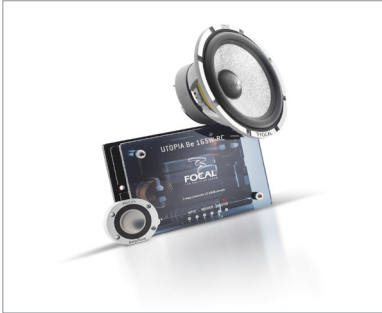


ELITE



Utopia Be

165W-RC	165mm (6,5")	2 way kit
Kit N°5	130mm (5") with crossblock	2 way kit
Kit N°6	165mm (6,5") with crossblock	2 way kit
Kit N°7	165mm (6,5") + 80mm (3") with crossblock	3 way kit
Kit N°5	130mm (5") without crossblock	2 way kit
Kit N°6	165mm (6,5") without crossblock	2 way kit
Kit N°7	165mm (6,5") + 80mm (3") without crossblock	3 way kit
13 WS	3cm (5")	Subwoofer for sealed box
21 WX	21cm (8")	Subwoofer
33 WX	33cm (13")	Subwoofer

K2 Power

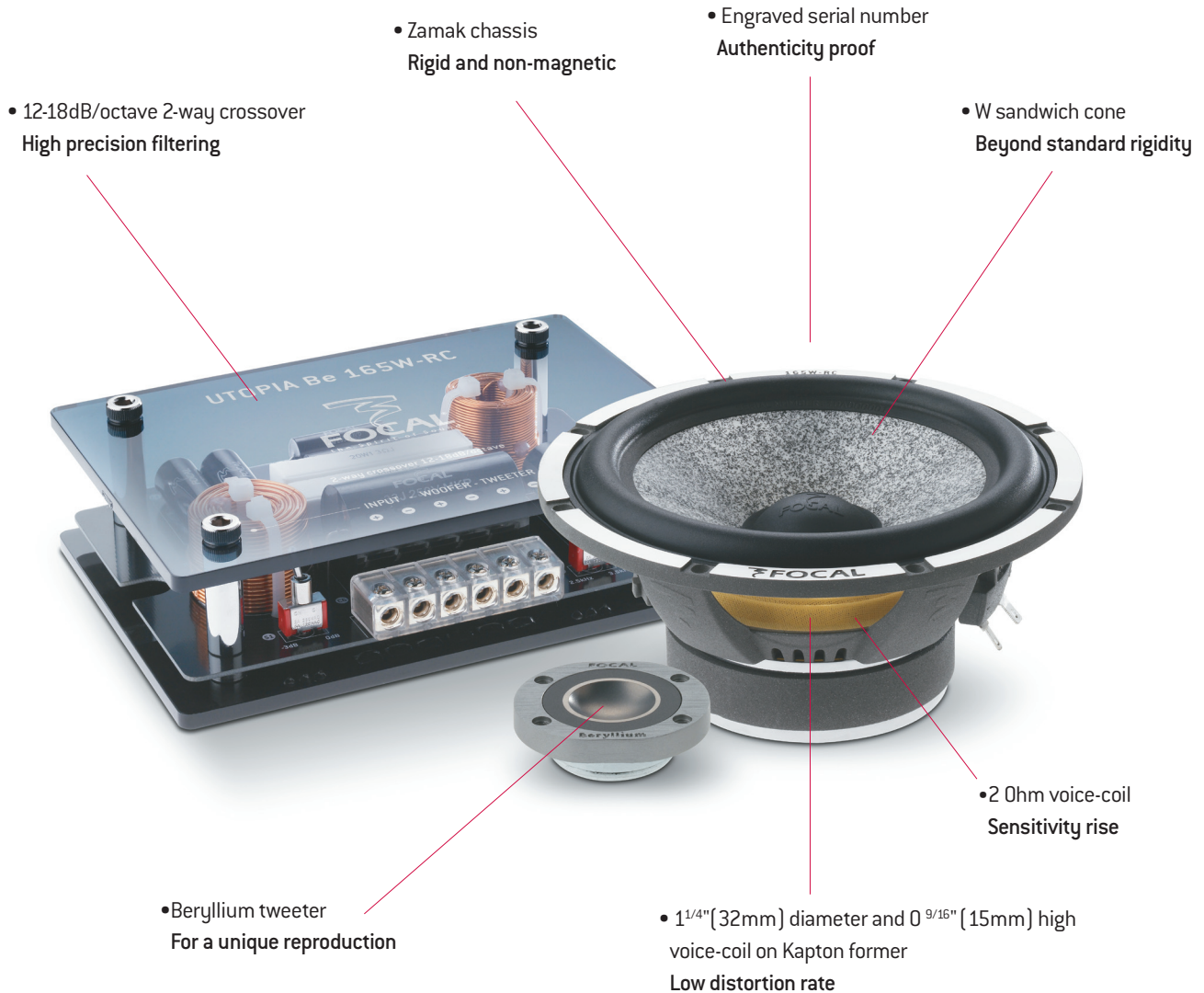
130 KRC	130mm (5")	coaxial kit
165 KRC	165mm (6,5")	coaxial kit
100 KRS	100mm (4") neodymium	2 way kit
130 KR	130mm (5")	2 way kit
165 KR	165mm (6,5")	2 way kit
165 KR2	165mm (6,5")	2 way kit (2 ohms)
165 KRX2	165mm (6,5")	2 way kit (2 ohms)
165 KRXS	165mm (6,5") neodymium	2 way kit
165 KRX3	165mm (6,5") + 80mm (3")	3 way kit
27 KX	27cm (11")	Subwoofer for sealed box
33 KX	33cm (13") double voice coil	Subwoofer for sealed box
40 KX	33cm (16") double voice coil	Subwoofer for sealed box
46 KX4	46cm (18") quadruple voice coil	Subwoofer for vented box

FPS amplifiers

FPS 1500	1 x 800W rms into 1 ohm	1 channel
FPS 2160	2 x 105W rms into 4 ohms	2 channels
FPS 3000	1 x 1500W rms into 1 ohm	1 channel
FPS 2300 RX	2 x 155W rms into 4 ohms	2 channels
FPS 4160	4 x 120W rms into 4 ohms	4 channels
High-Cap	Power supply booster	



Utopia Be 2-way kit



ADVANTAGES

- Available in 2 versions:
active: without crossover or passive: with crossover

TECHNICAL CHARACTERISTICS

2-way kit, 6 1/2" (165mm) diameter
Woofer: 6 1/2" (165mm)
"W" cone
Beryllium inverted dome tweeter
Max. power: 160W

Nom. power: 80W
Sensitivity (2.83V/1m): 93dB
Impedance: 4 Ohms
Frequency response: 60Hz - 30kHz
(Grilles supplied)

Elite 6W-RC



6¹/₂" 165 W-RC woofer



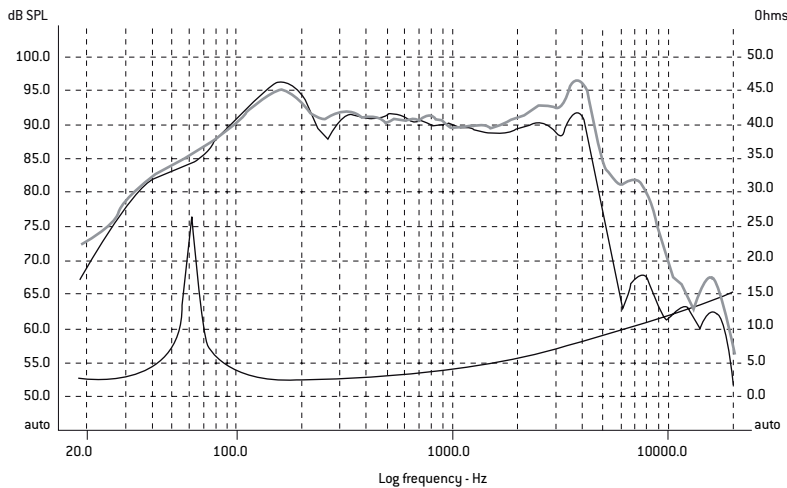
- High power handling
- Aluminum basket
- W composite sandwich cone

SPECIFICATIONS

Nominal power	80W
Maximum power	160W
Sensitivity	93dB
Cone	W
Surround	Butyl
Nom. impedance	2Ohm
DC resistance	1.7Ohm
VC diameter	32mm
VC height	15mm
Former	Kapton®
Layers	2
Wire	Copper
Inductance	0.11 mH
Xmax	5.5
Magnet dxh	90x17
Magnet weight	1550g
Flux density	1 T
Gap height	6 mm
Net weight	1800 g

FREQUENCY RESPONSE / IMPEDANCE

On axis, 0° and 30° off axis frequency response

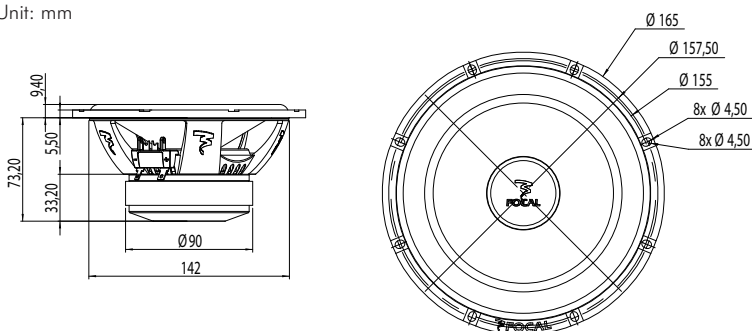


PARAMETERS

Fs	60,85 Hz
Vas	3.68 liters
Qts	0.56
Qes	0.6
Qms	10.43
Re	1.7Ohm
Sd	132.73cm ²
Cas	6.89E-08m ⁵ /N
Mas	99,27Kg/m ⁴
Ras	3639.09Ohm, ac
Cms	3.91E-04m/N
Mms	17.49g
Rms	0.641Kg/s
Ces	923.13mF
Les	7.41mH
Res	29.55Ohm
BI	4.35N/A
SPL	87.45 dB/W/m

MECHANICAL DRAWING

Unit: mm



Load	V (l)	F-3 (Hz)
Sealed	30	75

Elite TB 872



Utopia Be® tweeter

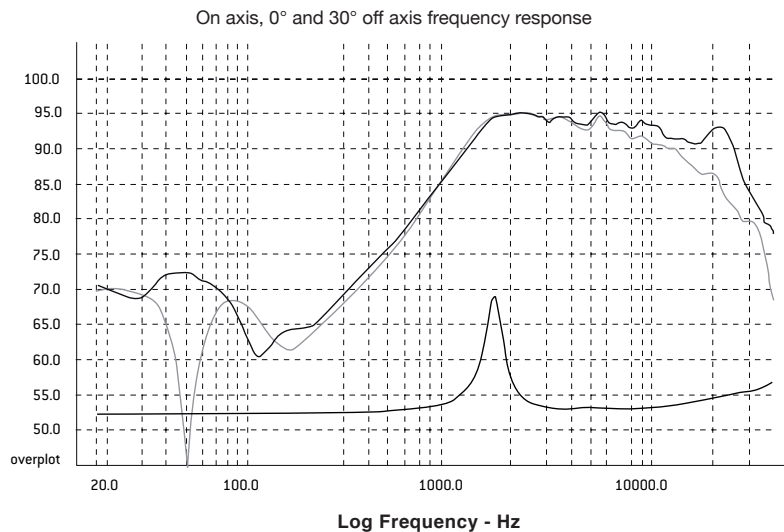


- Pure Beryllium inverted dome
- High power Neodymium ring magnet
- Thick cast zinc alloy mounting

SPECIFICATIONS

Nominal power	20W
Maximum power	200 W
Sensitivity	94.1 dB
Cone	Beryllium
Surround	Poron®
Nom. impedance	8Ohm
DC resistance	6Ohm
VC diameter	20 mm
VC height	1.4mm
Former	Aluminum
Layers	2
Wire	Aluminum
Inductance	-
Xmax	-
Magnet dxh	Neodymium
Magnet weight	-
Flux density	2.1 T
Gap height	2.5 mm
Net weight	-

FREQUENCY RESPONSE / IMPEDANCE

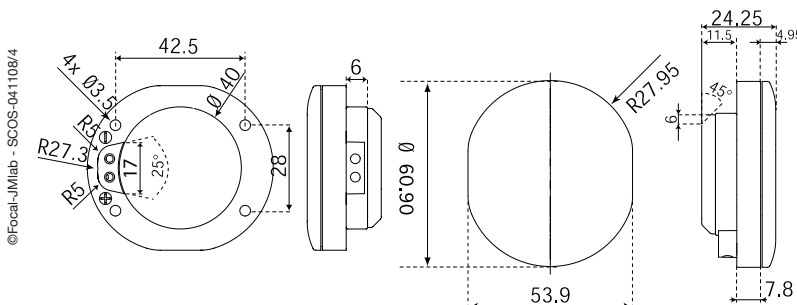


PARAMETERS

Fs	1294 Hz
Vas	-
Qts	-
Qes	-
Qms	-
Re	6Ohm
Sd	7.07cm ²
Cas	-
Mas	-
Ras	-
Cms	-
Mms	-
Rms	-
Ces	-
Les	-
Res	-
Bl	-
SPL	93 dB/W/m

MECHANICAL DRAWING

Unit: mm



N°.5

Elegance in high technology: live a unique experience



Features

- 5" 2-way reference system
- Pure Beryllium inverted dome tweeter
- W sandwich composite woofer cone
- Crossblock parametric crossover
- Compact woofer with damping
- Kick panel mounting
- Ready for biwiring

Technical data

Type	2 way, 5" (13cm) "W" woofer, 1" (2.5cm) Beryllium tweeter
Frequency response	75Hz to 40kHz
Sensitivity (2.83V/1M)	89.5dB
Power handling	75W
Nominal impedance	4 ohms
Voice-coil diameter	1 ¹ / ₄ " (32mm)
Voice-coil height	1/2" (13mm)
Xmax	1/8" (3.5mm)
Crossblock dim. (LxHxP)	13"x2 ¹ / ₄ "x10 ³ / ₈ " (332x58x263mm)

*This system is also available as N°5 Active version (without Crossblock filter).



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Exact product details likely to change. Focal-JMLab reserve the right to modify the specification, technology and price of the products without notice. Items may vary from those shown in the photographs. - © FocalJMLab - SCFR 041123/1

5 W2 Be

5" Utopia Be® woofer



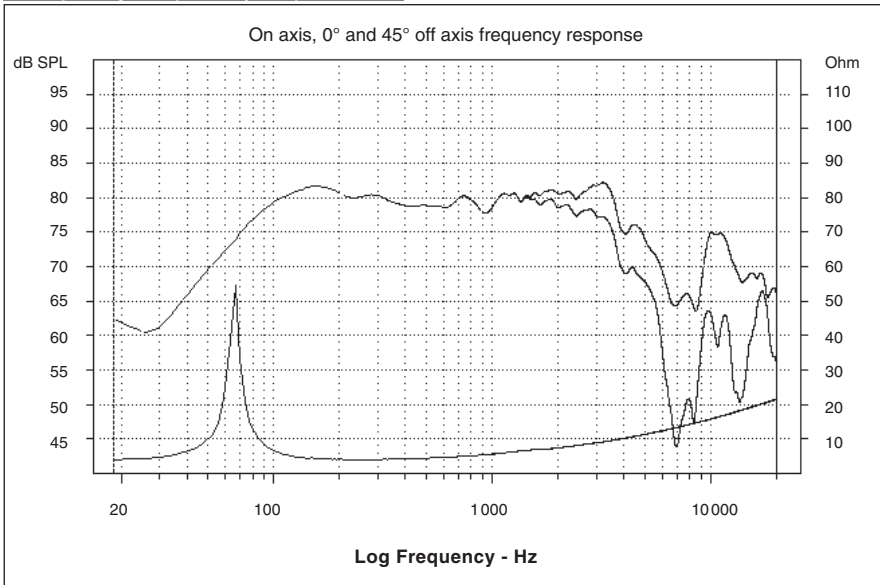
- W cone
- Aluminum focus phase plug
- Neodymium magnet
- Zamak basket



Specifications

Nominal power	75 W	
Maximum power	150 W	
Sensitivity (2.83V/m)	89.5 dB	
Cone	W	
Surround	Rubber	
Nom. impedance	4 ohm	
DC resistance	3.48 ohm	
VC diameter	32 mm	1.26 in
VC height	13 mm	0.5 in
Former	Black Kapton®	
Layers	2	
Wire	Copper	
Inductance	0.38 mH	
Xmax	3.5 mm	0.14 in
Magnet	Neodymium	
Flux density	0.8 T	
Gap height	6 mm	0.24 in
Net weight	0.65 kg	1.43 lbs

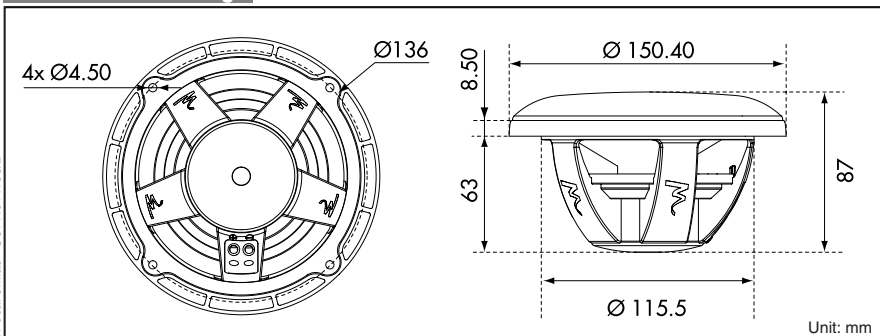
Frequency Response / Impedance



Parameters

Fs	67.47 Hz
Vas	5.23 l
Qts	0.6
Qes	0.64
Qms	9.37
Re	3.48 ohm
Sd	86.59 cm ²
Cas	3.73E-08 m ⁵ /N
Mas	149.38 kg/m ⁴
Ras	6758.22 ohm.ac
Cms	4.97E-04 m/N
Mms	11.2 g
Rms	0.507 kg/s
Ces	433.82 mF
Les	12.83 mH
Res	50.95 ohm
BI	5.08 N/A
SPL	85.84 dB/W/m

Mechanical Drawing



Focal® is a trademark of Focal-JMLab®

N°.6

The right balance



Features

- 6" 2-way reference system
- Pure Beryllium inverted dome tweeter
- W sandwich composite woofer cone
- Crossblock parametric crossover
- Compact woofer with damping
- Ready for biwiring

Technical data

Type	2 way, 6 ¹ / ₂ " (16.5cm) "W" woofer, 1" (2.5cm) Beryllium tweeter
Frequency response	66Hz to 40kHz
Sensitivity (2.83V/1M)	91.5dB
Power handling	100W
Nominal impedance	4 ohms
Voice-coil diameter	1 ¹ / ₂ " (40mm)
Voice-coil height	5/8" (15mm)
Xmax	3/16" (4.5mm)
Crossblock dim. (LxHxP)	13"x2 ¹ / ₄ "x10 ³ / ₈ " (332x58x263mm)

**This system is also available as N°6 Active version (without Crossblock filter).*



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6 W2 Be

6.5" Utopia Be® woofer



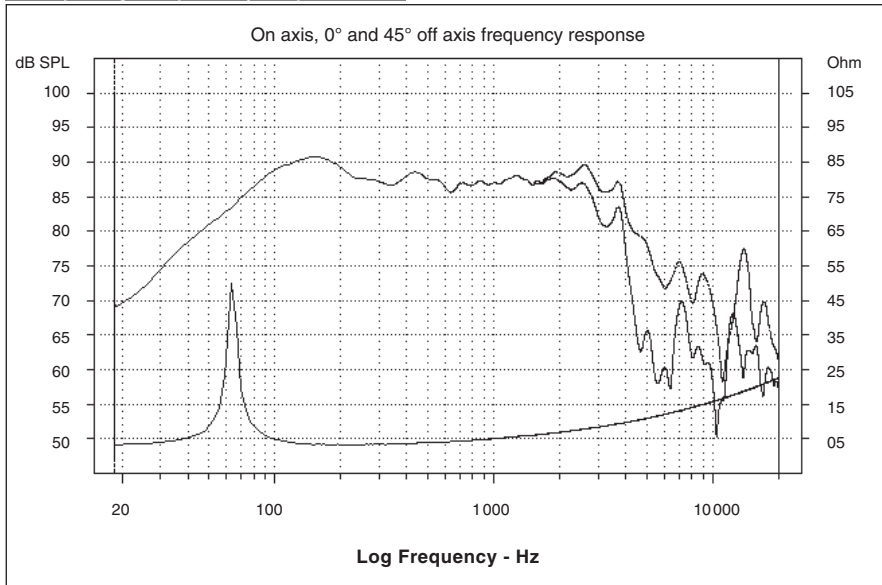
- W cone
- Aluminum focus phase plug
- Neodymium magnet
- Zamak basket



Specifications

Nominal power	100 W	
Maximum power	200 W	
Sensitivity (2.83V/m)	91.5 dB	
Cone	W	
Surround	Rubber	
Nom. impedance	4 ohm	
DC resistance	2.91 ohm	
VC diameter	40 mm	1.57 in
VC height	15 mm	0.6 in
Former	Black Kapton®	
Layers	2	
Wire	Copper	
Inductance	0.42 mH	
Xmax	4.5 mm	0.18 in
Magnet	Neodymium	
Flux density	0.8 T	
Gap height	6 mm	0.24 in
Net weight	0.85 kg	1.9 lbs

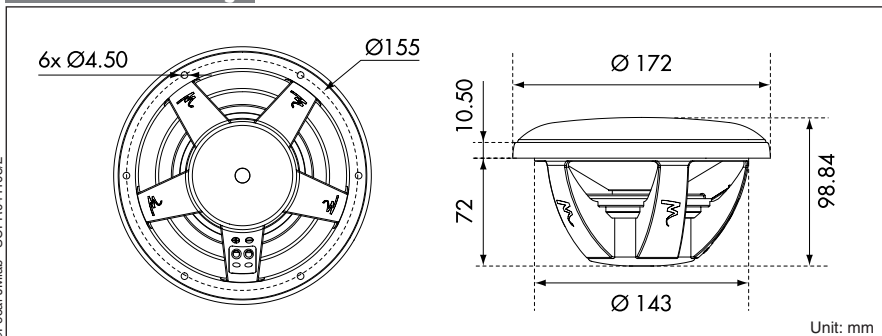
Frequency Response / Impedance



Parameters

Fs	64.39 Hz
Vas	9.19 l
Qts	0.75
Qes	0.79
Qms	14.73
Re	2.91 ohm
Sd	132.73 cm ²
Cas	6.54E-08 m ⁵ /N
Mas	93.37 kg/m ⁴
Ras	2564.53 ohm.ac
Cms	3.71E-04 m/N
Mms	16.45 g
Rms	0.452 kg/s
Ces	671.02 mF
Les	9.1 mH
Res	54.26 ohm
BI	4.95 N/A
SPL	86.76 dB/W/m

Mechanical Drawing



Focal® is a trademark of Focal-JMLab®

N°.7

The experts formula



Features

- 6" 3-way reference system
- Pure Beryllium inverted dome tweeter
- W sandwich composite woofer cone
- W sandwich composite midrange cone
- Crossblock N°7 crossover
- Compact woofer with damping
- Kick panel mounting for midrange
- Ready for biwiring

Technical data

Type	3 way, 6 ^{1/2} " (16.5cm) "W" woofer, 3" (8cm) "W" midrange, 1" (2.5cm) Beryllium tweeter
Frequency response	55Hz to 40kHz
Sensitivity (2.83V/1M)	89dB
Power handling	100W
Nominal impedance	4 ohms
Voice-coil diameter	1 ^{1/2} " (40mm) et 1" (25mm)
Voice-coil height	7/8" (17mm) et 5/16 (8mm)
Xmax	1/4" (5.5mm)
Crossblock dim. (LxHxP)	13"x2 ^{1/4} "x10 ^{3/8} " (332x58x263mm)

*This system is also available as N°7 Active version (without Crossblock filter).



