

PROFESSIONAL TRANSDUCERS

THE HEART OF YOUR SOUND

2024 ISSUE

OUR MISSION

At **REDCATT**, we believe in delivering exceptional value to our customers.

We understand that investing in a quality speaker system can be a significant expense, which is why we strive to offer products that provide a great balance between cost and performance.

Our speakers are designed to deliver exceptional sound quality and longevity, while remaining affordable and accessible to a wide range of customers.

We use only the highest quality materials and cutting-edge technology to produce speakers that offer a superior listening experience, without breaking the bank.

With our products, you can enjoy the benefits of a high-end speaker system, without the high-end price tag.

REDCATT®

INNOVATION

Design

Our team at REDCATT has a wealth of experience in designing and producing top-notch loudspeakers.

With years of expertise in audio engineering and a passion for creating immersive sound experiences, our team is skilled at crafting speakers that deliver unparalleled quality, longevity, and sound.

We use only the highest quality materials and cutting-edge technology to create speakers that are built to last and deliver crystal-clear sound in your audio system.

Whether you're design audio system for a music lover, movie buff, club animal, or audiophile, our team has the knowledge and expertise to create a speaker that will exceed your expectations and enhance your listening experience of your customers.

We use modern design tools to create the best loudspeakers by employing advanced software for 3D modeling and simulation, allowing us to optimize every aspect of the speaker's design for maximum performance.
These tools enable us to fine-tune the acoustics, materials, and structural integrity, resulting in a speaker that delivers exceptional sound quality and durability.
Our use of modern design tools ensures that our loudspeakers meet the highest standards of performance and reliability.

QUALITY

Quality assurance

At REDCATT, we take quality control very seriously.

Each and every one of our products goes through a rigorous testing process to ensure that they meet our high standards for quality and performance.

From the materials we use to the design of our speakers, every aspect of our product is scrutinized to ensure that it delivers exceptional sound quality and longevity.

Our team of experts meticulously tests our products to identify any potential issues and correct them before they ever reach our customers.

We are committed to delivering products that exceed expectations, and our rigorous quality control measures ensure that every speaker that leaves our facility is of the highest quality possible.

REDCATT®

2" | 22NFR

Full-range

REDCATT





Key features:

- FULL-RANGE FREQUENCY RESPONSE
- OPTIMIZED FREQUENCY RESPONSE
- USAGE IN HOME HI-FI, TV BARS, COLUMNS SYSTEMS AND ARRAYS

Design notes:

This small, but mighty, driver was designed for application where full-range frequency response from one unit is required.

Magnetic circuit is designed with neodymium slug and u-cup steel. This circuit delivers very good level of performance in compact and a cost effective way.

Very lightweight cone with attached rubber surround ensures good pistonic behavior across wide frequency range.

REDCATT has designed new basket for this application. The basket features front flange all around, which improves the mechanical rigidity of the chassis. The driver can be either front or back mounted onto the baffle.

Due to its compact size, yet excellent acoustical performance, the 22NFR can be used in variety of applications, from column speakers, multi-way systems, portable products, etc.

Specifications:

General specs	
Nominal Diameter:	2"
Rated Impedance:	8 ohm

Power handling	
AES Power:	20 watts
Program Power:	40 watts
Peak Power:	80 watts

Voice Coil	
Diameter:	1 in.
Winding wire:	CCAW
Former:	kapton
Winding height:	5.5 mm

T/S Parameters	
Resonant frequency:	255 Hz
Re:	5.6 ohm
Qes:	0.98
Qms:	6.46
Qts:	0.85
Vas:	0.08 liters
Sd:	15.9 cm2
Sensitivity:	85 dB
Mms:	1.67 grams
Bl:	3.91
Le:	0.06 mH

Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Conex
Plate thickness:	4 mm
Peak to peak linear cone displacement	3.6 mm
Overall diameter:	60.5 mm
Bolt circle diameter:	64 mm
Baffle cutout dia.:	52 mm
Number of mounting holes:	4
Depth (flange to rear):	35.5 mm
Net weight:	0.12kg

Ordering codes:

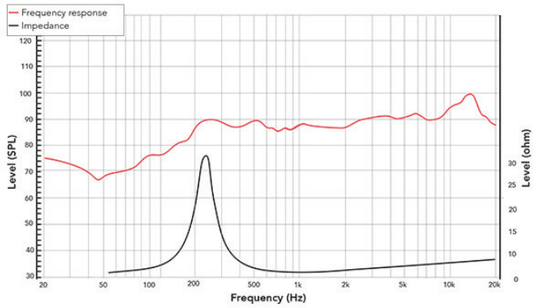
22NFR-X8 ohm-462A

Recone kits:

RC22NFRX-462A

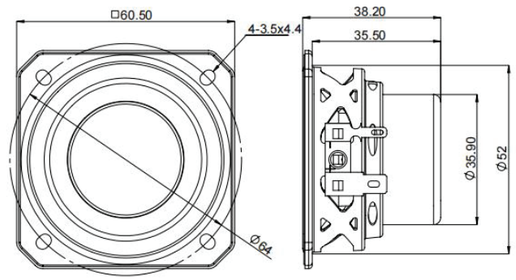
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



info@redcatt.net www.redcatt.net

2" | 21NFR

Full-range

REDCAT



Key features:

- COMPACT, FULL-RANGE DESIGN
- HIGHLY EFFICIENT MAGNETIC STRUCTURE
- HIGH POWER HANDLING CAPABILITY

Design notes:

Introducing the 21NFR - a small driver with a mighty punch! This gem was developed to deliver a full range of frequencies, from rich bass to crystal-clear highs, making it the perfect choice for portable products, bookshelf speakers, and array applications in columns.

What sets the 21NFR apart is its full-range behavior, eliminating the need for additional tweeters while still achieving excellent sound quality. Our extensive experience in designing highly efficient transducers shines through in this driver, offering top-notch performance without breaking the bank.

The u-cup style magnetic system is optimized to deliver consistent magnetic flux to the voice coil across the entire operational range, ensuring a powerful and consistent audio experience. Plus, with a lightweight yet robust cone attached to our specially crafted rubber blend surround, the 21NFR is designed to handle low frequencies with ease while also excelling as a high-frequency device.

Get ready to experience the power and versatility of the 21NFR - where small size meets massive performance.

Specifications:

General specs	
Nominal Diameter:	2"
Rated Impedance:	16 ohm
Power handling	
AES Power:	10 watts
Program Power:	20 watts
Peak Power:	40 watts
Voice Coil	
Diameter:	0.8 in.
Winding wire:	CCAW
Former:	kapton
Winding height:	6.4 mm

T/S Parameters	
Resonant frequency:	157 Hz
Re:	10.2 ohm
Qes:	0.82
Qms:	3.8
Qts:	0.68
Vas:	0.25 liters
Sd:	16.62 cm2
Sensitivity:	85 dB
Mms:	1.59 grams
Bl:	4.4
Le:	0.1 mH

Design details	
Surround Material:	Rubber
Cone material:	Paper
Spider:	Nomex
Plate thickness:	4 mm
Peak to peak linear cone displacement	8.2 mm
Overall diameter:	57.3 mm
Bolt circle diameter:	45.45 mm
Baffle cutout dia.:	50.5 mm
Number of mounting holes:	4
Depth (flange to rear):	34.5 mm
Net weight:	119g

Ordering codes:

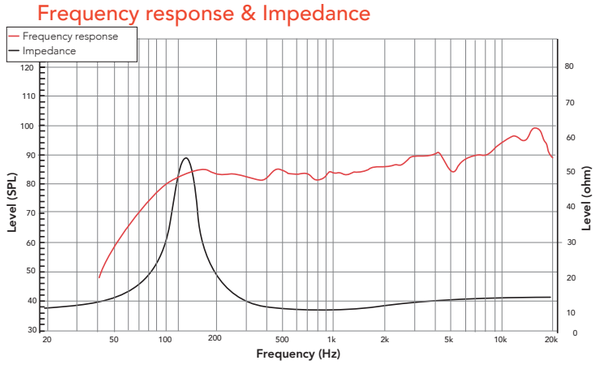
21NFR-X16 ohm-393D

Recone kits:

RC21NFRX-393D

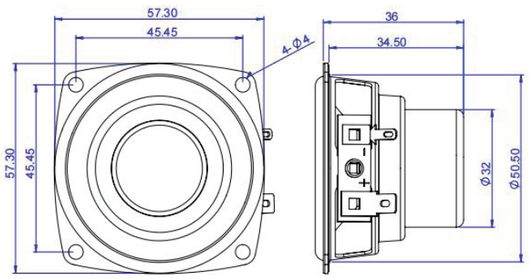
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

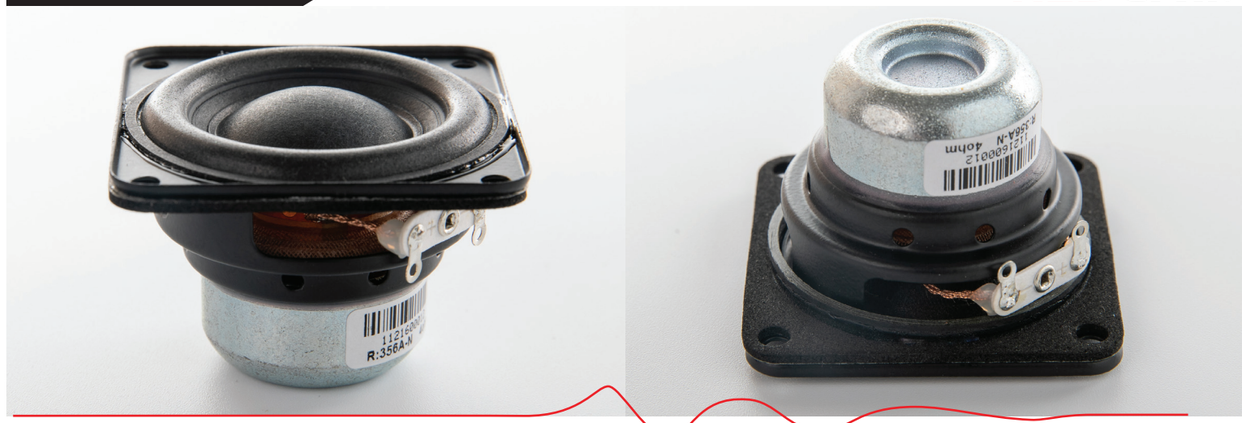
2D drawing



2" | 20NFR

Full-range

REDCAT



Key features:

- VERY COMPACT AND AFFORDABLE DESIGN
- LIGHTWEIGHT CONE ASSEMBLY
-

Design notes:

20NFR was designed for applications where true full-range frequency response from one driver is required. From low to up to 17kHz, this driver truly delivers that. With additional DSP, the driver can be used from about 60Hz up.

We have developed very lightweight foam surround material. This material is our preference anywhere where we are designing larger cone excursions, yet lightweight piston is required. It delivers excellent acoustical properties without the mass penalties.

The magnetic circuit was designed around neodymium slug magnets, with u-cup style steel. The circuit delivers very high performance in very small and lightweight form factor.

Specifications:

General specs	
Nominal Diameter:	2"
Rated Impedance:	4 ohm
Power handling	
AES Power:	10 watts
Program Power:	20 watts
Peak Power:	40 watts
Voice Coil	
Diameter:	0.75 in.
Winding wire:	Aluminum
Former:	kapton
Winding height:	8.5 mm

T/S Parameters	
Resonant frequency:	185 Hz
Re:	3.6 ohm
Qes:	0.54
Qms:	10.3
Qts:	0.52
Vas:	0.09 liters
Sd:	11.34 cm2
Sensitivity:	83 dB
Mms:	1.37 grams
Bl:	3.24
Le:	0.08 mH

Design details	
Surround Material:	Foam
Cone material:	Paper
Spider:	Nomex
Plate thickness:	3 mm
Peak to peak linear cone displacement	6 mm
Overall diameter:	48 mm
Bolt circle diameter:	56 mm
Baffle cutout dia.:	42.9 mm
Number of mounting holes:	4
Depth (flange to rear):	29 mm
Net weight:	0.08kg

Ordering codes:

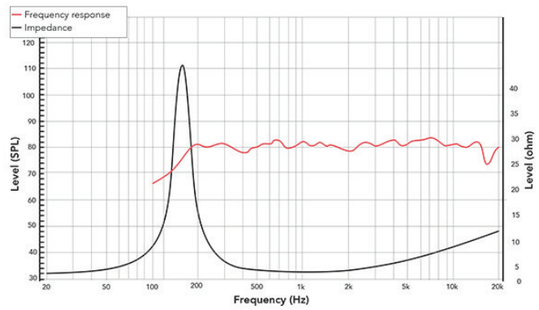
20NFR-X4 ohm-345A

Recone kits:

RC20NFRX-345A

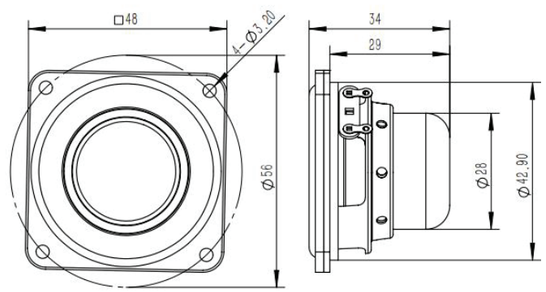
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Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing

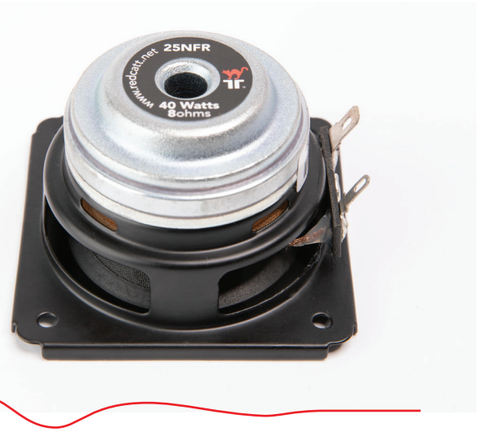


3" | 25NFR

Full-range

REDCAT





Key features:

- FULL-RANGE FREQUENCY RESPONSE
- A VERY SMALL FORM FACTOR
- OPTIMIZED FREQUENCY RESPONSE

Design notes:

25NFR was designed around neodymium ring magnet. The magnetic structure delivers very high level of magnetic force, while generating minimum amount of modulation distortion.

The lightweight, yet strong, paper cone with attached rubber surround was designed and optimized to deliver the highest level of performance in full-range applications.

This speaker finds its best application in columns or multi-way Hi-Fi products. Due to its excellent HF response, further usage of HF units is not required.

The small form-factor allows this product to be used in space limited applications or portable products.

Specifications:

General specs	
Nominal Diameter:	3"
Rated Impedance:	8 ohm
Power handling	
AES Power:	20 watts
Program Power:	40 watts
Peak Power:	80 watts
Voice Coil	
Diameter:	0.8 in.
Winding wire:	CCAW
Former:	kapton
Winding height:	8.3 mm

T/S Parameters	
Resonant frequency:	123 Hz
Re:	7.3 ohm
Qes:	0.81
Qms:	5.97
Qts:	0.71
Vas:	0.46 liters
Sd:	21.2 cm2
Sensitivity:	83 dB
Mms:	2.2 grams
Bl:	4
Le:	0.09 mH

Design details	
Surround Material:	Rubber
Cone material:	Paper
Spider:	Nomex
Plate thickness:	3 mm
Peak to peak linear cone displacement	7.8 mm
Overall diameter:	65 mm
Bolt circle diameter:	73 mm
Baffle cutout dia.:	56 mm
Number of mounting holes:	4
Depth (flange to rear):	37 mm
Net weight:	0.18kg

Ordering codes:

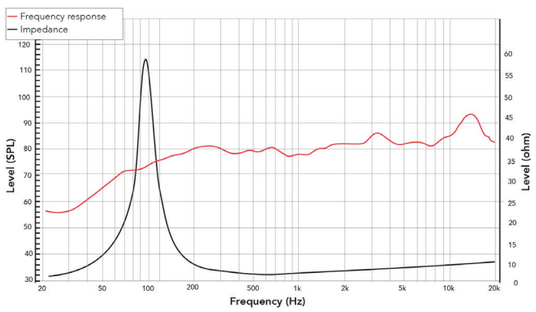
25NFR-X8 ohm-279

Recone kits:

RC25NFRX-279

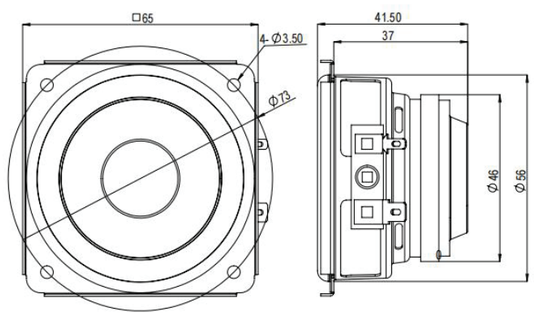
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



3" | 32NFR

Full-range

REDCAT





Key features:

- FULL-RANGE COVERAGE
- VERY COMPACT DESIGN
- SUITABLE FOR ARRAY, COLUMNS, OR USAGE WITHOUT HF DRIVERS

Design notes:

32NFR delivers incredible . It comes together with other speaker models as the next generation of our full-range drivers. Well balanced frequency response from LF to HF, low harmonic distortion, and on top of that all packed in a lightweight and compact mechanical structure.

The driver was designed around neodymium ring magnet. Magnetic circuit delivers the highest level of performance, with minimum modulation distortion.

The cone and surround were newly designed and optimized specifically for this model. Progressive roll surround further improves the frequency response.

Our newly designed basket with typical REDCATT visual aspects sports front and rear gaskets, thus the driver can be easily mounted on both sides of baffle. Large basket openings minimize turbulences and air noise. Space bellow spider is also vented. This further improves the temperature stability of this model. The mounting surface has a flange all around, feature that greatly improves mechanical rigidity.

Specifications:

General specs	
Nominal Diameter:	3"
Rated Impedance:	8 ohm
Power handling	
AES Power:	30 watts
Program Power:	60 watts
Peak Power:	120 watts
Voice Coil	
Diameter:	0.75 in.
Winding wire:	CCAW
Former:	kapton
Winding height:	6.4 mm

T/S Parameters	
Resonant frequency:	118 Hz
Re:	5.5 ohm
Qes:	0.35
Qms:	3.85
Qts:	0.32
Vas:	1.14 liters
Sd:	33.18 cm2
Sensitivity:	91 dB
Mms:	2.4 grams
Bl:	5.35
Le:	0.2 mH

Design details	
Surround Material:	Rubber
Cone material:	Paper
Spider:	Nomex
Plate thickness:	4 mm
Peak to peak linear cone displacement	6.4 mm
Overall diameter:	82.5 mm
Bolt circle diameter:	84 mm
Baffle cutout dia.:	70.5 mm
Number of mounting holes:	4
Depth (flange to rear):	45 mm
Net weight:	0.24kg

Ordering codes:

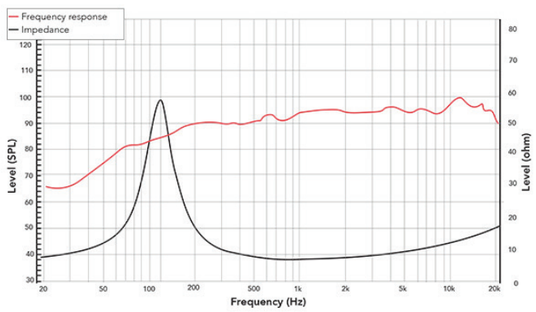
32NFR-X8 ohm-463A

Recone kits:

RC32NFRX-463A

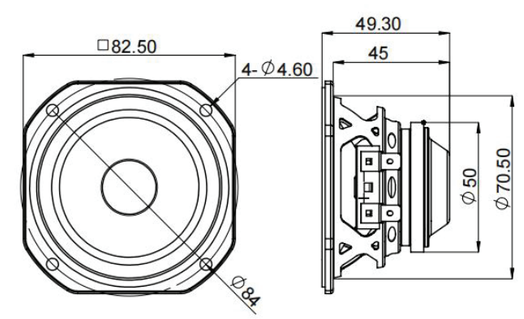
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



3" | 31NFR

Full-range



Key features:

- EXTENDED FREQUENCY RESPONSE
- HARD ANODIZED ALUMINUM CONE
- USAGE IN HI-FI, COLUMNS, OUTDOOR AND PORTABLE PRODUCTS

Design notes:

The 31NFR is a high efficiency, (84dB 1watt / 1 meter) 3-inch full range speaker with very linear frequency response characteristics and high power handling capability. The 31NFR uses a lightweight anodized aluminum cone assembly along with a NBR single roll geometry surround. The combination provides high efficiency, extended high frequency response and sustained output under variety of conditions, while generating low harmonic distortion over the working range of this speaker.

Magnetic circuit design
REDCATT engineers have developed neodymium based magnetic circuit with small form factor, high integrity magnetic flux gap and low distortion characteristic. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability. Copper demodulation cup is assembled over the t-pole.

Specifications:

General specs	
Nominal Diameter:	3"
Rated Impedance:	8 ohm
Power handling	
AES Power:	30 watts
Program Power:	60 watts
Peak Power:	120 watts
Voice Coil	
Diameter:	1 in.
Winding wire:	Aluminum
Former:	Kapton
Winding height:	7.4 mm

T/S Parameters	
Resonant frequency:	115 Hz
Re:	6.3 ohm
Qes:	0.94
Qms:	15.1
Qts:	0.88
Vas:	0.85 liters
Sd:	28.3 cm2
Sensitivity:	84 dB
Mms:	2.5 grams
Bl:	3.5
Le:	0.09 mH

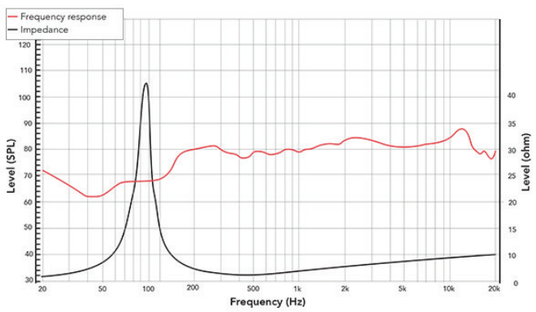
Design details	
Surround Material:	Rubber
Cone material:	Aluminum
Spider:	Nomex
Plate thickness:	4 mm
Peak to peak linear cone displacement	5.8 mm
Overall diameter:	78.7 mm
Bolt circle diameter:	84 mm
Baffle cutout dia.:	71.5 mm
Number of mounting holes:	4
Depth (flange to rear):	45.3 mm
Net weight:	0.18kg

Ordering codes:
31NFR-X8 ohm-229

Recone kits:
RC31NFRX-229

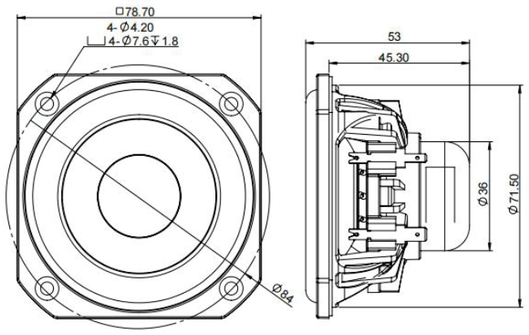
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



3" | 30FF

Full-range



Key features:

- FULL-RANGE FREQUENCY RESPONSE
- AFFORDABLE SMALL DRIVER THAT FITS ALL BUDGETS
- VERY POPULAR IN ARRAY AND COLUMN APPLICATIONS

Design notes:

The 30FF is a high efficiency, (85dB 1watt / 1 meter) 3-inch full range speaker with linear frequency response characteristics and high power handling capability while generating low harmonic distortion artifacts. The 30FF uses a lightweight exponential pressed cone assembly along with a NBR single roll geometry surround. The combination provides remarkable strength, high efficiency and sustained output under extreme conditions.

Power Handling
At the core of the 30FF is it‚Äôs voice coil technology featuring a Kapton former material capable of withstanding peak temperatures in excess of 240C, well beyond the thermal requirements of modern professional audio systems and providing optimal structural strength and thermal characteristics. Former strength provides the ideal transfer of power between the voice coil and the cone assembly and assists in reducing distortion artifacts. By combining this material with state of the art adhesives and our winding voice coil technology, the 30FF delivers very high performance.

The best application is in column speakers, two-way and multi-way audio systems. Due to its good HF extension, the HF units are not required.

Specifications:

General specs	
Nominal Diameter:	3"
Rated Impedance:	8 ohm
Power handling	
AES Power:	20 watts
Program Power:	40 watts
Peak Power:	80 watts
Voice Coil	
Diameter:	0.75 in.
Winding wire:	CCAW
Former:	Kapton
Winding height:	6.5 mm

T/S Parameters	
Resonant frequency:	119 Hz
Re:	5.6 ohm
Qes:	0.98
Qms:	3.87
Qts:	0.78
Vas:	0.81 liters
Sd:	28.27 cm2
Sensitivity:	85 dB
Mms:	2.4 grams
Bl:	3.25
Le:	0.04 mH

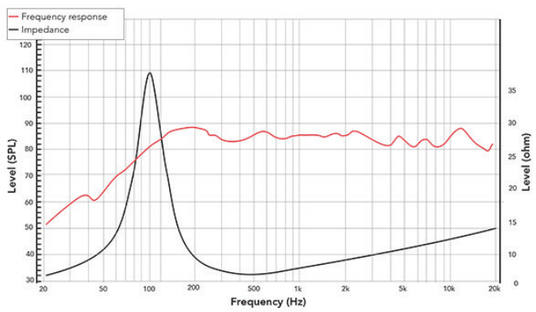
Design details	
Surround Material:	Rubber
Cone material:	Paper
Spider:	Nomex
Plate thickness:	4 mm
Peak to peak linear cone displacement	7.4 mm
Overall diameter:	79 mm
Bolt circle diameter:	86 mm
Baffle cutout dia.:	77 mm
Number of mounting holes:	4
Depth (flange to rear):	46.9 mm
Net weight:	0.47kg

Ordering codes:
30FF-X8 ohm-264B

Recone kits:
RC30FFX-264B

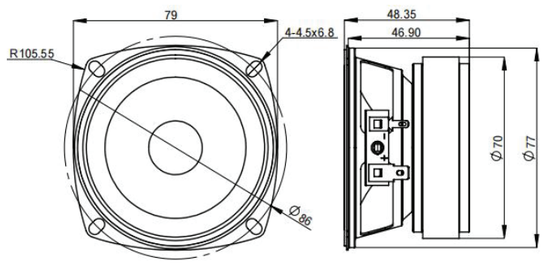
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



4" | Twiggy35

Woofer

REDCAT





Key features:

- REMARKABLY SLIM 10.15MM MOUNTING DEPTH
- 3.8MM CONE EXCURSION
- POWER HANDLING CAPACITY OF 20 WATTS

Design notes:

Introducing the 35Twiggy mid-woofer, designed for ultra-thin applications. With its remarkably slim 10.15mm mounting depth and maximum 3.8mm cone excursion, this driver delivers exceptional performance. The 3-layer honeycomb cone ensures optimal functionality across all ranges. Boasting a power handling capacity of 20 watts, the 35Twiggy is a standout in our Twiggy product line. Designed with our patented technology, Twiggy drivers offer unparalleled design flexibility for unique product shapes and space-constrained environments. Experience world-class audio innovation with the 35Twiggy.

Specifications:

General specs	
Nominal Diameter:	4"
Rated Impedance:	8 ohm
Power handling	
AES Power:	10 watts
Program Power:	20 watts
Peak Power:	40 watts
Voice Coil	
Diameter:	1.3 in.
Winding wire:	CCAW
Former:	Aluminum
Winding height:	3 mm

T/S Parameters	
Resonant frequency:	145 Hz
Re:	7.3 ohm
Qes:	1.75
Qms:	4.38
Qts:	1.25
Vas:	0.6 liters
Sd:	36.32 cm2
Sensitivity:	83 dB
Mms:	3.7 grams
Bl:	3.7
Le:	0.19 mH

Design details	
Surround Material:	Rubber
Cone material:	Paper Honey-
Spider:	Nomex
Plate thickness:	3 mm
Peak to peak linear cone displacement	3.8 mm
Overall diameter:	90*90 mm
Bolt circle diameter:	94 mm
Baffle cutout dia.:	77 mm
Number of mounting holes:	4
Depth (flange to rear):	10.15 mm
Net weight:	95g

Ordering codes:

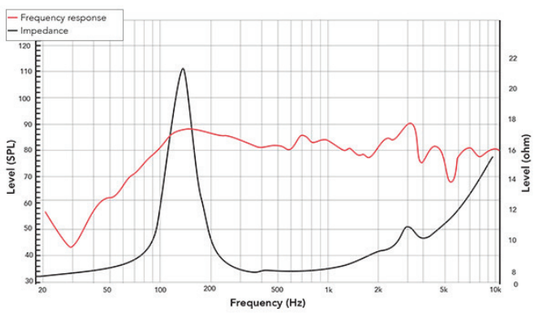
Twiggy35-X8 ohm-535D

Recone kits:

RCTwiggy35X-535D

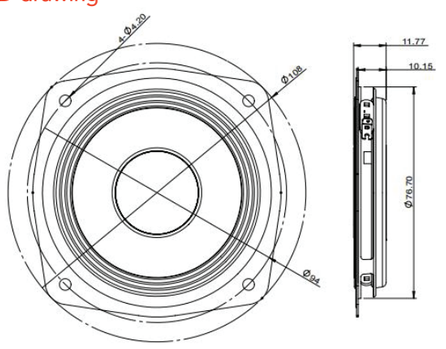
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



4" | 35FR

Full-range

REDCAT





Key features:

- MIGHTY DRIVER DELIVERING THE HIGHEST PERFORMANCE
- VERY GOOD LF EXTENSION, LARGE PEAK TO PEAK CONE DISPLACEMENT
-

Design notes:

35FR was developed as full-range ferrite magnet driver. It has an excellent HF extension and provides extended level of LF performance.

The driver was designed for usage in sealed speaker systems. It could be in column speakers, 2-way or 1-way speakers. It is also possible design a speaker system with a passive radiator to further extend the low frequency range.

Voice coil is wound with copper hi temperature wire directly on the aluminum former, ensuring good power handling and high temperature stability.

This driver brings good balance between performance and cost.

Depending on intended usage, we can deliver the driver either as 4 or 8 ohm version.

Specifications:

General specs	
Nominal Diameter:	4"
Rated Impedance:	4 ohm
Power handling	
AES Power:	25 watts
Program Power:	50 watts
Peak Power:	100 watts
Voice Coil	
Diameter:	1 in.
Winding wire:	Copper
Former:	Aluminum
Winding height:	6.9 mm

T/S Parameters	
Resonant frequency:	67 Hz
Re:	3.5 ohm
Qes:	0.37
Qms:	4.35
Qts:	0.34
Vas:	1.6 liters
Sd:	38.5 cm2
Sensitivity:	84 dB
Mms:	7.5 grams
Bl:	5.46
Le:	0.14 mH

Design details	
Surround Material:	Rubber
Cone material:	Paper
Spider:	Nomex
Plate thickness:	8 mm
Peak to peak linear cone displacement	12.2 mm
Overall diameter:	93 mm
Bolt circle diameter:	101 mm
Baffle cutout dia.:	85 mm
Number of mounting holes:	4
Depth (flange to rear):	51 mm
Net weight:	0.85kg

Ordering codes:

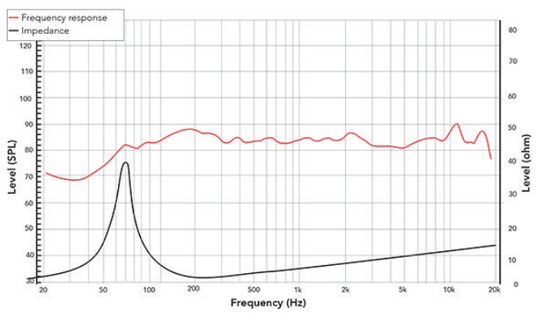
35FR-X4 ohm-155

Recone kits:

RC35FRX-155

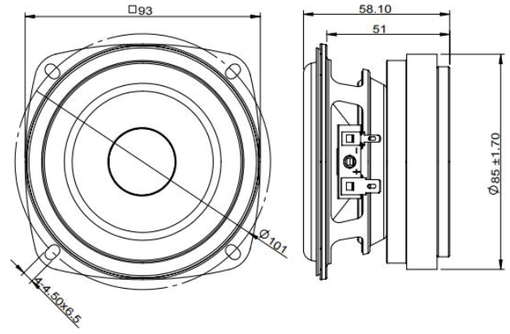
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



4" | 35FR

Full-range

REDCAT





Key features:

- EXTENDED FREQUENCY RESPONSE
- BL SYMMETRY
- FEM OPTIMIZED PAPER CONE AND SURROUND

Design notes:

35FR was developed as full-range ferrite magnet driver. It has an excellent HF extension and provides good level of LF performance.

The driver was designed for usage in sealed speaker systems. It could be in column speakers, 2-way or 1-way speakers. It is also possible design a speaker system with a passive radiator to further extend the low frequency range.

Voice coil is wound with CCAW hi temperature wire directly on the Kapton former, ensuring good power handling and high temperature stability.

This driver brings good balance between performance and cost.

Depending on intended usage, we can deliver the driver either as 4, 8 or 16 ohm version.

Specifications:

General specs	
Nominal Diameter:	4"
Rated Impedance:	8 ohm
Power handling	
AES Power:	20 watts
Program Power:	40 watts
Peak Power:	80 watts
Voice Coil	
Diameter:	1 in.
Winding wire:	CCAW
Former:	kapton
Winding height:	8.7 mm

T/S Parameters	
Resonant frequency:	128 Hz
Re:	6.3 ohm
Qes:	0.68
Qms:	7.76
Qts:	0.63
Vas:	1.14 liters
Sd:	40.7 cm2
Sensitivity:	89 dB
Mms:	3.1 grams
Bl:	4.8
Le:	0.25 mH

Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	4 mm
Peak to peak linear cone displacement	8.6 mm
Overall diameter:	93 mm
Bolt circle diameter:	101 mm
Baffle cutout dia.:	85.5 mm
Number of mounting holes:	4
Depth (flange to rear):	49 mm
Net weight:	0.57kg

Ordering codes:

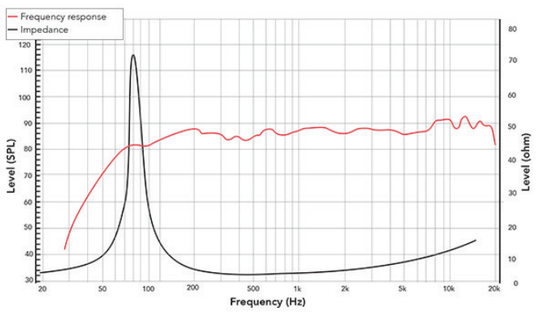
35FR-X8 ohm-406B

Recone kits:

RC35FRX-406B

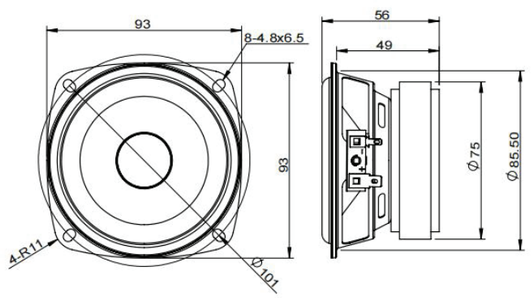
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



4" | 4FR

Full-range

REDCAT





Key features:

- 4FR MID-WOOFER WAS DESIGNED WITH OUTDOOR APPLICATIONS IN MIND. ALL
- EXTENDED LF FREQUENCY RESPONSE
- 2-WAY SPEAKER SYSTEMS

Design notes:

4FR Mid-woofer was designed with outdoor applications in mind. All speaker parts are coated to provide good protection against weather elements. The surround, cone and dust cap are produced with UV stabilizers. Our state of the art glue application and glue selection ensures the glue joints are waterproof.

Magnet circuit is designed around sizable ferrite magnet. Consistent and wide Bl field add to the well balanced performance of this driver.

Polypropylene cone and dust-cap are lightweight solution and deliver the highest levels of performance. Large surround roll extends the peak to peak cone displacement and greatly improves the LF performance.

The best application is in 2-way or multi-way speaker systems that can be designed for indoor or outdoor usage in Hi-Fi or professional products.

Specifications:

General specs	
Nominal Diameter:	4"
Rated Impedance:	4 ohm
Power handling	
AES Power:	30 watts
Program Power:	60 watts
Peak Power:	120 watts
Voice Coil	
Diameter:	1 in.
Winding wire:	Copper
Former:	Aluminum
Winding height:	4.3 mm

T/S Parameters	
Resonant frequency:	80 Hz
Re:	3.3 ohm
Qes:	0.58
Qms:	4.24
Qts:	0.51
Vas:	1.96 liters
Sd:	50.3 cm2
Sensitivity:	85 dB
Mms:	7.3 grams
Bl:	4.58
Le:	0.29 mH

Design details	
Surround Material:	Rubber
Cone material:	PP
Spider:	Nomex
Plate thickness:	5 mm
Peak to peak linear cone displacement	6.6 mm
Overall diameter:	116 mm
Bolt circle diameter:	109 mm
Baffle cutout dia.:	94.5 mm
Number of mounting holes:	4
Depth (flange to rear):	55.9 mm
Net weight:	0.78kg

Ordering codes:

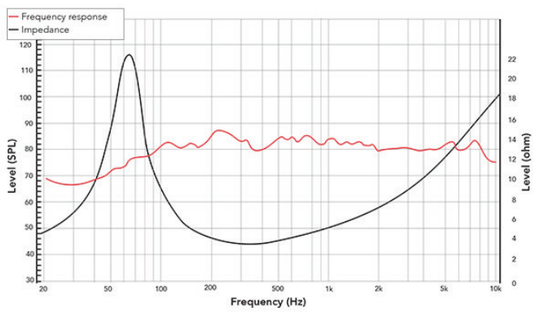
4FR-X4 ohm-385

Recone kits:

RC4FRX-385

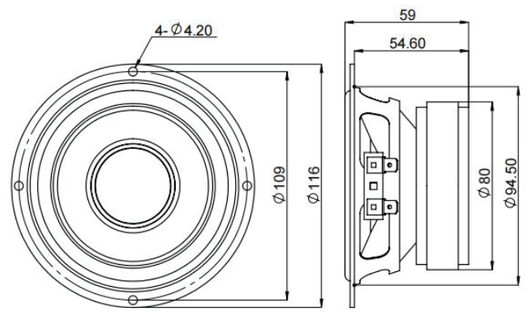
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

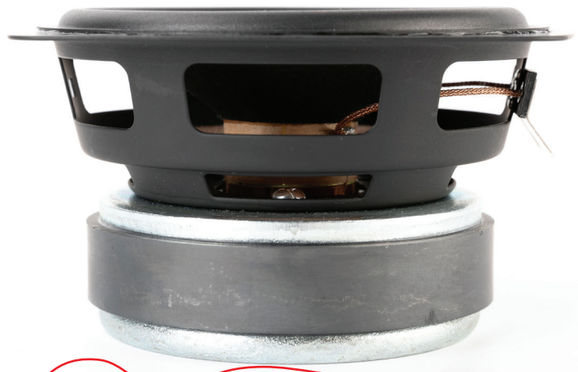
2D drawing



4" | 4FR

Full-range





Key features:

- OPTIMIZED FULL-RANGE PERFORMANCE
- GOOD LOW FREQUENCY BEHAVIOR
- AFFORDABLE DESIGN

Design notes:

4FR ferrite based mid-woofer was developed for applications where small size mid-woofer is required. Low resonant frequency and large cone excursion delivers seizable amounts of low frequencies. Yet, this driver delivers very good performance in mid-high frequency range.

Our engineers have chosen light-weight, yet strong, paper cone with rubber surround. Cone optimized shape brings remarkable strength of the piston and greatly improves harmonic distortion artifacts.

Overall this model delivers very good performance and is well balanced between performance - cost.

Specifications:

General specs	
Nominal Diameter:	4"
Rated Impedance:	4 ohm
Power handling	
AES Power:	30 watts
Program Power:	60 watts
Peak Power:	120 watts
Voice Coil	
Diameter:	1 in.
Winding wire:	Copper
Former:	Aluminum
Winding height:	10.6 mm

T/S Parameters	
Resonant frequency:	79 Hz
Re:	3.5 ohm
Qes:	0.61
Qms:	3.47
Qts:	0.52
Vas:	1.8 liters
Sd:	50.3 cm2
Sensitivity:	84 dB
Mms:	7.9 grams
Bl:	4.8
Le:	0.09 mH

Design details	
Surround Material:	Rubber
Cone material:	Paper
Spider:	Nomex
Plate thickness:	5 mm
Peak to peak linear cone displacement	6.6 mm
Overall diameter:	105.5 mm
Bolt circle diameter:	106 mm
Baffle cutout dia.:	93.6 mm
Number of mounting holes:	4
Depth (flange to rear):	56 mm
Net weight:	0.77kg

Ordering codes:

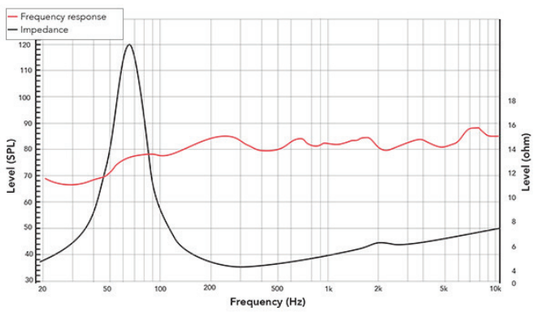
4FR-X4 ohm-322

Recone kits:

RC4FRX-322

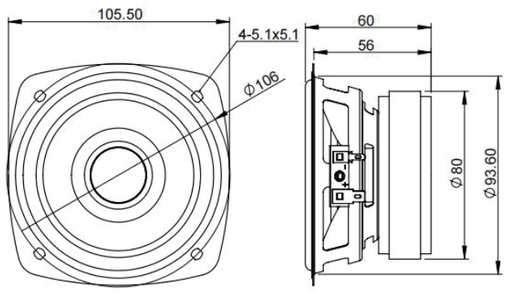
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



4" | 41NFR

Full-range





Key features:

- FULL-RANGE FREQUENCY RESPONSE
- EXTENDED LF RESPONSE
- FRONT OR REAR MOUNTING

Design notes:

41NFR was introduced as part of our new range of smaller transducers. The model is focusing on improvements in frequency response, both in LF and Mid-Freq. Powerful neodymium ring based magnetic structure delivers the highest levels of moving force onto the voice coil with minimum distortion artifacts.

