

W

CUDSPEAKERS

# CATALOGUE

E



# Index

Low Frequency

Coaxial

**Dome Tweeter** 

**Compression Driver** 

Horn



The Marche region caresses you with sounds, colours, scents and genuine tastes. A sweet vibrant energy that springs from the delicate melange of the green hills, that Giacomo Leopardi loved so dearly and from the Adriatic Sea, where the ancient myth of the Argonauts docked three thousand years ago. Forty years ago, SICA was born and raised in this region, cradle of so many Italian excellences, where the people are open, friendly, curious and determined.

The sounds of history and the area's radicated culture are the fil rouge for this dynamic company, where young professionals work

every day with passion and motivation in an informal environment. The universal notes of Gioacchino Rossini, Giovanni Battista Pergolesi, Gaspare Spontini and Beniamino Gigli, resonate in the Company's DNA. They all are sons of these lands and all polestars of those musical competences that from the late '50s naturally flowed and merged in the counties of Recanati, Osimo and Castelfidardo, turning this area into the "musical district" in Italy.

# History & Enviroment



SICA was born from passion as all beautiful things are. In 1979, a group of young men with love and passion for music and hi-fi stroked the loudspeaker market, creating a modern, professional, dynamic and flexible industrial enterprise, with constant expansion either from the manufacturing and the commercial side.

Custom designed and engineered semi-automatic manufacturing lines merge precision and quality with the typical creativity of the "made in Italy". The full customization capability of the products, together with a dynamic proactive approach to the production schedules for the fastest possible lead times, enabled SICA to gain all the international markets, establishing a relevant presence in the five continents. All this translates in the greatest versatility and cooperation with the Customer, aiming to fulfill even the most complex requirements in the MI and Pro Audio world market: from PA and Sound Reinforcement, to Cinema, Hi-Fi, and Musical Instruments. Experience and professionalism created the opportunity for SICA to obtain the license for the usage and development of the Jensen brand, reissuing those loudspeakers that wrote the history of the electric guitar tone in the last century, and developing new guitar loudspeakers for the next century.



# Passion & Quality



SICA's eco-friendly and sustainable philosophy is forward looking and characterizes every productive and manufacturing activity: environmental procedures, compliant to the most stringent international quality standards, strict adherence to the occupational safety regulations and a constant care and attention to the needs of the territory, with specific initiatives for the growth and development of its own community.

# Sustainability & Social

# **DATASHEET TOPICS**

The **frequency response** is measured with the loudspeaker mounted on a specified box, whereas the impedance curve is measured in free air.

The **Thiele-Small parameters** are measured with a laser sensor, after a preconditioning test.

The **X-max** value is measured to a Total Harmonic Distortion of 10%.

The **X-var** is the maximum excursion allowed by the loudspeaker, it is stated as the value corresponding to a decay of the Force Factor, or of the Compliance, or both, equal to 50% of the small signal value.

Loudspeakers with **further impedances** than those shown on the catalogue are available upon request.

Due to continuing product improvements, all features are subject to **change without notice**.

### **Power Handling**

The **Rated Power** is measured according to the AES 2-1984 standard, which calls for a pink noise signal with 6dB crest factor and band pass filtering to a decade in the working range of the loudspeaker. After a 2 hour test the loudspeaker did not show any permanent change in characteristics greater than 10%. The RMS power rating is calculated using the minimum electrical impedance value over the operating range of the speaker. The cone speakers are tested in free air, the compression drivers are tested coupled to the recommended horn.

The **Continuous Program Power** is specified as twice the rated power.

The dome tweeter is also declared the **Rated Noise Power**, which is measured according to the IEC60268-5 international standard that calls for a pink noise signal with 6dB crest factor and IEC program filtering to approximate the spectral content of real music. The test duration is 100 hours.





## **Quality Control**

The **Quality Control Department inspects 100% of the production**. Automatic checks, run through electronics devices, are carried out on all cone speakers, compression drivers and dome tweeters, checking Frequency response, Impedance curve, Resonance frequency, rub & buzz, polarity, THD and Thiele-Small parameters of each speaker.

### Materials and Constructive technologies

SICA technicians pay special attention to all innovations in the fields of advanced materials and constructive technologies. This is to improve performance and stability of the loudspeakers throughout their use, even if intensive.

In this context a series of innovations have been adopted, such as aluminium die cast baskets with thin brackets to avoid sound reflections on the rear side of the cone, magnet circuits with an additional magnet mounted on the central pole to make the flux fully symmetric in the magnetic gap and to improve the dynamic performance of the voice coil, magnet circuits with optimized ventilation to reduce the power compression, improved voice coil ventilation and sandwich windings to increase the power handling, spiders with asymmetrical progressive waves realized with DCS (double cross spider) technique to allow for linear elongation up to extreme values, cloth and rubber suspensions with DAR (double asymmetric rolls) technology for the perfect balance of the compliance in both displacement directions.

Further innovations are under development, to be applied in future projects.

# A onc LOW aavis Frequency

# **21 S 4 PL** 21" | 2400 W

Code **Z008424** 

4" voice coil Fiberglass former Double Cross Spider with Progressive Waves (DCSP) Triple Roll Cloth surround (TR) Autoclave Waterproof Cone Treatment (AWpT) Neodymium Magnet Circuit Ventilated Magnet to reduce Power Compression (VM) 98.8 dB sensitivity Frequency Range 35-500 Hz

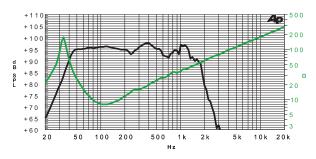


Subwoofer





General Specifications			
Nominal Diameter			545 mm / 21 in
Nominal Impedance			8 Ω
Rated Power AES (1)			1200 W
Continuous Program Power	(2)		2400 W
Sensitivity @ 1W/1m (3)			98.8 dB
Voice Coil Diameter			100 mm / 4 in
Voice Coil Winding Depth			23 mm
Magnetic Gap Depth			17 mm
Flux Density			0.89 T
Magnet Weight			536 g
Net Weight			10.5 kg
Thiele & Small Parameters	S <sup>(4)</sup>		
Re	5.7 Ω	Fs	34.6 Hz
Qms	9.95	Qes	0.31
Qts	0.30	Mms	325.0 g
Cms	65 µm/N	Bxl	36.10 Tm
Vas	255.0 I	Sd	1661.9 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 5.2 mm	X var (6)	+/- 10.7 mm
n <sub>o</sub>	3.29%	Le (1KHz)	1.60 mH



Frequency Response on 190 Lt @ 40 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Humidity Resistant Pulp
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	545 mm
Baffle Cutout Diameter	497 mm
Mounting Holes	8 holes 13x9 on ø 520 mm
Total Depth	249 mm

(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, loudspeaker in free air, power calculated on rated Zmin. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Calculated by Thiele & Small parameters, for SPL average in box refer to frequency response. (4) Thiele & Small parameters measured with laser system after preconditioning test. (5) Measured with respect to a THD of 10%. (6) Value corresponding to a decay of the Force Factor, or Compliance, or both, equal to the 50% of the small signal value.

MADE IN ITALY

# **18 PN 4** 18" | 2400 W

### Code **Z008396**

4" Sandwich voice coil Fiberglass former (SNDW) Double Konex Spider with Progressive Waves (DCSP) Triple Rolls Cloth surround (TR) Total Waterproof Cone Treatment (TWpT) Neodymium Magnet Circuit Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 96.0 dB sensitivity Frequency Range 35-700 Hz



Subwoofer

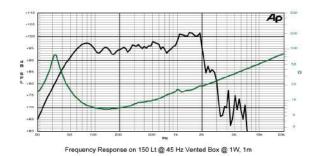








General Specifications			
Nominal Diameter			463 mm / 18 in
Nominal Impedance			8 Ω
Rated Power AES (1)			1200 W
Continuous Program Power	• (2)		2400 W
Sensitivity @ 1W/1m <sup>(3)</sup>			96.0 dB
Voice Coil Diameter			100 mm / 4 in
Voice Coil Winding Depth			27 mm
Magnetic Gap Depth			12 mm
Flux Density			1.05 T
Magnet Weight			536 g
Net Weight			8.7 kg
Thiele & Small Parameter	rs <sup>(4)</sup>		
Re	5.2 Ω	Fs	35.0 Hz
Qms	7.14	Qes	0.47
Qts	0.44	Mms	220.8 g
Cms	94 µm/N	Bxl	23.13 Tm
Vas	180.3 l	Sd	1164.2 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 9.0 mm	X var <sup>(6)</sup>	+/- 11.0 mm
n <sub>o</sub>	1.58%	Le (1KHz)	1.55 mH



**Constructive Characteristics** Magnet Neodymium Basket Material Aluminium Die-Cast Voice Coil Winding Material Copper Voice Coil Former Material Fiberglass Cone Material Paper Cone Treatment Total Waterproof Treatment Surround Material Treated Cloth Dust Dome Material Solid Paper Mounting Information Overall Diameter 462 mm Baffle Cutout Diameter 417 mm Mounting Holes 8 holes 6,5x9 on ø 441 mm Total Depth 211 mm

# **18 K 4 PL** 18" | 2400 W

Code **Z008402** 

4" Sandwich voice coil Fiberglass former (SNDW) Double Konex Spider with Progressive Waves (DPS) Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT) Neodymium Magnet Circuit Ventilated Magnet to reduce Power Compression (VM) 97.8 dB sensitivity Frequency Range 35-700 Hz

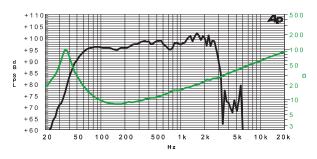






MADE IN ITALY

General Specifications			
Nominal Diameter			462 mm / 18 in
Nominal Impedance			8 Ω
Rated Power AES (1)			1200 W
Continuous Program Powe	r <sup>(2)</sup>		2400 W
Sensitivity @ 1W/1m (3)			97.8 dB
Voice Coil Diameter			100 mm / 4 in
Voice Coil Winding Depth			22 mm
Magnetic Gap Depth			12 mm
Flux Density			1.21 T
Magnet Weight			536 g
Net Weight			8.3 kg
Thiele & Small Paramete	ers <sup>(4)</sup>		
Re	6.0 Ω	Fs	36.8 Hz
Qms	4.62	Qes	0.35
Qts	0.32	Mms	178.8 g
Cms	105 µm/N	Bxl	26.8 Tm
Vas	201 I	Sd	1164.2 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 6.5 mm	X var (6)	+/- 10.0 mm
n <sub>o</sub>	2.78%	Le (1KHz)	1.60 mH



Frequency Response on 150 Lt @ 45 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Humidity Resistant Pulp
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	462 mm
Baffle Cutout Diameter	417 mm
Mounting Holes	8 holes 6,5x9 on ø 441 mm
Total Depth	211 mm

# **18 S 4 PL** 18" | 2400 W

Code **Z008405** 

4" Sandwich voice coil Fiberglass former (SNDW) Double Cross Spider with Progressive Waves (DCSP) Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT) Neodymium Magnet Circuit Ventilated Magnet to reduce Power Compression (VM) 97.3 dB sensitivity Frequency Range 35-700 Hz

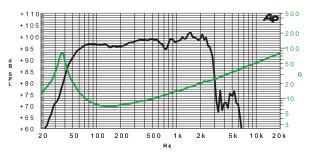


Subwoofer





General Specifications			
Nominal Diameter			462 mm / 18 in
Nominal Impedance			8 Ω
Rated Power AES (1)			1200 W
Continuous Program Power	- (2)		2400 W
Sensitivity @ 1W/1m (3)			97.3 dB
Voice Coil Diameter			100 mm / 4 in
Voice Coil Winding Depth			27 mm
Magnetic Gap Depth			12 mm
Flux Density			1.21 T
Magnet Weight			536 g
Net Weight			8.3 kg
Thiele & Small Paramete	rs <sup>(4)</sup>		
Re	5.2 Ω	Fs	36.2 Hz
Qms	6.56	Qes	0.42
Qts	0.39	Mms	197.0 g
Cms	98 µm/N	Bxl	23.54 Tm
Vas	189.0	Sd	1164.2 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 8.0 mm	X var (6)	+/- 10.1 mm
n <sub>o</sub>	2.07%	Le (1KHz)	1.35 mH



Frequency Response on 150 Lt @ 45 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Humidity Resistant Pulp
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	462 mm
Baffle Cutout Diameter	417 mm
Mounting Holes	8 holes 6,5x9 on ø 441 mm
Total Depth	211 mm

(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, loudspeaker in free air, power calculated on rated Zmin. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Calculated by Thiele & Small parameters, for SPL average in box refer to frequency response. (4) Thiele & Small parameters measured with laser system after preconditioning test. (5) Measured with respect to a THD of 10%. (6) Value corresponding to a decay of the Force Factor, or Compliance, or both, equal to the 50% of the small signal value.

MADE IN ITALY

# **18 PF 4** 18" | 2400 W

### Code Z008394

4" Sandwich voice coil Fiberglass former (SNDW) Double Cross Konex Spider with Progressive Waves (DCSP) Triple Roll Cloth surround (TR) Total Waterproof Cone Treatment (TWpT) High Excursion Ferrite Magnet Circuit (HeF) Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 96.3 dB sensitivity Frequency Range 35-700 Hz

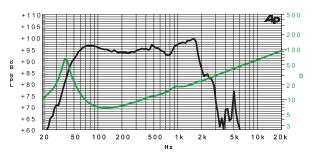


Subwoofer





General Specification	IS		
Nominal Diameter			463 mm / 18 in
Nominal Impedance			8 Ω
Rated Power AES (1)			1200 W
Continuous Program Po	ower (2)		2400 W
Sensitivity @ 1W/1m (3)			96.3 dB
Voice Coil Diameter			100 mm / 4 in
Voice Coil Winding Dep	th		27 mm
Magnetic Gap Depth			12 mm
Flux Density			1.05 T
Magnet Weight			3300 g
Net Weight			13.0 kg
Thiele & Small Param	ieters (4)		
Re	5.2 Ω	Fs	38.0 Hz
Qms	6.46	Qes	0.47
Qts	0.43	Mms	229.2 g
Cms	76 µm/N	Bxl	24.6 Tm
Vas	147.3	Sd	1164.2 cm <sup>2</sup>
X max (5)	+/- 8.0 mm	X var (6)	+/- 10.0 mm
n <sub>o</sub>	1.67%	Le (1KHz)	1.85 mH



Frequency Response on 150 Lt @ 45 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Total Waterproof Treatment
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	462 mm
Baffle Cutout Diameter	417 mm
Mounting Holes	8 holes 6,5x9 on ø 441 mm
Total Depth	209.5 mm

(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, loudspeaker in free air, power calculated on rated Zmin. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Calculated by Thiele & Small parameters, for SPL average in box refer to frequency response. (4) Thiele & Small parameters measured with laser system after preconditioning test. (5) Measured with respect to a THD of 10%. (6) Value corresponding to a decay of the Force Factor, or Compliance, or both, equal to the 50% of the small signal value.

MADE IN ITALY

# **18 S 4 CP** 18" | 2400 W

Code **Z008401** 

4" Sandwich voice coil Fiberglass former (SNDW) Double Cross Spider (DCS) Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment Ferrite Magnet Circuit Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 97.1 dB sensitivity Frequency Range 35-700 Hz

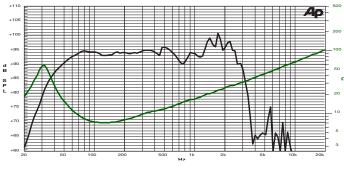






MADE IN ITALY

General Specifications			
Nominal Diameter			463 mm / 18 in
Nominal Impedance			8 Ω
Rated Power AES (1)			1200 W
Continuous Program Powe	r <sup>(2)</sup>		2400 W
Sensitivity @ 1W/1m (3)			97.1 dB
Voice Coil Diameter			100 mm / 4 in
Voice Coil Winding Depth			27 mm
Magnetic Gap Depth			12 mm
Flux Density			1.15 T
Magnet Weight			3300 g
Net Weight			14.2 kg
Thiele & Small Paramete	rs <sup>(4)</sup>		
Re	5.2 Ω	Fs	33.0 Hz
Qms	3.94	Qes	0.47
Qts	0.35	Mms	198.6 g
Cms	117 µm/N	Bxl	23.50 Tm
Vas	225 I	Sd	1164.2 cm <sup>2</sup>
X max (5)	+/- 11.0 mm	X var (6)	+/- 12.0 mm
n <sub>o</sub>	2.01%	Le (1KHz)	1.81 mH





Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Humidity Resistant Pulp
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	462 mm
Baffle Cutout Diameter	417 mm
Mounting Holes	8 holes 6,5x9 on ø 441 mm
Total Depth	203.5 mm

# **18 F 3 CP** 18" | 800 W

Code Z008362

3" voice coil Aluminium former Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT) Ferrite Magnet Circuit Ventilated Magnet to reduce Power Compression (VM) 96.9 dB sensitivity Frequency Range 30-700 Hz



Subwoofer

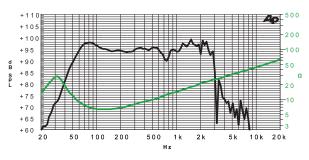








General Specifications			
Nominal Diameter			462 mm / 18 in
Nominal Impedance			8 Ω
Rated Power AES (1)			400 W
Continuous Program Power	(2)		800 W
Sensitivity @ 1W/1m <sup>(3)</sup>			96.9 dB
Voice Coil Diameter			75 mm / 3 in
Voice Coil Winding Depth			20 mm
Magnetic Gap Depth			10 mm
Flux Density			1.08 T
Magnet Weight			1800 g
Net Weight			8.6 kg
Thiele & Small Parameter	'S <sup>(4)</sup>		
Re	5.1 Ω	Fs	30.8 Hz
Qms	3.05	Qes	0.52
Qts	0.45	Mms	155 g
Cms	177 µm/N	Bxl	16.9 Tm
Vas	340.01	Sd	1164.2 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 6.5 mm	X var (6)	+/- 10.5 mm
n <sub>o</sub>	1.84%	Le (1KHz)	1.41 mH



Frequency Response on 150 Lt @ 45 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Aluminium
Cone Material	Paper
Cone Treatment	Humidity Resistant Pulp
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	462 mm
Baffle Cutout Diameter	417 mm
Mounting Holes	8 holes 6.5x9 on ø 441 mm
Total Depth	196.5 mm

# **15 K 4 PL** 15" 2400 W

### Code **Z008339**

4" Sandwich voice coil Kapton former (SNDW) Double Cross Spider with Progressive Waves (DCSP) Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT) Neodymium Magnet Circuit with Copper Demodulating Ring (CDR) Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 99.2 dB sensitivity Frequency Range 45-2000 Hz



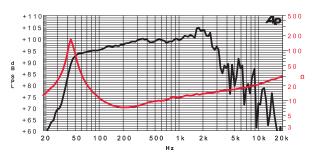
Professional





MADE IN ITALY

General Specifications			
Nominal Diameter			388 mm / 15 in
Nominal Impedance			8 Ω
Rated Power AES (1)			1200 W
Continuous Program Power	(2)		2400 W
Sensitivity @ 1W/1m <sup>(3)</sup>			99.2 dB
Voice Coil Diameter			100 mm / 4 in
Voice Coil Winding Depth			21 mm
Magnetic Gap Depth			12 mm
Flux Density			1.23 T
Magnet Weight			536 g
Net Weight			7.0 kg
Thiele & Small Parameter	S <sup>(4)</sup>		
Re	5.2 Ω	Fs	45.2 Hz
Qms	13.80	Qes	0.30
Qts	0.29	Mms	118.0 g
Cms	109 µm/N	Bxl	24.20 Tm
Vas	105.0 l	Sd	855.3 cm <sup>2</sup>
X max (5)	+/- 6.5 mm	X var (6)	+/- 10.5 mm
n	3.27%	Le (1KHz)	0.84 mH



Frequency Response on 90 Lt @ 48 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	Humidity Resistant Pulp
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	388 mm
Baffle Cutout Diameter	355 mm
Mounting Holes	8 holes 6x9 on ø 371 mm
Total Depth	176.8 mm

### Professional

# **15 F 4 CP** 15" | 1400 W

Code **Z008321** 

4" Sandwich voice coil Kapton former (SNDW) Double Cross Spider with Progressive Waves (DCSP) Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT) Ferrite Magnet Circuit Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 99.1 dB sensitivity Frequency Range 40-2000 Hz

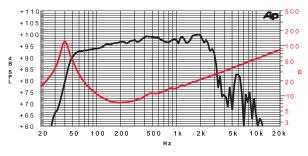




MADE IN ITALY



General Specifications			
Nominal Diameter			389 mm / 15 in
Nominal Impedance			8 Ω
Rated Power AES (1)			700 W
Continuous Program Power (2)			1400 W
Sensitivity @ 1W/1m (3)			99.1 dB
Voice Coil Diameter			100 mm / 4 in
Voice Coil Winding Depth			21 mm
Magnetic Gap Depth			10 mm
Flux Density			1.30 T
Magnet Weight			3300 g
Net Weight			12.1 kg
Thiele & Small Parameters (4)			
Re	5.1 Ω	Fs	41.0 Hz
Qms	7.42	Qes	0.26
Qts	0.25	Mms	130.0 g
Cms 116	6 µm/N	Bxl	25.9 Tm
Vas	120.4	Sd	855.3 cm <sup>2</sup>
X max <sup>(5)</sup> +/- 7	7.0 mm	X var (6)	+/- 10.0 mm
n <sub>o</sub>	3.12%	Le (1KHz)	1.48 mH



Frequency Response on 90 Lt @ 48 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	Humidity Resistant Pulp
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	388 mm
Baffle Cutout Diameter	355 mm
Mounting Holes	8 holes 6x9 on ø 371 mm
Total Depth	169 mm

# **15 PNS 4** 15" | 2400 W

Code **Z008325** 

4" Sandwich voice coil Fiberglass former (SNDW) Double Cross Spider (DCS) Triple Rolls Cloth surround (TR) Total Waterproof Cone Treatment (TWpT) High Excursion Neodymium Magnet Circuit Ventilated Magnet to Power Compression (VMVc) 96.0 dB sensitivity Frequency Range 35-2000 Hz

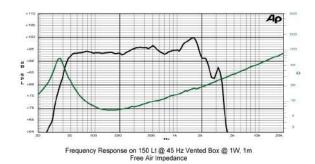


Subwoofer





General Specifications			
Nominal Diameter			388 mm / 15 in
Nominal Impedance			8 Ω
Rated Power AES (1)			1200 W
Continuous Program Power	(2)		2400 W
Sensitivity @ 1W/1m <sup>(3)</sup>			96.0 dB
Voice Coil Diameter			100 mm / 4 in
Voice Coil Winding Depth			27 mm
Magnetic Gap Depth			12 mm
Flux Density			1.20 T
Magnet Weight			536 g
Net Weight			7.0 kg
Thiele & Small Parameter	'S <sup>(4)</sup>		
Re	5.1 Ω	Fs	37.3 Hz
Qms	5.21	Qes	0.38
Qts	0.35	Mms	161.8 g
Cms	112 µm/N	Bxl	22.73 Tm
Vas	116.3	Sd	855.3 cm <sup>2</sup>
X max (5)	+/- 9.0 mm	X var (6)	+/- 9.0 mm
n <sub>o</sub>	1.55%	Le (1KHz)	1.42 mH



Constructive Characteristics		
Magnet	Neodymium	
Basket Material	Aluminium Die-Cast	
Voice Coil Winding Material	Copper	
Voice Coil Former Material	Fiberglass	
Cone Material	Paper	
Cone Treatment	Total Waterproof Treatment	
Surround Material	Treated Cloth	
Dust Dome Material	Solid Paper	
Mounting Information		
Overall Diameter	388 mm	
Baffle Cutout Diameter	355 mm	
Mounting Holes	8 holes 6x9 on ø 371 mm	
Total Depth	176.5 mm	

# **15 S 4 PL** 15" | 2400 W

Code **Z008175** 



4" Sandwich voice coil Fiberglass former (SNDW) Double Cross Spider with Progressive Waves (DCSP) Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT) Neodymium Magnet Circuit Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 98.1 dB sensitivity Frequency Range 35-2000 Hz

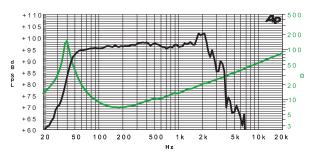






MADE IN ITALY

General Specification	S		
Nominal Diameter			388 mm / 15 in
Nominal Impedance			8 Ω
Rated Power AES (1)			1200 W
Continuous Program Po	Wer <sup>(2)</sup>		2400 W
Sensitivity @ 1W/1m <sup>(3)</sup>			98.1 dB
Voice Coil Diameter			100 mm / 4 in
Voice Coil Winding Dept	th		27 mm
Magnetic Gap Depth			12 mm
Flux Density			1.21 T
Magnet Weight			536 g
Net Weight			7.0 kg
Thiele & Small Param	eters <sup>(4)</sup>		
Re	5.1 Ω	Fs	38.0 Hz
Qms	14.5	Qes	0.29
Qts	0.28	Mms	134.1 g
Cms	131 µm/N	Bxl	23.84 Tm
Vas	135.91	Sd	855.3 cm <sup>2</sup>
X max (5)	+/- 8.5 mm	X var (6)	+/- 11.5 mm
n <sub>o</sub>	2.50%	Le (1KHz)	1.38 mH



Frequency Response on 150 Lt @ 45 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Humidity Resistant Pulp
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	388 mm
Baffle Cutout Diameter	355 mm
Mounting Holes	8 holes 6x9 on ø 371 mm
Total Depth	176.8 mm



Code Z008318

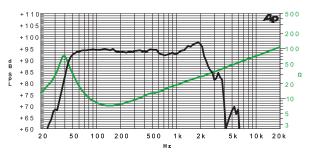
4" Sandwich voice coil Fiberglass former (SNDW) Double Cross Spider (DCS) Triple Roll Cloth surround (TR) Total Waterproof Cone Treatment (TWpT) High Excursion Ferrite Magnet Circuit (HeF) Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 95.8 dB sensitivity Frequency Range 35-2000 Hz





SNDW DCS TR TWpT HeF VMVc

General Specification	15		
Nominal Diameter			389 mm / 15 in
Nominal Impedance			8 Ω
Rated Power AES (1)			1200 W
Continuous Program Pe	ower (2)		2400 W
Sensitivity @ 1W/1m (3)	)		95.8 dB
Voice Coil Diameter			100 mm / 4 in
Voice Coil Winding Dep	oth		27 mm
Magnetic Gap Depth			12 mm
Flux Density			1.12 T
Magnet Weight			3300 g
Net Weight			12.3 kg
Thiele & Small Param	neters <sup>(4)</sup>		
Re	5.3 Ω	Fs	39.0 Hz
Qms	4.87	Qes	0.37
Qts	0.34	Mms	166.5 g
Cms	100 µm/N	Bxl	24.24 Tm
Vas	103.91	Sd	855.3 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 9.0 mm	X var (6)	+/- 9.0 mm
n <sub>o</sub>	1.61%	Le (1KHz)	1.80 mH



Frequency Response on 150 Lt @ 45 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Total Waterproof Treatment
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	388 mm
Baffle Cutout Diameter	355 mm
Mounting Holes	8 holes 6x9 on ø371 mm
Total Depth	175 mm

(1) Bated Power measured with 2-hour test with pink noise signal, 6dB crest factor, loudspeaker in free air, power calculated on rated Zmin. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Calculated by Thiele & Small parameters, for SPL average in box refer to frequency response. (4) Thiele & Small parameters measured with laser system after preconditioning test. (5) Measured with respect to a THD of 10%. (6) Value corresponding to a decay of the Force Factor, or Compliance, or both, equal to the 50% of the small signal value.



MADE IN ITALY

# **15 K 3 PL** 15" | 800 W

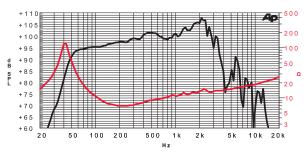
### Code **Z008331**

3" Sandwich voice coil Kapton former (SNDW) Konex Spider with Progressive Waves (PS) Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT) Balanced Neodymium Magnet Circuit with Copper Demodulating Ring (CDR) Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 99.7 dB sensitivity Frequency Range 40-2000 Hz





General Specifications			
Nominal Diameter			388 mm / 15 in
Nominal Impedance			8 Ω
Rated Power AES (1)			400 W
Continuous Program Powe	r <sup>(2)</sup>		800 W
Sensitivity @ 1W/1m <sup>(3)</sup>			99.7 dB
Voice Coil Diameter			75 mm / 3 in
Voice Coil Winding Depth			20 mm
Magnetic Gap Depth			10 mm
Flux Density			1.42 T
Magnet Weight			560 g
Net Weight			4.0 kg
Thiele & Small Paramete	rs <sup>(4)</sup>		
Re	5.2 Ω	Fs	40.0 Hz
Qms	8.31	Qes	0.28
Qts	0.27	Mms	99.0 g
Cms	160 µm/N	Bxl	21.40 Tm
Vas	166.1 I	Sd	855.3 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 6.5 mm	X var (6)	+/- 11.0 mm
n <sub>o</sub>	3.66%	Le (1KHz)	0.60 mH



Frequency Response on 90 Lt @ 48 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	Humidity Resistant Pulp
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	388 mm
Baffle Cutout Diameter	355 mm
Mounting Holes	4 holes 6x9 on ø 371 mm
Total Depth	169 mm

(1) Bated Power measured with 2-hour test with pink noise signal, 6dB crest factor, loudspeaker in free air, power calculated on rated Zmin. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Calculated by Thiele & Small parameters, for SPL average in box refer to frequency response. (4) Thiele & Small parameters measured with laser system after preconditioning test. (5) Measured with respect to a THD of 10%. (6) Value corresponding to a decay of the Force Factor, or Compliance, or both, equal to the 50% of the small signal value.