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TBe

Utopia Be® tweeter



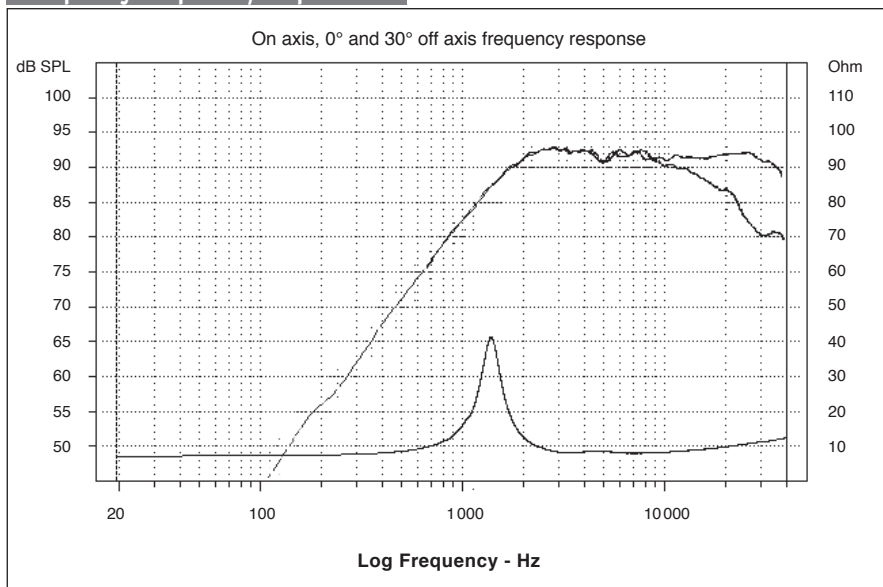
- Pure Beryllium inverted dome
- High power Neodymium ring magnet
- Thick cast zinc alloy mounting



Specifications

Nominal power	15 W (without filtering)	
Maximum power	200 W (with filtering)	
Sensitivity (2.83V/m)	94.1 dB	
Cone	Beryllium	
Surround	Foam	
Nom. impedance	8 ohm	
DC resistance	6 ohm	
VC diameter	20 mm	0.78 in
Former	Aluminum	
Layers	2	
Wire	Aluminum	
Inductance	0.06 mH	
Xmax	-	
Magnet	Neodymium	
Flux density	2.1 T	
Gap height	2.5 mm	0.1 in
Net weight	0.2 kg	0.44 lb

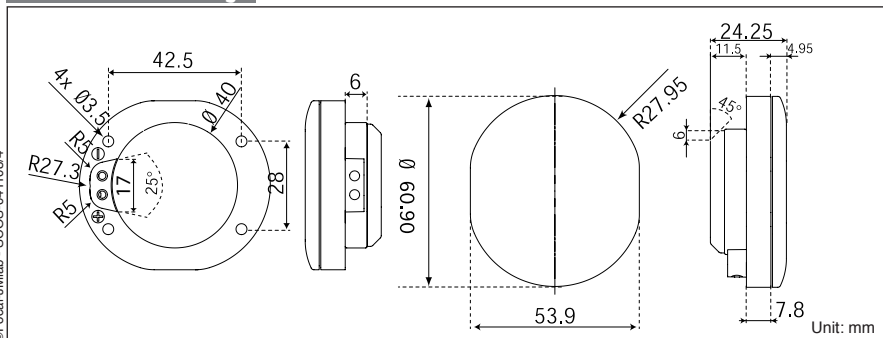
Frequency Response / Impedance



Parameters

Fs	1294 Hz
Vas	-
Qts	-
Qes	-
Qms	-
Re	6 ohm
Sd	4.9 cm ²
Cas	-
Mas	-
Ras	-
Cms	-
Mms	-
Rms	-
Ces	-
Les	-
Res	42 ohm
BI	-
SPL	93 dB/W/m

Mechanical Drawing



Focal® is a trademark of Focal-JMLab®

3 W2 Be

3" Utopia Be® midrange



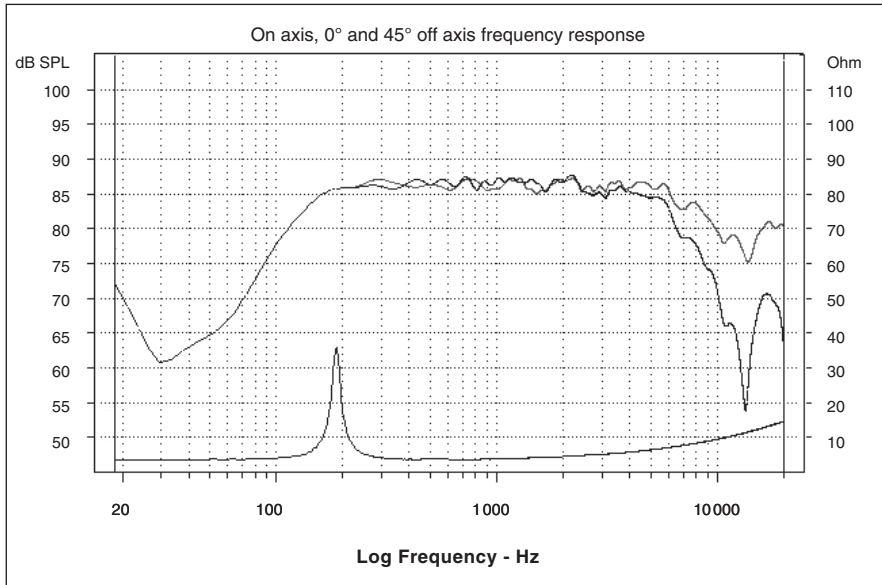
- W cone
- Neodymium magnet
- Zamak basket



Specifications

Nominal power	50 W	
Maximum power	100 W	
Sensitivity (2.83V/m)	88 dB	
Cone	W	
Surround	Rubber	
Nom. impedance	4 ohm	
DC resistance	3.37 ohm	
VC diameter	25 mm	1 in
VC height	8.5 mm	
Former	Kapton®	
Layers	2	
Wire	Aluminum	
Inductance	0.11 mH	
Xmax	2 mm	0.08 in
Magnet	Neodymium	
Flux density	1.2 T	
Gap height	4 mm	0.16 in
Net weight	0.18 kg	0.4 lb

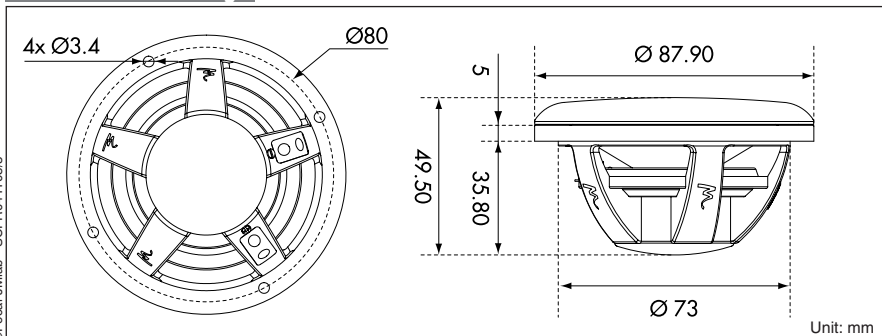
Frequency Response / Impedance



Parameters

Fs	188.74 Hz
Vas	0.31 l
Qts	0.729
Qes	0.770
Qms	13.790
Re	3.37 ohm
Sd	30.19 cm ²
Cas	2.18E-09 m ⁵ /N
Mas	325.84 kg/m ⁴
Ras	28021.38 ohm.ac
Cms	2.39E-04 m/N
Mms	2.97 g
Rms	0.255 kg/s
Ces	192.67 mF
Les	3.69 mH
Res	60.35 ohm
BI	3.93 N/A
SPL	86.12 dB/W/m

Mechanical Drawing



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6 W3 Be

6.5" Utopia Be® woofer



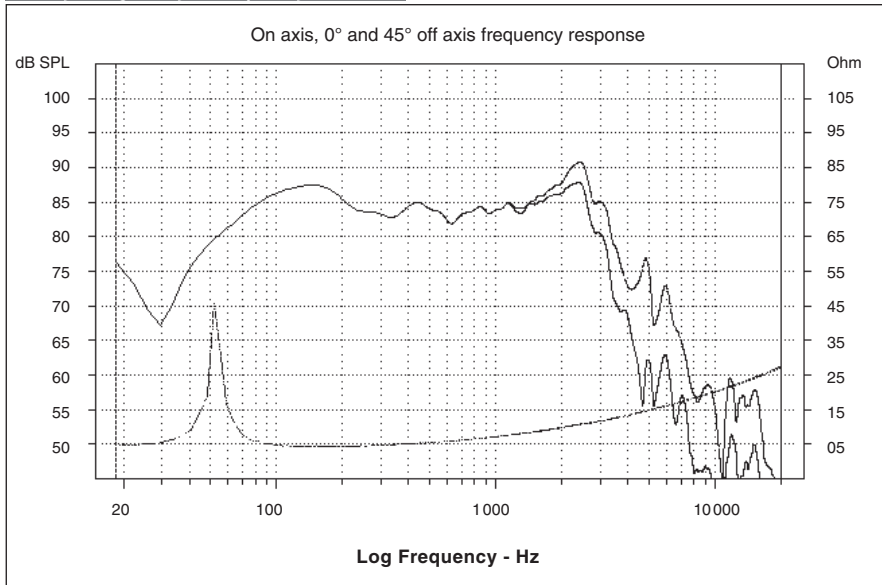
- W cone
- Neodymium magnet
- Zamak basket



Specifications

Nominal power	100 W	
Maximum power	200 W	
Sensitivity (2.83V/m)	89 dB	
Cone	W	
Surround	Rubber	
Nom. impedance	4 ohm	
DC resistance	3.22 ohm	
VC diameter	40 mm	1.57 in
VC height	17 mm	0.7 in
Former	Kapton®	
Layers	2	
Wire	Copper	
Inductance	0.69 mH	
Xmax	5.5 mm	
Magnet	Neodymium	
Flux density	0.8 T	
Gap height	6 mm	0.25 in
Net weight	0.9 kg	2 lbs

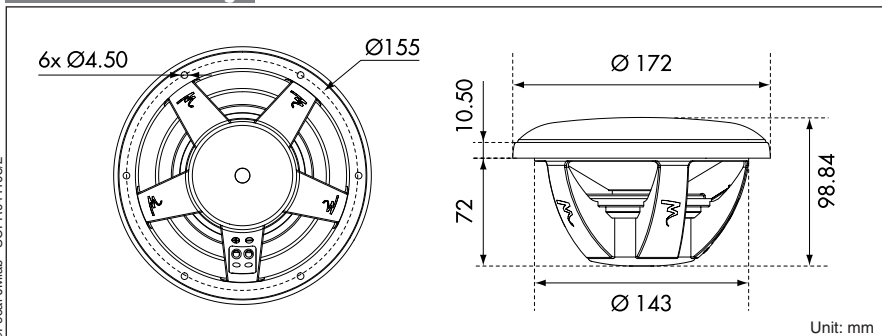
Frequency Response / Impedance



Parameters

Fs	55.28 Hz
Vas	9.92 l
Qts	0.765
Qes	0.82
Qms	11.42
Re	3.22 ohm
Sd	132.73 cm ²
Cas	7.07E-08 m ⁵ /N
Mas	117.32 kg/m ⁴
Ras	3568.36 ohm.ac
Cms	4.01E-04 m/N
Mms	20.67 g
Rms	0.629 kg/s
Ces	733.18 mF
Les	11.31 mH
Res	44.84 ohm
BI	5.31 N/A
SPL	84.95 dB/W/m

Mechanical Drawing



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CROSS UNIQ N°7

N°7 Utopia Be kits crossover

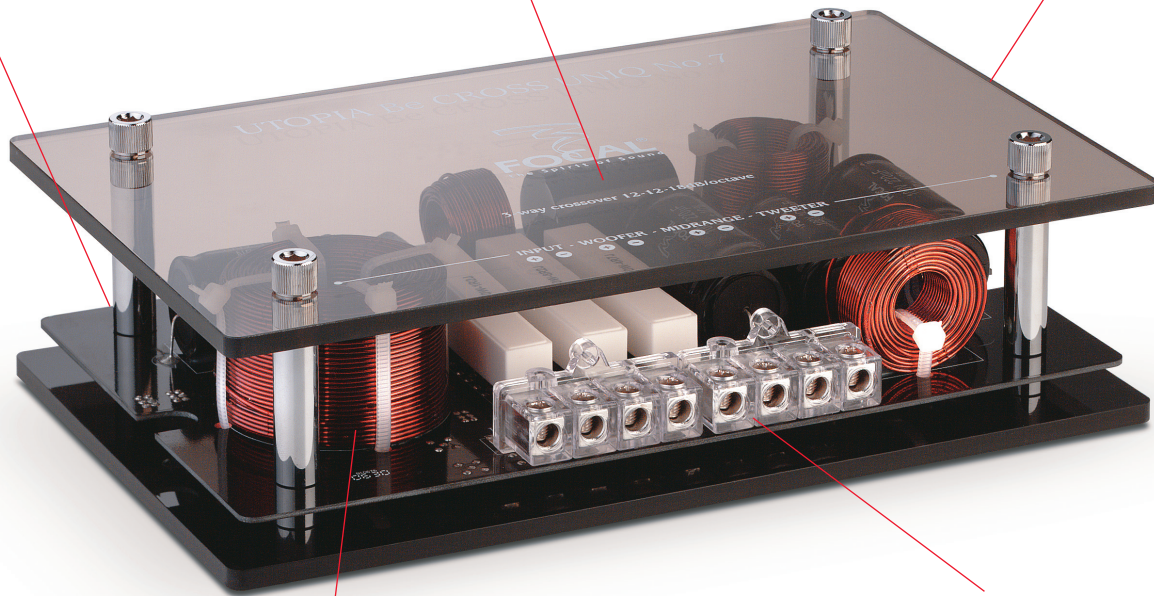
Tweeter level setting

0/+3dB setting to adapt the tweeter level to the vehicle

MKP capacitors

High sound quality

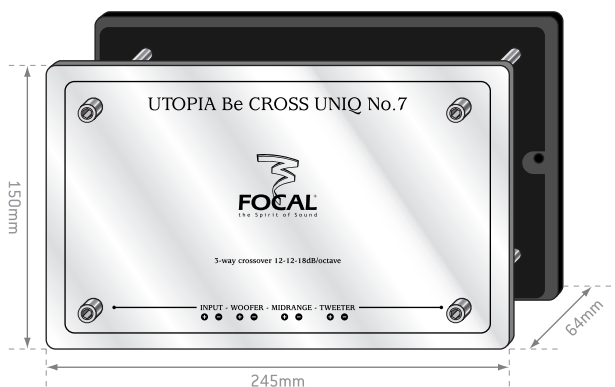
12-12-18dB/octave 3-way crossover
High precision filtering



Heavy gauge air core inductors

Very low distortion, no interference

Important cross section speaker terminals
Optimum circulation of the signal



SPECIFICATIONS

12-12-18dB/octave **3-way crossover**
220Hz and 7,5kHz **cut-off frequency**
Adjustable tweeter level (0/+3dB)

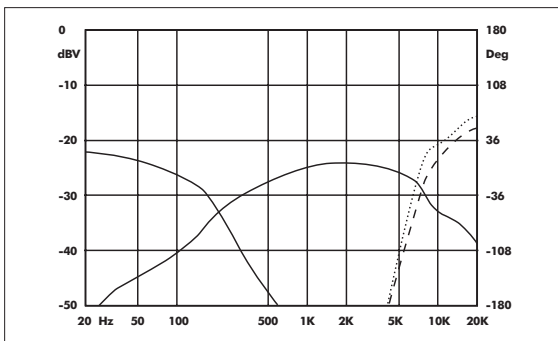
Specially designed for a specific location of the N°7 Utopia Be kits transducers (please refer to the user's manual or to the technical sheet)



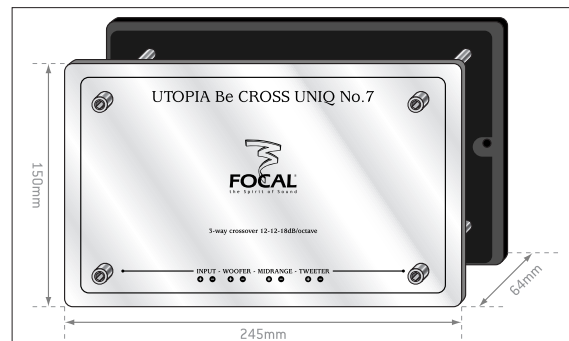
CROSS UNIQ N°7

N°7 Utopia Be kit crossover

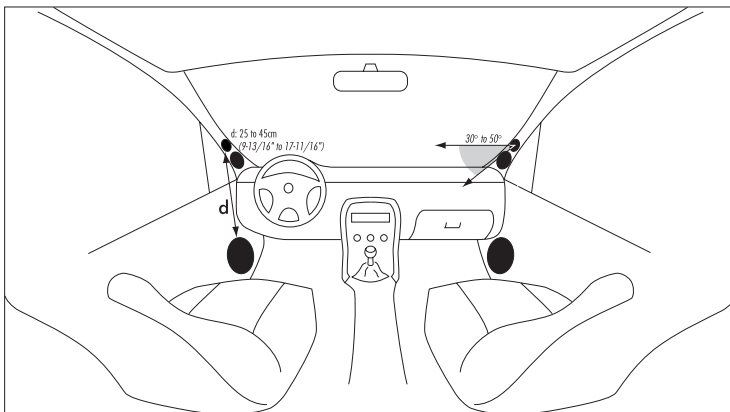
Electrical frequency response curve



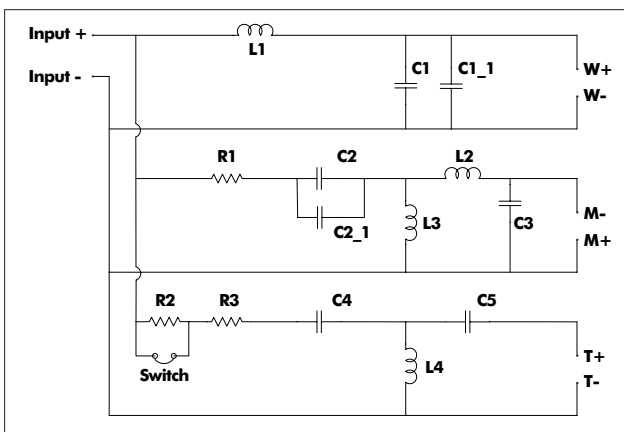
Mechanical Drawing



Optimal positioning of the transducers



Block diagram



- R1: 1.2 Ohms / 20 Watts, 5% ceramic
- R2: 8.2 Ohms / 20 Watts, 5% ceramic
- R3: 4.7 Ohms / 20 Watts, 5% ceramic
- C1: 220 μ F / 100V, 10% non polar capacitor (black color)
- C1_1: 100 μ F / 100V, 10% non polar capacitor (black color)
- C2: 220 μ F / 100V, 10% non polar capacitor (black color)
- C2_1: 100 μ F / 100V, 10% non polar capacitor (black color)
- C3: 8.2 μ F / 250V, 5% polypropylene capacitor (black color)
- C4: 1 μ F / 250V, 5% polypropylene capacitor (black color)
- C5: 1 μ F / 250V, 5% polypropylene capacitor (black color)
- L1: 4mH air core inductor wire \varnothing 1.00mm
- L2: 0.27mH air core inductor wire \varnothing 0.60mm
- L3: 1mH air core inductor wire \varnothing 0.85mm
- L4: 0.16mH air core inductor wire \varnothing 0.60mm
- S1: switch 2 positions

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13 WS

Condensed bass for better performance



Features

- 5" compact reference subwoofer
- For superior quality bass in 50 to 100Hz range
- Front mounting in vehicle
- For small sealed box (3 to 7 liter)
- W sandwich composite woofer cone
- Damping basket
- Ultra high powered Neodymium magnet
- High power handling

Technical data

Type	5" (13cm) "W" subwoofer
Frequency response (+/- 3dB)	36Hz
Sensitivity (2.83V/1M)	88dB
Power handling	75W/150W
Nominal impedance	4 ohms
Voice-coil diameter	1 1/4" (32mm)
Voice-coil height	7/8" (22mm)
Xmax	5/16" (8mm)



