



# CATALOGUE

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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 & Environment



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.

# LOW Frequency

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# **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

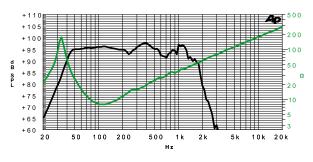


Subwoofer





General Specifications	;		
Nominal Diameter			545 mm / 21 in
Nominal Impedance			8 Ω
Rated Power AES (1)			1200 W
Continuous Program Pov	ver (2)		2400 W
Sensitivity @ 1W/1m (3)			98.8 dB
Voice Coil Diameter			100 mm / 4 in
Voice Coil Winding Deptl	1		23 mm
Magnetic Gap Depth			17 mm
Flux Density			0.89 T
Magnet Weight			536 g
Net Weight			10.5 kg
Thiele & Small Parame	eters (4)		
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
η	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

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MADE IN ITALY

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

Code **Z008402** 

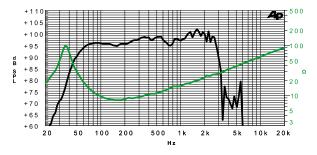
4" Sandwich voice coil Fiberglass former (SNDW) Double Konex Spider with Progressive Waves (DPS) Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT) Neodymium Magnet Circuit Ventilated Magnet to reduce Power Compression (VM) 97.8 dB sensitivity Frequency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







General Specifications			
Nominal Diameter			462 mm / 18 ir
Nominal Impedance			8 (
Rated Power AES (1)			1200 V
Continuous Program Power	2)		2400 V
Sensitivity @ 1W/1m (3)			97.8 dE
Voice Coil Diameter			100 mm / 4 ir
Voice Coil Winding Depth			22 mn
Magnetic Gap Depth			12 mn
Flux Density			1.21
Magnet Weight			536 (
Net Weight			8.3 kį
Thiele & Small Parameters	S <sup>(4)</sup>		
Re	6.0 Ω	Fs	36.8 H
Qms	4.62	Qes	0.35
Qts	0.32	Mms	178.8 (
Cms	105 µm/N	Bxl	26.8 Tn
Vas	201 I	Sd	1164.2 cm
X max (5)	+/- 6.5 mm	X var (6)	+/- 10.0 mn
η	2.78%	Le (1KHz)	1.60 mł



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.

### **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

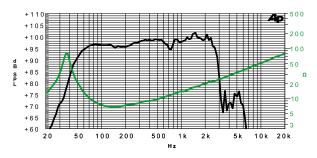


Subwoofer





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 Parameter	'S <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 l	Sd	1164.2 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 8.0 mm	X var (6)	+/- 10.1 mm
η	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.

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

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

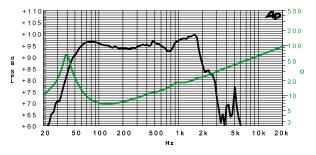
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MADE IN ITALY





General Specifications			
Nominal Diameter			463 mm / 18 ir
Nominal Impedance			8 Ω
Rated Power AES (1)			1200 W
Continuous Program Power	2)		2400 W
Sensitivity @ 1W/1m (3)			96.3 dE
Voice Coil Diameter			100 mm / 4 ir
Voice Coil Winding Depth			27 mm
Magnetic Gap Depth			12 mm
Flux Density			1.05 1
Magnet Weight			3300 g
Net Weight			13.0 kg
Thiele & Small Parameters	S <sup>(4)</sup>		
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	BxI	24.6 Tm
Vas	147.3 I	Sd	1164.2 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 8.0 mm	X var (6)	+/- 10.0 mm
$\eta_0$	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.

### **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

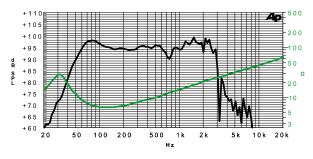


Subwoofer





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 (3)			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	340.0 I	Sd	1164.2 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 6.5 mm	X var (6)	+/- 10.5 mm
η	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

(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

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#### Professional

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

Code **Z008339** 

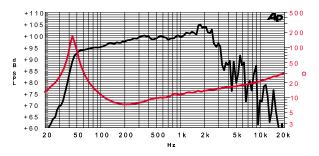
4" Sandwich voice coil Kapton former (SNDW) Double Cross Spider with Progressive Waves (DCSP) Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT) Neodymium Magnet Circuit with Copper Demodulating Ring (CDR) Ventilated Magnet and Voice Coil to reduce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







General Specification	ns		
Nominal Diameter			388 mm / 15 in
Nominal Impedance			8 Ω
Rated Power AES (1)			1200 W
Continuous Program P	ower <sup>(2)</sup>		2400 W
Sensitivity @ 1W/1m <sup>(3</sup>	3)		99.2 dB
Voice Coil Diameter			100 mm / 4 in
Voice Coil Winding Dep	oth		21 mm
Magnetic Gap Depth			12 mm
Flux Density			1.23 T
Magnet Weight			536 g
Net Weight			7.0 kg
Thiele & Small Paran	neters <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	BxI	24.20 Tm
Vas	105.0 I	Sd	855.3 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 6.5 mm	X var (6)	+/- 10.5 mm
η	3.27%	Le (1KHz)	0.84 mH



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

Copper Kapton
Aluminium Die-Cast Copper Kapton Paper
Kapton
•
Paper
Humidity Resistant Pulp
Treated Cloth
Solid Paper
388 mm
355 mm
8 holes 6x9 on ø 371 mm
176.8 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.

### **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

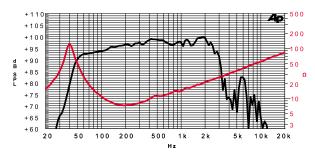


Professional





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 Parameter	S <sup>(4)</sup>		
Re	5.1 Ω	Fs	41.0 Hz
Qms	7.42	Qes	0.26
Qts	0.25	Mms	130.0 g
Cms	116 µm/N	Bxl	25.9 Tm
Vas	120.4 I	Sd	855.3 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 7.0 mm	X var (6)	+/- 10.0 mm
η	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

(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

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## **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

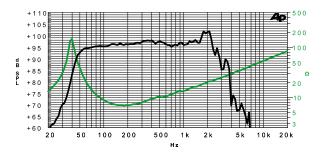


Subwoofer





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 (3)			98.1 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			7.0 kg
Thiele & Small Parameter	S <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	135.9 I	Sd	855.3 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 8.5 mm	X var (6)	+/- 11.5 mm
η	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

 ŋ\_0
 2.50%
 Le (1KHz)
 1.38 mH
 Total Depth
 176.8 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.

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

Code **Z008318** 



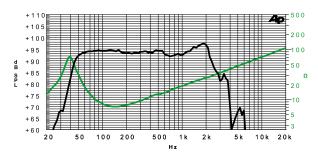
Subwoofer

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





General Specifications			
Nominal Diameter			389 mm / 15 in
Nominal Impedance			8 Ω
Rated Power AES (1)			1200 W
Continuous Program Power	(2)		2400 W
Sensitivity @ 1W/1m (3)			95.8 dB
Voice Coil Diameter			100 mm / 4 in
Voice Coil Winding Depth			27 mm
Magnetic Gap Depth			12 mm
Flux Density			1.12 T
Magnet Weight			3300 g
Net Weight			12.3 kg
Thiele & Small Parameter	rs <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	103.9 I	Sd	855.3 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 9.0 mm	X var (6)	+/- 9.0 mm
η	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) 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.

### **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

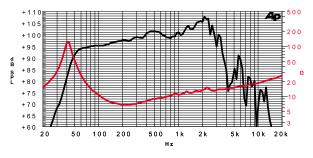


Professional





General Specifications			
Nominal Diameter			388 mm / 15 in
Nominal Impedance			8 Ω
Rated Power AES (1)			400 W
Continuous Program Pov	/er <sup>(2)</sup>		800 W
Sensitivity @ 1W/1m <sup>(3)</sup>			99.7 dE
Voice Coil Diameter			75 mm / 3 in
Voice Coil Winding Depth	l		20 mm
Magnetic Gap Depth			10 mm
Flux Density			1.42 T
Magnet Weight			560 g
Net Weight			4.0 kg
Thiele & Small Parame	ters <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	BxI	21.40 Tm
Vas	166.1 I	Sd	855.3 cm <sup>2</sup>
X max (5)	+/- 6.5 mm	X var (6)	+/- 11.0 mm
η	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) 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.

### **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

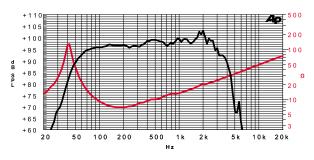


Professional



SNDW WpT VM

General Specifications			
Nominal Diameter			389 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 (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	rs <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 I	Sd	855.3 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 5.5 mm	X var (6)	+/- 10.0 mm
η	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

(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.

### **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)

Frequency Range 35-2000 Hz

97.2 dB sensitivity

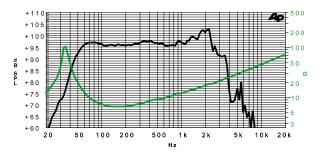


Subwoofer





General Specifications			
Nominal Diameter			388 mm / 15 ir
Nominal Impedance			8 (
Rated Power AES (1)			400 V
Continuous Program Power	(2)		800 V
Sensitivity @ 1W/1m (3)			97.2 dE
Voice Coil Diameter			75 mm / 3 ir
Voice Coil Winding Depth			24 mn
Magnetic Gap Depth			10 mn
Flux Density			1.22
Magnet Weight			360 (
Net Weight			3.9 kį
Thiele & Small Parameters	S <sup>(4)</sup>		
Re	5.2 Ω	Fs	33.0 H
Qms	14.10	Qes	0.39
Qts	0.38	Mms	105.0 (
Cms	221 µm/N	Bxl	17.10 Tn
Vas	230.0 I	Sd	855.3 cm
X max (5)	+/- 8.0 mm	X var (6)	+/- 11.1 mn
η	2.06%	Le (1KHz)	1.15 mł



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

(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.

### **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

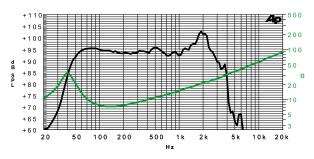


Subwoofer





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 <sup>(3)</sup>			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 Parameter	S <sup>(4)</sup>		
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 l	Sd	855.3 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 7.0 mm	X var (6)	+/- 9.0 mm
η	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

(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

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

#### Code **Z008020**

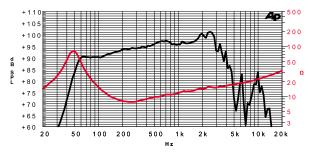
4" Sandwich voice coil Kapton former (SNDW) Double Cross Spider with Progressive Waves (DCSP) Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT) Neodymium Magnet Circuit with Copper Demodulating Ring (CDR) Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 97.1 dB sensitivity Frequency Range 50-3000 Hz







General Specifications			
Nominal Diameter			321 mm / 12 ir
Nominal Impedance			8 0
Rated Power AES (1)			1000 W
Continuous Program Power	2)		2000 W
Sensitivity @ 1W/1m (3)			97.1 dE
Voice Coil Diameter			100 mm / 4 ir
Voice Coil Winding Depth			21 mm
Magnetic Gap Depth			12 mm
Flux Density			1.10
Magnet Weight			536 (
Net Weight			6.6 k <u>(</u>
Thiele & Small Parameters	S <sup>(4)</sup>		
Re	5.2 Ω	Fs	48.0 Hz
Qms	4.41	Qes	0.25
Qts	0.24	Mms	93.6 (
Cms	115 µm/N	Bxl	24.70 Tr
Vas	46.3 I	Sd	530.9 cm
X max <sup>(5)</sup>	+/- 7.0 mm	X var (6)	+/- 9.0 mm
η	1.99%	Le (1KHz)	0.74 mł



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

(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 ))

### **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

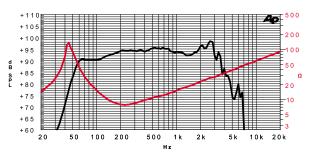


Professional





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	ers <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	BxI	25.80 Tm
Vas	49.9 I	Sd	530.9 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 5.5 mm	X var (6)	+/- 9.0 mm
η	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

(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 S 4 PL** 12" | 2000 W

#### Code **Z007951**

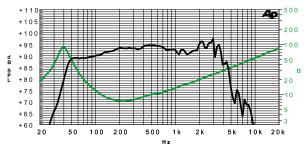
4" Sandwich voice coil Fiberglass former (SNDW) Double Cross Spider with Progressive Waves (DCSP) Cloth surround with Double Asymmetric Rolls Technology (DAR) Autoclave Waterproof Cone Treatment (AWpT) Neodymium Magnet Circuit Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 95.5 dB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







General Specifications			
Nominal Diameter			321 mm / 12 ir
Nominal Impedance			8 Ω
Rated Power AES (1)			1000 W
Continuous Program Power	2)		2000 W
Sensitivity @ 1W/1m (3)			95.5 dE
Voice Coil Diameter			100 mm / 4 ir
Voice Coil Winding Depth			27 mm
Magnetic Gap Depth			12 mm
Flux Density			1.21 1
Magnet Weight			536 g
Net Weight			6.6 kg
Thiele & Small Parameters	(4)		
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 l	Sd	530.9 cm <sup>2</sup>
X max (5)	+/- 7.5 mm	X var (6)	+/- 9.0 mm
η	1.39%	Le (1KHz)	1.15 mH



