass	Mms	kg	0.0096
Mechanical compl.	Cms	mm/N	0.26
BL factor	BL	Tesla m	12
Effective piston area	Sd	m <sup>2</sup>	0.0085
Max. linear excursion	Xmax	mm	± 5
Voice coil inductance	Le1k	mH	0.51 (4 Ohm)
	Le10k	mH	0.36 (4 Ohm)

Frequency response measured 100W (28.3V) at 1m in a closed enclosure of 10 Liter incl. 2nd and 3rd harmonic distortion raised 10dB.



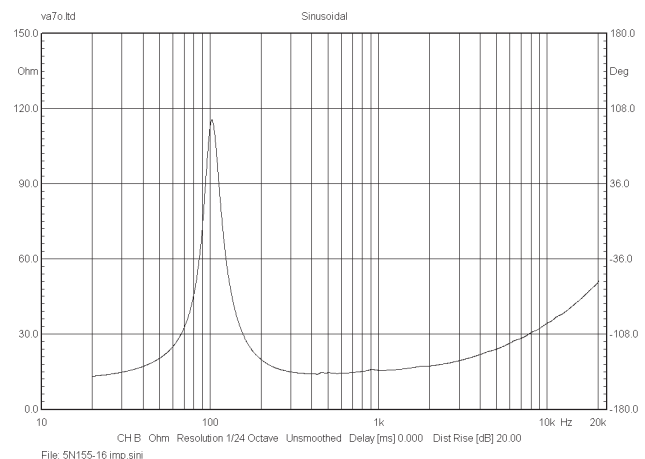
MOUNTING INFORMATION		
Overall diameter	mm	135 x 135
Mounting holes diameter	mm	4 x 5.3
Bolt circle diameter	mm	139
Baffle cut-out diameter	mm	117
Overall depth	mm	71
Net weight	kg	0.85

### Recommended reflex enclosure:

3.5L/91.5Hz, BRD=40mm/93mm long

Closed enclosure 1 / 4 Liter

### Impedance - 16 Ohm driver



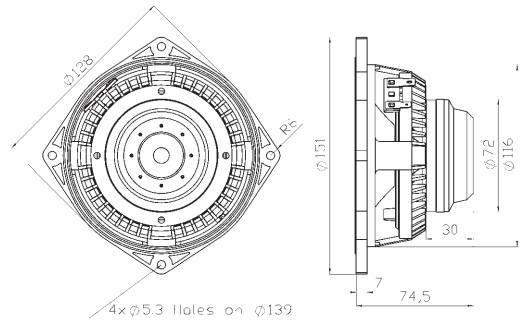


#### Features:

- 91 dB Sensitivity 1 W / 1 m
- 130 W Power handling
- 1.5" Sandwich Voice Coil
- Double treated Cone for Water Protection
- Neodymium Magnet System
- Twin Aluminum demodulating Rings for ultra low Distortion
- Optimal for compact 2- or 3-way Systems

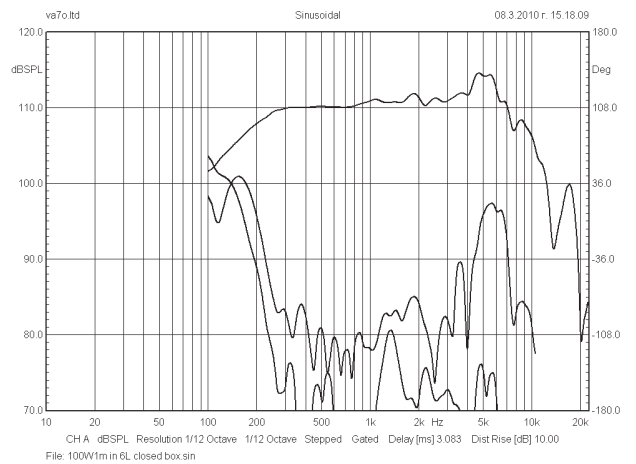
## SPECIFICATIONS

APPLICATION	Low-middle	
Nominal Impedance	Ohm	8 + 16
Power handling AES noise	W	130
Sensitivity (1 W / 1 m)	dB	91
Frequency response	Hz	80 - 4000
Voice coil diameter	mm	38 (1.5")
Voice coil material		Cu
Voice coil winding depth	mm	15
Magnet Gap Depth	mm	5
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	105



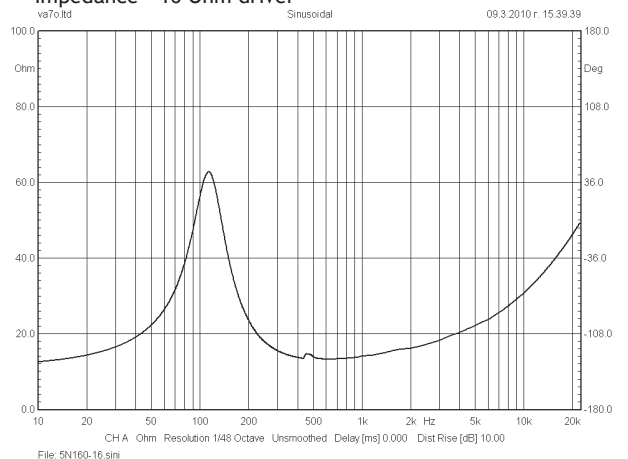
THIELE-SMALL PARAMETERS			
Resonance frequency	Fs	Hz	113
DC resistance	Re	Ohm	11.4
Mechanical Q factor	Qms		2.4
Electrical Q factor	Qes		0.52
Total Quality factor	Qts		0.43
Equivalent volume	Vas	L	2.57
Moving Mass	Mms	kg	0.0083
Mechanical compl.	Cms	mm <sup>4</sup> / N	0.24
BL factor	BL	Tesla m	11.3
Effective piston area	Sd	m <sup>2</sup>	0.0085
Max. linear excursion	Xmax	mm	+/- 5
Voice coil inductance	Le1k	mH	0.51
	Le10k	mH	0.35

Frequency response measured 100 W (28.3 V) at 1 m in a vented enclosure of 6 Liter incl. 2nd and 3rd harmonic distortion raised 10 dB



MOUNTING INFORMATION		
Overall diameter	mm	128
Mounting holes diameter	mm	4 x 5.3
Bolt circle diameter	mm	139
Baffle cut-out diameter	mm	117
Overall depth	mm	73.5
Net weight	kg	0.85

#### Impedance - 16 Ohm driver



#### Recommended reflex enclosure:

3.5 L / 91.5 Hz, BRD=40mm/93mm long  
 Closed enclosure 1 / 4 Liter

# 6N160

Neodymium Ultra Low Distortion Low Midrange Driver

# Neodymium Series

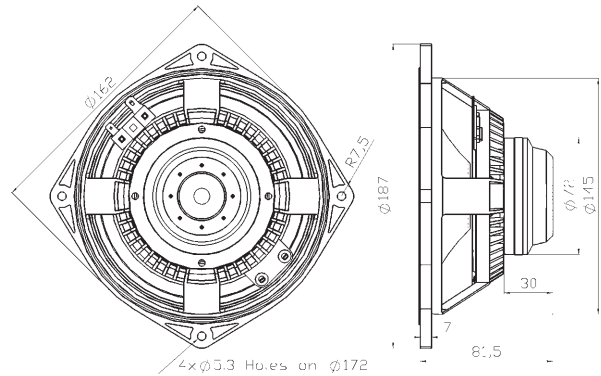


### Features:

- 93 dB Sensitivity 1 W/1 m
- 130 W Power Handling
- 1.5" Sandwich Voice Coil
- Double treated Cone for Water Protection
- Neodymium Magnet System
- Twin Aluminum demodulating Rings for ultra low Distortion
- Optimal for compact 2- or 3-way Systems

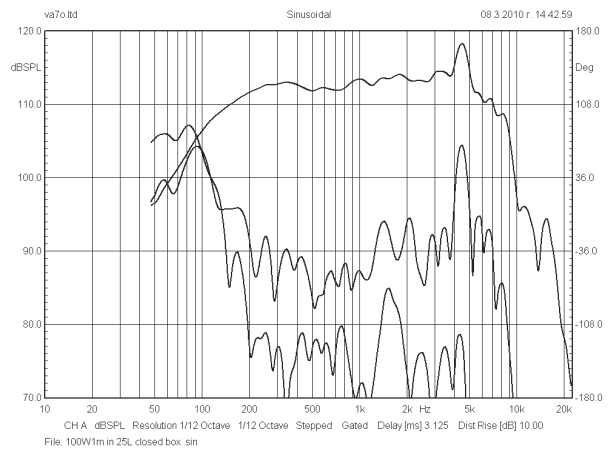
## SPECIFICATIONS

APPLICATION	Low-middle	
Nominal Impedance	Ohm	8 + 16
Power handling AES noise	W	130
Sensitivity (1 W / 1 m)	dB	93
Frequency response	Hz	80 - 3500
Voice coil diameter	mm	38 (1.5")
Voice coil material		Cu
Voice coil winding depth	mm	15
Magnet Gap Depth	mm	5
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	135



THIELE-SMALL PARAMETERS			
Resonance frequency	Fs	Hz	89
DC resistance	Re	Ohm	11.4
Mechanical Q factor	Qms		2.4
Electrical Q factor	Qes		0.58
Total Quality factor	Qts		0.47
Equivalent volume	Vas	L	7.7
Moving Mass	Mms	kg	0.0117
Mechanical compl.	Cms	mm <sup>4</sup> / N	0.27
BL factor	BL	Tesla m	11.3
Effective piston area	Sd	m <sup>2</sup>	0.0143
Max. linear excursion	Xmax	mm	+/- 5
Voice coil inductance	Le1k	mH	0.53
	Le10k	mH	0.37

Frequency response measured 100 W (28.3 V) at 1 m in a vented enclosure of 25 Liter incl. 2nd and 3rd harmonic distortion raised 10 dB.

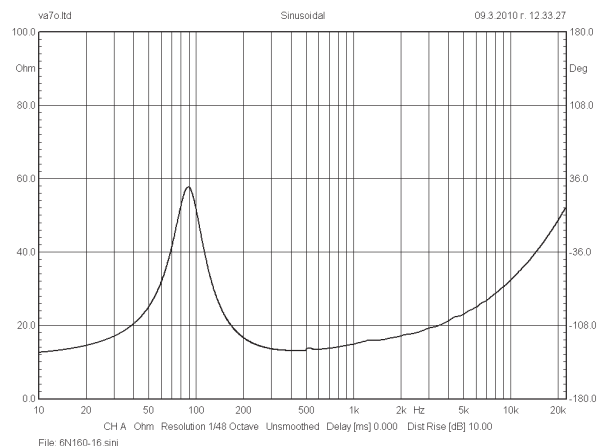


MOUNTING INFORMATION		
Overall diameter	mm	162
Mounting holes diameter	mm	4 x 5.3
Bolt circle diameter	mm	172
Baffle cut-out diameter	mm	146
Overall depth	mm	80.5
Net weight	kg	0.905

### Recommended reflex enclosure:

- 6 L / 82 Hz, BRD = 60 mm / 144 mm long
- 8.5 L / 72 Hz, BRD = 60 mm / 128 mm long
- 10 L / 70 Hz, BRD = 60 mm / 111 mm long

### Impedance - 16 Ohm driver





- Features:**
- 96dB sensitivity 1W/1m
  - 200W Power handling
  - Extremely light weight of 1.98kg
  - 2" copper sandwich voice coil for low power compression
  - Double treated cone for water protection
  - Neodymium magnet system
  - Triple aluminum demodulating rings for ultra low distortion
  - Optimal for compact 2-way systems
  - Light weight carbon fiber diaphragm

## SPECIFICATIONS

APPLICATION	Low-Middle	
Nominal impedance	Ohm	8 + 16
Power handling AES noise	W	200
Sensitivity ( 1W/1m )	dB	96
Frequency response	Hz	80 - 3000
Voive coil diameter	mm	52 (2")
Voice coil material		Cu
Voice coil winding depth	mm	15
Magnet gap depth	mm	7
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	168

THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	87.7
DC resistance	Re	Ohm	5.40
Mechanical Q factor	Qms		4.34
Electrical Q factor	Qes		0.32
Total Quality factor	Qts		0.30
Equivalent volume	Vas	L	11.04
Moving mass	Mms	kg	0.0206
Mechanical compl.	Cms	mm/N	0.16
BL factor	BL	Tesla m	13.80
Effective piston area	Sd	m <sup>2</sup>	0.0222
Max. linear excursion	Xmax	mm	± 4
Voice coil inductance	Le1k	mH	0.32 (4 Ohm)
	Le10k	mH	0.26 (4 Ohm)

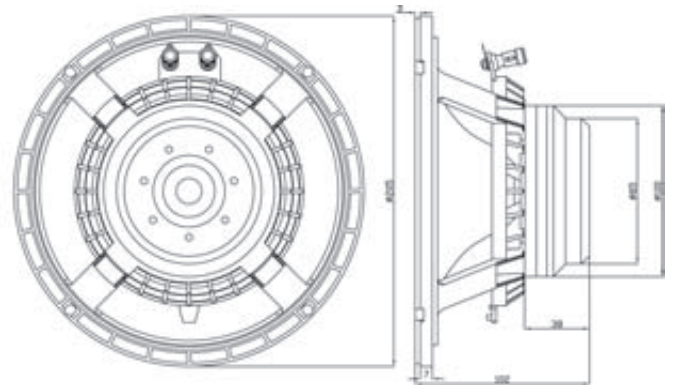
MOUNTING INFORMATION		
Overall diameter	mm	205
Mounting holes diameter	mm	4 x (6 x 6.5)
Bolt circle diameter	mm	195 - 197
Baffle cut-out diameter	mm	182
Overall depth	mm	102
Net weight	kg	1.98

**Recommended reflex enclosure:**

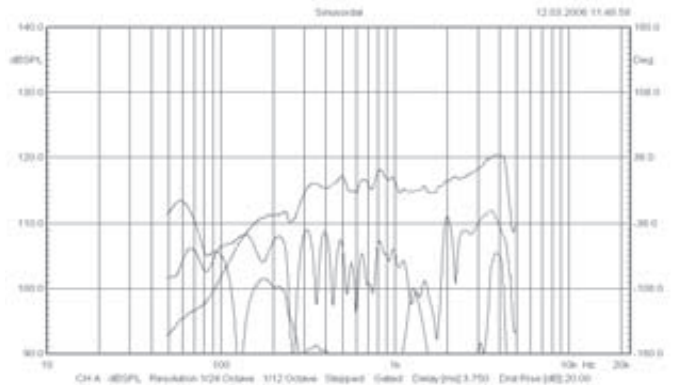
4L/108Hz, BRD=60mm/127mm long

7L/82Hz, BRD=60mm/126mm long

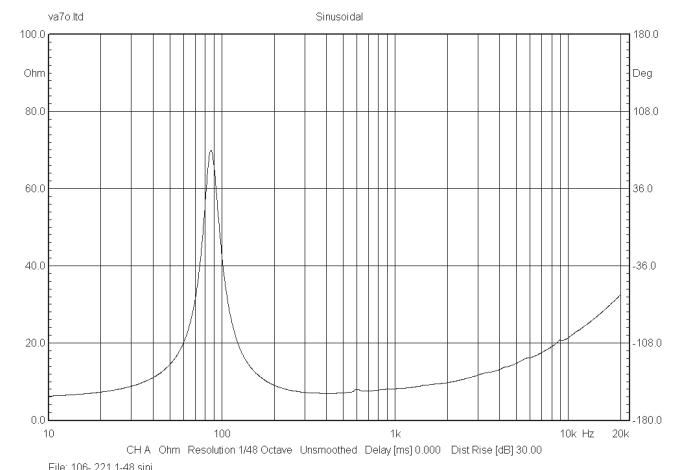
10L/70Hz, BRD=60mm/111mm long



Frequency response measured 100W (28.3V) at 1m in a closed enclosure of 10 Liter incl. 2nd and 3rd harmonic distortion raised 20dB.



**Impedance - 8 Ohm driver**






# 8N519

Neodymium Ultra Low Distortion Low Midrange Driver

# Neodymium Series





**Features:**

- 94 dB sensitivity 1 W / 1 m
- 250 W Power handling
- 2" voice coil
- Double treated cone for water protection
- Neodymium magnet system
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for compact 2-way systems
- Light weight carbon fibre diaphragm

## SPECIFICATIONS

APPLICATION	Low-Middle	
Nominal Impedance	Ohm	8
Power handling AES noise	W	250
Sensitivity (1 W / 1 m)	dB	94
Frequency response	Hz	80-3000
Voice Coil Diameter	mm	52 (2")
Voice Coil Material		Cu
Voice Coil Winding Depth	mm	19
Magnet Gap Depth	mm	6,5
Basket		Cast Aluminum
Effect. Diaphragm Diameter D	mm	168

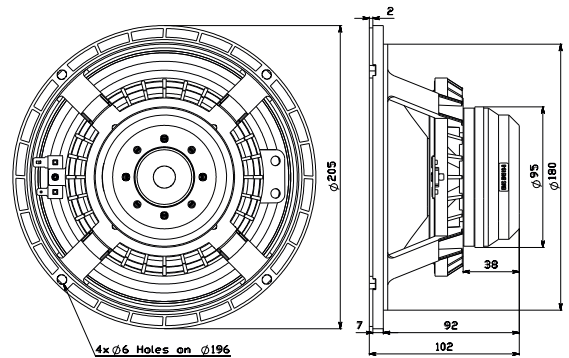
THIELE-SMALL PARAMETERS			
Resonance Frequency	Fs	Hz	74.9
DC Resistance	Re	Ohm	5.8
Mechanical Q Factor	Qms		4.2
Electrical Q Factor	Qes		0.41
Total Quality Factor	Qts		0.37
Equivalent Volume	Vas	L	10.9
Moving Mass	Mms	kg	0.0285
Mechanical Compliance	Cms	mm / N	0.16
BL Factor	BL	Tesla m	13.8
Effective Piston Area	Sd	m <sup>2</sup>	0.0222
Max. linear Excursion	Xmax	mm	±6.3
Voice Coil Inductance	Le1k	mH	0.36
	Le10k	mH	0.28

MOUNTING INFORMATION		
Overall diameter:	mm	205
Mounting holes diameter	mm	4x (6 x 6.5)
Bolt circle diameter	mm	196
Baffle cut-out diameter	mm	182
Overall depth	mm	102
Net weight	kg	1.95

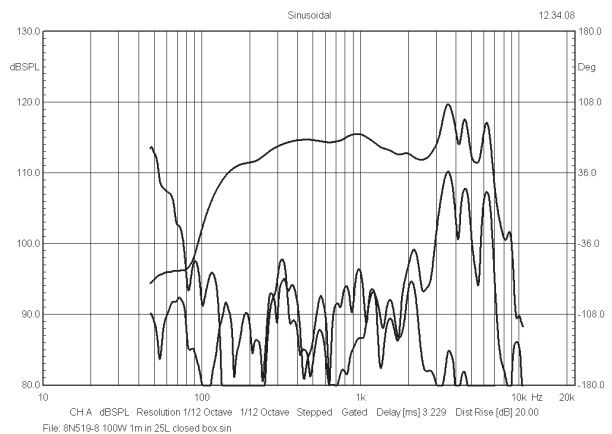
Recommended reflex enclosure:

9L/80 Hz, BRD=60mm/96mm long

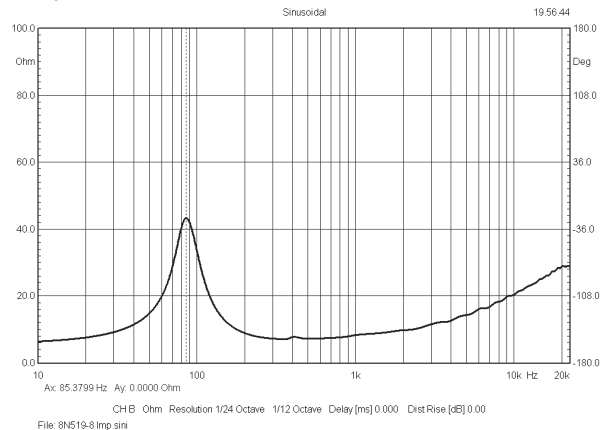
15L/63 Hz, BRD=70mm/133mm long



Frequency response measured 100 W (28.3 V) at 1 m in a closed enclosure of 25 liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20 dB.



Impedance - 8 Ohm driver



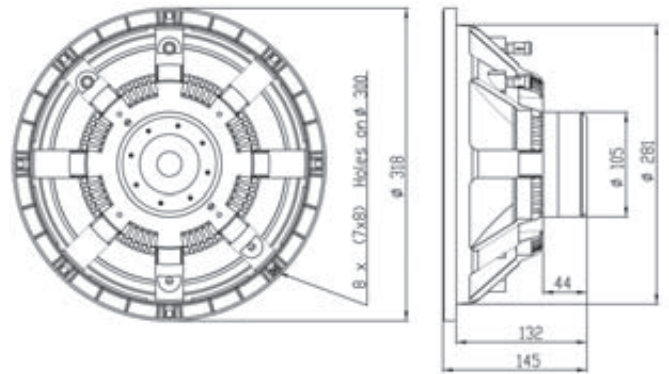


#### Features:

- 99dB sensitivity 1W/1m
- 400W Power handling
- Extremely light weight of 3.2kg
- 3" copper sandwich voice coil for low power compression
- Double treated cone for water protection
- Neodymium magnet system
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for compact 2- or 3-way systems

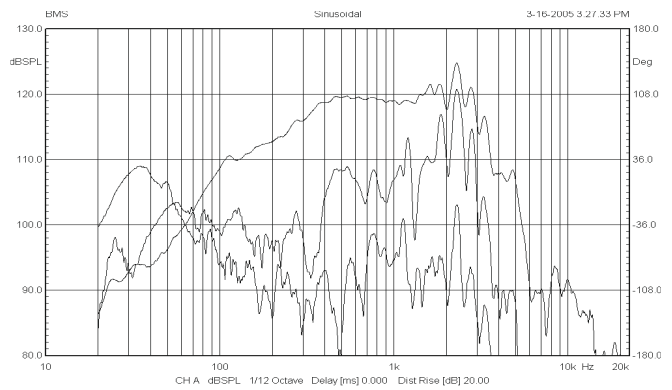
## SPECIFICATIONS

APPLICATION	Low-Middle	
Nominal impedance	Ohm	8
Power handling AES noise	W	400
Sensitivity ( 1W/1m )	dB	99
Frequency response	Hz	60 - 2500
Voive coil diameter	mm	77 (3")
Voice coil material		Cu
Voice coil winding depth	mm	15
Magnet gap depth	mm	8
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	260



THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	47
DC resistance	Re	Ohm	5.70
Mechanical Q factor	Qms		4.1
Electrical Q factor	Qes		0.25
Total Quality factor	Qts		0.24
Equivalent volume	Vas	L	70
Moving mass	Mms	kg	0.065
Mechanical compl.	Cms	mm/N	0.18
BL factor	BL	Tesla m	21
Effective piston area	Sd	m <sup>2</sup>	0.0531
Max. linear excursion	Xmax	mm	± 3.5
Voice coil inductance	Le1k	mH	0.6
	Le10k	mH	0.38

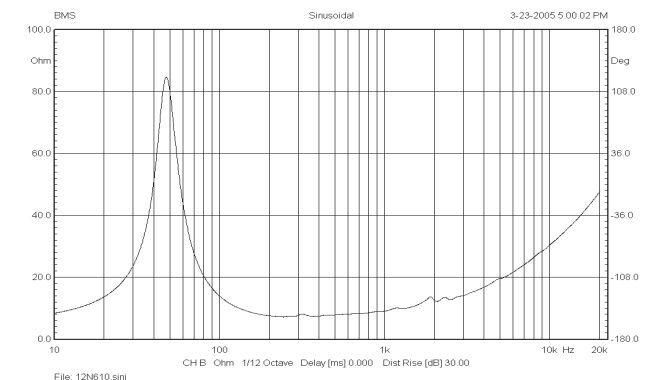
Frequency response measured 100W (28.3V) at 1m in a closed enclosure of 50 Liter in an anechoic chamber incl. 2nd and 3rdharmonic distortion raised 20dB.



MOUNTING INFORMATION		
Overall diameter	mm	318
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	300
Baffle cut-out diameter	mm	284
Overall depth	mm	145
Net weight	kg	3.2

#### Recommended reflex enclosure:

12L/72Hz, -3dB=94Hz, BRD=80mm/170mm long  
 20L/70Hz, -3dB=73Hz, BRD=100mm/157mm long




# 12N620

Neodymium Ultra Low Distortion Low Midrange Driver

Neodymium Series



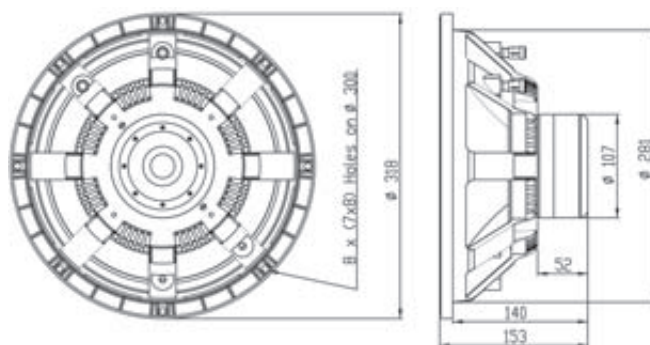


**Features:**

- 98dB sensitivity 1W/1m
- 500W Power handling
- Extremely light weight of 3.5kg
- 3" copper sandwich voice coil for low power compression
- Double treated cone for water protection
- Neodymium magnet system
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for compact 2- or 3-way systems

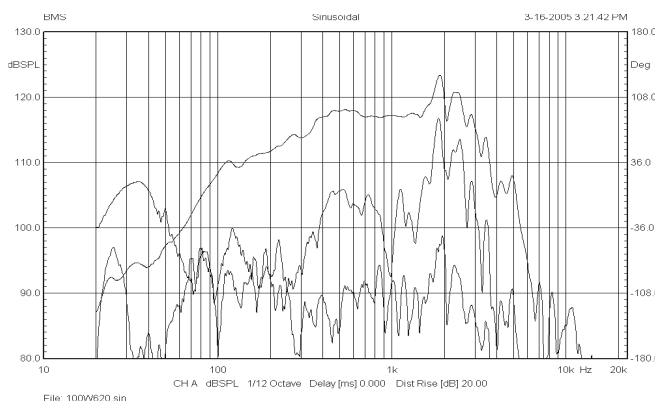
## SPECIFICATIONS

APPLICATION	Low-Middle	
Nominal impedance	Ohm	4 + 8
Power handling AES noise	W	500
Sensitivity ( 1W/1m )	dB	98
Frequency response	Hz	45 - 2500
Voive coil diameter	mm	77 (3")
Voice coil material		Cu
Voice coil winding depth	mm	19
Magnet gap depth	mm	8
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	260



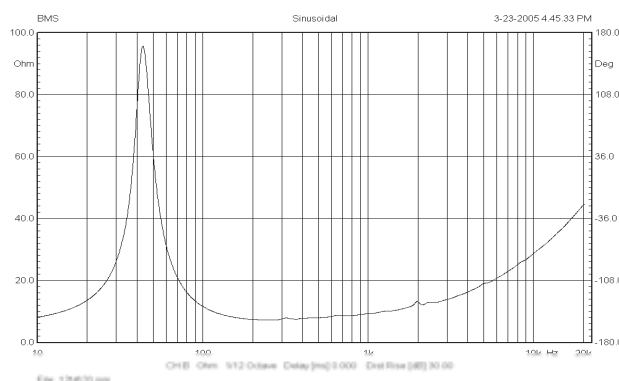
THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	44.7
DC resistance	Re	Ohm	5.70
Mechanical Q factor	Qms		5.1
Electrical Q factor	Qes		0.26
Total Quality factor	Qts		0.25
Equivalent volume	Vas	L	72.7
Moving mass	Mms	kg	0.068
Mechanical compl.	Cms	mm/N	0.18
BL factor	BL	Tesla m	20.60
Effective piston area	Sd	m <sup>2</sup>	0.0531
Max. linear excursion	Xmax	mm	± 3.5
Voice coil inductance	Le1k	mH	0.6
	Le10k	mH	0.39

Frequency response measured 100W (28.3V) at 1m in a closed enclosure of 50 Liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20dB.



MOUNTING INFORMATION		
Overall diameter	mm	318
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	300
Baffle cut-out diameter	mm	284
Overall depth	mm	145
Net weight	kg	3.5

Impedance - 8 Ohm driver



**Recommended reflex enclosure:**

17L/62Hz, -3dB=75Hz, BRD=80mm/148mm long

25L/60Hz, -3dB=63Hz, BRD=100mm/177mm long

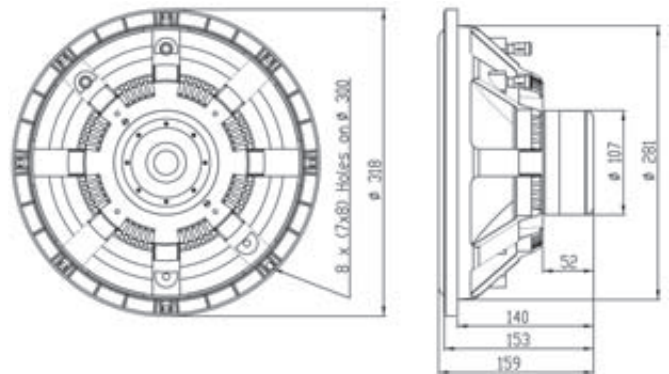


**Features:**

- 96dB sensitivity 1W/1m
- 600W Power handling
- Extremely light weight of 4.1kg
- 3" copper sandwich voice coil for low power compression
- Double treated cone for water protection
- Neodymium magnet system
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for compact subwoofers

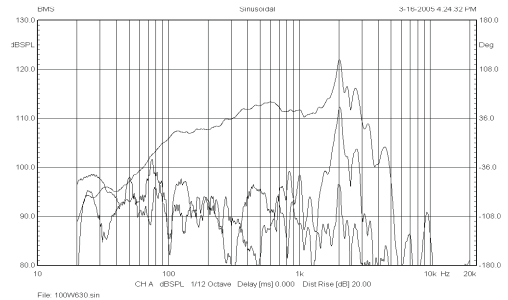
## SPECIFICATIONS

APPLICATION	Subwoofer	
Nominal impedance	Ohm	4 + 8
Power handling AES noise	W	600
Sensitivity ( 1W/1m )	dB	96
Frequency response	Hz	25 - 300
Voive coil diameter	mm	77 (3")
Voice coil material		Cu
Voice coil winding depth	mm	26
Magnet gap depth	mm	10
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	252

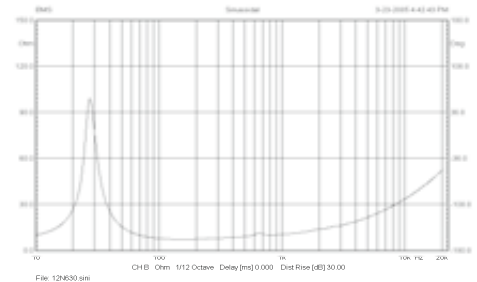


THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	28.6
DC resistance	Re	Ohm	6.00
Mechanical Q factor	Qms		6.24
Electrical Q factor	Qes		0.35
Total Quality factor	Qts		0.33
Equivalent volume	Vas	L	85.5
Moving mass	Mms	kg	0.127
Mechanical compl.	Cms	mm/N	0.24
BL factor	BL	Tesla m	19.8
Effective piston area	Sd	m <sup>2</sup>	0.0498
Max. linear excursion	Xmax	mm	± 8
Voice coil inductance	Le1k	mH	0.68
	Le10k	mH	0.44

Frequency response measured 100W (28.3V) at 1m in a closed enclosure of 50 Liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20dB.



Impedance - 8 Ohm driver

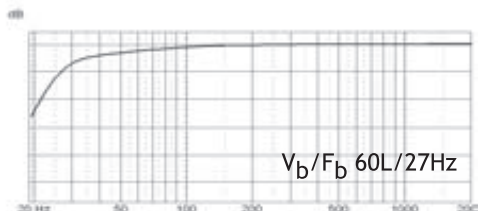


MOUNTING INFORMATION		
Overall diameter	mm	318
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	300
Baffle cut-out diameter	mm	284
Overall depth	mm	159
Net weight	kg	4.1

**Recommended reflex enclosure:**

44L/31Hz, -3dB=35Hz, BRD=120mm/434mm long

60L/27Hz, -3dB=32Hz, BRD=110mm/517mm long



V<sub>b</sub>/F<sub>b</sub> 60L/27Hz

# 12N810

Neodymium Ultra Low Distortion Low Midrange Driver

Neodymium Series

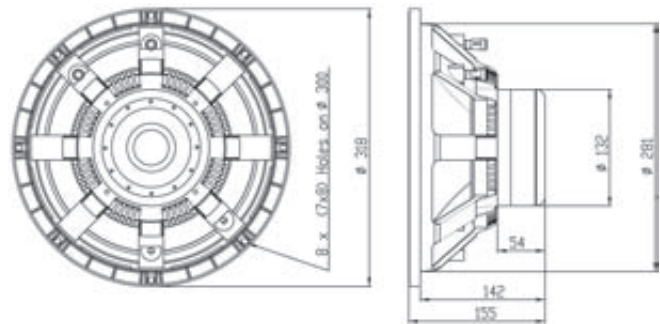


### Features:

- 100dB sensitivity 1W/1m
- 600W Power handling
- Extremely light weight of 5,5kg
- 4" copper sandwich voice coil for low power compression
- Double treated cone for water protection
- Neodymium magnet system
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for compact 2-way and horn loaded systems

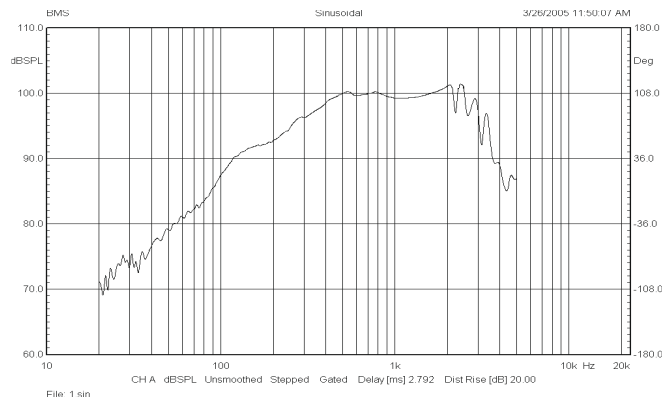
## SPECIFICATIONS

APPLICATION	Low-Middle	
Nominal impedance	Ohm	4 + 8
Power handling AES noise	W	600
Sensitivity ( 1W/1m )	dB	100
Frequency response	Hz	80 - 2000
Voive coil diameter	mm	101,6 (4")
Voice coil material		Cu
Voice coil winding depth	mm	15
Magnet gap depth	mm	10
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	260



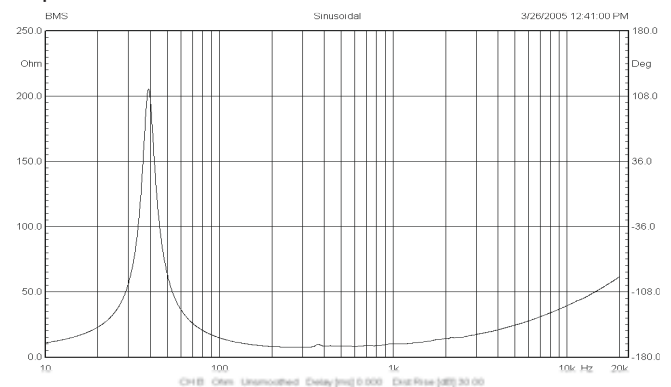
THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	40.7
DC resistance	Re	Ohm	5.8
Mechanical Q factor	Qms		5.1
Electrical Q factor	Qes		0.17
Total Quality factor	Qts		0.16
Equivalent volume	Vas	L	89.6
Moving mass	Mms	kg	0.068
Mechanical compl.	Cms	mm/N	0.23
BL factor	BL	Tesla m	24.5
Effective piston area	Sd	m <sup>2</sup>	0.0531
Max. linear excursion	Xmax	mm	± 2.5
Voice coil inductance	Le1k	mH	0.76
	Le10k	mH	0.53

Frequency response measured 1W (2.38V) at 1m in a closed enclosure of 50 Liter.



MOUNTING INFORMATION		
Overall diameter	mm	318
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	300
Baffle cut-out diameter	mm	284
Overall depth	mm	155
Net weight	kg	5.5

### Impedance - 8 Ohm driver



### Recommended reflex enclosure:

7L/90Hz, -3dB=118Hz, BRD=60mm/90mm long

15L/77Hz, -3dB=84Hz, BRD=70mm/65mm long

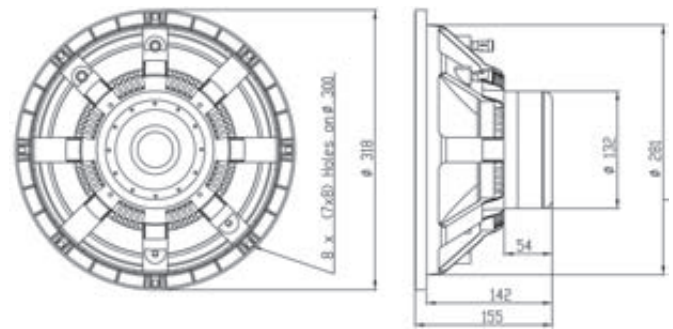


### Features:

- 98dB sensitivity 1W/1m
- 800W Power handling
- Extremely light weight of 5.5kg
- 4" copper sandwich voice coil for low power compression
- Double treated cone for water protection
- Neodymium magnet system
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for compact 2- or 3-way systems

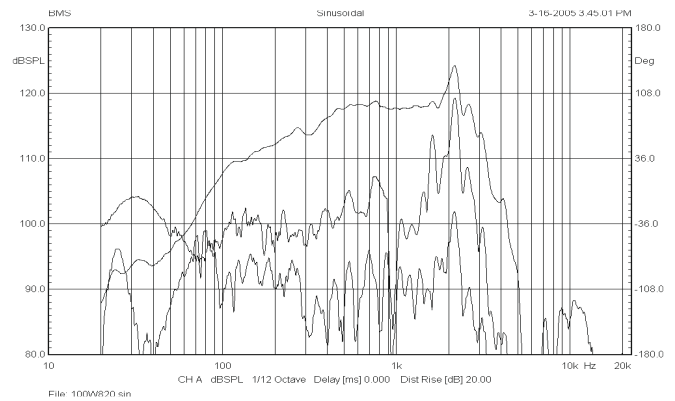
## SPECIFICATIONS

APPLICATION	Low-Middle	
Nominal impedance	Ohm	4 + 8
Power handling AES noise	W	800
Sensitivity ( 1W/1m )	dB	98
Frequency response	Hz	45 - 1700
Voive coil diameter	mm	101.6 (4")
Voice coil material		Cu
Voice coil winding depth	mm	19
Magnet gap depth	mm	10
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	260



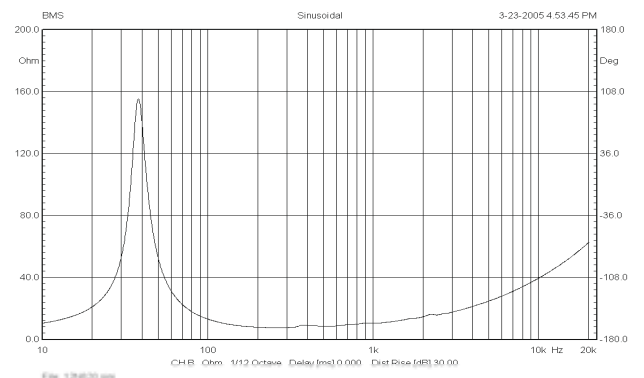
THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	37.8
DC resistance	Re	Ohm	5.7
Mechanical Q factor	Qms		5.3
Electrical Q factor	Qes		0.16
Total Quality factor	Qts		0.16
Equivalent volume	Vas	L	98.7
Moving mass	Mms	kg	0.072
Mechanical compl.	Cms	mm/N	0.25
BL factor	BL	Tesla m	24.2
Effective piston area	Sd	m <sup>2</sup>	0.0531
Max. linear excursion	Xmax	mm	± 4.5
Voice coil inductance	Le1k	mH	0.62
	Le10k	mH	0.51

Frequency response measured 100W (28.3V) at 1m in a closed enclosure of 50 Liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20dB.



MOUNTING INFORMATION		
Overall diameter	mm	318
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	300
Baffle cut-out diameter	mm	284
Overall depth	mm	155
Net weight	kg	5.5

### Impedance - 8 Ohm driver



### Recommended reflex enclosure:

8L/77Hz, -3dB=104Hz, BRD=70mm/178mm long  
 20L/64Hz, -3dB=70Hz, BRD=90mm/155mm long

# 12N802

12" Neodymium Ultra Low Distortion Low Midrange Driver

Neodymium Series

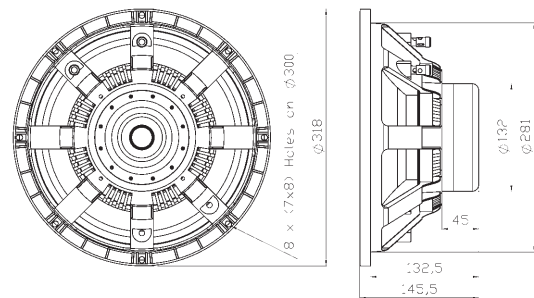


### Features:

- 98 dB Sensitivity 1 W / 1 m
- 1000 W Power Handling
- 4" Copper Sandwich Voice Coil for low Power Compression
- Double treated Cone for Water Protection
- Neodymium Magnet System
- Triple Aluminum demodulating Rings for ultra low Distortion
- Optimal for compact 2- or 3-way Systems

## SPECIFICATIONS

APPLICATION	Low-middle	
Nominal Impedance:	Ohm	4 + 8
Power handling AES noise:	W	1000
Sensitivity (1 W / 1 m):	dB	98
Frequency response:	Hz	45 - 1700
Voice Coil Diameter:	mm	101.6 (4")
Voice Coil Material:		Cu
Voice Coil Winding Depth:	mm	19
Magnet Gap Depth:	mm	10
Basket:		Cast Aluminum
Effect. diaphragm diameter D	mm	260



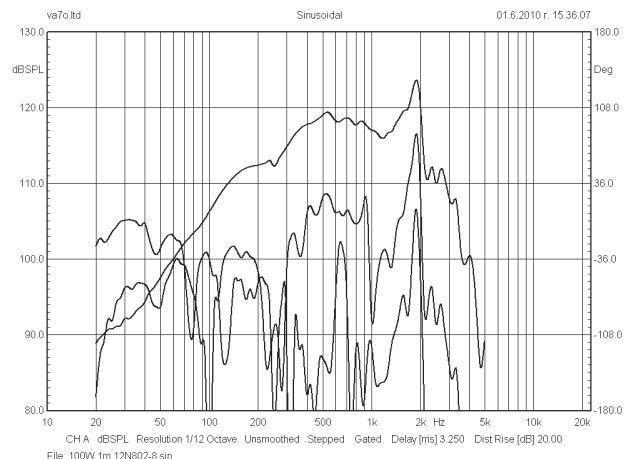
Frequency response measured 100W (28.3V) at 1 m in a closed enclosure of 50 Liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20 dB.