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13 WS Be

5" Utopia Be® subwoofer



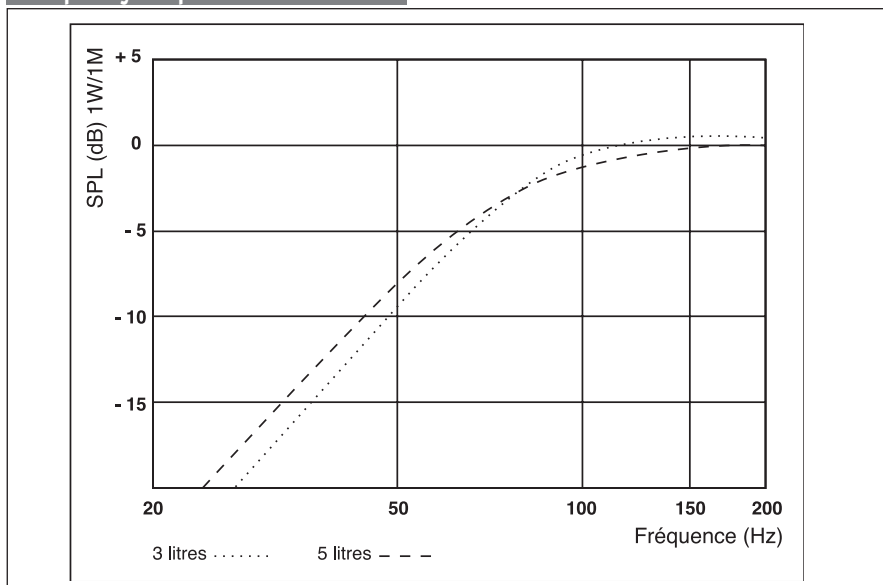
- Compact subwoofer
- W cone
- Neodymium magnet
- Zamak basket
- For small closed box



Specifications

Nominal power	75 W	
Maximum power	150 W	
Sensitivity (2.83V/m)	87.8 dB	
Cone	W	
Surround	Rubber	
Nom. impedance	4 ohm	
DC resistance	3.09 ohm	
VC diameter	32 mm	1.26 in
VC height	22 mm	0.86 in
Former	Kapton®	
Layers	2	
Wire	Copper	
Inductance	0.6 mH	
Xmax	8 mm	0.31 in
Magnet	Neodymium	
Flux density	1 T	
Gap height	6 mm	0.24 in
Net weight	0.7 kg	1.54 lbs

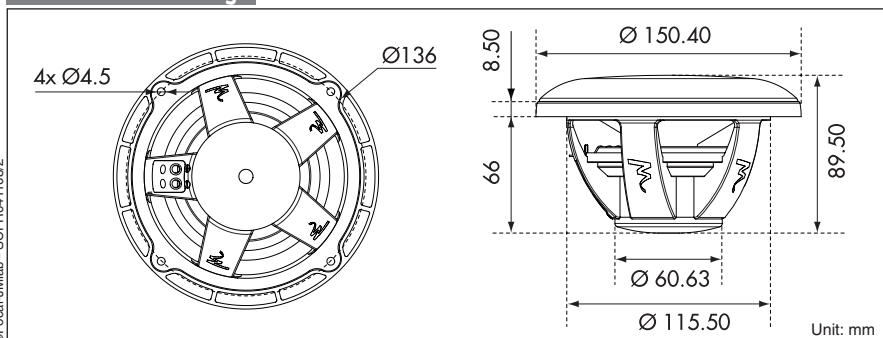
Frequency Response



Parameters

Fs	53.43 Hz
Vas	5.24 l
Qts	0.495
Qes	0.520
Qms	10.09
Re	3.09 ohm
Sd	86.59 cm ²
Cas	3.73E-08 m ⁵ /N
Mas	237.93 kg/m ⁴
Ras	7916.47 ohm.ac
Cms	4.97E-04 m/N
Mms	17.84 g
Rms	0.594 kg/s
Ces	501.28 mF
Les	17.70 mH
Res	59.96 ohm
BI	5.97 N/A
SPL	83.71 dB/W/m

Mechanical Drawing



Suggested application

Load	V (l)	Fb (Hz)	F-3 (Hz)	Ql
Sealed	5	-	96	0.707
Sealed	3	-	78	0.82

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21 WX

Bass for Beryllium



Features

- 8" reference subwoofer
- W sandwich composite woofer cone
- For small sealed box (15 to 30 liters)
- Multiferrite magnet
- Very high power handling

Technical data

Type	8" (21 cm) "W" subwoofer
Frequency response (+/- 3dB)	29Hz
Sensitivity (2.83V/1M)	86.5dB
Power handling	250W/500W
Nominal impedance	4 ohms
Voice-coil diameter	2" (50mm)
Voice-coil height	1" (25mm)
Xmax	1/3" (8.5mm)



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21 WX Be

8" Utopia Be® subwoofer



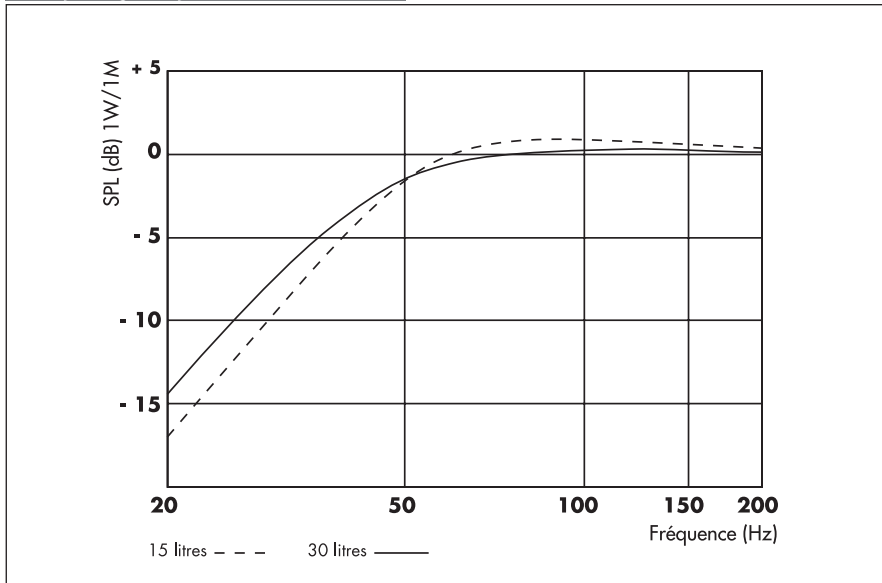
- Multiferrite magnet
- W cone
- For compact closed box
- High power handling



Specifications

Nominal power	250 W	
Maximum power	500 W	
Sensitivity (2.83V/m)	86.5 dB	
Cone	W	
Surround	Rubber	
Nom. impedance	4 ohm	
DC resistance	3.4 ohm	
VC diameter	50 mm	2 in
VC height	25 mm	1 in
Former	Aluminum	
Layers	2	
Wire	Copper	
Inductance	1.13 mH	
Xmax	8.5 mm	0.33 in
Magnet (12 units)	15x45 mm	0.6 x 1.8 in
Magnet weight	1.3 kg	2.9 lbs
Flux density	0.85 T	
Gap height	8 mm	0.31 in
Net weight	4 kg	8.8 lbs

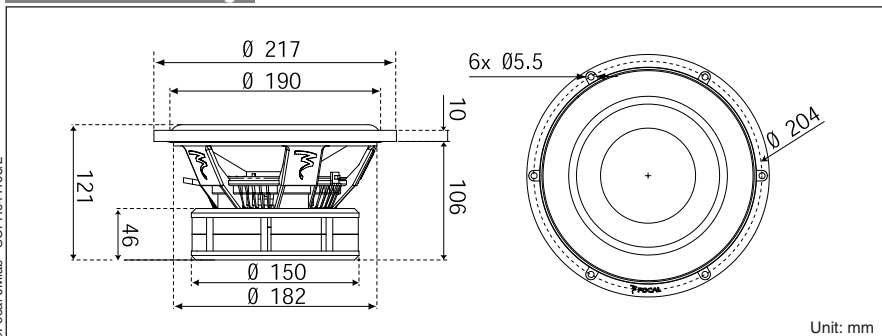
Frequency Response



Parameters

Fs	36.63 Hz
Vas	18.8 l
Qts	0.6
Qes	0.77
Qms	2.81
Re	3.4 ohm
Sd	208.67 cm ²
Cas	1.34E-07 m ⁵ /N
Mas	141.01 kg/m ⁴
Ras	11549.11 ohm.ac
Cms	3.07E-04 m/N
Mms	61.4 g
Rms	5.029 kg/s
Ces	984 mF
Les	19.19 mH
Res	12.41 ohm
BI	7.9 N/A
SPL	82.63 dB/W/m

Mechanical Drawing



Suggested application

Load	V (l)	Fb (Hz)	F-3 (Hz)	Ql
Sealed	30	-	43	0.77
Sealed	15	-	45	0.907

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33WX

Utopia Be



Technical characteristics :

Type : 33cm Subwoofer

77mm diameter single voice coil

Max. power : 800W

Nom. power : 400W

Sensitivity (2,83V/1m) : 92dB

Frequency response : 27 Hz - 350 Hz

It makes the difference :

- "W" cone
- Multi-ferrite magnet
- Bass depth
- High power handling



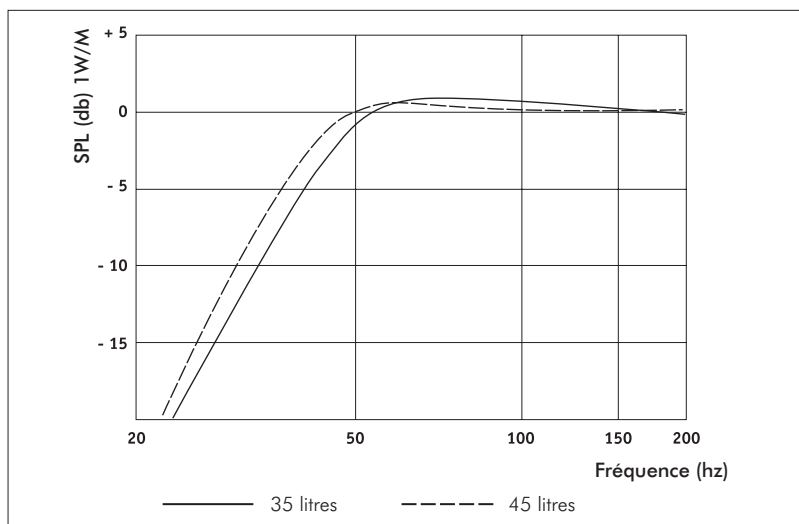
33 WX

13" Utopia Be® Subwoofer

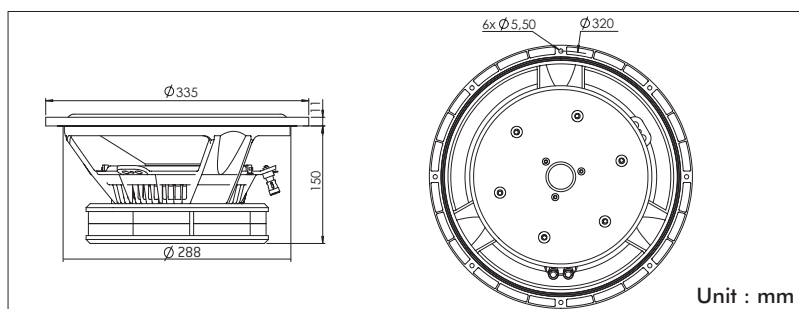
- Multiferrite magnet
- W cone
- For small and medium size
- High power handling



Frequency Reponse



Mechanical Drawing



Specifications

Nominal power	400W	
Maximum power	800W	
Sensitivity	92 dB	
Cone	W	
Surround	Rubber	
Nom. impedance	4 Ohms	
DC resistance	3.5 Ohms	
VC diameter	77 mm	3.08 in
VC height	28 mm	1.12 in
Former	Aluminum	
Layers	2	
Wire	Copper	
Inductance	2.05 mH	
Xmax	9 mm	0.36 in
Magnet (12 units)	15 x 72 mm	0.60x2.88 in
Magnet weight	10.3 kg	22.98 lbs
Flux density	0.8 T	
Gap height	10 mm	0,40 in
Net weight	12.45 kg	27.77 lbs

Parameters

Fs	32.52 Hz
Vas	73.06 l
Qts	0.349
Qes	0.360
Qms	11.75
Re	3.32 ohms
Sd	551.55 cm ²
Cas	5.20E-07 m ⁵ /N
Mas	46.04 Kg/m ⁴
Ras	800.71 ohms.ac
Cms	1.71E-04 m/N
Mms	140.07 g
Rms	2.436 kg/s
Ces	530.68 mF
Les	45.13 mH
Res	108.36 ohms
BI	16.25 N/A
SPL	90.28 dB/W/m

Suggested application

Load	V (l)	F-3 (Hz)	FB (Hz)	Évent (d x l)
Vented	35 litres	43	42	10 x 30 cm
Vented	45 litres	40	40	10 x 25 cm



130 KRC

K2 Power 2 way coaxial kit

- K2 composite sandwich cone
- Impact and details**

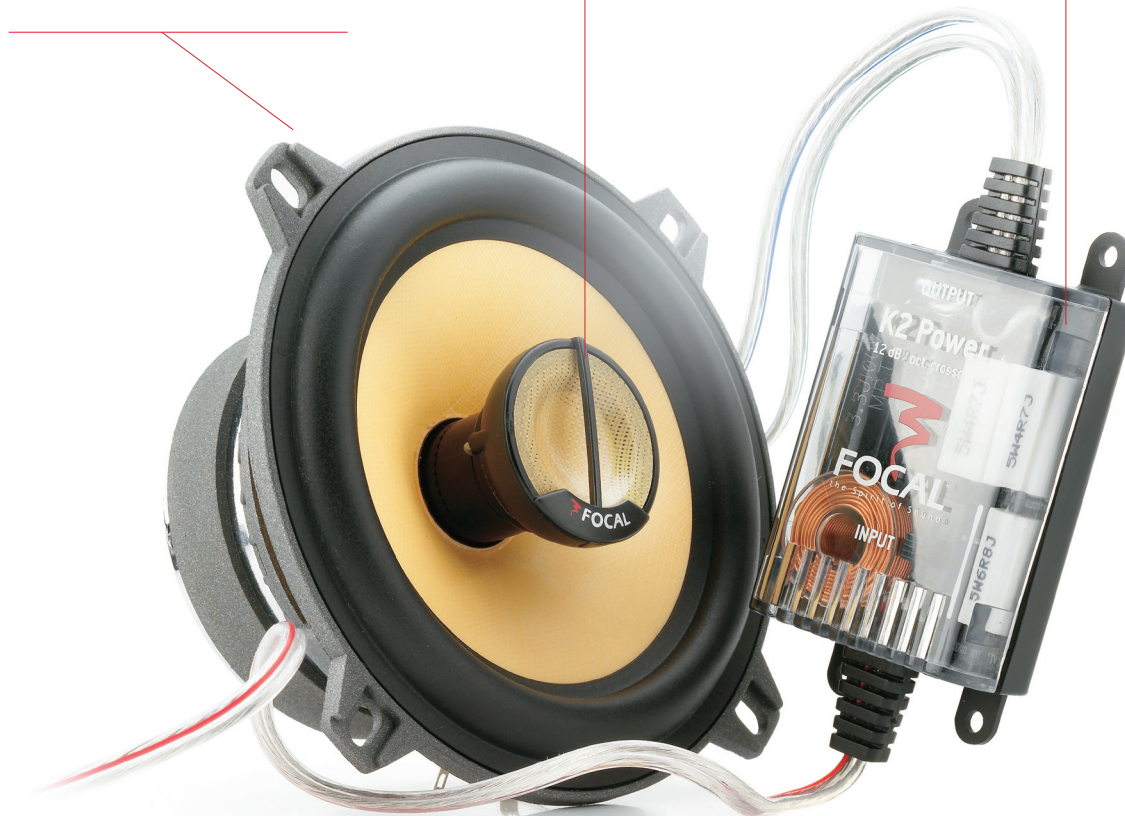
- Zamak chassis
- Rigid and non-magnetic**

- Butyl surround
- Excellent reliability**

- Serial number engraved in the block
- Authenticity certificate**

- Tweeter double orientation
- Sound image accuracy**
- Woven aramid fiber inverted dome tweeter
- Smoothness and accuracy**

- Polypropylene capacitor
- Natural treble reproduction**
- Adjustable tweeter level on 3 levels
- Installation flexibility**
- Air core inductor
- Resistant to parasites, maximum dynamics**



Technical characteristics :

Woofer: 5 1/8" [130mm]

Voice coil: 1" [25mm]

Magnet: 3 1/3" [85mm]

Aramid fiber inverted dome

Separate crossover: 12dB/oct [5.3kHz]

Adjustable tweeter level: (0, -3, -6dB)

Max. power: 140W

Nom. power: 70W

Sensitivity (2.83V/1m): 92dB

Frequency response: 70Hz – 20kHz

Accessories: grilles supplied

It makes the difference:

- High-end coaxial kit
- Aramid fiber woofer and tweeter
- Tweeter double orientation



130 KRC

5" K2 Power 2 way coaxial kit

- Adjustable Tweeter
- Zamac basket
- K2 power composite sandwich cone



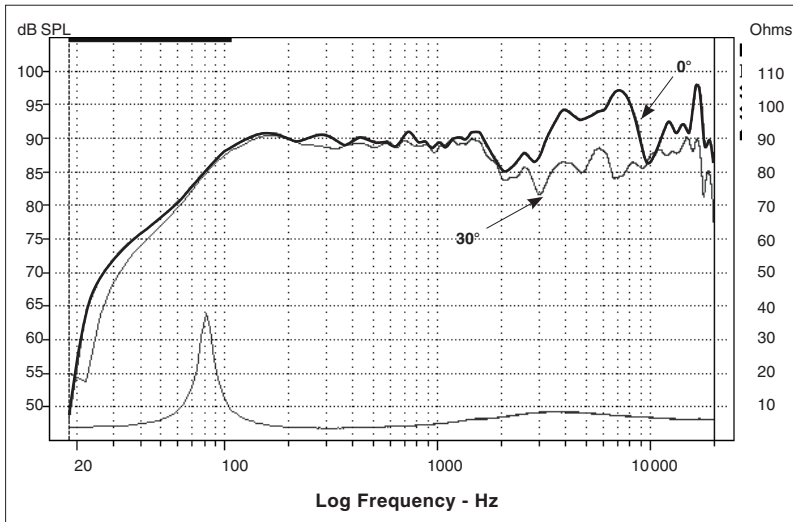
Specifications

Nominal power	70W	
Maximum power	140W	
Sensitivity	92dB	
Cone	CKMV	
Surround	Butyl	
Nom. impedance	4 ohms	
DC resistance	3.19 ohms	
VC diameter	25mm	1 in
VC height	10mm	7/16 in
Former	Kapton®	
Layers	2	
Wire	Copper	
Inductance	0,2mh	
Xmax	2mm	1/16 in
Magnet d x h	85 x 17mm	3-1/3x9/16 in
Magnet weight	0.4kg	0,88 lb
Flux density	1T	
Gap height	4mm	3/16 in
Net weight	1.1kg	2,43 lb

Parameters

Fs	85.04Hz
Vas	4.79l
Qts	0.649
Qes	0.7
Qms	8.83
Re	3.19 ohms
Sd	86.59cm ²
Cas	3.41E-08 m5/N
Mas	102.7kg/m4
Ras	6214.36 ohms.ac
Cms	4.55E-04 m/N
Mms	7.7g
Rms	0.466kg/s
Ces	410.68mF
Les	8.53mH
Res	40.24 ohms
BI	4.33 N/A
SPL	88dB/W/m

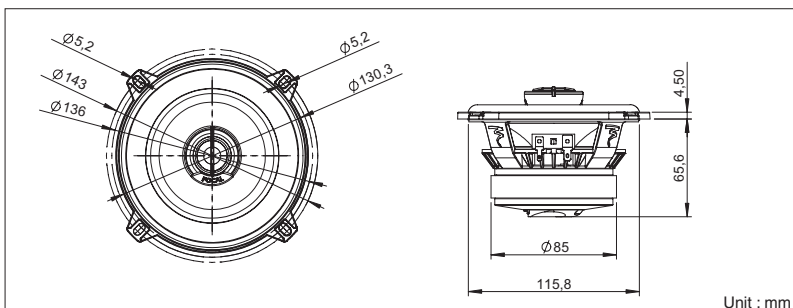
Frequency Response / Impedance



Suggested application

Load	V (l)	Fb (Hz)	F-3 (Hz)	Ql
Sealed	30	-	92,7	7

Mechanical Drawing



165 KRC

K2 Power 2 way coaxial kit

- K2 composite sandwich cone
- Impact and details**

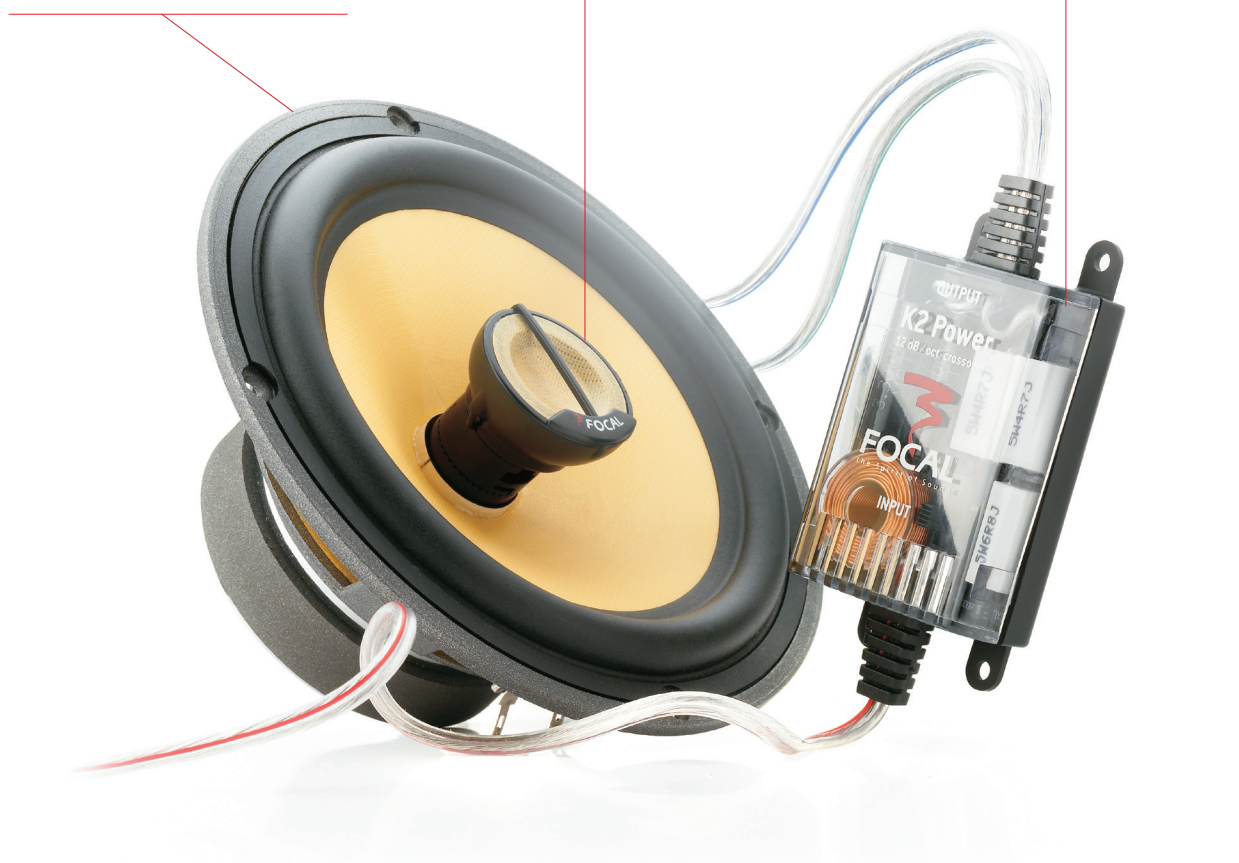
- Zamak chassis
- Rigid and non-magnetic**