MADE IN ITALY

**Professional** 

### Professional

# **15 PF 3** 15" | 1200 W

Code **Z008316** 

3" Sandwich voice coil Fiberglass former (SNDW) Konex Spider Triple rolls Cloth surroind (TR) Total Waterproof Cone Treatment (TWpT) Balanced Ferrite Magnet Circuit with Aliminium Demodulating Ring (BMF) Ventilated Magnet to reduce Power Compression (VM) 99.1 dB sensitivity Frequency Range 45-3000 Hz

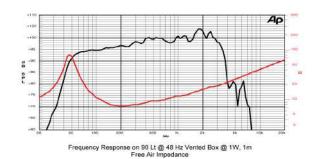






MADE IN ITALY

General Specifications			
Nominal Diameter			389 mm / 15 in
Nominal Impedance			8 Ω
Rated Power AES (1)			600 W
Continuous Program Power <sup>(2)</sup>			1200 W
Sensitivity @ 1W/1m <sup>(3)</sup>			99.1 dB
Voice Coil Diameter			75 mm / 3 in
Voice Coil Winding Depth			17 mm
Magnetic Gap Depth			10 mm
Flux Density			1.46 T
Magnet Weight			2900 g
Net Weight			9.0 kg
Thiele & Small Parameters (4)			
Re	5.1 Ω	Fs	45.0 Hz
Qms	5.56	Qes	0.33
Qts	0.31	Mms	110.5 g
Cms 113	µm/N	Bxl	21.95 Tm
Vas	117.6	Sd	855.3 cm <sup>2</sup>
X max <sup>(5)</sup> +/- 8	.0 mm	X var (6)	+/- 10.0 mm
n <sub>o</sub>	3.12%	Le (1KHz)	1.02 mH



### **Constructive Characteristics**

Magnet	Ferrite	
Basket Material	Aluminium Die-Cast	
Voice Coil Winding Material	Copper	
Voice Coil Former Material	Fiberglass	
Cone Material	Paper	
Cone Treatment	Total Waterproof Treatment	
Surround Material	Treated Cloth	
Dust Dome Material	Solid Paper	
Mounting Information		
Overall Diameter	388 mm	
Baffle Cutout Diameter	355 mm	
Mounting Holes	4 holes 6x9 on ø 371 mm	
Total Depth	169 mm	

# **15 Fe 3 CP** 15" | 800 W

Code **Z008308** 

3" Sandwich voice coil Fiberglass former (SNDW) Konex Spider Waterproof Cone Treatment (WpT) Ferrite Magnet Circuit Ventilated Magnet to reduce Power Compression (VM) 99.4 dB sensitivity Frequency Range 40-2000 Hz



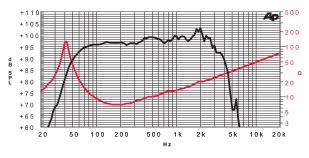
Professional







General Specifications			
Nominal Diameter			389 mm / 15 in
Nominal Impedance			8 Ω
Rated Power AES (1)			400 W
Continuous Program Powe	er <sup>(2)</sup>		800 W
Sensitivity @ 1W/1m (3)			99.4 dB
Voice Coil Diameter			75 mm / 3 in
Voice Coil Winding Depth			17 mm
Magnetic Gap Depth			10 mm
Flux Density			1.18 T
Magnet Weight			1800 g
Net Weight			8.1 kg
Thiele & Small Paramete	ers <sup>(4)</sup>		
Re	5.2 Ω	Fs	40.2 Hz
Qms	9.52	Qes	0.34
Qts	0.33	Mms	91.0 g
Cms	164 µm/N	Bxl	19.10 Tm
Vas	170.4	Sd	855.3 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 5.5 mm	X var (6)	+/- 10.0 mm
n	3.42%	Le (1KHz)	1.22 mH



Frequency Response on 90 Lt @ 48 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics		
Magnet	Ferrite	
Basket Material	Aluminium Die-Cast	
Voice Coil Winding Material	Copper	
Voice Coil Former Material	Fiberglass	
Cone Material	Paper	
Cone Treatment	Surface Waterproof Treatment	
Surround Material	Treated Cloth	
Dust Dome Material	Solid Paper	
Mounting Information		
Overall Diameter	388 mm	
Baffle Cutout Diameter	355 mm	
Mounting Holes	8 holes 6x9 on ø 371 mm	
Total Depth	161 mm	

# **15 S 3 PL** 15" | 800 W

### Code **Z008173**

3" Sandwich voice coil Fiberglass former (SNDW) Konex Spider with Progressive Waves (PS) Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT) High Excursion Neodymium Magnet Circuit (HeN) Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 97.2 dB sensitivity Frequency Range 35-2000 Hz

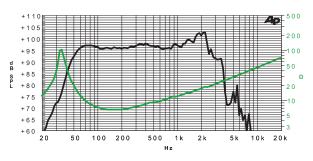






MADE IN ITALY

General Specifications			
Nominal Diameter			388 mm / 15 in
Nominal Impedance			8 Ω
Rated Power AES (1)			400 W
Continuous Program Powe	er <sup>(2)</sup>		800 W
Sensitivity @ 1W/1m (3)			97.2 dB
Voice Coil Diameter			75 mm / 3 in
Voice Coil Winding Depth			24 mm
Magnetic Gap Depth			10 mm
Flux Density			1.22 T
Magnet Weight			360 g
Net Weight			3.9 kg
Thiele & Small Paramete	ers <sup>(4)</sup>		
Re	5.2 Ω	Fs	33.0 Hz
Qms	14.10	Qes	0.39
Qts	0.38	Mms	105.0 g
Cms	221 µm/N	Bxl	17.10 Tm
Vas	230.0 I	Sd	855.3 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 8.0 mm	X var (6)	+/- 11.1 mm
n <sub>o</sub>	2.06%	Le (1KHz)	1.15 mH



Frequency Response on 150 Lt @ 45 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics		
Magnet	Neodymium	
Basket Material	Aluminium Die-Cast	
Voice Coil Winding Material	Copper	
Voice Coil Former Material	Fiberglass	
Cone Material	Paper	
Cone Treatment	Humidity Resistant Pulp	
Surround Material	Treated Cloth	
Dust Dome Material	Solid Paper	
Mounting Information		
Overall Diameter	388 mm	
Baffle Cutout Diameter	355 mm	
Mounting Holes	8 holes 6x9 on ø 371 mm	
Total Depth	161 mm	

# **15 PFS 3** 15" | 1000 W

Code Z008314

3" Sandwich voice coil Fiberglass former (SNDW) Konex Spider with Progressive Waves (PS) Triple Roll Cloth surround (TR) Total Waterproof Cone Treatment (TWpT) Balanced Ferrite Magnet Circuit (BMF) Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 95.9 dB sensitivity Frequency Range 35-2000 Hz



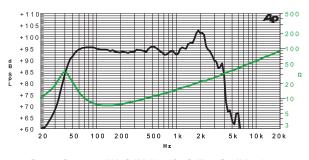
Subwoofer





MADE IN ITALY

General Specifications		
Nominal Diameter		389 mm / 15 in
Nominal Impedance		8 Ω
Rated Power AES (1)		500 W
Continuous Program Power (2)		1000 W
Sensitivity @ 1W/1m (3)		95.9 dB
Voice Coil Diameter		75 mm / 3 in
Voice Coil Winding Depth		24 mm
Magnetic Gap Depth		10 mm
Flux Density		1.08 T
Magnet Weight		1790 g
Net Weight		7.7 kg
Thiele & Small Parameters (4)		
Re 5.1 Ω	Fs	39.0 Hz
Qms 3.24	Qes	0.52
Qts 0.45	Mms	127.7 g
Cms 130 µm/N	Bxl	17.50 Tm
Vas 135.5 I	Sd	855.3 cm <sup>2</sup>
X max <sup>(5)</sup> +/- 7.0 mm	X var (6)	+/- 9.0 mm
n <sub>0</sub> 1.49%	Le (1KHz)	1.36 mH



Frequency Response on 150 Lt @ 45 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Total Waterproof Treatment
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	388 mm
Baffle Cutout Diameter	355 mm
Mounting Holes	8 holes 6x9 on ø 371 mm
Total Depth	163 mm

# 12 K 4 PL 12" 2000 W

### Code **Z008020**







Professional

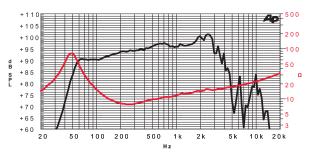








General Specifications			
Nominal Diameter			321 mm / 12 in
Nominal Impedance			8 Ω
Rated Power AES (1)			1000 W
Continuous Program Power	(2)		2000 W
Sensitivity @ 1W/1m <sup>(3)</sup>			97.1 dB
Voice Coil Diameter			100 mm / 4 in
Voice Coil Winding Depth			21 mm
Magnetic Gap Depth			12 mm
Flux Density			1.10 T
Magnet Weight			536 g
Net Weight			6.6 kg
Thiele & Small Parameter	S <sup>(4)</sup>		
Re	5.2 Ω	Fs	48.0 Hz
Qms	4.41	Qes	0.25
Qts	0.24	Mms	93.6 g
Cms	115 µm/N	Bxl	24.70 Tm
Vas	46.3 I	Sd	530.9 cm <sup>2</sup>
X max (5)	+/- 7.0 mm	X var (6)	+/- 9.0 mm
n <sub>o</sub>	1.99%	Le (1KHz)	0.74 mH



Frequency Response on 45 Lt @ 55 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	Humidity Resistant Pulp
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	320 mm
Baffle Cutout Diameter	284 mm
Mounting Holes	8 holes 6x9 on ø 301 mm
Total Depth	154.8 mm

# **12 F 4 CP** 12" | 1400 W

Code Z008019

4" sandwich voice coil Kapton former (SNDW) Double Cross Spider with Progressive Waves (DCSP) Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT) Ferrite Magnet Circuit Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 97.3 dB sensitivity Frequency Range 48-3000 Hz



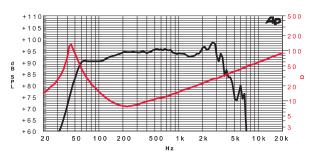
Professional







General Specifications			
Nominal Diameter			321 mm / 12 in
Nominal Impedance			8 Ω
Rated Power AES (1)			700 W
Continuous Program Powe	r <sup>(2)</sup>		1400 W
Sensitivity @ 1W/1m (3)			97.3 dB
Voice Coil Diameter			100 mm / 4 in
Voice Coil Winding Depth			21 mm
Magnetic Gap Depth			10 mm
Flux Density			1.31 T
Magnet Weight			3300 g
Net Weight			11.7 kg
Thiele & Small Paramete	rs <sup>(4)</sup>		
Re	5.2 Ω	Fs	46.0 Hz
Qms	7.50	Qes	0.22
Qts	0.22	Mms	96.0 g
Cms	125 µm/N	Bxl	25.80 Tm
Vas	49.91	Sd	530.9 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 5.5 mm	X var (6)	+/- 9.0 mm
n	2.14%	Le (1KHz)	1.58 mH



Frequency Response on 45 Lt @ 55 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics		
Magnet	Ferrite	
Basket Material	Aluminium Die-Cast	
Voice Coil Winding Material	Copper	
Voice Coil Former Material	Kapton	
Cone Material	Paper	
Cone Treatment	Humidity Resistant Pulp	
Surround Material	Treated Cloth	
Dust Dome Material	Solid Paper	
Mounting Information		
Overall Diameter	320 mm	
Baffle Cutout Diameter	284 mm	
Mounting Holes	8 holes 6x9 on ø 301 mm	
Total Depth	147.3 mm	

# **12 S 4 PL** 12" | 2000 W

Code Z007951



4" Sandwich voice coil Fiberglass former (SNDW) Double Cross Spider with Progressive Waves (DCSP) Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT) Neodymium Magnet Circuit Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 95.5 dB sensitivity Frequency Range 40-2000 Hz

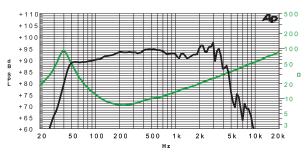




MADE IN ITALY



<b>General Specifications</b>			
Nominal Diameter			321 mm / 12 in
Nominal Impedance			8 Ω
Rated Power AES (1)			1000 W
Continuous Program Pow	er <sup>(2)</sup>		2000 W
Sensitivity @ 1W/1m (3)			95.5 dB
Voice Coil Diameter			100 mm / 4 in
Voice Coil Winding Depth			27 mm
Magnetic Gap Depth			12 mm
Flux Density			1.21 T
Magnet Weight			536 g
Net Weight			6.6 kg
Thiele & Small Paramet	ers <sup>(4)</sup>		
Re	5.2 Ω	Fs	40.4 Hz
Qms	4.50	Qes	0.26
Qts	0.25	Mms	109.0 g
Cms	142 µm/N	Bxl	23.50 Tm
Vas	57.0 I	Sd	530.9 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 7.5 mm	X var (6)	+/- 9.0 mm
n <sub>o</sub>	1.39%	Le (1KHz)	1.15 mH



Frequency Response on 60 Lt @ 45 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Humidity Resistant Pulp
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	320 mm
Baffle Cutout Diameter	284 mm
Mounting Holes	8 holes 6x9 on ø 301 mm
Total Depth	154.8 mm

# **12 PFS 4** 12" | 2000 W

### Code **Z007954**

4" Sandwich voice coil Fiberglass former (SNDW) Double Cross Konex Spider with Progressive Waves (DCSP) Triple Roll Cloth surround (TR) Total Waterproof Cone Treatment (TWpT) High Excursion Ferrite Magnet Circuit (HeF) Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 94.8 dB sensitivity Frequency Range 35-2000 Hz

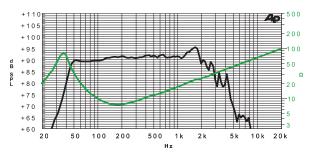








General Specifications			
Nominal Diameter			321 mm / 12 in
Nominal Impedance			8 Ω
Rated Power AES (1)			1000 W
Continuous Program Pow	/er <sup>(2)</sup>		2000 W
Sensitivity @ 1W/1m (3)			94.8 dB
Voice Coil Diameter			100 mm / 4 in
Voice Coil Winding Depth			27 mm
Magnetic Gap Depth			12 mm
Flux Density			1.08 T
Magnet Weight			3300 g
Net Weight			11.5 kg
Thiele & Small Parame	ters (4)		
Re	5.2 Ω	Fs	39.0 Hz
Qms	4.60	Qes	0.27
Qts	0.26	Mms	120.0 g
Cms	139 µm/N	BxI	23.88 Tm
Vas	55.6 l	Sd	530.9 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 9.0 mm	X var (6)	+/- 10.0 mm
n <sub>0</sub>	1.18%	Le (1KHz)	1.76 mH



Frequency Response on 60 Lt @ 45 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Total Waterproof Treatment
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	320 mm
Baffle Cutout Diameter	284 mm
Mounting Holes	8 holes 6x9 on ø 301 mm
Total Depth	153.3 mm

# **12 N 3 PL** 12" | 800 W

### Code **Z007983**

3" Sandwich voice coil Fiberglass former and Aluminium Winding (SNDW) Konex Spider with Progressive Waves (PS) Cloth surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) Neodymium Magnet Circuit Ventilated Voice Coil to reduce Power Compression (VVc) 98.5 dB sensitivity Frequency Range 45-3000 Hz



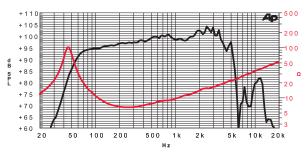
Professional





MADE IN ITALY

General Specifications			
Nominal Diameter			320 mm / 12 in
Nominal Impedance			Ω 8
Rated Power AES (1)			400 W
Continuous Program Powe	r <sup>(2)</sup>		800 W
Sensitivity @ 1W/1m (3)			98.5 dB
Voice Coil Diameter			75 mm / 3 in
Voice Coil Winding Depth			21 mm
Magnetic Gap Depth			10 mm
Flux Density			1.18 T
Magnet Weight			360 g
Net Weight			3.5 kg
Thiele & Small Paramete	rs <sup>(4)</sup>		
Re	5.0 Ω	Fs	46.0 Hz
Qms	7.50	Qes	0.31
Qts	0.30	Mms	56.5 g
Cms	220 µm/N	Bxl	16.00 Tm
Vas	87.9 I	Sd	530.9 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 5.5 mm	X var (6)	+/- 9.0 mm
n <sub>o</sub>	2.68%	Le (1KHz)	0.80 mH



Frequency Response on 45 Lt @ 55 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics		
Magnet	Neodymium	
Basket Material	Aluminium Die-Cast	
Voice Coil Winding Material	Aluminium	
Voice Coil Former Material	Fiberglass	
Cone Material	Paper	
Cone Treatment	Surface Waterproof Treatment	
Surround Material	Treated Cloth	
Dust Dome Material	Solid Paper	
Mounting Information		
Overall Diameter	320 mm	
Baffle Cutout Diameter	284 mm	
Mounting Holes	8 holes 6x9 on ø 301 mm	
Total Depth	135.4 mm	

# **12 PF 3** 12" | 1000 W

### Code **Z007845**

3" Sandwich voice coil Fiberglass former and Aluminium Winding (SNDW) Konex Spider with Progressive Waves (PS)

Triple Roll Cloth surround (TR)

Total Waterproof Cone Treatment (TWpT)

Balanced Ferrite Magnet Circuit with Aluminium Demodulating Ring (BMF) Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 96.4 dB sensitivity

Frequency Range 45-3000 Hz



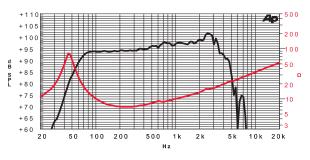
Professional







General Specifications			
Nominal Diameter			321 mm / 12 in
Nominal Impedance			8 Ω
Rated Power AES (1)			500 W
Continuous Program Powe	er <sup>(2)</sup>		1000 W
Sensitivity @ 1W/1m (3)			96.4 dB
Voice Coil Diameter			75 mm / 3 in
Voice Coil Winding Depth			17 mm
Magnetic Gap Depth			10 mm
Flux Density			1.05 T
Magnet Weight			1790 g
Net Weight			6.7 kg
Thiele & Small Paramete	ers <sup>(4)</sup>		
Re	5.6 Ω	Fs	47.0 Hz
Qms	5.80	Qes	0.42
Qts	0.39	Mms	60.0 g
Cms	191 µm/N	Bxl	15.38 Tm
Vas	76.5 l	Sd	530.9 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 5.5 mm	X var (6)	+/- 8.5 mm
n <sub>o</sub>	1.84%	Le (1KHz)	0.70 mH



Frequency Response on 45 Lt @ 55 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Aluminium
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Total Waterproof Treatment
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	320 mm
Baffle Cutout Diameter	284 mm
Mounting Holes	8 holes 6x9 on ø 301 mm
Total Depth	141.3 mm

# **12 S 3 PL** 12" | 800 W

### Code **Z007946**

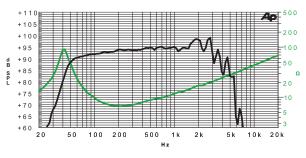
3" Sandwich voice coil Fiberglass former (SNDW) Double Cross Konex Spider with Progressive Waves (DCSP) Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT) High Excursion Neodymium Magnet Circuit (HeN) Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 95.8 dB sensitivity Frequency Range 40-2000 Hz







General Specification	IS		
Nominal Diameter			320 mm / 12 in
Nominal Impedance			8 Ω
Rated Power AES (1)			400 W
Continuous Program Po	ower (2)		800 W
Sensitivity @ 1W/1m (3)			95.8 dB
Voice Coil Diameter			75 mm / 3 in
Voice Coil Winding Dep	th		24 mm
Magnetic Gap Depth			10 mm
Flux Density			1.22 T
Magnet Weight			360 g
Net Weight			3.5 kg
Thiele & Small Param	ieters <sup>(4)</sup>		
Re	5.2 Ω	Fs	42.0 Hz
Qms	6.10	Qes	0.36
Qts	0.34	Mms	74.8 g
Cms	192 µm/N	Bxl	16.80 Tm
Vas	76.91	Sd	530.9 cm <sup>2</sup>
X max (5)	+/- 7.0 mm	X var (6)	+/- 9.0 mm
n <sub>o</sub>	1.51%	Le (1KHz)	1.04 mH



Frequency Response on 60 Lt @ 45 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Humidity Resistant Pulp
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	320 mm
Baffle Cutout Diameter	284 mm
Mounting Holes	8 holes 6x9 on ø 301 mm
Total Depth	139.4 mm

(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, loudspeaker in free air, power calculated on rated Zmin. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Calculated by Thiele & Small parameters, for SPL average in box refer to frequency response. (4) Thiele & Small parameters measured with laser system after preconditioning test. (5) Measured with respect to a THD of 10%. (6) Value corresponding to a decay of the Force Factor, or Compliance, or both, equal to the 50% of the small signal value.



MADE IN ITALY

# **12 PFS 3** 12" | 1000 W

Code **Z007847** 

3" Sandwich voice coil Fiberglass former (SNDW) Double Cross Konex Spider (DCS) Triple Roll Cloth surround (TR) Total Waterproof Cone Treatment (TWpT) High Excursion Ferrite Magnet Circuit (HeF) Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 93.6 dB sensitivity Frequency Range 40-2000 Hz



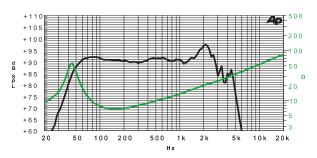


SICA )) loudspeakers ®





General Specifications			
Nominal Diameter			321 mm / 12 in
Nominal Impedance			8 Ω
Rated Power AES (1)			500 W
Continuous Program Pow	/er <sup>(2)</sup>		1000 W
Sensitivity @ 1W/1m (3)			93.6 dB
Voice Coil Diameter			75 mm / 3 in
Voice Coil Winding Depth	1		24 mm
Magnetic Gap Depth			10 mm
Flux Density			1.04 T
Magnet Weight			1790 g
Net Weight			6.7 kg
Thiele & Small Parame	ters <sup>(4)</sup>		
Re	5.1 Ω	Fs	43.0 Hz
Qms	5.35	Qes	0.51
Qts	0.47	Mms	93.7 g
Cms	146 µm/N	Bxl	15.89 Tm
Vas	58.5 I	Sd	530.9 cm <sup>2</sup>
X max (5)	+/- 7.0 mm	X var (6)	+/- 10.0 mm
n <sub>o</sub>	0.86%	Le (1KHz)	1.07 mH



Frequency Response on 60 Lt @ 45 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Total Waterproof Treatment
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	320 mm
Baffle Cutout Diameter	284 mm
Mounting Holes	8 holes 6x9 on ø 301 mm
Total Depth	141.3 mm

# **12 SR 3 PL** 12" | 800 W

### Code **Z007948**

3" Sandwich voice coil Fiberglass former (SNDW) Double Cross Konex Spider (DCS) Rubber surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) High Excursion Neodymium Magnet Circuit (HeN) Ventilated Voice Coil to reduce Power Compression (VVc) 91.8 dB sensitivity Frequency Range 35-2000 Hz

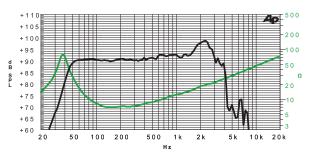






MADE IN ITALY

General Specifications			
Nominal Diameter			320 mm / 12 in
Nominal Impedance			8 Ω
Rated Power AES (1)			400 W
Continuous Program Power	(2)		800 W
Sensitivity @ 1W/1m (3)			91.8 dB
Voice Coil Diameter			75 mm / 3 in
Voice Coil Winding Depth			24 mm
Magnetic Gap Depth			10 mm
Flux Density			1.19 T
Magnet Weight			360 g
Net Weight			3.5 kg
Thiele & Small Parameter	S <sup>(4)</sup>		
Re	5.3 Ω	Fs	36.0 Hz
Qms	5.90	Qes	0.45
Qts	0.42	Mms	108.5 g
Cms	177 µm/N	Bxl	17.02 Tm
Vas	60.4 I	Sd	490.9 cm <sup>2</sup>
X max (5)	+/- 7.0 mm	X var (6)	+/- 11.0 mm
n <sub>o</sub>	0.61%	Le (1KHz)	1.15 mH



Frequency Response on 60 Lt @ 45 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Surface Waterproof Treatment
Surround Material	Rubber
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	320 mm
Baffle Cutout Diameter	284 mm
Mounting Holes	8 holes ø 6 on ø 300 mm
Total Depth	142.9 mm

# **12 SR 3 CP** 12" | 900 W

Code **Z007942** 

3" Sandwich voice coil Fiberglass former (SNDW) Double Cross Konex Spider (DCS) Rubber surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) High Excursion Ferrite Magnet Circuit (HeF) Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 92.4 dB sensitivity Frequency Range 35-2000 Hz

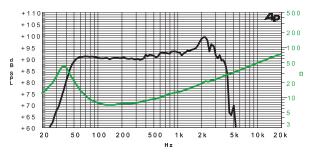








General Specifications			
Nominal Diameter			321 mm / 12 in
Nominal Impedance			8 Ω
Rated Power AES (1)			450 W
Continuous Program Power (2)			900 W
Sensitivity @ 1W/1m (3)			92.4 dB
Voice Coil Diameter			75 mm / 3 in
Voice Coil Winding Depth			20 mm
Magnetic Gap Depth			10 mm
Flux Density			1.00 T
Magnet Weight			1790 g
Net Weight			7.3 kg
Thiele & Small Parameters (4)		•	
Re 5	.1 Ω	Fs	36.8 Hz
Qms	3.20	Qes	0.44
Qts	0.39	Mms	100.1 g
Cms 187 µ	m/N	Bxl	16.39 Tm
Vas 6	4.01	Sd	490.9 cm <sup>2</sup>
X max <sup>(5)</sup> +/- 6.0	mm	X var (6)	+/- 8.8 mm
n <sub>0</sub> 0.	67%	Le (1KHz)	1.14 mH



Frequency Response on 60 Lt @ 45 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Surface Waterproof Treatment
Surround Material	Rubber
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	320 mm
Baffle Cutout Diameter	284 mm
Mounting Holes	8 holes ø 6 on ø 300 mm
Total Depth	140.8 mm

# **12 L1 2,5 SL** 12" | 600 W

Code **Z007903** 

Professional



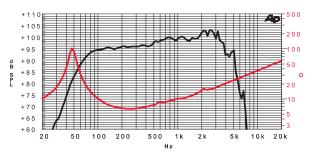
2.5" voice coil Kapton former
Konex Spider
Neodymium Magnet Circuit
Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc)
97.3 dB sensitivity
Frequency Range 50-3000 Hz





MADE IN ITALY

General Specifications			
Nominal Diameter			318 mm / 12 in
Nominal Impedance			8 Ω
Rated Power AES (1)			300 W
Continuous Program Pow	rer (2)		600 W
Sensitivity @ 1W/1m (3)			97.3 dB
Voice Coil Diameter			65 mm / 2.5 in
Voice Coil Winding Depth			14 mm
Magnetic Gap Depth			8 mm
Flux Density			1.15 T
Magnet Weight			220 g
Net Weight			2.3 kg
Thiele & Small Paramet	ters (4)		
Re	5.5 Ω	Fs	47.5 Hz
Qms	7.50	Qes	0.38
Qts	0.36	Mms	47.0 g
Cms	239 µm/N	Bxl	14.20 Tm
Vas	81.8 I	Sd	490.9 cm <sup>2</sup>
X max (5)	+/- 3.7 mm	X var (6)	+/- 6.0 mm
n <sub>o</sub>	2.21%	Le (1KHz)	0.75 mH



Frequency Response on 45 Lt @ 55 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Pressed Sheet Steel
Voice Coil Winding Material	Copper
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	No
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	318 mm
Baffle Cutout Diameter	287 mm
Mounting Holes	8 holes 5x9 on ø 300 mm
Total Depth	130.2 mm