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

#### **Constructive Characteristics**

Neodymi	Magnet
Aluminium Die-C	Basket Material
Сор	Voice Coil Winding Material
Fibergl	Voice Coil Former Material
Pa	Cone Material
Humidity Resistant F	Cone Treatment
Treated Cl	Surround Material
Solid Pa	Dust Dome Material
	Mounting Information
320 г	Overall Diameter
284 1	Baffle Cutout Diameter
8 holes 6x9 on ø 301 r	Mounting Holes
154.8 г	Total Depth

(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 PFS 4** 12" | 2000 W

#### Code **Z007954**

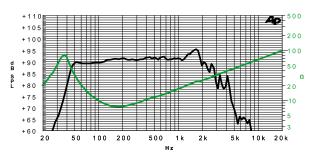
4" Sandwich voice coil Fiberglass former (SNDW) Double Cross Konex Spider with Progressive Waves (DCSP) Triple Roll Cloth surround (TR) Total Waterproof Cone Treatment (TWpT) High Excursion Ferrite Magnet Circuit (HeF) Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 94.8 dB sensitivity 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 Power (2)			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 Parameters	(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	Bxl	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
η	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

(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 N 3 PL** 12" | 800 W

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

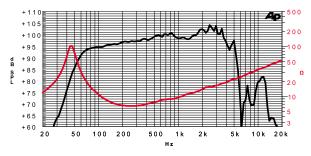


Professional





General Specifications			
Nominal Diameter			320 mm / 12 ir
Nominal Impedance			8 Ω
Rated Power AES (1)			400 W
Continuous Program Power	2)		800 W
Sensitivity @ 1W/1m (3)			98.5 dE
Voice Coil Diameter			75 mm / 3 ir
Voice Coil Winding Depth			21 mm
Magnetic Gap Depth			10 mm
Flux Density			1.18 1
Magnet Weight			360 g
Net Weight			3.5 kg
Thiele & Small Parameters	s <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	Sd	530.9 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 5.5 mm	X var (6)	+/- 9.0 mm
η	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

(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 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

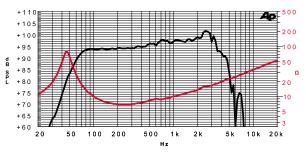




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MADE IN ITALY

General Specifications			
Nominal Diameter			321 mm / 12 in
Nominal Impedance			8 Ω
Rated Power AES (1)			500 W
Continuous Program Powe	r <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
η	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

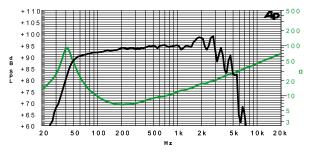
Frequency Range 40-2000 Hz







General Specifications			
Nominal Diameter			320 mm / 12 ir
Nominal Impedance			8 0
Rated Power AES (1)			400 W
Continuous Program Power	(2)		800 W
Sensitivity @ 1W/1m (3)			95.8 dE
Voice Coil Diameter			75 mm / 3 ir
Voice Coil Winding Depth			24 mm
Magnetic Gap Depth			10 mm
Flux Density			1.22
Magnet Weight			360 <u>(</u>
Net Weight			3.5 kç
Thiele & Small Parameter	S <sup>(4)</sup>	_	
Re	5.2 Ω	Fs	42.0 Hz
Qms	6.10	Qes	0.36
Qts	0.34	Mms	74.8 <u>(</u>
Cms	192 µm/N	Bxl	16.80 Tm
Vas	76.9 I	Sd	530.9 cm
X max (5)	+/- 7.0 mm	X var (6)	+/- 9.0 mm
η	1.51%	Le (1KHz)	1.04 mF



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

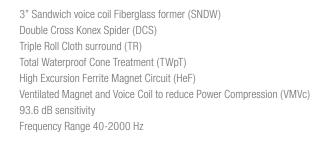
#### **Constructive Characteristics**

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.

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

Code **Z007847** 





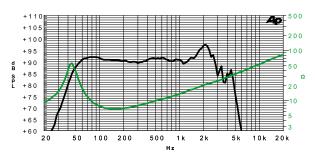




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MADE IN ITALY

General Specifications			
Nominal Diameter			321 mm / 12 in
Nominal Impedance			8 Ω
Rated Power AES (1)			500 W
Continuous Program Powe	r <sup>(2)</sup>		1000 W
Sensitivity @ 1W/1m (3)			93.6 dB
Voice Coil Diameter			75 mm / 3 in
Voice Coil Winding Depth			24 mm
Magnetic Gap Depth			10 mm
Flux Density			1.04 T
Magnet Weight			1790 g
Net Weight			6.7 kg
Thiele & Small Paramete	ers <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
η	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

(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 SR 3 PL** 12" | 800 W

Code **Z007948** 

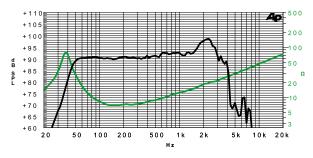
3" Sandwich voice coil Fiberglass former (SNDW) Double Cross Konex Spider (DCS) Rubber surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) High Excursion Neodymium Magnet Circuit (HeN) Ventilated Voice Coil to reduce Power Compression (VVc) 91.8 dB sensitivity Frequency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







General Specifications			
Nominal Diameter			320 mm / 12 ir
Nominal Impedance			8 Ω
Rated Power AES (1)			400 W
Continuous Program Power	2)		800 W
Sensitivity @ 1W/1m (3)			91.8 dE
Voice Coil Diameter			75 mm / 3 ir
Voice Coil Winding Depth			24 mm
Magnetic Gap Depth			10 mm
Flux Density			1.19 1
Magnet Weight			360 g
Net Weight			3.5 kg
Thiele & Small Parameters	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 <sup>(5)</sup>	+/- 7.0 mm	X var (6)	+/- 11.0 mm
η	0.61%	Le (1KHz)	1.15 mF



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

#### Constructive Characteristics

Neodymiun	Magnet
Aluminium Die-Cas	Basket Material
Сорре	Voice Coil Winding Material
Fiberglass	Voice Coil Former Material
Pape	Cone Material
Surface Waterproof Treatmen	Cone Treatment
Rubbe	Surround Material
Solid Pape	Dust Dome Material
	Mounting Information
320 mr	Overall Diameter
284 mn	Baffle Cutout Diameter
8 holes ø 6 on ø 300 mn	Mounting Holes
142.9 mn	Total Depth

Neadvmium

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MADE IN ITALY

(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 SR 3 CP** 12" | 900 W

#### Code **Z007942**

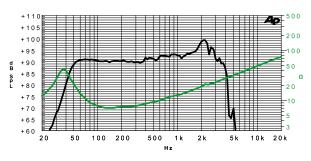
3" Sandwich voice coil Fiberglass former (SNDW) Double Cross Konex Spider (DCS) Rubber surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) High Excursion Ferrite Magnet Circuit (HeF) Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 92.4 dB sensitivity 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 µm/N	Bxl	16.39 Tm
Vas 64.0 I	Sd	490.9 cm <sup>2</sup>
X max <sup>(5)</sup> +/- 6.0 mm	X var (6)	+/- 8.8 mm
η <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

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

Code **Z007903** 

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

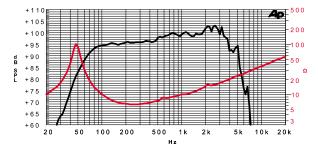


Professional





General Specifications			
Nominal Diameter			318 mm / 12 ir
Nominal Impedance			8 0
Rated Power AES (1)			300 V
Continuous Program Power	(2)		600 V
Sensitivity @ 1W/1m (3)			97.3 dE
Voice Coil Diameter			65 mm / 2.5 ir
Voice Coil Winding Depth			14 mn
Magnetic Gap Depth			8 mn
Flux Density			1.15
Magnet Weight			220 (
Net Weight			2.3 kį
Thiele & Small Parameter	s <sup>(4)</sup>		
Re	5.5 Ω	Fs	47.5 H
Qms	7.50	Qes	0.38
Qts	0.36	Mms	47.0 (
Cms	239 µm/N	Bxl	14.20 Tn
Vas	81.8 I	Sd	490.9 cm
X max <sup>(5)</sup>	+/- 3.7 mm	X var (6)	+/- 6.0 mn
η	2.21%	Le (1KHz)	0.75 mł



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

(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 D 1,5 CS 12" 260 W

Dual Cone

96.9 dB sensitivity

Frequency Range 65-15000 Hz

Code **Z007360** 



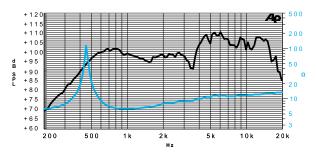


Dual Cone





General Specifications			
Nominal Diameter			318 mm / 12 in
Nominal Impedance			8 Ω
Rated Power AES (1)			130 W
Continuous Program Powe	r <sup>(2)</sup>		260 W
Sensitivity @ 1W/1m (3)			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 Paramete	ers <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 <sup>(5)</sup>	+/- 2.7 mm	X var (6)	+/- 5.0 mm
η	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

(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

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

#### Code **Z006950**

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

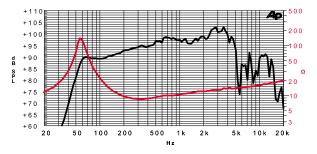
Frequency Range 55-4000 Hz







General Specifications			
Nominal Diameter			269 mm / 10 in
Nominal Impedance			8 Ω
Rated Power AES (1)			800 W
Continuous Program Power	)		1600 W
Sensitivity @ 1W/1m (3)			95.8 dE
Voice Coil Diameter			100 mm / 4 in
Voice Coil Winding Depth			19 mm
Magnetic Gap Depth			12 mm
Flux Density			1.10 T
Magnet Weight			536 g
Net Weight			6.3 kg
Thiele & Small Parameters	(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 I	Sd	346.4 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 5.0 mm	X var (6)	+/- 7.0 mm
η	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-Cas
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

(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 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

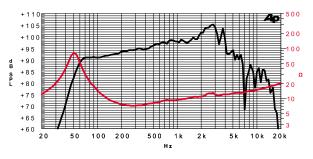
Frequency Range 50-3000 Hz





SNDW PS DAR AWPT CDR VMVc

General Specifications		-	
Nominal Diameter			268 mm / 10 in
Nominal Impedance			8 Ω
Rated Power AES (1)			400 W
Continuous Program Power <sup>(2)</sup>			800 W
Sensitivity @ 1W/1m <sup>(3)</sup>			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 Parameters (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	40.0 l	Sd	346.4 cm <sup>2</sup>
X max (5)	+/- 6.5 mm	X var (6)	+/- 8.5 mm
η₀	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

(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

Professional

### **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

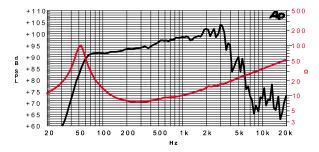


Professional





General Specifications			
Nominal Diameter			269 mm / 10 ir
Nominal Impedance			8 0
Rated Power AES (1)			450 W
Continuous Program Power	(2)		900 W
Sensitivity @ 1W/1m (3)			95.9 dE
Voice Coil Diameter			75 mm / 3 ir
Voice Coil Winding Depth			17 mm
Magnetic Gap Depth			10 mm
Flux Density			1.08 1
Magnet Weight			1790 g
Net Weight			6.6 kg
Thiele & Small Parameter	S <sup>(4)</sup>		
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 Tr
Vas	38.6 l	Sd	346.4 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 5.0 mm	X var (6)	+/- 7.5 mm
η	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

(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.

#### Subwoofer

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

#### Code **Z006015**

3" Sandwich voice coil Fiberglass former (SNDW)

Konex Spider with Progressive Waves (PS)

Cloth surround with Double Asymmetric Rolls Technology (DAR)

 $\label{eq:autoclave} Autoclave \ Waterproof \ Cone \ Treatment \ (AWpT)$ 

High Excursion Neodymium Magnet Circuit (HeN)

Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc)

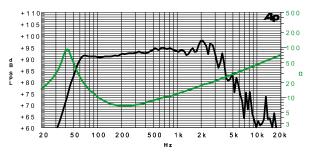
94.5 dB sensitivity Frequency Range 40-2000 Hz







General Specifications			
Nominal Diameter			268 mm / 10 in
Nominal Impedance			8 Ω
Rated Power AES (1)			400 W
Continuous Program Power	(2)		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 Parameter	'S <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
η	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.