THIELE-SMALL PARAMETERS			
Resonance Frequency:	Fs	Hz	43
DC Resistance:	Re	Ohm	5.70
Mechanical Q Factor:	Qms		5.2
Electrical Q Factor:	Qes		0.25
Total Quality Factor:	Qts		0.24
Equivalent Volume:	Vas	L	65
Moving Mass:	Mms	kg	0.080
Mechanical Compliance:	Cms	mm / N	0.170
BL Factor:	BL	Tesla m	22.25
Effective Piston Area:	Sd	m <sup>2</sup>	0.0531
Max. linear Excursion:	Xmax	mm	+/- 4.5
Voice Coil Inductance:	Le1k	mH	0.85
	Le10k	mH	0.54

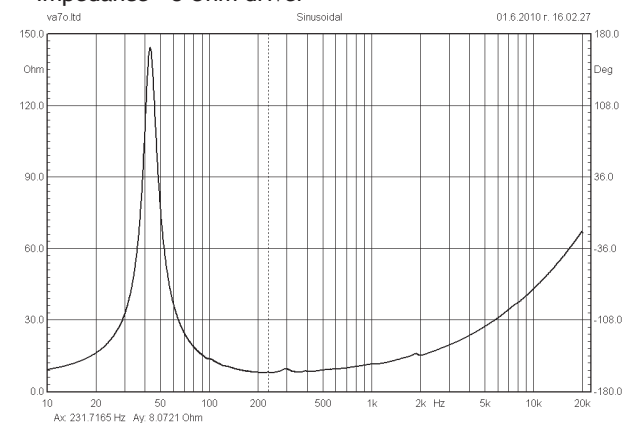
MOUNTING INFORMATION		
Overall Diameter:	mm	318
Mounting Holes Diameter:	mm	8 x (7 x 8)
Bolt Circle Diameter:	mm	300
Baffle cut-out Diameter:	mm	284
Overall depth:	mm	146
Net Weight:	kg	4.7

### Recommended reflex enclosure:

15 L / 70 Hz, -3 dB = 82 Hz, BRD = 80 mm / 138 mm long  
 25 L / 60 Hz, -3 dB = 67 Hz, BRD = 100 mm / 177 mm long



### Impedance - 8 Ohm driver





#### Features:

- 97 dB Sensitivity 1 W / 1 m
- 1000 W Power Handling
- 4" Copper Sandwich Voice Coil for low Power Compression
- Double treated Cone for Water Protection
- Neodymium Magnet System
- Triple Aluminum demodulating Rings for ultra low Distortion
- Optimal for compact 2- or 3-way Systems

## SPECIFICATIONS

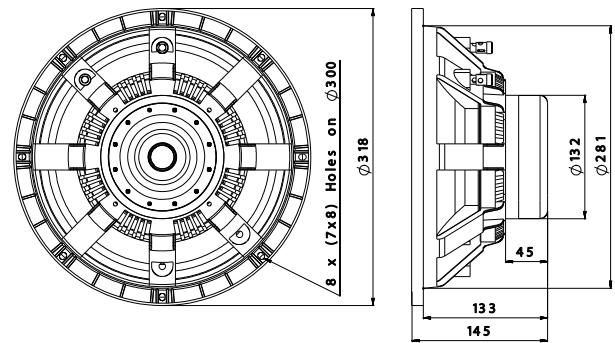
APPLICATION	Low-middle	
Nominal Impedance:	Ohm	8
Power handling AES noise:	W	1000
Sensitivity (1 W / 1 m):	dB	97
Frequency response:	Hz	40 - 1700
Voice Coil Diameter:	mm	101.6 (4")
Voice Coil Material:		Cu
Voice Coil Winding Depth:	mm	22
Magnet Gap Depth:	mm	10
Basket:		Cast Aluminum
Effect. diaphragm diameter D:	mm	260

THIELE-SMALL PARAMETERS			
Resonance Frequency:	Fs	Hz	41
DC Resistance:	Re	Ohm	5.70
Mechanical Q Factor:	Qms		5.2
Electrical Q Factor:	Qes		0.25
Total Quality Factor:	Qts		0.24
Equivalent Volume:	Vas	L	77
Moving Mass:	Mms	kg	0.078
Mechanical Compliance:	Cms	mm / N	0.193
BL Factor:	BL	Tesla m	21.35
Effective Piston Area:	Sd	m <sup>2</sup>	0.0531
Max. linear Excursion:	Xmax	mm	+/- 6
Voice Coil Inductance:	Le1k	mH	0.61
	Le10k	mH	0.42

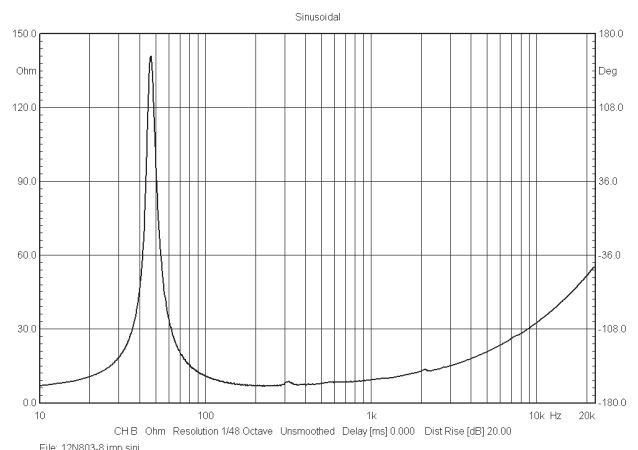
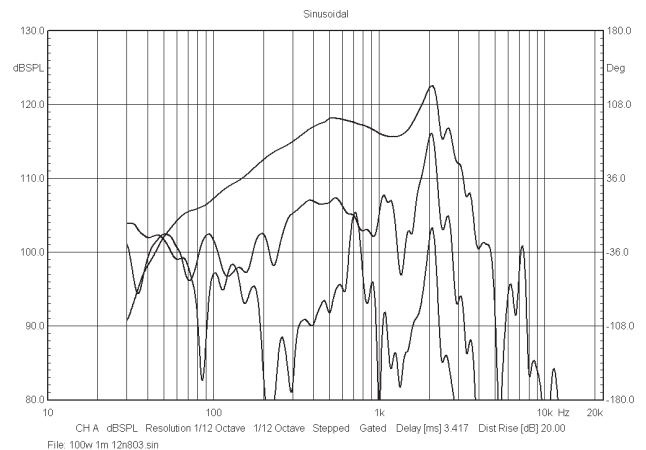
MOUNTING INFORMATION		
Overall Diameter:	mm	318
Mounting Holes Diameter:	mm	8 x (7 x 8)
Bolt Circle Diameter:	mm	300
Baffle cut-out Diameter:	mm	283
Overall depth:	mm	147
Net Weight:	kg	4.7

#### Recommended reflex enclosure:

- 15 l / 70 Hz, -3 dB = 83 Hz, BRD = 80 mm / 138 mm long
- 25 l / 60 Hz, -3 dB = 68 Hz, BRD = 100 mm / 177 mm long



Frequency response measured 100W (28.3V) at 1 m in a closed enclosure of 50 Liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20 dB





# 12N804

12" Neodymium Ultra Low Distortion Low Midrange Driver

Neodymium Series



### Features:

- 95 dB Sensitivity 1 W / 1 m
- 1100 W Power Handling
- 4" Sandwch Voice Coil for low Power Compression
- Double treated Cone for Water Protection
- Neodymium Magnet
- Triple Aluminum demodulating Rings for ultra low Distortion
- Optimal for compact 2- or 3-way Systems

## SPECIFICATIONS

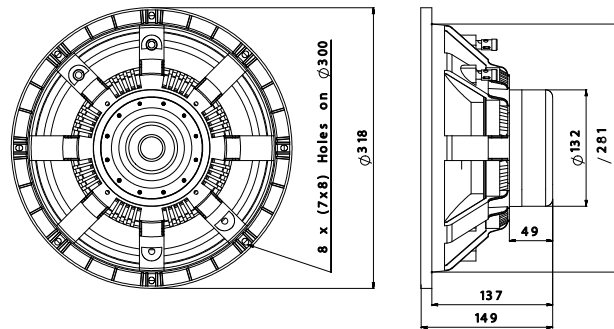
APPLICATION	Low-middle	
Nominal Impedance:	Ohm	4 or 8
Power handling AES noise:	W	1100
Sensitivity (1 W / 1 m):	dB	95
Frequency response:	Hz	40 - 1700
Voice Coil Diameter:	mm	101.6 (4")
Voice Coil Material:	Cu	
Voice Coil Winding Depth:	mm	26
Magnet Gap Depth:	mm	10
Basket:		Cast Aluminum
Effect. diaphragm diameter D:	mm	260

THIELE-SMALL PARAMETERS			
Resonance Frequency:	Fs	Hz	39
DC Resistance:	Re	Ohm	5.7
Mechanical Q Factor:	Qms		4.6
Electrical Q Factor:	Qes		0.31
Total Quality Factor:	Qts		0.29
Equivalent Volume:	Vas	L	71
Moving Mass:	Mms	kg	0.092
Mechanical Compliance:	Cms	mm / N	0.18
BL Factor:	BL	Tesla m	20.4
Effective Piston Area:	Sd	m <sup>2</sup>	0.0531
Max. linear Excursion:	Xmax	mm	+/- 8
Voice Coil Inductance:	Le1k	mH	0.66
	Le10k	mH	0.44

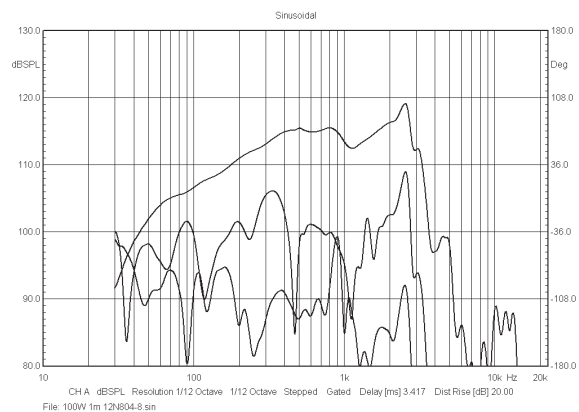
MOUNTING INFORMATION		
Overall Diameter:	mm	318
Mounting Holes Diameter:	mm	8 x (7 x 8)
Bolt Circle Diameter:	mm	300
Baffle cut-out Diameter:	mm	283
Overall depth:	mm	151
Net Weight:	vkg	5.1

### Recommended reflex enclosure:

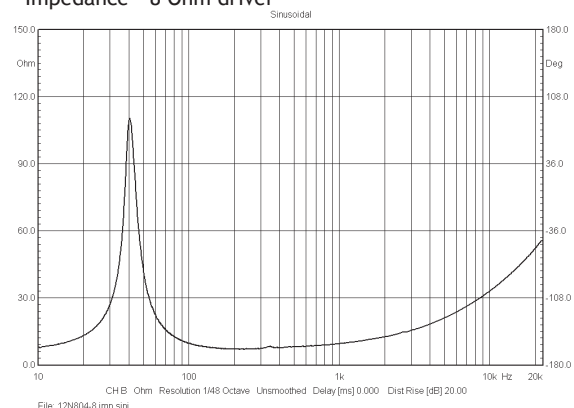
40 l / 45 Hz, -3 dB = 50 Hz, BRD = 110 mm / 270 mm long

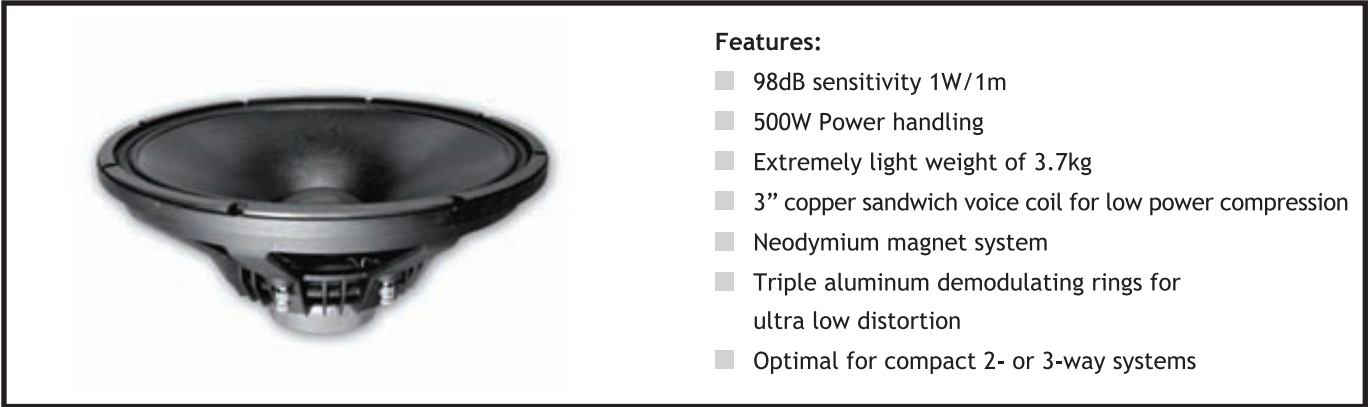


Frequency response measured 100W (28.3V) at 1 m in a closed enclosure of 50 Liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20 dB



### Impedance - 8 Ohm driver



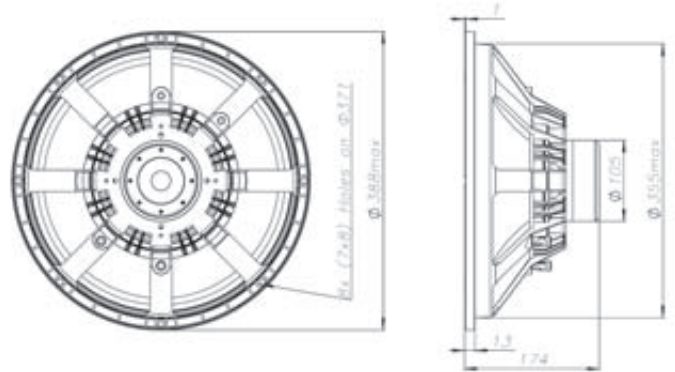


#### Features:

- 98dB sensitivity 1W/1m
- 500W Power handling
- Extremely light weight of 3.7kg
- 3" copper sandwich voice coil for low power compression
- Neodymium magnet system
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for compact 2- or 3-way systems

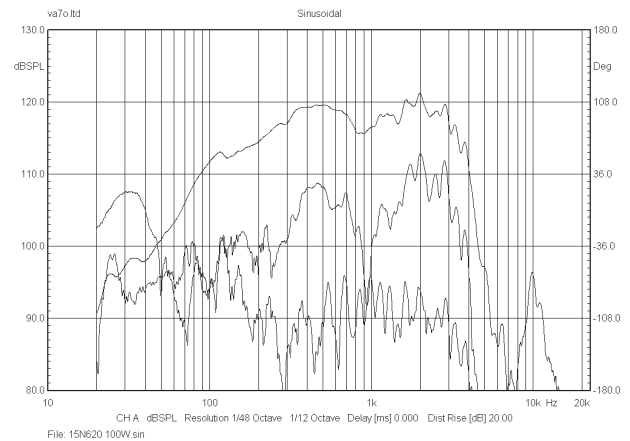
## SPECIFICATIONS

APPLICATION	Low-Middle	
Nominal impedance	Ohm	4 + 8
Power handling AES noise	W	500
Sensitivity ( 1W/1m )	dB	98
Frequency response	Hz	35 - 2500
Voive coil diameter	mm	77 (3")
Voive coil winding depth	mm	19
Magnet gap depth	mm	8
Voice coil material		Cu
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	335

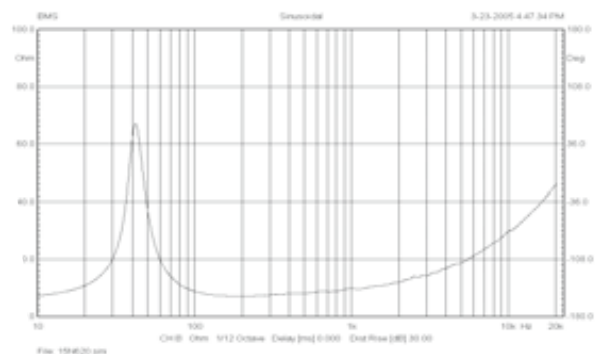


THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	41
DC resistance	Re	Ohm	5.7
Mechanical Q factor	Qms		5.9
Electrical Q factor	Qes		0.37
Total Quality factor	Qts		0.35
Equivalent volume	Vas	L	154
Moving mass	Mms	kg	0.109
Mechanical compl.	Cms	mm/N	0.14
BL factor	BL	Tesla m	20.6
Effective piston area	Sd	m <sup>2</sup>	0.0880
Max. linear excursion	Xmax	mm	± 5.5
Voice coil inductance	Le1k	mH	0.65
	Le10k	mH	0.4

Frequency response measured 100W (28.3V) at 1m in a closed enclosure of 100 Liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20dB.



#### Impedance - 8 Ohm driver



MOUNTING INFORMATION		
Overall diameter	mm	388
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	371
Baffle cut-out diameter	mm	358
Overall depth	mm	174
Net weight	kg	3.7

#### Recommended reflex enclosure:


60L/50Hz, -3dB=56Hz, BRD=130mm/150mm long  
 80L/45Hz, -3dB=50Hz, BRD=140mm/162mm long

# 15N630

Neodymium Ultra Low Distortion Woofer

Neodymium Series



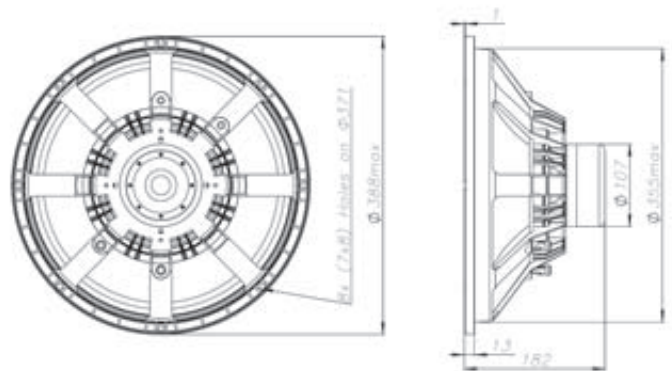


**Features:**

- 98dB sensitivity 1W/1m
- 600W Power handling
- Extremely light weight of 4,3 kg
- 3" copper sandwich voice coil for low power compression
- Double treated cone for water protection
- Neodymium magnet system
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for compact subwoofers

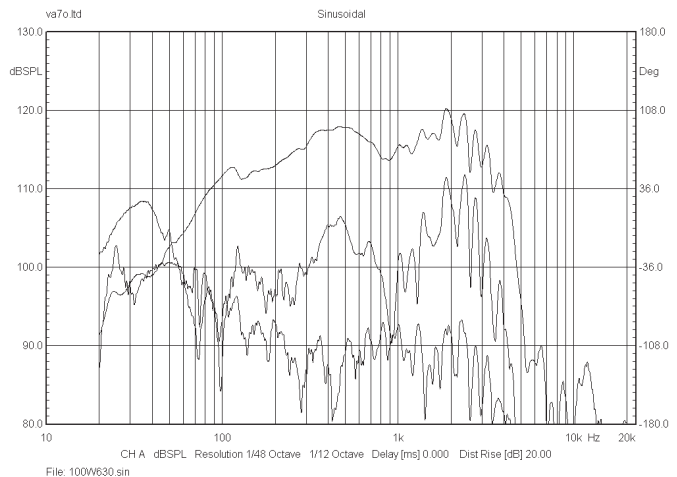
## SPECIFICATIONS

APPLICATION	Subwoofer	
Nominal impedance	Ohm	4 + 8
Power handling AES noise	W	600
Sensitivity ( 1W/1m )	dB	98
Frequency response	Hz	35 - 2500
Voive coil diameter	mm	77 (3")
Voice coil material		Cu
Voice coil winding depth	mm	26
Magnet gap depth	mm	10
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	335



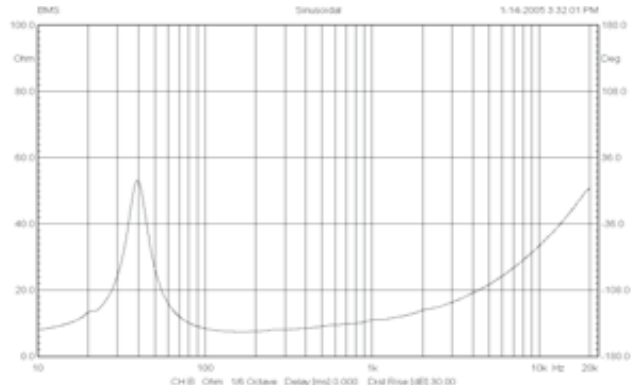
THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	39
DC resistance	Re	Ohm	6
Mechanical Q factor	Qms		6.74
Electrical Q factor	Qes		0.45
Total Quality factor	Qts		0.42
Equivalent volume	Vas	L	152
Moving mass	Mms	kg	0.121
Mechanical compl.	Cms	mm/N	0.140
BL factor	BL	Tesla m	19.8
Effective piston area	Sd	m <sup>2</sup>	0.0880
Max. linear excursion	Xmax	mm	± 8
Voice coil inductance	Le1k	mH	0.7
	Le10k	mH	0.45

Frequency response measured 100W (28.3V) at 1m in a closed enclosure of 100 Liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20dB.



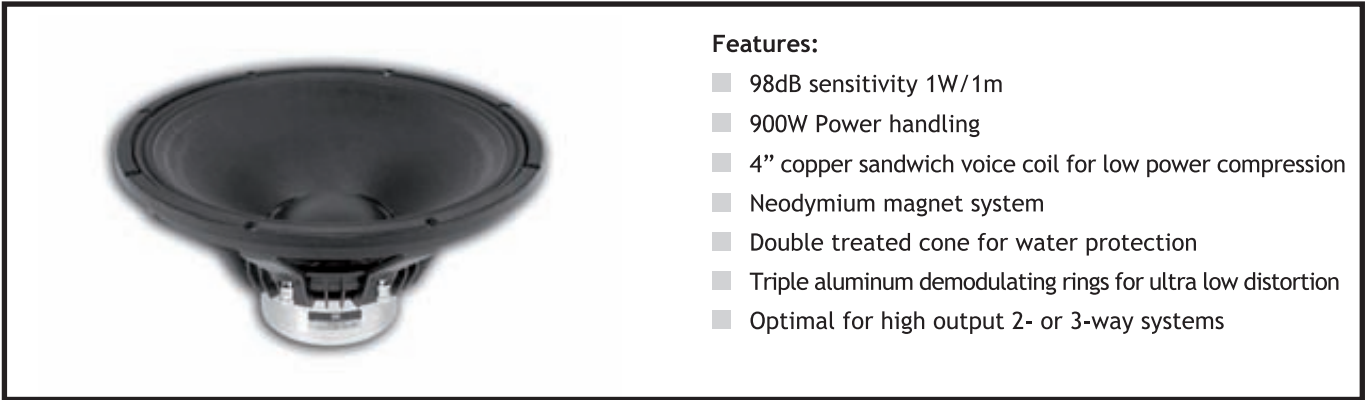
MOUNTING INFORMATION		
Overall diameter	mm	388
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	371
Baffle cut-out diameter	mm	358
Overall depth	mm	182
Net weight	kg	4.3

Impedance - 8 Ohm driver



Recommended reflex enclosure:

90L/43Hz, -3dB=44Hz, BRD=150mm/187mm long

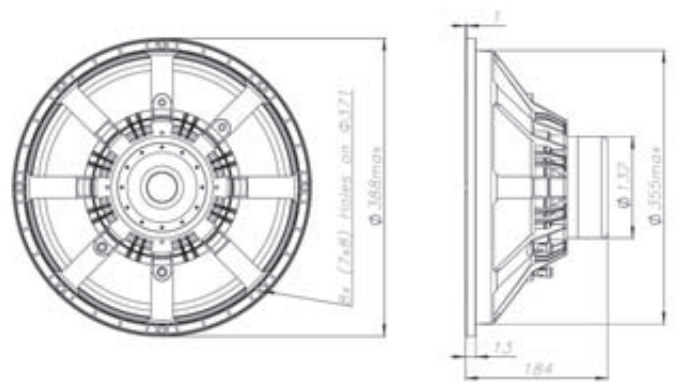


**Features:**

- 98dB sensitivity 1W/1m
- 900W Power handling
- 4" copper sandwich voice coil for low power compression
- Neodymium magnet system
- Double treated cone for water protection
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for high output 2- or 3-way systems

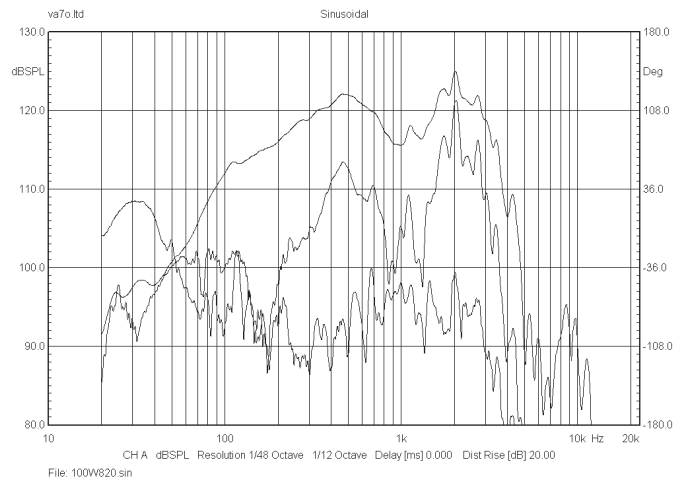
## SPECIFICATIONS

APPLICATION	2- or 3-way systems	
Nominal impedance	Ohm	4 + 8
Power handling AES noise	W	900
Sensitivity ( 1W/1m )	dB	98
Frequency response	Hz	40 - 2500
Voice coil diameter	mm	101.6 (4")
Voice coil material		Cu
Voice coil winding depth	mm	20
Magnet gap depth	mm	10
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	335



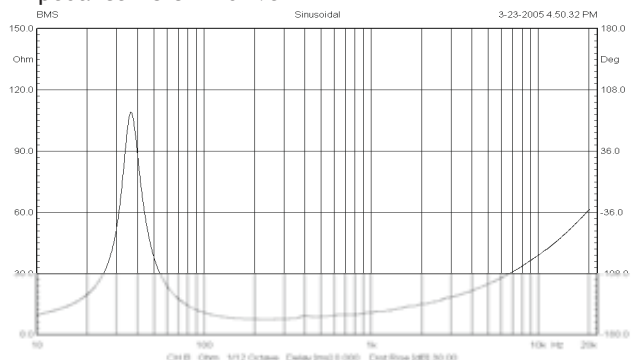
THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	39.2
DC resistance	Re	Ohm	5.7
Mechanical Q factor	Qms		4.5
Electrical Q factor	Qes		0.27
Total Quality factor	Qts		0.26
Equivalent volume	Vas	L	159
Moving mass	Mms	kg	0.114
Mechanical compl.	Cms	mm/N	0.144
BL factor	BL	Tesla m	24.2
Effective piston area	Sd	m <sup>2</sup>	0.0880
Max. linear excursion	Xmax	mm	± 4.5
Voice coil inductance	Le1k	mH	0.81
	Le10k	mH	0.53

Frequency response measured 100W (28.3V) at 1m in a closed enclosure of 100 Liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20dB.



MOUNTING INFORMATION		
Overall diameter	mm	388
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	371
Baffle cut-out diameter	mm	358
Overall depth	mm	184
Net weight	kg	5.7

### Impedance - 8 Ohm driver



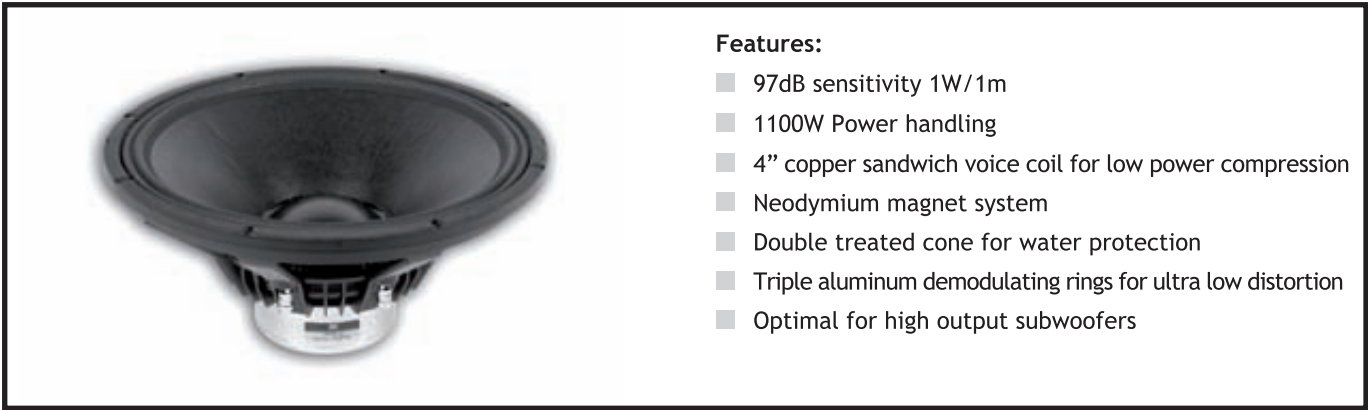
**Recommended reflex enclosure:**

60L/50Hz, -3dB=58Hz, BRD=140mm/183mm long

# 15N830v2

Neodymium Ultra Low Distortion Woofer

## Neodymium Series

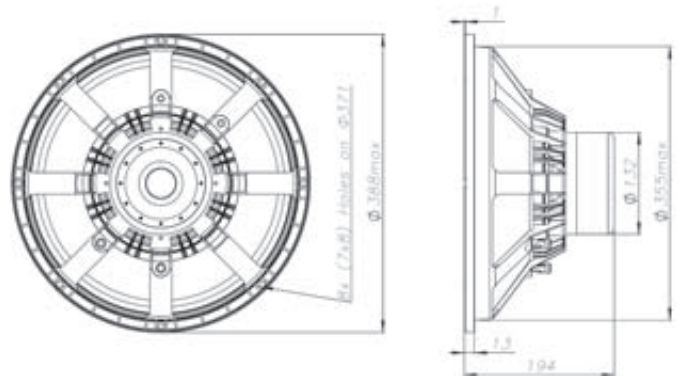


### Features:

- 97dB sensitivity 1W/1m
- 1100W Power handling
- 4" copper sandwich voice coil for low power compression
- Neodymium magnet system
- Double treated cone for water protection
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for high output subwoofers

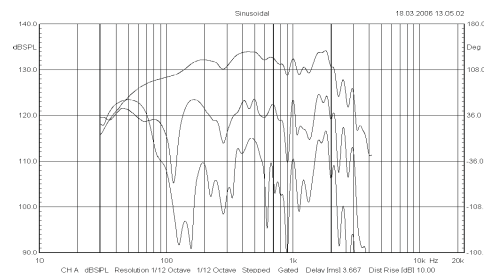
## SPECIFICATIONS

APPLICATION	Subwoofer	
Nominal impedance	Ohm	4 or 8
Power handling AES noise	W	1100
Sensitivity ( 1W/1m )	dB	97
Frequency response	Hz	35 - 1000
Voice coil diameter	mm	101.6 (4")
Voice coil material		Cu
Voice coil winding depth	mm	26
Magnet gap depth	mm	10
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	335

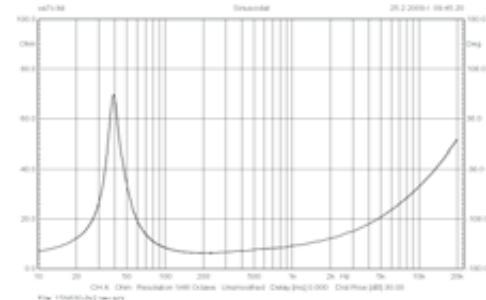


THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	39.5
DC resistance	Re	Ohm	4.8
Mechanical Q factor	Qms		4.2
Electrical Q factor	Qes		0.29
Total Quality factor	Qts		0.27
Equivalent volume	Vas	L	159
Moving mass	Mms	kg	0.130
Mechanical compl.	Cms	mm/N	0.144
BL factor	BL	Tesla m	22.4
Effective piston area	Sd	m <sup>2</sup>	0.0880
Max. linear excursion	Xmax	mm	± 8
Voice coil inductance	Le1k	mH	0.7
	Le10k	mH	0.45

Frequency response measured 1000W (89.4V) at 1m in a closed enclosure of 100 Liter incl. 2nd and 3rd harmonic distortion raised 10dB.



Impedance - 8 Ohm driver

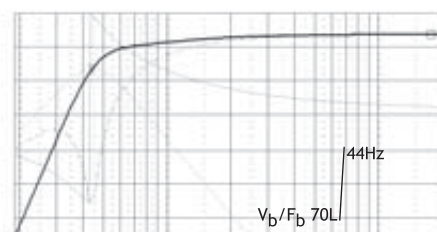


MOUNTING INFORMATION		
Overall diameter	mm	388
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	371
Baffle cut-out diameter	mm	358
Overall depth	mm	194
Net weight	kg	5.7

Recommended reflex enclosure:

70L/44Hz, BRD=180mm/422mm long

85L/41Hz, BRD=190mm/447mm long



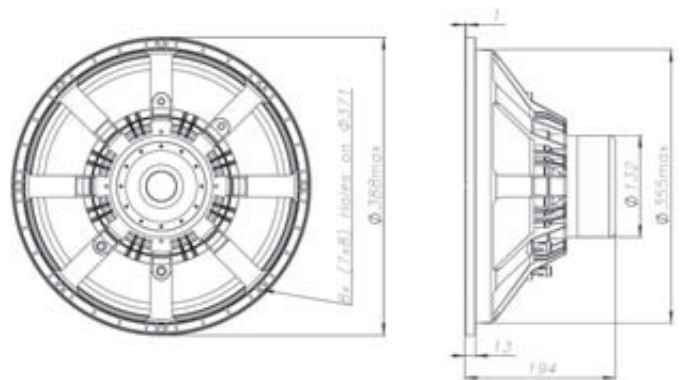


**Features:**

- 95dB sensitivity 1W/1m
- 1.200W Power handling
- 4" copper sandwich voice coil for low power compression
- Neodymium magnet system
- Double treated cone for water protection
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for high output subwoofers
- Light weight carbon fiber diaphragm

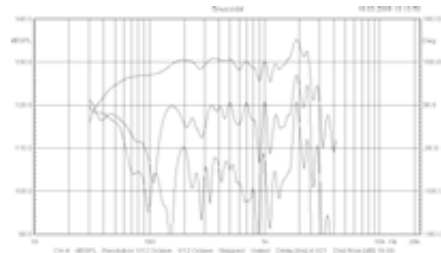
## SPECIFICATIONS

APPLICATION	infra-subwoofer	
Nominal impedance	Ohm	4 + 8
Power handling AES noise	W	1200
Sensitivity ( 1W/1m )	dB	95
Frequency response	Hz	22 - 300
Voive coil diameter	mm	101.6 (4")
Voice coil material		Cu
Voice coil winding depth	mm	32
Magnet gap depth	mm	10
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	330

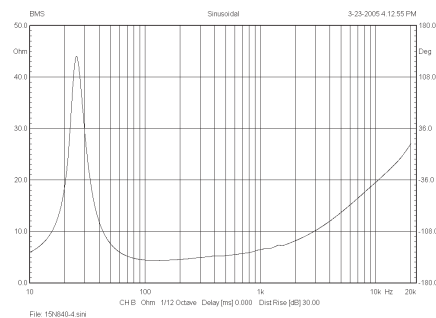


THIELE - SMALL PARAMETERS			
Resonance frequency	F <sub>s</sub>	Hz	35.6
DC resistance	R <sub>e</sub>	Ohm	5
Mechanical Q factor	Q <sub>ms</sub>		5.75
Electrical Q factor	Q <sub>es</sub>		0.32
Total Quality factor	Q <sub>ts</sub>		0.30
Equivalent volume	V <sub>as</sub>	L	145.7
Moving mass	M <sub>ms</sub>	kg	0.137
Mechanical compl.	C <sub>ms</sub>	mm/N	0.146
BL factor	BL	Tesla m	24.6
Effective piston area	S <sub>d</sub>	m <sup>2</sup>	0.0845
Max. linear excursion	X <sub>max</sub>	mm	± 11
Voice coil inductance	Le1k	mH	0.82
	Le10k	mH	0.31

Frequency response measured 1000W (89.4V) at 1m in a closed enclosure of 100 Liter incl. 2nd and 3rd harmonic distortion raised 10dB.

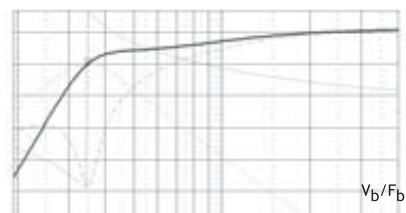


**Impedance - 8 Ohm driver**



MOUNTING INFORMATION		
Overall diameter	mm	388
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	371
Baffle cut-out diameter	mm	358
Overall depth	mm	194
Net weight	kg	6.8


**Recommended reflex enclosure:**  
 70L/42Hz, BRD=180mm/476mm long  
 85L/35Hz, BRD=180mm/590mm long



V<sub>b</sub>/F<sub>b</sub> 85L/35Hz

# 15N850v2

Neodymium Ultra Low Distortion Woofer

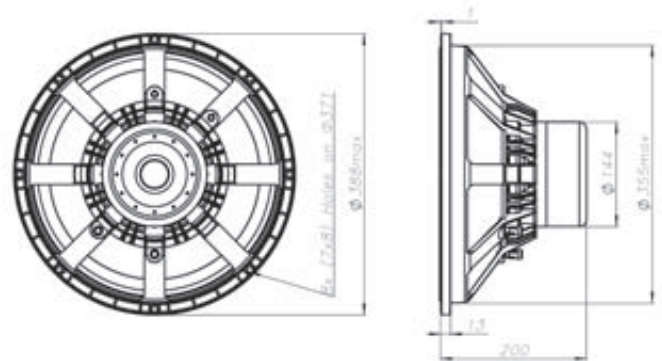


**Features:**

- 95dB sensitivity 1W/1m
- 1.200W Power handling
- 4" copper sandwich voice coil for low power compression
- Neodymium magnet system
- Double treated cone for water protection
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for high output subwoofers
- Light weight carbon fiber diaphragm

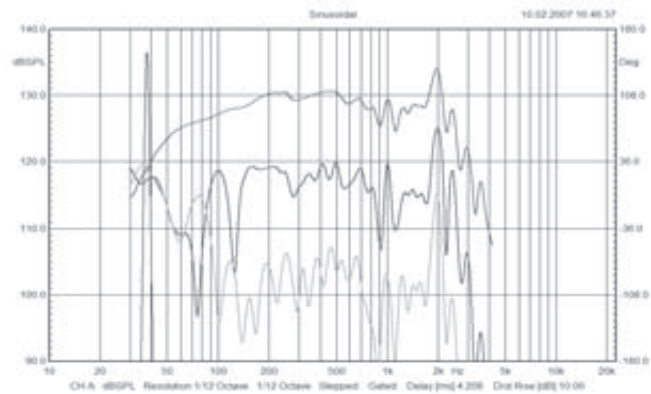
## SPECIFICATIONS

APPLICATION	subwoofer	
Nominal impedance	Ohm	4 or 8
Power handling AES noise	W	1200
Sensitivity ( 1W/1m )	dB	95
Frequency response	Hz	20 - 200
Voive coil diameter	mm	101.6 (4")
Voice coil material		Cu
Voice coil winding depth	mm	36
Magnet gap depth	mm	12
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	328



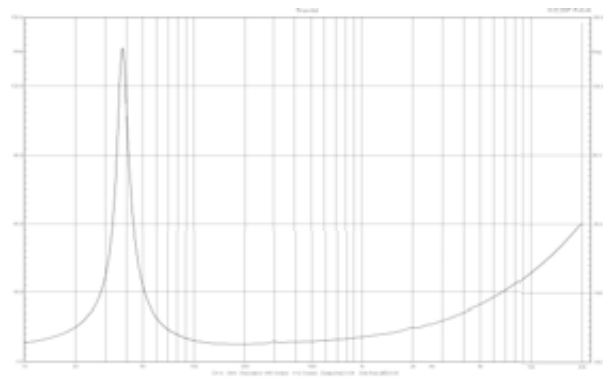
THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	37
DC resistance	Re	Ohm	5.6
Mechanical Q factor	Qms		7.38
Electrical Q factor	Qes		0.34
Total Quality factor	Qts		0.33
Equivalent volume	Vas	L	110.96
Moving mass	Mms	kg	0.167
Mechanical compl.	Cms	mm/N	0.17
BL factor	BL	Tesla m	25.2
Effective piston area	Sd	m <sup>2</sup>	0.0845
Max. linear excursion	Xmax	mm	± 12
Voice coil inductance	Le1k	mH	1.43
	Le10k	mH	0.58

Frequency response measured 1000W (89.4V) at 1m in a closed enclosure of 100 Liter incl. 2nd and 3rd harmonic distortion raised 10dB.



MOUNTING INFORMATION		
Overall diameter	mm	388
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	371
Baffle cut-out diameter	mm	357
Overall depth	mm	200
Net weight	kg	8.55

Impedance - 8 Ohm driver



**Recommended reflex enclosure:**

50L/43Hz, BRD=160mm/522mm long

75L/35Hz, BRD=175mm/64mm long



#### Features:

- 96dB sensitivity 1W/1m
- 1100W Power handling
- 4" copper sandwich voice coil for low power compression
- Neodymium magnet system
- Double treated cone for water protection
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for high output subwoofers
- Light weight carbon fiber diaphragm

## SPECIFICATIONS

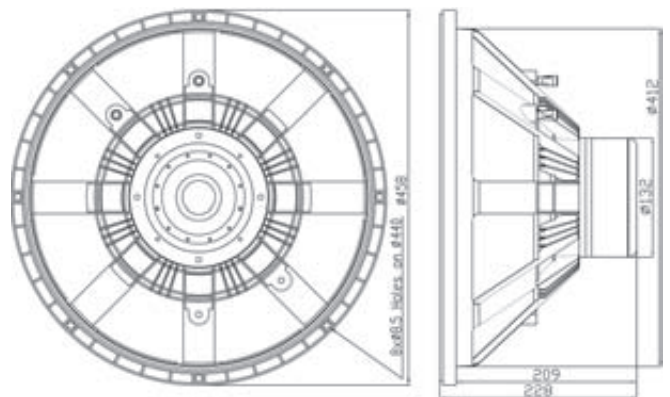
APPLICATION	subwoofer	
Nominal impedance	Ohm	4 + 8
Power handling AES noise	W	1100
Sensitivity ( 1W/1m )	dB	96
Frequency response	Hz	20 - 200
Voive coil diameter	mm	101.6 (4")
Voice coil material		Cu
Voice coil winding depth	mm	26
Magnet gap depth	mm	10
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	393

THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	31
DC resistance	Re	Ohm	4.8
Mechanical Q factor	Qms		6
Electrical Q factor	Qes		0.39
Total Quality factor	Qts		0.37
Equivalent volume	Vas	L	262
Moving mass	Mms	kg	0.210
Mechanical compl.	Cms	mm/N	0.125
BL factor	BL	Tesla m	22.4
Effective piston area	Sd	m <sup>2</sup>	0.1212
Max. linear excursion	Xmax	mm	± 8
Voice coil inductance	Le1k	mH	0.77
	Le10k	mH	0.43

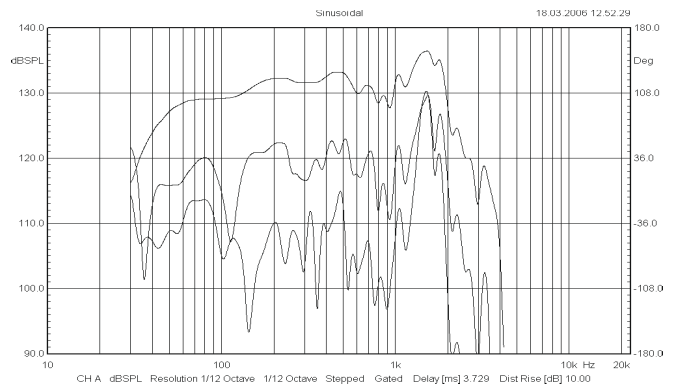
MOUNTING INFORMATION		
Overall diameter	mm	458
Mounting holes diameter	mm	8 x 8.5
Bolt circle diameter	mm	440
Baffle cut-out diameter	mm	414
Overall depth	mm	228
Net weight	kg	7.72

#### Recommended reflex enclosure:

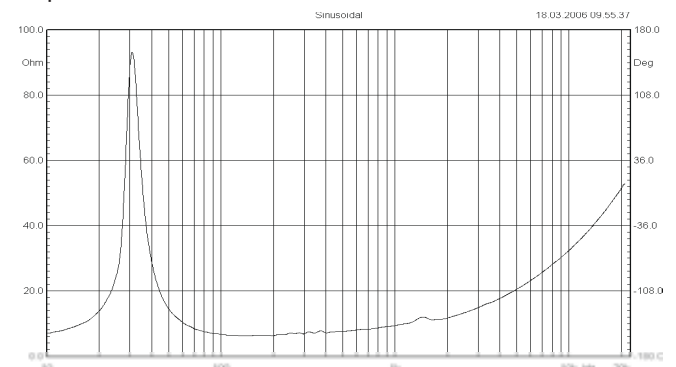
140L/36Hz, BRD=200mm/366mm long



Frequency response measured 1000W (89.4V) at 1m in a vented enclosure of 170 litre tuned 32Hz incl. 2nd and 3rd harmonic distortion raised 10dB.



#### Impedance - 8 Ohm driver





# 18N840

Neodymium Ultra Low Distortion Woofer

Neodymium Series

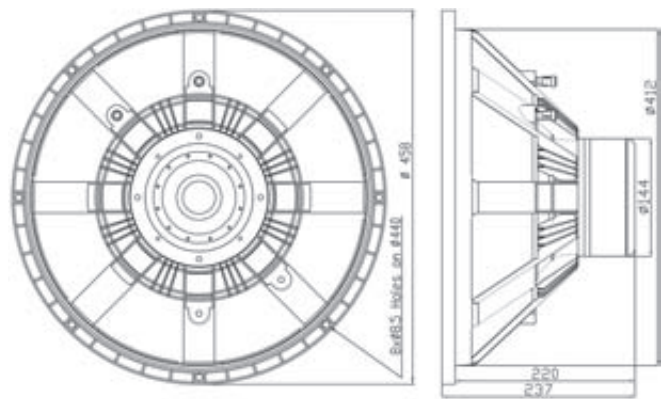


### Features:

- 95dB sensitivity 1W/1m
- 1200W Power handling
- 4" copper sandwich voice coil for low power compression
- Neodymium magnet system
- Double treated cone for water protection
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for high output subwoofers
- Light weight carbon fiber diaphragm

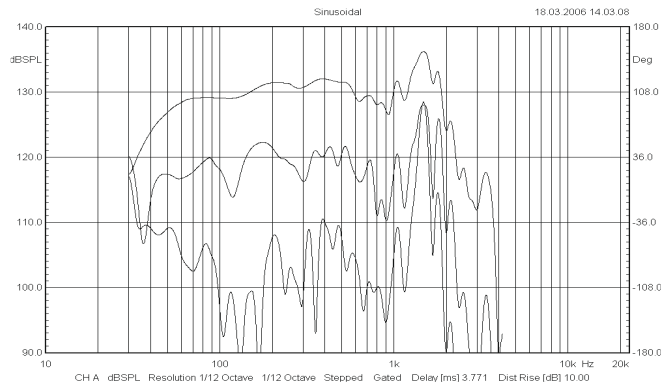
## SPECIFICATIONS

APPLICATION	infra-subwoofer	
Nominal impedance	Ohm	4 or 8
Power handling AES noise	W	1200
Sensitivity ( 1W/1m )	dB	95
Frequency response	Hz	20 - 200
Voive coil diameter	mm	101.6 (4")
Voice coil material		Cu
Voice coil winding depth	mm	32
Magnet gap depth	mm	12
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	393



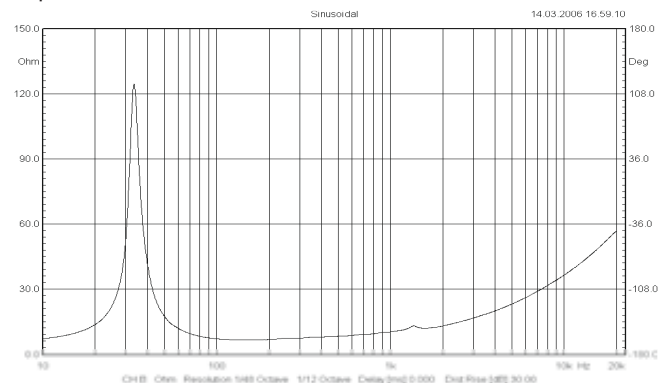
THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	30.2
DC resistance	Re	Ohm	5
Mechanical Q factor	Qms		6.3
Electrical Q factor	Qes		0.4
Total Quality factor	Qts		0.37
Equivalent volume	Vas	L	261
Moving mass	Mms	kg	0.222
Mechanical compl.	Cms	mm/N	0.125
BL factor	BL	Tesla m	23
Effective piston area	Sd	m <sup>2</sup>	0.1213
Max. linear excursion	Xmax	mm	± 10
Voice coil inductance	Le1k	mH	0.87
	Le10k	mH	0.51

Frequency response measured 1000W (89.4V) at 1m in a vented enclosure of 170 Liter tuned 32Hz incl. 2nd and 3rd harmonic distortion raised 10dB.