# **12 D 1,5 CS** 12" 260 W

Code **Z007360** 

1,5" voice coil Kapton former Dual Cone Ferrite Magnet Circuit with Copper Demodulating Ring (CDR) 96.9 dB sensitivity Frequency Range 65-15000 Hz



Dual Cone

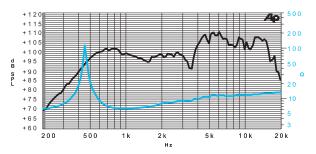


MADE IN ITALY



CDR

General Specifications			
Nominal Diameter			318 mm / 12 in
Nominal Impedance			8 Ω
Rated Power AES (1)			130 W
Continuous Program Power	- (2)		260 W
Sensitivity @ 1W/1m <sup>(3)</sup>			96.9 dB
Voice Coil Diameter			38 mm / 1.5 in
Voice Coil Winding Depth			9 mm
Magnetic Gap Depth			8 mm
Flux Density			1.21 T
Magnet Weight			1100 g
Net Weight			3.7 kg
Thiele & Small Parameter	rs <sup>(4)</sup>		
Re	5.1 Ω	Fs	62.0 Hz
Qms	18.30	Qes	0.78
Qts	0.75	Mms	35.5 g
Cms	186 µm/N	Bxl	9.51 Tm
Vas	63.5 l	Sd	490.9 cm <sup>2</sup>
X max (5)	+/- 2.7 mm	X var (6)	+/- 5.0 mm
n <sub>o</sub>	1.87%	Le (1KHz)	0.35 mH



Frequency Response on 45 Lt @ 55 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Pressed Sheet Steel
Voice Coil Winding Material	Copper
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	No
Surround Material	Paper - Integrated
Dust Dome Material	Non Treated Cloth
Mounting Information	
Overall Diameter	318 mm
Baffle Cutout Diameter	287 mm
Mounting Holes	8 holes 5x9 on ø 300 mm
Total Depth	134.7 mm

### **10 K 4 PL** 10" | 1600 W

#### Code **Z006950**





Professional

4" Sandwich voice coil Fiberglass former (SNDW) Polycotton Spider with Progressive Waves (PS) Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT) Neodymium Magnet Circuit with Copper Demodulating Ring (CDR) Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 95.8 dB sensitivity Frequency Range 55-4000 Hz

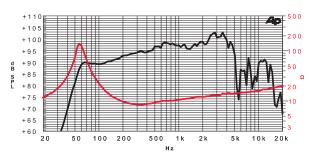




MADE IN ITALY



General Specification	s		
Nominal Diameter			269 mm / 10 in
Nominal Impedance			8 Ω
Rated Power AES (1)			800 W
Continuous Program Po	wer <sup>(2)</sup>		1600 W
Sensitivity @ 1W/1m (3)			95.8 dB
Voice Coil Diameter			100 mm / 4 in
Voice Coil Winding Dep	th		19 mm
Magnetic Gap Depth			12 mm
Flux Density			1.10 T
Magnet Weight			536 g
Net Weight			6.3 kg
Thiele & Small Param	eters (4)		
Re	6.1 Ω	Fs	58.5 Hz
Qms	8.99	Qes	0.26
Qts	0.25	Mms	53.9 g
Cms	137 µm/N	Bxl	21.62 Tm
Vas	23.4	Sd	346.4 cm <sup>2</sup>
X max (5)	+/- 5.0 mm	X var (6)	+/- 7.0 mm
n <sub>o</sub>	1.75%	Le (1KHz)	0.40 mH



Frequency Response on 35 Lt @ 60 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Humidity Resistant Pulp
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	268 mm
Baffle Cutout Diameter	232 mm
Mounting Holes	8 holes 6x9 on ø 247 mm
Total Depth	136 mm

### **10 K 3 PL** 10" | 800 W

#### Code **Z005840**

3" Sandwich voice coil Kapton former and Aluminium Winding (SNDW) Konex Spider with Progressive Waves (PS)

Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT)

Neodymium Magnet Circuit with Copper Demodulating Ring (CDR) Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 96.7 dB sensitivity

Frequency Range 50-3000 Hz

MADE IN ITALY

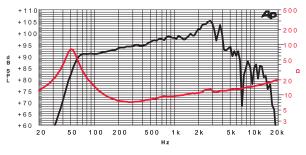


Professional





General Specifications			
Nominal Diameter			268 mm / 10 in
Nominal Impedance			8 Ω
Rated Power AES (1)			400 W
Continuous Program Pow	er (2)		800 W
Sensitivity @ 1W/1m (3)			96.7 dB
Voice Coil Diameter			75 mm / 3 in
Voice Coil Winding Depth			20 mm
Magnetic Gap Depth			10 mm
Flux Density			1.20 T
Magnet Weight			360 g
Net Weight			2.8 kg
Thiele & Small Paramet	ers (4)		
Re	5.2 Ω	Fs	50.6 Hz
Qms	5.02	Qes	0.27
Qts	0.26	Mms	42.1 g
Cms	235 µm/N	Bxl	16.05 Tm
Vas	40.01	Sd	346.4 cm <sup>2</sup>
X max (5)	+/- 6.5 mm	X var (6)	+/- 8.5 mm
n,	1.85%	Le (1KHz)	0.49 mH



Frequency Response on 35 Lt @ 60 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Aluminium
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	Humidity Resistant Pulp
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	268 mm
Baffle Cutout Diameter	232 mm
Mounting Holes	8 holes 6x9 on ø 247 mm
Total Depth	128.5 mm

### **10 Fe 3 CP** 10" 900 W

#### Code **Z005831**

3" Sandwich voice coil Fiberglass former and Aluminium Winding (SNDW) Konex Spider with Progressive Waves (PS)

Cloth surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT)

Balanced Ferrite Magnet Circuit with Aluminium Demodulating Ring (BMF) Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 95.9 dB sensitivity

Frequency Range 50-3000 Hz



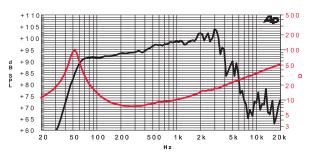
Professional



MADE IN ITALY



General Specifications	\$		
Nominal Diameter			269 mm / 10 in
Nominal Impedance			8 Ω
Rated Power AES (1)			450 W
Continuous Program Por	wer <sup>(2)</sup>		900 W
Sensitivity @ 1W/1m (3)			95.9 dB
Voice Coil Diameter			75 mm / 3 in
Voice Coil Winding Dept	h		17 mm
Magnetic Gap Depth			10 mm
Flux Density			1.08 T
Magnet Weight			1790 g
Net Weight			6.6 kg
Thiele & Small Parame	eters (4)		
Re	5.6 Ω	Fs	52.0 Hz
Qms	7.50	Qes	0.32
Qts	0.31	Mms	41.4 g
Cms	226 µm/N	Bxl	15.35 Tm
Vas	38.61	Sd	346.4 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 5.0 mm	X var (6)	+/- 7.5 mm
n <sub>o</sub>	1.63%	Le (1KHz)	0.67 mH



Frequency Response on 35 Lt @ 60 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics		
Magnet	Ferrite	
Basket Material	Aluminium Die-Cast	
Voice Coil Winding Material	Aluminium	
Voice Coil Former Material	Fiberglass	
Cone Material	Paper	
Cone Treatment	Surface Waterproof Treatment	
Surround Material	Treated Cloth	
Dust Dome Material	Solid Paper	
Mounting Information		
Overall Diameter	268 mm	
Baffle Cutout Diameter	232 mm	
Mounting Holes	8 holes 6x9 on ø 247 mm	
Total Depth	122.5 mm	

#### Subwoofer

### **10 S 3 PL** 10" | 800 W

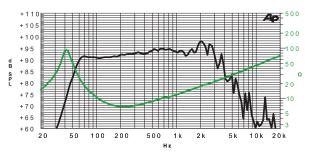
#### Code 2006015

3" Sandwich voice coil Fiberglass former (SNDW) Konex Spider with Progressive Waves (PS) Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT) High Excursion Neodymium Magnet Circuit (HeN) Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 94.5 dB sensitivity Frequency Range 40-2000 Hz





General Specifications			
Nominal Diameter			268 mm / 10 in
Nominal Impedance			8 Ω
Rated Power AES (1)			400 W
Continuous Program Powe	r <sup>(2)</sup>		800 W
Sensitivity @ 1W/1m (3)			94.5 dB
Voice Coil Diameter			75 mm / 3 in
Voice Coil Winding Depth			24 mm
Magnetic Gap Depth			10 mm
Flux Density			1.19 T
Magnet Weight			360 g
Net Weight			3.1 kg
Thiele & Small Paramete	rs <sup>(4)</sup>		
Re	5.1 Ω	Fs	43.0 Hz
Qms	4.80	Qes	0.28
Qts	0.27	Mms	58.5 g
Cms	234 µm/N	Bxl	16.86 Tm
Vas	39.91	Sd	346.4 cm <sup>2</sup>
X max (5)	+/- 7.0 mm	X var (6)	+/- 9.0 mm
n <sub>o</sub>	1.08%	Le (1KHz)	1.18 mH



Frequency Response on 35 Lt @ 60 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Humidity Resistant Pulp
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	268 mm
Baffle Cutout Diameter	232 mm
Mounting Holes	8 holes 6x9 on ø 247 mm
Total Depth	120.5 mm

(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, loudspeaker in free air, power calculated on rated Zmin. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Calculated by Thiele & Small parameters, for SPL average in box refer to frequency response. (4) Thiele & Small parameters measured with laser system after preconditioning test. (5) Measured with respect to a THD of 10%. (6) Value corresponding to a decay of the Force Factor, or Compliance, or both, equal to the 50% of the small signal value.



MADE IN ITALY

#### Subwoofer

### **10 S 3 CP** 10" | 900 W

#### Code 2006017

3" Sandwich voice coil Fiberglass former (SNDW) Konex Spider with Progressive Waves (PS) Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT) High Excursion Ferrite Magnet Circuit (HeF) Ventilated Voice Coil to reduce Power Compression 93.8 dB sensitivity Frequency Range 40-2000 Hz

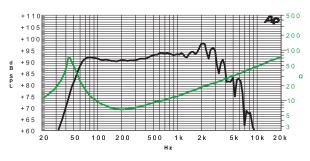








General Specifications			
Nominal Diameter			269 mm / 10 in
Nominal Impedance			8 Ω
Rated Power AES (1)			450 W
Continuous Program Power	(2)		900 W
Sensitivity @ 1W/1m (3)			93.8 dB
Voice Coil Diameter			75 mm / 3 in
Voice Coil Winding Depth			24 mm
Magnetic Gap Depth			10 mm
Flux Density			1.00 T
Magnet Weight			1790 g
Net Weight			6.5 kg
Thiele & Small Parameter	S <sup>(4)</sup>		
Re	5.1 Ω	Fs	43.0 Hz
Qms	4.02	Qes	0.34
Qts	0.31	Mms	58.5 g
Cms	234 µm/N	Bxl	15.50 Tm
Vas	39.9 l	Sd	346.4 cm <sup>2</sup>
X max (5)	+/- 7.0 mm	X var (6)	+/- 8.5 mm
n <sub>o</sub>	0.91%	Le (1KHz)	1.19 mH



Frequency Response on 35 Lt @ 60 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Humidity Resistant Pulp
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	268 mm
Baffle Cutout Diameter	232 mm
Mounting Holes	8 holes 6x9 on ø 247 mm
Total Depth	122.5 mm

### **10 N 2,5 PL** 10" | 600 W

#### Code **Z005701**



Professional

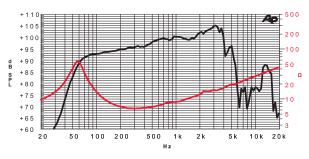
2,5" voice coil Kapton former and Aluminium Winding Spider with Progressive Waves (PS) Cloth surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) Neodymium Magnet Circuit Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 96.6 dB sensitivity Frequency Range 55-3500 Hz





MADE IN ITALY

General Specifications			
Nominal Diameter			268 mm / 10 in
Nominal Impedance			8 Ω
Rated Power AES (1)			300 W
Continuous Program Power	- (2)		600 W
Sensitivity @ 1W/1m <sup>(3)</sup>			96.6 dB
Voice Coil Diameter			65 mm / 2.5 in
Voice Coil Winding Depth			12 mm
Magnetic Gap Depth			8 mm
Flux Density			1.22 T
Magnet Weight			220 g
Net Weight			2.2 kg
Thiele & Small Paramete	rs <sup>(4)</sup>		
Re	5.5 Ω	Fs	57.0 Hz
Qms	4.25	Qes	0.39
Qts	0.36	Mms	32.5 g
Cms	240 µm/N	Bxl	12.80 Tm
Vas	40.91	Sd	346.4 cm <sup>2</sup>
X max (5)	+/- 4.5 mm	X var (6)	+/- 7.0 mm
n <sub>o</sub>	1.87%	Le (1KHz)	0.50 mH



Frequency Response on 35 Lt @ 60 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics		
Magnet	Neodymium	
Basket Material	Aluminium Die-Cast	
Voice Coil Winding Material	Aluminium	
Voice Coil Former Material	Kapton	
Cone Material	Paper	
Cone Treatment	Surface Waterproof Treatment	
Surround Material	Treated Cloth	
Dust Dome Material	Solid Paper	
Mounting Information		
Overall Diameter	268 mm	
Baffle Cutout Diameter	232 mm	
Mounting Holes	8 holes 6x9 on ø 247 mm	
Total Depth	111.5 mm	

### **10 Fe 2,5 CP** 10" 600 W

#### Code **Z005710**

2,5" voice coil Fiberglass former and Aluminium Winding
Spider with Progressive Waves (PS)
Cloth surround with Double Asymmetric Rolls Technology (DAR)
Waterproof Cone Treatment (WpT)
Balanced Ferrite Magnet Circuit with Aluminium Demodulating Ring (BMF)
Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc)
96.3 dB sensitivity
Frequency Range 55-3500 Hz



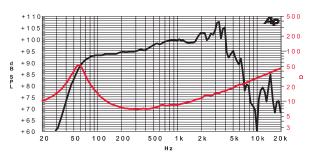
Professional





MADE IN ITALY

General Specifications			
Nominal Diameter			269 mm / 10 in
Nominal Impedance			8 Ω
Rated Power AES (1)			300 W
Continuous Program Power	- (2)		600 W
Sensitivity @ 1W/1m <sup>(3)</sup>			96.3 dB
Voice Coil Diameter			65 mm / 2.5 in
Voice Coil Winding Depth			12 mm
Magnetic Gap Depth			8 mm
Flux Density			1.17 T
Magnet Weight			1430 g
Net Weight			4.9 kg
Thiele & Small Paramete	rs <sup>(4)</sup>		
Re	5.5 Ω	Fs	57.0 Hz
Qms	4.23	Qes	0.40
Qts	0.37	Mms	33.5 g
Cms	233 µm/N	Bxl	12.80 Tm
Vas	39.7 I	Sd	346.4 cm <sup>2</sup>
X max (5)	+/- 4.0 mm	X var (6)	+/- 7.0 mm
n	1.76%	Le (1KHz)	0.46 mH



Frequency Response on 35 Lt @ 60 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Aluminium
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Surface Waterproof Treatment
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	268 mm
Baffle Cutout Diameter	232 mm
Mounting Holes	8 holes 6x9 on ø 247 mm
Total Depth	119.5 mm

### **10 SR 2,5 CP** 10" | 600 W

Code Z006013



Subwoofer

2,5" voice coil Fiberglass former
High Excursion Rubber surround (RHE)
Waterproof Cone Treatment (WpT)
High Excursion Ferrite Magnet Circuit (HeF)
Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc)
93.0 dB sensitivity
Frequency Range 35-2000 Hz

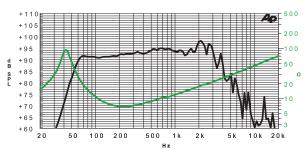




MADE IN ITALY



General Specifications			
Nominal Diameter			269 mm / 10 in
Nominal Impedance			8 Ω
Rated Power AES (1)			300 W
Continuous Program Power	(2)		600 W
Sensitivity @ 1W/1m <sup>(3)</sup>			93.0 dB
Voice Coil Diameter			65 mm / 2.5 in
Voice Coil Winding Depth			18 mm
Magnetic Gap Depth			8 mm
Flux Density			1.05 T
Magnet Weight			1430 g
Net Weight			5.0 kg
Thiele & Small Parameter	S <sup>(4)</sup>		
Re	5.2 Ω	Fs	34.5 Hz
Qms	6.35	Qes	0.34
Qts	0.32	Mms	56.5 g
Cms	377 µm/N	Bxl	13.7 Tm
Vas	66.7 I	Sd	353.0 cm <sup>2</sup>
X max (5)	+/- 6.0 mm	X var (6)	+/- 10.0 mm
n	0.78%	Le (1KHz)	1.16 mH



Frequency Response on 35 Lt @ 60 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Surface Waterproof Treatment
Surround Material	Rubber
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	270 mm
Baffle Cutout Diameter	232 mm
Mounting Holes	8 holes ø 6 on ø 252 mm
Total Depth	122 mm

### **10 D 1,5 CS** 10" | 200 W

Code **Z006510** 

1,5" voice coil Kapton formerDual ConeFerrite Magnet Circuit with Copper Demodulating Ring (CDR)93.9 dB sensitivityFrequency Range 70-15000 Hz



Dual Cone

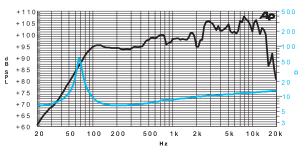


MADE IN ITALY





General Specifications			
Nominal Diameter			266 mm / 10 in
Nominal Impedance			8 Ω
Rated Power AES (1)			100 W
Continuous Program Power	(2)		200 W
Sensitivity @ 1W/1m <sup>(3)</sup>			93.9 dB
Voice Coil Diameter			38 mm / 1.5 in
Voice Coil Winding Depth			9 mm
Magnetic Gap Depth			6 mm
Flux Density			0.95 T
Magnet Weight			426 g
Net Weight			1.9 kg
Thiele & Small Parameter	'S <sup>(4)</sup>		
Re	5.0 Ω	Fs	68.0 Hz
Qms	12.27	Qes	1.23
Qts	1.12	Mms	22.6 g
Cms	242 µm/N	Bxl	6.26 Tm
Vas	37.5 I	Sd	330.1 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 2.5 mm	X var (6)	+/- 5.0 mm
n <sub>o</sub>	0.92%	Le (1KHz)	0.26 mH



Frequency Response on 35 Lt Closed Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Pressed Sheet Steel
Voice Coil Winding Material	Copper
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	No
Surround Material	Paper - Integrated
Dust Dome Material	Non Treated Cloth
Mounting Information	
Overall Diameter	266 mm
Baffle Cutout Diameter	237 mm
Mounting Holes	8 holes 5x9 on ø 250 mm
Total Depth	97.4 mm

### 8 K 3 PL 8" | 800 W

#### Code **Z005520**

3" Sandwich voice coil Fiberglass former and Aluminium Winding (SNDW) Konex Spider with Progressive Waves (PS)

Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT)

Neodymium Magnet Circuit with Copper Demodulating Ring (CDR) Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 95.1 dB sensitivity

Frequency Range 65-3000 Hz

MADE IN ITALY

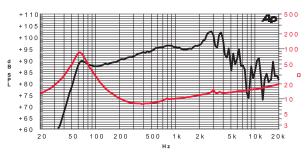


Professional





General Specifications			
Nominal Diameter			210 mm / 8 in
Nominal Impedance			8 Ω
Rated Power AES (1)			400 W
Continuous Program Power	- (2)		800 W
Sensitivity @ 1W/1m (3)			95.1 dB
Voice Coil Diameter			75 mm / 3 in
Voice Coil Winding Depth			17 mm
Magnetic Gap Depth			10 mm
Flux Density			1.20 T
Magnet Weight			360 g
Net Weight			2.4 kg
Thiele & Small Paramete	rs <sup>(4)</sup>		
Re	5.6 Ω	Fs	68.1 Hz
Qms	3.85	Qes	0.27
Qts	0.25	Mms	29.0 g
Cms	188 µm/N	BxI	16.10 Tm
Vas	12.2	Sd	213.8 cm <sup>2</sup>
X max (5)	+/- 5.0 mm	X var (6)	+/- 6.5 mm
n <sub>o</sub>	1.38%	Le (1KHz)	0.37 mH



Frequency Response on 25 Lt @ 65 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics		
Magnet	Neodymium	
Basket Material	Aluminium Die-Cast	
Voice Coil Winding Material	Aluminium	
Voice Coil Former Material	Fiberglass	
Cone Material	Paper	
Cone Treatment	Humidity Resistant Pulp	
Surround Material	Treated Cloth	
Dust Dome Material	Solid Pape	
Mounting Information		
Overall Diameter	210 mm	
Baffle Cutout Diameter	184 mm	
Mounting Holes	4 holes 5.5x7.5 on ø 196 mm	
Total Depth	93 mm	

### 8 N 2,5 PL 8" | 600 W

#### Code **Z005200**



Professional

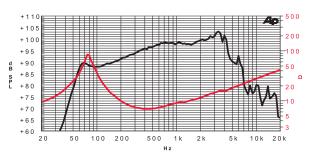
2,5" voice coil Kapton former and Aluminium Winding Spider with Progressive Waves (PS) Cloth surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) Neodymium Magnet Circuit Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 96.4 dB sensitivity Frequency Range 75-4000 Hz





MADE IN ITALY

General Specifications			
Nominal Diameter			210 mm / 8 in
Nominal Impedance			8 Ω
Rated Power AES (1)			300 W
Continuous Program Powe	r <sup>(2)</sup>		600 W
Sensitivity @ 1W/1m (3)			96.4 dB
Voice Coil Diameter			65 mm / 2.5 in
Voice Coil Winding Depth			13 mm
Magnetic Gap Depth			8 mm
Flux Density			1.22 T
Magnet Weight			220 g
Net Weight			1.8 kg
Thiele & Small Paramete	rs <sup>(4)</sup>		
Re	5.6 Ω	Fs	77.0 Hz
Qms	4.21	Qes	0.33
Qts	0.30	Mms	20.3 g
Cms	210 µm/N	Bxl	12.95 Tm
Vas	13.7 I	Sd	213.8 cm <sup>2</sup>
X max (5)	+/- 3.5 mm	X var (6)	+/- 6.2 mm
n <sub>o</sub>	1.83%	Le (1KHz)	0.37 mH



Frequency Response on 25 Lt @ 65 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics		
Magnet	Neodymium	
Basket Material	Aluminium Die-Cast	
Voice Coil Winding Material	Aluminium	
Voice Coil Former Material	Kapton	
Cone Material	Paper	
Cone Treatment	Surface Waterproof Treatment	
Surround Material	Treated Cloth	
Dust Dome Material	Solid Paper	
Mounting Information		
Overall Diameter	210 mm	
Baffle Cutout Diameter	184 mm	
Mounting Holes	4 holes 5.5x7.5 on ø 196 mm	
Total Depth	90 mm	

### 8 Fe 2,5 CP 8″ 600 W

#### Code **Z005203**

2,5" voice coil Kapton former and Aluminium Winding
Spider with Progressive Waves (PS)
Cloth surround with Double Asymmetric Rolls Technology (DAR)
Waterproof Cone Treatment (WpT)
Balanced Ferrite Magnet Circuit with Aluminium Demodulating Ring (BMF)
Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc)
96.7 dB sensitivity
Frequency Range 70-4000 Hz

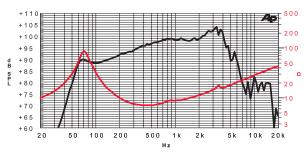








General Specifications			
Nominal Diameter			210 mm / 8 in
Nominal Impedance			8 Ω
Rated Power AES (1)			300 W
Continuous Program Power	· (2)		600 W
Sensitivity @ 1W/1m (3)			96.7 dB
Voice Coil Diameter			65 mm / 2.5 in
Voice Coil Winding Depth			13 mm
Magnetic Gap Depth			8 mm
Flux Density			1.11 T
Magnet Weight			1430 g
Net Weight			4.5 kg
Thiele & Small Paramete	rs <sup>(4)</sup>		
Re	5.5 Ω	Fs	73.0 Hz
Qms	3.73	Qes	0.30
Qts	0.28	Mms	19.8 g
Cms	240 µm/N	Bxl	13.01 Tm
Vas	15.6	Sd	213.8 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 4.0 mm	X var (6)	+/- 6.5 mm
n,	1.97%	Le (1KHz)	0.50 mH



Frequency Response on 25 Lt @ 65 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Aluminium
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	Surface Waterproof Treatment
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	210 mm
Baffle Cutout Diameter	184 mm
Mounting Holes	4 holes 5.5x7.5 on ø 196 mm
Total Depth	98 mm

(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, loudspeaker in free air, power calculated on rated Zmin. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Calculated by Thiele & Small parameters, for SPL average in box refer to frequency response. (4) Thiele & Small parameters measured with laser system after preconditioning test. (5) Measured with respect to a THD of 10%. (6) Value corresponding to a decay of the Force Factor, or Compliance, or both, equal to the 50% of the small signal value.