The cone and rubber surround were further FEM modeled and deliver incredible performance.

41NFR was designed for column speakers, micro line-array systems and two-way audio systems. Due to its good performance in high frequencies, this driver can be used without HF unit, which opens new opportunities for the system engineers to design compact, yet good sounding products.

Our newly developed basket with typical REDCATT shapes, utilizes tall front EVA gasket and 1mm rear gasket. The driver can be thus mounted from both sides of the baffle.

Specifications:

General specs	
Nominal Diameter:	4"
Rated Impedance:	16 ohm
Power handling	
AES Power:	40 watts
Program Power:	80 watts
Peak Power:	160 watts
Voice Coil	
Diameter:	1 in.
Winding wire:	Copper
Former:	kapton
Winding height:	11.3 mm

T/S Parameters	
Resonant frequency:	98 Hz
Re:	12.2 ohm
Qes:	0.4
Qms:	5.05
Qts:	0.37
Vas:	2.1 liters
Sd:	56.75 cm2
Sensitivity:	90 dB
Mms:	5.4 grams
Bl:	10
Le:	0.58 mH

Design details	
Surround Material:	Rubber
Cone material:	Paper
Spider:	Nomex
Plate thickness:	5 mm
Peak to peak linear cone displacement	10.2 mm
Overall diameter:	104.5 mm
Bolt circle diameter:	106.3 mm
Baffle cutout dia.:	92.2 mm
Number of mounting holes:	4
Depth (flange to rear):	51.2 mm
Net weight:	0.54kg

Ordering codes:

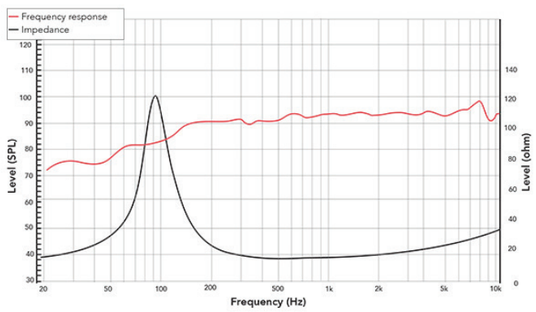
41NFR-X16 ohm-464A

Recone kits:

RC41NFRX-464A

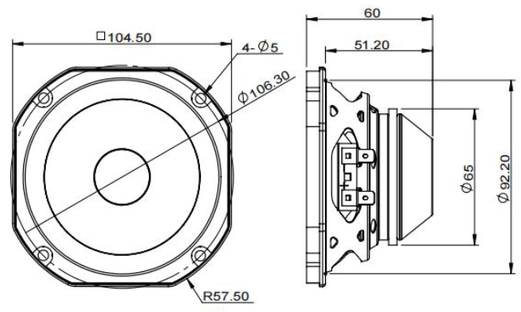
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



4" | 41FR

Full-range

REDCATT





Key features:

- VERY GOOD PERFORMANCE AT AFFORDABLE PRICE
- EXCELLENT HF EXTENSION
- ARRAY APPLICATIONS, 2-WAY SYSTEMS, CAN BE USED WITHOUT HF UNIT

Design notes:

41FR is ferrite based mid-woofer, developed for applications where small size mid-woofer is required. This version was developed with extended HF response and in some cases could be used as full-range driver. Yet, this driver delivers very good performance low frequency range as well.

Our engineers have chosen light-weight, yet strong, paper cone with rubber surround. Cone optimized shape brings remarkable strength of the piston and greatly improves harmonic distortion artifacts.

Overall this model delivers very good performance and is well balanced between performance - cost.

Specifications:

General specs	
Nominal Diameter:	4"
Rated Impedance:	8 ohm
Power handling	
AES Power:	20 watts
Program Power:	40 watts
Peak Power:	80 watts
Voice Coil	
Diameter:	1 in.
Winding wire:	CCAW
Former:	kapton
Winding height:	7.2 mm

T/S Parameters	
Resonant frequency:	134 Hz
Re:	5.6 ohm
Qes:	0.81
Qms:	10.6
Qts:	0.75
Vas:	1.3 liters
Sd:	50.3 cm2
Sensitivity:	89 dB
Mms:	3.8 grams
Bl:	4.78
Le:	0.09 mH

Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	5 mm
Peak to peak linear cone displacement	7 mm
Overall diameter:	105.5 mm
Bolt circle diameter:	106 mm
Baffle cutout dia.:	93.6 mm
Number of mounting holes:	4
Depth (flange to rear):	55.9 mm
Net weight:	0.78kg

Ordering codes:

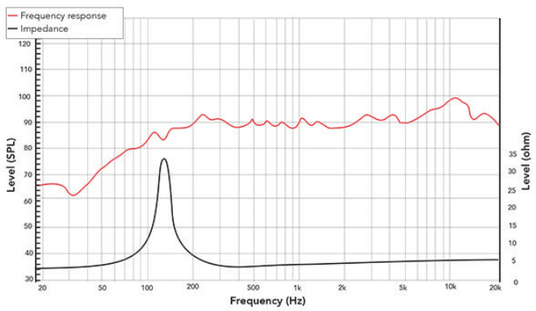
41FR-X8 ohm-360B

Recone kits:

RC41FRX-360B

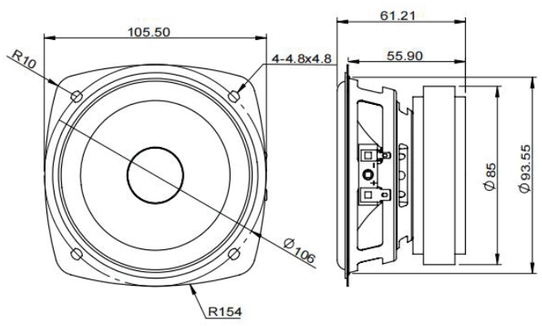
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



4" | 40NFR

Full-range

REDCATT





Key features:

- FULL-RANGE FREQUENCY RESPONSE
- UNIQUE CONE MATERIAL
- FOR COLUMN SYSTEMS, DESKTOP HIGH PERFORMANCE 2 WAY OR ONE-WAY SPEAKERS, HI-FI

Design notes:

The 40NFR is a very high efficiency, (86dB 1watt / 1 meter) 4-inch full range speaker with linear frequency response characteristics and high power handling capability while generating low harmonic distortion artifacts. The 40NFR uses a unique exponential cone, made off very lightweight glass-carbon fiber woven fabric, along with a NBR single roll geometry surround. The combination provides remarkable strength, high efficiency and sustained output under extreme conditions.

Magnetic circuit design
REDCATT engineers have developed neodymium based magnetic circuit, capable of delivering the highest level of performance, providing a consistent, high integrity magnetic flux gap, low distortion characteristic. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability.

The compact size of the magnetic circuit ensures the speaker can fit in tight space of modern audio product designs.

Specifications:

General specs	
Nominal Diameter:	4"
Rated Impedance:	16 ohm
Power handling	
AES Power:	25 watts
Program Power:	50 watts
Peak Power:	100 watts
Voice Coil	
Diameter:	0.75 in.
Winding wire:	CCAW
Former:	Kapton
Winding height:	4.9 mm

T/S Parameters	
Resonant frequency:	115 Hz
Re:	12.3 ohm
Qes:	1.3
Qms:	6.2
Qts:	1.1
Vas:	1.5 liters
Sd:	50.2 cm2
Sensitivity:	86 dB
Mms:	4.4 grams
Bl:	5.3
Le:	0.2 mH

Design details	
Surround Material:	Rubber
Cone material:	Glass Fiber
Spider:	Nomex
Plate thickness:	4 mm
Peak to peak linear cone displacement	5.8 mm
Overall diameter:	103.5 mm
Bolt circle diameter:	115 mm
Baffle cutout dia.:	91 mm
Number of mounting holes:	4
Depth (flange to rear):	50.5 mm
Net weight:	0.2kg

Ordering codes:

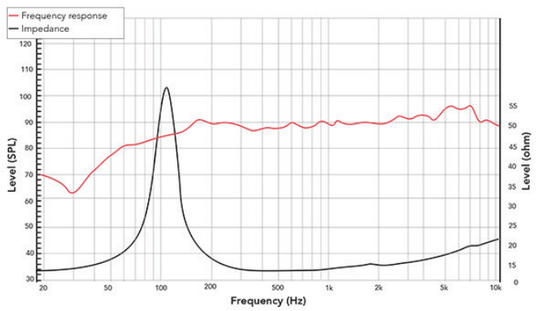
40NFR-X16 ohm-223

Recone kits:

RC40NFRX-223

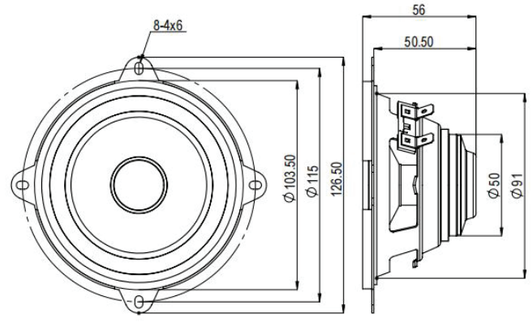
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



5" | 5FR

Full-range



Key features:

- WIDE RANGE FREQUENCY RESPONSE
- RUBBER SURROUND, CUSTOM PAPER PULP CONE
- DESIGNED FOR HI-FI, STUDIO DESK-TOP, COLUMNS OR OTHER MULTI-WAY SYSTEMS

Design notes:

5FR delivers a good balance of low-mid frequencies. Extended frequency response opens opportunity do design compact audio systems with sizable amounts of low frequencies, yet wit great clarity in mid to high frequency region. The optimized behavior of this driver in the mid-frequency region allows the audio engineers design simplified passive crossovers or DSP without the needs for large equalizations.

The magnetic structure was designed around large high-grade ferrite magnet. All steel parts are extensively coated to cope with the most demanding environments.

The cone paper pulp and surround were fully developed by REDCATT engineers and address all major break-up modes. The speaker has improved off-axes frequency response.

The newly designed steel basket with front and rear gaskets allow this mid-woofer to be mounted from the front and rear.

Specifications:

General specs	
Nominal Diameter:	5"
Rated Impedance:	8 ohm
Power handling	
AES Power:	60 watts
Program Power:	120 watts
Peak Power:	240 watts
Voice Coil	
Diameter:	1 in.
Winding wire:	Copper
Former:	kapton
Winding height:	9 mm

T/S Parameters	
Resonant frequency:	92 Hz
Re:	5.6 ohm
Qes:	0.73
Qms:	11.4
Qts:	0.69
Vas:	3.8 liters
Sd:	90 cm2
Sensitivity:	90 dB
Mms:	8.8 grams
Bl:	6.3
Le:	0.28 mH

Design details	
Surround Material:	Rubber
Cone material:	Paper
Spider:	Nomex
Plate thickness:	5 mm
Peak to peak linear cone displacement	9.6 mm
Overall diameter:	130.5 mm
Bolt circle diameter:	139 mm
Baffle cutout dia.:	113.5 mm
Number of mounting holes:	4
Depth (flange to rear):	61 mm
Net weight:	0.99kg

Ordering codes:

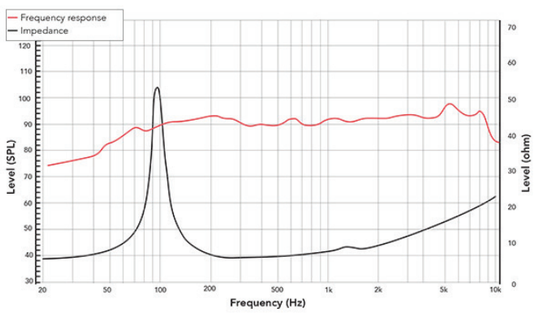
5FR-X8 ohm-465A

Recone kits:

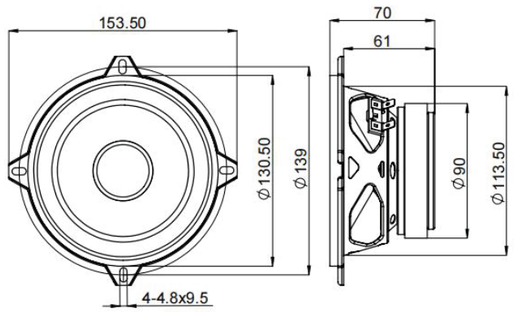
RC5FRX-465A

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

5" | 5FHW

Woofer



Key features:

- SMALL SUB-WOOFERS, HI-FI APPLICATIONS
- DESIGNED FOR INDOOR OR OUTDOOR APPLICATIONS

Design notes:

The 5FHW was designed for woofer applications in either home hi-fi or outdoor speaker systems.

Our engineers have designed polypropylene cone and dustcap for this driver, combined with ferrite magnetic circuit.

Overall, this model provides great level of balance between the performance and cost.

The cone, dust cap and surround material are produced with UV stabilizers. Furthermore, the state of the art REDCATT adhesives dispensing and selection ensures the driver is waterproof and thus can be used in outdoor applications.

Specifications:

General specs	
Nominal Diameter:	5"
Rated Impedance:	4 ohm
Power handling	
AES Power:	30 watts
Program Power:	60 watts
Peak Power:	120 watts
Voice Coil	
Diameter:	1 in.
Winding wire:	Copper
Former:	Aluminum
Winding height:	12.4 mm

T/S Parameters	
Resonant frequency:	50 Hz
Re:	3.2 ohm
Qes:	0.38
Qms:	4.94
Qts:	0.35
Vas:	6.55 liters
Sd:	86.6 cm2
Sensitivity:	86 dB
Mms:	15.8 grams
Bl:	6.55
Le:	0.66 mH

Design details	
Surround Material:	Rubber
Cone material:	PP
Spider:	Nomex
Plate thickness:	6 mm
Peak to peak linear cone displacement	11.2 mm
Overall diameter:	131 mm
Bolt circle diameter:	123 mm
Baffle cutout dia.:	112 mm
Number of mounting holes:	4
Depth (flange to rear):	60 mm
Net weight:	1.23kg

Ordering codes:

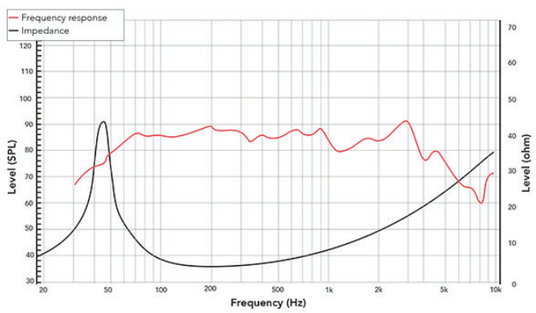
5FHW-X4 ohm-380

Recone kits:

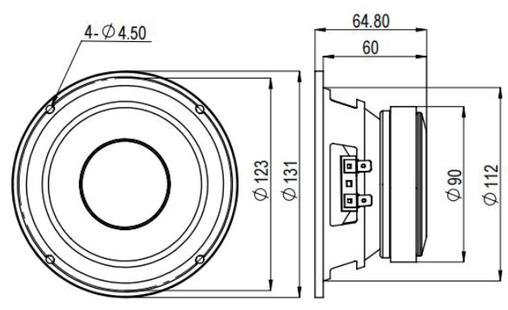
RC5FHWX-380

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

5" | 51FHW

Woofer





Key features:

- WIDE FREQUENCY RANGE
- VERY LOW HARMONIC DISTORTION

Design notes:

Introducing the 51FHW, a compact yet powerful woofer that redefines performance in our product lineup. Engineered with an optimized cone, surround, dust cap, and spider design, this woofer utilizes advanced materials and a cutting-edge magnetic circuit to deliver exceptional sound quality across a wide frequency range. Experience minimal breakup modes and harmonic distortion artifacts, allowing for crystal-clear audio reproduction. With the capability to perform seamlessly up to 15kHz, the 51FHW is the perfect choice for those seeking a well-balanced and high-performing solution in a compact form. Elevate your audio experience with the 51FHW!

Specifications:

General specs	
Nominal Diameter:	5"
Rated Impedance:	8 ohm
Power handling	
AES Power:	30 watts
Program Power:	60 watts
Peak Power:	120 watts
Voice Coil	
Diameter:	1 in.
Winding wire:	CCAW
Former:	Aluminum
Winding height:	12.5 mm

T/S Parameters	
Resonant frequency:	57 Hz
Re:	6.9 ohm
Qes:	0.34
Qms:	3.9
Qts:	0.31
Vas:	3.28 liters
Sd:	52.8 cm2
Sensitivity:	85 dB
Mms:	8.6 grams
Bl:	8.1
Le:	0.64 mH

Design details	
Surround Material:	Rubber
Cone material:	Paper
Spider:	Nomex
Plate thickness:	4 mm
Peak to peak linear cone displacement	11.4 mm
Overall diameter:	123.8 mm
Bolt circle diameter:	114 mm
Baffle cutout dia.:	94 mm
Number of mounting holes:	6
Depth (flange to rear):	50.5 mm
Net weight:	0.85kg

Ordering codes:

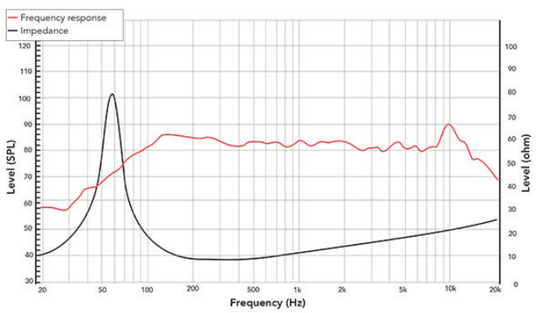
51FHW-X8 ohm-562B

Recone kits:

RC51FHWX-562B

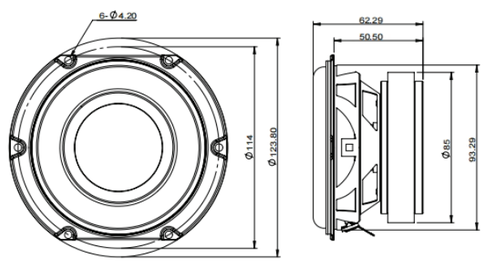
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



6" | 6NPM

Mid-range





Key features:

- VERY HIGH EFFICIENCY MIDRANGE
- ULTRA LOW HARMONIC DISTORTION
- HIGH POWER HANDLING

Design notes:

The 6NPM is a very high efficiency, (97 dB 1watt / 1 meter in 1l enclosure) 6-inch midrange speaker with incredibly linear frequency response characteristics and ultra low harmonic distortion artifacts. The 6NPM has extremely high sound quality. The 6NPM uses a lightweight paper pulp, specifically developed for this application. This unique cone provides the ideal weight to strength ratio.

Voice Coil
At the core of the 6NPM is it‚Äôs voice coil technology featuring edge wounded aluminum ribbon wire. Unique lightweight and very short former provides the ideal transfer of power between the voice coil and the cone assembly and assists in reducing the distortion artifacts. By combining this material with the state of the art adhesives, the 6NPM delivers incredible performance. The neodymium magnet is in a direct contact with the CNC exposed aluminum section of the basket, hold in place by our thermal transfer adhesives. This design dramatically improves the heat transfer. Further more, based upon a request, we have developed added on aluminum heat-sink. The heat-sink is a recommended optional accessory for applications in sealed mid-range, low volume enclosures.

Specifications:

General specs	
Nominal Diameter:	6"
Rated Impedance:	8 ohm
Power handling	
AES Power:	180 watts
Program Power:	360 watts
Peak Power:	720 watts
Voice Coil	
Diameter:	1.75 in.
Winding wire:	Aluminum
Former:	Glass Fiber
Winding height:	6.8 mm

T/S Parameters	
Resonant frequency:	150 Hz
Re:	6.9 ohm
Qes:	0.38
Qms:	4.58
Qts:	0.35
Vas:	2.9 liters
Sd:	143.1 cm2
Sensitivity:	97 dB
Mms:	11.1 grams
Bl:	13.7
Le:	0.16 mH

Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	6 mm
Peak to peak linear cone displacement	7.2 mm
Overall diameter:	162 mm
Bolt circle diameter:	172 mm
Baffle cutout dia.:	145 mm
Number of mounting holes:	4
Depth (flange to rear):	52.5 mm
Net weight:	1.2kg

Ordering codes:

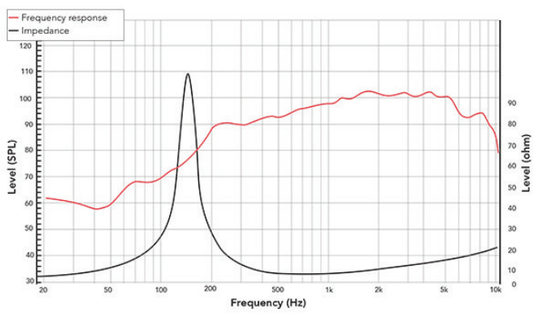
6NPM-X8 ohm-164

Recone kits:

RC6NPMX-164

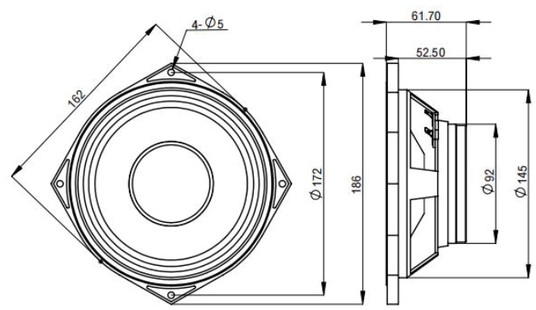
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



6" | 6FHM

Mid-woofer

REDCAT





Key features:

- 3 LAYER CONE, CONSISTING HI-END 1K CARBON FIBER ON NOMEX HONEYCOMB CORE
- FEM OPTIMIZED MOTOR STRUCTURE
- LOW HARMONIC DISTORTION

Design notes:

The 6FHM is a high efficiency, (89 dB 1watt / 1 meter) 6-inch mid-woofer with incredibly linear frequency response characteristics and ultra low harmonic distortion artifacts. The 6FHM uses a lightweight 1k carbon fiber material, assembled on both sides of Nomex honey-comb core. This unique cone provides the ideal weight to strength ratio. The rubber surround has been FEM modeled and optimized. The honeycomb cone with high-end 1k carbon fiber material provides remarkable strength, while pushing the cone break-up modes to high frequencies, significantly extending the working range of the speaker.

The cone

The 6FHM cone is made using 1k carbon fiber honey-comb, placed from both sides of Nomex core, while the dustcap is made off hard-anodization reinforced aluminum. The dustcap shape and the hard anodizing are further improving the mid to high frequency behavior.

Specifications:

General specs	
Nominal Diameter:	6"
Rated Impedance:	8 ohm

Power handling	
AES Power:	40 watts
Program Power:	80 watts
Peak Power:	160 watts

Voice Coil	
Diameter:	1.3 in.
Winding wire:	CCAR
Former:	Kapton
Winding height:	14.5 mm

T/S Parameters	
Resonant frequency:	36 Hz
Re:	6.9 ohm
Qes:	0.29
Qms:	12.7
Qts:	0.29
Vas:	26.1 liters
Sd:	132.7 cm2
Sensitivity:	89 dB
Mms:	18.1 grams
Bl:	9.89
Le:	0.26 mH

Design details	
Surround Material:	Rubber
Cone material:	CF Honey-
Spider:	Nomex
Plate thickness:	6 mm
Peak to peak linear cone displacement	8.8 mm
Overall diameter:	181.5 mm
Bolt circle diameter:	169.5 mm
Baffle cutout dia.:	151 mm
Number of mounting holes:	6
Depth (flange to rear):	81.7 mm
Net weight:	2.4kg

Ordering codes:

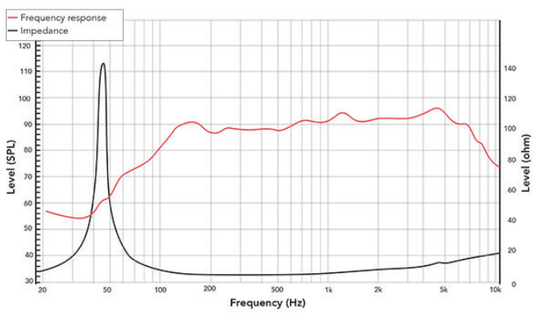
6FHM-X8 ohm-152C

Recone kits:

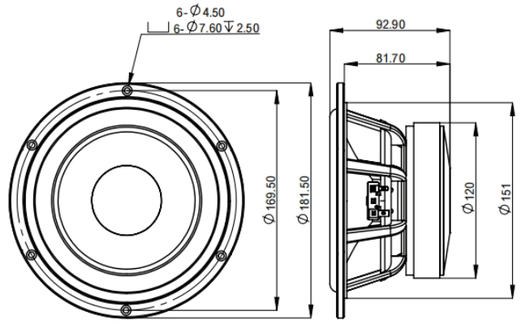
RC6FHMX-152C

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

6" | 61XR

Mid-woofer

REDCAT





Key features:

- EXTENDED FREQUENCY RESPONSE, INCREDIBLE SOUND REPRODUCTION CLARITY
- SECONDARY AND STATIC SHORTING COIL
- HIGH POWER HANDLING

Design notes:

The 61XR was designed to be simply the best driver for 2-way and multi-way systems on the market. We bring this with clarity in the mid-frequencies and undistorted bass. The combination of our XR patented technology with static shorting coil brings an nonparallel opportunity to the audio designers.

Motor Design

The magnetic design incorporates large neodymium magnets placed along the voice coil winding, together with the 2nd and static coil placed on the pole piece. This has allowed us to push the cone excursion to 30mm peak to peak, while lowering the inductance. The shorting coil covers the complete main coil excursion. This is also an improvement compared to some previous designs on the market.

Our extensive R&D on the surround foam material has yielded material that has proven its benefits over and over again. The surround is extremely light, yet it allows the cone excursion as the traditional, but heavier, rubber surround.

61XR best application is in hi-quality home hi-fi applications and studio monitors where the requirements for precise sound reproduction without distortion artifacts are required.

Specifications:

General specs	
Nominal Diameter:	6"
Rated Impedance:	4 ohm

Power handling	
AES Power:	100 watts
Program Power:	200 watts
Peak Power:	400 watts

Voice Coil	
Diameter:	1.75 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	10.3 mm

T/S Parameters	
Resonant frequency:	64 Hz
Re:	3.1 ohm
Qes:	0.96
Qms:	2.88
Qts:	0.72
Vas:	8.6 liters
Sd:	132.7 cm2
Sensitivity:	87 dB
Mms:	17.3 grams
Bl:	4.77
Le:	0.06 mH

Design details	
Surround Material:	Foam
Cone material:	Paper
Spider:	Nomex
Plate thickness:	27 mm
Peak to peak linear cone displacement	19.6 mm
Overall diameter:	181.5 mm
Bolt circle diameter:	169.5 mm
Baffle cutout dia.:	151 mm
Number of mounting holes:	6
Depth (flange to rear):	94 mm
Net weight:	1.5kg

Ordering codes:

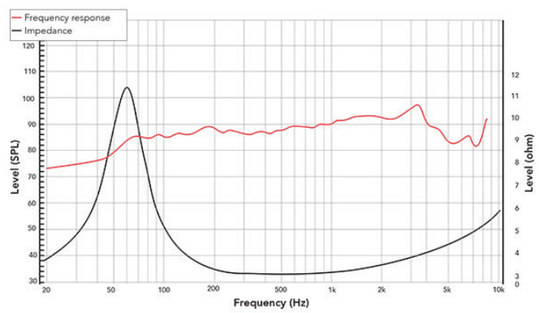
61XR-X4 ohm-404D

Recone kits:

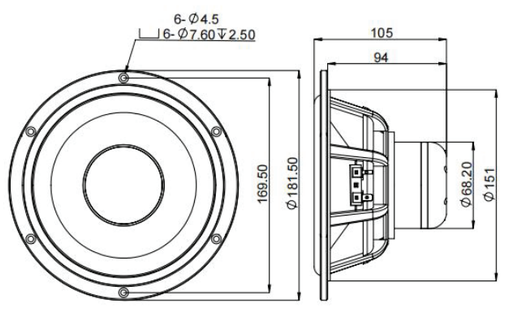
RC61XRX-404D

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

7" | 61NPM

Mid-woofer

REDCAT





Key features:

- VERY GOOD PERFORMANCE IN MID FREQUENCIES
- COMPACT DESIGN THAT DELIVERS VERY HIGH PERFORMANCE
- HIGH POWER HANDLING

Design notes:

61NPM was developed for all applications where compact and lightweight t mid-woofer is required.

The driver delivers very good performance in mid-frequencies, with a good extension into the low frequencies.

Neodymium based magnetic circuit was optimized to deliver the highest level of performance.

Lightweight paper cone with glass fibers is attached to ,ÄúM,Äù roll fabric surround. It provides great combination that delivers very good performance across wide range of frequencies.

Our newly designed basket was structurally reinforced and supports the magnetic structure with ease. Furthermore, the driver sports front and rear gaskets, thus you can mount it into the baffle as front or rear mount.

Specifications:

General specs	
Nominal Diameter:	7"
Rated Impedance:	8 ohm

Power handling	
AES Power:	100 watts
Program Power:	200 watts
Peak Power:	400 watts

Voice Coil	
Diameter:	1.5 in.
Winding wire:	Copper
Former:	kapton
Winding height:	10.6 mm

T/S Parameters	
Resonant frequency:	92 Hz
Re:	5.2 ohm
Qes:	0.38
Qms:	5.6
Qts:	0.36
Vas:	7 liters
Sd:	143.1 cm2
Sensitivity:	95 dB
Mms:	12.3 grams
Bl:	9.8
Le:	0.37 mH

Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	6 mm
Peak to peak linear cone displacement	10.4 mm
Overall diameter:	167 mm
Bolt circle diameter:	155 mm
Baffle cutout dia.:	145.9 mm
Number of mounting holes:	4
Depth (flange to rear):	61.5 mm
Net weight:	0.8kg

Ordering codes:

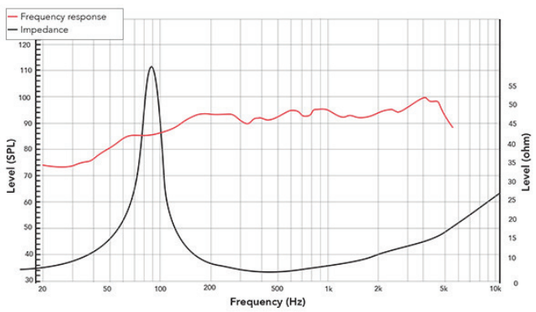
61NPM-X8 ohm-466A

Recone kits:

RC61NPMX-466A

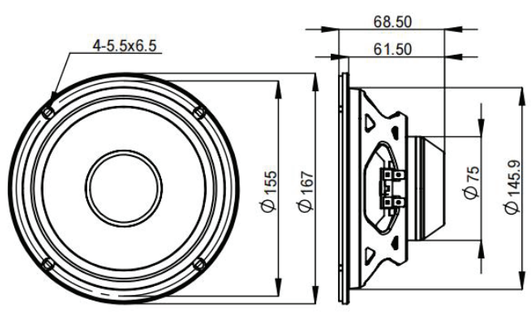
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



7" | 61FIND

Mid-woofer

REDCAT





Key features:

- EXTENDED FREQUENCY RESPONSE
- LIGHTWEIGHT, YET STRONG PAPER CONE. WEATHER SEALED, FIRE-RETARDANT MATERIALS
- AFFORDABLE DESIGN

Design notes:

61FIND continues our series of affordable ferrite mid-woofers. The driver was designed with ferrite magnetic circuit, combined with lightweight, yet strong, paper cone and fabric surround. In the heart of the 61FIND is 2,Äù CCAW high temperature wire wound on TIL former. This combination provides remarkable strength, great temperature resistance and ensures high level of move force transfer onto the cone without sound artifacts.

All steel parts are extensively treated for weather protection. Cone neck was furthermore treated with fire-retardants. That together with non-flammable Nomex spider and TIL voice coil former allows the designers accommodate this driver in UL listed products.

Specifications:

General specs	
Nominal Diameter:	7"
Rated Impedance:	16 ohm

Power handling	
AES Power:	150 watts
Program Power:	300 watts
Peak Power:	600 watts

Voice Coil	
Diameter:	2 in.
Winding wire:	CCAW
Former:	Glass Fiber
Winding height:	12.6 mm

T/S Parameters	
Resonant frequency:	130 Hz
Re:	14.9 ohm
Qes:	0.71
Qms:	5.13
Qts:	0.62
Vas:	2.64 liters
Sd:	132.7 cm2
Sensitivity:	92 dB
Mms:	14.3 grams
Bl:	15.64
Le:	0.92 mH

Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	8 mm
Peak to peak linear cone displacement	7.2 mm
Overall diameter:	165.2 mm
Bolt circle diameter:	157.5 mm
Baffle cutout dia.:	144.5 mm
Number of mounting holes:	4
Depth (flange to rear):	78 mm
Net weight:	2.7kg

Ordering codes:

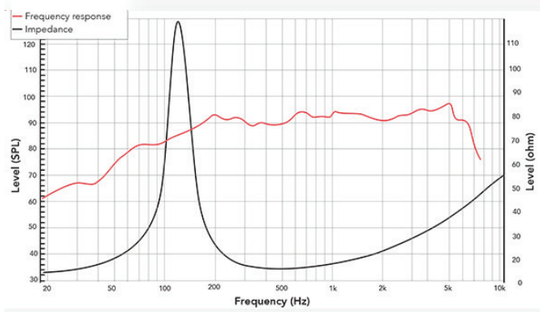
61FIND-X16 ohm-332A

Recone kits:

RC61FINDX-332A

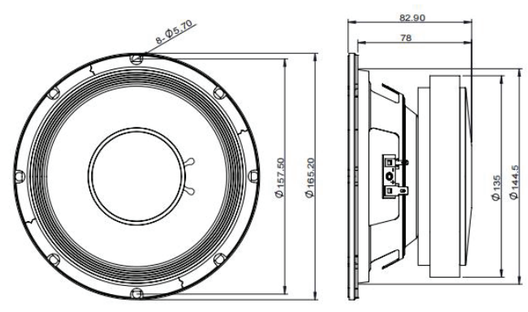
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



7" | 61FHM

Mid-woofer

REDCATT





Key features:

- EXTENDED FREQUENCY RESPONSE
-
-

Design notes:

61FHM mid-woofer was designed for outdoor applications, yet it will shine in hi-fi home and studio applications as well.

Optimized ferrite based magnetic circuit with good air-venting features ensures long lasting performance.

Our engineers have chosen polypropylene cone with rubber surround for this model. Both of these components are produced with UV stabilizers. Furthermore, REDCATT state of the art adhesives and dispensing techniques ensures waterproof seals in all weather exposed glue joints. Sealing to the exposure can be guaranteed by EVA gaskets or based upon a request by Form In Place Gaskets.

The audio system designers can rest assured we have extensively tested this product with UV exposure, salt exposure and waterproofing.

The extended mid-frequency response allows the systems to be used with higher resonance frequency HF units. For the best performance in the audio systems, we recommend usage in vented enclosures.

Specifications:

General specs	
Nominal Diameter:	7"
Rated Impedance:	4 ohm
Power handling	
AES Power:	50 watts
Program Power:	100 watts
Peak Power:	200 watts
Voice Coil	
Diameter:	1 in.
Winding wire:	Copper
Former:	Aluminum
Winding height:	12.4 mm

T/S Parameters	
Resonant frequency:	44 Hz
Re:	3.2 ohm
Qes:	0.58
Qms:	5.27
Qts:	0.52
Vas:	14.4 liters
Sd:	132.7 cm2
Sensitivity:	86 dB
Mms:	23.04 grams
Bl:	6.02
Le:	0.74 mH

Design details	
Surround Material:	Rubber
Cone material:	PP
Spider:	Nomex
Plate thickness:	6 mm
Peak to peak linear cone displacement	12.2 mm
Overall diameter:	165.5 mm
Bolt circle diameter:	157 mm
Baffle cutout dia.:	143 mm
Number of mounting holes:	4
Depth (flange to rear):	68 mm
Net weight:	1.04kg

Ordering codes:

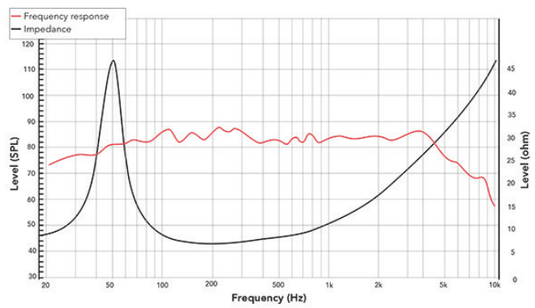
61FHM-X4 ohm-381

Recone kits:

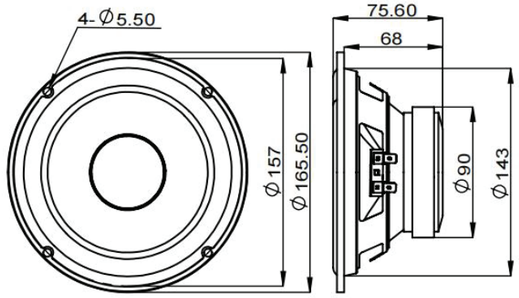
RC61FHMX-381

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

7" | 61FHM

Mid-woofer

REDCATT





Key features:

- EXTENDED FREQUENCY RESPONSE
- HARD ANODIZED ALUMINUM CONE, ALUMINUM BASKET
- DESIGNED FOR HI-FI AND OUTDOOR APPLICATIONS

Design notes:

61FHM mid-woofer was designed for outdoor applications, yet it will shine in hi-fi home and studio applications as well.

Optimized ferrite based magnetic circuit with good air-venting features ensures long lasting performance.

Our engineers have chosen hard-anodized cone with rubber surround for this model. Both of these components are produced with UV stabilizers. Furthermore, REDCATT state of the art adhesives and dispensing techniques ensures waterproof seals in all weather exposed glue joints. Sealing to the exposure can be guaranteed by EVA gaskets or based upon a request by Form In Place Gaskets.

The audio system designers can rest assured we have extensively tested this product with UV exposure, salt exposure and waterproofing.

The extended mid-frequency response allows the systems to be used with higher resonance frequency HF units. For the best performance in the audio systems, we recommend usage in sealed enclosures. In this model the aluminum cone further improves the mid-frequency response and lowers the harmonic distortion artifacts.

Specifications:

General specs	
Nominal Diameter:	7"
Rated Impedance:	8 ohm
Power handling	
AES Power:	60 watts
Program Power:	120 watts
Peak Power:	240 watts
Voice Coil	
Diameter:	1.5 in.
Winding wire:	CCAW
Former:	Glass Fiber
Winding height:	17.6 mm

T/S Parameters	
Resonant frequency:	37 Hz
Re:	5.8 ohm
Qes:	0.52
Qms:	11.01
Qts:	0.49
Vas:	28.2 liters
Sd:	132.7 cm2
Sensitivity:	88 dB
Mms:	16.4 grams
Bl:	6.6
Le:	0.4 mH

Design details	
Surround Material:	Rubber
Cone material:	Aluminum
Spider:	Nomex
Plate thickness:	5 mm
Peak to peak linear cone displacement	17.4 mm
Overall diameter:	181.5 mm
Bolt circle diameter:	169.5 mm
Baffle cutout dia.:	151 mm
Number of mounting holes:	6
Depth (flange to rear):	78.6 mm
Net weight:	1.61kg

Ordering codes:

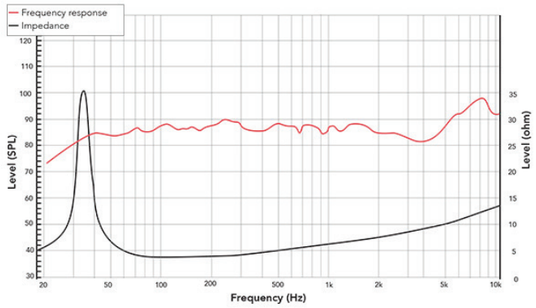
61FHM-X8 ohm-430A

Recone kits:

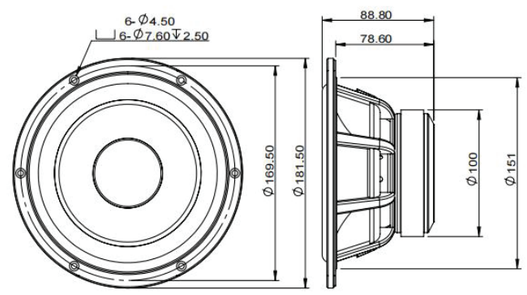
RC61FHMX-430A

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

8" | 8NPM

Mid-woofer

REDCAT





Key features:

- HI SENSITIVITY
- HI POWER HANDLING
- DESIGNED FOR APPLICATIONS WHERE ARE SIZABLE AMOUNTS OF MID-FREQUENCIES REQUIRED

Design notes:

The 8NPM is a high efficiency, (96dB 1watt / 1 meter) 8-inch mid-woofer with extended mid frequency response and high power handling capability. The 8NPM uses a lightweight half pressed paper cone along with a double roll fabric surround. Spider is made of Nomex material with optimized shape for well controlled pistonic motion. The used high quality components ensure long lasting performance even in high powered applications. The chosen material combination provides remarkable strength, high efficiency and sustained output under extreme conditions.

Power Handling
The voice coil featuring Kapton former material capable of withstanding peak temperatures in excess of 280C, well beyond the thermal requirements of modern audio systems. Former strength provides the ideal transfer of power between the voice coil and the cone assembly and assists in reducing distortion artifacts. By combining this material with state of the art adhesives and our winding voice coil technology, the 8NPM delivers incredibly high performance.