- Butyl surround
- Excellent reliability**

- Serial number engraved in the block
- Authenticity certificate**

- Tweeter double orientation
- Sound image accuracy**
- Woven aramid fiber inverted dome tweeter
- Smoothness and accuracy**

- Polypropylene capacitor
- Natural treble reproduction**
- Adjustable tweeter level on 3 levels
- Installation flexibility**
- Air core inductor
- Resistant to parasites, maximum dynamics**



Technical characteristics :

Woofer: 6 1/2" [165mm]

Voice coil: 1" [25mm]

Magnet: 3 1/3" [85mm]

Aramid fiber inverted dome

Separate crossover: 12dB/oct [5.3kHz]

Adjustable tweeter level: (0, -3, -6dB)

Max. power: 160W

Nom. power: 80W

Sensitivity [2,83V/1m]: 93dB

Frequency response: 60Hz – 20kHz

Accessories: grilles supplied

It makes the difference:

- High-end coaxial kit
- Aramid fiber woofer and tweeter
- Tweeter double orientation
- High sensitivity



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165 KRC

6" K2 Power Coaxial Kit

- Adjustable tweeter
- High power handling
- Butyl surround



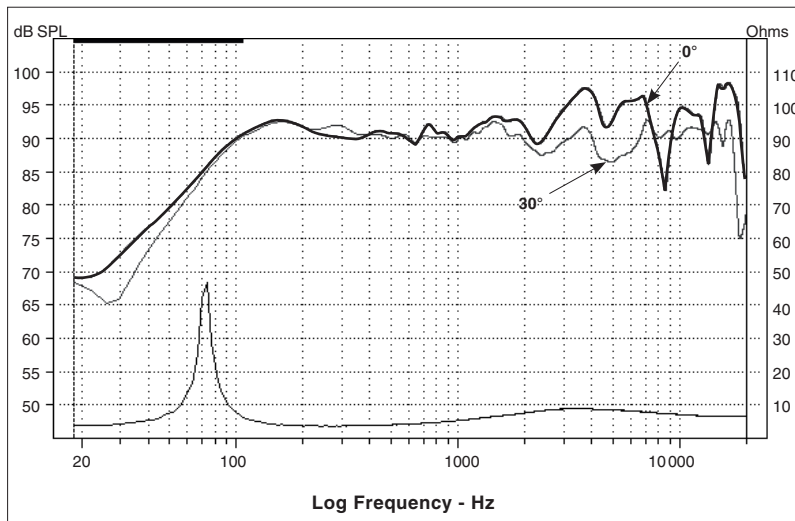
Specifications

Nominal power	80W	
Maximum power	160W	
Sensitivity	93dB	
Cone	CKMV	
Surround	Butyl	
Nom. impedance	4 ohms	
DC resistance	3,2 ohms	
VC diameter	25mm	
VC height	15mm	
Former	Kapton®	
Layers	2	
Wire	Copper	
Inductance	0,23mh	
Xmax	5mm	3/16 in
Magnet d x h	85 x 17mm	3-1/3x2/3 in
Magnet weight	0.4kg	0,88 lb
Flux density	1T	
Gap height	5mm	3/16 in
Net weight	1.2 kg	2,65 lb

Parameters

Fs	86.26Hz	
Vas	6.46l	
Qts	0.753	
Qes	0.82	
Qms	9.17	
Re	3.2 ohms	
Sd	132.73cm²	
Cas	4.6E-08 m5/N	
Mas	73.96kg/m4	
Ras	4371.31 ohms.ac	
Cms	2.61E-04 m/N	
Mms	13.03g	
Rms	0.770kg/s	
Ces	475.77mF	
Les	7.16mH	
Res	35.56 ohms	
BI	5.23 N/A	
SPL	88.88dB/W/m	

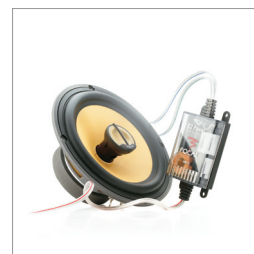
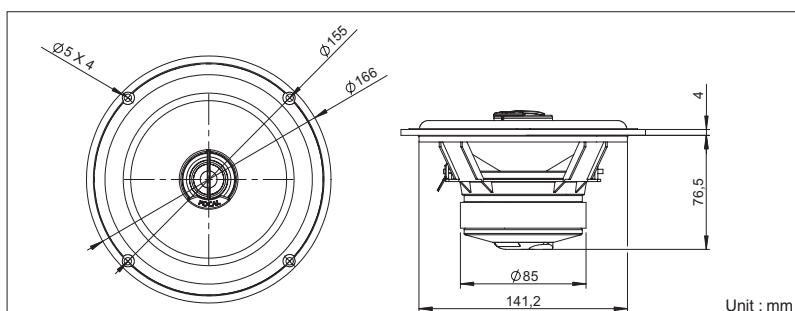
Frequency Response / Impedance



Suggested application

Load	V (l)	Fb (Hz)	F-3 (Hz)	Ql
Sealed	30	-	82	7

Mechanical Drawing



100 KRS

2-way K2 Power kit

- K2 composite sandwich cone

Impact and details

- Zamak chassis

Rigid and non-magnetic

- Aluminum phase plug

Mid-range precision

- Butyl surround
- Excellent reliability
- Engraved serial number
- Authenticity certificate

- Adjustable tweeter 3 levels per stage of 3dB

Installation flexibility

- Polypropylene capacitor

Neutral reproduction of high frequencies

- Multi-wire air core inductor

Resistant to parasites, maximum dynamics



- TNK inverted dome tweeter
- Smoothness and precision
- Neodymium ring magnet
- Very high linearity and dynamics
- Foam surround
- Extended frequency response

Technical characteristics:

100mm (4") Woofer

25mm (1") Voice coil

Magnet: Neodymium

TNK inverted dome tweeter

Separate crossover : 12/12dB/oct (3.5kHz)

Adjustable tweeter level: (0,-3,-6dB)

Max. power: 100W

Nom. power: 50W

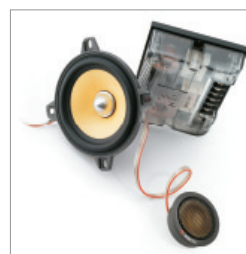
Sensitivity (2,83V/1m): 90dB

Frequency response: 120Hz – 20kHz

Accessories: grilles supplied

It makes the difference:

- Treble smoothness
- Dynamic and neutrality
- Precision of sound stage
- Tweeter sound level adjustment
- Can be used as central speaker in 5.0 or 5.1 system



4 K SLIM (100 KRS WOOFER KIT)

4''K2 Power® woofer

- Extra slim 39 mm
- Zamak basket
- Aluminium phase plug
- Neodymium magnet



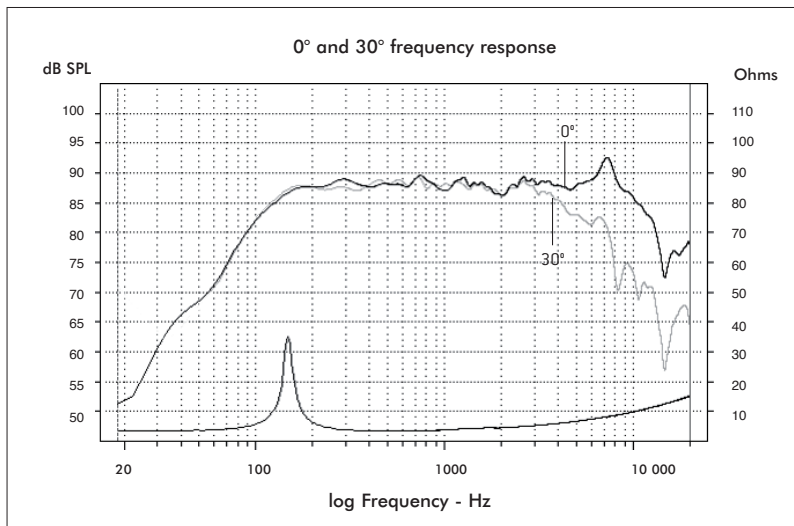
Specifications

Nominal power	50 W	
Maximum power	100 W	
Sensitivity	90 dB	
Cone	K2 Composite Sandwich*	
Surround	Butyl	
Nom. impedance	4 ohms	
DC resistance	3.2 ohms	
VC diameter	25 mm	0.98 in
VC height	8.5 mm	0.33 in
Former	Kapton®	
Layers	2	
Wire	Copper	
Inductance	0,26 mH	
Xmax	2.5 mm	0.10 in
Magnet (d x h)	-	-
Magnet weight	-	-
Flux density	0.9 T	
Gap height	3 mm	0.11 in
Net weight	0.35 kg	0.77 lb

Parameters

Fs	140.6 Hz
Vas	1.13 l
Qts	0.872
Qes	0.96
Qms	9.55
Re (in parallel)	3.2 ohms
Sd	55.42 cm ²
Cas	8.04E-09 m ⁵ /N
Mas	159.23 kg/m ⁴
Ras	14733.21 ohms.ac
Cms	2.62E-4 m/N
Mms	4.89 g
Rms	452 g/s
Ces	339.49 mF
Les	3.77 mH
Res	31.83 ohms
Bl	3.8 N/A
SPL	87 dB/W/m

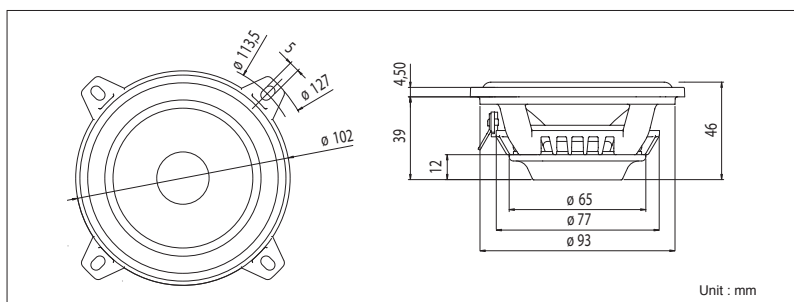
Frequency response / Impedance



Suggested application

Load	V (l)	FB (Hz)	F-3 (Hz)	Q1
Sealed	30	-	120	7

Mechanical Drawing



130 KR

2-way K2 Power kit

- K2 composite sandwich cone

Impact and details

- Zamak chassis

Strong, rigid and non-magnetic chassis

- Butyl surround

Excellent reliability

- Engraved serial number

Certificate of authenticity

- Adjustable tweeter 3 levels per stage of 3dB

Installation flexibility

- Polypropylene capacitor

Neutral reproduction of high frequencies

- Multi-wire air core inductor

Resistant to parasites, maximum dynamic



- TNK inverted dome tweeter

Smoothness and precision

- Neodymium ring magnet

Very high linearity and dynamism

- Foam surround

Extended frequency response

Technical characteristics:

130mm (5") Woofer

25mm (1") Voice coil

85mm (3.5") Magnet

TNK inverted dome tweeter

Separate crossover : 12/12dB/oct (3.5kHz)

Adjustable tweeter level : {0,-3,-6dB}

Max. power : 140W

Nom. power : 70W

Sensitivity (2,83V/1m) : 90dB

Frequency response : 70Hz – 20kHz

Accessories : grilles supplied

It makes the difference:

- Treble smoothness
- Dynamic and neutrality
- Precision of sound stage
- Tweeter sound level adjustment



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5 KP (130 KR WOOFER KIT)

5''K2 Power® woofer

- High power handling
- Zamak basket
- Acoustically transparent dust cap



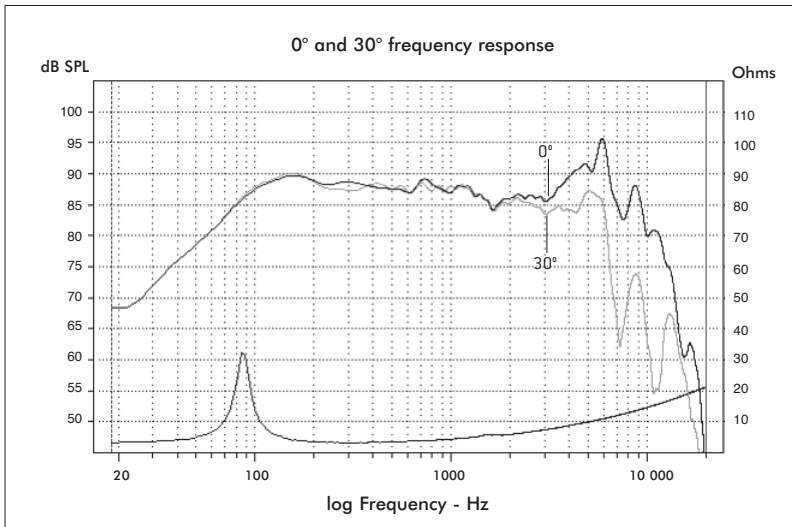
Specifications

Nominal power	70 W	
Maximum power	140 W	
Sensitivity	90 dB	
Cone	K2 Composite Sandwich®	
Surround	Butyl	
Nom. impedance	4 ohms	
DC resistance	3.2 ohms	
VC diameter	25 mm	0.98 in
VC height	10 mm	0.40 in
Former	Kapton®	
Layers	2	
Wire	Copper	
Inductance	0,45 mH	
Xmax	2.5 mm	0.10 in
Magnet (d x h)	85 x 15 mm	3.34 x 0.60 in
Magnet weight	361 g	0.80 lb
Flux density	0.9 T	
Gap height	5 mm	0.20 in
Net weight	0.75 kg	1.65 lb

Parameters

Fs	88.64 Hz
Vas	4.93 l
Qts	0.678
Qes	0.74
Qms	8.06
Re (in parallel)	3.2 ohms
Sd	86.59 cm ²
Cas	3.51E-08 m ⁵ /N
Mas	110.97 kg/m ⁴
Ras	6975.6 ohms.ac
Cms	4.68E-4 m/N
Mms	8.32 g
Rms	523 g/s
Ces	456.41 mF
Les	8.53 mH
Res	34.85 ohms
Bl	4.27 N/A
SPL	87.27 dB/W/m

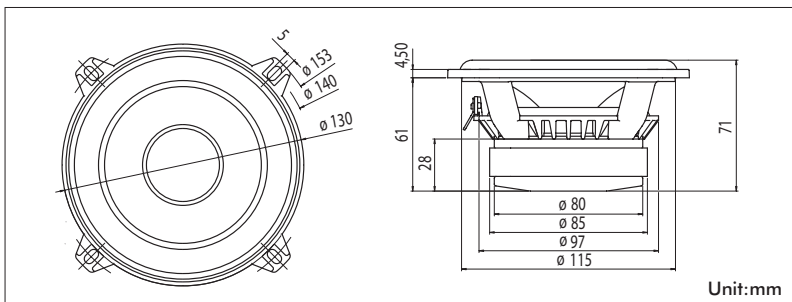
Frequency response / Impedance



Suggested application

Load	V (l)	FB (Hz)	F-3 (Hz)	Q1
Sealed	30	-	84	7

Mechanical Drawing



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165 KR

2-way K2 Power kit

- K2 composite sandwich cone

Impact and details

- Zamak chassis

Strong, rigid and non-magnetic chassis

- Butyl surround

Excellent reliability

- Engraved serial number

Certificate of authenticity

- Adjustable tweeter 3 levels per stage of 3dB

Installation flexibility

- Polypropylene capacitor

Neutral reproduction of high frequencies

- Multi-wire air core inductor

Resistant to parasites, maximum dynamic



- TNK inverted dome tweeter

Smoothness and precision

- Neodymium ring magnet

Very high linearity and dynamism

- Foam surround

Extended frequency response

Technical characteristics :

165mm (6.5") Woofer

25mm (1") Voice coil

85mm (3.5") Magnet

TNK inverted dome tweeter

Separate crossover : 12/12dB/oct (3.8kHz)

Adjustable tweeter level: (0,-3,-6dB)

Max. power: 160W

Nom. power: 80W

Sensitivity (2,83V/1m): 91dB

Frequency response: 60Hz – 20kHz

Accessories: grilles supplied

It makes the difference:

- Treble smoothness
- Dynamic and neutrality
- Precision of sound stage
- Tweeter sound level adjustment
- Excellent linearity of the two speakers
- High sensitivity



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6 KPS (165 KR WOOFER KIT)

6'' K2 Power® woofer

- High power handling
- Zamak basket
- K2 composite sandwich cone



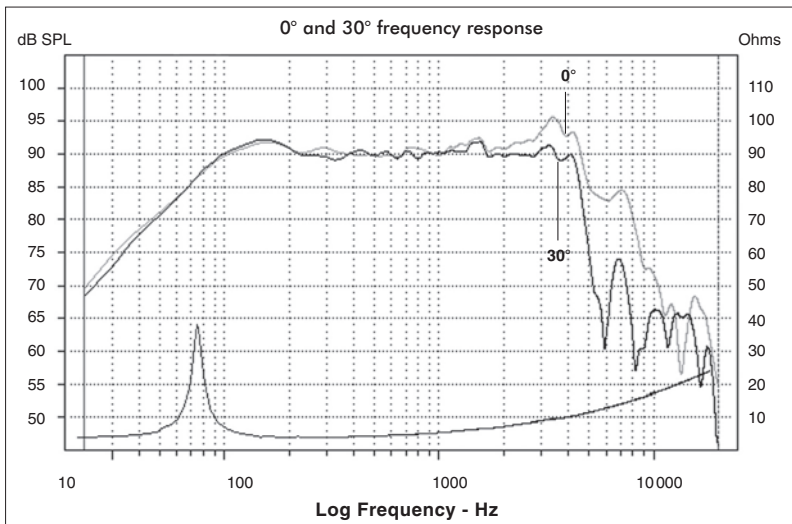
Specifications

Nominal power	80W	
Maximum power	160W	
Sensitivity	91dB	
Cone	K2 Composite Sandwich®	
Surround	Butyl	
Nom. impedance	4 ohms	
DC resistance	3 ohms	
VC diameter	25 mm	0.98 in
VC height	15 mm	0.59 in
Former	Kapton®	
Layers	2	
Wire	Copper	
Inductance	0.57 mH	
Xmax	5 mm	0.20 in
Magnet d x h	85 x 15 mm	3.35 x 0.59 in
Magnet weight	750 g	1.65 lb
Flux density	1 T	
Gap height	5 mm	0.20 in
Net weight	1.15 kg	2.53 lb

Parameters

Fs	73.05 Hz
Vas	7.71 l
Qts	0.74
Qes	0.81
Qms	9.01
Re	3 ohms
Sd	132.73 cm ²
Cas	5.49E-08 m ⁵ /N
Mas	86.5 kg/m ⁴
Ras	4406.64 ohms.ac
Cms	3.11E-4 m/N
Mms	15.24 g
Rms	776 g/s
Ces	588.25 mF
Les	8.07 mH
Res	33.37 ohms
Bl	5.09 N/A
SPL	87.53 dB/W/m

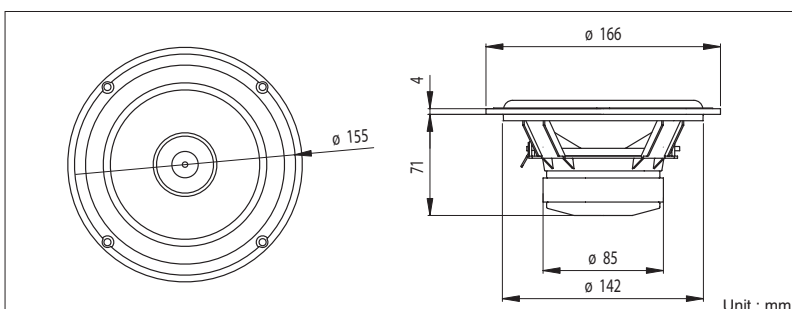
Frequency Response / Impedance



Suggested application

Load	V (l)	Fb (Hz)	F-3 (Hz)	Ql
Sealed	30	-	71.3	0.83

Mechanical Drawing



165 KR2

2-way K2 Power kit

- K2 composite sandwich cone

Impact and details

- Zamak chassis

Strong, rigid and non-magnetic chassis

- Butyl surround

Excellent reliability

- Engraved serial number
Certificate of authenticity

- Aluminum phase plug

Better directivity of the mid-range

- Heavy ferrite

Magnetic flux increase

- Adjustable tweeter level per stage of 3dB

Installation flexibility

- Polypropylene capacitor

Neutral reproduction of high frequencies

- Multi-wire air core inductor

Resistant to parasites, maximum dynamic



- TNK inverted dome tweeter

Smoothness and precision

- Neodymium ring magnet

Very high linearity and dynamism

- Foam surround

Extended frequency response

Technical characteristics :