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

Code **Z006017** 

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

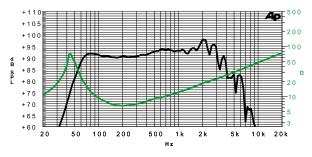


Subwoofer





General Specifications			
Nominal Diameter			269 mm / 10 ir
Nominal Impedance			8 Ω
Rated Power AES (1)			450 W
Continuous Program Power	2)		900 W
Sensitivity @ 1W/1m (3)			93.8 dE
Voice Coil Diameter			75 mm / 3 ir
Voice Coil Winding Depth			24 mm
Magnetic Gap Depth			10 mm
Flux Density			1.00 1
Magnet Weight			1790 g
Net Weight			6.5 kg
Thiele & Small Parameters	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	Sd	346.4 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 7.0 mm	X var (6)	+/- 8.5 mm
η	0.91%	Le (1KHz)	1.19 mF



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

#### Constructive Characteristics

Ferri	Magnet
Aluminium Die-Ca	Basket Material
Copp	Voice Coil Winding Material
Fiberglas	Voice Coil Former Material
Pap	Cone Material
Humidity Resistant Pu	Cone Treatment
Treated Clo	Surround Material
Solid Pap	Dust Dome Material
	Mounting Information
268 m	Overall Diameter
232 m	Baffle Cutout Diameter
8 holes 6x9 on ø 247 m	Mounting Holes
122.5 m	Total Depth

(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

### 10″ 600 W

10 N 2,5 PL

#### Code **Z005701**

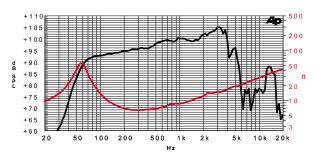
2,5" voice coil Kapton former and Aluminium Winding Spider with Progressive Waves (PS) Cloth surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) Neodymium Magnet Circuit Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 96.6 dB sensitivity Frequency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







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 (3)			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 Parameter	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	40.9 I	Sd	346.4 cm <sup>2</sup>
X max (5)	+/- 4.5 mm	X var (6)	+/- 7.0 mm
η	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

38

### **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

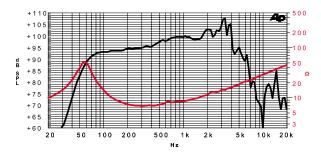


Professional





General Specifications			
Nominal Diameter			269 mm / 10 ir
Nominal Impedance			8 Ω
Rated Power AES (1)			300 W
Continuous Program Power	2)		600 W
Sensitivity @ 1W/1m (3)			96.3 dE
Voice Coil Diameter			65 mm / 2.5 ir
Voice Coil Winding Depth			12 mm
Magnetic Gap Depth			8 mm
Flux Density			1.17 1
Magnet Weight			1430 g
Net Weight			4.9 kg
Thiele & Small Parameters	s <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	BxI	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
η	1.76%	Le (1KHz)	0.46 mH



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

#### **Constructive Characteristics** Ferrite Magnet 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

(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.

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

Code **Z006013** 

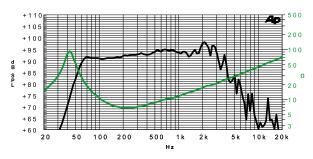
2,5" voice coil Fiberglass former
High Excursion Rubber surround (RHE)
Waterproof Cone Treatment (WpT)
High Excursion Ferrite Magnet Circuit (HeF)
Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc)
93.0 dB sensitivity
Frequency Range 35-2000 Hz







General Specifications			
Nominal Diameter			269 mm / 10 in
Nominal Impedance			Ω 8
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 Parameters (4)		_	
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	BxI	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
η₀	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

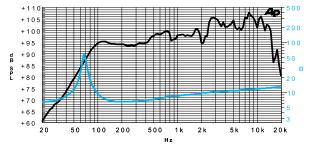


Dual Cone





General Specifications			
Nominal Diameter			266 mm / 10 ir
Nominal Impedance			8 0
Rated Power AES (1)			100 W
Continuous Program Power	(2)		200 W
Sensitivity @ 1W/1m (3)			93.9 dE
Voice Coil Diameter			38 mm / 1.5 ir
Voice Coil Winding Depth			9 mm
Magnetic Gap Depth			6 mm
Flux Density			0.95 1
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 Trr
Vas	37.5 I	Sd	330.1 cm <sup>2</sup>
X max (5)	+/- 2.5 mm	X var (6)	+/- 5.0 mm
η	0.92%	Le (1KHz)	0.26 mH



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

#### **Constructive Characteristics**

Ferr	Magnet
Pressed Sheet Ste	Basket Material
Сорг	Voice Coil Winding Material
Kapt	Voice Coil Former Material
Pap	Cone Material
	Cone Treatment
Paper - Integrat	Surround Material
Non Treated Clo	Dust Dome Material
	Mounting Information
266 m	Overall Diameter
237 m	Baffle Cutout Diameter
8 holes 5x9 on ø 250 m	Mounting Holes
97.4 m	Total Depth

(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 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

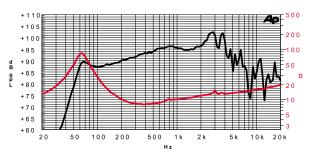


Professional





General Specifications			
Nominal Diameter			210 mm / 8 in
Nominal Impedance			8 Ω
Rated Power AES (1)			400 W
Continuous Program Pow	er <sup>(2)</sup>		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 Paramet	ers (4)		
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	Bxl	16.10 Tm
Vas	12.2 I	Sd	213.8 cm <sup>2</sup>
X max (5)	+/- 5.0 mm	X var (6)	+/- 6.5 mm
η	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	

(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 N 2,5 PL** 8" | 600 W

#### Code **Z005200**

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

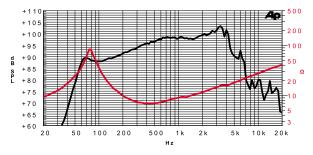


Professional





General Specifications			
Nominal Diameter			210 mm / 8 ir
Nominal Impedance			8 0
Rated Power AES (1)			300 W
Continuous Program Power	2)		600 W
Sensitivity @ 1W/1m (3)			96.4 dE
Voice Coil Diameter			65 mm / 2.5 ir
Voice Coil Winding Depth			13 mm
Magnetic Gap Depth			8 mm
Flux Density			1.22
Magnet Weight			220 g
Net Weight			1.8 kç
Thiele & Small Parameters	S <sup>(4)</sup>		
Re	5.6 Ω	Fs	77.0 Hz
Qms	4.21	Qes	0.33
Qts	0.30	Mms	20.3 (
Cms	210 µm/N	Bxl	12.95 Tr
Vas	13.7 I	Sd	213.8 cm
X max <sup>(5)</sup>	+/- 3.5 mm	X var (6)	+/- 6.2 mm
η	1.83%	Le (1KHz)	0.37 mł



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

Neodymium Aluminium Die-Cast Aluminium
Aluminium
Kapton
Paper
Surface Waterproof Treatment
Treated Cloth
Solid Paper
210 mm
184 mm
4 holes 5.5x7.5 on ø 196 mm
90 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.

### 8 Fe 2,5 CP 8" 600 W

#### Code **Z005203**

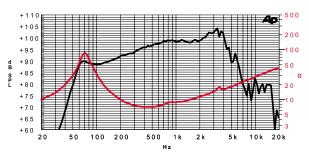
2,5" voice coil Kapton former and Aluminium Winding
Spider with Progressive Waves (PS)
Cloth surround with Double Asymmetric Rolls Technology (DAR)
Waterproof Cone Treatment (WpT)
Balanced Ferrite Magnet Circuit with Aluminium Demodulating Ring (BMF)
Ventilated Magnet and Voice Coil to reduce Power Compression (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 Parameter	'S <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	BxI	13.01 Tm
Vas	15.6 l	Sd	213.8 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 4.0 mm	X var (6)	+/- 6.5 mm
η	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.

MADE IN ITALY

### Professional

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

Code **Z005205** 

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

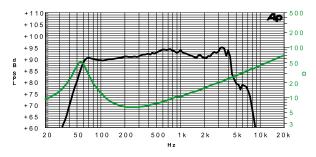


Subwoofer





General Specifications			
Nominal Diameter			210 mm / 8 ir
Nominal Impedance			8 0
Rated Power AES (1)			300 W
Continuous Program Power (2	)		600 W
Sensitivity @ 1W/1m (3)			93.0 dE
Voice Coil Diameter			65 mm / 2.5 ir
Voice Coil Winding Depth			18 mm
Magnetic Gap Depth			8 mm
Flux Density			0.89
Magnet Weight			1430 <u>(</u>
Net Weight			4.5 kç
Thiele & Small Parameters	(4)		
Re	5.1 Ω	Fs	54.0 Hz
Qms	3.44	Qes	0.37
Qts	0.33	Mms	30.3 (
Cms	287 µm/N	Bxl	11.90 Tm
Vas	18.6 I	Sd	213.8 cm
X max <sup>(5)</sup>	+/- 5.0 mm	X var (6)	+/- 7.0 mm
η	0.76%	Le (1KHz)	1.00 mF



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

(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 H 2 CP 8" 400 W

#### Code **Z005158**



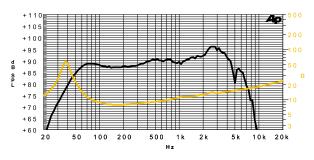
2" voice coil Kapton former Spider with Progressive Waves (PS) Damping Cone Treatment (DT) Balanced Ferrite Magnet Circuit with Copper Demodulating Ring (CDR) Ventilated Magnet to reduce Power Compression (VM) 88.8 dB sensitivity Frequency Range 35-3000 Hz





PS DT CDR VM

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)		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 Parameters (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 34.81	Sd	213.8 cm <sup>2</sup>
X max <sup>(5)</sup> +/- 6.5 mm	X var (6)	+/- 9.0 mm
η <sub>0</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	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	93.0 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.

### **8 L 2 SL** 8″ | 400 W

Code **Z005055** 

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

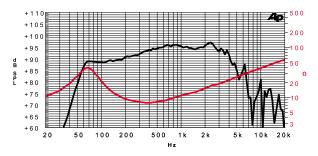


Professional





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 Paramet	ers (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
η	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	
Mounting Holes	4 holes ø 4.5 on ø 198.5 mm
Total Depth	94.5 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.

### 8 Fe 2 CP 8" 400 W

#### Code **Z005112**



Professional

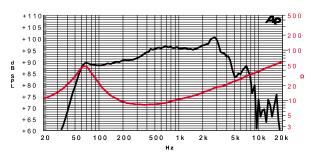
2" voice coil Kapton former Cloth surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) Balanced Ferrite Magnet Circuit with Aluminium Demodulating Ring (BMF) Ventilated Magnet to reduce Power Compression (VM) 94.6 dB sensitivity Frequency Range 65-3000 Hz



BMF

VM

General Specifications			
Nominal Diameter			210 mm / 8 in
Nominal Impedance			8 Ω
Rated Power AES (1)			200 W
Continuous Program Power <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 Parameters (4)			
Re	6.1 Ω	Fs	67.0 Hz
Qms	2.27	Qes	0.37
Qts	0.32	Mms	21.7 g
Cms 2	260 µm/N	Bxl	12.27 Tm
Vas	16.9 l	Sd	213.8 cm <sup>2</sup>
X max (5) +/	'- 4.5 mm	X var (6)	+/- 7.0 mm
n₀	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 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	

(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 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



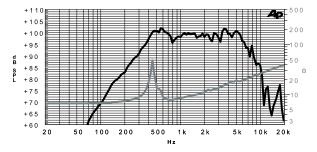




Midrange



General Specifications			
Nominal Diameter			208 mm / 8 in
Nominal Impedance			8 Ω
Rated Power AES (1)			100 W
Continuous Program Power	(2)		200 W
Sensitivity @ 1W/1m (3)			98.7 dB
Voice Coil Diameter			38 mm / 1.5 in
Voice Coil Winding Depth			8 mm
Magnetic Gap Depth			6 mm
Flux Density			1.15 T
Magnet Weight			640 g
Net Weight			2.7 kg
Thiele & Small Parameter	S <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 (5)	+/- 1.0 mm	X var (6)	+/- 1.0 mm
η	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.

### 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

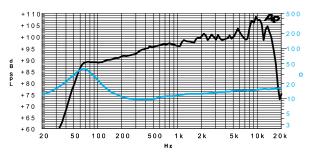


Dual Cone





General Specifications			
Nominal Diameter			208 mm / 8 in
Nominal Impedance			8 Ω
Rated Power AES (1)			130 W
Continuous Program Power	· (2)		260 W
Sensitivity @ 1W/1m (3)			95.3 dB
Voice Coil Diameter			38 mm / 1.5 in
Voice Coil Winding Depth			10 mm
Magnetic Gap Depth			8 mm
Flux Density			1.10 T
Magnet Weight			1100 g
Net Weight			3.1 kg
Thiele & Small Paramete	rs <sup>(4)</sup>		
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	BxI	11.18 Tm
Vas	25.5 I	Sd	213.8 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 2.5 mm	X var <sup>(6)</sup>	+/- 4.0 mm
η	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

(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.

### **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

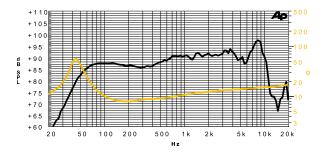


**Studio Monitor** 





General Specifications			
Nominal Diameter			174 mm / 6.5 ir
Nominal Impedance			8 Ω
Rated Power AES (1)			120 W
Continuous Program Power	2)		240 W
Sensitivity @ 1W/1m (3)			89.4 dE
Voice Coil Diameter			38 mm / 1.5 ir
Voice Coil Winding Depth			15 mm
Magnetic Gap Depth			6 mm
Flux Density			0.90 1
Magnet Weight			515 g
Net Weight			1.6 kg
Thiele & Small Parameters	S <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	20.2 l	Sd	122.7 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 6.0 mm	X var (6)	+/- 8.5 mm
η	0.40%	Le (1KHz)	0.48 mF



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.

## **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

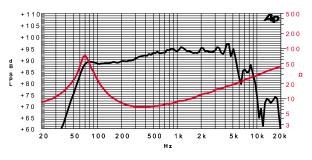


Professional





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 <sup>(3)</sup>			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
η	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

(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.