Specifications:

General specs	
Nominal Diameter:	8"
Rated Impedance:	8 ohm

Power handling	
AES Power:	200 watts
Program Power:	400 watts
Peak Power:	800 watts

Voice Coil	
Diameter:	2 in.
Winding wire:	CCAW
Former:	Kapton
Winding height:	15.4 mm

T/S Parameters	
Resonant frequency:	79 Hz
Re:	5.4 ohm
Qes:	0.31
Qms:	3.85
Qts:	0.29
Vas:	10.9 liters
Sd:	213.8 cm2
Sensitivity:	96 dB
Mms:	23.9 grams
Bl:	14.2
Le:	0.6 mH

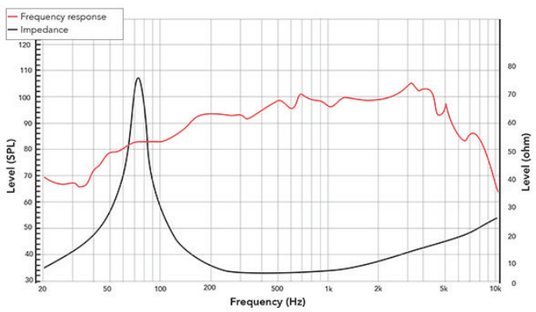
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	8 mm
Peak to peak linear cone displacement	10.2 mm
Overall diameter:	209.5 mm
Bolt circle diameter:	197.5 mm
Baffle cutout dia.:	185 mm
Number of mounting holes:	8
Depth (flange to rear):	87.3 mm
Net weight:	1.8kg

Ordering codes:
8NPM-X8 ohm-157

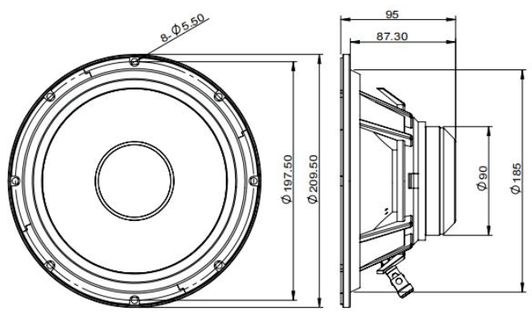
Recone kits:
RC8NPMX-157

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

8" | 8FR

Full-range

REDCAT





Key features:

- LIGHWEIGHT, YET STRONG PAPER CONE REINFORCED BY BAMBOO FIBERS
- WORKING RANGE UP TO 15KHZ
- AESTHETICS TUNED FOR MODER HI-FI LOOK

Design notes:

8FR was developed for Hi-Fi applications where single point audio source is required. Our engineers designed the cone to be lightweight, yet strong, using our new paper pulp reinforced by bamboo fibers. The driver sports wizard cone that extends the working range up to 15kHz, paired with bullet style phase plug. Combination of these two key features ensures smooth frequency response and an optimal sound reproduction on and off axes. Magnetic circuit was design to deliver robust B field across the whole range of working frequencies. Additional copper shorting cup further improves the driver behavior in mid-high working region.
The aesthetics of this driver were tuned to support modern hi-fi system designs, where the driver can be exposed to the end user. Distinctive colors ensures the driver can be featured as part of the overall industrial design.

Specifications:

General specs	
Nominal Diameter:	8"
Rated Impedance:	4 ohm

Power handling	
AES Power:	30 watts
Program Power:	60 watts
Peak Power:	120 watts

Voice Coil	
Diameter:	1.6 in.
Winding wire:	Aluminum
Former:	kapton
Winding height:	17.6 mm

T/S Parameters	
Resonant frequency:	53 Hz
Re:	3.8 ohm
Qes:	0.396
Qms:	8.473
Qts:	0.378
Vas:	36.8 liters
Sd:	213.8 cm2
Sensitivity:	93 dB
Mms:	18.38 grams
Bl:	7.86
Le:	0.08 mH

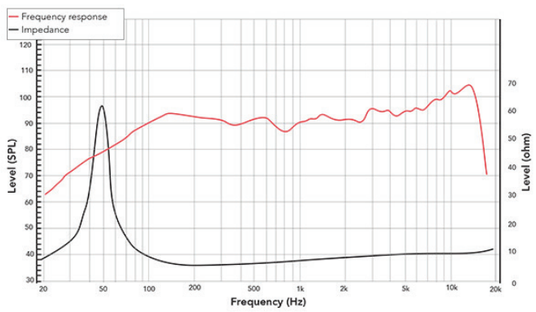
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	6 mm
Peak to peak linear cone displacement	9.8 mm
Overall diameter:	210 mm
Bolt circle diameter:	195.5 mm
Baffle cutout dia.:	186.88 mm
Number of mounting holes:	8
Depth (flange to rear):	91.8 mm
Net weight:	2.55kg

Ordering codes:
8FR-X4 ohm-551A

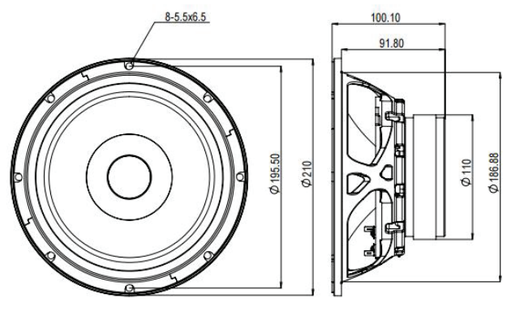
Recone kits:
RC8FRX-551A

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

8" | 8FIND

Mid-woofer



Key features:

- EXTENDED FREQUENCY RESPONSE, HIGH EFFICIENCY
- CARBON FIBER LOADED AND REINFORCED PAPER CONE
- NOMEX SPIDER

Design notes:

The 8FIND is a high efficiency, (97 dB 1watt / 1 meter) 8-inch mid bass woofer with incredibly linear frequency response characteristics, high power handling capability while generating low harmonic distortion artifacts.
The 8FIND uses a lightweight carbon fiber loaded cone assembly along with a precision double roll surround. This combination provides remarkable strength, high efficiency and a excursion linearity of 9.4mm.

Magnetic Circuit
REDCATT engineers have developed an efficient, ferrite based magnetic circuit, capable of delivering the highest level of performance providing a consistent, high integrity magnetic flux gap, low distortion characteristic. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability.

Specifications:

General specs	
Nominal Diameter:	8"
Rated Impedance:	8 ohm

Power handling	
AES Power:	200 watts
Program Power:	400 watts
Peak Power:	800 watts

Voice Coil	
Diameter:	2 in.
Winding wire:	CCAW
Former:	Glass Fiber
Winding height:	12.4 mm

T/S Parameters	
Resonant frequency:	70 Hz
Re:	5.7 ohm
Qes:	0.25
Qms:	6.4
Qts:	0.25
Vas:	18.2 liters
Sd:	227 cm2
Sensitivity:	97 dB
Mms:	20.7 grams
Bl:	14.3
Le:	0.48 mH

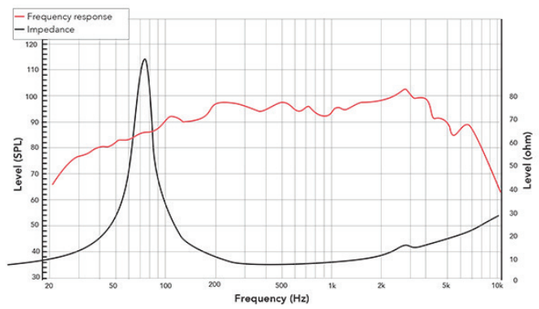
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	8 mm
Peak to peak linear cone displacement	9.4 mm
Overall diameter:	209.5 mm
Bolt circle diameter:	197.5 mm
Baffle cutout dia.:	185 mm
Number of mounting holes:	8
Depth (flange to rear):	91.5 mm
Net weight:	3.73kg

Ordering codes:
8FIND-X8 ohm-030

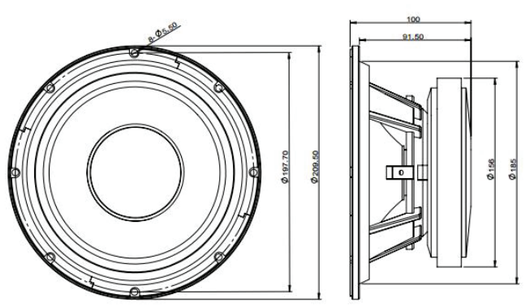
Recone kits:
RC8FINDX-030

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

8" | 8FHW

Woofer



Key features:

- HEAVY-DUTY RUBBER SURROUND AND PAPER CONE
- IDEAL FOR SMALL SUBWOOFERS, HI-FI APPLICATIONS
- HIGH POWER HANDLING

Design notes:

The 8FHW is 8-inch low frequency woofer with linear frequency response characteristics, high power handling capability while generating low harmonic distortion artifacts.
The single roll rubber surround design allows the cone to travel in long linear motion. Together with lightweight, yet strong cone,this combination provides remarkable strength, high efficiency and a excursion linearity of 13mm (one direction).

Magnetic Circuit
REDCATT engineers have developed an efficient, ferrite based magnetic circuit, capable of delivering the high level of performance providing a consistent, high integrity magnetic flux gap, low distortion characteristic. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability.

Specifications:

General specs	
Nominal Diameter:	8"
Rated Impedance:	4 ohm

Power handling	
AES Power:	200 watts
Program Power:	400 watts
Peak Power:	800 watts

Voice Coil	
Diameter:	1.4 in.
Winding wire:	Copper
Former:	Aluminum
Winding height:	25.4 mm

T/S Parameters	
Resonant frequency:	41 Hz
Re:	4.0 ohm
Qes:	0.75
Qms:	4.2
Qts:	0.6
Vas:	19.6 liters
Sd:	202.3 cm2
Sensitivity:	84 dB
Mms:	45.9 grams
Bl:	7.88
Le:	0.72 mH

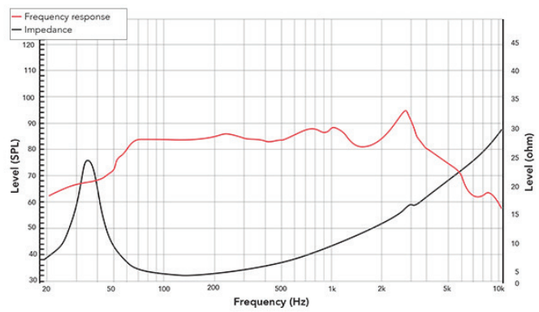
Design details	
Surround Material:	Rubber
Cone material:	Paper
Spider:	Conex
Plate thickness:	8 mm
Peak to peak linear cone displacement	26 mm
Overall diameter:	214 mm
Bolt circle diameter:	204 mm
Baffle cutout dia.:	181 mm
Number of mounting holes:	8
Depth (flange to rear):	105 mm
Net weight:	2.1kg

Ordering codes:
8FHW-X4 ohm-088

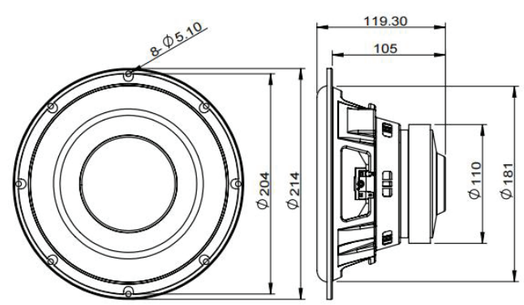
Recone kits:
RC8FHWX-088

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

8" | 8FHW

Mid-woofer

REDCAT





Key features:

- MID-WOOFER DESIGNED FOR OUTDOOR OR IN-DOOR APPLICATIONS
- UV STABILIZED POLYPROPYLENE CONE AND RUBBER SURROUND
- COMPONENTS ARE TREATED TO SURVIVE HARSH OUTDOOR ENVI-RONMENTS

Design notes:

8FHW was designed as mid-woofer, with extended frequency response to low frequencies, as well as good extension into the mid-frequencies. All parts are intensively treated for outdoor usage, cone, surround material are with UV stabilizers. The used adhesives make sure the driver is waterproof.

The cone utilizes polypropyl-ene material and rubber surround. This combination sports sizable amounts of low frequencies and good behavior in the higher mid-frequencies.

Specifications:

General specs	
Nominal Diameter:	8"
Rated Impedance:	4 ohm
Power handling	
AES Power:	100 watts
Program Power:	200 watts
Peak Power:	400 watts
Voice Coil	
Diameter:	1.2 in.
Winding wire:	Copper
Former:	Aluminum
Winding height:	15.3 mm

T/S Parameters	
Resonant frequency:	36 Hz
Re:	3.3 ohm
Qes:	0.38
Qms:	4.53
Qts:	0.35
Vas:	34.3 liters
Sd:	213.8 cm2
Sensitivity:	89 dB
Mms:	36.59 grams
Bl:	8.6
Le:	0.89 mH

Design details	
Surround Material:	Rubber
Cone material:	PP
Spider:	Nomex
Plate thickness:	8 mm
Peak to peak linear cone displacement	16.8 mm
Overall diameter:	209.5 mm
Bolt circle diameter:	197 mm
Baffle cutout dia.:	184.5 mm
Number of mounting holes:	8
Depth (flange to rear):	86.5 mm
Net weight:	1.5kg

Ordering codes:

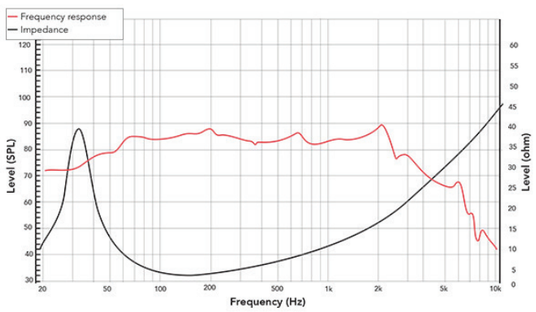
8FHW-X4 ohm-382

Recone kits:

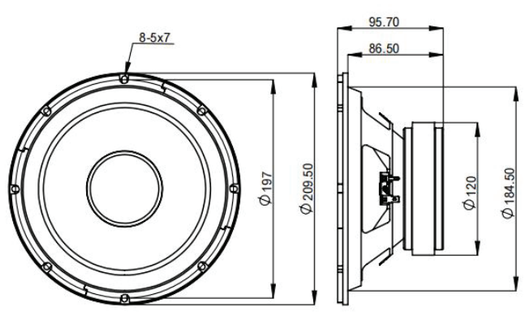
RC8FHWX-382

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

8" | 8FHM

Woofer

REDCAT





Key features:

- EXTENDED FREQUENCY RESPONSE
- 1K CARBON-FIBER NOMEX CORE HONEYCOMB CONE
- IDEAL FOR HIGH QUAL-ITY HI-FI APPLICATIONS, STUDIO MONITORS

Design notes:

The 8FHM is a high efficiency, (89 dB 1watt / 1 meter) 8-inch mid-woofer with incredibly linear frequency response char-acteristics and ultra low harmonic distor-tion artifacts. The 8FHM uses a lightweight 1k carbon fiber material, assembled from both sides of Nomex honey-comb core. This unique cone provides the ideal weight to strength ratio. The rubber surround has been FEM modeled and optimized. The honeycomb cone with high end 1k carbon fiber material provides remarkable strength, while pushing the cone break-up modes to high frequencies, significantly extending the working range of the speaker.

The cone
The 8FHM cone is made using 1k carbon fiber hone-comb, placed from both sides of Nomex core, while the dustcap is made off hard-anodization reinforced aluminum. The dustcap shape and the hard anodizing are further improving the high frequency behavior.

Specifications:

General specs	
Nominal Diameter:	8"
Rated Impedance:	4 ohm
Power handling	
AES Power:	50 watts
Program Power:	100 watts
Peak Power:	200 watts
Voice Coil	
Diameter:	1.4 in.
Winding wire:	CCAW
Former:	kapton
Winding height:	18 mm

T/S Parameters	
Resonant frequency:	38 Hz
Re:	3.6 ohm
Qes:	0.41
Qms:	12.9
Qts:	0.39
Vas:	32.1 liters
Sd:	206.1 cm2
Sensitivity:	89 dB
Mms:	31.5 grams
Bl:	8.19
Le:	0.46 mH

Design details	
Surround Material:	Rubber
Cone material:	CF Honey-
Spider:	Nomex
Plate thickness:	8 mm
Peak to peak linear cone displacement	18.2 mm
Overall diameter:	223.5 mm
Bolt circle diameter:	210 mm
Baffle cutout dia.:	189 mm
Number of mounting holes:	6
Depth (flange to rear):	94.5 mm
Net weight:	2.8kg

Ordering codes:

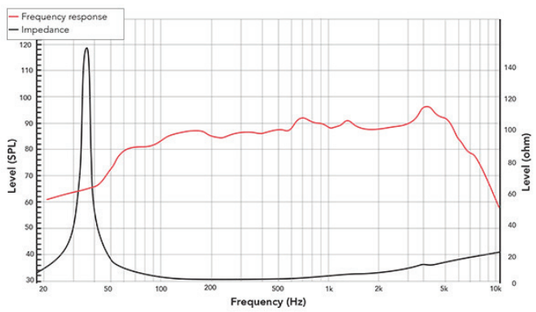
8FHM-X4 ohm-091

Recone kits:

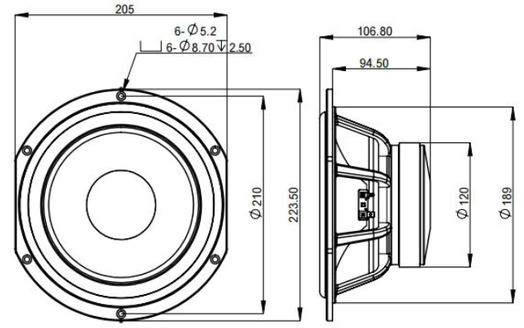
RC8FHMX-091

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

8" | 82FHM

Mid-woofer

REDCAT



Key features:

- EXTENDED FREQUENCY RESPONSE
- HARD ANODIZED ALUMINUM CONE WITH RUBBER SURROUND
- ALUMINUM BASKET

Design notes:

82FHM is mid-woofer driver, designed for hi-fi, studio monitors and outdoor applications. Design sports hard-anodized aluminum cone and dustcap. These two key components extend the working range of the woofer. The parameters were optimized for usage in sealed enclosures.

All metal parts are coated to further increase weatherized protection, surround has UV stabilizers.

Strong aluminum basket was used in this design which further improves the mechanical fatigue and allow the speaker to be used in demanding portable products.

Further more, we have developed new magnetic circuit for this model. Our clever engineering takes the best balance between the performance and cost. Rest assure we have FEM optimized air-venting of this design that minimizes the air-noise and greatly improves voice coil winding venting.

Specifications:

General specs	
Nominal Diameter:	8"
Rated Impedance:	8 ohm

Power handling	
AES Power:	60 watts
Program Power:	120 watts
Peak Power:	240 watts

Voice Coil	
Diameter:	1.5 in.
Winding wire:	Copper
Former:	Aluminum
Winding height:	15.9 mm

T/S Parameters	
Resonant frequency:	42 Hz
Re:	5.7 ohm
Qes:	0.76
Qms:	3.1
Qts:	0.61
Vas:	33.6 liters
Sd:	213.8 cm2
Sensitivity:	88 dB
Mms:	28.3 grams
Bl:	7.56
Le:	0.47 mH

Design details	
Surround Material:	Rubber
Cone material:	Aluminum
Spider:	Nomex
Plate thickness:	5 mm
Peak to peak linear cone displacement	16.8 mm
Overall diameter:	223.5 mm
Bolt circle diameter:	210 mm
Baffle cutout dia.:	189 mm
Number of mounting holes:	6
Depth (flange to rear):	87.5 mm
Net weight:	1.8kg

Ordering codes:

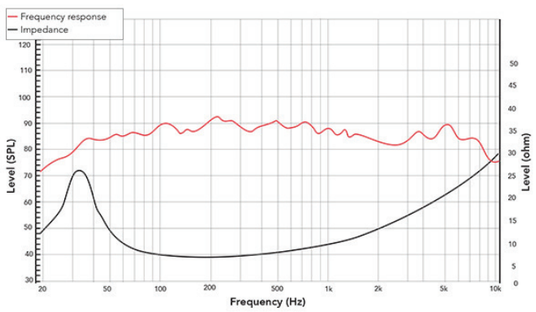
82FHM-X8 ohm-445A

Recone kits:

RC82FHMX-445A

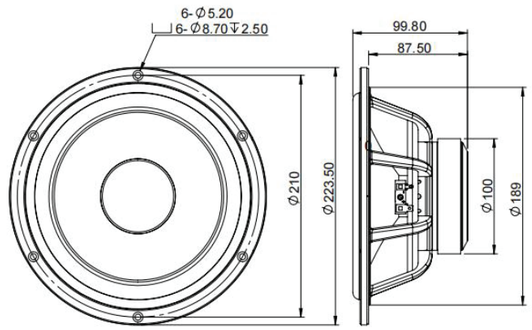
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



info@redcatt.net www.redcatt.net

ONE TO RULE THEM ALL...



8" | 81XR

Woofer





Key features:

- NONPARALLEL VOICE AND LOW FREQUENCY REPRODUCTION QUALITY
- PATENTED MAGNETIC CIRCUIT AND AIR VENTING DESIGN
- EXTREMELY LOW HARMONIC DISTORTION

Design notes:

The 81XR was designed to be simply the best driver for 2-way and multi-way systems on the market, yet this driver will also shine in sub-woofer applications. The combination of our XR patented technology with static shorting coil brings an nonparallel opportunity to the audio designers. The common request for 2-way speakers is ‚Äúmore of everything,Äù. Designers wishes for more bass, more mids. Well, there you have it! But not only that. We bring this with clarity in the mid-frequencies and undistorted bass. Our designers were able to achieve THD below 0.5% from 20Hz up to 2.5kHz. There isn‚Äôt another driver like this on the market.

Motor Design
The magnetic design incorporates large neodymium magnets placed along the voice coil winding, together with the 2nd and static coil placed on the pole piece. This has allowed us to push the cone excursion to 30mm peak to peak, while lowering the inductance. The shorting coil covers the complete main coil excursion. This is also an improvement compared to some previous designs on the market that utilizes static coil. Unique gap side venting ensures good air circulation, lowers air noise and greatly improves the reliability of this driver.

Specifications:

General specs	
Nominal Diameter:	8"
Rated Impedance:	8 ohm
Power handling	
AES Power:	200 watts
Program Power:	400 watts
Peak Power:	800 watts
Voice Coil	
Diameter:	2.5 in.
Winding wire:	Copper Sq.
Former:	Glass Fiber
Winding height:	18.3 mm

T/S Parameters	
Resonant frequency:	73 Hz
Re:	5.5 ohm
Qes:	0.37
Qms:	1.466
Qts:	0.3
Vas:	7.2 liters
Sd:	201 cm2
Sensitivity:	93 dB
Mms:	38 grams
Bl:	16
Le:	0.19 mH

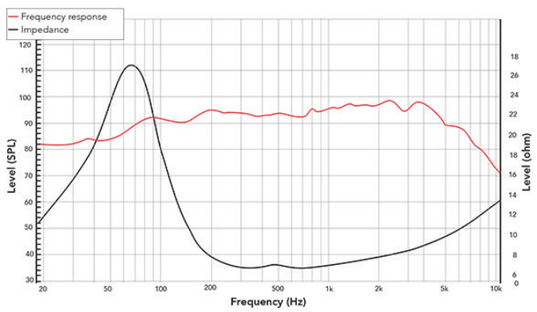
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	31 mm
Peak to peak linear cone displacement	28.4 mm
Overall diameter:	210 mm
Bolt circle diameter:	195 mm
Baffle cutout dia.:	186.88 mm
Number of mounting holes:	8
Depth (flange to rear):	128.3 mm
Net weight:	4.9kg

Ordering codes:
81XR-X8 ohm-424A

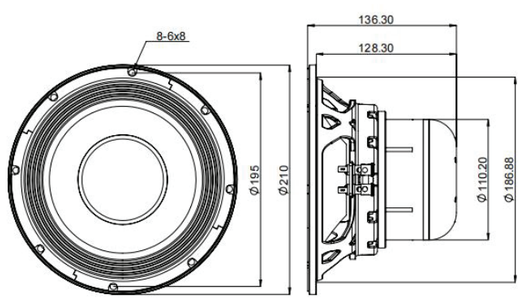
Recone kits:
RC81XRX-424A

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

8" | 81NPM

Mid-woofer





Key features:

- EXTENDED FREQUENCY RESPONSE
- 2 DEMODULATION RINGS POWERFUL MOTOR STRUCTURE
- DESIGNED FOR 2-WAY AND MULTI-WAY SPEAKER SYSTEMS

Design notes:

The 81NPM was designed for good reproduction of voice. With an extended low-frequency response, this mid-woofer is highly suitable for two-way and multi-way systems. It‚Äôs high power handling capabilities extend the ideal usage as a mid-range driver in line-array systems. The 81NPM uses a lightweight half-pressed paper cone reinforced by our proprietary cone treatment, which also works as weatherization protection. The used high-quality components ensure long-lasting performance even in high powered applications. The chosen material combination provides remarkable strength, high efficiency and¬†sustained output under extreme conditions.¬†

Power Handling
The voice coil sports Kapton former material capable of withstanding peak temperatures above 300¬∞C, well beyond the thermal requirements of modern audio systems. Former strength provides the ideal transfer of power between the voice coil and the cone assembly and assists in reducing distortion artifacts. By combining this material with state of the art adhesives and our winding voice coil technology, the 81NPM delivers incredibly high performance.

Specifications:

General specs	
Nominal Diameter:	8"
Rated Impedance:	8 ohm
Power handling	
AES Power:	200 watts
Program Power:	400 watts
Peak Power:	800 watts
Voice Coil	
Diameter:	3 in.
Winding wire:	CCAW
Former:	Glass Fiber
Winding height:	18.6 mm

T/S Parameters	
Resonant frequency:	69 Hz
Re:	7.1 ohm
Qes:	0.29
Qms:	4.84
Qts:	0.28
Vas:	10.3 liters
Sd:	219 cm2
Sensitivity:	93 dB
Mms:	34.2 grams
Bl:	0.5
Le:	0.75 mH

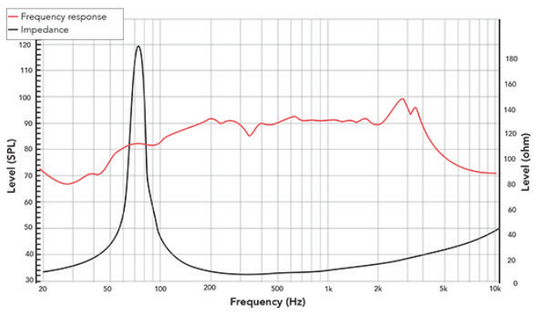
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	11 mm
Peak to peak linear cone displacement	12.8 mm
Overall diameter:	210 mm
Bolt circle diameter:	195.5 mm
Baffle cutout dia.:	186.88 mm
Number of mounting holes:	8
Depth (flange to rear):	101.3 mm
Net weight:	3.2kg

Ordering codes:
81NPM-X8 ohm-373A

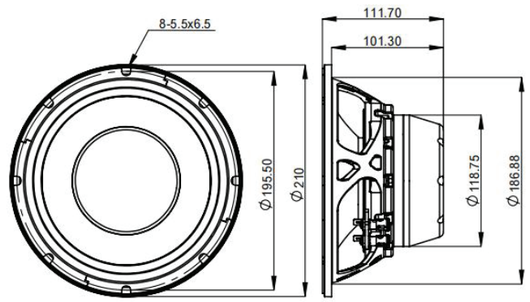
Recone kits:
RC81NPMX-373A

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

8" | 81FIND

Mid-woofer

REDCAT





Key features:

- EXTENDED FREQUENCY RESPONSE
- IDEAL FOR SMALL AND PORTABLE 2-WAY SYSTEMS
- AFFORDABLE, YET VERY CAPABLE DESIGN FOR COST SENSITIVE PRODUCT

Design notes:

The 81FIND is a high efficiency, (95 dB 1watt / 1 meter) 8-inch woofer with linear frequency response characteristics, good power handling capability while generating low harmonic distortion artifacts. The 81FIND uses a lightweight glass-fiber loaded cone assembly along with a high excursion M-roll surround. This combination provides a lightweight, yet strong, piston.

Magnetic Circuit

Ferrite based magnetic circuit, capable of delivering the good level of performance, providing a consistent, high integrity magnetic flux gap, low distortion characteristic and high-efficiency cooling system. The metal parts are extensively coated to provide the maximum weather protection.

This driver has been chosen by many audio engineers for smaller sized, or portable audio products. It has proven its capability over and over again all around the world, many times in challenging applications or environments. 81FIND is proven design that delivers good balance between performance and cost.

Specifications:

General specs	
Nominal Diameter:	8"
Rated Impedance:	8 ohm

Power handling	
AES Power:	200 watts
Program Power:	400 watts
Peak Power:	800 watts

Voice Coil	
Diameter:	2 in.
Winding wire:	CCAW
Former:	Glass Fiber
Winding height:	12.5 mm

T/S Parameters	
Resonant frequency:	80 Hz
Re:	4.7 ohm
Qes:	0.53
Qms:	8.35
Qts:	0.5
Vas:	11.3 liters
Sd:	213.8 cm2
Sensitivity:	95 dB
Mms:	22.6 grams
Bl:	10.2
Le:	0.44 mH

Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	8 mm
Peak to peak linear cone displacement	13.2 mm
Overall diameter:	209 mm
Bolt circle diameter:	197 mm
Baffle cutout dia.:	180 mm
Number of mounting holes:	8
Depth (flange to rear):	91.5 mm
Net weight:	2.8kg

Ordering codes:

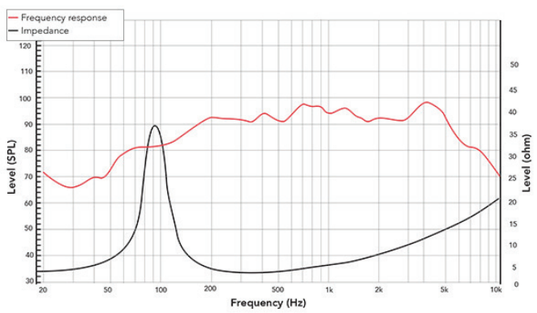
81FIND-X8 ohm-290

Recone kits:

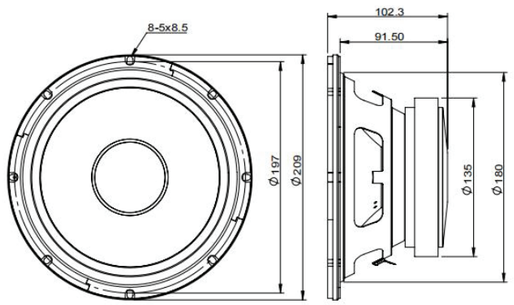
RC81FINDX-290

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

8" | 81FHW

Woofer

REDCAT





Key features:

- GOOD LOW FREQUENCY RESPONSE
- LIGHTWEIGHT SURROUND, STIFF PAPER CONE
- AFFORDABLE WOOFER

Design notes:

The 81FHW woofer was designed with smaller hi-fi subwoofers in mind. The woofer works well in vented enclosures or combined with a passive radiator. Optimized magnetic structure delivers good level of performance and balancing well performance vs cost.

We have chosen lightweight foam surround in this design. Our extensive development and testing of this material yielded in custom formulation of the raw material we use for the surround and guaranties its long lasting performance.

Specifications:

General specs	
Nominal Diameter:	8"
Rated Impedance:	4 ohm

Power handling	
AES Power:	100 watts
Program Power:	200 watts
Peak Power:	400 watts

Voice Coil	
Diameter:	1.4 in.
Winding wire:	Copper
Former:	Aluminum
Winding height:	18.2 mm

T/S Parameters	
Resonant frequency:	39 Hz
Re:	3.6 ohm
Qes:	0.58
Qms:	5.4
Qts:	0.52
Vas:	21.5 liters
Sd:	201.1 cm2
Sensitivity:	86 dB
Mms:	44 grams
Bl:	8.25
Le:	1.12 mH

Design details	
Surround Material:	Foam
Cone material:	Paper
Spider:	Nomex
Plate thickness:	6 mm
Peak to peak linear cone displacement	19 mm
Overall diameter:	209 mm
Bolt circle diameter:	197 mm
Baffle cutout dia.:	180 mm
Number of mounting holes:	8
Depth (flange to rear):	95 mm
Net weight:	1.7kg

Ordering codes:

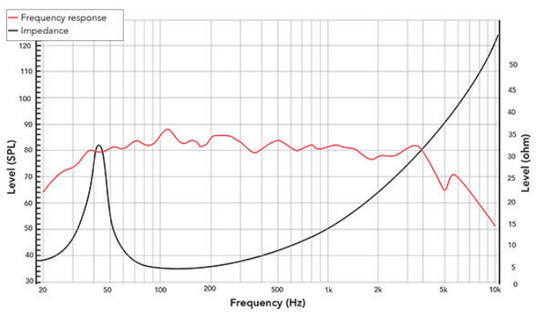
81FHW-X4 ohm-289

Recone kits:

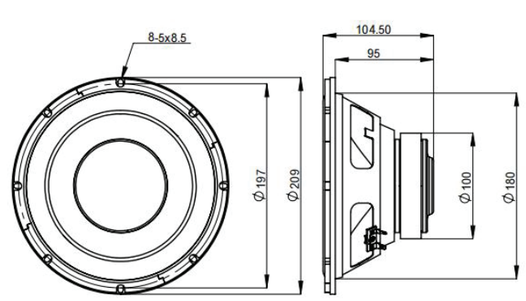
RC81FHWX-289

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

8" | 81NPM

Mid-woofer





Key features:

- EXTENDED FREQUENCY RESPONSE
- 2 DEMODULATION RINGS POWERFUL MOTOR STRUCTURE
- DESIGNED FOR 2-WAY AND MULTI-WAY SPEAKER SYSTEMS

Design notes:

The 81NPM was designed for good reproduction of voice. With an extended low-frequency response, this mid-woofer is highly suitable for two-way and multi-way systems. It,Äôs high power handling capabilities extend the ideal usage as a mid-range driver in line-array systems. The 81NPM uses a lightweight half-pressed paper cone reinforced by our proprietary cone treatment, which also works as weatherization protection. The used high-quality components ensure long-lasting performance even in high powered applications. The chosen material combination provides remarkable strength, high efficiency and¬†-sustained output under extreme conditions.¬†

Power Handling
The voice coil sports Kapton former material capable of withstanding peak temperatures above 300¬∞C, well beyond the thermal requirements of modern audio systems. Former strength provides the ideal transfer of power between the voice coil and the cone assembly and assists in reducing distortion artifacts. By combining this material with state of the art adhesives and our winding voice coil technology, the 81NPM delivers incredibly high performance.

Specifications:

General specs	
Nominal Diameter:	8"
Rated Impedance:	8 ohm

Power handling	
AES Power:	200 watts
Program Power:	400 watts
Peak Power:	800 watts

Voice Coil	
Diameter:	3 in.
Winding wire:	CCAW
Former:	Glass Fiber
Winding height:	22.5 mm

T/S Parameters	
Resonant frequency:	72 Hz
Re:	5.2 ohm
Qes:	0.34
Qms:	7.97
Qts:	0.33
Vas:	10.3 liters
Sd:	219 cm2
Sensitivity:	93 dB
Mms:	40.5 grams
Bl:	16.7
Le:	0.5 mH

Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	11 mm
Peak to peak linear cone displacement	15 mm
Overall diameter:	210 mm
Bolt circle diameter:	195.5 mm
Baffle cutout dia.:	186.88 mm
Number of mounting holes:	8
Depth (flange to rear):	101.3 mm
Net weight:	3.2kg

Ordering codes:

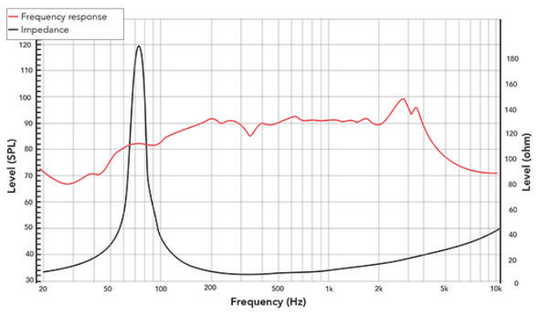
81NPM-X8 ohm-263

Recone kits:

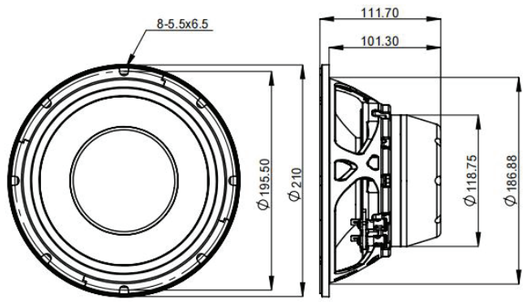
RC81NPMX-263

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

10" | 10NPM

Woofer





Key features:

- HI SENSITIVITY, HI POWER HANDLING
- CARBON FIBER LOADED PAPER CONE, NOMEX SPIDER
- EXCELLENT FREQUENCY RESPONSE

Design notes:

The 10NPM is a high efficiency, (95 dB 1watt / 1 meter) 10-inch mid bass woofer with incredibly linear frequency response characteristics, extreme high power handling capability while generating low harmonic distortion artifacts.-
The 10NPM uses a lightweight carbon fiber loaded cone assembly along with a precision double roll constant geometry surround. This combination provides remarkable strength, high efficiency and a excursion linearity of 15.4mm.

Magnetic Circuit
REDCATT engineers have developed a lightweight, inside-neodymium slug based magnetic circuit capable of delivering the highest level of performance providing a consistent, high integrity magnetic flux gap, ultra low distortion characteristic and high efficiency cooling system. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability.

Specifications:

General specs	
Nominal Diameter:	10"
Rated Impedance:	8 ohm

Power handling	
AES Power:	200 watts
Program Power:	400 watts
Peak Power:	800 watts

Voice Coil	
Diameter:	3 in.
Winding wire:	CCAW
Former:	Glass Fiber
Winding height:	23.2 mm

T/S Parameters	
Resonant frequency:	58 Hz
Re:	6.5 ohm
Qes:	0.36
Qms:	4.68
Qts:	0.33
Vas:	29.3 liters
Sd:	363.1 cm2
Sensitivity:	95 dB
Mms:	47 grams
Bl:	17.9
Le:	0.79 mH

Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	11 mm
Peak to peak linear cone displacement	15.4 mm
Overall diameter:	262 mm
Bolt circle diameter:	246 mm
Baffle cutout dia.:	234 mm
Number of mounting holes:	4
Depth (flange to rear):	107.8 mm
Net weight:	3.5kg

Ordering codes:

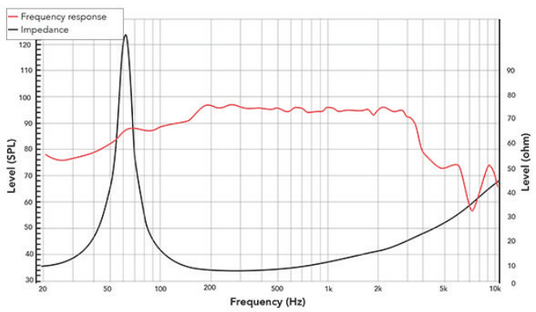
10NPM-X8 ohm-319

Recone kits:

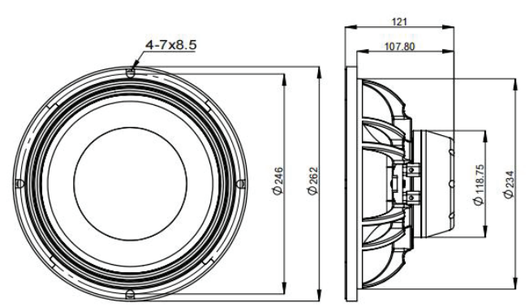
RC10NPMX-319

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

10″ | 10FIND

Mid-woofer





Key features:

- GLASS FIBER LOADED PAPER CONE
- 2 DEMODULATION RINGS, POWERFUL MOTOR STRUCTURE
- HIGH SPL, LOW THD

Design notes:

The 10FIND is a high efficiency, (96 dB 1watt / 1 meter) 10-inch woofer with linear frequency response characteristics, high power handling capability, while generating ultra low harmonic distortion artifacts. The 10FIND uses a lightweight glass fiber loaded cone assembly along with a high excursion double roll surround. This combination provides a lightweight, yet strong, piston.

Magnetic Circuit
REDCATT engineers have developed a ferrite based magnetic circuit, capable of delivering the highest level of performance, providing a consistent, high integrity magnetic flux gap, ultra low distortion characteristic and high efficiency cooling system. The magnetic structure has integrated two aluminum shorting rings. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability.

