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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 compression driver 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 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 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.

Optimized magnet structure:

The triple demodulation Aluminum rings placed near the voice coil not only minimize 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 minimizing 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 Ferrite 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 optimized 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.

# 5N160

Neodymium ultra low distortion low midrange driver

# Neodymium Series

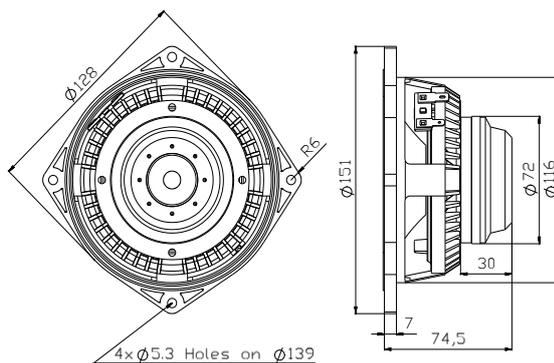


### Features:

- 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

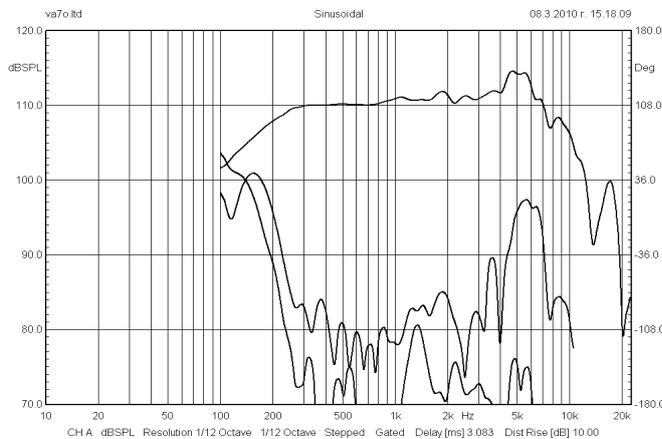
## SPECIFICATIONS

Application	Low-middle	
Nominal impedance	Ohm	8 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 (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

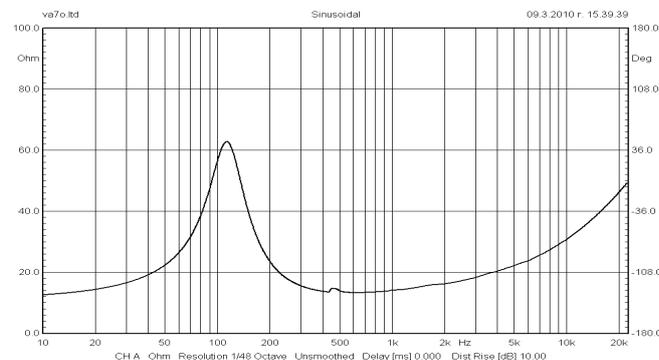


Frequency response measured 100 W (28.3 V) at 1 m in a vented enclosure of 6 liter incl. 2nd and 3rd harmonic distortion raised 10 dB.

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 / 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



Impedance - 16 Ohm driver

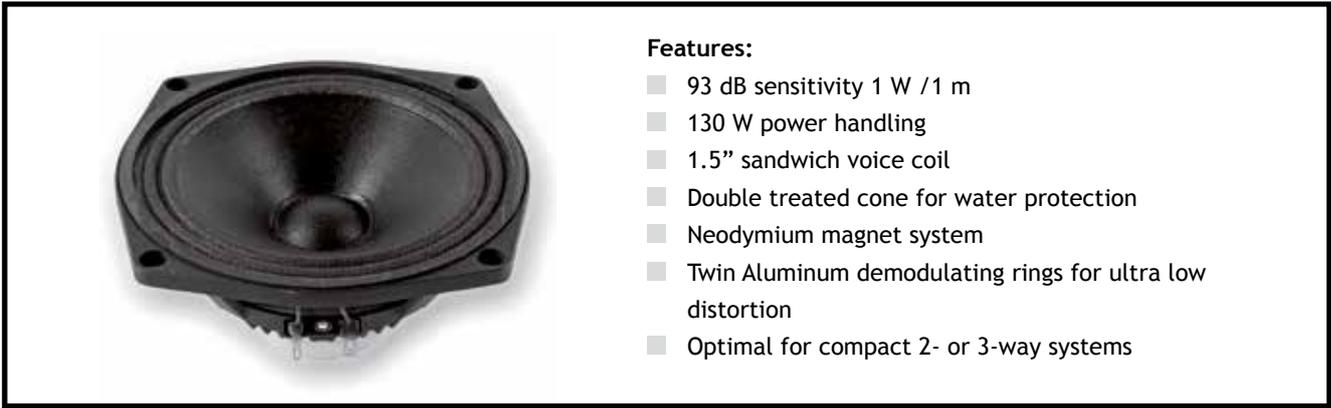


MOUNTING INFORMATION		
Overall diameter	mm	128
Mounting holes diameter	mm	4 x 5.3
Bolt circle diameter	mm	139
Baffle cut-out diameter	mm	117
Overall depth	mm	73.5
Net weight	kg	0.85

### Recommended reflex enclosure:

3.5 l / 91.5 Hz, BRD = 40 mm / 93 mm long  
 Closed enclosure 1 / 4 liter

Neodymium cone drivers

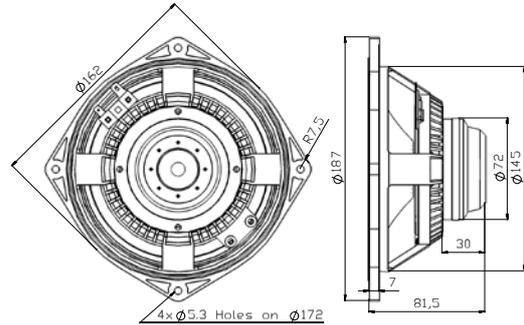


**Features:**

- 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

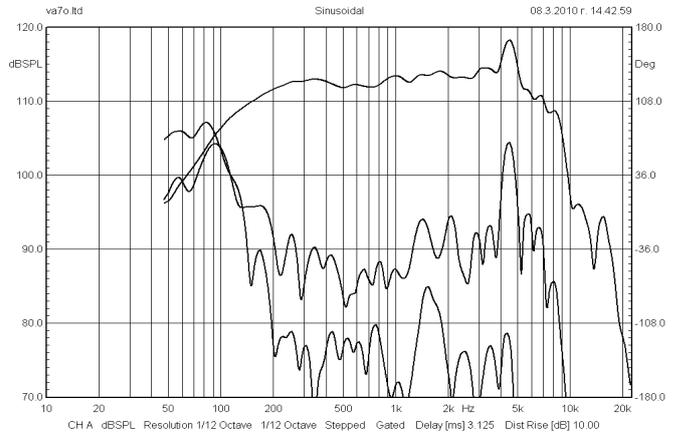
## SPECIFICATIONS

Application	Low-middle	
Nominal impedance	Ohm	8 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 (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

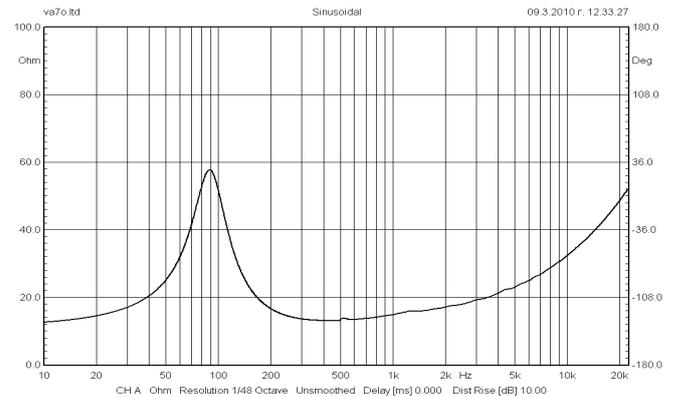


Frequency response measured 100 W (28.3 V) at 1 m in a vented enclosure of 25 liter incl. 2nd and 3rd harmonic distortion raised 10 dB.

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 / 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



**Impedance - 16 Ohm driver**



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

# 8N515

8" Neodymium ultra low distortion low midrange driver

## Neodymium Series

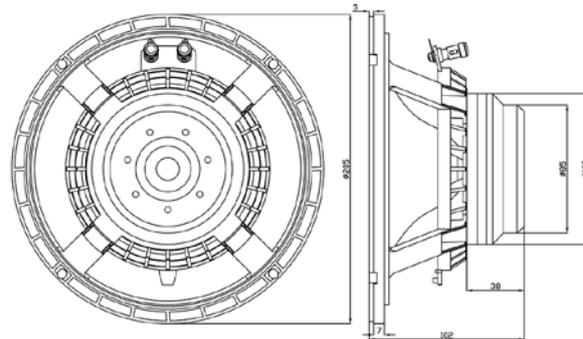


### Features:

- 96 dB sensitivity 1 W / 1 m
- 200 W power handling
- Extremely light weight of 1.98 kg
- 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- or 3-way systems
- Light weight Carbon fiber diaphragm

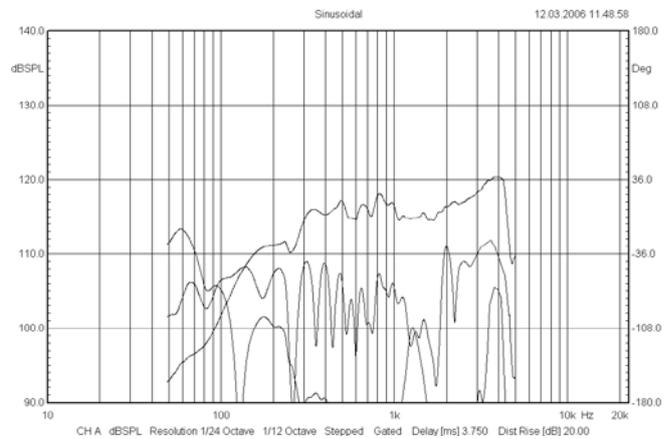
## SPECIFICATIONS

Application	Low-middle	
Nominal impedance	Ohm	8 or 16
Power handling AES noise	W	200
Sensitivity (1 W / 1 m)	dB	96
Frequency response	Hz	80 - 3000
Voice 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

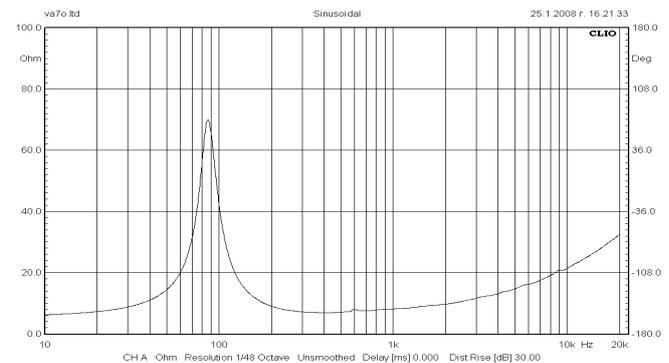


Frequency response measured 100 W (28.3 V) at 1 m in a closed enclosure of 10 liter incl. 2nd and 3rd harmonic distortion raised 20 dB.

THIELE-SMALL PARAMETERS			
Resonance frequency	Fs	Hz	87.7
DC resistance	Re	Ohm	5.4
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)



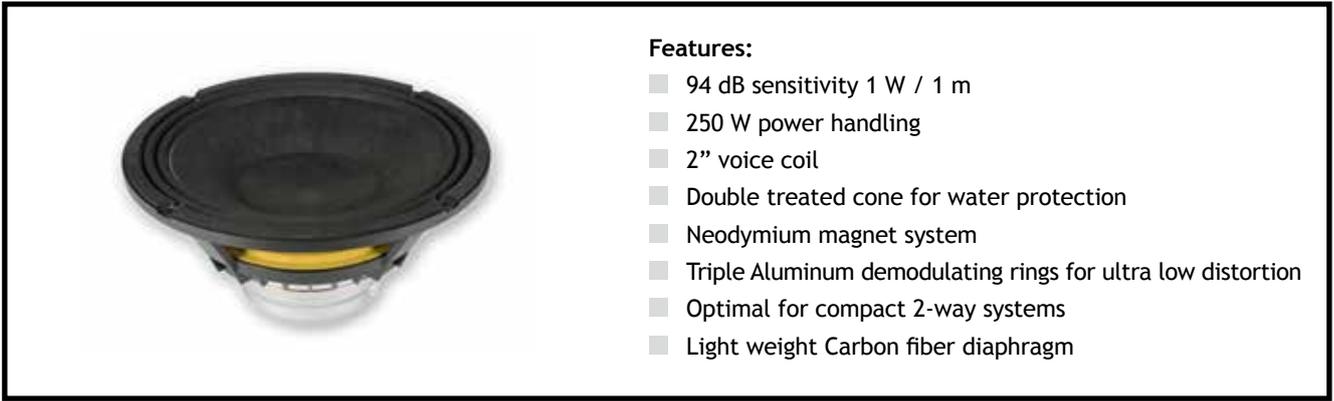
### Impedance - 8 Ohm driver



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	102
Net weight	kg	1.98

### Recommended reflex enclosure:

- 4 l / 108 Hz, BRD = 60 mm / 127 mm long
- 7 l / 82 Hz, BRD = 60 mm / 126 mm long
- 10 l / 70 Hz, BRD = 60 mm / 111 mm long

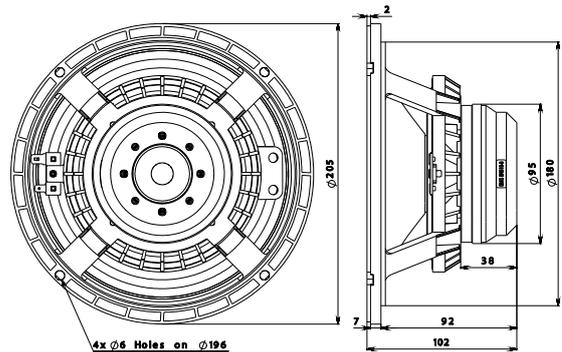


**Features:**

- 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 fiber diaphragm

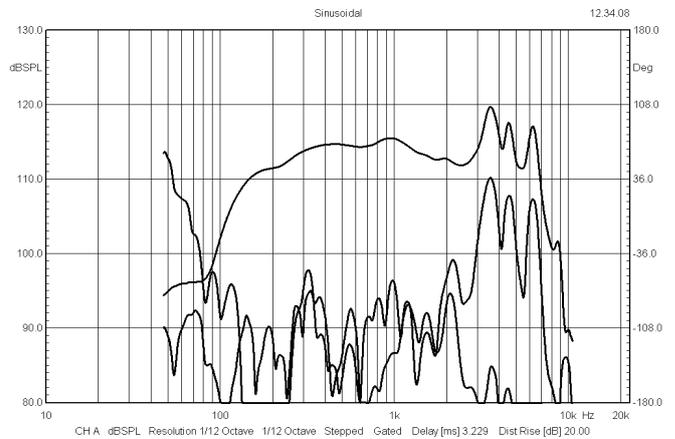
## SPECIFICATIONS

Application	Low-middle	
Nominal Impedance	Ohm	8 or 16
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

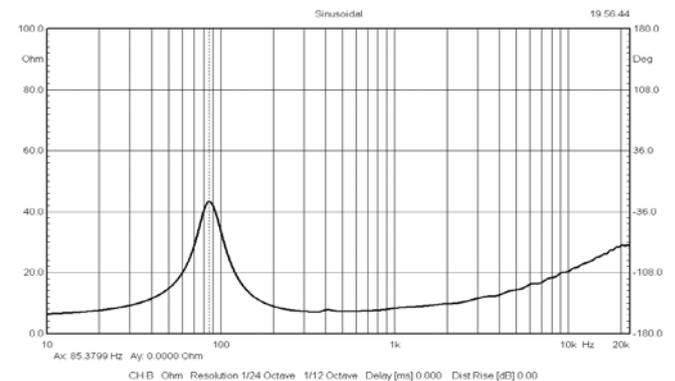


Frequency response measured 100 W (28.3 V) at 1 m in a closed enclosure of 25 liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20 dB.

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 compl.	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



Impedance - 8 Ohm driver



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:**

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

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

# 12N620

12" Neodymium ultra low distortion low midrange driver

# Neodymium Series

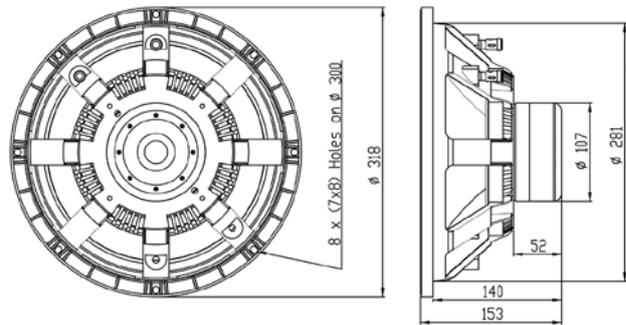


**Features:**

- 98 dB sensitivity 1 W / 1 m
- 500 W power handling
- Extremely light weight of 3.5 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 2- or 3-way system

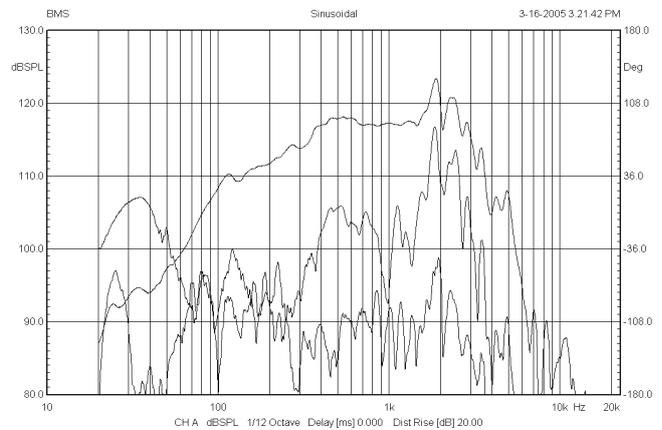
## SPECIFICATIONS

Application	Low-middle	
Nominal impedance:	Ohm	8 or 16
Power handling AES noise:	W	500
Sensitivity (1 W / 1 m):	dB	98
Frequency response:	Hz	45 - 2500
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	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	44.7
DC resistance:	Re	Ohm	5.7
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	20.6
Effective piston area:	Sd	m <sup>2</sup>	0.0531
Max. linear excursion:	Xmax	mm	± 5.5
Voice coil inductance:	Le1k	mH	0.6
	Le10k	mH	0.39

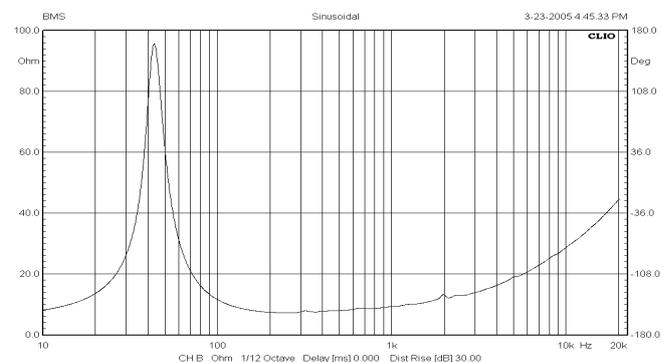


MOUNTING INFORMATION		
Overall diameter:	mm	318
Mounting holes diameter:	mm	8 x (7 x 8)
Bolt circle diameter:	mm	300
Baffle cut-out diameter:	mm	284
Overall depth:	mm	145
Net weight:	kg	3.5

### Recommended reflex enclosure:

17 l / 62 Hz, -3 dB = 75 Hz, BRD = 80 mm / 148 mm long  
 25 l / 60 Hz, -3 dB = 63 Hz, BRD = 100 mm / 177 mm long

### Impedance - 8 Ohm driver



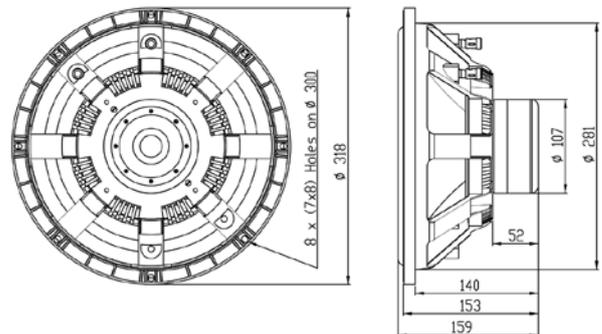


#### Features:

- 96 dB sensitivity 1 W / 1 m
- 600 W power handling
- Extremely light weight of 4.1 kg
- 3" sandwich 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 subwoofers

## SPECIFICATIONS

Application	Subwoofer	
Nominal impedance:	Ohm	4 or 8
Power handling AES noise:	W	600
Sensitivity (1 W / 1 m):	dB	96
Frequency response:	Hz	25 - 300
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	252



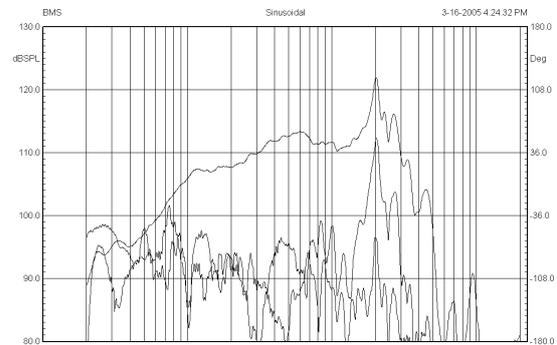
Frequency response measured 100 W (28.3 V) at 1 m in a closed enclosure of 50 liter incl. 2nd and 3rd harmonic distortion raised 20 dB.

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

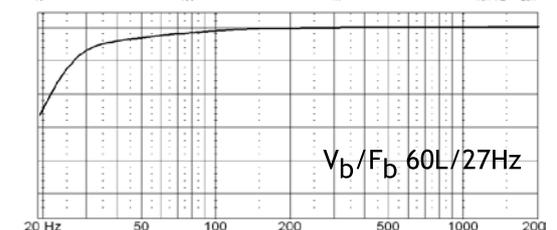
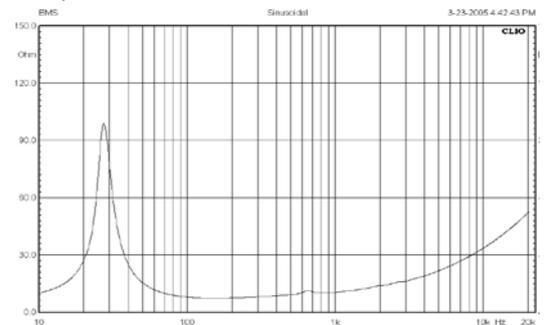
MOUNTING INFORMATION		
Overall diameter:	mm	318
Mounting holes diameter:	mm	8 x (7 x 8)
Bolt circle diameter:	mm	300
Baffle cut-out diameter:	mm	284
Overall depth:	mm	159
Net weight:	kg	4.1

#### Recommended reflex enclosure:

44 l / 31 Hz, -3 dB = 35 Hz, BRD = 120 mm / 434 mm long  
 60 l / 27 Hz, -3 dB = 32 Hz, BRD = 110 mm / 517 mm long



Impedance - 8 Ohm driver



$V_b/F_b$  60L/27Hz

## 12N810

12" Neodymium ultra low distortion low midrange driver

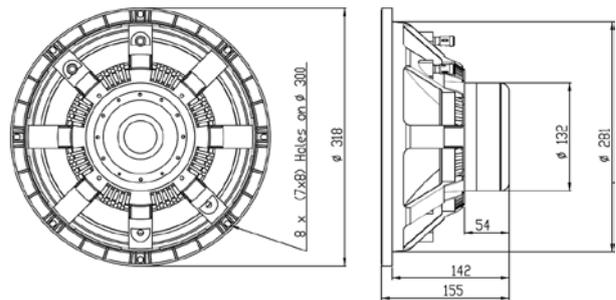


**Features:**

- 100 dB sensitivity 1 W / 1 m
- 600 W power handling
- Extremely light weight of 5.5 kg
- 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

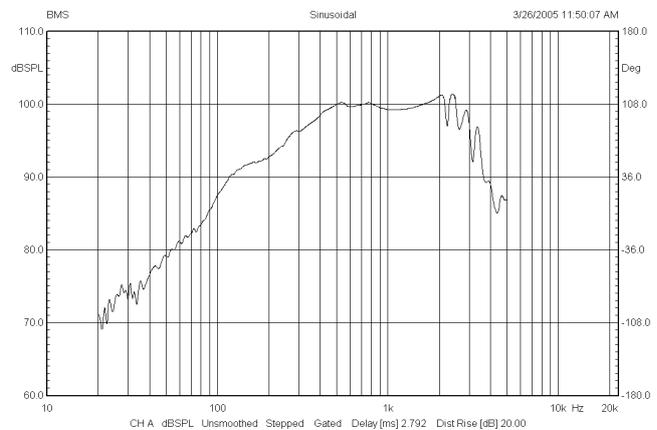
## SPECIFICATIONS

Application	Low-middle	
Nominal impedance:	Ohm	4 or 8
Power handling AES noise:	W	600
Sensitivity (1 W / 1 m):	dB	100
Frequency response:	Hz	80 - 2000
Voice 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

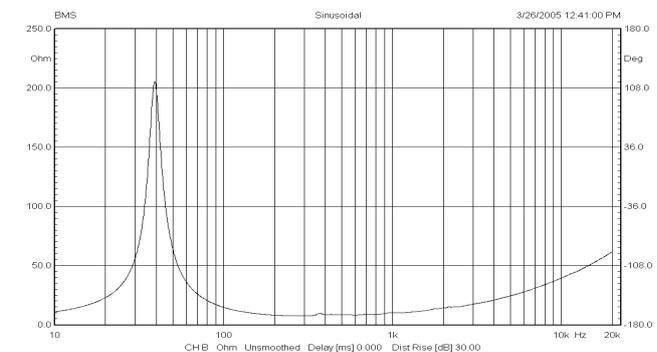


Frequency response measured 1 W (2.83 V) at 1 m in a closed enclosure of 50 liter.

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



Impedance - 8 Ohm driver

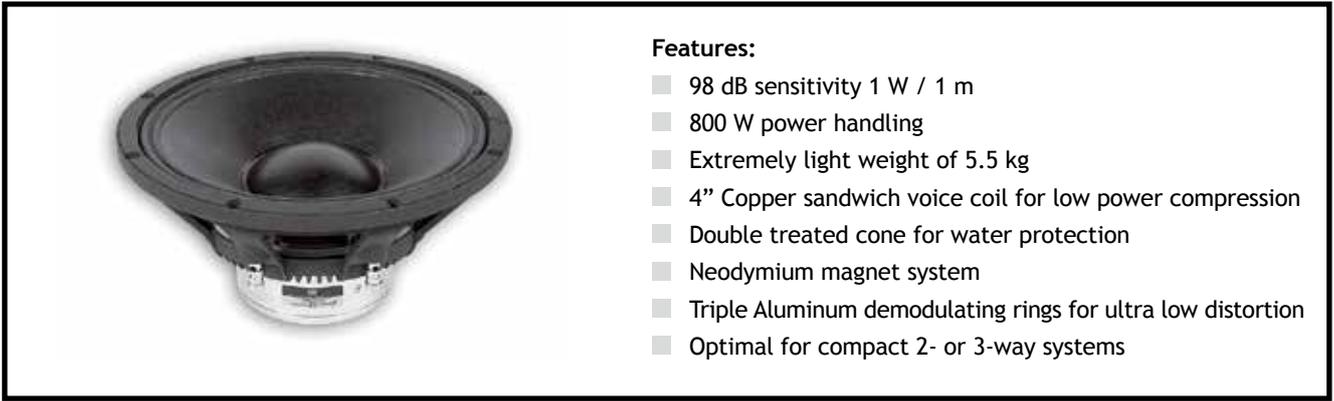


MOUNTING INFORMATION		
Overall diameter:	mm	318
Mounting holes diameter:	mm	8 x (7 x 8)
Bolt circle diameter:	mm	300
Baffle cut-out diameter:	mm	284
Overall depth:	mm	155
Net weight:	kg	5.5

### Recommended reflex enclosure:

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

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

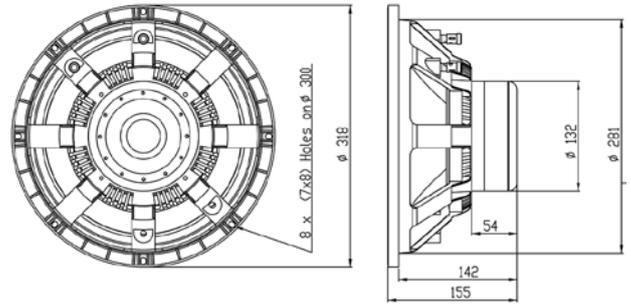


**Features:**

- 98 dB sensitivity 1 W / 1 m
- 800 W power handling
- Extremely light weight of 5.5 kg
- 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

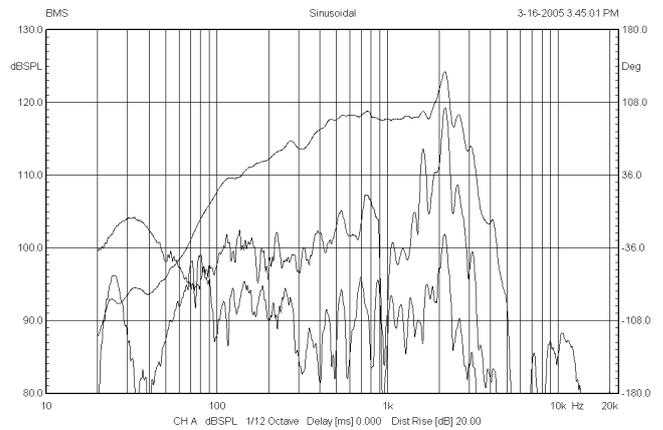
## SPECIFICATIONS

Application	Low-middle	
Nominal impedance	Ohm	4 or 8 or 16
Power handling AES noise	W	800
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

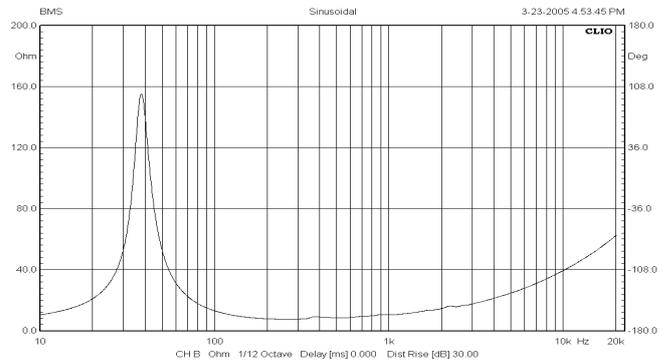


Frequency response measured 100 W (28.3V) at 1 m in a closed enclosure of 50 liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20 dB.

THIELE-SMALL PARAMETERS			
Resonance frequency	Fs	Hz	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



Impedance - 8 Ohm driver



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

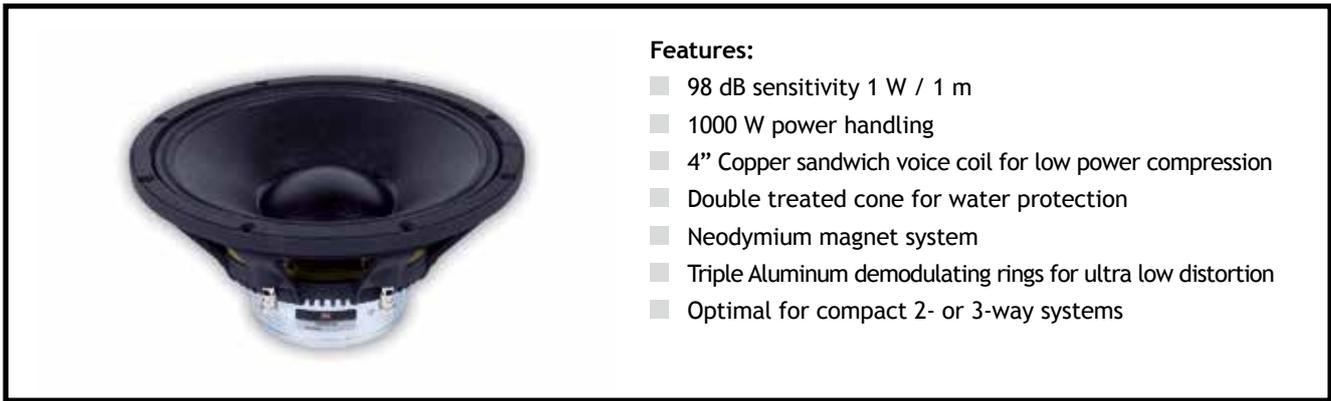
**Recommended reflex enclosure:**

8 l / 77 Hz, -3 dB = 104 Hz, BRD = 70 mm / 178 mm long

20 l / 64 Hz, -3 dB = 70 Hz, BRD = 90 mm / 155 mm long

## 12N802

12" Neodymium ultra low distortion low midrange driver

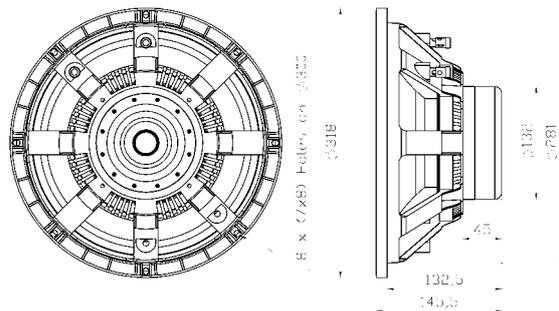


### Features:

- 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

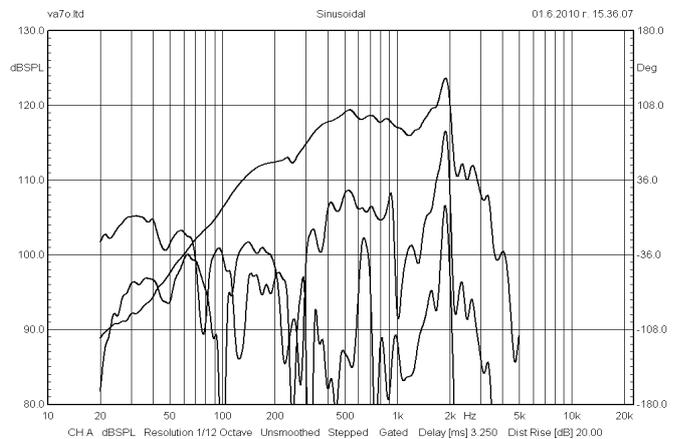
## SPECIFICATIONS

Application	Low-middle	
Nominal impedance:	Ohm	4 or 8 or 16
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

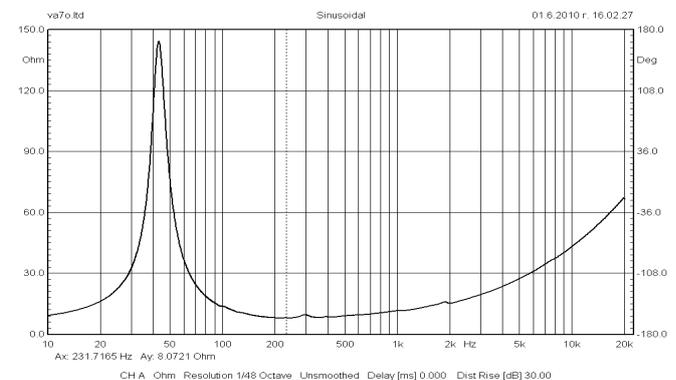


Frequency response measured 100 W (28.3V) at 1 m in a closed enclosure of 50 liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20 dB.

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 compl.:	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



### 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	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

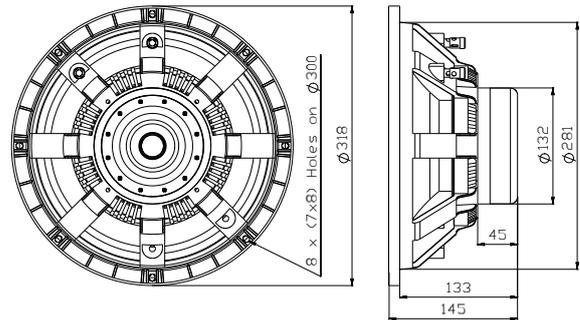


**Features:**

- 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

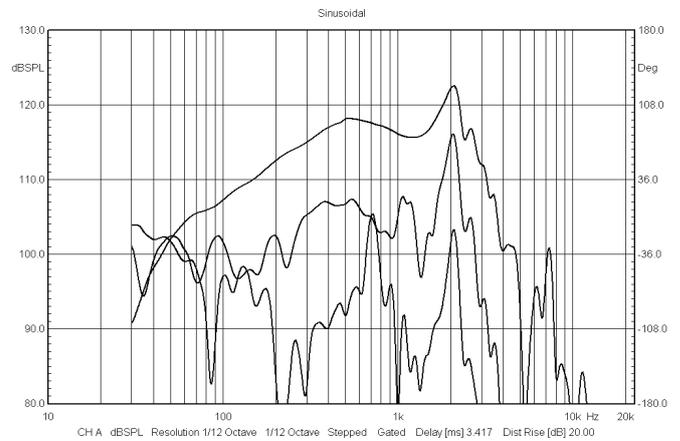
## SPECIFICATIONS

Application	Low-middle	
Nominal impedance:	Ohm	4 or 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

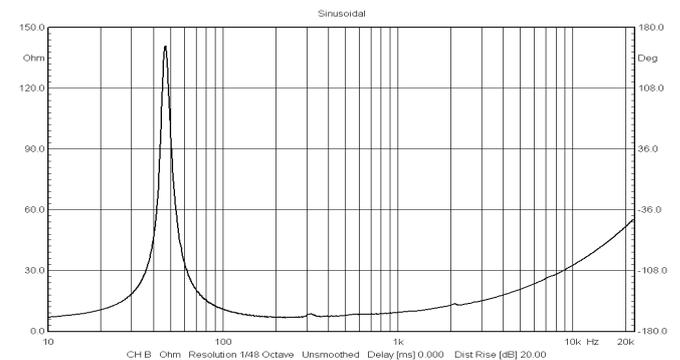


Frequency response measured 100 W (28.3V) at 1 m in a closed enclosure of 50 liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20 dB.