## **6 N 2 PL** 6" | 400 W

#### 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

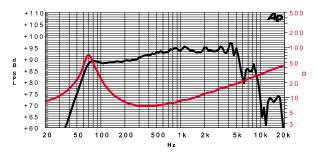


Professional





General Specifications			
Nominal Diameter			166 mm / 6 ir
Nominal Impedance			8 Ω
Rated Power AES (1)			200 W
Continuous Program Power	2)		400 W
Sensitivity @ 1W/1m (3)			92.3 dE
Voice Coil Diameter			50 mm / 2 ir
Voice Coil Winding Depth			15 mm
Magnetic Gap Depth			8 mm
Flux Density			1.20 1
Magnet Weight			160 g
Net Weight			1.5 kg
Thiele & Small Parameters	S <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 I	Sd	122.7 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 3.5 mm	X var (6)	+/- 5.0 mm
η	0.72%	Le (1KHz)	0.61 mF



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

#### **Constructive Characteristics**

Magnet	Neodymium
Basket Material	Aluminium Die-Cas
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

MADE IN ITALY

## **6 NR 2 PL** 6" | 400 W

#### Code **Z004068**

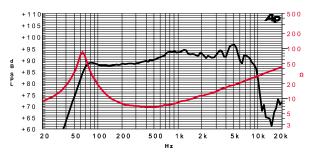
2" voice coil Fiberglass former and Aluminium Winding Spider with Progressive Waves (PS) Rubber surround with Double Asymmetric Rolls Technology (DAR) Waterproof Cone Treatment (WpT) Neodymium Magnet Circuit Ventilated Magnet and Voice Coil to reduce Power Compression (VMVc) 91.4 dB sensitivity Frequency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







General Specifications			
Nominal Diameter			166 mm / 6 in
Nominal Impedance			8 Ω
Rated Power AES (1)			200 W
Continuous Program Power	r <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 Paramete	rs <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	BxI	9.86 Tm
Vas	9.41	Sd	122.7 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 4.0 mm	X var (6)	+/- 6.5 mm
η	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

(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

#### Professional

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

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

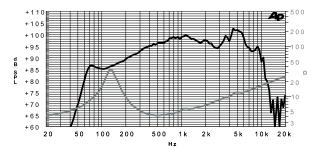
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MADE IN ITALY





General Specifications			
Nominal Diameter			166 mm / 6 in
Nominal Impedance			4 Ω
Rated Power AES (1)			150 W
Continuous Program Power	2)		300 W
Sensitivity @ 1W/1m (3)			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 Parameters	s <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 I	Sd	138.9 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 2.0 mm	X var (6)	+/- 4.0 mm
η	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**



Professional

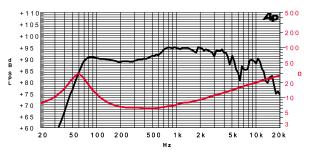
1,5" voice coil Aluminium former

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





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 I	Sd	122.7 cm <sup>2</sup>
X max (5)	+/- 2.5 mm	X var (6)	+/- 3.9 mm
η	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	

(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

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

### Code **Z004035**

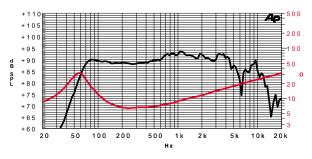
1,5" voice coil Aluminium former
Rubber surround with Double Asymmetric Rolls Technology (DAR)
Waterproof Cone Treatment (WpT)
Ferrite Magnet Circuit
Ventilated Voice Coil to reduce Power Compression (VVc)
91.5 dB sensitivity
Frequency Range 60-4000 Hz







General Specifications			
Nominal Diameter			164 mm / 6 in
Nominal Impedance			8 Ω
Rated Power AES (1)			100 W
Continuous Program Power	(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 Parameter	S <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
η	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

(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.

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

Code **Z004065** 



1,5" voice coil Aluminium formerDual ConeNeodymium Magnet Circuit with Copper Demodulating Ring (CDR)93.9 dB sensitivityFrequency Range 110-15000 Hz

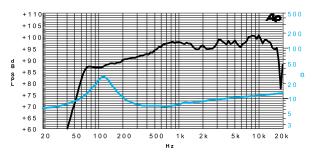




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MADE IN ITALY

General Specifications			
Nominal Diameter			165 mm / 6 in
Nominal Impedance			8 Ω
Rated Power AES (1)			130 W
Continuous Program Pow	er <sup>(2)</sup>		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 Paramet	ers (4)		
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
η	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

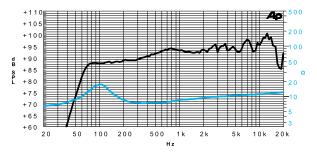


Dual Cone





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	Sd	122.7 cm <sup>2</sup>
X max (5)	+/- 1.5 mm	X var (6)	+/- 4.0 mm
η	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**

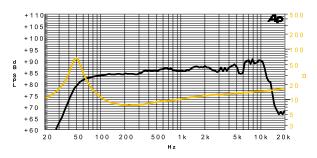
1,5" voice coil Kapton former Rubber surround with Double Asymmetric Rolls Technology (DAR) Damping Cone Treatment (DT) Ferrite Magnet Circuit with Copper Demodulating Ring (CDR) Ventilated Magnet to reduce Power Compression (VM) 86.7 dB sensitivity Frequency Range 48-5500 Hz





DAR DT CDR VM

General Specifications			
Nominal Diameter			150 mm / 5.5 in
Nominal Impedance			8 Ω
Rated Power AES (1)			120 W
Continuous Program Power	(2)		240 W
Sensitivity @ 1W/1m (3)			86.7 dB
Voice Coil Diameter			38 mm / 1.5 in
Voice Coil Winding Depth			15 mm
Magnetic Gap Depth			6 mm
Flux Density			0.98 T
Magnet Weight			515 g
Net Weight			1.5 kg
Thiele & Small Parameter	S <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
$\eta_0$	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

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MADE IN ITALY

# **5 N 1,5 PL**

5" 260 W

Code **Z002647** 



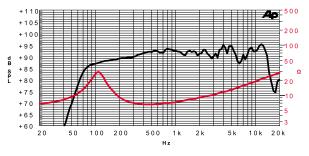








General Specifications			
Nominal Diameter			132 mm / 5 in
Nominal Impedance			8 Ω
Rated Power AES (1)			130 W
Continuous Program Power	2)		260 W
Sensitivity @ 1W/1m (3)			91.0 dE
Voice Coil Diameter			38 mm / 1.5 in
Voice Coil Winding Depth			12 mm
Magnetic Gap Depth			6 mm
Flux Density			1.14 T
Magnet Weight			98 g
Net Weight			0.8 kg
Thiele & Small Parameters	S <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	BxI	6.21 Tm
Vas	3.0 I	Sd	84.9 cm <sup>2</sup>
X max (5)	+/- 3.0 mm	X var (6)	+/- 4.0 mm
η	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

(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

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

#### 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





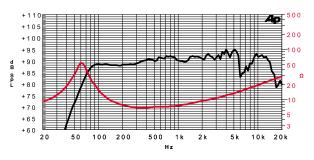


DAR WpT VVc

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MADE IN ITALY

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 Parameter	S <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	BxI	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
η	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**

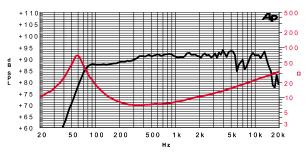
1,5" voice coil Kapton former and Aluminium Winding
Rubber surround with Double Asymmetric Rolls Technology (DAR)
Waterproof Cone Treatment (WpT)
Ferrite Magnet Circuit
Ventilated Voice Coil to reduce Power Compression (VVc)
90.8 dB sensitivity
Frequency Range 60-5000 Hz







General Specifications			
Nominal Diameter			132 mm / 5 in
Nominal Impedance			8 Ω
Rated Power AES (1)			100 W
Continuous Program Power	(2)		200 W
Sensitivity @ 1W/1m <sup>(3)</sup>			90.8 dE
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 Parameter	S <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	BxI	6.95 Tm
Vas	8.4 I	Sd	78.5 cm²
X max <sup>(5)</sup>	+/- 3.5 mm	X var (6)	+/- 6.0 mm
η	0.51%	Le (1KHz)	0.48 mH



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

#### **Constructive Characteristics**

Magnet
Basket Material
Voice Coil Winding Material
Voice Coil Former Material
Cone Material
Cone Treatment
Surround Material
Dust Dome Material
Mounting Information
Overall Diameter
Baffle Cutout Diameter
Mounting Holes
Total Depth

(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.

### **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





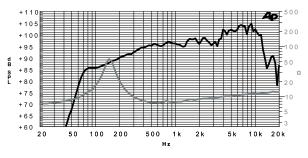


MADE IN ITALY

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General Specifications			
Nominal Diameter			132 mm / 5 in
Nominal Impedance			8 Ω
Rated Power AES (1)			130 W
Continuous Program Powe	er <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			7 mm
Magnetic Gap Depth			6 mm
Flux Density			1.20 T
Magnet Weight			121 g
Net Weight			0.8 kg
Thiele & Small Paramet	ers <sup>(4)</sup>		
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	2.0	Sd	84.9 cm <sup>2</sup>
X max (5)	+/- 1.5 mm	X var (6)	+/- 2.5 mm
η	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

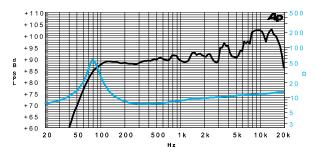


Dual Cone





General Specifications			
Nominal Diameter			129 mm / 5 ir
Nominal Impedance			8 0.
Rated Power AES (1)			60 W
Continuous Program Power	2)		120 W
Sensitivity @ 1W/1m (3)			90.0 dE
Voice Coil Diameter			25 mm / 1 ir
Voice Coil Winding Depth			9 mm
Magnetic Gap Depth			6 mm
Flux Density			0.95
Magnet Weight			280 <u>(</u>
Net Weight			0.9 kç
Thiele & Small Parameters	S <sup>(4)</sup>		
Re	6.0 Ω	Fs	79.0 Hz
Qms	4.95	Qes	0.58
Qts	0.52	Mms	6.4 <u>(</u>
Cms	634 µm/N	Bxl	5.73 Tr
Vas	5.5 l	Sd	78.5 cm
X max (5)	+/- 3.0 mm	X var (6)	+/- 4.5 mm
η	0.45%	Le (1KHz)	0.33 mł



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

#### **Constructive Characteristics**

agnet	Ferrite	
sket Material	Pressed Sheet Steel	
ice Coil Winding Material	Copper	
ice Coil Former Material	Epotex	
ne Material	Paper	
ne Treatment	Surface Waterproof Treatment	
rround Material	Rubber	
ist Dome Material	Non Treated Clot	
ounting Information		
erall Diameter	130 mm	
ffle Cutout Diameter	113 mm	
punting Holes	4 holes 4.7x10 on ø 139 mm	
tal Depth	58.1 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.

### **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



Code **Z001449** 







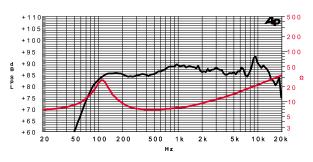
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MADE IN ITALY

WpT

BNd

General Specificati	ons		
Nominal Diameter			102 mm / 4 in
Nominal Impedance			8 Ω
Rated Power AES (1)			60 W
Continuous Program	Power <sup>(2)</sup>		120 W
Sensitivity @ 1W/1m	(3)		86.2 dB
Voice Coil Diameter			25 mm / 1 in
Voice Coil Winding D	epth		9 mm
Magnetic Gap Depth			5 mm
Flux Density			0.99 T
Magnet Weight			42 g
Net Weight			0.2 kg
Thiele & Small Para	imeters <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	BxI	5.10 Tm
Vas	1.21	Sd	44.2 cm <sup>2</sup>
X max (5)	+/- 2.4 mm	X var (6)	+/- 4.0 mm
$\eta_0$	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

Code **Z001804** 

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MADE IN ITALY

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

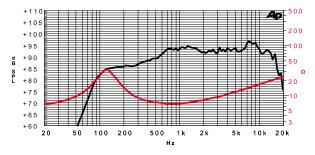








General Specifications			
Nominal Diameter			104 mm / 4 in
Nominal Impedance			8 Ω
Rated Power AES (1)			70 W
Continuous Program Power	2)		140 W
Sensitivity @ 1W/1m (3)			90.5 dB
Voice Coil Diameter			25 mm / 1 in
Voice Coil Winding Depth			10 mm
Magnetic Gap Depth			5 mm
Flux Density			1.39 T
Magnet Weight			92 g
Net Weight			0.4 kg
Thiele & Small Parameters	S <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	1.2	Sd	44.2 cm <sup>2</sup>
X max (5)	+/- 2.5 mm	X var (6)	+/- 4.1 mm
η	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 Ogiv	
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





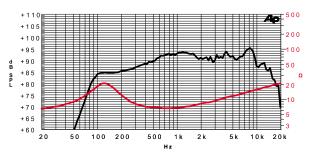
1" voice coil Aluminium former and Aluminium Winding Waterproof Cone Treatment (WpT) Ferrite Magnet Circuit 90.0 dB sensitivity Frequency Range 120-10000 Hz



MADE IN ITALY



General Specificatio	ns		
Nominal Diameter			104 mm / 4 in
Nominal Impedance			8 Ω
Rated Power AES (1)			70 W
Continuous Program F	Ower (2)		140 W
Sensitivity @ 1W/1m	3)		90.0 dB
Voice Coil Diameter			25 mm / 1 in
Voice Coil Winding De	pth		9 mm
Magnetic Gap Depth			6 mm
Flux Density			1.10 T
Magnet Weight			380 g
Net Weight			1.0 kg
Thiele & Small Parar	neters <sup>(4)</sup>		
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	1.31	Sd	44.2 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 2.2 mm	X var (6)	+/- 3.5 mm
η	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

Code **Z001300** 

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

**General Specifications** 

Continuous Program Power (2) Sensitivity @ 1W/1m (3)

Nominal Diameter Nominal Impedance

Rated Power AES (1)

Voice Coil Diameter

Magnetic Gap Depth

Flux Density

Net Weight

Re

Qms

Qts

Cms

Vas

 $\eta_0$ 

X max<sup>(5)</sup>

Magnet Weight

Voice Coil Winding Depth

Thiele & Small Parameters (4)

3.0 Ω

4.20

0.92

1.2 I Sd

416 µm/N

+/- 1.3 mm

0.26%

Fs

Qes

Mms

Bxl

X var (6)

Le (1KHz)





Dual Cone



	+ 110 + 105 + 100 + 95 d +90 g +80 + 85 L +80 + 75 + 70		$\wedge$		^		
102 mm / 4 in	+65	1			-		3
4 Ω	+60 20	50 1	00 200	500 1k	2 k	5k 10	k 20 k
35 W				Hz			
70 W	Frequen	cy Response	on 5.5 Lt @ 1	10 Hz Vented Box	@ 1W, 1m.	. Free Air Imp	edance.
87.5 dB							
20 mm / 0.8 in	Constructive C	haracteris	tics				

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

(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.