Professional

### **8 S 2,5 CP** 8" | 600 W

#### Code **Z005205**

Subwoofer

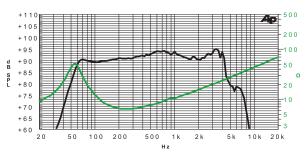
2,5" voice coil Fiberglass former Spider with Progressive Waves (PS) Cloth surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) High Excursion Ferrite Magnet Circuit (HeF) Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 93.0 dB sensitivity Frequency Range 50-3500 Hz



MADE IN ITALY



General Specifications			
Nominal Diameter			210 mm / 8 in
Nominal Impedance			8 Ω
Rated Power AES (1)			300 W
Continuous Program Pow	/er (2)		600 W
Sensitivity @ 1W/1m (3)			93.0 dB
Voice Coil Diameter			65 mm / 2.5 in
Voice Coil Winding Depth	1		18 mm
Magnetic Gap Depth			8 mm
Flux Density			0.89 T
Magnet Weight			1430 g
Net Weight			4.5 kg
Thiele & Small Parame	ters <sup>(4)</sup>		
Re	5.1 Ω	Fs	54.0 Hz
Qms	3.44	Qes	0.37
Qts	0.33	Mms	30.3 g
Cms	287 µm/N	Bxl	11.90 Tm
Vas	18.6 l	Sd	213.8 cm <sup>2</sup>
X max (5)	+/- 5.0 mm	X var (6)	+/- 7.0 mm
n <sub>o</sub>	0.76%	Le (1KHz)	1.00 mH



Frequency Response on 25 Lt @ 65 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Surface Waterproof Treatment
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	210 mm
Baffle Cutout Diameter	184 mm
Mounting Holes	4 holes 5,5x7,5 on ø 196 mm
Total Depth	98 mm

### 8 H 2 CP 8″ 400 W

#### Code Z005158

2" voice coil Kapton former Spider with Progressive Waves (PS) Damping Cone Treatment (DT) Balanced Ferrite Magnet Circuit with Copper Demodulating Ring (CDR) Ventilated Magnet to reduce Power Compression (VM) 88.8 dB sensitivity Frequency Range 35-3000 Hz

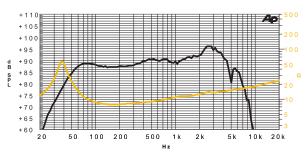








General Specifications			
Nominal Diameter			210 mm / 8 in
Nominal Impedance			8 Ω
Rated Power AES (1)			200 W
Continuous Program Pow	er (2)		400 W
Sensitivity @ 1W/1m (3)			88.8 dB
Voice Coil Diameter			50 mm / 2 in
Voice Coil Winding Depth			18 mm
Magnetic Gap Depth			5 mm
Flux Density			0.89 T
Magnet Weight			930 g
Net Weight			2.7 kg
Thiele & Small Paramet	ters (4)		
Re	6.1 Ω	Fs	38.0 Hz
Qms	5.25	Qes	0.53
Qts	0.48	Mms	32.7 g
Cms	536 µm/N	Bxl	9.45 Tm
Vas	34.8 I	Sd	213.8 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 6.5 mm	X var (6)	+/- 9.0 mm
n <sub>o</sub>	0.35%	Le (1KHz)	0.59 mH



Frequency Response on 25 Lt @ 45 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	Surface Damping Treatment
Surround Material	Rubber
Dust Dome Material	Rubber
Mounting Information	
Overall Diameter	210 mm
Baffle Cutout Diameter	184 mm
Mounting Holes	4 holes 5.5x7.5 on ø 196 mm
Total Depth	93.0 mm

### **8 L 2 SL** 8" | 400 W

Code **Z005055** 

Professional

2" voice coil Kapton former Neodymium Magnet Circuit Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 94.5 dB sensitivity Frequency Range 65-3000 Hz

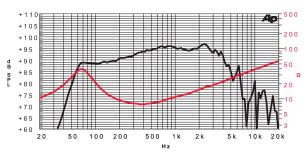








General Specifications			
Nominal Diameter			209 mm / 8 in
Nominal Impedance			8 Ω
Rated Power AES (1)			200 W
Continuous Program Pow	/er (2)		400 W
Sensitivity @ 1W/1m (3)			94.5 dB
Voice Coil Diameter			50 mm / 2 in
Voice Coil Winding Depth			14 mm
Magnetic Gap Depth			8 mm
Flux Density			1.20 T
Magnet Weight			160 g
Net Weight			1.6 kg
Thiele & Small Parame	ters (4)		
Re	6.1 Ω	Fs	64.0 Hz
Qms	2.69	Qes	0.36
Qts	0.32	Mms	22.1 g
Cms	280 µm/N	Bxl	12.30 Tm
Vas	18.2	Sd	231.8 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 3.5 mm	X var (6)	+/- 5.0 mm
n	1.28%	Le (1KHz)	0.85 mH



Frequency Response on 25 Lt @ 65 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Pressed Sheet Steel
Voice Coil Winding Material	Copper
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	No
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	210 mm
Baffle Cutout Diameter	181 mm
Mounting Holes	4 holes ø 4.5 on ø 198.5 mm
Total Depth	94.5 mm

### 8 Fe 2 CP 8" 400 W

#### Code **Z005112**

2" voice coil Kapton former Cloth surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) Balanced Ferrite Magnet Circuit with Aluminium Demodulating Ring (BMF) Ventilated Magnet to reduce Power Compression (VM) 94.6 dB sensitivity Frequency Range 65-3000 Hz

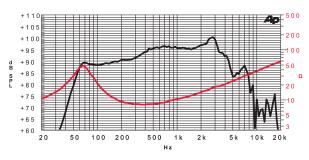


Professional





General Specifications			
Nominal Diameter			210 mm / 8 in
Nominal Impedance			8 Ω
Rated Power AES (1)			200 W
Continuous Program Power	r <sup>(2)</sup>		400 W
Sensitivity @ 1W/1m (3)			94.6 dB
Voice Coil Diameter			50 mm / 2 in
Voice Coil Winding Depth			14 mm
Magnetic Gap Depth			8 mm
Flux Density			1.20 T
Magnet Weight			930 g
Net Weight			2.8 kg
Thiele & Small Paramete	rs <sup>(4)</sup>		
Re	6.1 Ω	Fs	67.0 Hz
Qms	2.27	Qes	0.37
Qts	0.32	Mms	21.7 g
Cms	260 µm/N	Bxl	12.27 Tm
Vas	16.91	Sd	213.8 cm <sup>2</sup>
X max (5)	+/- 4.5 mm	X var (6)	+/- 7.0 mm
n <sub>o</sub>	1.32%	Le (1KHz)	0.78 mH



Frequency Response on 25 Lt @ 65 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics		
Magnet	Ferrite	
Basket Material	Aluminium Die-Cast	
Voice Coil Winding Material	Copper	
Voice Coil Former Material	Kapton	
Cone Material	Paper	
Cone Treatment	Surface Waterproof Treatment	
Surround Material	Treated Cloth	
Dust Dome Material	Solid Paper	
Mounting Information		
Overall Diameter	210 mm	
Baffle Cutout Diameter	184 mm	
Mounting Holes	4 holes 5.5x7.5 on ø 196 mm	
Total Depth	93 mm	

## 8 M 1,5 CS 8" | 200 W

1,5" voice coil Epotex former Ferrite Magnet Circuit Closed steel basket 98.7 dB sensitivity Frequency Range 500-6000 Hz



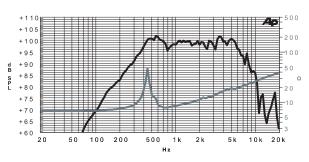




Midrange



General Specification	ons		
Nominal Diameter			208 mm / 8 in
Nominal Impedance			8 Ω
Rated Power AES (1)			100 W
Continuous Program	Power <sup>(2)</sup>		200 W
Sensitivity @ 1W/1m	(3)		98.7 dB
Voice Coil Diameter			38 mm / 1.5 in
Voice Coil Winding De	epth		8 mm
Magnetic Gap Depth			6 mm
Flux Density			1.15 T
Magnet Weight			640 g
Net Weight			2.7 kg
Thiele & Small Para	meters <sup>(4)</sup>		
Re	6.0 Ω	Fs	460.0 Hz
Qms	12.36	Qes	2.13
Qts	1.82	Mms	11.6 g
Cms	10 µm/N	Bxl	9.83 Tm
Vas	0.7	Sd	213.8 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 1.0 mm	X var (6)	+/- 1.0 mm
n	2.91%	Le (1KHz)	0.37 mH



Frequency Response on IEC Baffle (DIN 45575) @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Pressed Sheet Steel
Voice Coil Winding Material	Copper
Voice Coil Former Material	Epotex
Cone Material	Paper
Cone Treatment	No
Surround Material	Paper - Integrated
Dust Dome Material	Paper Ogive
Mounting Information	
Overall Diameter	208 mm
Baffle Cutout Diameter	184 mm
Mounting Holes	4 holes 5x8 on ø 197 mm
Total Depth	82 mm

(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, loudspeaker in free air, power calculated on rated Zmin. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Calculated by Thiele & Small parameters, for SPL average in box refer to frequency response. (4) Thiele & Small parameters measured with laser system after preconditioning test. (5) Measured with respect to a THD of 10%. (6) Value corresponding to a decay of the Force Factor, or Compliance, or both, equal to the 50% of the small signal value.

MADE IN ITALY

### 8 D 1,5 CS 8" 260 W

Code **Z004950** 

1,5" voice coil Kapton formerDual ConeFerrite Magnet Circuit with Copper Demodulating Ring (CDR)95.3 dB sensitivityFrequency Range 65-15000 Hz



Dual Cone

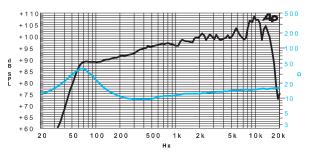








General Specifications	3		
Nominal Diameter			208 mm / 8 in
Nominal Impedance			8 Ω
Rated Power AES (1)			130 W
Continuous Program Por	wer <sup>(2)</sup>		260 W
Sensitivity @ 1W/1m (3)			95.3 dB
Voice Coil Diameter			38 mm / 1.5 in
Voice Coil Winding Dept	h		10 mm
Magnetic Gap Depth			8 mm
Flux Density			1.10 T
Magnet Weight			1100 g
Net Weight			3.1 kg
Thiele & Small Parame	eters (4)		
Re	6.6 Ω	Fs	62.0 Hz
Qms	2.21	Qes	0.35
Qts	0.30	Mms	16.8 g
Cms	392 µm/N	Bxl	11.18 Tm
Vas	25.5 I	Sd	213.8 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 2.5 mm	X var (6)	+/- 4.0 mm
n <sub>o</sub>	1.69%	Le (1KHz)	0.35 mH



Frequency Response on 25 Lt @ 65 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	-
Magnet	Ferrite
Basket Material	Pressed Sheet Steel
Voice Coil Winding Material	Copper
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	No
Surround Material	Treated Cloth
Dust Dome Material	Treated Cloth
Mounting Information	
Overall Diameter	208 mm
Baffle Cutout Diameter	184 mm
Mounting Holes	4 holes 5x8 on ø 197 mm
Total Depth	88.6 mm

### **6,5 H 1,5 CP** 6,5" | 240 W

#### Code **Z004100**

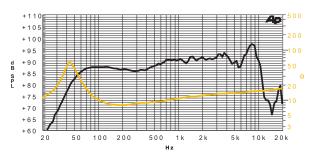
1,5" voice coil Kapton former
Spider with Progressive Waves (PS)
Rubber surround with Double Asymmetric Rolls Technology (DAR)
Damping Cone Treatment (DT)
Ferrite Magnet Circuit with Copper Demodulating Ring (CDR)
Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc)
89.4 dB sensitivity
Frequency Range 40-4500 Hz







General Specifications			
Nominal Diameter			174 mm / 6.5 in
Nominal Impedance			8 Ω
Rated Power AES (1)			120 W
Continuous Program Power	(2)		240 W
Sensitivity @ 1W/1m (3)			89.4 dB
Voice Coil Diameter			38 mm / 1.5 in
Voice Coil Winding Depth			15 mm
Magnetic Gap Depth			6 mm
Flux Density			0.90 T
Magnet Weight			515 g
Net Weight			1.6 kg
Thiele & Small Parameter	rs <sup>(4)</sup>		
Re	6.1 Ω	Fs	45.4 Hz
Qms	5.21	Qes	0.46
Qts	0.42	Mms	13.0 g
Cms	945 µm/N	Bxl	7.02 Tm
Vas	20.21	Sd	122.7 cm <sup>2</sup>
X max (5)	+/- 6.0 mm	X var (6)	+/- 8.5 mm
n <sub>o</sub>	0.40%	Le (1KHz)	0.48 mH



Frequency Response on 18 Lt @ 50 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics		
Magnet	Ferrite	
Basket Material	Aluminium Die-Cast	
Voice Coil Winding Material	Copper	
Voice Coil Former Material	Kapton	
Cone Material	Paper	
Cone Treatment	Surface Damping Treatment	
Surround Material	Rubber	
Dust Dome Material	Paper ogive	
Mounting Information		
Overall Diameter	175 mm	
Baffle Cutout Diameter	143 mm	
Mounting Holes	8 holes ø 5.5 on ø 164.2 mm	
Total Depth	77.5 mm	

(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, loudspeaker in free air, power calculated on rated Zmin. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Calculated by Thiele & Small parameters, for SPL average in box refer to frequency response. (4) Thiele & Small parameters measured with laser system after preconditioning test. (5) Measured with respect to a THD of 10%. (6) Value corresponding to a decay of the Force Factor, or Compliance, or both, equal to the 50% of the small signal value.

MADE IN ITALY

### **6 N 2,5 PL** 6" | 600 W

### Code **Z004080**

2,5" Sandwich voice coil Fiberglass former and Aluminium Winding (SNDW) Spider with Progressive Waves (PS) Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT) Neodymium Magnet Circuit Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 92.5 dB sensitivity Frequency Range 80-5000 Hz



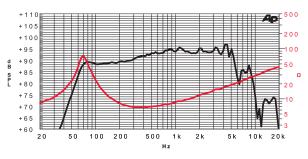
Professional





MADE IN ITALY

General Specifications			
Nominal Diameter			166 mm / 6 in
Nominal Impedance			8 Ω
Rated Power AES (1)			300 W
Continuous Program Power	- (2)		600 W
Sensitivity @ 1W/1m (3)			92.5 dB
Voice Coil Diameter			65 mm / 2.5 in
Voice Coil Winding Depth			16 mm
Magnetic Gap Depth			8 mm
Flux Density			1.14 T
Magnet Weight			220 g
Net Weight			1.5 kg
Thiele & Small Paramete	rs <sup>(4)</sup>		
Re	6.2 Ω	Fs	80.0 Hz
Qms	3.05	Qes	0.29
Qts	0.27	Mms	17.1 g
Cms	231 µm/N	Bxl	13.50 Tm
Vas	4.91	Sd	122.7 cm <sup>2</sup>
X max (5)	+/- 4.5 mm	X var (6)	+/- 6.5 mm
n <sub>o</sub>	0.84%	Le (1KHz)	0.62 mH



Frequency Response on 18 Lt @ 70 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Aluminium
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Humidity Resistant Pulp
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	166 mm
Baffle Cutout Diameter	143 mm
Mounting Holes	4 holes 5x6 on ø 155 mm
Total Depth	82.8 mm

### Professional



#### Code **Z004083**

2" voice coil Fiberglass former and Aluminium Winding Spider with Progressive Waves (PS) Cloth surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) Neodymium Magnet Circuit Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 92.3 dB sensitivity Frequency Range 70-5000 Hz



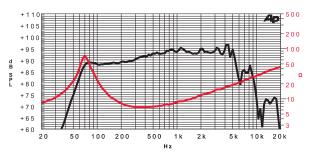




MADE IN ITALY



General Specifications			
Nominal Diameter			166 mm / 6 in
Nominal Impedance			8 Ω
Rated Power AES (1)			200 W
Continuous Program Powe	r <sup>(2)</sup>		400 W
Sensitivity @ 1W/1m (3)			92.3 dB
Voice Coil Diameter			50 mm / 2 in
Voice Coil Winding Depth			15 mm
Magnetic Gap Depth			8 mm
Flux Density			1.20 T
Magnet Weight			160 g
Net Weight			1.5 kg
Thiele & Small Paramete	rs <sup>(4)</sup>		
Re	5.7 Ω	Fs	68.0 Hz
Qms	4.02	Qes	0.36
Qts	0.33	Mms	13.5 g
Cms	406 µm/N	Bxl	9.50 Tm
Vas	8.7	Sd	122.7 cm <sup>2</sup>
X max (5)	+/- 3.5 mm	X var (6)	+/- 5.0 mm
n	0.72%	Le (1KHz)	0.61 mH



Frequency Response on 18 Lt @ 70 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Aluminium
Voice Coil Former Material	Fiberglass
Cone Material	Paper
Cone Treatment	Surface Waterproof Treatment
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	166 mm
Baffle Cutout Diameter	143 mm
Mounting Holes	4 holes 5x6 on ø 155 mm
Total Depth	82.8 mm

### **6 NR 2 PL** 6″ 400 W

#### Code **Z004068**



Professional

2" voice coil Fiberglass former and Aluminium Winding Spider with Progressive Waves (PS) Rubber surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) Neodymium Magnet Circuit Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 91.4 dB sensitivity Frequency Range 60-5000 Hz

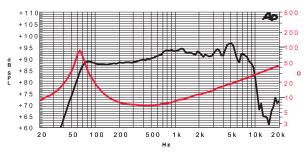




MADE IN ITALY



General Specifications			
Nominal Diameter			166 mm / 6 in
Nominal Impedance			8 Ω
Rated Power AES (1)			200 W
Continuous Program Powe	er <sup>(2)</sup>		400 W
Sensitivity @ 1W/1m (3)			91.4 dB
Voice Coil Diameter			50 mm / 2 in
Voice Coil Winding Depth			16 mm
Magnetic Gap Depth			8 mm
Flux Density			1.20 T
Magnet Weight			160 g
Net Weight			1.5 kg
Thiele & Small Paramet	ers <sup>(4)</sup>		
Re	5.6 Ω	Fs	60.5 Hz
Qms	6.05	Qes	0.34
Qts	0.33	Mms	15.7 g
Cms	441 µm/N	Bxl	9.86 Tm
Vas	9.4	Sd	122.7 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 4.0 mm	X var (6)	+/- 6.5 mm
n <sub>o</sub>	0.58%	Le (1KHz)	0.51 mH



Frequency Response on 18 Lt @ 70 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics		
Magnet	Neodymium	
Basket Material	Aluminium Die-Cast	
Voice Coil Winding Material	Aluminium	
Voice Coil Former Material	Fiberglass	
Cone Material	Paper	
Cone Treatment	Surface Waterproof Treatment	
Surround Material	Rubber	
Dust Dome Material	Solid Paper	
Mounting Information		
Overall Diameter	166 mm	
Baffle Cutout Diameter	143 mm	
Mounting Holes	4 holes 5x6 on ø 155 mm	
Total Depth	82.8 mm	

### 6 M 2 CP 6" | 300 W

Code **Z004079** 

2" voice coil Kapton former and Aluminium Winding Spider with Progressive Waves (PS) Ferrite Magnet Circuit Ventilated Voice Coil to reduce Power Compression (VVc) 96.8 dB sensitivity Frequency Range 130-6000 Hz



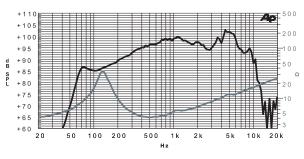
Midrange







General Specifications			
Nominal Diameter			166 mm / 6 in
Nominal Impedance			4 Ω
Rated Power AES (1)			150 W
Continuous Program Pow	er <sup>(2)</sup>		300 W
Sensitivity @ 1W/1m <sup>(3)</sup>			96.8 dB
Voice Coil Diameter			50 mm / 2 in
Voice Coil Winding Depth			9 mm
Magnetic Gap Depth			8 mm
Flux Density			1.14 T
Magnet Weight			810 g
Net Weight			2.7 kg
Thiele & Small Paramet	ers <sup>(4)</sup>		
Re	3.1 Ω	Fs	135.0 Hz
Qms	4.05	Qes	0.38
Qts	0.35	Mms	10.8 g
Cms	129 µm/N	Bxl	8.62 Tm
Vas	3.5	Sd	138.9 cm <sup>2</sup>
X max (5)	+/- 2.0 mm	X var (6)	+/- 4.0 mm
n <sub>o</sub>	2.21%	Le (1KHz)	0.38 mH



Frequency Response on 18 Lt @ 70 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Aluminium
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	No
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Diameter	166 mm
Baffle Cutout Diameter	143 mm
Mounting Holes	4 holes 6x5 on ø 155 mm
Total Depth	77.8 mm

### **6 L 1,5 SL** 6" 260 W

#### Code **Z004059**

1,5" voice coil Aluminium former

Rubber surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) Neodymium Magnet Circuit Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 91.0 dB sensitivity Frequency Range 60-4000 Hz





Professional

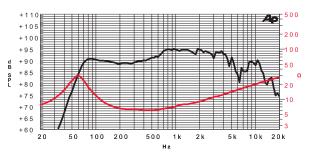








General Specifications			
Nominal Diameter			164 mm / 6 in
Nominal Impedance			8 Ω
Rated Power AES (1)			130 W
Continuous Program Powe	r <sup>(2)</sup>		260 W
Sensitivity @ 1W/1m <sup>(3)</sup>			91.0 dB
Voice Coil Diameter			38 mm / 1.5 in
Voice Coil Winding Depth			11 mm
Magnetic Gap Depth			6 mm
Flux Density			1.14 T
Magnet Weight			98 g
Net Weight			0.9 kg
Thiele & Small Paramete	rs <sup>(4)</sup>		
Re	5.0 Ω	Fs	59.0 Hz
Qms	2.31	Qes	0.47
Qts	0.39	Mms	14.1 g
Cms	516 µm/N	Bxl	7.50 Tm
Vas	11.0	Sd	122.7 cm <sup>2</sup>
X max (5)	+/- 2.5 mm	X var (6)	+/- 3.9 mm
n	0.47%	Le (1KHz)	0.48 mH



Frequency Response on 18 Lt @ 70 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Pressed Sheet Steel
Voice Coil Winding Material	Copper
Voice Coil Former Material	Aluminium
Cone Material	Paper
Cone Treatment	Surface Waterproof Treatment
Surround Material	Rubber
Dust Dome Material	Paper Ogive
Mounting Information	
Overall Diameter	165.8 mm
Baffle Cutout Diameter	142 mm
Mounting Holes	4 holes 5x7 on ø 156 mm
Total Depth	79.2 mm

# 6 E 1,5 CS

#### Code **Z004035**



Professional

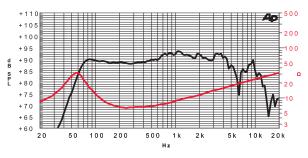
1,5" voice coil Aluminium former
Rubber surround with Double Asymmetric Rolls Technology (DAR)
Waterproof Cone Treatment (WpT)
Ferrite Magnet Circuit
Ventilated Voice Coil to reduce Power Compression (VVc)
91.5 dB sensitivity
Frequency Range 60-4000 Hz



MADE IN ITALY



General Specifications			
Nominal Diameter			164 mm / 6 in
Nominal Impedance			8 Ω
Rated Power AES (1)			100 W
Continuous Program Pow	er (2)		200 W
Sensitivity @ 1W/1m (3)			91.5 dB
Voice Coil Diameter			38 mm / 1.5 in
Voice Coil Winding Depth			11 mm
Magnetic Gap Depth			8 mm
Flux Density			1.00 T
Magnet Weight			426 g
Net Weight			1.5 kg
Thiele & Small Paramet	ers <sup>(4)</sup>		
Re	5.0 Ω	Fs	60.0 Hz
Qms	2.4	Qes	0.45
Qts	0.38	Mms	13.3 g
Cms	529 µm/N	Bxl	7.5 Tm
Vas	11.3	Sd	122.7 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 2.5 mm	X var (6)	+/- 4.5 mm
n <sub>o</sub>	0.53%	Le (1KHz)	0.61 mH



Frequency Response on 10 Lt @ 75 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Pressed Sheet Steel
Voice Coil Winding Material	Copper
Voice Coil Former Material	Aluminium
Cone Material	Paper
Cone Treatment	Surface Waterproof Treatment
Surround Material	Rubber
Dust Dome Material	Paper Ogive
Mounting Information	
Overall Diameter	165.8 mm
Baffle Cutout Diameter	142 mm
Mounting Holes	4 holes 5x7 on ø 156 mm
Total Depth	75.7 mm

### 6 D 1,5 SL 6" 260 W

Code **Z004065** 

1,5" voice coil Aluminium former Dual Cone Neodymium Magnet Circuit with Copper Demodulating Ring (CDR)

93.9 dB sensitivity Frequency Range 110-15000 Hz

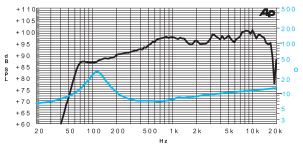








General Specifications			
Nominal Diameter			165 mm / 6 in
Nominal Impedance			8 Ω
Rated Power AES (1)			130 W
Continuous Program Power	(2)		260 W
Sensitivity @ 1W/1m (3)			93.9 dB
Voice Coil Diameter			38 mm / 1.5 in
Voice Coil Winding Depth			9 mm
Magnetic Gap Depth			6 mm
Flux Density			1.20 T
Magnet Weight			126 g
Net Weight			0.9 kg
Thiele & Small Parameter	'S <sup>(4)</sup>		
Re	5.0 Ω	Fs	110.0 Hz
Qms	2.65	Qes	0.55
Qts	0.46	Mms	11.2 g
Cms	187 µm/N	Bxl	8.35 Tm
Vas	4.0 I	Sd	122.7 cm <sup>2</sup>
X max (5)	+/- 1.5 mm	X var (6)	+/- 4.0 mm
n <sub>o</sub>	0.92%	Le (1KHz)	0.22 mH



Frequency Response on 18 Lt @ 70 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Pressed Sheet Steel
Voice Coil Winding Material	Copper
Voice Coil Former Material	Aluminium
Cone Material	Paper
Cone Treatment	No
Surround Material	Treated Cloth
Dust Dome Material	Treated Cloth
Mounting Information	
Overall Diameter	165.5 mm
Baffle Cutout Diameter	143 mm
Mounting Holes	4 holes 5x7 on ø 155 mm
Total Depth	75.6 mm

### 6 D 1,5 CS 6" | 200 W

Code **Z004002** 

1,5" voice coil Aluminium formerDual ConeFerrite Magnet Circuit with Copper Demodulating Ring (CDR)91.9 dB sensitivityFrequency Range 100-18000 Hz



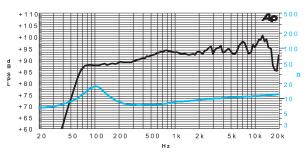
Dual Cone



MADE IN ITALY



General Specifications			
Nominal Diameter			165 mm / 6 in
Nominal Impedance			8 Ω
Rated Power AES (1)			100 W
Continuous Program Power	(2)		200 W
Sensitivity @ 1W/1m (3)			91.9 dB
Voice Coil Diameter			38 mm / 1.5 in
Voice Coil Winding Depth			9 mm
Magnetic Gap Depth			6 mm
Flux Density			0.95 T
Magnet Weight			426 g
Net Weight			1.4 kg
Thiele & Small Parameter	S <sup>(4)</sup>		
Re	5.0 Ω	Fs	104.0 Hz
Qms	1.81	Qes	0.80
Qts	0.55	Mms	11.6 g
Cms	202 µm/N	Bxl	6.91 Tm
Vas	4.3 I	Sd	122.7 cm <sup>2</sup>
X max (5)	+/- 1.5 mm	X var (6)	+/- 4.0 mm
n <sub>o</sub>	0.59%	Le (1KHz)	0.36 mH



Frequency Response on 18 Lt @ 70 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Pressed Sheet Steel
Voice Coil Winding Material	Copper
Voice Coil Former Material	Aluminium
Cone Material	Paper
Cone Treatment	No
Surround Material	Treated Cloth
Dust Dome Material	Treated Cloth
Mounting Information	
Overall Diameter	165.5 mm
Baffle Cutout Diameter	143 mm
Mounting Holes	4 holes 7x5 on ø 155 mm
Total Depth	72.1 mm

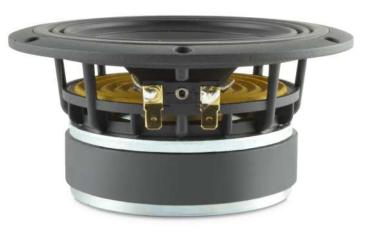
#### Studio Monitor

### **5,5 H 1,5 CP** 5,5" 240 W

#### Code **Z002800**



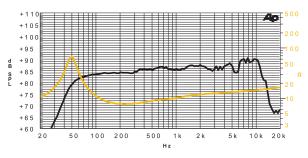
1,5" voice coil Kapton former
Rubber surround with Double Asymmetric Rolls Technology (DAR)
Damping Cone Treatment (DT)
Ferrite Magnet Circuit with Copper Demodulating Ring (CDR)
Ventilated Magnet to reduce Power Compression (VM)
86.7 dB sensitivity
Frequency Range 48-5500 Hz



MADE IN ITALY



General Specificatio	ns		
Nominal Diameter			150 mm / 5.5 in
Nominal Impedance			8 Ω
Rated Power AES (1)			120 W
Continuous Program P	ower <sup>(2)</sup>		240 W
Sensitivity @ 1W/1m	3)		86.7 dB
Voice Coil Diameter			38 mm / 1.5 in
Voice Coil Winding De	pth		15 mm
Magnetic Gap Depth			6 mm
Flux Density			0.98 T
Magnet Weight			515 g
Net Weight			1.5 kg
Thiele & Small Parar	neters <sup>(4)</sup>		
Re	6.1 Ω	Fs	48.5 Hz
Qms	4.15	Qes	0.41
Qts	0.37	Mms	12.0 g
Cms	897 µm/N	Bxl	7.4 Tm
Vas	7.8	Sd	78.5 cm <sup>2</sup>
X max (5)	+/- 4.5 mm	X var (6)	+/- 6.5 mm
n <sub>o</sub>	0.21%	Le (1KHz)	0.53 mH



Frequency Response on 10 Lt @ 55 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	Surface Damping Treatment
Surround Material	Rubber
Dust Dome Material	Rubber
Mounting Information	
Overall Diameter	148 mm
Baffle Cutout Diameter	113 mm
Mounting Holes	6 holes ø 5 on ø 139 mm
Total Depth	71.5 mm

### **5 N 1,5 PL** 5" 260 W

#### Code **Z002647**

1,5" voice coil Kapton former and Aluminium Winding Waterproof Cone Treatment (WpT) Neodymium Magnet Circuit Ventilated Voice Coil to reduce Power Compression (VVc) 91.0 dB sensitivity Frequency Range 100-5000 Hz





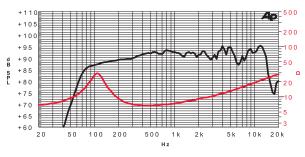
Professional







General Specifications			
Nominal Diameter			132 mm / 5 in
Nominal Impedance			8 Ω
Rated Power AES (1)			130 W
Continuous Program Powe	r <sup>(2)</sup>		260 W
Sensitivity @ 1W/1m (3)			91.0 dB
Voice Coil Diameter			38 mm / 1.5 in
Voice Coil Winding Depth			12 mm
Magnetic Gap Depth			6 mm
Flux Density			1.14 T
Magnet Weight			98 g
Net Weight			0.8 kg
Thiele & Small Paramete	ers <sup>(4)</sup>		
Re	5.7 Ω	Fs	110.6 Hz
Qms	2.55	Qes	0.72
Qts	0.56	Mms	7.1 g
Cms	293 µm/N	Bxl	6.21 Tm
Vas	3.01	Sd	84.9 cm <sup>2</sup>
X max (5)	+/- 3.0 mm	X var (6)	+/- 4.0 mm
n	0.54%	Le (1KHz)	0.31 mH



Frequency Response on 10 Lt @ 75 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Aluminium
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	Surface Waterproof Treatment
Surround Material	Treated Cloth
Dust Dome Material	Treated Cloth
Mounting Information	
Overall Diameter	132 mm
Baffle Cutout Diameter	113 mm
Mounting Holes	4 holes ø 5 on ø 139 mm
Total Depth	72 mm