THIELE-SMALL PARAMETERS			
Resonance frequency:	Fs	Hz	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 compl.:	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



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	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

## 12N804

12" Neodymium ultra low distortion woofer

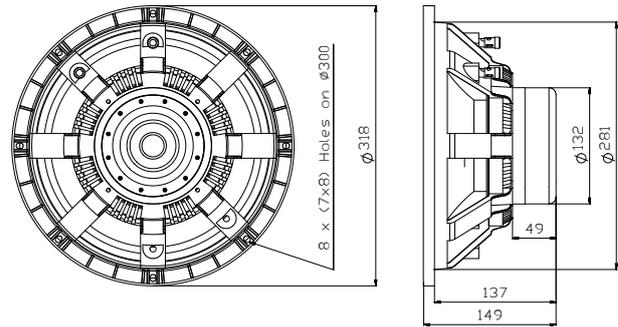


### Features:

- 95 dB sensitivity 1 W / 1 m
- 1100 W power handling
- 4" sandwich 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 subwoofers

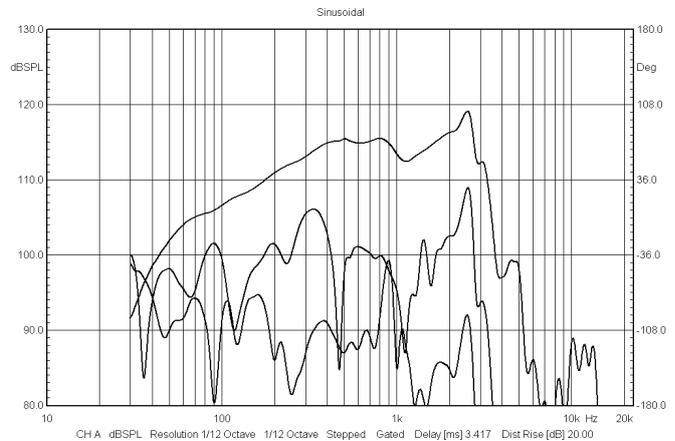
## SPECIFICATIONS

Application	Subwoofer	
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

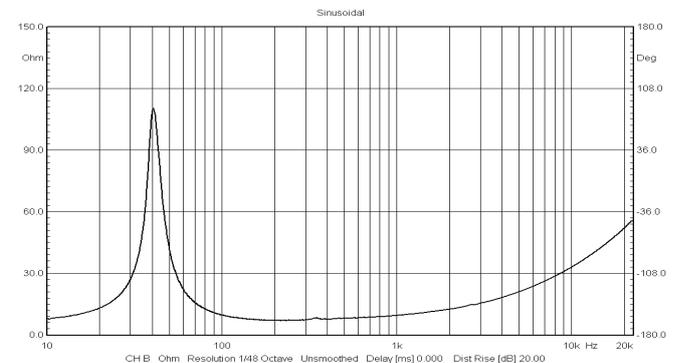


Frequency response measured 100 W (28.3V) at 1 m in a closed enclosure of 50 liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20 dB

THIELE-SMALL PARAMETERS			
Resonance frequency:	Fs	Hz	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 compl.:	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



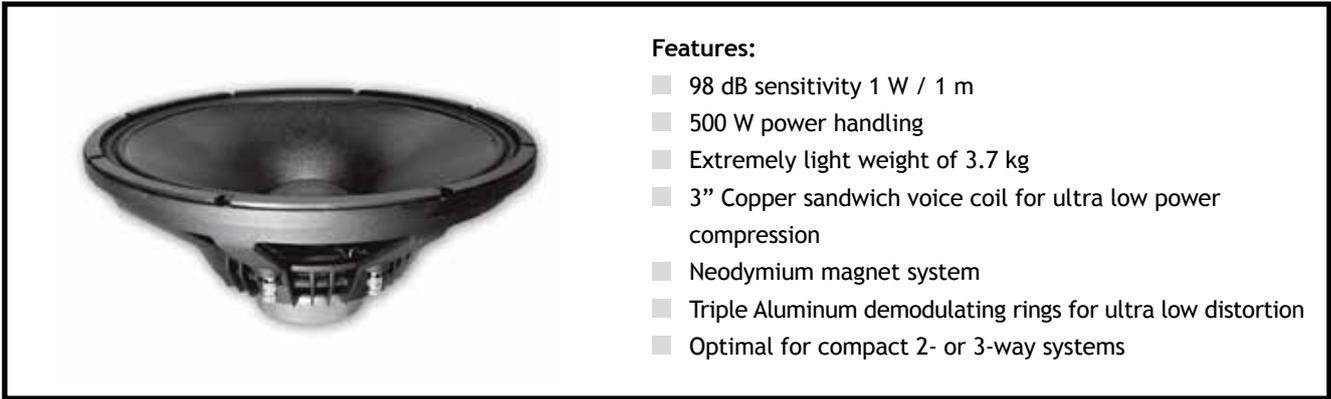
### Impedance - 8 Ohm driver



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	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

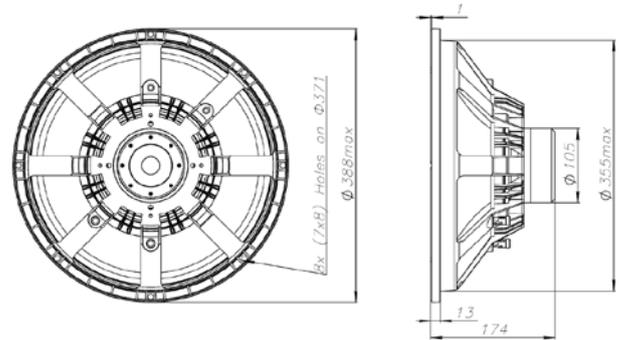


**Features:**

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

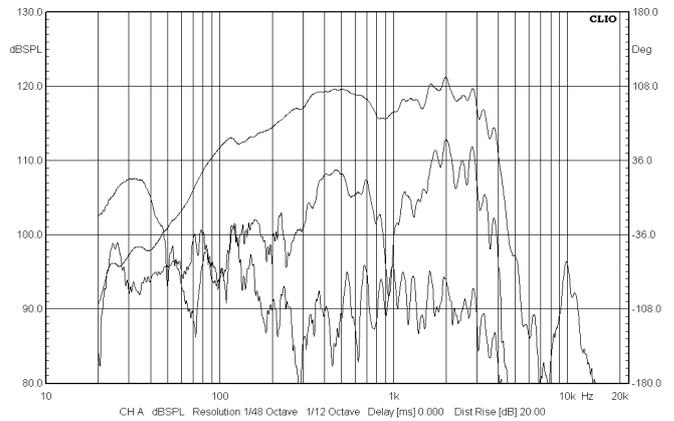
## SPECIFICATIONS

Application	Low-middle	
Nominal impedance:	Ohm	4 or 8 or 16
Power handling AES noise:	W	500
Sensitivity (1 W / 1 m):	dB	98
Frequency response:	Hz	35 - 2500
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

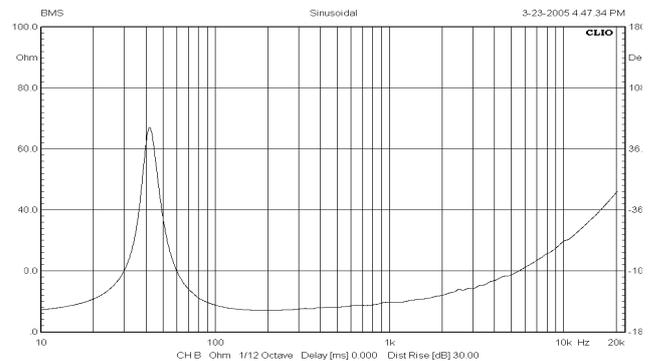


Frequency response measured 100 W (28.3 V) at 1 m in a closed enclosure of 100 liter incl. 2nd and 3rd harmonic distortion raised 20 dB.

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



**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:**

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

## 15N630

15" Neodymium ultra low distortion woofer

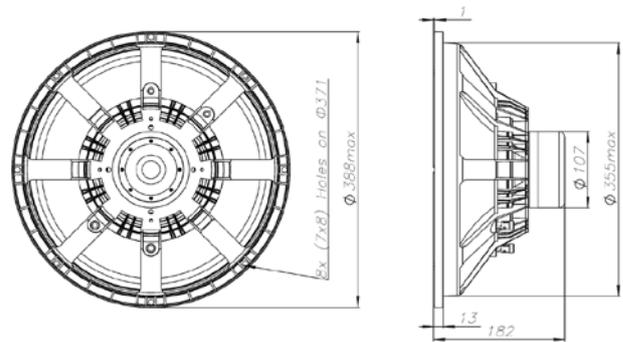


**Features:**

- 98 dB sensitivity 1 W / 1 m
- 600 W 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

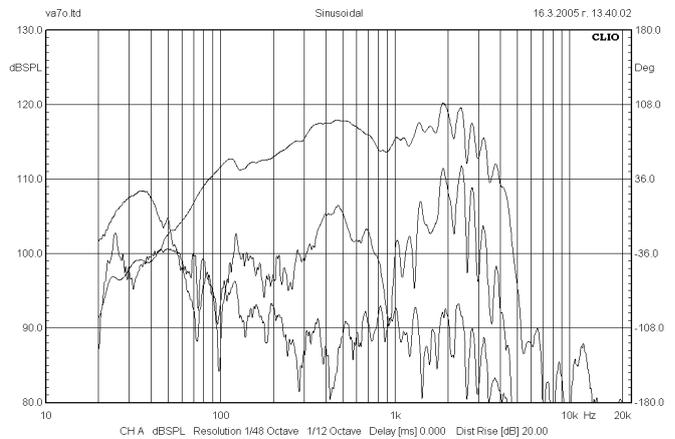
## SPECIFICATIONS

Application	Subwoofer	
Nominal impedance:	Ohm	4 or 8
Power handling AES noise:	W	600
Sensitivity (1 W / 1 m):	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



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

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

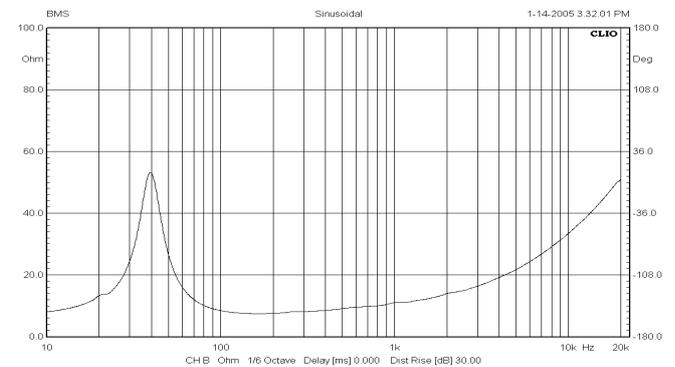


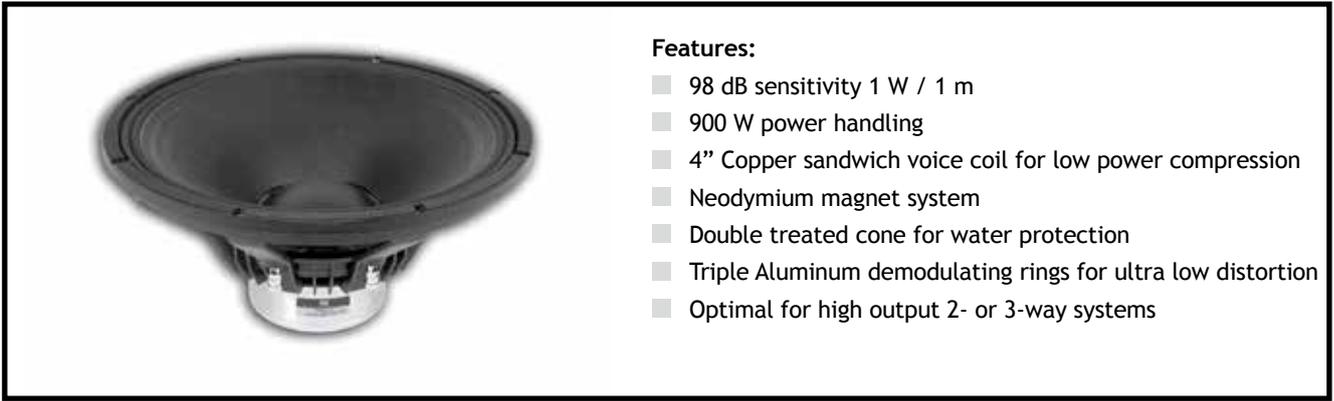
MOUNTING INFORMATION		
Overall diameter:	mm	388
Mounting holes diameter:	mm	8 x (7 x 8)
Bolt circle diameter:	mm	371
Baffle cut-out diameter:	mm	358
Overall depth:	mm	182
Net weight:	kg	4.3

### Recommended reflex enclosure:

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

### Impedance - 8 Ohm driver



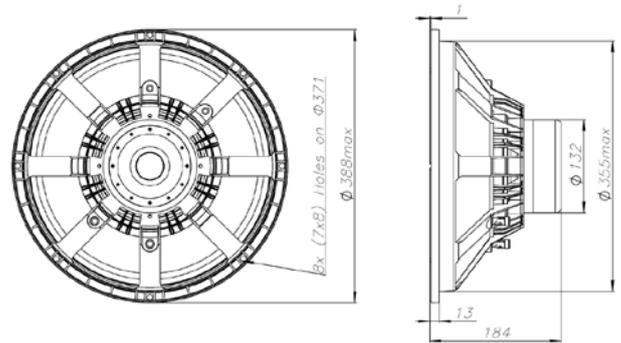


**Features:**

- 98 dB sensitivity 1 W / 1 m
- 900 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
- Optimal for high output 2- or 3-way systems

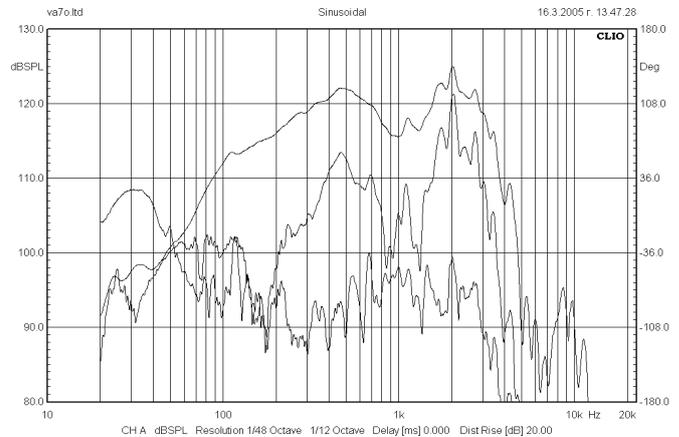
## SPECIFICATIONS

Application	2- or 3-way systems	
Nominal impedance:	Ohm	4 or 8 or 16
Power handling AES noise:	W	900
Sensitivity (1 W / 1 m):	dB	98
Frequency response:	Hz	40 - 2500
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	335

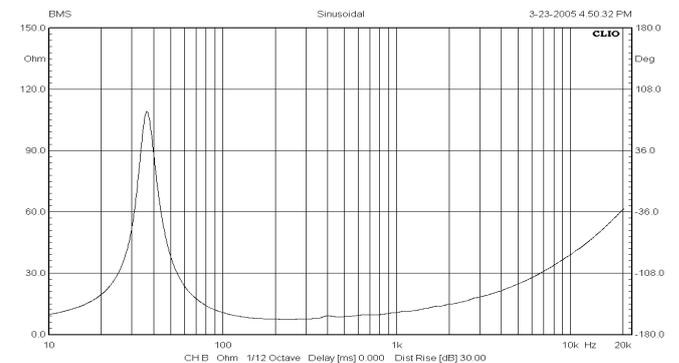


Frequency response measured 100 W (28.3 V) at 1 m in a closed enclosure of 100 liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20 dB.

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



**Impedance - 8 Ohm driver**

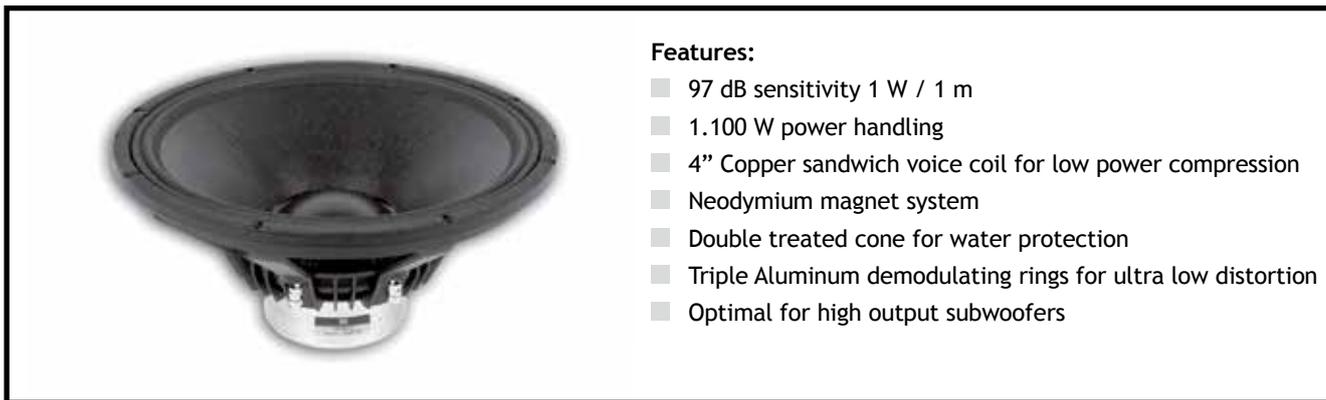


MOUNTING INFORMATION		
Overall diameter:	mm	388
Mounting holes diameter:	mm	8 x (7 x 8)
Bolt circle diameter:	mm	371
Baffle cut-out diameter:	mm	358
Overall depth:	mm	184
Net weight:	kg	5.7

**Recommended reflex enclosure:**  
60 l / 50 Hz, -3 dB = 58 Hz, BRD = 140 mm / 183 mm long

# 15N830v2

## 15" Neodymium ultra low distortion woofer

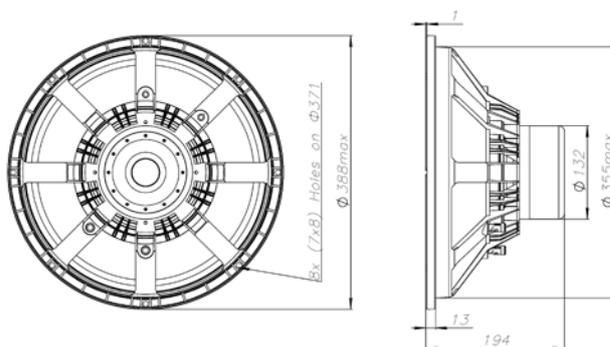


### Features:

- 97 dB sensitivity 1 W / 1 m
- 1.100 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
- Optimal for high output subwoofers

## SPECIFICATIONS

Application	Subwoofer	
Nominal impedance:	Ohm	4 or 8
Power handling AES noise:	W	1100
Sensitivity (1 W / 1 m):	dB	96
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



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

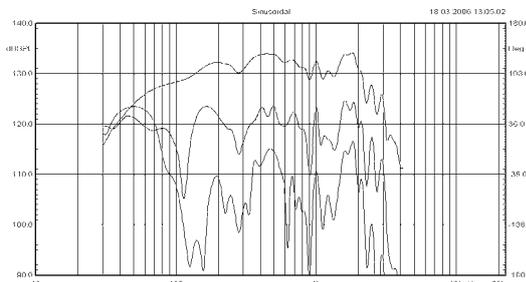
THIELE-SMALL PARAMETERS			
Resonance frequency:	Fs	Hz	37
DC resistance:	Re	Ohm	4.8
Mechanical Q factor:	Qms		4.2
Electrical Q factor:	Qes		0.29
Total quality factor:	Qts		0.27
Equivalent volume:	Vas	l	159
Moving mass:	Mms	kg	0.130
Mechanical compl.:	Cms	mm / N	0.144
BL factor:	BL	Tesla m	22.4
Effective 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

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

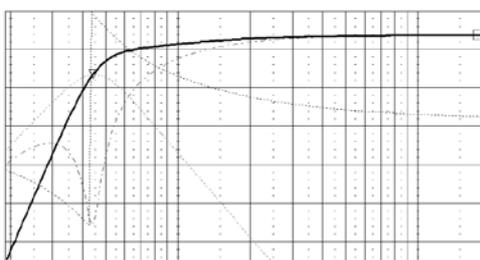
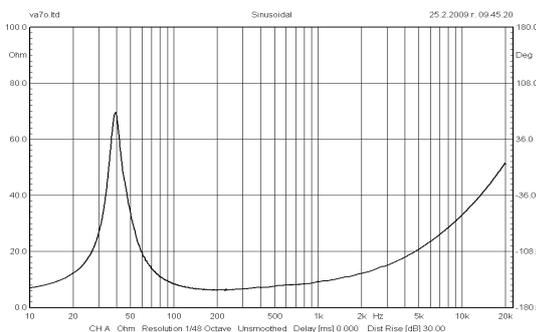
### Recommended reflex enclosure:

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

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



### Impedance - 8 Ohm driver



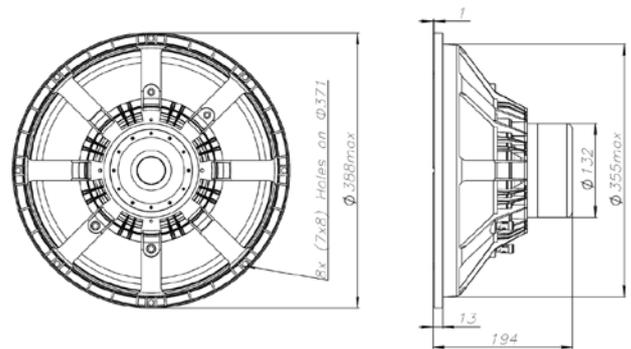


**Features:**

- 95 dB sensitivity 1 W / 1 m
- 1.200 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
- 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 (1 W / 1 m):	dB	95
Frequency response:	Hz	22 - 300
Voice 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



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

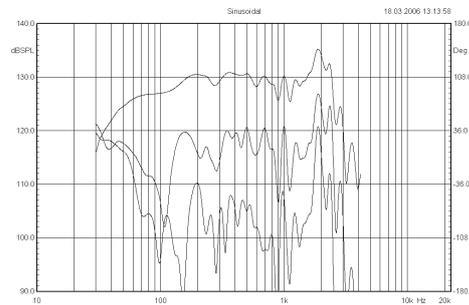
THIELE-SMALL PARAMETERS			
Resonance frequency:	Fs	Hz	35.6
DC resistance:	Re	Ohm	5.00
Mechanical Q factor:	Qms		5.75
Electrical Q factor:	Qes		0.32
Total quality factor:	Qts		0.30
Equivalent volume:	Vas	l	145.7
Moving mass:	Mms	kg	0.137
Mechanical compl.:	Cms	mm / N	0.146
BL factor:	BL	Tesla m	24.6
Effective piston area:	Sd	m <sup>2</sup>	0.0845
Max. linear excursion:	Xmax	mm	± 11
Voice coil inductance:	Le1k	mH	0.82
	Le10k	mH	0.31

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

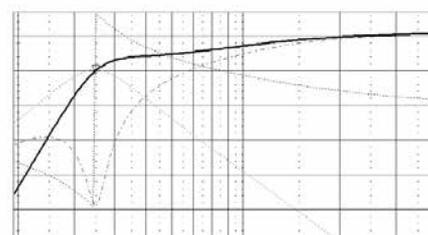
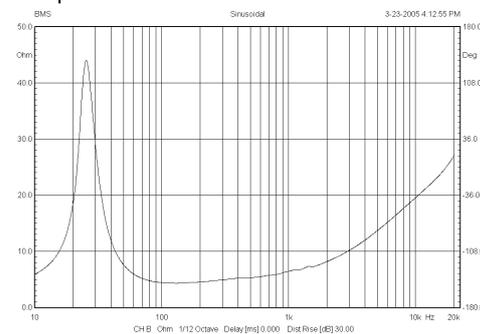
**Recommended reflex enclosure:**

70 l / 42 Hz, BRD = 180 mm / 476 mm long

85 l / 35 Hz, BRD = 180 mm / 590 mm long



**Impedance - 8 Ohm driver**



# 15N850v<sup>2</sup>

## 15" Neodymium ultra low distortion woofer

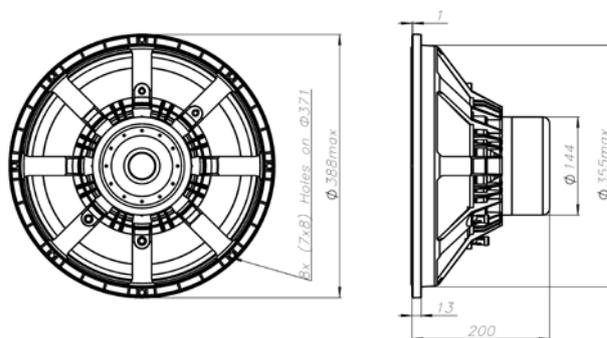


### Features:

- 95 dB sensitivity 1 W / 1 m
- 1.200 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
- Optimal for high output subwoofers
- Light weight Carbon fiber diaphragm

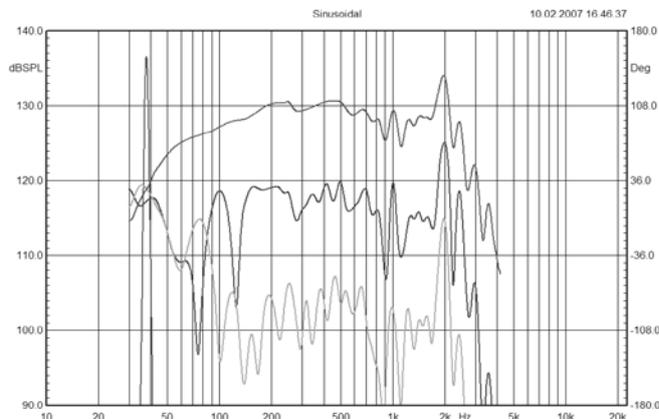
## SPECIFICATIONS

Application	Subwoofer	
Nominal impedance:	Ohm	4 or 8
Power handling AES noise:	W	1200
Sensitivity (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	36
Magnet gap depth:	mm	12
Basket:		Cast Aluminum
Effect. diaphragm diameter D	mm	328

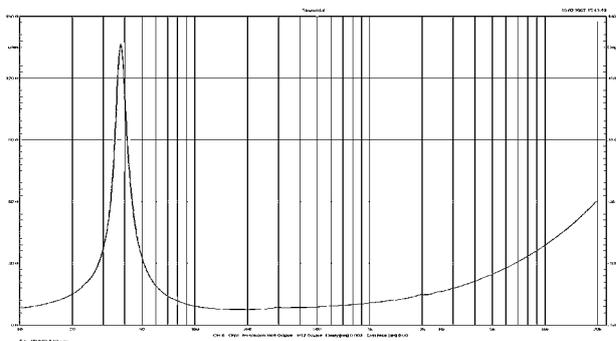


Frequency response measured 1000 W (89.4 V) at 1 m in a closed enclosure of 100 liter incl. 2nd and 3rd harmonic distortion raised 10 dB.

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



Impedance - 8 Ohm driver

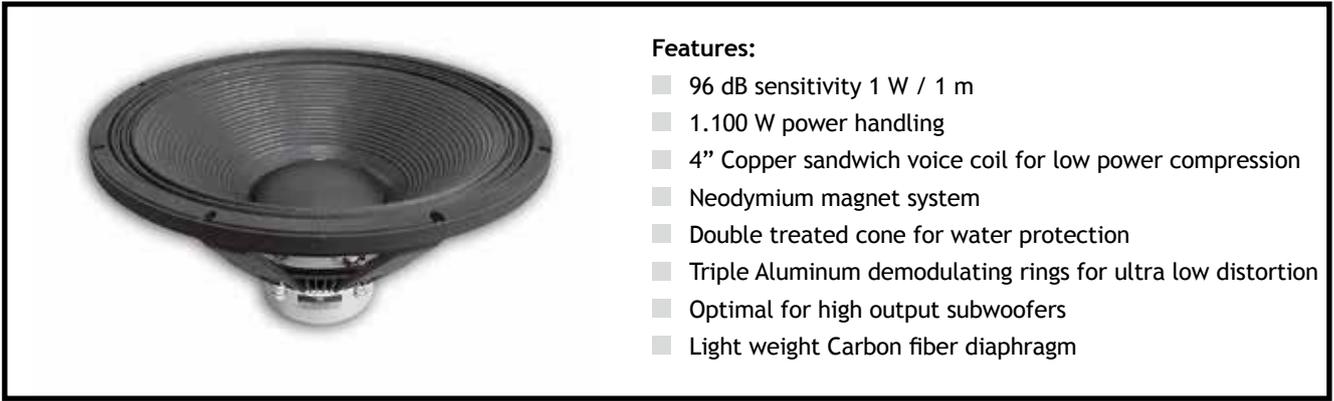


MOUNTING INFORMATION		
Overall diameter:	mm	388
Mounting holes diameter:	mm	8 x (7 x 8)
Bolt circle diameter:	mm	371
Baffle cut-out diameter:	mm	357
Overall depth:	mm	200
Net weight:	kg	8.55

### Recommended reflex enclosure:

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

75 l / 35 Hz, BRD = 175 mm / 640 mm long

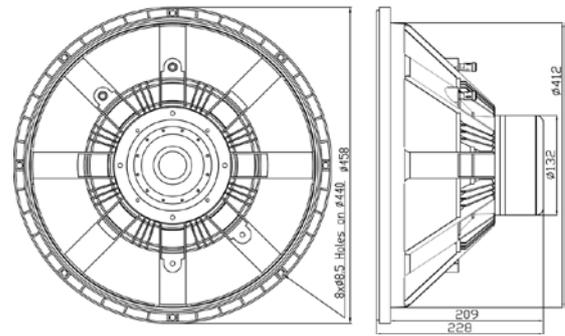


**Features:**

- 96 dB sensitivity 1 W / 1 m
- 1.100 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
- Optimal for high output subwoofers
- Light weight Carbon fiber diaphragm

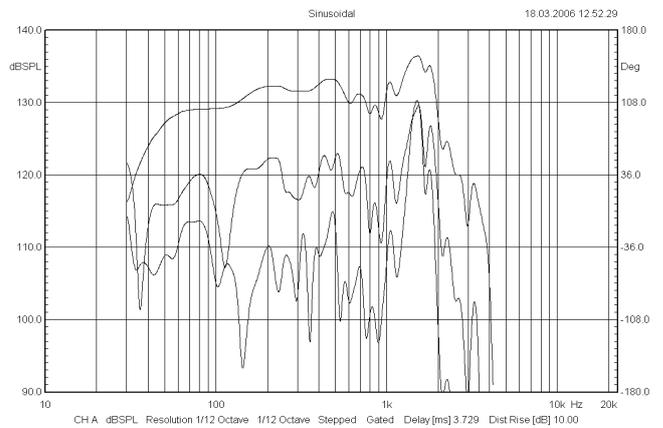
## SPECIFICATIONS

Application	Subwoofer	
Nominal impedance:	Ohm	4 or 8
Power handling AES noise:	W	1100
Sensitivity (1 W / 1 m):	dB	96
Frequency response:	Hz	20 - 200
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	393

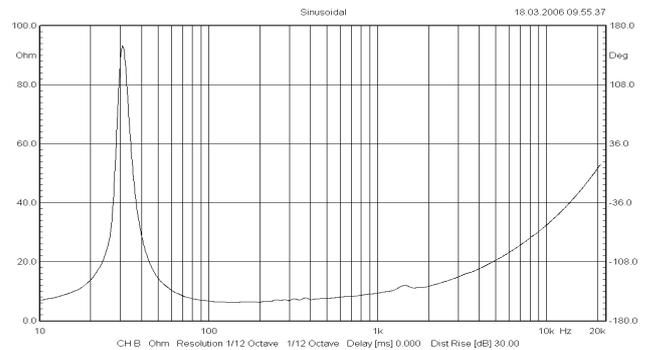


Frequency response measured 1000 W (89.4 V) at 1 m in a vented enclosure of 170 liter tuned 32 Hz incl. 2nd and 3rd harmonic distortion raised 10 dB.

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



**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	228
Net weight:	kg	7.72

**Recommended reflex enclosure:**

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

# 18N850v<sup>2</sup>

18" Neodymium ultra low distortion woofer

## Neodymium Series

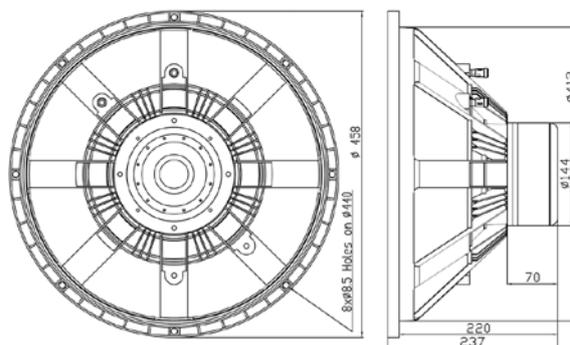


### Features:

- 95 dB sensitivity 1 W / 1 m
- 1.200 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
- Optimal for high output subwoofers
- Light weight Carbon fiber diaphragm

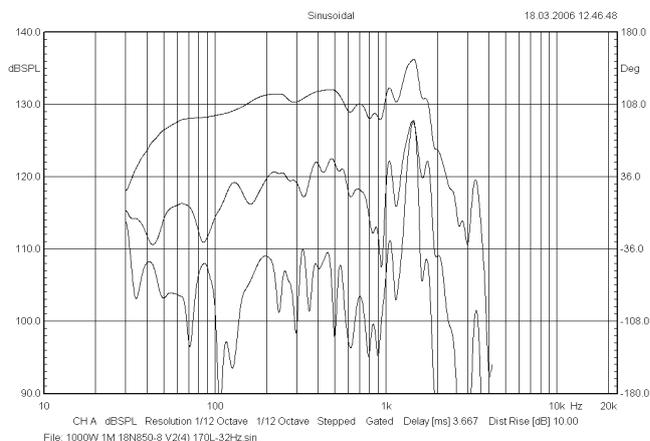
## SPECIFICATIONS

Application	Infra-Subwoofer	
Nominal impedance:	Ohm	4 or 8
Power handling AES noise:	W	1200
Sensitivity (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	36
Magnet gap depth:	mm	12
Basket:		Cast Aluminum
Effect. diaphragm diameter D	mm	393

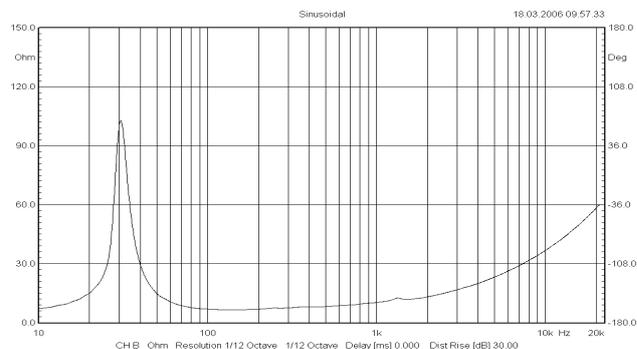


Frequency response measured 1000 W (89.4 V) at 1 m in a vented enclosure of 170 liter tuned 32 Hz incl. 2nd and 3rd harmonic distortion raised 10 dB.

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



### 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	237
Net weight:	kg	9.8

### Recommended reflex enclosure:

140 l / 32 Hz, BRD = 200 mm / 502 mm long

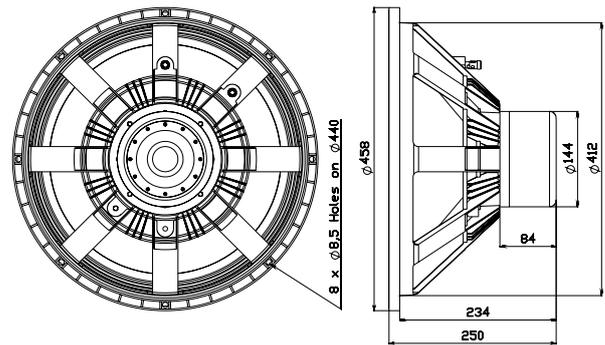


#### Features:

- 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

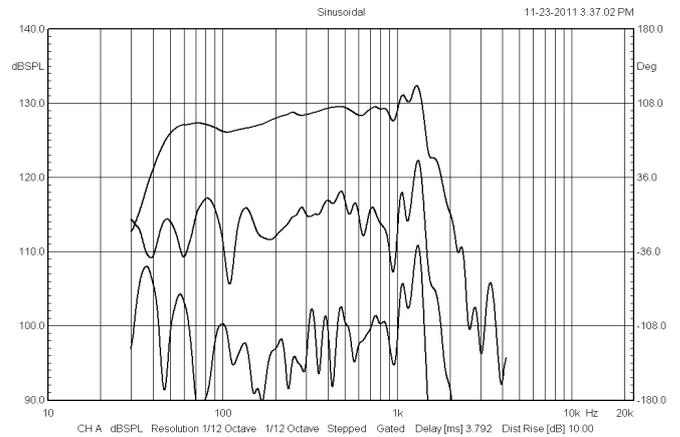
## SPECIFICATIONS

Application	Infra-Subwoofer	
Nominal impedance	Ohm	4 or 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

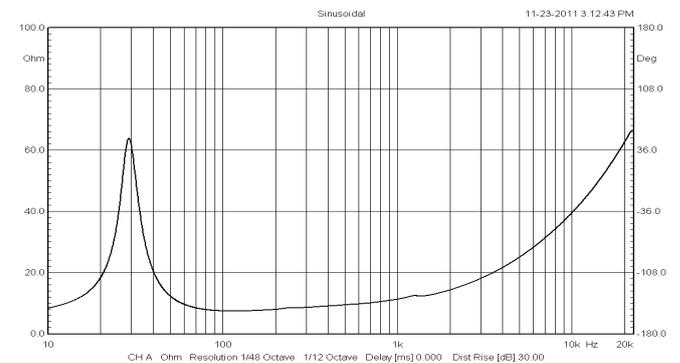


Frequency response measured 1000 W (89.4 V) at 1 m in a vented enclosure of 170 liter tuned 32 Hz incl. 2nd and 3rd harmonic distortion raised 10 dB.