5 mm

4 mm

1.10 T

154 g

0.4 kg

140.0 Hz

1.18

3.1 g

2.65 Tm

44.2 cm<sup>2</sup>

0.14 mH

+/- 3.0 mm

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

#### Code **Z000963**

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

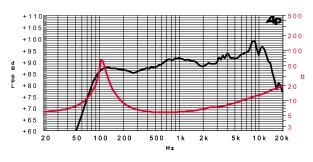


MADE IN ITALY

70



General Specifications			
Nominal Diameter			88 mm / 3.5 in
Nominal Impedance			8 Ω
Rated Power AES (1)			45 W
Continuous Program Powe	r <sup>(2)</sup>		90 W
Sensitivity @ 1W/1m <sup>(3)</sup>			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 Paramete	ers <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
η₀	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

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MADE IN ITALY

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

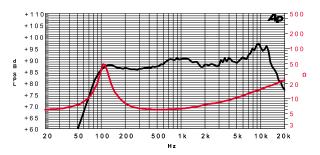








General Specifications			
Nominal Diameter			88 mm / 3.5 in
Nominal Impedance			8 Ω
Rated Power AES (1)			45 W
Continuous Program Power	(2)		90 W
Sensitivity @ 1W/1m (3)			88.5 dE
Voice Coil Diameter			25 mm / 1 in
Voice Coil Winding Depth			6 mm
Magnetic Gap Depth			4 mm
Flux Density			1.04 T
Magnet 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 (5)	+/- 1.5 mm	X var (6)	+/- 3.1 mm
η	0.26%	Le (1KHz)	0.21 mH



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

Ferrite
Nylon Fiberglass Doped
Copper
Kapton
Paper
Surface Waterproof Treatment
Rubber
Treated Cloth
88 mm
81 mm
4 holes ø 4 on ø 98 mm
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

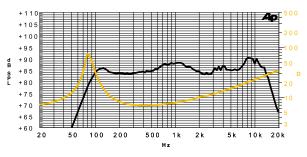


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MADE IN ITALY

DT VV

General Specifications			
Nominal Diameter			88 mm / 3.5 in
Nominal Impedance			8 Ω
Rated Power AES (1)			45 W
Continuous Program Pow	er <sup>(2)</sup>		90 W
Sensitivity @ 1W/1m (3)			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 Paramet	ers <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	855 µm/N	Bxl	4.83 Tm
Vas	1.81	Sd	38.5 cm <sup>2</sup>
X max (5)	+/- 2.5 mm	X var (6)	+/- 4.2 mm
η	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

(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.

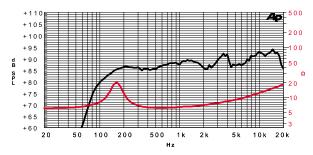
## 3 L 0,8 SL 3" | 40 W

Code **Z000900** 



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





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

86.4 dB		
20 mm / 0.8 in	Constructive Characteristics	
4 mm	Magnet	Neodymium
3 mm	Basket Material	Pressed Sheet Steel
1.30 T	Voice Coil Winding Material	Copper
16 g	Voice Coil Former Material	Epotex
0.1 kg	Cone Material	Paper
	Cone Treatment	No
145.0 Hz	Surround Material	Treated Cloth
1.28	Dust Dome Material	Solid Paper
2.0 g	Mounting Information	
2.80 Tm	Overall Diameter	79 mm
30.2 cm <sup>2</sup>	Baffle Cutout Diameter	73 mm
+/- 2.5 mm	Mounting Holes	4 holes ø 4.5 on ø 84 mm
0.11 mH	Total Depth	44.9 mm

General Specificatio	ns		
Nominal Diameter			80 mm / 3 in
Nominal Impedance			8 Ω
Rated Power AES (1)			20 W
Continuous Program P	ower <sup>(2)</sup>		40 W
Sensitivity @ 1W/1m (3	3)		86.4 dB
Voice Coil Diameter			20 mm / 0.8 in
Voice Coil Winding De	oth		4 mm
Magnetic Gap Depth			3 mm
Flux Density			1.30 T
Magnet Weight			16 g
Net Weight			0.1 kg
Thiele & Small Paran	neters <sup>(4)</sup>		
Re	5.5 Ω	Fs	145.0 Hz
Qms	4.92	Qes	1.28
Qts	1.01	Mms	2.0 g
Cms	602 µm/N	BxI	2.80 Tm
Vas	0.8	Sd	30.2 cm <sup>2</sup>
X max (5)	+/- 1.5 mm	X var (6)	+/- 2.5 mm
η	0.18%	Le (1KHz)	0.11 mH

(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

## **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



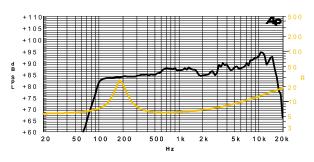




MADE IN ITALY

D

General Specifications			
Nominal Diameter			66x66 mm / 2.5 in
Nominal Impedance			8 Ω
Rated Power AES (1)			20 W
Continuous Program Powe	r <sup>(2)</sup>		40 W
Sensitivity @ 1W/1m (3)			85.6 dB
Voice Coil Diameter			20 mm / 0.8 in
Voice Coil Winding Depth			5 mm
Magnetic Gap Depth			3 mm
Flux Density			1.30 T
Magnet Weight			16 g
Net Weight			0.1 kg
Thiele & Small Paramete	rs <sup>(4)</sup>		
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
η	1.14%	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

(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.

# 2 H 0,8 SL

### 2" 40 W

Code **Z000795** 





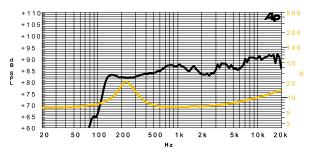




MADE IN ITALY



General Specifications			
Nominal Diameter			53x53 mm / 2 in
Nominal Impedance			8 Ω
Rated Power AES (1)			20 W
Continuous Program Power	(2)		40 W
Sensitivity @ 1W/1m (3)			84.1 dB
Voice Coil Diameter			20 mm / 0.8 in
Voice Coil Winding Depth			4 mm
Magnetic Gap Depth			3 mm
Flux Density			1.30 T
Magnet Weight			16 g
Net Weight			0.1 kg
Thiele & Small Parameter	s <sup>(4)</sup>		
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 I	Sd	11.3 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 1.4 mm	X var (6)	+/- 2.7 mm
η	0.11%	Le (1KHz)	0.20 mH



Frequency Response on 5.5 Lt @ 130 Hz Vented Box @ 1W, 1m. Free Air Impedance.

#### **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	

(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

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

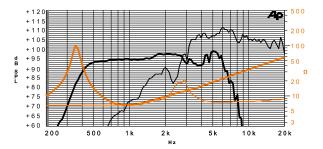
98.0 dB sensitivity

Frequency Range 50-20000 Hz



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
Voice Coil Winding Depth		15 mm	2.6 mm
Magnetic Gap Depth		10 mm	3 mm
HF Recomm. Crossover Frequ	lency		1.6 kHz
Magnet Weight		2700 g	
Net Weight			8.3 kg
Thiele & Small Parameters	(4)		
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	BxI	16.03 Tm
Vas	72.81	Sd	530.9 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 4.5 mm	X var (6)	+/- 8.0 mm
η	2.38%	Le (1KHz)	1.02 mH





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

#### Z007996 - Horizontal Directivity

**Z007996 - Vertical Directivity** 

+30

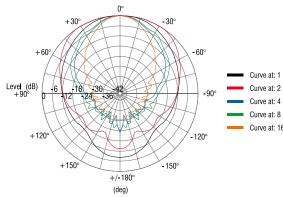
+60

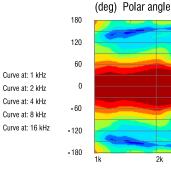
Level (dB) +90° 0°

30

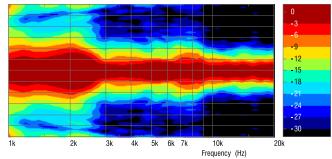
-60

-90

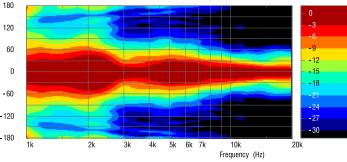




Sound pressure, Level (dB)



Sound pressure, Level (dB)



-120° +120° +150° +150° +/-180° (deg)

Curve at: 1 kHz

Curve at: 2 kHz

(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.

(deg) Polar angle

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MADE IN ITALY

Coaxial

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

Code **Z007857** 

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

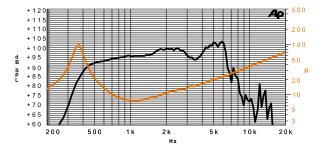
Frequency Range 55-3500 Hz



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 <sup>(3)</sup>			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
<b>Thiele &amp; Small Parameter</b>	'S <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	Sd	530.9 cm <sup>2</sup>
X max <sup>(5)</sup>	+/- 5.0 mm	X var (6)	+/- 8.5 mm
η	3.40%	Le (1KHz)	1.12 mH



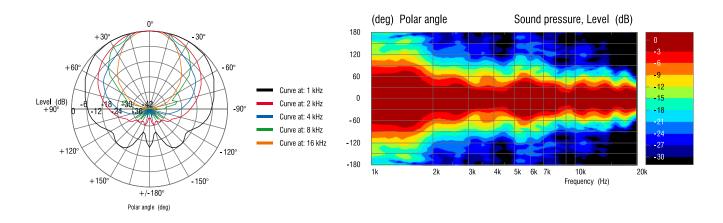
**Coaxial Woofer** 



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	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.

(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 CP** 12" | 400 W

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

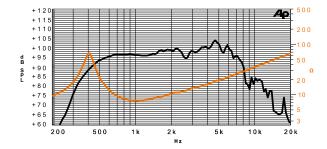
98.0 dB sensitivity

DAF

Frequency Range 60-3500 Hz



**Coaxial Woofer** 

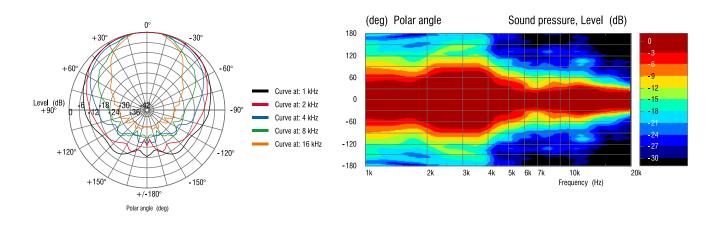


Frequency Response on 45 Lt @ 55 Hz Vented Box @ 1W, 1m. Free Air Impedance.

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)		
<u>Re</u> 6.2 Ω	Fs	58.4 Hz
Qms 5.60	Qes	0.49
Qts 0.45	Mms	40.0 g
Cms 186 µm/N	Bxl	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
<u>η<sub>0</sub></u> 2.91%	Le (1KHz)	0.83 mH

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.