Specifications:

General specs	
Nominal Diameter:	10″
Rated Impedance:	8 ohm

Power handling	
AES Power:	250 watts
Program Power:	500 watts
Peak Power:	1000 watts

Voice Coil	
Diameter:	2.5 in.
Winding wire:	CCAW
Former:	Glass Fiber
Winding height:	13.5 mm

T/S Parameters	
Resonant frequency:	66 Hz
Re:	5.5 ohm
Qes:	0.41
Qms:	13.13
Qts:	0.39
Vas:	23.5 liters
Sd:	346 cm2
Sensitivity:	96 dB
Mms:	41.3 grams
Bl:	15.5
Le:	0.68 mH

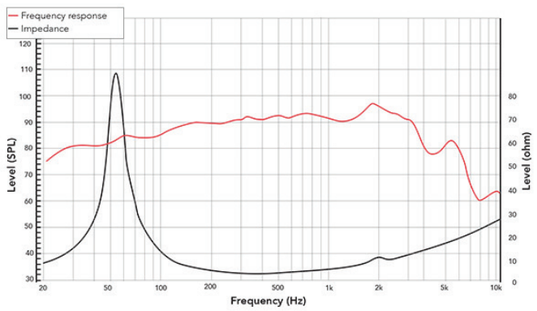
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	8 mm
Peak to peak linear cone displacement	15.4 mm
Overall diameter:	262 mm
Bolt circle diameter:	246 mm
Baffle cutout dia.:	230 mm
Number of mounting holes:	8
Depth (flange to rear):	108.5 mm
Net weight:	4.55kg

Ordering codes:
10FIND-X8 ohm-033

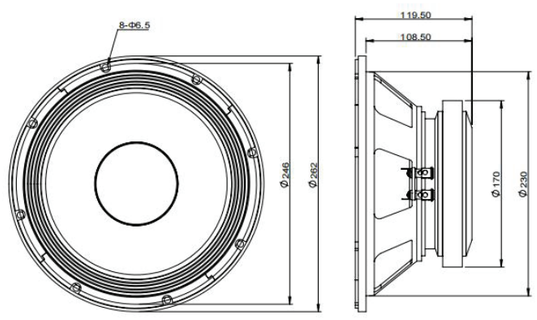
Recone kits:
RC10FINDX-033

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

10″ | 10FHW

Sub-woofer





Key features:

- GOOD LOW FREQUENCY EXTENSION
- ALUMINUM CHASSIS, ALUMINUM CONE, NOMEX SPIDER WITH ATTACHED TINSEL WIRE
- HIGH POWER HANDLING

Design notes:

The 10FHW is a high efficiency, (87dB 1watt / 1 meter) 10-inch sub-woofer speaker with extended low frequency response and high power handling capability. The 10FHW uses a strong anodized aluminum cone assembly along with a single roll rubber surround. Spider is Nomex material with stitched-on tinsel wires. This ensures long lasting performance even in high powered applications. The chosen material combination provides remarkable strength, high efficiency and sustained output under extreme conditions.

Magnetic Circuit
REDCATT engineers have developed a ferrite based magnetic circuit, capable of delivering the highest level of performance, providing a consistent, high integrity magnetic flux gap, ultra low distortion characteristic and high efficiency cooling system. The magnetic structure has integrated two aluminum shorting rings. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability.

Specifications:

General specs	
Nominal Diameter:	10″
Rated Impedance:	4 ohm

Power handling	
AES Power:	200 watts
Program Power:	400 watts
Peak Power:	800 watts

Voice Coil	
Diameter:	2 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	32.3 mm

T/S Parameters	
Resonant frequency:	25 Hz
Re:	3.6 ohm
Qes:	0.4
Qms:	13.72
Qts:	0.39
Vas:	57.9 liters
Sd:	330.1 cm2
Sensitivity:	87 dB
Mms:	110.4 grams
Bl:	12.7
Le:	0.62 mH

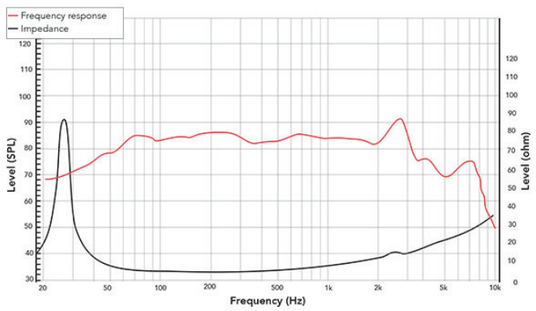
Design details	
Surround Material:	Rubber
Cone material:	Aluminum
Spider:	Nomex
Plate thickness:	8 mm
Peak to peak linear cone displacement	29.4 mm
Overall diameter:	269 mm
Bolt circle diameter:	258 mm
Baffle cutout dia.:	239 mm
Number of mounting holes:	8
Depth (flange to rear):	117 mm
Net weight:	6kg

Ordering codes:
10FHW-X4 ohm-117

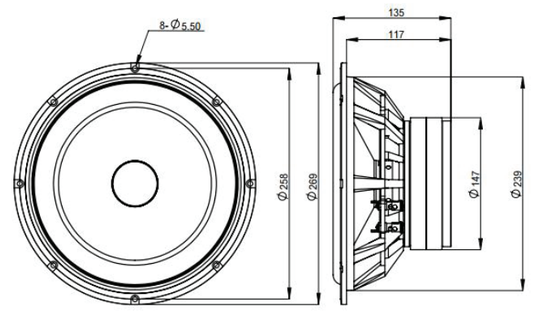
Recone kits:
RC10FHWX-117

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

10" | 101NPM

Mid-woofer

REDCAT





Key features:

- ULTRA LIGHTWEIGHT, DESIGNED FOR PORTABLE PRODUCTS
- HIGH EFFICIENCY, LOW HARMONIC DISTORTION
- CARBON FIBER LOADED PAPER CONE

Design notes:

The 101NPM is a high efficiency, (95 dB 1watt / 1 meter) 10-inch mid-woofer with incredibly linear frequency response characteristics, high power handling capability, while generating ultra low harmonic distortion artifacts. The 101NPM uses a lightweight glass fiber loaded cone assembly along with a high excursion triple roll surround. This combination provides a lightweight, yet strong, piston, high efficiency and a peak to peak maximum excursion of 13.6.

Magnetic Circuit
REDCATT engineers have developed a ultra lightweight, inside neodymium slug based magnetic circuit, capable of delivering the highest level of performance, providing a consistent, high integrity magnetic flux gap, ultra low distortion characteristic and high efficiency cooling system. The magnetic structure has integrated two aluminum shorting rings. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability.

Specifications:

General specs	
Nominal Diameter:	10"
Rated Impedance:	8 ohm

Power handling	
AES Power:	150 watts
Program Power:	300 watts
Peak Power:	600 watts

Voice Coil	
Diameter:	2 in.
Winding wire:	CCAR
Former:	Glass Fiber
Winding height:	14.5 mm

T/S Parameters	
Resonant frequency:	53 Hz
Re:	5.0 ohm
Qes:	0.61
Qms:	5.51
Qts:	0.55
Vas:	49.7 liters
Sd:	363 cm2
Sensitivity:	95 dB
Mms:	32.6 grams
Bl:	9.6
Le:	0.53 mH

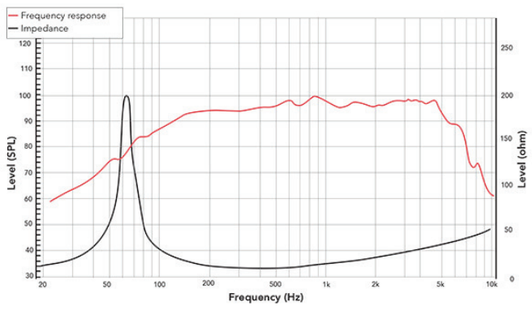
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	8 mm
Peak to peak linear cone displacement	13.6 mm
Overall diameter:	262 mm
Bolt circle diameter:	246 mm
Baffle cutout dia.:	230 mm
Number of mounting holes:	8
Depth (flange to rear):	111.5 mm
Net weight:	1.97kg

Ordering codes:
101NPM-X8 ohm-119

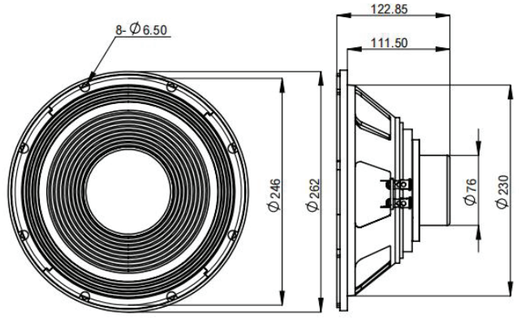
Recone kits:
RC101NPMX-119

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

10" | 101FHW

Sub-woofer

REDCAT





Key features:

- GLASS FIBER LOADED PAPER CONE AND DUST-CAP
- NOMEX SPIDER WITH STITCHED TINSEL WIRES
- EXCELLENT LOW FREQUENCY RESPONSE

Design notes:

The 101FHW is a high efficiency, (87dB 1watt / 1 meter) 10-inch woofer speaker with extended low frequency response and high power handling capability. The 101FHW uses a strong glass fiber reinforced paper cone assembly along with a single roll rubber surround. Spider is Nomex material with stitched-in tinsel wires. This ensures long lasting performance even in high powered applications. The chosen material combination provides remarkable strength, high efficiency and sustained output under extreme conditions.

The 101FHW cone and dust cap are made using glass fiber loaded paper pulp. All ‚Äúsoft‚Äù parts are bonded together using state of the art high temperature adhesives. Metal parts in the speaker assembly are coated for extreme weatherization protection. Speaker push terminals are gold plated to ensure the best connection.

Specifications:

General specs	
Nominal Diameter:	10"
Rated Impedance:	4 ohm

Power handling	
AES Power:	200 watts
Program Power:	400 watts
Peak Power:	800 watts

Voice Coil	
Diameter:	2 in.
Winding wire:	Copper
Former:	Aluminum
Winding height:	32.3 mm

T/S Parameters	
Resonant frequency:	27 Hz
Re:	3.6 ohm
Qes:	0.37
Qms:	1.5
Qts:	0.3
Vas:	54.7 liters
Sd:	330.1 cm2
Sensitivity:	87 dB
Mms:	97.8 grams
Bl:	12.7
Le:	0.82 mH

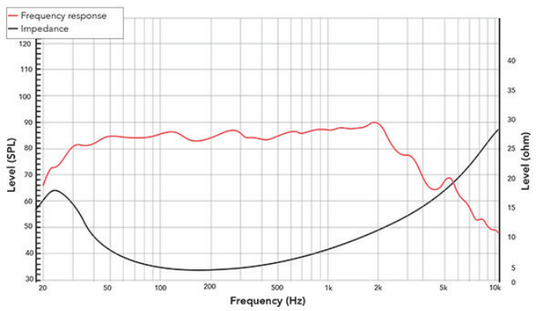
Design details	
Surround Material:	Rubber
Cone material:	Paper
Spider:	Nomex
Plate thickness:	8 mm
Peak to peak linear cone displacement	22.6 mm
Overall diameter:	269 mm
Bolt circle diameter:	258 mm
Baffle cutout dia.:	239 mm
Number of mounting holes:	8
Depth (flange to rear):	117 mm
Net weight:	6kg

Ordering codes:
101FHW-X4 ohm-118

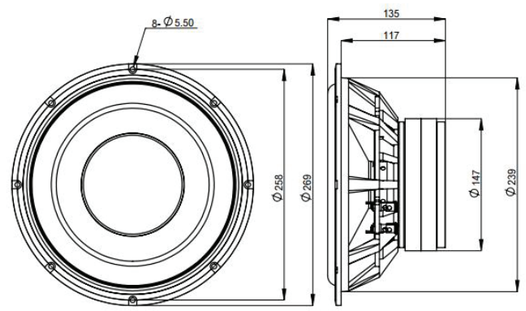
Recone kits:
RC101FHWX-118

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

10" | 101FHW

Sub-woofer

REDCAT





Key features:

- FIBER REINFORCED PAPER CONE
- TWO DEMODULATION RINGS
- OPTMIZED AIR VENTILATION

Design notes:

Introducing the 101FHW: the latest iteration of our award-winning 10FHW woofer model. This high-efficiency 10-inch subwoofer delivers an impressive 87dB sensitivity (1 watt / 1 meter), offering extended low-frequency response and robust power handling capabilities.

Crafted with a fiber-reinforced paper cone assembly and a single roll rubber surround, the 101FHW is built for durability and performance. Its Nomex spider, featuring stitched tinsel wires, ensures long-lasting reliability even in high-powered applications. Enhanced back plate space and additional venting have been integrated to optimize power handling and cooling, making this woofer truly exceptional.

The carefully selected materials provide remarkable strength, high efficiency, and sustained output under extreme conditions.

On the magnetic front, our REDCATT engineers have designed a cutting-edge ferrite-based magnetic circuit that sets a new standard for performance. This innovative design features a consistent, high-integrity magnetic flux gap, ultra-low distortion characteristics, and an efficient cooling system. With integrated aluminum shorting rings, the magnetic circuit minimizes flux modulation, ensuring exceptional stability

Specifications:

General specs	
Nominal Diameter:	10"
Rated Impedance:	8 ohm

Power handling	
AES Power:	200 watts
Program Power:	400 watts
Peak Power:	800 watts

Voice Coil	
Diameter:	2 in.
Winding wire:	Copper
Former:	Aluminum
Winding height:	32.3 mm

T/S Parameters	
Resonant frequency:	25 Hz
Re:	5.8 ohm
Qes:	0.43
Qms:	1.76
Qts:	0.34
Vas:	73.3 liters
Sd:	363 cm2
Sensitivity:	87 dB
Mms:	100.2 grams
Bl:	14.6
Le:	0.63 mH

Design details	
Surround Material:	Rubber
Cone material:	Paper
Spider:	Nomex
Plate thickness:	8 mm
Peak to peak linear cone displacement	27.6 mm
Overall diameter:	269 mm
Bolt circle diameter:	257 mm
Baffle cutout dia.:	238 mm
Number of mounting holes:	8
Depth (flange to rear):	123 mm
Net weight:	6kg

Ordering codes:

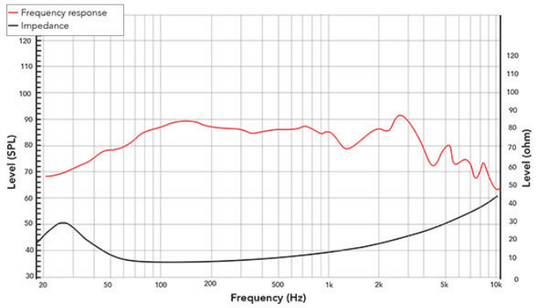
101FHW-X8 ohm-118D

Recone kits:

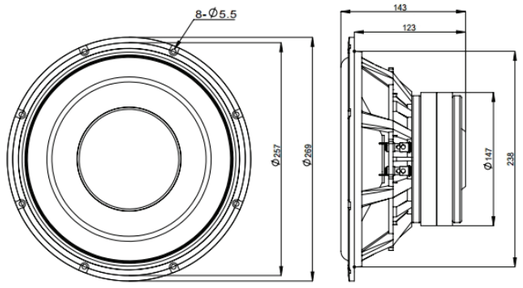
RC101FHWX-118D

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

10" | 10FHW

Sub-woofer

REDCAT





Key features:

- ANODIZED ALUMINUM CONE
- TWO DEMODULATION RINGS
- OPTMIZED AIR VENTILATION

Design notes:

Introducing the 10FHW: the latest evolution of our acclaimed 10FHW woofer model. This high-efficiency 10-inch subwoofer boasts an impressive 86dB sensitivity (1 watt / 1 meter), delivering extended low-frequency response and exceptional power handling capabilities.

Crafted with a robust anodized aluminum cone assembly and a single roll rubber surround, the 10FHW is designed for durability and performance. Its Nomex spider, complete with stitched tinsel wires, ensures longevity even in high-powered scenarios. Enhanced back plate space and additional venting optimize power handling and cooling, making this woofer a standout in its class.

Our innovative material selection guarantees remarkable strength, high efficiency, and sustained output under the most demanding conditions.

On the magnetic front, REDCATT engineers have developed a cutting-edge ferrite-based magnetic circuit that elevates performance to new heights. This design features a consistent, high-integrity magnetic flux gap, ultra-low distortion characteristics, and an efficient cooling system. With integrated aluminum shorting rings, our optimized magnetic circuit minimizes flux

Specifications:

General specs	
Nominal Diameter:	10"
Rated Impedance:	8 ohm

Power handling	
AES Power:	200 watts
Program Power:	400 watts
Peak Power:	800 watts

Voice Coil	
Diameter:	2 in.
Winding wire:	Copper
Former:	Aluminum
Winding height:	32.3 mm

T/S Parameters	
Resonant frequency:	24 Hz
Re:	5.7 ohm
Qes:	0.45
Qms:	2.37
Qts:	0.37
Vas:	65.9 liters
Sd:	346 cm2
Sensitivity:	86 dB
Mms:	113.4 grams
Bl:	14.7
Le:	0.58 mH

Design details	
Surround Material:	Rubber
Cone material:	Aluminum
Spider:	Nomex
Plate thickness:	8 mm
Peak to peak linear cone displacement	27 mm
Overall diameter:	269 mm
Bolt circle diameter:	257 mm
Baffle cutout dia.:	238 mm
Number of mounting holes:	8
Depth (flange to rear):	123 mm
Net weight:	6kg

Ordering codes:

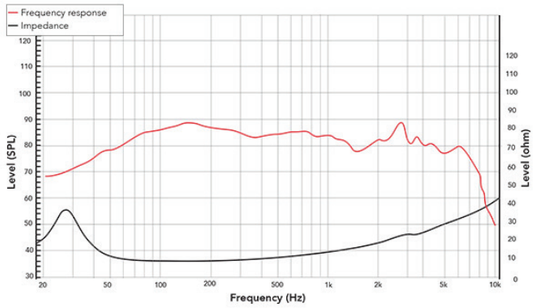
10FHW-X8 ohm-117D

Recone kits:

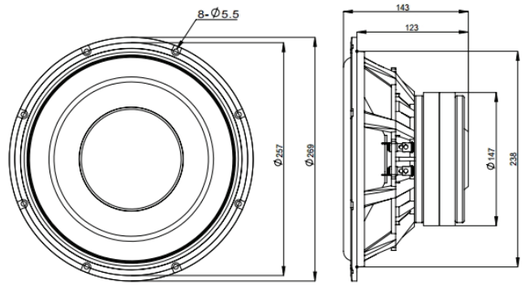
RC10FHWX-117D

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

12" Twiggy 12

Woofer

REDCAT





Key features:

- SHALLOW, YET HIGH CONE EXCURSION
- HONEYCOMB CONE
- IDEAL FOR 4X4" WALL SUBWOOFER, CAR UNDERSEAT SUBWOOFERS

Design notes:

The ultimate in shallow depth woofer design! We created this powerhouse of a speaker with limited spaces in mind, allowing you to fit it into the most compact areas while still delivering massive low frequencies. The extreme shallowness of the Twiggy 12 opens up a world of possibilities, allowing designers to craft enclosures that seamlessly integrate into typical 4x4" wall structures, under vehicle seats, beneath sofas, and more.

But don't be fooled by its shallow design ,Äì the cone excursion approaches an impressive 22.4mm peak to peak, ensuring that this woofer will deliver sizable amounts of low frequencies without compromising on performance. The cone is constructed with a honeycomb structure and layers of woven glass fibers, adding not only to its strength but also to the overall rigidity and performance.
Our patented design guarantees that the depth versus cone excursion ratio is the best available in the market, ensuring optimal sound quality in any installation. The unique magnetic structure of the Twiggy 12 delivers a high-strength B field with minimal distortion artifacts, further enhancing the audio experience.
To top it off, this little powerhouse can handle up to 800 watts of peak power amplification, making it the go-to choice for delivering excelent sound experience.

Specifications:

General specs	
Nominal Diameter:	12"
Rated Impedance:	4 ohm

Power handling	
AES Power:	200 watts
Program Power:	400 watts
Peak Power:	800 watts

Voice Coil	
Diameter:	3 in.
Winding wire:	CCAW
Former:	Glass Fiber
Winding height:	26.5 mm

T/S Parameters	
Resonant frequency:	30 Hz
Re:	3.6 ohm
Qes:	1.16
Qms:	16
Qts:	1.08
Vas:	59.8 liters
Sd:	506.7 cm2
Sensitivity:	84 dB
Mms:	160.7 grams
Bl:	9.9
Le:	1 mH

Design details	
Surround Material:	Rubber
Cone material:	GF Honey-
Spider:	Nomex
Plate thickness:	8 mm
Peak to peak linear cone displacement	22.4 mm
Overall diameter:	323 mm
Bolt circle diameter:	305 mm
Baffle cutout dia.:	293.5 mm
Number of mounting holes:	8
Depth (flange to rear):	73.7 mm
Net weight:	5.1kg

Ordering codes:

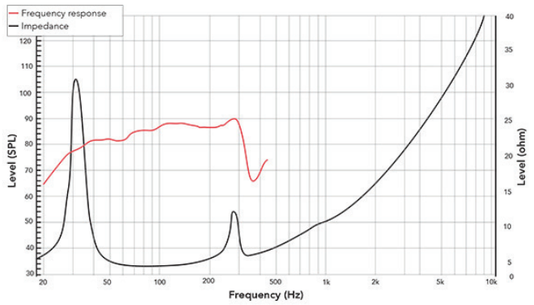
Twiggy 12-X4 ohm-470A

Recone kits:

RCTwiggy 12X-470A

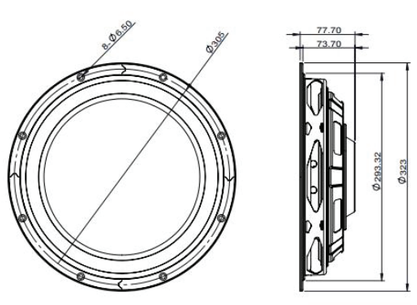
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



12" 12XR

Woofer

REDCAT





Key features:

- VERY HIGH CONE EXCURSION, WITH VERY LOW THD
- CAPABLE TO HANDLE VERY LOW FREQUENCIES
- HIGH POWER HANDLING, COPPER CAP, STITCHED TINSEL WIRES

Design notes:

The 12XR was designed around our new approach to the magnetic system. Our XR series speaker motors were designed so the voice coil winding doesn,Äôt leave the gap for most of the cone excursion. The desired cone excursion is carefully evaluated and incorporated into the design. The 12XR allows the designer to design sub-woofers with very large cone excursions, without the otherwise present harmonic distortion due to the voice coil leaving the magnetic gap. If you like the sound of a clean, undistorted bass, then the 12XR is the right transducer for your application.

Motor Design
The magnetic design incorporates large neodymium magnets placed along the voice coil winding. This has allowed us to push the cone excursion to 28mm peak to peak. Unique gap venting ensures good air circulation and greatly improves the reliability of this driver. We have also developed a new technique for manufacturing deep copper caps.

The design further sports a large spider on top of which is hot-pressed tinsel wires. Cone is carbon fiber reinforced, with a lightweight foamed rubber surround. The suspension was designed for large excursions.

Specifications:

General specs	
Nominal Diameter:	12"
Rated Impedance:	8 ohm

Power handling	
AES Power:	500 watts
Program Power:	1000 watts
Peak Power:	2000 watts

Voice Coil	
Diameter:	2.5 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	12.6 mm

T/S Parameters	
Resonant frequency:	35 Hz
Re:	5.7 ohm
Qes:	0.73
Qms:	10.5
Qts:	0.68
Vas:	89.7 liters
Sd:	531 cm2
Sensitivity:	91 dB
Mms:	88.3 grams
Bl:	12.3
Le:	0.24 mH

Design details	
Surround Material:	Rubber
Cone material:	Paper
Spider:	Nomex
Plate thickness:	31 mm
Peak to peak linear cone displacement	28.2 mm
Overall diameter:	320 mm
Bolt circle diameter:	299 mm
Baffle cutout dia.:	281 mm
Number of mounting holes:	8
Depth (flange to rear):	172.5 mm
Net weight:	5.7kg

Ordering codes:

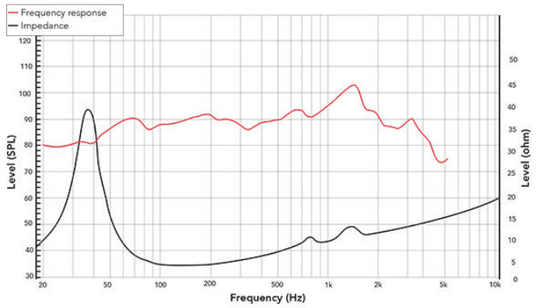
12XR-X8 ohm-270

Recone kits:

RC12XRX-270

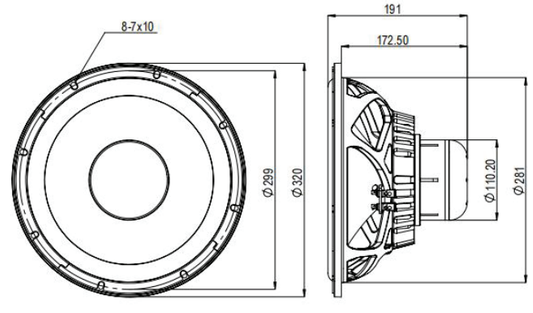
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



12" | 12NPM

Mid-woofer

REDCAT





Key features:

- CARBON FIBER LOADED PAPER CONE
- VERY HIGH EFFICIENCY
- LIGHTWEIGHT MECHANICAL STRUCTURE

Design notes:

The 12NPM is a high efficiency, (98 dB 1watt / 1 meter) 12-inch mid bass woofer with incredibly linear frequency response characteristics, extreme high power handling capability while generating low harmonic distortion artifacts.-
The 12NPM uses a lightweight carbon fiber loaded cone assembly along with a precision double roll constant geometry surround. This combination provides remarkable strength, high efficiency and a excursion linearity of 18.2mm.

Magnetic Circuit
REDCATT engineers have developed a lightweight, inside-neodymium slug based magnetic circuit capable of delivering the highest level of performance providing a consistent, high integrity magnetic flux gap, ultra low distortion characteristic and high efficiency cooling system. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability.

Specifications:

General specs	
Nominal Diameter:	12"
Rated Impedance:	8 ohm

Power handling	
AES Power:	450 watts
Program Power:	900 watts
Peak Power:	1800 watts

Voice Coil	
Diameter:	3 in.
Winding wire:	CCAW
Former:	Glass Fiber
Winding height:	18.6 mm

T/S Parameters	
Resonant frequency:	49 Hz
Re:	4.7 ohm
Qes:	0.32
Qms:	9.95
Qts:	0.31
Vas:	63.6 liters
Sd:	531 cm2
Sensitivity:	98 dB
Mms:	65.6 grams
Bl:	17.3
Le:	0.65 mH

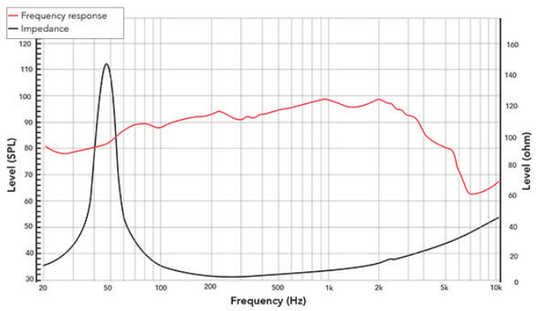
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	11 mm
Peak to peak linear cone displacement	18.2 mm
Overall diameter:	315 mm
Bolt circle diameter:	298 mm
Baffle cutout dia.:	285 mm
Number of mounting holes:	8
Depth (flange to rear):	142.5 mm
Net weight:	4.1kg

Ordering codes:
12NPM-X8 ohm-054

Recone kits:
RC12NPMX-054

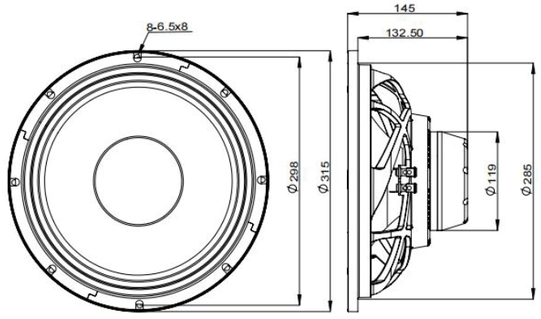
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



12" | 123NPM

Mid-woofer

REDCAT





Key features:

- HIGH SENSITIVITY, EXTENDED FREQUENCY RESPONSE
- 3 DEMODULATION RINGS, POWERFUL MOTOR STRUCTURE, DUAL AIR-GAP
- HIGH POWER HANDLING

Design notes:

The 123NPM is a truly unique full range woofer. We have designed cutting edge product, using the best available materials and highly optimized design for the best performance in its class. It delivers very high efficiency, (96 dB 1watt / 1 meter), incredibly linear frequency response characteristics with extended HF frequency response, extreme high power handling capability, while generating ultra low harmonic distortion artifacts. The 123NPM uses a lightweight carbon fiber loaded cone assembly along with a high excursion triple roll constant geometry surround. This combination provides remarkable strength, high efficiency and a peak to peak linear excursion of 21mm.

Magnetic Circuit
The magnetic circuit features two aluminum shorting rings, double air-gap front plate. The cooling system and the air flow has been designed using the modern FEM techniques and further optimized to provide the highest levels of cooling efficiency. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability.

Specifications:

General specs	
Nominal Diameter:	12"
Rated Impedance:	8 ohm

Power handling	
AES Power:	800 watts
Program Power:	1600 watts
Peak Power:	3200 watts

Voice Coil	
Diameter:	4 in.
Winding wire:	Aluminum Sq.
Former:	TIL
Winding height:	23 mm

T/S Parameters	
Resonant frequency:	58 Hz
Re:	4.7 ohm
Qes:	0.45
Qms:	12.6
Qts:	0.43
Vas:	31.6 liters
Sd:	551 cm2
Sensitivity:	96 dB
Mms:	100 grams
Bl:	19.6
Le:	0.71 mH

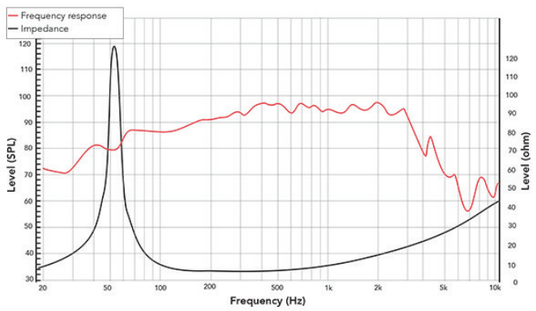
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	13 mm
Peak to peak linear cone displacement	21.2 mm
Overall diameter:	320.35 mm
Bolt circle diameter:	299 mm
Baffle cutout dia.:	281.9 mm
Number of mounting holes:	8
Depth (flange to rear):	140.5 mm
Net weight:	6.2kg

Ordering codes:
123NPM-X8 ohm-185

Recone kits:
RC123NPMX-185

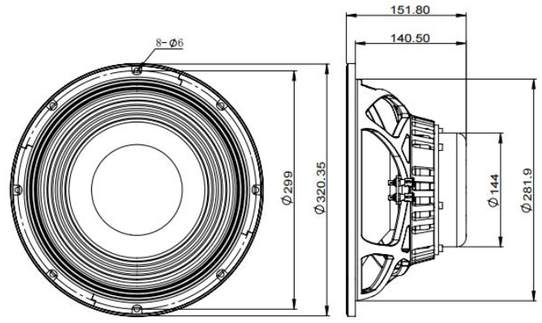
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



12" | 123FPM

Mid-woofer





Key features:

- EXTENDED FREQUENCY RESPONSE
- RIB REINFORCED PAPER CONE
- HIGH POWER HANDLING

Design notes:

The 123FPM is a high efficiency, (98 dB 1watt / 1 meter) 12-inch mid bass woofer with incredibly linear frequency response characteristics. The 123FPM uses a lightweight rib-reinforced cone assembly along with a precision double roll constant geometry surround. This combination provides remarkable strength, high efficiency and a excursion linearity of 10.2mm.

Magnetic Circuit
REDCATT engineers have developed a lightweight, inside-neodymium slug based magnetic circuit capable of delivering the highest level of performance providing a consistent, high integrity magnetic flux gap, ultra low distortion characteristic and high efficiency cooling system. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability.

Specifications:

General specs	
Nominal Diameter:	12"
Rated Impedance:	4 ohm

Power handling	
AES Power:	300 watts
Program Power:	600 watts
Peak Power:	1200 watts

Voice Coil	
Diameter:	2.5 in.
Winding wire:	CCAW
Former:	Glass Fiber
Winding height:	13.5 mm

T/S Parameters	
Resonant frequency:	45 Hz
Re:	3.1 ohm
Qes:	0.29
Qms:	4.96
Qts:	0.27
Vas:	98.5 liters
Sd:	531 cm2
Sensitivity:	98 dB
Mms:	52.1 grams
Bl:	12.8
Le:	0.42 mH

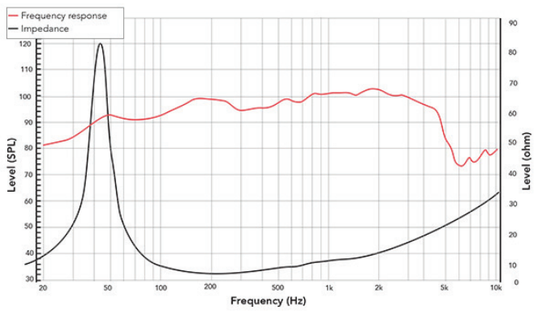
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	8 mm
Peak to peak linear cone displacement	10.2 mm
Overall diameter:	320 mm
Bolt circle diameter:	302 mm
Baffle cutout dia.:	282 mm
Number of mounting holes:	8
Depth (flange to rear):	127.8 mm
Net weight:	5kg

Ordering codes:
123FPM-X4 ohm-188B

Recone kits:
RC123FPMX-188B

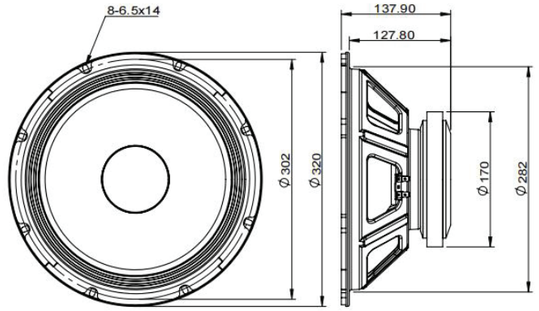
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



12" | 122NPW

Woofer





Key features:

- CARBON FIBER FILLED PAPER CONE
- DOUBLE SILICONE SPIDER
- HIGH POWER HANDLING

Design notes:

The 122NPW is a high efficiency, (97 dB 1watt / 1 meter) 12-inch woofer with incredibly linear frequency response characteristics, extreme high power handling capability while generating low harmonic distortion artifacts. The 122NPW uses a lightweight carbon fiber loaded cone assembly along with a high excursion triple roll constant geometry surround. This combination provides remarkable strength, high efficiency and a peak to peak maximum excursion of 19mm. Woofer features REDCATT double silicone sealed spider.

Power Handling
At the core of the 122NPW is it‚Äôs voice coil technology featuring a composite Polyimide former material capable of withstanding peak temperatures in excess of 350degC, well beyond the thermal requirements of modern professional audio systems.

The woofer cone is also extensively treated to withstand harsh environments and high humidity. Metal parts in the speaker assembly are coated for extreme weatherization protection.

Specifications:

General specs	
Nominal Diameter:	12"
Rated Impedance:	8 ohm

Power handling	
AES Power:	800 watts
Program Power:	1600 watts
Peak Power:	3200 watts

Voice Coil	
Diameter:	4 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	25.5 mm

T/S Parameters	
Resonant frequency:	35 Hz
Re:	5.5 ohm
Qes:	0.17
Qms:	6.65
Qts:	0.17
Vas:	81.9 liters
Sd:	551 cm2
Sensitivity:	97 dB
Mms:	81.9 grams
Bl:	27
Le:	1.27 mH

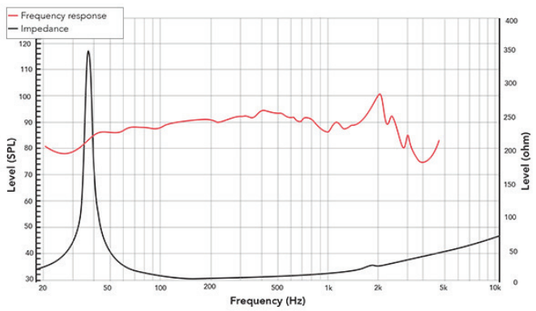
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	14 mm
Peak to peak linear cone displacement	19.2 mm
Overall diameter:	322 mm
Bolt circle diameter:	302 mm
Baffle cutout dia.:	287 mm
Number of mounting holes:	8
Depth (flange to rear):	154 mm
Net weight:	7.6kg

Ordering codes:
122NPW-X8 ohm-102

Recone kits:
RC122NPWX-102

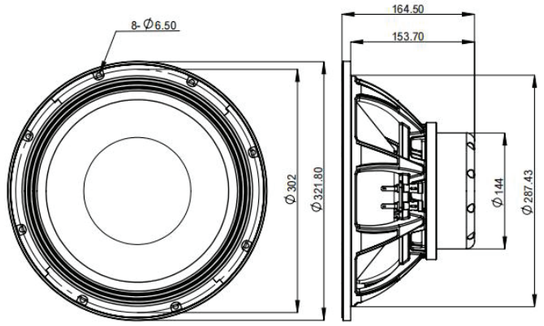
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



12" | 121XR

Woofer

REDCAT



Key features:

- EXTENDED FREQUENCY RESPONSE, HIGH EXCURSION, ULTRA LOW THD
- STATIC DEMODULATION COIL, LARGE SPIDER WITH STITCHED TINSEL WIRES
- CARBON FIBER LOADED PAPER CONE

Design notes:

The 121XR was designed to be simply the best driver for 2-way and multi-way systems on the market, yet this driver will also shine in sub-woofer applications. The combination of our XR patented technology with static shorting coil brings an nonparallel opportunity to the audio designers. The common request for 2-way speakers is ‚Äúmore of everything,Äù. Designers wishes for more bass, more mids. Well, there you have it! But not only that. We bring this with clarity in the mid-frequencies and undistorted bass. Our designers were able to achieve THD below 0.5% from 20Hz up to 2.5kHz. There isn‚Äôt another driver like this on the market.

Motor Design
The magnetic design incorporates large neodymium magnets placed along the voice coil winding, together with the 2nd and static coil placed on the pole piece. This has allowed us to push the cone excursion to 25mm peak to peak, while lowering the inductance. The shorting coil covers the complete main coil excursion. This is also an improvement compared to some previous designs on the market. Unique gap venting ensures good air circulation and greatly improves the reliability of this driver.

Specifications:

General specs	
Nominal Diameter:	12"
Rated Impedance:	8 ohm

Power handling	
AES Power:	500 watts
Program Power:	1000 watts
Peak Power:	2000 watts

Voice Coil	
Diameter:	2.5 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	18.3 mm

T/S Parameters	
Resonant frequency:	46 Hz
Re:	5.6 ohm
Qes:	0.42
Qms:	1.56
Qts:	0.33
Vas:	69.1 liters
Sd:	531 cm2
Sensitivity:	96 dB
Mms:	66.8 grams
Bl:	16
Le:	0.16 mH

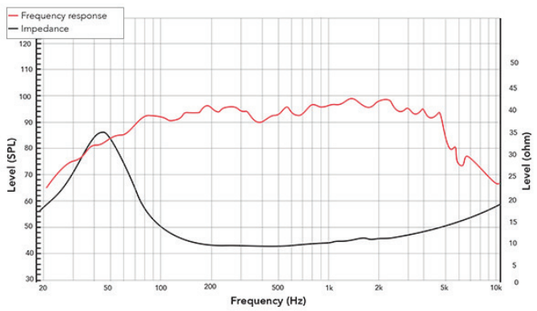
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	31 mm
Peak to peak linear cone displacement	25.4 mm
Overall diameter:	320 mm
Bolt circle diameter:	299 mm
Baffle cutout dia.:	281 mm
Number of mounting holes:	8
Depth (flange to rear):	172.5 mm
Net weight:	5.1kg

Ordering codes:
121XR-X8 ohm-352

Recone kits:
RC121XRX-352

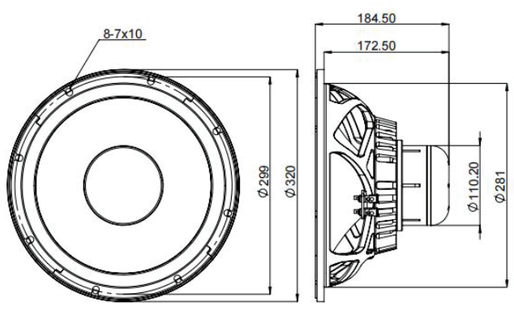
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



12" | 121NPM

Mid-woofer

REDCAT



Key features:

- VERY HIGH EFFICIENCY MID-WOOFER
- LINEAR FREQUENCY RESPONSE, LOW HARMONIC DISTORTION
- LIGHTWEIGHT CARBON FIBER LOADED PAPER CONE, NOMEX SPIDER

Design notes:

The 121NPM is a ultra high efficiency, (100dB 1watt / 1 meter) 12-inch mid bass woofer with incredibly linear frequency response characteristics, extreme high power handling capability while generating low harmonic distortion artifacts.-
The 121NPM uses a lightweight carbon fiber loaded cone assembly along with a precision double roll constant geometry surround. This combination provides remarkable strength, high efficiency and a excursion linearity of 14.2mm.

Magnetic Circuit
REDCATT engineers have developed a lightweight, neodymium outside ring based magnetic circuit capable of delivering the highest level of performance providing a consistent, high integrity magnetic flux gap, ultra low distortion characteristic and high efficiency cooling system. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability.

Specifications:

General specs	
Nominal Diameter:	12"
Rated Impedance:	8 ohm

Power handling	
AES Power:	450 watts
Program Power:	900 watts
Peak Power:	1800 watts

Voice Coil	
Diameter:	3 in.
Winding wire:	CCAW
Former:	Glass Fiber
Winding height:	13 mm

T/S Parameters	
Resonant frequency:	50 Hz
Re:	6.0 ohm
Qes:	0.16
Qms:	7.51
Qts:	0.16
Vas:	59.2 liters
Sd:	531 cm2
Sensitivity:	100 dB
Mms:	66.7 grams
Bl:	27.8
Le:	0.51 mH

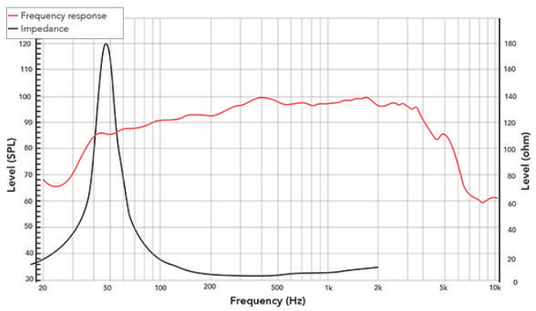
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	10 mm
Peak to peak linear cone displacement	14.2 mm
Overall diameter:	315 mm
Bolt circle diameter:	298 mm
Baffle cutout dia.:	285 mm
Number of mounting holes:	8
Depth (flange to rear):	123.5 mm
Net weight:	4kg

Ordering codes:
121NPM-X8 ohm-079

Recone kits:
RC121NPMX-079

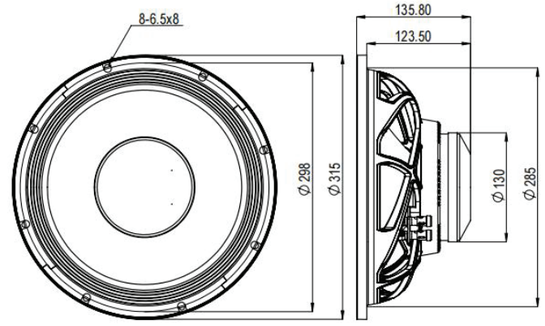
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



12" | 121FIND

Mid-woofer

REDCAT





Key features:

- EXTENDED FREQUENCY RESPONSE
- PROVEN COST EFFECTIVE DESIGN
- NOMEX SPIDER, WATER-REPELLENT & NON-FLAMMABLE PAPER CONE

Design notes:

The 121FIND is a high efficiency, (96 dB 1watt/ 1 meter) 12inch woofer with incredibly linear frequency response characteristics, high power handling capability while generating low harmonic distortion artifacts. 121FIND uses lightweight cone which movement is controlled by ,ÄúM,Äù shaped surround. Pistonic behavior and the long term stability
Is supported by Nomex spider. The woofer cone is treated to withstand harsh environments and high humidity.