### Professional



#### Code **Z002650**

1,5" voice coil Kapton former and Aluminium Winding Rubber surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) Neodymium Magnet Circuit Ventilated Voice Coil to reduce Power Compression (VVc) 90.0 dB sensitivity Frequency Range 60-5000 Hz





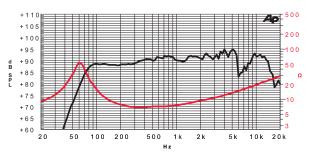








General Specifications			
Nominal Diameter			132 mm / 5 in
Nominal Impedance			8 Ω
Rated Power AES (1)			130 W
Continuous Program Power	- (2)		260 W
Sensitivity @ 1W/1m (3)			90.0 dB
Voice Coil Diameter			38 mm / 1.5 in
Voice Coil Winding Depth			12 mm
Magnetic Gap Depth			6 mm
Flux Density			1.14 T
Magnet Weight			98 g
Net Weight			0.8 kg
Thiele & Small Paramete	rs <sup>(4)</sup>		
Re	5.6 Ω	Fs	61.0 Hz
Qms	4.10	Qes	0.39
Qts	0.35	Mms	8.0 g
Cms	851 µm/N	Bxl	6.65 Tm
Vas	7.4	Sd	78.5 cm <sup>2</sup>
X max (5)	+/- 3.5 mm	X var (6)	+/- 6.0 mm
n <sub>o</sub>	0.42%	Le (1KHz)	0.34 mH



Frequency Response on 10 Lt @ 75 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Aluminium
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	Surface Waterproof Treatment
Surround Material	Rubber
Dust Dome Material	Treated Cloth
Mounting Information	
Overall Diameter	132 mm
Baffle Cutout Diameter	113 mm
Mounting Holes	4 holes ø 5 on ø 139 mm
Total Depth	71 mm

### Professional

### **5 F 1,5 CP** 5" | 200 W

#### Code **Z002652**

1,5" voice coil Kapton former and Aluminium Winding
Rubber surround with Double Asymmetric Rolls Technology (DAR)
Waterproof Cone Treatment (WpT)
Ferrite Magnet Circuit
Ventilated Voice Coil to reduce Power Compression (VVc)
90.8 dB sensitivity
Frequency Range 60-5000 Hz



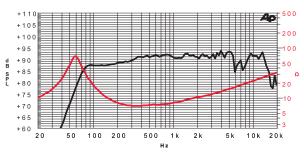




MADE IN ITALY



General Specifications			
Nominal Diameter			132 mm / 5 in
Nominal Impedance			8 Ω
Rated Power AES (1)			100 W
Continuous Program Powe	r <sup>(2)</sup>		200 W
Sensitivity @ 1W/1m (3)			90.8 dB
Voice Coil Diameter			38 mm / 1.5 in
Voice Coil Winding Depth			12 mm
Magnetic Gap Depth			6 mm
Flux Density			0.98 T
Magnet Weight			426 g
Net Weight			1.4 kg
Thiele & Small Paramete	rs <sup>(4)</sup>		
Re	5.6 Ω	Fs	59.0 Hz
Qms	4.32	Qes	0.33
Qts	0.31	Mms	7.6 g
Cms	957 µm/N	Bxl	6.95 Tm
Vas	8.4	Sd	78.5 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 3.5 mm	X var (6)	+/- 6.0 mm
n	0.51%	Le (1KHz)	0.48 mH



Frequency Response on 10 Lt @ 75 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Aluminium
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	Surface Waterproof Treatment
Surround Material	Rubber
Dust Dome Material	Treated Cloth
Mounting Information	
Overall Diameter	132 mm
Baffle Cutout Diameter	113 mm
Mounting Holes	4 holes ø 5 on ø 139 mm
Total Depth	65.5 mm

## **5 M 1,5 PL** 5" | 260 W

#### Code **Z002649**

1,5" voice coil Kapton former and Aluminium Winding
Autoclave Waterproof Cone Treatment (AWpT)
Neodymium Magnet Circuit with Copper Demodulating Ring (CDR)
Ventilated Voice Coil to reduce Power Compression (VVc)
93.7 dB sensitivity
Frequency Range 150-10000 Hz





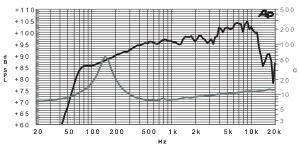




MADE IN ITALY



General Specifications			
Nominal Diameter			132 mm / 5 in
Nominal Impedance			8 Ω
Rated Power AES (1)			130 W
Continuous Program Pov	ver <sup>(2)</sup>		260 W
Sensitivity @ 1W/1m <sup>(3)</sup>			93.7 dB
Voice Coil Diameter			38 mm / 1.5 in
Voice Coil Winding Depth	ı		7 mm
Magnetic Gap Depth			6 mm
Flux Density			1.20 T
Magnet Weight			121 g
Net Weight			0.8 kg
Thiele & Small Parame	ters (4)		
Re	6.0 Ω	Fs	145.0 Hz
Qms	5.12	Qes	0.56
Qts	0.51	Mms	6.1 g
Cms	197 µm/N	Bxl	7.69 Tm
Vas	2.01	Sd	84.9 cm <sup>2</sup>
X max (5)	+/- 1.5 mm	X var (6)	+/- 2.5 mm
n <sub>o</sub>	1.05%	Le (1KHz)	0.10 mH



Frequency Response on 10 Lt @ 75 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Aluminium
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	Humidity Resistant Pulp
Surround Material	Treated Cloth
Dust Dome Material	Treated Cloth
Mounting Information	
Overall Diameter	132 mm
Baffle Cutout Diameter	113 mm
Mounting Holes	4 holes ø 5 on ø 139 mm
Total Depth	72 mm

### **5 D 1 CS** 5" | 120 W

Code **Z002400** 

1" voice coil Epotex former Dual Cone Waterproof Cone Treatment (WpT) Ferrite Magnet Circuit with Copper Demodulating Ring (CDR) 90.0 dB sensitivity Frequency Range 80-18000 Hz



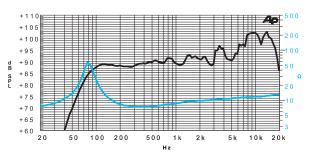
Dual Cone



MADE IN ITALY



General Specifications			
Nominal Diameter		-	129 mm / 5 in
Nominal Impedance			8 Ω
Rated Power AES <sup>(1)</sup>			60 W
Continuous Program Power	(2)		120 W
Sensitivity @ 1W/1m (3)			90.0 dB
Voice Coil Diameter			25 mm / 1 in
Voice Coil Winding Depth			9 mm
Magnetic Gap Depth			6 mm
Flux Density			0.95 T
Magnet Weight			280 g
Net Weight			0.9 kg
Thiele & Small Parameter	'S <sup>(4)</sup>		
Re	6.0 Ω	Fs	79.0 Hz
Qms	4.95	Qes	0.58
Qts	0.52	Mms	6.4 g
Cms	634 µm/N	Bxl	5.73 Tm
Vas	5.5	Sd	78.5 cm <sup>2</sup>
X max (5)	+/- 3.0 mm	X var (6)	+/- 4.5 mm
n	0.45%	Le (1KHz)	0.33 mH



Frequency Response on 10 Lt @ 75 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Pressed Sheet Steel
Voice Coil Winding Material	Copper
Voice Coil Former Material	Epotex
Cone Material	Paper
Cone Treatment	Surface Waterproof Treatment
Surround Material	Rubber
Dust Dome Material	Non Treated Cloth
Mounting Information	
Overall Diameter	130 mm
Baffle Cutout Diameter	113 mm
Mounting Holes	4 holes 4.7x10 on ø 139 mm
Total Depth	58.1 mm

### **4 L 1 SL** 4" | 120 W

1" voice coil Epotex former Waterproof Cone Treatment (WpT) Balanced Neodymium Magnet Circuit (BNd) 86.2 dB sensitivity Frequency Range 110-10000 Hz







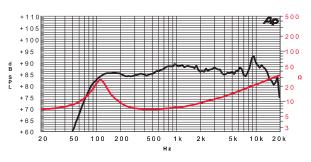
Professional







General Specifications			
Nominal Diameter			102 mm / 4 in
Nominal Impedance			8 Ω
Rated Power AES (1)			60 W
Continuous Program Pow	/er <sup>(2)</sup>		120 W
Sensitivity @ 1W/1m (3)			86.2 dB
Voice Coil Diameter			25 mm / 1 in
Voice Coil Winding Depth			9 mm
Magnetic Gap Depth			5 mm
Flux Density			0.99 T
Magnet Weight			42 g
Net Weight			0.2 kg
Thiele & Small Parame	ters <sup>(4)</sup>		
Re	6.0 Ω	Fs	108.3 Hz
Qms	3.15	Qes	0.78
Qts	0.63	Mms	5.0 g
Cms	432 µm/N	Bxl	5.10 Tm
Vas	1.2	Sd	44.2 cm <sup>2</sup>
X max (5)	+/- 2.4 mm	X var (6)	+/- 4.0 mm
n <sub>o</sub>	0.19%	Le (1KHz)	0.37 mH



Frequency Response on 5.5 Lt @ 110 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Pressed Sheet Steel
Voice Coil Winding Material	Copper
Voice Coil Former Material	Epotex
Cone Material	Paper
Cone Treatment	Surface Waterproof Treatment
Surround Material	Rubber
Dust Dome Material	Polypropylene Ogive
Mounting Information	
Overall Diameter	100 mm
Baffle Cutout Diameter	90 mm
Mounting Holes	4 holes ø 5 on ø 116 mm
Total Depth	46.5 mm

### **4 L1 1 SL** 4" | 140 W



1" voice coil Aluminium former and Aluminium Winding Waterproof Cone Treatment (WpT) Neodymium Magnet Circuit 90.5 dB sensitivity Frequency Range 120-10000 Hz





Professional

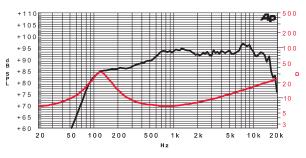




MADE IN ITALY



General Specifications			
Nominal Diameter			104 mm / 4 in
Nominal Impedance			8 Ω
Rated Power AES (1)			70 W
Continuous Program Powe	r <sup>(2)</sup>		140 W
Sensitivity @ 1W/1m (3)			90.5 dB
Voice Coil Diameter			25 mm / 1 in
Voice Coil Winding Depth			10 mm
Magnetic Gap Depth			5 mm
Flux Density			1.39 T
Magnet Weight			92 g
Net Weight			0.4 kg
Thiele & Small Paramete	ers <sup>(4)</sup>		
Re	5.5 Ω	Fs	120.0 Hz
Qms	2.15	Qes	0.44
Qts	0.36	Mms	4.0 g
Cms	440 µm/N	Bxl	6.16 Tm
Vas	1.21	Sd	44.2 cm <sup>2</sup>
X max (5)	+/- 2.5 mm	X var (6)	+/- 4.1 mm
n <sub>o</sub>	0.46%	Le (1KHz)	0.15 mH



Frequency Response on 5.5 Lt @ 110 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Pressed Sheet Steel
Voice Coil Winding Material	Aluminium
Voice Coil Former Material	Aluminium
Cone Material	Paper
Cone Treatment	Surface Waterproof Treatment
Surround Material	Treated Cloth
Dust Dome Material	Polypropylene Ogive
Mounting Information	
Overall Dimensions	104x104 mm
Baffle Cutout Diameter	90 mm
Mounting Holes	4 holes ø 5 on ø 106 mm
Total Depth	53.8 mm

### **4 E 1 CS** 4" | 140 W

Code **Z001800** 





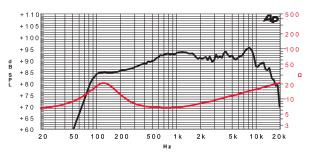








General Specifications		
Nominal Diameter		104 mm / 4 in
Nominal Impedance		8 Ω
Rated Power AES (1)		70 W
Continuous Program Power (2)		140 W
Sensitivity @ 1W/1m (3)		90.0 dB
Voice Coil Diameter		25 mm / 1 in
Voice Coil Winding Depth		9 mm
Magnetic Gap Depth		6 mm
Flux Density		1.10 T
Magnet Weight		380 g
Net Weight		1.0 kg
Thiele & Small Parameters (4)		
Re 5.60 Ω	Fs	118.0 Hz
Qms 1.85	Qes	0.49
Qts 0.39	Mms	3.9 g
Cms 466 μm/N	Bxl	5.76 Tm
Vas 1.3 I	Sd	44.2 cm <sup>2</sup>
X max <sup>(5)</sup> +/- 2.2 mm	X var (6)	+/- 3.5 mm
n <sub>0</sub> 0.42%	Le (1KHz)	0.14 mH



Frequency Response on 5.5 Lt @ 110 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Pressed Sheet Steel
Voice Coil Winding Material	Aluminium
Voice Coil Former Material	Aluminium
Cone Material	Paper
Cone Treatment	Surface Waterproof Treatment
Surround Material	Treated Cloth
Dust Dome Material	Polypropylene Ogive
Mounting Information	
Overall Dimensions	104x104 mm
Baffle Cutout Diameter	90 mm
Mounting Holes	4 holes ø 5 on ø 106 mm
Total Depth	58.3 mm

## **4 D 0,8 CS** 4" | 70 W

0,8" voice coil Epotex former Dual Cone Ferrite Magnet Circuit 87.5 dB sensitivity Frequency Range 140-20000 Hz



Code **Z001300** 



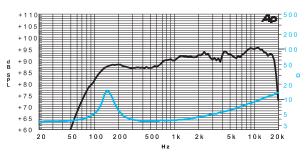








General Specifications			
Nominal Diameter			102 mm / 4 in
Nominal Impedance			4 Ω
Rated Power AES (1)			35 W
Continuous Program Power (2)			70 W
Sensitivity @ 1W/1m <sup>(3)</sup>			87.5 dB
Voice Coil Diameter			20 mm / 0.8 in
Voice Coil Winding Depth			5 mm
Magnetic Gap Depth			4 mm
Flux Density			1.10 T
Magnet Weight			154 g
Net Weight			0.4 kg
Thiele & Small Parameters	(4)		
Re	3.0 Ω	Fs	140.0 Hz
Qms	4.20	Qes	1.18
Qts	0.92	Mms	3.1 g
Cms	416 µm/N	Bxl	2.65 Tm
Vas	1.21	Sd	44.2 cm <sup>2</sup>
X max (5)	+/- 1.3 mm	X var (6)	+/- 3.0 mm
n <sub>o</sub>	0.26%	Le (1KHz)	0.14 mH



Frequency Response on 5.5 Lt @ 110 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Pressed Sheet Steel
Voice Coil Winding Material	Copper
Voice Coil Former Material	Epotex
Cone Material	Paper
Cone Treatment	No
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	-
Overall Diameter	100 mm
Baffle Cutout Diameter	90 mm
Mounting Holes	4 holes ø 5 on ø 116 mm
Total Depth	50 mm

# **3,5 L 1 SL** 3,5" 90 W

1" voice coil Kapton former Waterproof Cone Treatment (WpT) Balanced Neodymium Magnet Circuit (BNd) Ventilated Voice Coil to reduce Power Compression (VVc) 88.6 dB sensitivity Frequency Range 110-12000 Hz





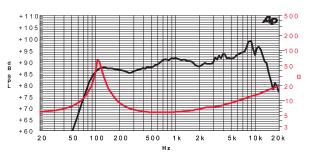
Professional







General Specifications			
Nominal Diameter			88 mm / 3.5 in
Nominal Impedance			8 Ω
Rated Power AES (1)			45 W
Continuous Program Power (2	2)		90 W
Sensitivity @ 1W/1m (3)			88.6 dB
Voice Coil Diameter			25 mm / 1 in
Voice Coil Winding Depth			6 mm
Magnetic Gap Depth			4 mm
Flux Density			1.20 T
Magnet Weight			42 g
Net Weight			0.2 kg
Thiele & Small Parameters	<sup>(4)</sup>		
Re	5.0 Ω	Fs	108.0 Hz
Qms	7.83	Qes	0.61
Qts	0.57	Mms	3.3 g
Cms	658 µm/N	Bxl	4.27 Tm
Vas	1.4	Sd	38.5 cm <sup>2</sup>
X max (5)	+/- 1.5 mm	X var (6)	+/- 3.0 mm
n <sub>o</sub>	0.27%	Le (1KHz)	0.12 mH



Frequency Response on 5.5 Lt @ 110 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Nylon Fiberglass Doped
Voice Coil Winding Material	Copper
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	Surface Waterproof Treatment
Surround Material	Rubber
Dust Dome Material	Treated Cloth
Mounting Information	
Overall Diameter	88 mm
Baffle Cutout Diameter	81 mm
Mounting Holes	4 holes ø 4 on ø 98 mm
Total Depth	42.2 mm

## **3,5 F 1 CS** 3,5" 90 W

1" voice coil Kapton former Waterproof Cone Treatment (WpT) Ferrite Magnet Circuit 88.5 dB sensitivity Frequency Range 110-12000 Hz







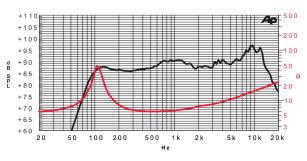
Professional







General Specifications			
Nominal Diameter 8			88 mm / 3.5 in
Nominal Impedance			8 Ω
Rated Power AES (1)			45 W
Continuous Program Power	(2)		90 W
Sensitivity @ 1W/1m (3)			88.5 dB
Voice Coil Diameter			25 mm / 1 in
Voice Coil Winding Depth			6 mm
Magnetic Gap Depth			4 mm
Flux Density			1.04 T
Magnet Weight			160 g
Net Weight			0.4 kg
Thiele & Small Parameter	'S <sup>(4)</sup>		
Re	5.0 Ω	Fs	107.0 Hz
Qms	6.52	Qes	0.63
Qts	0.57	Mms	3.3 g
Cms	670 µm/N	Bxl	4.20 Tm
Vas	1.4	Sd	38.5 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 1.5 mm	X var (6)	+/- 3.1 mm
n	0.26%	Le (1KHz)	0.21 mH



Frequency Response on 5.5 Lt @ 110 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Nylon Fiberglass Doped
Voice Coil Winding Material	Copper
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	Surface Waterproof Treatment
Surround Material	Rubber
Dust Dome Material	Treated Cloth
Mounting Information	
Overall Diameter	88 mm
Baffle Cutout Diameter	81 mm
Mounting Holes	4 holes ø 4 on ø 98 mm
Total Depth	44.7 mm

## **3,5 H 1 CS** 3,5" | 90 W

Code **Z000957** 

1" voice coil Kapton former Damping Cone Treatment (DT) Ferrite Magnet Circuit Ventilated Voice Coil to reduce Power Compression (VVc) 86.1 dB sensitivity Frequency Range 85-10000 Hz

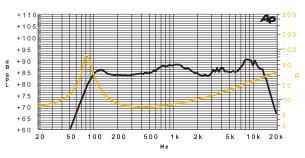








General Specifications			
Nominal Diameter			88 mm / 3.5 in
Nominal Impedance			8 Ω
Rated Power AES (1)			45 W
Continuous Program Power (2)			90 W
Sensitivity @ 1W/1m <sup>(3)</sup>			86.1 dB
Voice Coil Diameter			25 mm / 1 in
Voice Coil Winding Depth			9 mm
Magnetic Gap Depth			4 mm
Flux Density			1.04 T
Magnet Weight			160 g
Net Weight			0.4 kg
Thiele & Small Parameters <sup>(4)</sup>			
Re	6.1 Ω	Fs	85.0 Hz
Qms	6.95	Qes	0.57
Qts	0.53	Mms	4.1 g
Cms 85	5 µm/N	Bxl	4.83 Tm
Vas	1.8	Sd	38.5 cm <sup>2</sup>
X max (5) +/- 2	2.5 mm	X var (6)	+/- 4.2 mm
n <sub>o</sub>	0.19%	Le (1KHz)	0.4 mH



Frequency Response on 5.5 Lt @ 110 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Nylon Fiberglass Doped
Voice Coil Winding Material	Copper
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	Surface Damping Treatment
Surround Material	Rubber
Dust Dome Material	Treated Cloth
Mounting Information	
Overall Diameter	88 mm
Baffle Cutout Diameter	81 mm
Mounting Holes	4 holes ø 4 on ø 98 mm
Total Depth	44.7 mm

## **3 L 0,8 SL** 3″ | 40 W

0,8" voice coil Epotex former Neodymium Magnet Circuit 86.4 dB sensitivity Frequency Range 150-20000 Hz Code **Z000900** 





Professional





MADE IN ITALY

**General Specifications** 

	+110							500
	+105							-
	+100							-200
	+95							100
d B	+90				$\sim$ /	^ ↓	$\sim$	<b>1</b> 50
	+ 8 5		$ \frown$		$\sim$	~~~		Δ <sup>30</sup> Ω
S P L	+80		~					20
	+75							10
	+70							
	+65	///						5
	+60							- 3
	20	50 100	200	500	1 k 2 k	5 k	10 k	20 k
				Hz				
	Frequency	Response on 5.	5 Lt @ 11(	) Hz Vented	Box @ 1W, 1m	. Free Air	Impedar	nce.

8 Ω 20 W 40 W 86.4 dB 20 mm / 0.8 in
40 W 86.4 dB
86.4 dB
20 mm / 0.8 in
4 mm
3 mm
1.30 T
16 g
0.1 kg
145.0 Hz
1.28
2.0 g
2.80 Tm
30.2 cm <sup>2</sup>
+/- 2.5 mm
z) 0.11 mH
-

Constructive Characteristics				
Magnet	Neodymium			
Basket Material	Pressed Sheet Steel			
Voice Coil Winding Material	Copper			
Voice Coil Former Material	Epotex			
Cone Material	Paper			
Cone Treatment	No			
Surround Material	Treated Cloth			
Dust Dome Material	Solid Paper			
Mounting Information				
Overall Diameter	79 mm			
Baffle Cutout Diameter	73 mm			
Mounting Holes	4 holes ø 4.5 on ø 84 mm			
Total Depth	44.9 mm			

# **2,5 H 0,8 SL** 2,5" 40 W

Code **Z000855** 

0,8" voice coil Kapton former Damping Cone Treatment (DT) Neodymium Magnet Circuit Ventilated Magnet to reduce Power Compression (VM) 85.6 dB sensitivity Frequency Range 180-20000 Hz





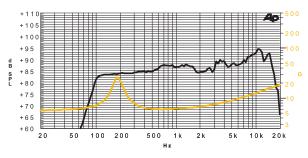








General Specification	IS		
Nominal Diameter			66x66 mm / 2.5 in
Nominal Impedance			8 Ω
Rated Power AES (1)			20 W
Continuous Program Po	ower (2)		40 W
Sensitivity @ 1W/1m (3)			85.6 dB
Voice Coil Diameter			20 mm / 0.8 in
Voice Coil Winding Dep	th		5 mm
Magnetic Gap Depth			3 mm
Flux Density			1.30 T
Magnet Weight			16 g
Net Weight			0.1 kg
Thiele & Small Param	ieters (4)		
Re	5.0 Ω	Fs	185.0 Hz
Qms	5.23	Qes	1.11
Qts	0.92	Mms	1.5 g
Cms	493 µm/N	Bxl	2.80 Tm
Vas	0.21	Sd	18.9 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 1.3 mm	X var (6)	+/- 2.6 mm
n <sub>o</sub>	0.14%	Le (1KHz)	0.12 mH



Frequency Response on 5.5 Lt @ 110 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Pressed Sheet Steel
Voice Coil Winding Material	Copper
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	Surface Damping Treatment
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Dimensions	66x66 mm
Baffle Cutout Diameter	61 mm
Mounting Holes	4 holes 4.5x6 on ø 75.5 mm
Total Depth	36.6 mm

## **2 H 0,8 SL** 2″ | 40 W

Code **Z000795** 







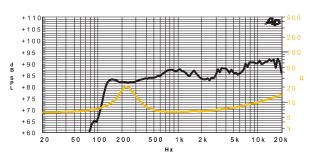


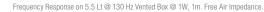






General Specificatio	ns		
Nominal Diameter			53x53 mm / 2 in
Nominal Impedance			8 Ω
Rated Power AES (1)			20 W
Continuous Program F	Power (2)		40 W
Sensitivity @ 1W/1m	3)		84.1 dB
Voice Coil Diameter			20 mm / 0.8 in
Voice Coil Winding De	pth		4 mm
Magnetic Gap Depth			3 mm
Flux Density			1.30 T
Magnet Weight			16 g
Net Weight			0.1 kg
Thiele & Small Parar	neters (4)		
Re	5.5 Ω	Fs	216.0 Hz
Qms	2.75	Qes	1.00
Qts	0.81	Mms	0.9 g
Cms	603 µm/N	Bxl	2.60 Tm
Vas	0.1	Sd	11.3 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 1.4 mm	X var (6)	+/- 2.7 mm
n <sub>o</sub>	0.11%	Le (1KHz)	0.20 mH





Constructive Characteristics	
Magnet	Neodymium
Basket Material	Nylon Fiberglass Doped
Voice Coil Winding Material	Aluminium
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	Surface Damping Treatment
Surround Material	Treated Cloth
Dust Dome Material	Solid Paper
Mounting Information	
Overall Dimensions	52.5x52.5 mm
Baffle Cutout Diameter	48 mm
Mounting Holes	4 holes ø 3.2 on ø 61.5 mm
Total Depth	32.5 mm





## 15 Cx 3 PL 8+8

#### Coaxial

### 15" 800 W

#### Code Z008191P-8+8

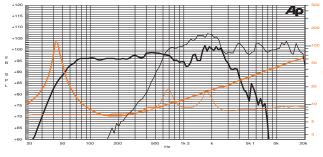
LF 3" Sandwich voice coil Fiberglass former and Aluminium Winding (SNDW) HF Polymide dome 1,7" voice coil Flat Aluminium wire Cloth surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) Neodymium Magnet Circuit 90° Horn coverage 99.1 dB sensitivity

Frequency Range 45-20000 Hz

### SNDW DAR WpT

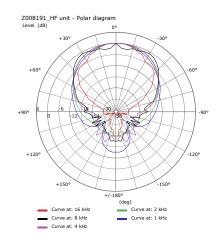
General Specifications			LF unit	HF unit
Nominal Diameter		388 mm / 15 in		
Nominal Impedance			8 Ω	8 Ω
Rated Power AES (1)			400 W	60 W
Continuous Program Power	2)		800 W	120 W
Sensitivity @ 1W/1m (3)			99.1 dB	102.3 dB
Voice Coil Diameter		75 n	1m / 3 in	44 mm / 1.7 in
Voice Coil Winding Depth			17 mm	2.6 mm
Magnetic Gap Depth			10 mm	3 mm
HF Recomm. Crossover Freq	uency			1.6 kHz
Magnet Weight		532 g		
Net Weight		5.3 kg		
<b>Thiele &amp; Small Parameters</b>	(4)			
Re (LF)	5.1 Ω	Fs (LF)		44.5 Hz
Re (HF)	6.0 Ω	Fs (HF)		700 Hz
Qms	12.88	Qes		0.42
Qts	0.40	Mms		87.2 g
Cms	147 µm/N	Bxl		17.26 Tm
Vas	152.4	Sd		855.3 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 5.5 mm	X var (6)		+/- 8.0 mm
n <sub>o</sub>	3.10%	Le (1KHz)		1.12 mH



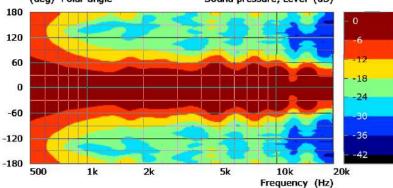


Frequency Response on 90 Lt @ 48 Hz Vented Box @ 1W, 1m Free Air Impedance

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
LF Voice Coil Winding/Former Material	Copper / Fiberglass
HF Voice Coil Winding/Former Material	Aluminium Flat Wire / Kapton
LF Cone Material	Paper
HF Dome Material	Polymide
Surround Material	Treated Cloth
HF Spare Part Code	Z009396P-FI
Mounting Information	
Overall Diameter	388 mm
Baffle Cutout Diameter	355 mm
Mounting Holes	8 holes 6x9 on ø 371 mm
Total Depth	178.9 mm



Z008191\_HF unit - Polar diagram (deg) Polar angle Sound pressure, Level (dB)



(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, loudspeaker in free air, power calculated on rated Zmin. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Calculated by Thiele & Small parameters, for SPL average in box refer to frequency response. (4) Thiele & Small parameters measured with laser system after preconditioning test. (5) Measured with respect to a THD of 10%. (6) Value corresponding to a decay of the Force Factor, or Compliance, or both, equal to the 50% of the small signal value.