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## **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

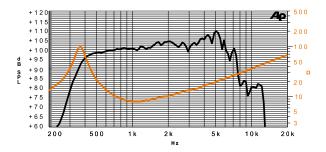
Frequency Range 55-3500 Hz



General Specifications			
Nominal Diameter			268 mm / 10 in
Nominal Impedance			8 Ω
Rated Power AES (1)			200 W
Continuous Program Powe	r <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 Parameter	ers <sup>(4)</sup>		
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	Bxl	12.70 Tm
Vas	63.21	Sd	346.4 cm <sup>2</sup>
X max (5)	+/- 4.0 mm	X var (6)	+/- 7.0 mm
$\eta_0$	2.31%	Le (1KHz)	0.81 mH



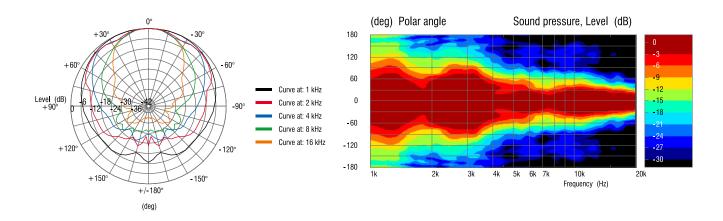
**Coaxial Woofer** 



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 C 2 CP** 8" | 400 W

#### Code **Z005061**

B +90 +85

+65 +60 200

500

1 k

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



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	4)		
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 (6)	+/- 7.0 mm
$\eta_{0}$	2.14%	Le (1KHz)	0.80 mH

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	+120					F								A	Ø	500
	+115 +110															200
	+105+100															100
d B	+95		/	١			~~	~		U	h			_		50

**Constructive Characteristics** Ferrite Magnet Aluminium Die-Cast Basket Material Voice Coil Winding Material Copper Voice Coil Former Material Kapton Cone Material Paper Cone Treatment No Surround Material Treated Cloth None Mounting Information 210 mm **Overall Diameter** 184 mm Baffle Cutout Diameter 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

2 k

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

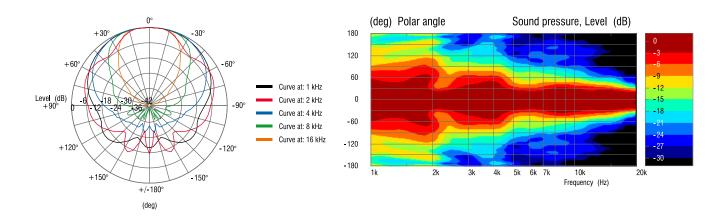
5 k

## **SIC**A loudspeakers

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MADE IN ITALY

#### 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).

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.

0

201

10 k

ah.



# DOME Tweeter



40

## LP 90.28 / N92 TW

### 1,1" | 120 W

#### Code **Z009160**

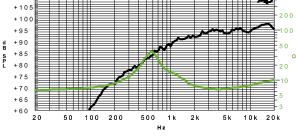
+110

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



90 mm
D 8
25 W
50 W
120 W
94.4 dE
28 mm / 1.1 ir
2.7 mm
3.0 mm
1.80 1
6.0 C
0.6 kHz
92 g
0.41 kg
1.5 kHz

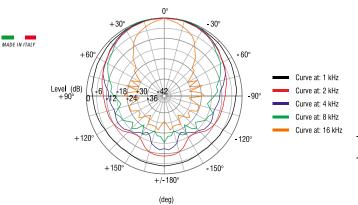


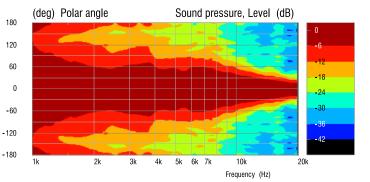


Frequency Response on IEC Baffle (DIN 45575) @ 1W,1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Neodymium
Voice Coil Winding Material	Aluminium Flat Wire
Voice Coil Former Material	Aluminium
Diaphragm	Treated Silk
Ferrofluid in Air Gap	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

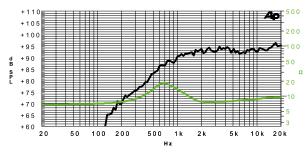
Code **Z009240** 

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 (3)	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 Voice Coil Winding Material

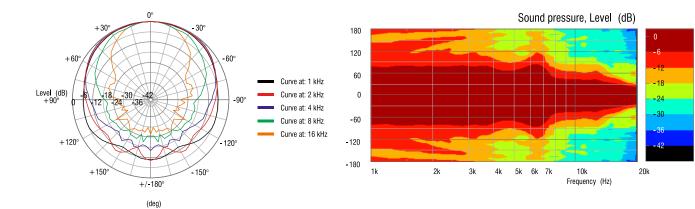
Voice Coil Winding Material	Aluminium Flat Wire
Voice Coil Former Material	Aluminium
Diaphragm	Treated Silk
Ferrofluid in Air Gap	No
Flange	Aluminium
Spare Part Code	Z009410
Mounting Information	
Overall Diameter	110 mm
Baffle Cutout Diameter	88 mm
Mounting Holes	4 holes ø 4.5 on ø 98 mm
Total Depth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

#### 110 mm 88 mm ø 98 mm 49.6 mm

Ferrite

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#### Z009240 - Directivity



### Dome Tweeter

## LP 53x58.28 / N20 TW

### 1,1" | 80 W

Code **Z008985** 

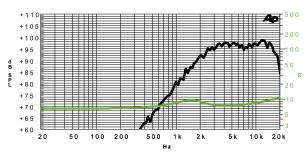
Code **Z009215** 

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 <sup>(1)</sup> (2500 - 20000 Hz)	20 W
Continuous Program Power (2)	40 W
Rated Noise Power (IEC 60268-5) (3)	80 W
Sensitivity @ 1W/1m (4)	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

**Dome Tweeter** 

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MADE IN ITALY

## LP 111.25 / 245 TW

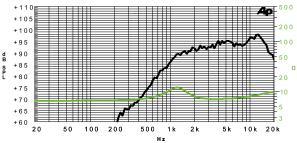
1" | 120 W

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 <sup>(2)</sup>	50 W
Rated Noise Power (IEC 60268-5) (3)	120 W
Sensitivity @ 1W/1m <sup>(4)</sup>	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





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

(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 98.25 / 245 TW

1" | 120 W

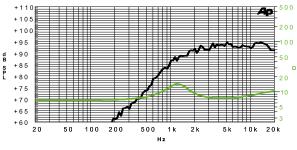
Code **Z009170** 

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 <sup>(2)</sup>	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

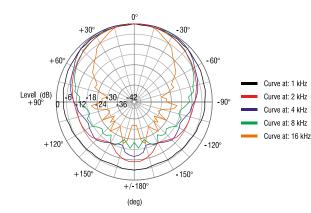


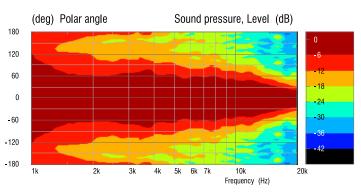


Frequency Response on IEC Baffle (DIN 45575) @ 1W,1m. Free Air Impedance.

Constructive Characteristics	
Magnet	Ferrite
Voice Coil Winding Material	Copper
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





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## LP 66.25 / N14 TW

### 1" | 70 W

90.7 dB sensitivity

FF

**General Specifications** 

Continuous Program Power<sup>(2)</sup>

Rated Power AES (1) (3000 - 20000 Hz)

Rated Noise Power (IEC 60268-5) (3)

Nominal Diameter

Nominal Impedance

Sensitivity @ 1W/1m (4)

Voice Coil Winding Depth

Voice Coil Diameter

Magnetic Gap Depth

Resonance Frequency

Flux Density

DC Resistance

TSD

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

Code **Z008950** 

**Dome Tweeter** 

8Ω

17 W

34 W

70 W

90.7 dB

1.7 mm

2.0 mm

1.20 T

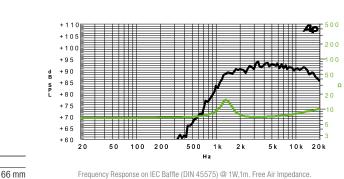
6.0 Ω

1.3 kHz 14 g 0.09 kg 2.5 kHz

Code **Z009040** 

25 mm / 1 in





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

Constructive Characteristics	
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

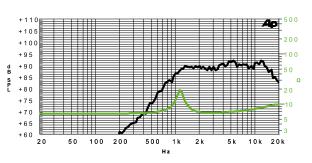


1" voice coil Aluminium former Treated Silk Dome (TSD) Ferrofluid in Air Gap (FF) Ferrite Magnet C ircuit 89.8 dB sensitivity



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.

## LP 38x50.18/N5 TW

### 0,7" | 50 W

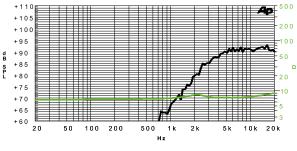
Code **Z008701** 

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

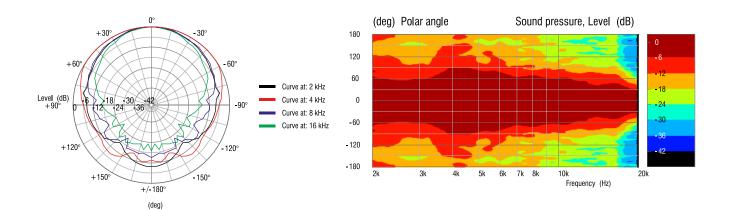




Frequency Response on IEC Baffle (DIN 45575) @ 1W,1m. Free Air Impedance.

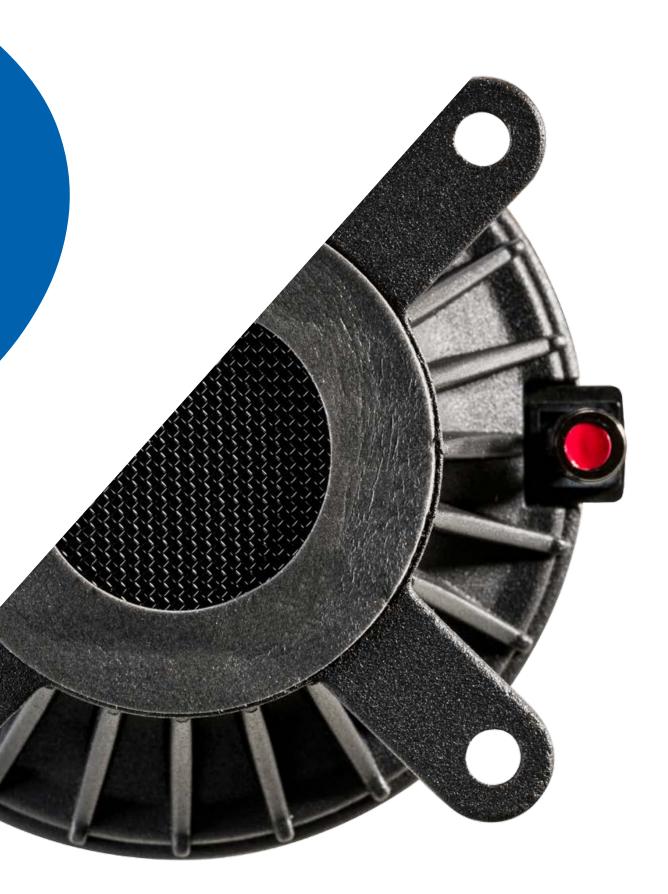
Constructive Characteristics	
Magnet	Neodymium
Voice Coil Winding Material	Copper
Voice Coil Former Material	Epotex
Diaphragm	Treated Silk
Ferrofluid in Air Gap	Yes
Flange	Nylon Fiberglass Doped
Spare Part Code	-
Mounting Information	
Overall Dimensions	38 x 50 mm
Baffle Cutout Diameter	34 mm
Mounting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

### Z008701 - Directivity



## SICA )) loudspeakers ®

# COMPRESSION Driver



## CD 105.65/N220

### Compression Driver

### 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 diameter108.8 dB sensitivity



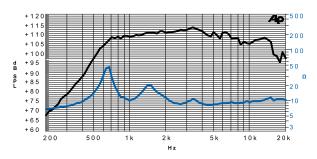




**General Specifications** 

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

Nominal Diameter	105 mm
Nominal Impedance	8 Ω
Rated Power AES (1) (1500 - 20000 Hz)	80 W
Continuous Program Power <sup>(2)</sup>	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

(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

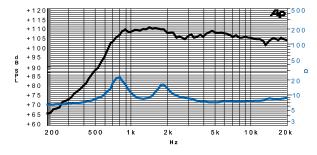
106.3 dB sensitivity



General Specifications	
Nominal Diameter	96 mm
Nominal Impedance	8 Ω
Rated Power AES (1) (1500 - 20000 Hz)	60 W
Continuous Program Power (2)	120 W
Sensitivity @ 1W/1m (3)	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



**Compression Driver** 



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

MADE IN ITALY

## **CD 95.44/N240 POLY**

1,7" | 120 W

Code **Z009493P** 

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

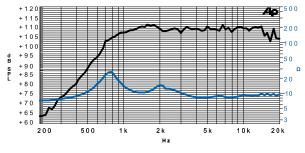
108.7 dB sensitivity



General Specifications	
Nominal Diameter	96 mm
Nominal Impedance	8 Ω
Rated Power AES (1) (1500 - 20000 Hz)	60 W
Continuous Program Power <sup>(2)</sup>	120 W
Sensitivity @ 1W/1m (3)	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



Compression Driver



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	Polyimide
Ferrofluid in Air Gap	No
Spare Part Code	Z009396P
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

(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** 

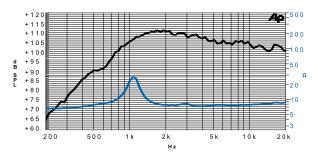
1,7" voice coil Kapton former and Aluminium Flat Wire (AIFW)
Titanium diaphragm (TD)
Ferrite Magnet Circuit with Copper Demodulating Ring (CDR)
1" horn throath diameter
106.3 dB sensitivity



General Specifications	
Nominal Diameter	120 mm
Nominal Impedance	8 Ω
Rated Power AES (1) (1500 - 20000 Hz)	60 W
Continuous Program Power <sup>(2)</sup>	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



**Compression Driver** 



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

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MADE IN ITALY

## 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

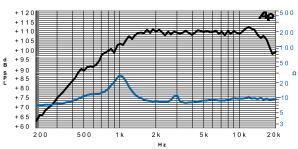
109.0 dB sensitivity



General Specifications	
Nominal Diameter	120 mm
Nominal Impedance	8 Ω
Rated Power AES (1) (1500 - 20000 Hz)	60 W
Continuous Program Power <sup>(2)</sup>	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



Compression Driver



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

**Compression Driver** 

1,5" | 60 W

Code **Z009484** 

1,5" voice coil Kapton former and Aluminium Flat Wire (AIFW)

PEI diaphragm

Neodymium Magnet Circuit

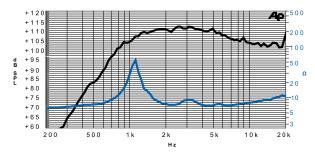
1" horn throath diameter

107.9 dB sensitivity



General Specifications	
Nominal Diameter	60 mm
Nominal Impedance	8 Ω
Rated Power AES (1) (1500 - 20000 Hz)	30 W
Continuous Program Power (2)	60 W
Sensitivity @ 1W/1m (3)	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

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MADE IN ITALY

## CD 90.38/405

1,5" | 60 W

Code **Z009487** 

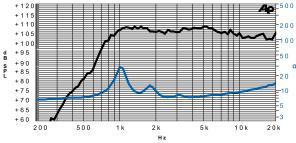
1,5" voice coil Kapton former and Aluminium Flat Wire (AIFW) PEI diaphragm Ferrite Magnet Circuit 1" horn throath diameter 105.7 dB sensitivity



General Specifications	
Nominal Diameter	90 mm
Nominal Impedance	8 Ω
Rated Power AES (1) (1500 - 20000 Hz)	30 W
Continuous Program Power <sup>(2)</sup>	60 W
Sensitivity @ 1W/1m (3)	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



**Compression Driver** 



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	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.