165mm (6.5") Woofer

32mm (1.26") Voice coil

90mm (3.54") Magnet

TNK tweeter

Kevlar inverted dome

Separate crossover : 12/12/18dB/oct (4kHz)

Adjustable tweeter level: (0,-3,-6dB)

Max. power: 160W

Nom. power: 80W

Sensitivity (2,8V/1m): 93dB

Frequency response: 70Hz – 20kHz

Accessories: grilles supplied

It makes the difference:

- Treble smoothness
- Dynamic and neutrality
- Precision of sound stage
- Tweeter sound level adjustment
- Excellent linearity of the two speakers
- High sensitivity
- 2 Ohms impedance



TNK

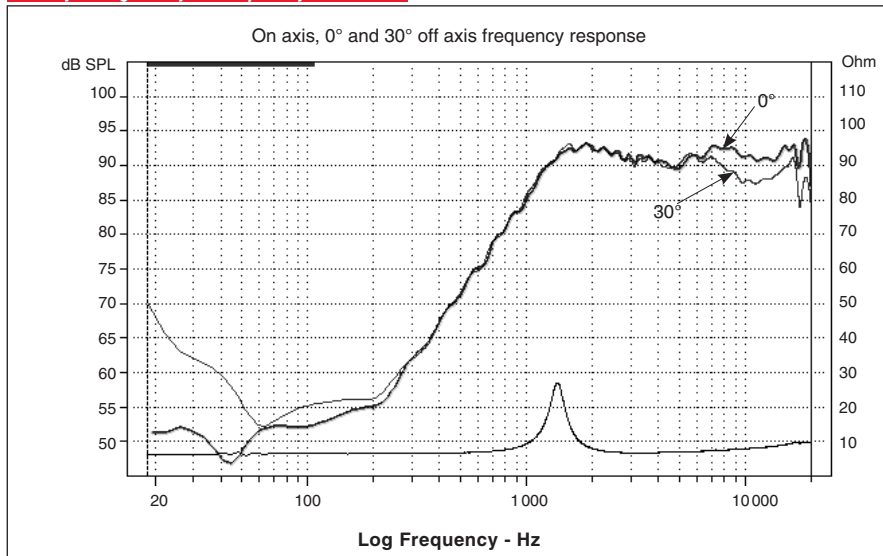
K2 Power tweeter



Specifications

Nominal power	15W	
Maximum power	100W	
Sensitivity (2.83V/m)	93dB	
Cone	Woven aramid fiber	
Surround	-	
Nom. impedance	8 ohms	
DC resistance	6 ohms	
VC diameter	20.5mm	4.5 in
VC height	2,5mm	1/10 in
Former	Aluminum	
Layers	2	
Wire	Aluminum	
Inductance	0.03 mH	
Xmax	-	
Magnet (dxh)	20 x 2mm	13/16x1/16 in
Magnet weight	-	
Flux density	1.6 T	
Gap height	2mm	1/16 in
Net weight	85g	0.18 lb

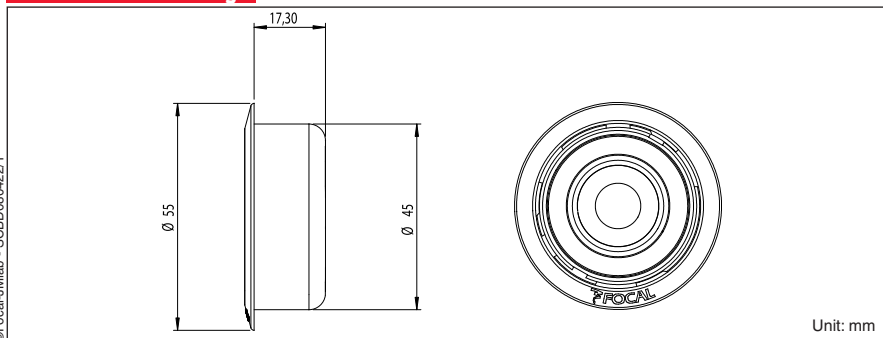
Frequency Response / Impedance



Parameters

Fs	1405 Hz
Vas	-
Qts	-
Qes	-
Qms	-
Re	6 ohms
Sd	-
Cas	-
Mas	-
Ras	-
Cms	-
Mms	-
Rms	-
Ces	-
Les	-
Res	25 ohms
BI	-
SPL	-

Mechanical Drawing



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6 KR2 (165 KR2 WOOFER KIT)

6'' K2 Power® woofer

- High power handling
- Zamak basket
- K2 composite sandwich cone



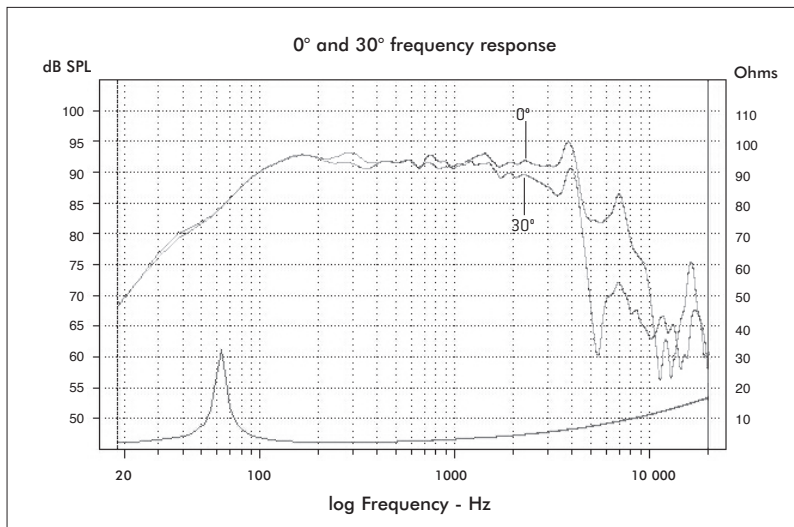
Specifications

Nominal power	80 W	
Maximum power	160 W	
Sensitivity	93 dB	
Cone	K2 Composite Sandwich®	
Surround	Butyl	
Nom. impedance	2 ohms	
DC resistance (in parallel)	1.8 ohms	
VC diameter	32 mm	1.26 in
VC height	15 mm	0.59 in
Former	Kapton®	
Layers	2	
Wire	Copper	
Inductance	0.26 mH	
Xmax	5 mm	0.20 in
Magnet (d x h)	90 x 17 mm	3.54 x 0.7 in
Magnet weight	350 g	0.88 lb
Flux density	1.05 T	
Gap height	5 mm	0.20 in
Net weight	1.4 kg	2.42 lb

Parameters

Fs	61.38 Hz
Vas	10.87 l
Qts	0.528
Qes	0.56
Qms	9.3
Re (in parallel)	1.84 ohms
Sd	132.73 cm ²
Cas	7.74E-08 m ⁵ /N
Mas	86.84 kg/m ⁴
Ras	3601.32 ohms.ac
Cms	4.39E-04 m/N
Mms	15.3 g
Rms	0,634 kg/s
Ces	789.16 mF
Les	8.52 mH
Res	30.56 ohms
Bl	4.4 N/A
SPL	88.3 dB/W/m

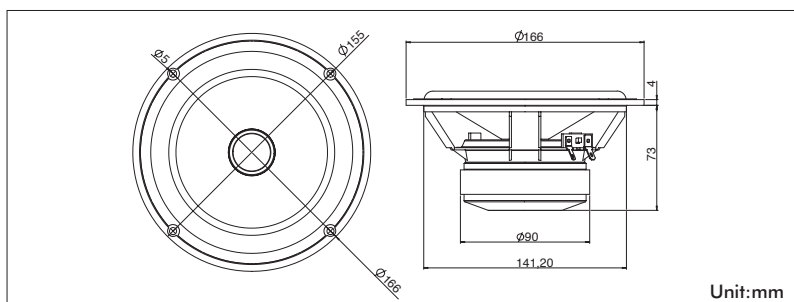
Frequency response / Impedance



Suggested application

Load	V (l)	FB (Hz)	F-3 (Hz)	Q1
Sealed	30	-	85	7

Mechanical Drawing



165 KRX2

2-way K2 Power kit

- K2 composite sandwich cone

Impact and details

- Zamak chassis

Rigid and non-magnetic

- Aluminum phase plug

Better midrange directivity

- Butyl surround

Excellent reliability

- Serial number engraved in the block

Authenticity certificate

- 2 Ohm voice coil

Sensitivity rise

- Inverted dome tweeter TN53K

Smoothness and accuracy

- Neodymium ring magnet

Very high linearity and dynamics

- Foam separate surround

Extended frequency response

- Phase part

Slight directivity

- Adjustable tweeter level per step of 3dB

Installation flexibility

- Polypropylene capacitor

Natural treble reproduction

- Air core inductor

Resistant to parasites, maximum dynamics

- Super Tweeter

Emphasizes the extreme treble



Technical characteristics :

Woofer: 6 1/2" [165mm]

Voice coil: 1 9/16" [40mm]

Magnet: 3 15/16" [100mm]

TN53K tweeter

Inverted dome

Separate crossover: Full/12 12/18dB/oct [4.7kHz]

Adjustable tweeter level: (0, -3, -6dB)

Max. power: 200W

Nom. power: 100W

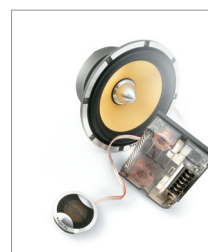
Sensitivity [2.83V/1m]: 93dB

Frequency response: 70Hz – 20kHz

Accessories: grilles supplied

It makes the difference:

- 2 Ohm voice coil
- High sensitivity
- Tweeter sound level adjustment



6 KRX2 (165 KRX2 WOOFER KIT)

6" K2 Power Woofer

- 2 Ohm voice-coil
- Aluminum basket
- High power handling



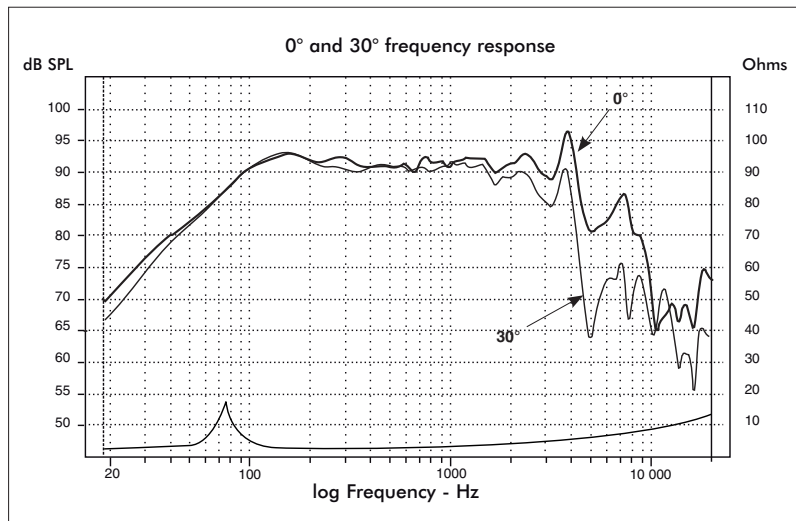
Specifications

Nominal power	100	
Maximum power	200	
Sensitivity	93 dB	
Cone	CKMV	
Surround	Butyl	
Nom. impedance	2 ohms	
DC resistance	1,9 ohms	
VC diameter	40 mm	1-9/16 in
VC height	17 mm	2/3 in
Former	Kapton	
Layers	2	
Wire	copper	
Inductance	0,11mH	
Xmax	5,5mm	3/16 in
Magnet d x h	100x20mm	3-15/16x13/16 in
Magnet weight	1550 g	3,42 lb
Flux density	1T	
Gap height	6mm	1/4 in
Net weight	1800g	3,97 lb

Parameters

Fs	76,46 Hz
Vas	7,45 liters
Qts	0,754
Qes	0,83
Qms	8,24
Re	1,93 Ohms
Sd	132,73cm
Cas	5,3E-08 m5/N
Mas	81,68 Kg/m4
Ras	4762 ohms.ac
Cms	3,01E-04 m/N
Mms	14,39g
Rms	0,839Kg/s
Ces	895,17 mF
Les	4,84 mH
Res	19,16 ohms
BI	4,01N/A
SPL	87,87 dB/W/M

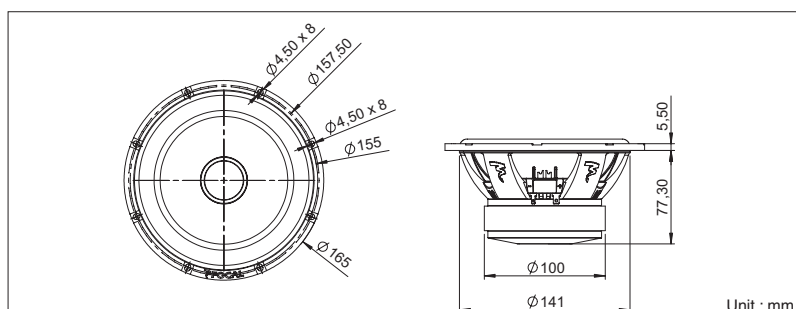
Frequency Response / Impedance



Suggested application

Load	V (l)	Fb (Hz)	F-3 (Hz)	Ql
Sealed	30	-	73,8	7

Mechanical Drawing



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165 KRXS

2-way K2 Power kit

- K2 composite sandwich cone

Impact and details

- Aluminum basket

Light and non-magnetic

- Butyl surround

Excellent reliability

- Engraved serial number

Authenticity certificate

- Neodymium magnet

Minimal volume

- TN53K inverted dome tweeter

Smoothness and precision

- Neodymium ring magnet

Very high linearity and dynamism

- Foam separate surround

Extended frequency response

- Phase plug

Low directivity

- Adjustable tweeter level per step of 3dB

Easy installation

- Polypropylene capacitor

Natural treble reproduction

- Air core inductor

Resistant to parasites, maximal dynamics

- Super Tweeter set up

Increases high-treble



Technical characteristics:

Woofer: 6 1/2" [165mm]

Voice coil: 1 1/4" [32mm]

Neodymium magnet

TN53K inverted dome tweeter

Separate crossover: Full/12-12/18dB/oct (3.8kHz)

Adjustable tweeter level: [0, -3, -6dB]

Max. power: 120W

Nom. power: 60W

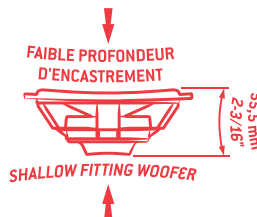
Sensitivity [2.83V/1m]: 94dB

Frequency response: 75Hz – 20kHz

Accessories: grilles, tweeter support

It makes the difference:

- Very high sensitivity
- Possibility of super tweeter set up
- Mounting depth 2 3/16" [55.5mm]
- Tight punchy bass



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the Spirit of Sound

6 KRXS (165 KRXS WOOFER KIT)

6" K2 Power Woofer

- Mounting depth 2^{3/16"} (55,5mm)
- Very high sensitivity
- Neodymium magnet



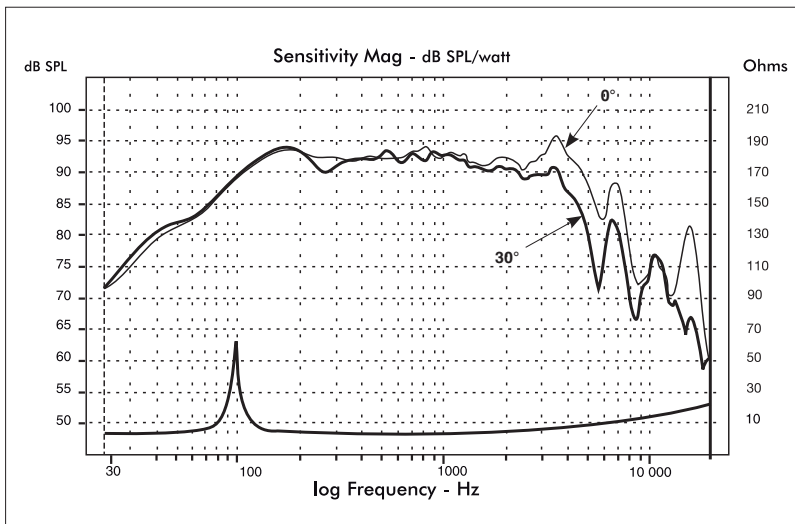
Specifications

Nominal power	60W	
Maximum power	120W	
Sensitivity	94 dB	
Cone	CKMV	
Surround	Butyl	
Nom. impedance	4 ohms	
DC resistance	2,83 ohms	
VC diameter	32 mm	1-1/4 in
VC height	10,5 mm	0-7/16 in
Former	Kapton	
Layers	2	
Wire	Copper	
Inductance	0,22mH	
Xmax	3,5mm	0-1/18 in
Magnet	Neodymium	
Magnet weight	350g	
Flux density	1T	
Gap height	4mm	0-3/16 in
Net weight	550g	

Parameters

Fs	91,18 Hz
Vas	6,13 liters
Qts	0,79
Qes	0,82
Qms	18,73
Re	2,83 Ohms
Sd	143,14 cm ²
Cas	4,37E-08 m ⁵ /N
Mas	69,75 Kg/m ⁴
Ras	2133,34 ohms.ac
Cms	2,13E-4 m/N
Mms	14,29 g
Rms	0,437 Kg/s
Ces	505,76 mF
Les	6,02 mH
Res	64,64 ohms
BI	5,31 N/A
SPL	89,4 dB

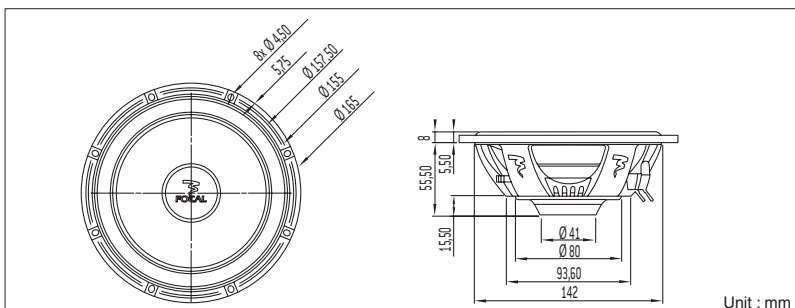
Frequency Response / Impedance



Suggested application

Load	V (l)	Fb (Hz)	F-3 (Hz)	QI
Sealed	30	-	85	7

Mechanical Drawing



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165 KRX3

3-way K2 Power kit

- K2 composite sandwich cone

Impact and details

- Zamak chassis

Rigid and non-magnetic

- Butyl surround

Excellent reliability

- Serial number engraved in the block

Authenticity certificate

- Diamond cutting manufacture

Much style

- Inverted dome tweeter TN53K

Smoothness and accuracy

- Neodymium ring magnet

Very high linearity and dynamics

- Phase part

Directivity control

- High-quality crossover

162 possible adjustments

- Polypropylene capacitor

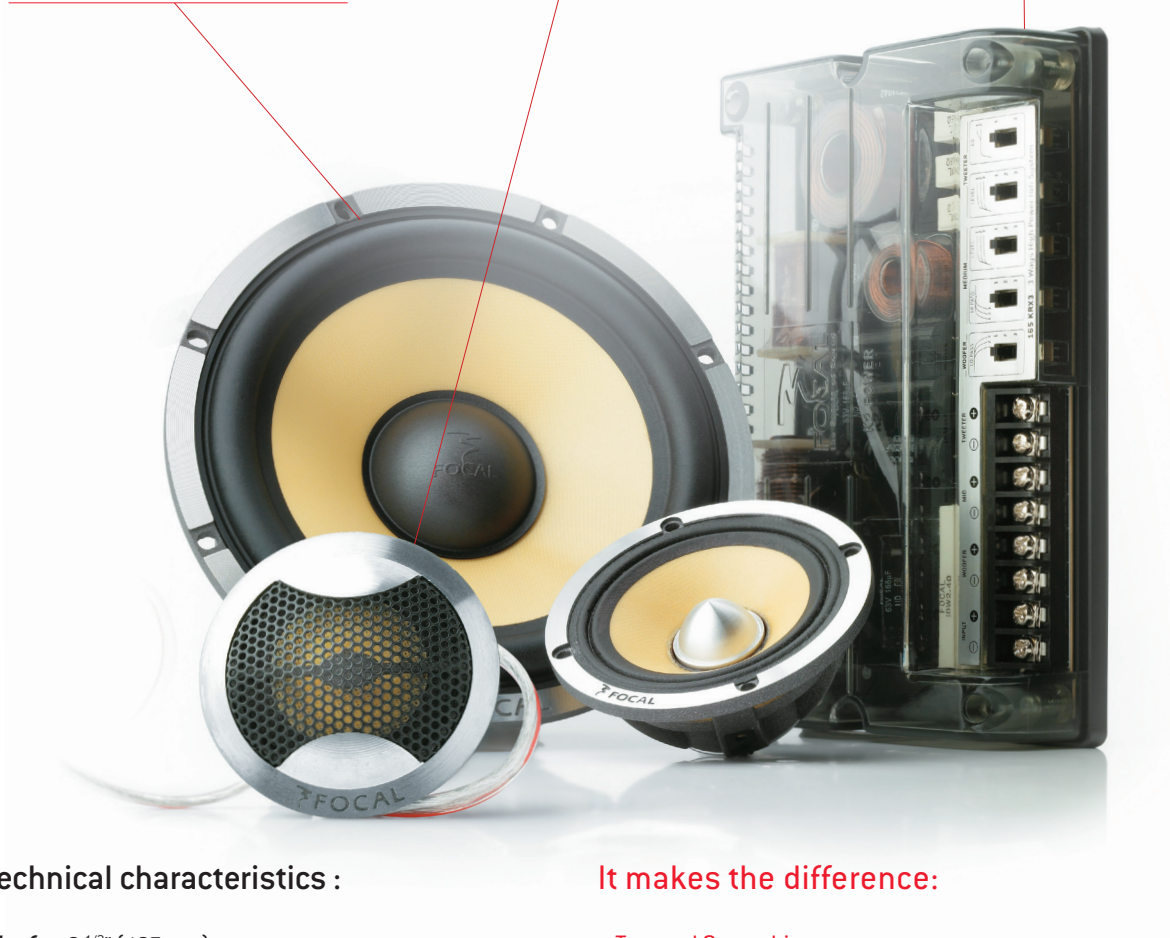
Natural treble reproduction

- Air core inductor

Resistant to parasites, maximum dynamics

- Super Tweeter

Emphasizes the extreme treble



Technical characteristics :