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 compl.	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



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	412
Overall depth	mm	250
Net weight	kg	10.5

#### Recommended reflex enclosure:

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

Closed enclosure 100 l, -3 dB = 50Hz

# 5S117

5" ultra low distortion low midrange driver

## Ultra low distortion Series

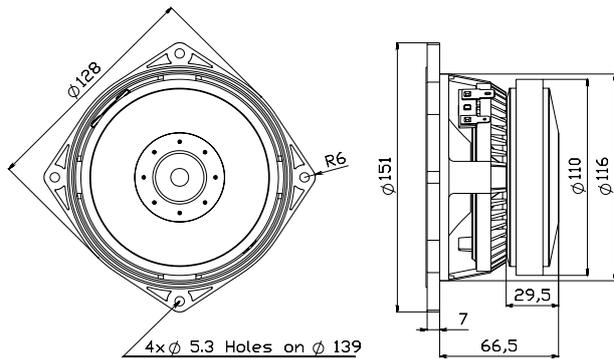


**Features:**

- 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

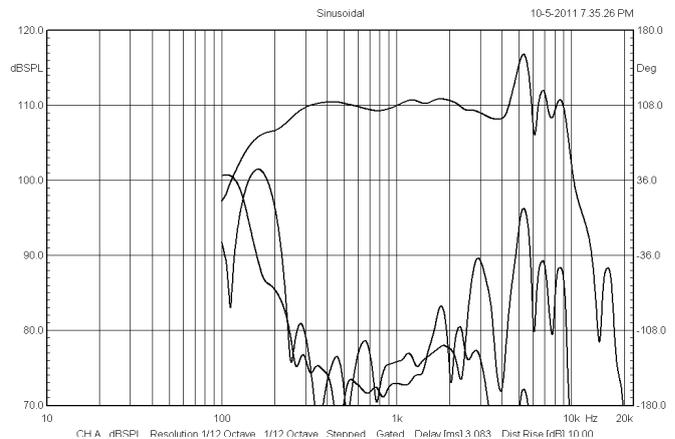
## SPECIFICATIONS

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

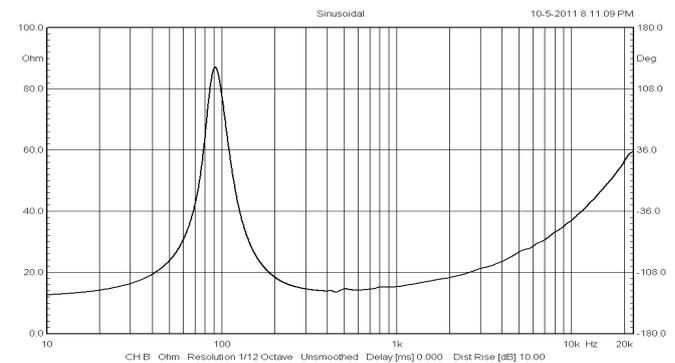


Frequency response measured 100 W (28.3 V) at 1 m in a closed enclosure of 11 liter in a closed box incl. 2nd and 3rd harmonic distortion raised 10 dB.

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>	0.0085
Max. linear excursion	Xmax	mm	± 5
Voice coil inductance	Le1k	mH	0.58
	Le10k	mH	0.46



Impedance - 16 Ohm driver



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

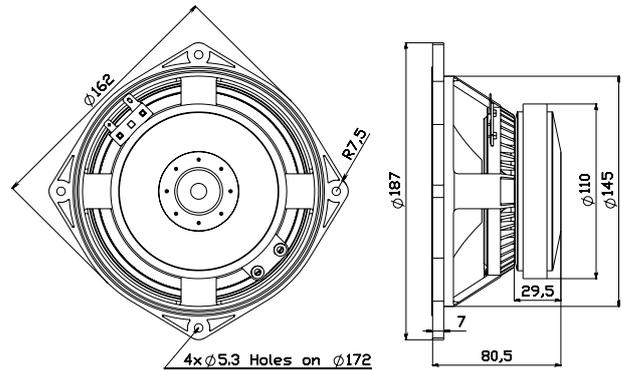


**Features:**

- 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

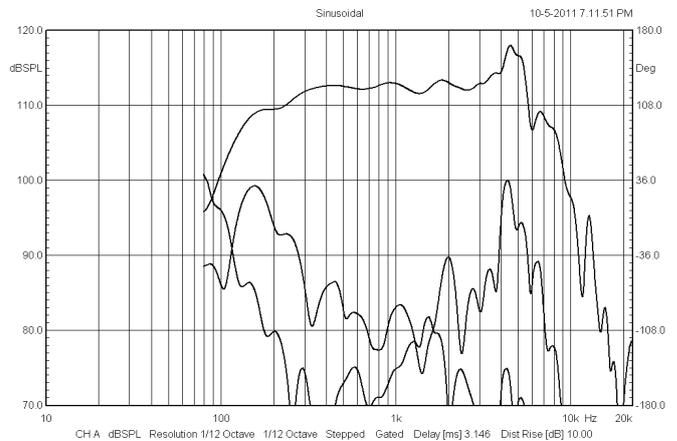
## SPECIFICATIONS

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

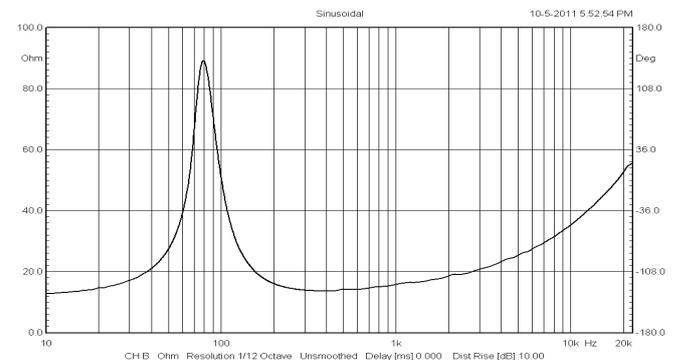


Frequency response measured 100 W (28.3 V) at 1 m in a closed enclosure of 11 liter in a closed box incl. 2nd and 3rd harmonic distortion raised 10 dB.

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



Impedance - 16 Ohm driver



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	81.5
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 mm long
- 10 l / 70 Hz, BRD = 60 mm / 111 mm long

# 8S215

8" ultra low distortion low midrange driver

# Ultra low distortion Series

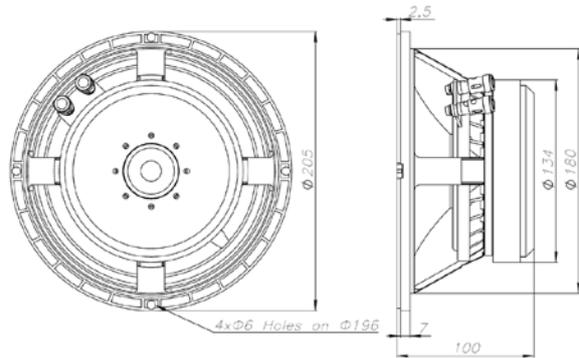


### Features:

- 96 dB sensitivity 1 W / 1 m
- 200 W power handling
- 2" Copper sandwich voice coil
- Double treated cone for water protection
- Triple Aluminum demodulating rings for ultra low distortion
- Optimal for compact 2-way systems

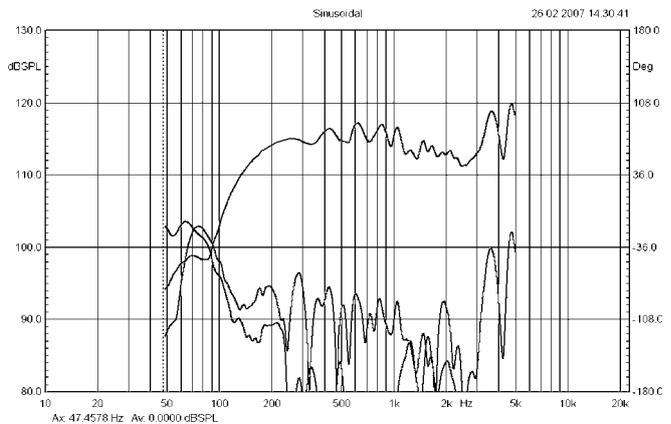
## SPECIFICATIONS

Application	Low-middle	
Nominal impedance:	Ohm	8 or 16
Power handling AES noise:	W	200
Sensitivity (1 W / 1 m):	dB	96
Frequency response:	Hz	80 - 3000
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	168

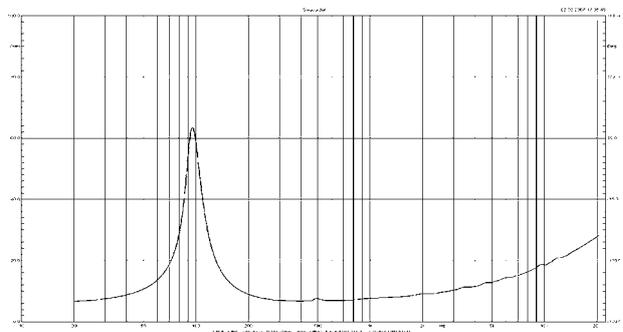


Frequency response measured 100 W (28.3 V) at 1 m in a closed enclosure of 25 liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 10 dB.

THIELE-SMALL PARAMETERS			
Resonance frequency:	Fs	Hz	87.7
DC resistance:	Re	Ohm	5.4
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	13.6
Effective piston area:	Sd	m <sup>2</sup>	0.0222
Max. linear excursion:	Xmax	mm	± 4.25
Voice coil inductance:	Le1k	mH	0.2
	Le10k	mH	0.12



Impedance - 8 Ohm driver



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 reflex enclosure:

- 4 l / 108 Hz, BRD = 60 mm / 127 mm long
- 7 l / 82 Hz, BRD = 60 mm / 126 mm long
- 10 l / 70 Hz, BRD = 60 mm / 111 mm long

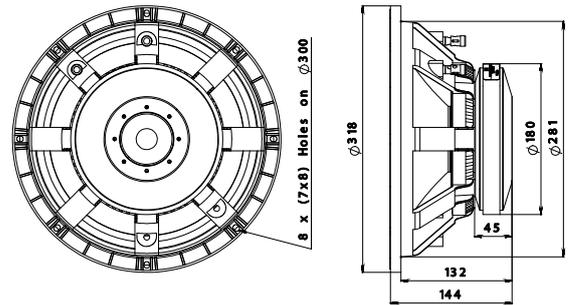


### Features:

- 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 fiber diaphragm

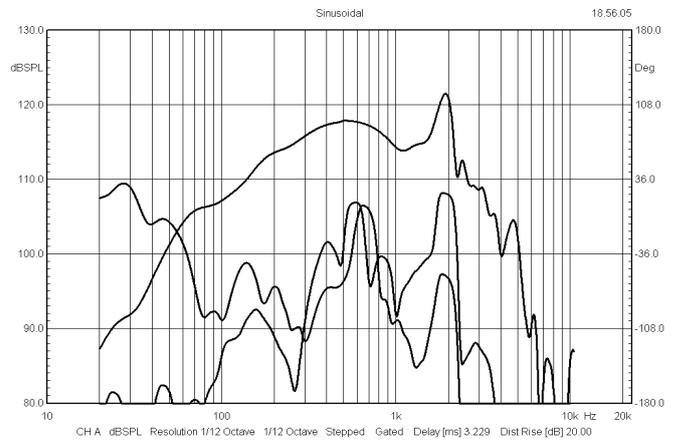
## SPECIFICATIONS

Application	Compact 2- or 3-way	
Nominal impedance	Ohm	8 or 16
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

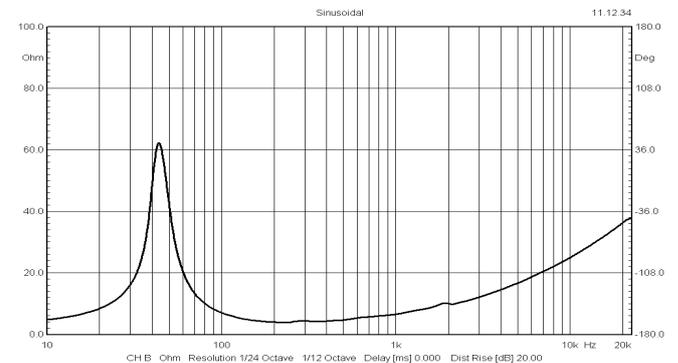


Frequency response measured 100 W (28.3 V) at 1 m in a closed enclosure of 50 liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20 dB.

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 compl.	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



### 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	144
Net weight	kg	6.7

### Recommended reflex enclosure:

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

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

# 12S305

12" ultra low distortion low midrange driver

## Ultra low distortion Series

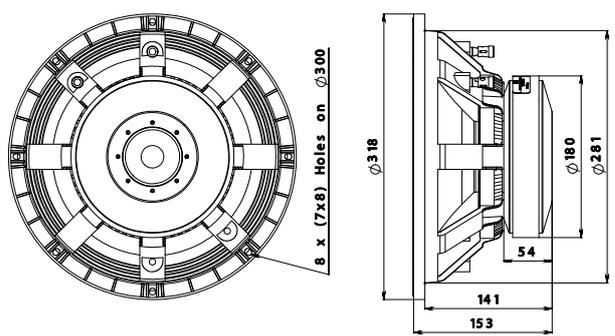


**Features:**

- 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 fiber diaphragm

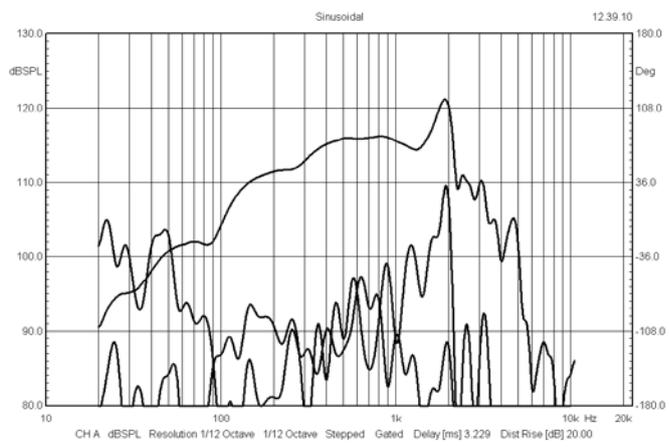
## SPECIFICATIONS

Application	Low-middle	
Nominal impedance	Ohm	4 or 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



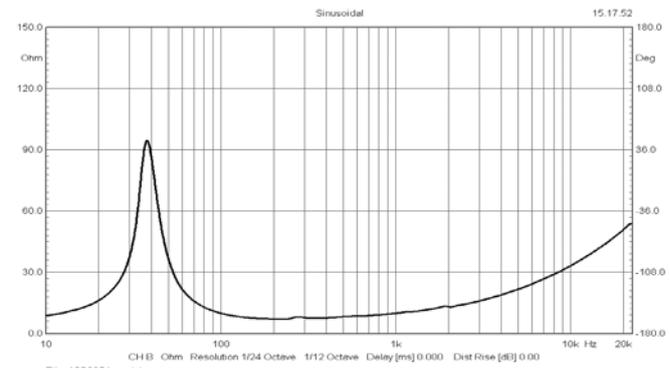
Frequency response measured 100 W (28.3 V) at 1 m in a closed enclosure of 50 liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20 dB.

THIELE-SMALL PARAMETERS			
Resonance frequency	Fs	Hz	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 compl.	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



Impedance - 8 Ohm driver

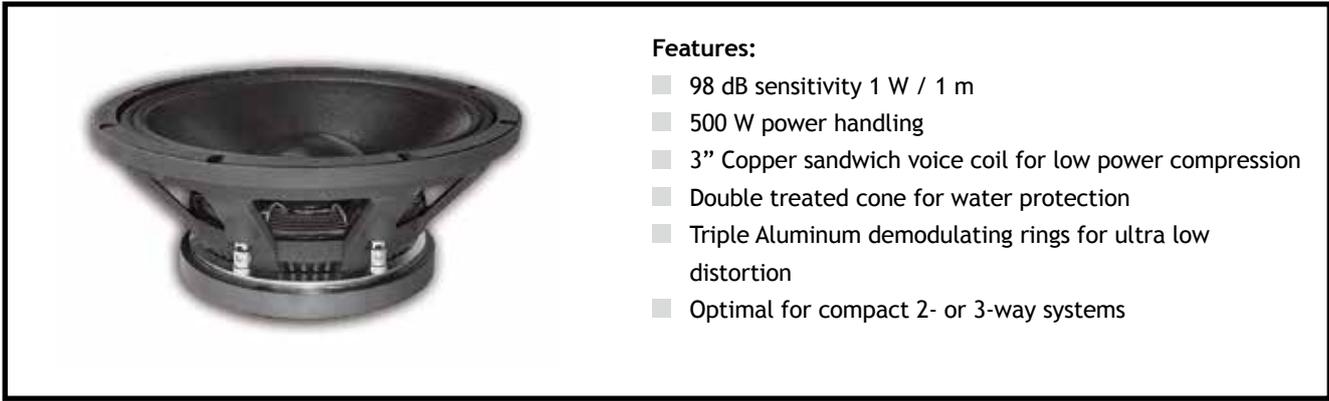
MOUNTING INFORMATION		
Overall diameter	mm	318
Mounting holes diameter	mm	8 x (7 x 8)
Bolt circle diameter	mm	300
Baffle cut-out	mm	284
Overall depth	mm	153
Net weight	kg	8



### Recommended reflex enclosure:

- 30 l / 50 Hz, BRD = 100mm / 226mm
- 40 l / 45 Hz, BRD = 100mm / 204mm

Cone drivers

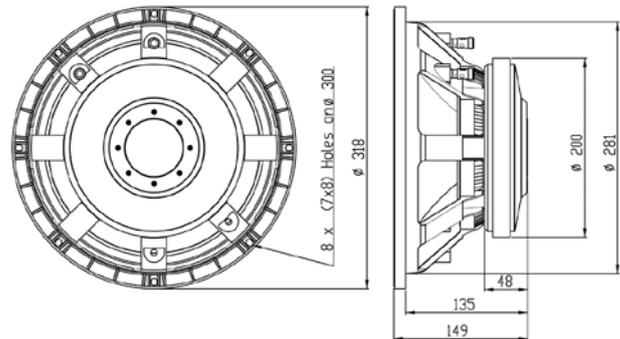


### Features:

- 98 dB sensitivity 1 W / 1 m
- 500 W 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

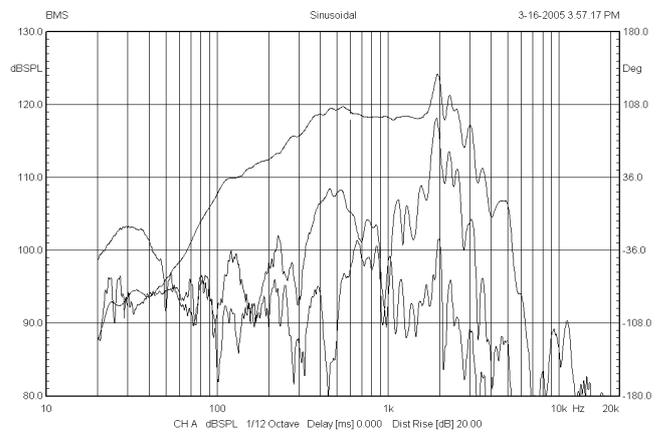
## SPECIFICATIONS

Application	Compact 2- or 3-way	
Nominal impedance:	Ohm	4 or 8 or 16
Power handling AES noise:	W	500
Sensitivity (1 W / 1 m):	dB	98
Frequency response:	Hz	45 - 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	260

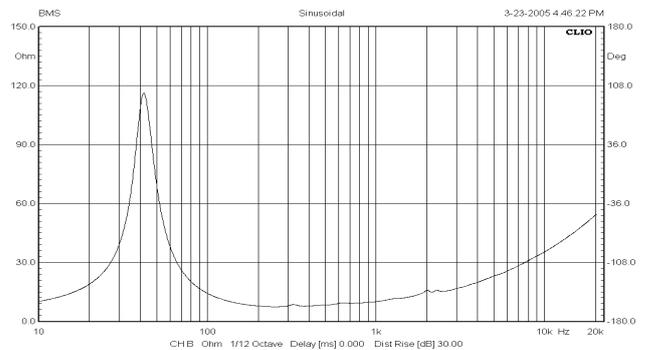


Frequency response measured 100 W (28.3 V) at 1 m in a closed enclosure of 50 liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20 dB.

THIELE-SMALL PARAMETERS			
Resonance frequency:	Fs	Hz	45.4
DC resistance:	Re	Ohm	5.7
Mechanical Q factor:	Qms		4.2
Electrical Q factor:	Qes		0.21
Total quality factor:	Qts		0.2
Equivalent volume:	Vas	l	69.5
Moving mass:	Mms	kg	0.069
Mechanical compliance:	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



### 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	149
Net weight:	kg	8.1

### Recommended reflex enclosure:

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

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

# 12S330

12" ultra low distortion woofer

## Ultra low distortion Series

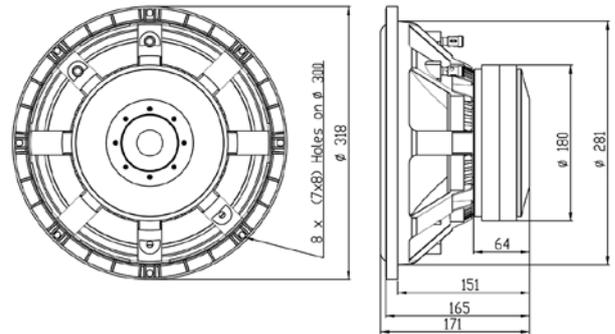


**Features:**

- 92 dB sensitivity 1 W / 1 m
- 600 W 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

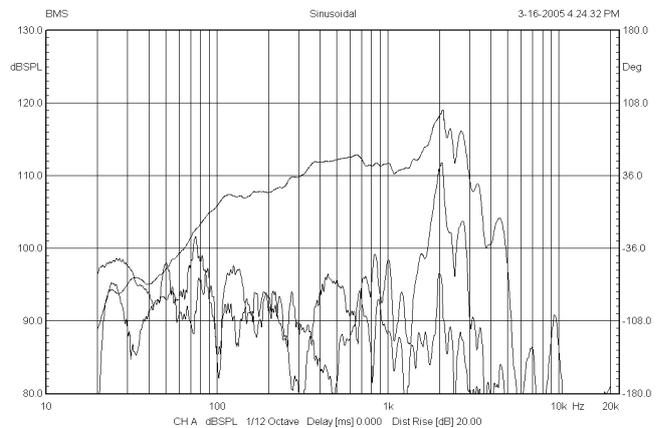
## SPECIFICATIONS

Application	Subwoofer	
Nominal impedance:	Ohm	4 or 8
Power handling AES noise:	W	600
Sensitivity (1 W / 1 m):	dB	96
Frequency response:	Hz	25 - 300
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	252

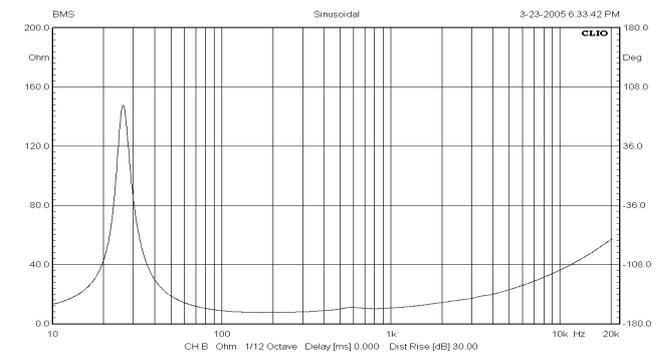


Frequency response measured 100 W (28.3 V) at 1 m in a closed enclosure of 50 liter an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20 dB.

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



Impedance - 8 Ohm driver

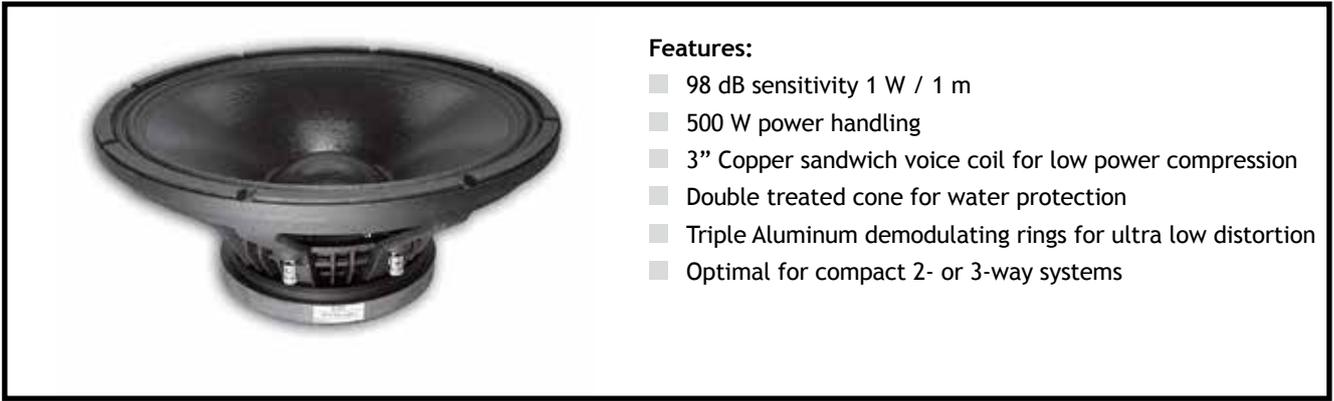


MOUNTING INFORMATION		
Overall diameter:	mm	318
Mounting holes diameter:	mm	8 x (7 x 8)
Bolt circle diameter:	mm	300
Baffle cut-out diameter:	mm	284
Overall depth:	mm	171
Net weight:	kg	9.4

### Recommended reflex enclosure:

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

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

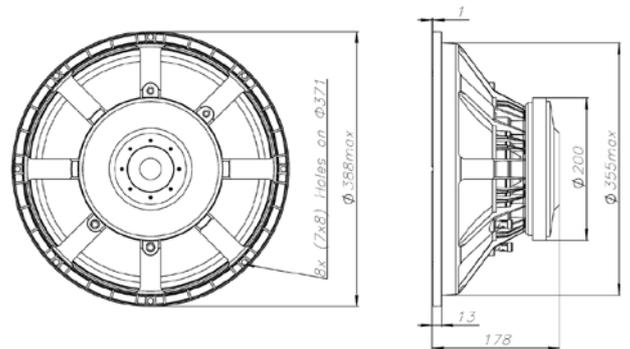


**Features:**

- 98 dB sensitivity 1 W / 1 m
- 500 W 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

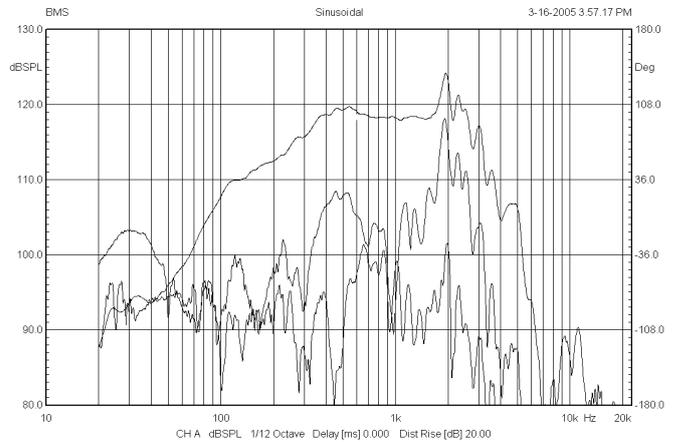
### SPECIFICATIONS

Application	Subwoofer	
Nominal impedance:	Ohm	4 or 8 or 16
Power handling AES noise:	W	500
Sensitivity (1 W / 1 m):	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

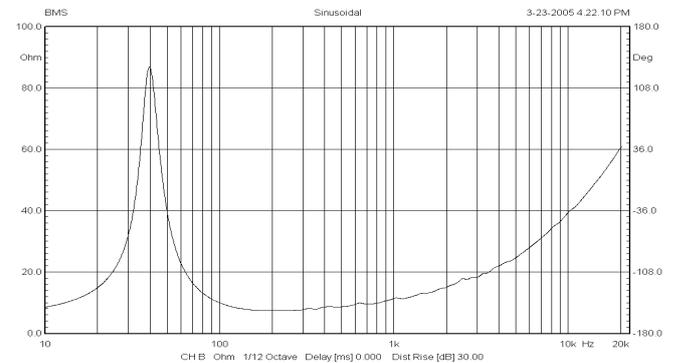


Frequency response measured 100 W (28.3 V) at 1 m in a closed enclosure of 100 liter in an anechoic chamber incl. 2nd and 3rd harmonic distortion raised 20 dB.

THIELE-SMALL PARAMETERS			
Resonance frequency:	Fs	Hz	41
DC resistance:	Re	Ohm	5.7
Mechanical Q factor:	Qms		5
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



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	178
Net weight:	kg	9

**Recommended reflex enclosure:**  
70 l / 50 Hz, -3 dB = 54 Hz, BRD = 140 mm / 155 mm long

# 15S330

15" ultra low distortion woofer

## Ultra low distortion Series

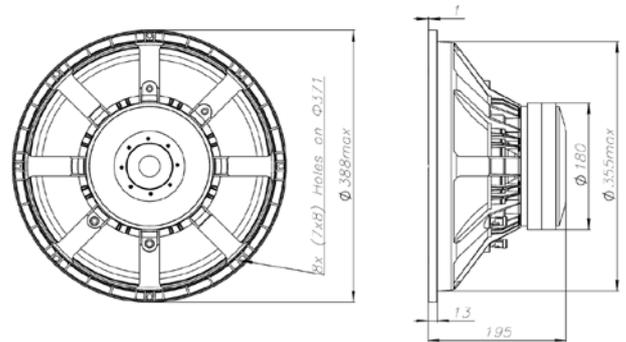


**Features:**

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

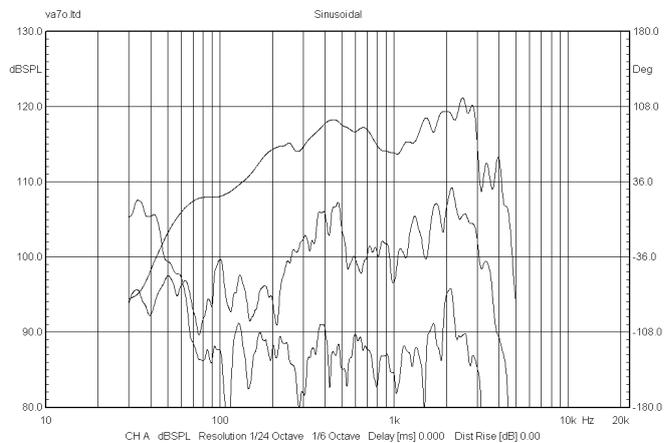
## SPECIFICATIONS

Application	Subwoofer	
Nominal impedance:	Ohm	4 or 8
Power handling AES noise:	W	600
Sensitivity (1 W / 1 m):	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

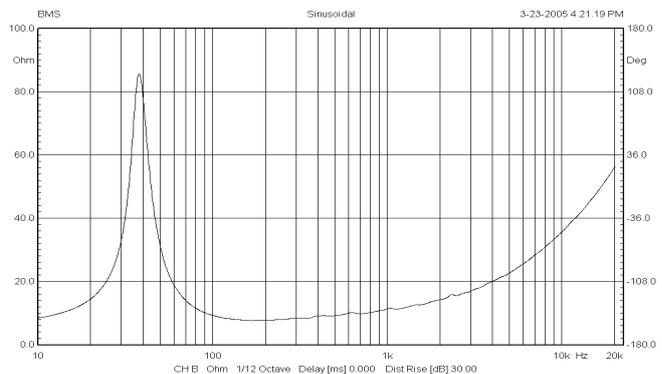


Frequency Response measured 100 W (28.3 V) at 1 m in a closed enclosure of 100 liter in a closed box incl. 2nd and 3rd harmonic distortion raised 20 dB.

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	0.121
Mechanical compl.:	Cms	mm / N	0.14
BL factor:	BL	Tesla m	23
Effective piston area:	Sd	m <sup>2</sup>	0.088
Max. linear excursion:	Xmax	mm	± 8
Voice coil inductance:	Le1k	mH	0.72
	Le10k	mH	0.45



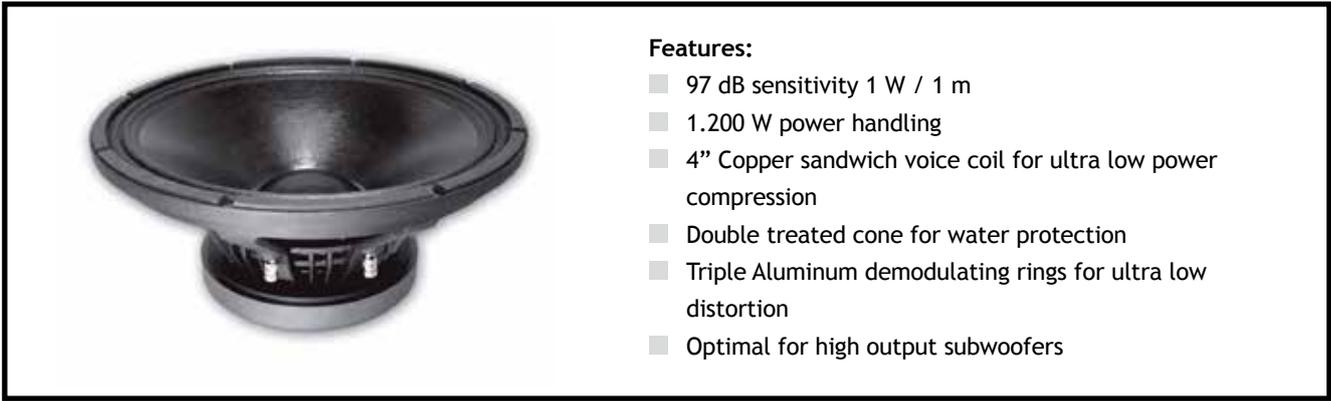
Impedance - 8 Ohm driver



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	195
Net weight:	kg	9.6

**Recommended reflex enclosure:**

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

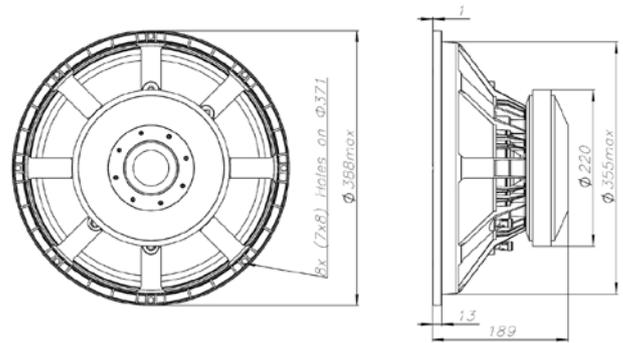


**Features:**

- 97 dB sensitivity 1 W / 1 m
- 1.200 W power handling
- 4" Copper sandwich voice coil for ultra 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 or 8
Power handling AES noise:	W	1200
Sensitivity (1 W / 1 m):	dB	97
Frequency response:	Hz	35 - 2500
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

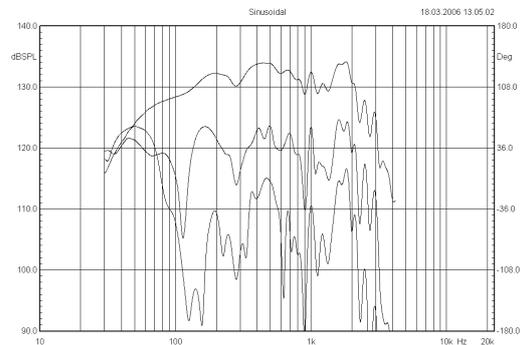


Frequency response measured 1000 W (89.4 V) at 1 m in a closed enclosure of 100 liter incl. 2nd and 3rd harmonic distortion raised 10 dB.

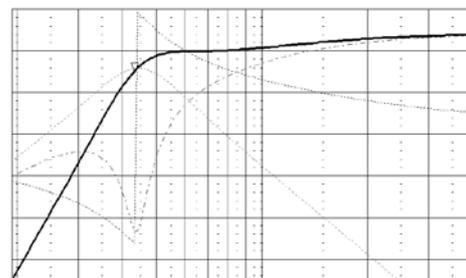
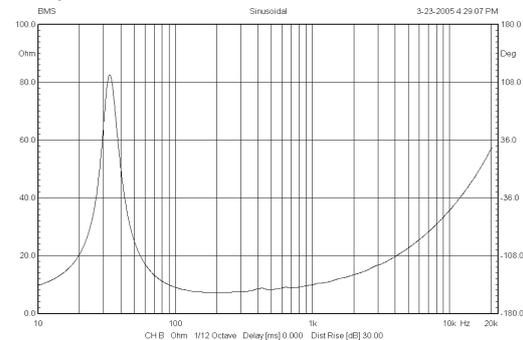
THIELE-SMALL PARAMETERS			
Resonance frequency:	Fs	Hz	39.8
DC resistance:	Re	Ohm	4.8
Mechanical Q factor:	Qms		6.4
Electrical Q factor:	Qes		0.29
Total quality factor:	Qts		0.28
Equivalent volume:	Vas	l	135
Moving mass:	Mms	kg	0.130
Mechanical compl.:	Cms	mm / N	0.12
BL factor:	BL	Tesla m	23.5
Effective piston area:	Sd	m <sup>2</sup>	0.0880
Max. linear excursion:	Xmax	mm	± 8
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:**  
80 l / 44 Hz, BRD = 190 mm / 402 mm long



**Impedance - 8 Ohm driver**



# 18S430v<sup>2</sup>

## 18" ultra low distortion woofer

### Ultra low distortion Series

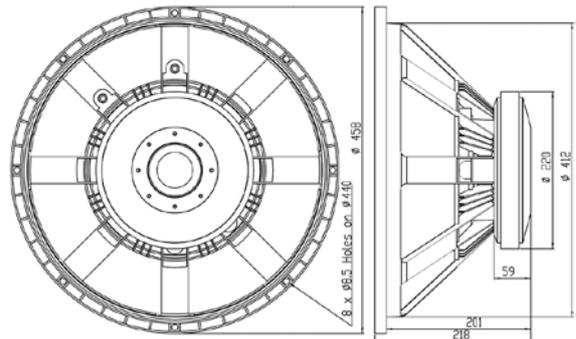


**Features:**

- 96 dB sensitivity 1 W / 1 m
- 1.200 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

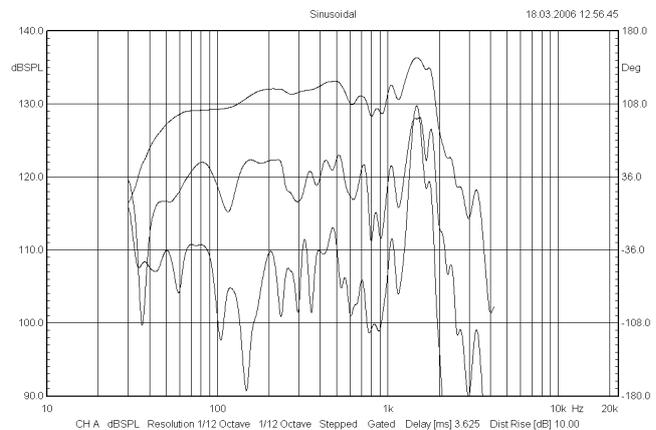
## SPECIFICATIONS

Application	Subwoofer	
Nominal impedance:	Ohm	4 or 8
Power handling AES noise:	W	1200
Sensitivity (1 W / 1 m):	dB	96
Frequency response:	Hz	20 - 200
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	393

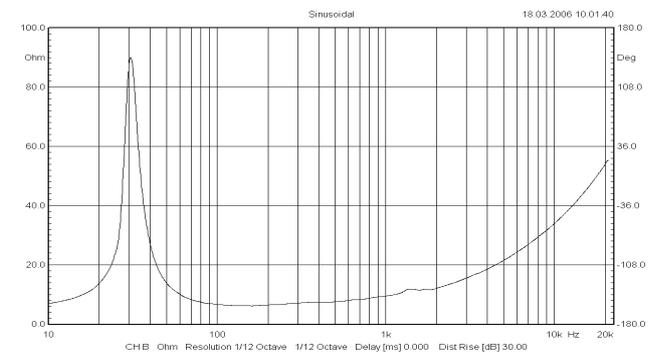


Frequency response measured 1000 W (89.4 V) at 1 m in a vented enclosure of 170 liter tuned 32 Hz incl. 2nd and 3rd harmonic distortion raised 10 dB.