### **Compression Driver**

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

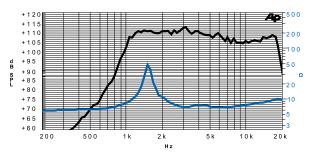
Code **Z009470** 

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



Nominal Diameter	83 mm
Nominal Impedance	8 Ω
Rated Power AES (1) (1500 - 20000 Hz)	20 W
Continuous Program Power <sup>(2)</sup>	40 W
Sensitivity @ 1W/1m (3)	107.3 dE
Voice Coil Diameter	25 mm / 1 ir
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
Mauntine Hales	4 holes ø 4.5 on ø 95 mm
Mounting Holes	2 holes M5 on ø 76 mm
Total Depth	50.9 mm

### Compression Driver

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## CD 78.26/N92

1" 40 W

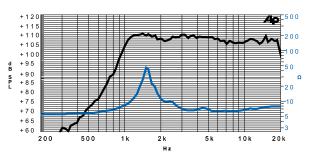
### Code **Z009450**

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 <sup>(2)</sup>	40 W
Sensitivity @ 1W/1m <sup>(3)</sup>	107.3 dE
Voice Coil Diameter	25 mm / 1 ir
Voice Coil Winding Depth	2.1 mm
Magnetic Gap Depth	2.0 mm
Flux Density	1.92 1
DC Resistance	5.3 C
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 ir





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

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.

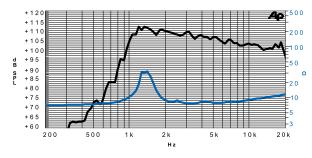
## CD 78.26/245

1″ | 32 W

Code **Z009442** 

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

0	-	
	-	



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

General Specifications	
Nominal Diameter	78 mm
Nominal Impedance	8 Ω
Rated Power AES (1) (1500 - 20000 Hz)	16 W
Continuous Program Power (2)	32 W
Sensitivity @ 1W/1m (3)	105.5 dB
Voice Coil Diameter	25 mm / 1 in
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
Net Weight	0.6 kg
Recommended Crossover Frequency	2.5 kHz
Throat Diameter	25.4 mm / 1 in

Constructive Characteristics	
Magnet	Ferrite
Voice Coil Winding Material	Сорре
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 Holos	2 holes ø 4.5 on ø 95 mm
Mounting Holes	2 holes M5 on ø 76 mm
Total Depth	51.6 mm

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### Compression Driver



## 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		

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-30

-150°

- 30°

-150°

- 60°

-120°

-60°

120°

-90

-90

Curve at: 1 kHz

Curve at: 2 kHz

Curve at: 4 kHz Curve at: 8 kHz Curve at: 16 kHz

	(deg) Polar ar	ngle						Level (df	3)
90				-					-0
60									3
30									9
0									15 18
30									-21
60									-24 27
90	- Backprose							T 2	30
	1k	2k	3k	4k	5k	6k	7k	10k Frequency (Hz)	20k



+/-180° (deg)

+/-180° (deg)

Q07015A - Horizontal Directivity 0°

+30

+60

+120°

-6

+150°

+30

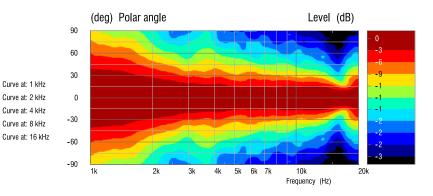
+150°

+60°

+120

Level (dB) +90°

Level (dB)  $+90^{\circ}$ 



## Q07020A

1" Horn

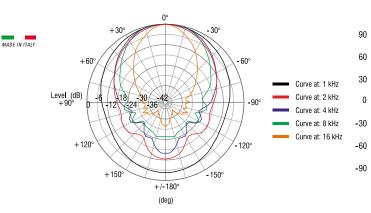


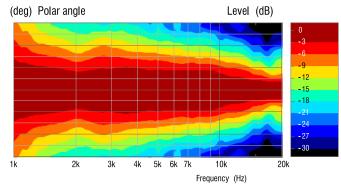
General Specifications	
Throat Diameter	25.4 mm / 1 in
Cutoff Frequency	1.50 kHz
Net Weight	0.30 Kg
Horizontal coverage	90°
Vertical coverage	60°
Material	Plastic

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

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#### Q07020A - Horizontal Directivity





-9

-12

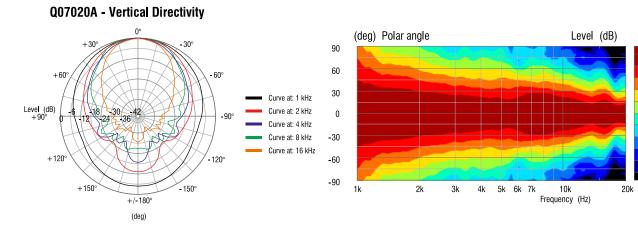
-15

-18

21

-24

-30



## Q07030A Q07032B

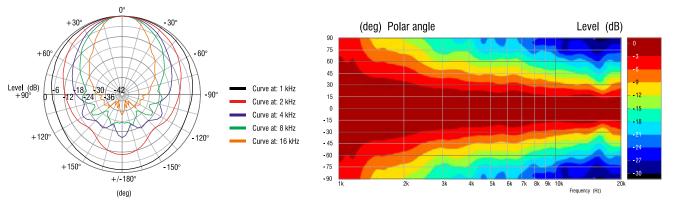
1" Horn

### 1" Horn

General Specifications		
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



### Q07030A - Q07032B - Directivity

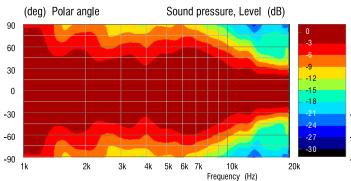


## **Q07050A**

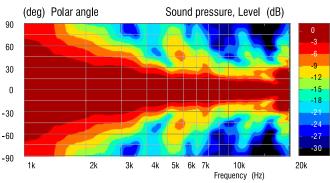
### 1" Wave Guide

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

#### **Q07050A** - Horizontal Directivity



### **Q07050A** - Vertical Directivity



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## Index

Model	Application	Code	Nom. Diam. inch	VC mm/inch	Cont Prog PW Watt	Rated PW AES Watt	lmp Ohm	Fs Hz
21 S 4 PL	Subwoofer	Z008424	21	100/4	2400	1200	8	34.6
18 K 4 PL	Subwoofer	Z008402	18	100/4	2400	1200	8	36.8
18 S 4 PL	Subwoofer	Z008405	18	100/4	2400	1200	8	36.2
18 PF 4	Subwoofer	Z008394	18	100/4	2400	1200	8	38.0
18 F 3 CP	Subwoofer	Z008362	18	75/3	800	400	8	30.8
15 K 4 PL	Professional	Z008339	15	100/4	2400	1200	8	45.2
15 F 4 CP	Professional	Z008321	15	100/4	1400	700	8	41.0
15 S 4 PL	Subwoofer	Z008175	15	100/4	2400	1200	8	38.0
15 PFS 4	Subwoofer	Z008318	15	100/4	2400	1200	8	39.0
15 K 3 PL	Professional	Z008331	15	75/3	800	400	8	40.0
15 Fe 3 CP	Professional	Z008308	15	75/3	800	400	8	40.2
15 S 3 PL	Subwoofer	Z008173	15	75 / 3	800	400	8	33.0
15 PFS 3	Subwoofer	Z008314	15	75/3	1000	500	8	39.0
12 K 4 PL	Professional	Z008020	12	100/4	2000	1000	8	48.0
12 F 4 CP	Professional	Z008019	12	100/4	1400	700	8	46.0
12 S 4 PL	Subwoofer	Z007951	12	100/4	2000	1000	8	40.4
12 PFS 4	Subwoofer	Z007954	12	100/4	2000	1000	8	39.0
12 N 3 PL	Professional	Z007983	12	75/3	800	400	8	46.0
12 PF 3	Professional	Z007845	12	75/3	1000	500	8	47.0
12 S 3 PL	Subwoofer	Z007946	12	75/3	800	400	8	42.0
12 PFS 3	Subwoofer	Z007847	12	75/3	1000	500	8	43.0
12 SR 3 PL	Subwoofer	Z007948	12	75/3	800	400	8	36.0
12 SR 3 CP	Subwoofer	Z007942	12	75/3	900	450	8	36.8
12 L1 2,5 SL	Professional	Z007903	12	65 / 2.5	600	300	8	47.5
12 D 1,5 CS	Dual Cone	Z007360	12	38 / 1.5	260	130	8	62.0
10 K 4 PL	Professional	Z006950	10	100/4	1600	800	8	58.5
10 K 3 PL	Professional	Z005840	10	75/3	800	400	8	50.6
10 Fe 3 CP	Professional	Z005831	10	75/3	900	450	8	52.0
10 S 3 PL	Subwoofer	Z006015	10	75/3	800	400	8	43.0
10 S 3 CP	Subwoofer	Z006017	10	75/3	900	450	8	43.0
10 N 2,5 PL	Professional	Z005701	10	65 / 2.5	600	300	8	57.0
10 Fe 2,5 CP	Professional	Z005710	10	65 / 2.5	600	300	8	57.0
10 SR 2,5 CP	Subwoofer	Z006013	10	65 / 2.5	600	300	8	34.5
10 D 1,5 CS	Dual Cone	Z006510	10	38 / 1.5	200	100	8	68.0
8 K 3 PL	Professional	Z005520	8	75/3	800	400	8	68.1
8 N 2,5 PL	Professional	Z005200	8	65 / 2.5	600	300	8	77.0
8 Fe 2,5 CP	Professional	Z005203	8	65 / 2.5	600	300	8	73.0
8 S 2,5 CP	Subwoofer	Z005205	8	65 / 2.5	600	300	8	54.0
8 H 2 CP	Studio Monitor	Z005158	8	50/2	400	200	8	38.0
8 L 2 SL	Professional	Z005055	8	50 / 2	400	200	8	64.0
8 Fe 2 CP	Professional	Z005112	8	50 / 2	400	200	8	67.0
8 M 1,5 CS	Midrange	Z004930	8	38 / 1.5	200	100	8	460.0
8 D 1,5 CS	Dual Cone	Z004950	8	38 / 1.5	260	130	8	62.0
6,5 H 1,5 CP	Studio Monitor	Z004100	6.5	38 / 1.5	240	120	8	45.4
6 N 2,5 PL	Professional	Z004080	6	65 / 2.5	600	300	8	80.0
6 N 2 PL	Professional	Z004083	6	50 / 2	400	200	8	68.0
6 NR 2 PL	Professional	Z004068	6	50 / 2	400	200	8	60.5
6 M 2 CP	Midrange	Z004079	6	50 / 2	300	150	4	135.0
6 L 1,5 SL	Professional	Z004059	6	38 / 1.5	260	130	8	59.0
6 E 1,5 CS	Professional	Z004035	6	38 / 1.5	200	100	8	60.0
6 D 1,5 SL	Dual Cone	Z004065	6	38 / 1.5	260	130	8	110.0
6 D 1,5 CS	Dual Cone	Z004002	6	38 / 1.5	200	100	8	104.0
5,5 H 1,5 CP	Studio Monitor	Z002800	5.5	38 / 1.5	240	120	8	48.5
5 N 1,5 PL	Professional	Z002647	5	38 / 1.5	260	130	8	110.6
5 NR 1,5 PL	Professional	Z002650	5	38 / 1.5	260	130	8	61.0