Woofer: 6 1/2" (165mm)

Voice coil: 1 9/16" (40mm)

Magnet: 4 3/4" (120mm)

Midrange: 3 1/8" (80mm)

Voice coil: 1" (25mm)

Magnet: Neodymium

TN53K tweeter

Inverted dome

Separate crossover:

162 possible adjustments

Max. power: 200W

Nom. power: 100W

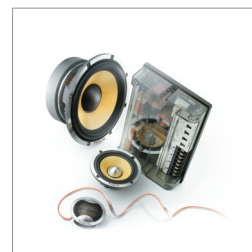
Sensitivity (2.83V/1m): 93dB

Frequency response: 45Hz – 20kHz

Accessories: grilles supplied

It makes the difference:

- Top-end 3 way kit
- Crossover with 162 possible adjustments
- Installation part
- Accessories



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TN53K

K2 Power tweeter

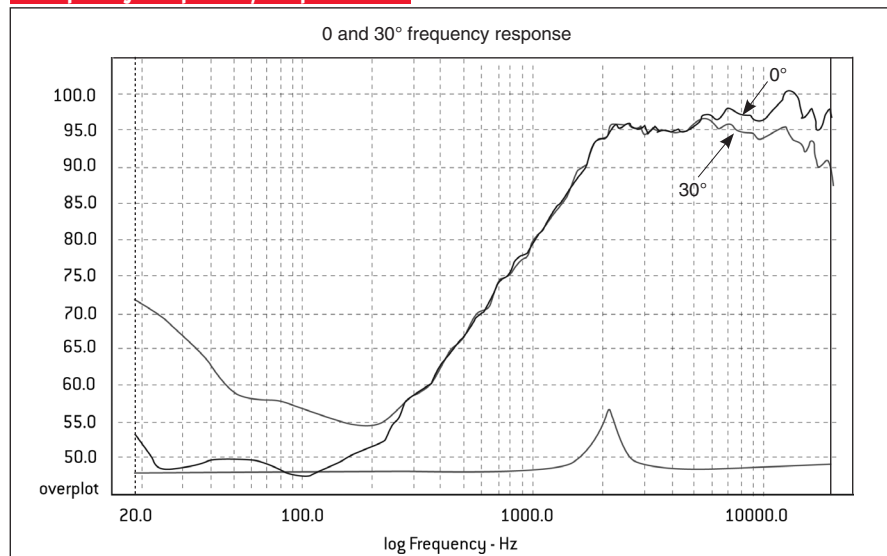
- Woven aramide Fiber
- Inverted dome
- Dual Flange for optimized staging



Specifications

Nominal power	15W	
Maximum power	100W	
Sensitivity (2.83V/m)	95 dB	
Cone	Woven aramid fiber	
Surround	-	
Nom. impedance	8 ohms	
DC resistance	5,8 ohms	
VC diameter	20,4mm	13/16 in
VC height	1,5mm	1/16 in
Former	Aluminum	
Layers	2	
Wire	Copper	
Inductance	0.02 mH	
Xmax	-	
Magnet (dxh)	40 x 7mm	1-3/16x1/4 in
Magnet weight	114g	
Flux density	1.94 T	
Gap height	3mm	1/8 in
Net weight	178g	

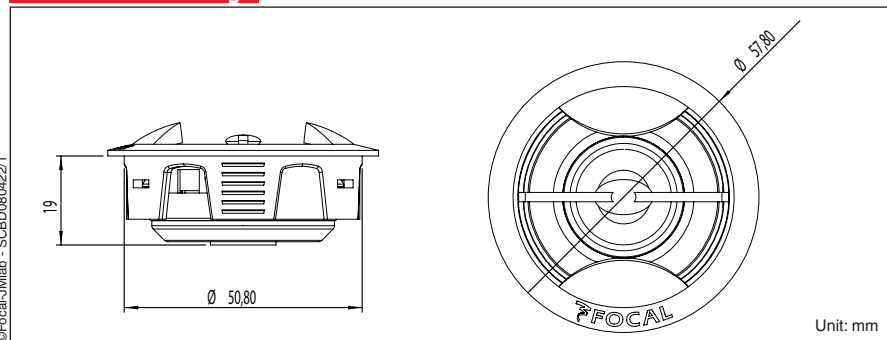
Frequency Response / Impedance



Parameters

Fs	2149Hz
Vas	-
Qts	-
Qes	-
Qms	-
Re	5.8 ohms
Sd	-
Cas	-
Mas	-
Ras	-
Cms	-
Mms	-
Rms	-
Ces	-
Les	-
Res	16.66 ohms
BI	-
SPL	-

Mechanical Drawing



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3 KRX3 (165 KRX3 MIDRANGE KIT)

3" K2 Power midrange

- Small size
- Neodymium magnet
- Aluminum basket



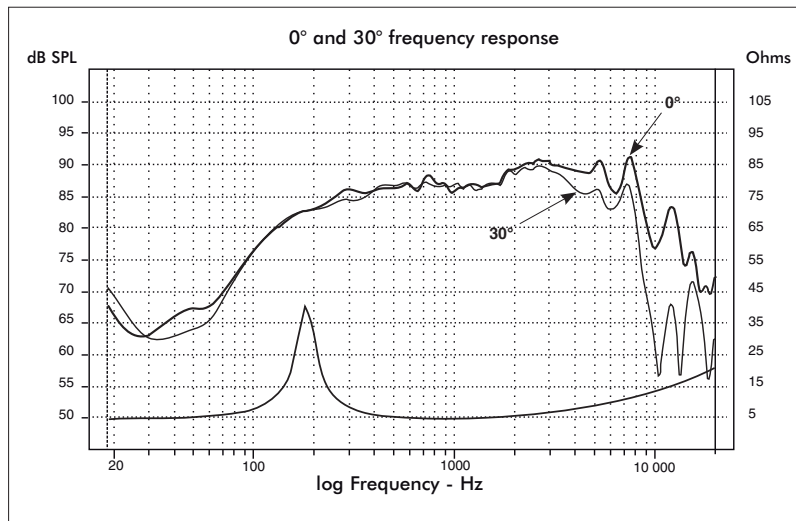
Specifications

Nominal power	50W	
Maximum power	100W	
Sensitivity	90dB	
Cone	CKMV	
Surround	Tissu	
Nom. impedance	4 ohms	
DC resistance	4,57 ohms	
VC diameter	25mm	1"
VC height	7mm	1/4"
Former	Kapton	
Layers	2	
Wire	Copper	
Inductance	0,16mH	
Xmax	1,50mm	1/16"
Magnet d x h	Neodymium	
Magnet weight	136g	0,30lb
Flux density	1,30T	
Gap height	4mm	3/16"
Net weight	196g	0,43lb

Parameters

Fs	197,31 Hz	
Vas	0,34 liters	0,012Ft ³
Qts	0,66	
Qes	0,72	
Qms	7,28	
Re	4,57 ohms	
Sd	32,17 cm ²	
Cas	2,42E-09 m ⁵ /N	
Mas	268,62 Kg/m ⁴	
Ras	45744,90 ohms.ac	
Cms	2,34E-04 m/N	
Mms	2,78 g	0,06lb
Rms	0,47 Kg/s	
Ces	127,08 mF	
Les	5,12 mH	
Res	46,21 ohms	
Bl	4,68 N/A	
SPL	87,44 dB/W/M	

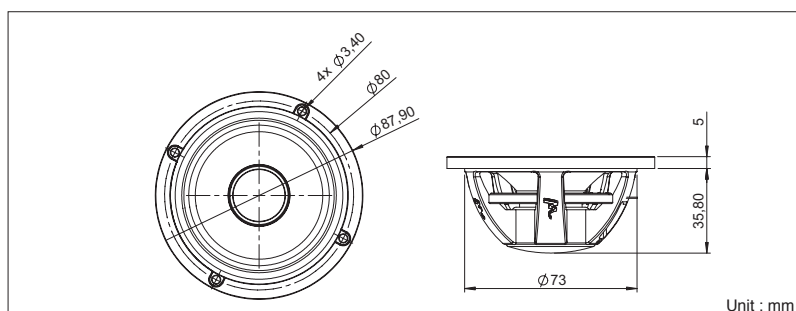
Frequency Response / Impedance



Suggested application

Load	V (l)	Fb (Hz)	F-3dB (Hz)	Ql
Sealed	0,3	-	231	7

Mechanical Drawing



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6 KRX3 (165 KRX3 WOOFER KIT)

6" K2 Power woofer

- 120mm magnet
- High power handling
- Aluminum basket



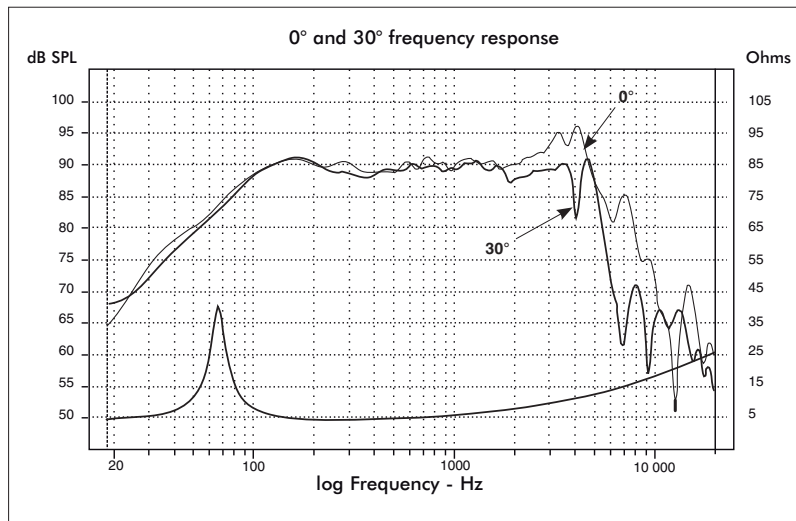
Specifications

Nominal power	100W	
Maximum power	200W	
Sensitivity	91dB	
Cone	CKMV	
Surround	Butyl	
Nom. impedance	4 ohms	
DC resistance	3,8 ohms	
VC diameter	40 mm	1-9/16"
VC height	17 mm	2/3"
Former	Kapton	
Layers	2	
Wire	copper	
Inductance	0,2mH	
Xmax	5,5mm	3/16"
Magnet d x h	121x22	4-3/4x7/8"
Magnet weight	2100 g	4.63lb
Flux density	1T	
Gap height	6mm	
Net weight	2250g	4.96lb

Parameters

Fs	69,56 Hz	
Vas	8,64 liters	0,31Ft3
Qts	0,663	
Qes	0,72	
Qms	8,37	
Re	3,8 Ohms	
Sd	132,73cm ²	
Cas	6,15E-08 m ⁵ /N	
Mas	85,14 Kg/m ⁴	
Ras	4445,82 ohms.ac	
Cms	3,49E-04 m/N	
Mms	15 g	0,031b
Rms	0,783 Kg/s	
Ces	433,52 mF	
Les	12,08 mH	
Res	44,18 ohms	
Bl	5,88 N/A	
SPL	87,9 dB/W/M	

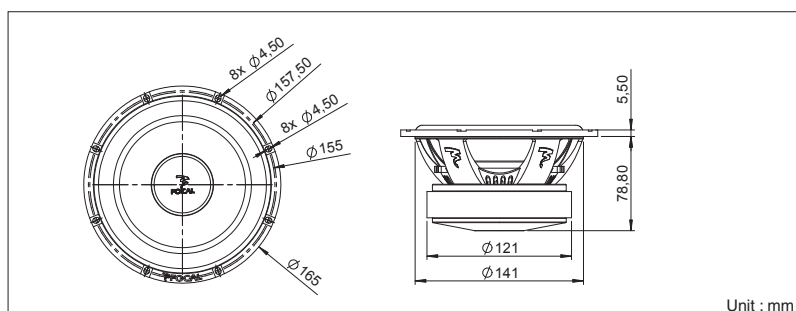
Frequency Response / Impedance



Suggested application

Load	V (l)	Fb (Hz)	F-3dB (Hz)	Ql
Sealed	30	-	73,74	7

Mechanical Drawing



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SUBWOOFER 27 KX

K2 Power



Technical characteristics:

Subwoofer 10^{5/8"} (27cm)

Voice coil 2^{9/16"} (65mm)

Max. power: 600W

Nom. power: 300W rms

Sensitivity (2.8V/1m): 88dB

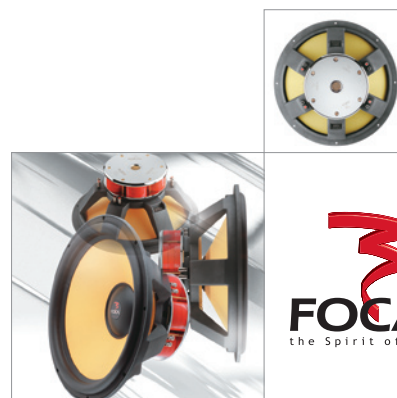
Frequency response*: 35Hz – 1500Hz

Max. power: 140W

Load type	Volume (l)	Cut-off frequency (-3dB)	Ql
Sealed	20	48Hz	7
Sealed	30	45Hz	7
Sealed	40	44Hz	7

It makes the difference:

- Specially designed for integration in compact enclosures
- Steady and controlled bass
- 2x2 ohms double voice coil: numerous wiring possibilities.



27 KX

270 mm K2 Power® subwoofer



- Multiferrites magnet
- Zamak basket
- For closed box
- High power handling

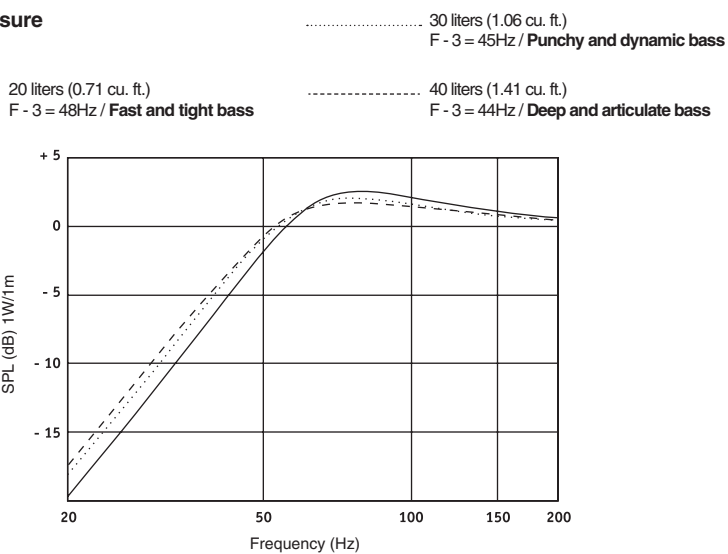


Specifications

Nominal power	300 W	
Maximum power	600 W	
Sensitivity	88 dB	
Cone	K2 Composite Sandwich®	
Surround	Butyl	
Nom. impedance	4 ohms	
DC resistance	4.6 ohms	
VC diameter	65 mm	2.55 in
VC height	26 mm	1.02 in
Former	Kapton®	
Layers	1	
Wire	Flat Copper	
Inductance	1.9 mH	
Xmax	9 mm	0.35 in
Magnet d x h (12)	60 x 14 mm	2.36 x 0.55 in
Magnet weight	2106 g	4.66 lb
Flux density	0.9 T	
Gap height	8 mm	0.3 in
Net weight	7.2 kg	15.87 lb

Suggested Application

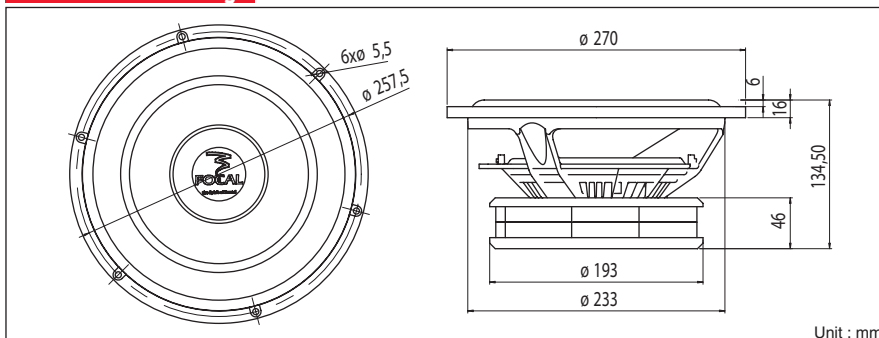
Sealed enclosure



Parameters

Fs	48 Hz	
Vas	14.92 l	0.53 Ft ³
Qts	0.908	
Qes	0.97	
Qms	14.19	
Re	4.6 ohms	
Sd	314.16 cm ²	48.7 in ²
Cas	1.06E-07 m ⁵ /N	
Mas	102.23 kg/m ⁴	
Ras	2186.43 ohms.ac	
Cms	1.08E-04 m/N	
Mms	100.9 g	0.22 lb
Rms	2158 g/s	
Ces	694.84 mF	
Les	15.63 mH	
Res	67.29 ohms	
BI	12.05 N/A	
SPL	84.23 dB/W/m	

Mechanical Drawing



Suggested application

Load	V (l)	Fb (Hz)	F-3 (Hz)	Ql
Sealed	20	-	48	7
Sealed	30	-	45	7
Sealed	40	-	44	7

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SUBWOOFER 33 KX

K2 Power



Technical characteristics:

Subwoofer 13" (33cm)

Voice coil 2^{9/16}" (65mm)

Max. power: 800W

Nom. power: 400W rms

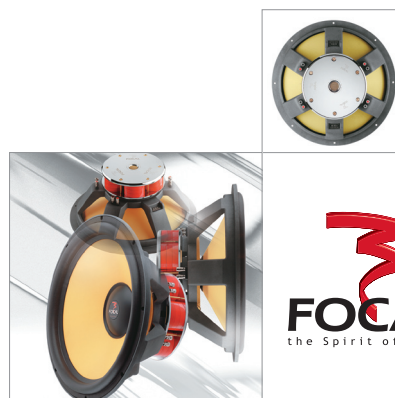
Sensitivity (2.8V/1m): 90dB

Frequency response*: 30Hz – 1000Hz

Load type	Volume (l)	Cut-off frequency (-3dB)	QI
Sealed	30	42Hz	7
Sealed	40	41Hz	7
Sealed	50	40Hz	7

It makes the difference:

- No compromise musicality
- High power handling
- Bass steadiness
- 2x2 ohms double voice coil: numerous wiring possibilities.