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

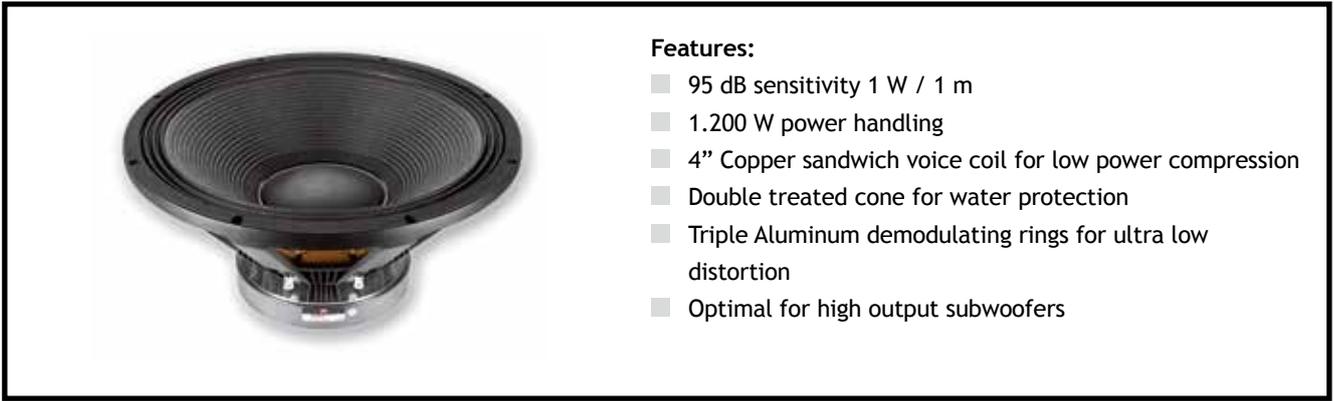


Impedance - 8 Ohm driver



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:**  
130 l / 38 Hz, BRD = 210 mm / 393 mm long

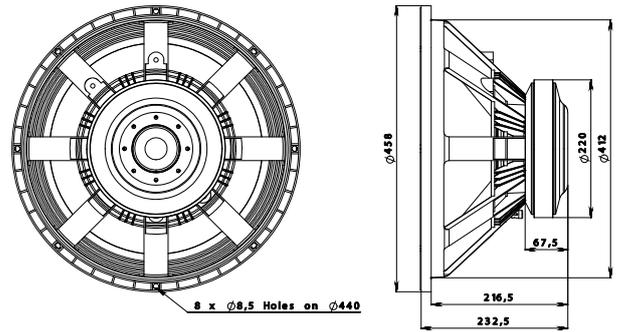


**Features:**

- 95 dB sensitivity 1 W / 1 m
- 1.200 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

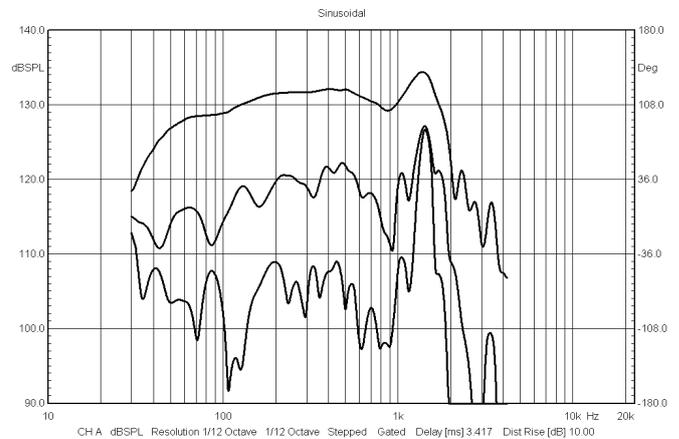
### SPECIFICATIONS

Application	Subwoofer	
Nominal impedance	Ohm	4 or 8
Power handling AES noise	W	1200
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	36
Magnet gap depth	mm	12
Basket		Cast Aluminum
Effect. diaphragm diameter D	mm	393

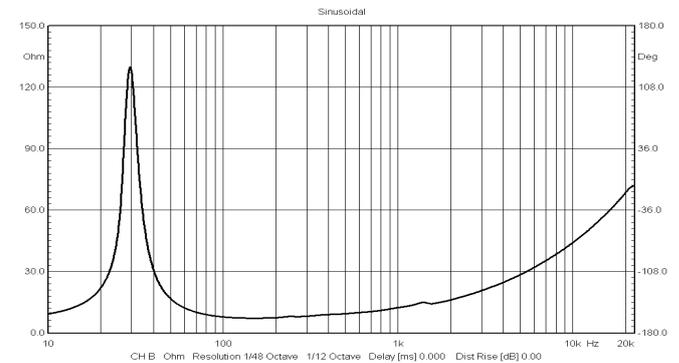


Frequency response measured 1000 W (89.4 V) at 1 m in a vented enclosure of 170 liter tuned 32 Hz incl. 2nd and 3rd harmonic distortion raised 10 dB.

THIELE-SMALL PARAMETERS			
Resonance frequency	Fs	Hz	29
DC resistance	Re	Ohm	5.5
Mechanical Q factor		Qms	7.25
Electrical Q factor		Qes	0.32
Total quality factor		Qts	0.31
Equivalent volume	Vas	l	281
Moving mass	Mms	kg	0.224
Mechanical compl.	Cms	mm / N	0.134
BL factor	BL	Tesla m	26.5
Effective piston area	Sd	m <sup>2</sup>	0.1213
Max. linear excursion	Xmax	mm	±12
Voice Coil Inductance	Le1k	mH	1.1
	Le10k	mH	0.58



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	233
Net weight	kg	14.5

**Recommended reflex enclosure:**  
130 l / 38 Hz, BRD = 210 mm / 393 mm long

# 5CN140

5" Neodymium coaxial transducer

Coaxial Series

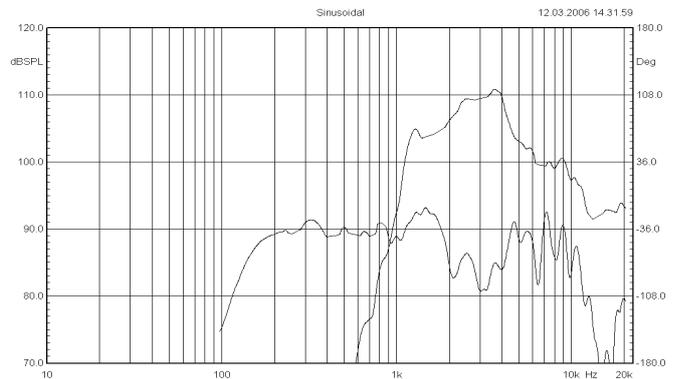
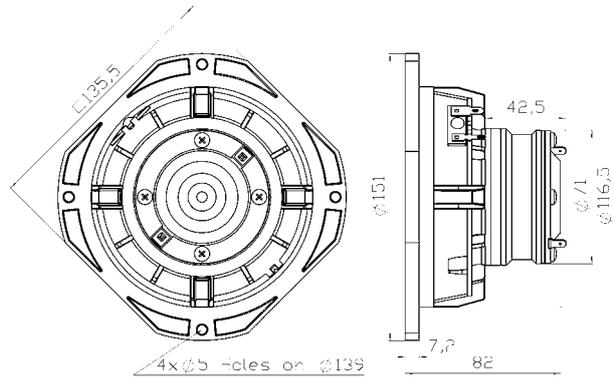


**Features:**

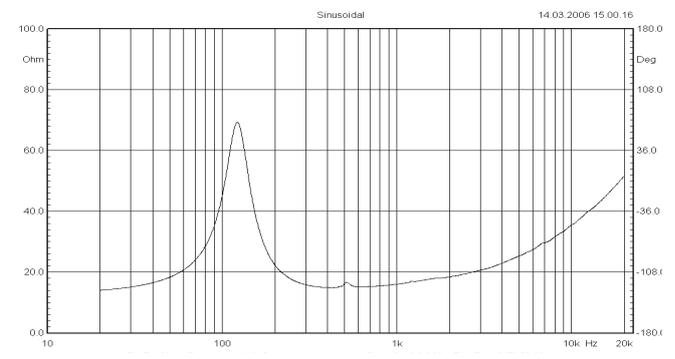
- 90 dB sensitivity 1 W / 1 m
- 130 W + 60 W power handling
- 1.5" + 1.5" Copper voice coil
- Single point source providing coherent wave front
- 90° conical dispersion
- Optimal for compact 2-way systems

## SPECIFICATIONS

Application	2-way transducer		
Nominal impedance:	Ohm	8 or 16	
Power handling AES noise:	W	120	
Sensitivity (1 W / 1 m):	dB	90	
Frequency response:	Hz	80 - 4000	
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)	
<b>THIELE-SMALL PARAMETERS</b>			
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 compliance:	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
<b>SPECIFICATIONS HIGH FREQUENCY</b>			
Nominal impedance:	Ohm	16	
Power handling AES:	W	60	
Peak power:	W	300	
Sensitivity (1 W / 1 m):	dB	113	
Frequency range:	Hz	1500 - 20000	
Recommended crossover:	Hz	1900	
Voice coil diameter:	mm	38 (1.5")	
Magnet material:		Neodymium	
Flux density	T	2	
Voice coil material:	Copper clad Aluminum		
	(2 layers in- and outside 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:**

- 1.9 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

Coaxial drivers

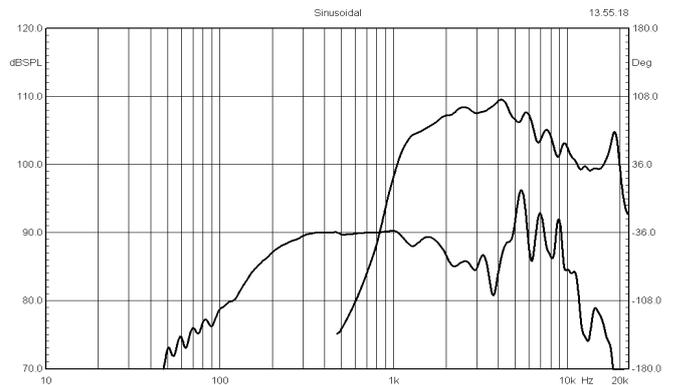
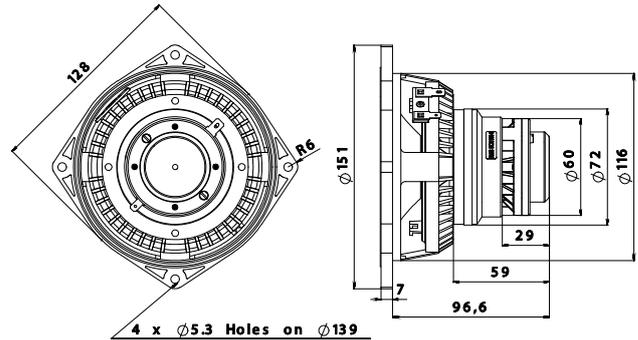


### Features:

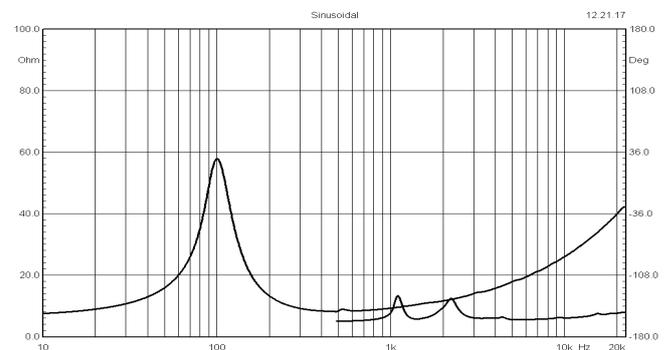
- 90 dB sensitivity 1 W / 1 m
- 130 W + 25 W power handling
- 1.5" + 1" voice coil
- Single point source providing coherent wave front
- 90° conical dispersion
- Optimal for compact 2-way systems

## SPECIFICATIONS

Application	2-way transducer		
Nominal impedance	Ohm	8 or 16	
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	



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	104
Net weight	kg	1.14

### Recommended reflex enclosure:

1.9 l / 104 Hz, BRD = 30 mm / 77 mm long

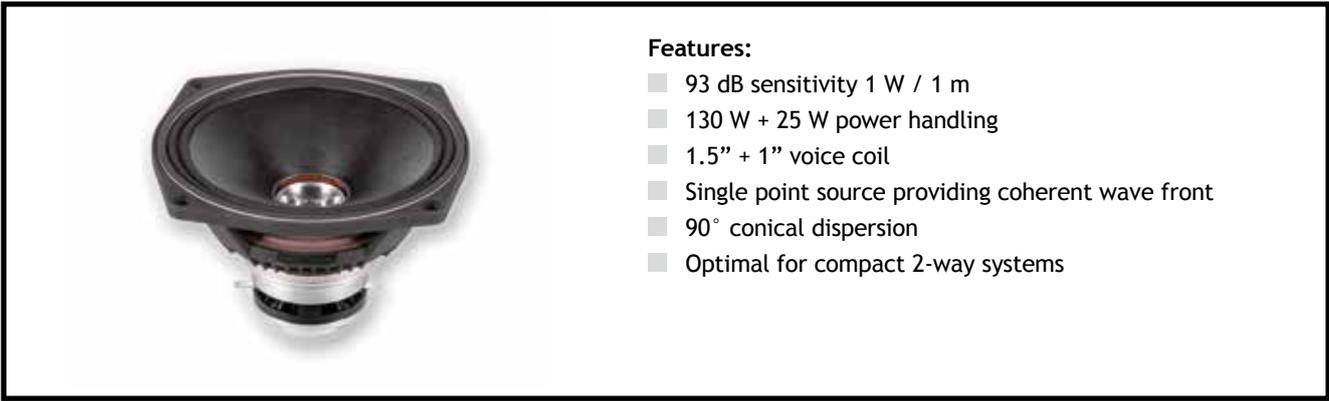
3.8 l / 90 Hz, BRD = 40 mm / 86 mm long

Closed enclosure 1 - 4 liter

# 6CN160

6.5" Neodymium coaxial transducer

# Coaxial Series

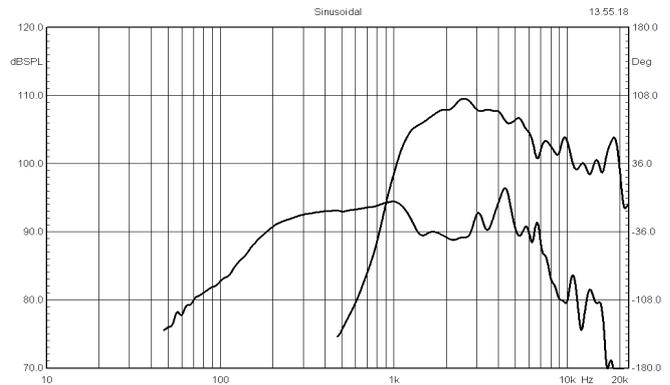
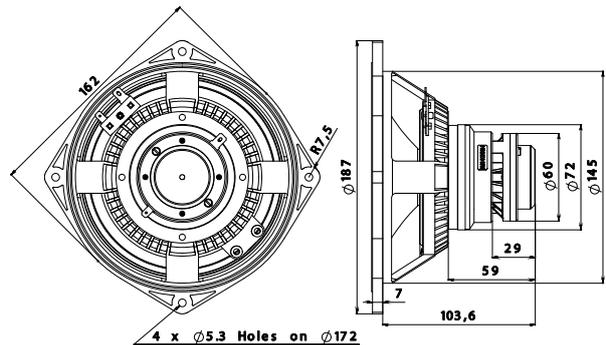


### Features:

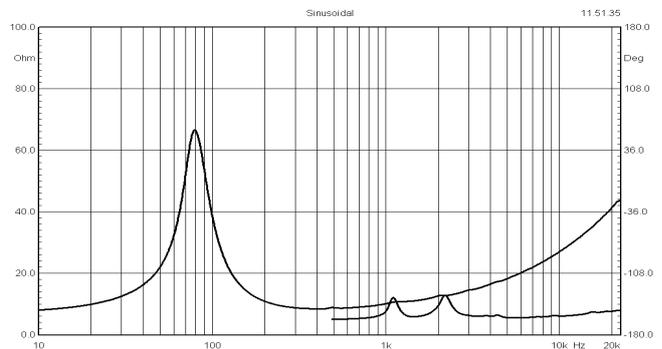
- 93 dB sensitivity 1 W / 1 m
- 130 W + 25 W power handling
- 1.5" + 1" voice coil
- Single point source providing coherent wave front
- 90° conical dispersion
- Optimal for compact 2-way systems

## SPECIFICATIONS

Application	2-way transducer		
Nominal impedance	Ohm	8 or 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		
Voice coil former	Kapton™		
Diaphragm material	Polyester		



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

### Recommended reflex enclosure:

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

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

Coaxial drivers

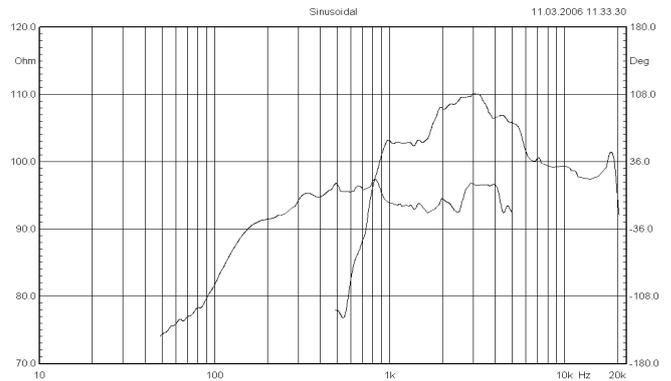
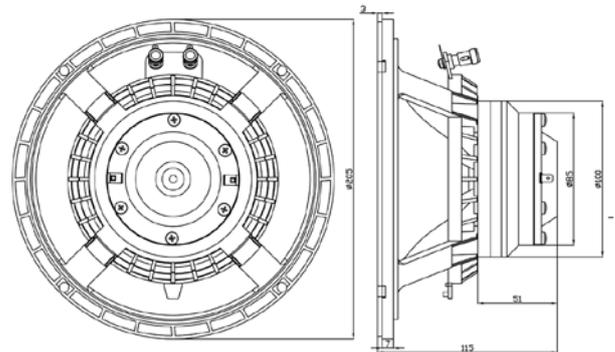


### Features:

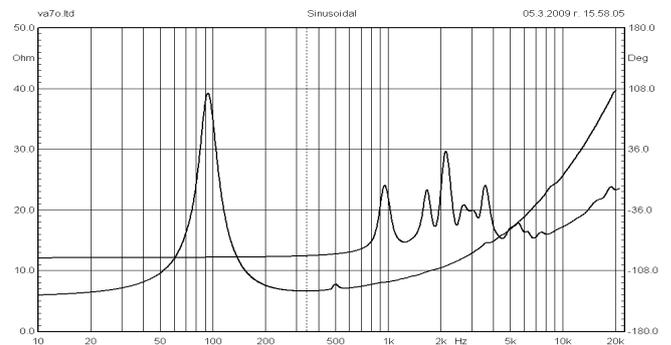
- 95.5 dB sensitivity 1 W / 1 m
- 200 W + 80 W power handling
- 2" + 1.75" Aluminum sandwich voice coil
- Single point source providing coherent wave front
- 90° conical dispersion
- Optimal for compact 2-way systems
- Light weight Carbon fiber diaphragm

## SPECIFICATIONS

Application	2-way transducer		
Nominal impedance:	Ohm		8 or 16
Power handling AES noise:	W		200
Sensitivity (1 W / 1 m):	dB		95.5
Frequency response:	Hz		70 - 3000
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 compliance:	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			
Nominal impedance:	Ohm		16
Power handling AES:	W		80
Peak power:	W		450
Sensitivity (1 W / 1 m):	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 (2 layers in- and outside the VC)		
Voice coil former:			Kapton™
Diaphragm material:			Polyester



Impedance - 16 Ohm driver



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	115
Net weight:	kg	2.15

### Recommended reflex enclosure:

- 3 l / 115 Hz, BRD = 50 mm / 98 mm long
- 8 l / 85 Hz, BRD = 60 mm / 94 mm long
- 10 l / 66 Hz, BRD = 60 mm / 139 mm long

# 12CN680

12" Neodymium coaxial transducer

# Coaxial Series



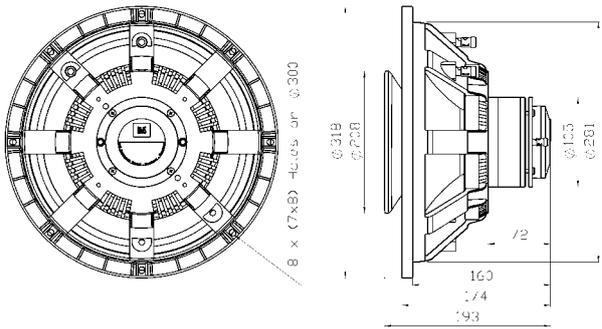


**Features:**

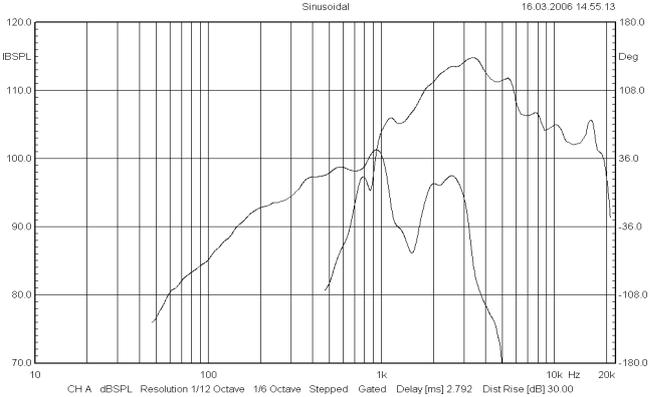
- Neodymium coaxial transducer
- 98 dB sensitivity 1 W / 1 m
- 500 W + 80 W power handling
- 3" Copper sandwich voice coil
- Triple Aluminum demodulating rings
- Elliptical 80° x 60° waveguide for precise directivity
- Single point source providing coherent wave front
- Very high SPL, superb quality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

## SPECIFICATIONS

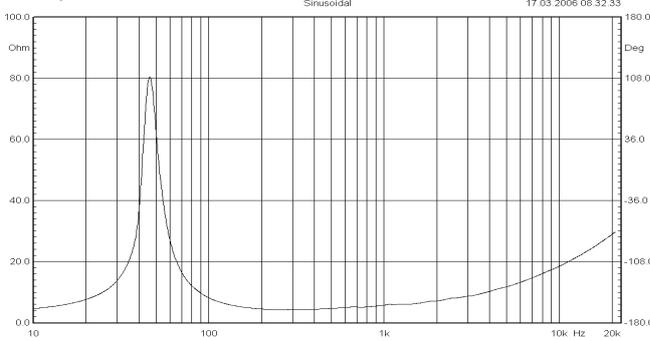
Application	2-way transducer		
Nominal impedance:	Ohm	8 or 16	
Power handling AES noise:	W	500	
Sensitivity (1 W / 1 m):	dB	98	
Frequency response:	Hz	50 - 20000	
Voice coil diameter:	mm	77 (3")	
Voice coil material:		Cu	
Voice coil winding depth:	mm	19	
Magnet gap depth:	mm	8	
Basket:		Cast Aluminum	
Voice coil inductance Le	mH	0.6	
<b>THIELE-SMALL PARAMETERS</b>			
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
<b>SPECIFICATIONS HIGH FREQUENCY</b>			
Nominal impedance:	Ohm	8	
Power handling AES:	W	80	
Peak power:	W	450	
Sensitivity (1 W / 1 m):	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 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.



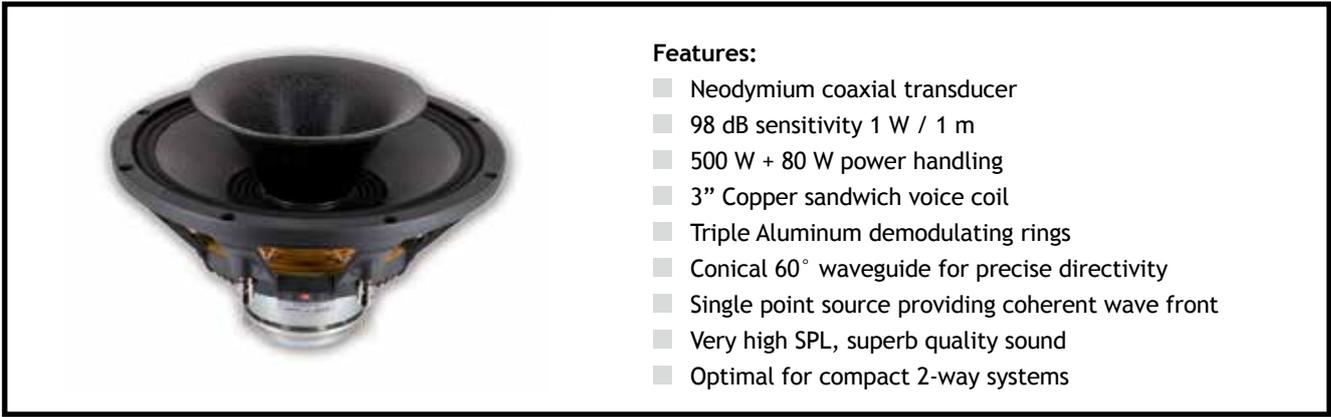
Impedance - 8 Ohm driver



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	180
Net weight:	kg	5.1

**Recommended reflex enclosure:**  
24 l / 57 Hz, BRD = 90 mm / 153 mm long

Coaxial drivers



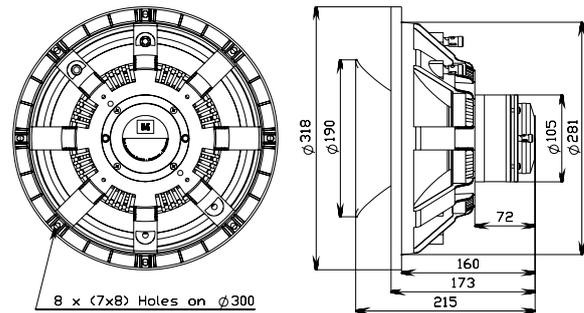
### Features:

- 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

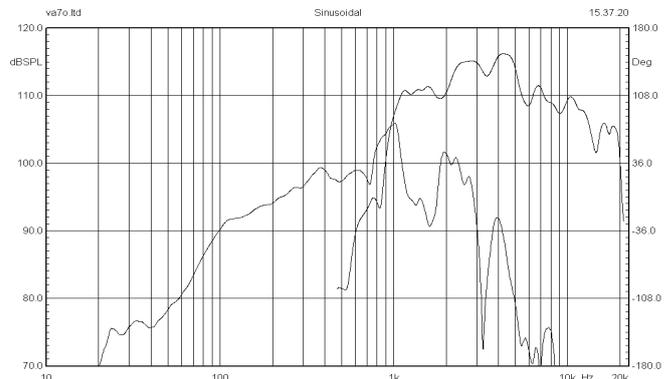
## SPECIFICATIONS

Application	2-way transducer		
Nominal impedance:	Ohm	8 or 16	
Power handling AES noise:	W	500	
Sensitivity (1 W / 1 m):	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			
Nominal impedance:	Ohm	8	
Power handling AES:	W	80	
Peak power:	W	450	
Sensitivity (1 W / 1 m):	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 the VC)	
Voice coil former:		Kapton™	
Diaphragm material:		Polyester	

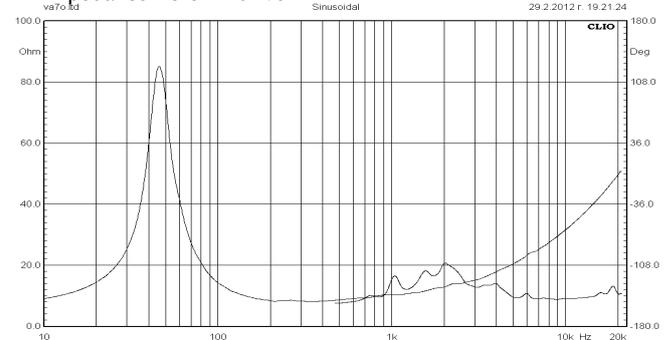
**Recommended reflex enclosure:**  
24 l / 57 Hz, BRD = 90 mm / 153 mm long



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



### 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	281
Overall depth:	mm	215
Net weight:	kg	5.1

## 15CN680

15" Neodymium coaxial transducer

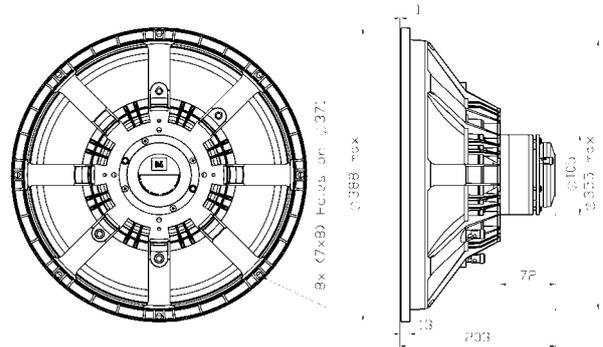


**Features:**

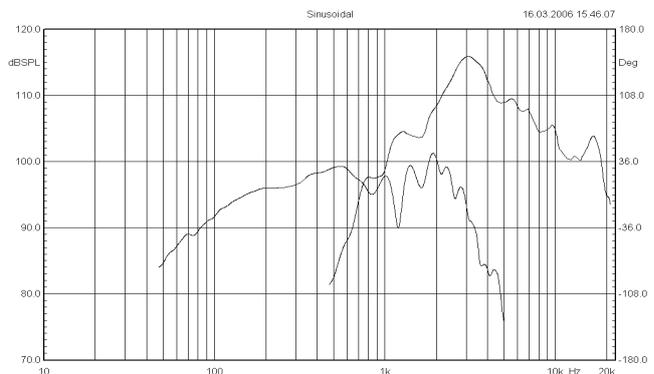
- Neodymium coaxial transducer
- 98 dB sensitivity 1 W / 1 m
- 500 W + 80 W power handling
- 3" Copper sandwich voice coil
- Triple Aluminum demodulating rings
- Elliptical 80° x 60° waveguide for precise directivity
- Single point source providing coherent wave front
- Very high SPL, superb quality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

## SPECIFICATIONS

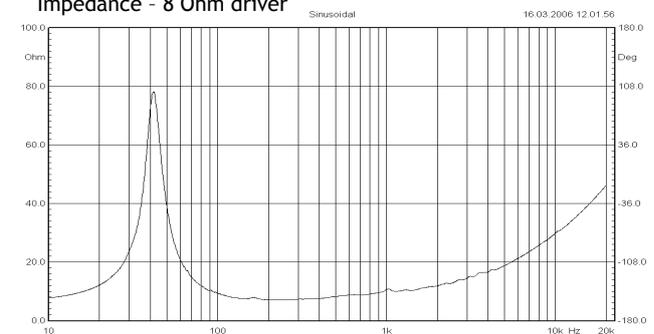
Application	2-way transducer		
Nominal impedance:	Ohm	8 or 16	
Power handling AES noise:	W	500	
Sensitivity (1 W / 1 m):	dB	98	
Frequency response:	Hz	40 - 2000	
Voice coil diameter:	mm	77 (3")	
Voice coil material:		Cu	
Voice coil winding depth:	mm	19	
Magnet gap depth:	mm	8	
Basket:		Cast Aluminum	
Effect. diaphragm diameter D	mm	335	
<b>THIELE-SMALL PARAMETERS</b>			
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 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	± 5.5
<b>SPECIFICATIONS HIGH FREQUENCY</b>			
Nominal impedance:	Ohm	8	
Power handling AES:	W	80	
Peak power:	W	450	
Sensitivity (1 W / 1 m):	dB	113	
Frequency range:	Hz	600 - 20000	
Recommended crossover:	Hz	1200	
Voice coil diameter:	mm	80° x 60° (1.75")	
Magnet material:		Neodymium	
Flux density	T	2.2	
Voice coil material:	Copper clad Aluminum		
	(2 layers in- and outside 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 100 liter.



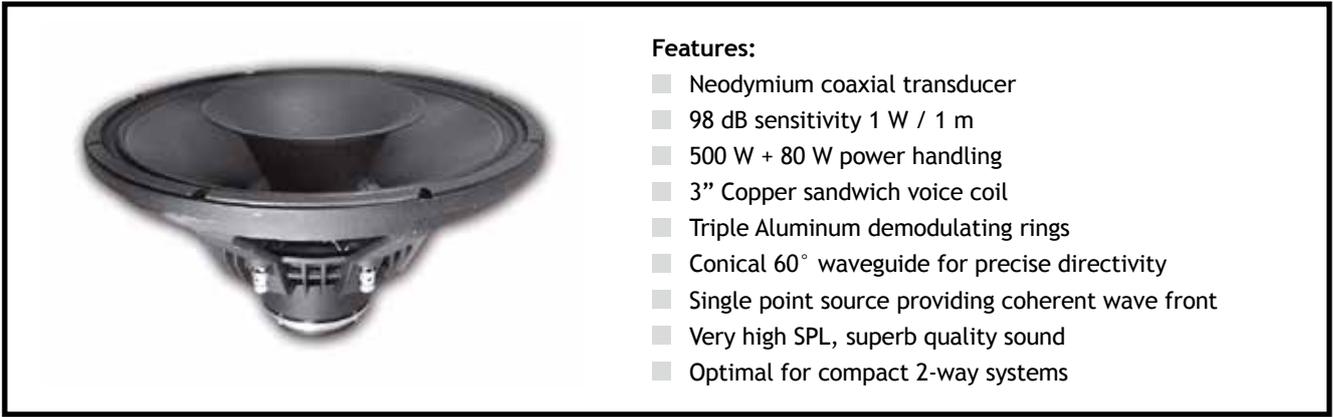
Impedance - 8 Ohm driver



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	203
Net weight:	kg	5.3

### Recommended reflex enclosure:

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

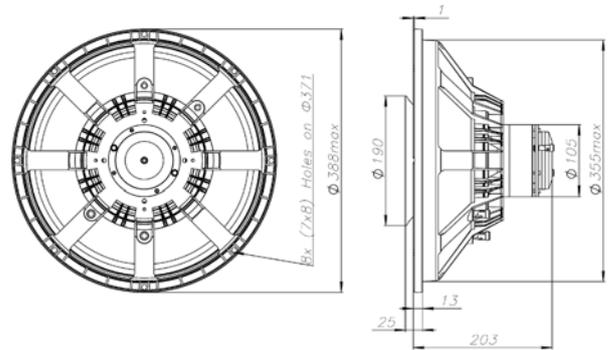


#### Features:

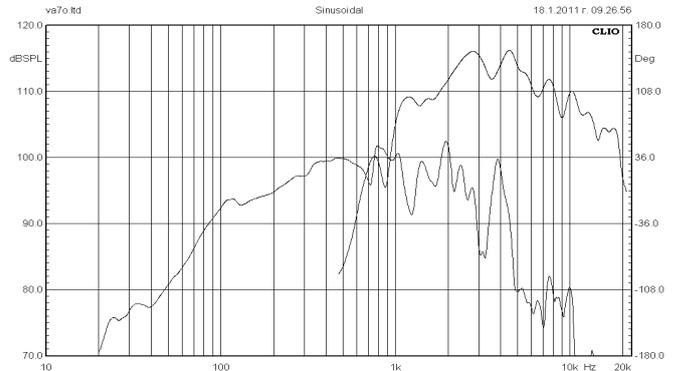
- Neodymium coaxial transducer
- 98 dB sensitivity 1 W / 1 m
- 500 W + 80 W power handling
- 3" Copper sandwich voice coil
- Triple Aluminum demodulating rings
- Conical 60° waveguide for precise directivity
- Single point source providing coherent wave front
- Very high SPL, superb quality sound
- Optimal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

## SPECIFICATIONS

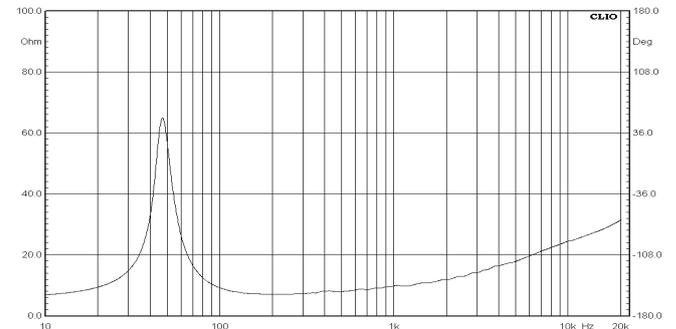
Application	2-way transducer		
Nominal impedance:	Ohm	8 or 16	
Power handling AES noise:	W	500	
Sensitivity (1 W / 1 m):	dB	98	
Frequency response:	Hz	40 - 2000	
Voice coil diameter:	mm	77 (3")	
Voice coil material:		Cu	
Voice coil winding depth:	mm	19	
Magnet gap depth:	mm	8	
Basket:		Cast Aluminum	
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 compliance:	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	± 5.5
SPECIFICATION HIGH FREQUENCY			
Nominal impedance:	Ohm	8	
Power handling AES:	W	80	
Peak power:	W	450	
Sensitivity (1 W / 1 m):	dB	113	
Frequency range:	Hz	600 - 20000	
Recommended crossover:	Hz	1200	
Voice coil diameter:	mm	80° x 60° (1.75")	
Magnet material:		Neodymium	
Fluchs density	T	2.2	
Voice coil material:	Copper clad Aluminum		
	(2 layers in- and outside 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 100 liter.