MOUNTING INFORMATION		
Overall diameter	mm	458
Mounting holes diameter	mm	8 x 8.5
Bolt circle diameter	mm	440
Baffle cut-out diameter	mm	414
Overall depth	mm	237
Net weight	kg	9.8

### Impedance - 8 Ohm driver



### Recommended reflex enclosure:

140L/35Hz, BRD=200mm/396mm long



#### Features:

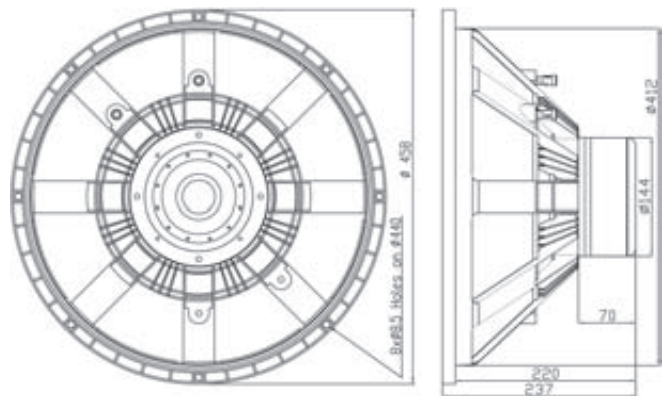
- 95dB sensitivity 1W/1m
- 1.200W Power handling
- 4" copper sandwich voice coil for low power compression
- Neodymium magnet system
- Double treated cone for water protection
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for high output subwoofers
- Light weight carbon fiber diaphragm

## SPECIFICATIONS

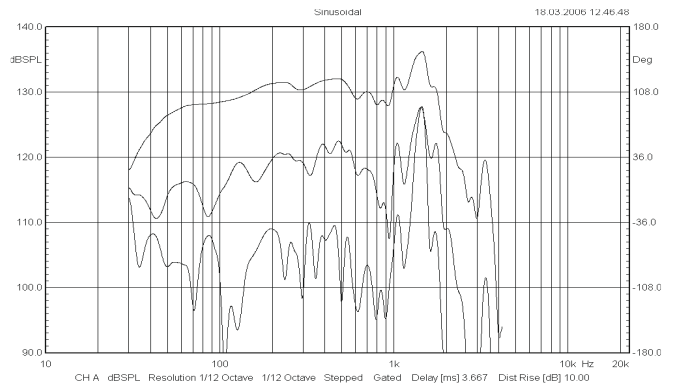
APPLICATION	infra-Subwoofer	
Nominal impedance	Ohm	4 + 8
Power handling AES noise	W	1200
Sensitivity ( 1W/1m )	dB	95
Frequency response	Hz	20 - 200
Voive coil diameter	mm	101.6 (4")
Voive coil winding depth	mm	36
Magnet gap depth	mm	12
Voice coil material		Cu
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	393

THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	29.8
DC resistance	Re	Ohm	5
Mechanical Q factor	Qms		7
Electrical Q factor	Qes		0.35
Total Quality factor	Qts		0.33
Equivalent volume	Vas	L	243
Moving mass	Mms	kg	0.240
Mechanical compl.	Cms	mm/N	0.120
BL factor	BL	Tesla m	25.4
Effective piston area	Sd	m <sup>2</sup>	0.1213
Max. linear excursion	Xmax	mm	± 12
Voice coil inductance	Le1k	mH	0.85
	Le10k	mH	0.49

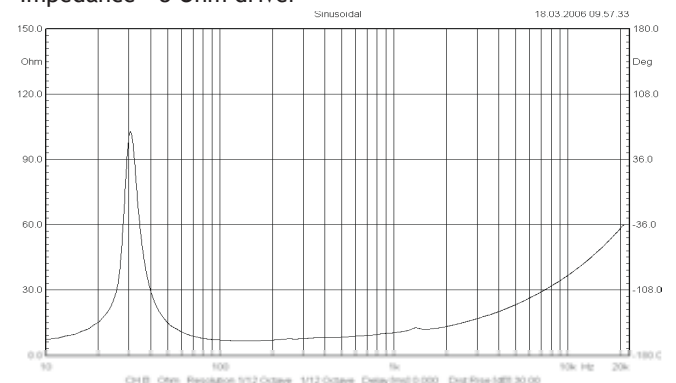
MOUNTING INFORMATION		
Overall diameter	mm	458
Mounting holes diameter	mm	8 x 8.5
Bolt circle diameter	mm	440
Baffle cut-out diameter	mm	414
Overall depth	mm	237
Net weight	kg	9.8



Frequency response measured 1000W (89.4V) at 1m in a vented enclosure of 170 Liter tuned 32Hz incl. 2nd and 3rd harmonic distortion raised 10dB.



#### Impedance - 8 Ohm driver



**Recommended reflex enclosure:**  
140L/32Hz, BRD=200mm/502mm long

# 18N862

18" Neodymium Ultra low Distortion Woofer

Neodymium Series



### Features:

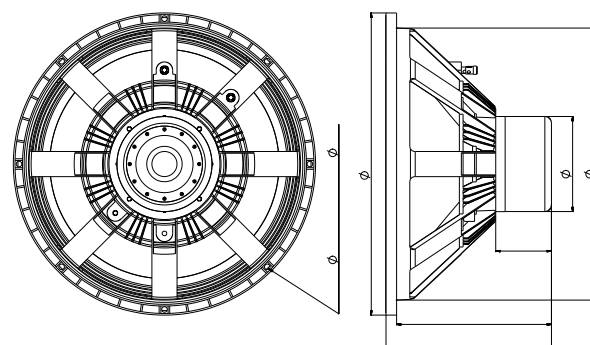
- 95 dB Sensitivity 1 W / 1 m
- 1500 W Power handling
- 4" copper sandwich voice coil for low power compression
- Neodymium magnet system
- Double treated cone for water protection
- Triple aluminum demodulating rings for ultra low distortion
- Light Weight Carbon Fiber Diaphragm
- Optimal for high output Subwoofers

## SPECIFICATIONS

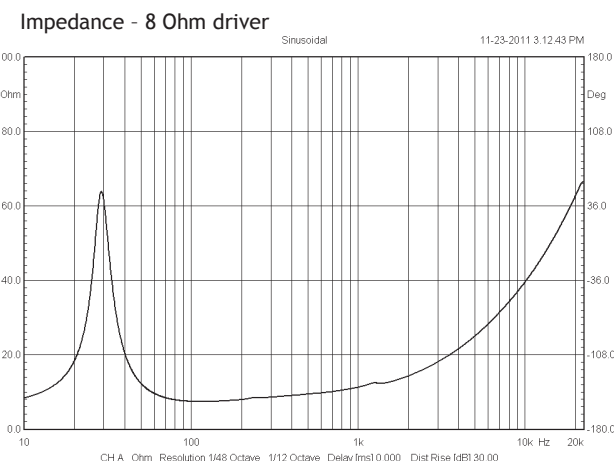
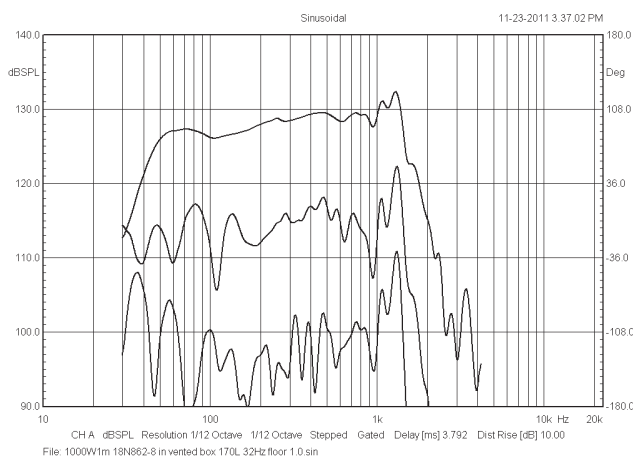
APPLICATION	Infra-Subwoofer	
Nominal Impedance	Ohm	4 + 8
Power handling AES noise	W	1500
Sensitivity (1 W / 1 m)	dB	95
Frequency response	Hz	20 - 200
Voice Coil Diameter	mm	101.6 (4")
Voice Coil Material		Cu
Voice Coil Winding Depth	mm	50
Magnet Gap Depth	mm	12
Basket		Aluminum
Effect. diaphragm diameter D	mm	394

THIELE-SMALL PARAMETERS			
Resonance Frequency	Fs	Hz	25.1
DC Resistance	Re	Ohm	5.56
Mechanical Q Factor	Qms		6.75
Electrical Q Factor	Qes		0.36
Total Quality Factor	Qts		0.34
Equivalent Volume	Vas	L	312
Moving Mass	Mms	kg	0.267
Mechanical Compliance	Cms	mm / N	0.15
BL Factor	BL	Tesla m	25.52
Effective Piston Area	Sd	m <sup>2</sup>	0.1219
Max. linear Excursion	Xmax	mm	+/- 19
Voice Coil Inductance	Le1k	mH	0.81
	Le10k	mH	0.5

MOUNTING INFORMATION		
Overall Diameter	mm	458
Mounting Holes Diameter	mm	8 x 8.5
Bolt Circle Diameter	mm	440
Baffle cut-out Diameter	mm	412
Overall depth	mm	250
Net Weight	kg	10.5



Frequency response measured 1000 W (89.4 V) at 1 m in a vented enclosure of 170 Liter tuned 32 Hz incl. 2nd and 3rd harmonic distortion raised 10 dB.



### Recommended reflex enclosure:

153 L / 28,5 Hz, BRD = 200 mm / 601 mm long

Closed enclosure 100 L, -3 dB = 50Hz



#### Features:

- 91 dB Sensitivity 1 W / 1 m
- 130 W Power Handling
- 1.5" Copper Sandwich Voice Coil
- Double treated Cone for Water Protection
- Triple Aluminum demodulating Rings for ultra low Distortion
- Optimal for compact 2- or 3-way Systems

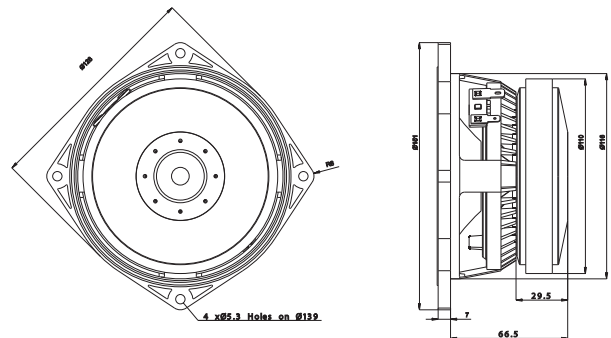
## SPECIFICATIONS

APPLICATION	Low-middle	
Nominal impedance	Ohm	8 or 16
Power handling AES noise	W	130
Sensitivity (1 W / 1 m)	dB	91
Frequency response	Hz	80 - 4000
Voice coil diameter	mm	38
Voice coil material		Cu
Voice coil winding depth	mm	15
Magnet gap depth	mm	5
Basket		Cast Aluminum
Effect. diaphragm diameter	mm	105

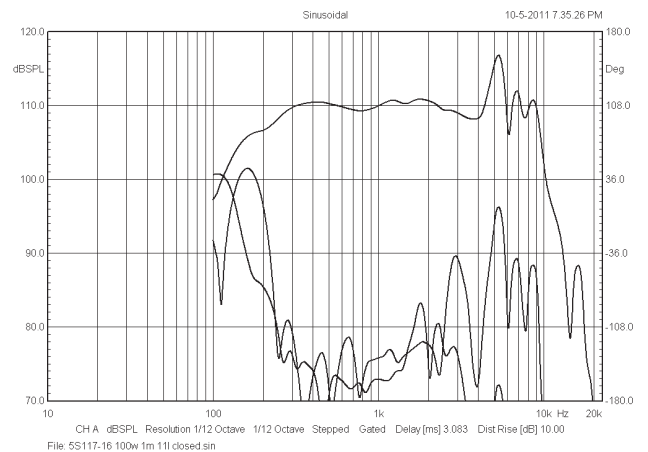
THIELE-SMALL PARAMETERS			
Resonance frequency	Fs	Hz	95
DC resistance	Re	Ohm	11.4
Mechanical Q factor	Qms		3.3
Electrical Q factor	Qes		0.49
Total quality factor	Qts		0.42
Equivalent volume	Vas	L	3.25
Moving mass	Mms	kg	0.0089
Mechanical compl.	Cms	mm/N	0.31
BL factor	BL	Tesla m	11.3
Effective piston area	Sd	m <sup>2</sup>	0.085
Max. linear excursion	Xmax	mm	+/-5
Voice coil inductance	Le1k	mH	0.58
	Le10k	mH	0.46

MOUNTING INFORMATION		
Overall diameter	mm	128
Mounting holes diameter	mm	4 x 5.3
Bolt circle diameter	mm	139
Baffle cut-out diameter	mm	117
Overall depth	mm	66.5
Net weight	kg	1.56

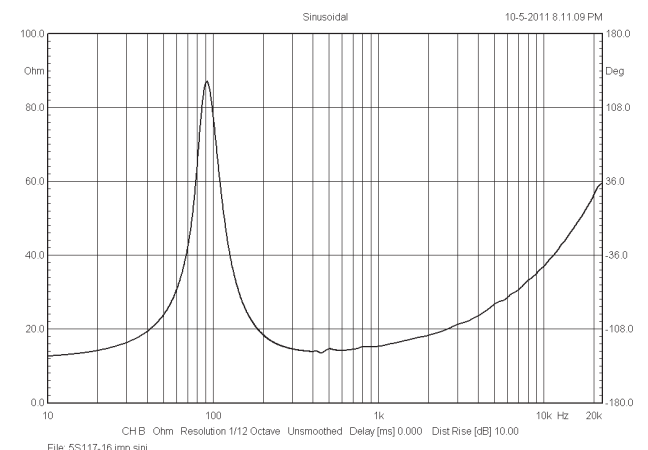
**Recommended reflex enclosure:**  
 3.5 L / 91.5 Hz, BRD = 40 mm / 93 mm long  
 Closed enclosure 1/4 Liter



Frequency Response measured 100 W (28.3 V) at 1 m in a closed enclosure of 11 Liter in a closed box incl. 2nd and 3rd harmonic distortion raised 10 dB.



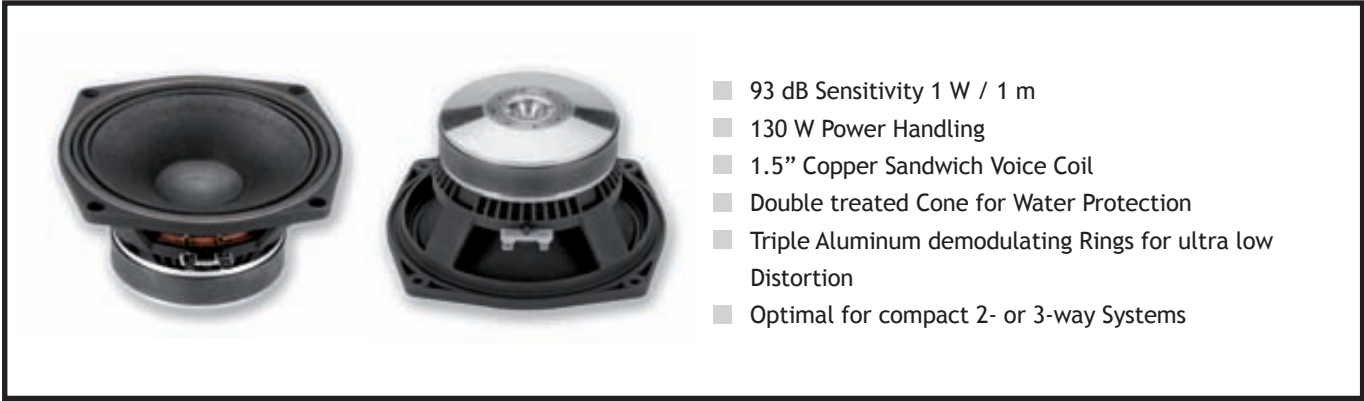
#### Impedance - 16 Ohm driver



# 6S117

Ultra Low Distortion Low Midrange Driver

# Ultra Low Distortion Series



- 93 dB Sensitivity 1 W / 1 m
- 130 W Power Handling
- 1.5" Copper Sandwich Voice Coil
- Double treated Cone for Water Protection
- Triple Aluminum demodulating Rings for ultra low Distortion
- Optimal for compact 2- or 3-way Systems

## SPECIFICATIONS

APPLICATION	Low-middle	
Nominal impedance	Ohm	8 or 16
Power handling AES noise	W	130
Sensitivity (1 W / 1 m)	dB	93
Frequency response	Hz	80 - 3500
Voice coil diameter	mm	38
Voice coil material		Cu
Voice coil winding depth	mm	15
Magnet gap depth	mm	5
Basket		Cast Aluminum
Effect. diaphragm diameter	mm	135

THIELE-SMALL PARAMETERS			
Resonance frequency	Fs	Hz	80
DC resistance	Re	Ohm	11.4
Mechanical Q factor	Qms		3.3
Electrical Q factor	Qes		0.49
Total quality factor	Qts		0.43
Equivalent volume	Vas	L	10.4
Moving mass	Mms	kg	0.011
Mechanical compl.	Cms	mm/N	0.36
BL factor	BL	Tesla m	11.3
Effective piston area	Sd	m <sup>2</sup>	0.0143
Max. linear excursion	Xmax	mm	+/- 5
Voice coil inductance	Le1k	mH	0.64
	Le10k	mH	0.42

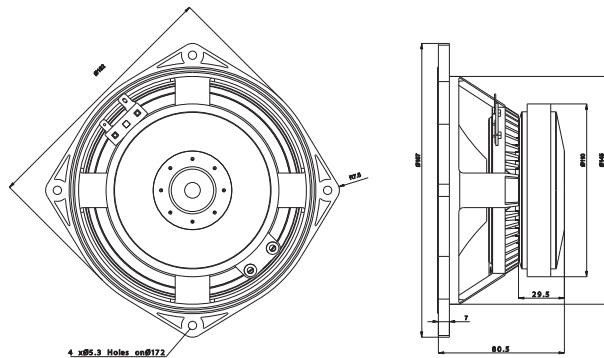
MOUNTING INFORMATION		
Overall diameter	mm	162
Mounting holes diameter	mm	4 x 5.3
Bolt circle diameter	mm	172
Baffle cut-out diameter	mm	146
Overall depth	mm	80.5
Net weight	kg	1.61

### Recommended reflex enclosure:

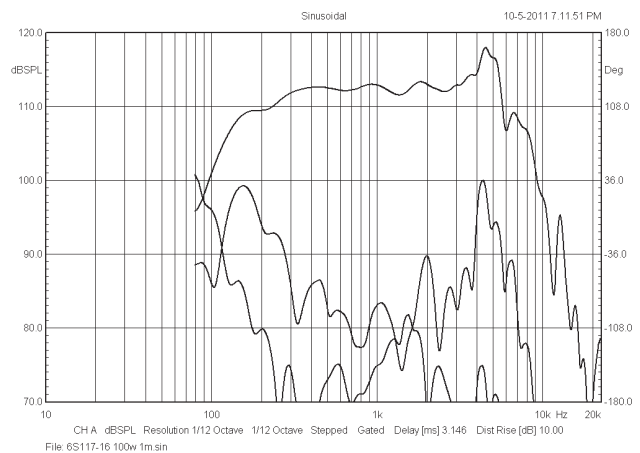
6 L / 82 Hz, BRD = 60 mm / 144 mm long,

8.5 L / 72 Hz, BRD = 60 mm / 128 long,

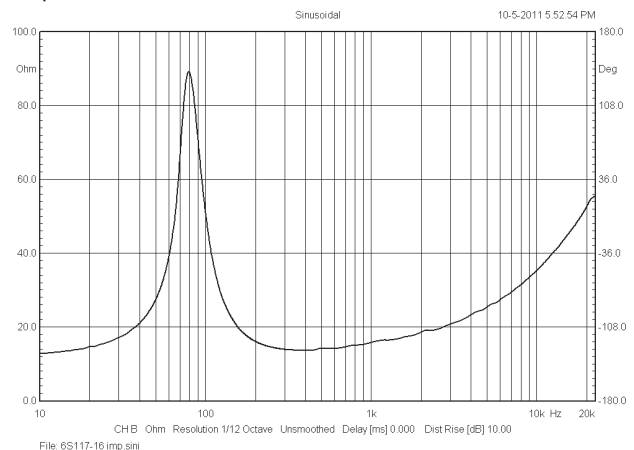
10 L / 70 Hz, BRD = 60 mm / 111 mm long



Frequency Response measured 100 W (28.3 V) at 1 m in a closed enclosure of 11 Liter in a closed box incl. 2nd and 3rd harmonic distortion raised 10 dB.



### Impedance - 16 Ohm driver



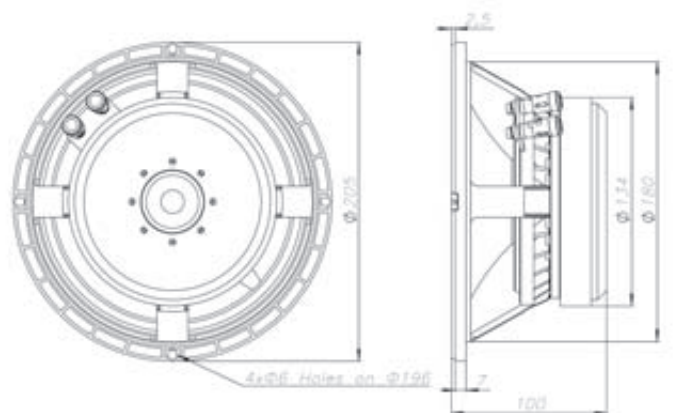


#### Features:

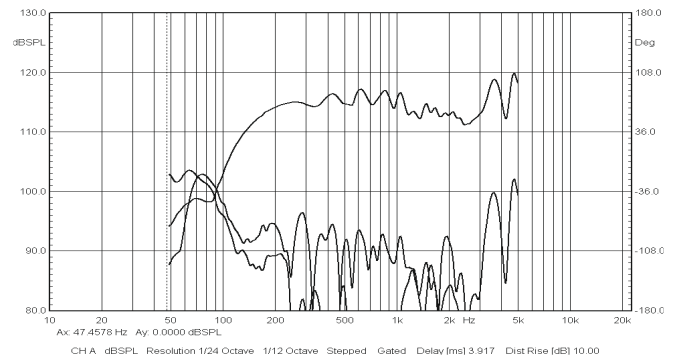
- 96dB sensitivity 1W/1m
- 200W Power handling
- 2" copper sandwich voice coil for low power compression
- Double treated cone for water protection
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for compact 2-way systems
- Light weight carbon fiber diaphragm

## SPECIFICATIONS

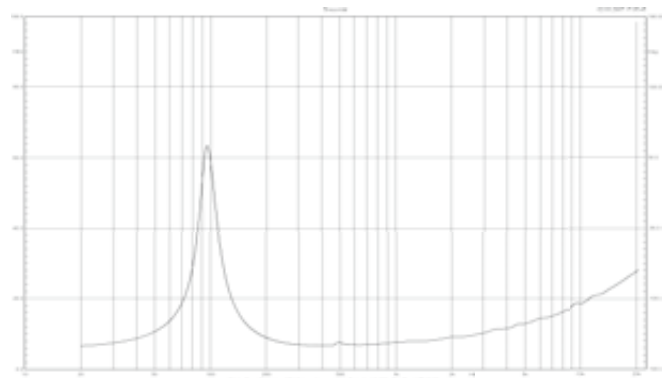
APPLICATION	Low-middle	
Nominal impedance	Ohm	8 + 16
Power handling AES noise	W	200
Sensitivity ( 1W/1m )	dB	96
Frequency response	Hz	80 - 3000
Voive coil diameter	mm	51 (2")
Voice coil material		Cu
Voice coil winding depth	mm	15
Magnet gap depth	mm	6.5
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	168



Frequency response measured 100 W (28.3V) at 1m in a closed enclosure of 25 Liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 10dB.



Impedance - 8 Ohm driver



THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	87.7
DC resistance	Re	Ohm	5.40
Mechanical Q factor	Qms		4.4
Electrical Q factor	Qes		0.33
Total Quality factor	Qts		0.31
Equivalent volume	Vas	L	11.04
Moving mass	Mms	kg	0.0206
Mechanical compl.	Cms	mm/N	0.16
BL factor	BL	Tesla m	13.60
Effective piston area	Sd	m <sup>2</sup>	0.0222
Max. linear excursion	Xmax	mm	± 4.25
Voice coil inductance	Le1k	mH	0.20
	Le10k	mH	0.12

MOUNTING INFORMATION		
Overall diameter	mm	205
Mounting holes diameter	mm	4 x (6 x 6.5)
Bolt circle diameter	mm	196
Baffle cut-out diameter	mm	182
Overall depth	mm	100
Net weight	kg	3.25

#### Recommended enclosure:

4L/108Hz, BRD=60mm/127mm long

7L/82Hz, BRD=60mm/126mm long

10L/70Hz, BRD=60mm/111mm long

# 12S302

Ultra Low Distortion Low Midrange Driver

## Ultra Low Distortion Series

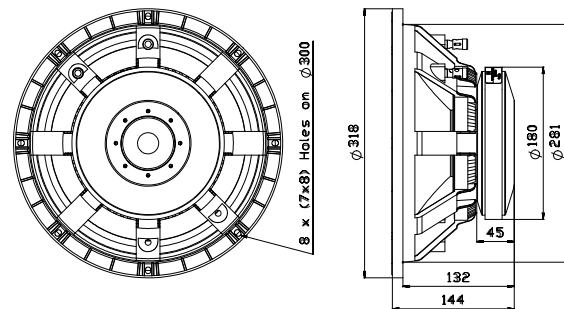


### Features:

- 96 dB sensitivity 1 W / 1 m
- 500 W Power handling
- 3" voice coil
- Double treated cone for water protection
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for compact 2- or 3-way systems
- Light weight carbon fibre diaphragm

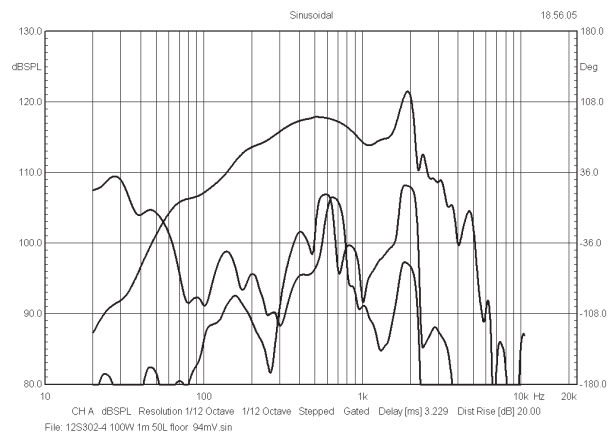
## SPECIFICATIONS

APPLICATION	Low-middle	
Nominal Impedance	Ohm	8
Power handling AES noise	W	500
Sensitivity (1 W / 1 m)	dB	96
Frequency response	Hz	45-2500
Voice Coil Diameter	mm	77
Voice Coil Material	Cu	
Voice Coil Winding Depth	mm	19
Magnet Gap Depth	mm	10
Basket		Cast Aluminum
Effect. Diaphragm Diameter D	mm	260



Frequency response measured 100 W (28.3 V) at 1 m in a closed enclosure of 50 Liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20 dB.

THIELE-SMALL PARAMETERS			
Resonance Frequency	Fs	Hz	45
DC Resistance	Re	Ohm	3
Mechanical Q Factor	Qms		5
Electrical Q Factor	Qes		0.267
Total Quality Factor	Qts		0.253
Equivalent Volume	Vas	L	65
Moving Mass	Mms	kg	0.077
Mechanical Compliance	Cms	mm / N	0.16
BL Factor	BL	Tesla m	15.65
Effective Piston Area	Sd	m <sup>2</sup>	0.0531
Max. linear Excursion	Xmax	mm	± 4.5
Voice Coil Inductance	Le1k	mH	0.5
	Le10k	mH	0.32



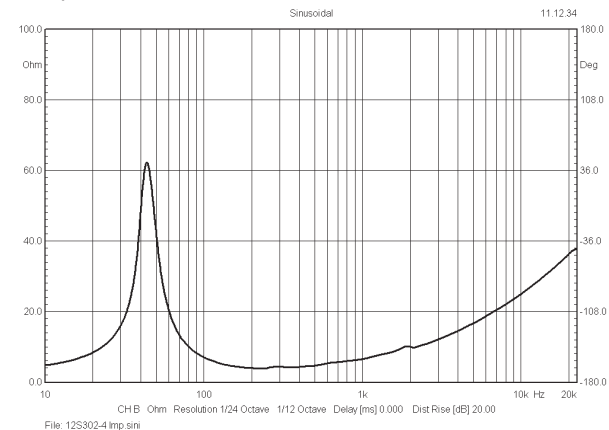
MOUNTING INFORMATION		
Overall diameter	mm	318
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	300
Baffle cut-out diameter	mm	284
Overall depth	mm	144
Net weight	kg	6.7

### Recommended reflex enclosure

17L/62Hz, BRD=80mm/148mm long

25L/60Hz, BRD=100mm/177mm long

### Impedance - 8 Ohm driver



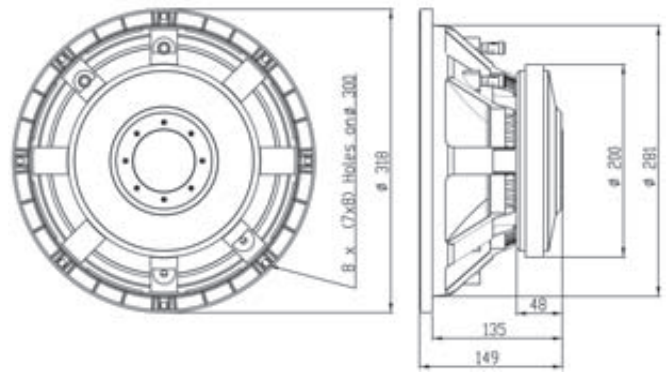


#### Features:

- 98dB sensitivity 1W/1m
- 500W Power handling
- 3" copper sandwich voice coil for low power compression
- Double treated cone for water protection
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for compact 2- or 3-way systems

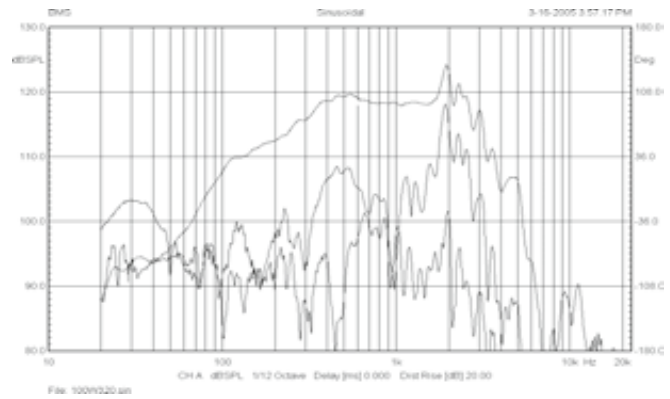
## SPECIFICATIONS

APPLICATION	Compact 2- or 3-way	
Nominal impedance	Ohm	4 + 8
Power handling AES noise	W	500
Sensitivity ( 1W/1m )	dB	98
Frequency response	Hz	45 - 2500
Voive coil diameter	mm	77 (3")
Voice coil material		Cu
Voice coil winding depth	mm	19
Magnet gap depth	mm	10
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	260

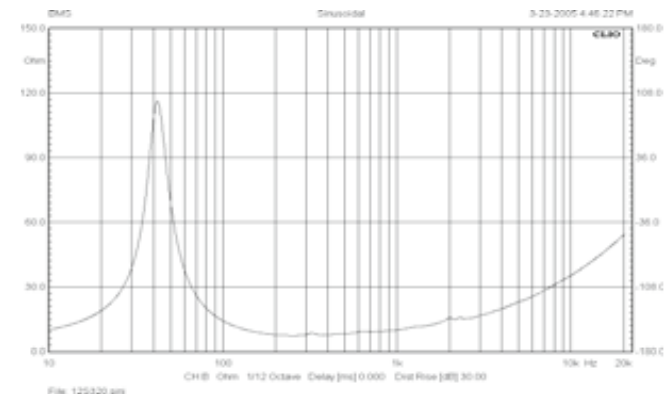


THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	45.4
DC resistance	Re	Ohm	5.7
Mechanical Q factor	Qms		4.2
Electrical Q factor	Qes		0.21
Total Quality factor	Qts		0.20
Equivalent volume	Vas	L	69.5
Moving mass	Mms	kg	0.0069
Mechanical compl.	Cms	mm/N	0.176
BL factor	BL	Tesla m	23.3
Effective piston area	Sd	m <sup>2</sup>	0.0531
Max. linear excursion	Xmax	mm	± 4.5
Voice coil inductance	Le1k	mH	0.75
	Le10k	mH	0.46

Frequency response measured 100W (28.3V) at 1m in a closed enclosure of 50 Liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20dB.



Impedance - 8 Ohm driver



#### Recommended reflex enclosure:

10L/77Hz, -3dB=103Hz, BRD=70mm/132mm long

25L/63Hz, -3dB=68Hz, BRD=90mm/106mm long



# 12S305

Ultra Low Distortion Low Midrange Driver

## Ultra Low Distortion Series



### Features:

- 95 dB sensitivity 1 W / 1 m
- 800 W Power handling
- 3" voice coil
- Double treated cone for water protection
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for compact 2- or 3-way systems
- Light weight carbon fibre diaphragm

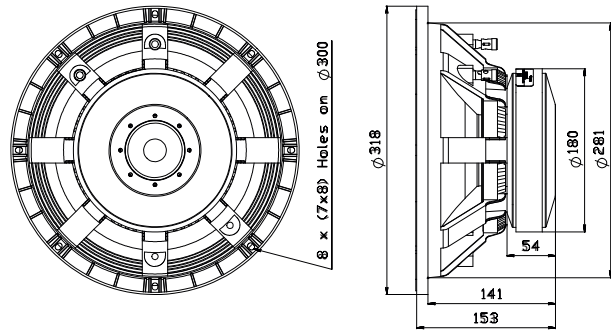
## SPECIFICATIONS

APPLICATION	Low-middle	
Nominal Impedance	Ohm	4 + 8
Power handling AES noise	W	800
Sensitivity (1 W / 1 m)	dB	95
Frequency response	Hz	35-2500
Voice Coil Diameter	mm	77
Voice Coil Material		Cu
Voice Coil Winding Depth	mm	32
Magnet Gap Depth	mm	10
Basket		Cast Aluminum
Effect. Diaphragm Diameter D	mm	256

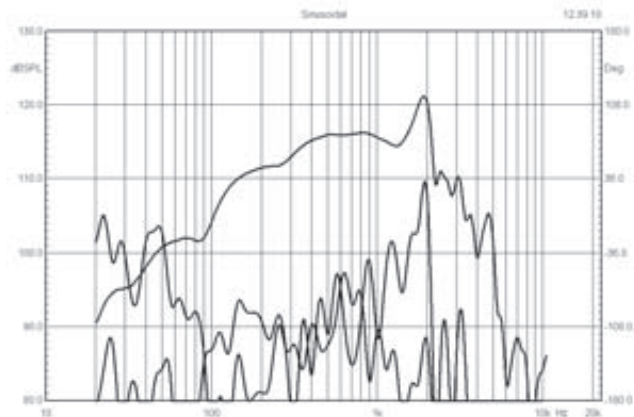
Thiele-Small Parameters			
Resonance Frequency	Fs	Hz	35
DC Resistance	Re	Ohm	5.4
Mechanical Q Factor	Qms		5.8
Electrical Q Factor	Qes		0.278
Total Quality Factor	Qts		0.265
Equivalent Volume	Vas	L	82
Moving Mass	Mms	kg	0.095
Mechanical Compliance	Cms	mm / N	0.218
BL Factor	BL	Tesla m	20.14
Effective Piston Area	Sd	m <sup>2</sup>	0.0515
Max. linear Excursion	Xmax	mm	± 11
Voice Coil Inductance	Le1k	mH	0.7
	Le10k	mH	0.41

Mounting information		
Overall diameter	mm	318
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	300
Baffle cut-out	mm	284
Overall depth	mm	153
Net weight	kg	8

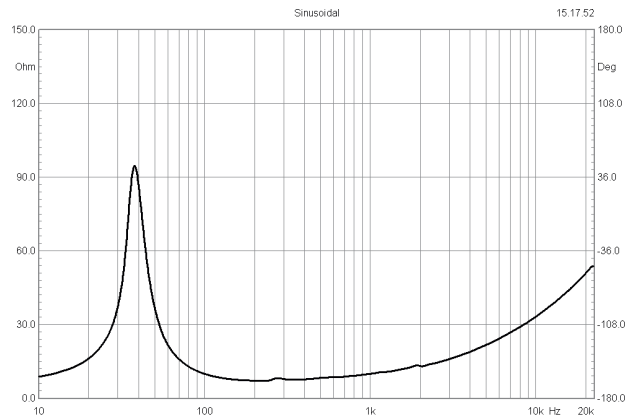
Recommended reflex enclosure  
 30L/50Hz, BRD=100mm/226mm  
 40L/45Hz, BRD=100mm/204mm



Frequency response measured 100 W (28.3 V) at 1 m in a closed enclosure of 50 Liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20 dB.



Impedance - 8 Ohm driver



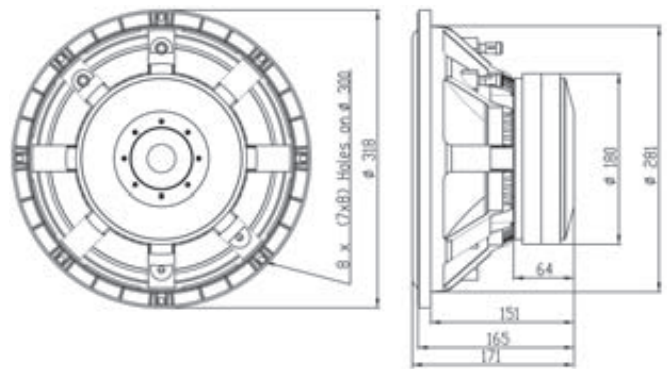


### Features:

- 96dB sensitivity 1W/1m
- 600W Power handling
- 3" copper sandwich voice coil for low power compression
- Double treated cone for water protection
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for compact subwoofers

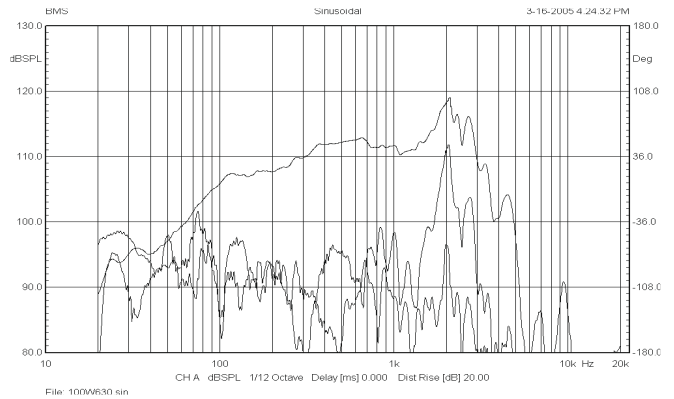
## SPECIFICATIONS

APPLICATION	Subwoofer	
Nominal impedance	Ohm	4 + 8
Power handling AES noise	W	600
Sensitivity ( 1W/1m )	dB	96
Frequency response	Hz	25 - 300
Voive coil diameter	mm	77 (3")
Voice coil material		Cu
Voice coil winding depth	mm	26
Magnet gap depth	mm	10
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	252



THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	28.6
DC resistance	Re	Ohm	6
Mechanical Q factor	Qms		5.9
Electrical Q factor	Qes		0.25
Total Quality factor	Qts		0.24
Equivalent volume	Vas	L	85.5
Moving mass	Mms	kg	0.127
Mechanical compl.	Cms	mm/N	0.24
BL factor	BL	Tesla m	23
Effective piston area	Sd	m <sup>2</sup>	0.0498
Max. linear excursion	Xmax	mm	± 8
Voice coil inductance	Le1k	mH	0.7
	Le10k	mH	0.43

Frequency response measured 100W (28.3V) at 1m in a closed enclosure of 50 Liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20dB.



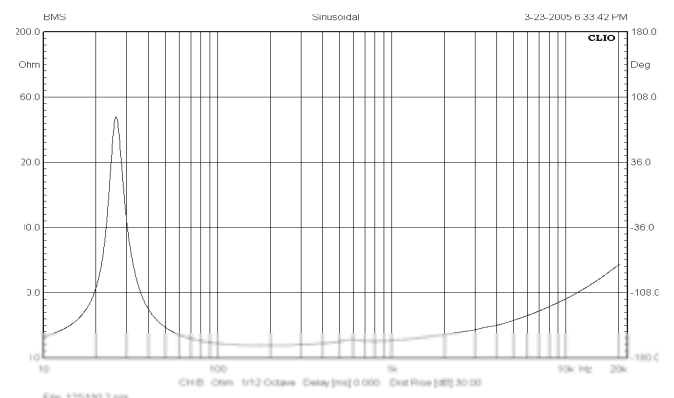
MOUNTING INFORMATION		
Overall diameter	mm	318
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	300
Baffle cut-out diameter	mm	284
Overall depth	mm	171
Net weight	kg	9.4

### Recommended reflex enclosure:

44L/31Hz, -3dB=35Hz, BRD=120mm/434mm long

60L/27Hz, -3dB=32Hz, BRD=110mm/517mm long

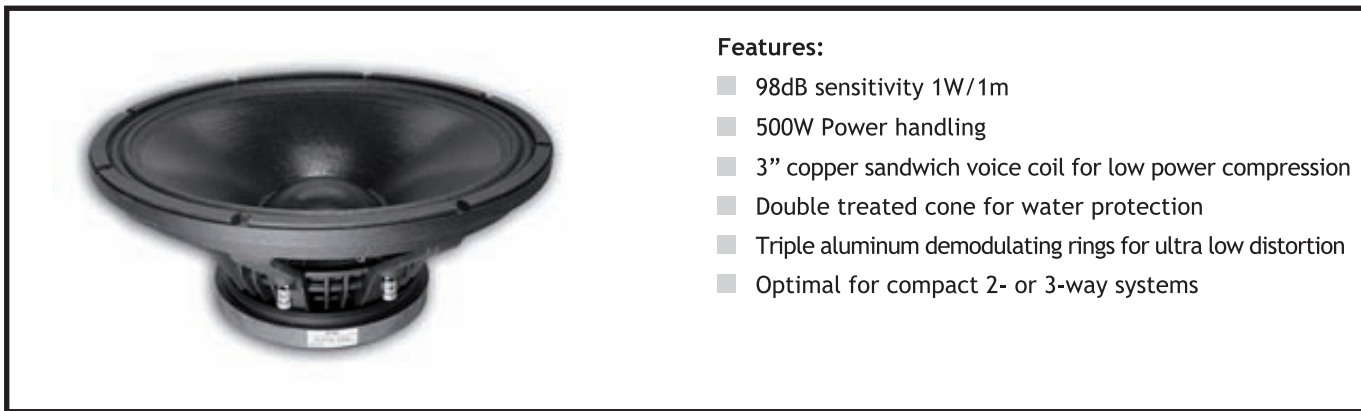
### Impedance - 8 Ohm driver



# 15S320

Ultra Low Distortion Low Midrange Driver

## Ultra Low Distortion Series

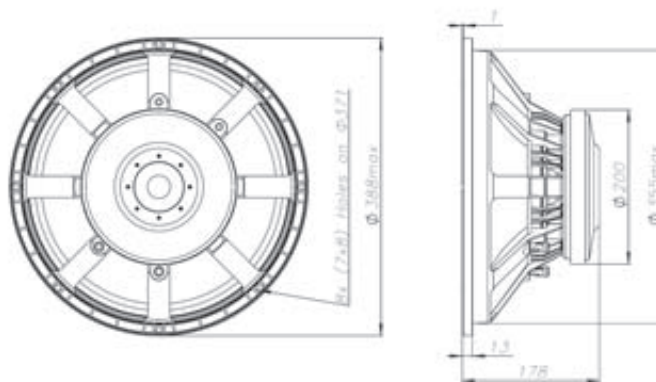


### Features:

- 98dB sensitivity 1W/1m
- 500W Power handling
- 3" copper sandwich voice coil for low power compression
- Double treated cone for water protection
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for compact 2- or 3-way systems

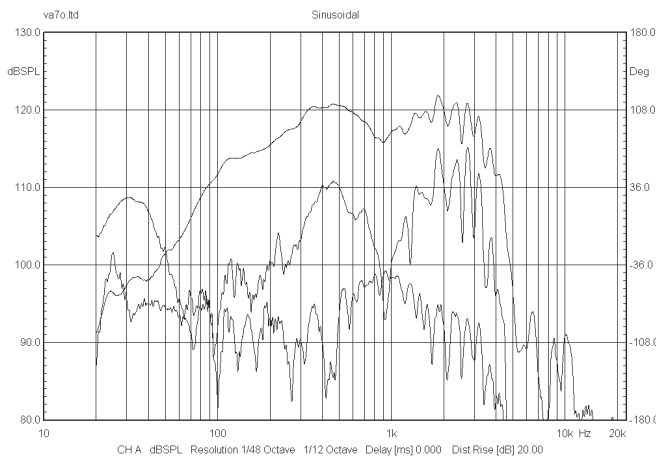
## SPECIFICATIONS

APPLICATION	Compact 2- or 3-way systems	
Nominal impedance	Ohm	4 + 8
Power handling AES noise	W	500
Sensitivity ( 1W/1m )	dB	98
Frequency response	Hz	40 - 2500
Voice coil diameter	mm	77 (3")
Voice coil material		Cu
Voice coil winding depth	mm	19
Magnet gap depth	mm	10
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	335



THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	41
DC resistance	Re	Ohm	5.7
Mechanical Q factor	Qms		5.0
Electrical Q factor	Qes		0.29
Total Quality factor	Qts		0.28
Equivalent volume	Vas	L	154
Moving mass	Mms	kg	0.109
Mechanical compl.	Cms	mm/N	0.14
BL factor	BL	Tesla m	23.3
Effective piston area	Sd	m <sup>2</sup>	0.0880
Max. linear excursion	Xmax	mm	± 4.5
Voice coil inductance	Le1k	mH	0.8
	Le10k	mH	0.52

Frequency response measured 100W (28.3V) at 1m in a closed enclosure of 100 Liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20dB.