The 121FIND was design for its best use in the 2-way applications, where excellent midrange response is required. Speaker provides good low frequency extension and delivers seizable amounts of low frequencies.
The metal parts in the speaker are coated and tested to ensure extreme weatherization protection.

Specifications:

General specs	
Nominal Diameter:	12"
Rated Impedance:	4 ohm
Power handling	
AES Power:	250 watts
Program Power:	500 watts
Peak Power:	1000 watts
Voice Coil	
Diameter:	2 in.
Winding wire:	CCAW
Former:	Glass Fiber
Winding height:	11.7 mm

T/S Parameters	
Resonant frequency:	59 Hz
Re:	3.1 ohm
Qes:	0.56
Qms:	7.34
Qts:	0.52
Vas:	59.1 liters
Sd:	531 cm2
Sensitivity:	96 dB
Mms:	49.1 grams
Bl:	10.2
Le:	0.32 mH

Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	8 mm
Peak to peak linear cone displacement	13 mm
Overall diameter:	320 mm
Bolt circle diameter:	302 mm
Baffle cutout dia.:	282 mm
Number of mounting holes:	8
Depth (flange to rear):	124 mm
Net weight:	4.6kg

Ordering codes:

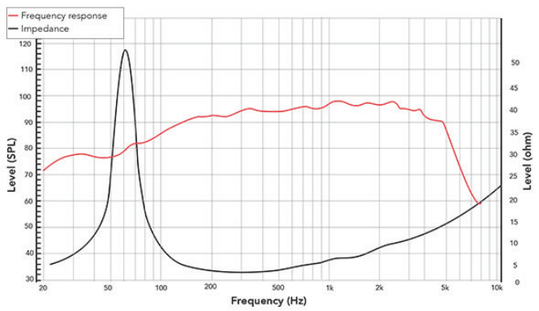
121FIND-X4 ohm-233

Recone kits:

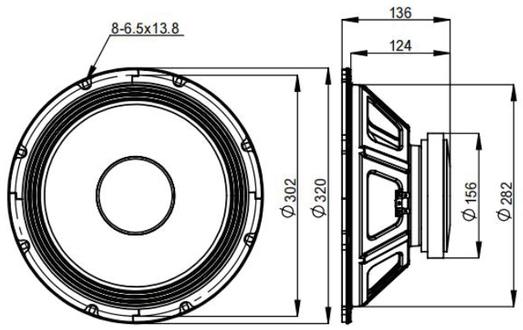
RC121FINDX-233

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

15" | 15NPW

Woofer

REDCAT





Key features:

- CARBON FIBER LOADED PAPER CONE
- DOUBLE SILICONE SPIDER
- HIGH POWER HANDLING

Design notes:

The 15NPW is a high efficiency, (97 dB 1watt / 1 meter) 15-inch woofer with linear frequency response characteristics, high power handling capability while generating low harmonic distortion artifacts. The 15NPW uses a lightweight carbon fiber loaded cone assembly along with a high excursion triple roll constant geometry surround. This combination provides remarkable strength, high efficiency and a peak to peak maximum excursion of 15mm.
Woofer features REDCATT double silicone sealed spider.

Power Handling
At the core of the 15NPW is it,Äôs voice coil technology featuring a composite Polyimide former material capable of withstanding peak temperatures in excess of 350degC, well beyond the thermal requirements of modern professional audio systems.
The 15NPW cone and dust cap are made using an advanced carbon fiber loaded REDCATT pulp. The woofer cone is also extensively treated to withstand harsh environments and high humidity. Metal parts in the speaker assembly are coated for extreme weatherization protection.

Specifications:

General specs	
Nominal Diameter:	15"
Rated Impedance:	8 ohm
Power handling	
AES Power:	1200 watts
Program Power:	2400 watts
Peak Power:	4800 watts
Voice Coil	
Diameter:	4 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	25.5 mm

T/S Parameters	
Resonant frequency:	40 Hz
Re:	5.6 ohm
Qes:	0.28
Qms:	8.77
Qts:	0.27
Vas:	107 liters
Sd:	881 cm2
Sensitivity:	97 dB
Mms:	155.1 grams
Bl:	28.3
Le:	1.65 mH

Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	14 mm
Peak to peak linear cone displacement	14.6 mm
Overall diameter:	392 mm
Bolt circle diameter:	373 mm
Baffle cutout dia.:	360 mm
Number of mounting holes:	8
Depth (flange to rear):	155.5 mm
Net weight:	8.5kg

Ordering codes:

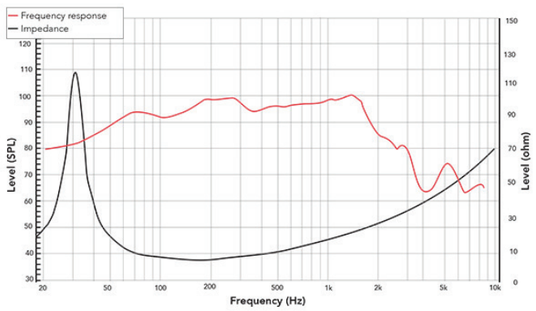
15NPW-X8 ohm-016

Recone kits:

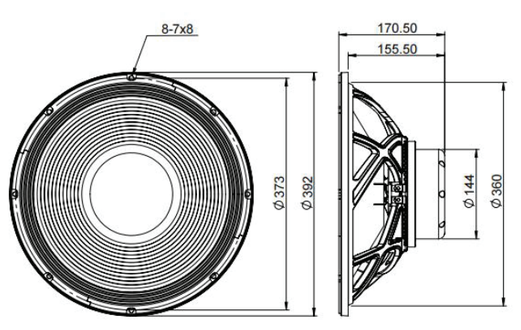
RC15NPWX-016

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

15" | 15NPM

Mid-woofer





Key features:

- EXTENDED FREQUENCY RESPONSE
- 2 DEMODULATION RINGS, LIGHTWEIGHT CARBON FIBER LOADED PAPER CONE
- HI BL, DOUBLE AIR-GAP, POWERFUL MOTOR STRUCTURE

Design notes:

The 15NPM is a truly unique full range woofer. We have designed cutting edge product, using the best available materials and highly optimized design for the best performance in its class. It delivers very high efficiency, (98 dB 1watt / 1 meter), incredibly linear frequency response characteristics with extended HF frequency response, high power handling capability, while generating ultra low harmonic distortion artifacts. The 15NPM uses a lightweight carbon fiber loaded cone assembly along with a high excursion triple roll constant geometry surround. This combination provides remarkable strength, high efficiency and a peak to peak linear excursion of 21mm.

Magnetic Circuit
The magnetic circuit sports two aluminum shorting rings, double air-gap front plate. The cooling system and the air flow has been designed using modern FEM techniques and further optimized to provide the highest levels of cooling efficiency. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability..

Specifications:

General specs	
Nominal Diameter:	15"
Rated Impedance:	8 ohm
Power handling	
AES Power:	800 watts
Program Power:	1600 watts
Peak Power:	3200 watts
Voice Coil	
Diameter:	4 in.
Winding wire:	Aluminum Sq.
Former:	Glass Fiber
Winding height:	23 mm

T/S Parameters	
Resonant frequency:	48 Hz
Re:	4.7 ohm
Qes:	0.47
Qms:	16.5
Qts:	0.46
Vas:	89.9 liters
Sd:	855.3 cm2
Sensitivity:	98 dB
Mms:	123 grams
Bl:	19.3
Le:	0.68 mH

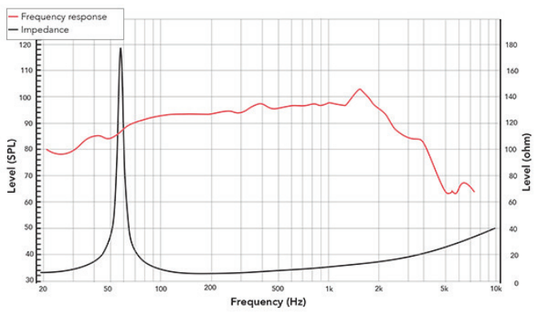
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	13 mm
Peak to peak linear cone displacement	21.2 mm
Overall diameter:	392 mm
Bolt circle diameter:	373 mm
Baffle cutout dia.:	360 mm
Number of mounting holes:	8
Depth (flange to rear):	149.5 mm
Net weight:	6.65kg

Ordering codes:
15NPM-X8 ohm-262

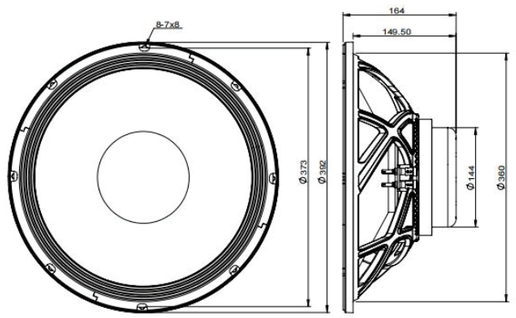
Recone kits:
RC15NPMX-262

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

15" | 15FPM

Mid-woofer





Key features:

- CARBON FIBER REINFORCED PAPER CONE
- SQUARE ALUMINUM WINDING WIRE (ALR)
- GREAT OPTION FOR POWERFUL 2-WAY SYSTEMS

Design notes:

The 15FPM is a high efficiency, (98 dB 1watt / 1 meter) 15-inch woofer with incredibly linear frequency response characteristics. The 15FPM uses a lightweight, but strong, carbon fiber loaded cone assembly along with a high excursion triple roll constant geometry surround. Cone material was specifically developed with 2-way or multi-way application in mind. The 15FPM has extended mid frequency range, providing possibility for cross overs at higher frequencies.

Power Handling
At the core of the 15FPM is it‚Äôs voice coil technology featuring a composite Polyimide former material capable of withstanding peak temperatures in excess of 250¬∞C, well beyond the thermal requirements of modern professional audio systems. The coil is wound on the outside of the former. Winding material is aluminum ribbon, material that provides ideal transient response.

REDCATT has implemented a silicone spider design to ensure long term Fs memory, consistency and diminish anomalies associated with spider deterioration. The sealed spider works as a air pump and pushes the air trough out motor to increase heat transfer and cooling of the parts.

Specifications:

General specs	
Nominal Diameter:	15"
Rated Impedance:	8 ohm
Power handling	
AES Power:	1000 watts
Program Power:	2000 watts
Peak Power:	4000 watts
Voice Coil	
Diameter:	4 in.
Winding wire:	Aluminum Sq.
Former:	Glass Fiber
Winding height:	21 mm

T/S Parameters	
Resonant frequency:	41 Hz
Re:	5.2 ohm
Qes:	0.38
Qms:	8.07
Qts:	0.36
Vas:	134.9 liters
Sd:	908 cm2
Sensitivity:	98 dB
Mms:	126.6 grams
Bl:	21.3
Le:	1.17 mH

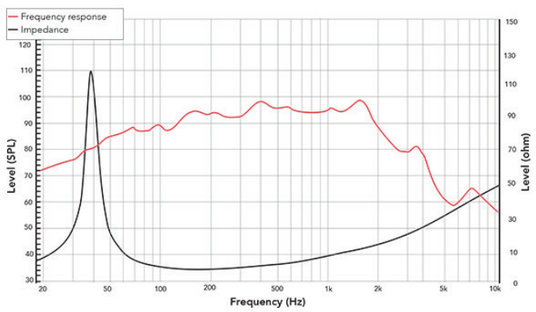
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	12 mm
Peak to peak linear cone displacement	15.4 mm
Overall diameter:	392 mm
Bolt circle diameter:	373 mm
Baffle cutout dia.:	360 mm
Number of mounting holes:	8
Depth (flange to rear):	150 mm
Net weight:	12kg

Ordering codes:
15FPM-X8 ohm-063

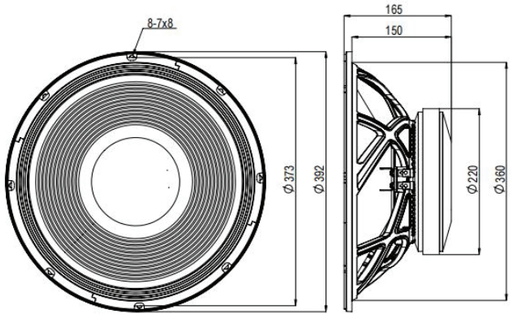
Recone kits:
RC15FPMX-063

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

15" | 15FIND

Woofer

REDCAT



Key features:

- GLASS FIBER AND RIB REINFORCED PAPER CONE
- FEM OPTIMIZED AIR CIRCULATION
- SILICONE SEALED SURROUND

Design notes:

The 15FIND is a high efficiency, (97 dB 1watt / 1 meter) 15-inch woofer with incredibly linear frequency response characteristics, extreme high power handling capability while generating low harmonic distortion artifacts. The 15FIND uses a lightweight, but strong, glass fiber loaded cone assembly along with a high excursion triple roll constant geometry surround. This combination provides remarkable strength, high efficiency and a peak to peak maximum excursion of 21mm.

Power Handling
At the core of the 15FIND is it‚Äôs voice coil technology featuring a composite Polyimide former material capable of withstanding peak temperatures in excess of 250¬∞C, well beyond the thermal requirements of modern professional audio systems. Winding if winded on the outside and inside of the former.

REDCATT has implemented a silicone spider design to ensure long term Fs memory, consistency and diminish anomalies associated with spider deterioration. The sealed spider works as a air pump and pushes the air trough out motor to increase heat transfer and cooling of the parts.

Specifications:

General specs	
Nominal Diameter:	15"
Rated Impedance:	8 ohm
Power handling	
AES Power:	1000 watts
Program Power:	2000 watts
Peak Power:	4000 watts
Voice Coil	
Diameter:	4 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	25.5 mm

T/S Parameters	
Resonant frequency:	42 Hz
Re:	5.4 ohm
Qes:	0.37
Qms:	8.31
Qts:	0.36
Vas:	96.4 liters
Sd:	881 cm2
Sensitivity:	97 dB
Mms:	159.6 grams
Bl:	24.6
Le:	1.18 mH

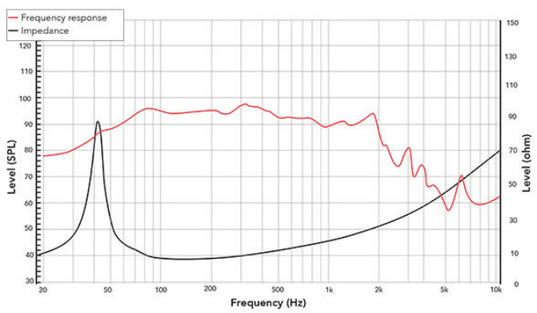
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	12 mm
Peak to peak linear cone displacement	21 mm
Overall diameter:	392 mm
Bolt circle diameter:	373 mm
Baffle cutout dia.:	360 mm
Number of mounting holes:	8
Depth (flange to rear):	150 mm
Net weight:	12kg

Ordering codes:
15FIND-X8 ohm-035

Recone kits:
RC15FINDX-035

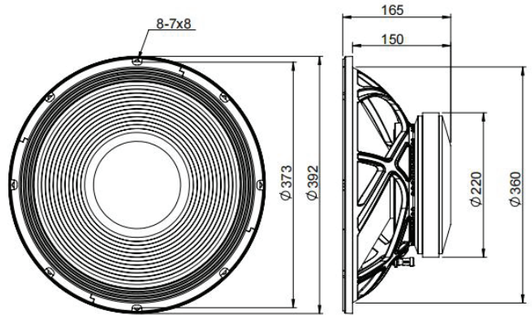
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



15" | 15FHW

Sub-woofer

REDCAT



Key features:

- HI SENSITIVITY, LOW RESONANT FREQUENCY
- NOMEX SPIDER
- STRONG, YET LIGHTWEIGHT CONE

Design notes:

The 15FHW is an ultra low frequency sub-woofer, designed to deliver large amounts of very low frequencies. With 91 dB 1watt / 1 meter sensitivity, you find this 15-inch sub-woofer with incredibly linear frequency response characteristics ideally assembled in sub-woofers for hi-fi, gaming, studios or cinema. The 15FHW uses a strong paper cone, along with a high excursion single roll rubber surround. Rubber surround material was specifically developed for this application. The shape of the surround roll was FEM optimized to ensure low distortion in whole working range.

Power Handling
At the core of the 15FHW is it‚Äôs voice coil technology featuring a composite Polyimide former material capable of withstanding peak temperatures in excess of 200¬∞C, well beyond the thermal requirements of modern professional audio systems.

REDCATT has implemented a Nomex(r) spider design to ensure long term Fs memory, consistency and diminish anomalies associated with spider deterioration.

Specifications:

General specs	
Nominal Diameter:	15"
Rated Impedance:	8 ohm
Power handling	
AES Power:	400 watts
Program Power:	800 watts
Peak Power:	1600 watts
Voice Coil	
Diameter:	3 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	19.7 mm

T/S Parameters	
Resonant frequency:	24 Hz
Re:	5.8 ohm
Qes:	0.63
Qms:	11.9
Qts:	0.6
Vas:	221.2 liters
Sd:	804 cm2
Sensitivity:	91 dB
Mms:	169.6 grams
Bl:	15.8
Le:	0.96 mH

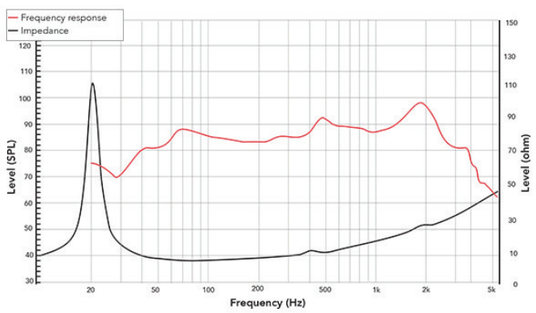
Design details	
Surround Material:	Rubber
Cone material:	Paper
Spider:	Cotton
Plate thickness:	10 mm
Peak to peak linear cone displacement	19.6 mm
Overall diameter:	385 mm
Bolt circle diameter:	371 mm
Baffle cutout dia.:	349 mm
Number of mounting holes:	8
Depth (flange to rear):	168.1 mm
Net weight:	6.8kg

Ordering codes:
15FHW-X8 ohm-089

Recone kits:
RC15FHWX-089

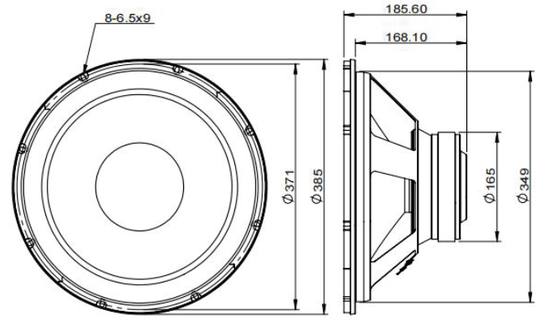
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



15" | 154FIND

Mid-woofer

REDCAT





Key features:

- COST EFFECTIVE DESIGN, YET WITH HIGH SPL, EXTENDED MID FREQUENCY
- GOOD POWER HANDLING
- LIGHTWEIGHT PAPER CONE, CONEX SPIDER

Design notes:

The 154FIND is a cost-effective solution for two-way and multi-way systems, together with subwoofers. It‚Äôs lightweight yet strong cone allows the magnetic circuit to be size optimized while delivering a seizable amount of sound pressure. With its high efficiency (97 dB 1watt / 1 meter) and high power handling capabilities, this woofer will excel in all applications with tight budgets. The cone shape and material was developed to extend mid-frequency response, making the woofer good choice for two-way and multi-way systems.¬†

Power Handling
At the core of the 154FIND is its voice coil technology featuring a composite Polyimide former material capable of withstanding peak temperatures above 280¬∞C. The winding with high temperature handling copper wire ensures the long life of the voice coil, without the costly service cycles.¬†
The cone is also extensively treated to withstand harsh environments and high humidity. Metal parts in the speaker assembly are coated for extreme weatherization protection.

Specifications:

General specs	
Nominal Diameter:	15"
Rated Impedance:	8 ohm

Power handling	
AES Power:	500 watts
Program Power:	1000 watts
Peak Power:	2000 watts

Voice Coil	
Diameter:	2.5 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	17 mm

T/S Parameters	
Resonant frequency:	38 Hz
Re:	5.6 ohm
Qes:	0.43
Qms:	8.1
Qts:	0.4
Vas:	187.2 liters
Sd:	881 cm2
Sensitivity:	97 dB
Mms:	103 grams
Bl:	18.1
Le:	0.97 mH

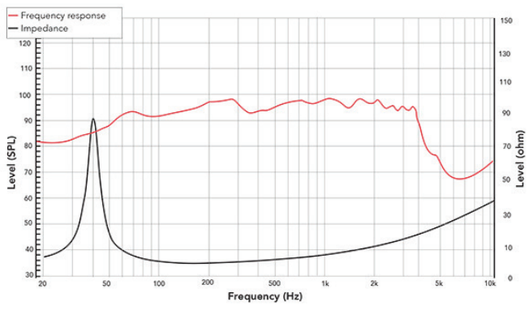
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	8 mm
Peak to peak linear cone displacement	17.2 mm
Overall diameter:	387 mm
Bolt circle diameter:	374 mm
Baffle cutout dia.:	355 mm
Number of mounting holes:	8
Depth (flange to rear):	155 mm
Net weight:	6.3kg

Ordering codes:
154FIND-X8 ohm-298

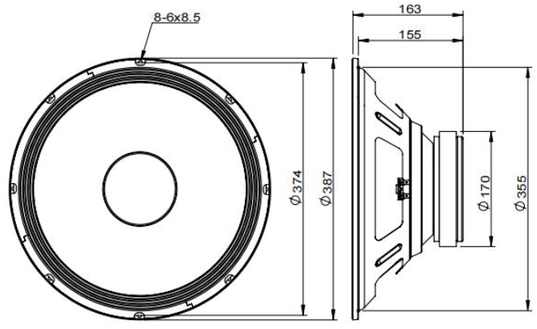
Recone kits:
RC154FINDX-298

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

15" | 152FIND

Woofer

REDCAT





Key features:

- EXTENDED LOW FREQUENCY RESPONSE
- LIGHTWEIGHT CARBON FIBER LOADED PAPER CONE
- HIGH SPL

Design notes:

The 152FIND is a high efficiency, (99 dB 1watt / 1 meter) 15-inch woofer with incredibly linear frequency response characteristics, high power handling capability while generating low harmonic distortion artifacts. The 152FIND uses a lightweight carbon fiber loaded cone assembly along with a high excursion triple roll constant geometry surround. This combination provides remarkable strength, high efficiency and a peak to peak maximum excursion of 15mm.

Power Handling
At the core of the 152FIND is it‚Äôs voice coil technology featuring a composite Polyimide former material capable of withstanding peak temperatures in excess of 280C, well beyond the thermal requirements of modern professional audio systems.

The 152FIND cone and dust cap are made using an advanced carbon fiber loaded REDCATT pulp. The woofer cone is also extensively treated to withstand harsh environments and high humidity. Metal parts in the speaker assembly are coated for extreme weatherization protection.

Specifications:

General specs	
Nominal Diameter:	15"
Rated Impedance:	8 ohm

Power handling	
AES Power:	800 watts
Program Power:	1600 watts
Peak Power:	3200 watts

Voice Coil	
Diameter:	3 in.
Winding wire:	CCAW
Former:	Glass Fiber
Winding height:	18.9 mm

T/S Parameters	
Resonant frequency:	44 Hz
Re:	4.8 ohm
Qes:	0.38
Qms:	13
Qts:	0.37
Vas:	128.5 liters
Sd:	829.6 cm2
Sensitivity:	99 dB
Mms:	95.6 grams
Bl:	18.3
Le:	0.98 mH

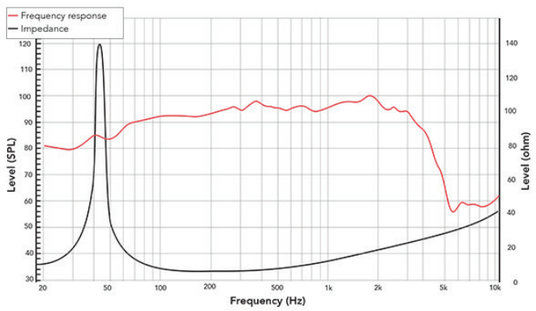
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	10 mm
Peak to peak linear cone displacement	15 mm
Overall diameter:	392 mm
Bolt circle diameter:	373 mm
Baffle cutout dia.:	360 mm
Number of mounting holes:	8
Depth (flange to rear):	137 mm
Net weight:	8.5kg

Ordering codes:
152FIND-X8 ohm-115

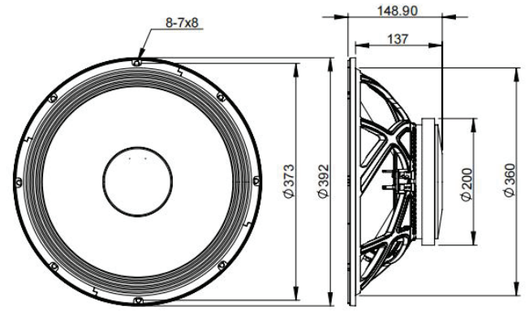
Recone kits:
RC152FINDX-115

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

15" | 152FIND

Sub-woofer

REDCAT





Key features:

- EXTENDED LOW FREQUENCY RESPONSE
- CARBON FIBER REINFORCED CONE
- HIGH EXCURSION RUBBER SURROUND

Design notes:

The 152FIND-333 is a high efficiency, (96 dB 1watt / 1 meter) 15-inch woofer with linear frequency response characteristics and high power handling capability. The 152FIND-333 uses a lightweight carbon fiber loaded cone assembly along with a high excursion rubber surround. This combination greatly improves low-frequency response and provides great level of control over the moving cone at high excursion levels. We have designed a lightweight surround, using our own rubber compound. As the result, the SPL is not compromised and the woofer can be used in professional audio applications, where high amounts of low frequencies are required.

Power Handling
At the core of the 152FIND-333 is it‚Äôs voice coil technology featuring a composite Polyimide former material capable of withstanding peak temperatures in excess of 280C, well beyond the thermal requirements of modern professional audio systems.
The 152FIND-333 cone is extensively treated to withstand harsh environments and high humidity. Metal parts in the speaker assembly are coated for extreme weatherization protection.

Specifications:

General specs	
Nominal Diameter:	15"
Rated Impedance:	8 ohm

Power handling	
AES Power:	800 watts
Program Power:	1600 watts
Peak Power:	3200 watts

Voice Coil	
Diameter:	3 in.
Winding wire:	CCAW
Former:	Glass Fiber
Winding height:	19 mm

T/S Parameters	
Resonant frequency:	37 Hz
Re:	4.6 ohm
Qes:	0.46
Qms:	10.2
Qts:	0.44
Vas:	119 liters
Sd:	804 cm2
Sensitivity:	96 dB
Mms:	140 grams
Bl:	18.4
Le:	0.55 mH

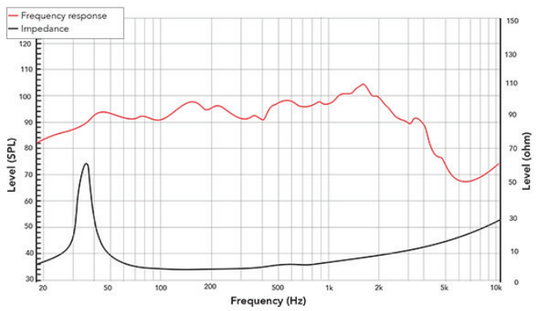
Design details	
Surround Material:	Rubber
Cone material:	Paper
Spider:	Nomex
Plate thickness:	10 mm
Peak to peak linear cone displacement	20 mm
Overall diameter:	392 mm
Bolt circle diameter:	375 mm
Baffle cutout dia.:	360 mm
Number of mounting holes:	8
Depth (flange to rear):	143 mm
Net weight:	9kg

Ordering codes:
152FIND-X8 ohm-333

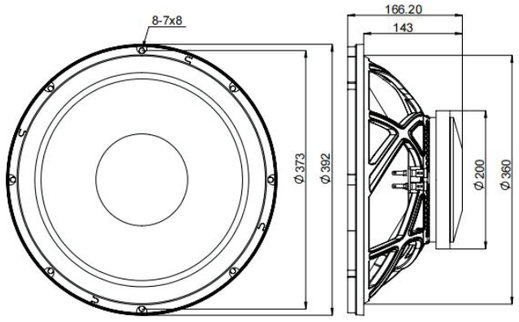
Recone kits:
RC152FINDX-333

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

18" | 18XR

Sub-woofer

REDCAT





Key features:

- CONE EXCURSION 56MM !! PATENTED DESIGN.
- 1 DEMODULATION COPPER RING, POWERFUL AND INNOVATIVE MOTOR STRUCTURE, INNOVATIVE VENTING SYSTEM
- DOUBLE SPIDER WITH SPACER, WOVEN-IN TINSEL WIRES, OPTIMIZED SURROUND

Design notes:

The 18XR is a truly ground-breaking subwoofer. REDCATT team has spent countless hours creating something outstanding. Where the conventional sub-woofers stop performing due to the design limitations, the XR series just starts and shines. With huge excursion, high Bl, newly designed suspension system, we are giving you a product that will not limit you to achieve even your wildest sub-woofer dreams.

Motor Design
The magnetic design incorporates large neodymium magnets placed along the voice coil winding. This has allowed us to push the cone excursion to 52mm peak to peak. Unique gap venting ensures good air circulation and greatly improves the reliability of this driver. We have also developed a new technique for manufacturing deep copper caps.

The design further utilizes two, uncommonly large, spiders, spaced apart with spacer, hot-pressed tinsel wires onto the top spider, reinforced cone. The suspension is designed for large excursions. Large lightweight surround sports resonant control features that we fully FEM designed and optimized to provide the best possible performance under large excursions.

Specifications:

General specs	
Nominal Diameter:	18"
Rated Impedance:	4 ohm

Power handling	
AES Power:	1200 watts
Program Power:	2400 watts
Peak Power:	4800 watts

Voice Coil	
Diameter:	4 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	22 mm

T/S Parameters	
Resonant frequency:	21 Hz
Re:	3.3 ohm
Qes:	0.36
Qms:	17
Qts:	0.35
Vas:	300 liters
Sd:	1256.6 cm2
Sensitivity:	92 dB
Mms:	402 grams
Bl:	22.2
Le:	0.54 mH

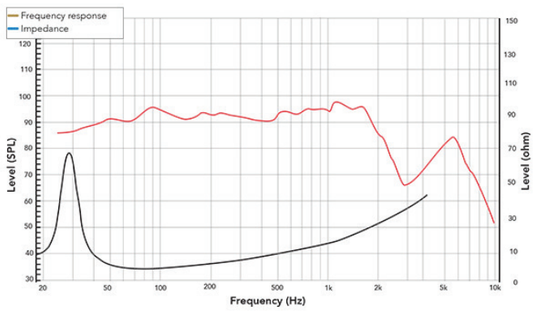
Design details	
Surround Material:	Rubber
Cone material:	Paper
Spider:	Nomex
Plate thickness:	56 mm
Peak to peak linear cone displacement	52 mm
Overall diameter:	467.6 mm
Bolt circle diameter:	442 mm
Baffle cutout dia.:	422 mm
Number of mounting holes:	8
Depth (flange to rear):	257.2 mm
Net weight:	14.7kg

Ordering codes:
18XR-X4 ohm-304B

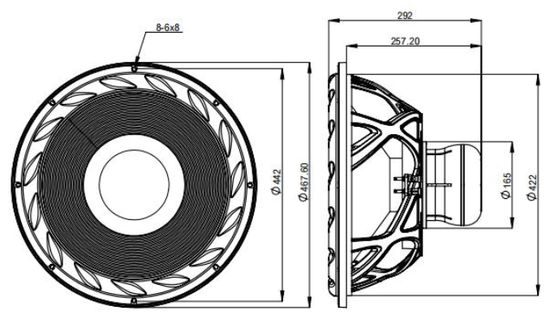
Recone kits:
RC18XRX-304B

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle



18" | 18NPW

Woofer

REDCATT





Key features:

- STRONG GLASS FIBER LOADED CONE
- HIGH TEMPERATURE VOICE COIL, DOUBLE LAYER SILICONE SPIDER
- HIGH POWER HANDLING

Design notes:

The 18NPW is a high efficiency, (99 dB 1watt / 1 meter) 18-inch woofer with incredibly linear frequency response characteristics, extreme high power handling capability while generating low harmonic distortion artifacts. The 18NPW uses a lightweight, but strong, glass fiber loaded cone assembly along with a high excursion triple roll constant geometry surround. This combination provides remarkable strength, high efficiency and a peak to peak maximum excursion of 21.5mm.

Power Handling
At the core of the 18NPW is it‚Äôs voice coil technology featuring a composite Polyimide former material capable of withstanding peak temperatures in excess of 350¬∞C, well beyond the thermal requirements of modern professional audio systems. The 18NPW delivers incredible performance.

REDCATT has implemented a double layer/silicone spider design to ensure long term Fs memory, consistency and diminish anomalies associated with spider deterioration. The sealed spider works as a air pump and pushes the air trough out motor to increase heat transfer and cooling of the parts.

Specifications:

General specs	
Nominal Diameter:	18"
Rated Impedance:	8 ohm

Power handling	
AES Power:	1200 watts
Program Power:	2400 watts
Peak Power:	4800 watts

Voice Coil	
Diameter:	4 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	23.7 mm

T/S Parameters	
Resonant frequency:	36 Hz
Re:	5.1 ohm
Qes:	0.28
Qms:	8.39
Qts:	0.278
Vas:	211.5 liters
Sd:	1257 cm2
Sensitivity:	99 dB
Mms:	199.4 grams
Bl:	27.3
Le:	1.51 mH

Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	14 mm
Peak to peak linear cone displacement	21.4 mm
Overall diameter:	468 mm
Bolt circle diameter:	442 mm
Baffle cutout dia.:	426 mm
Number of mounting holes:	8
Depth (flange to rear):	189 mm
Net weight:	9.4kg

Ordering codes:

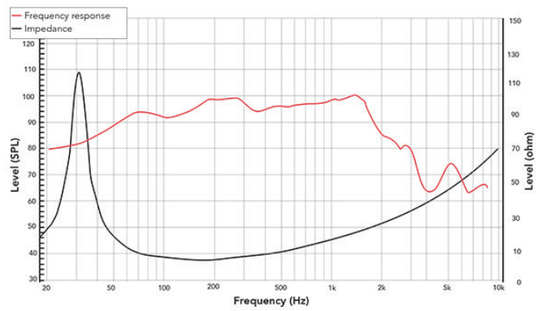
18NPW-X8 ohm-017

Recone kits:

RC18NPWX-017

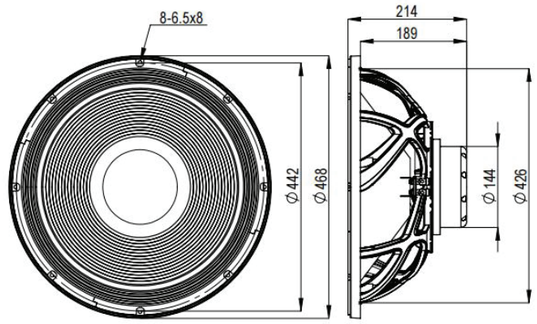
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



info@redcatt.net www.redcatt.net

18" 18FIND

Woofer

REDCAT





Key features:

- EXTENDED FREQUENCY RESPONSE
- OPTIMIZED VENTING SYSTEM
- HIGH POWER HANDLING

Design notes:

The 18FIND is a high efficiency, (97 dB 1watt / 1 meter) 18-inch woofer with incredibly linear frequency response characteristics, high power handling capability while generating low harmonic distortion artifacts. The 18FIND uses a lightweight glass fiber loaded cone assembly along with a high excursion triple roll constant geometry surround. This combination provides remarkable strength, high efficiency and a peak to peak maximum excursion of 21mm.

Power Handling
At the core of the 18FIND is it‚Äôs voice coil technology featuring a composite Polyimide former material capable of withstanding peak temperatures in excess of 250C, well beyond the thermal requirements of modern professional audio systems.

REDCATT has implemented a silicone spider design to ensure long term shape memory, consistency and diminish anomalies associated with spider deterioration.

Specifications:

General specs	
Nominal Diameter:	18"
Rated Impedance:	8 ohm
Power handling	
AES Power:	1000 watts
Program Power:	2000 watts
Peak Power:	4000 watts
Voice Coil	
Diameter:	4 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	23.7 mm

T/S Parameters	
Resonant frequency:	36 Hz
Re:	5.2 ohm
Qes:	0.44
Qms:	8.4
Qts:	0.42
Vas:	203.4 liters
Sd:	1257 cm2
Sensitivity:	97 dB
Mms:	211.8 grams
Bl:	23.6
Le:	1.74 mH

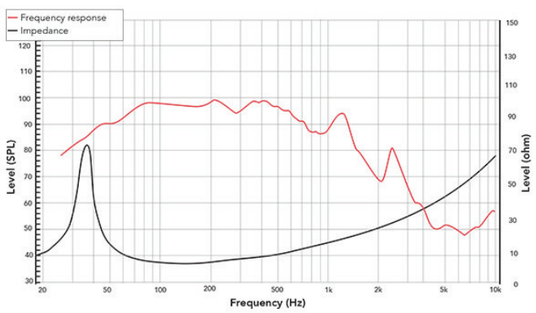
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	12 mm
Peak to peak linear cone displacement	20.8 mm
Overall diameter:	468 mm
Bolt circle diameter:	442 mm
Baffle cutout dia.:	426 mm
Number of mounting holes:	8
Depth (flange to rear):	184 mm
Net weight:	13.7kg

Ordering codes:
18FIND-X8 ohm-036

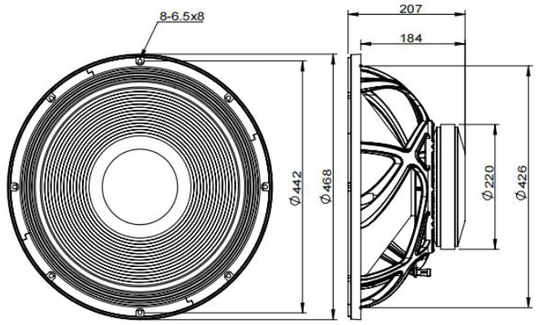
Recone kits:
RC18FINDX-036

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

18" 186FIND

Woofer

REDCAT





Key features:

- 4.5 INCH HIGH TEMPERATURE VOICE COIL
- HIGH SOUND PRESSURE LEVEL
- VERY HIGH POWER HANDLING

Design notes:

Introducing 186FIND, the powerhouse woofer designed for superior audio performance. With a staggering 3,600 watts of peak power and a 4.5" voice coil that can withstand temperatures exceeding 350¬∞C, this woofer is built to impress. Featuring a new paper pulp mixed with glass fibers, high excursion surround, and an extra large spider, it delivers unparalleled longevity and bass. The motor system's high grade ferrite magnet creates a strong symmetrical flux field, while the extended space below the voice coil allows for maximum excursion. Get ready to be blown away by the 186FIND woofer.

Specifications:

General specs	
Nominal Diameter:	18"
Rated Impedance:	8 ohm
Power handling	
AES Power:	1800 watts
Program Power:	3600 watts
Peak Power:	7200 watts
Voice Coil	
Diameter:	4.5 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	31.8 mm

T/S Parameters	
Resonant frequency:	33 Hz
Re:	5.5 ohm
Qes:	0.36
Qms:	12.1
Qts:	0.35
Vas:	174.2 liters
Sd:	1256 cm2
Sensitivity:	96 dB
Mms:	288 grams
Bl:	30.2
Le:	1.51 mH

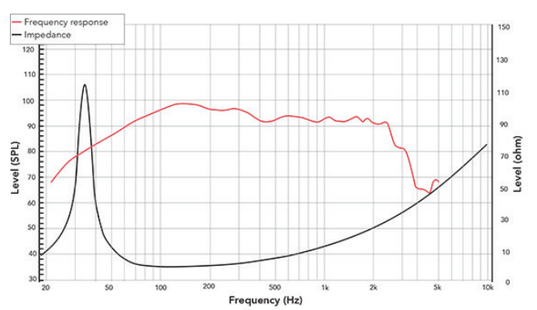
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	15 mm
Peak to peak linear cone displacement	19 mm
Overall diameter:	468 mm
Bolt circle diameter:	442 mm
Baffle cutout dia.:	423 mm
Number of mounting holes:	8
Depth (flange to rear):	212 mm
Net weight:	19.3kg

Ordering codes:
186FIND-X8 ohm-552A

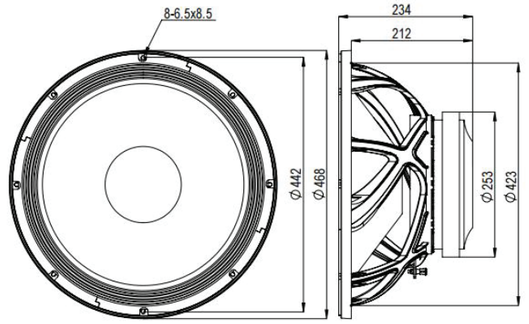
Recone kits:
RC186FINDX-552A

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

18" 183FIND

Woofer

REDCAT





Key features:

- OPTIMIZED FERRITE MAGNETIC STRUCTURE
- LIGHTWEIGHT, YET STRONG PAPER CONE
- HI SPL

Design notes:

183FIND is a cost-effective solution for subwoofers. Its lightweight yet strong cone allows the magnetic circuit to be size optimized while delivering a seizable amount of sound pressure. With its high efficiency (97 dB 1watt / 1 meter) and high power handling capabilities, this woofer will excel in all applications with tight budgets. The cone shape and material was developed to provide an optimum low-frequency response, making the woofer good choice for subwoofer systems.¬†

Power Handling
At the core of the 183FIND is its voice coil technology featuring a composite Polyimide former material capable of withstanding peak temperatures above 280¬∞C. The winding with high-temperature specification copper wire ensures the long life of the voice coil, without the costly service cycles.¬†

The cone is also extensively treated to withstand harsh environments and high humidity. Metal parts in the speaker assembly are coated for extreme weatherization protection.