## **12 Cx 3 CP** 12" | 800 W

#### Code **Z007996**

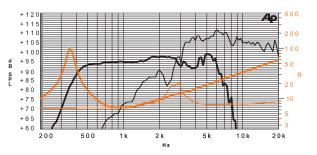
LF 3" Sandwich voice coil Fiberglass former (SNDW) HF Titanium dome 1,7" voice coil Flat Aluminium wire (TD) Cloth surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) Ferrite Magnet Circuit 60° x 40° coverage horn 98.0 dB sensitivity Frequency Range 50-20000 Hz

### SNDW TD DAR WpT

General Specifications		LF unit	HF unit
Nominal Diameter		321 mm / 12 in	
Nominal Impedance		8 Ω	8 Ω
Rated Power AES (1)		400 W	60 W
Continuous Program Power	2)	800 W	120 W
Sensitivity @ 1W/1m (3)		98.0 dB	106.2 dB
Voice Coil Diameter		75 mm / 3 in	44 mm / 1.7 in
/oice Coil Winding Depth		15 mm	2.6 mm
Vagnetic Gap Depth		10 mm	3 mm
HF Recomm. Crossover Frec	uency		1.6 kHz
Vagnet Weight		2700 g	
Net Weight		8.3 kg	
Thiele & Small Parameters	S <sup>(4)</sup>		
Re (LF)	5.0 Ω	Fs (LF)	49.0 Hz
Re (HF)	6.0 Ω	Fs (HF)	1100 Hz
Qms	7.21	Qes	0.35
Qts	0.33	Mms	58.0 g
Cms	182 µm/N	Bxl	16.03 Tm
Vas	72.81	Sd	530.9 cm <sup>2</sup>
X max (5)	+/- 4.5 mm	X var (6)	+/- 8.0 mm
n <sub>o</sub>	2.38%	Le (1KHz)	1.02 mH

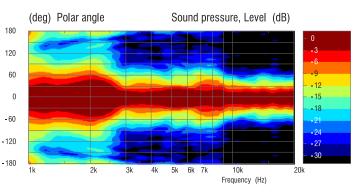


Coaxial

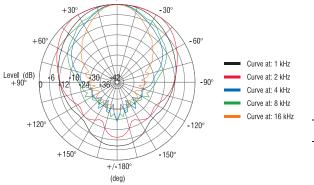


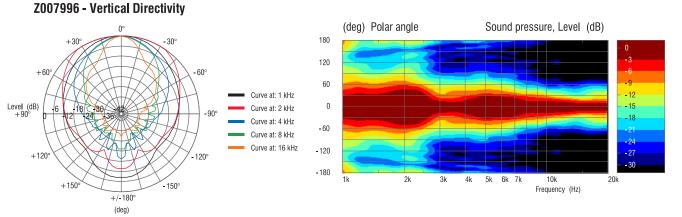
Frequency Response on 45 Lt @ 55 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
LF Voice Coil Winding/Former Material	Copper / Fiberglass
HF Voice Coil Winding/Former Material	Aluminium Flat Wire / Kapton
LF Cone Material	Paper
HF Dome Material	Titanium
Surround Material	Treated Cloth
HF Spare Part Code	Z009395
Mounting Information	
Overall Diameter	320 mm
Baffle Cutout Diameter	284 mm
Mounting Holes	8 holes 6x9 on ø 301 mm
Total Depth	167.3 mm









(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, loudspeaker in free air, power calculated on rated Zmin. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Calculated by Thiele & Small parameters, for SPL average in box refer to frequency response. (4) Thiele & Small parameters measured with laser system after preconditioning test. (5) Measured with respect to a THD of 10%. (6) Value corresponding to a decay of the Force Factor, or Compliance, or both, equal to the 50% of the small signal value.





## **12 C 2,5 CP** 12" | 600 W

Code **Z007857** 

2,5" voice coil Kapton former

Cloth surround with Double Asymmetric Rolls Technology (DAR)

1" throath diameter for Compression Driver

60° coverage Aluminium horn for Compression Driver

Ferrite Magnet Circuit

Possibility to use different Compression Drivers

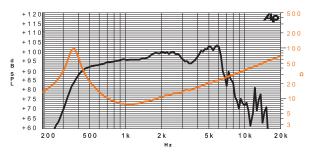
98.6 dB sensitivity

Frequency Range 55-3500 Hz



0 10 17 11			
General Specifications			
Nominal Diameter			321 mm / 12 in
Nominal Impedance			8 Ω
Rated Power AES (1)			300 W
Continuous Program Power	· (2)		600 W
Sensitivity @ 1W/1m (3)			98.6 dB
Voice Coil Diameter			65 mm / 2.5 in
Voice Coil Winding Depth			16 mm
Magnetic Gap Depth			8 mm
Flux Density			1.30 T
Magnet Weight			1450 g
Net Weight			5.0 kg
Thiele & Small Parameter	rs <sup>(4)</sup>		
Re	6.2 Ω	Fs	50.5 Hz
Qms	8.85	Qes	0.31
Qts	0.30	Mms	47.0 g
Cms	211 µm/N	Bxl	17.30 Tm
Vas	84.5 I	Sd	530.9 cm <sup>2</sup>
X max (5)	+/- 5.0 mm	X var (6)	+/- 8.5 mm
n <sub>o</sub>	3.40%	Le (1KHz)	1.12 mH

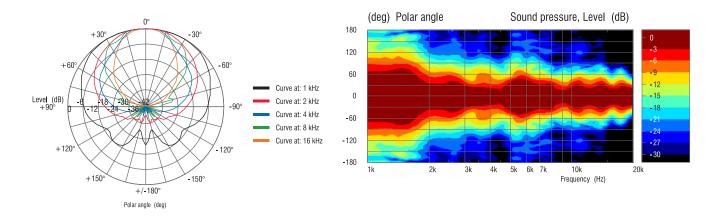




Frequency Response on 45 Lt @ 55 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	No
Surround Material	Treated Cloth
Dust Dome Material	None
Mounting Information	
Overall Diameter	320 mm
Baffle Cutout Diameter	284 mm
Mounting Holes	8 holes 6x9 on ø 301 mm
Total Depth	132.3 mm
Throath Diameter for Compression Driver	25.4 mm
Compression Driver Mounting Holes	4 holes M4 on ø 95 mm 4 holes M5 on ø129 mm with adapter Q07310A

#### Z007857 - Directivity



Coaxial woofer 12 C 2,5 CP can be used with SICA compression drivers CD 95.44 / N240 (pag 93), CD 60.38 / N92 (pag 95), CD 83.26 / 380 (pag 96), CD 78.26 / N92 (pag 96), CD 78.26 / 245 (pag 97).

Compression drivers CD 120.44 / 640 (pag 94) and CD 90.38/405 (pag 95) can be used with coaxial woofer 12 C 2,5 CP thanks to the adapter Q07310A.



## **12 C 2 CP** 12" | 400 W

#### Code **Z007852**

2" voice coil Kapton former

Cloth surround with Double Asymmetric Rolls Technology (DAR)

1" throath diameter for Compression Driver

Front-loaded perforated horn to improve the coupling with the woofer Ferrite Magnet Circuit

Possibility to use different Compression Drivers

98.0 dB sensitivity

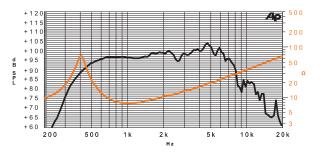
Frequency Range 60-3500 Hz



General Specifications		
Nominal Diameter		320 mm / 12 in
Nominal Impedance		8 Ω
Rated Power AES (1)		200 W
Continuous Program Power (2)		400 W
Sensitivity @ 1W/1m (3)		98.0 dB
Voice Coil Diameter		50 mm / 2 in
Voice Coil Winding Depth		14 mm
Magnetic Gap Depth		8 mm
Flux Density		1.08 T
Magnet Weight		1100 g
Net Weight		3.8 kg
Thiele & Small Parameters (4)		
Re 6.2 Ω	Fs	58.4 Hz
Qms 5.60	Qes	0.49
Qts 0.45	Mms	40.0 g
Cms 186 µm/N	BxI	13.70 Tm
Vas 74.3 I	Sd	530.9 cm <sup>2</sup>
X max <sup>(5)</sup> +/- 4.5 mm	X var (6)	+/- 7.0 mm
n <sub>0</sub> 2.91%	Le (1KHz)	0.83 mH



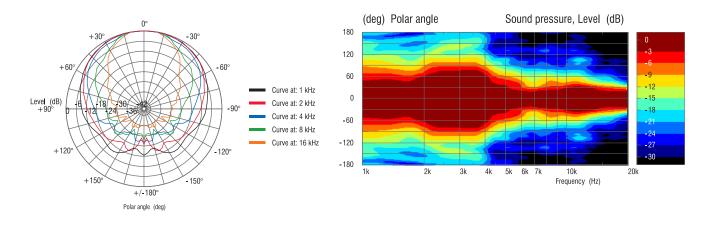
**Coaxial Woofer** 



Frequency Response on 45 Lt @ 55 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	No
Surround Material	Treated Cloth
Dust Dome Material	None
Mounting Information	
Overall Diameter	320 mm
Baffle Cutout Diameter	284 mm
Mounting Holes	8 holes 6x9 on ø 301 mm
Total Depth	130.4 mm
Throath Diameter for Compression Driver	25.4 mm
Compression Driver Mounting Holes	4 holes M4 on ø 95 mm

#### Z007852 - Directivity



Coaxial woofer 12 C 2 CP can be used with SICA compression drivers

CD 95.44 / N240 (pag 93), CD 60.38 / N92 (pag 95), CD 83.26 / 380 (pag 96),

CD 78.26 / N92 (pag 96), CD 78.26 / 245 (pag 97).

(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, loudspeaker in free air, power calculated on rated Zmin. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Calculated by Thiele & Small parameters, for SPL average in box refer to frequency response. (4) Thiele & Small parameters measured with laser system after preconditioning test. (5) Measured with respect to a THD of 10%. (6) Value corresponding to a decay of the Force Factor, or Compliance, or both, equal to the 50% of the small signal value.

## 10 Cx 3 PL 8+8

#### 10" 800 W

#### Code Z005839-8+8

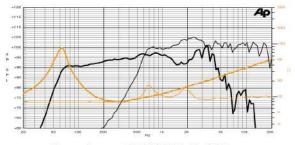
LF 3" Sandwich voice coil Fiberglass former and Aluminium Winding (SNDW) HF Polymide dome 1,7" voice coil Flat Aluminium wire Cloth surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) Neodymium Magnet Circuit 100° nominal coverage 97.2 dB sensitivity

Frequency Range 60-20000 Hz

### SNDW DAR WpT

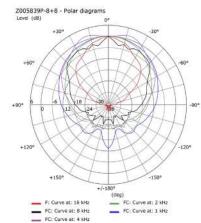
General Specifications	eneral Specifications LF unit HF			
Nominal Diameter		268 mm / 10 in		
Nominal Impedance		8 Ω	8 Ω	
Rated Power AES (1)		400 W	60 W	
Continuous Program Power (2)		800 W	120 W	
Sensitivity @ 1W/1m <sup>(3)</sup>		97.2 dB	102.1 dB	
Voice Coil Diameter		75 mm / 3 in	44 mm / 1.7 in	
Voice Coil Winding Depth		17 mm	2.6 mm	
Magnetic Gap Depth		10 mm	3 mm	
HF Recomm. Crossover Frequ	ency		1.6 kHz	
Magnet Weight			532 g	
Net Weight		4.3 kg		
Thiele & Small Parameters	4)			
Re (LF)	5.7 Ω	Fs (LF)	59.0 Hz	
Re (HF)	6.0 Ω	Fs (HF)	700 Hz	
Qms	4.13	Qes	0.31	
Qts	0.29	Mms	34.3 g	
Cms	212 µm/N	Bxl	15.32 Tm	
Vas	36.1 I	Sd	346.4 cm <sup>2</sup>	
X max <sup>(5)</sup>	+/- 6.0 mm	X var (6)	+/- 8.0 mm	
n <sub>o</sub>	2.32%	Le (1KHz)	0.84 mH	



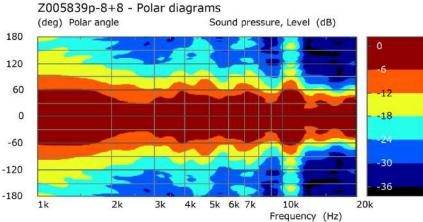


Frequency Response on 35 Lt @ 60 Hz Vented Box @ 1W, 1m Free Air Impedance

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
LF Voice Coil Winding/Former Material	Aluminium / Fiberglass
HF Voice Coil Winding/Former Material	Aluminium Flat Wire / Kapton
LF Cone Material	Paper
HF Dome Material	Polymide
Surround Material	Treated Cloth
HF Spare Part Code	Z009396P-FI
Mounting Information	
Overall Diameter	268 mm
Baffle Cutout Diameter	232 mm
Mounting Holes	8 holes 6x9 on ø 247 mm
Total Depth	139.1 mm







(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, loudspeaker in free air, power calculated on rated Zmin. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Calculated by Thiele & Small parameters, for SPL average in box refer to frequency response. (4) Thiele & Small parameters measured with laser system after preconditioning test. (5) Measured with respect to a THD of 10%. (6) Value corresponding to a decay of the Force Factor, or Compliance, or both, equal to the 50% of the small signal value.

Coaxial

## **10 C 2 CP** 10" | 400 W

#### Code **Z006781**

2" voice coil Kapton former

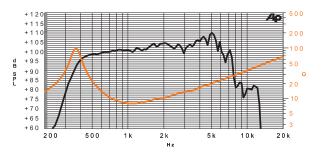
Cloth surround with Double Asymmetric Rolls Technology (DAR) 1" throath diameter for Compression Driver Front-loaded perforated horn to improve the coupling with the woofer Ferrite Magnet Circuit Possibility to use different Compression Drivers 96.9 dB sensitivity Frequency Range 55-3500 Hz



General Specifications		
Nominal Diameter		268 mm / 10 in
Nominal Impedance		8 Ω
Rated Power AES <sup>(1)</sup>		200 W
Continuous Program Power <sup>(2)</sup>		400 W
Sensitivity @ 1W/1m <sup>(3)</sup>		96.9 dB
Voice Coil Diameter		50 mm / 2 in
Voice Coil Winding Depth		14 mm
Magnetic Gap Depth		8 mm
Flux Density		1.08 T
Magnet Weight		1100 g
Net Weight		3.5 kg
Thiele & Small Parameters (4)		
Re 6.2 Ω	Fs	50.0 Hz
Qms 4.71	Qes	0.33
Qts 0.31	Mms	27.3 g
Cms 371 µm/N	BxI	12.70 Tm
Vas 63.2 I	Sd	346.4 cm <sup>2</sup>
X max <sup>(5)</sup> +/- 4.0 mm	X var (6)	+/- 7.0 mm
n <sub>0</sub> 2.31%	Le (1KHz)	0.81 mH



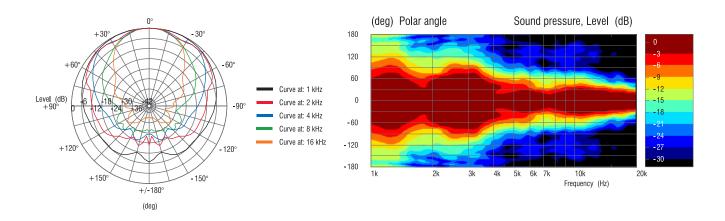
**Coaxial Woofer** 



Frequency Response on 35 Lt @ 60 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	No
Surround Material	Treated Cloth
Dust Dome Material	None
Mounting Information	
Overall Diameter	268 mm
Baffle Cutout Diameter	232 mm
Mounting Holes	8 holes 6x9 on ø 247 mm
Total Depth	111.5 mm
Throath Diameter for Compression Driver	25.4 mm
Compression Driver Mounting Holes	4 holes M4 on ø 95 mm

#### Z006781- Directivity



Coaxial woofer 10 C 2 CP can be used with SICA compression drivers CD 95.44 / N240 (pag 93), CD 60.38 / N92 (pag 95), CD 83.26 / 380 (pag 96), CD 78.26 / N92 (pag 96), CD 78.26 / 245 (pag 97).

(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, loudspeaker in free air, power calculated on rated Zmin. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Calculated by Thiele & Small parameters, for SPL average in box refer to frequency response. (4) Thiele & Small parameters measured with laser system after preconditioning test. (5) Measured with respect to a THD of 10%. (6) Value corresponding to a decay of the Force Factor, or Compliance, or both, equal to the 50% of the small signal value.

## 8 Cx 2,5 PL 8+8

#### 8″ 600 W

#### Code Z005209P-8+8

LF 2,5" Sandwich voice coil Fiberglass former and Aluminium Winding (SNDW) HF Polymide dome 1,7" voice coil Flat Aluminium wire Cloth surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) Neodymium Magnet Circuit 100° nominal coverage 96.7 dB sensitivity

Frequency Range 75-20000 Hz

### SNDW DAR WpT

General Specifications LF unit			HF unit	
Nominal Diameter		210 mm / 8 in		
Nominal Impedance		8 Ω	8 Ω	
Rated Power AES (1)		300 W	60 W	
Continuous Program Power	2)	600 W	120 W	
Sensitivity @ 1W/1m (3)		96.7 dB	101.3 dB	
Voice Coil Diameter		65 mm / 2,5 in	44 mm / 1.7 in	
Voice Coil Winding Depth		15 mm	2.6 mm	
Magnetic Gap Depth		8 mm	3 mm	
HF Recomm. Crossover Freq	uency		1.6 kHz	
Magnet Weight		364 g		
Net Weight		2.3 kg		
Thiele & Small Parameters	(4)			
Re (LF)	5.6 Ω	Fs (LF)	74.0 Hz	
Re (HF)	6.0 Ω	Fs (HF)	700 Hz	
Qms	2.63	Qes	0.32	
Qts	0.28	Mms	18.5 g	
Cms	251 µm/N	Bxl	12.34 Tm	
Vas	16.21	Sd	213.8 cm <sup>2</sup>	
X max <sup>(5)</sup>	+/- 5.0 mm	X var (6)	+/- 6.5 mm	
n	1.99%	Le (1KHz)	0.60 mH	

-120

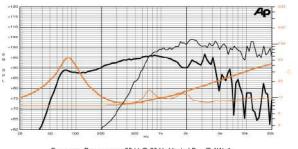
-180

1k

2k

3k





Frequency Response on 25 Lt @ 65 Hz Vented Box @ 1W, 1m Free Air Impedance

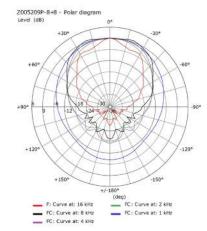
Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
LF Voice Coil Winding/Former Material	Aluminium / Fiberglass
HF Voice Coil Winding/Former Material	Aluminium Flat Wire / Kapton
LF Cone Material	Paper
HF Dome Material	Polymide
Surround Material	Treated Cloth
HF Spare Part Code	Z009396P-FI
Mounting Information	
Overall Diameter	210 mm
Baffle Cutout Diameter	184mm
Mounting Holes	4 holes 5.5x7.5 on ø 196 mm
Total Depth	111.6 mm

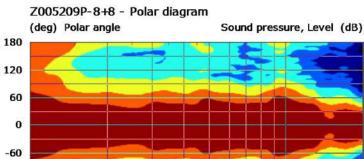
-18

30

-36

20k





4k

(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, loudspeaker in free air, power calculated on rated Zmin. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Calculated by Thiele & Small parameters, for SPL average in box refer to frequency response. (4) Thiele & Small parameters measured with laser system after preconditioning test. (5) Measured with respect to a THD of 10%. (6) Value corresponding to a decay of the Force Factor, or Compliance, or both, equal to the 50% of the small signal value.

5k 6k 7k

10k

Frequency (Hz)

Coaxial

## 8 C 2 CP 8" | 400 W

#### Code **Z005061**

2" voice coil Kapton former

Cloth surround with Double Asymmetric Rolls Technology (DAR) 1" throath diameter for Compression Driver Front-loaded perforated horn to improve the coupling with the woofer Ferrite Magnet Circuit Possibility to use different Compression Drivers 96.7 dB sensitivity Frequency Range 80-4500 Hz

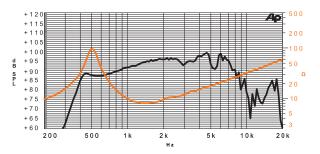


MADE IN ITALY

General Specifications	
Nominal Diameter	210 mm / 8 in
Nominal Impedance	8 Ω
Rated Power AES (1)	200 W
Continuous Program Power (2)	400 W
Sensitivity @ 1W/1m (3)	96.7 dB
Voice Coil Diameter	50 mm / 2 in
Voice Coil Winding Depth	14 mm
Magnetic Gap Depth	8 mm
Flux Density	1.08 T
Magnet Weight	1100 g
Net Weight	3.0 kg
Thiele & Small Parameters <sup>(4)</sup>	
Re 6.1 Ω	Fs 78.5 Hz
Qms 4.55	Qes 0.32
Qts 0.30	Mms 18.2 g
Cms 226 µm/N	Bxl 13.50 Tm
Vas 14.7 I	Sd 213.8 cm <sup>2</sup>
X max <sup>(5)</sup> +/- 3.5 mm	X var <sup>(6)</sup> +/- 7.0 mm
n <sub>0</sub> 2.14%	Le (1KHz) 0.80 mH



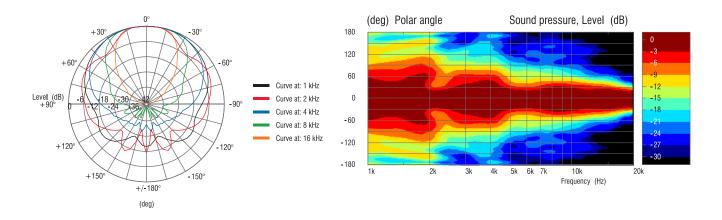
**Coaxial Woofer** 



Frequency Response on 25 Lt @ 65 Hz Vented Box @ 1W, 1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Basket Material	Aluminium Die-Cast
Voice Coil Winding Material	Copper
Voice Coil Former Material	Kapton
Cone Material	Paper
Cone Treatment	No
Surround Material	Treated Cloth
Dust Dome Material	None
Mounting Information	
Overall Diameter	210 mm
Baffle Cutout Diameter	184 mm
Mounting Holes	4 holes 5.5x7.5 on ø 196 mm
Total Depth	90.0 mm
Throath Diameter for Compression Driver	25.4 mm
Compression Driver Mounting Holes	4 holes M4 on ø 95 mm

#### Z005061 - Directivity



Coaxial woofer 8 C 2 CP can be used with SICA compression drivers

CD 95.44 / N240 (pag 93), CD 60.38 / N92 (pag 95), CD 83.26 / 380 (pag 96),

CD 78.26 / N92 (pag 96), CD 78.26 / 245 (pag 97).

## 6,5 C 1,5 CP 8+8

### 6,5" 240 W

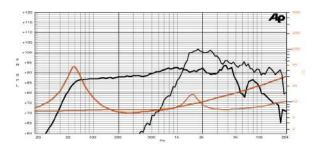
Code **Z004102** 

LF 1,5" voice coil Kapton former HF Treated Silk dome 1" voice coil Rubber surround with Double Asymmetric Rolls Technology (DAR) Damping Cone Treatment (DT) LF Ferrite Magnet Circuit HF Neodymium Magnet Circuit 91.0 dB sensitivity Frequency Range 55-18000 Hz

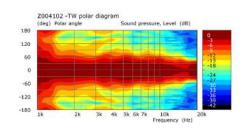


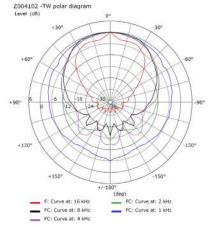
General Specifications			LF unit	HF unit
Nominal Diameter			174 mn	n / 6,5 in
Nominal Impedance			8Ω	8 Ω
Rated Power AES (1)			120 W	
Continuous Program Power (2)			240 W	
Sensitivity @ 1W/1m (3)			91.0 dB	93.9 dB
Voice Coil Diameter		38 mm	/ 1,5 in	25 mm / 1 in
Voice Coil Winding Depth			12 mm	1.7 mm
Magnetic Gap Depth			5 mm	2 mm
HF Recomm. Crossover Frequ	ency			3.0 kHz
Magnet Weight			515 g	14 g
Net Weight			1.7	' kg
Thiele & Small Parameters	4)			
Re (LF)	5.1 Ω	Fs (LF)		50.8 Hz
Re (HF)	6.0 Ω	Fs (HF)		1500 Hz
Qms	6.09	Qes		0.42
Qts	0.39	Mms		13.1 g
Cms	745 µm/N	Bxl		7.21 Tm
Vas	15.9 I	Sd		122.7 cm <sup>2</sup>
X max (5)	+/- 4.5 mm	X var (6)		+/- 8.0 mm
n <sub>o</sub>	0.48%	Le (1KHz)		0.44 mH

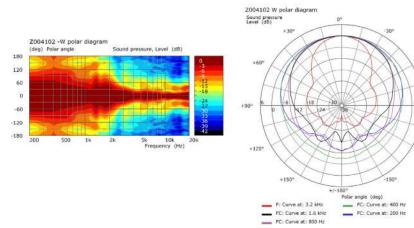




Constructive Characteristics	
Magnet	Ferrite (LF) / Neodymium (HF)
Basket Material	Aluminium Die-Cast
LF Voice Coil Winding/Former Material	Copper / Kapton
HF Voice Coil Winding/Former Material	Copper / Aluminium
LF Cone Material	Paper
HF Dome Material	Treated Silk
Surround Material	Rubber
HF Spare Part Code	Z008955
Mounting Information	
Overall Diameter	175 mm
Baffle Cutout Diameter	143 mm
Mounting Holes	8 holes ø 5.5 on ø 164.2 mm
Total Depth	79.5 mm







(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, loudspeaker in free air, power calculated on rated Zmin. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Calculated by Thiele & Small parameters, for SPL average in box refer to frequency response. (4) Thiele & Small parameters measured with laser system after preconditioning test. (5) Measured with respect to a THD of 10%. (6) Value corresponding to a decay of the Force Factor, or Compliance, or both, equal to the 50% of the small signal value.

MADE IN ITALY

Coaxial

## 6 Cx 2 PL 8+8

#### 6" 400 W

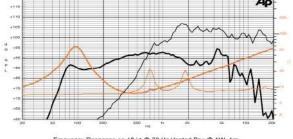
#### Code Z004091P-8+8

LF 2" voice coil Fiberglass former HF Polymide dome 1,7" voice coil Flat Aluminium wire Cloth surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) Neodymium Magnet Circuit 100° nominal coverage 94.2 dB sensitivity Frequency Range 80-20000 Hz

### DAR WpT

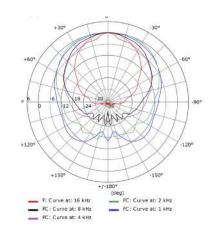
General Specifications LF unit			HF unit	
Nominal Diameter		166 mm / 6 in		
Nominal Impedance		8 Ω	8 Ω	
Rated Power AES (1)		200 W	60 W	
Continuous Program Power	2)	400 W	120 W	
Sensitivity @ 1W/1m (3)		94.2 dB	102.7 dB	
Voice Coil Diameter		50 mm / 2 in	44 mm / 1.7 in	
Voice Coil Winding Depth		11 mm	2.6 mm	
Magnetic Gap Depth		8 mm	3 mm	
HF Recomm. Crossover Freq	uency		1.6 kHz	
Magnet Weight		308 g		
Net Weight		1.8 kg		
Thiele & Small Parameters	(4)			
Re (LF)	6.0 Ω	Fs (LF)	85.0 Hz	
Re (HF)	6.0 Ω	Fs (HF)	700 Hz	
Qms	2.41	Qes	0.27	
Qts	0.24	Mms	13.8 g	
Cms	254 µm/N	Bxl	12.79 Tm	
Vas	5.4 I	Sd	122.7 cm <sup>2</sup>	
X max (5)	+/- 3.5 mm	X var (6)	+/- 6.0 mm	
n <sub>o</sub>	1.19%	Le (1KHz)	0.70 mH	





#### Frequency Response on 18 Lt @ 70 Hz Vented Box @ 1W, 1m Free Air Impedance

Constructive Characteristics	
Magnet	Neodymium
Basket Material	Aluminium Die-Cast
LF Voice Coil Winding/Former Material	Copper / Fiberglass
HF Voice Coil Winding/Former Material	Aluminium Flat Wire / Kapton
LF Cone Material	Paper
HF Dome Material	Polymide
Surround Material	Treated Cloth
HF Spare Part Code	Z009396P-FI
Mounting Information	
Overall Diameter	166 mm
Baffle Cutout Diameter	143 mm
Mounting Holes	4 holes 5x6 on ø 155 mm
Total Depth	104.1 mm



Z004091P-8+8 - Polar diagram Sound pressure, Level (dB) (deg) Polar angle 180 120 60 0 18 -60 30 -120 -36 -180 1k 2k 3k 4k 5k 6k 7k 10k 20k Frequency (Hz)

(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, loudspeaker in free air, power calculated on rated Zmin. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Calculated by Thiele & Small parameters, for SPL average in box refer to frequency response. (4) Thiele & Small parameters measured with laser system after preconditioning test. (5) Measured with respect to a THD of 10%. (6) Value corresponding to a decay of the Force Factor, or Compliance, or both, equal to the 50% of the small signal value.