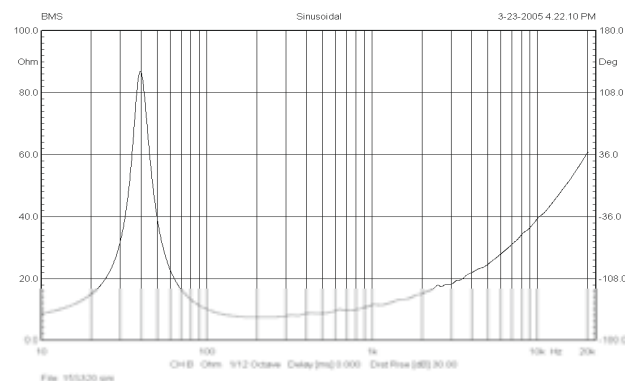


MOUNTING INFORMATION		
Overall diameter	mm	388
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	371
Baffle cut-out diameter	mm	358
Overall depth	mm	178
Net weight	kg	9

### Recommended reflex enclosure:

70L/50Hz, -3dB=54Hz, BRD=140mm/155mm long

### Impedance - 8 Ohm driver



Cone Drivers

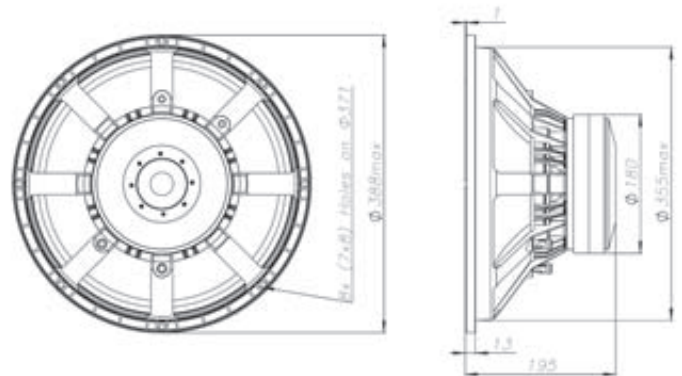


### Features:

- 98dB sensitivity 1W/1m
- 600W Power handling
- 3" copper sandwich voice coil for low power compression
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for compact subwoofers

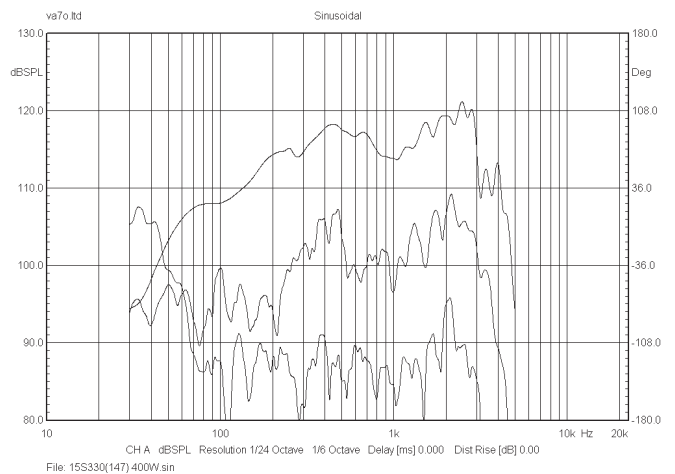
## SPECIFICATIONS

APPLICATION	Subwoofer	
Nominal impedance	Ohm	4 + 8
Power handling AES noise	W	600
Sensitivity ( 1W/1m )	dB	98
Frequency response	Hz	35 - 2500
Voice coil diameter	mm	77 (3")
Voice coil material	Cu	
Voice coil winding depth	mm	26
Magnet gap depth	mm	10
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	335

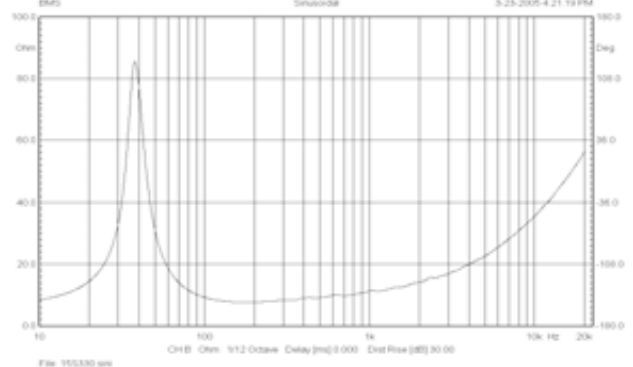


THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	39
DC resistance	Re	Ohm	6
Mechanical Q factor	Qms		6.6
Electrical Q factor	Qes		0.34
Total Quality factor	Qts		0.32
Equivalent volume	Vas	L	152
Moving mass	Mms	kg	0.115
Mechanical compl.	Cms	mm/N	0.14
BL factor	BL	Tesla m	23
Effective piston area	Sd	m <sup>2</sup>	0.0880
Max. linear excursion	Xmax	mm	± 8
Voice coil inductance	Le1k	mH	0.72
	Le10k	mH	0.45

Frequency response measured 100W (28.3V) at 1m in a closed enclosure of 100 Liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20dB.



### Impedance - 8 Ohm driver



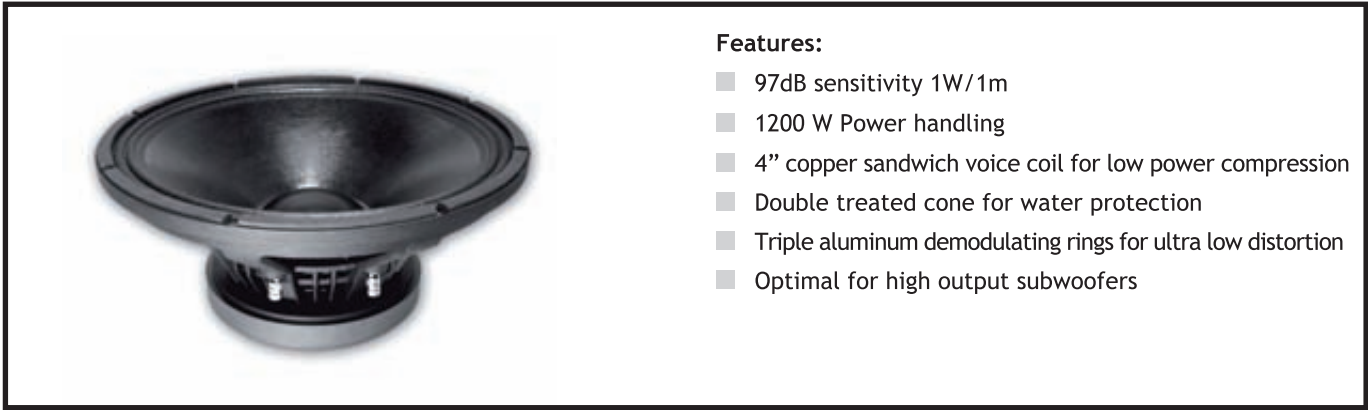
### Recommended reflex enclosure:

80L/45Hz, -3dB=49Hz, BRD=140mm/175mm long

# 15S430v2

Ultra Low Distortion Woofer

## Ultra Low Distortion Series

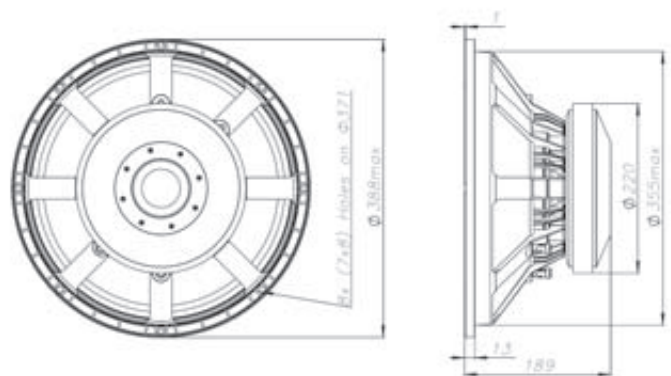


### Features:

- 97dB sensitivity 1W/1m
- 1200 W Power handling
- 4" copper sandwich voice coil for low power compression
- Double treated cone for water protection
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for high output subwoofers

## SPECIFICATIONS

APPLICATION	Subwoofer	
Nominal impedance	Ohm	4 + 8
Power handling AES noise	W	1200
Sensitivity ( 1W/1m )	dB	97
Frequency response	Hz	35 - 2500
Voice coil diameter	mm	101.6 (4")
Voice coil material		Cu
Voice coil winding depth	mm	25
Magnet gab depth	mm	10
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	335

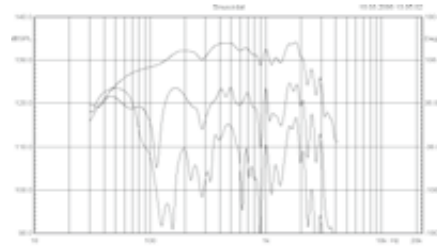


THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	39.8
DC resistance	Re	Ohm	5
Mechanical Q factor	Qms		6.60
Electrical Q factor	Qes		0.27
Total Quality factor	Qts		0.26
Equivalent volume	Vas	L	135
Moving mass	Mms	kg	0.132
Mechanical compl.	Cms	mm/N	0.12
BL factor	BL	Tesla m	24.96
Effective piston area	Sd	m <sup>2</sup>	0.0897
Max. linear excursion	Xmax	mm	± 7.5
Voice coil inductance	Le1k	mH	0.73
	Le10k	mH	0.51

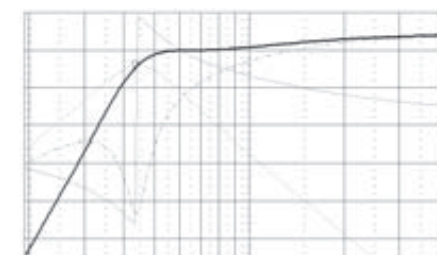
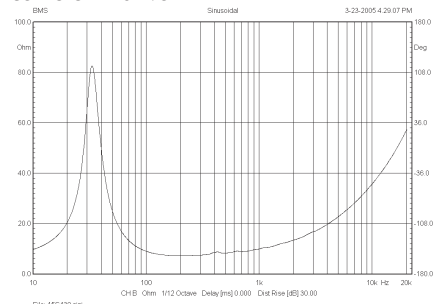
MOUNTING INFORMATION		
Overall diameter	mm	388
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	371
Baffle cut-out diameter	mm	358
Overall depth	mm	189
Net weight	kg	10.7

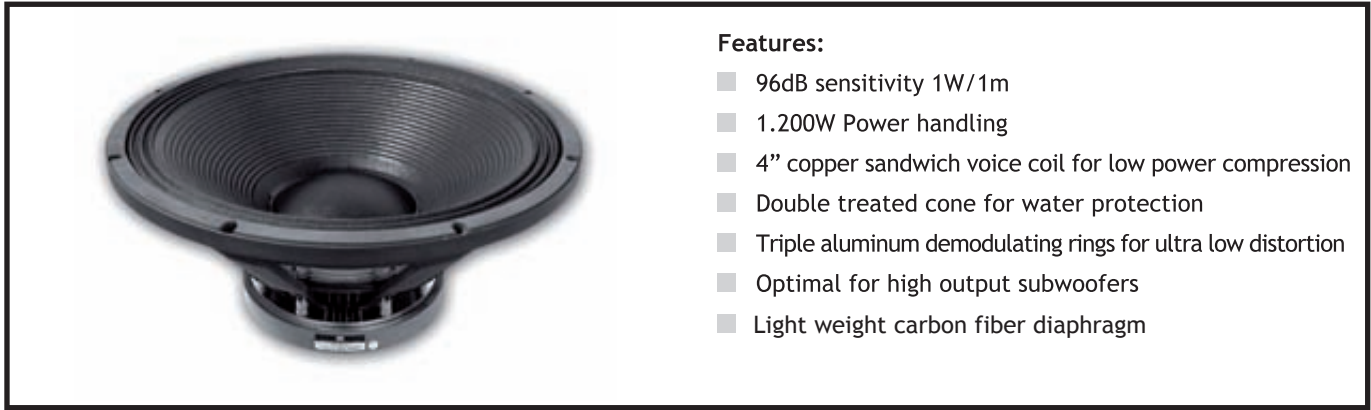
**Recommended reflex enclosure:**  
80L/44Hz, BRD=190mm/402mm long

Frequency response measured 1000W (89.4V) at 1m in a closed enclosure of 100 Liter incl. 2nd and 3rd harmonic distortion raised 10dB.



### Impedance - 8 Ohm driver



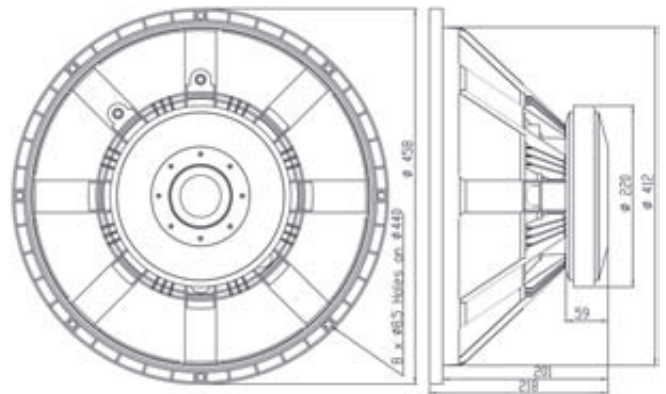


#### Features:

- 96dB sensitivity 1W/1m
- 1.200W Power handling
- 4" copper sandwich voice coil for low power compression
- Double treated cone for water protection
- Triple aluminum demodulating rings for ultra low distortion
- Optimal for high output subwoofers
- Light weight carbon fiber diaphragm

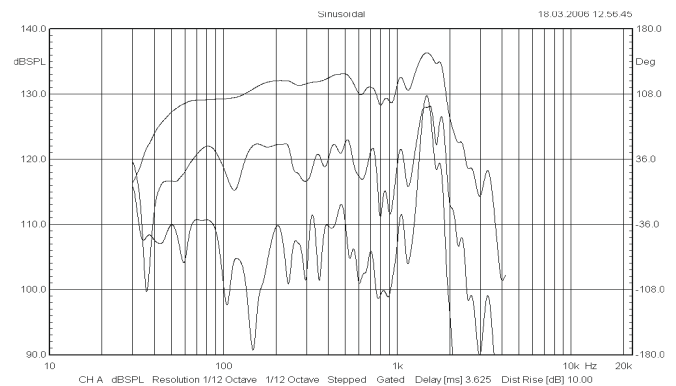
## SPECIFICATIONS

APPLICATION	Subwoofer	
Nominal impedance	Ohm	4 + 8
Power handling AES noise	W	1200
Sensitivity ( 1W/1m )	dB	96
Frequency response	Hz	20 - 200
Voive coil diameter	mm	101.6 (4")
Voice coil material		Cu
Voice coil winding depth	mm	26
Magnet gap depth	mm	10
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	393

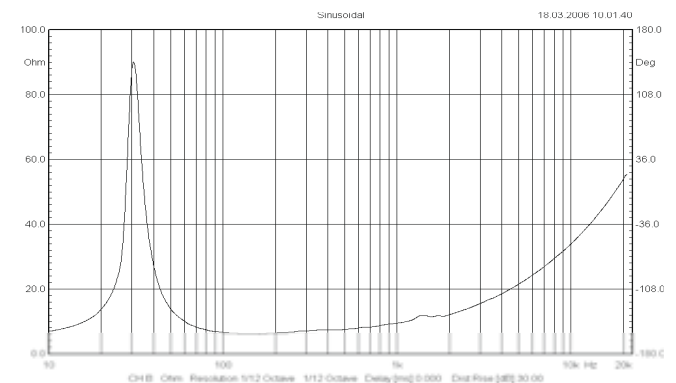


THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	31
DC resistance	Re	Ohm	4.8
Mechanical Q factor	Qms		6
Electrical Q factor	Qes		0.36
Total Quality factor	Qts		0.34
Equivalent volume	Vas	L	262
Moving mass	Mms	kg	0.210
Mechanical compl.	Cms	mm/N	0.125
BL factor	BL	Tesla m	23.5
Effective piston area	Sd	m <sup>2</sup>	0.1213
Max. linear excursion	Xmax	mm	± 8
Voice coil inductance	Le1k	mH	0.82
	Le10k	mH	0.47

Frequency response measured 1000W (89.4V) at 1m in a vented enclosure of 170 Liter tuned 32Hz incl. 2nd and 3rd harmonic distortion raised 10dB.



#### Impedance - 8 Ohm driver



MOUNTING INFORMATION		
Overall diameter	mm	458
Mounting holes diameter	mm	8 x 8.5
Bolt circle diameter	mm	440
Baffle cut-out diameter	mm	414
Overall depth	mm	218
Net weight	kg	12.8

#### Recommended reflex enclosure:

130L/38Hz, BRD=210mm/393mm long

# 5CN140

Neodymium Coaxial Transducer

Coaxial Series

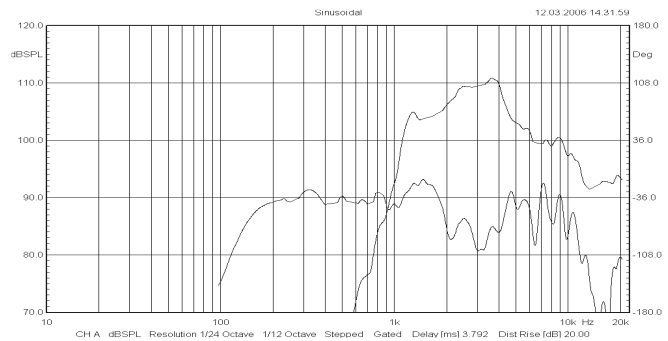
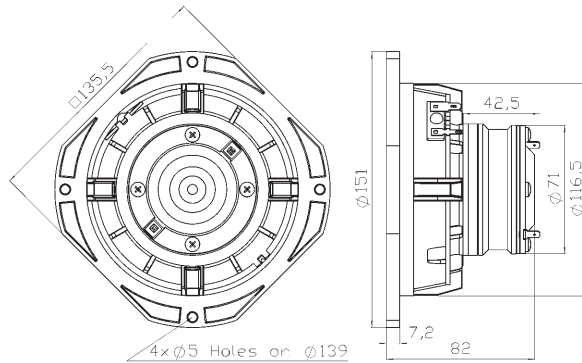


### Features:

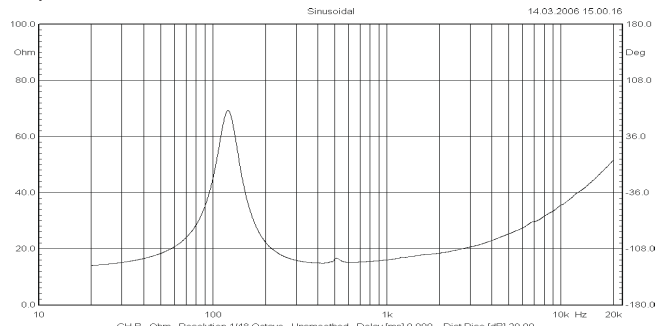
- 90dB sensitivity 1W/1m
- 120W + 60W Power handling
- 1.5" + 1.5" copper voice coil
- Single point source providing coherent wave front
- 90° conical dispersion
- Optimal for compact 2-way systems

## SPECIFICATIONS

APPLICATION		Transducer	
Nominal impedance	Ohm	8 + 16	
Power handling AES noise	W	120	
LOW FREQUENCY UNIT			
Sensitivity ( 1W/1m )	dB	91	
Frequency response	Hz	80 - 30000	
Voice coil diameter	mm	38 (1.5")	
Voice coil material		Cu	
Voice coil winding depth	mm	12	
Magnet gap depth	mm	5	
Basket		Cast Aluminum	
Voice coil inductance Le	mH	0.45 (16 Ohm)	
THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	138
DC resistance	Re	Ohm	12.2
Mechanical Q factor	Qms		3.4
Electrical Q factor	Qes		0.87
Total Quality factor	Qts		0.69
Equivalent volume	Vas	L	1.03
Moving mass	Mms	kg	0.009
Mechanical compl.	Cms	mm/N	0.14
BL factor	BL	Tesla m	10.7
Effective piston area	Sd	m <sup>2</sup>	0.0074
Max. linear excursion	Xmax	mm	+ 3.5
SPECIFICATIONS HIGH FREQUENCY			
Power handling AES	W	60	
Peak Power	W	300	
Sensitivity ( 1W/1m )	dB	113	
Frequency range	Hz	1500 - 30000	
Recommended crossover	Hz	1900	
Voice coil diameter	mm	38 (1.5")	
Magnet material		Neodymium	
Flux density	T	2	
Voice coil material	Copper Clad Aluminum (2Layers in and outside of the VC)		
Voice coil former		Kapton™	
Diaphragm material		Polyester	



Impedance - 16 Ohm driver



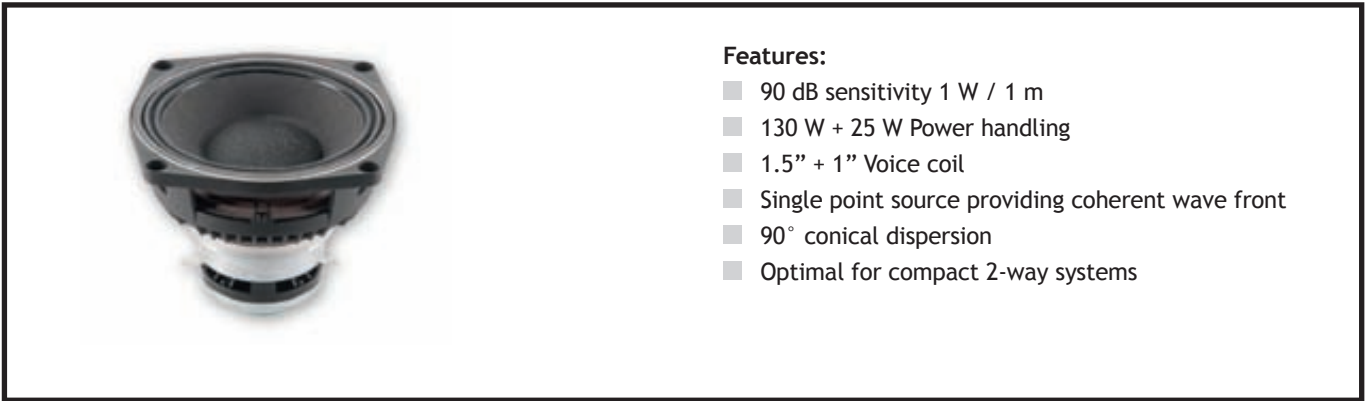
MOUNTING INFORMATION		
Overall diameter	mm	135 x 135
Mounting holes diameter	mm	4 x 5.3
Bolt circle diameter	mm	139
Baffle cut-out diameter	mm	117
Overall depth	mm	82
Net weight	kg	0.98

### Recommended reflex enclosure:

1,9L/104Hz, BRD=30mm/77mm long

3,8L/90Hz, BRD=40mm/86mm long

Closed enclosure 1 - 4 Liter

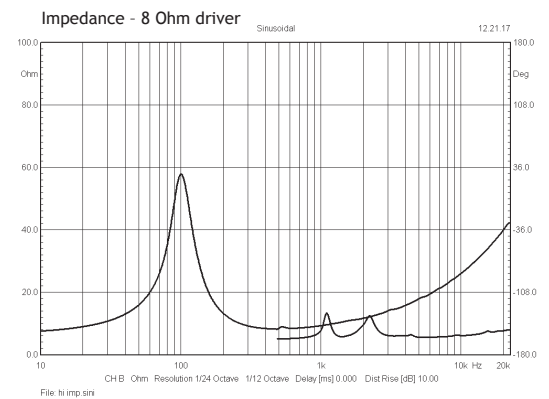
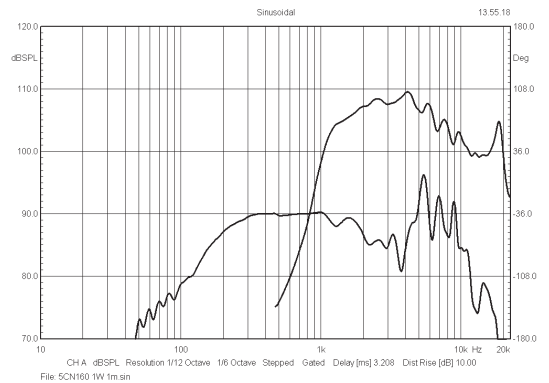
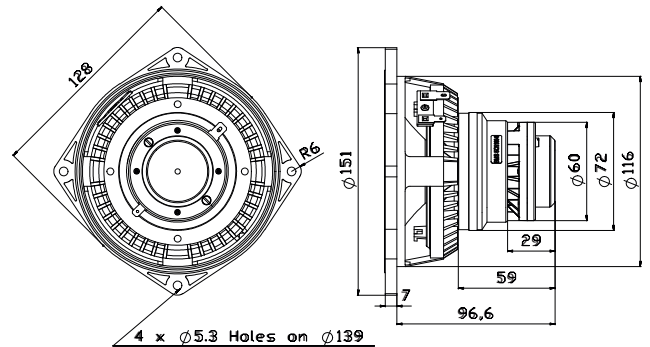


### Features:

- 90 dB sensitivity 1 W / 1 m
- 130 W + 25 W Power handling
- 1.5" + 1" Voice coil
- Single point source providing coherent wave front
- 90° conical dispersion
- Optimal for compact 2-way systems

## SPECIFICATIONS

APPLICATION	2-way Transducer		
Nominal Impedance	Ohm	4 + 8	
Power handling AES noise	W	130	
Sensitivity (1 W / 1 m)	dB	90	
Frequency response	Hz	80 - 20000	
Voice Coil Diameter	mm	38 (1.5")	
Voice Coil Material:		Cu	
Voice Coil Winding Depth:	mm	15	
Magnet Gap Depth	mm	5	
Basket		Cast Aluminum	
Effect. Diaphragm Diameter	mm	98	
THIELE-SMALL-PARAMETERS			
Resonance Frequency	Fs	Hz	100
DC Resistance	Re	Ohm	6.85
Mechanical Q Factor	Qms		3.1
Electrical Q Factor	Qes		0.41
Total Quality Factor	Qts		0.36
Equivalent Volume	Vas	L	2.1
Moving Mass	Mms	kg	0.009
Mechanical Compliance	Cm	mm / N	0.27
BL Factor	BL	Tesla m	10
Effective Piston Area	Sd	m <sup>2</sup>	0.0075
Max. linear Excursion:	Xmax	mm	+/-5
Voice Coil Inductance	Le1k	mH	0.39
	Le10k	mH	0.32
HIGH FREQUENCY			
Power Handling AES	W	25	
Peak Power	W	200	
Sensitivity (1 W / 1 m)	dB	110	
Frequency Range	Hz	1200 - 20000	
Recommended Crossover	Hz	1700	
Voice Coil Diameter	mm	25.4 (1")	
Magnet Material		Neodymium	
Flux Density	T	1.6	
Voice Coil Material	Copper Clad Aluminium (2 Layers in- and outside the VC)		
Voice Coil Former	Kapton™		
Diaphragm Material	Polyester		



MOUNTING INFORMATION		
Overall Diameter	mm	128 x 128
Mounting Holes Diameter	mm	4 x 5.3
Bolt Circle Diameter	mm	139
Baffle cut-out Diameter	mm	117
Overall depth	mm	104
Net Weight	kg	1.14

### Recommended reflex enclosure:

- 1.9 L / 104 Hz, BRD = 30 mm / 77 mm long
- 3.8 L / 90 Hz, BRD = 40 mm / 86 mm long
- Closed enclosure 1 - 4 Liter



# 6CN160

6.5" Neodymium Coaxial Transducer

Coaxial Series



### Features:

- 93 dB sensitivity 1 W / 1 m
- 130 W + 25 W Power handling
- 1.5" + 1" Voice coil
- Single point source providing coherent wave front
- 90° conical dispersion
- Optimal for compact 2-way systems

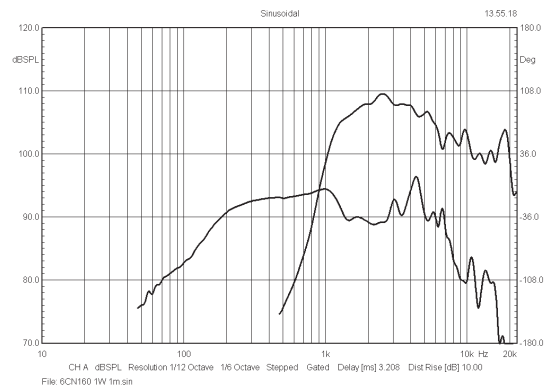
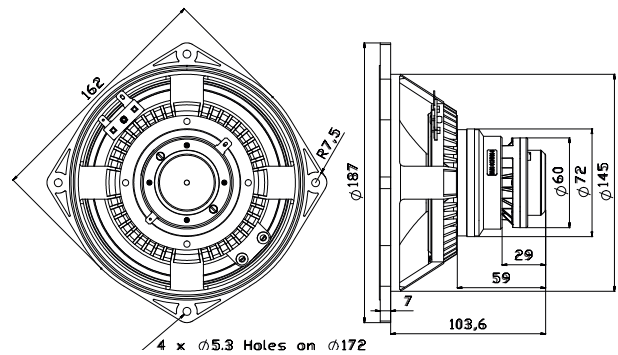
## SPECIFICATIONS

APPLICATION	2-way Transducer		
Nominal Impedance	Ohm	8 + 16	
Power handling AES noise	W	130	
Sensitivity (1 W / 1 m)	dB	93	
Frequency response	Hz	80 - 20000	
Voice Coil Diameter	mm	38	
Voice Coil Material:		Cu	
Voice Coil Winding Depth:	mm	15	
Magnet Gap Depth	mm	5	
Basket		Cast Aluminum	
Effect. Diaphragm Diameter	mm	129	
THIELE-SMALL-PARAMETERS			
Resonance Frequency	Fs	Hz	79
DC Resistance	Re	Ohm	6.85
Mechanical Q Factor	Qms		3.3
Electrical Q Factor	Qes		0.38
Total Quality Factor	Qts		0.34
Equivalent Volume	Vas	L	8,9
Moving Mass	Mms	kg	0.011
Mechanical Compliance	Cms	mm / N	0.37
BL Factor	BL	Tesla m	10
Effective Piston Area	Sd	m <sup>2</sup>	0.0132
Max. linear Excursion:	Xmax	mm	+/-5
Voice Coil Inductance	Le1k	mH	0.51
	Le10k	mH	0.33
SPECIFICATIONS HIGH FREQUENCY			
Power Handling AES	W	25	
Peak Power	W	200	
Sensitivity (1 W / 1 m)	dB	110	
Frequency Range	Hz	1200 - 20000	
Recommended Crossover	Hz	1500	
Voice Coil Diameter	mm	25,4 (1")	
Magnet Material		Neodymium	
Flux Density	T	1.6	
Voice Coil Material		Copper Clad Aluminium (2 layers in- and outside of the VC)	
Voice Coil Former		Kapton™	
Diaphragm Material		Polyester	

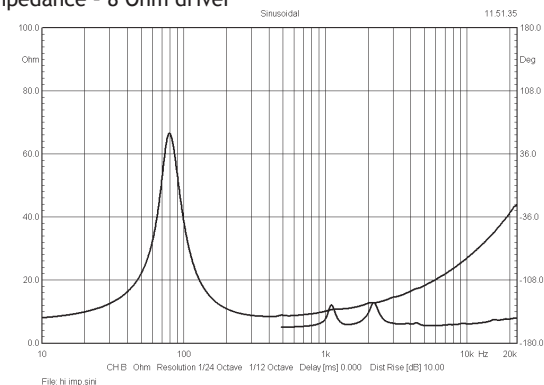
### Recommended reflex enclosure:

6 L / 90 Hz, BRD=50 mm / 79 mm long

9 L / 80 Hz, BRD=60 mm / 96 mm long



Impedance - 8 Ohm driver



MOUNTING INFORMATION		
Overall Diameter	mm	162 x 162
Mounting Holes Diameter	mm	4 x 5.3
Bolt Circle Diameter	mm	172
Baffle cut-out Diameter	mm	146
Overall depth	mm	111
Net Weight	kg	1.18



#### Features:

- 95.5dB sensitivity 1W/1m
- 200W + 80W Power handling
- 2" + 1.75" copper sandwich voice coil
- Single point source providing coherent wave front
- 90° conical dispersion
- Optimal for compact 2-way systems
- Light weight carbon fiber diaphragm

## SPECIFICATIONS

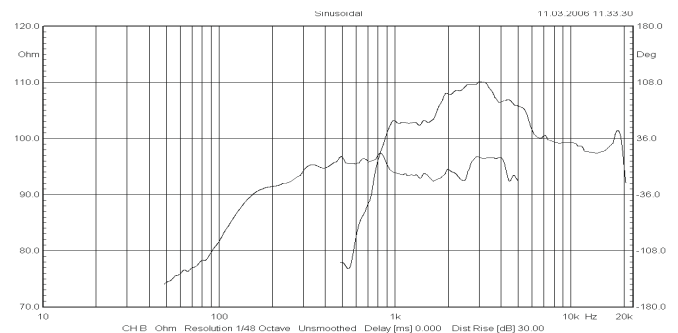
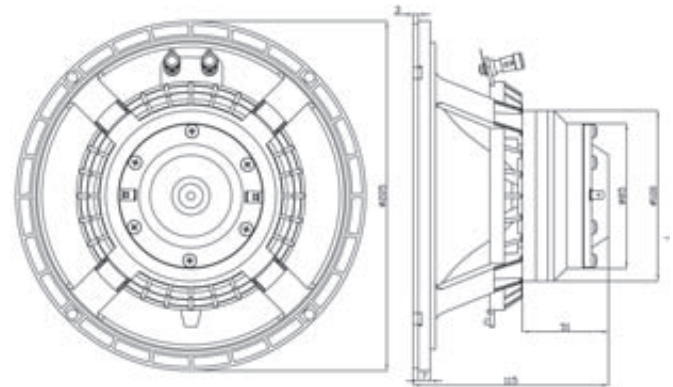
APPLICATION		Transducer	
Nominal impedance	Ohm	8 + 16	
Power handling AES noise	W	200	
LOW FREQUENCY UNIT			
Sensitivity ( 1W/1m )	dB	95.5	
Frequency response	Hz	70 - 20000	
Voice coil diameter	mm	52 (2")	
Voice coil material		Cu	
Voice coil winding depth	mm	15	
Magnet gap depth	mm	7	
Basket		Cast Aluminum	
Voice coil inductance Le	mH	0.179 (4 Ohm)	
THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	87.6
DC resistance	Re	Ohm	5.40
Mechanical Q factor	Qms		5.28
Electrical Q factor	Qes		0.30
Total Quality factor	Qts		0.29
Equivalent volume	Vas	L	10.08
Moving mass	Mms	kg	0.0183
Mechanical compl.	Cms	mm/N	0.18
BL factor	BL	Tesla m	13.44
Effective piston area	Sd	m <sup>2</sup>	0.0200
Max. linear excursion	Xmax	mm	± 4
SPECIFICATIONS HIGH FREQUENCY			
Power handling AES	W	80	
Peak Power	W	450	
Sensitivity ( 1W/1m )	dB	112	
Frequency range	Hz	1500 - 20000	
Recommended crossover	Hz	1500	
Voice coil diameter	mm	44.4 (1.75")	
Magnet material		Neodymium	
Flux density	T	2	
Voice coil material	Copper Clad Aluminum (2Layers in and outside of the VC)		
Voice coil former		Kapton™	
Diaphragm material		Polyester	

#### Recommended reflex enclosure:

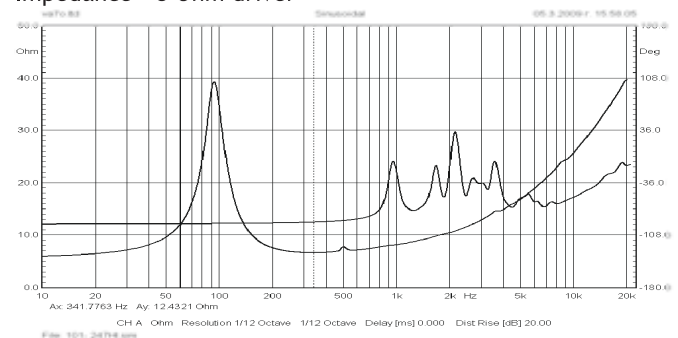
3L/115Hz, BRD=50mm/98mm long

8L/85Hz, BRD=60mm/94mm long

10L/66Hz, BRD=60mm/139mm long



#### Impedance - 8 Ohm driver



#### MOUNTING INFORMATION

Overall diameter	mm	205
Mounting holes diameter	mm	4 x (6 x 6.5)
Bolt circle diameter	mm	195 - 197
Baffle cut-out diameter	mm	182
Overall depth	mm	115
Net weight	kg	2.15

# 12CN680

Neodymium Coaxial Transducer

Coaxial Series

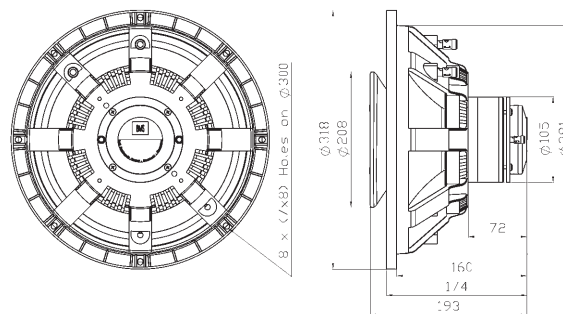


### Features:

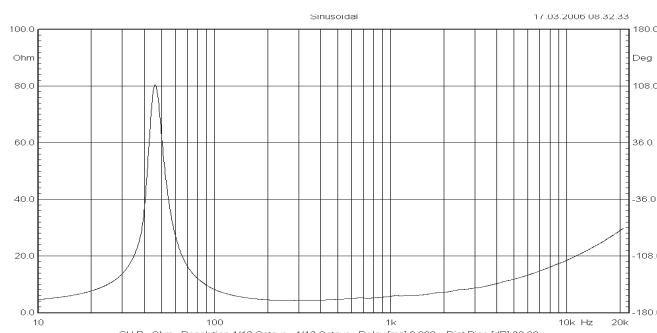
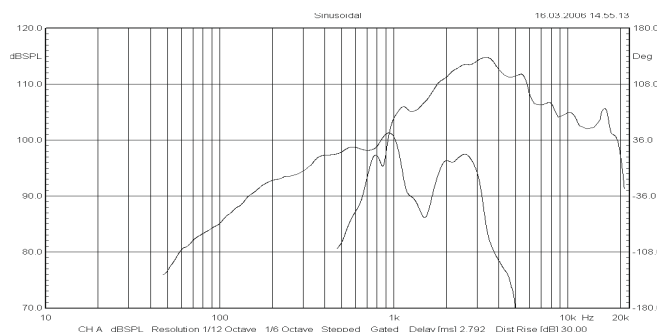
- Neodymium coaxial transducer
- 98dB sensitivity 1W/1m
- 500W + 80W Power handling
- 3" copper sandwich voice coil
- Triple aluminum demodulating rings
- elliptical 80° x 60° waveguide for precise directivity
- Single point source providing coherent wave front
- Very high SPL, superb quality sound
- Optimal for compact 2-way systems

## SPECIFICATIONS

APPLICATION		Transducer	
Nominal impedance	Ohm	8/8	
Power handling AES noise	W	500	
LOW FREQUENCY UNIT			
Sensitivity ( 1W/1m )	dB	98	
Frequency response	Hz	50 - 20000	
Voice coil diameter	mm	77 (3")	
Voice coil material		Cu	
Voice coil winding depth	mm	19	
Magnet gap depth	mm	8	
Basket		Cast Aluminum	
Voice coil inductance Le	mH	0.6	
THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	46
DC resistance	Re	Ohm	5.7
Mechanical Q factor	Qms		5.8
Electrical Q factor	Qes		0.27
Total Quality factor	Qts		0.26
Equivalent volume	Vas	L	58
Moving mass	Mms	kg	0.069
Mechanical compliance	Cms	mm/N	0.170
BL factor	BL	Tesla m	20.6
Effective piston area	Sd	m <sup>2</sup>	0.0487
Max. linear excursion	Xmax	mm	± 5.5
SPECIFICATIONS HIGH FREQUENCY			
Power handling AES	W	80	
Peak Power	W	450	
Sensitivity ( 1W/1m )	dB	113	
Frequency range	Hz	600 - 20000	
Recommended crossover	Hz	1300	
Voice coil diameter	mm	44.4 (1.75")	
Magnet material		Neodymium	
Flux density	T	2.2	
Voice coil material	Copper Clad Aluminum (2 layers in- and outside of the VC)		
Voice coil former		Kapton™	
Diaphragm material		Polyester	



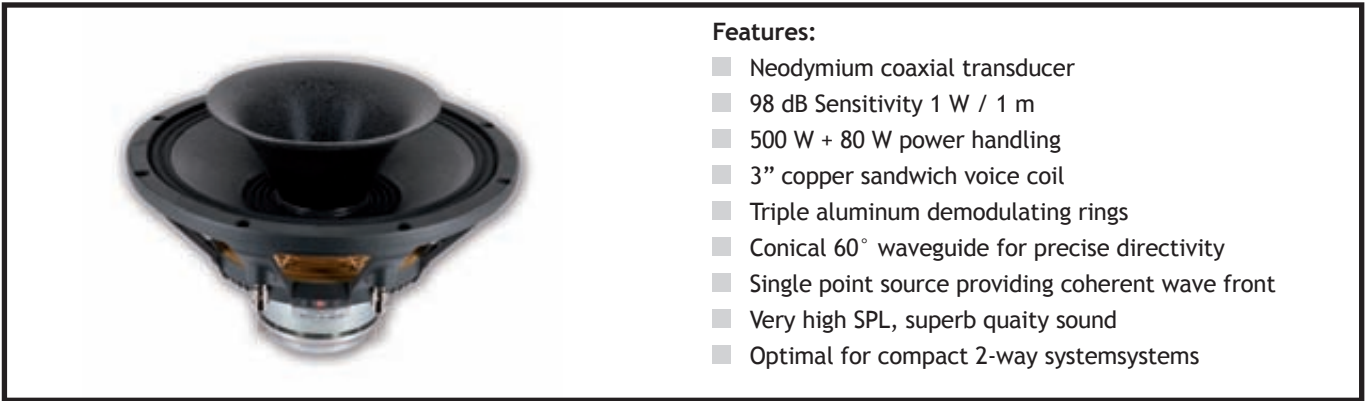
Frequency response measured 1W (2.83V) at 1m in a closed aenclosure of 50 Liter.



MOUNTING INFORMATION		
Overall diameter	mm	318
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	300
Baffle cut-out diameter	mm	284
Overall depth	mm	193
Net weight	kg	5.1

Recommended reflex enclosure:

24L/57Hz, BRD=90mm/153mm long

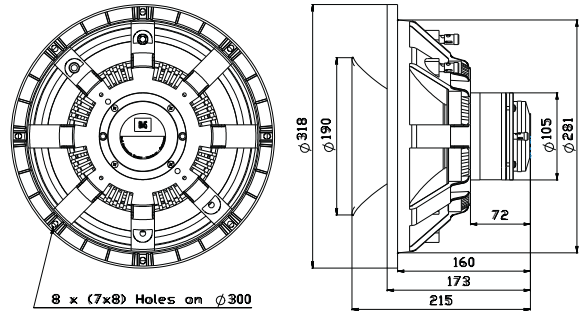


### Features:

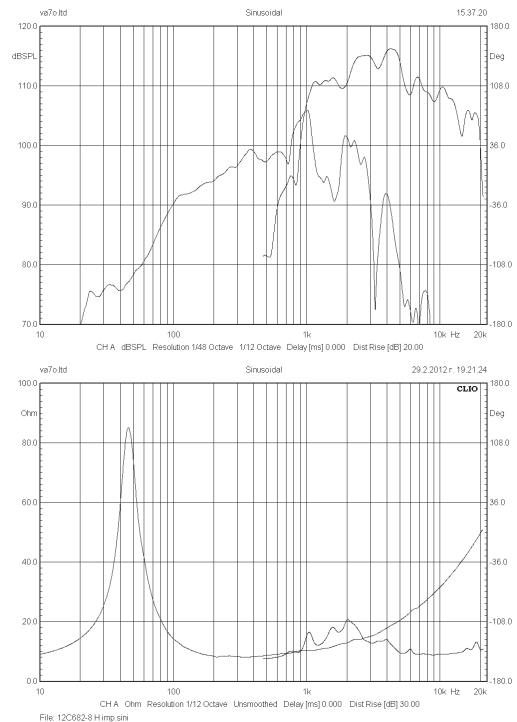
- Neodymium coaxial transducer
- 98 dB Sensitivity 1 W / 1 m
- 500 W + 80 W power handling
- 3" copper sandwich voice coil
- Triple aluminum demodulating rings
- Conical 60° waveguide for precise directivity
- Single point source providing coherent wave front
- Very high SPL, superb quality sound
- Optimal for compact 2-way systems

## SPECIFICATIONS

Application	Transducer		
Nominal impedance	Ohm	8/8	
Power handling AES noise	W	500	
LOW FREQUENCY UNIT			
Sensitivity (1W / 1m)	dB	98	
Frequency response	Hz	50 - 20000	
Voice coil diameter	mm	77 (3")	
Voice coil material		Cu	
Voice coil winding depth	mm	19	
Magnet gap depth	mm	8	
Basket		Cast Aluminum	
Voice coil inductance Le	mH	0.6	
THIELE-SMALL PARAMETERS			
Resonance frequency	Fs	Hz	46
DC resistance	Re	Ohm	5.7
Mechanical Q factor		Qms	5.8
Electrical Q factor		Qes	0.27
Total Quality factor		Qts	0.26
Equivalent volume	Vas	L	58
Moving mass	Mms	kg	0.069
Mechanical compliance	Cms	mm/N	0.170
BL factor	BL	Tesla m	20.6
Effective piston area	Sd	m <sup>2</sup>	0.0487
Max. linear excursion	Xmax	mm	+/- 5.5
SPECIFICATIONS HIGH FREQUENCY			
Power handling AES	W	80	
Peak power	W	450	
Sensitivity (1W / 1m)	dB	113	
Frequency range	Hz	600-20000	
Recommended crossover	Hz	1300	
Voice coil diameter	mm	44.4 (1.75")	
Magnet material		Neodymium	
Flux density	T	2.2	
Voice coil material	Copper Clad aluminum (2 layers in- and outside of the VC)		
Voice coil former	Kapton™		
Diaphragm material	Polyester		



Frequency response measured 1 W (2.83 V) at 1 m in a closed enclosure of 50 Liter.