Specifications:

General specs	
Nominal Diameter:	18"
Rated Impedance:	8 ohm

Power handling	
AES Power:	600 watts
Program Power:	1200 watts
Peak Power:	2400 watts

Voice Coil	
Diameter:	3 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	19.8 mm

T/S Parameters	
Resonant frequency:	32 Hz
Re:	5.9 ohm
Qes:	0.43
Qms:	13.2
Qts:	0.42
Vas:	329.5 liters
Sd:	1225.4 cm2
Sensitivity:	97 dB
Mms:	165 grams
Bl:	21.14
Le:	0.73 mH

Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	ET-0527
Plate thickness:	8 mm
Peak to peak linear cone displacement	16.8 mm
Overall diameter:	461 mm
Bolt circle diameter:	442 mm
Baffle cutout dia.:	422 mm
Number of mounting holes:	8
Depth (flange to rear):	184 mm
Net weight:	8.8kg

Ordering codes:

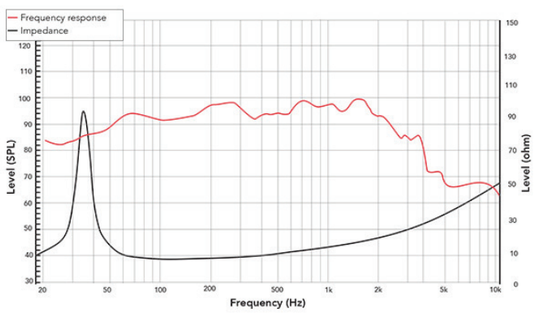
183FIND-X8 ohm-297

Recone kits:

RC183FINDX-297

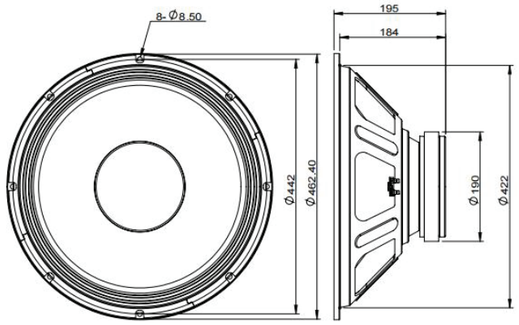
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



18" 182FIND

Woofer

REDCAT





Key features:

- INSIDE / OUTSIDE WOUND COIL
- REINFORCED HALF PRESSED CONE
- SILICONE NOMEX SPIDER

Design notes:

The 182FIND is a high efficiency, (98 dB 1watt / 1 meter) 18-inch woofer with extended linear frequency response characteristics. The 182FIND uses durable half-pressed paper cone assembly along with a high excursion triple roll constant geometry surround. This combination provides remarkable strength at any given situation, high efficiency and a peak to peak maximum excursion of 27mm.

Power Handling
At the core of the 182FIND is it‚Äôs voice coil technology featuring a composite Polyimide former material capable of withstanding peak temperatures in excess of 250C, well beyond the thermal requirements of modern professional audio systems. Voice coil winding is wound inside and outside of the former in the 1-3 split.

REDCATT has implemented a silicone spider design to ensure long term shape memory, consistency and diminish anomalies associated with spider deterioration.

Specifications:

General specs	
Nominal Diameter:	18"
Rated Impedance:	8 ohm

Power handling	
AES Power:	1000 watts
Program Power:	2000 watts
Peak Power:	4000 watts

Voice Coil	
Diameter:	4 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	25.5 mm

T/S Parameters	
Resonant frequency:	31 Hz
Re:	5.5 ohm
Qes:	0.24
Qms:	8.85
Qts:	0.23
Vas:	208.6 liters
Sd:	1257 cm2
Sensitivity:	98 dB
Mms:	281 grams
Bl:	35.4
Le:	4.92 mH

Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	14 mm
Peak to peak linear cone displacement	27.2 mm
Overall diameter:	468 mm
Bolt circle diameter:	442 mm
Baffle cutout dia.:	426 mm
Number of mounting holes:	8
Depth (flange to rear):	189 mm
Net weight:	14kg

Ordering codes:

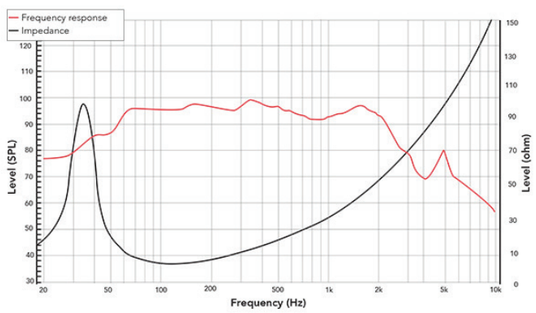
182FIND-X8 ohm-127

Recone kits:

RC182FINDX-127

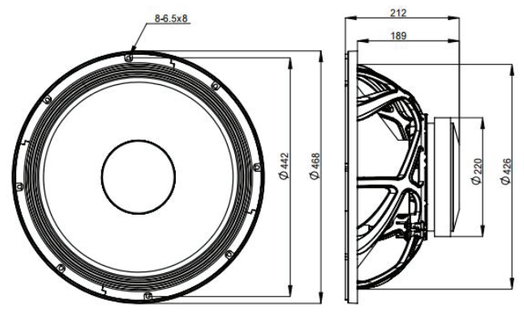
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



18" 181XR

Sub-woofer

REDCAT





Key features:

- CONE EXCURSION 56MM !! PATENTED DESIGN.
- 1 DEMODULATION COPPER RING, POWERFUL AND INNOVATIVE MOTOR STRUCTURE, INNOVATIVE VENTING SYSTEM
- DOUBLE SPIDER WITH SPACER, WOVEN-IN TINSEL WIRES, REINFORCED CONE EDGE.

Design notes:

Designed based upon the 18XR, the 181XR was designed for professional audio segment.
The basic characters and design concept remains the same for the 181XR. We have used newly designed 4 roll waterproof fabric surround that fully supports the high cone excursions of this incredible loudspeaker. The target was to push the envelope of possibilities. We are giving you a product that will not limit you to achieve even your wildest sub-woofer dreams.

Motor Design
The magnetic design incorporates large neodymium magnets placed along the voice coil winding. This has allowed us to push the cone excursion to 44mm peak to peak. Unique gap venting ensures good air circulation and greatly improves the reliability of this driver. We have also developed a new technique for manufacturing deep copper caps.

The design further utilizes dual, uncommonly large, spiders, spaced with spacer, hot-pressed tinsel wires onto the top spider, reinforced cone edge, reinforced surround to cone joint, reinforced spider to basket joints, etc.

Specifications:

General specs	
Nominal Diameter:	18"
Rated Impedance:	4 ohm
Power handling	
AES Power:	1200 watts
Program Power:	2400 watts
Peak Power:	4800 watts
Voice Coil	
Diameter:	4 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	22 mm

T/S Parameters	
Resonant frequency:	30 Hz
Re:	3.3 ohm
Qes:	0.24
Qms:	13.2
Qts:	0.23
Vas:	195 liters
Sd:	1256.6 cm2
Sensitivity:	97 dB
Mms:	306 grams
Bl:	28.3
Le:	1.3 mH

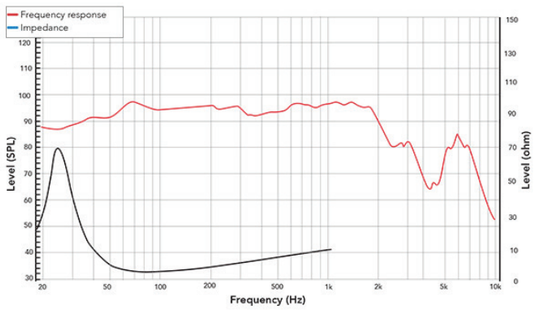
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	56 mm
Peak to peak linear cone displacement	44.4 mm
Overall diameter:	467.6 mm
Bolt circle diameter:	442 mm
Baffle cutout dia.:	422 mm
Number of mounting holes:	8
Depth (flange to rear):	257.2 mm
Net weight:	14.5kg

Ordering codes:
181XR-X4 ohm-350

Recone kits:
RC181XRX-350

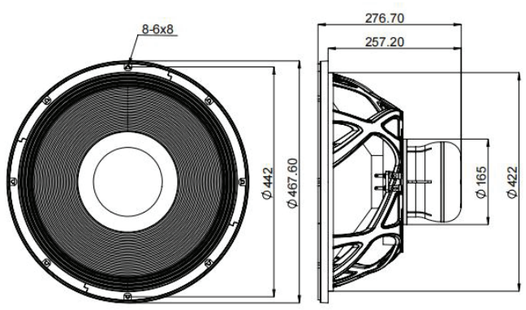
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



18" 181NPW

Woofer

REDCAT





Key features:

- 5.3,ÄÙ DIAMETER VOICE COIL, HIGH POWER HANDLING
- IMPROVED COIL AND MAGNET AIR-VENTILATION SYSTEM, HIGH TEMP. CAPABLE VOICE COIL WINDING
- CARBON FIBER REINFORCED PAPER CONE, TRIPLE SILICONE SPIDER

Design notes:

The 181NPW is a high efficiency, (95 dB 1watt / 1 meter) 18-inch woofer with incredibly linear frequency response characteristics, extreme high power handling capability while generating low harmonic distortion artifacts. The 181NPW uses a lightweight carbon fiber loaded cone assembly along with a high excursion triple roll constant geometry surround. This combination provides remarkable strength, high efficiency and a peak to peak maximum excursion of 30.5mm.

Power Handling
At the core of the 181NPW is it,Äôs voice coil technology featuring a composite Polyimide former material capable of withstanding peak temperatures in excess of 350C, well beyond the thermal requirements of modern professional audio systems. The 181NPW delivers incredible performance.

REDCATT has implemented a triple layer/ silicone spider design to ensure long term shape memory, consistency and diminish anomalies associated with spider deterioration.

Specifications:

General specs	
Nominal Diameter:	18"
Rated Impedance:	4 ohm
Power handling	
AES Power:	1500 watts
Program Power:	3000 watts
Peak Power:	6000 watts
Voice Coil	
Diameter:	5.3 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	32.8 mm

T/S Parameters	
Resonant frequency:	28 Hz
Re:	3.2 ohm
Qes:	0.25
Qms:	15.8
Qts:	0.25
Vas:	167.7 liters
Sd:	1225.4 cm2
Sensitivity:	95 dB
Mms:	391.2 grams
Bl:	29.7
Le:	1.76 mH

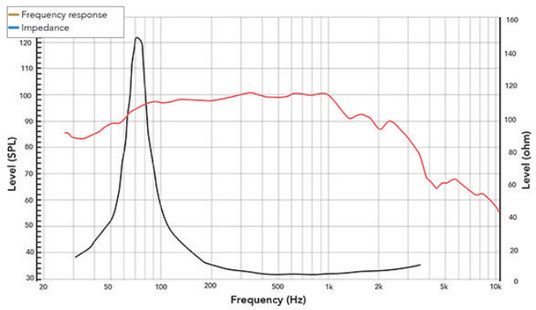
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	15 mm
Peak to peak linear cone displacement	30.4 mm
Overall diameter:	468 mm
Bolt circle diameter:	442 mm
Baffle cutout dia.:	426 mm
Number of mounting holes:	8
Depth (flange to rear):	210 mm
Net weight:	13.9kg

Ordering codes:
181NPW-X4 ohm-099

Recone kits:
RC181NPWX-099

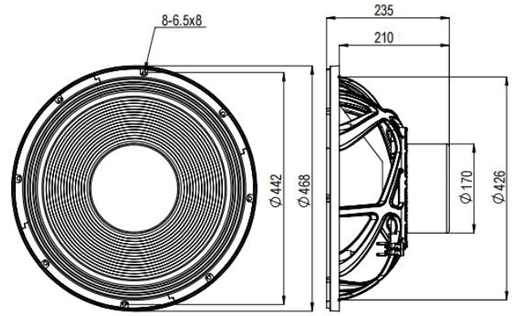
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



21" 21XR

Woofer

REDCAT





Key features:

- LINEAR CONE EXCURSION 60MM PEAK TO PEAK !!
- UNPARALLEL LOW DISTORTION AT LOW FREQUENCIES
- PATENTED DESIGN, INNOVATIVE MAGNETIC STRUCTURE & VENTING SYSTEM

Design notes:

The 21XR is a high efficiency, (96 dB 1watt / 1 meter) 21-inch woofer with incredibly linear frequency response characteristics. Our new and patented ground up motor design is a new approach to high-excursion woofers. The voice coil winding is always in the magnetic gap that is extremely wide. This feature ensures extremely low distortion across whole working range of this unique driver.

Motor Design
The magnetic design incorporates large neodymium magnets placed along the voice coil winding. This has allowed us to push the cone excursion to 50mm peak to peak. Unique gap venting ensures good air circulation and greatly improves the reliability of this driver. We have also developed a new technique for manufacturing deep copper caps that are implemented in this design and covering the whole voice coil movement..

The design further utilizes triple, uncommonly large, spiders, spaced with spacers, hot-pressed tinsel wires onto the top spider, reinforced cone edge, reinforced surround to cone joint, reinforced spider to basket joints, etc.

Specifications:

General specs	
Nominal Diameter:	21"
Rated Impedance:	8 ohm
Power handling	
AES Power:	1800 watts
Program Power:	3600 watts
Peak Power:	7200 watts
Voice Coil	
Diameter:	5.3 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	21 mm

T/S Parameters	
Resonant frequency:	32.3 Hz
Re:	4.5 ohm
Qes:	0.51
Qms:	16.79
Qts:	0.5
Vas:	152.79 liters
Sd:	1662 cm2
Sensitivity:	96 dB
Mms:	488.58 grams
Bl:	29.37
Le:	0.65 mH

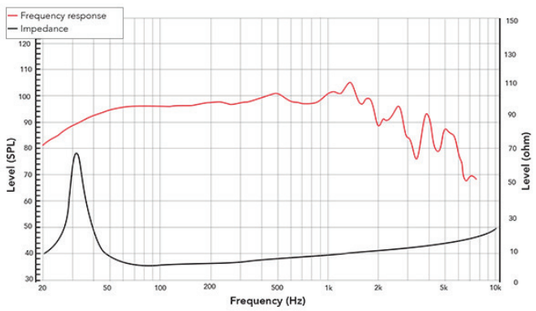
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	67 mm
Peak to peak linear cone displacement	49.6 mm
Overall diameter:	549 mm
Bolt circle diameter:	525 mm
Baffle cutout dia.:	503 mm
Number of mounting holes:	8
Depth (flange to rear):	287 mm
Net weight:	23.8kg

Ordering codes:
21XR-X8 ohm-347A

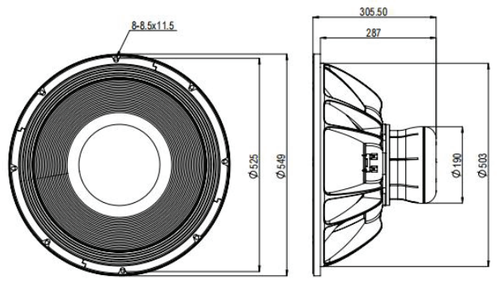
Recone kits:
RC21XRX-347A

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

21" 21NPW

Woofer

REDCAT





Key features:

- 5.3,ÄÙ DIAMETER VOICE COIL
- 3600 WATTS PROGRAM POWER HANDLING
- TRIPLE SILICONE SPIDER, HEAVY DUTY FIBER REINFORCED CONE WITH LARGE SURROUND

Design notes:

The 21NPW is a high efficiency, (96 dB 1watt / 1 meter) 21-inch woofer with incredibly linear frequency response characteristics, extreme high power handling capability while generating low harmonic distortion artifacts. The 21NPW uses a lightweight carbon fiber loaded cone assembly along with a high excursion triple roll constant geometry surround. This combination provides remarkable strength, high efficiency and a peak to peak maximum excursion of 31mm.

Power Handling
At the core of the 21NPW is it,Äôs voice coil technology featuring a composite Polyimide former material capable of withstanding peak temperatures in excess of 350C, well beyond the thermal requirements of modern professional audio systems. The 21NPW delivers incredible performance.

REDCATT has implemented a triple layer/ silicone spider design to ensure long term Fs memory, consistency and diminish anomalies associated with spider deterioration.

Specifications:

General specs	
Nominal Diameter:	21"
Rated Impedance:	4 ohm
Power handling	
AES Power:	1800 watts
Program Power:	3600 watts
Peak Power:	7200 watts
Voice Coil	
Diameter:	5.3 in.
Winding wire:	Copper
Former:	Glass Fiber
Winding height:	33 mm

T/S Parameters	
Resonant frequency:	35 Hz
Re:	3.0 ohm
Qes:	0.33
Qms:	11.12
Qts:	0.32
Vas:	149 liters
Sd:	1662 cm2
Sensitivity:	96 dB
Mms:	514 grams
Bl:	32.9
Le:	1.14 mH

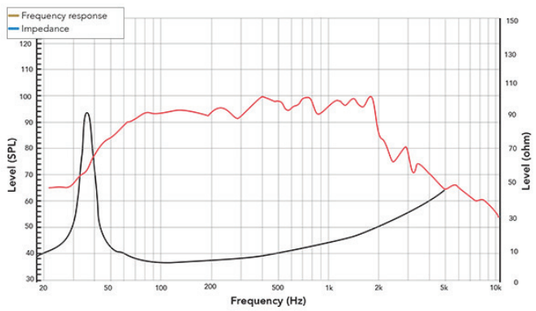
Design details	
Surround Material:	Fabric
Cone material:	Paper
Spider:	Nomex
Plate thickness:	15 mm
Peak to peak linear cone displacement	31 mm
Overall diameter:	546 mm
Bolt circle diameter:	520 mm
Baffle cutout dia.:	496 mm
Number of mounting holes:	8
Depth (flange to rear):	245 mm
Net weight:	14.85kg

Ordering codes:
21NPW-X4 ohm-018

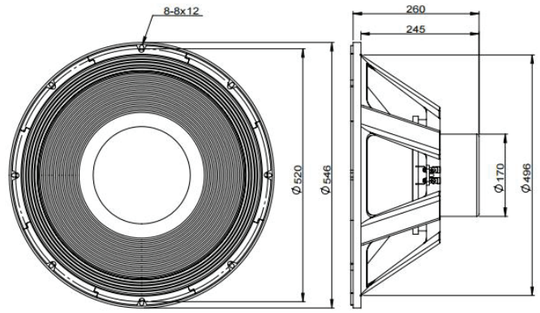
Recone kits:
RC21NPWX-018

In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



2D drawing



Frequency response measured on IAC baffle

REDCAT®

THE HEART OF YOUR SOUND

COAXIAL TRANSDUCERS



6" | CX6F140 Coaxial Ferrite-Neodymium Driver

REDCATT





Key features:

- LF AND HF COMBINED MAGNETIC CIRCUIT
- COMPACT, BUT POWERFUL SPEAKER
- MAGNETIC CIRCUIT COMBINING FERRITE AND NEODYMIUM MAGNETS

Design notes:

The CX6F-140F is a high efficiency, (93dB 1watt / 1 meter) 6.5-inch coaxial speaker with very linear frequency response characteristics and high power handling capability. The mid-woofer utilizes REDCATT developed paper pulp cone that has proven its performance in many our successful designs. The HF section was designed around our most successful dome assembly as used in 140FCD. The mini waveguide is CNC machined from single piece of aluminum, given the whole assembly incredible precision. The combination of used materials with our state of the art quality production yields in well performing driver even in the most demanding extreme conditions.

Magnetic circuit design
REDCATT engineers have developed ferrite-neodymium based magnetic circuit, capable of delivering the highest level of performance in a small form factor. The combination of ferrite and neodymium delivers an excellent magnetic performance. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability. Aluminum demodulation ring is assembled in the HF section.

Specifications:

General specs (LF/HF)	
Nom. Diameter:	6"
Rated Imp.:	8 ohm

Power handling (LF/HF)	
AES Power:	100/30 watts
Program Power:	200/60 watts
Peak Power:	400/120 watts

Voice Coil (LF/HF)	
Diameter:	1.75/1.4 in.
Winding wire:	CCAR
Former:	Glass Fiber/
Winding height:	10/2.5 mm

T/S Parameters (LF/HF)	
Resonant frequency:	121/1000 Hz
Re:	5.4/5.5
Qes:	0.52
Qms:	4.73
Qts:	0.47
Vas:	4.4 liters
Sd:	141 cm2
Sensitivity:	93.8/101
Mms:	10.9 grams
Bl:	9.27
Le:	0.45 mH

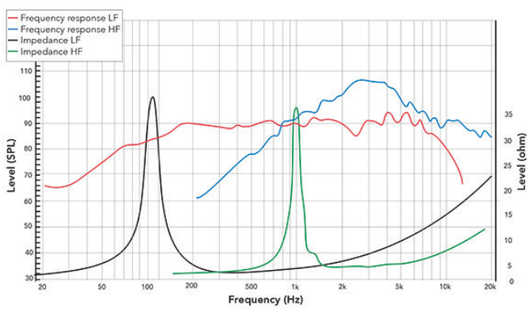
Design details (LF/HF)	
Surround Material:	Fabric/Poly-
Cone/ dome material:	Paper/Polymer
Spider:	Nomex/n/a
Plate thickness:	6 mm
Peak to peak linear cone displacement	9.2 mm
Overall diameter:	165.2 mm
Bolt circle diameter:	157.5 mm
Baffle cutout dia.:	144 mm
Number of mounting holes:	8
Depth (flange to rear):	85.8 mm
Net weight:	2.1kg

Ordering codes:
CX6F140X-361C

Recone kits:

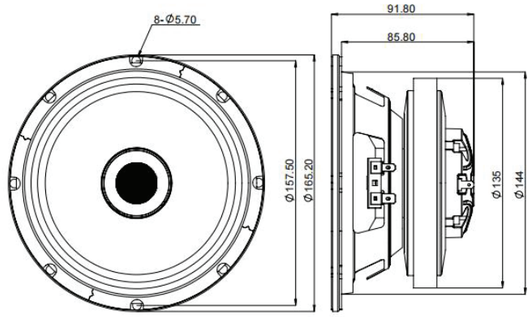
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



8" | CX8F140 Coaxial Ferrite-Neodymium Driver

REDCATT





Key features:

- LF AND HF INTEGRATED FERRITE-NEODYMIUM MAGNETIC CIRCUIT
- ALUMINUM SYMMETRICAL HORN
- GOOD OFF-AXES FREQUENCY RESPONSE

Design notes:

The CX8F-140F is a high efficiency, (92.5dB 1watt / 1 meter) 8-inch coaxial speaker with very linear frequency response characteristics and high power handling capability. The mid-woofer utilizes REDCATT developed paper pulp cone that has proven its performance in many ours successful designs. The HF section was designed around our most successful dome assembly as used in 140FCD and has integrated symmetrical aluminum horn. The combination of used materials with our state of the art quality production yields in well performing driver even in the most demanding and extreme weather conditions.

Magnetic circuit design
REDCATT engineers have developed ferrite-neodymium based magnetic circuit, capable of delivering the highest level of performance in a small form factor. The combination of ferrite and neodymium delivers an excellent magnetic performance. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability. Aluminum demodulation ring is assembled in the HF section.

Specifications:

General specs (LF/HF)	
Nom. Diameter:	8"
Rated Imp.:	8 ohm

Power handling (LF/HF)	
AES Power:	150/30 watts
Program Power:	300/60 watts
Peak Power:	600/120 watts

Voice Coil (LF/HF)	
Diameter:	2/1.4 in.
Winding wire:	CCAW
Former:	Glass Fiber/
Winding height:	12/2.5 mm

T/S Parameters (LF/HF)	
Resonant frequency:	86/1000 Hz
Re:	5.6/5.5
Qes:	0.63
Qms:	9.06
Qts:	0.59
Vas:	10.7 liters
Sd:	213.8 cm2
Sensitivity:	92.44/103
Mms:	20.2 grams
Bl:	9.93
Le:	0.47 mH

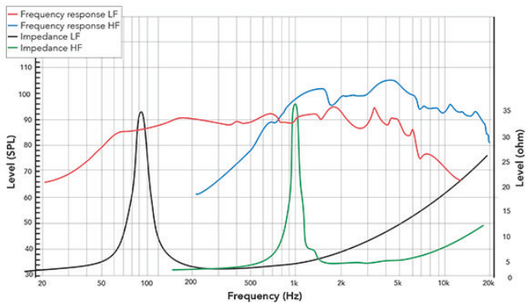
Design details (LF/HF)	
Surround Material:	Fabric/Poly-
Cone/ dome material:	Paper/Polymer
Spider:	Nomex/n/a
Plate thickness:	8 mm
Peak to peak linear cone displacement	11.4 mm
Overall diameter:	207 mm
Bolt circle diameter:	197.2 mm
Baffle cutout dia.:	178 mm
Number of mounting holes:	8
Depth (flange to rear):	107.5 mm
Net weight:	2.8KG

Ordering codes:
CX8F140X-374B

Recone kits:

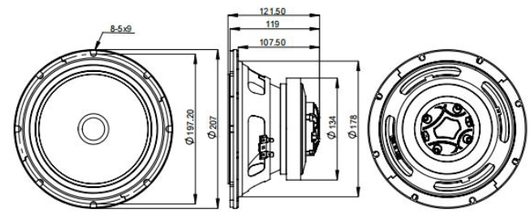
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



10" | CX10F140 Coaxial Ferrite-Neodymium Driver

REDCATT





Key features:

- LF AND HF INTEGRATED FERRITE-NEODYMIUM MAGNETIC CIRCUIT
- ALUMINUM SYMMETRICAL HORN
- GOOD OFF-AXES FREQUENCY RESPONSE

Design notes:

The CX10F-140F is a high efficiency, (93.5dB 1watt / 1 meter) 8-inch coaxial speaker with very linear frequency response characteristics and high power handling capability. The mid-woofer utilizes REDCATT developed paper pulp cone that has proven its performance in many ours successful designs. The HF section was designed around our most successful dome assembly as used in 140FCD and has integrated symmetrical aluminum horn. The combination of used materials with our state of the art quality production yields in well performing driver even in the most demanding and extreme weather conditions.

Magnetic circuit design
REDCATT engineers have developed ferrite-neodymium based magnetic circuit, capable of delivering the highest level of performance in a small form factor. The combination of ferrite and neodymium delivers an excellent magnetic performance. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability. Aluminum demodulation ring is assembled in the HF section.

Specifications:

General specs (LF/HF)	
Nom. Diameter:	10"
Rated Imp.:	8 ohm

Power handling (LF/HF)	
AES Power:	200/30 watts
Program Power:	400/60 watts
Peak Power:	800/120 watts

Voice Coil (LF/HF)	
Diameter:	2/1.4 in.
Winding wire:	CCAW
Former:	Glass Fiber/
Winding height:	12/2.5 mm

T/S Parameters (LF/HF)	
Resonant frequency:	75/1000 Hz
Re:	5.5/5.5
Qes:	0.75
Qms:	5.03
Qts:	0.65
Vas:	24.2 liters
Sd:	346.4 cm2
Sensitivity:	93.4/105
Mms:	31.2 grams
Bl:	10.36
Le:	0.49 mH

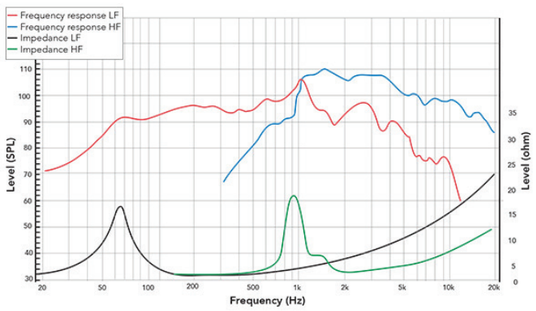
Design details (LF/HF)	
Surround Material:	Fabric/Poly-
Cone/ dome material:	Paper/Polymer
Spider:	Nomex/n/a
Plate thickness:	8 mm
Peak to peak linear cone displacement	11.6 mm
Overall diameter:	256 mm
Bolt circle diameter:	245 mm
Baffle cutout dia.:	231.5 mm
Number of mounting holes:	8
Depth (flange to rear):	120.7 mm
Net weight:	3.1kg

Ordering codes:
CX10F140X-375B

Recone kits:

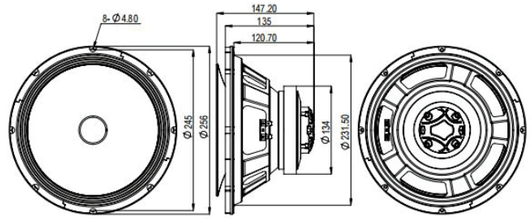
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



12" | CX12F140 Coaxial Ferrite-Neodymium Driver

REDCATT





Key features:

- INTEGRATED ALUMINUM SYMMETRICAL HORN
- HIGH SENSITIVITY

Design notes:

The CX12F-140F is a high efficiency, (95 dB 1watt / 1 meter) 12-inch coaxial speaker with very linear frequency response characteristics and high power handling capability. The mid-woofer utilizes REDCATT developed paper pulp cone that has proven its performance in many ours successful designs. The HF section was designed around our most successful dome assembly as used in 140FCD and has integrated symmetrical aluminum horn. The combination of used materials with our state of the art quality production yields in well performing driver even in the most demanding and extreme weather conditions.

Magnetic circuit design
REDCATT engineers have developed ferrite-neodymium based magnetic circuit, capable of delivering the highest level of performance in a small form factor. The combination of ferrite and neodymium delivers an excellent magnetic performance. The magnetic circuit design is optimized to generate the minimum amount of flux modulation, providing exceptional stability. Aluminum demodulation ring is assembled in the HF section.

Specifications:

General specs (LF/HF)	
Nom. Diameter:	12"
Rated Imp.:	8 ohm

Power handling (LF/HF)	
AES Power:	200/30 watts
Program Power:	400/60 watts
Peak Power:	800/120 watts

Voice Coil (LF/HF)	
Diameter:	2/1.4 in.
Winding wire:	Copper
Former:	Glass Fiber/
Winding height:	15.8/2.5 mm

T/S Parameters (LF/HF)	
Resonant frequency:	56/1000 Hz
Re:	5.5/5.5
Qes:	0.54
Qms:	6.53
Qts:	0.5
Vas:	63.9 liters
Sd:	530.93 cm2
Sensitivity:	95.2/105
Mms:	50.3 grams
Bl:	13.4
Le:	0.7 mH

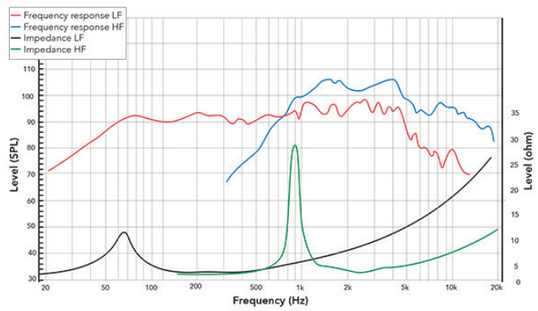
Design details (LF/HF)	
Surround Material:	Fabric/Poly-
Cone/ dome material:	Paper/Polymer
Spider:	Nomex/n/a
Plate thickness:	8 mm
Peak to peak linear cone displacement	15.2 mm
Overall diameter:	320 mm
Bolt circle diameter:	302 mm
Baffle cutout dia.:	281 mm
Number of mounting holes:	8
Depth (flange to rear):	142.5 mm
Net weight:	5.3Kg

Ordering codes:
CX12F140X-376B

Recone kits:

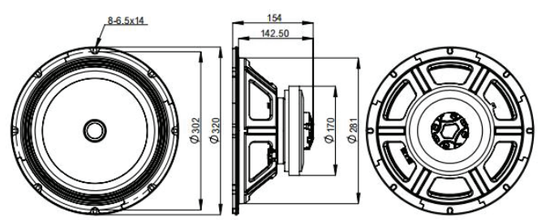
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



REDCAT®

THE HEART OF YOUR SOUND

HF
TRANSDUCERS





1" | 16TN

Neodymium Tweeter

REDCATT



Key features:

- SMALL SYSTEMS WITH LIMITED BAFFLE SPACE
- WORKING RANGE UP TO 20KHZ
- LIGHTWEIGHT. IDEAL FOR PORTABLE PRODUCTS.

Design notes:

The 16TN tweeter was designed with a small form factor in mind. It finds its best use in applications where the baffle space is limited. It is a high performance, high frequency device with extended HF frequency range well over 20kHz. .

Diaphragm Assembly

The driver features a 16mm Poly-silk diaphragm formed as single piece with suspension. The dome rests on plastic carrier that also consists two mounting holes.

The dome is carefully attached to a 16mm aluminum former voice coil. Further, a common sized connector is used. Optionaly, the connector can be replaced by another type that would suit the best your application, or completelly replaced by conventional fast-on terminals.

Magnetic system uses high-temperature grade neodymium, ensuring the longevity of this tweeter.

Specifications:

General specs	
Nominal Diameter:	1"
Rated Impedance:	4 ohm

Power handling	
AES Power:	5 watts
Program Power:	10 watts
Peak Power:	20 watts

Voice Coil	
Diameter:	0.6 in.
Winding wire:	CCAW
Former:	Aluminum

T/S Parameters	
Resonant frequency:	2000 Hz
Nominal sensitivity	82 dB
Re:	4.0 ohm
Le:	n/a mH

Design details	
Dome Material:	Silk
Surround material:	Silk
Magnet material:	Neodymium
Overall diameter:	26 mm
Bolt circle diameter:	31.8 mm
Throat diameter:	n/a mm
Number of mounting holes:	2
Depth (front to rear):	13.5 mm
Net weight:	25g

Ordering codes:

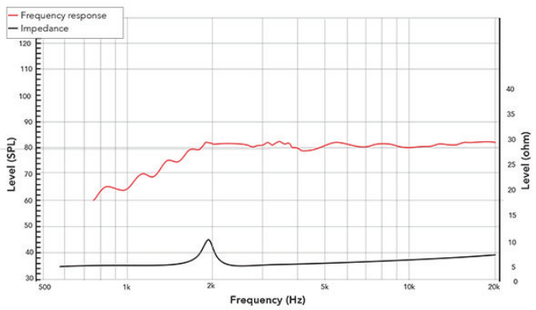
16TNX-182

Recone kits:

RC16TNX-182

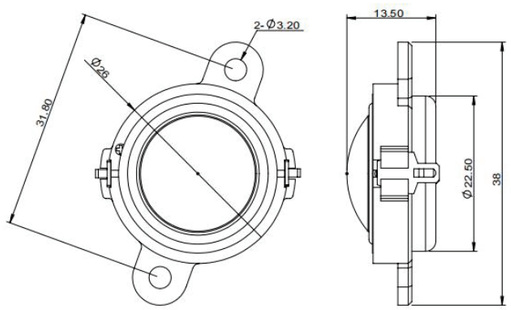
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

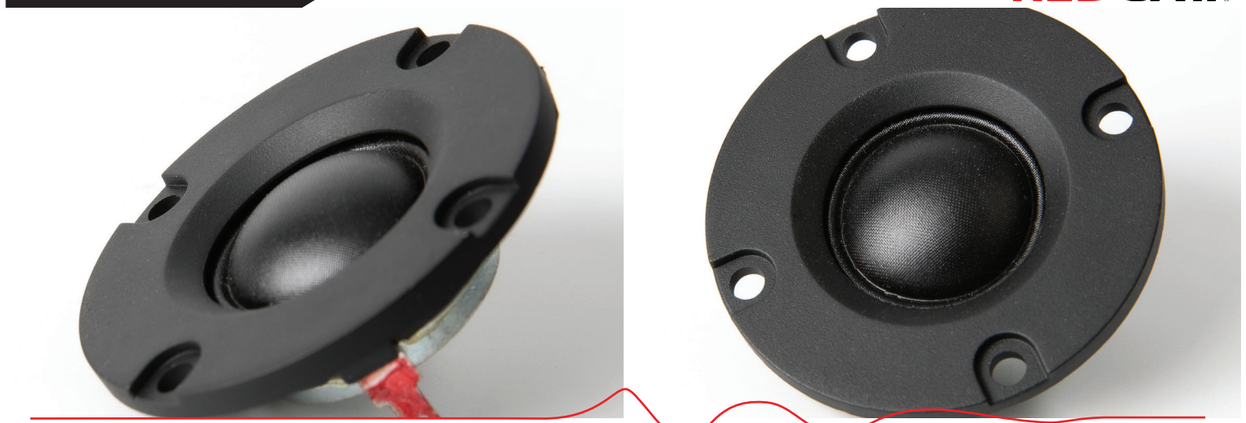
2D drawing



1" | 20TN

Neodymium Tweeter

REDCATT



Key features:

- COMPACT SIZE
- INTEGRATED WAVEGUIDE
- EASY CROSSOVER DESIGN POSSIBLE

Design notes:

The 20TN tweeter has a lower resonance frequency, making the crossover design a non-complicated task. The tweeter comes with a small waveguide, but based upon request, the tweeter can be also delivered as a ‚Äúbare‚Äù tweeter and assembled with your own waveguide.

The best application is in tabletop studio monitors, prosumer products, bookshelf speakers, TV bars, micro line-arrays, etc.

Specifications:

General specs	
Nominal Diameter:	1"
Rated Impedance:	8 ohm

Power handling	
AES Power:	10 watts
Program Power:	20 watts
Peak Power:	40 watts

Voice Coil	
Diameter:	0.8 in.
Winding wire:	CCAW
Former:	Aluminum

T/S Parameters	
Resonant frequency:	1700 Hz
Nominal sensitivity	87 dB
Re:	7.2 ohm
Le:	n/a mH

Design details	
Dome Material:	Tetoron
Surround material:	Tetoron
Magnet material:	Neodymium
Overall diameter:	50.5 mm
Bolt circle diameter:	44 mm
Throat diameter:	n/a mm
Number of mounting holes:	4
Depth (front to rear):	19.65 mm
Net weight:	25g

Ordering codes:

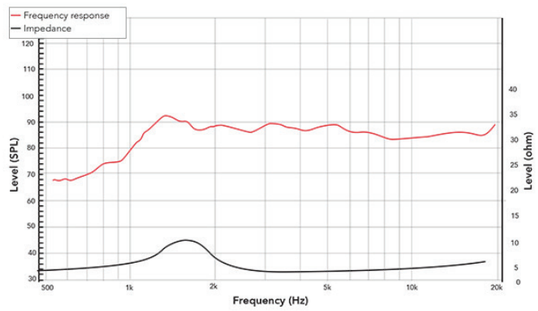
20TNX-383

Recone kits:

RC20TNX-383

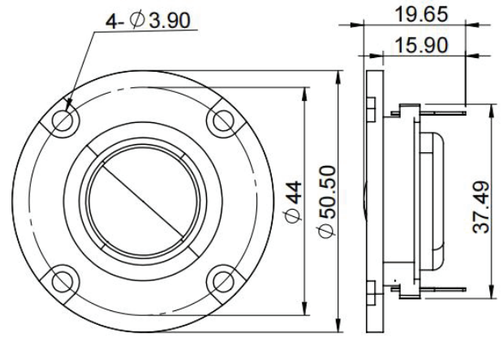
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

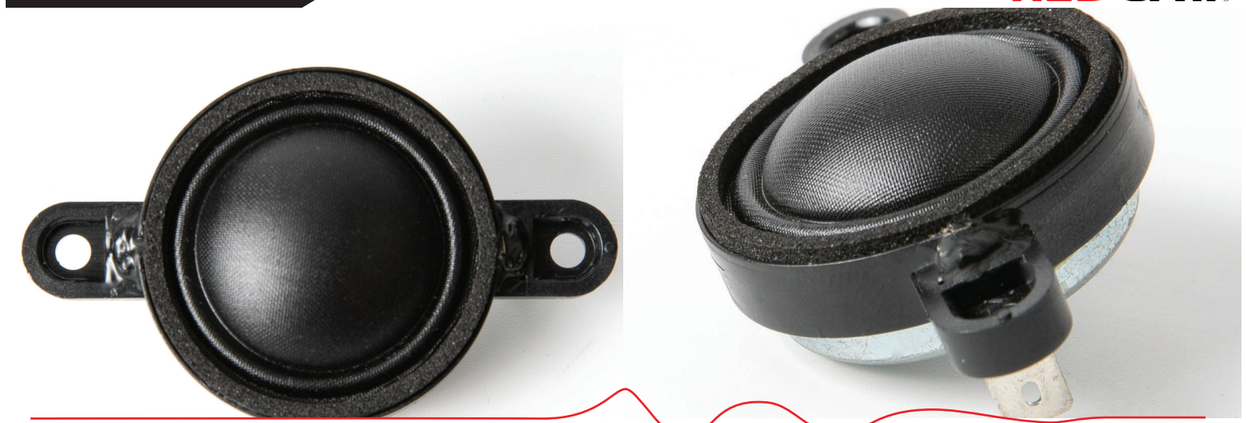
2D drawing



1" | 201TN

Neodymium Tweeter

REDCATT



Key features:

- DESIGN CAN BE EASILY IMPLEMENTED IN YOUR OWN WAVEGUIDE
- WIDE BAND FREQUENCY RESPONSE
-

Design notes:

The 201TN tweeter has a lower resonance frequency, making the crossover design a non-complicated task. The tweeter is delivered as a ‚Äúbare,Äù tweeter and shall assembled with your own waveguide or to a baffle with integrated waveguide.
The best application is in tabletop studio monitors, prosumer products, bookshelf speakers, TV bars, micro line-arrays, etc.