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	215
Net weight:	kg	5.2

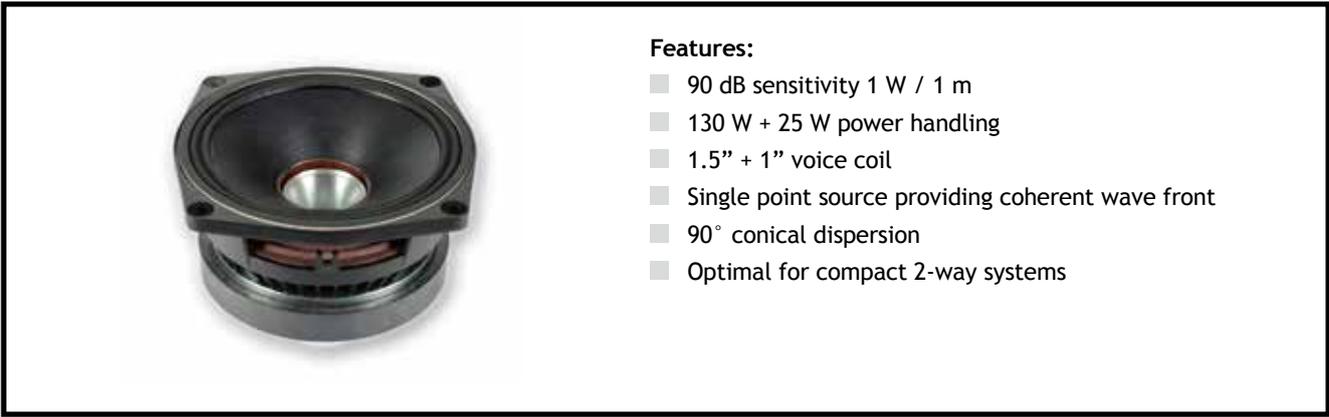
#### Recommended reflex enclosure:

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

# 5C150

5" coaxial transducer

# Coaxial Series

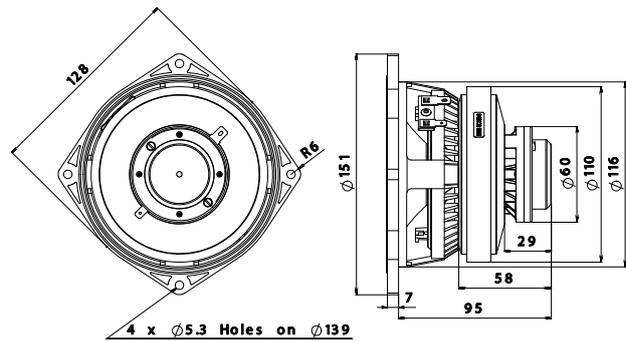


### Features:

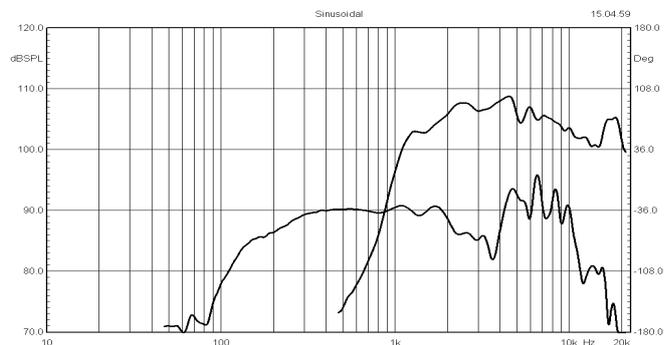
- 90 dB sensitivity 1 W / 1 m
- 130 W + 25 W power handling
- 1.5" + 1" voice coil
- Single point source providing coherent wave front
- 90° conical dispersion
- Optimal for compact 2-way systems

## SPECIFICATIONS

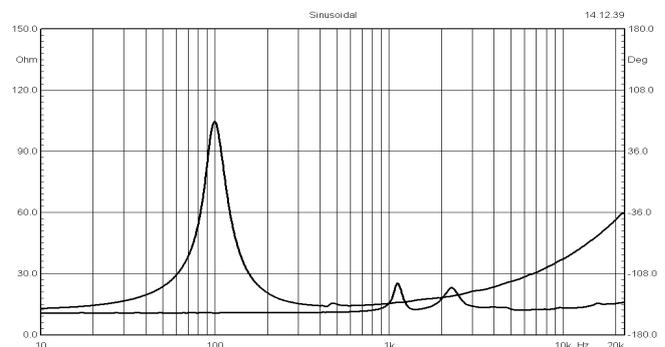
Application	2-way transducer		
Nominal impedance	Ohm	8 or 16	
Power handling AES noise	W	130	
Sensitivity (1 W / 1 m)	dB	90	
Frequency response	Hz	80-20000	
Voice coil diameter	mm	38 (1,5")	
Voice coil material		Cu	
Voice coil winding depth	mm	15	
Magnet gap depth	mm	5	
Basket		Cast Aluminium	
Effect. 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
SPECIFICATION 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 (1")	
Magnet material		Neodymium	
Flux density	T	1.6	
Voice coil material	Copper clad Aluminium		
Voice coil material	Kapton™		
Diaphragm material	Polyester		



Frequency response measured 1 W (2.83V) at 1 m 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:

1,9 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

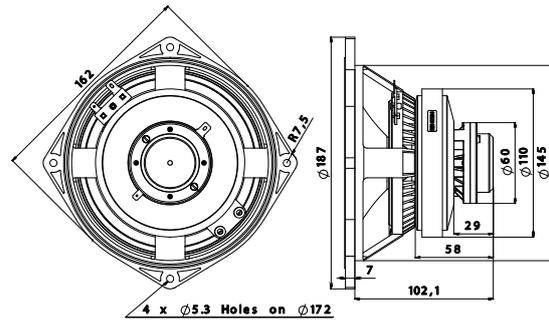


### Features:

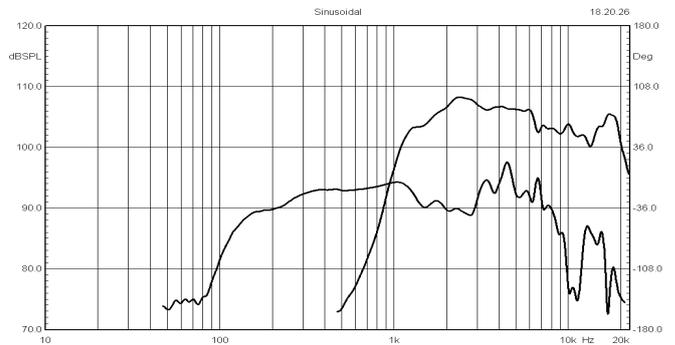
- 93 dB sensitivity 1 W / 1 m
- 130 W + 25 W power handling
- 1.5" + 1" voice coil
- Single point source providing coherent wave front
- 90° conical dispersion
- Optimal for compact 2-way systems

## SPECIFICATIONS

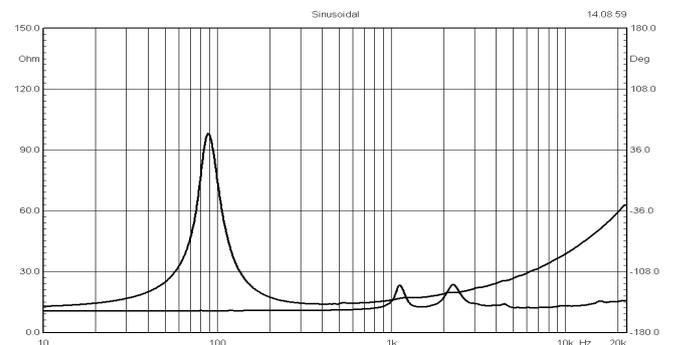
Application	2-way transducer		
Nominal impedance	Ohm	8 or 16	
Power handling AES noise	W	130	
Sensitivity (1 W / 1 m)	dB	93	
Frequency response	Hz	80-20000	
Voice coil diameter	mm	38 (1,5")	
Voice coil material		Cu	
Voice coil winding depth	mm	15	
Magnet gap depth	mm	5	
Basket		Cast Aluminium	
Effect. 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
SPECIFICATION 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 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:

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

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

# 8C250

8" coaxial cone driver

Coaxial Series



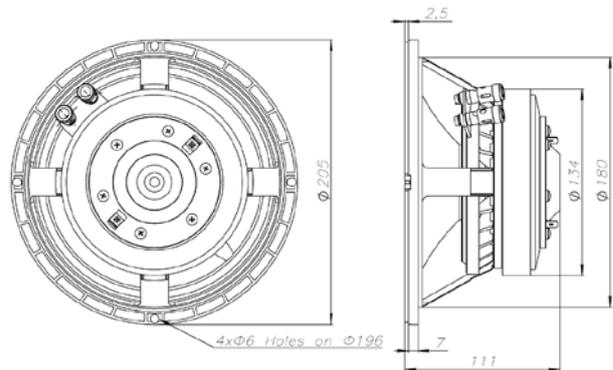


**Features:**

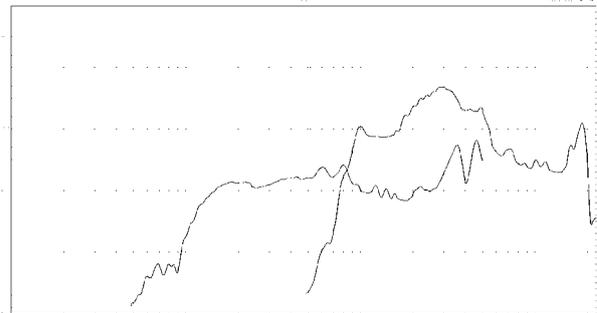
- 93 dB sensitivity 1 W / 1 m
- 200 W + 80 W power handling
- 2" + 1.75" sandwich voice coil
- Single point source providing coherent wave front
- 90° conical dispersion
- Optimal for compact 2- or 3-way systems

## SPECIFICATIONS

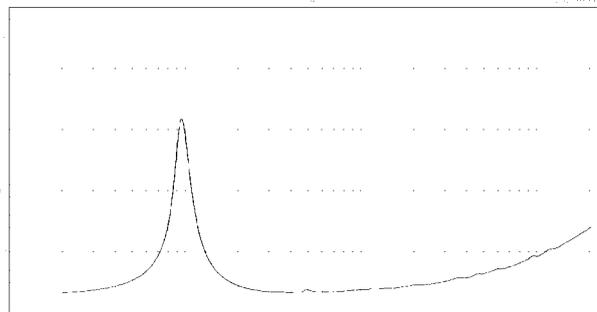
Application	2-way transducer		
Nominal impedance:	Ohm	8 or 16	
Power handling AES noise:	W	200	
Sensitivity (1 W / 1 m):	dB	93	
Frequency response:	Hz	70 - 3000	
Voice coil diameter:	mm	51 (2")	
Voice coil material:		Cu	
Voice coil winding depth:	mm	15	
Magnet gap depth:	mm	6.5	
Basket:		Cast Aluminum	
Effect. diaphragm diameter D	mm	160	
<b>THIELE-SMALL PARAMETERS</b>			
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 compliance:	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
<b>SPECIFICATIONS HIGH FREQUENCY</b>			
Nominal impedance:	Ohm	16	
Power handling AES:	W	80	
Peak power:	W	300	
Sensitivity (1 W / 1 m):	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		
	(2 layers in- and outside of the VC)		
Voice coil former:		Kapton™	
Diaphragm material:		Polyester	



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



Impedance - 8 Ohm driver

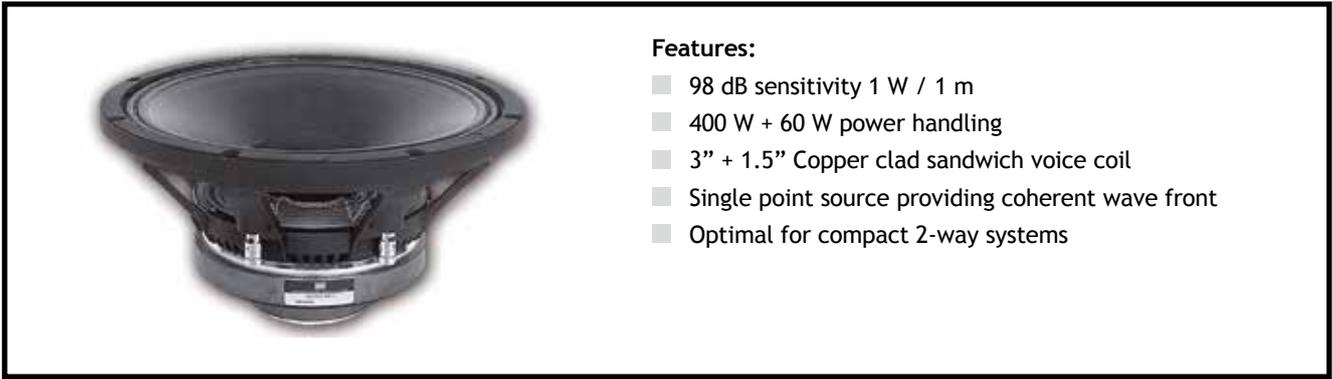


MOUNTING INFORMATION		
Overall diameter:	mm	205
Mounting holes diameter:	mm	4 x (6 x 6.5)
Bolt circle diameter:	mm	196
Baffle cut-out diameter:	mm	182
Overall depth:	mm	111
Net weight:	kg	3

**Recommended reflex enclosure:**

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

Closed enclosure 8 - 12 liter

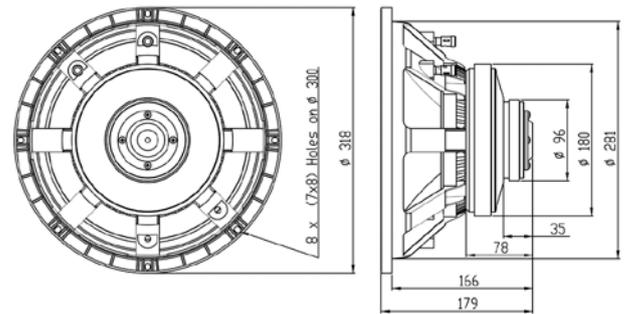


#### Features:

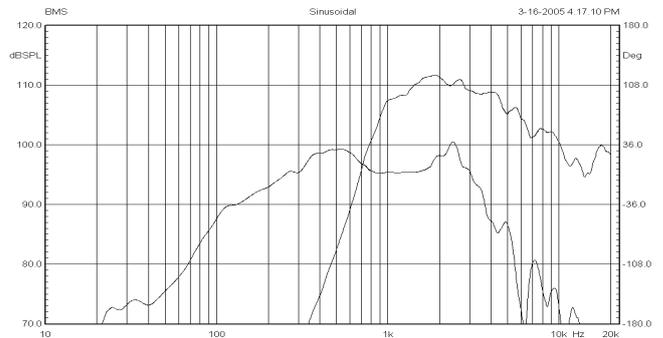
- 98 dB sensitivity 1 W / 1 m
- 400 W + 60 W power handling
- 3" + 1.5" Copper clad sandwich voice coil
- Single point source providing coherent wave front
- Optimal for compact 2-way systems

## SPECIFICATIONS

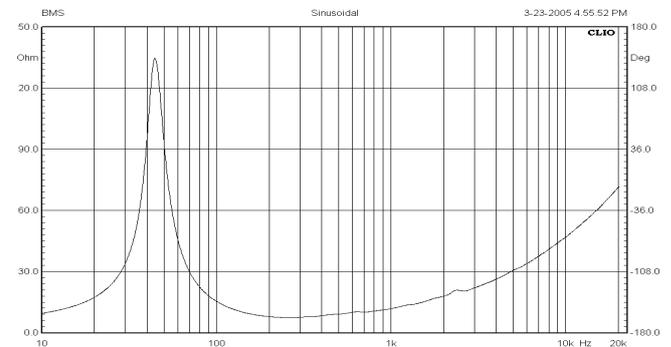
Application	2-way transducer		
Nominal impedance:	Ohm	8/8	
Power handling AES noise:	W	400	
Sensitivity (1 W / 1 m):	dB	98	
Frequency response:	Hz	55 - 2000	
Voice coil diameter:	mm	77 (3")	
Voice coil material:		Cu	
Voice coil winding depth:	mm	15	
Magnet gap depth:	mm	10	
Basket:		Cast Aluminum	
Effect. diaphragm diameter D	mm	249	
<b>THIELE-SMALL PARAMETERS</b>			
Resonance frequency:	Fs	Hz	47.3
DC resistance:	Re	Ohm	5.70
Mechanical Q factor:	Qms		5.40
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 compliance:	Cms	mm / N	0.180
BL factor:	BL	Tesla m	20.6
Effective piston area:	Sd	m <sup>2</sup>	0.0487
Max. linear excursion:	Xmax	mm	± 2.5
<b>SPECIFICATIONS HIGH FREQUENCY</b>			
Nominal impedance:	Ohm	8	
Power handling AES:	W	60	
Peak power:	W	300	
Sensitivity (1 W / 1 m):	dB	112	
Frequency range:	Hz	1.2 - 20000	
Recommended crossover:	Hz	1800	
Voice coil diameter:	mm	38 (1.5")	
Magnet material:		Ceramic	
Flux density	T	1.9	
Voice coil material:	Copper clad Aluminum		
	(2 layers in- and outside of the VC)		
Voice coil former:		Kapton™	
Basket:		Cast Aluminum	
Diaphragm material:		Polyester	



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



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	179
Net weight:	kg	7.8

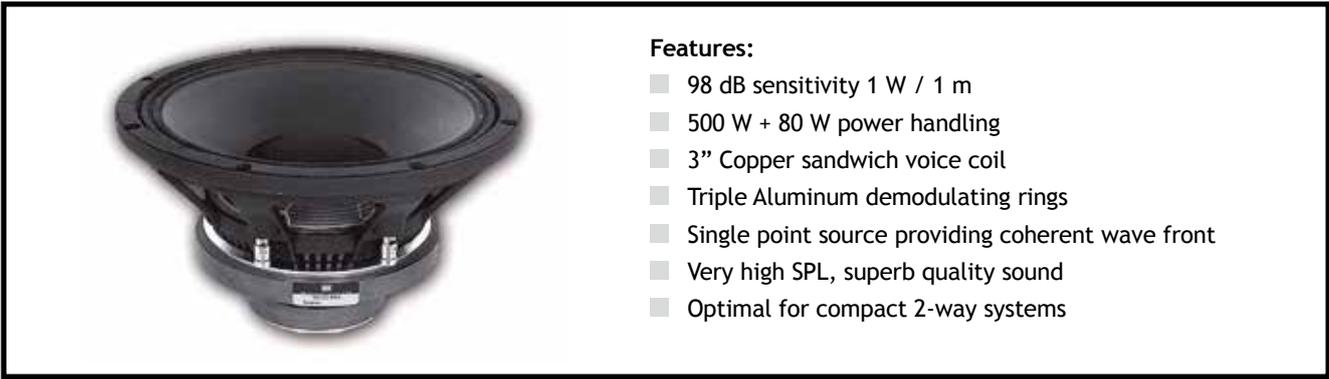
#### Recommended reflex enclosure:

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

# 12C362

12" coaxial cone driver

# Coaxial Series

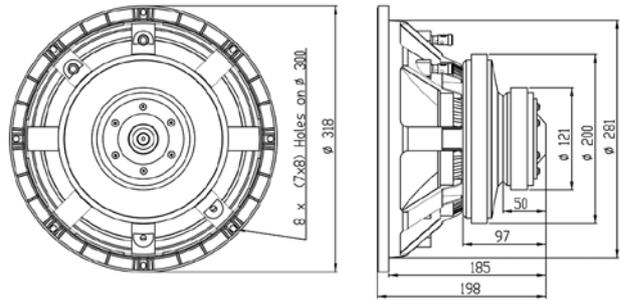


**Features:**

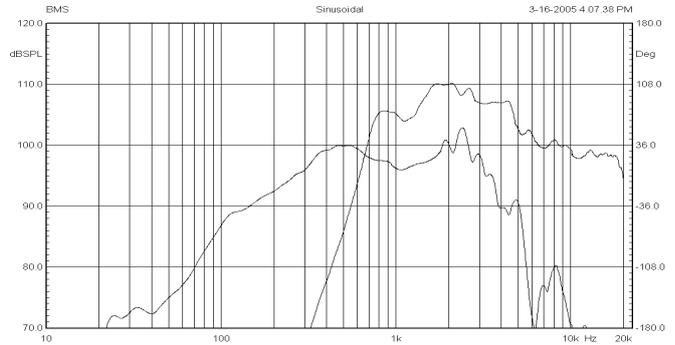
- 98 dB sensitivity 1 W / 1 m
- 500 W + 80 W power handling
- 3" Copper sandwich voice coil
- Triple Aluminum demodulating rings
- Single point source providing coherent wave front
- Very high SPL, superb quality sound
- Optimal for compact 2-way systems

## SPECIFICATIONS

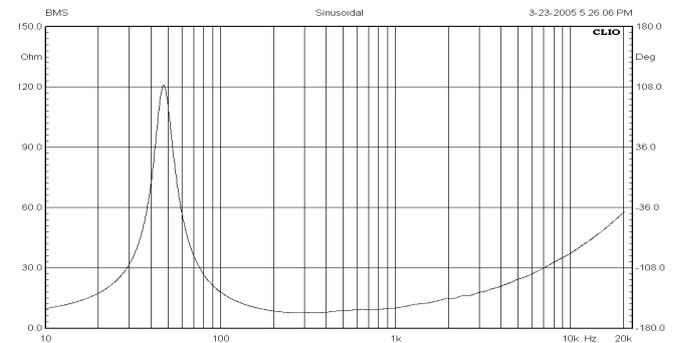
Application	2-way transducer		
Nominal impedance:	Ohm	8/8	
Power handling AES noise:	W	500	
Sensitivity (1 W / 1 m):	dB	98	
Frequency response:	Hz	45 - 2000	
Voice coil diameter:	mm	77 (3")	
Voice coil material:		Cu	
Voice coil winding depth:	mm	19	
Magnet gap depth:	mm	10	
Basket:		Cast Aluminum	
Effect. diaphragm diameter D	mm	249	
<b>THIELE-SMALL PARAMETERS</b>			
Resonance frequency:	Fs	Hz	45.8
DC resistance:	Re	Ohm	5.70
Mechanical Q factor:	Qms		5.60
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	0.180
BL factor:	BL	Tesla m	23.2
Effective piston area:	Sd	m <sup>2</sup>	0.0487
Max. linear excursion:	Xmax	mm	± 4.5
<b>SPECIFICATIONS HIGH FREQUENCY</b>			
Nominal impedance:	Ohm	8	
Power handling AES:	W	80	
Peak power:	W	450	
Sensitivity (1 W / 1 m):	dB	112	
Frequency range:	Hz	600 - 20000	
Recommended crossover:	Hz	1200	
Voice coil diameter:	mm	44.4 (1.75")	
Magnet material:		Ceramic	
Flux density	T	2.0	
Voice coil material:	Copper clad Aluminum		
	(2 layers in- and outside of the VC)		
Voice coil former:		Kapton™	
Basket:		Cast Aluminum	
Diaphragm material:		Polyester	



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



Impedance - 8 Ohm driver

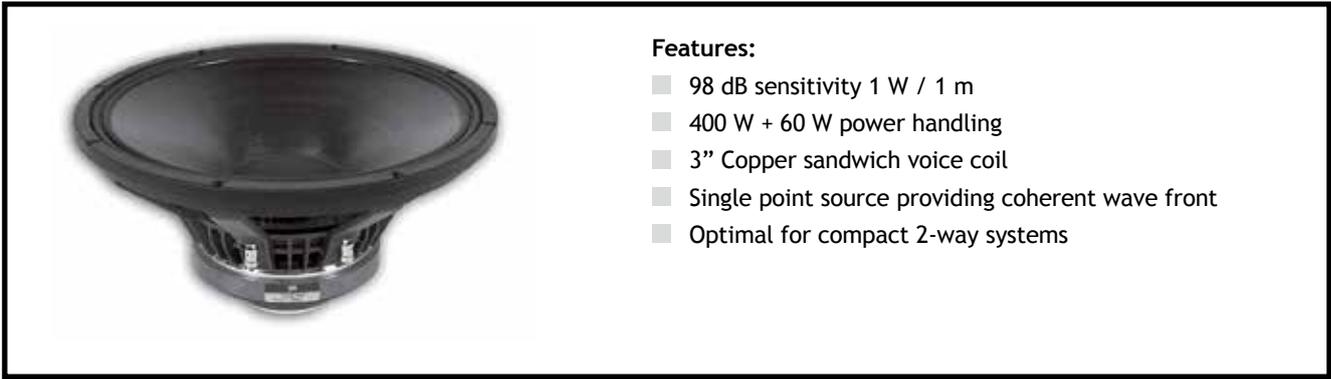


<b>MOUNTING INFORMATION</b>		
Overall diameter:	mm	318
Mounting holes diameter:	mm	8 x (7 x 8)
Bolt circle diameter:	mm	300
Baffle cut-out diameter:	mm	284
Overall depth:	mm	198
Net weight:	kg	10.20

**Recommended reflex enclosure:**

10 l / 77 Hz, -3 dB = 103 Hz, BRD = 70 mm / 132 mm long  
 25 l / 63 Hz, -3 dB = 68 Hz, BRD = 90 mm / 106 mm long

Coaxial drivers

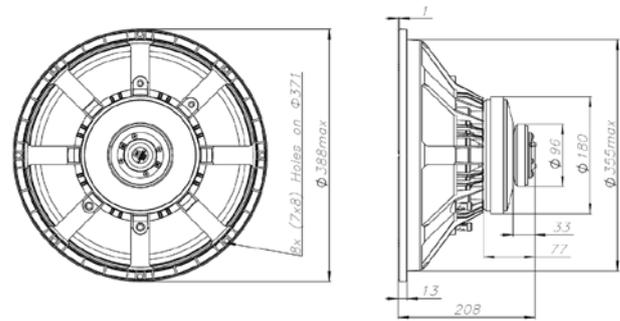


### Features:

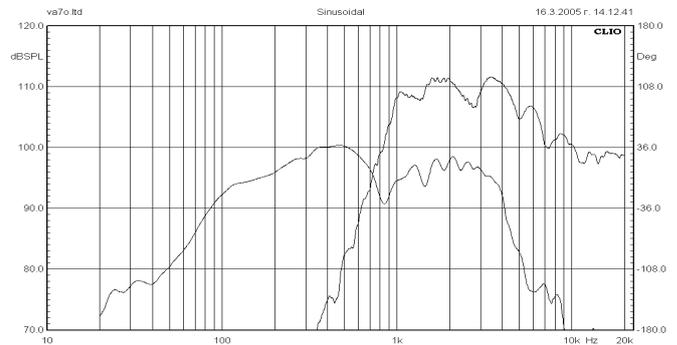
- 98 dB sensitivity 1 W / 1 m
- 400 W + 60 W power handling
- 3" Copper sandwich voice coil
- Single point source providing coherent wave front
- Optimal for compact 2-way systems

## SPECIFICATIONS

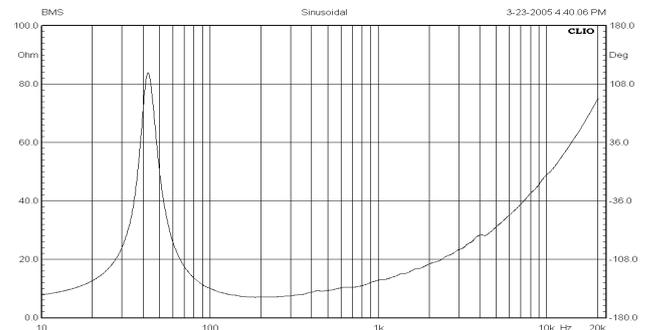
Application	2-way transducer		
Nominal impedance:	Ohm	8/8	
Power handling AES noise:	W	400	
Sensitivity (1 W / 1 m):	dB	98	
Frequency response:	Hz	40 - 2500	
Voice coil diameter:	mm	77 (3")	
Voice coil Material:		Cu	
Voice coil winding depth:	mm	15	
Magnet gap depth:	mm	10	
Basket:		Cast Aluminum	
Effect. diaphragm diameter D	mm	335	
<b>THIELE-SMALL PARAMETERS</b>			
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	0.1000
Mechanical compliance:	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	± 2.5
<b>SPECIFICATIONS HIGH FREQUENCY</b>			
Nominal impedance:	Ohm	8	
Power handling AES:	W	60	
Peak power:	W	300	
Sensitivity (1 W / 1 m):	dB	112	
Frequency range:	Hz	1200 - 20000	
Recommended crossover:	Hz	1800	
Voice coil diameter:	mm	38 (1.5")	
Magnet material:		Ceramic	
Flux density	T	1.9	
Voice coil material:	Copper clad Aluminum		
Voice coil former:	Kapton™		
Basket:	Cast Aluminum		
Diaphragm material:	Polyester		



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



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	208
Net weight:	kg	7.6

### Recommended reflex enclosure:

65 l / 50 Hz, -3 dB = 57 Hz, BRD = 130 mm / 143 mm long  
 80 l / 48 Hz, -3 dB = 52 Hz, BRD = 130 mm / 115 mm long

# 15C362

15" coaxial cone driver

# Coaxial Series





**Features:**

- 98 dB sensitivity 1 W / 1 m
- 500 W + 80 W 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 2-way systems

## SPECIFICATIONS

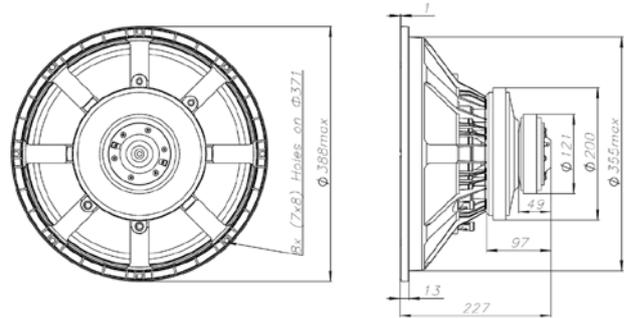
Application	2-way transducer	
Nominal impedance:	Ohm	8/8
Power handling AES noise:	W	500
Sensitivity (1 W / 1 m):	dB	98
Frequency response:	Hz	40 - 20000
Voice coil diameter:	mm	77 (3")
Voice coil material:		Cu
Voice coil winding depth	mm	19
Magnet gap depth	mm	10
Basket		Cast Aluminum
Effect. diaphragm 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 compliance:	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

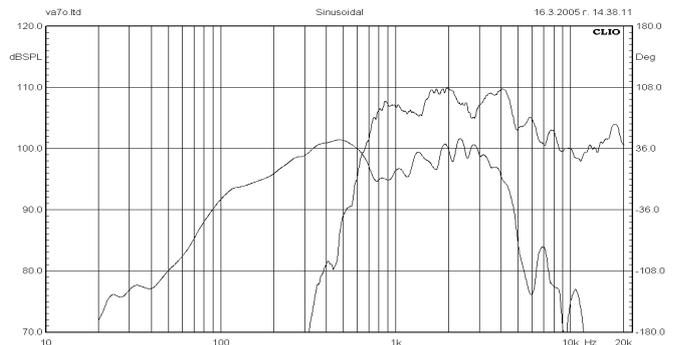
SPECIFICATIONS HIGH FREQUENCY		
Nominal impedance:	Ohm	8
Power handling AES:	W	80
Peak power:	W	450
Sensitivity (1 W / 1 m):	dB	112
Frequency range:	Hz	600 - 20000
Recommended crossover:	Hz	1200
Voice coil diameter:	mm	44.4 (1.75")
Magnet material:		Ceramic
Flux density:	T	2.0
Voice coil material:	Copper clad Aluminum	
	(2 layers in and outside of the VC)	
Voice coil former:		Kapton™
Diaphragm material:		Polyester

**Recommended reflex enclosure:**

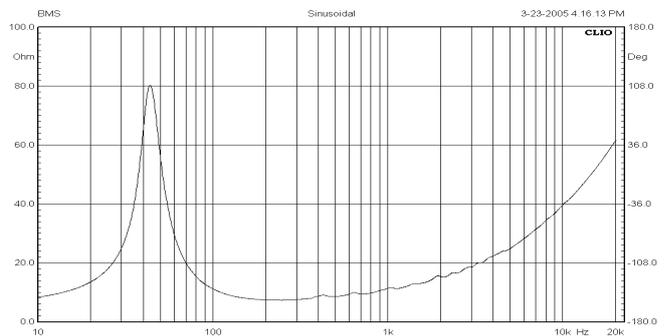
43 l / 56 Hz, -3 dB = 67 Hz, BRD = 120 mm / 155 mm long  
 70 l / 50 Hz, -3 dB = 54 Hz, BRD = 140 mm / 155 mm long



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

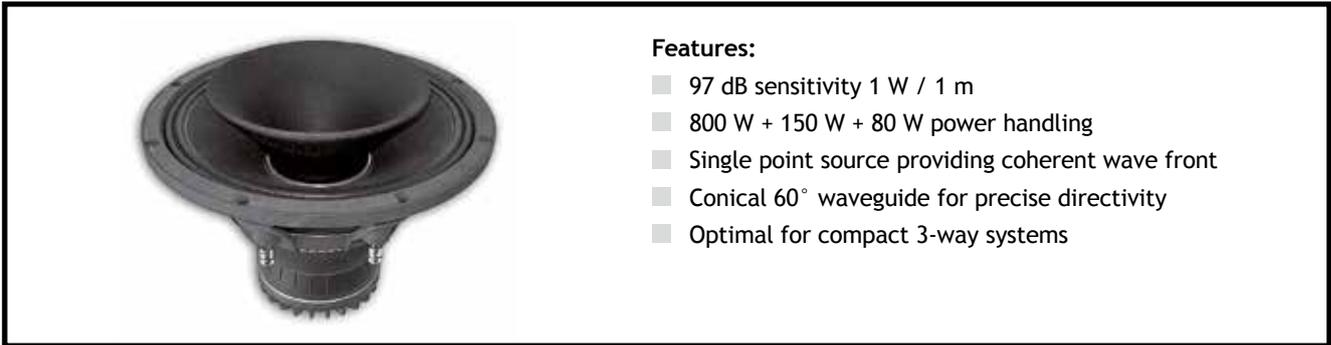


**Impedance - 8 Ohm driver**



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

Coaxial drivers

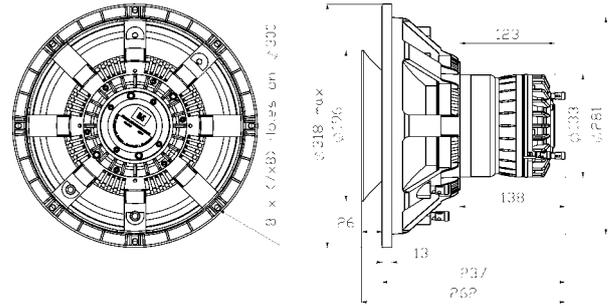


#### Features:

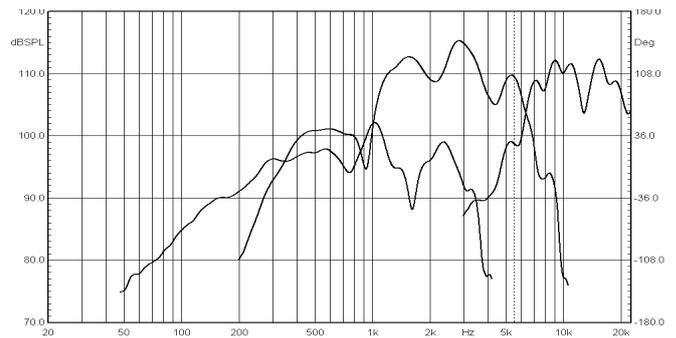
- 97 dB sensitivity 1 W / 1 m
- 800 W + 150 W + 80 W power handling
- Single point source providing coherent wave front
- Conical 60° waveguide for precise directivity
- Optimal for compact 3-way systems

## SPECIFICATIONS

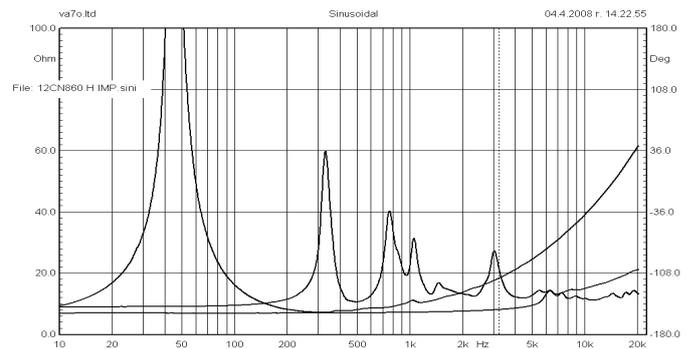
Application	Transducer		
Nominal impedance:	Ohm		8
Power handling AES noise:	W		800
Low frequency:			
Sensitivity (1 W / 1 m):	dB		98
Frequency response:	Hz		40 - 22000
Voice coil diameter:	mm		101.6 (4")
Voice coil material:			Cu
Voice coil winding depth:	mm		19
Magnet gap depth:	mm		10
Basket:			Cast Aluminum
Effect. diaphragm diameter D:	mm		239
THIELE-SMALL PARAMETERS			
Resonance frequency:	Fs	Hz	52
DC resistance:	Re	Ohm	5.70
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 compliance:	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
SPECIFICATIONS 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™
Diaphragm material:			Polyester