MOUNTING INFORMATION		
Overall diameter	mm	318
Mounting holes diameter	mm	8x (7x8)
Bolt circle diameter	mm	300
Baffle cut out diameter	mm	284
Overall depth	mm	215
Net weight	kg	5.1

### Recommended reflex enclosure:


24L / 57 Hz, BRD = 90 mm / 153 mm long

# 15CN680

Neodymium Coaxial Transducer

Coaxial Series



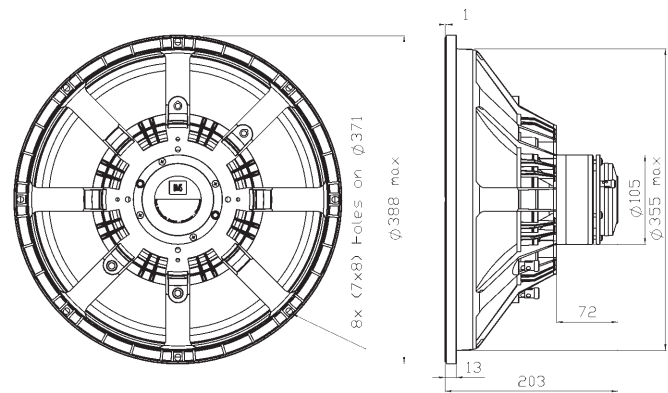


**Features:**

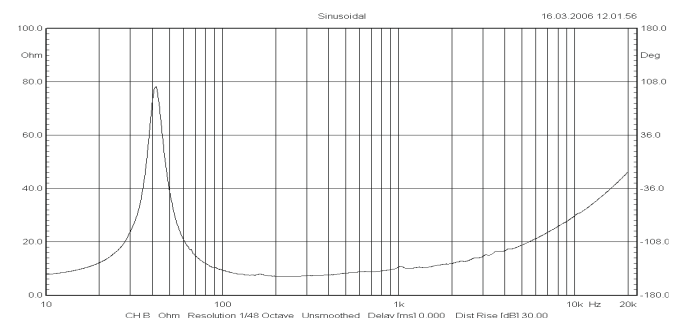
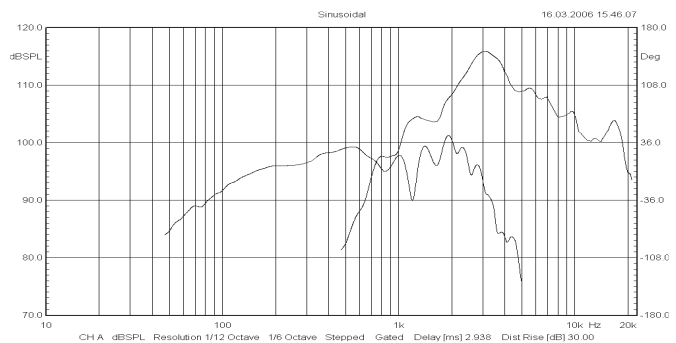
- Neodymium coaxial transducer
- 98dB sensitivity 1W/1m
- 500W + 80W Power handling
- 3" copper sandwich voice coil
- Triple aluminum demodulating rings
- elliptical 80° x 60° waveguide for precise directivity
- Single point source providing coherent wave front
- Very high SPL, superb quality sound
- Optimal for compact 2-way systems

## SPECIFICATIONS

APPLICATION	Transducer		
Nominal impedance	Ohm	8/8	
Power handling AES noise	W	500	
LOW FREQUENCY UNIT			
Sensitivity ( 1W/1m )	dB	98	
Frequency response	Hz	40 - 20000	
Voice coil diameter	mm	77 (3")	
Voice coil material		Cu	
Voice coil winding depth	mm	19	
Magnet gap depth	mm	8	
Basket		Cast Aluminum	
Effect. diaphragm diameter D	mm	335	
THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	40.7
DC resistance	Re	Ohm	5.7
Mechanical Q factor	Qms		6.28
Electrical Q factor	Qes		0.38
Total Quality factor	Qts		0.36
Equivalent volume	Vas	L	137
Moving mass	Mms	kg	0.110
Mechanical compl.	Cms	mm/N	0.14
BL factor	BL	Tesla m	20.6
Effective piston area	Sd	m <sup>2</sup>	0.0834
Max. linear excursion	Xmax	mm	± 5.5
SPECIFICATIONS HIGH FREQUENCY			
Power handling AES	W	80	
Peak Power	W	450	
Sensitivity ( 1W/1m )	dB	113	
Frequency range	Hz	600-20000	
Recommended crossover	Hz	1200	
Voice coil diameter	mm	44.4 (1.75")	
Magnet material		Neodymium	
Flux density	T	2.2	
Voice coil material		Copper Clad Aluminum	
		(2Layers in and outside of the VC)	
Voice coil former		Kapton™	
Diaphragm material		Polyester	



Frequency response measured 1W (2.83V) at 1m in a closed enclosure of 100 litre.



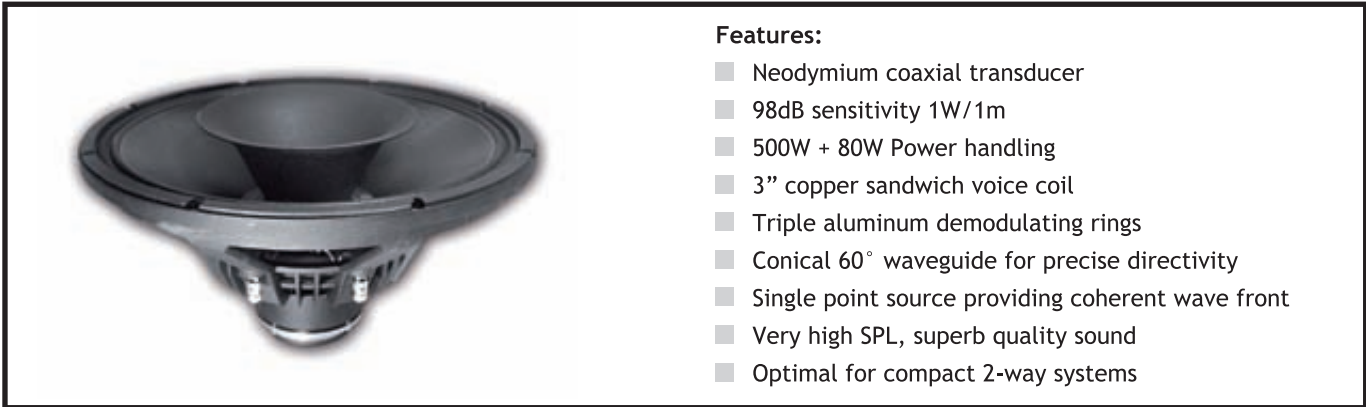
MOUNTING INFORMATION		
Overall diameter	mm	388
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	371
Baffle cut-out diameter	mm	358
Overall depth	mm	203
Net weight	kg	5.3

**Recommended reflex enclosure:**

60L/50Hz, -3dB=56Hz, BRD=130mm/150mm long

80L/45Hz, -3dB=50Hz, BRD=140mm/162mm long

Coaxial Drivers



### Features:

- Neodymium coaxial transducer
- 98dB sensitivity 1W/1m
- 500W + 80W Power handling
- 3" copper sandwich voice coil
- Triple aluminum demodulating rings
- Conical 60° waveguide for precise directivity
- Single point source providing coherent wave front
- Very high SPL, superb quality sound
- Optimal for compact 2-way systems

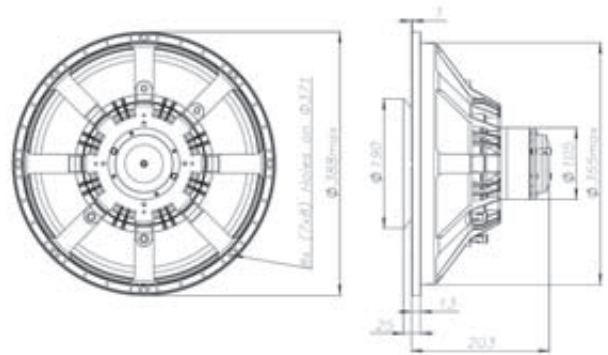
## SPECIFICATIONS

APPLICATION		Transducer	
Nominal impedance	Ohm	8/8	
Power handling AES noise	W	500	
LOW FREQUENCY UNIT			
Sensitivity ( 1W/1m )	dB	98	
Frequency response	Hz	40 - 20000	
Voice coil diameter	mm	77 (3")	
Voice coil material		Cu	
Voice coil winding depth	mm	19	
Magnet gap depth	mm	8	
Basket		Cast Aluminum	
Effect. diaphragm diameter D	mm	335	
THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	40.7
DC resistance	Re	Ohm	5.7
Mechanical Q factor	Qms		6.28
Electrical Q factor	Qes		0.38
Total Quality factor	Qts		0.36
Equivalent volume	Vas	L	137
Moving mass	Mms	kg	0.110
Mechanical compl.	Cms	mm/N	0.140
BL factor	BL	Tesla m	20.6
Effective piston area	Sd	m <sup>2</sup>	0.0834
Max. linear excursion	Xmax	mm	± 8
SPECIFICATIONS HIGH FREQUENCY			
Power handling AES	W	80	
Peak Power	W	450	
Sensitivity ( 1W/1m )	dB	113	
Frequency range	Hz	600-20.000	
Recommended crossover	Hz	1200	
Voice coil diameter	mm	44.4 (1.75")	
Magnet material		Neodymium	
Flux density	T	2.2	
Voice coil material	Copper Clad Aluminum		
	(2Layers in and outside of the VC)		
Voice coil former		Kapton™	
Diaphragm material		Polyester	

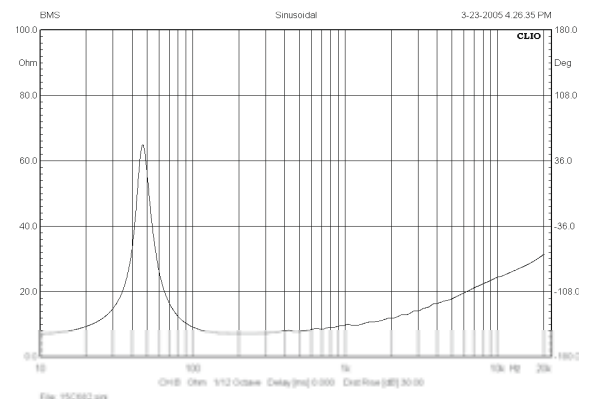
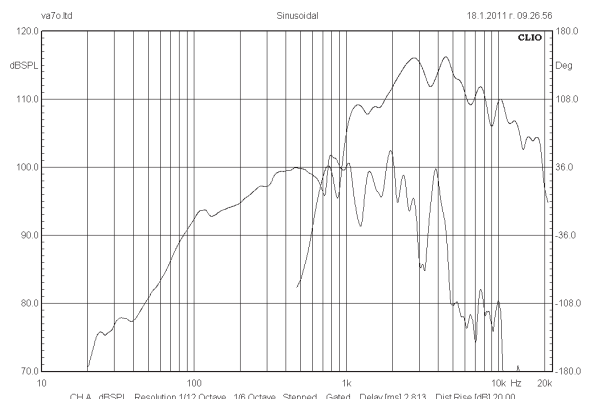
### Recommended reflex enclosure:

60L/50Hz, -3dB=56Hz, BRD=130mm/150mm long

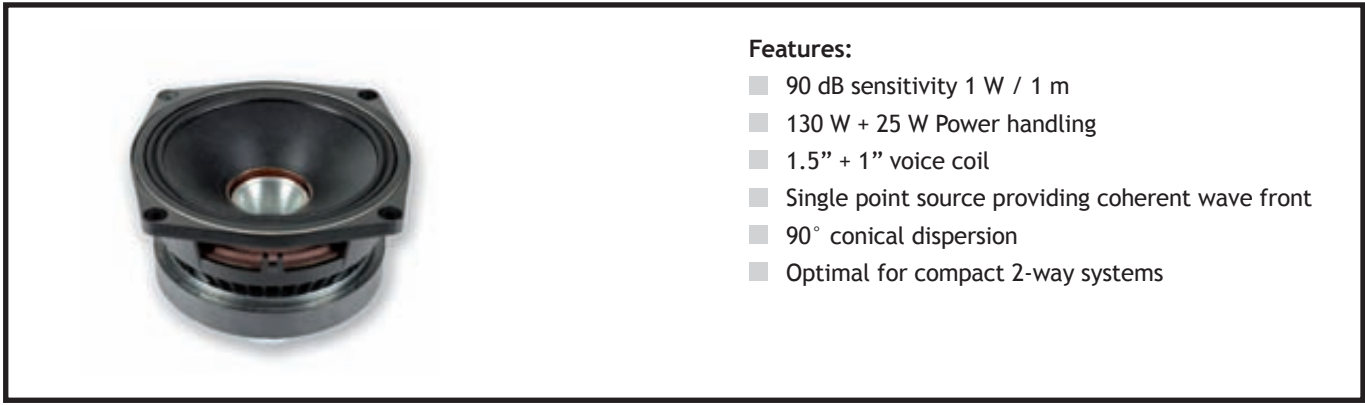
80L/45Hz, -3dB=50Hz, BRD=140mm/162mm long



Frequency response measured 1W (2.83V) at 1m in a closed enclosure of 100 Liter.



MOUNTING INFORMATION		
Overall diameter	mm	388
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	371
Baffle cut-out diameter	mm	358
Overall depth	mm	215
Net weight	kg	5.2



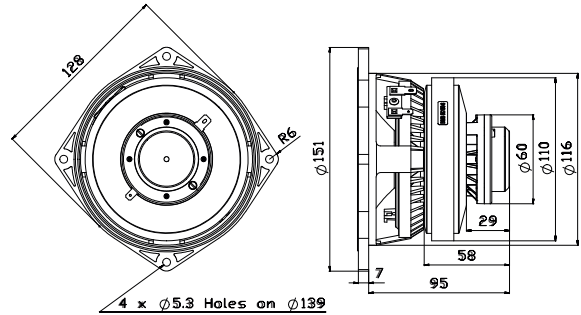
- Features:**
- 90 dB sensitivity 1 W / 1 m
  - 130 W + 25 W Power handling
  - 1.5" + 1" voice coil
  - Single point source providing coherent wave front
  - 90° conical dispersion
  - Optimal for compact 2-way systems

**SPECIFICATIONS**

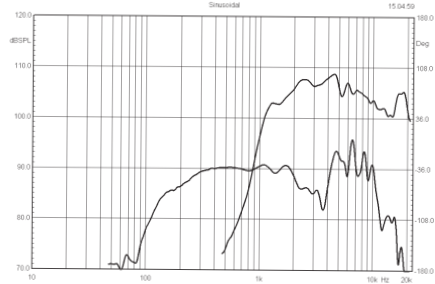
APPLICATION	Transducer	
Nominal Impedance	Ohm	8 + 16
Power handling AES noise	W	130
Sensitivity (1 W / 1 m)	dB	90
Frequency response	Hz	80-20000
Voice Coil Diameter	mm	38
Voice Coil Material		Cu
Voice Coil Winding Depth	mm	15
Magnet Gap Depth	mm	5
Basket		Cast Aluminium
Effect. Diaphragm Diameter D	mm	98

THIELE-SMALL PARAMETERS			
Resonance Frequency	Fs	Hz	99.4
DC Resistance	Re	Ohm	11.9
Mechanical Q Factor	Qms		3.8
Electrical Q Factor	Qes		0.48
Total Quality Factor	Qts		0.43
Equivalent Volume	Vas	L	2.4
Moving Mass	Mms	kg	0.008
Mechanical Compliance	Cms	mm / N	0.3
BL Factor	BL	Tesla m	11.4
Effective Piston Area	Sd	m <sup>2</sup>	0.0075
Max. linear Excursion	Xmax	mm	±5
Voice Coil Inductance	Le1k	mH	0.5
	Le10k	mH	0.44

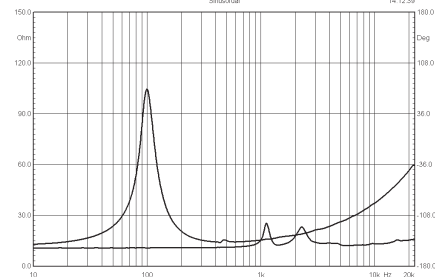
Specifications High Frequency		
Power Handling AES	W	25
Peak Power	W	200
Sensitivity(1W/1m)	dB	110
Frequency range	Hz	1200-20000
Recommended crossover	Hz	>1500
Voice coil diameter	mm	25.4mm (1")
Magnet material		Neodymium
Flux density	T	1.6
Voice coil material	Copper Clad Aluminium (2 layers in- and outside of the VC)	
Voice coil material		Kapton™
Diaphragm material		Polyester



Frequency response measured 1 W (2.83V) at 1 m in a closed enclosure of 11 liter in a closed box incl. 2nd and 3rd harmonic distortion raised 10 dB.



Impedance - 16 Ohm driver



MOUNTING INFORMATION		
Overall diameter	mm	128 x 128
Mounting holes diameter	mm	4 x 5.3
Bolt circle diameter	mm	139
Baffle cut-out diameter	mm	117
Overall depth	mm	102
Net weight	kg	1.9

**Recommended reflex enclosure:**  
**1,9L/104 Hz, BRD=30mm/77mm long**  
**3,8L/90 Hz, BRD=40mm/86mm long**  
**Closed enclosure 1 - 4 Liter**



### Features:

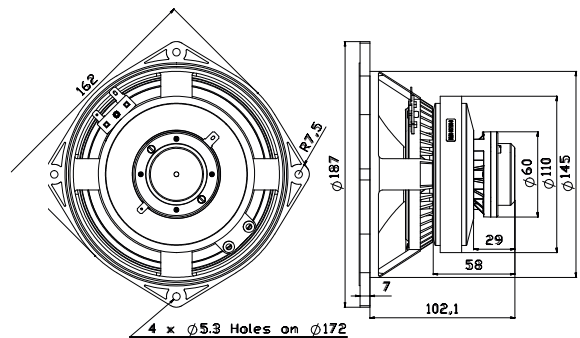
- 93 dB sensitivity 1 W / 1 m
- 130 W + 25 W Power handling
- 1.5" + 1" voice coil
- Single point source providing coherent wave front
- 90° conical dispersion
- Optimal for compact 2-way systems

## SPECIFICATIONS

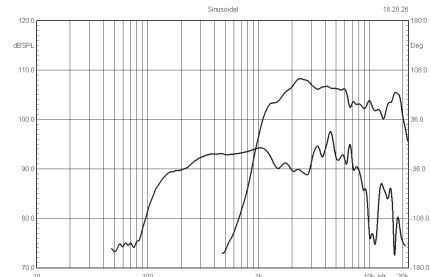
APPLICATION	Transducer	
Nominal Impedance	Ohm	8 + 16
Power handling AES noise	W	130
Sensitivity (1 W / 1 m)	dB	93
Frequency response	Hz	80-20000
Voice Coil Diameter	mm	38
Voice Coil Material		Cu
Voice Coil Winding Depth	mm	15
Magnet Gap Depth	mm	5
Basket		Cast Aluminium
Effect. Diaphragm Diameter D	mm	129

THIELE-SMALL PARAMETERS			
Resonance Frequency	Fs	Hz	88.4
DC Resistance	Re	Ohm	11.9
Mechanical Q Factor	Qms		3.9
Electrical Q Factor	Qes		0.53
Total Quality Factor	Qts		0.46
Equivalent Volume	Vas	L	7.6
Moving Mass	Mms	kg	0.01
Mechanical Compliance	Cms	mm / N	0.31
BL Factor	BL	Tesla m	11.36
Effective Piston Area	Sd	m <sup>2</sup>	0.0132
Max. linear Excursion	Xmax	mm	±5
Voice Coil Inductance	Le1k	mH	0.68
	Le10k	mH	0.47

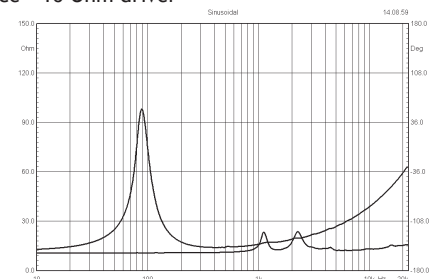
Specifications High Frequency		
Power Handling AES	W	25
Peak Power	W	200
Sensitivity (1W/1m)	dB	110
Frequency range	Hz	1200-20000
Recommended crossover	Hz	>1500
Voice coil diameter	mm	25.4 mm (1")
Magnet material		Neodymium
Flux density	T	1.6
Voice coil material	Copper Clad Aluminium	
	(2 layers in- and outside of the VC)	
Voice coil material		Kapton™
Diaphragm material		Polyester



Frequency response measured 1 W (2.83V) at 1 m in a closed enclosure of 11 Liter in a closed box incl. 2nd and 3rd harmonic distortion raised 10 dB.



Impedance - 16 Ohm driver



MOUNTING INFORMATION		
Overall diameter	mm	162 x 162
Mounting holes diameter	mm	4 x 5.3
Bolt circle diameter	mm	172
Baffle cut-out diameter	mm	146
Overall depth	mm	109
Net weight	kg	1.95

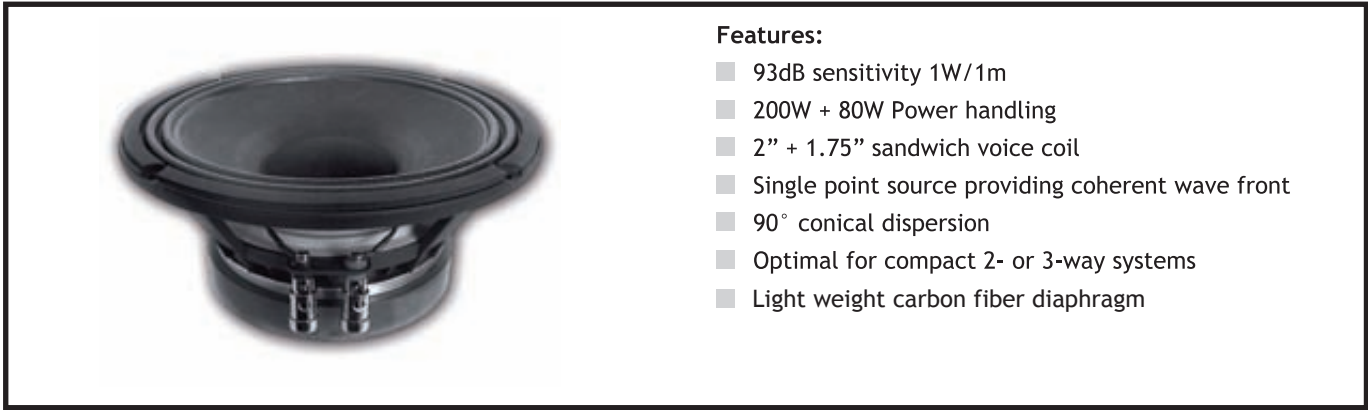
**Recommended reflex enclosure:**  
 6L/90 Hz, BRD=50mm/79mm long  
 9L/80 Hz, BRD=60mm/96mm long



# 8C250

Coaxial Transducer

Coaxial Series



**Features:**

- 93dB sensitivity 1W/1m
- 200W + 80W Power handling
- 2" + 1.75" sandwich voice coil
- Single point source providing coherent wave front
- 90° conical dispersion
- Optimal for compact 2- or 3-way systems
- Light weight carbon fiber diaphragm

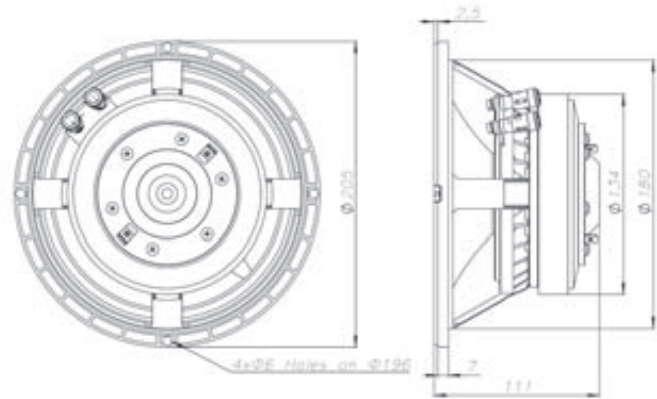
## SPECIFICATIONS

APPLICATION	Transducer		
Nominal impedance	Ohm	8 + 16	
Power handling AES noise	W	200	
LOW FREQUENCY UNIT			
Sensitivity ( 1W/1m )	dB	93	
Frequency response	Hz	20 - 20000	
Voice coil diameter	mm	51 (2")	
Voice coil material		Cu	
Voice coil winding depth	mm	15	
Magnet gap depth	mm	6.5	
Basket		Cast Aluminum	
Effect. diaphragm diameter D	mm	160	
THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	79.1
DC resistance	Re	Ohm	5.40
Mechanical Q factor	Qms		4.85
Electrical Q factor	Qes		0.61
Total Quality factor	Qts		0.52
Equivalent volume	Vas	L	10.18
Moving mass	Mms	kg	0.0183
Mechanical compl.	Cms	mm/N	0.18
BL factor	BL	Tesla/ m	9.95
Effective piston area	Sd	m <sup>2</sup>	0.0201
Max. linear excursion	Xmax	mm	± 4.25
SPECIFICATIONS HIGH FREQUENCY			
Power handling AES	W	80	
Peak Power	W	450	
Sensitivity ( 1W/1m )	dB	109	
Frequency range	Hz	1000-20000	
Recommended crossover	Hz	1500	
Voice coil diameter	mm	44.4 (1.75")	
Magnet material		Ferrite	
Flux density	T	1.8	
Voice coil material	Copper Clad Aluminum		
	(2Layers in and outside of the VC)		
Voice coil former		Kapton™	
Diaphragm material		Polyester	

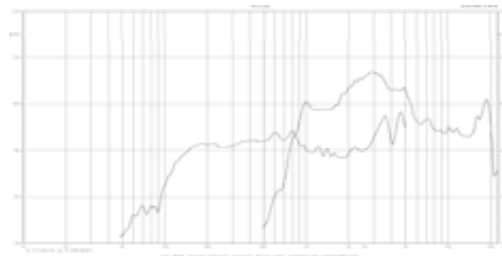
**Recommended reflex enclosure:**

12L/65Hz, BRD=60mm/114mm long

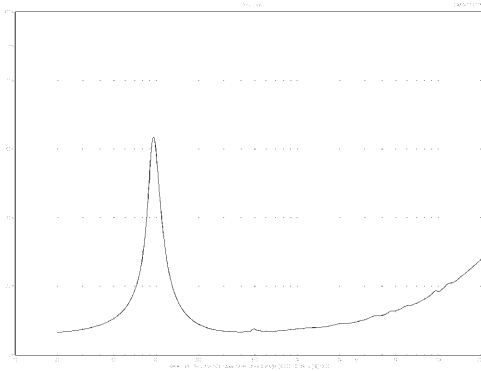
8 - 12L closed box



Frequency response measured 1W (2.83V) at 1m in a closed enclosure of 25 Liter.



Impedance - 8 Ohm driver



MOUNTING INFORMATION		
Overall diameter	mm	205
Mounting holes diameter	mm	4 x (6 x 6.5)
Bolt circle diameter	mm	195 - 197
Baffle cut-out diameter	mm	182
Overall depth	mm	111
Net weight	kg	3

Coaxial Drivers

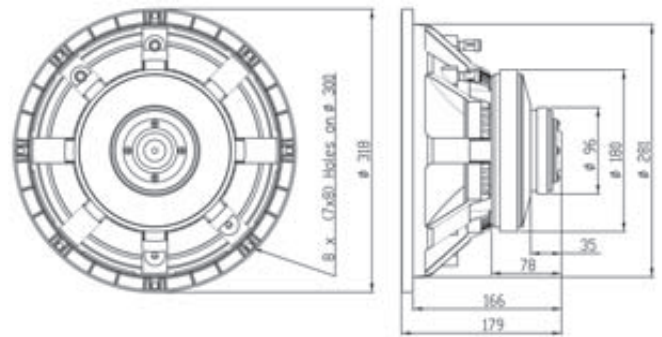


### Features:

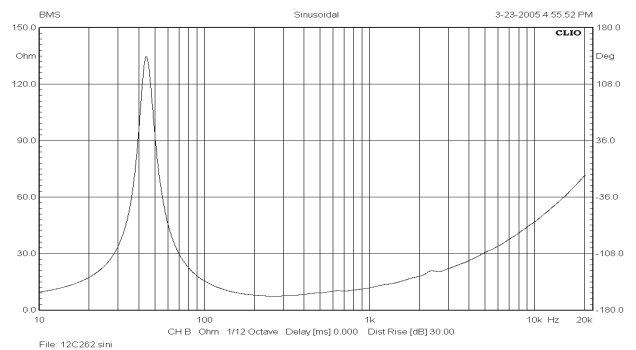
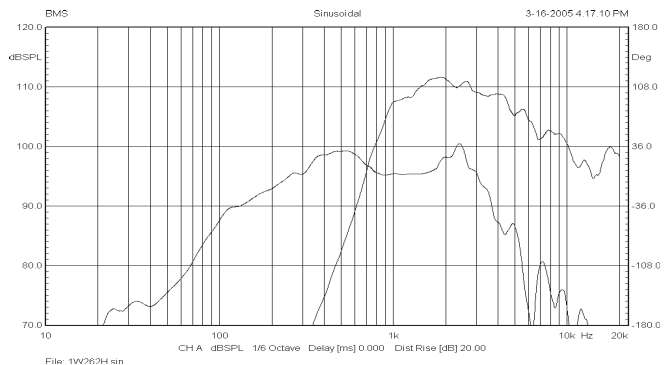
- 98dB sensitivity 1W/1m
- 400W + 60W Power handling
- 3" + 1.5" copper sandwich voice coil
- Single point source providing coherent wave front
- Optimal for compact 2-way systems

## SPECIFICATIONS

APPLICATION		Transducer	
Nominal impedance	Ohm	8/8	
Power handling AES noise	W	400	
LOW FREQUENCY UNIT			
Sensitivity ( 1W/1m )	dB	98	
Frequency response	Hz	55 - 30000	
Voice coil diameter	mm	77 (3")	
Voice coil material		Cu	
Voice coil winding depth	mm	15	
Magnet gap depth	mm	10	
Basket		Cast Aluminum	
Effect. diaphragm diameter D	mm	249	
THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	47.3
DC resistance	Re	Ohm	5.7
Mechanical Q factor	Qms		5.4
Electrical Q factor	Qes		0.25
Total Quality factor	Qts		0.24
Equivalent volume	Vas	L	60.6
Moving mass	Mms	kg	0.063
Mechanical complience	Cms	mm/N	0.18
BL factor	BL	Tesla m	20.6
Effective piston area	Sd	m <sup>2</sup>	0.0487
Max. linear excursion	Xmax	mm	± 2.5
SPECIFICATIONS HIGH FREQUENCY			
Power handling AES	W	60	
Peak Power	W	300	
Sensitivity ( 1W/1m )	dB	112	
Frequency range	Hz	1200 - 30000	
Recommended crossover	Hz	1800	
Voice coil diameter	mm	38 (1.5")	
Magnet material		Ferrite	
Flux density	T	1.9	
Voice coil material	Copper Clad Aluminum (2 layers in- and outside of the VC)		
Voice coil former		Kapton™	
Diaphragm material		Polyester	



Frequency response measured 1W (2.83V) at 1m in a closed enclosure of 50 Liter.



### MOUNTING INFORMATION

Overall diameter	mm	318
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	300
Baffle cut-out diameter	mm	284
Overall depth	mm	179
Net weight	kg	7.8

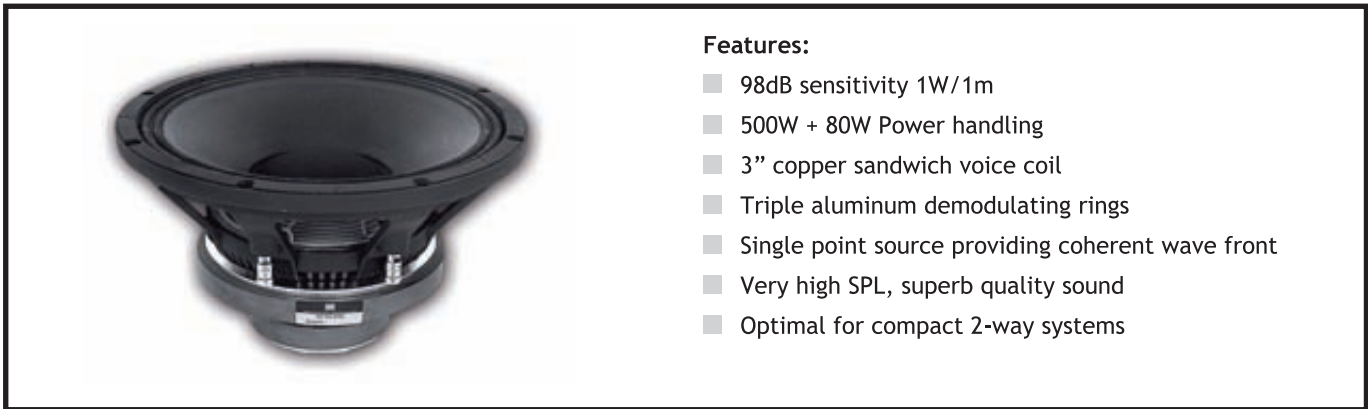
### Recommended reflex enclosure:

14L/68Hz, -3dB=86Hz, BRD=70mm/109mm long  
25L/63Hz, -3dB=70Hz, BRD=80mm/78mm long

# 12C362

Coaxial Transducer

Coaxial Series

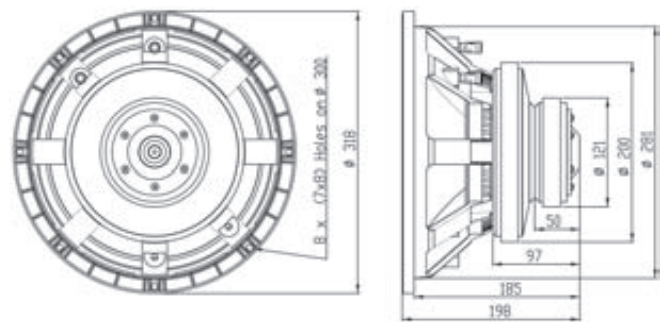


**Features:**

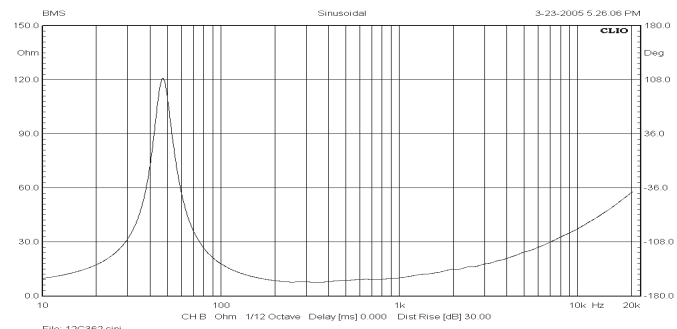
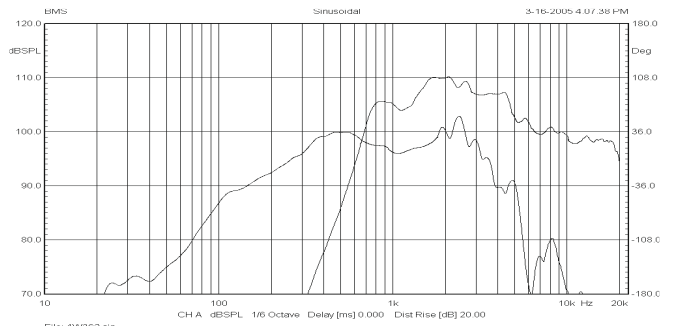
- 98dB sensitivity 1W/1m
- 500W + 80W Power handling
- 3" copper sandwich voice coil
- Triple aluminum demodulating rings
- Single point source providing coherent wave front
- Very high SPL, superb quality sound
- Optimal for compact 2-way systems

## SPECIFICATIONS

APPLICATION	Transducer		
Nominal impedance	Ohm	8/8	
Power handling AES noise	W	500	
LOW FREQUENCY UNIT			
Sensitivity ( 1W/1m )	dB	98	
Frequency response	Hz	45 - 20000	
Voice coil diameter	mm	77 (3")	
Voice coil material		Cu	
Voice coil winding depth	mm	19	
Magnet gap depth	mm	10	
Basket		Cast Aluminum	
Effect. diaphragm diameter D	mm	249	
THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	45.8
DC resistance	Re	Ohm	5.7
Mechanical Q factor	Qms		5.6
Electrical Q factor	Qes		0.20
Total Quality factor	Qts		0.20
Equivalent volume	Vas	L	60.6
Moving mass	Mms	kg	0.067
Mechanical compliance	Cms	mm/N	0.18
BL factor	BL	Tesla m	23.2
Effective piston area	Sd	m <sup>2</sup>	0.0487
Max. linear excursion	Xmax	mm	± 4.5
SPECIFICATIONS HIGH FREQUENCY			
Power handling AES	W	80	
Peak Power	W	450	
Sensitivity ( 1W/1m )	dB	112	
Frequency range	Hz	600 - 20000	
Recommended crossover	Hz	1200	
Voice coil diameter	mm	44.4 (1.75")	
Magnet material		Ferrite	
Flux density	T	2.0	
Voice coil material	Copper Clad Aluminum		
	(2 layers in- and outside of the VC)		
Voice coil former		Kapton™	
Diaphragm material		Polyester	



Frequency response measured 1W (2.83V) at 1m in a closed enclosure of 50 Liter.



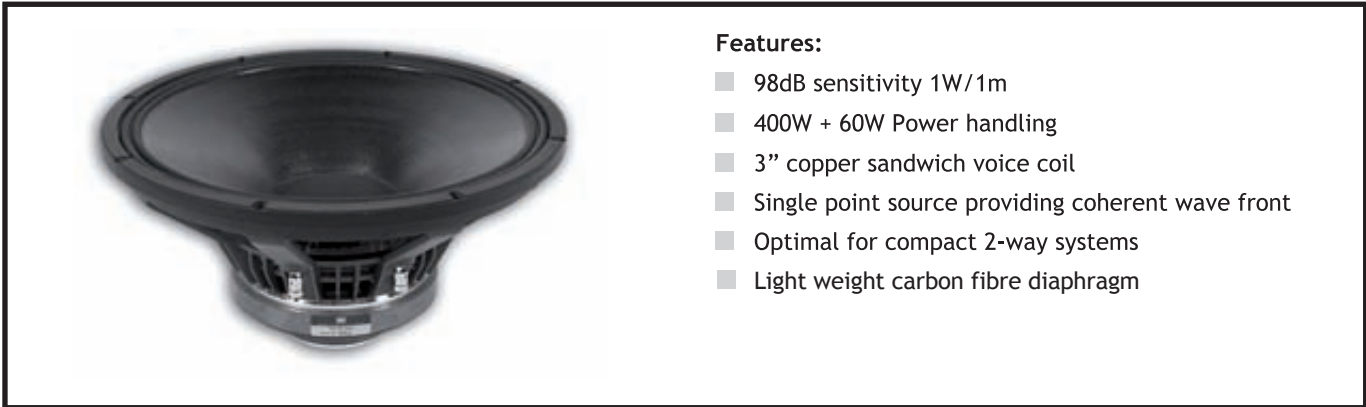
MOUNTING INFORMATION		
Overall diameter	mm	318
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	300
Baffle cut-out diameter	mm	284
Overall depth	mm	198
Net weight	kg	10.20

**Recommended reflex enclosure:**

10L/77Hz, -3dB=103Hz, BRD=70mm/132mm long

25L/63Hz, -3dB=68Hz, BRD=90mm/106mm long

Coaxial Drivers



### Features:

- 98dB sensitivity 1W/1m
- 400W + 60W Power handling
- 3" copper sandwich voice coil
- Single point source providing coherent wave front
- Optimal for compact 2-way systems
- Light weight carbon fibre diaphragm

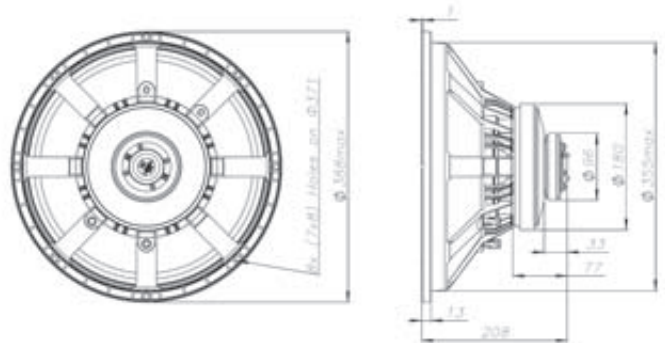
## SPECIFICATIONS

APPLICATION		Transducer	
Nominal impedance	Ohm	8/8	
Power handling AES noise	W	400	
LOW FREQUENCY UNIT			
Sensitivity ( 1W/1m )	dB	98	
Frequency response	Hz	40 - 30000	
Voice coil diameter	mm	77 (3")	
Voice coil material		Cu	
Voice coil winding depth	mm	15	
Magnet gap depth	mm	10	
Basket		Cast Aluminum	
Effect. diaphragm diameter D	mm	335	
THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	42.5
DC resistance	Re	Ohm	5.7
Mechanical Q factor	Qms		5.4
Electrical Q factor	Qes		0.36
Total Quality factor	Qts		0.34
Equivalent volume	Vas	L	138
Moving mass	Mms	kg	0.10
Mechanical compliance	Cms	mm/N	0.14
BL factor	BL	Tesla m	20.6
Effective piston area	Sd	m <sup>2</sup>	0.0834
Max. linear excursion	Xmax	mm	± 2.5
SPECIFICATIONS HIGH FREQUENCY			
Power handling AES	W	60	
Peak Power	W	300	
Sensitivity ( 1W/1m )	dB	112	
Frequency range	Hz	1200 - 30000	
Recommended crossover	Hz	1800	
Voice coil diameter	mm	38 (1.5")	
Magnet material		Ferrite	
Flux density	T	1.9	
Voice coil material		Copper Clad Aluminum	
Voice coil former		Kapton™	
Basket		Cast Aluminum	
Diaphragm material		Polyester	

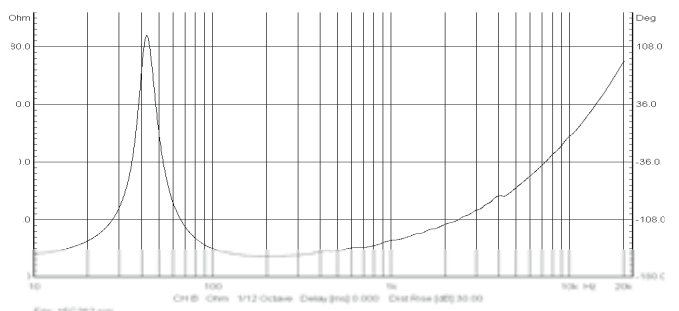
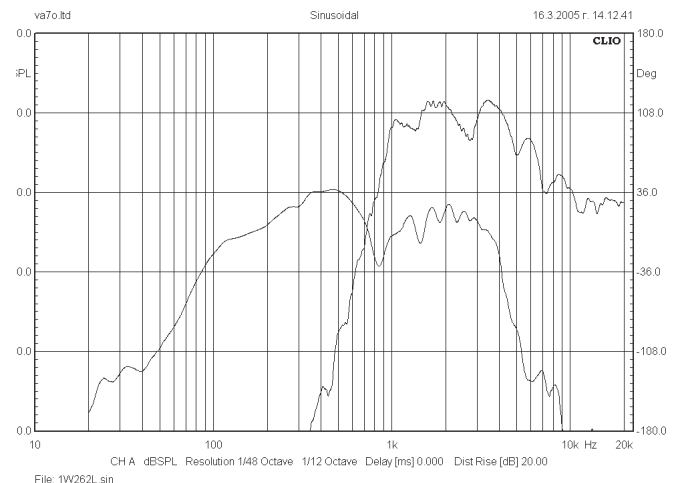
### Recommended reflex enclosure:

65L/50Hz, -3dB=57Hz, BRD=130mm/143mm long

80L/48Hz, -3dB=52Hz, BRD=130mm/115mm long



Frequency response measured 1W (2.83V) at 1m in a closed enclosure of 50 Liter.