Specifications:

General specs	
Nominal Diameter:	1"
Rated Impedance:	8 ohm

Power handling	
AES Power:	10 watts
Program Power:	20 watts
Peak Power:	40 watts

Voice Coil	
Diameter:	0.8 in.
Winding wire:	CCAW
Former:	Aluminum

T/S Parameters	
Resonant frequency:	1900 Hz
Nominal sensitivity	86 dB
Re:	7.2 ohm
Le:	n/a mH

Design details	
Dome Material:	Tetoron
Surround material:	Tetoron
Magnet material:	Neodymium
Overall diameter:	31.5 mm
Bolt circle diameter:	43.5 mm
Throat diameter:	n/a mm
Number of mounting holes:	2
Depth (front to rear):	19.7 mm
Net weight:	40g

Ordering codes:

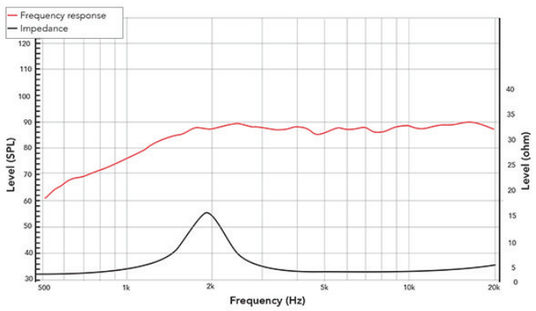
201TNX-399

Recone kits:

RC201TNX-399

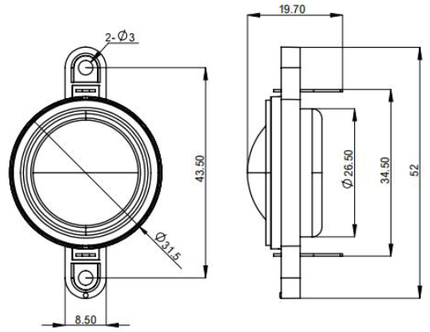
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



1" | 33TN

Neodymium Tweeter

REDCATT



Key features:

- SMOOTH FREQUENCY RESPONSE, WORKING RANGE FROM 1,200HZ ~ 25KHZ
- HIGH POWERHANDLING
- VERY COMPACT SIZE, SHALLOW DEPTH

Design notes:

33TN tweeter was developped for system applications where high SPL and high power handling is required. The tweeter is supplied as ‚Äúbullet,Äù in general terms, however based upon a request, our engineers can recommend or design waveguide for your application.

The tweeter sports large surround and unsually tall dome. This combination provides excellent low frequency behaviour and smooth frequency response.

The magnetic structer utilizes high grade neodymium magnets and u-cup style steel. Overall the structe delivers very high performance with consistent BL field.

Connection is made with solder lugs. Based upon request, we can deliver this tweeter with soldered wire harness as per your specifications.

Intended applications are array systems, hi-SPL 2-way and multiway speaker systems and autmotive applications.

Specifications:

General specs	
Nominal Diameter:	1"
Rated Impedance:	8 ohm

Power handling	
AES Power:	10 watts
Program Power:	20 watts
Peak Power:	40 watts

Voice Coil	
Diameter:	1 in.
Winding wire:	CCAW
Former:	Aluminum

T/S Parameters	
Resonant frequency:	1200 Hz
Nominal sensitivity	92 dB
Re:	5.5 ohm
Le:	n/a mH

Design details	
Dome Material:	silk
Surround material:	silk
Magnet material:	Neodymium
Overall diameter:	48 mm
Bolt circle diameter:	n/a mm
Throat diameter:	n/a mm
Number of mounting holes:	n/a
Depth (front to rear):	20.7 mm
Net weight:	70g

Ordering codes:

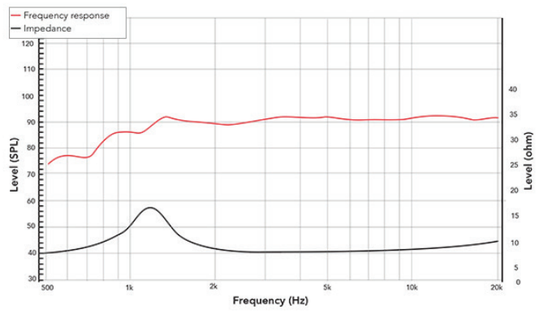
33TNX-410B

Recone kits:

RC33TNX-410B

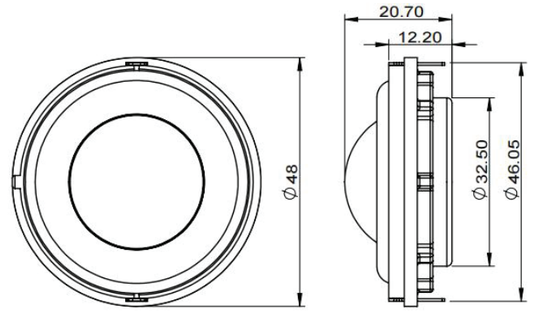
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

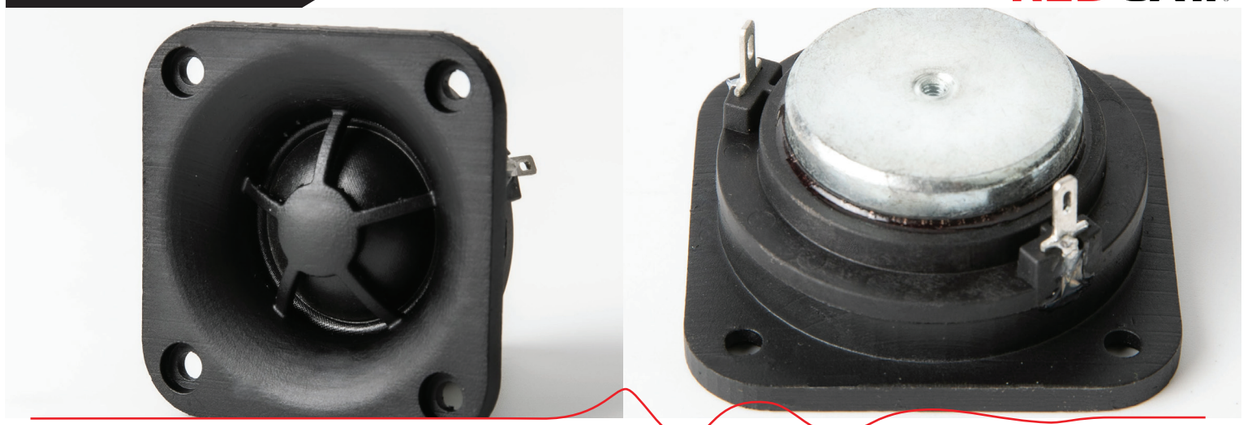
2D drawing



1" | 25TN

Neodymium Tweeter

REDCATT



Key features:

- VERY HIGH SENSITIVITY
- LOW RESONANCE FREQUENCY
- HIGH POWER HANDLING

Design notes:

The 25TN tweeter has a very low resonance frequency, making it possible to work with larger sized mid-woofers.

The tweeter has a designed-in acoustical phase plug, that ensures the off-axis good response and also increases acoustical pressure. Integrated small waveguide makes the usage of this tweeter very easy.

Dual neodymium high-temperature grade neodymium magnets deliver a high-density flux field for the CCAW coil with a minimum amount of flux modulation.

The tweeter has well-ballanced performance and very low har- monic distortion even at high powers.

This tweeter can be used in all aplication where high SPL and low Fs is required. Line-array systems, Hi-Fi center channels, 2-way and multi-way systems.

Specifications:

General specs	
Nominal Diameter:	1"
Rated Impedance:	4 ohm

Power handling	
AES Power:	15 watts
Program Power:	30 watts
Peak Power:	60 watts

Voice Coil	
Diameter:	1 in.
Winding wire:	CCAW
Former:	Aluminum

T/S Parameters	
Resonant frequency:	1250 Hz
Nominal sensitivity	91 dB
Re:	3.4 ohm
Le:	n/a mH

Design details	
Dome Material:	silk
Surround material:	silk
Magnet material:	Neodymium
Overall diameter:	54.5*54.5 mm
Bolt circle diameter:	58 mm
Throat diameter:	n/a mm
Number of mounting holes:	4
Depth (front to rear):	25.55 mm
Net weight:	84g

Ordering codes:

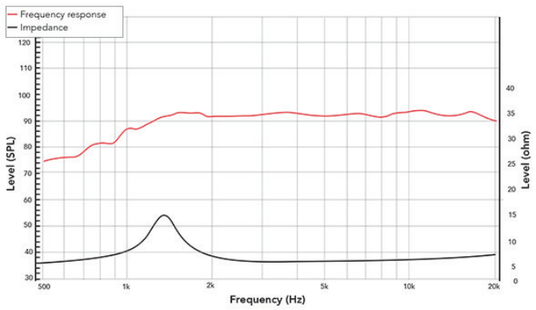
25TNX-386B

Recone kits:

RC25TNX-386B

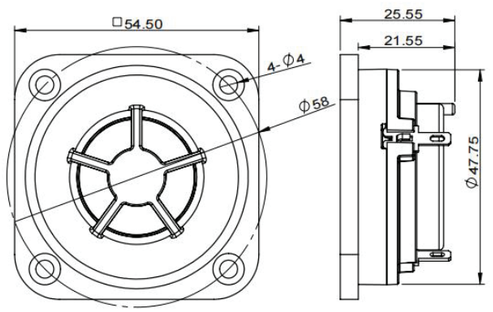
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



1" | 25TF

Ferrite Tweeter

REDCATT



Key features:

- EASY IMPLEMENTATION, INTEGRATED WAVEGUIDE
- WEATHER SEALED
- BALLANCED FREQUENCY RESPONSE, LOW RESONANT FREQUENCY

Design notes:

25TF ferrite based tweter was design for high quality audio applications. It sports aluminum dome, carefully attached to poly-silk surround. Furthermore, the magnetic system and dome sub-assembly is inbuilt into carrier that is later further assembled with our waveguide.

The magnetic circuit delivers robust and consistent B field. Its design has been FEM optimized and features small resonant chamber. All metal parts are coated for weather protection.

The dome is carefully attached to CCAW winding voice coil, wound on a Kapton former. Our precission adhesive dispensing ensures consistency and reliability of all our products.

The best application of this device is in studio monitors, 2-way Hi-Fi systems as well as outdoor products.

Specifications:

General specs	
Nominal Diameter:	1"
Rated Impedance:	4 ohm

Power handling	
AES Power:	10 watts
Program Power:	20 watts
Peak Power:	40 watts

Voice Coil	
Diameter:	1 in.
Winding wire:	CCAW
Former:	Aluminum

T/S Parameters	
Resonant frequency:	1500 Hz
Nominal sensitivity	90 dB
Re:	3.6 ohm
Le:	n/a mH

Design details	
Dome Material:	Aluminum
Surround material:	silk
Magnet material:	Ferrite
Overall diameter:	103.5 mm
Bolt circle diameter:	93.5 mm
Throat diameter:	n/a mm
Number of mounting holes:	4
Depth (front to rear):	34.2 mm
Net weight:	524g

Ordering codes:

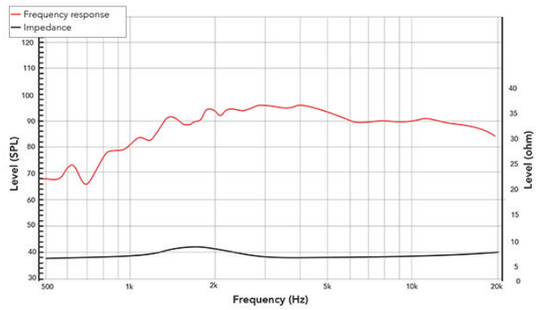
25TFX-431A

Recone kits:

RC25TFX-431A

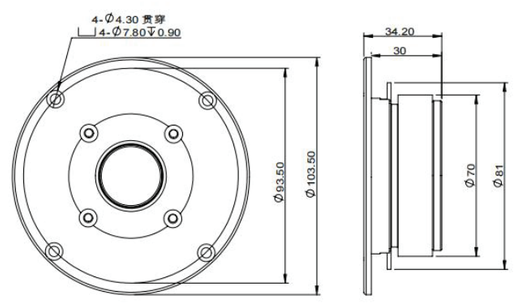
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing





1" | 25TF

Ferrite Tweeter

REDCATT





Key features:

- LOW RESONANT FREQUENCY, HIGH SPL
- SMOOTH FREQUENCY RESPONSE
- EASY CROSSOVER DESIGN POSSIBLE

Design notes:

25TF ferrite based tweter was design for high quality audio applications. It sports single piece poly-silk dome, formed together with surround. Furthermore, the magnetic system and dome sub-assembly is inbuilt into carrier that is later further assembled with our waveguide.

The magnetic circuit delivers robust and consistent B field. Its design has been FEM optimized and features small resonant chamber. All metal parts are coated for weather protection.

The dome is carefully attached to CCAW winding voice coil, wound on a Kapton former. Our precission adhesive dispensing ensures consistency and reliability of all our products.

This version of 25TF style tweeter shares all components with aluminum dome version 25TF. The difference is only the dome itself. While aluminum dome delivers crisp HF, the poly-silk dome is dampened in the high frequencies and has a smoother roll off. Each version has its own application, that perhaps depends on personal preferences of the audio engineer.

The best application of this device is in studio monitors, 2-way Hi-Fi systems as well as outdoor products.

Specifications:

General specs	
Nominal Diameter:	1"
Rated Impedance:	4 ohm

Power handling	
AES Power:	10 watts
Program Power:	20 watts
Peak Power:	40 watts

Voice Coil	
Diameter:	1 in.
Winding wire:	CCAW
Former:	Aluminum

T/S Parameters	
Resonant frequency:	1000 Hz
Nominal sensitivity	90 dB
Re:	3.8 ohm
Le:	n/a mH

Design details	
Dome Material:	silk
Surround material:	silk
Magnet material:	Ferrite
Overall diameter:	103.5 mm
Bolt circle diameter:	93.5 mm
Throat diameter:	n/a mm
Number of mounting holes:	4
Depth (front to rear):	34.2 mm
Net weight:	524g

Ordering codes:

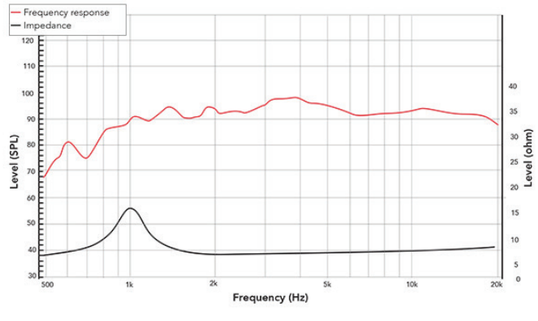
25TFX-431B

Recone kits:

RC25TFX-431B

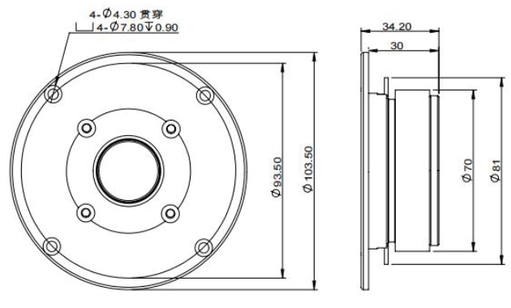
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



1" | 251TN

Neodymium Tweeter

REDCATT





Key features:

- WIDE BAND FREQUENCY RANGE
- LOW RESONANT FREQUENCY
- DESIGNED FOR LIMITED HEIGHT PRODUCTS, OR ARRAY APPLICATIONS

Design notes:

The 251TN tweeter delivers incredible performance. The aluminum dome excels in higher frequencies with bright, undistorted sound. The dome is carefully attached to a poly-silk composite surround.

The tweeter is assembled on a small wave-guide, making a further application a breeze. The shape of the waveguide was carefully considered to fit narrow hight applications, such as TV Bars. The tweeters can be also vertically stacked for array-like columns.

Specifications:

General specs	
Nominal Diameter:	1"
Rated Impedance:	4 ohm

Power handling	
AES Power:	10 watts
Program Power:	20 watts
Peak Power:	40 watts

Voice Coil	
Diameter:	1 in.
Winding wire:	CCAW
Former:	Aluminum

T/S Parameters	
Resonant frequency:	1500 Hz
Nominal sensitivity	90 dB
Re:	3.6 ohm
Le:	n/a mH

Design details	
Dome Material:	Aluminum
Surround material:	silk
Magnet material:	Neodymium
Overall diameter:	70.5*54.3 mm
Bolt circle diameter:	63.5 mm
Throat diameter:	n/a mm
Number of mounting holes:	4
Depth (front to rear):	16.41 mm
Net weight:	62g

Ordering codes:

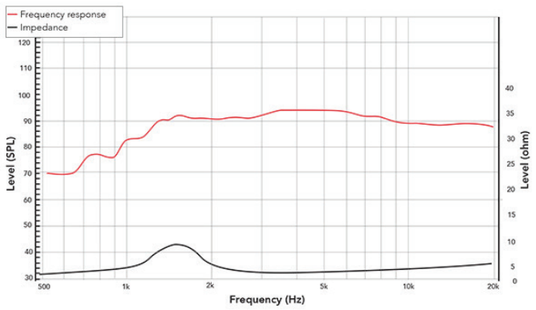
251TNX-384

Recone kits:

RC251TNX-384

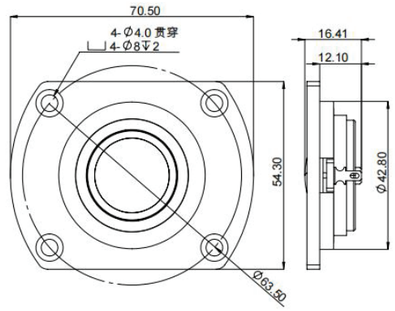
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



1" | 252TN

Neodymium Tweeter

REDCATT





Key features:

- HELMHOLTZ RESONANT CHAMBER
- COMPACT AND LIGHT-WEIGHT
- LOW FS

Design notes:

Introducing the 252TN, the latest innovation in our compact tweeter lineup. Engineered with a natural fiber silk dome, this tweeter is crafted from the ground up using advanced FEM tools, paired with a highly optimized neodymium-based magnetic circuit and a finely tuned Helmholtz resonant chamber.

The result? An exceptionally high-performing tweeter that excels in a variety of applications, from smaller bookshelf speakers and portable systems to high-fidelity floor-standing towers and automotive audio. Its low resonant frequency enables a lower crossover point, enhancing overall sound quality.

Designed for versatility, the 252TN is fully weather-sealed, making it ideal for even the most demanding environments. Elevate your audio experience with the 252TN,Äîwhere cutting-edge technology meets outstanding performance.

Specifications:

General specs	
Nominal Diameter:	1"
Rated Impedance:	4 ohm

Power handling	
AES Power:	10 watts
Program Power:	20 watts
Peak Power:	40 watts

Voice Coil	
Diameter:	1 in.
Winding wire:	CCAW
Former:	Aluminum

T/S Parameters	
Resonant frequency:	850 Hz
Nominal sensitivity	93 dB
Re:	3.5 ohm
Le:	n/a mH

Design details	
Dome Material:	Tetoron
Surround material:	Tetoron
Magnet material:	Neodymium
Overall diameter:	69.8 mm
Bolt circle diameter:	58.8 mm
Throat diameter:	n/a mm
Number of mounting holes:	3
Depth (front to rear):	33.3 mm
Net weight:	0.1kg

Ordering codes:

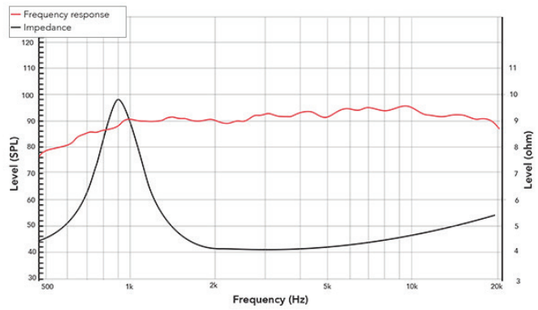
252TNX-563A

Recone kits:

RC252TNX-563A

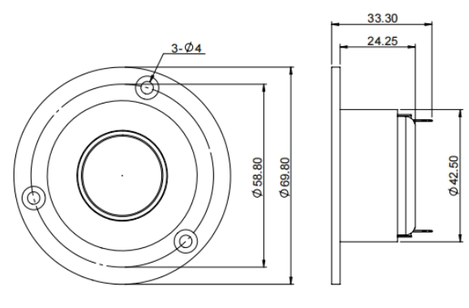
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



1" | 25TF

Ferrite Tweeter

REDCAT



Key features:

- WORKING RANGE UP TO 30KHZ
- LOW RESONANT FREQUENCY
- TITANIUM NITRIDE DOME

Design notes:

The 25TF tweeter has incredibly linear frequency response characteristics, high power handling capability while generating ultra low harmonic distortion artifacts.

The 25TF Dome utilizes REDCATT in-house unique titanium coating technology. Nitride is extremely hard ceramic material. We deposit the nitride from both sides of the titanium dome. The coated dome has dramatically improved flexural rigidity (aka stiffness), compared to the pure titanium dome. The coating has dramatic effect onto the distortion artifacts. The 3rd harmonic distortion stays bellow 0.05% in the working range. Extended high frequency response without major dome breakup modes and improved transient response are the other positive effects of REDCATT Titanium-Nitride Domes.

The 25TF has implemented FEM tuned rear resonant chamber. The chamber is improving the tweeter behavior at low frequencies and further lowering the harmonic distortion. All tweeter parts are bonded together using state of the art high temperature adhesives. Metal parts in the tweeter assembly are coated for extreme weatherization protection.
This tweeter can be used in all applica-

Specifications:

General specs	
Nominal Diameter:	1"
Rated Impedance:	8 ohm

Power handling	
AES Power:	10 watts
Program Power:	20 watts
Peak Power:	40 watts

Voice Coil	
Diameter:	0.8 in.
Winding wire:	CCAW
Former:	Aluminum

T/S Parameters	
Resonant frequency:	1200 Hz
Nominal sensitivity	92 dB
Re:	5.7 ohm
Le:	n/a mH

Design details	
Dome Material:	Titanium
Surround material:	Foam
Magnet material:	Ferrite
Overall diameter:	122.5*96 mm
Bolt circle diameter:	108 mm
Throat diameter:	n/a mm
Number of mounting holes:	4
Depth (front to rear):	49.1 mm
Net weight:	787g

Ordering codes:

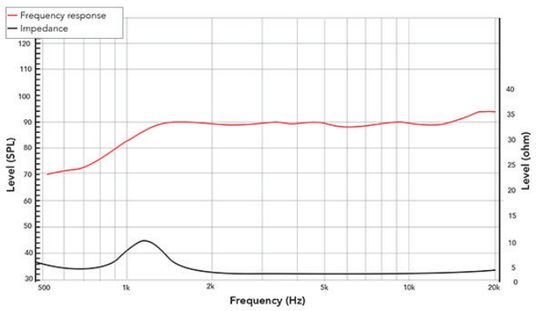
25TFX-065

Recone kits:

RC25TFX-065

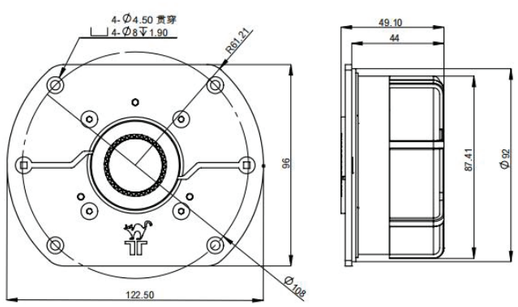
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing

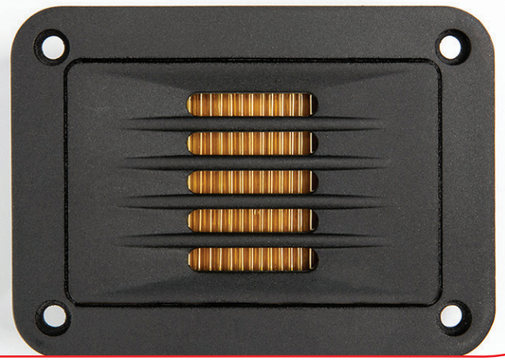


info@redcatt.net www.redcatt.net

1" | AMT2838

Air Motion Transformer

REDCAT





Key features:

- SMOOTH FREQUENCY RESPONSE IN WORKING RAGE, VERY LOW HARMONIC DISTORTION
- COMPACT DESIGN WITH INTEGRATED WAVEGUIDE
- BEST USE IN HIGH PERFORMING HI-FI AUDIO SYSTEMS

Design notes:

Introducing our Air Motion Transformer AMT2838, meticulously engineered to elevate the auditory experience in high-fidelity audio products. Designed to be the pinnacle of sound reproduction, the AMT2838 delivers ultra-clean, detailed, and well-defined mid to high-frequency sound, setting a new standard in audio excellence.

Crafted with precision manufacturing, stringent quality control processes, and advanced glue dispensing techniques, our AMT2838 is engineered for long-term durability and unwavering performance, ensuring that the product in your hands is synonymous with reliability and stability.

The AMT2838,Äôs magnetic system provides a robust B field to the formed diaphragm, enhancing its overall performance and contributing to its exceptional sound output. The diaphragm assembly is a marvel in engineering, featuring polyimide foils encapsulating aluminum conductive film. Our innovative high-precision forming technique ensures that each diaphragm is crafted with a high degree of repeatability, enhancing unit-to-unit consistency and delivering stability, resulting in unparalleled audio performance.

Specifications:

General specs	
Nominal Diameter:	1"
Rated Impedance:	4 ohm

Power handling	
AES Power:	10 watts
Program Power:	20 watts
Peak Power:	40 watts

Voice Coil	
Diameter:	n/a in.
Winding wire:	Aluminum
Former:	kapton

T/S Parameters	
Resonant frequency:	2200 Hz
Nominal sensitivity	96 dB
Re:	4.0 ohm
Le:	n/a mH

Design details	
Dome Material:	n/a
Surround material:	Kapton
Magnet material:	Neodymium
Overall diameter:	93*68 mm
Bolt circle diameter:	77*52 mm
Throat diameter:	n/a mm
Number of mounting holes:	4
Depth (front to rear):	27.1 mm
Net weight:	0.22kg

Ordering codes:

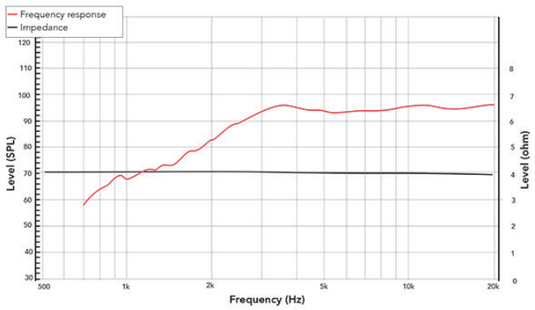
AMT2838X-541A

Recone kits:

RCAMT2838X-541A

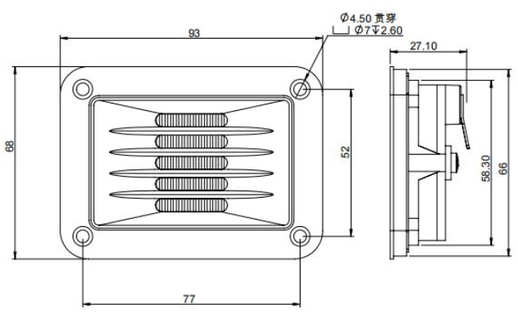
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



1" | 075NCD

Neodymium Compression Driver

REDCAT





Key features:

- HIGH SENSITIVITY IN VERY SMALL BODY
- LIGHTWEIGHT, SUITABLE FOR PORTABLE PRODUCTS
-

Design notes:

The 075NCD compression driver is a high performance, high frequency device ideal for professional loudspeaker systems, high output hi-fi systems and after market car audio applications. The driver,Äôs neodymium based magnetic circuit provides a robust, high force BL field, providing precision control of the Polyimide diaphragm assembly. The unit delivers the frequency response and high power handling through 0.75 inch exit throat.

Diaphragm Assembly

The driver features a 19mm Polyimide diaphragm formed as single piece with Polyimide suspension.

The dome is carefully attached to a high temperature Kapton voice coil former that withstands the long term power characteristics typically seen in professional applications. The acoustic output exits through a bullet phase plug and a 0.75 inch throat aperture. Nominal sensitivity is 109 dB 1watt / 1 meter.

Specifications:

General specs	
Nominal Diameter:	1"
Rated Impedance:	8 ohm

Power handling	
AES Power:	20 watts
Program Power:	40 watts
Peak Power:	80 watts

Voice Coil	
Diameter:	0.75 in.
Winding wire:	CCAW
Former:	kapton

T/S Parameters	
Resonant frequency:	2300 Hz
Nominal sensitivity	100 dB
Re:	7.0 ohm
Le:	n/a mH

Design details	
Dome Material:	Polymer
Surround material:	Polymer
Magnet material:	Neodymium
Overall diameter:	59.5 mm
Bolt circle diameter:	53 mm
Throat diameter:	19 mm mm
Number of mounting holes:	4
Depth (front to rear):	35 mm
Net weight:	0.17 kg

Ordering codes:

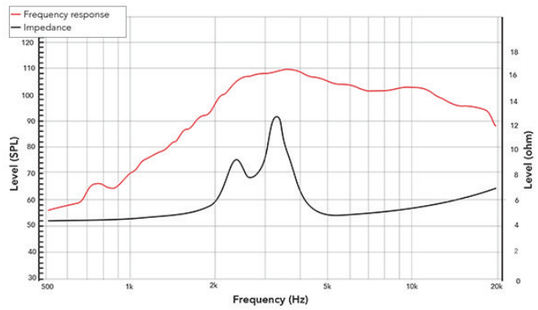
075NCDX-015

Recone kits:

RC075NCDX-015

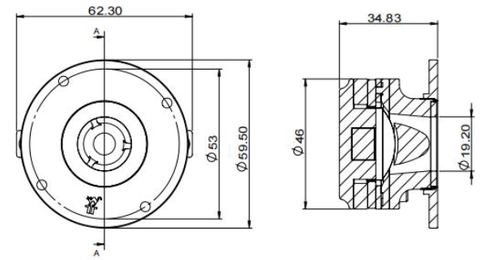
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



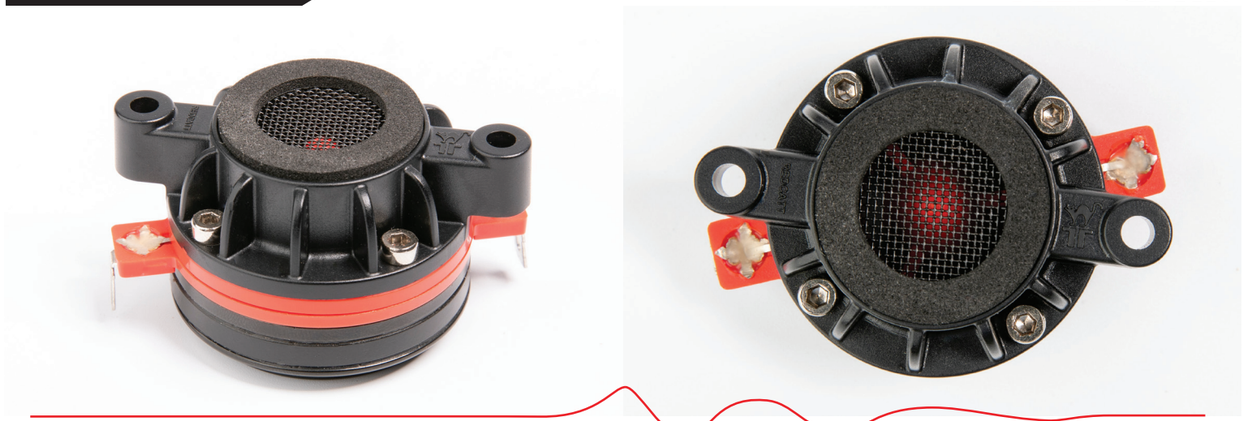
Frequency response measured on IAC baffle

2D drawing



1" | 075NCD Neodymium Compression Driver

REDCATT



Key features:

- BUDGET SENSITIVE APPLICATIONS
- EASY HORN MOUNTING
- 19MM POLYIMIDE DIAPHRAGM

Design notes:

Introducing the cutting-edge 075NCD compression driver, an exceptional high-performance, high-frequency marvel tailored for professional loudspeaker systems, high-output hi-fi setups, and aftermarket car audio installations. Boasting a neodymium-based magnetic circuit, this driver generates a resilient, high-force BL field, guaranteeing precise control over the Polyimide diaphragm assembly. Delivering unrivaled frequency response and robust power handling capabilities, all through a sleek 0.75-inch exit throat.

Diaphragm Design:
Featuring a 19mm Polyimide diaphragm meticulously crafted as a single piece, alongside a Polyimide suspension that ensures superior durability. The unparalleled acoustic output is channeled through a bullet phase plug coupled with a 0.75-inch throat aperture.

Specifications:

General specs	
Nominal Diameter:	1"
Rated Impedance:	4 ohm

Power handling	
AES Power:	20 watts
Program Power:	40 watts
Peak Power:	80 watts

Voice Coil	
Diameter:	0.75 in.
Winding wire:	CCAW
Former:	kapton

T/S Parameters	
Resonant frequency:	2500 Hz
Nominal sensitivity	100 dB
Re:	4.0 ohm
Le:	n/a mH

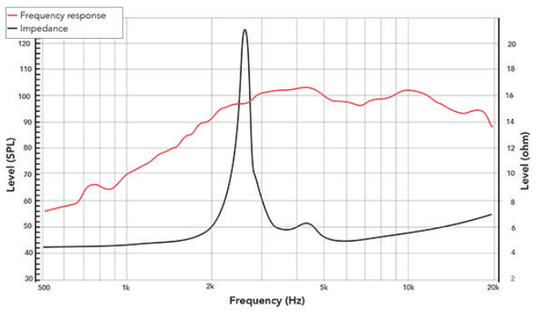
Design details	
Dome Material:	Polymer
Surround material:	Polymer
Magnet material:	Neodymium
Overall diameter:	59.5 mm
Bolt circle diameter:	53 mm
Throat diameter:	19 mm mm
Number of mounting holes:	2
Depth (front to rear):	33.38 mm
Net weight:	0.17 kg

Ordering codes:
075NCDX-567A

Recone kits:
RC075NCDX-567A

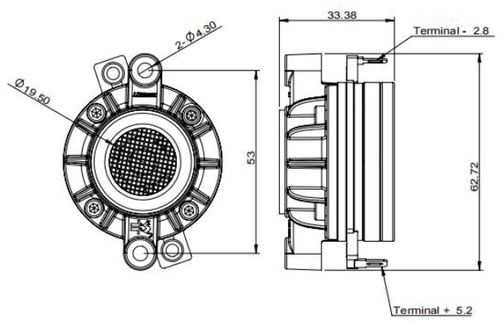
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



1" | 101FCD Ferrite Compression Driver

REDCATT



Key features:

- HIGH SPL
- HIGH POWER HANDLING
- COMPACT SIZE

Design notes:

The 101FCD compression driver is a very high performance, high frequency device ideal for compact professional loudspeaker systems. The driver ferrite based magnetic circuit provides precision control over Polyamide diaphragm assembly. The unit delivers extended frequency response and high power handling throughout 1.0 inch exit throat. The diaphragm is carefully attached to a high temperature Nomex voice coil former that can withstand the long term power handling characteristic typically seen in professional audio applications. REDCATT uses state of the art adhesives in all assembly steps. Our voice coil to dome bonding is unique process, developed to greatly improve the power handling capabilities. REDCATT unique and precise adhesives dispensing, combined with our in-house developed dome treatments are further improving the long term reliability of this product.

Specifications:

General specs	
Nominal Diameter:	1"
Rated Impedance:	8 ohm

Power handling	
AES Power:	20 watts
Program Power:	40 watts
Peak Power:	80 watts

Voice Coil	
Diameter:	1 in.
Winding wire:	CCAR
Former:	kapton

T/S Parameters	
Resonant frequency:	2000 Hz
Nominal sensitivity	109 dB
Re:	5.6 ohm
Le:	n/a mH

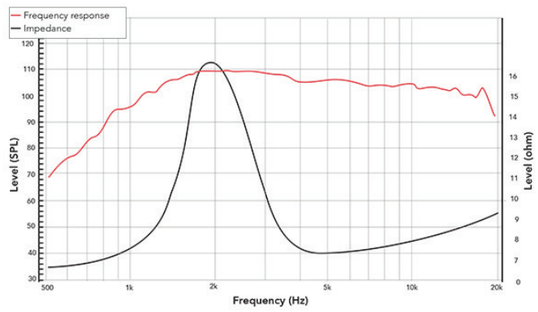
Design details	
Dome Material:	Polymer
Surround material:	Polymer
Magnet material:	Ferrite
Overall diameter:	102.5 mm
Bolt circle diameter:	76 mm
Throat diameter:	25mm mm
Number of mounting holes:	2
Depth (front to rear):	57.7 mm
Net weight:	907g

Ordering codes:
101FCDX-539A

Recone kits:
RC101FCDX-539A

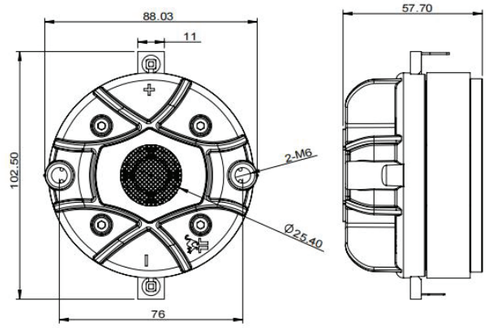
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



1" | 101NCD Neodymium Compression Driver

REDCATT





Key features:

- IDEAL FOR COMPACT LINE-ARRAYS
- HIGH POWER HANDLING
- LOW DISTORTION, HIGH SPL

Design notes:

The 101NCD compact size compression driver is a very high performance, high frequency device ideal for compact professional loudspeaker systems. The driver neodymium based magnetic circuit provides precision control over Polyamide diaphragm assembly in very compact package. The unit delivers extended frequency response and high power handling throughout 1.0 inch exit throat. The diaphragm is carefully attached to a high temperature Nomex voice coil former that can withstand the long term power handling characteristic typically seen in professional audio applications. REDCATT uses state of the art adhesives in all assembly steps. Our voice coil to dome bonding is unique process, developed to greatly improve the power handling capabilities. REDCATT unique and precise adhesives dispensing, combined with our in-house developed dome treatments are further improving the long term reliability of this product.

Specifications:

General specs	
Nominal Diameter:	1"
Rated Impedance:	8 ohm

Power handling	
AES Power:	20 watts
Program Power:	40 watts
Peak Power:	80 watts

Voice Coil	
Diameter:	1 in.
Winding wire:	CCAW
Former:	kapton

T/S Parameters	
Resonant frequency:	1900 Hz
Nominal sensitivity	109 dB
Re:	4.6 ohm
Le:	n/a mH

Design details	
Dome Material:	Polymer
Surround material:	Polymer
Magnet material:	Neodymium
Overall diameter:	86 mm
Bolt circle diameter:	53 mm
Throat diameter:	25mm mm
Number of mounting holes:	2
Depth (front to rear):	37 mm
Net weight:	615g

Ordering codes:

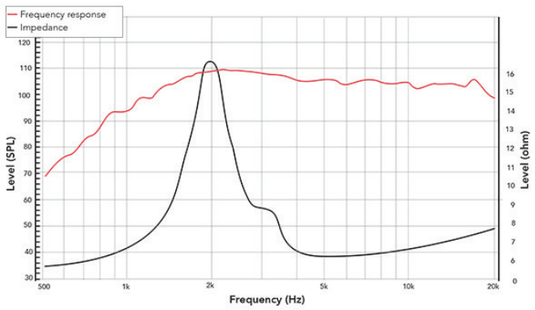
101NCDX-160

Recone kits:

RC101NCDX-160

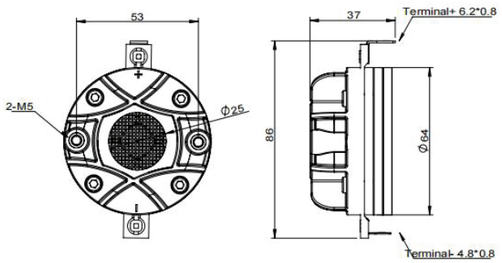
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



1" | 142FCD Ferrite Compression Driver

REDCATT





Key features:

- VERY HIGH SPL, LOW FS
- HIGH POWER HANDLING
- SMOOTH FREQUENCY RESPONSE IN WORKING RANGE

Design notes:

Introducing our latest innovation ‚Äì the 142FCD compression driver! Developed using advanced FEM techniques, this driver outperforms many of our competitor products. With a resonant frequency of 1kHz, it allows for a lower frequency crossover point, while delivering very high SPL and a natural rolloff in high frequencies, making it a breeze to implement in your high-quality sound systems.

But that's not all ‚Äì our state-of-the-art robotic dome forming is at play here too. The result? Highly precise and consistent polymer domes that further elevate the exceptional performance of this driver.

Moreover, the robust ferrite magnetic circuit delivers a high B field to the edge-wound voice coil, which is carefully attached to the dome by the best available adhesives. This not only ensures precise and consistent performance but also enhances the high power handling capabilities of the 142FCD compression driver. Experience the next level of audio quality with the 142FCD compression driver - where innovation meets superior craftsmanship.