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



Impedance - 8 Ohm driver



#### MOUNTING INFORMATION

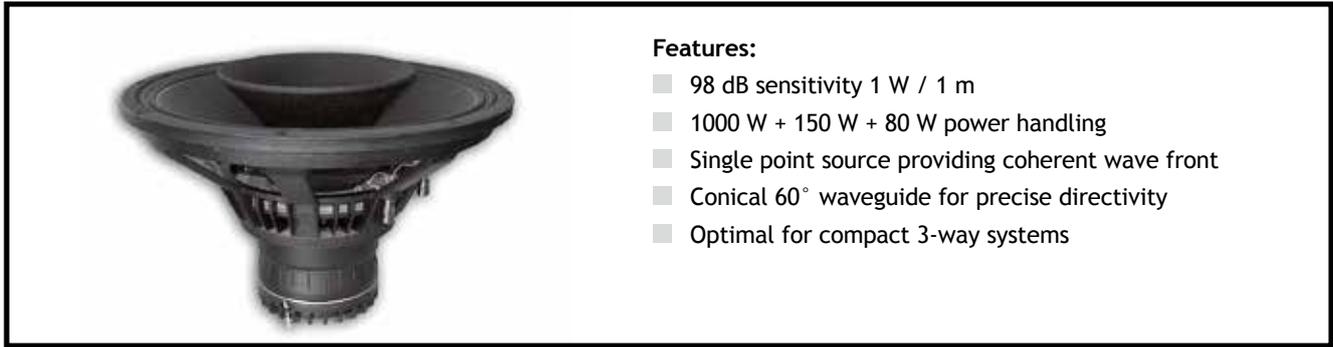
Overall diameter:	mm	318
Mounting holes diameter:	mm	8 x (7 x 8)
Bolt circle diameter:	mm	300
Baffle cut-out diameter:	mm	284
Overall depth:	mm	263
Net weight:	kg	8.55

#### Recommended reflex enclosure:

20 l / 57 Hz, BRD = 90 mm / 194 mm long

## 15CN860

15" Neodymium triaxial transducer

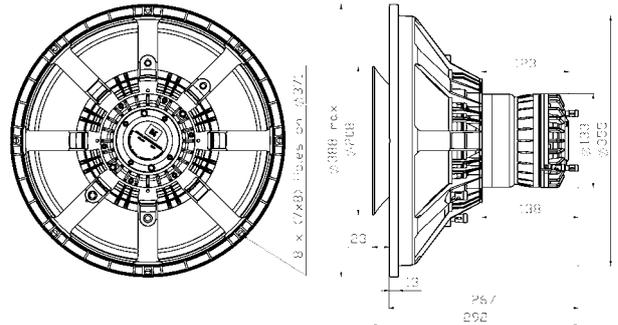


**Features:**

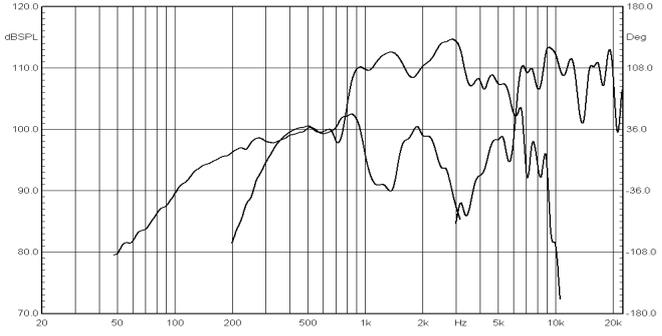
- 98 dB sensitivity 1 W / 1 m
- 1000 W + 150 W + 80 W power handling
- Single point source providing coherent wave front
- Conical 60° waveguide for precise directivity
- Optimal for compact 3-way systems

## SPECIFICATIONS

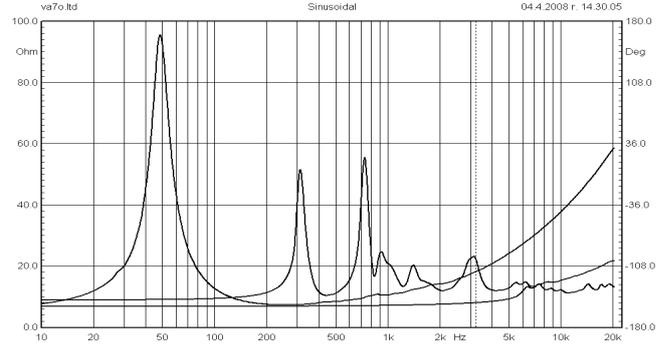
Application	Transducer		
Nominal impedance:	Ohm	8	
Power handling AES noise:	W	1000	
Low frequency			
Sensitivity (1 W / 1 m):	dB	98	
Frequency response:	Hz	40 - 22000	
Voice coil Diameter:	mm	101.6 (4")	
Voice coil winding depth:	mm	22	
Magnet gap depth:	mm	10	
Voice coil material:		Cu	
Basket:		Cast 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
SPECIFICATIONS 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™	
Diaphragm material:		Polyester	



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



Impedance - 8 Ohm driver

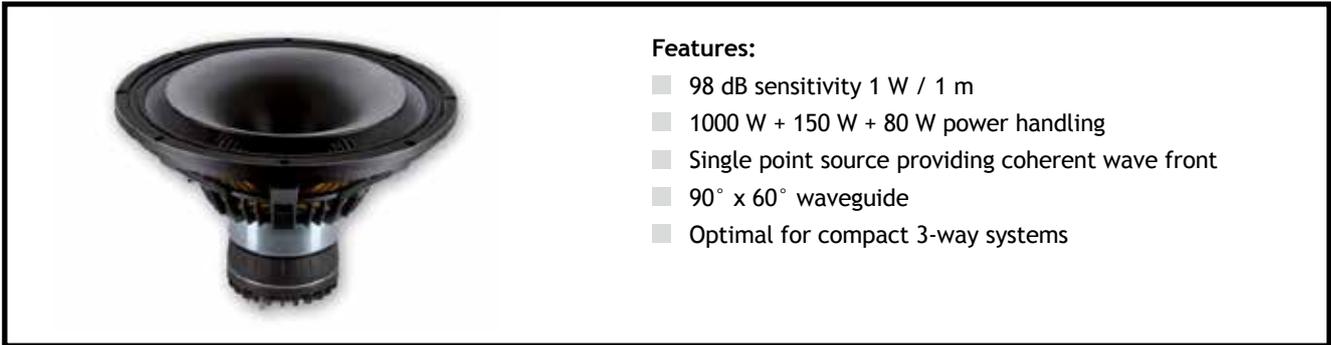


<b>MOUNTING INFORMATION</b>		
Overall diameter:	mm	388
Mounting holes diameter:	mm	8 x (7 x 8)
Bolt circle diameter:	mm	371
Baffle cut-out diameter:	mm	358
Overall depth:	mm	292
Net weight:	kg	8.95

**Recommended reflex enclosure:**

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

Triaxial drivers

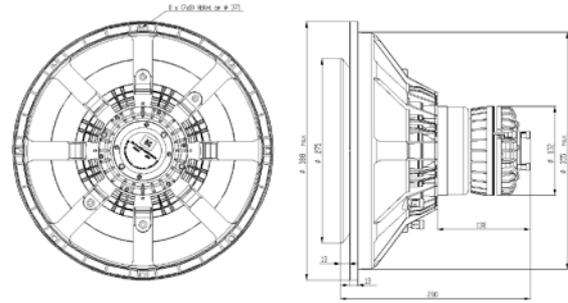


#### Features:

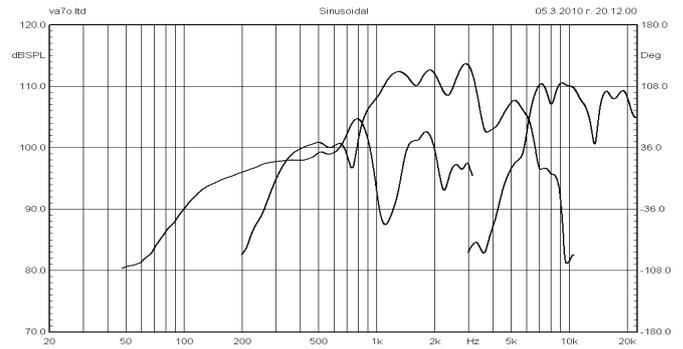
- 98 dB sensitivity 1 W / 1 m
- 1000 W + 150 W + 80 W power handling
- Single point source providing coherent wave front
- 90° x 60° waveguide
- Optimal for compact 3-way systems

## SPECIFICATIONS

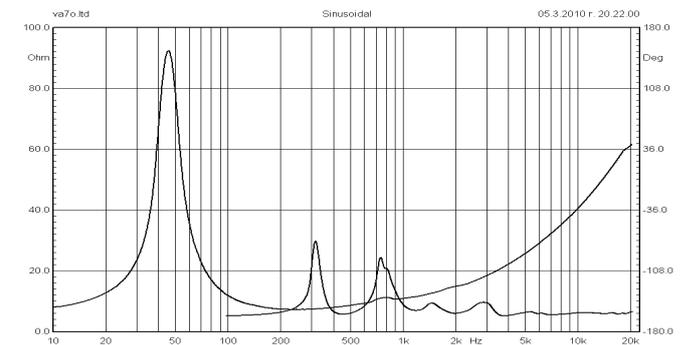
Application	Transducer		
Nominal impedance:	Ohm		8
Power handling AES noise:	W		1000
Low frequency			
Sensitivity (1 W / 1 m):	dB		98
Frequency response:	Hz		40 - 22000
Voice coil diameter:	mm		101.6 (4")
Voice coil winding depth:	mm		22
Magnet gap depth:	mm		10
Voice coil material:			Cu
Basket:			Cast 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	0.120
Mechanical compliance:	Cms	mm / N	0.0884
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
SPECIFICATIONS 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™
Diaphragm material:			Polyester



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



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	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

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 specialized manufacturing methods.

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

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, increase 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 diaphragms 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.

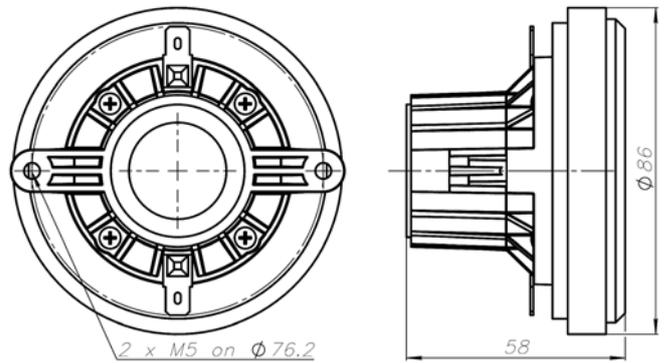


**Features:**

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

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 BMS 4524 has an exceptional dynamic range and produces even the most complex music signals with depth and definition.

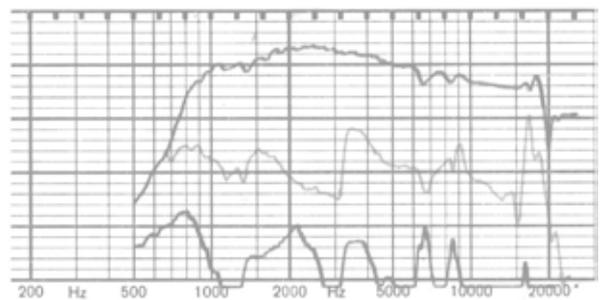
The BMS 4524 - 1" compression driver is designed for a wide variety of applications including high fidelity audio, small to medium high quality professional reinforcement systems and studio monitors. The BMS 4524 offers all the benefits of the patented BMS compression driver design, but at much reduced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



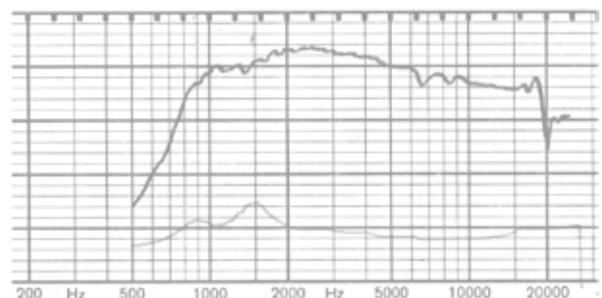
## SPECIFICATIONS

Throat diameter:	1" (25.4 mm)	
Nominal impedance:	8 Ohm	
Power capacity (AES):	25 W	
Peak power:	200 W	
Sensitivity		
CD horn 90° x 75° 1 W / 1 m:	113 dB	
Plane wave tube, 1 W / 1 m:	117dB	
Maximal SPL (cont.):	127 dB at 25 W	
Frequency range:	1200 - 30000 Hz	
Recommended crossover:	1900 Hz	
Magnet material:	Ferrite	
Flux density (Tesla):	1.8	
Voice coil material:	Copper clad Aluminum	
Voice coil former:	Kapton™	
Diaphragm material:	Polyester	
<b>MOUNTING INFORMATION</b>		
Overall diameter:	mm	86
Depth:	mm	58
Net weight:	kg	0.665
2 x M5 holes, 180° on 76.2 mm diameter		

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



# 4538

1" high frequency compression driver

# 1" Compression drivers



**Features:**

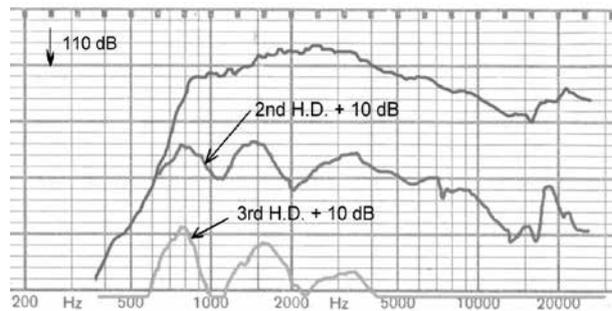
- Unique patented design
- 114 dB sensitivity 1 W / 1 m
- 1.9 kHz crossover
- Extended high frequency response up to 30 kHz
- Very small size and low weight
- 38 mm voice coil
- 8 Ohm

BMS 4538 is a powerful 1" professional compression driver that delivers superb sonic quality at a small package.

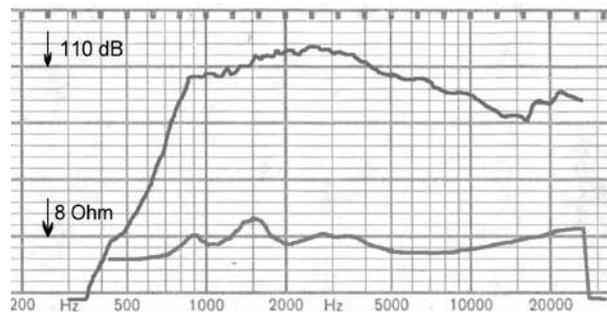
The unique BMS annular diaphragm together with the patented radial phasing plug achieve very high sensitivity and linear frequency response up to 30 kHz. The sound of the BMS 4538 has an exceptional dynamic range and produces even the most complex music signals with depth and definition.

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.

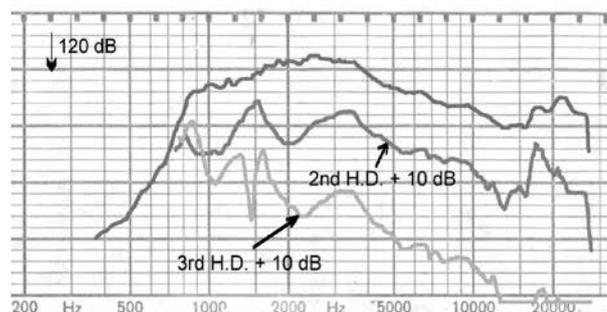
BMS 4538-8, CD 90/75 Horn, SPL 1W / 1m



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



BMS 4538-8, CD 90/75 Horn, SPL 10W / 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° x 75°, 1 W / 1 m	114 dB	
Plane wave tube, 1 mW	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	
<b>MOUNTING INFORMATION</b>		
Overall diameter:	mm	96
Depth:	mm	40
Net weight:	kg	0.98
2 x M5 holes, 180° on 76.2 mm diameter		



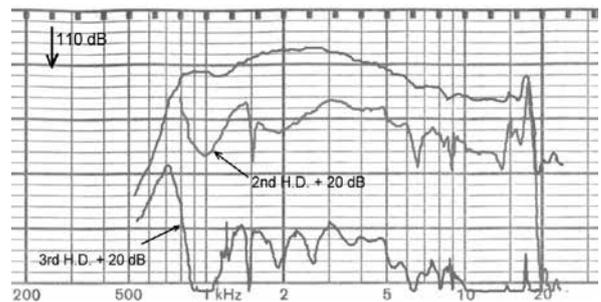
#### Features:

- Unique patented design
- 113 dB sensitivity 1 W / 1 m
- 1.3 kHz crossover
- Extended high frequency response up to 20 kHz
- Small size and low weight
- 44.4 mm sandwich in- and outside the voice coil
- 8 or 16 Ohm

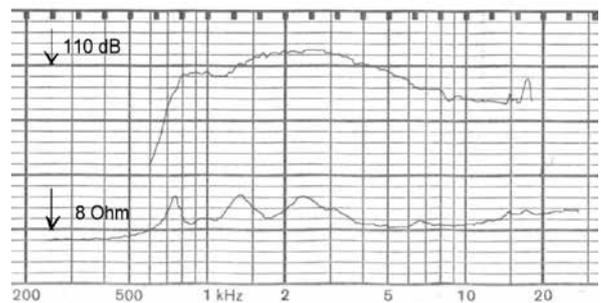
BMS 4544 is a powerful 1" professional compression driver that delivers excellent sonic quality in a small package. The BMS exclusive voice coil technology employs light weight Cooper clad Aluminum wire wound inside and outside of the Kapton™ former to improve the heat dissipation.

This technology dramatically increase the acoustic output and reliability of the drive and minimizes the power compression. The BMS 4544 - 1" compression driver is designed wide variety of applications in high quality professional reinforcement systems and stage monitors.

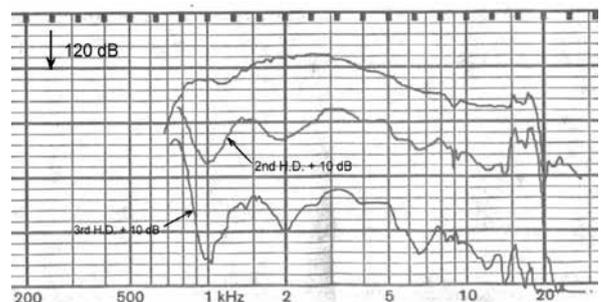
BMS 4544, CD 90/75 Horn, SPL 1W / 1m



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:	400 W	
Sensitivity		
CD horn 90° x 75°, 1 W / 1 m:	113 dB	
Plane wave tube, 1 mW:	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
2 x M6 holes, 180° on 76.2 mm diameter		

# 4550

1" high frequency compression driver

# 1" Compression drivers



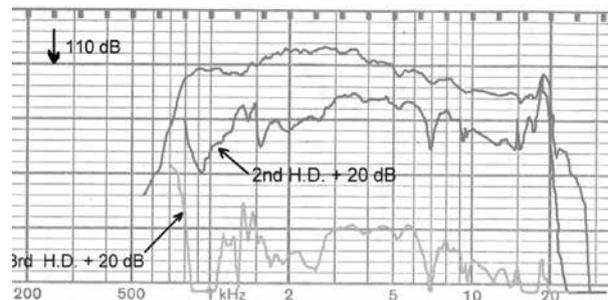
**Features:**

- Unique patented design
- 113 dB sensitivity 1 W / 1 m
- 800 Hz crossover
- Extended high frequency response up to 20 kHz
- Small size and low weight
- 44.4 mm sandwich in- and outside VC
- 8 or 16 Ohm

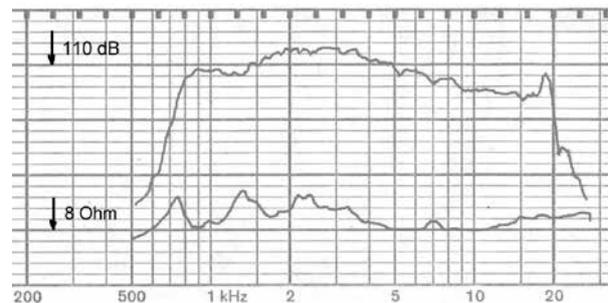
BMS 4550 is a powerful 1" professional compression driver that delivers outstanding sonic quality in a small package. It has an exceptional dynamic range and produces even the most complex music signals with depth and definition.

The BMS exclusive voice coil technology employs a light weight Copper clad 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 minimizes 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.

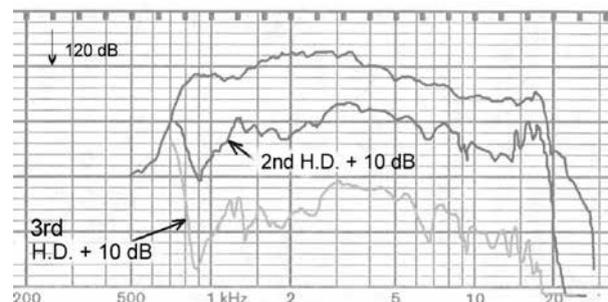
BMS 4550, CD 90/75 Horn, SPL 1W / 1m



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



BMS 4550, 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° x 75°, 1 W / 1 m:	113 dB	
Plane wave tube, 1 mW:	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 Aluminum	
Voice coil former:	Kapton™	
Diaphragm material:	Polyester	
MOUNTING INFORMATION		
Overall diameter:	mm	123
Depth:	mm	52
Net weight:	kg	2.25
2 x M6 holes, 180° on 76.2 mm diameter		



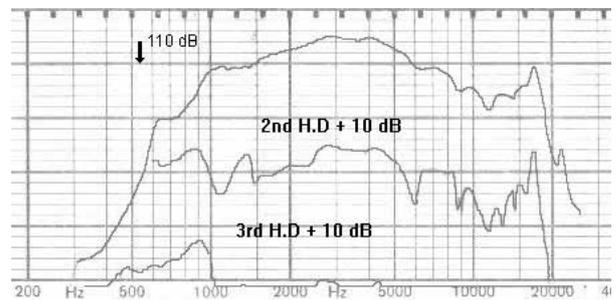
#### Features:

- 1.4" driver for budget projects
- Unique patented design
- 113 dB sensitivity 1 W / 1 m
- 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
- 8 or 16 Ohm

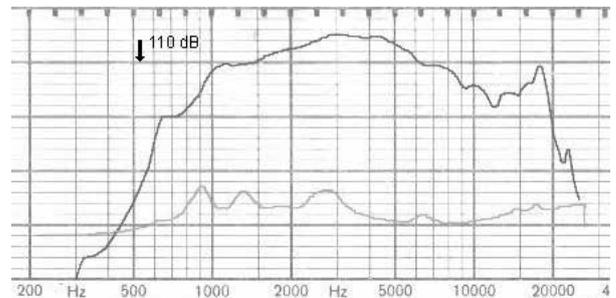
BMS 4554 is a powerful 1.4" professional compression driver that delivers outstanding sonic quality in a small package. The BMS exclusive voice coil technology employs a light weight Copper clad Aluminum wire wound inside and outside of the Kapton™ former to improve the heat dissipation, dramatically increasing the acoustic output and reliability of the driver while minimizing 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.

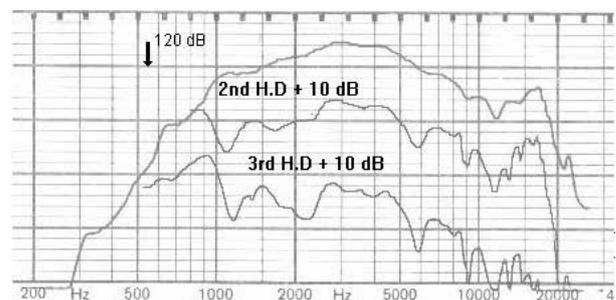
BMS 4554, 60° x 40° elliptical waveguide, SPL 1W / 1m



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° x 75°, 1 W / 1 m:	113 dB	
Efficiency:	25% (1000 - 3500 Hz)	
Maximal SPL (cont.):	132 dB	
Frequency range:	500 - 22000 Hz	
Recommended crossover:	1000 Hz	
Voice coil diameter:	1.75" (44.4 mm)	
Magnet material:	Ferrite	
Flux density (Tesla):	2	
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
2 x M6 holes, 180° on 76.2 mm diameter		

# 4555

1.5" high frequency compression driver

# 1.5" Compression drivers



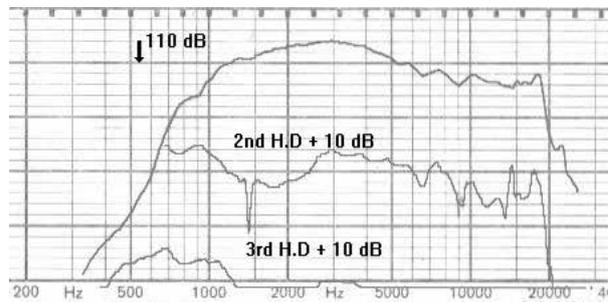
**Features:**

- 1.5" driver for budget projects
- Unique patented design
- 113 dB sensitivity 1 W / 1 m
- 1 kHz crossover
- Extended high frequency response up to 20 kHz
- Very small size and low weight
- 44.4 mm voice coil
- 8 or 16 Ohm

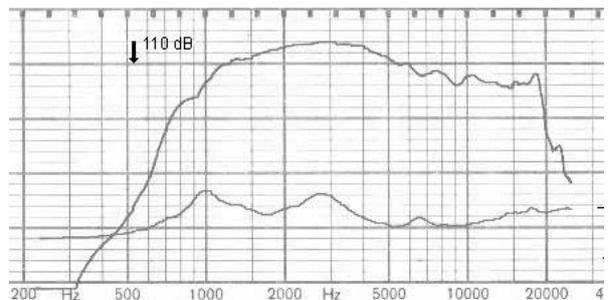
BMS 4555 is a powerful 1.5" professional compression driver that delivers outstanding sonic quality in a small package. The BMS exclusive voice coil technology employs a light weight Copper clad Aluminum wire wound inside and outside of the Kapton™ former to improve the heat dissipation, dramatically increasing the acoustic output and reliability of the driver while minimizing 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.

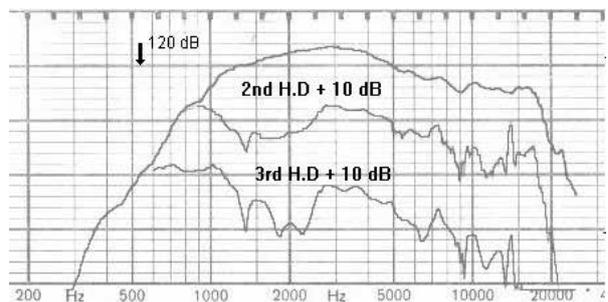
BMS 4555, 60° elliptical waveguide, SPL 1W / 1m



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



BMS 4555, 60° elliptical waveguide, SPL 10W / 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° x 75°, 1 W / 1 m:	113 dB	
Efficiency:	25% (1000 - 3500 Hz)	
Maximal SPL (cont.):	132 dB at 80 W	
Frequency range:	500 - 22000 Hz	
Recommended crossover:	1000 Hz	
Voice coil diameter:	1.75" (44.4 mm)	
Magnet material:	Ferrite	
Flux density (Tesla):	2	
Voice coil material:	Copper clad Aluminum	
Voice coil former:	Kapton™	
Diaphragm material:	Polyester	
<b>MOUNTING INFORMATION</b>		
Overall diameter:	mm	123
Depth:	mm	52
Net weight:	kg	2.25
4 x M6 holes, 90° on 101.6 mm, 4" diameter		

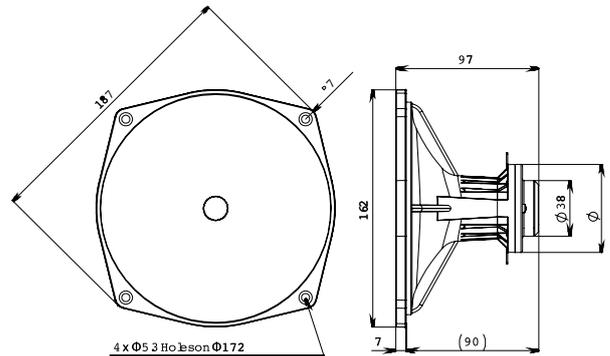


**Features:**

- Unique patented design
- 113 dB sensitivity 1 W / 1 m
- Very small size and low weight
- 1" (25.4 mm) voice coil
- 8 Ohm

The BMS 4528ND is a powerful 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.

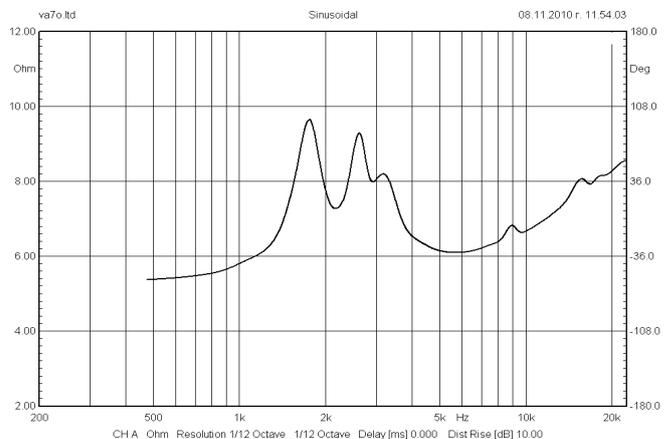
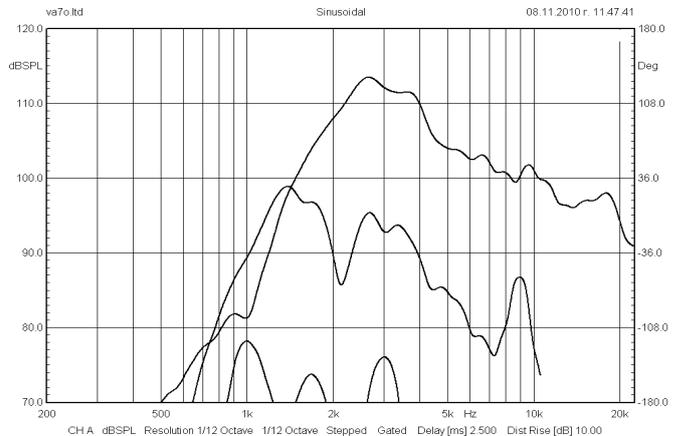
The sound of the 4528ND is extremely transparent and detailed, it has an exceptional dynamic range and produces even the most complex music signals with depth and definition.



Neodymium compression drivers

## SPECIFICATIONS

Voice coil diameter:	1" (25.4 mm)	
Nominal impedance:	8 Ohm	
Power capacity (AES):	25 W	
Peak power:	200 W	
Sensitivity 1 W / 1 m:	113 dB	
Frequency range:	1200 - 30000 Hz	
Recommended crossover:	1800 Hz	
Magnet material:	Neodymium	
Flux density (Tesla):	1.6	
Voice coil material:	Copper clad Aluminum	
Voice coil former:	Kapton™	
Diaphragm material:	Polyester	
MOUNTING INFORMATION		
Dimensions:	mm	187 x 162
Depth:	mm	101
Net weight:	kg	0.4
4 x 5.3 mm holes, 90° on 172 mm diameter		



# 4540ND

1" high frequency Neodymium compression driver

# 1" Neo compression drivers



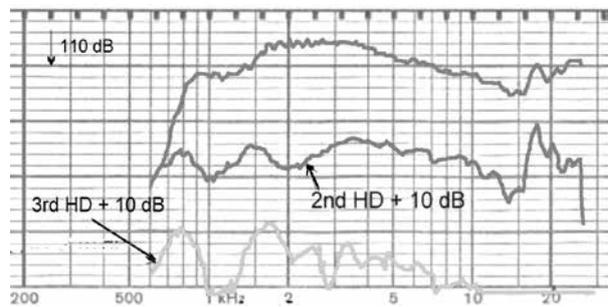
**Features:**

- Unique patented design
- Neodymium magnet assembly
- 114 dB sensitivity 1 W / 1 m
- Extended high frequency response up to 30 kHz
- Very small size and low weight
- 38 mm voice coil
- 1 3/8" - 18N screw or 1" flange adapter
- 8 or 16 Ohm

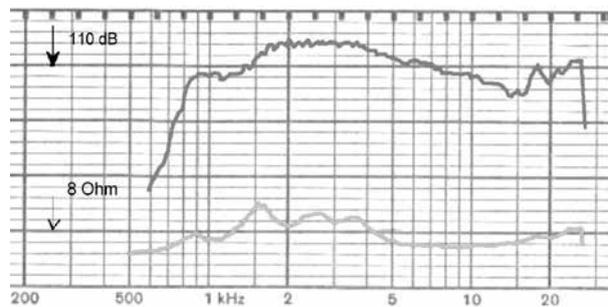
BMS 4540ND is a powerful 1" professional compression driver that delivers superb sonic quality in a very small package. The unique BMS annular diaphragm together with the high energy Neodymium magnet achieve very high sensitivity and linear frequency response up to 30 kHz.

The sound of the 4540ND is extremely transparent and detailed, it has an exceptional dynamic range and produces even the most complex music signals with depth and definition. 4540ND - 1" compression driver is designed for a wide variety of applications including high level professional reinforcement systems, studio monitors and high-end audio.

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



BMS 4540ND, 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° x 75°, 1 W / 1 m:	114 dB	
Plane wave tube, 1 mW:	118 dB	
Max. 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





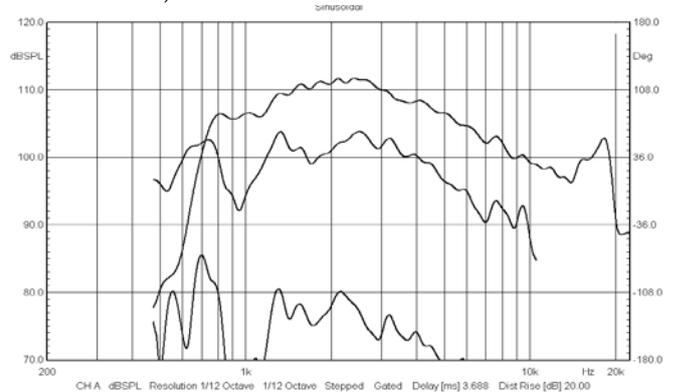
**Features:**

- 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 to 20 kHz
- Very small size and low weight
- 44.4 mm sandwich in- and outside voice coil
- 8 or 16 Ohm

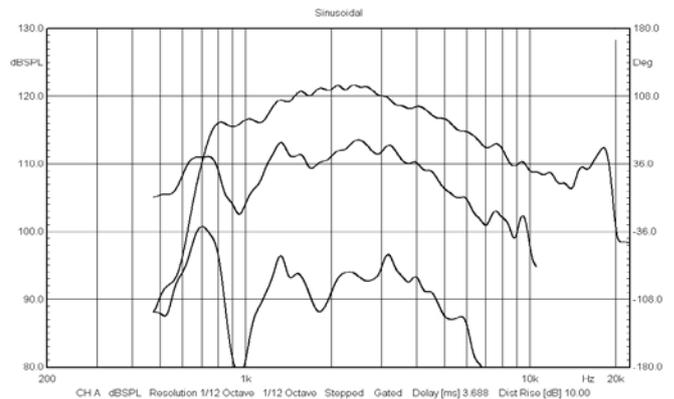
BMS 4545ND is a powerful 1" professional compression driver that delivers superb sonic quality in a very small package. The unique BMS annular diaphragm together with the cost effective, high energy Neodymium magnet assembly offers an economical solution for a wide variety of high level professional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

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

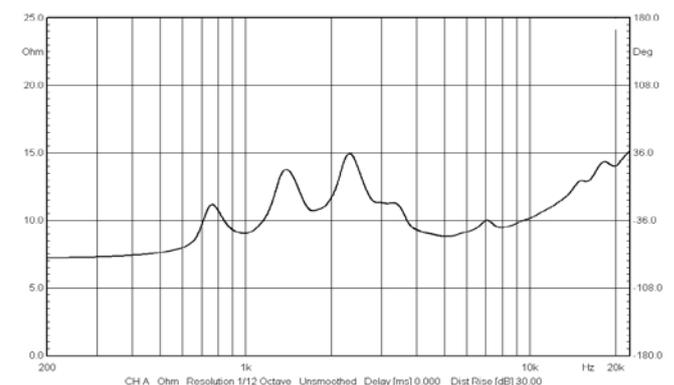
BMS 4545ND-8, 90° x 75° horn, 2nd + 3rd harmonic raised 20 dB, SPL 1W / 1m



BMS 4545ND-8, 90° x 75° horn, 2nd + 3rd harmonic raised 20 dB, SPL 10W / 1m



BMS 4545ND-8, 90° x 75° horn, impedance



Neodymium 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° x 75°, 1 W / 1 m:	113 dB	
Plane wave tube, 1 mW:	118 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):	2.2	
Voice coil material:	Copper clad Aluminum	
Voice coil former:	Kapton™	
Diaphragm material:	Polyester	
MOUNTING INFORMATION		
Overall diameter:	mm	84 (+/- 0.1 mm)
Depth:	mm	48
Net weight:	kg	0.56
1 3/8" - 18N screw		

# 4547ND

1" high frequency Neodymium compression driver

# 1" Neo compression drivers



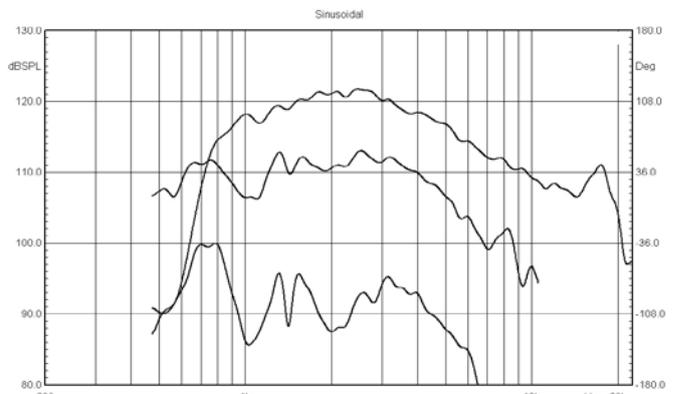
**Features:**

- Unique patented design
- Cost effective, high efficiency Neodymium magnet assembly
- 113 dB sensitivity 1 W / 1 m
- 1.2 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

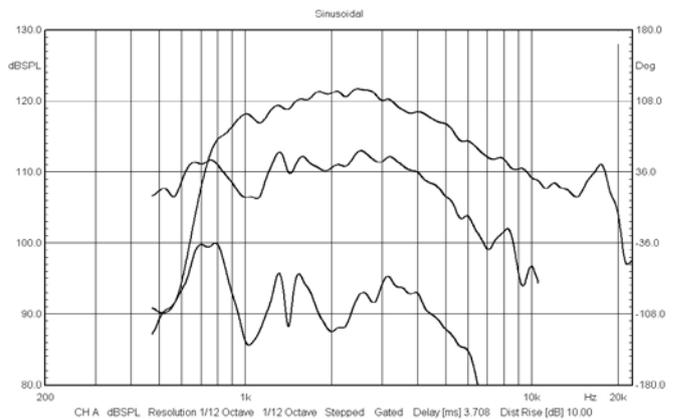
The BMS 4547ND is a powerful 1" professional compression driver that delivers superb sonic quality in a small package. The unique BMS annular diaphragm together with the cost effective, high efficiency Neodymium magnet assembly offers an economical solution for a wide variety of high level professional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

BMS 4547ND achieves very high sensitivity and linear frequency response up to 20 kHz. The sound of BMS 4547ND is extremely transparent and detailed, it has an exceptional dynamic range and produces even the most complex music signals with depth and definition.