33 KX

330 mm K2 Power® subwoofer



- Multiferrites magnet
- Zamak basket
- For closed box
- High power handling
- Dual voice coil



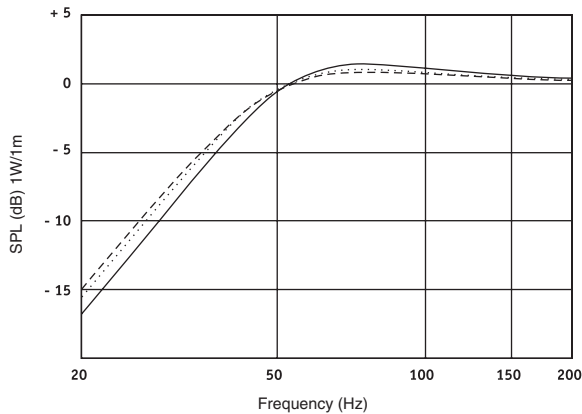
Specifications

Nominal power	400 W	
Maximum power	800 W	
Sensitivity	90 dB	
Cone	K2 Composite Sandwich®	
Surround	Butyl	
Nom. impedance	4 ohms (2 x 2)	
DC resistance	4.2 ohms (2 x 2.1)	
VC diameter	65 mm	2.55 in
VC height	32 mm	1.26 in
Former	aluminium	
Layers	4	
Wire	Copper	
Inductance	4.3 mH (in series)	
Xmax	11 mm	0.43 in
Magnet d x h (18)	60 x 14 mm	2.36 x 0.55 in
Magnet weight	2916 g	6.42 lb
Flux density	0.9 T	
Gap height	10 mm	0.39 in
Net weight	9.8 kg	21.6 lb

Suggested Application

Sealed enclosure

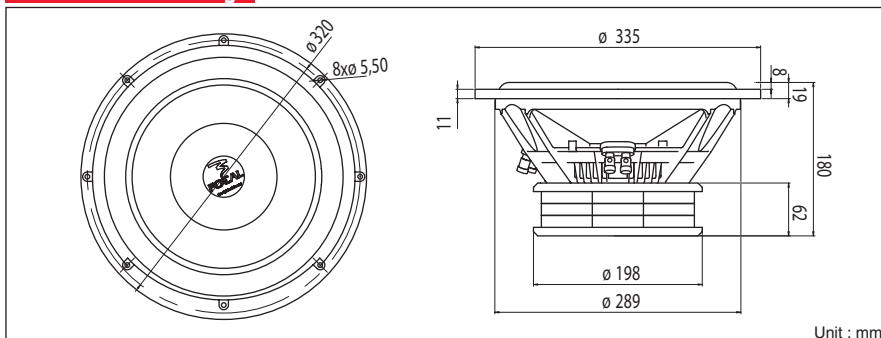
- 40 liters (1.41 cu. ft.)
F - 3 = 41Hz / **Punchy and dynamic bass**
- _____ 30 liters (1.06 cu. ft.)
F - 3 = 42Hz / **Fast and tight bass**
- 50 liters (1.77 cu. ft.)
F - 3 = 40Hz / **Deep and articulate bass**



Parameters

Fs	39 Hz	
Vas	24.59 l	0.86 Ft ³
Qts	0.733	
Qes	0.84	
Qms	5.77	
Re	4.2 ohms (in series)	
Sd	490.87 cm ²	7.6 in ²
Cas	1.75E-07 m ⁵ /N	
Mas	95.12 kg/m ⁴	
Ras	4039.65 ohms.ac	
Cms	7.27E-05 m/N	
Mms	229.2 g	0.5 lb
Rms	9734 g/s	
Ces	816.18 mF	
Les	20.4 mH	
Res	28.85 ohms	
BI	16.76 N/A (in series)	
SPL	84.24 dB/W/m	

Mechanical Drawing



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Suggested application

Load	V (l)	Fb (Hz)	F-3 (Hz)	Ql
Sealed	30	-	42	7
Sealed	40	-	41	7
Sealed	50	-	40	7

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40 KX

40 KX subwoofer - K2P subwoofer

- Butyl surround

Performance continuity

- High-tech spider with integrated braids

Performance and reliability

- 2 $9/16''$ (65mm) double voice coil on Kapton support

High power handling

- 2x2 0hm double voice coil

Numerous possibilities of wiring

- Voice coil auto-regulated cooling system

Reliability

- K2 composite sandwich cone

Extremely rigid and light cone

- Zamak chassis

High rigidity, non-magnetic

- Multiferrite magnet

Magnetic field optimization



Technical characteristics :

Subwoofer: 15 $3/4''$ (40cm)

Double voice coil: 2 $9/16''$ (65mm)

Max. power: 1000W

Nom. power: 500W

Sensitivity (2.8V/1m): 92.5dB

Frequency response: 25Hz – 1000Hz

It makes the difference :

- High power handling
- Bass firmness
- 2x2 0hm double voice coil



FOCAL
the Spirit of Sound

40 KX

400 mm K2 Power® subwoofer



- Multiferrites magnet
- Zamak basket
- For closed box
- High power handling
- Dual voice coil

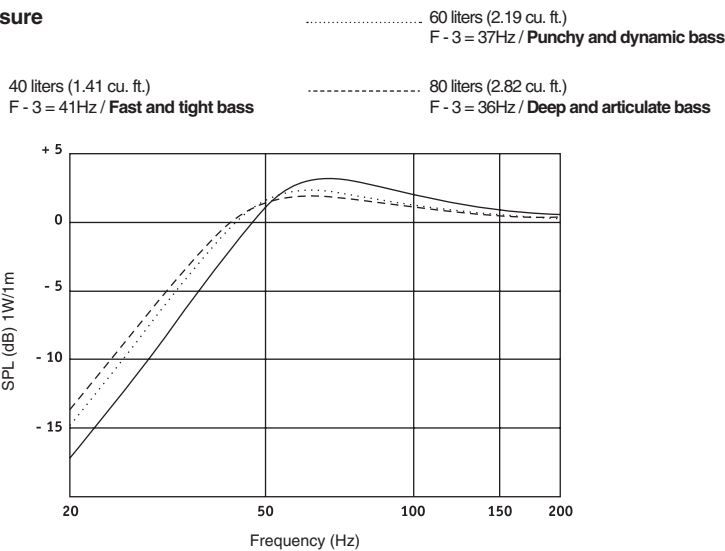


Specifications

Nominal power	500 W	
Maximum power	1000 W	
Sensitivity	92.5 dB	
Cone	K2 Composite Sandwich®	
Surround	Butyl	
Nom. impedance	4 ohms (2 x 2)	
DC resistance	4.2 ohms (2 x 2.1)	
VC diameter	65 mm	2.55 in
VC height	32 mm	1.25 in
Former	aluminium	
Layers	4	
Wire	Copper	
Inductance	4.2 mH (in series)	
Xmax	11 mm	0.43 in
Magnet d x h (18)	60 x 14 mm	2.36 x 0.55 in
Magnet weight	2916 g	6.42 lb
Flux density	0.9 T	
Gap height	10 mm	0.39 in
Net weight	10.7 kg	23.58 lb

Suggested Application

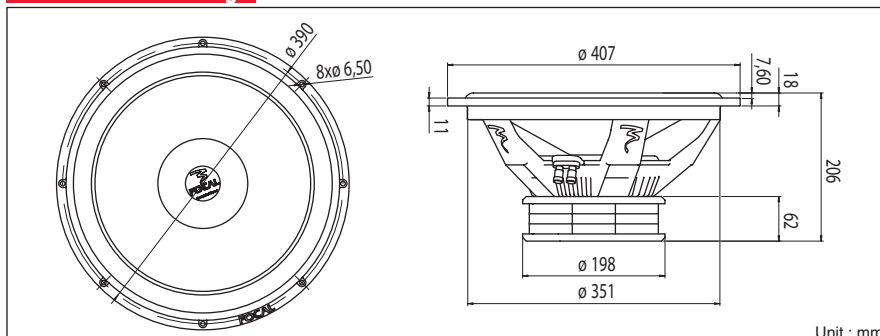
Sealed enclosure



Parameters

Fs	34.6 Hz	
Vas	64.83 l	2.28 Ft ³
Qts	0.82	
Qes	0.97	
Qms	5.3	
Re	4.2 ohms (in series)	
Sd	804.25 cm ²	124.65 in ²
Cas	4.62E-07 m ⁵ /N	
Mas	45.84 kg/m ⁴	
Ras	1880.29 ohms.ac	
Cms	7.14E-05 m/N	
Mms	296.5 g	0.65 lb
Rms	12.162 g/s	
Ces	1062.35 mF	
Les	19.92 mH	
Res	22.95 ohms	
BI	16.71 N/A (in series)	
SPL	86.26 dB/W/m	

Mechanical Drawing



Suggested application

Load	V (l)	Fb (Hz)	F-3 (Hz)	QI
Sealed	40	-	41	7
Sealed	60	-	37	7
Sealed	80	-	36	7

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46 KX 4

46 KX4 subwoofer - K2P subwoofer

- Butyl surround

Performance continuity

- High-tech spider with integrated braids

Performance and reliability

- 3 1/16" [77mm] double voice coil on Kapton support

High power handling

- 4 x 1 Ohm voice coils

Numerous possibilities of wiring

- Voice coil auto-regulated cooling system

Reliability

- K2 composite sandwich cone

Extremely rigid and light cone

- Zamak chassis

High rigidity, non-magnetic

- Multiferrite magnet

Magnetic field optimization



Technical characteristics:

Subwoofer: 18 1/8" [46cm]

Double voice coil: 3 1/16" [77mm]

Max. power: 2000W

Nom. power: 1000W

Sensitivity [2.8 V/1m]: 96.5dB

Frequency response: 20Hz – 1000Hz

It makes the difference:

- High power handling
- Bass firmness
- 4x1 Ohm double voice coils
- Very high sensitivity



FOCAL
the Spirit of Sound

46 KX 4

460 mm K2 Power® subwoofer



- 4 voice coil
- Multiferrites magnet
- Aluminium basket
- For bass reflex box
- High output level



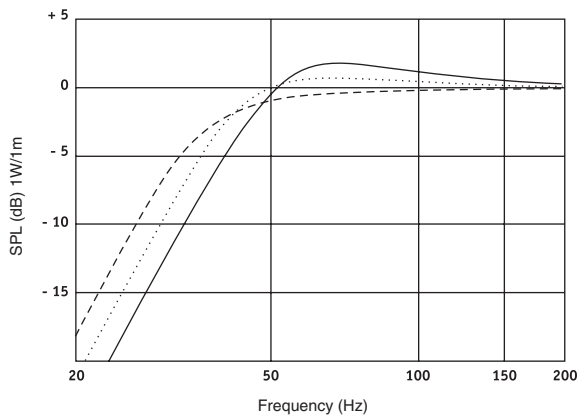
Specifications

Nominal power	1000 W	
Maximum power	2000 W	
Sensitivity	96.5 dB	
Cone	K2 Composite Sandwich®	
Surround	High density foam	
Nom. impedance	4 ohms (4 x 1)	
DC resistance	4.2 ohms (4 x 1.05)	
VC diameter	77 mm	3.03 in
VC height	30 mm	1.18 in
Former	aluminium	
Layers	8	
Wire	Copper	
Inductance	3 mH (in series)	
Xmax	10 mm	0.39 in
Magnet d x h (18)	75 x 15 mm	2.95 x 0.59 in
Magnet weight	8100 g	17.86 lb
Flux density	0.9 T	
Gap height	10 mm	0.039 in
Net weight	17 kg	37.47 lb

Suggested Application

Vented enclosure

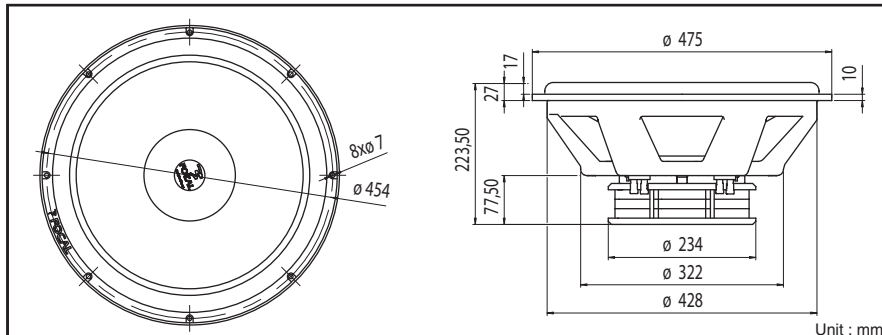
- 80 liters (2.82 cu. ft.)
F - 3 = 45Hz / Fast and tight bass
- 100 liters (3.53 cu. ft.)
F - 3 = 40Hz / Punchy and dynamic bass
- 120 liters (4.24 cu. ft.)
F - 3 = 37Hz / Deep and articulate bass



Parameters

Fs	29.4 Hz	
Vas	206.31 l	7.66 Ft ³
Qts	0.345	
Qes	0.37	
Qms	5.05	
Re	4.2 ohms (in series)	
Sd	1320.25 cm ²	204.63 in ²
Cas	1.47E-06 m ⁵ /N	
Mas	19.95 kg/m ⁴	
Ras	729.77 ohms.ac	
Cms	8.43E-05 m/N	
Mms	347.75 g	0.76 lb
Rms	12.72 kg/s	
Ces	476.9 mF	
Les	61.45 mH	
Res	57.32 ohms	
BI	27 N/A (in series)	
SPL	93.35 dB/W/m	

Mechanical Drawing



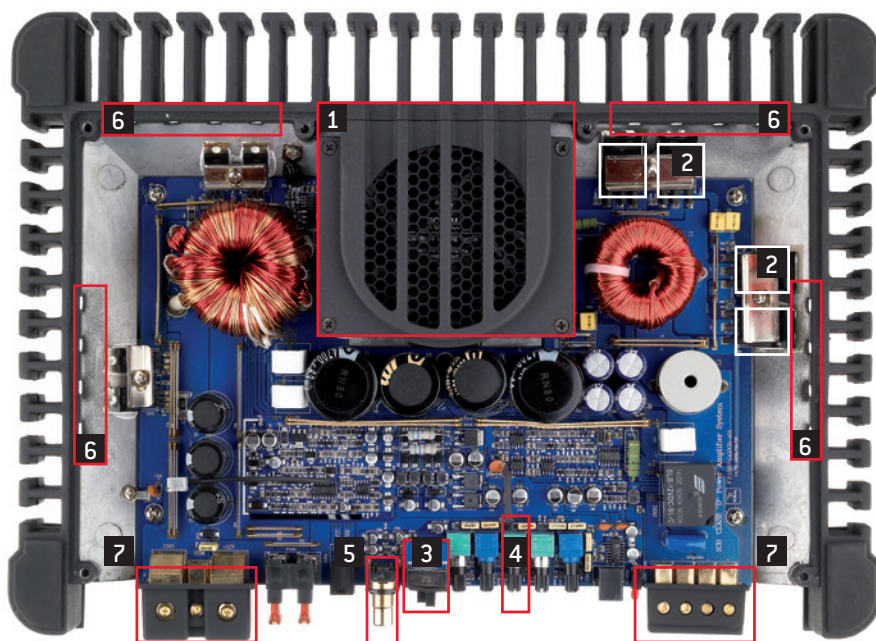
Suggested application

Load	V (l)	Fb (Hz)	F-3 (Hz)	Ql
Vented	80	45	45	7
Vented	100	34	41	7
Vented	120	28	38	7

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FPS 1500

 symmetric amplifier



- 1 Progressive controlled cooling system
Regulates the amplifier temperature
- 2 Mosfets (IRFP250N)
Audiophile and powerful
- 3 Direct mode
The audio signal is directly amplified
- 4 Low-pass crossovers
Adjustable from 50Hz to 500Hz
- 5 Pseudo-balanced input
No parasite
- 6 Controlled cooling system
Air flow control
- 7 Safety terminal
Cable and sheath complete integration

Technical characteristics:

2006 CEA power (4 Ohms, $\leq 1\%$ THD+N, 14.4 Volts): 1x320W

Nom. power: 1x500W into 2 Ohms, with 0.4% THD

Nom. power: 1x750W into 1 Ohm with 0.8% THD

Adjustable low-pass crossover from 50Hz to 500Hz

Direct mode

Protections: short-circuit, direct current, thermal overload, polarity reversal

It makes the difference:

- Remote control
- Direct mode
- Stable into 1 Ohm
- High-Cap compatible
- Class D amplification
- Full Mosfet



FPS 1500

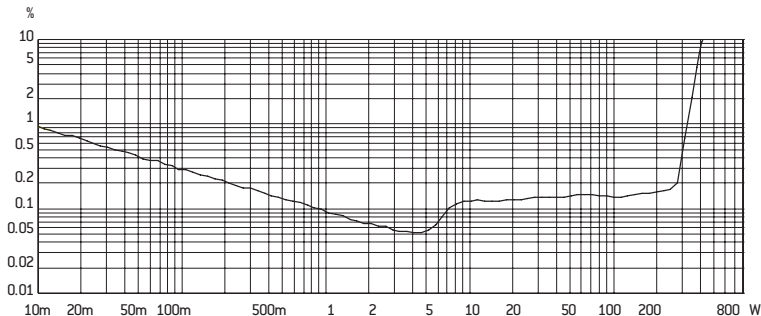
Audiophile, Powerful... Always

- Class D amplifier
- Direct mode
- Low-pass crossover
- Controlled cooling system

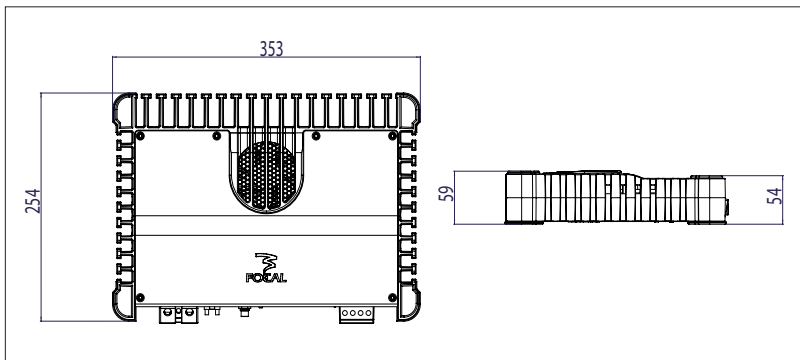


THD / Power

FPS 1500 measured at 14,4V/4ohms/1V/100Hz



Mechanical Drawing



Specifications

RMS power - 14.4V 4Ω - THD+N < 1% (CEA 2006)	1 x 325W
RMS power - 14.4V 2Ω - THD+N < 1%	1 x 550W
RMS power - 14.4V 1Ω - THD+N < 1%	1 x 800W
RMS power in bridged mode - 14.4V 4Ω - THD+N < 1%	-
RMS power in bridged mode - 14.4V 2Ω - THD+N < 1%	-
Frequency response (-1dB) in direct mode	10Hz - 2.5kHz
Signal/noise ratio (@CEA power)	87dBA
Distortion into 4 Ohms @1kHz (with 22kHz low-pass)	-
Distortion into 4 Ohms @100Hz (with 22kHz low-pass)	< 0.15% between 5 and 270W
Crosstalk (@ 1kHz - 10V - 4 Ohms)	-
Damping factor into 4 Ω at 100Hz	220
Input sensitivity	0.2V - 5.2V
High-pass crossover	-
Low-pass crossover	50Hz - 500Hz
Bandpass crossover	-
Subsonic crossover	Variable from 20 to 50Hz (24dB/oct.) released
Direct mode	Yes
Bass boost level	0/+9dB linear
Bass Boost center frequency	45Hz
Variable phase (SUB)	0-180° linear
Remote control	Yes
Protections	Short-circuit Thermal overload (76°C) Soft clipping High voltage Polarity reversal
Dimensions (H x L x D)	59 x 353 x 254mm

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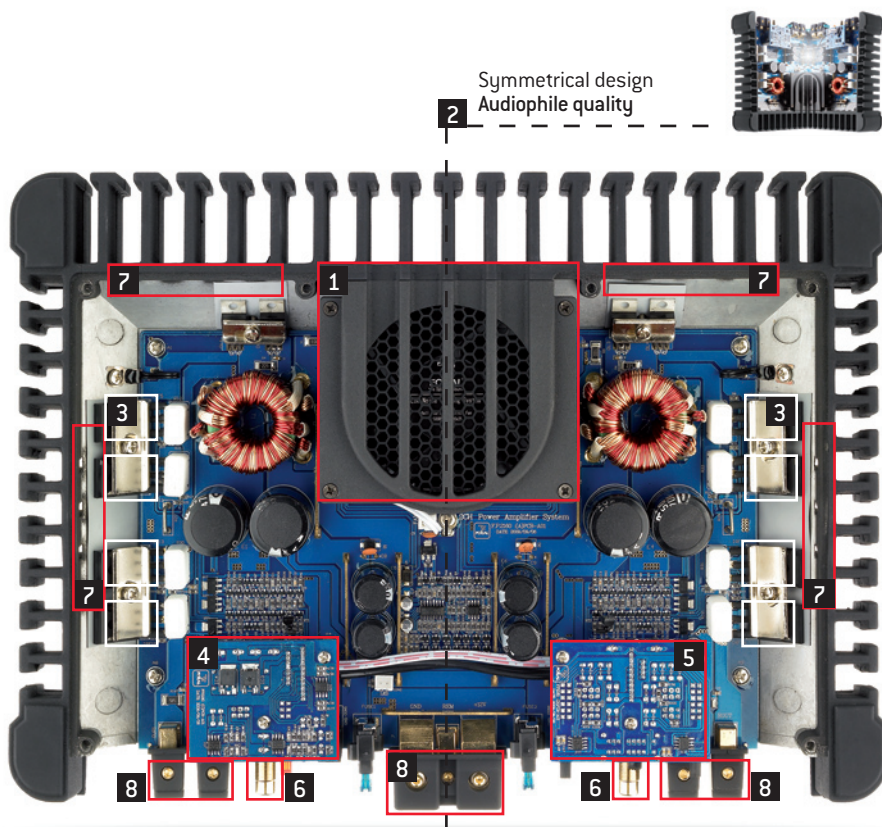
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FOCAL
the Spirit of Sound

FPS 2160

symmetric amplifier



2 Symmetrical design
Audiophile quality

- 1 Progressive controlled cooling system
Regulates the amplifier temperature
- 3 Insulated Gate Bipolar Transistor (IGBT)
Audiophile and powerful
- 4 Direct mode
The audio signal is directly amplified
- 5 High-pass, low-pass and band-pass
crossovers
Adjustable from 50Hz to 5kHz
- 6 Pseudo-balanced input
No parasite
- 7 Controlled cooling system
Air flow control
- 8 Safety terminal
Cable and sheath complete integration

Technical characteristics:

CEA 2006 power (4 Ohms, $\leq 1\%$ THD+N, 14,4 Volts): 2x105W
Nom. power: 2x160W into 2 Ohms with 0.11% THD
Nom. power (bridged mode): 1x360W into 4 Ohms with 0.4% THD
Adjustable high-pass crossover from 50Hz to 5kHz
Adjustable low-pass crossover from 50 Hz to 5kHz
Adjustable band-pass crossover from 50 Hz to 5kHz
Direct Mode
Protections: short-circuit, direct current, thermal overload,
polarity reversal

It makes the difference:

- Symmetrical design
- Direct Mode
- Stable into 2 Ohms stereo
- High-Cap Compatible
- Class AB amplification (IGBT)



FOCAL
the Spirit of Sound

FPS 2160

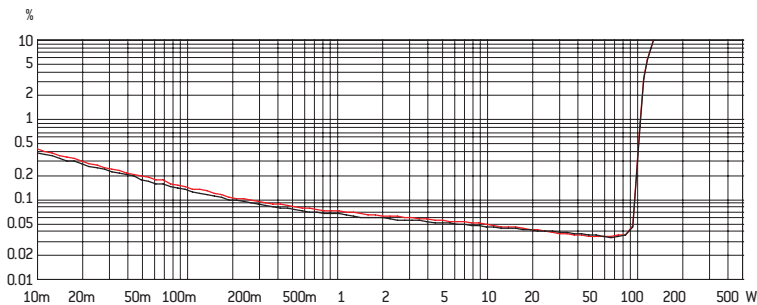
Audiophile, Powerful... Always

- Symmetrical design
- Direct mode
- High-pass, low-pass and band-pass crossovers
- Controlled cooling system
- Stable 1 ohm