Coaxial

## 5,5 C 1,5 CP 8+8

### 5,5" 240 W

Code **Z002810** 

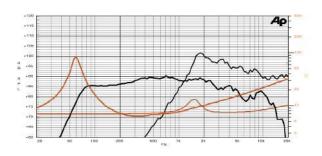


LF 1,5" voice coil Kapton former HF Treated Silk dome 1" voice coil Rubber surround with Double Asymmetric Rolls Technology (DAR) Damping Cone Treatment (DT) LF Ferrite Magnet Circuit HF Neodymium Magnet Circuit 89.8 dB sensitivity Frequency Range 60-20000 Hz

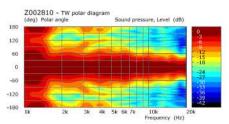


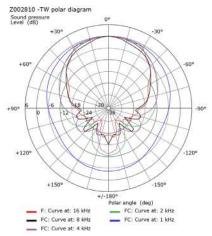
General Specifications		L	F unit	HF unit
Nominal Diameter		140 mm / 5,5 in		ı / 5,5 in
Nominal Impedance			8Ω	8 Ω
Rated Power AES (1)			120 W	
Continuous Program Power	2)		240 W	
Sensitivity @ 1W/1m (3)		89	9.8 dB	93.5 dB
Voice Coil Diameter		38 mm /	1,5 in	25 mm / 1 in
Voice Coil Winding Depth		1	2 mm	1.7 mm
Magnetic Gap Depth			5 mm	2 mm
HF Recomm. Crossover Freq	uency			3.0 kHz
Magnet Weight			515 g	14 g
Net Weight			1.7	kg
Thiele & Small Parameters	(4)			
Re (LF)	5.1 Ω	Fs (LF)		62.0 Hz
Re (HF)	6.0 Ω	Fs (HF)		1500 Hz
Qms	4.67	Qes		0.34
Qts	0.31	Mms		10.6 g
Cms	621 µm/N	Bxl		7.89 Tm
Vas	5.4 I	Sd		78.5 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 4.0 mm	X var (6)		+/- 6.0 mm
n <sub>o</sub>	0.37%	Le (1KHz)		0.50 mH



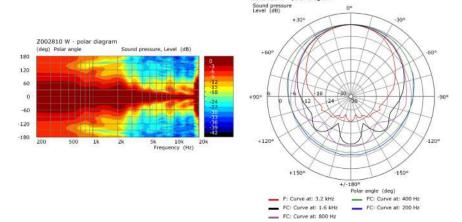


Constructive Characteristics	
Magnet	Ferrite (LF) / Neodymium (HF)
Basket Material	Aluminium Die-Cas
LF Voice Coil Winding/Former Material	Copper / Kaptor
HF Voice Coil Winding/Former Material	Copper / Aluminium
LF Cone Material	Paper
HF Dome Material	Treated Silk
Surround Material	Rubbe
HF Spare Part Code	Z008955
Mounting Information	
Overall Diameter	148 mm
Baffle Cutout Diameter	113 mm
Mounting Holes	6 holes ø 4.2 on ø 138 mm
Total Depth	73.5 mm





Z002810 W - polar diagram





## 4 C 1,5 CP 8+8

### 4" | 200 W

LF 1,5" voice coil Epotex former HF Treated Silk dome 1" voice coil Cloth Surround Damping Cone Treatment (DT) LF Ferrite Magnet Circuit HF Neodymium Magnet Circuit 91.2 dB sensitivity Frequency Range 100-18000 Hz

### DT

General Specifications			LF unit	HF unit
Nominal Diameter			106 m	m / 4 in
Nominal Impedance			8Ω	8 Ω
Rated Power AES (1)			100 W	
Continuous Program Power	!)		200 W	
Sensitivity @ 1W/1m (3)			91.2 dB	91.9 dB
Voice Coil Diameter		38 mm	ı / 1,5 in	25 mm / 1 in
Voice Coil Winding Depth			9 mm	1.7 mm
Magnetic Gap Depth			5 mm	2 mm
HF Recomm. Crossover Freq	uency			3.0 kHz
Magnet Weight			405 g	14 g
Net Weight			1.1	kg
<b>Thiele &amp; Small Parameters</b>	(4)			
Re (LF)	5.1 Ω	Fs (LF)		102.0 Hz
Re (HF)	6.0 Ω	Fs (HF)		1500 Hz
Qms	4.05	Qes		0.35
Qts	0.32	Mms		5.4 g
Cms	413 µm/N	Bxl		7.27 Tm
Vas	1.5 I	Sd		51.5 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 2.0 mm	X var (6)		+/- 2.5 mm
n <sub>o</sub>	0.51%	Le (1KHz)		0.35 mH

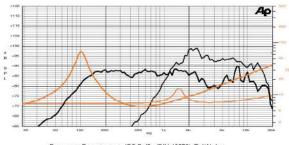




Z001920-TW Polar diagram

Level (dB)

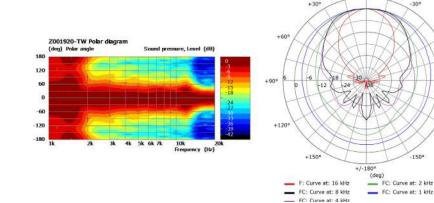


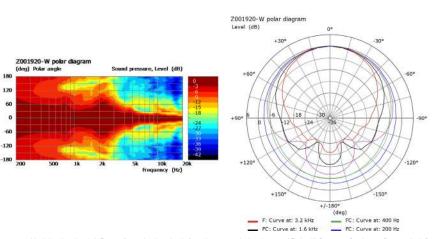


Frequency Response on IEC Baffle (DIN 45575) @ 1W, 1m Free Air Impedance

Constructive Characteristics	
Magnet	Ferrite (LF) / Neodymium (HF)
Basket Material	Aluminium Die-Cast
LF Voice Coil Winding/Former Material	Copper / Epotex
HF Voice Coil Winding/Former Material	Copper / Aluminium
LF Cone Material	Surface Treated Paper
HF Dome Material	Treated Silk
Surround Material	Treated Cloth
HF Spare Part Code	Z008955
Mounting Information	
Overall Diameter	105.5 x 105.5 mm
Baffle Cutout Diameter	91 mm
Mounting Holes	4 holes ø 5 on ø 106 mm
Total Depth	68.6 mm

120





(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, loudspeaker in free air, power calculated on rated Zmin. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Calculated by Thiele & Small parameters, for SPL average in box refer to frequency response. (4) Thiele & Small parameters measured with laser system after preconditioning test. (5) Measured with respect to a THD of 10%. (6) Value corresponding to a decay of the Force Factor, or Compliance, or both, equal to the 50% of the small signal value.

SICA ) loudspeakers Coaxial

### **CROSSOVER x Z001920** 8Ω

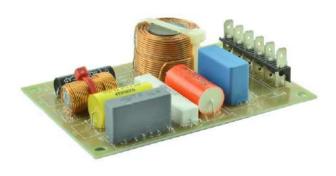
*Code* ZC01920

### DESCRIPTION

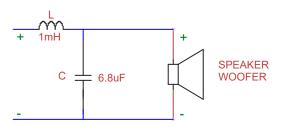
2-way crossover circuit dedicated to Z001920 coaxial speaker

General Specifications	
Nominal Impedance	8 Ω
Crossover Frequency	3.0 kHz
High-Pass Slope	18 dB/oct
Low-Pass Slope	12 dB/oct
Filter Type	2-Way
Overall Dimension	131 x 90 mm
Notes	

Cables for speakers connection included



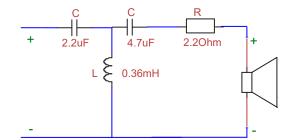
#### **Crossover Schematics**



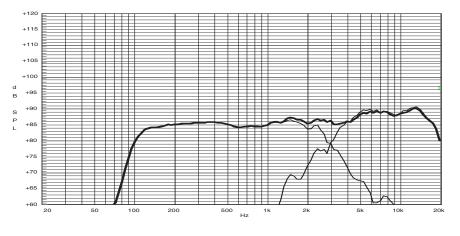
	Cabinet Suggestion
	Cabinet Type
MADE IN ITALY	Internal Volume
	Tuning Frequency
	Vents Shape
	Vents Number

Vents Dimension

Vents Length



SPEAKER TWEETER



Vented Box

1.8 lt

120 Hz

Round 2

Ø 22 mm

70 mm

Frequency Response on 1.8 Lt @ 120 Hz Vented Box @ 1W, 1m

Crossover available from Sonora Distribution

### **CROSSOVER x Z002810** 8Ω

#### Crossover for Coaxial Speaker

*Code* ZC02810

#### DESCRIPTION

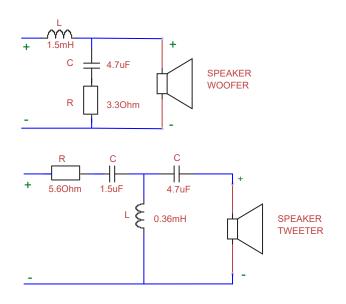
2-way crossover circuit dedicated to Z002810 coaxial speaker

General Specifications	
Nominal Impedance	8 Ω
Crossover Frequency	2.8 kHz
High-Pass Slope	18 dB/oct
Low-Pass Slope	12 dB/oct
Filter Type	2-Way
Overall Dimension	131 x 90 mm
Notes	

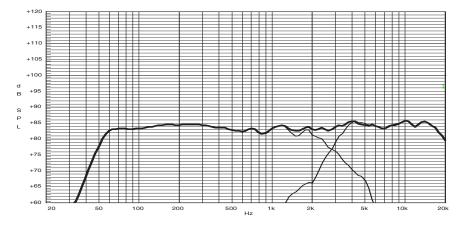
Cables for speakers connection included



#### **Crossover Schematics**



Cabinet Suggestion	
Cabinet Type	Vented Box
Internal Volume	9 lt
Tuning Frequency	58 Hz
Vents Shape	Round
Vents Number	1
Vents Dimension	Ø 55 mm
Vents Length	160 mm



Frequency Response on 9 Lt @ 58 Hz Vented Box @ 1W, 1m

Crossover available from Sonora Distribution

### **CROSSOVER x Z004102 8**Ω

#### Crossover for Coaxial Speaker

**Code** ZC04102

#### DESCRIPTION

2-way crossover circuit dedicated to Z004102 coaxial speaker

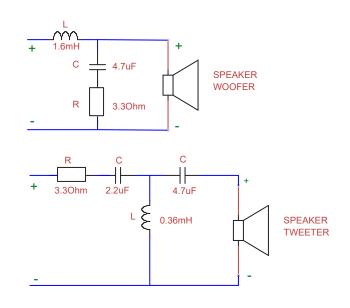
General Specifications	
Nominal Impedance	8 Ω
Crossover Frequency	2.5 kHz
High-Pass Slope	18 dB/oct
Low-Pass Slope	12 dB/oct
Filter Type	2-Way
Overall Dimension	131 x 90 mm
Notos	

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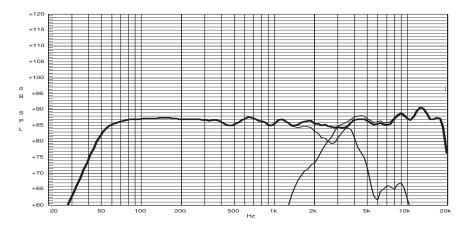
Cables for speakers connection included



#### **Crossover Schematics**



Cabinet Suggestion	
Cabinet Type	Vented Box
Internal Volume	17 lt
Tuning Frequency	50 Hz
Vents Shape	Round
Vents Number	2
Vents Dimension	Ø 46 mm
Vents Length	150 mm



Frequency Response on 17 Lt @ 55 Hz Vented Box @ 1W, 1m

Crossover available from Sonora Distribution



## LP 90.28 / N92 TW

### 1,1" | 120 W

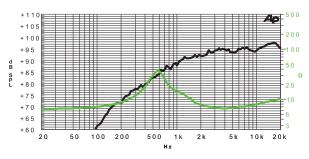
Code **Z009160** 

1,1" voice coil Aluminium former and Aluminium Flat Wire (AIFW) Treated Silk dome with Additional Damping Treatment (TSDD) Cooling radiator to reduce Power Compression (CRd) Neodymium Magnet Circuit with Damping Material inside (DM) Low resonance, 600 Hz (LFs) Damped rear chamber 94.4 dB sensitivity



General Specifications	
Nominal Diameter	90 mm
Nominal Impedance	D 8
Rated Power AES (1) (2000 - 20000 Hz)	25 W
Continuous Program Power <sup>(2)</sup>	50 W
Rated Noise Power (IEC 60268-5) (3)	120 W
Sensitivity @ 1W/1m <sup>(4)</sup>	94.4 dE
Voice Coil Diameter	28 mm / 1.1 ir
Voice Coil Winding Depth	2.7 mm
Magnetic Gap Depth	3.0 mm
Flux Density	1.80 1
DC Resistance	6.0 C
Resonance Frequency	0.6 kHz
Magnet Weight	92 g
Net Weight	0.41 kg
Recommended Crossover Frequency	1.5 kH

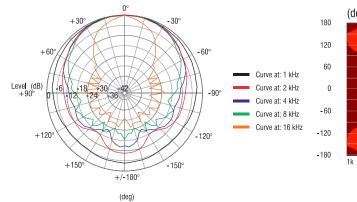


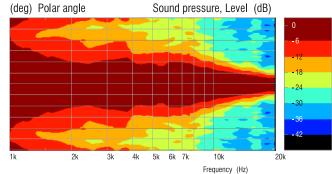


Frequency Response on IEC Baffle (DIN 45575) @ 1W,1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Voice Coil Winding Material	Aluminium Flat Wire
Voice Coil Former Material	Aluminium
Diaphragm	Treated Silk
Ferrofluid in Air Gap	No
Flange	Aluminium
Spare Part Code	Z009405
Mounting Information	
Overall Diameter	90 mm
Baffle Cutout Diameter	67 mm
Mounting Holes	4 holes ø 4.5 on ø 80 mm
Total Depth	37.5 mm

#### Z009160 - Directivity





## LP 110.28 / 380 TW

#### 1,1" | 120 W

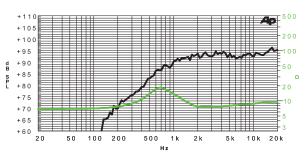
#### Code **Z009240**

1,1" voice coil Aluminium former and Aluminium Flat Wire (AIFW)
Treated Silk dome with Additional Damping Treatment (TSDD)
Ferrite Magnet Circuit with Copper Demodulating Ring (CDR)
Low resonance, 650 Hz (LFs)
Damped rear chamber
93.3 dB sensitivity



General Specifications	
Nominal Diameter	110 mm
Nominal Impedance	8 Ω
Rated Power AES (1) (2000 - 20000 Hz)	25 W
Continuous Program Power (2)	50 W
Rated Noise Power (IEC 60268-5) (3)	120 W
Sensitivity @ 1W/1m <sup>(3)</sup>	93.3 dB
Voice Coil Diameter	28 mm / 1.1 in
Voice Coil Winding Depth	2.7 mm
Magnetic Gap Depth	3 mm
Flux Density	1.28 T
DC Resistance	6.0 Ω
Resonance Frequency	0.65 kHz
Magnet Weight	380 g
Net Weight	0.80 kg
Recommended Crossover Frequency	1.5 kHz

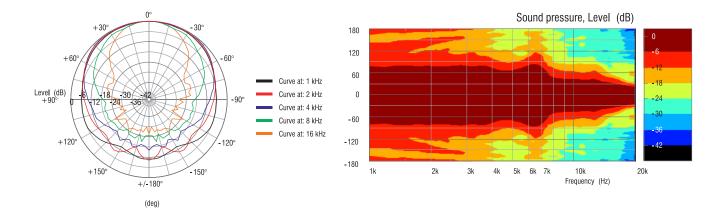




Frequency Response on IEC Baffle (DIN 45575) @ 1W,1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Voice Coil Winding Material	Aluminium Flat Wire
Voice Coil Former Material	Aluminium
Diaphragm	Treated Silk
Ferrofluid in Air Gap	No
Flange	Aluminium
Spare Part Code	Z009410
Mounting Information	
Overall Diameter	110 mm
Baffle Cutout Diameter	88 mm
Mounting Holes	4 holes ø 4.5 on ø 98 mm
Total Depth	49.6 mm

#### Z009240 - Directivity



## LP 53x58.28 / N20 TW

#### 1,1" | 80 W

Code **Z008985** 

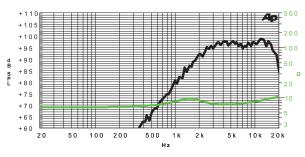
Code **Z009215** 

1,1" voice coil Aluminium former and Aluminium Flat Wire (AIFW) Treated Silk dome (TSD) Ferrofluid in Air Gap (FF) Neodymium Magnet Circuit 95.8 dB sensitivity

## AIFW TSD FF

General Specifications	
Nominal Dimensions	53x58 mm
Nominal Impedance	8 Ω
Rated Power AES (1) (2500 - 20000 Hz)	20 W
Continuous Program Power (2)	40 W
Rated Noise Power (IEC 60268-5) (3)	80 W
Sensitivity @ 1W/1m <sup>(4)</sup>	95.8 dB
Voice Coil Diameter	28 mm / 1.1 in
Voice Coil Winding Depth	2.7 mm
Magnetic Gap Depth	2.0 mm
Flux Density	1.37 T
DC Resistance	6.0 Ω
Resonance Frequency	1.5 kHz
Magnet Weight	20 g
Net Weight	0.08 kg
Recommended Crossover Frequency	2.5 kHz





Frequency Response on IEC Baffle (DIN 45575) @ 1W,1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Voice Coil Winding Material	Aluminium Flat Wire
Voice Coil Former Material	Aluminium
Diaphragm	Treated Silk
Ferrofluid in Air Gap	Yes
Flange	Nylon Fiberglass Doped
Spare Part Code	-
Mounting Information	
Overall Dimensions	53x58 mm
Baffle Cutout Diameter	49 mm
Mounting Holes	4 holes ø 3.8 on ø 62.3 mm
Total Depth	23.9 mm

MADE IN ITALY

## LP 111.25 / 245 TW

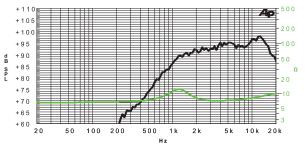
1" | 120 W

1" voice coil Aluminium former Treated Silk Dome (TSD) Ferrofluid in Air Gap (FF) Ferrite Magnet Circuit 95.1 dB sensitivity



General Specifications	
Nominal Diameter	110 mm
Nominal Impedance	8 Ω
Rated Power AES <sup>(1)</sup> (2500 - 20000 Hz)	25 W
Continuous Program Power (2)	50 W
Rated Noise Power (IEC 60268-5) (3)	120 W
Sensitivity @ 1W/1m (4)	95.1 dB
Voice Coil Diameter	25 mm / 1 in
Voice Coil Winding Depth	1.7 mm
Magnetic Gap Depth	2.0 mm
Flux Density	1.70 T
DC Resistance	6.0 Ω
Resonance Frequency	1.2 kHz
Magnet Weight	245 g
Net Weight	0.60 kg
Recommended Crossover Frequency	2.5 kHz

**Dome Tweeter** 



Frequency Response on IEC Baffle (DIN 45575) @ 1W,1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Voice Coil Winding Material	Copper
Voice Coil Former Material	Aluminium
Diaphragm	Treated Silk
Ferrofluid in Air Gap	Yes
Flange	ABS
Spare Part Code	Z009402
Mounting Information	
Overall Diameter	110 mm
Baffle Cutout Diameter	84 mm
Mounting Holes	4 holes ø 4.5 on ø 98 mm
Total Depth	32.9 mm

Dome Tweeter

(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Rated Noise Power measured with 100 hours test pink noise, 6 dB crest factor IFC60268-5 filtering. (4) Measured at 1W, 1m in axis within the frequency range.

## LP 98.25 / 245 TW

### 1" | 120 W

Code **Z009170** 

-18

-24

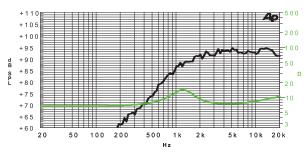
-30

1" voice coil Aluminium former Treated Silk dome with Additional Damping Treatment (TSDD) Ferrofluid in Air Gap (FF) Ferrite Magnet Circuit 93.1 dB sensitivity



General Specifications	
Nominal Diameter	98 mm
Nominal Impedance	8 Ω
Rated Power AES (1) (2500 - 20000 Hz)	25 W
Continuous Program Power (2)	50 W
Rated Noise Power (IEC 60268-5) (3)	120 W
Sensitivity @ 1W/1m <sup>(4)</sup>	93.1 dB
Voice Coil Diameter	25 mm / 1 in
Voice Coil Winding Depth	1.7 mm
Magnetic Gap Depth	2.0 mm
Flux Density	1.70 T
DC Resistance	6.0 Ω
Resonance Frequency	1.2 kHz
Magnet Weight	245 g
Net Weight	0.60 kg
Recommended Crossover Frequency	2.5 kHz

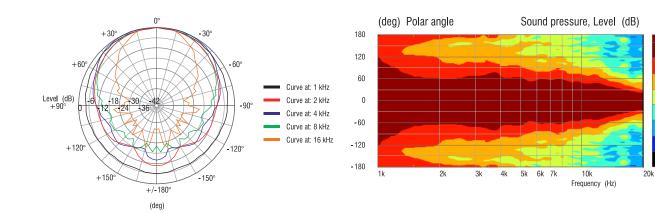




Frequency Response on IEC Baffle (DIN 45575) @ 1W,1m. Free Air Impedance.

Magnet	Ferrite
Voice Coil Winding Material	Сорре
Voice Coil Former Material	Aluminium
Diaphragm	Treated Silk
Ferrofluid in Air Gap	Yes
Flange	Aluminium
Spare Part Code	Z009407
Mounting Information	
Overall Diameter	98 mm
Baffle Cutout Diameter	78 mm
Mounting Holes	4 holes ø 4.5 on ø 87.5 mm
Total Depth	32.4 mm

#### Z009170 - Directivity





## LP 66.25 / N14 TW

### 1" | 70 W

Code **Z008950** 

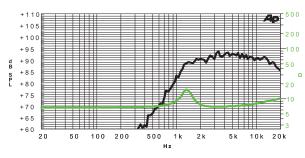
Code **Z009040** 

1" voice coil Aluminium former Treated Silk Dome (TSD) Ferrofluid in Air Gap (FF) Neodymium Magnet Circuit 90.7 dB sensitivity



General Specifications	
Nominal Diameter	66 mm
Nominal Impedance	8 Ω
Rated Power AES (1) (3000 - 20000 Hz)	17 W
Continuous Program Power (2)	34 W
Rated Noise Power (IEC 60268-5) (3)	70 W
Sensitivity @ 1W/1m <sup>(4)</sup>	90.7 dB
Voice Coil Diameter	25 mm / 1 in
Voice Coil Winding Depth	1.7 mm
Magnetic Gap Depth	2.0 mm
Flux Density	1.20 T
DC Resistance	6.0 Ω
Resonance Frequency	1.3 kHz
Magnet Weight	14 g
Net Weight	0.09 kg
Recommended Crossover Frequency	2.5 kHz





Frequency Response on IEC Baffle (DIN 45575) @ 1W,1m. Free Air Impedance.

Magnet	Neodymium
Voice Coil Winding Material	Copper Round Wire
Voice Coil Former Material	Aluminium
Diaphragm	Treated Silk
Ferrofluid in Air Gap	Yes
Flange	Nylon Fiberglass Doped
Spare Part Code	-
Mounting Information	
Overall Diameter	66 mm
Baffle Cutout Diameter	46 mm
Mounting Holes	4 holes ø 3 on ø 56 mm
Total Depth	20 mm

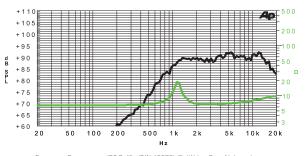
## LP 85.25 / 95 TW

1" voice coil Aluminium former Treated Silk Dome (TSD) Ferrofluid in Air Gap (FF) Ferrite Magnet C ircuit 89.8 dB sensitivity



General Specifications	
Nominal Diameter	85 mm
Nominal Impedance	8 Ω
Rated Power AES (1) (3000 - 20000 Hz)	20 W
Continuous Program Power <sup>(2)</sup>	40 W
Rated Noise Power (IEC 60268-5) (3)	80 W
Sensitivity @ 1W/1m <sup>(4)</sup>	89.8 dB
Voice Coil Diameter	25 mm / 1 in
Voice Coil Winding Depth	1.8 mm
Magnetic Gap Depth	3 mm
Flux Density	1.06 T
DC Resistance	6.3 Ω
Resonance Frequency	1.1 kHz
Magnet Weight	95 g
Net Weight	0.26 kg
Recommended Crossover Frequency	2.5 kHz





Frequency Response on IEC Baffle (DIN 45575) @ 1W,1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Voice Coil Winding Material	Copper
Voice Coil Former Material	Aluminium
Diaphragm	Treated Silk
Ferrofluid in Air Gap	Yes
Flange	ABS
Spare Part Code	-
Mounting Information	
Overall Diameter	85 mm
Baffle Cutout Diameter	62 mm
Mounting Holes	4 holes ø 4 on ø 75 mm
Total Depth	23.5 mm

(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Rated Noise Power measured with 100 hours test pink noise, 6 dB crest factor IFC60268-5 filtering. (4) Measured at 1W, 1m in axis within the frequency range.

#### .

Dome Tweeter

## LP 38x50.18/N5 TW

### 0,7" | 50 W

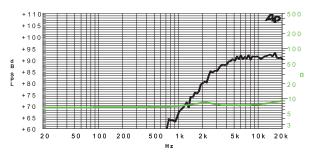
Code **Z008701** 

0,7" voice coil Epotex former Treated Silk Dome (TSD) Ferrofluid in Air Gap (FF) Neodymium Magnet Circuit 91.1 dB sensitivity



General Specifications	
Nominal Dimensions	38x50 mm
Nominal Impedance	8 Ω
Rated Power AES (4500-20000) (1)	12 W
Continuous Program Power (2)	24 W
Rated Noise Power (IEC 60268-5) (3)	50W
Sensitivity @ 1W/1m (3)	91.1 dB
Voice Coil Diameter	18 mm / 0.7 in
Voice Coil Winding Depth	1.7 mm
Magnetic Gap Depth	2 mm
Flux Density	1.10 T
DC Resistance	5.8 Ω
Resonance Frequency	2.2 kHz
Magnet Weight	5 g
Net Weight	0.03 kg
Recommended Crossover Frequency	4.5 kHz

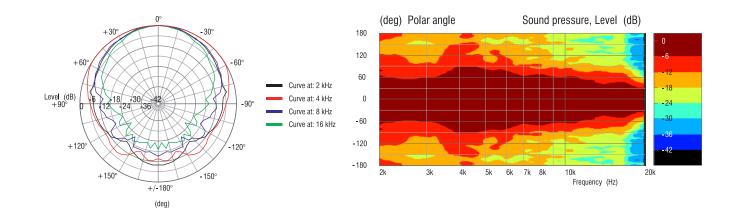




Frequency Response on IEC Baffle (DIN 45575) @ 1W,1m. Free Air Impedance.

Manaah	N a a alcorationa
Magnet	Neodymium
Voice Coil Winding Material	Copper
Voice Coil Former Material	Epote>
Diaphragm	Treated Silk
Ferrofluid in Air Gap	Yes
Flange	Nylon Fiberglass Doped
Spare Part Code	-
Mounting Information	
Overall Dimensions	38 x 50 mm
Baffle Cutout Diameter	34 mm
Mounting Holes	4 holes ø 3.8 on ø 46 mm
Total Depth	16.6 mm

#### Z008701 - Directivity



# COMPRESSION Driver

### CD 124.75/N353 3" 220 W

#### Code **Z009512**

3" voice coil Kapton former and Aluminium Flat Wire (AIFW) Titanium diaphragm (TD) Neodymium Magnet Circuit with Copper Demodulating Ring (CDR) 1,4" horn throath diameter 108.4 dB sensitivity

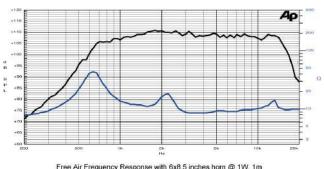


Compression Driver





**General Specifications** 



Free Air Frequency Response with 6x8,5 inches horn @ 1W, 1m Impedance (without horn)

220 W		
108.4dB	Constructive Characteristics	
i mm / 3 in	Magnet	Neodymium
3.0 mm	Voice Coil Winding Material	Aluminium Flat Wire
3.0 mm	Voice Coil Former Material	Kapton
2.1 T	Diaphragm	Titanium
5.8 Ω	Ferrofluid in Air Gap	No
0.65 kHz	Spare Part Code	
353 g	Mounting Information	
2.1 kg	Overall Diameter	124 mm
1.2 kHz	Mounting Holes	4 holes M6 on ø 102 mm
nm / 1.4 in	Total Depth	52.7 mm

124 mm Nominal Diameter Nominal Impedance 8Ω Rated Power AES (1) (1500 - 20000 Hz) 110 W Continuous Program Power<sup>(2)</sup> Sensitivity @ 1W/1m <sup>(3)</sup> Voice Coil Diameter 75 Voice Coil Winding Depth Magnetic Gap Depth Flux Density DC Resistance Resonance Frequency Magnet Weight Net Weight Recommended Crossover Frequency Throat Diameter 35.5 mr

(1) Rated Power measured with 2 hours test with pink noise signal, 6dB crest factor, driver coupled to the recommended horn. (2) Power on Continuous Program is defined as 3 dB greater than the Rated Power. (3) Measured at 1W,1m in axis within the frequency range, driver coupled to the recommended horn.