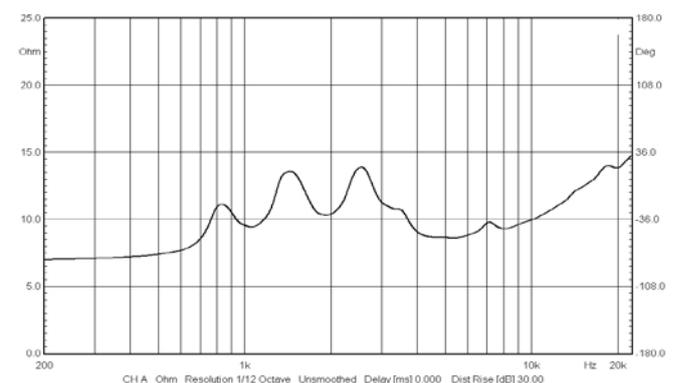
BMS 4547ND-8, 90° x 75° horn, 2nd + 3rd harmonic raised 20 dB, SPL 1W / 1m



BMS 4547ND-8, 90° x 75° horn, 2nd + 3rd harmonic raised 20 dB, SPL 10W / 1m



BMS 4547ND-8, 90° x 75° 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:	118 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):	2.2	
Voice coil material:	Copper clad Aluminum	
Voice coil former:	Kapton™	
Diaphragm material:	Polyester	
<b>MOUNTING INFORMATION</b>		
Overall diameter:	mm	84 (+/- 0.1 mm)
Depth:	mm	35
Net weight:	kg	0.535
4547NDv1	3x M5 holes,	120° on 57.15 mm diameter
4547NDv2	2x M5 holes,	180° on 76.2 mm diameter

Neodymium compression drivers



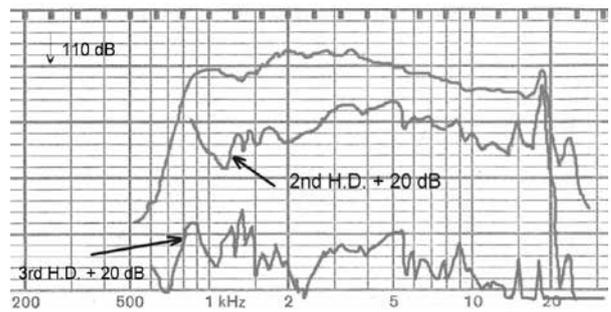
**Features:**

- Unique patented design
- Neodymium magnet assembly
- 113 dB sensitivity 1 W / 1 m
- 1 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

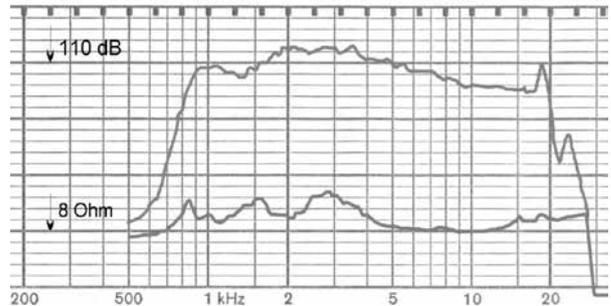
The BMS 4552ND is a powerful 1" professional compression driver that delivers superb sonic quality in a small package. The unique BMS annular diaphragm together with the high energy Neodymium magnet achieve very high sensitivity and linear frequency response up to 20 kHz.

The sound of BMS 4552ND is extremely transparent and detailed, it has an exceptional dynamic range and produces even the most complex music signals with depth and definition. 4552ND - 1" compression driver is designed for a wide variety of applications including high level professional reinforcement systems, studio monitors and high-end audio.

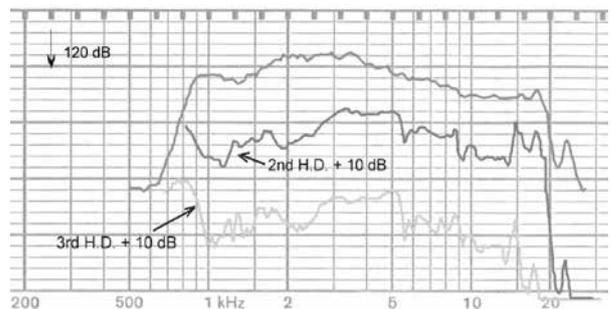
BMS 4552 ND, CD 90/75 Horn, SPL 1W / 1m



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



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



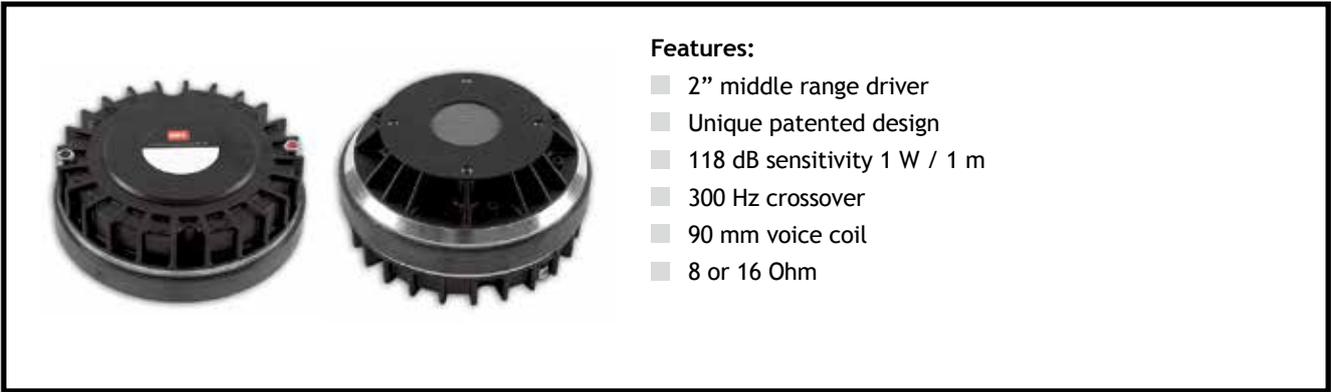
Neodymium compression drivers

## 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° 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:	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
2 x M5 holes, 180° on 76.2 mm diameter		

## 4591

2" mid-range compression driver



**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 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 minimizing the power compression.

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

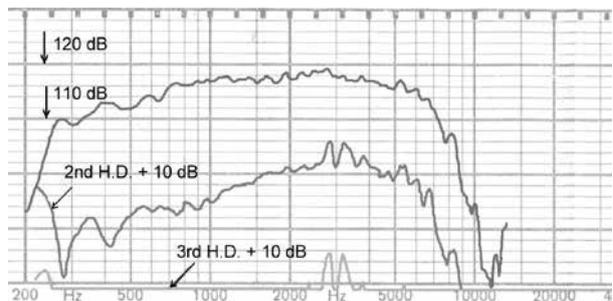


Compression drivers

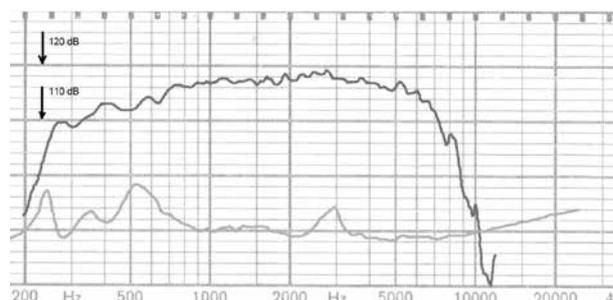
## SPECIFICATIONS

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 (cont.):	136 dB at 150 W	
Sensitivity 1 W / 1 m:	118 dB	
Frequency range:	200 - 9000 Hz	
Recommended crossover:	300 Hz	
Min. impedance modulus:	8.3	
Voice coil diameter:	3.5" (90 mm)	
Magnet material:	Ferrite	
Flux density (Tesla):	1.95	
Efficiency:	35 % (300 - 5000 Hz)	
Voice coil material:	Copper clad Aluminum	
Voice coil former:	Kapton™	
Diaphragm material:	Polyester	
<b>MOUNTING INFORMATION</b>		
Overall diameter:	mm	182 (+/- 3 mm)
Depth:	mm	90
Net weight:	kg	6
4 x M6 holes, 90° on 101.6 mm, 4" diameter		

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



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





**Features:**

- 3,5" sandwich in- and outside voice coil
- Large annular diaphragm
- High efficiency of 35%
- High power handling of 150W (AES)
- Frequency range 200Hz to 9kHz, optimized for human voice
- Specially designed for high output applications
- Ultra low distortion
- 8 or 16 Ohms

The 4591C is the BMS latest generation 2" mid-range compression driver providing extremely high acoustical output. The driver incorporates a 3,5" voice coil and a large annular ring diaphragm and has been optimized for middle range applications requiring high SPL. Overall improvements to previous models include optimized frequency response as well as increased peak power and reliability.

The patented design of the BMS 4591C is a result of extensive dedicated research and development, providing dramatic improvement in efficiency, power handling, dynamic response and clarity.

The BMS large annular diaphragm covers the frequency range from 250 Hz to 9.000 Hz with a smooth, linear response. The high diaphragm excursion of maximal + / - 0,8 mm results in high output and increased power handling up to 1300 W peak.

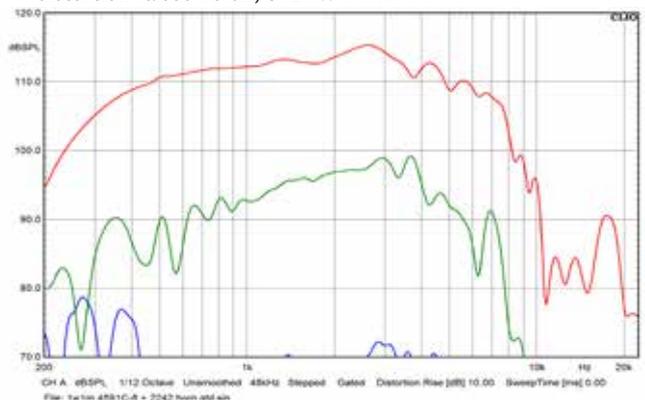
The unique voice coil technology employs a high purity copper wire wound inside and outside of the Kapton™ former to improve the heat dissipation, dramatically increasing the acoustic output and reliability of the driver while minimizing the power compression.

Neodymium compression drivers

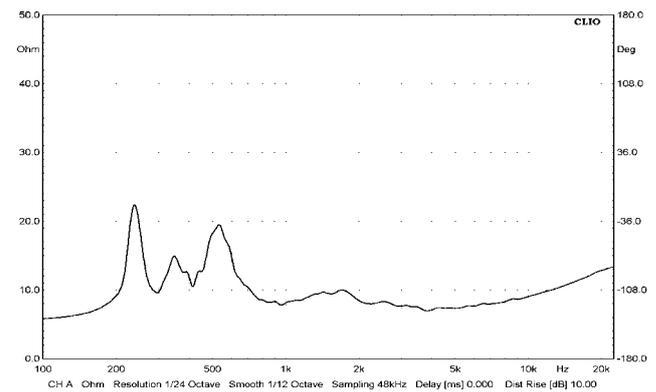
## SPECIFICATIONS

Throat	2" (50,8mm)
Nominal impedance	8 or 16 Ohm
Power capacity (AES)	150W
Peak power	1500W
Sensitivity 1W@1m	123 dB on a 40°x20° waveguide
Frequency range	200 - 9.000 Hz
Recommended crossover	300 Hz
Voice coil	3,5 " (90 mm)
Magnet material	Ferrite
Flux density mid-range	1,95 T
Voice coil material	Copper
	(2 layers inside and outside of the VC)
Voice coil former	Kapton
Diaphragm material	Polyester
<b>MOUNTING INFORMATION</b>	
Overall Diameter	180 mm (+/- 0.3mm)
Depth	97 mm
Net weight	6 kg
4x M6 holes 90° on 101.6 mm, 4" Diameter	

BMS-4591C-8, 40°x20° CD horn, 2nd and 3rd harmonic distortion raised 10 dB, SPL 1W / 1m



BMS-4591C, Impedance in 40°x20° CD horn



# 4594ND-mid

1.4" mid-range Neodymium compression driver

# 1.4" Neo compression drivers

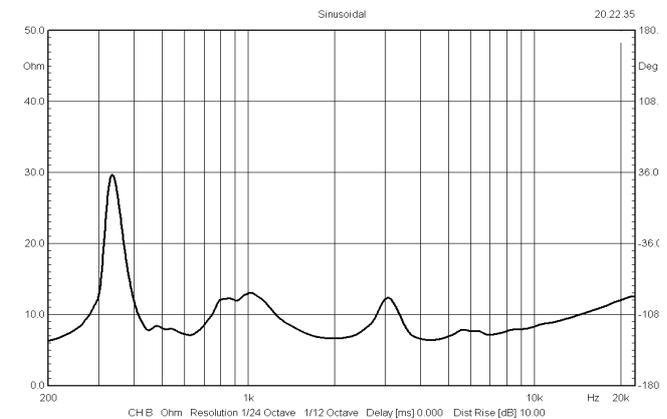


**Features:**

- 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 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 minimizing 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:	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:	200 - 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
<b>MOUNTING INFORMATION</b>	
Overall diameter:	mm 133 (+/- 0.3 mm)
Depth:	mm 74
Net weight:	kg 2
4 x M6 holes, 90° on 101.6 mm, 4" diameter	

Neodymium compression drivers

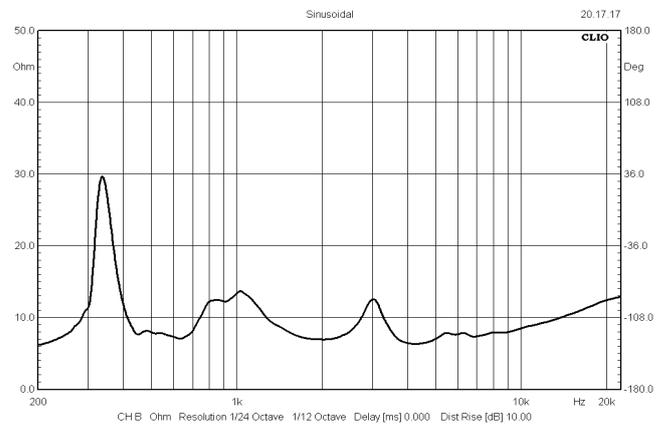
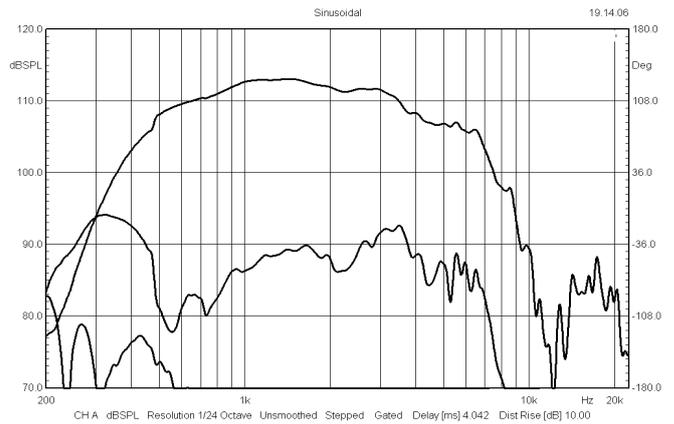


**Features:**

- 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 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 minimizing 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:	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:	200 - 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	
<b>MOUNTING INFORMATION</b>		
Overall diameter:	mm	133 (+/- 0.3 mm)
Depth:	mm	74
Net weight:	kg	2
4 x M6 holes, 90° on 101.6 mm, 4" diameter		

Neodymium compression drivers

# 4592ND-mid

2" mid-range Neodymium compression driver

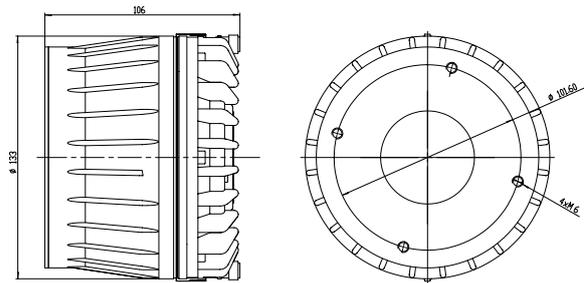
# 2" Neo compression drivers



**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

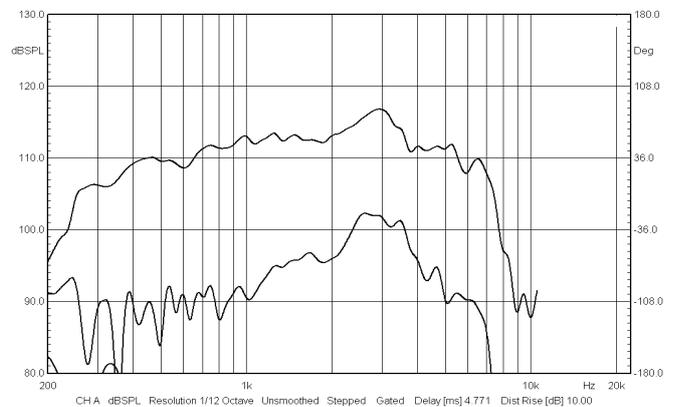
The BMS exclusive voice coil technology employs a light weight Copper clad Aluminum wire wound inside and outside of the Kapton™ former to improve the heat dissipation, dramatically increasing the acoustic output and reliability of the driver while minimizing the power compression.



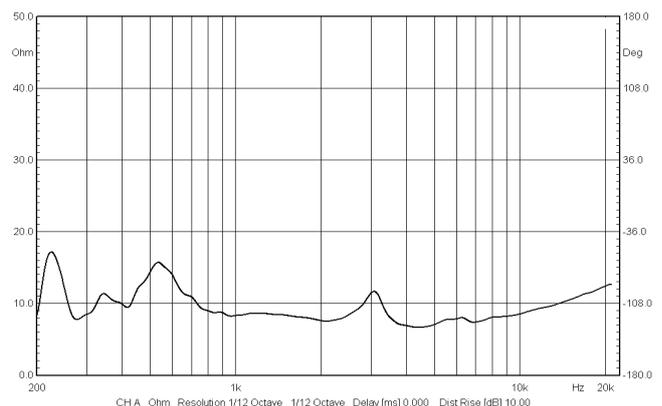
## SPECIFICATIONS

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 (cont.):	136 dB at 150 W	
Sensitivity 1 W / 1 m:	118 dB	
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:	Neodymium	
Flux density (Tesla):	1.95	
Efficiency:	35 % (300 - 5000 Hz)	
Voice coil material:	Copper clad Aluminum	
Voice coil former:	Kapton™	
Diaphragm material:	Polyester	
<b>MOUNTING INFORMATION</b>		
Overall diameter:	mm	133 (+/- 3 mm)
Depth:	mm	106
Net weight:	kg	2.4
4 x M6 holes, 90° on 101.6 mm, 4" diameter		

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



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





**Features:**

- 3,5" sandwich in- and outside voice coil
- Large annular diaphragm
- High efficiency of 35%
- High power handling of 150W (AES)
- Frequency range 200Hz to 9kHz, optimized for human voice
- Specially designed for high output applications
- Ultra low distortion
- Neodymium Magnet Assembly
- Ultra light weight and small size
- 8 or 16 Ohms

The 4596 is the BMS latest generation 2" mid-range compression driver providing extremely high acoustical output. The driver incorporates a 3,5" voice coil and a large annular ring diaphragm and has been optimized for middle range applications requiring high SPL. Overall improvements to previous models include optimized frequency response as well as increased peak power and reliability. The patented design of the BMS 4596 is a result of extensive dedicated research and development, providing dramatic improvement in efficiency, power handling, dynamic response and clarity.

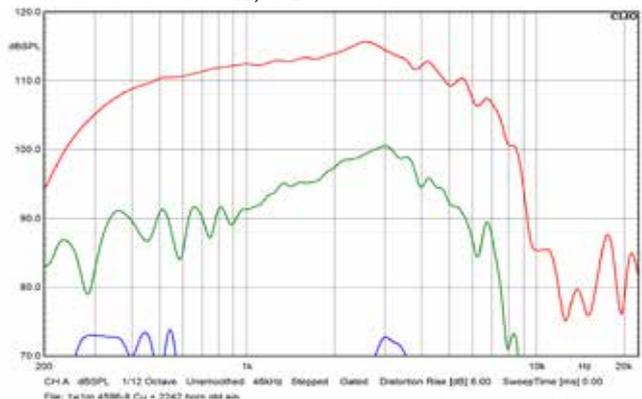
The BMS large annular diaphragm covers the frequency range from 250 Hz to 9.000 Hz with a smooth, linear response. The high diaphragm excursion of maximal + / - 0,8 mm results in high output and increased power handling up to 1300 W peak. The unique voice coil technology employs a high purity copper 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 minimizing the power compression. The use of high grade neodymium magnets provides improved performance while significantly reducing transducer weight.

Neodymium compression drivers

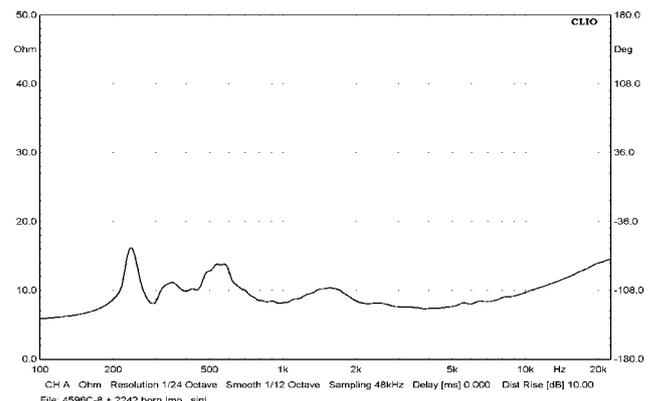
## SPECIFICATIONS

Throat	2" (50,8mm)
Nominal impedance	8 or 16 Ohm
Power capacity (AES)	150W
Peak power	1500W
Sensitivity 1W@1m	123 dB on a 40°x20° waveguide
Frequency range	200 - 9.000 Hz
Recommended crossover	300 Hz
Voice coil	3,5 " (90 mm)
Magnet material	Neodymium
Flux density mid-range	1,95 T
Voice coil material	Copper
	(2 layers inside and outside of the VC)
Voice coil former	Kapton
Diaphragm material	Polyester
<b>MOUNTING INFORMATION</b>	
Overall Diameter	133 mm (+/- 0.3mm)
Depth	92 mm
Net weight	1.9 kg
4x M6 holes 90° on 101.6 mm, 4" Diameter	

BMS-4596ND-8, 40°x20° CD horn, 2nd and 3rd harmonic distortion raised 10 dB, SPL 1W / 1m



BMS-4596ND, Impedance in 40°x20° CD horn



# 4599ND

2" Dual Diaphragm Driver

# 2" Neo compression drivers



**Features:**

- Dual 3.5" voice coils / annular diaphragms
- Perfect acoustical coupling
- Extremely high efficiency
- Exceptionally high power handling of 400 W (AES)
- Provides 6 dB more sound pressure than a comparable single voice coil driver
- Ultra low distortion
- Specially designed for extreme high output applications
- Neodymium Magnet Assembly
- Ultra light weight and small size
- 2x 8 Ohm or 2x 16 Ohm

The BMS 4599ND dual diaphragm driver incorporates two identical 3.5" concentric annular ring diaphragms, connected to a common 2" throat, providing extremely high acoustical output.

The patented design of the BMS 4599ND is a result of extensive dedicated research and development, providing dramatic improvement in efficiency, power handling, dynamic response and clarity.

In fact the double voice coil/diaphragm assembly provides 6 dB higher maximal SPL compared to an equal single voice coil driver.

Two large annular diaphragms cover the frequency range 200 Hz to 9000 Hz with a smooth, linear response.

The high diaphragm excursion of maximal +/- 0.8 mm results in high output and increased power handling up to 2600 W peak.

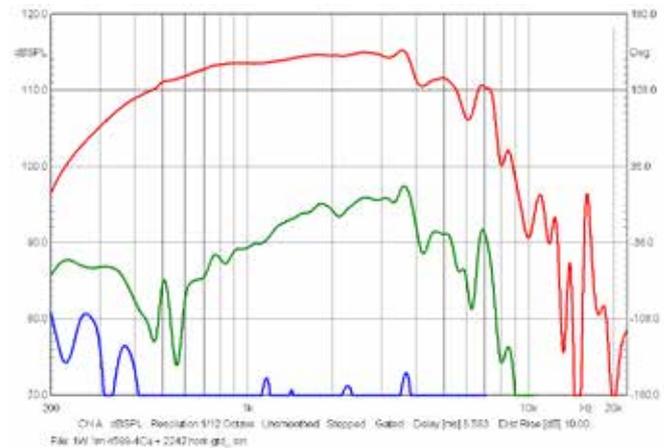
The unique voice coil technology employs a high purity copper wire wound inside and outside of the Kapton™ former to improve the heat dissipation, dramatically increasing the acoustic output and reliability of the driver, while minimizing the power compression.

The voice coils may be driven in parallel, serial or separately for optimal amplifier loading, allowing a single channel of 4, 8, 16 or 32 Ohm as well as double channel of 2x 8 Ohm or 2x 16 Ohm. The use of high grade neodymium magnets provides improved performance while significantly reducing transducer weight.

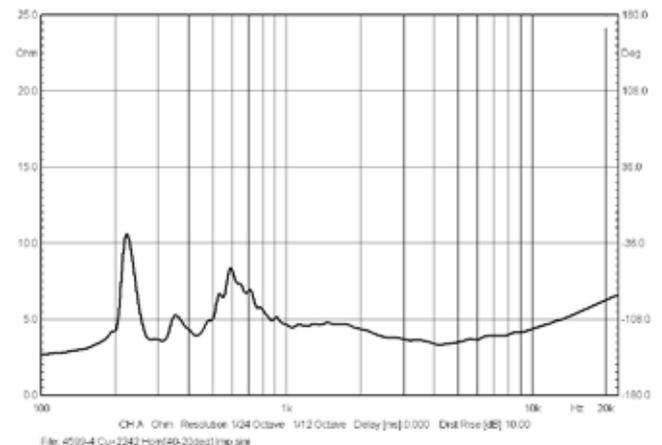
## SPECIFICATIONS

Throat 2"	(50.8mm)
Nominal impedance	2x 8 or 2x 16 Ohm
Power capacity (AES)	400 W (2 x 200 W above 300 Hz)
Peak power	2000 W (2 x 1000 W above 400 Hz)
Sensitivity 2x1W/1m	123 dB on a 40° x 20° waveguide
Frequency range	200 - 9000 Hz
Recommended crossover	250 Hz
Voice coil	2 x 3.5 " (2 x 90 mm)
Magnet material	Neodymium
Flux density mid-range	1.95 T
Voice coil material Copper	(2 layers Inside and outside of the VC)
Voice coil former	Kapton
Diaphragm material	Polyester
<b>MOUNTING INFORMATION</b>	
Overall Diameter	133 (+/- 0.3 mm)
Depth	98 mm
Net weight	3.1 kg
4x M6 holes 90° on 101.6 mm, 4" Diameter	

BMS-4599ND-8, 40°x20° CD horn, 2nd and 3rd harmonic distortion raised 10 dB, SPL 1W / 1m



BMS-4599ND, Impedance in 40°x20° CD horn

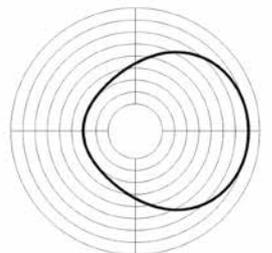
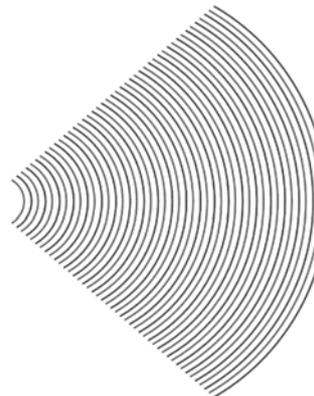
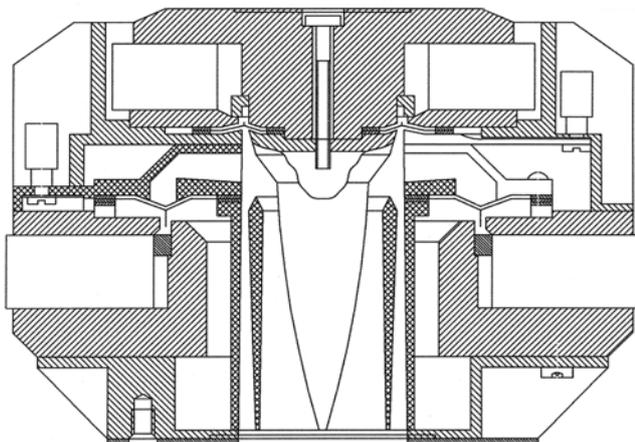
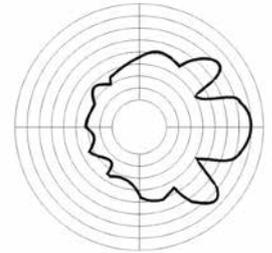
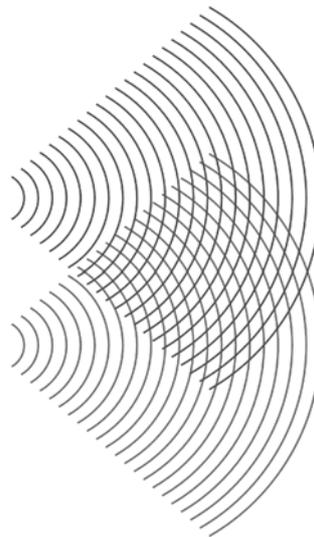


BMS developed a unique driver technology to radiate a coherent single point wave front for superior dispersion control and fidelity sound. The advanced design aligns the acoustical centers of the transducers providing a coherent wave front coming out from the throat.

The driver is in fact a 2-way system employing two concentric annular ring diaphragms. The larger of the two reproduces middle frequency from 300 Hz upwards, crossing over 6.3 kHz to the HF transducer which is capable of reaching 22 kHz. 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 minimizing the power compression.

Conventional drivers



## 4590 / 4590P

2" 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 dynamics and extremely low distortion
- Perfect time alignment without problems of multi-source interference
- 8 or 16 Ohm

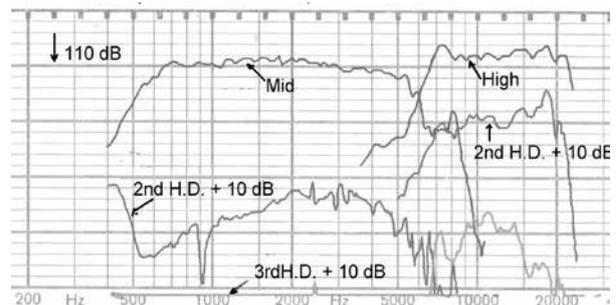
In a conventional full range compression driver the phase plug must be located extremely close to the diaphragm, excursion of the diaphragm is limited and middle frequency performance is compromised. A typical 2" dome compression driver has a limited high frequency response. Above 8 kHz the dome diaphragm 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 increases power handling up to 1300 W peak. The ultra light annular diaphragm for the high range offers exceptional transient response with very high efficiency between 6 and 22 kHz.

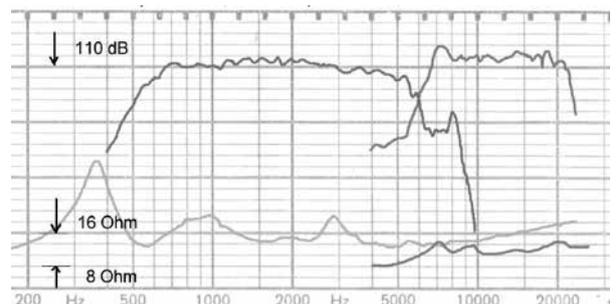
## SPECIFICATIONS

Throat diameter:	2" (50.8)	
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 1 W / 1 m	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:	6300 Hz	
Voice coil high range:	1.75" (44.4 mm)	
Voice coil mid range:	3.5" (90 mm)	
Magnet material:	Ferrite	
Flux density (Tesla) high:	2.1	
Flux density (Tesla) mid:	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	
<b>MOUNTING INFORMATION</b>		
Overall diameter:	mm	182 (+/- 3 mm)
Depth:	mm	129
Net weight:	kg	9
4 x M6 holes, 90° on 101.6 mm, 4" diameter		

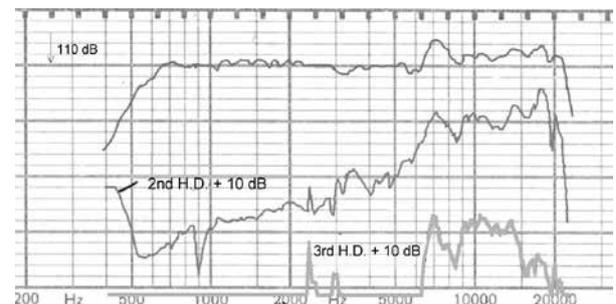
BMS4590, 90°x60° Horn, 1W/1m, 4V RMS



BMS4590, 90°x60° Horn, 1W/1m, 4V RMS



BMS4590, including passive crossover, SPL 1W/1m, 4V RMS





**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
- 8 or 16 Ohm

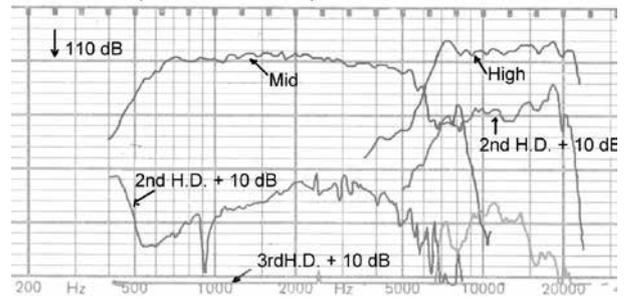
The patented design of the BMS 4592 is a result of extensive dedicated research and development providing dramatic improvement in dynamic response, clarity and transparency. The BMS annular midrange diaphragm covers the frequency range between 300 and 7000 Hz with a smooth, linear response. The large 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 minimizes the power compression. The use of high grade Neodymium magnets provide improved performance while significantly reducing transducer weight.