Specifications:

General specs	
Nominal Diameter:	1"
Rated Impedance:	8 ohm

Power handling	
AES Power:	35 watts
Program Power:	70 watts
Peak Power:	140 watts

Voice Coil	
Diameter:	1.4 in.
Winding wire:	CCAR
Former:	kapton

T/S Parameters	
Resonant frequency:	1000 Hz
Nominal sensitivity	105 dB
Re:	6.0 ohm
Le:	n/a mH

Design details	
Dome Material:	Polymer
Surround material:	Polymer
Magnet material:	Ferrite
Overall diameter:	95 mm
Bolt circle diameter:	76 mm
Throat diameter:	25.4mm mm
Number of mounting holes:	4
Depth (front to rear):	54.2 mm
Net weight:	1.25kg

Ordering codes:

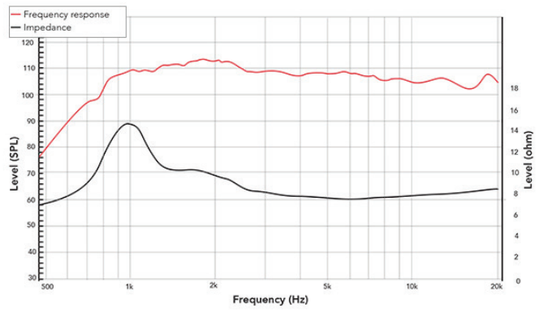
142FCDX-557A

Recone kits:

RC142FCDX-557A

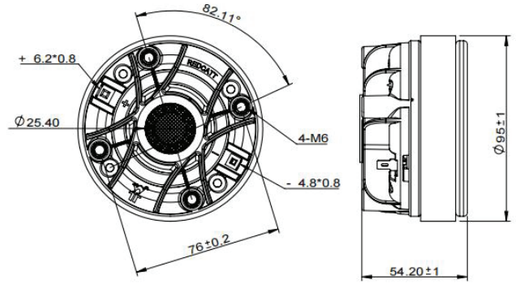
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



1" | 141FCD

Ferrite Compression Driver

REDCATT



Key features:

- LOW RESONANT FREQUENCY
- MOUNTING PLASTIC ADAPTER WITH THREAD
- FOR APPLICATIONS WITH LIMITED SPACE

Design notes:

The 141FCD compression driver is a high performance high frequency device ideal for professional loudspeaker systems. It,Äôs core is designed based on our very 140FCD model. In fact the dome assembly is shared between these two models. The driver,Äôs ferrite based magnetic circuit was modified to fit applications with a limited space and lower budget. Furthermore, we have added mounting adapter with 1 3/8,Äù 18TPI thread to easy and fast mounting onto the horn throats that incorporate this thread.

Diaphragm Assembly

The driver features a 36mm Polyimide diaphragm formed as single piece with Polyimide suspension. The suspension has designed and FEM optimized venting features to lover the harmonic distortion.

The dome is carefully attached to a high temperature Nomex voice coil former that withstands the long term power characteristics typically seen in professional applications. The acoustic output exits through a radial phase plug and a 1.0 inch throat aperture. Nominal sensitivity is 105 dB 1watt / 1 meter.

Specifications:

General specs	
Nominal Diameter:	1"
Rated Impedance:	4 ohm

Power handling	
AES Power:	30 watts
Program Power:	60 watts
Peak Power:	120 watts

Voice Coil	
Diameter:	1.4 in.
Winding wire:	CCAR
Former:	kapton

T/S Parameters	
Resonant frequency:	900 Hz
Nominal sensitivity	105 dB
Re:	2.5 ohm
Le:	n/a mH

Design details	
Dome Material:	Polymer
Surround material:	Polymer
Magnet material:	Ferrite
Overall diameter:	72 mm
Bolt circle diameter:	Thread
Throat diameter:	25mm mm
Number of mounting holes:	n/a
Depth (front to rear):	65.7 mm
Net weight:	634g

Ordering codes:

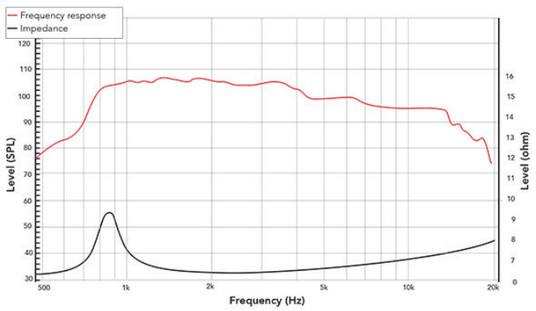
141FCDX-337

Recone kits:

RC141FCDX-337

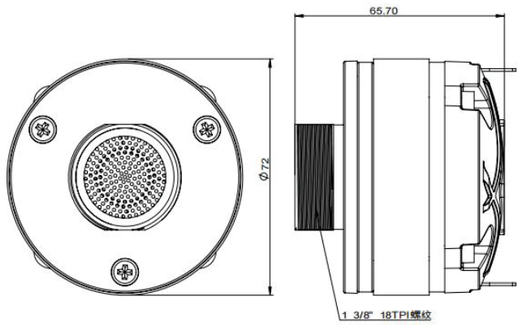
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

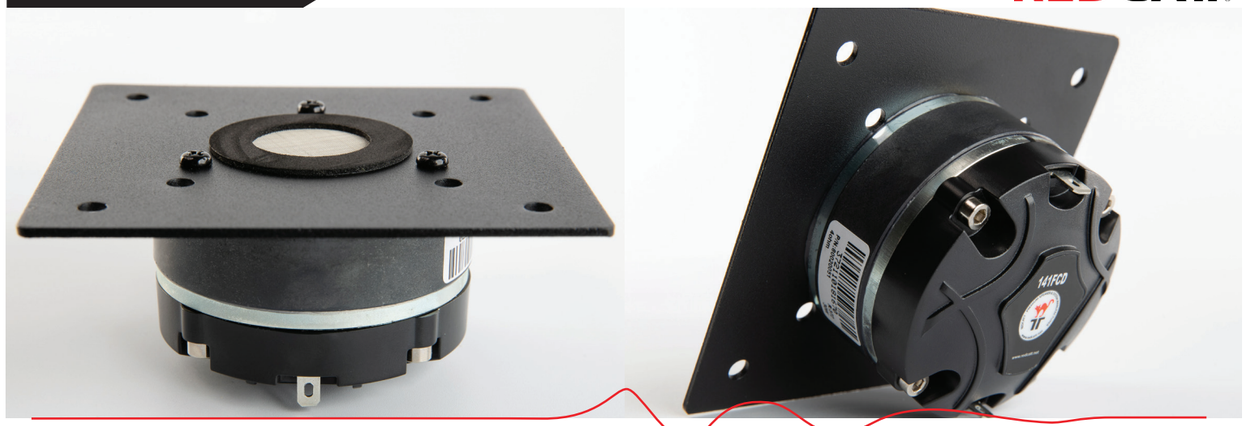
2D drawing



1" | 141FCD

Ferrite Compression Driver

REDCATT



Key features:

- COMPACT DESIGN
- DELIVERED WITH MOUNTING STEEL PLATE
- LOW RESONANT FREQUENCY

Design notes:

The 141FCD compression driver is a high performance high frequency device ideal for professional loudspeaker systems. It,Äôs core is designed based on our very 140FCD model. In fact the dome assembly is shared between these two models. The driver,Äôs ferrite based magnetic circuit was modified to fit applications with a limited space and lower budget. Furthermore, we have added steel face-plate for easier assembly on production lines for high-volume productions.

Diaphragm Assembly

The driver features a 36mm Polyimide diaphragm formed as single piece with Polyimide suspension. The suspension has designed and FEM optimized venting features to lover the harmonic distortion.

The dome is carefully attached to a high temperature Nomex voice coil former that withstands the long term power characteristics typically seen in professional applications. The acoustic output exits through a radial phase plug and a 1.0 inch throat aperture. Nominal sensitivity is 105 dB 1watt / 1 meter.

Specifications:

General specs	
Nominal Diameter:	1"
Rated Impedance:	4 ohm

Power handling	
AES Power:	30 watts
Program Power:	60 watts
Peak Power:	120 watts

Voice Coil	
Diameter:	1.4 in.
Winding wire:	CCAR
Former:	kapton

T/S Parameters	
Resonant frequency:	950 Hz
Nominal sensitivity	105 dB
Re:	2.5 ohm
Le:	n/a mH

Design details	
Dome Material:	Polymer
Surround material:	Polymer
Magnet material:	Ferrite
Overall diameter:	110 mm
Bolt circle diameter:	84.85 mm
Throat diameter:	25.6mm mm
Number of mounting holes:	4
Depth (front to rear):	50.45 mm
Net weight:	808g

Ordering codes:

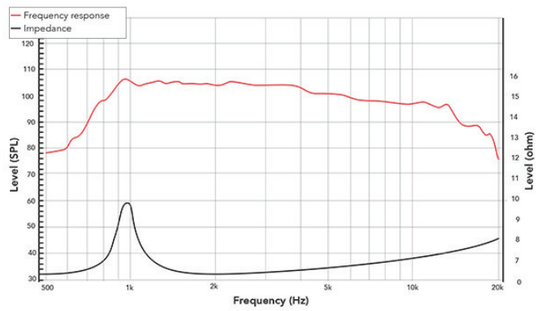
141FCDX-372

Recone kits:

RC141FCDX-372

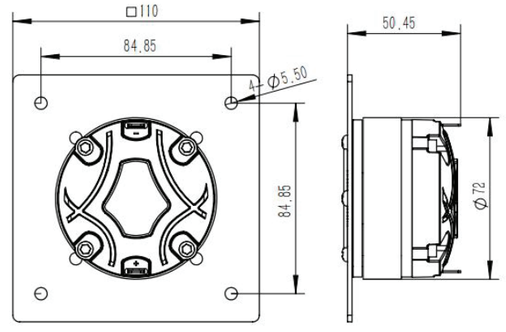
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



info@redcatt.net www.redcatt.net

1" | 140NCD Neodymium Compression Driver

REDCATT



Key features:

- VERY HIGH PERFORMANCE AT SMALL SIZE
- 2-WAY AND MULTI-WAY SPEAKER SYSTEMS
-

Design notes:

The 140NCD is a high performance high frequency device ideal for professional loudspeaker systems. The unit delivers extended frequency response and high power handling through 1.3inch exit throat. The suspension has designed and FEM optimized venting features to lover the harmonic distortion. The venting holes also improves the control over the dome movements at low frequencies.

140NCD ultra compact design ensures the driver can be used in enclosure designs where the space is very limited, such as line array systems. Redcatt has focused on designing an optimized neodymium based magnetic circuit capable of delivering the highest level of performance and value. The neodymium circuit is optimized to generate the minimum amount of flux modulation providing exceptional stability.

Specifications:

General specs	
Nominal Diameter:	1"
Rated Impedance:	8 ohm

Power handling	
AES Power:	30 watts
Program Power:	60 watts
Peak Power:	120 watts

Voice Coil	
Diameter:	1.4 in.
Winding wire:	CCAR
Former:	kapton

T/S Parameters	
Resonant frequency:	1200 Hz
Nominal sensitivity	109 dB
Re:	5.5 ohm
Le:	n/a mH

Design details	
Dome Material:	Polymer
Surround material:	Polymer
Magnet material:	Neodymium
Overall diameter:	95 mm
Bolt circle diameter:	76 mm
Throat diameter:	25mm mm
Number of mounting holes:	4
Depth (front to rear):	47.85 mm
Net weight:	538g

Ordering codes:

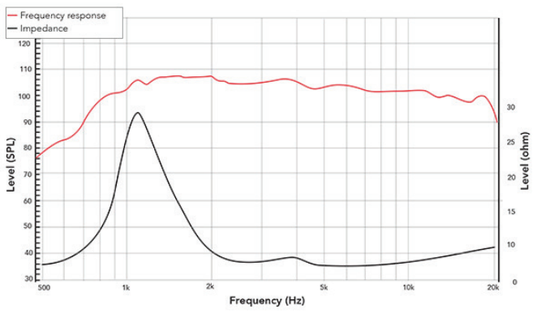
140NCDX-077

Recone kits:

RC140NCDX-077

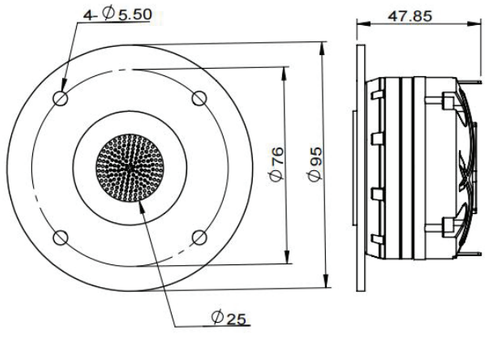
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



1" | 140FCD Ferrite Compression Driver

REDCATT



Key features:

- HIGH PERFORMANCE, HIGH QUALITY COMPRESSION DRIVER
- FITS ANY BUDGET
- DESIGNED FOR USAGE IN 2-WAY & MULTI-WAY SYSTEMS

Design notes:

The 140FCD is a very high performance device ideal for professional loudspeaker systems. The unit delivers extended frequency response and high power handling through 1.0inch exit throat. REDCATT has developed unique motor system magnetic gap volume tuning. This feature dramatically improves THD and improves the transient response of the driver. The driver features a 36mm Polyimide diaphragm formed as single piece with Polyimide suspension. The suspension has designed and FEM optimized venting features to lover the harmonic distortion.

The dome is carefully attached to a high temperature Nomex voice coil former that withstands the long term power characteristics typically seen in professional applications. The acoustic output exits through a radial phase plug and a 1.0 inch throat aperture. Nominal sensitivity is 110.5 dB 1watt / 1 meter.

Our voice coil to dome bonding is unique process, developed to greatly improve the power handling capabilities. REDCATT precise adhesives dispensing, combined with our in-house developed dome treatments are further improving the long term reliability of this product.

Specifications:

General specs	
Nominal Diameter:	1"
Rated Impedance:	8 ohm

Power handling	
AES Power:	30 watts
Program Power:	60 watts
Peak Power:	120 watts

Voice Coil	
Diameter:	1.4 in.
Winding wire:	CCAR
Former:	kapton

T/S Parameters	
Resonant frequency:	1200 Hz
Nominal sensitivity	106 dB
Re:	5.5 ohm
Le:	n/a mH

Design details	
Dome Material:	Polymer
Surround material:	Polymer
Magnet material:	Ferrite
Overall diameter:	100 mm
Bolt circle diameter:	76 mm
Throat diameter:	26mm mm
Number of mounting holes:	4
Depth (front to rear):	48 mm
Net weight:	1.1kg

Ordering codes:

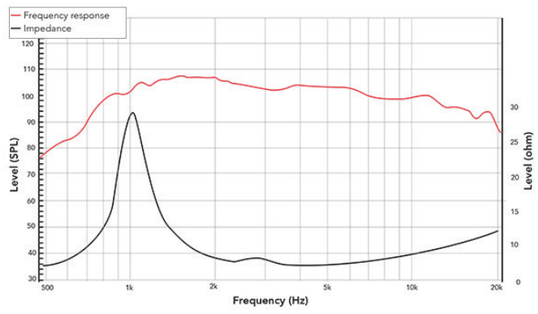
140FCDX-087

Recone kits:

RC140FCDX-087

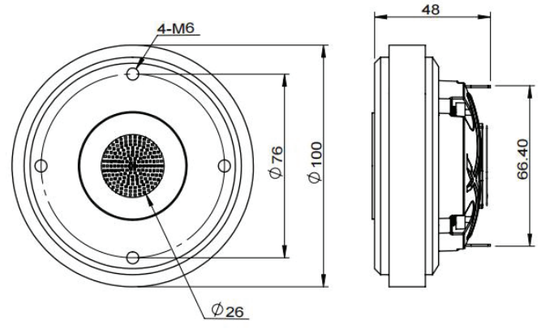
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



2" | 181FCD

Ferrite Compression Driver

REDCATT



Key features:

- EXTENDED FREQUENCY RESPONSE
- FEM OPTIMIZED MAGNETIC STRUCTURE
- USE IN LARGER SPEAKER SYSTEMS

Design notes:

The 181FCD compression driver is a very high performance high frequency device ideal for professional loud-speaker systems. The driver,Äôs dome is carefully attached to based magnetic circuit provides a robust, high force BL field, providing precision control of the Polyimide diaphragm assembly. We have optimized the overall perfor-mance of this compression driver to deliver pleasant sound.

Specifications:

General specs	
Nominal Diameter:	2"
Rated Impedance:	8 ohm

Power handling	
AES Power:	70 watts
Program Power:	140 watts
Peak Power:	280 watts

Voice Coil	
Diameter:	1.8 in.
Winding wire:	Aluminum Sq.
Former:	NSV

T/S Parameters	
Resonant frequency:	1500 Hz
Nominal sensitivity	109 dB
Re:	5.2 ohm
Le:	n/a mH

Design details	
Dome Material:	Polymer
Surround material:	Polymer
Magnet material:	Ferrite
Overall diameter:	110 mm
Bolt circle diameter:	57 mm
Throat diameter:	26mm mm
Number of mounting holes:	4
Depth (front to rear):	62.83 mm
Net weight:	1.75kg

Ordering codes:

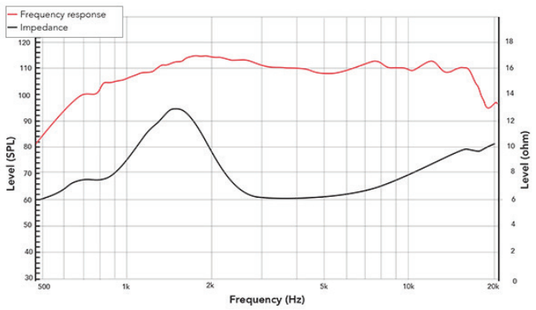
181FCDX-227D

Recone kits:

RC181FCDX-227D

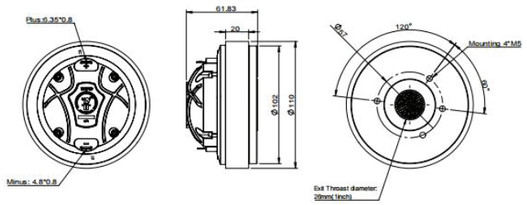
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



2" | 180NCD

Neodymium Compression Driver

REDCATT



Key features:

- VERY COMPACT DESIGN
- POWERFUL NEODYMIUM MAGNETIC CIRCUIT
- BEST USE IN HIGH PERFORMING SPEAKER SYSTEMS AND ARRAYS

Design notes:

The 180NCD is a high performance high frequency device ideal for professional loudspeaker systems. In a ultra compact size, the driver,Äôs neodymium based magnetic circuit provides a robust, high force BL field providing precision control of the Polyimide diaphragm assembly. The unit delivers extended frequency response and high power handling through 1.0 inch exit throat. The suspension has designed and FEM optimized venting features to lover the harmonic distortion. The venting holes also improves the control over the dome movements at low frequencies. REDCATT has developed unique phase plug. Phase plug is FEM optimized to lower the distortion artifacts at mid frequencies.

180NCD ultra compact design ensures the driver can be used in enclosure designs where the space is very limited, such as line array systems. Redcatt has focused on designing an optimized neodymium based magnetic circuit capable of delivering the highest level of performance and value. This effort has resulted in a device that offers uncompromising performance featuring high efficiency, exceptional transient response and controlled distortion characteristics, all that in extremely compact size.

Specifications:

General specs	
Nominal Diameter:	2"
Rated Impedance:	16 ohm

Power handling	
AES Power:	40 watts
Program Power:	80 watts
Peak Power:	160 watts

Voice Coil	
Diameter:	1.8 in.
Winding wire:	CCAR
Former:	Nomex

T/S Parameters	
Resonant frequency:	1100 Hz
Nominal sensitivity	110 dB
Re:	12.0 ohm
Le:	n/a mH

Design details	
Dome Material:	Polymer
Surround material:	Polymer
Magnet material:	Neodymium
Overall diameter:	75 mm
Bolt circle diameter:	57 mm
Throat diameter:	26mm mm
Number of mounting holes:	4
Depth (front to rear):	46.5 mm
Net weight:	550g

Ordering codes:

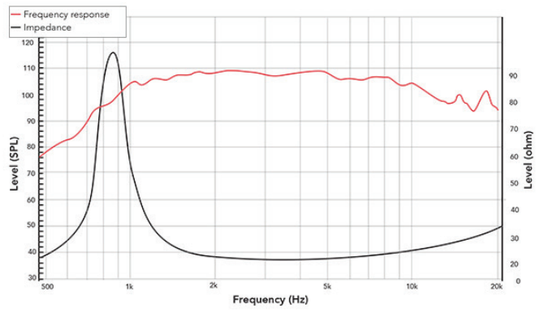
180NCDX-086B

Recone kits:

RC180NCDX-086B

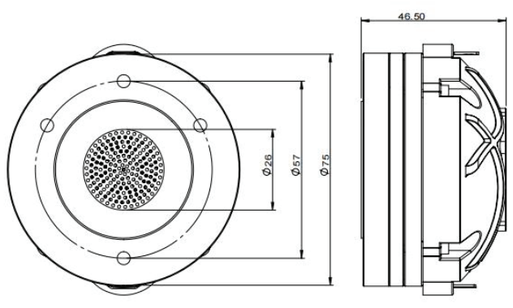
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



2" | 180FCD

Ferrite Compression Driver

REDCATT



Key features:

- EXTENDED FREQUENCY RESPONSE
- FEM OPTIMIZED MAGNETIC STRUCTURE
- USE IN LARGER SPEAKER SYSTEMS

Design notes:

The 180FCD compression driver is a very high performance high frequency device ideal for professional loudspeaker systems. The driver,Äôs dome is carefully attached to based magnetic circuit provides a robust, high force BL field, providing precision control of the Polyimide diaphragm assembly.

Diaphragm Assembly

The driver features a 44mm Polyimide diaphragm formed as single piece with Polyimide suspension.

The dome is assembled to a high temperature Nomex voice coil former that withstands the long term power characteristics typically seen in professional applications. The acoustic output exits through a bullet phase plug and a 1.0 inch throat aperture. Nominal sensitivity is 108.5 dB 1watt / 1 meter.

REDCATT uses state of the art adhesives in all assembly steps. Our voice coil to dome bonding is unique process, developed to greatly improve the power handling capabilities. REDCATT unique and precise adhesives dispensing, combined with our in-house developed dome treatments are further improving the long term reliability of this product.

Specifications:

General specs	
Nominal Diameter:	2"
Rated Impedance:	8 ohm

Power handling	
AES Power:	40 watts
Program Power:	80 watts
Peak Power:	160 watts

Voice Coil	
Diameter:	1.8 in.
Winding wire:	CCAR
Former:	kapton

T/S Parameters	
Resonant frequency:	2000 Hz
Nominal sensitivity	109 dB
Re:	5.8 ohm
Le:	n/a mH

Design details	
Dome Material:	Polymer
Surround material:	Polymer
Magnet material:	Ferrite
Overall diameter:	120 mm
Bolt circle diameter:	76&57 mm
Throat diameter:	28.5mm mm
Number of mounting holes:	2+3
Depth (front to rear):	69 mm
Net weight:	2.2kg

Ordering codes:

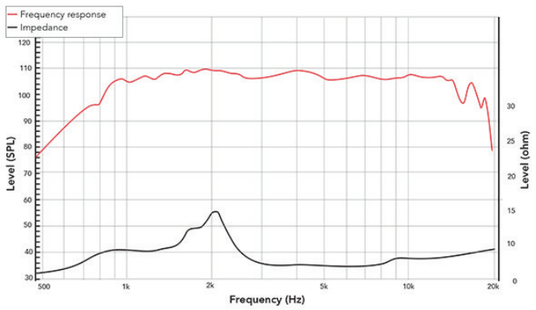
180FCDX-044

Recone kits:

RC180FCDX-044

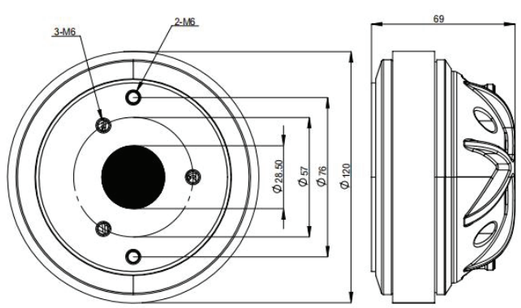
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



2" | 180FCD

Ferrite Compression Driver

REDCATT





Key features:

- DRIVER DELIVERING HIGH SPL AT AFFORDABLE COST
- ROBUST, HIGH BL MAGNETIC CIRCUIT
-

Design notes:

The 180FCD compression driver is a very high-performance, high-frequency device ideal for professional loudspeaker systems, such as larger 2-way systems.¬†

Diaphragm Assembly

The driver sports a 44mm polyimide diaphragm formed as a single piece with the suspension. The voice coil is attached to the dome with our state of the art adhesives and precise bonding equipment.

The acoustic output exits through a circumferential phase plug and a 1.0-inch throat aperture.¬†Nominal sensitivity is 109.5 dB 1watt / 1 meter.

¬†¬†

REDCATT uses state of the art adhesives in all assembly steps. Our voice coil to dome bonding is a unique process, developed to greatly improve the power handling capabilities. REDCATT unique and precise adhesives dispensing, combined with our in-house developed dome treatments are further improving the long term reliability of this product.

Specifications:

General specs	
Nominal Diameter:	2"
Rated Impedance:	8 ohm

Power handling	
AES Power:	55 watts
Program Power:	110 watts
Peak Power:	220 watts

Voice Coil	
Diameter:	1.8 in.
Winding wire:	CCAR
Former:	kapton

T/S Parameters	
Resonant frequency:	1100 Hz
Nominal sensitivity	110 dB
Re:	5.8 ohm
Le:	n/a mH

Design details	
Dome Material:	Polymer
Surround material:	Polymer
Magnet material:	Ferrite
Overall diameter:	120 mm
Bolt circle diameter:	76&57 mm
Throat diameter:	28.5mm mm
Number of mounting holes:	2+3
Depth (front to rear):	69 mm
Net weight:	2.2kg

Ordering codes:

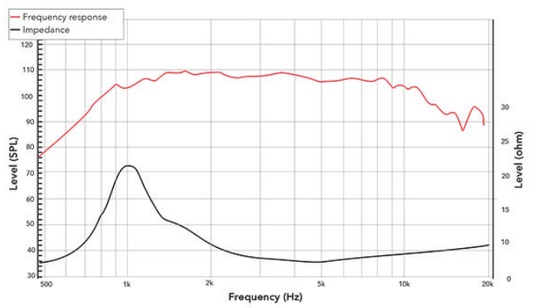
180FCDX-330

Recone kits:

RC180FCDX-330

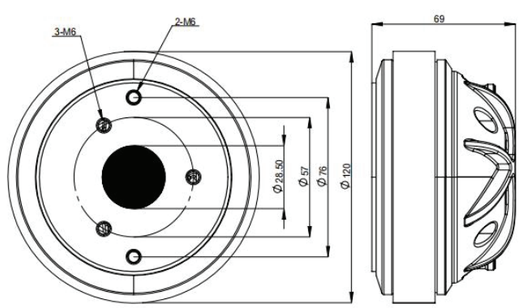
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



3" | 202NTi Neodymium Compression Driver

REDCATT





Key features:

- VERY COMPACT DESIGN
- PURE TITANIUM DOME WITH SURROUND INTEGRATED RESONANCE CONTROL FEATURES
- PORTABLE PRODUCTS, 2-WAY AND MULTI-WAY SYSTEMS, LINE-ARRAY APPLICATIONS

Design notes:

Introducing the 202NTi: Elevating sound performance to new heights! With cutting-edge technology and precision engineering, this compression driver takes your audio experience to the next level. Designed with a newly updated magnetic circuit, phase plug, voice coil, and dome, it outshines its predecessor, the 201NTi. No compromises on sound quality - only pure, powerful sound in a compact package.

The Neodymium magnetic circuit offers unrivaled control, paired with a 1.4-inch exit throat and titanium diaphragm for crystal-clear sound.
Featuring a groundbreaking dome assembly design, the 202NTi boasts seamless integration of components for superior frequency response and power handling. Each step of the assembly process is meticulously executed with state-of-the-art adhesives, ensuring unmatched reliability and performance. Redefine your audio experience with the 202NTi - where innovation meets excellence.

Specifications:

General specs	
Nominal Diameter:	3"
Rated Impedance:	8 ohm

Power handling	
AES Power:	100 watts
Program Power:	200 watts
Peak Power:	400 watts

Voice Coil	
Diameter:	3 in.
Winding wire:	CCAR
Former:	kapton

T/S Parameters	
Resonant frequency:	700 Hz
Nominal sensitivity	109 dB
Re:	5.9 ohm
Le:	n/a mH

Design details	
Dome Material:	Titanium
Surround material:	Titanium
Magnet material:	Neodymium
Overall diameter:	112 mm
Bolt circle diameter:	102 mm
Throat diameter:	36mm mm
Number of mounting holes:	4
Depth (front to rear):	58 mm
Net weight:	1.9kg

Ordering codes:

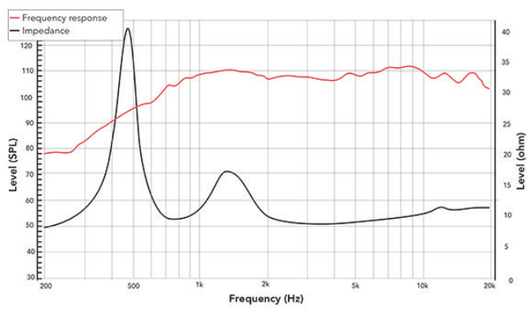
202NTiX-555A

Recone kits:

RC202NTiX-555A

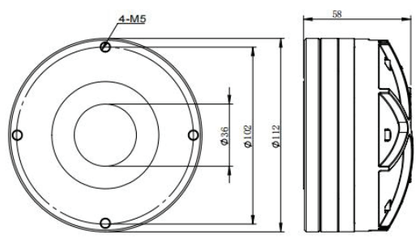
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



3" | 202FCD Ferrite Compression Driver

REDCATT



Key features:

- DESIGNED FOR APPLICATIONS WITH LOW BUDGET
- POLYIMIDE SURROUND WITH PURE TITANIUM DOME
-

Design notes:

The 202FCD compression driver is a high-performance, high-frequency device ideal for professional loudspeaker systems. The driver,Äôs ferrite based magnetic circuit provides a robust, high force BL field providing precision control of the pure titanium diaphragm assembly. Featuring 1.4inch exit throat. The suspension is made of polyimide material, providing optimum control over the diaphragm movement. The design has been optimized to have a great level of performance at very affordable price levels. The drivers are suitable for 2-way and multi-way speaker systems.
Dome Assembly Design
REDCATT has designed the pure titanium dome to be bonded to the polyimide surround. This solution greatly improves the control of the dome pistonic motion, having a positive effect on the transient response.¬†

Specifications:

General specs	
Nominal Diameter:	3"
Rated Impedance:	8 ohm

Power handling	
AES Power:	100 watts
Program Power:	200 watts
Peak Power:	400 watts

Voice Coil	
Diameter:	3 in.
Winding wire:	CCAR
Former:	kapton

T/S Parameters	
Resonant frequency:	500 Hz
Nominal sensitivity	108 dB
Re:	6.2 ohm
Le:	n/a mH

Design details	
Dome Material:	Titanium
Surround material:	Polymer
Magnet material:	Ferrite
Overall diameter:	170 mm
Bolt circle diameter:	102 mm
Throat diameter:	36mm mm
Number of mounting holes:	4
Depth (front to rear):	70.8 mm
Net weight:	5kg

Ordering codes:

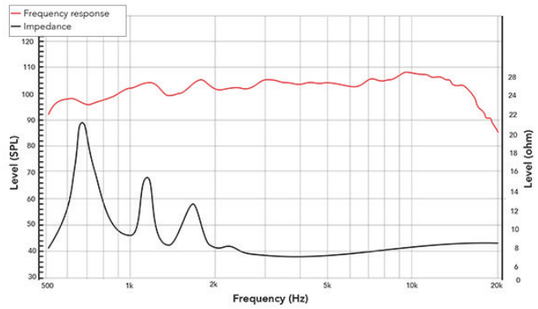
202FCDX-273

Recone kits:

RC202FCDX-273

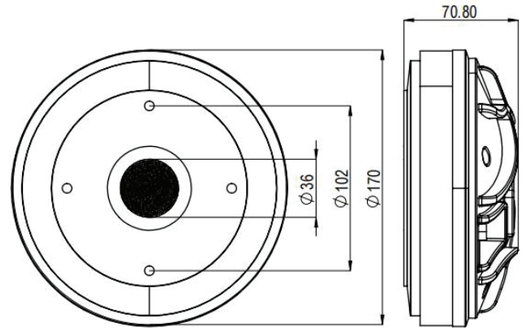
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



3" | 201NTi Neodymium Compression Driver

REDCATT





Key features:

- VERY COMPACT DESIGN
- PURE TITANIUM DOME WITH SURROUND INTEGRATED RESONANCE CONTROL FEATURES
- PORTABLE PRODUCTS, 2-WAY AND MULTI-WAY SYSTEMS, LINE-ARRAY APPLICATIONS

Design notes:

The 201NTi compression driver is based on the design of our successful 200NTi. We have shared the same dome assembly between these two models, while we have packed the driver into a smaller form factor. Not any compromises have been made to the sound character. This driver is here to supports your needs in the applications where the space is limited. The driver,Äôs Neodymium based magnetic circuit provides a robust, high force BL field, delivering precision control of the pure titanium diaphragm assembly, featuring 1.4inch exit throat.

Dome Assembly Design

REDCATT has designed the dome and the surround of this compression driver as a single part. The voice coil former is attached to the dome as ‚ÄúL‚Äù sandwich. This solution greatly improves the transfer of all frequencies onto the dome, with a good transient response. It also dramatically improves the power handling capability of the driver.

Specifications:

General specs	
Nominal Diameter:	3"
Rated Impedance:	8 ohm

Power handling	
AES Power:	100 watts
Program Power:	200 watts
Peak Power:	400 watts

Voice Coil	
Diameter:	3 in.
Winding wire:	CCAR
Former:	kapton

T/S Parameters	
Resonant frequency:	700 Hz
Nominal sensitivity	109 dB
Re:	5.9 ohm
Le:	n/a mH

Design details	
Dome Material:	Titanium
Surround material:	Titanium
Magnet material:	Neodymium
Overall diameter:	112 mm
Bolt circle diameter:	102 mm
Throat diameter:	36mm mm
Number of mounting holes:	4
Depth (front to rear):	62.1 mm
Net weight:	1.95kg

Ordering codes:

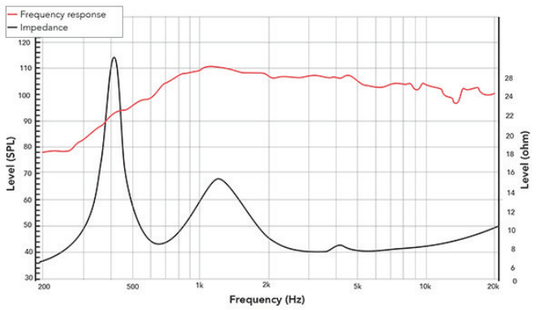
201NTiX-316

Recone kits:

RC201NTiX-316

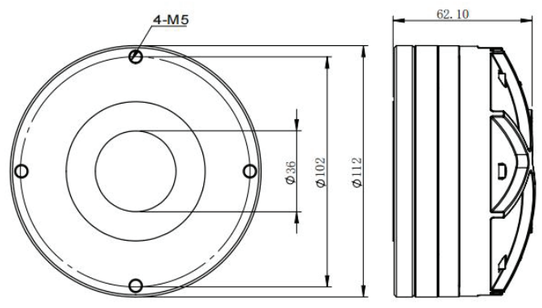
In many cases REDCATT produces 4 ohms, 8 ohms and 16 ohms versions. Indicate what impedance do you need in your request.

Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



3" | 200NTI Neodymium Compression Driver

REDCATT





Key features:

- ULTRA HIGH FORCE MAGNETIC SYSTEM WITH BACK PRESSURE REGULATION FEATURES
- VERY HIGH SPL
- CNC MACHINED, PRECISE ALUMINUM PHASE PLUG

Design notes:

The 200NTi compression driver is a high performance high frequency device ideal for professional loudspeaker systems. The driver,Äôs advanced neodymium based magnetic circuit provides a compact, yet robust, ultra high force BL field with precision control of the pure titanium diaphragm assembly. The unit delivers incredibly linear frequency response and very high power handling through 1.4inch exit throat.

The driver features a 75mm pure titanium diaphragm formed as single piece with titanium suspension consisting resonance control features. REDCATT uses advanced manufacturing and quality control techniques, resulting in superb consistency of all our compression drivers.

Optimized, lightweight neodymium based magnetic circuit capable of delivering the highest level of performance. Device that offers uncompromising performance featuring high efficiency, exceptional transient response and controlled distortion characteristics. The annular phase plug is CNC machined from a single block of aircraft grade aluminum. Our phase plug is true high-tech masterpiece. The reached shape and aligning tolerances are beyond what have been commercially produced

Specifications:

General specs	
Nominal Diameter:	3"
Rated Impedance:	8 ohm

Power handling	
AES Power:	100 watts
Program Power:	200 watts
Peak Power:	400 watts

Voice Coil	
Diameter:	3 in.
Winding wire:	CCAR
Former:	kapton

T/S Parameters	
Resonant frequency:	800 Hz
Nominal sensitivity	111 dB
Re:	5.9 ohm
Le:	n/a mH

Design details	
Dome Material:	Titanium
Surround material:	Titanium
Magnet material:	Neodymium
Overall diameter:	130 mm
Bolt circle diameter:	102 mm
Throat diameter:	36mm mm
Number of mounting holes:	4
Depth (front to rear):	57 mm
Net weight:	2.9kg

Ordering codes:

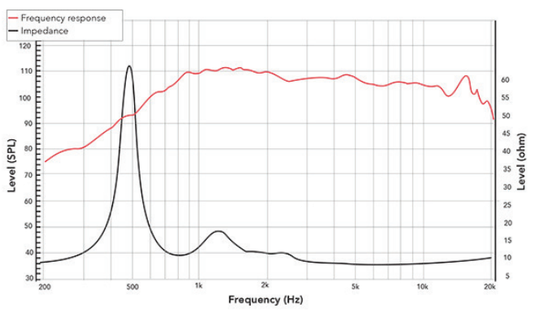
200NTIX-043

Recone kits:

RC200NTIX-043

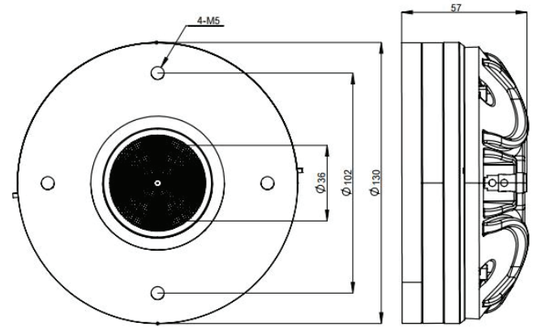
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Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



3" | 200FCD

Ferrite Compression Driver

REDCAT





Key features:

- VERY LOW RESONANT FREQUENCY
- COPPER CAP DEMODULATION RING, POWERFUL MOTOR STRUCTURE
- DESIGNED FOR LARGE SPEAKER SYSTEMS WHERE HIGH SPL IS REQUIRED

Design notes:

The 200FCD compression driver is a very high performance high frequency device ideal for large professional loudspeaker systems. The driver uses all components that were designed and manufacture with one objective in mind - be the best. The driver,Äôs phase plug is CNC machined from solid aluminum with unbeaten level of precision. The dome is carefully attached to the voice coil with our sandwich joint, improving the transfer of the high frequencies and further improving power handling and reliability of the driver.

Diaphragm Assembly

The driver features a 75mm pure titanium diaphragm. Suspension is formed from Polyimide material.

The acoustic output exits through an aluminum, radial 3 slot phase plug and a 2.0 inch throat aperture. Nominal sensitivity is 108.5 dB 1watt / 1 meter.

Specifications:

General specs	
Nominal Diameter:	3"
Rated Impedance:	8 ohm

Power handling	
AES Power:	110 watts
Program Power:	220 watts
Peak Power:	440 watts

Voice Coil	
Diameter:	3 in.
Winding wire:	CCAR
Former:	kapton

T/S Parameters	
Resonant frequency:	500 Hz
Nominal sensitivity	109 dB
Re:	5.5 ohm
Le:	n/a mH

Design details	
Dome Material:	Titanium
Surround material:	Polymer
Magnet material:	Ferrite
Overall diameter:	180 mm
Bolt circle diameter:	102 mm
Throat diameter:	48mm mm
Number of mounting holes:	4
Depth (front to rear):	91.5 mm
Net weight:	5kg

Ordering codes:

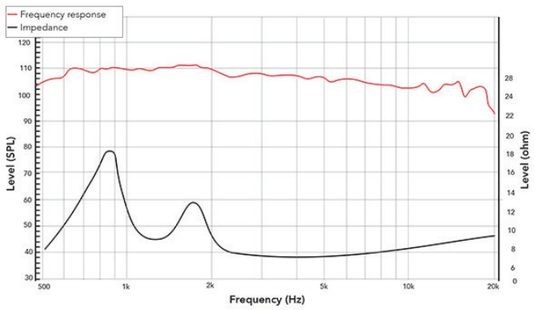
200FCDX-049

Recone kits:

RC200FCDX-049

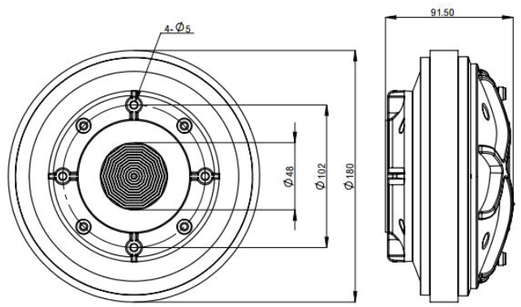
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Frequency response & Impedance



Frequency response measured on IAC baffle

2D drawing



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