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Freq Range Hz	Qts	Vas I	SPL dB	Magnet	Basket	Weight kg	page
35 - 500	0.30	255.0	98.8	Nd	AI	10.5	8
35 - 700	0.32	201.0	97.8	Nd	AI	8.3	ç
35 - 700	0.39	189.0	97.3	Nd	AI	8.3	10
35 - 700	0.43	147.3	96.3	Fe	AI	13.0	11
30 - 700	0.45	340.0	96.9	Fe	AI	8.6	12
45 - 2000	0.29	105.0	99.2	Nd	AI	7.0	13
40 - 2000	0.25	120.4	99.1	Fe	AI	12.1	14
35 - 2000	0.28	135.9	98.1	Nd	AI	7.0	15
35 - 2000	0.34	103.9	95.8	Fe	AI	12.3	16
40 - 2000	0.27	166.1	99.7	Nd	AI	4.0	17
40 - 2000	0.33	170.4	99.4	Fe	AI	8.1	18
35 - 2000	0.38	230.0	97.2	Nd	AI	3.9	19
35 - 2000	0.45	135.5	95.9	Fe	AI	7.7	20
50 - 3000	0.24	46.3	97.1	Nd	Al	6.6	21
48 - 3000	0.24	49.9	97.3	Fe	Al	11.7	22
					Al		23
40 - 2000	0.25	57.0	95.5	Nd		6.6	
35 - 2000 45 - 3000	0.26	55.6	94.8	Fe	Al	11.5	24
	0.30	87.9 76 F	98.5	Nd	Al	3.5	25
45 - 3000	0.39	76.5	96.4	Fe	Al	6.7	26
40 - 2000	0.34	76.9	95.8	Nd	AI	3.5	27
40 - 2000	0.47	58.5	93.6	Fe	Al	6.7	28
35 - 2000	0.42	60.4	91.8	Nd	AI	3.5	29
35 - 2000	0.39	64.0	92.4	Fe	AI	7.3	30
50 - 3000	0.36	81.8	97.3	Nd	St	2.3	31
65 - 15000	0.75	63.5	96.9	Fe	St	3.7	32
55 - 4000	0.25	23.4	95.8	Nd	AI	6.3	33
50 - 3000	0.26	40.0	96.7	Nd	AI	2.8	34
50 - 3000	0.31	38.6	95.9	Fe	AI	6.6	35
40 - 2000	0.27	39.9	94.5	Nd	AI	3.1	36
40 - 2000	0.31	39.9	93.8	Fe	AI	6.5	37
55 - 3500	0.36	40.9	96.6	Nd	AI	2.2	38
55 - 3500	0.37	39.7	96.3	Fe	AI	4.9	39
35 - 2000	0.32	66.7	93.0	Fe	AI	5.0	40
70 - 15000	1.12	37.5	93.9	Fe	St	1.9	41
65 - 3000	0.25	12.2	95.1	Nd	AI	2.4	42
75 - 4000	0.30	13.7	96.4	Nd	AI	1.8	43
70 - 4000	0.28	15.6	96.7	Fe	AI	4.5	44
50 - 3500	0.33	18.6	93.0	Fe	AI	4.5	45
35 - 3000	0.48	34.8	88.8	Fe	AI	2.7	46
65 - 3000	0.32	18.2	94.5	Nd	St	1.6	47
65 - 3000	0.32	16.9	94.6	Fe	Al	2.8	48
500 - 6000	1.82	0.7	98.7	Fe	St	2.7	49
65 - 15000	0.30	25.5	95.3	Fe	St	3.1	43
40 - 4500	0.42	20.2	89.4	Fe	Al	1.6	51
40 - 4300 80 - 5000	0.42	4.9	92.5	Nd	Al	1.5	52
70 - 5000	0.27	4.9 8.7	92.3	Nd	Al	1.5	53
		8.7 9.4					
60 - 5000	0.33		91.4	Nd	Al	1.5	54
130 - 6000	0.35	3.5	96.8	Fe	Al	2.7	55
60 - 4000	0.39	11.0	91.0	Nd	St	0.9	56
60 - 4000	0.38	11.3	91.5	Fe	St	1.5	57
110 - 15000	0.46	4.0	93.9	Nd	St	0.9	58
100 - 18000	0.55	4.3	91.9	Fe	St	1.4	59
48 - 5500	0.37	7.8	86.7	Fe	AI	1.5	60
100 - 5000	0.56	3.0	91.0	Nd	AI	0.8	61
60 - 5000	0.35	7.4	90.0	Nd	Al	0.8	62

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### Index

Nodel	Application	Code	No	om. Diam. ch	VC mm/inch	Cont Prog F Watt	PW Rat Wa	ted PW AES att	lmp Ohm	Fs Hz	
5 F 1,5 CP	Professional	Z002652	5		38 / 1.5	200	10	0	8	59.0	
5 M 1,5 PL	Midrange	Z002649	5		38 / 1.5	260	13		8	145.0	
5 D 1 CS	Dual Cone	Z002400	5		25 / 1	120	60		8	79.0	
4 L 1 SL	Professional	Z001449	4		25 / 1	120	60		8	108.3	
4 L1 1 SL	Professional	Z001804	4		25 / 1	140	70		8	120.0	
4 E 1 CS	Professional	Z001800	4		25 / 1	140	70		8	118.0	
4 D 0,8 CS	Dual Cone	Z001300	4		20/0.8	70	35		4	140.0	
3,5 L 1 SL	Professional	Z000963	3.	5	25 / 1	90	45		8	108.0	
3,5 F 1 CS	Professional	Z000960	3.		25 / 1	90	45		8	107.0	
3,5 H 1 CS	Studio Monitor	Z000957	3.		25 / 1	90	45		8	85.0	
3 L 0,8 SL	Professional	Z000900	3		20 / 0.8	40	20		8	145.0	
2,5 H 0,8 SL	Studio Monitor	Z000855	2.	5	20 / 0.8	40	20		8	185.0	
2 H 0,8 SL	Studio Monitor	Z000795	2		20 / 0.8	40	20		8	216.0	
		2000100			207 0.0	10	20		0	210.0	
12 Cx 3 CP	Coaxial Unit	Z007996	12								
	woofer				75/3	800	40		8	49.0	
	compression drive				44 / 1.7	120	60		8	1100.0	
12 C 2,5 CP	Coaxial Woofer	Z007857	12		65 / 2.5	600	30		8	50.5	
12 C 2 CP	Coaxial Woofer	Z007852	12		50/2	400	20		8	58.4	
10 C 2 CP	Coaxial Woofer	Z006781	10		50/2	400	20		8	50.0	
8 C 2 CP	Coaxial Woofer	Z005061	8		50 / 2	400	20	0	8	78.5	
Nodel	Application	Code	VC mm/ine		loise PW EC 602 68-5)	Rated PW AES Watt	S Imp Ohm	Fs kHz	Recomr kHz	m Xover Freq	
LP 90.28/N92 TW	Dome Tweeter	Z009160	28 / 1.	1 120		25	8	0.60	1.5		
LP 110.28/380 TW	Dome Tweeter	Z009240	28 / 1.	1 120		25	8	0.65	1.5		
LP 53x58.28/N20 TW	Dome Tweeter	Z008985	28 / 1.1	1 80		20	8	1.50	2.5		
LP 111.25/245 TW	Dome Tweeter	Z009215	25/1	120		25	8	1.20	2.5		
LP 98.25/245 TW	Dome Tweeter	Z009170	25 / 1	120		25	8	1.20	2.5		
LP 66.25/N14 TW	Dome Tweeter	Z008950	25/1	70		17	8	1.30	2.5		
LP 85.25/95 TW	Dome Tweeter	Z009040	25 / 1	80		20	8	1.10	2.5		
LP 38x50.18/N5 TW	Dome Tweeter	Z008701	18 / 0.	7 50		12	8	2.20	4.5		
Nodel	Application	Code	Throa inch	t VC mm/inc		Power Rated AES W		np Fs hm kHz	Recor kHz	mm Xover Freq	
CD 105.65/N220	Compression driv	er <b>Z009497</b>	1.4	65 / 2.5		80	8	0.65	1.2		
CD 95.44/N240	Compression driv	er <b>Z009493</b>	1	44 / 1.7	7 120	60	8	0.80	1.6		
CD 95.44/N240 POLY	Compression driv	er <b>Z009493</b> F	<b>)</b> 1	44 / 1.7	7 120	60	8	0.80	1.6		
CD 120.44/640	Compression driv	er <b>Z009491</b>	1	44 / 1.7	7 120	60	8	1.10	1.6		
CD 120.44/640 POLY	Compression driv	er <b>Z009491F</b>	1	44 / 1.7	7 120	60	8	1.00	1.6		
CD 60.38/N92	Compression driv	er <b>Z009484</b>	1	38 / 1.5	5 60	30	8	1.10	2.0		
CD 90.38/405	Compression driv	er <b>Z009487</b>	1	38 / 1.5	5 60	30	8	1.00	2.0		
CD 83.26/380	Compression driv	er <b>Z009470</b>	1	25/1	40	20	8	1.50	2.5		
CD 78.26/N92	Compression driv	er <b>Z009450</b>	1	25/1	40	20	8	1.50	2.5		
CD 78.26/245	Compression driv	er <b>Z009442</b>	1	25/1	32	16	8	1.50	2.5		
Nodel	(	Code	Throat inch	Horizo	ontal coverage	Vertical c	overage	Cutoff F kHz	-req		
RECTANGULAR HORN		070154		<u>80</u> °		60°					
		07015A	1					1.0			
ELLIPTIC HORN		07020A	1	90°		60°		1.5			
ROUND HORN		07030A	1	80°		80°		2.0			
<b>ROUND HORN (SQUA</b>	RECONTOUR) (	07032A	1	80°		80°		2.0			
WAVE GUIDE		07050A	1	130°		00		1.5			

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Freq Range Hz	Qts	Vas	SPL dB	Magnet	Basket	Weight kg	page
60 - 5000	0.31	8.4	90.8	Fe	AI	1.4	63
150 - 10000	0.51	2.0	93.7	Nd	AI	0.8	64
80 - 18000	0.52	5.5	90.0	Fe	St	0.9	65
110 - 10000	0.63	1.2	86.2	Nd	St	0.2	66
120 - 10000	0.36	1.2	90.5	Nd	St	0.4	67
120 - 10000	0.39	1.3	90.0	Fe	St	1.0	68
140 - 20000	0.92	1.2	87.5	Fe	St	0.4	69
110 - 12000	0.57	1.4	88.6	Nd	NyFG	0.2	70
110 - 12000	0.57	1.4	88.5	Fe	NyFG	0.4	71
85 - 10000	0.53	1.8	86.1	Fe	NyFG	0.4	72
150 - 20000	1.01	0.8	86.4	Nd	St	0.1	73
180 - 20000	0.92	0.2	85.6		St		73
				Nd		0.1	
200 - 20000	0.81	0.1	84.1	Nd	NyFG	0.1	75
50 - 20000	0.33	72.8	98.0	Fe	AI	8.3	77
			106.2				
55 - 3500	0.30	84.5	98.6	Fe	AI	5.0	78
60 - 3500	0.30	74.3	98.0 98.0	Fe	AI	3.8	70
55 - 3500	0.45		98.0 96.9			3.8 3.5	
80 - 4500	0.30	63.2 14.7	96.9 96.7	Fe Fe	Al	3.0	80 81
			_				
SPL dB	Flux density T	Magnet	VC winding	Diaphragm	Weight kg	Spare part	page
94.4	1.80	Nd	flat Al	Treated silk	0.41	Z009405	84
93.3	1.28	Fe	flat Al	Treated silk	0.80	Z009410	85
95.8	1.37	Nd	flat Al	Treated silk	0.08	-	86
95.1	1.70	Fe	Cu	Treated silk	0.60	Z009402	86
93.1	1.70	Fe	Cu	Treated silk	0.60	Z009407	87
90.7	1.20	Nd	Cu	Treated silk	0.09	-	88
89.8	1.06	Fe	Cu	Treated silk	0.26		88
91.1	1.10	Nd	Cu	Treated silk	0.03	-	89
SPL	Flux density T	Magnet	VC windin	g Diaphragm	Weight	Spare part	pag
dB					kg		
108.8	1.93	Nd	flat Al	Ti	1.30	Z009399	92
106.3	2.10	Nd	flat Al	Ti	1.10	Z009396	93
108.7	2.10	Nd	flat Al	PI	1.10	Z009396P	93
106.3	1.70	Fe	flat Al	Ti	1.90	Z009396	94
109.0	1.70	Fe	flat Al	PI	1.90	Z009396P	94
107.9	1.85	Nd	flat Al	PEI	0.40	Z009390	9
105.7	1.64	Fe	flat Al	PEI	0.93	Z009392	9
107.3	1.70	Fe	flat Al	Tri-acetate	0.80	Z009370	90
107.3	1.92	Nd	flat Al	Tri-acetate	0.40	Z009376	90
105.5	1.56	Fe	Cu	Tri-acetate	0.60	Z009374	9
 Material	Overall dim.	Baffle cutout dim.		Mounting holes	Weight		page
	(WxDxH) mm	mm			kg		
plastic	290x160x150	255x135		8 holes Ø 4.5mm	0.41		99
plastic	200x160x100	167x129		4 holes Ø 5.0 mm	0.30		100
plastic	Ø140x80	Ø109		4 holes Ø 5.0 mm	0.10		101
plastic	119x119x80	Ø109		4 holes Ø 5.0 mm	0.10		101
		108x62					

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Catalogue n. 17



SICA ALTOPARLANTI s.r.l. via G. Galilei 20 - Loc. Ripe 60012 Trecastelli (AN) - Italy

Tel. +39 071 7958072 Fax +39 071 7959006 info@sica.it

www.sica.it www.sicaloudspeakers.com

graphic design: brugiatelli design® photo: Sica Altoparlanti, Francesco Cesaroni print: **b\_Bold group** 



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