### MOUNTING INFORMATION

Overall diameter	mm	388
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	371
Baffle cut-out diameter	mm	358
Overall depth	mm	208
Net weight	kg	7.6

# 15C362

Coaxial Transducer

Coaxial Series

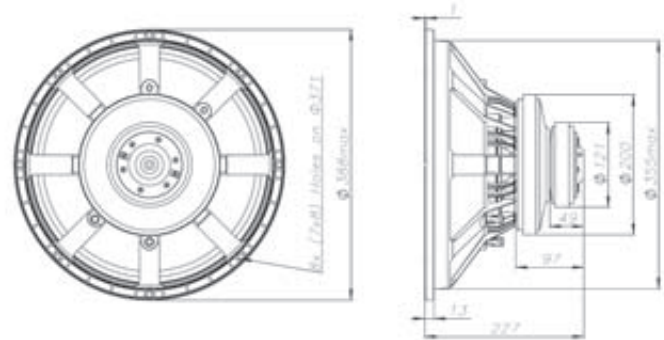


**Features:**

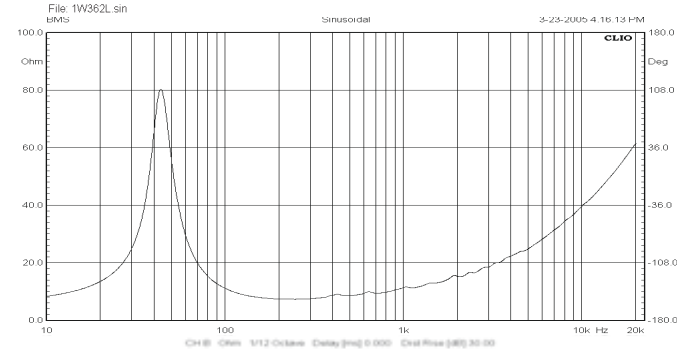
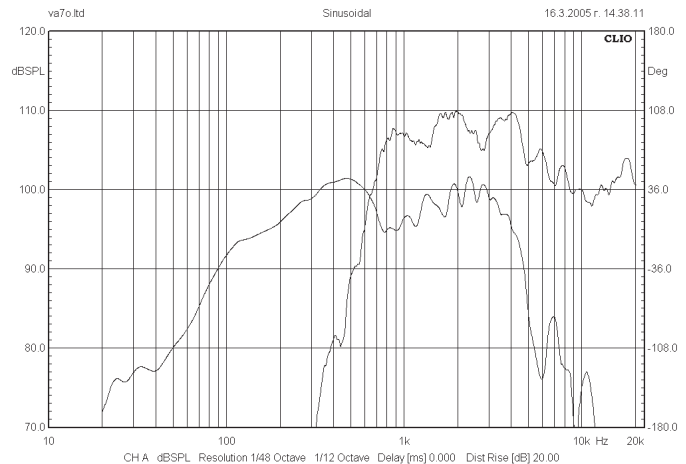
- 98dB sensitivity 1W/1m
- 500W + 80W Power handling
- 3" copper sandwich voice coil
- Triple aluminum demodulating rings
- Single point source providing coherent wave front
- Very high SPL, superb quality sound
- Optimal for compact 2-way systems
- Light weight carbon fibre diaphragm

## SPECIFICATIONS

APPLICATION	Transducer		
Nominal impedance	Ohm	8/8	
Power handling AES noise	W	500	
LOW FREQUENCY UNIT			
Sensitivity ( 1W/1m )	dB	98	
Frequency response	Hz	40 - 20000	
Voice coil diameter	mm	77 (3")	
Voice coil material		Cu	
Voice coil winding depth	mm	19	
Magnet gap depth	mm	10	
Basket		Cast Aluminum	
Effect. diaphragm diameter D	mm	335	
THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	41.5
DC resistance	Re	Ohm	5.7
Mechanical Q factor	Qms		5.5
Electrical Q factor	Qes		0.29
Total Quality factor	Qts		0.28
Equivalent volume	Vas	L	138
Moving mass	Mms	kg	0.105
Mechanical complience	Cms	mm/N	0.140
BL factor	BL	Tesla m	23.2
Effective piston area	Sd	m <sup>2</sup>	0.0834
Max. linear excursion	Xmax	mm	± 4.5
SPECIFICATIONS HIGH FREQUENCY			
Power handling AES	W	80	
Peak Power	W	450	
Sensitivity ( 1W/1m )	dB	112	
Frequency range	Hz	600 - 20000	
Recommended crossover	Hz	1200	
Voice coil diameter	mm	44.4 (1.75")	
Magnet material		Ferrite	
Flux density	T	2.0	
Voice coil material	Copper Clad Aluminum		
	(2Layers in and outside of the VC)		
Voice coil former		Kapton™	
Diaphragm material		Polyester	



Frequency response measured 1W (2.83V) at 1m in a closed enclosure of 100 Liter.



MOUNTING INFORMATION		
Overall diameter	mm	388
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	371
Baffle cut-out diameter	mm	358
Overall depth	mm	227
Net weight	kg	10.5

**Recommended reflex enclosure:**

43L/56Hz, -3dB=67Hz, BRD=120mm/155mm long  
 70L/50Hz, -3dB=54Hz, BRD=140mm/155mm long

Coaxial Drivers

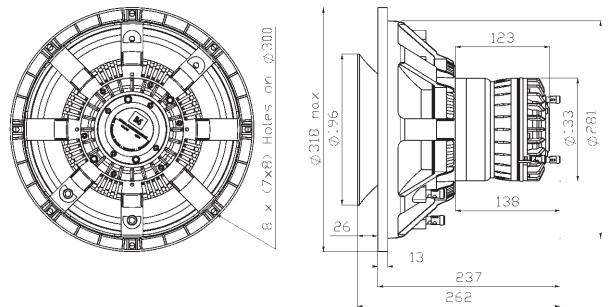


#### Features:

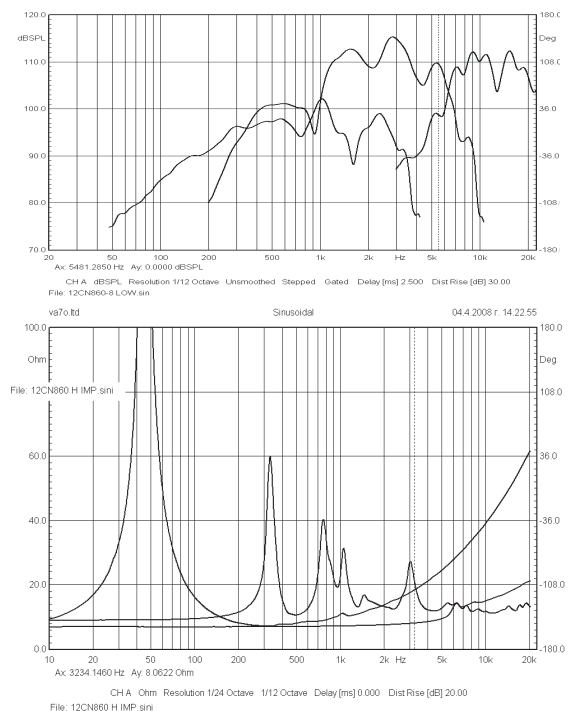
- 97 dB Sensitivity
- 800 W + 150 W + 80 W Power handling
- Single Point source providing coherent wavefront
- Conical 60° waveguide for precise directivity
- Optimal for compact 3-way systems

## SPECIFICATIONS

APPLICATION	Transducer		
Nominal impedance	Ohm	8/8 or 16	
Power handling AES noise	W	800	
<b>LOW FREQUENCY UNIT</b>			
Sensitivity ( 1W/1m )	dB	97	
Frequency response	Hz	40 - 22000	
Voice coil diameter	mm	101.6	
Voice coil material		Cu	
Voice coil winding depth	mm	19	
Magnet gap depth	mm	10	
Basket		Cast Aluminum	
Effect. diaphragm diameter D	mm	239	
<b>THIELE - SMALL PARAMETERS</b>			
Resonance frequency	Fs	Hz	52
DC resistance	Re	Ohm	5.7
Mechanical Q factor	Qms		4.5
Electrical Q factor	Qes		0.23
Total Quality factor	Qts		0.22
Equivalent volume	Vas	L	37
Moving mass	Mms	kg	0.072
Mechanical compl.	Cms	mm/N	0.13
BL factor	BL	Tesla m	24.2
Effective piston area	Sd	m <sup>2</sup>	0.0449
Max. linear excursion	Xmax	mm	± 4.5
Voice coil inductance:	Le1k	mH	0.89
	Le10k	mH	0.58
<b>SPECIFICATIONS HIGH/MIDDLE FREQUENCY</b>			
Middle range (AES)	W	150	
Peak Power	W	1000	
High range (AES)	W	80	
Peak Power	W	320	
Sensitivity 1W/1m	dB	113	
Middle frequency range	Hz	700 -7000	
High frequency range	Hz	6000-22000	
Recommended crossover	Hz	800, 6.300	
Voice coil diameter	mm	44.4 (1.75") high	
		90 (3.5") middle	
Magnet material	Neodymium		
Flux density	T	2	
Voice coil material	Copper Clad Aluminum		
	(2 Layers in-and outside of the VC)		
Voice coil former	Kapton TM		
Diaphragm material	Polyester		



Frequency response measured 1W (2.83V) at 1m in a closed enclosure of 50 Liter.



MOUNTING INFORMATION		
Overall diameter	mm	318
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	300
Baffle cut-out diameter	mm	284
Overall depth	mm	263
Net weight	kg	8.55

Recommended reflex enclosure:  
20 L / 57 Hz, BRD = 90 mm / 194 mm long

# 15CN860

Neodymium Triaxial Transducer

Triaxial Series

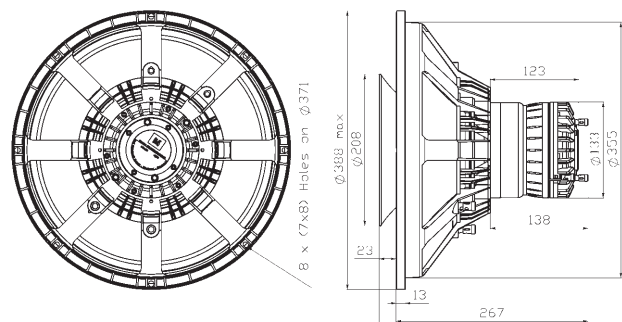


### Features:

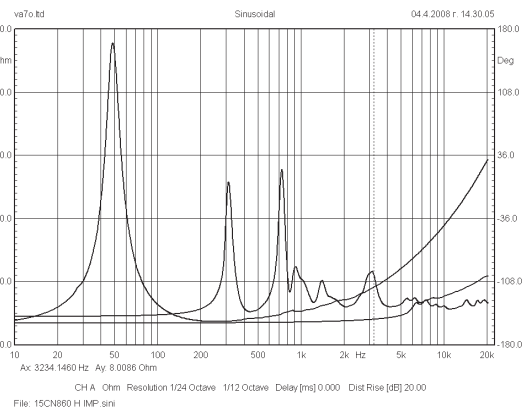
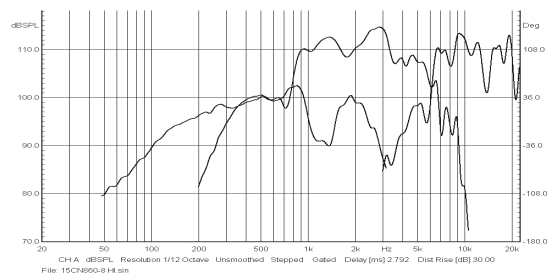
- 98 dB sensitivity 1 W / 1 m
- 1000 W + 150 W + 80 W Power handling
- Single point source providing coherent wave front
- Conical 60° waveguide for precise directivity
- Optimal for compact 3-way systems

## SPECIFICATIONS

APPLICATION	Transducer		
Nominal impedance	Ohm	8 + 16	
Power handling AES noise	W	1000	
LOW FREQUENCY UNIT			
Sensitivity ( 1W/1m )	dB	98	
Frequency response	Hz	40 - 22000	
Voice coil diameter	mm	101.6	
Voice coil material		Cu	
Voice coil winding depth	mm	22	
Magnet gap depth	mm	10	
Basket		Cast Aluminum	
Effect. diaphragm diameter D	mm	320	
THIELE - SMALL PARAMETERS			
Resonance frequency	Fs	Hz	50
DC resistance	Re	Ohm	5.7
Mechanical Q factor	Qms		3.7
Electrical Q factor	Qes		0.38
Total Quality factor	Qts		0.35
Equivalent volume	Vas	L	77
Moving mass	Mms	kg	0.12
Mechanical compl.	Cms	mm/N	0.084
BL factor	BL	Tesla m	23.6
Effective piston area	Sd	m <sup>2</sup>	0.0449
Max. linear excursion	Xmax	mm	± 6
Voice Coil Inductance	Le1k	mH	0.8
	Le10k	mH	0.56
SPECIFICATIONS HIGH/MIDDLE FREQUENCY			
Middle range (AES)	W	150	
Peak Power	W	1000	
High range (AES)	W	80	
Peak Power	W	320	
Sensitivity 1W/1m	dB	113	
Middle frequency range	Hz	700 -7000	
High frequency range	Hz	6000-22000	
Recommended crossover	Hz	800, 6.300	
Voice coil diameter	mm	44.4 (1.75") high	
		90 (3.5") middle	
Magnet material	Neodymium		
Flux density	T	2	
Voice coil material	Copper Clad Aluminum		
	(2 layers in- and outside of the VC)		
Voice coil former	Kapton TM		
Diaphragm material	Polyester		



Frequency response measured 1W (2.83V) at 1m in a closed enclosure of 100 Liter.



MOUNTING INFORMATION		
Overall diameter	mm	388
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	371
Baffle cut-out diameter	mm	358
Overall depth	mm	292
Net weight	kg	8.95

Recommended reflex enclosure:

60 l / 50 Hz, BRD = 130 mm / 150 mm long  
 80 L / 45 Hz, BRD = 140 mm / 162 mm long

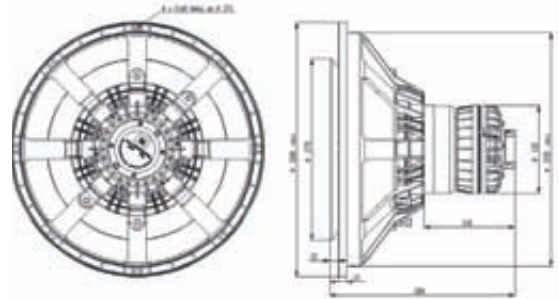


### Features:

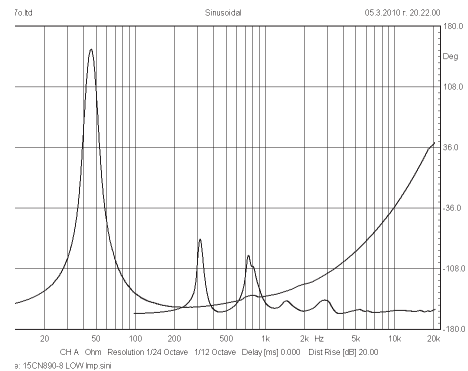
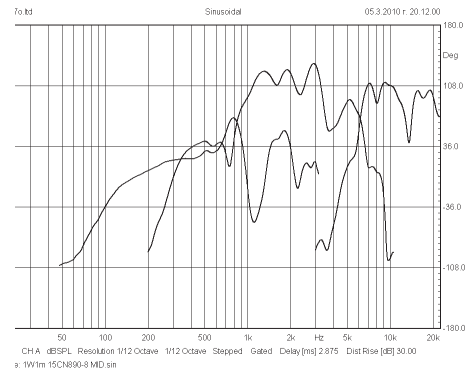
- 98 dB Sensitivity 1 W / 1 m
- 1000 W + 150 W + 80 W Power Handling
- Single Point Source providing coherent Wave Front
- 90° x 60° Waveguide
- Optimal for compact 3-way Systems
- Light weight carbon fibre diaphragm

## SPECIFICATIONS

Application	3-way Transducer		
Nominal Impedance	Ohm	8 or 16	
Power handling AES noise	W	1000	
Low Frequency			
Sensitivity (1 W / 1 m)	dB	98	
Frequency response	Hz	40 - 22000	
Voice Coil Diameter	mm	101.6 (4")	
Voice Coil Winding Depth	mm	22	
Magnet Gap Depth	mm	10	
Voice Coil Material	Cu		
Basket	Cast Aluminum		
Effect. diaphragm diameter D	mm	320	
THIELE-SMALL PARAMETERS			
Resonance Frequency	Fs	Hz	50
DC Resistance	Re	Ohm	5.70
Mechanical Q Factor	Qms	3.7	
Electrical Q Factor	Qes	0.38	
Total Quality Factor	Qts	0.35	
Equivalent Volume	Vas	L	77
Moving Mass	Mms	kg	0.12
Mechanical Compliance	Cms	mm / N	0.084
BL Factor	BL	Tesla m	23.6
Effective Piston Area	Sd	m <sup>2</sup>	0.0804
Max. linear Excursion	Xmax	mm	+/- 6
Voice Coil Inductance:	Le1k	mH	0.8
	Le10k	mH	0.56
SPECIFICATION HIGH / MIDDLE FREQUENCY			
Middle range (AES)	W	150	
Peak Power	W	1000	
High range (AES)	W	80	
Peak Power	W	320	
Sensitivity (1 W / 1 m)	dB	113	
Middle Frequency range	Hz	700 - 7000 Hz	
High Frequency range	Hz	6000 - 22000	
Recommended Crossover	Hz	800, 6300	
Voice Coil Diameter	mm	44.4 (1.75") high	
		90 (3.5") middle	
Magnet Material	Neodymium		
Flux Density	T	2.0	
Voice Coil Material	Copper Clad Aluminum		
	(2 layers in and outside the VC)		
Voice Coil Former	Kapton TM		
Diaphragm Material	Polyester		



Frequency Response measured 1 W (2.83 V) at 1 m in a closed enclosure of 100 litre.



### MOUNTING INFORMATION

Overall Diameter	mm	388
Mounting Holes Diameter	mm	8 x (7 x 8)
Bolt Circle Diameter	mm	371
Baffle cut-out Diameter	mm	358
Overall depth	mm	280
Net Weight:	kg	8.95

### Recommended reflex enclosure:

60 L / 50 Hz, BRD = 130 mm / 150 mm long  
 80 L / 45 Hz, BRD = 140 mm / 162 mm long



## Introduction

For years, the production of compression drivers has relied on the same old principles. Design engineers and technicians have tried to improve durability and sonic characteristics by incorporating space age materials such as Titanium, Beryllium and Neodymium into highly specialised manufacturing methods.

BMS has taken steps to go beyond the frontiers of conventional technology compression drivers.

The diaphragm is the piece de resistance of a BMS driver. For mechanical strength conventional diaphragms use a metal foil dome bounded to a synthetic surround. This construction method, however, increases the mass of the diaphragm resulting in poor sensitivity figures, less dynamics, considerable distortion and reduced high frequency response. BMS has developed a unique diaphragm without a dome that has less mass than traditional diaphragms. It has an exceptional dynamic range and produces even the most complex musical signals with depth and definition.

The patented BMS design remarkably reduces diaphragm excursion and inertia. There is no loss of energy required to drive conventional diaphragms. That is why BMS drivers have a much higher sound pressure level and less dynamic compression than previous designs. Due to their reduced excursion and excellent transient response BMS drivers react extremely fast to peak level signals. The result is an increase in dynamic headroom and improved precise definition. In conjunction with the double-centered suspension the BMS diaphragm reduce excursion and also prevent those critical partial vibrations that cause harmonic distortion.

By changing diaphragm geometry, diaphragm material strength and throat, BMS drivers may be custom tuned to different resonant frequencies.

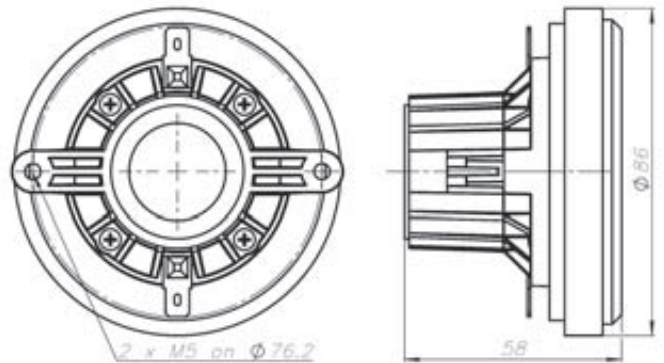


#### Features:

- Unique patented design
- 113dB sensitivity 1W/1m
- 1.9 kHz Crossover
- Very small size and low weight
- 25.4 mm voice coil

BMS 4524 is an ultra compact 1" professional compression driver that delivers excellent sonic quality. The unique BMS annular diaphragm achieves very high sensitivity and linear frequency response up to 20 kHz. The sound of the BMS4524 has an exceptional dynamic range and produces even the most complex music signals with depth and definition.

The BMS 4524 - 1" compression driver is designed for a wide variety of applications including high fidelity audio, small to medium high quality professional reinforcement systems and studio monitors. The 4524 offers all the benefits of the patented BMS compression driver design, but at much reduced cost.



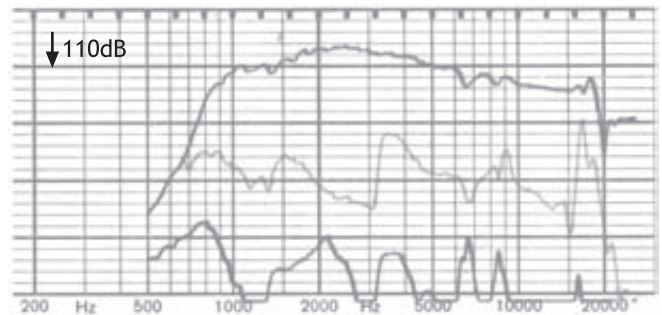
## SPECIFICATIONS

Throat diameter	1" (25.4 mm)
Nominal impedance	8 Ohm
Power capacity (AES)	25 W
Peak Power	200 W

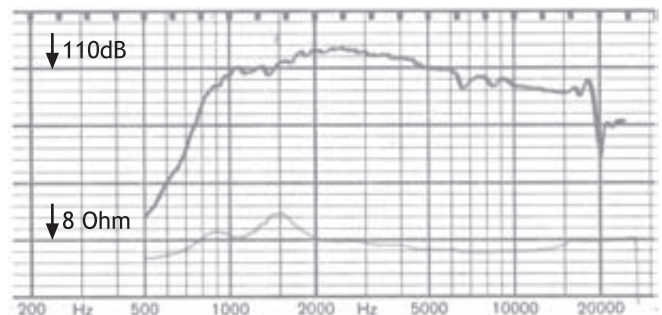
Sensitivity	
CD Horn 90° x75°, 1W/1m	113 dB
Plane wave tube, 1mW	117 dB
Maximal SPL (cont.)	127 dB at 25 W
Frequency range	1200 - 30000 Hz
Recommended crossover	1900 Hz
Voice coil diameter	1" (25.4 mm)
Magnet material	Ferrite
Flux density (Tesla)	1.8
Voice coil material	Copper Clad Aluminum
Voice coil former	Kapton™
Diaphragm material	Polyester

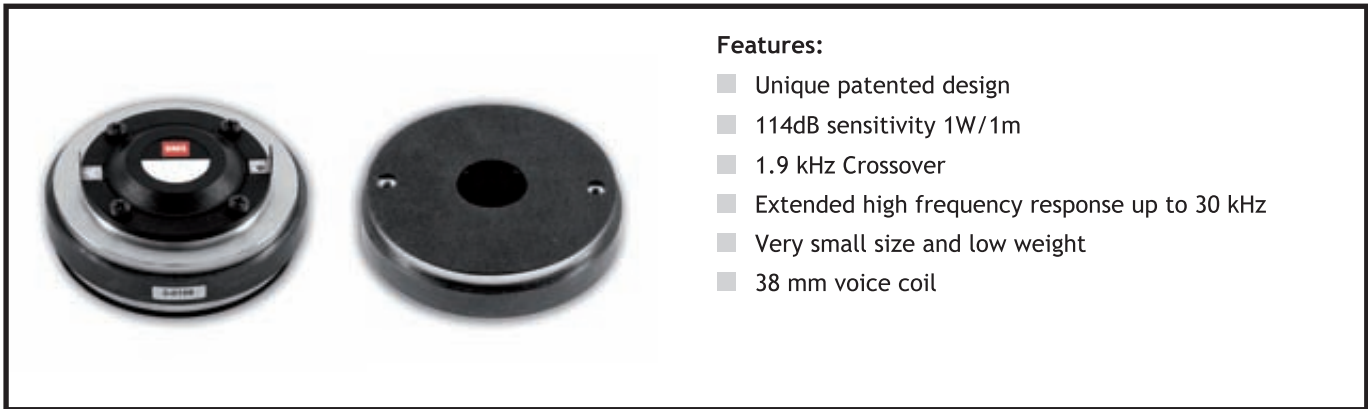
MOUNTING INFORMATION		
Overall diameter	mm	86
Depth	mm	58
Net weight	kg	0.665
2x M5 holes, 180° on 76,2 mm		

BMS 4524-8, CD 90/75 Horn, 2nd + 3rd harmonic distortion raised 10dB., SPL 1W / 1m



BMS 4524-8, CD 90/75 Horn, SPL 1W / 1m



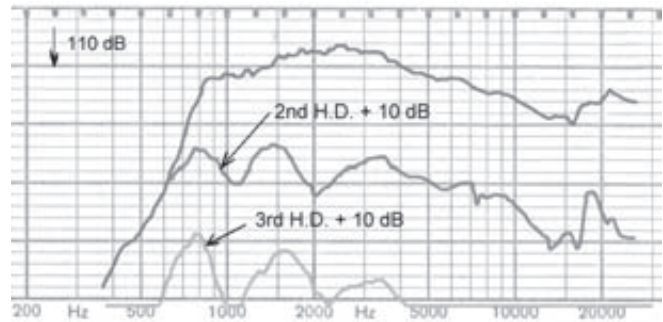


### Features:

- Unique patented design
- 114dB sensitivity 1W/1m
- 1.9 kHz Crossover
- Extended high frequency response up to 30 kHz
- Very small size and low weight
- 38 mm voice coil

BMS 4538 is a powerful 1" professional compression driver that delivers excellent sonic quality in a small package. The unique BMS annular diaphragm together with the patented radial phasing plug achieve very high sensitivity and linear frequency response up to 30 kHz. The sound of the BMS 4538 has an exceptional dynamic range and produces even the most complex music signals with depth and definition. The BMS 4538 - 1" compression driver is designed for a wide variety of applications including small to medium high quality professional reinforcement systems and stage monitors. The 4538 offers all the benefits of the patented BMS compression driver design, but at much reduced cost.

BMS 4538-8, CD 90/75 Horn, SPL 1W / 1m



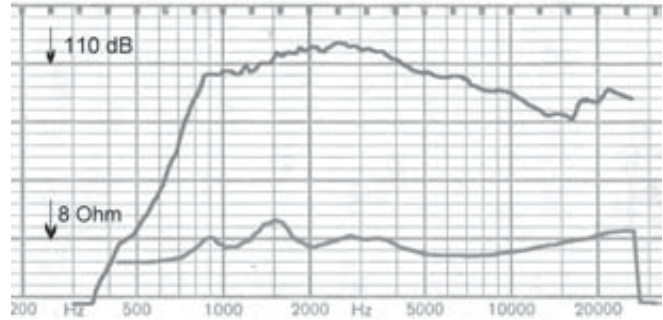
## SPECIFICATIONS

Throat diameter	1" (25.4 mm)
Nominal impedance	8 Ohm
Power capacity (AES)	60 W
Peak Power	300 W

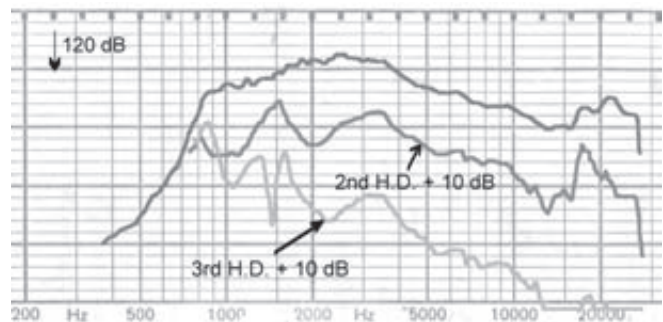
Sensitivity	
CD Horn 90°x75°, 1W/1m	114 dB
Plane wave tube, 1mW	118 dB
Maximal SPL (cont.)	132 dB at 60 W
Frequency range	1200 - 30000 Hz
Recommended crossover	1900 Hz
Voice coil diameter	1.5" (38 mm)
Magnet material	Ferrite
Flux density (Tesla)	1.8
Voice coil material	Copper Clad Aluminum
Voice coil former	Kapton™
Diaphragm material	Polyester

MOUNTING INFORMATION		
Overall diameter	mm	96
Depth	mm	40
Net weight	kg	0.98
2x M5 holes, 180° on 76,2 mm		

BMS 4538-8, CD 90/75 Horn, SPL 1W / 1m



BMS 4538-8, CD 90/75 Horn, SPL 10W / 1m





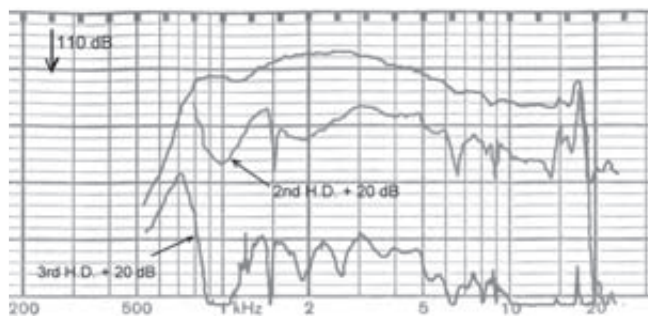
#### Features:

- Unique patented design
- 113dB sensitivity 1W/1m
- 1.3 kHz Crossover
- Extended high frequency response up to 20 kHz
- Small size and low weight
- 44.4 mm sandwich in- and outside voice coil

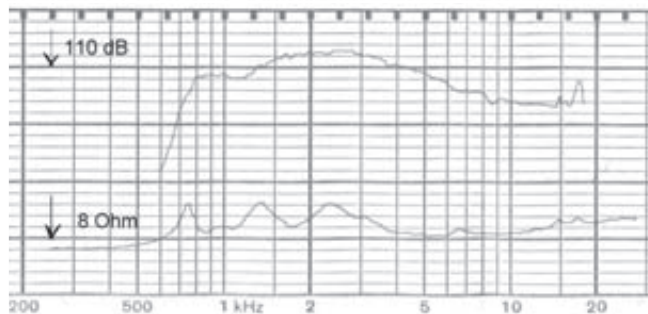
BMS 4544 is a powerful 1" professional compression driver that delivers excellent sonic quality in a small package. The BMS exclusive voice coil technology employs a light weight Copper Clad Aluminium wire wound inside and outside of the Kapton™ former to improve the heat dissipation. This technology dramatically increases the acoustic output and reliability of the driver and minimises the power compression.

The BMS 4544 - 1" compression driver is designed for a wide variety of applications in high quality professional reinforcement systems and stage monitors.

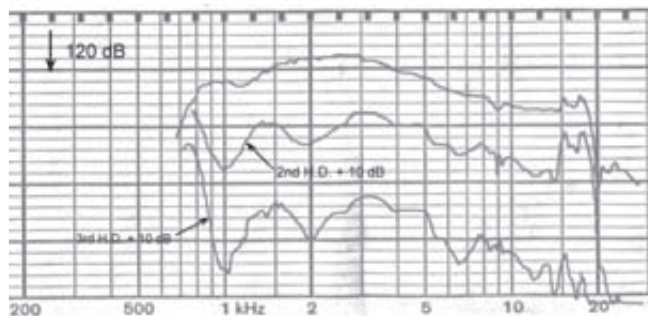
BMS 4544, CD 90/75 Horn, SPL 1W / 1m



BMS 4544, CD 90/75 Horn, SPL 1W / 1m



BMS 4544, CD 90/75 Horn, SPL 10W / 1m



## SPECIFICATIONS

Throat diameter	1" (25.4 mm)
Nominal impedance	8 or 16 Ohm
Power capacity (AES)	80 W
Peak Power	450 W

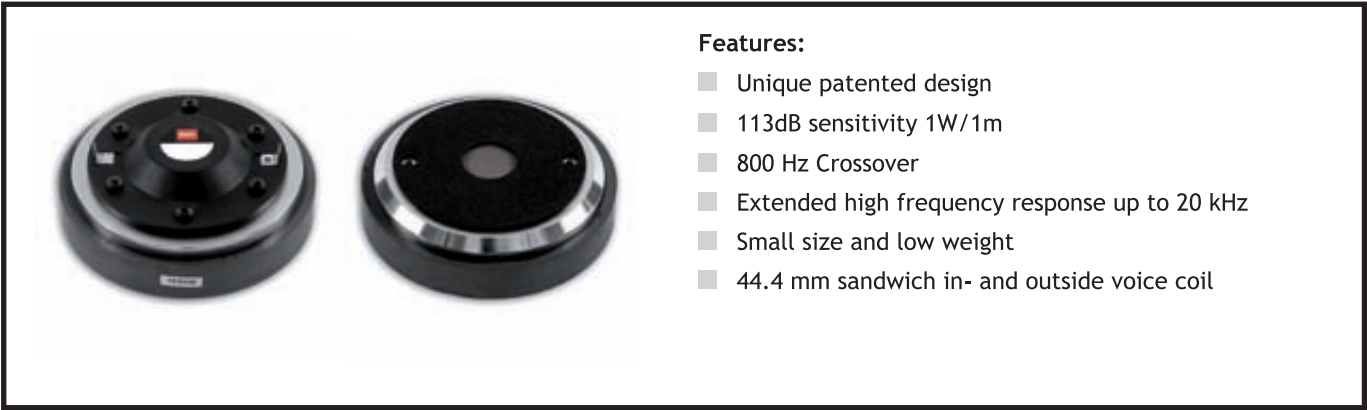
Sensitivity	
CD Horn 90°x75°, 1W/1m	113 dB
Plane wave tube, 1mW	117 dB
Maximal SPL (cont.)	132 dB at 80 W
Frequency range	500 - 20000 Hz
Recommended crossover	1300 Hz
Voice coil diameter	1.75" (44.4 mm)
Magnet material	Ferrite
Flux density (Tesla)	1.85
Voice coil material	Copper Clad Aluminum
Voice coil former	Kapton™
Diaphragm material	Polyester

MOUNTING INFORMATION		
Overall diameter	mm	110
Depth	mm	47
Net weight	kg	1.53
2x M6 holes, 180° on 76.2 mm diameter		

# 4550

## 1" High Frequency Compression Driver

# 1" Compression Drivers

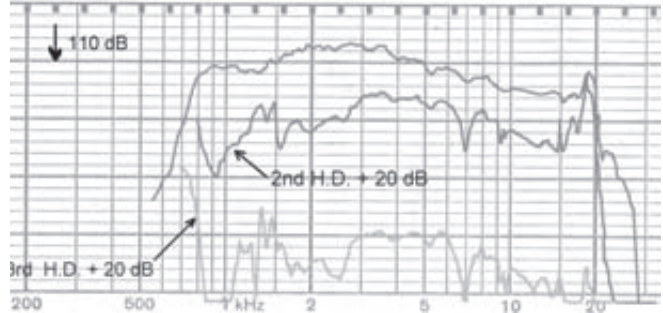


### Features:

- Unique patented design
- 113dB sensitivity 1W/1m
- 800 Hz Crossover
- Extended high frequency response up to 20 kHz
- Small size and low weight
- 44.4 mm sandwich in- and outside voice coil

BMS 4550 is a powerful 1" professional compression driver that delivers outstanding sonic quality in a small package. It has an exceptional dynamic range and produces even the most complex music signals with depth and definition. The BMS exclusive voice coil technology employs a light weight Copper Clad Aluminium wire wound inside and outside of the Kapton™ former to improve the heat dissipation, dramatically increasing the acoustic output and reliability of the driver while minimising the power compression. The BMS 4550 - 1" compression driver is designed for a wide variety of applications in high quality, high power professional reinforcement systems and stage monitors where low crossover frequency is needed.

BMS 4550, CD 90/75 Horn, SPL 1W / 1m



Compression Drivers

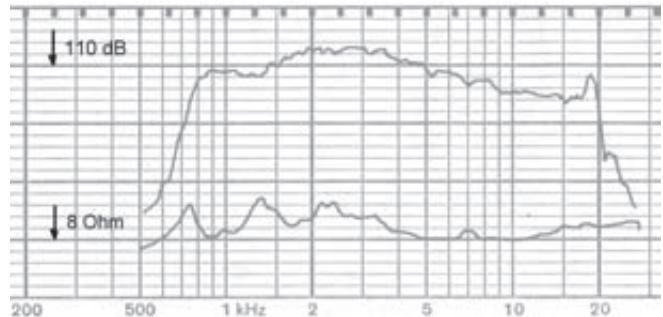
## SPECIFICATIONS

Throat diameter	1" (25.4 mm)
Nominal impedance	8 or 16 Ohm
Power capacity (AES)	80 W
Peak Power	450 W

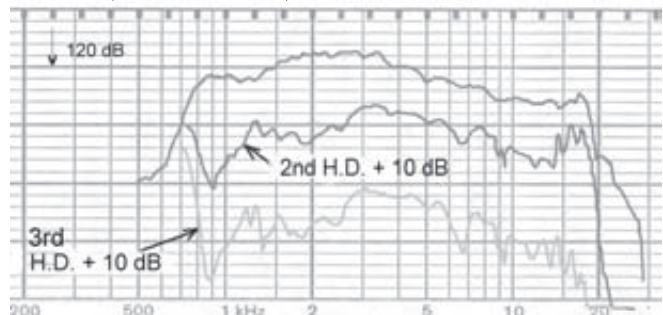
Sensitivity	
CD Horn 90°x75°, 1W/1m	113 dB
Plane wave tube, 1mW	117 dB
Maximal SPL (cont.)	132 dB at 80 W
Frequency range	500 - 20000 Hz
Recommended crossover	800 Hz
Voice coil diameter	1.75" (44.4 mm)
Magnet material	Ferrite
Flux density (Tesla)	2.0
Voice coil material	Copper Clad Aluminium
Voice coil former	Kapton™
Diaphragm material	Polyester

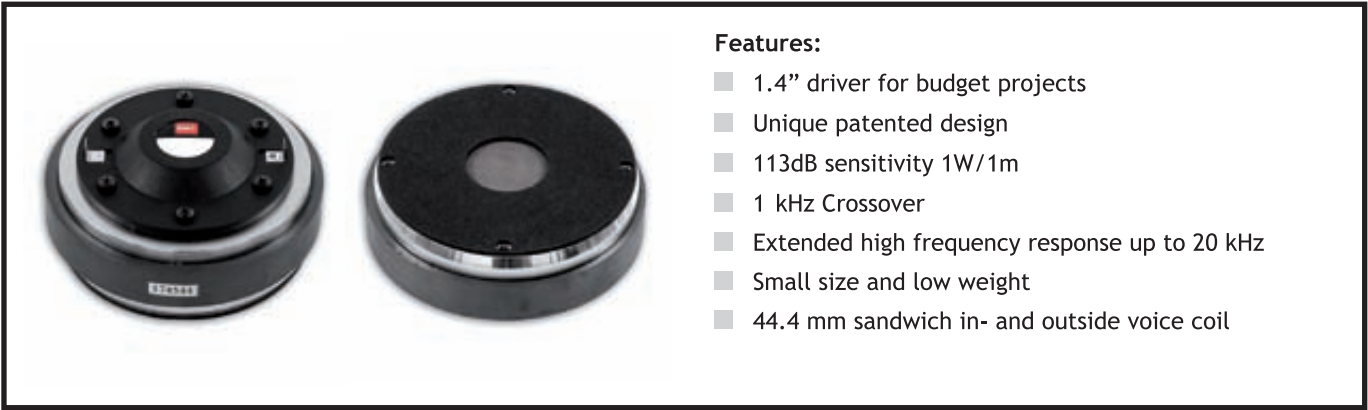
MOUNTING INFORMATION		
Overall diameter	mm	123
Depth	mm	52
Net weight	kg	2.25
2x M6 holes, 180° on 76.2 mm diameter		

BMS 4550, CD 90/75 Horn, SPL 1W / 1m



BMS 4550, CD 90/75 Horn, SPL 10W / 1m



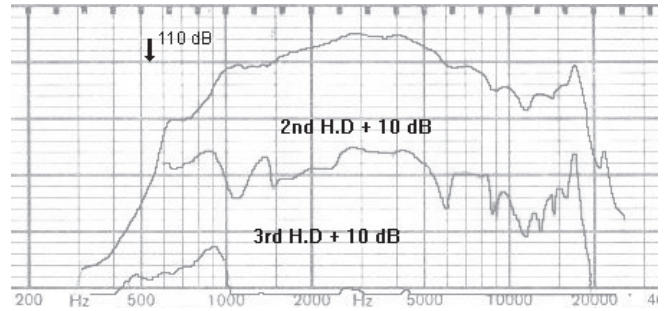


**Features:**

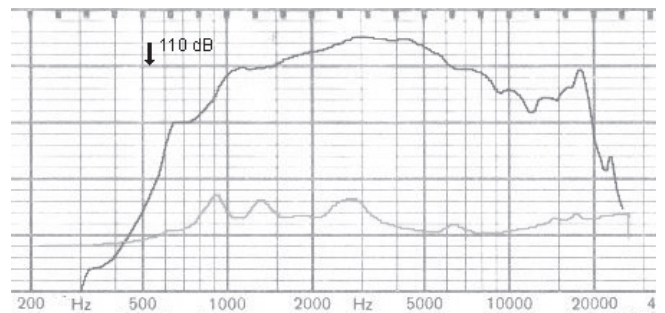
- 1.4" driver for budget projects
- Unique patented design
- 113dB sensitivity 1W/1m
- 1 kHz Crossover
- Extended high frequency response up to 20 kHz
- Small size and low weight
- 44.4 mm sandwich in- and outside voice coil

BMS 4554 is a powerful 1.4" professional compression driver that delivers excellent sonic quality in a small package. The BMS exclusive voice coil technology employs a light weight Copper Clad Aluminium wire wound inside and outside of the Kapton™ former to improve the heat dissipation, dramatically increasing the acoustic output and reliability of the driver while minimising the power compression. The BMS 4554 - 1.4" compression driver is designed for a wide variety of applications including budget projects requiring 1.4" driver of high sonic quality. The 4554 offers all the benefits of the patented BMS compression driver in a 1.4" format, but at much reduced cost.

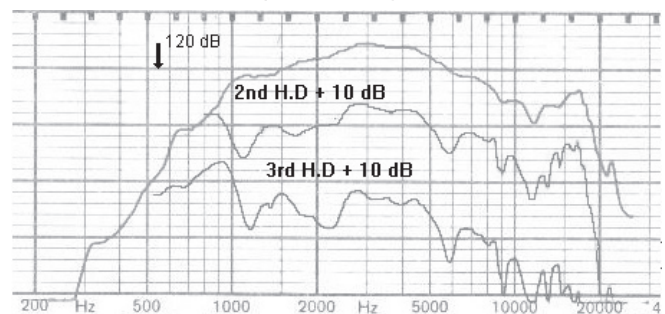
BMS 4554, 60° x 40° elliptical waveguide, 1W / 1m



BMS 4554, 60° x 40° elliptical waveguide, SPL 1W / 1m



BMS 4554, 60° x 40° elliptical waveguide, SPL 10W / 1m



## SPECIFICATIONS

Throat diameter	1.4" (36 mm)
Nominal impedance	8 or 16 Ohm
Power capacity (AES)	80 W
Peak Power	450 W

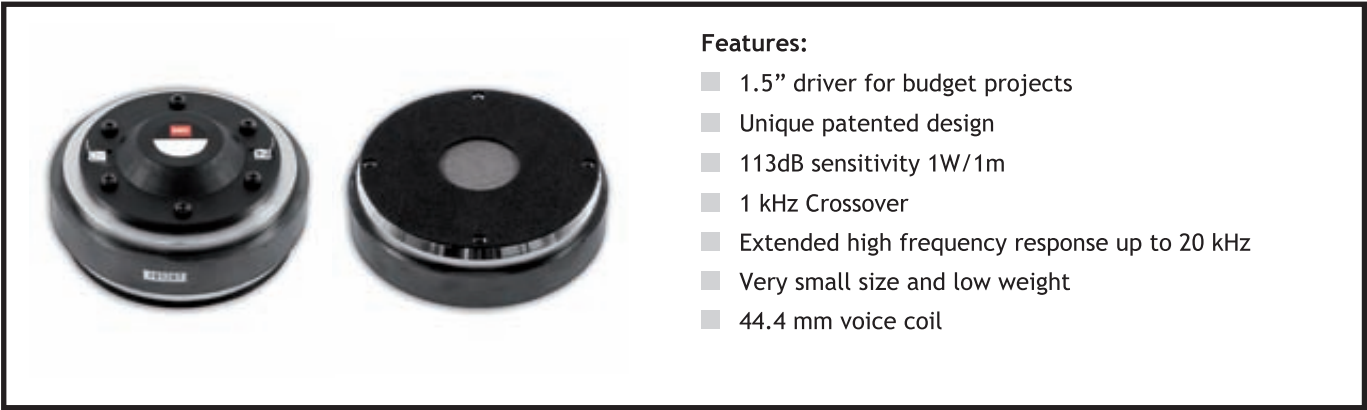
Sensitivity	
CD Horn 90°x75°, 1W/1m	113 dB
Efficiency	25% (1000-3500 Hz)
Maximal SPL (cont.)	132 dB
Frequency range	500- 20000Hz
Recommended crossover	1000 Hz
Voice coil diameter	1.75" (44.4 mm)
Magnet material	Ferrite
Flux density (Tesla)	2.0
Voice coil material	Copper Clad Aluminum
Voice coil former	Kapton™
Diaphragm material	Polyester

MOUNTING INFORMATION		
Overall diameter	mm	123
Depth	mm	47
Net weight	kg	2.25
2x M6 holes, 180° on 76.2 mm diameter		

# 4555

## 1.5" High Frequency Compression Driver

# 1.5" Compression Drivers

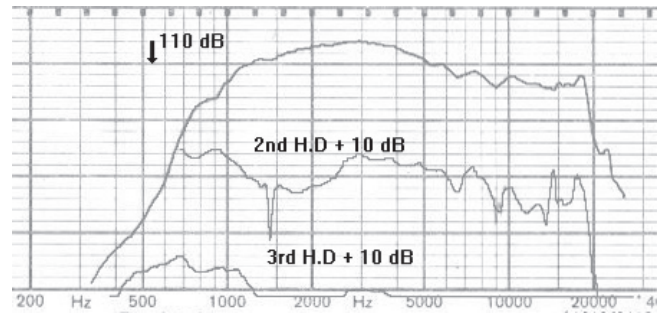


### Features:

- 1.5" driver for budget projects
- Unique patented design
- 113dB sensitivity 1W/1m
- 1 kHz Crossover
- Extended high frequency response up to 20 kHz
- Very small size and low weight
- 44.4 mm voice coil

BMS 4555 is a powerful 1.5" professional compression driver that delivers excellent sonic quality in a small package. The BMS exclusive voice coil technology employs a light weight Copper Clad Aluminium wire wound inside and outside of the Kapton™ former to improve the heat dissipation, dramatically increasing the acoustic output and reliability of the driver while minimising the power compression. The BMS 4555 - 1.5" compression driver is designed for a wide variety of applications including budget projects requiring 1.5" driver of high sonic quality. The 4555 offers all the benefits of the patented BMS compression driver in a 1.5" format, but at much reduced cost.