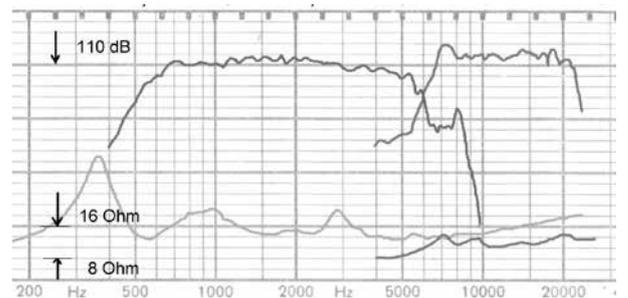
## SPECIFICATIONS

Throat diameter:	2" (50.8 mm)	
Nominal impedance:	8 or 16 Ohm	
Power capacity:		
Middle range (AES):	150 W 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 2242 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 mid-range (Tesla):	1.95	
Flux density high-range (Tesla):	2.0	
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	
<b>MOUNTING INFORMATION</b>		
Overall diameter:	mm	132 (+/- 3 mm)
Depth:	mm	113
Net weight:	kg	2.3
4 x M6 holes, 90° on 101.6 mm, 4" diameter		

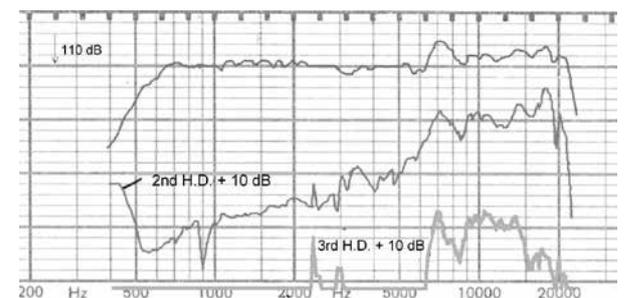
BMS4592ND, 90°x60° Horn, 1W/1m, 4V RMS



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



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



# 4593ND

1.4" coaxial Neodymium compression driver

# 1.4" Coax Neo compression drivers



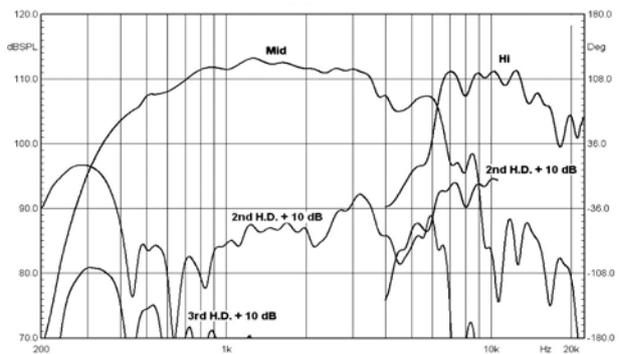
**Features:**

- 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 and small size
- 8 or 16 Ohm

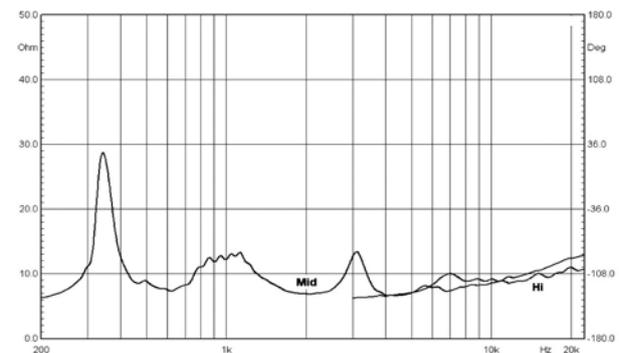
## SPECIFICATIONS

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 mid-range (Tesla):	1.95	
Flux density high-range (Tesla):	2	
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	
<b>MOUNTING INFORMATION</b>		
Overall diameter:	mm	132 (+/- 3 mm)
Depth:	mm	85
Net weight:	kg	2.5
4 x M6 holes, 90° on 101.6 mm, 4" diameter		

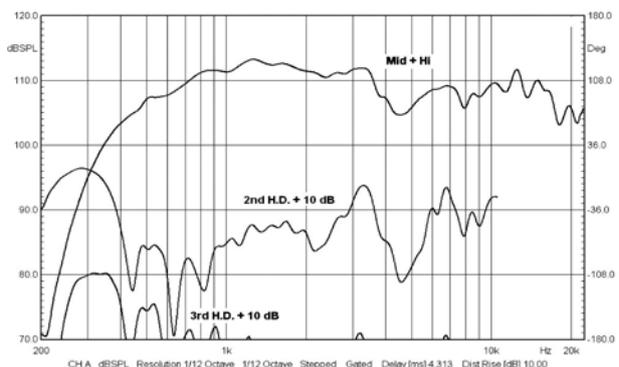
BMS-4593-8, 60° x 40° Horn, 2nd + 3rd harmonic distortion raised 10 dB, SP L 1 W / 1 m



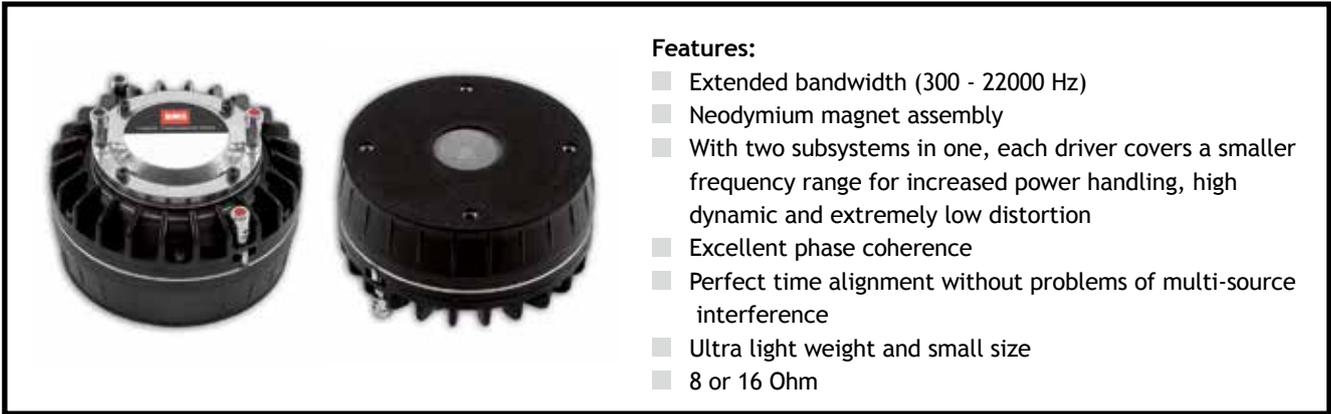
BMS-4593-8, Impedance



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



Coaxial Neodymium compression drivers



**Features:**

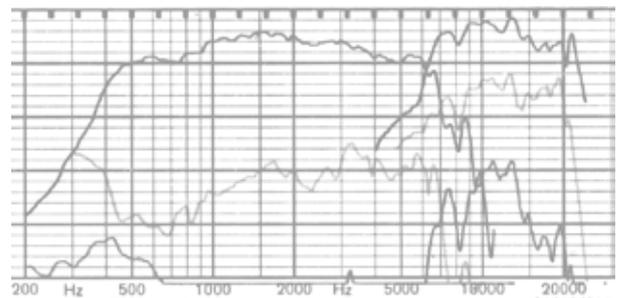
- Extended bandwidth (300 - 22000 Hz)
- Neodymium magnet assembly
- With two subsystems in one, each driver covers a smaller frequency range for increased power handling, high dynamic and extremely low distortion
- Excellent phase coherence
- Perfect time alignment without problems of multi-source interference
- Ultra light weight and small size
- 8 or 16 Ohm

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.

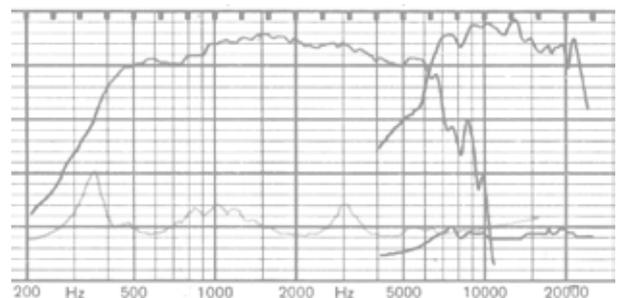
The patented design of the BMS 4594 is a result of extensive dedicated research and development providing dramatic improvement in dynamic response, clarity and transparency. The BMS annular midrange diaphragm covers the frequency range between 300 and 7.000 Hz with a smooth, linear response. The large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

## SPECIFICATIONS

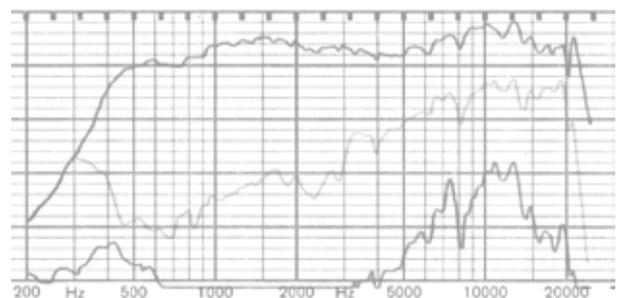
Throat diameter:	1.4" (36 mm)	
Nominal impedance:	8 or 16 Ohm	
Power capacity:		
Middle range (AES):	150 W AES above 400 Hz	
Peak:	1000 W peak above 500 Hz	
High range (AES):	80 W	
Peak:	320 W	
Sensitivity 1 W / 1 m:	118 dB on 40° x 20° Horn	
Frequency range:	200 - 22000 Hz	
Recommended crossover:	300 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 high-range (Tesla):	2.2	
Flux density mid-range (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	
<b>MOUNTING INFORMATION</b>		
Overall diameter:	mm	132 (+/- 3 mm)
Depth:	mm	94
Net weight:	kg	2.3
4 x 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



# 4595ND

1.5" coaxial Neodymium compression driver

# 1.5" 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 and small size
- 8 or 16 Ohm

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.

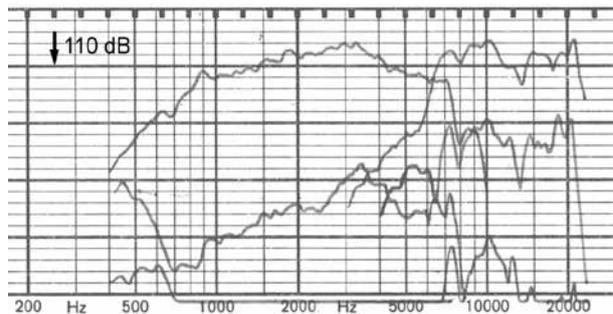
The larger of the two reproduces middle frequency from 300 Hz upward, crossing over 6.3 kHz to the HF transducer which is capable of reaching 22 kHz. The large diaphragm

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 heat sinking ensuring high power handling and low compression.

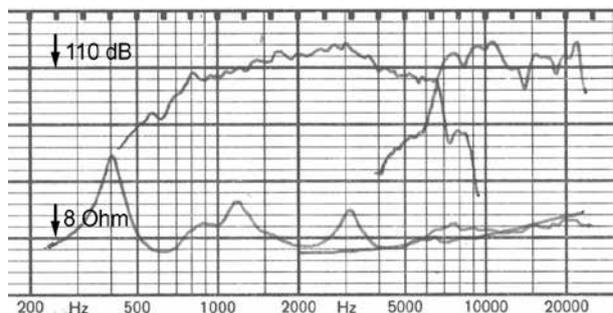
## SPECIFICATIONS

Throat diameter:	1.5" (38 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) mid:	1.95	
Flux density (Tesla) high:	2.2	
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	
<b>MOUNTING INFORMATION</b>		
Overall diameter:	mm	132 (+/- 3 mm)
Depth:	mm	94
Net weight:	kg	2.3
4 x M6 holes, 90° on 101.6 mm, 4" diameter		

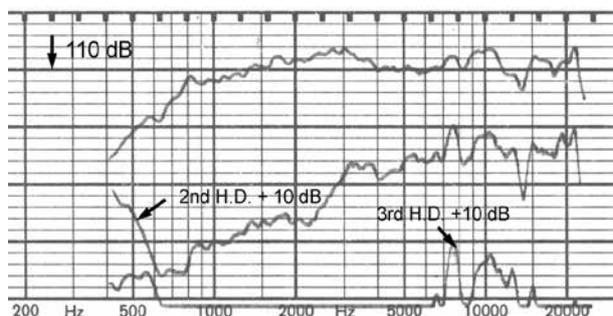
BMS 4595-8, 60° conical, 2nd + 3rd harmonic distortion raised 10dB, SPL 1W / 1m



BMS 4595-8, 60° conical, SPL 1W / 1m

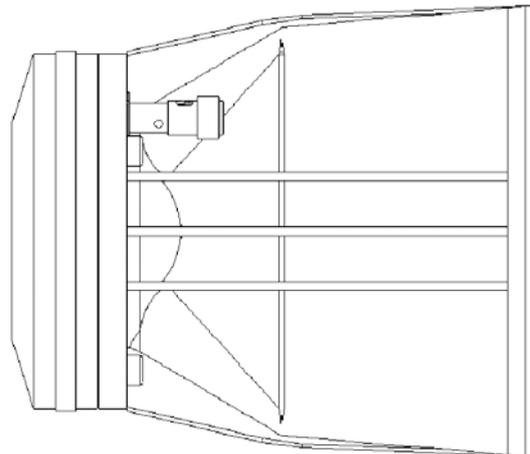
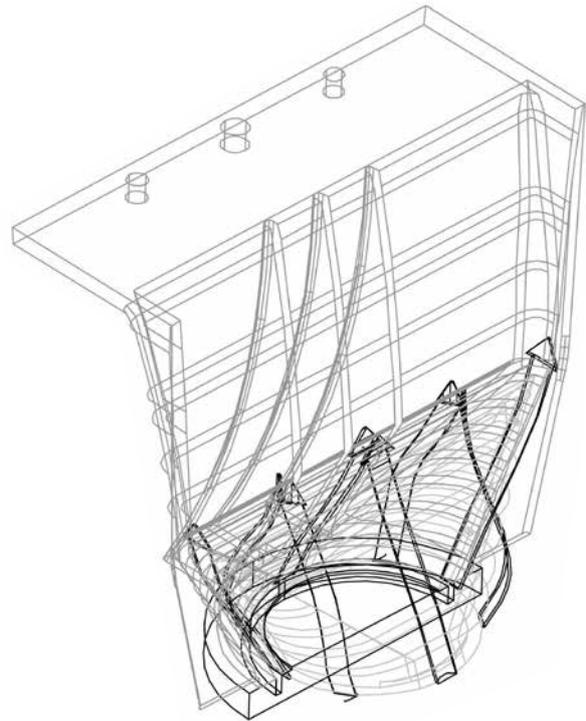
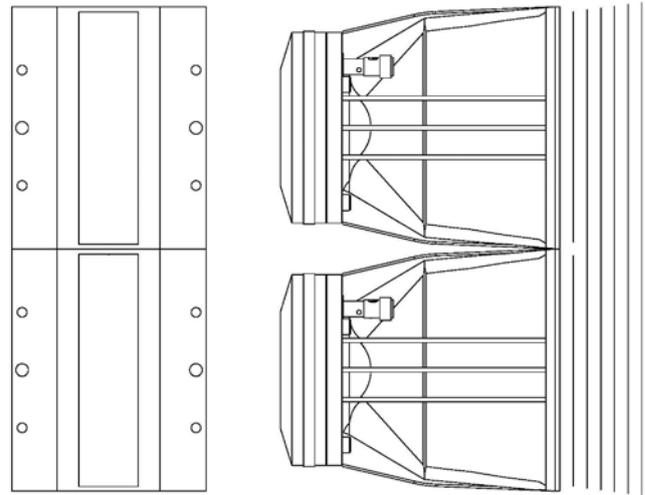


BMS 4595-8, incl. passive crossover, 2nd + 3rd harmonic distortion raised 10dB, SPL 1W / 1m



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 new transducer was engineered to work with 4-inch (4" x 1") rectangular throat waveguide providing extremely high sensitivity.

The 4510ND is optimized 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 a virtually continuous line source. The driver contains a high energy neodymium magnet system and a unique annular ring diaphragm. The ring diaphragm works similar to a wound 140 mm long ribbon diaphragm providing a linear frequency response up to 20 kHz. The unique planar wave phase plug provides a coherent planar wave front without internal diffraction.



# 4505ND

5" Neodymium planar wave driver

# 5" Neodymium planar wave drivers



**Features:**

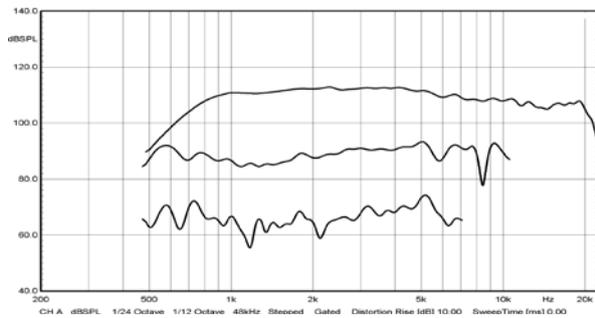
- Unique Planar Wave Design
- Cost effective, high efficiency Neodymium magnet assembly
- Perfect acoustical coupling of individual units to create virtually continuous line source
- 113 dB sensitivity 1 W / 1 m
- 1 kHz Crossover
- Extended high frequency response up to 20 kHz
- 8 or 16 Ohm

Extending the range of planar wave drivers, BMS introduces the new 4505ND.

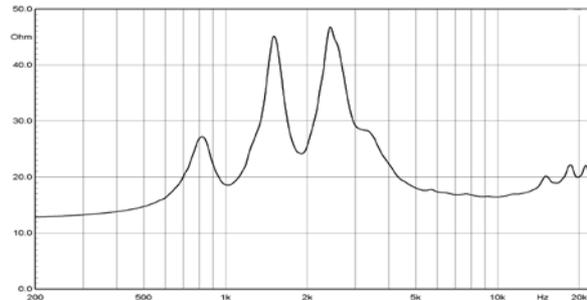
The advanced design of the 4505ND planar wave driver allows perfect acoustical coupling of individual units to create a virtually continuous line source.

The 4505ND contains a high energy neodymium magnet system and a unique annular ring diaphragm, providing a frequency response up to 20 kHz.

BMS 4505ND-16, 90° x 20° horn, 2nd and 3rd harmonic raised 10 dB, SPL 1 W / 1 m



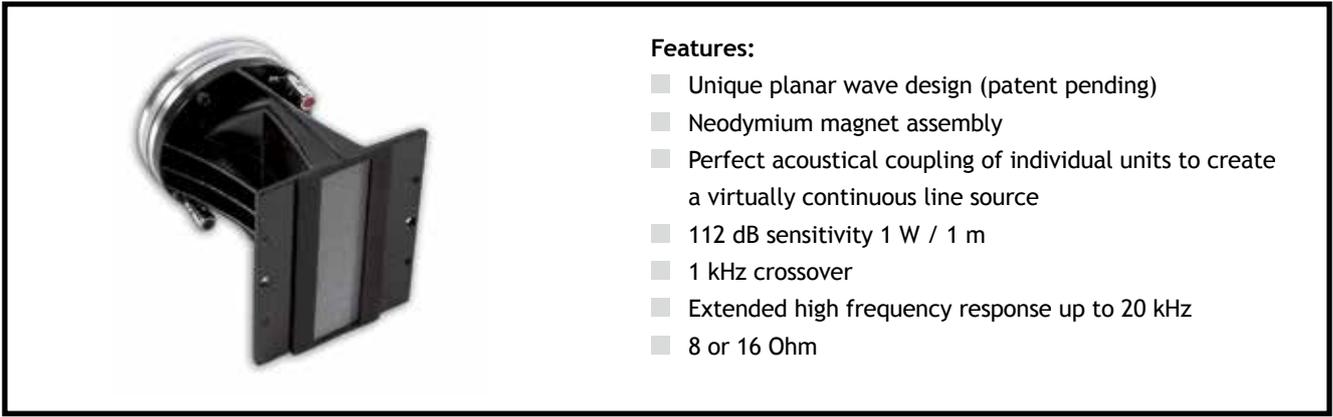
Impedance - 16 Ohm driver



## SPECIFICATIONS

Throat dimensions	5" x 1" (125.5 x 13.2 mm)
	Rectangular piston
Nominal impedance	8 or 16 Ohm
Power capacity (AES)	80W
Peak power	450W
Sensitivity CD Horn 90° x 20°	113 dB
Efficiency	25% (1000 - 3500 Hz)
Max. SPL (continuous)	132 dB at 80W
Frequency range:	500 - 20000 Hz
Recommended crossover	1000 Hz
Voice coil diameter	1,75 (44.4 mm)
Magnet material	Neodymium
Flux density	2.2 Tesla
Voice coil material	Cooper Clad Aluminum
	(2 Layers in- and outside of the VC)
Voice coil former	Kapton™
Diaphragm material	Polyester
<b>MOUNTING INFORMATION</b>	
Overall dimensions	132 x 85 x 80 mm
Net weight	1.1 kg
4 x M6 holes on 101.6 x 63.5mm (4" x 2.5")	

Neodymium compression drivers



**Features:**

- Unique planar wave design (patent pending)
- Neodymium magnet assembly
- Perfect acoustical coupling of individual units to create a 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

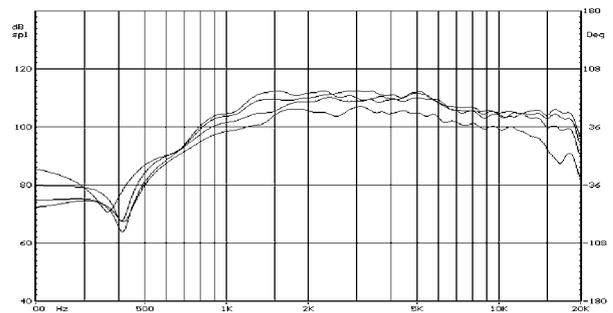
The BMS 4510ND planar wave driver radiates a coherent planar wave front from a rectangular piston without internal diffraction for superior dispersion control and high fidelity sound. This distinctive new transducer was engineered to work with 4-inch (4" x 1") rectangular throat waveguides providing extremely high sensitivity.

The 4510ND is optimized 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 20 kHz. The unique planar wave phase plug provide a coherent planar wave front without internal diffraction.

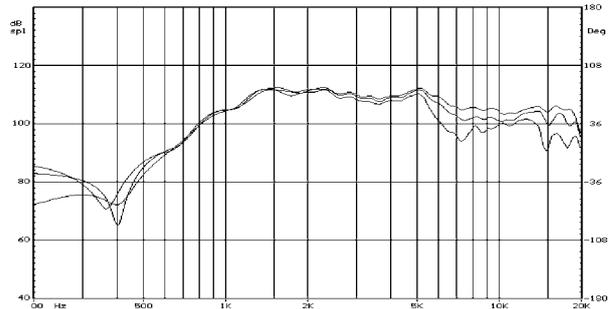
## SPECIFICATIONS

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 in:	
CD horn 120° x 10°:	114 dB 1 W / 1 m
Efficiency:	25% (1000-3500)
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 material:	Copper clad Aluminum
	(2 layers inside and outside of the VC)
Voice coil former:	Kapton™
Diaphragm material:	Polyester
<b>MOUNTING INFORMATION</b>	
Overall dimensions:	122 x 85 x 106.6 mm
Net weight:	1.3 kg
4 x M5 holes, 90° on 101.6 mm, 4" diameter	

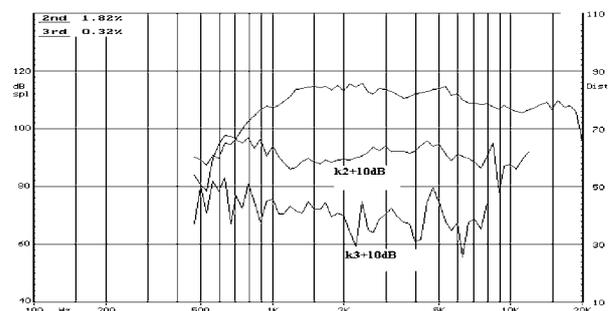
BMS 4510ND on small 90° x 10° horn, horizontal 0°, 15°, 30°, 45°



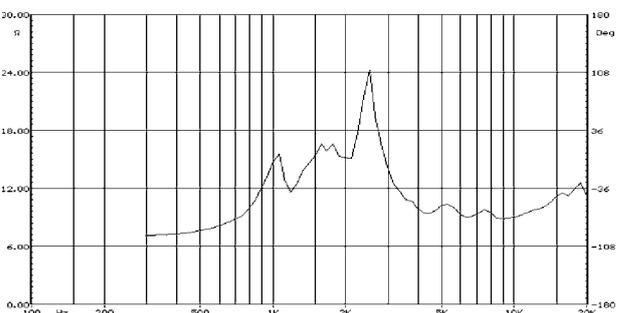
BMS 4510ND on small 90° x 10° horn, vertical 0°, 5°, 10°



BMS 4510ND on small 90° x 10° horn, 2nd + 3rd harmonic distortion



BMS 4510ND on small 90° x 10° horn, impedance



# 4512ND

4" Neodymium planar wave driver

# 4" Neodymium planar wave drivers



**Features:**

- Unique planar wave design
- Cost effective, high efficiency Neodymium magnet assembly
- Perfect acoustical coupling of individual units to create a 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 optimized 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 a perfect acoustical coupling of individual units to create a virtually continuous line source.

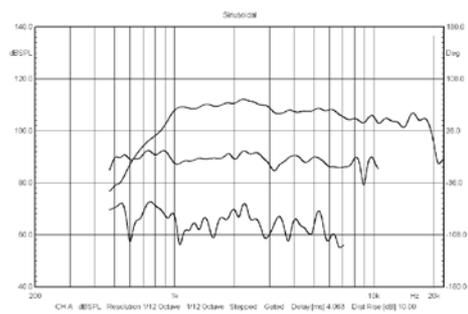
The BMS annular diaphragm together with the cost effective, high efficiency Neodymium magnet assembly offers an economical solution for high performance line arrays.

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.

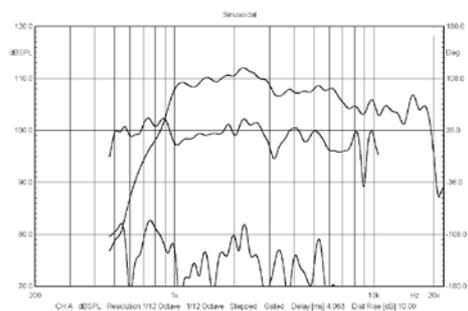
## SPECIFICATIONS

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 high-range:	2.2 Tesla
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 dimensions:	107 x 85 x 119 mm
Net weight:	0.87 kg
4 x M5 holes, 90° on 76.2 x 50.8 mm, (3" x 2")	

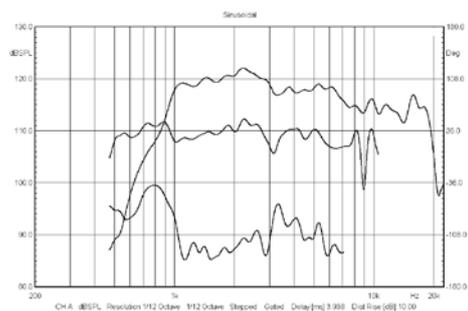
BMS4512ND-8, 90°x10° horn, 2nd + 3rd harmonic raised 20 dB, SPL 1W / 1m



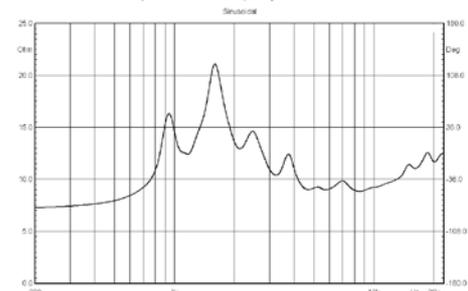
BMS4512ND-8, 90°x10° horn, 2nd + 3rd harmonic raised 20 dB, SPL 1W / 1m



BMS4512ND, 90°x10° horn, 2nd + 3rd harmonic raised 10 dB, SPL 10W / 1m



BMS4512ND-8, 90°x10° horn, Impedance



Neodymium compression drivers

**Features:**

- Dual diaphragm coaxial planar wave design
- Rectangular piston of 6.5" x 3/4" (162 x 19 mm)
- Neodymium magnet assembly
- Perfect acoustical coupling of individual units to create a virtually continuous line source
- Extended bandwidth (400 - 22000 hz)
- 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
- 8 or 16 ohm

The BMS 4507ND dual diaphragm coaxial planar wave driver radiates a coherent planar wave front from a rectangular piston without internal diffraction for superior dispersion control and high fidelity sound.

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.

This distinctive new transducer was engineered to work with 6.5-inch (162 mm x 19 mm) rectangular throat waveguides providing extremely high sensitivity.

The patented design of the BMS 4507ND is a result of extensive dedicated research and development providing dramatic improvement in dynamic response, clarity and transparency. The larger annular midrange diaphragm covers the frequency range between 400 and 6500 Hz with a smooth, linear response.

The high 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 voice coils may be driven in conjunction with a passive crossover or driven individually from an active crossover.

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 minimizing the power compression. The use of high grade Neodymium magnets provide improved performance while significantly reducing transducer weight

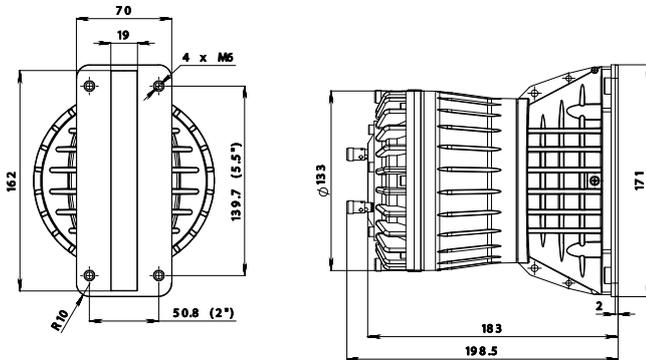
The 4507ND is optimized for 0° to 15° vertical dispersion and allows a horizontal coverage up to 120° depending on the waveguide used.

The unique design of the 4507ND dual diaphragm planar wave driver allows perfect acoustical coupling of individual units with excellent phase coherence and perfect time alignment to create virtually continuous line source.

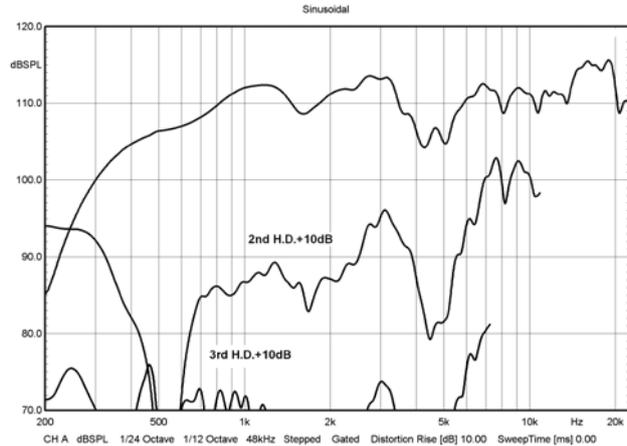
# 4507ND

6.5" dual diaphragm coaxial planar wave driver

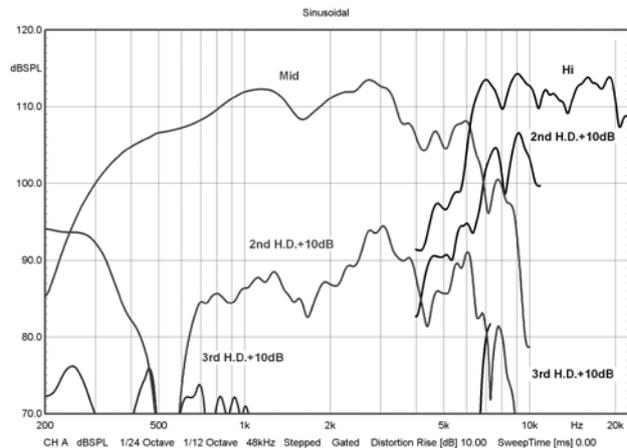
# Coaxial Neodymium planar wave driver



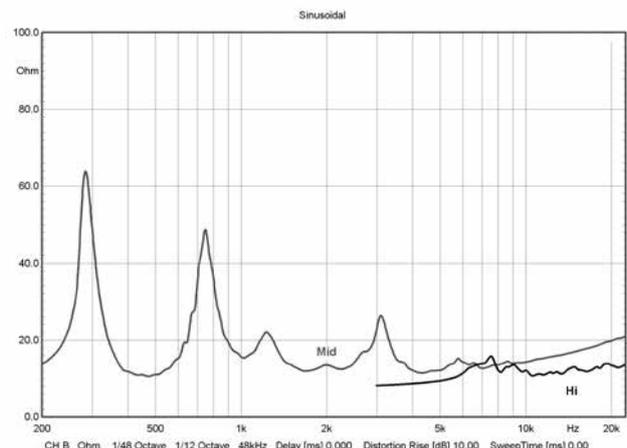
BMS 4507ND-16, 90° x 10° horn+ passive crossover 2nd + 3rd harmonic distortion raised 10 dB, SPL 1 W / 1 m



BMS 4507ND-16, 90° x 10° horn, 2nd + 3rd harmonic distortion raised 10 dB, SPL 1 W / 1 m



BMS 4507ND-16, Impedance



## SPECIFICATIONS

Throat diameter	162.5 x 19 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 1 W / 1 m	112 dB on 90° x 10° Horn
Frequency range (Hz)	400 - 22000 Hz
Recommended crossover (mid)	400 Hz
Middle frequency range	400 - 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) mid range	1.95
Flux density (Tesla) high range	2.2
Efficiency	35% (400 - 5000 Hz)
Voice coil material	Cooper clad Aluminum (2Layers in-and outside of the VC)
Voice coil former	Kapton™
Diaphragm material	Polyester

### MOUNTING INFORMATION

Overall dimensions	171 x 133 x 198.5 mm (+/- 0.3 mm)
Net weight	3.45 kg
4x M6 holes on	139.7 x 50.8 mm (5.5" x 2")

Coaxial Neodymium compression drivers



**Features:**

- Dual diaphragm coaxial planar wave design
- Rectangular piston of 8"x3/4" (215.6 x 19 mm)
- Neodymium magnet assembly
- Perfect acoustical coupling of individual units to create a virtually continuous line source
- Extended bandwidth (400 - 22000 hz)
- 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
- 8 or 16 ohm

The BMS 4508ND dual diaphragm coaxial planar wave driver radiates a coherent planar wave front from a rectangular piston without internal diffraction for superior dispersion control and high fidelity sound. 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. This distinctive new transducer was engineered to work with 8-inch (215.6 mm x 19 mm) rectangular throat waveguides providing extremely high sensitivity.

The patented design of the BMS 4508 is a result of extensive dedicated research and development providing dramatic improvement in dynamic response, clarity and transparency. The larger annular midrange diaphragm covers the frequency range between 400 and 6.500 Hz with a smooth, linear response. The high 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 voice coils may be driven in conjunction with a passive crossover or driven individually from an active crossover.

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.

The 4508ND is optimized for 0° to 15° vertical dispersion and allows a horizontal coverage up to 120° depending on the waveguide used. The unique design of the 4508ND dual diaphragm planar wave driver allows perfect acoustical

coupling of individual units with excellent phase coherence and perfect time alignment to create virtually continuous line source.

## SPECIFICATIONS

Throat Rectangular	8" x 3/4" (215.6 x 19 mm)
Nominal impedance	8 or 16 Ohm
Efficiency	35% (400 - 5.000 Hz)
Power capacity	
Middle range (AES)	150 W above 400 Hz
Peak	1000 W above 500 Hz
High range (AES)	80W
Peak	320W
Sensitivity	112 dB on 90° x 10° horn
Frequency range	400 - 22.000 Hz
Recommended crossover Mid:	400 Hz
Middle frequency range	400 - 7.000 Hz
High frequency range	6.000 - 22.000 Hz
Middle/High crossover	6.300 Hz
Voice coil mid-range	3.5" (90 mm)
Voice coil high-range	1.75" (44.4 mm)
Magnet material	Neodymium
Flux density mid-range	1.95 Tesla
Flux density high-range	2.2 Tesla
Voice coil material	Cooper clad Aluminum
	(2 layers inside and outside of the VC)
Voice coil former	Kapton™
Diaphragm material	Polyester

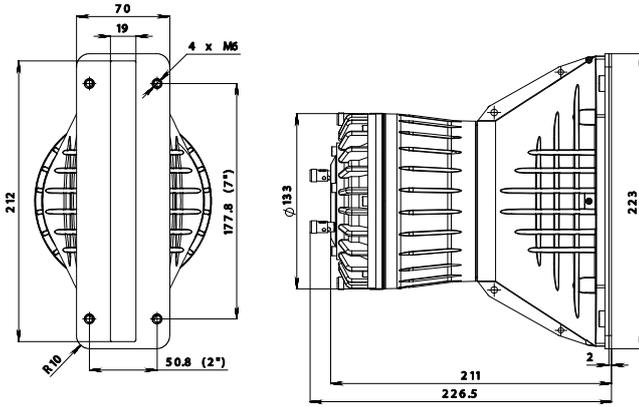
### MOUNTING INFORMATION

Overall dimensions	223 x 133 x 226.5 mm (+/- 0.3 mm)
Net weight	3.9 kg
4 x M6 Holes on	177.8 x 50.8 mm, (7" x 2")

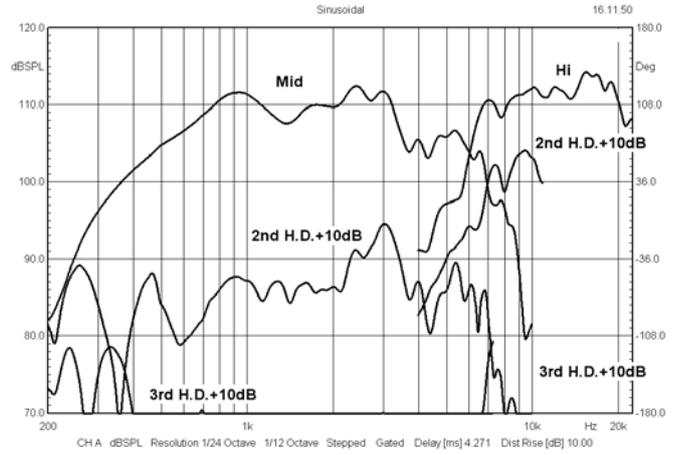
# 4508ND

8" dual diaphragm coaxial planar wave driver

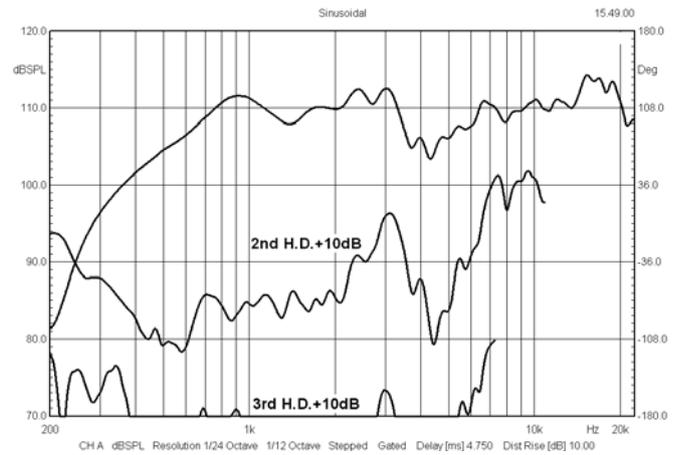
# Coaxial Neodymium planar wave driver



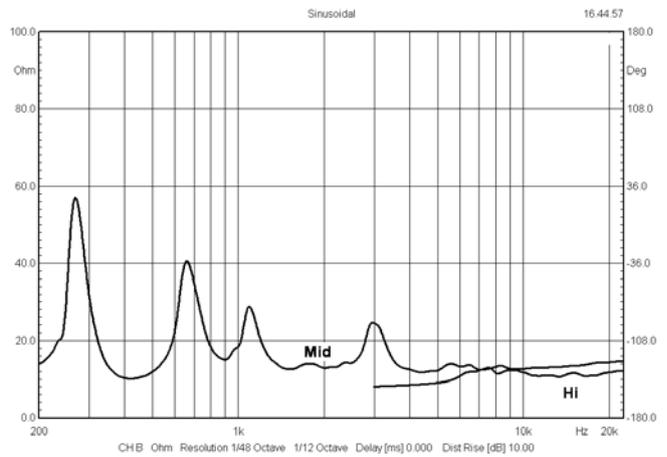
BMS 4508ND-16, 90°x10° horn, 2nd and 3rd harmonic raised 10 dB, SPL 1 W / 1 m



BMS 4508ND-16, incl. passive crossover, 90°x10° horn, 2nd and 3rd harmonic raised 10 dB, SPL 1 W / 1 m



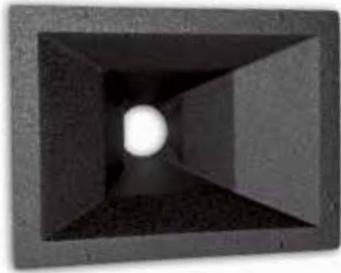
Impedance - 16 Ohm driver



Coaxial Neodymium  
compression drivers

## 2119

1" Fiberglass horn



### SPECIFICATIONS

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

## 2193

1" Fiberglass horn

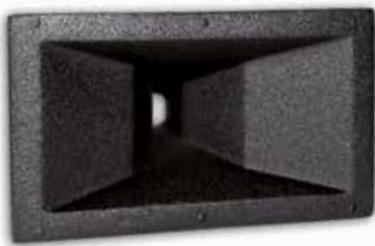


### SPECIFICATIONS

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

## 2230

2" Fiberglass horn

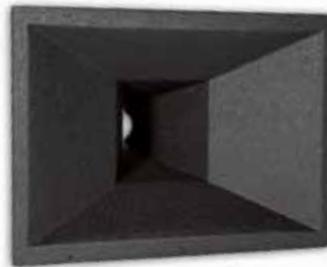


### SPECIFICATIONS

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

## 2236

2" Fiberglass horn



### SPECIFICATIONS

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



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