# **CD 105.65/N220** 2,5" | 160 W

#### Code **Z009497**

2,5" voice coil Kapton former and Aluminium Flat Wire (AIFW)
Titanium diaphragm (TD)
Neodymium Magnet Circuit with Copper Demodulating Ring (CDR)
1,4" horn throath diameter
108.8 dB sensitivity







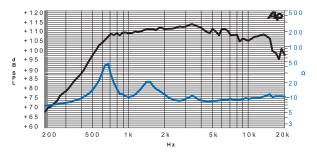
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AIFW

TD

CDR



Free Air Frequency Response with 6x8.5 inches horn @ 1W,1m. Impedance (without horn).

General Specifications	
Nominal Diameter	105 mm
Nominal Impedance	8 Ω
Rated Power AES (1) (1500 - 20000 Hz)	80 W
Continuous Program Power (2)	160 W
Sensitivity @ 1W/1m <sup>(3)</sup>	108.8 dB
Voice Coil Diameter	65 mm / 2.5 in
Voice Coil Winding Depth	3.0 mm
Magnetic Gap Depth	3.0 mm
Flux Density	1.93 T
DC Resistance	6.0 Ω
Resonance Frequency	0.65 kHz
Magnet Weight	220 g
Net Weight	1.3 kg
Recommended Crossover Frequency	1.2 kHz
Throat Diameter	35.5 mm / 1.4 in

Constructive Characteristics	
Magnet	Neodymium
Voice Coil Winding Material	Aluminium Flat Wire
Voice Coil Former Material	Kapton
Diaphragm	Titanium
Ferrofluid in Air Gap	No
Spare Part Code	Z009399
Mounting Information	
Overall Diameter	105 mm
Mounting Holes	4 holes ø 6.5 on ø 102 mm
Total Depth	88.7 mm

Compression Driver

(1) Rated Power measured with 2 hours test with pink noise signal, 6dB crest factor, driver coupled to the recommended horn. (2) Power on Continuous Program is defined as 3 dB greater than the Rated Power. (3) Measured at 1W,1m in axis within the frequency range, driver coupled to the recommended horn.

## CD 95.44/N240 1,7" | 120 W

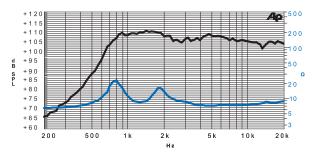
#### Code **Z009493**

1,7" voice coil Kapton former and Aluminium Flat Wire (AIFW) Titanium diaphgram (TD) Neodymium Magnet Circuit with Copper Demodulating Ring (CDR) 1" horn throat diameter 106.3 dB sensitivity



General Specifications	
Nominal Diameter	96 mm
Nominal Impedance	8 Ω
Rated Power AES <sup>(1)</sup> (1500 - 20000 Hz)	60 W
Continuous Program Power (2)	120 W
Sensitivity @ 1W/1m <sup>(3)</sup>	106.3 dB
Voice Coil Diameter	44 mm / 1.7 in
Voice Coil Winding Depth	2.6 mm
Magnetic Gap Depth	3.0 mm
Flux Density	2.10 T
DC Resistance	5.8 Ω
Resonance Frequency	0.8 kHz
Magnet Weight	235 g
Net Weight	1.1 kg
Recommended Crossover Frequency	1.6 kHz
Throat Diameter	25.4 mm / 1 in





Free Air Frequency Response with 6x11 inches horn @ 1W,1m. Impedance (without horn).

Constructive Characteristics	
Magnet	Neodymium
Voice Coil Winding Material	Aluminium Flat Wire
Voice Coil Former Material	Kapton
Diaphragm	Titanium
Ferrofluid in Air Gap	No
Spare Part Code	Z009396
Mounting Information	
Overall Diameter	96 mm
Mounting Holes	4 holes ø 4.5 on ø 95 mm
	2 holes M6 on ø 76 mm
Total Depth	47 mm

## **CD 95.44/N240 POLY**

1,7" | 120 W

Code **Z009493P** 

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S P L

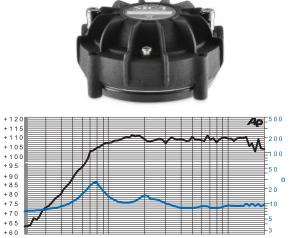
1.7" voice coil Kapton former and Aluminium Flat Wire (AIFW) PI diaphragm

Neodymium Magnet Circuit with Copper Demodulating Ring (CDR) 1" horn throat diameter

108.7 dB sensitivity



General Specifications	
Nominal Diameter	96 mm
Nominal Impedance	8 Ω
Rated Power AES <sup>(1)</sup> (1500 - 20000 Hz)	60 W
Continuous Program Power <sup>(2)</sup>	120 W
Sensitivity @ 1W/1m <sup>(3)</sup>	108.7 dB
Voice Coil Diameter	44 mm / 1.7 in
Voice Coil Winding Depth	2.6 mm
Magnetic Gap Depth	3.0 mm
Flux Density	2.10 T
DC Resistance	5.8 Ω
Resonance Frequency	0.8 kHz
Magnet Weight	235 g
Net Weight	1.1 kg
Recommended Crossover Frequency	1.6 kHz
Throat Diameter	25.4 mm / 1 in



Free Air Frequency Response with 6x11 inches horn @ 1W,1m. Impedance (without horn).

2 k

Нz

5 k

20 k

10 k

500

1 k

200

Voice Coil Winding Material     Aluminium Flat Win       Voice Coil Former Material     Kapto       Diaphragm     Polyimic       Ferrofluid in Air Gap     N       Spare Part Code     Z009396       Mounting Information     Overall Diameter       Mounting Holes     4 holes Ø 4.5 on Ø 95 m       2 holes M6 on Ø 76 m	Constructive Characteristics	
Voice Coil Former Material       Kapto         Diaphragm       Polyimid         Ferrofluid in Air Gap       N         Spare Part Code       Z009396         Mounting Information       0         Overall Diameter       96 million         Mounting Holes       4 holes ø 4.5 on ø 95 million         2 holes M6 on ø 76 million       2 holes M6 on ø 76 million	Magnet	Neodymium
Diaphragm     Polyimid       Ferrofluid in Air Gap     N       Spare Part Code     Z009396       Mounting Information     96 m       Overall Diameter     96 m       Mounting Holes     2 holes % 4.5 on ø 95 m       2 holes M6 on ø 76 m	Voice Coil Winding Material	Aluminium Flat Wire
Ferrofluid in Air Gap     N       Spare Part Code     Z009396       Mounting Information     96 mi       Overall Diameter     96 mi       Mounting Holes     4 holes ø 4.5 on ø 95 mi       2 holes M6 on ø 76 mi     2 holes M6 on ø 76 mi	Voice Coil Former Material	Kapton
Spare Part Code     Z009396       Mounting Information     0       Overall Diameter     96 minor       Mounting Holes     4 holes Ø 4.5 on Ø 95 minor       2 holes M6 on Ø 76 minor     2 holes M6 on Ø 76 minor	Diaphragm	Polyimide
Mounting Information         96 mm           Overall Diameter         96 mm           Mounting Holes         4 holes ø 4.5 on ø 95 mm           2 holes M6 on ø 76 mm         2 holes M6 on ø 76 mm	Ferrofluid in Air Gap	No
Overall Diameter         96 mi           Mounting Holes         4 holes ø 4.5 on ø 95 mi           2 holes M6 on ø 76 mi         2 holes M6 on ø 76 mi	Spare Part Code	Z009396P
Mounting Holes 4.5 on Ø 95 m 2 holes M6 on Ø 76 m	Mounting Information	
Mounting Holes 2 holes M6 on Ø 76 mi	Overall Diameter	96 mm
2 holes M6 on Ø 76 mi	Mounting Holes	4 holes ø 4.5 on ø 95 mm
Total Depth 47 mi		2 holes M6 on ø 76 mm
	Total Depth	47 mm

(3) Measured at 1W,1m in axis within the frequency range, driver coupled to the recommended horn.

(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, driver coupled to the recommended horn. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power.

## **CD 120.44/640** 1,7" | 120 W

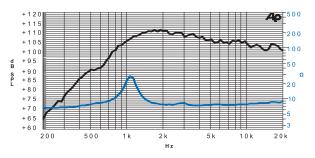
#### Code **Z009491**

1,7" voice coil Kapton former and Aluminium Flat Wire (AIFW)Titanium diaphragm (TD)Ferrite Magnet Circuit with Copper Demodulating Ring (CDR)1" horn throath diameter106.3 dB sensitivity



General Specifications	
Nominal Diameter	120 mm
Nominal Impedance	8 Ω
Rated Power AES <sup>(1)</sup> (1500 - 20000 Hz)	60 W
Continuous Program Power (2)	120 W
Sensitivity @ 1W/1m <sup>(3)</sup>	106.3 dB
Voice Coil Diameter	44 mm / 1.7 in
Voice Coil Winding Depth	2.6 mm
Magnetic Gap Depth	3.0 mm
Flux Density	1.70 T
DC Resistance	5.8 Ω
Resonance Frequency	1.10 kHz
Magnet Weight	640 g
Net Weight	1.9 kg
Recommended Crossover Frequency	1.6 kHz
Throat Diameter	25.4 mm / 1 in





Free Air Frequency Response with 6x11 inches horn @ 1W,1m. Impedance (without horn).

Constructive Characteristics	
Magnet	Ferrite
Voice Coil Winding Material	Aluminium Flat Wire
Voice Coil Former Material	Kapton
Diaphragm	Titanium
Ferrofluid in Air Gap	No
Spare Part Code	Z009396
Mounting Information	
Overall Diameter	121 mm
Mounting Holes	2 holes M6 on ø 76 mm
Note: adapter Q07310A is required for coupling with SICA horns	
Total Depth	52 mm

## CD 120.44/640 POLY

1,7" | 120 W

Code **Z009491P** 

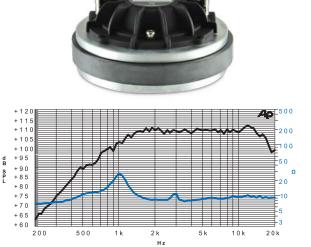
1,7" voice coil Kapton former and Aluminium Flat Wire (AIFW) PI diaphragm

Ferrite Magnet Circuit with Copper Demodulating Ring (CDR) 1" horn throath diameter

109.0 dB sensitivity



General Specifications	
Nominal Diameter	120 mm
Nominal Impedance	8 Ω
Rated Power AES <sup>(1)</sup> (1500 - 20000 Hz)	60 W
Continuous Program Power (2)	120 W
Sensitivity @ 1W/1m <sup>(3)</sup>	109.0 dB
Voice Coil Diameter	44 mm / 1.7 in
Voice Coil Winding Depth	2.6 mm
Magnetic Gap Depth	3.0 mm
Flux Density	1.70 T
DC Resistance	5.8 Ω
Resonance Frequency	1.00 kHz
Magnet Weight	640 g
Net Weight	1.9 kg
Recommended Crossover Frequency	1.6 kHz
Throat Diameter	25.4 mm / 1 in



Free Air Frequency Response with 6x11 inches horn @ 1W,1m. Impedance (without horn).

Constructive Characteristics	
Magnet	Ferrite
Voice Coil Winding Material	Aluminium Flat Wire
Voice Coil Former Material	Kapton
Diaphragm	Polyimide
Ferrofluid in Air Gap	No
Spare Part Code	Z009396P
Mounting Information	
Overall Diameter	121
Mounting Holes	2 holes M6 on ø 76 mm
Note: adapter Q07310A is required for coupling with SICA horns	
Total Depth	52 mm

(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, driver coupled to the recommended horn. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Measured at 1W,1m in axis within the frequency range, driver coupled to the recommended horn.

## **CD 60.38/N92** 1,5" | 60 W

Code **Z009484** 

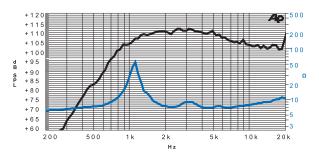
Code **Z009487** 

1,5" voice coil Kapton former and Aluminium Flat Wire (AIFW) PEI diaphragm Neodymium Magnet Circuit 1" horn throath diameter 107.9 dB sensitivity



General Specifications	
Nominal Diameter	60 mm
Nominal Impedance	8 Ω
Rated Power AES <sup>(1)</sup> (1500 - 20000 Hz)	30 W
Continuous Program Power <sup>(2)</sup>	60 W
Sensitivity @ 1W/1m <sup>(3)</sup>	107.9 dB
Voice Coil Diameter	38 mm / 1.5 in
Voice Coil Winding Depth	2.5 mm
Magnetic Gap Depth	2.5 mm
Flux Density	1.85 T
DC Resistance	6.0 Ω
Resonance Frequency	1.1 kHz
Magnet Weight	92 g
Net Weight	0.4 kg
Recommended Crossover Frequency	2.0 kHz
Throat Diameter	25.4mm / 1 in





Free Air Frequency Response with 6x11 inches horn @ 1W,1m. Impedance (without horn).

Constructive Characteristics	
Magnet	Neodymium
Voice Coil Winding Material	Aluminium Flat Wire
Voice Coil Former Material	Kapton
Diaphragm	PEI
Ferrofluid in Air Gap	No
Spare Part Code	Z009390
Mounting Information	
Overall Diameter	60 mm
Mounting Holes	2 holes ø 5.5 on ø 95 mm
	2 holes ø 5.5 on ø 76 mm
Total Depth	45.4 mm

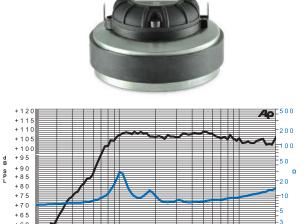
## CD 90.38/405

1,5" 60 W

1,5" voice coil Kapton former and Aluminium Flat Wire (AIFW)PEI diaphragmFerrite Magnet Circuit1" horn throath diameter105.7 dB sensitivity



General Specifications	
Nominal Diameter	90 mm
Nominal Impedance	8 Ω
Rated Power AES <sup>(1)</sup> (1500 - 20000 Hz)	30 W
Continuous Program Power (2)	60 W
Sensitivity @ 1W/1m <sup>(3)</sup>	105.7 dB
Voice Coil Diameter	38 mm / 1.5 in
Voice Coil Winding Depth	2.5 mm
Magnetic Gap Depth	2.5 mm
Flux Density	1.64 T
DC Resistance	6.0 Ω
Resonance Frequency	1.0 kHz
Magnet Weight	405 g
Net Weight	0.93 kg
Recommended Crossover Frequency	2.0 kHz
Throat Diameter	25.4 mm / 1 in



Free Air Frequency Response with 6x11 inches horn @ 1W,1m. Impedance (without horn).

2 k

Ηz

5 k

10 k

20 k

1 k

Constructive Characteristics	
Magnet	Ferrite
Voice Coil Winding Material	Aluminium Flat Wire
Voice Coil Former Material	Kapton
Diaphragm	PEI
Ferrofluid in Air Gap	No
Spare Part Code	Z009392
Mounting Information	
Overall Diameter	90 mm
Mounting Holes	2 holes M5 on ø 76 mm
Note: adapter Q07310A is required for coupling with SICA horns	
Total Depth	46.6 mm

(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, driver coupled to the recommended horn. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Measured at 1W,1m in axis within the frequency range, driver coupled to the recommended horn.

+60

500

### **CD 40x70.26/N35** 1″ | 30 W cc

#### Code **Z009430**

1" voice coil Kapton former and Aluminium Flat Wire (AIFW) Tri-acetate diaphragm Neodymium Magnet Circuit 1" horn throath diameter 106.0 dB sensitivity

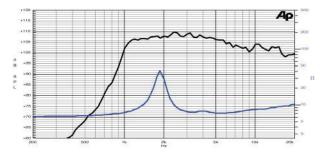




SICA )) loudspeakers ®



AIFW



Free Air Frequency Response with 6x8.5 inches horn @ 1W,1m. Impedance (without horn).

General Specifications	
Nominal Diameter	40x70 mm
Nominal Impedance	8 Ω
Rated Power AES (1) (1500 - 20000 Hz)	15 W
Continuous Program Power (2)	30 W
Sensitivity @ 1W/1m (3)	106.0dB
Voice Coil Diameter	25 mm / 1 in
Voice Coil Winding Depth	2.1 mm
Magnetic Gap Depth	2.0 mm
Flux Density	1.72 T
DC Resistance	5.3 Ω
Resonance Frequency	1.7 kHz
Magnet Weight	38 g
Net Weight	0.2 kg
Recommended Crossover Frequency	2.5 kHz
Throat Diameter	25.4 mm / 1 in

Constructive Characteristics	
Magnet	Neodymium
Voice Coil Winding Material	Aluminium Flat Wire
Voice Coil Former Material	Kapton
Diaphragm	Tri-acetate Film
Ferrofluid in Air Gap	No
Spare Part Code	Z009430-S.P.
Mounting Information	
Overall Diameter	70x40 mm
Mounting Holes	2 holes M6 on ø 53 mm
Total Depth	40.5 mm

(1) Rated Power measured with 2 hours test with pink noise signal, 6dB crest factor, driver coupled to the recommended horn. (2) Power on Continuous Program is defined as 3 dB greater than the Rated Power. (3) Measured at 1W,1m in axis within the frequency range, driver coupled to the recommended horn.

## **CD 83.26/380** 1" | 40 W

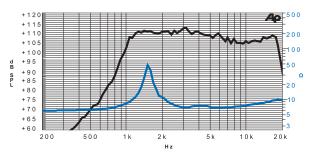
Code **Z009470** 

1" voice coil Kapton former and Aluminium Flat Wire (AIFW) Tri-Acetate diaphragm Ferrite Magnet Circuit 1" horn throath diameter 107.3 dB sensitivity



General Specifications	
Nominal Diameter	83 mm
Nominal Impedance	8 Ω
Rated Power AES <sup>(1)</sup> (1500 - 20000 Hz)	20 W
Continuous Program Power (2)	40 W
Sensitivity @ 1W/1m <sup>(3)</sup>	107.3 dB
Voice Coil Diameter	25 mm / 1 in
Voice Coil Winding Depth	2.1 mm
Magnetic Gap Depth	2.0 mm
Flux Density	1.70 T
DC Resistance	5.5 Ω
Resonance Frequency	1.5 kHz
Magnet Weight	380 g
Net Weight	0.8 kg
Recommended Crossover Frequency	2.5 kHz
Throat Diameter	25.4 mm / 1 in





Free Air Frequency Response with 6x8 inches horn @ 1W,1m. Impedance (without horn).

Constructive Characteristics	
Magnet	Ferrite
Voice Coil Winding Material	Aluminium Flat Wire
Voice Coil Former Material	Kapton
Diaphragm	Tri-acetate Film
Ferrofluid in Air Gap	No
Spare Part Code	Z009370
Mounting Information	
Overall Dimensions	86x95 mm
Mounting Holes	4 holes ø 4.5 on ø 95 mm
	2 holes M5 on ø 76 mm
Total Depth	50.9 mm





## CD 78.26/N92

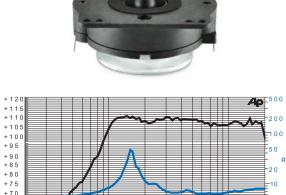
1" 40 W

Code **Z009450** 

1" voice coil Kapton former and Aluminium Flat Wire (AIFW) Tri-Acetate diaphragm Neodymium Magnet Circuit 1" horn throath diameter 107.3 dB sensitivity



General Specifications	
Nominal Diameter	78 mm
Nominal Impedance	8 Ω
Rated Power AES (1) (1500 - 20000 Hz)	20 W
Continuous Program Power (2)	40 W
Sensitivity @ 1W/1m <sup>(3)</sup>	107.3 dB
Voice Coil Diameter	25 mm / 1 in
Voice Coil Winding Depth	2.1 mm
Magnetic Gap Depth	2.0 mm
Flux Density	1.92 T
DC Resistance	5.3 Ω
Resonance Frequency	1.5 kHz
Magnet Weight	92 g
Net Weight	0.4 kg
Recommended Crossover Frequency	2.5 kHz
Throat Diameter	25.4 mm / 1 in



Free Air Frequency Response with 6x8 inches horn @ 1W,1m. Impedance (without horn).

11

2 k

Ηz

51

-3

20 k

101

Constructive Characteristics	
Magnet	Neodymium
Voice Coil Winding Material	Aluminium Flat Wire
Voice Coil Former Material	Kapton
Diaphragm	Tri-acetate Film
Ferrofluid in Air Gap	No
Spare Part Code	Z009376
Mounting Information	
Overall Dimensions	78x88.5 mm
Mounting Holes	4 holes ø 4.5 on ø 95 mm
Mounting Holes	2 holes M5 on ø 76 mm
Total Depth	43.6 mm

(1) Rated Power measured with 2-hour test with pink noise signal, 6dB crest factor, driver coupled to the recommended horn. (2) Power on Continuous Program is defined as 3dB greater than the Rated Power. (3) Measured at 1W,1m in axis within the frequency range, driver coupled to the recommended horn.

d B

S P L

+65

+60 200

500

## **CD 78.26/245** 1" | 32 W

Code **Z009442** 

2.5 kHz

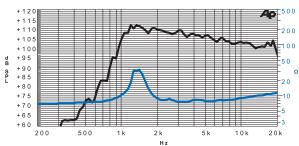
25.4 mm / 1 in

1" voice coil Kapton former Tri-Acetate diaphragm Ferrite Magnet Circuit 1" horn throath diameter 105.5 dB sensitivity

Recommended Crossover Frequency

Throat Diameter





Free Air Frequency Response with 6x8 inches horn @ 1W,1m. Impedance (without horn).

Constructive Characteristics	
Magnet	Ferrite
Voice Coil Winding Material	Coppe
Voice Coil Former Material	Kaptor
Diaphragm	Tri-acetate Film
Ferrofluid in Air Gap	No
Spare Part Code	Z009374
Mounting Information	
Overall Dimensions	78x88.5 mm
Mounting Holes	2 holes ø 4.5 on ø 95 mm
	2 holes M5 on ø 76 mm
Total Depth	51.6 mm



MADE IN ITALY

**General Specifications** 78 mm Nominal Diameter Nominal Impedance 8Ω Rated Power AES (1) (1500 - 20000 Hz) 16 W Continuous Program Power (2) 32 W Sensitivity @ 1W/1m (3 105.5 dB 25 mm / 1 in Voice Coil Diameter Voice Coil Winding Depth 1.7 mm Magnetic Gap Depth 2.0 mm Flux Density 1.56 T DC Resistance 6.3 Ω Resonance Frequency 1.5 kHz Magnet Weight 245 g 0.6 kg Net Weight



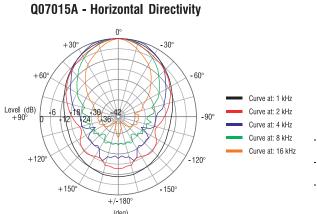
## Q07015A

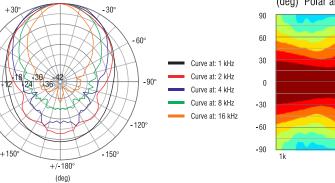
1" Horn

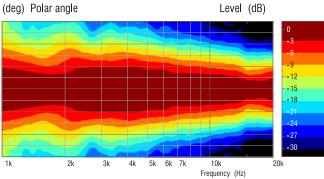


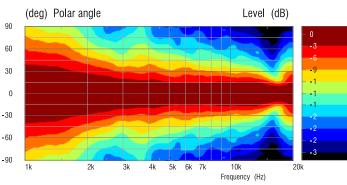
General Specifications	
Throat Diameter	25.4 mm / 1 in
Cutoff Frequency	1.00 kHz
Net Weight	0.41 Kg
Horizontal coverage	80°
Vertical coverage	60°
Material	Plastic

Mounting Information		
Shape	Rectangular	
Overall Dimensions	290x160x150 mm	
Baffle Cutout Dimensions	255x135 mm	
Mounting Holes	8 holes ø 4.5 mm	

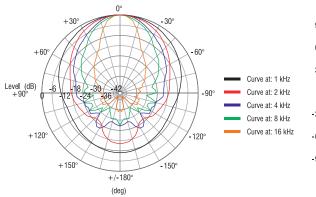












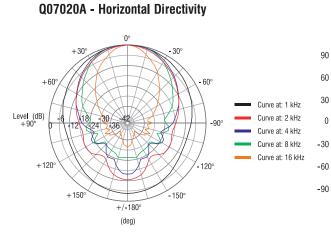
## **Q07020A**

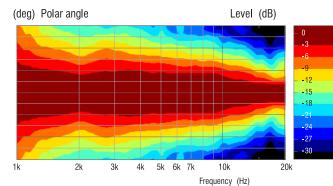
1" Horn



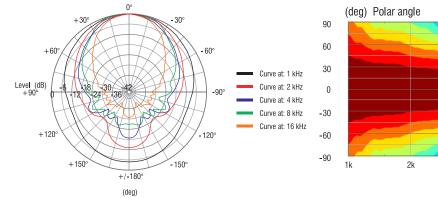
General Specifications	
Throat Diameter	25.4 mm / 1 in
Cutoff Frequency	1.50 kHz
Net Weight	0.30 Kg
Horizontal coverage	90°
Vertical coverage	60°
Material	Plastic

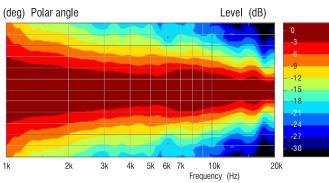
Mounting Information	
Shape	Elliptic
Overall Dimensions	200x160x100 mm
Baffle Cutout Dimensions	167x129 mm
Mounting Holes	4 holes ø 5.0 mm











## Q07030A Q07032B

#### 1" Horn

1″ F	lorn
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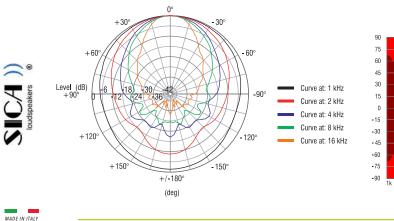
General Specification	S

Throat Diameter		25.4 mm / 1 in
Cutoff Frequency		2.00 kHz
Net Weight		0.10 Kg
Horizontal coverage		80°
Vertical coverage		80°
Material		Plastic
Mounting Information	Q07030A	Q07032B
Shape	Round	Round (square contour)
Overall Dimensions	ø 140x80 mm	119x119x80 mm
Baffle Cutout Dimensions	ø 109 mm	ø 109 mm
Mounting Holes	4 holes ø 5.0 mm	4 holes ø 5.0 mm



(deg) Polar angle

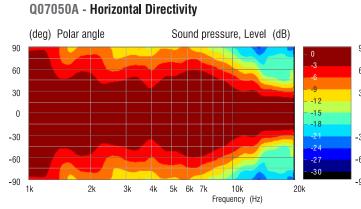
#### Q07030A - Q07032B - Directivity



## Q07050A

#### 1" Wave Guide

General Specifications	
Throat Diameter	25.4 mm / 1 in
Cutoff Frequency	1.50 Hz
Net Weight	0.10 Kg
Horizontal coverage	130°
Material	Plastic
Mounting Information	
Overall Dimensions	110x87x112 mm
Baffle Cutout Dimensions	108x62 mm
Mounting Holes	4 holes ø 4.8 mm

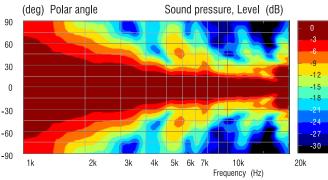




4k 5k 6k

7k 8k 9k 10k

#### **Q07050A - Vertical Directivity**



ñ

Frequency (Hz)

Level (dB)

- 12

- 15

- 18

#### Horr



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