BMS 4555, 60° conical waveguide, 1W / 1m



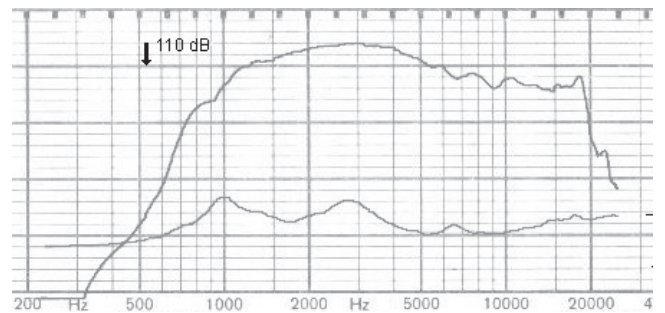
## SPECIFICATIONS

Throat diameter	1.5" (38 mm)
Nominal impedance	8 or 16 Ohm
Power capacity (AES)	80 W
Peak Power	450 W

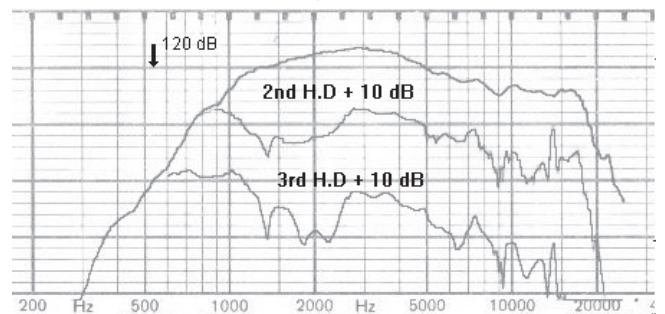
Sensitivity	
CD Horn 90°x75°, 1W/1m	113 dB
Efficiency	25% (1000-3500 Hz)
Maximal SPL (cont.)	132 dB at 80 W
Frequency range	500 - 20000 Hz
Recommended crossover	1000 Hz
Voice coil diameter	1.75" (44.4 mm)
Magnet material	Ferrite
Flux density (Tesla)	2.0
Voice coil material	Copper Clad Aluminum
Voice coil former	Kapton™
Diaphragm material	Polyester

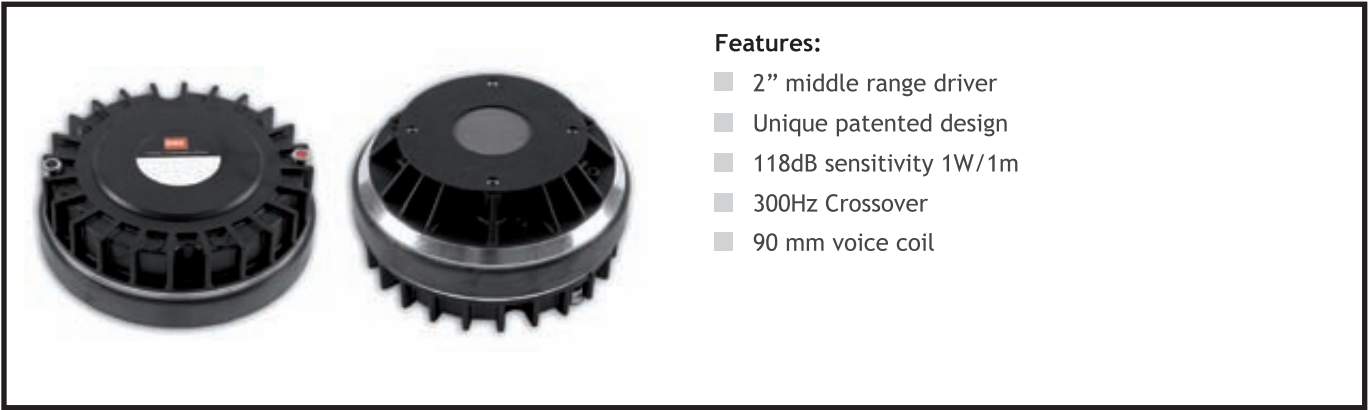
MOUNTING INFORMATION		
Overall diameter	mm	123
Depth	mm	52
Net weight	kg	2.25
4x M6 holes, 90° on 101.6 mm, 4" diameter		

BMS 4555, 60° conical waveguide, SPL 1W / 1m



BMS 4555, 60° conical waveguide, SPL 10W / 1m

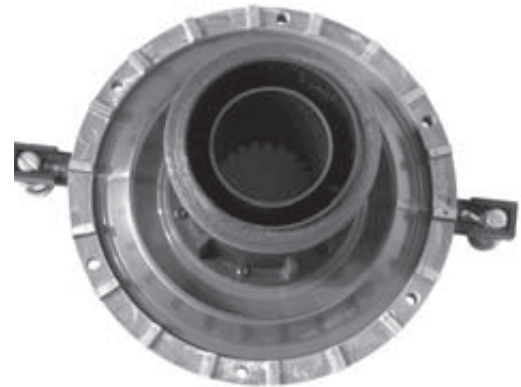




**Features:**

- 2" middle range driver
- Unique patented design
- 118dB sensitivity 1W/1m
- 300Hz Crossover
- 90 mm voice coil

The BMS exclusive voice coil technology employs a light weight Copper Clad Aluminium wire wound inside and outside of the Kapton™ former to improve the heat dissipation, dramatically increasing the acoustic output and reliability of the driver while minimising the power compression.



Ring radiator diaphragm for mid-range from 300 - 7000 Hz

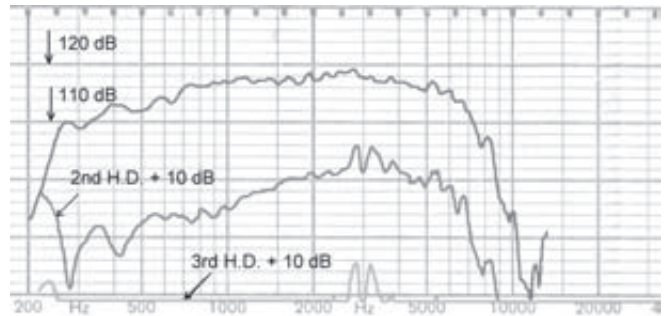
## SPECIFICATIONS

Throat diameter	2" (50.8 mm)
Nominal impedance	8 or 16 Ohm
Power capacity (AES)	150 W AES above 400 Hz
Peak Power	1000 W peak above 500 Hz
max SPL	136 dB at 150 W

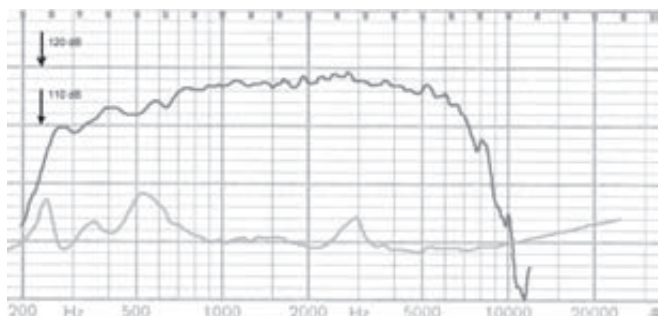
Sensitivity	
1W/1m	118 dB on 2242 Horn
Frequency range	200 - 9000 Hz
Recommended crossover	300 Hz
min. impedance modulus	8.3 Ohm at 5 kHz
Voice coil diameter	3.5" (90 mm)
Magnet material	Ferrite
Flux density (Tesla)	1.95
Efficiency	35% (300 - 5000Hz)
Voice coil material	Copper Clad Aluminum
Voice coil former	Kapton™
Diaphragm material	Polyester

MOUNTING INFORMATION		
Overall diameter	mm	182 (+/- 3 mm)
Depth	mm	90
Net weight	kg	6
4x M6 holes, 90° on 101.6 mm, 4" diameter		

BMS 4591, 40° x 20° CD Horn, 1W / 1m



BMS 4591, 40° x 20° CD Horn, SPL 1W / 1m





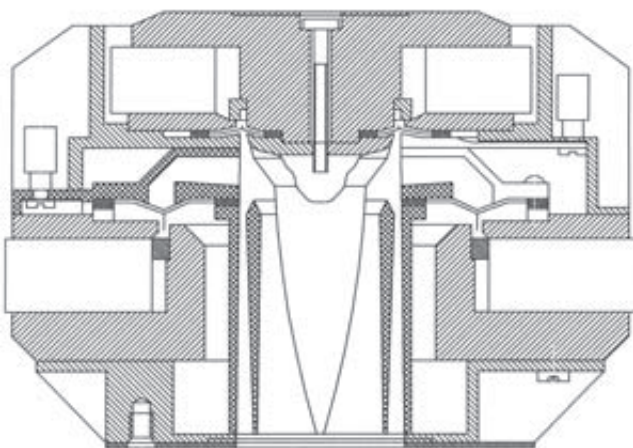
# Introduction

BMS developed a unique driver technology to radiate a coherent single point wave front for superior dispersion control and high fidelity sound. The advanced design aligns the acoustical centers of the transducers providing a coherent wave front coming out from the throat.

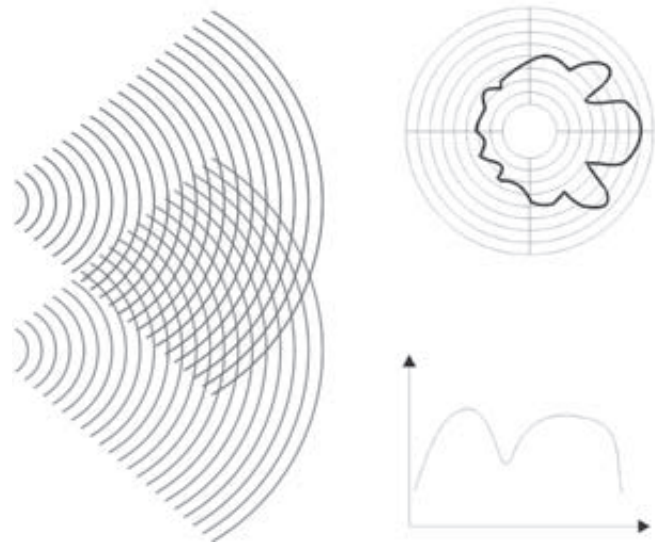
The driver is in fact a 2-way system employing two concentric annular ring diaphragms. The larger of the two reproduces middle frequency from 300Hz upwards, crossing over over 6.3kHz to the HF transducer which is capable of reaching 22kHz. The voice coils may be driven in conjunction with a passive crossover or driven individually from an active crossover. The outer casting features extensive heat sinking ensuring high power handling and low compression.

The unique voice coil technology employs a light weight Copper Clad Aluminum wire wound inside and outside of the Kapton™ former to improve the heat dissipation, dramatically increasing the acoustic output and reliability of the driver while minimising the power compression.

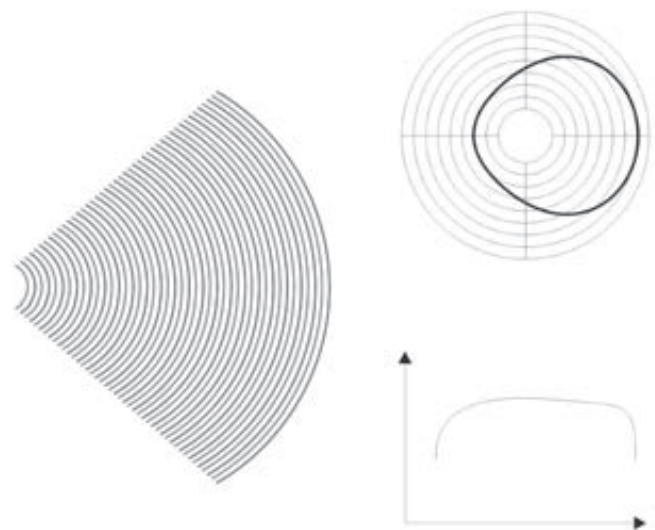
Cross section view of the BMS 4590 2" coaxial compression driver



Conventional System



BMS Coaxial Compression Driver





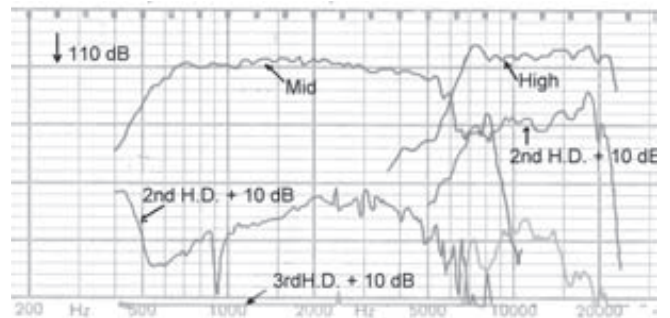
#### Features:

- Extended bandwidth (300 - 22000 Hz)
- Point source sound reproduction
- Excellent phase coherence
- With two subsystems in one, each driver covers a smaller frequency range for increased power handling, high dynamic and extremely low distortion
- Perfect time alignment without problems of multi-source interference

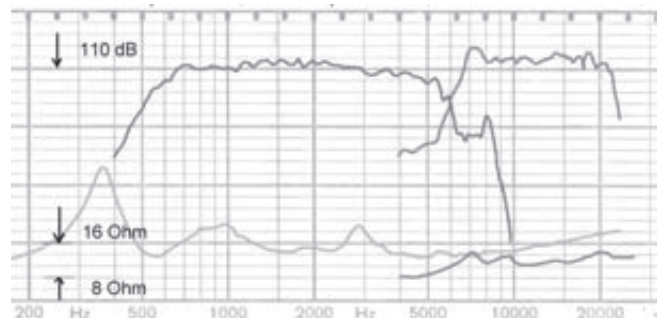
In a conventional full range compression driver the phase plug must be located extremely close to the diaphragm, excursion of the diaphragm is limited and middle frequency performance is compromised. A typical 2" dome compression driver has a limited high frequency response. Over 8 kHz the dome diaphragm breaks up causing resonance and harsh, metallic sound.

The BMS annular midrange diaphragm covers the frequency range between 400 and 7000 Hz with a smooth, linear response. The large diaphragm excursion of max. +/-0.8 mm results in high output and increased power handling up to 1300 W peak. The ultra light annular diaphragm for the high range offers exceptional transient response with very high efficiency from 6 to 22 kHz.

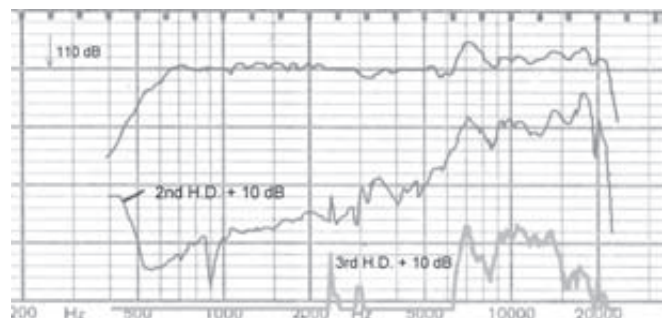
BMS4590, 90°x60° Horn, 1W/1m, 4V RMS



BMS4590, 90°x60° Horn, 1W/1m, 4V RMS



BMS 4590P, including passive crossover, SPL 1W / 1m



## SPECIFICATIONS

Throat diameter	2" (50.8 mm)
Nominal impedance	8 or 16 Ohm
Power capacity	
Middle range (AES)	150 W AES above 400 Hz
peak	1000 W peak above 500 Hz
High range (AES)	80 W
peak	450 W
Sensitivity 1W/1m	118 dB on 2242 Horn
Frequency range (Hz)	300 - 22000
Recommended crossover	300 Hz
Middle frequency range	300 - 7000 Hz
High frequency range	6000 - 22000 Hz
Middle/High crossover	6300Hz
Voice coil high-range	1.75" (44.4 mm)
Voice coil mid-range	3.5" (90 mm)
Magnet material	Ferrite
Flux density (Tesla)	1.95 (mid), 2.1 (high)
Efficiency	35% (300 - 5000 Hz)
Voice coil material	Copper Clad Aluminum
	(2Layers in and outside of the VC)
Voice coil former	Kapton™
Diaphragm material	Polyester
<b>Mounting information</b>	
Overall Diameter	182 mm (+/- 3 mm)
Depth	129 mm
Net weight	9 kg
4x M6 holes, 90° on 101.6 mm, 4" diameter	

# 4528ND

Neodymium High Frequency Compression Driver and Waveguide 90° x 60°

## Neo Compression Drivers

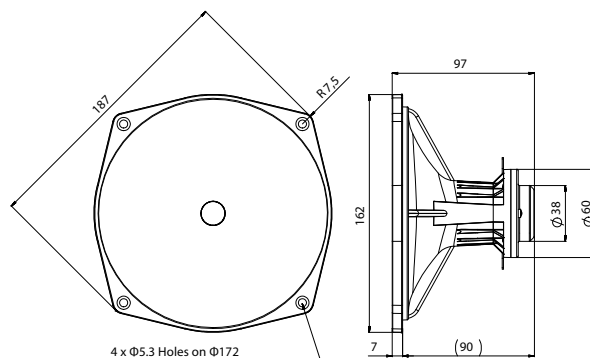


### Features:

- Unique Patented Design
- 113 dB sensitivity 1 W / 1 m
- Very small Size and low Weight
- 1" (25.4 mm) Voice Coil

BMS 4528ND is a powerful professional compression driver with 90° x 60° waveguide that delivers superb sonic quality in a very small package. The unique BMS annular diaphragm together with the high energy neodymium magnet achieve very high sensitivity and linear frequency response up to 30 kHz.

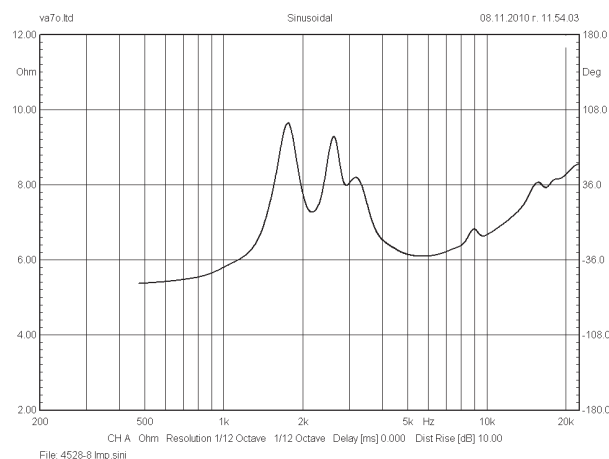
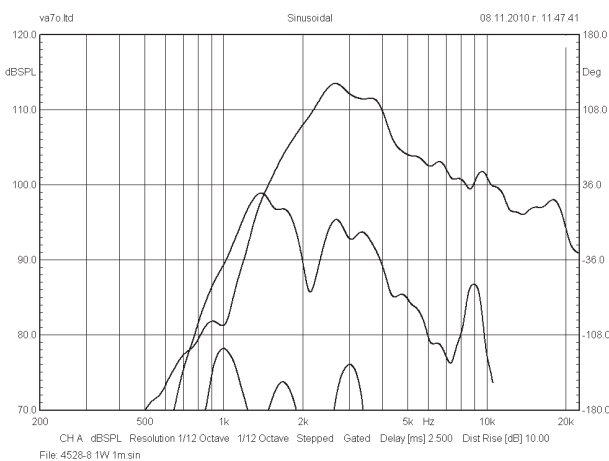
The sound of 4528ND is extremely transparent and detailed, it has an exceptional dynamic range and produces even the most complex music signals with depth and definition.



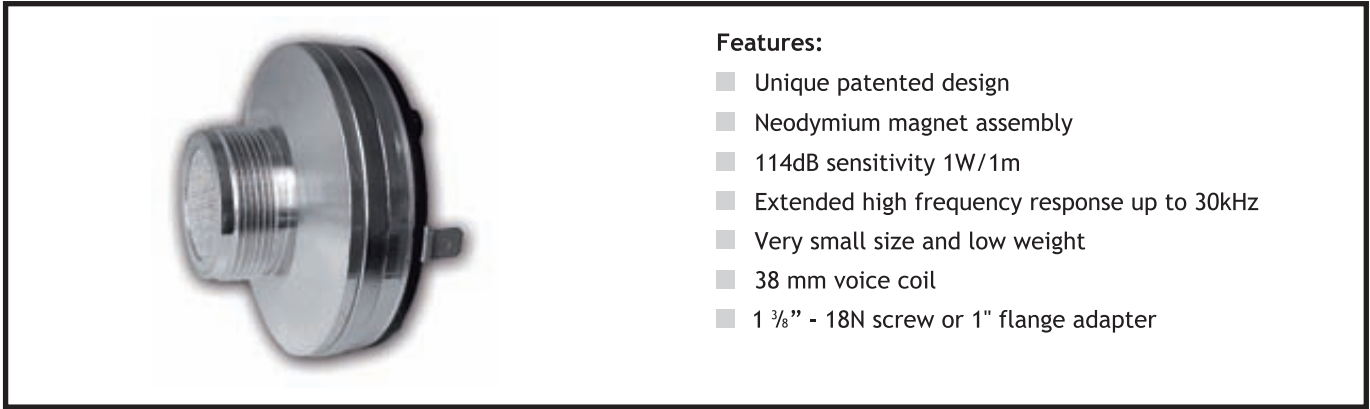
## SPECIFICATIONS

Nominal impedance	8 Ohm	
Power capacity (AES)	25 W	
Peak Power	200 W	
Sensitivity 1W/1m	113 dB	
Maximal SPL (cont.)	124 dB at 25W	
Frequency range	1200 - 30000 Hz	
Recommended crossover	1800 Hz	
Voice coil diameter	1" (25.4 mm)	
Magnet material	Neodymium	
Flux density (Tesla)	1.6	
Voice coil material	Copper clad aluminum	
Voice coil former	Kapton	
Diaphragm material	Polyester	

MOUNTING INFORMATION		
Overall diameter	mm	187 x 162
Depth	mm	97
Net weight	kg	0.36
4x 5.3 holes	90°	on 172 mm diameter



Neodymium Compression Drivers

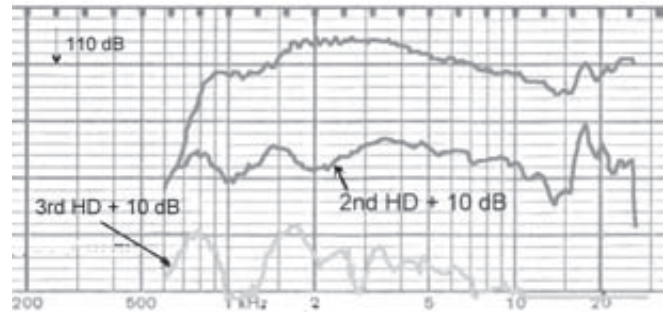


**Features:**

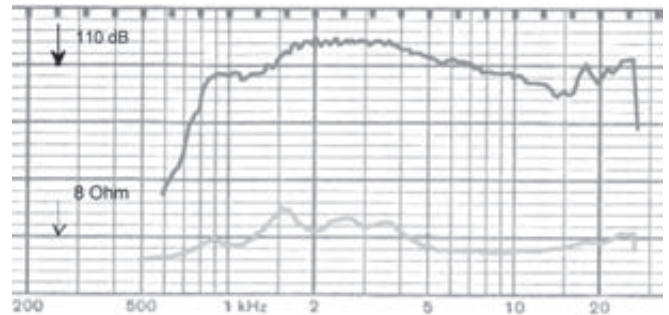
- Unique patented design
- Neodymium magnet assembly
- 114dB sensitivity 1W/1m
- Extended high frequency response up to 30kHz
- Very small size and low weight
- 38 mm voice coil
- 1 3/8" - 18N screw or 1" flange adapter

BMS 4540 ND is a powerful 1" professional compression driver that delivers superb sonic quality in a very small package. The unique BMS annular diaphragm together with the high energy neodymium magnet achieve very high sensitivity and linear frequency response up to 30 kHz. The sound of 4540 ND is extremely transparent and detailed, it has an exceptional dynamic range and produces even the most complex music signals with depth and definition. 4540 ND - 1" compression driver is designed for a wide variety of applications including high level professional reinforcement systems, studio monitors and high-end audio.

BMS 4540 ND, 90/75 Horn, SPL 1W / 1m



BMS 4540 ND, CD 90/75 Horn, SPL 1W / 1m



## SPECIFICATIONS

Throat diameter	1" (25,4 mm)
Nominal impedance	8 or 16 Ohm
Power capacity (AES)	60 W
Peak Power	300 W

Sensitivity	
CD Horn 90°x75°, 1W/1m	114 dB
Plane wave tube, 1mW	118 dB
Maximal SPL (cont.)	132 dB at 60 W
Frequency range	1200 - 30000 Hz
Recommended crossover	1900 Hz
Voice coil diameter	1.5" (38 mm)
Magnet material	Neodymium
Flux density (Tesla)	2.2
Voice coil material	Copper Clad Aluminum
Voice coil former	Kapton™
Diaphragm material	Polyester

MOUNTING INFORMATION		
Overall diameter	mm	72 (+/- 0.1 mm)
Depth	mm	45
Net weight	kg	0.53
1 3/8"-18N screw		

Ring radiator diaphragm for 4540ND




# 4545ND

1" High Frequency Neodymium Compression Driver

# 1" Neo Compression Drivers





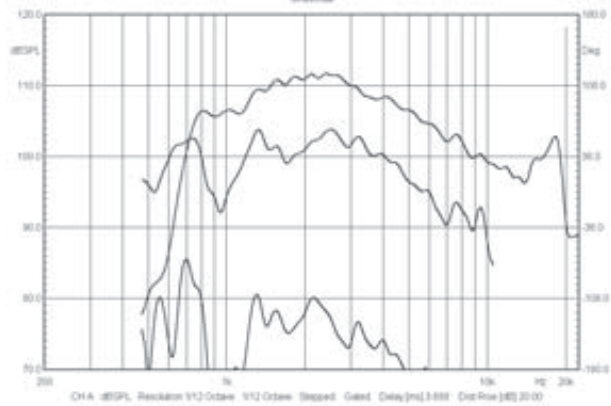
**Features:**

- Unique Patented Design
- Cost effective, high efficiency Neodymium Magnet Assembly
- 113 dB Sensitivity 1 W / 1 m
- 1.2kHz Crossover
- Extended high frequency response up to 20 kHz
- Very small Size and low Weight
- 44.4 mm Sandwich in- and outside Voice Coil
- 8 or 16 Ohm

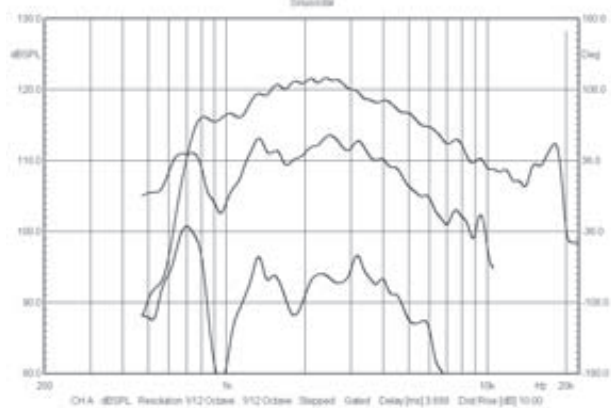
BMS 4545ND is a powerful 1" professional compression driver that delivers superb sonic quality in a very small package. The unique BMS annular diaphragm together with the cost effective, high energy Neodymium magnet assembly offers an economical solution for a wide variety of high level professional reinforcement system applications.

BMS 4545ND achieves very high sensitivity and linear frequency response up to 20 kHz. The sound of BMS4545ND is extremely transparent and detailed, it has an exceptional dynamic range and produces even the most complex music signals with depth and definition.

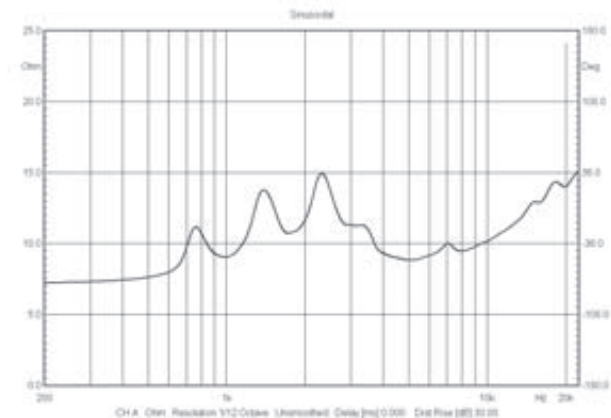
BMS 4545ND-8, 90°x75° horn, 2nd + 3rd harmonic raised 20 dB, SPL 1W / 1m



BMS 4545ND-8, 90°x75° horn, 2nd + 3rd harmonic raised 10 dB, SPL 10W / 1m



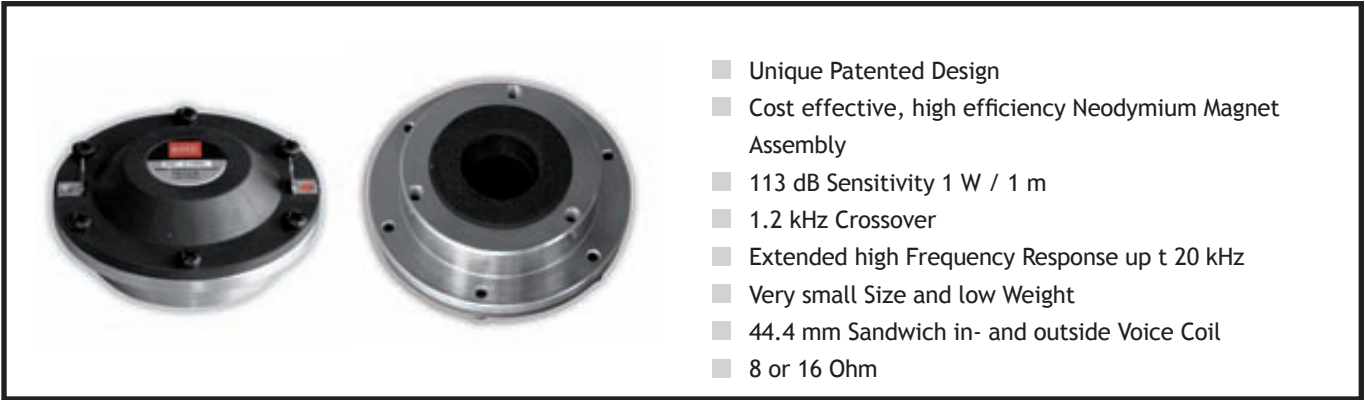
BMS 4545ND-8, 90°x75° horn, Impedance



## SPECIFICATIONS

Throat diameter:	1" (25.4 mm)	
Nominal impedance	8 or 16 Ohm	
Power capacity (AES):	80 W	
Peak Power:	450 W	
Sensitivity		
CD Horn 90° x 75°, 1 W / 1 m:	113 dB	
Plane Wave Tube, 1 mW:	117 dB	
Max. SPL (cont.):	132 dB at 80 W	
Frequency Range:	500 - 20000 Hz	
Recommended Crossover:	1900 Hz	
Voice Coil Diameter:	1.75" (44.4 mm)	
Magnet Material:	Neodymium	
Flux Density (Tesla):	1.7	
Voice Coil Material:	Copper Clad Aluminum	
Voice Coil Former:	Kapton TM	
Diaphragm Material:	Polyester	
Mounting information		
Overall Diameter:	mm	85 (+/- 0.1 mm)
Depth:	mm	48
Net Weight:	kg	0.57
1 3/8" - 18N Screw		

Neodymium Compression Drivers

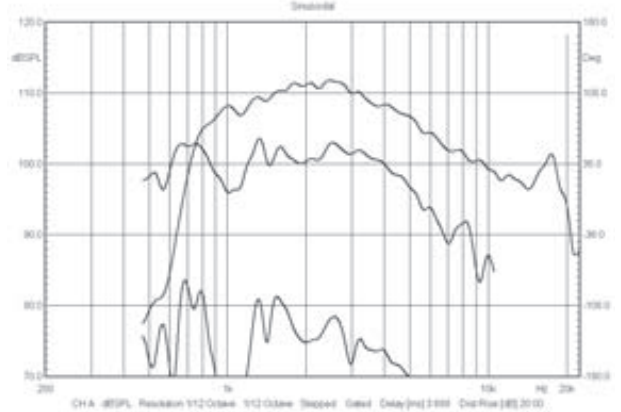


- Unique Patented Design
- Cost effective, high efficiency Neodymium Magnet Assembly
- 113 dB Sensitivity 1 W / 1 m
- 1.2 kHz Crossover
- Extended high Frequency Response up t 20 kHz
- Very small Size and low Weight
- 44.4 mm Sandwich in- and outside Voice Coil
- 8 or 16 Ohm

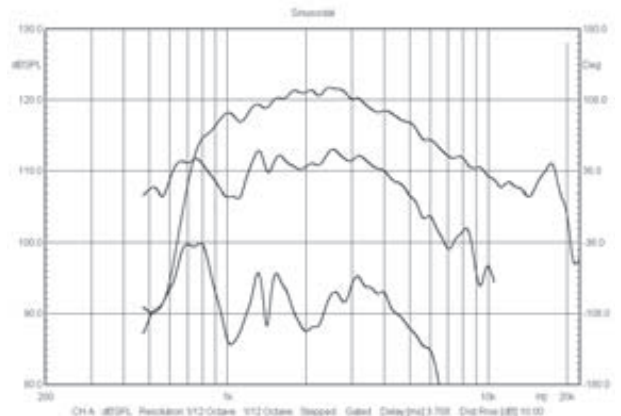
The BMS 4547ND is a powerful 1" professional compression driver that delivers superb sonic quality in a small package. The unique BMS annular diaphragm together with the cost effective, high efficiency Neodymium magnet assembly offers an economical solution for a wide variety of high level professional reinforcement system applications.

BMS4547ND achieves very high sensitivity and linear frequency response up to 20 kHz. The sound of BMS4547ND is extremely transparent and detailed, it has an exceptional dynamic range and produces even the most complex music signals with depth and definition.

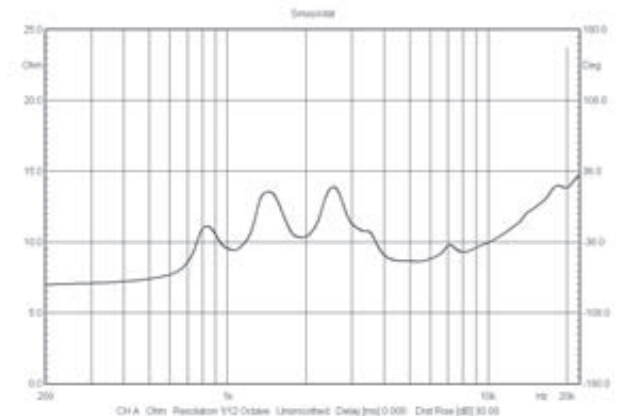
BMS 4547ND-8, 90°x75° horn,  
2nd + 3rd harmonic raised 20 dB, SPL 1W / 1 m



BMS 4547ND-8, 90°x75° horn,  
2nd + 3rd harmonic raised 20 dB, SPL 10 W / 1m



BMS 4547ND-8, 90°x75° horn, Impedance



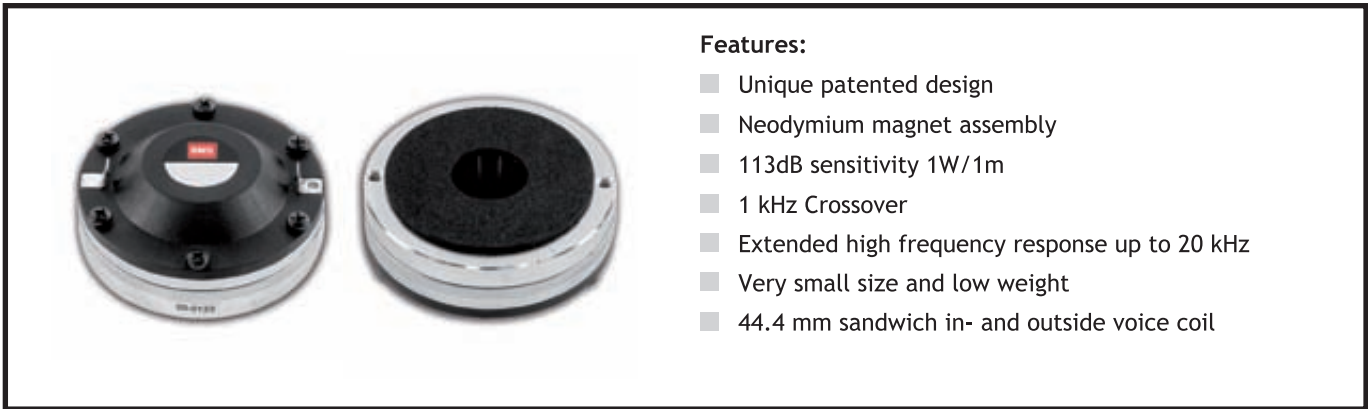
## SPECIFICATIONS

Throat diameter:	1" (25.4 mm)	
Nominal impedance:	8 or 16 Ohm	
Power capacity (AES):	80 W	
Peak Power:	450 W	
Sensitivity		
CD Horn 90° x 75° 1 W / 1 m:	113 dB	
Plane Wave Tube, 1 W / 1 m:	117 dB	
Max. SPL (cont.):	132 dB at 80 W	
Frequency Range:	500 - 20000 Hz	
Recommended Crossover:	1200 Hz	
Voice Coil Diameter:	1.75" (44.4 mm)	
Magnet Material:	Neodymium	
Flux Density (Tesla):	1.7	
Voice Coil Material:	Copper Clad Aluminum	
Voice Coil Former:	Kapton TM	
Diaphragm Material:	Polyester	
Mounting information		
Overall Diameter:	mm	85 (+/- 0.1 mm)
Depth:	mm	36
Net Weight:	kg	0.585
4547NDv1	3x M5 Holes, 120° on 57.15 mm Diameter	
4547NDv2	2x M5 Holes, 180° on 76.2 mm Diameter	

# 4552ND

1" High Frequency Neodymium Compression Driver

# 1" Neo Compression Drivers



### Features:

- Unique patented design
- Neodymium magnet assembly
- 113dB sensitivity 1W/1m
- 1 kHz Crossover
- Extended high frequency response up to 20 kHz
- Very small size and low weight
- 44.4 mm sandwich in- and outside voice coil

BMS 4552 ND is a powerful 1" professional compression driver that delivers superb sonic quality in a small package. The unique BMS annular diaphragm together with the high energy neodymium magnet achieve very high sensitivity and linear frequency response up to 20 kHz. The sound of 4552 ND is extremely transparent and detailed, it has an exceptional dynamic range and produces even the most complex music signals with depth and definition.

The BMS 4552ND - 1" compression driver is designed for a wide variety of applications including high level professional reinforcement systems, studio monitors and high-end audio.

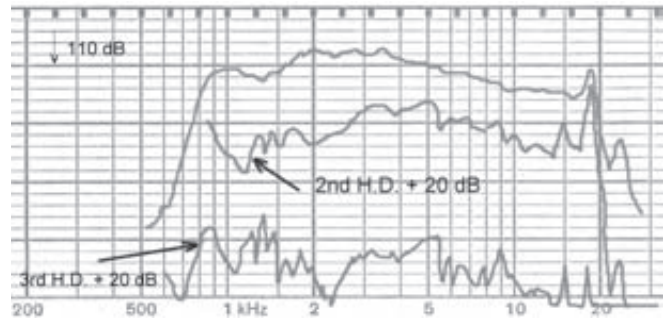
## SPECIFICATIONS

Throat diameter	1" (25.4 mm)
Nominal impedance	8 or 16 Ohm
Power capacity (AES)	80 W
Peak Power	450 W

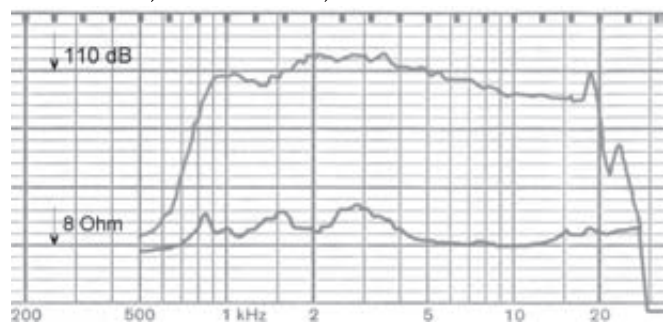
Sensitivity	
CD Horn 90°x75°, 1W/1m	113 dB
Plane wave tube, 1mW	117 dB
Maximal SPL (cont.)	132 dB at 80 W
Frequency range	500 - 20000 Hz
Recommended crossover	1000 Hz
Voice coil diameter	1.75" (44.4 mm)
Magnet material	Neodymium
Flux density (Tesla)	2.2
Voice coil material	Copper Clad Aluminum
Voice coil former	Kapton™
Diaphragm material	Polyester

MOUNTING INFORMATION		
Overall diameter	mm	85 (+/- 0.1 mm)
Depth	mm	36
Net weight	kg	0.83
2x M6 holes, 180° on 76.2 mm diameter		

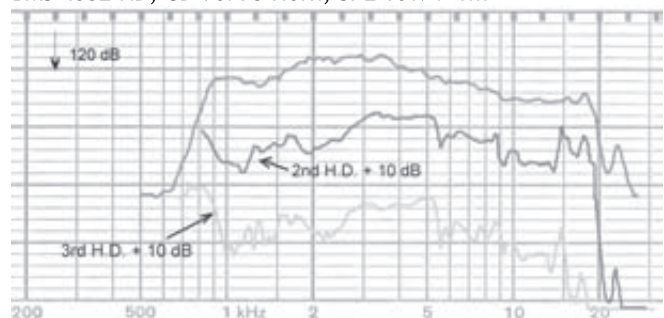
BMS 4552 ND, CD 90/75 Horn, SPL 1W / 1m



BMS 4552 ND, CD 90/75 Horn, SPL 1W / 1m



BMS 4552 ND, CD 90/75 Horn, SPL 10W / 1m





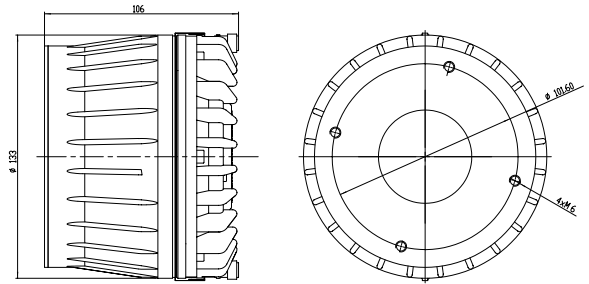
**Features:**

- 2" Middle Range Driver
- Unique patented Design
- 118 dB sensitivity 1 W / 1 m
- 300 Hz Crossover
- 90 mm Voice Coil
- 8 or 16 Ohm

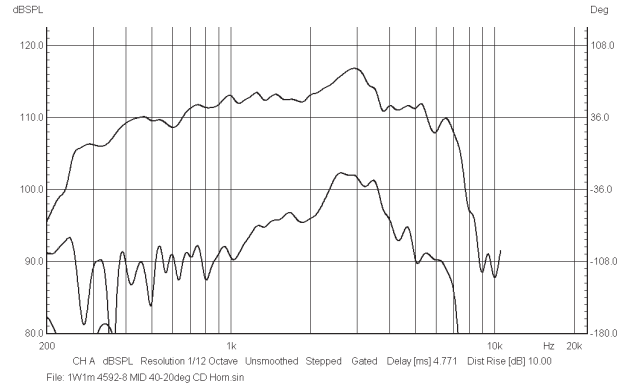
The BMS exclusive voice coil technology employs a light weight Copper Clad Aluminium wire wound inside and outside of the Kapton™ former to improve the heat dissipation, dramatically increasing the acoustic output and reliability of the driver while minimising the power compression.

## SPECIFICATIONS

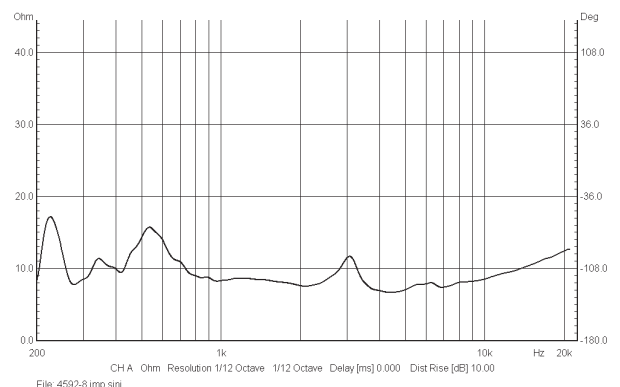
Throat diameter	2" (50.8 mm)
Nominal impedance	8 or 16 Ohm
Power capacity (AES)	150 W above 400 Hz
Peak Power	1000 W peak above 500 Hz
max. SPL (cont.)	136 db at 150 W
Sensivity (1W/1m)	118 dB on 2242 Horn
Frequency range	200-9000 Hz
Recommend crossover	300 Hz
Min. impedance modulus	8.3 Ohm at 5 kHz
Voice coil diameter	3.5" (90 mm)
Magnet Material	Neodymium
Flux density	1.95
Efficiency	35% (300-5000 Hz)
Voice coil material	Copper Clad Aluminium
Voice coil former	Kapton™
Diaphragm material	Polyester



BMS 4592ND-mid-8, 40°x20° CD horn, 1W / 1m



BMS4592ND- mid-8, Impedance, 40°x20° CD horn



MOUNTING INFORMATION	
Overall Diameter	133 mm
Depth	106 mm
Weight	2.4 kg
4x M6 holes, 90° on 101.6 mm, 4" diameter	



# 4594ND-mid

1.4" Mid Range Neodymium Compression Driver

# 1.4" Neo Compression Drivers

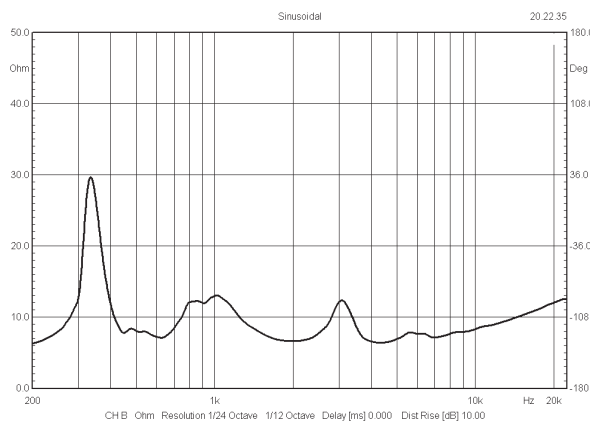
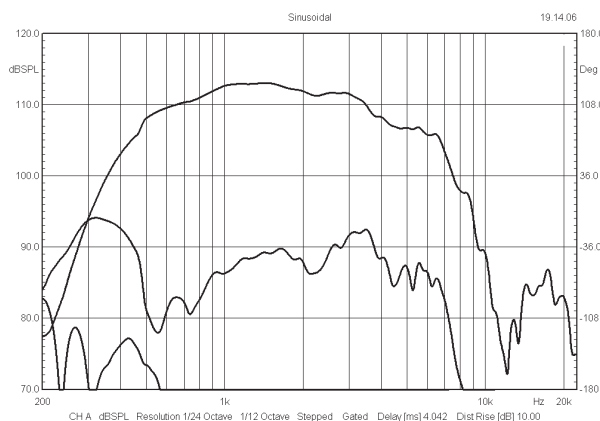


### Features:

- 1.4" Middle range driver
- Unique patented design
- 118 dB sensitivity 1 W / 1 m
- 300 Hz crossover
- 90 mm voice coil
- 8 or 16 Ohm

BMS 4594ND-mid is a powerful 1.4" professional compression driver that delivers outstanding sonic quality in a small package. The BMS exclusive voice coil technology employs a light weight Copper Clad Aluminium wire wound inside and outside of the Kapton™ former to improve the heat dissipation, dramatically increasing the acoustic output and reliability of the driver while minimising the power compression.

The BMS annular diaphragm covers the frequency range between 300 and 7.000 Hz with a smooth, linear response. The large diaphragm excursion of max. +/-0.8 mm results in high output and increased power handling up to 1.300 W peak.



## SPECIFICATIONS

Throat diameter:	1.4" (36 mm)
Nominal impedance:	8 or 16 Ohm
Power capacity (AES):	150 W AES above 400 Hz
Peak power:	1000 W peak above 500 Hz
Sensitivity 1 W / 1 m:	118 dB on 40° x 20° Horn
Frequency range:	300 - 7000 Hz
Recommended crossover:	300 Hz
Voice coil diameter:	3.5" (90 mm)
Magnet Material:	Neodymium
Flux Density (Tesla):	1.95
Efficiency:	35 % (300 - 5000 Hz)
Voice Coil Material:	Copper Clad Aluminum
	(2 Layers in- and outside of the VC)
Voice Coil Former:	Kapton™
Diaphragm Material:	Polyester
Mounting information	
Overall diameter:	mm 133 (+/- 0.3 mm)
Depth:	mm 74
Net weight:	kg 2
4x M6 holes, 90° on 101.6 mm, 4" diameter	

Neodymium Compression Drivers

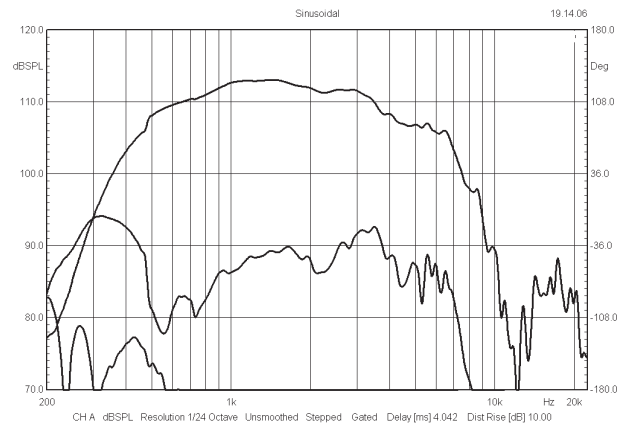


**Features:**

- 1.5" Middle range driver
- Unique patented design
- 118 dB sensitivity 1 W / 1 m
- 300 Hz crossover
- 90 mm voice coil
- 8 or 16 Ohm

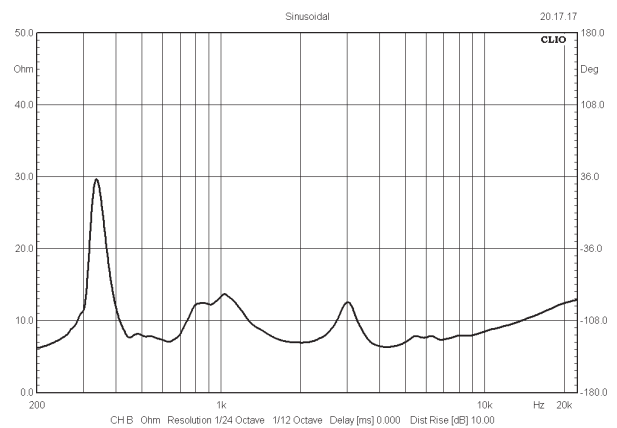
BMS 4595ND-mid is a powerful 1.5" professional compression driver that delivers outstanding sonic quality in a small package. The BMS exclusive voice coil technology employs a light weight Copper Clad Aluminium wire wound inside and outside of the Kapton™ former to improve the heat dissipation, dramatically increasing the acoustic output and reliability of the driver while minimising the power compression.

The BMS annular diaphragm covers the frequency range between 300 and 7.000 Hz with a smooth, linear response. The large diaphragm excursion of max. +/-0.8 mm results in high output and increased power handling up to 1.300 W peak.



## SPECIFICATIONS

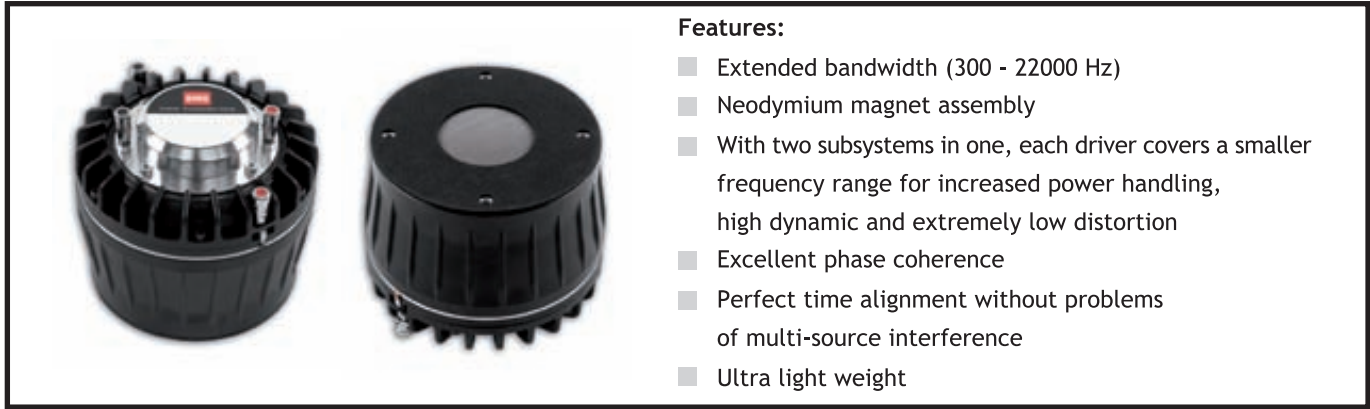
Throat diameter:	1.5" (38 mm)	
Nominal impedance:	8 or 16 Ohm	
Power capacity (AES):	150 W AES above 400 Hz	
Peak power:	1000 W peak above 500 Hz	
Sensitivity 1 W / 1 m:	118 dB on 40° x 20° Horn	
Frequency range:	300 - 7000 Hz	
Recommended crossover:	300 Hz	
Voice coil diameter:	3.5" (90 mm)	
Magnet Material:	Neodymium	
Flux Density (Tesla):	1.95	
Efficiency:	35 % (300 - 5000 Hz)	
Voice Coil Material:	Copper Clad Aluminum	
	(2 Layers in- and outside of the VC)	
Voice Coil Former:	Kapton™	
Diaphragm Material:	Polyester	
Mounting information		
Overall diameter:	mm	133 (+/- 0.3 mm)
Depth:	mm	74
Net weight:	kg	2
4x M6 holes, 90° on 101.6 mm, 4" diameter		



# 4592ND

2" Coaxial Neodymium Compression Driver

# 2" Coax Neo Compression Drivers



### Features:

- Extended bandwidth (300 - 22000 Hz)
- Neodymium magnet assembly
- With two subsystems in one, each driver covers a smaller frequency range for increased power handling, high dynamic and extremely low distortion
- Excellent phase coherence
- Perfect time alignment without problems of multi-source interference
- Ultra light weight

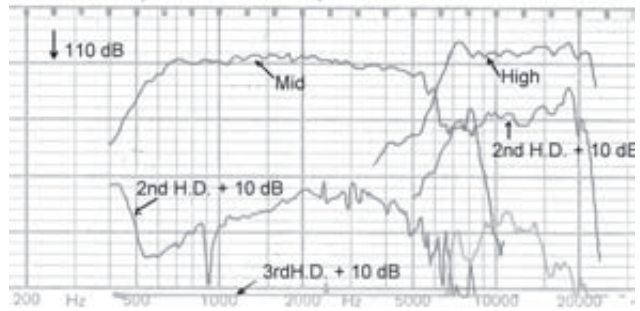
The patented design of the BMS 4592 is a result of extensive dedicated research and development providing dramatic improvement in dynamic response, clarity and transparency. The BMS annular midrange diaphragm covers the frequency range between 300 and 7000 Hz with a smooth, linear response. The large diaphragm excursion of max. + / - 0,8 mm results in high output and increased power handling up to 1300 W peak. The ultra light annular diaphragm for the high range offers exceptional transient response with very high efficiency from 6 to 22 kHz.

The unique voice coil technology employs a light weight Copper Clad Aluminum wire wound inside and outside of the Kapton™ former to improve the heat dissipation, dramatically increasing the acoustic output and reliability of the driver while minimises the power compression. The use of high grade neodymium magnets provide improved performance while significantly reducing transducer weight.

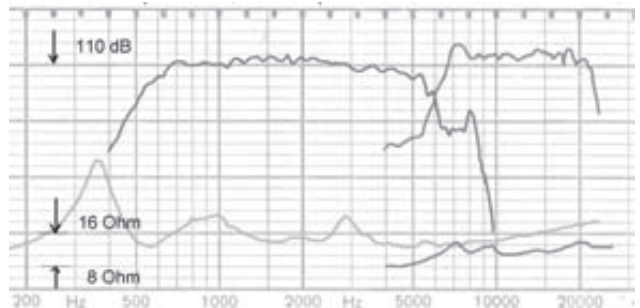
## SPECIFICATIONS

Throat diameter	2" (50.8 mm)
Nominal impedance	8 or 16 Ohm
Power capacity	
Middle range (AES)	150 W above 400 Hz
peak	1000 W peak above 500 Hz
High range (AES)	80 W
peak	320 W
Sensitivity 1W/1m	118dB on 2242 Horn
Frequency range (Hz)	300 - 22000
Recommended crossover	300 Hz
Middle frequency range	300 - 7000 Hz
High frequency range	6000 - 22000 Hz
Middle/High crossover	6300 Hz
Voice coil high-range	1.75" (44.4 mm)
Voice coil mid-range	3.5" (90 mm)
Magnet material	Neodymium
Flux density (Tesla)	1.95 (mid), 2.0 (high)
Efficiency	35% (300 - 5000 Hz)
Voice coil material	Copper Clad Aluminum
	(2 layers inside and outside of the VC)
Voice coil former	Kapton™
Diaphragm material	Polyester
<b>Mounting information</b>	
Overall Diameter	132 mm (+/- 3 mm)
Depth	113 mm
Net weight	2.3 kg
4x M6 holes, 90° on 101.6 mm, 4" diameter	

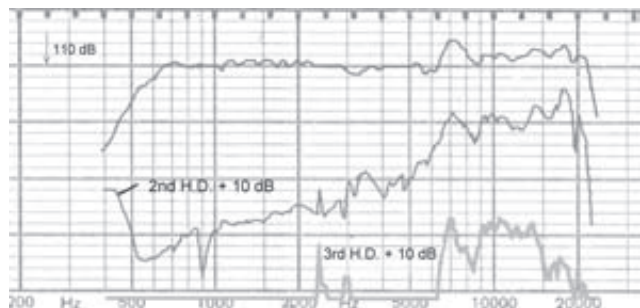
BMS4592ND, 90°x60° Horn, 1W/1m, 4V RMS



BMS4592ND, 90°x60° Horn, 1W/1m, 4V RMS



BMS4592ND, including passive crossover, SPL 1W / 1m





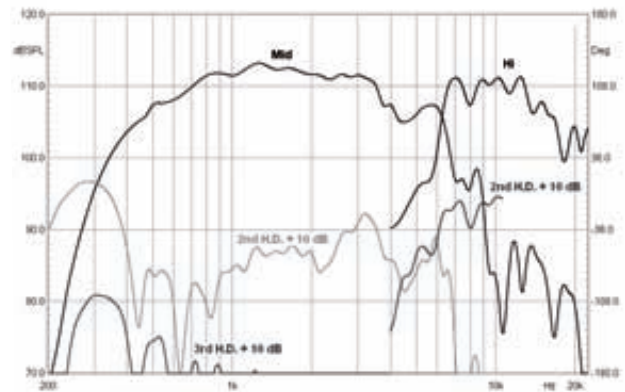
**Features:**

- Extended Bandwidth (300 - 22000 Hz)
- Neodymium Magnet Assembly
- With two Subsystems in one, each Driver covers a smaller
- Frequency Range for increased Power Handling, high Dynamic and extremely low Distortion
- Excellent Phase Coherence
- Perfect Time Alignment without Problems of Multi-Source Interference
- Ultra light Weight and small Size

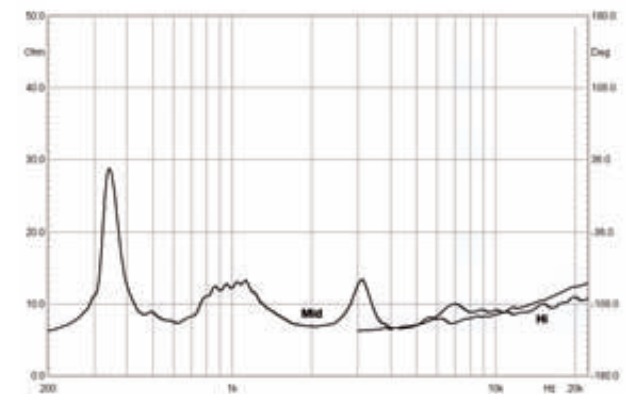
## SPECIFICATIONS

Throat diameter	1.4" (36 mm)
Nominal impedance	8 or 16 Ohm
Power capacity	
Middle Range (AES)	150 W AES above 400 Hz
Peak	1000 W peak above 500 Hz
High Range (AES)	80 W
Peak	320 W
Sensitivity 1 W / 1 m	118 dB on 40° x 20° Horn
Frequency Range	300 - 22000 Hz
Recommended Crossover	300 Hz
Middle Frequency Range	300 - 7000 Hz
High Frequency Range	6000 - 22000 Hz
Middle /High Crossover	6300 Hz
Voice Coil High-Range	1.75" (44.4 mm)
Voice Coil Mid-Range	3.5" (90 mm)
Magnet Material	Neodymium
Flux Density (Tesla) middle	1.95
Flux Density (Tesla) high	2
Efficiency	35 % (300 - 5000 Hz)
Voice Coil Material	Copper Clad Aluminum
	(2 Layers in- and outside of the VC)
Voice Coil Former	Kapton TM
Diaphragm Material	Polyester

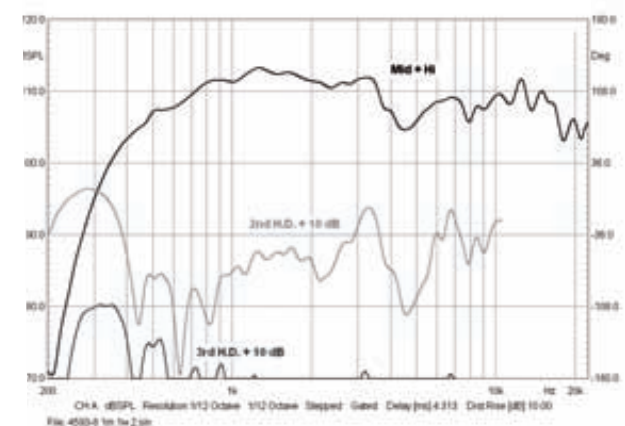
BMS-4593-8, 60° x 40° Horn, 2nd + 3rd harmonic distortion raised 10 dB, SPL 1 W / 1 m



BMS-4593-8 Impedance



BMS-4593-8, incl. passive crossover, 2nd + 3rd harmonic distortion raised 10 dB, SPL 1 W / 1 m



# 4594ND

1.4" Coaxial Neodymium Compression Driver

# 1.4" Coax Neo Compression Drivers



**Features:**

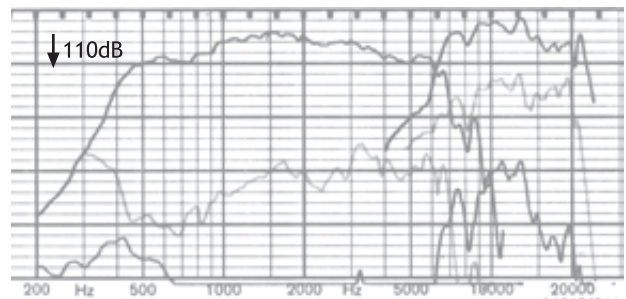
- Extended bandwidth (300 - 22000Hz)
- Neodymium magnet assembly
- With two subsystems in one, each driver covers a smaller frequency range for increased power handling, high dynamic and extremely low distortion
- Excellent phase coherence
- Perfect time alignment without problems of multi-source interference
- Ultra lightweight and small size

In a conventional full range compression driver the phase plug must be located extremely close to the diaphragm, excursion of the diaphragm is limited and middle frequency performance is compromised. A typical large diaphragm dome compression driver has a limited high frequency response. Over 8 kHz the dome diaphragm breaks up causing resonance and harsh, metallic sound.

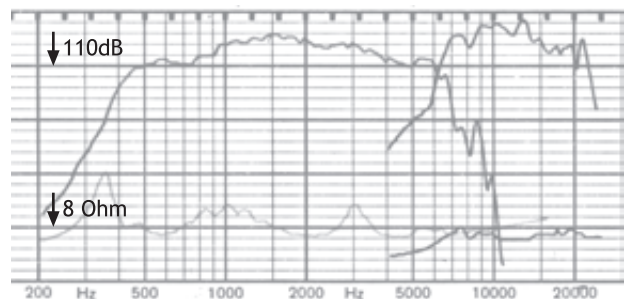
The patented design of the BMS 4594 is a result of extensive dedicated research and development providing dramatic improvement in dynamic response, clarity and transparency. The BMS annular midrange diaphragm covers the frequency range between 300 and 7.000 Hz with a smooth, linear response. The large diaphragm excursion of max. +/-0,8 mm results in high output and increased power handling up to 1.300 W peak.

## SPECIFICATIONS

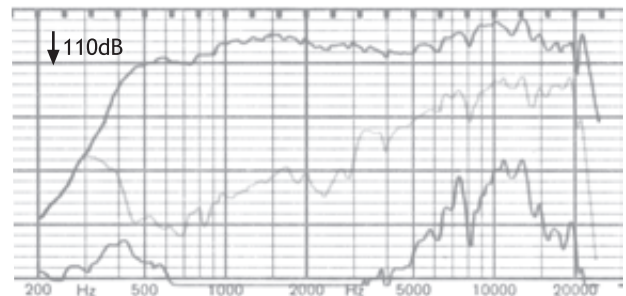
Throat diameter	1.4" (36 mm)
Nominal impedance	8 or 16 Ohm
Power capacity	
Middle range (AES)	150 W above 400 Hz
peak	1000 W peak above 500 Hz
High range (AES)	80 W
peak	320 W
Sensitivity 1W/1m	118 dB on 40° x 20° Horn
Frequency range (Hz)	300 - 22000 Hz
Recommended crossover	300 Hz
Middle frequency range	300 - 7000 Hz
High frequency range	6000 - 22000 Hz
Middle/High crossover	6300Hz
Voice coil high-range	1.75" (44.4 mm)
Voice coil mid-range	3.5" (90 mm)
Magnet material	Neodymium
Flux density (Tesla)	1.95 (mid), 2.2 (high)
Efficiency	35% (300 - 5000 Hz)
Voice coil material	Copper Clad Aluminum
	(2Layers in- and outside of the VC)
Voice coil former	Kapton™
Diaphragm material	Polyester
<b>Mounting information</b>	
Overall Diameter	132 mm (+/- 3 mm)
Depth	94 mm
Net weight	2.3 kg
4x M6 holes, 90° on 101.6 mm, 4" diameter	

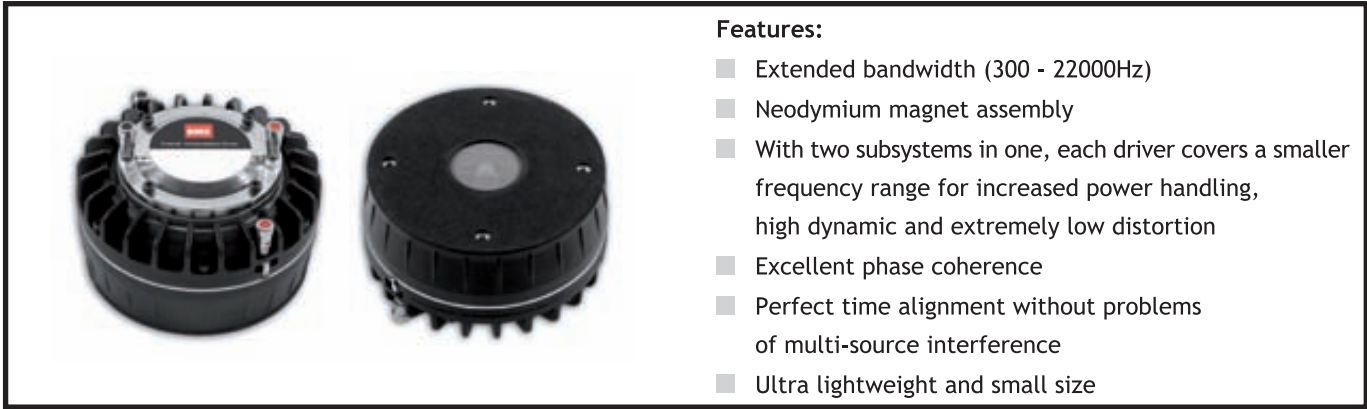


BMS 4594-8, 60° x 40° Horn, SPL 1W / 1m



BMS 4594-8, incl. passive crossover, 2nd + 3rd harmonic distortion raised 10dB., SPL 1W / 1m





#### Features:

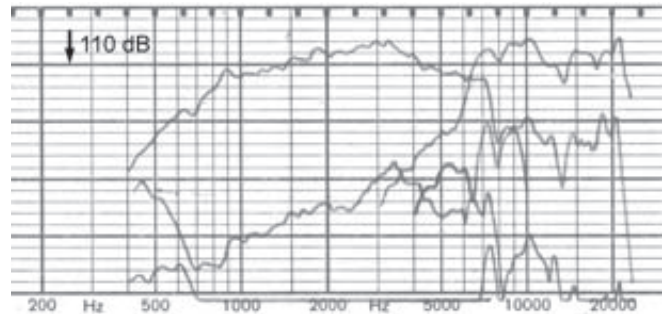
- Extended bandwidth (300 - 22000Hz)
- Neodymium magnet assembly
- With two subsystems in one, each driver covers a smaller frequency range for increased power handling, high dynamic and extremely low distortion
- Excellent phase coherence
- Perfect time alignment without problems of multi-source interference
- Ultra lightweight and small size

The 4595ND is a 1,5" coaxial compression driver delivering a real coherent single point wave front without hot spots with excellent phase coherence and perfect time alignment. The driver is in fact a 2-way system employing two concentric annular ring diaphragms. Each driver covers a smaller frequency range for increased power handling, high dynamic and extremely low distortion.

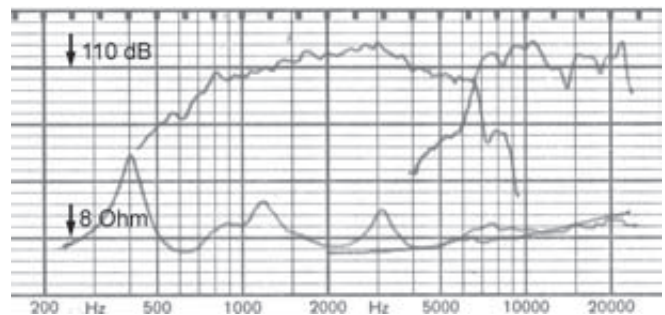
The larger of the two reproduces middle frequency from 300 Hz upward, crossing over 6,3 kHz to the HF transducer which is capable of reaching 22 kHz. Large diaphragm excursion of max. + / - 0,8 mm results in high output and increased power handling up to 1300 W peak.

The voice coils may be driven in conjunction with a passive crossover or driven individually from an active crossover. The outer casting features extensive heatsinking ensuring high power handling and low compression.

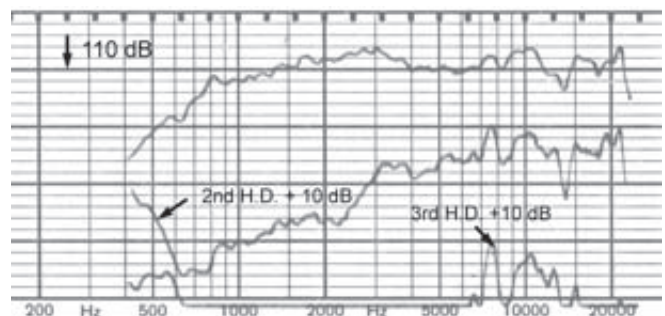
BMS 4595-8, 60° conical, 2nd + 3rd harmonic distortion raised 10dB., SPL 1W / 1m



BMS 4595-8, 60° conical, SPL 1W / 1m



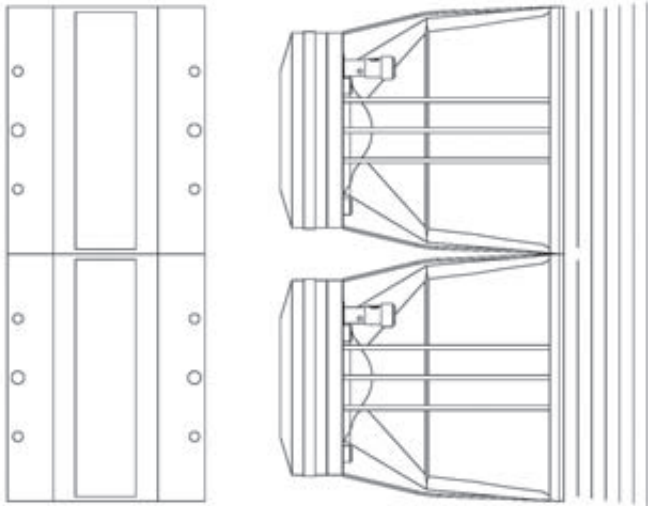
BMS 4595-8, incl. passive crossover, 2nd + 3rd harmonic distortion raised 10dB., SPL 1W / 1m



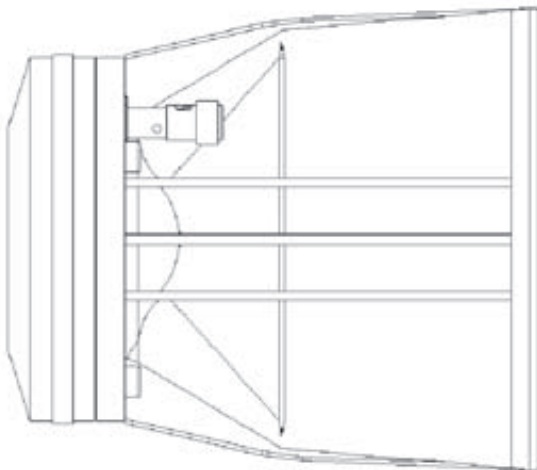
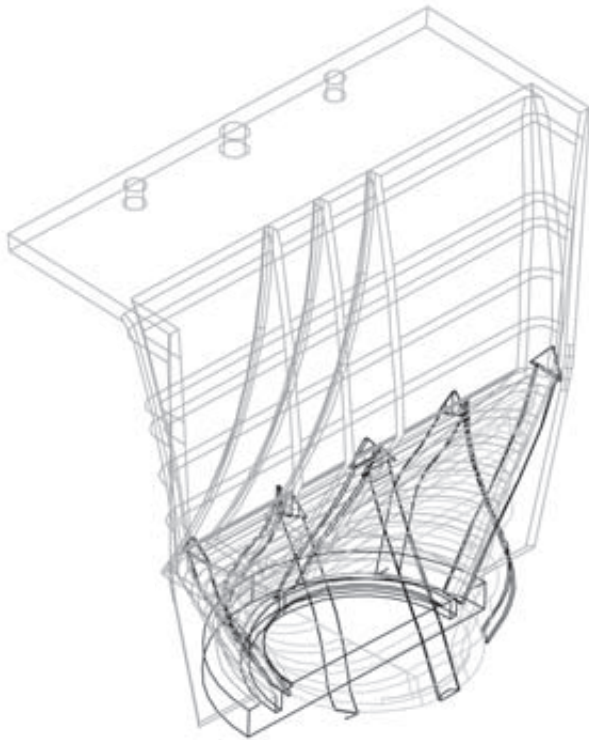
## SPECIFICATIONS

Throat diameter	1.5" (38 mm)
Nominal impedance	8 or 16 Ohm
Power capacity	
Middle range (AES)	150 W above 400 Hz
peak	1000 W peak above 500 Hz
High range (AES)	80 W
peak	320 W
Sensitivity 1W/1m	118 dB on 40° x 20° Horn
Frequency range (Hz)	300 - 22000 Hz
Recommended crossover	300 Hz
Middle frequency range	300 - 7000 Hz
High frequency range	6000 - 22000 Hz
Middle/High crossover	6300Hz
Voice coil high-range	1.75" (44.4 mm)
Voice coil mid-range	3.5" (90 mm)
Magnet material	Neodymium
Flux density (Tesla)	1.95 (mid), 2.2 (high)
Efficiency	35% (300 - 5000 Hz)
Voice coil material	Copper Clad Aluminum
	(2Layers in- and outside of the VC)
Voice coil former	Kapton™
Diaphragm material	Polyester
<b>Mounting information</b>	
Overall Diameter	132 mm (+/- 3 mm)
Depth	94 mm
Net weight	2.3 kg
	4x M6 holes, 90° on 101.6 mm, 4" diameter

## Introduction



Unique BMS 4" Neodymium Planar Wave Driver



The BMS 4510ND Planar wave driver radiates a coherent planar wave front from a rectangular piston without internal diffraction for superior dispersion control and high fidelity sound. This distinctive transducer was engineered to work with 4-inch (4"x1") rectangular throat waveguides providing extremely high sensitivity.

The 4510ND is optimised for 10° vertical dispersion and allows a horizontal coverage from 60° to 120° depending on the waveguide used.

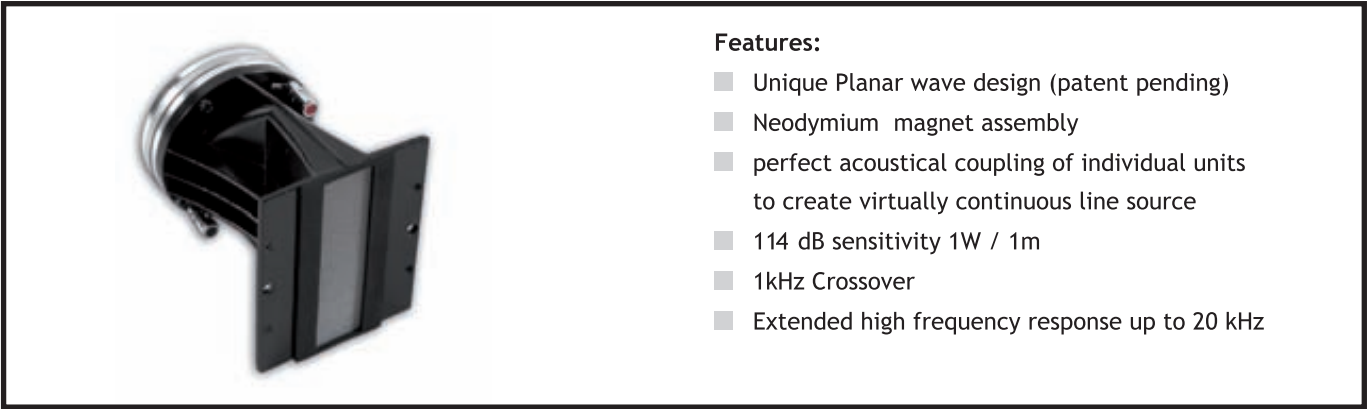
The unique design of the 4510ND planar wave driver allows perfect acoustical coupling of individual units to create virtually continuous line source. The driver contains a high energy neodymium magnet system and a unique annular ring diaphragm. The ring diaphragm works similar as a wound 140 mm long ribbon diaphragm providing linear frequency response up to 20kHz. The unique planar wave phase plug provide a coherent planar wave front without internal diffraction.

### History

All kinds of 1", 2" or 1.5" compression drivers are designed to produce a spherical wave front coming out from a circular throat. The very first waveguides were round and it was reasonable to make compression drivers with round throat to produce a spherical wave front. It has not been changed until today. Usually this works well together with conical wave guides to create a spherical wave front. The requirements of speaker systems today have enormously increased. Precise directivity of different horizontal and vertical angles are needed. Horizontal coverage of 90° by 40° vertical or more extreme 90° /120° by 10° for line arrays.

Engineers are using different horn design techniques such as pipes with an integrated vertical slot to reshape the compression driver's spherical wave front into planar wavefront. Such long, small aperture waveguides increase distortion causing a typical resonant CD horn sound.

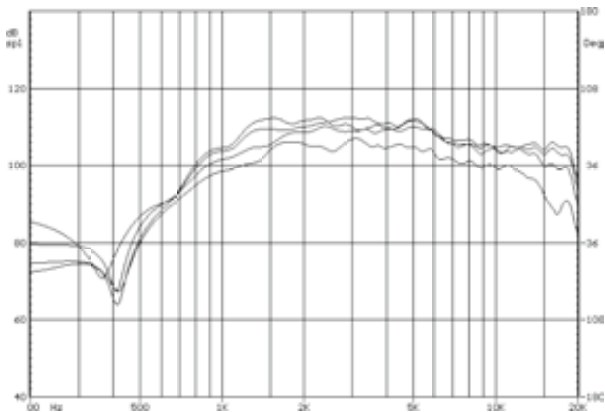




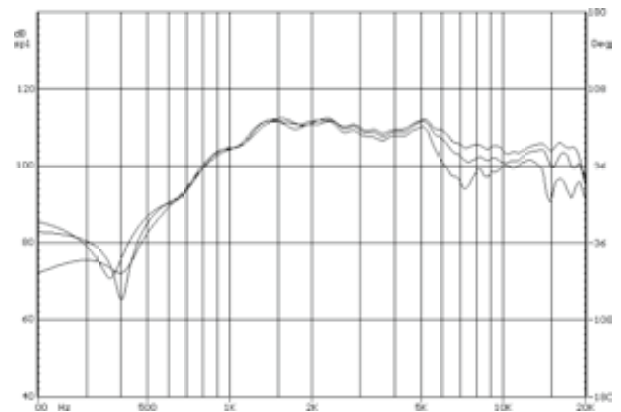
#### Features:

- Unique Planar wave design (patent pending)
- Neodymium magnet assembly
- perfect acoustical coupling of individual units to create virtually continuous line source
- 114 dB sensitivity 1W / 1m
- 1kHz Crossover
- Extended high frequency response up to 20 kHz

BMS 4510ND on small 90°x10° horn, Horizontal 0°, 15°, 30°, 45°



BMS 4510ND on small 90°x10° horn, Vertical 0°, 5°, 10°.



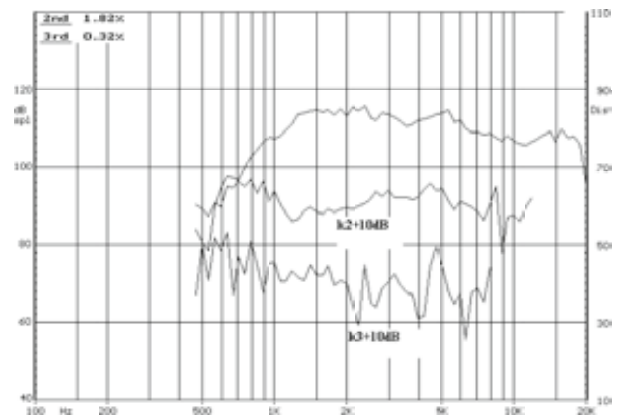
## SPECIFICATIONS

Throat diameter	4"x1" (101.6 x 25.4 mm)
	rectangular piston
Nominal impedance	8 or 16 Ohm
Power capacity (AES)	80 W
Peak Power	450 W
Sensitivity in:	
CD Horn 120°x10°	114dB 1W/1m
Efficiency	25% (1000 - 3500) Hz
max. SPL (cont.)	133 dB at 80 W
Frequency range	500 - 20000 Hz
Recommended crossover	1000 Hz
Voice coil diameter	1.75" (44.4 mm)
Magnet material	Neodymium
Flux density high-range	2.2 Tesla
Voice coil materia	Copper Clad Aluminum
	(2 layers inside and outside of the VC)
Voice coil former	Kapton™
Diaphragm material	Polyester

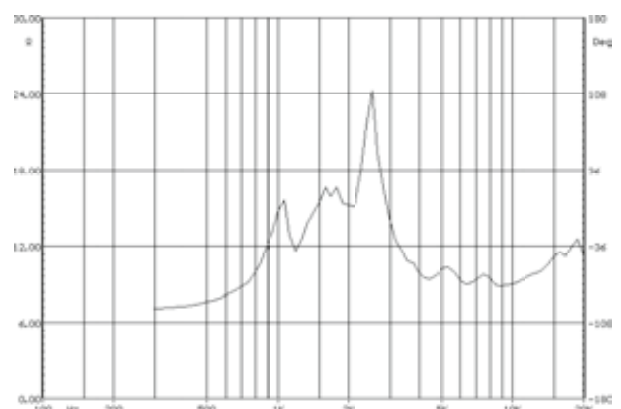
#### MOUNTING INFORMATION

Overall dimensions	107x85x122 mm
Net weight	1.3 kg
4x M5 holes, 90° on 76.2 x 50.8 mm (3" x 2")	

BMS 4510ND on small 90°x10° horn, 2nd and 3rd harmonic distortion.



BMS 4510ND on small 90°x10° horn, Impedance






# 4512ND

4" Neodymium Planar Wave Driver

# Neodymium Planar Wave Driver





**Features:**

- Unique Planar Wave Design
- Cost effective, high efficiency Neodymium magnet assembly
- Perfect acoustical coupling of individual units to create virtually continuous line source
- 112 dB sensitivity 1 W / 1 m
- 1 kHz Crossover
- Extended high frequency response up to 20 kHz
- 8 or 16 Ohm

The BMS 4512ND Planar wave driver radiates a coherent planar wave front from a rectangular piston without internal diffraction for superior dispersion control and high fidelity sound. This distinctive new transducer was engineered to work with 4-inch (4" x 1") rectangular throat waveguides providing extremely high sensitivity.

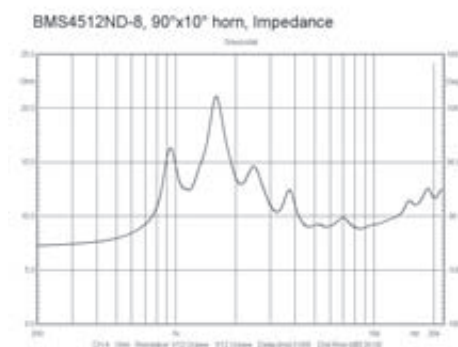
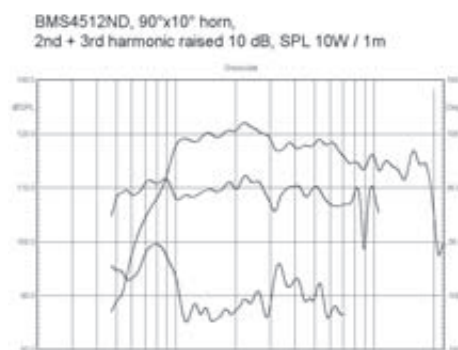
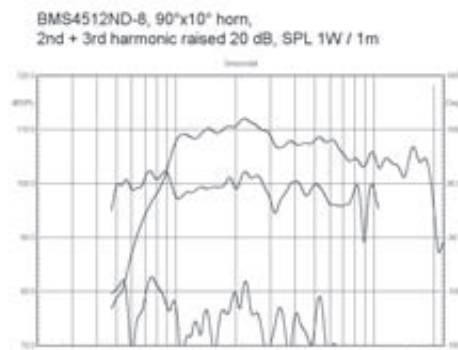
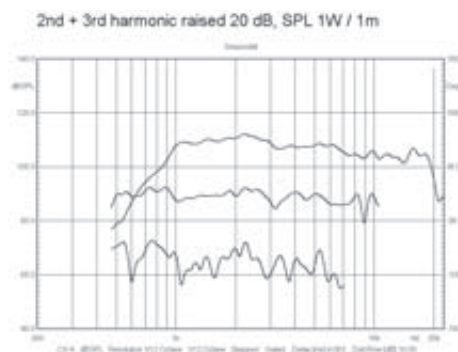
The 4512ND is optimised for 10° vertical dispersion and allows a horizontal coverage from 60° to 120° depending on the waveguide used. The unique design of the 4512ND planar wave driver allows perfect acoustical coupling of individual units to create virtually continuous line source.

The BMS annular diaphragm together with the cost effective, high efficiency Neodymium magnet assembly offers an economical solution for high performance line arrays.

The ring diaphragm works similar as a wound 140 mm long ribbon diaphragm providing linear frequency response up to 20 kHz. The unique planar wave phase plug provides a coherent planar wave front without internal diffraction.

## SPECIFICATIONS

Throat diameter:	4" x 1" (101.6 x 25.4 mm)
	rectangular piston
Nominal impedance:	8 or 16 Ohm
Power capacity (AES):	80 W
Peak Power:	450 W
Sensitivity:	
CD Horn 120° x 10°:	112 dB 1 W / 1 m
Efficiency:	25%
max. SPL (cont.):	133 dB at 80 W
Frequency range:	500 - 20000 Hz
Voice Coil Diameter:	1.75" (44.4 mm)
Magnet Material:	Neodymium
Flux Density (Tesla)	1.85
Voice Coil Material:	Copper Clad Aluminum
	(2 layers inside and outside of the VC)
Voice Coil Former:	Kapton TM
Diaphragm Material:	Polyester
<b>Mounting information</b>	
Overall dimensions	107 x 85 x 122 mm
Net weight	kg 0.98
4 x M5 holes, 90° on 76.2 x 50.8 mm, (3" x 2")	



Neodymium Compression Drivers

**2193**

1" Horn

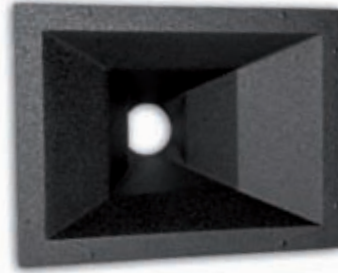


**SPECIFICATIONS**

Material:	Fiberglass
Nominal coverage (HxV):	90° x 40°
Cut off frequency:	1400Hz
Throat diameter:	1" (25.4 mm)
<b>Overall dimensions:</b>	
Width:	216 mm
Height:	112 mm
Depth:	70 mm
<b>Baffle cut out:</b>	
Width:	184 mm
Height:	94 mm

**2230**

2" Horn

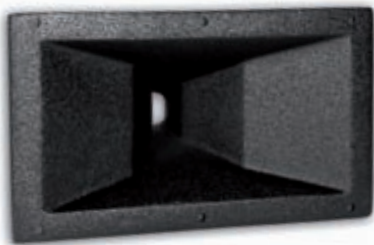


**SPECIFICATIONS**

Material:	Fiberglass
Nominal coverage (HxV):	90° x 55°
Cut off frequency:	700Hz
Throat diameter:	2" (50.8 mm)
<b>Overall dimensions:</b>	
Width:	319 mm
Height:	229 mm
Depth:	120 mm
<b>Baffle cut out:</b>	
Width:	240 mm
Height:	195 mm

**2119**

1" Horn

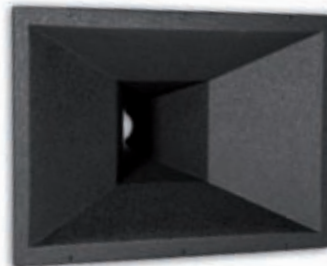


**SPECIFICATIONS**

Material:	Fiberglass
Nominal coverage (HxV):	90° x 40°
Cut off frequency:	900Hz
Throat diameter:	1" (25.4 mm)
<b>Overall dimensions:</b>	
Width:	300 mm
Height:	170 mm
Depth:	119 mm
<b>Baffle cut out:</b>	
Width:	256 mm
Height:	130 mm

**2236**

2" Horn



**SPECIFICATIONS**

Material:	Fiberglass
Nominal coverage (HxV):	60° x 40°
Cut off frequency:	400Hz
Throat diameter:	2" (50.8 mm)
<b>Overall dimensions:</b>	
Width:	498 mm
Height:	348 mm
Depth:	265 mm
<b>Baffle cut out:</b>	
Width:	450 mm
Height:	305 mm



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