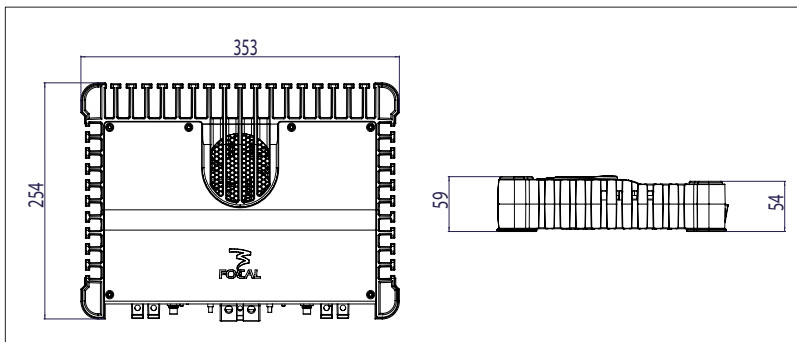


THD / Power

FPS 2160 measured at 14,4V/4ohms/1V/1kHz



Mechanical Drawing

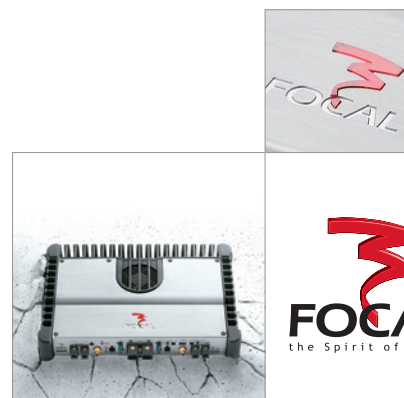


Specifications

RMS power - 14.4V 4Ω - THD+N < 1% (CEA 2006)	2 x 105W
RMS power - 14.4V 2Ω - THD+N < 1%	2 x 180W
RMS power - 14.4V 1Ω - THD+N < 1%	-
RMS power in bridged mode 14.4V / 4Ω - THD+N < 1%	1 x 360W
RMS power in bridged mode 14.4V / 2Ω - THD+N < 1%	-
Frequency response (-1 dB) in direct mode	10Hz - 52kHz
Signal/noise ratio (@ CEA power)	92dBA
Distortion into 4 Ohms @ 1kHz (with 22kHz low-pass)	< 0.05% between 10 and 95W
Distortion into 4 Ohms @ 100Hz (with 22kHz low-pass)	-
Crosstalk (@ 1kHz - 10V - 4 Ohms)	> 64dB
Damping factor into 4 Ω at 100Hz	250
Input impedance	13kΩ
Input sensitivity	0.2V - 5.2V
High-pass crossover	50Hz - 500Hz 500Hz - 5kHz-
Low-pass crossover	50Hz - 500Hz 500Hz - 5kHz
Bandpass crossover	50Hz - 500Hz 500Hz - 5kHz
Subsonic crossover	-
Direct mode	Yes
Bass boost level	-
Bass Boost center frequency	-
Variable phase (SUB)	-
Remote control	-
Maximum gauge of the power cables	35mm ² / 2 AWG
Standby consumption	0.8A
Fuse(s)	2*30A
Protections	Short-circuit Thermal overload (78°C) Soft clipping High voltage Polarity reversal
Dimensions (H x L x D)	59 x 353 x 254mm

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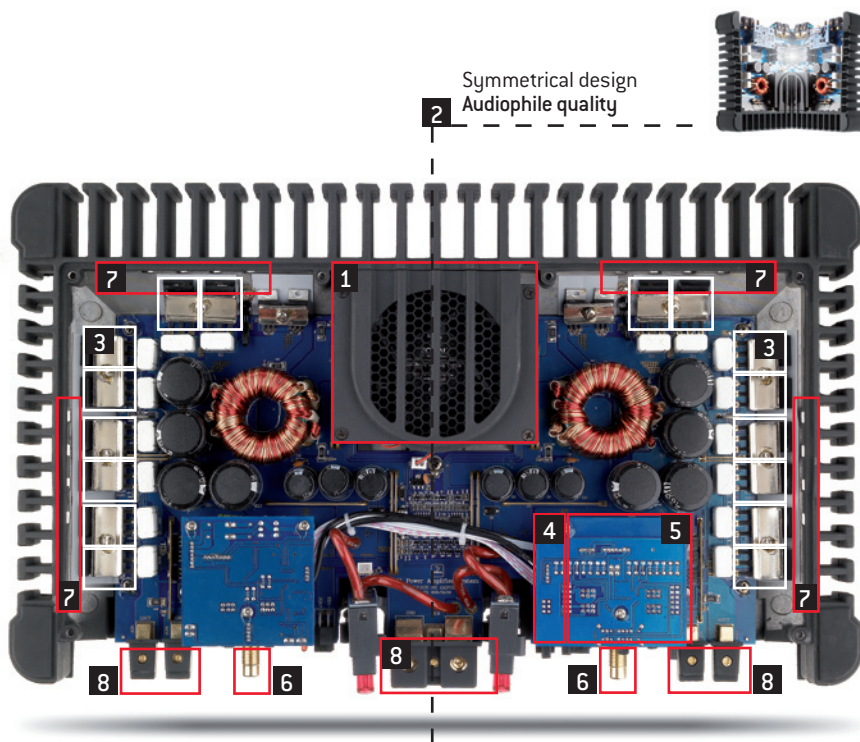
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FOCAL
the Spirit of Sound

FPS 2300RX

symmetric amplifier



2 Symmetrical design
Audiophile quality

- 1 Progressive controlled cooling system
Regulates the amplifier temperature
- 3 Insulated Gate Bipolar Transistor (IGBT)
Audiophile and powerful
- 4 Direct mode
The audio signal is directly amplified
- 5 High-pass, low-pass and band-pass
crossovers
Adjustable from 50Hz to 5kHz
- 6 Pseudo-balanced input
No parasite
- 7 Controlled cooling system
Air flow control
- 8 Safety terminal
Cable and sheath complete integration

Technical characteristics:

CEA 2006 power (4 Ohms, $\leq 1\%$ THD+N, 14.4 Volts): 2x155W
Nom. power: 2x200W into 2 Ohms with 0.04% THD
Nom. power: 2x300W into 1 Ohm with 0.05% THD
Nom. power (bridged mode): 1x410W into 4 Ohms with 0.03% THD
Nom. power (bridged mode): 1x600W into 2 Ohms with 0.04% THD
Adjustable high-pass crossover from 50Hz to 5kHz
Adjustable low-pass crossover from 50Hz to 5kHz
Adjustable band-pass crossover from 50Hz to 5kHz
Direct Mode
Protections: short-circuit, direct current, thermal overload,
polarity reversal

It makes the difference:

- Symmetrical design
- Remote control
- Direct Mode
- Stable into 1 Ohm stereo
- High-Cap Compatible
- Classe AB amplification (IGBT)



FPS 2300 RX

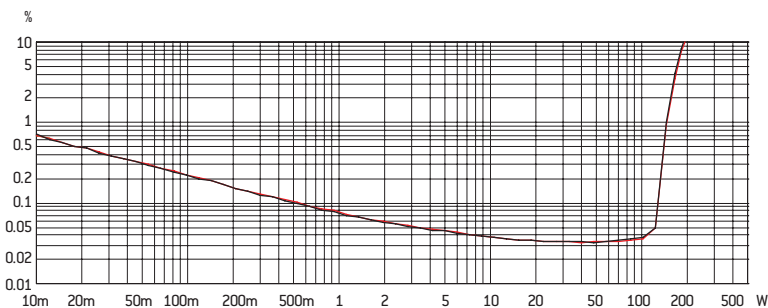
Audiophile, Powerful... Always

- Symmetrical design
- Direct mode
- High-pass, low-pass and band-pass crossovers
- Controlled cooling system
- Stable 1 ohm

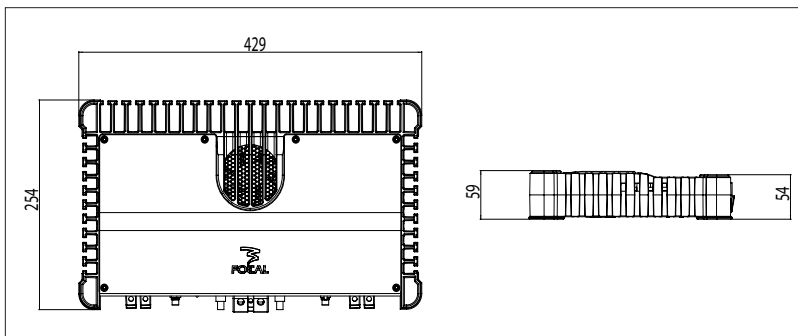


THD / Power

FPS 2300 RX measured 14,4V/4ohms/1V/1kHz

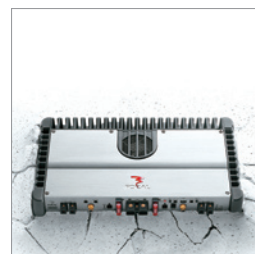


Mechanical Drawing



Specifications

RMS power - 14.4V 4Ω - THD+N < 1% (CEA 2006)	2 x 155W
RMS power - 14.4V 2Ω - THD+N < 1%	2 x 265W
RMS power - 14.4V 1Ω - THD+N < 1%	2 x 430W
RMS power in bridged mode - 14.4V / 4Ω - THD+N < 1%	1 x 530W
RMS power in bridged mode - 14.4V / 2Ω - THD+N < 1%	1x 750W
Frequency response (-1dB) in direct mode	10Hz-25kHz
Signal/noise ratio (@ CEA power)	89dBA
Distortion into 4 Ohms @ 1kHz (with 22kHz low-pass)	< 0.04% between 5 and 110W
Distortion into 4 Ohms @ 100Hz (with 22kHz low-pass)	-
Crosstalk (@ 1kHz - 10V - 4 Ohms)	> 70dB
Damping factor into 4 Ω at 100Hz	250
Input impedance	13kΩ
Input sensitivity	0.2V - 4.8V
High-pass crossover	50Hz - 500Hz 500Hz - 5kHz
Low-pass crossover	50Hz - 500Hz 500Hz - 5kHz
Bandpass crossover	50Hz - 500Hz 500Hz - 5kHz
Subsonic crossover	-
Direct mode	Yes
Bass boost level	0/+9dB linear
Bass boost center frequency	95Hz
Variable phase (SUB)	-
Remote control	Yes
Maximum gauge of the power cables	35mm ² / 2 AWG
Standby consumption	1.3A
Fuse(s)	2*50A
Protections	Short-circuit Thermal overload (81°C) Soft clipping High voltage Polarity reversal
Dimensions (H x L x D)	59 x 429 x 254mm



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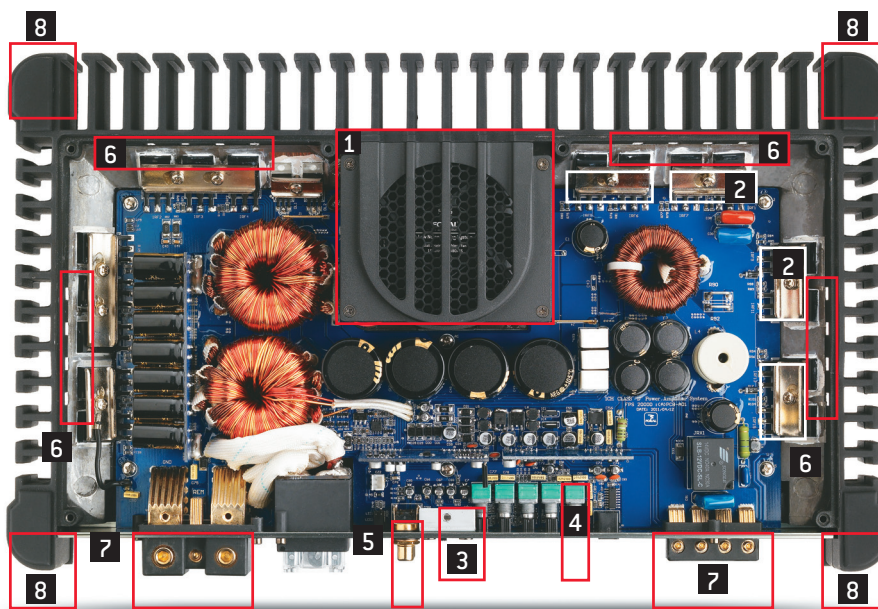
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FPS 3000

symmetric amplifier



- 1500W monochannel power amplifier based on the FPS 1500 technology
- Class D technology (improvement of efficiency, power/size ratio and thermal characteristics)
- Aluminum alloy dissipation basket with T fins to ensure optimized ventilation and reduce overheating risks (a common issue with monochannel amplifiers)
- High tech design (component structure and choice) to push back the limits of the cut-off and thus provide maximum power for the longest time possible.



- 1 Progressive controlled cooling system
Regulates the amplifier temperature
- 2 Mosfets (IRFP250N)
Audiophile and powerful
- 3 Direct mode
The audio signal is directly amplified
- 4 Low-pass crossovers
Adjustable from 50Hz to 500Hz
- 5 Pseudo-balanced input
No parasite
- 6 Controlled cooling system
Air flow control
- 7 Safety terminal
Cable and sheath complete integration
- 8 Rubber pads in the corners
Damping of vibrations

Advantages:

- High bass quality
- Class D amplification
- Full Mosfet
- Very high power
- Stable into 1 Ohm stereo
- Remote control
- Direct Mode

Technical characteristics:

CEA 2006 power [4 Ohms, $\leq 1\%$ THD+N, 14.4 Volts]: 1x590W

Nom. power: 1x1000W into 2 Ohms with 1% de THD

Nom. power: 1x1500W into 1 Ohm with 1 % de THD

Adjustable high-pass crossover from 50Hz to 500Hz

Subsonique crossover - Continuous phase setting

Direct Mode

Protections: short-circuit, direct current, thermal overload, polarity reversal.



FOCAL
the Spirit of Sound

Elite *FPS 3000*



Audiophile, Powerful... Always



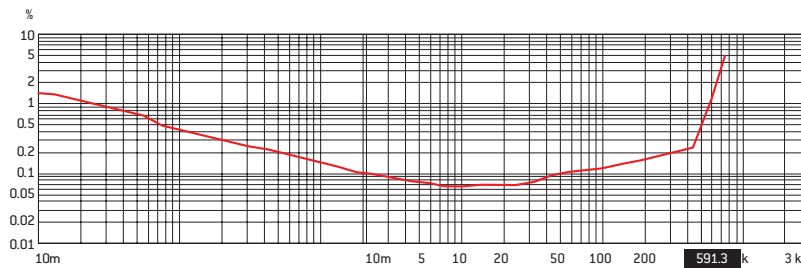
- Class D amplifier
- Monocanal 1500W
- Direct mode
- High power
- Controlled cooling system
- Full crossover features



SPECIFICATIONS

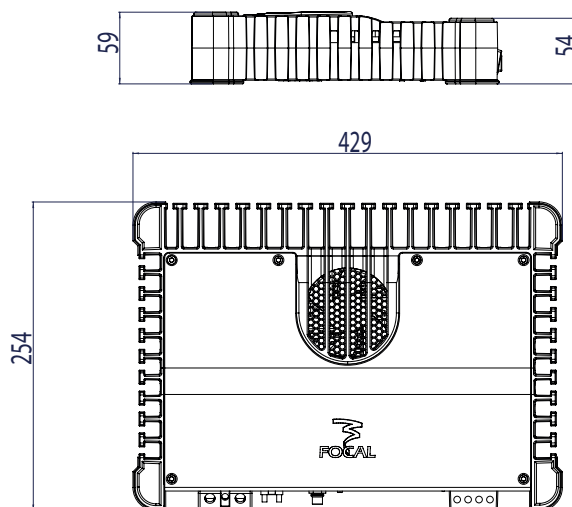
Power RMS - 14.4V 4Ω - THD+N < 1% 100Hz	590W
Power RMS - 14.4 V 2Ω - THD+N < 1% 100Hz	1000W
Power RMS - 14.4V 1Ω - THD+N < 1% 100Hz	1500W
Frequency response (-1dB in direct mode)	10Hz - 2.5kHz
Signal/noise ratio (@ CEA power)	93dBa
Distortion (4 Ohms @ 100Hz with lo-pass 22kHz)	< 0.2% from 3W to 400W
Damping factor (4 Ohms @ 100Hz)	300
Input impedance	47Kohms
Input sensitivity	0.2V - 4.6V
Low-pass filter	50Hz - 500Hz
Subsonic filter	Variable from 20 to 50Hz (24dB/oct.) with bypass
Direct mode	yes
Adjustable bass boost	0/+9dB linear
Bass boost central frequency	45Hz
Variable phase (SUB)	0-180° linear
Remote control	yes
Maximum cross section of power cable	107 mm ² / 0000 AWG
Idle current	2.2A
Fuses	2x80A
Protections	Short-circuit Overheating (80°C) Soft clipping Overvoltage Reversal polarity
Low noise ventilation system	yes (auto turn on at 50°C)
Dimensions (HxWxD)	59x429x254mm

FREQUENCY RESPONSE / IMPEDANCE



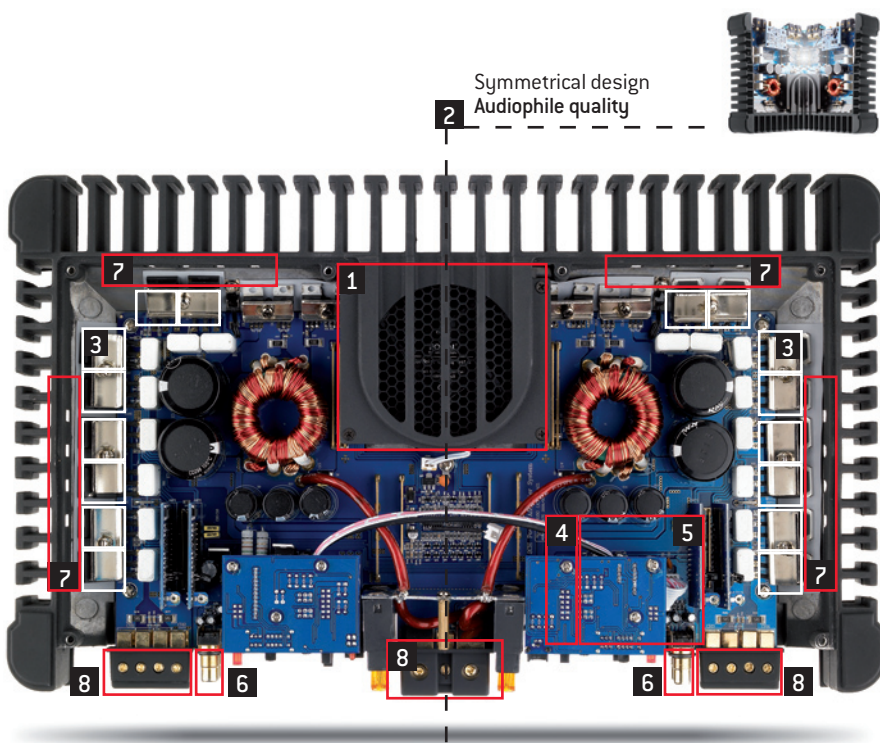
MECHANICAL DRAWING

Unit: mm



FPS 4160

symmetric amplifier



Symmetrical design
Audiophile quality

- 1** Progressive controlled cooling system
Regulates the amplifier temperature
- 3** Insulated Gate Bipolar Transistor (IGBT)
Audiophile and powerful
- 4** Direct mode
The audio signal is directly amplified
- 5** High-pass, low-pass and band-pass
crossovers
Adjustable from 50Hz to 5kHz
- 6** Pseudo-balanced input
No parasite
- 7** Controlled cooling system
Air flow control
- 8** Safety terminal
Cable and sheath complete integration

Technical characteristics:

CEA 2006 power (4 Ohms, $\leq 1\%$ THD+N, 14.4 Volts): 4x120W
Nom. power: 4x160W into 2 Ohms with 0.07% THD
Nom. power (bridged mode): 2x360W into 4 Ohms with 0.08% THD
Adjustable high-pass crossover from 50Hz to 5kHz
Adjustable low-pass crossover from 50Hz to 5kHz
Adjustable band-pass crossover from 50Hz to 5kHz
Direct Mode
Protections: short-circuit, direct current, thermal overload,
polarity reversal

It makes the difference:

- Symmetrical design
- Remote control
- Direct Mode
- Stable into 2 Ohms stereo
- High-Cap Compatible
- Class AB amplification (IGBT)



FPS 4160

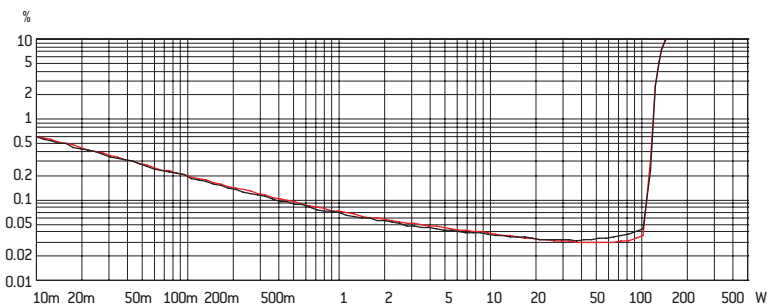
Audiophile, Powerful... Always

- Symmetrical design
- Direct mode
- High-pass, low-pass and band-pass crossovers
- Controlled cooling system
- Stable 1 ohm

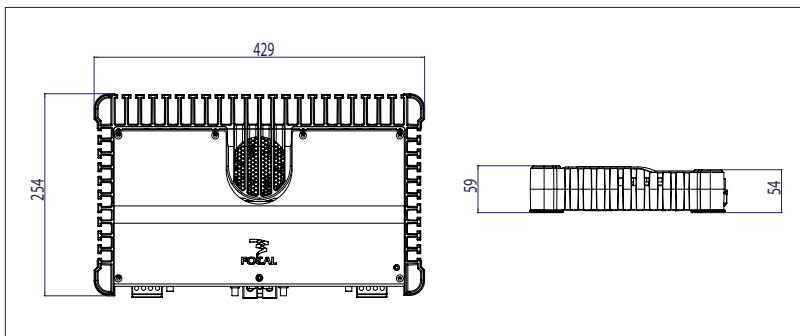


THD / Power

FPS 4160 measured at 14,4V/4ohms/1V/1kHz



Mechanical Drawing



Specifications

RMS power - 14.4V 4Ω - THD+N < 1% (CEA 2006)	4 x 120W
RMS power - 14.4V 2Ω - THD+N < 1%	4 x 200W
RMS power - 14.4V 1Ω - THD+N < 1%	-
RMS power in bridged mode - 14.4V - 4Ω - THD+N < 1%	2 x 380W
RMS power in bridged mode - 14.4V - 2Ω - THD+N < 1%	-
Frequency response (-1 dB) in direct mode	10Hz - 52kHz
Signal/noise ratio (@ CEA power)	92dBA
Distortion into 4 Ohms @ 1kHz (with 22kHz low-pass)	< 0.05% between 5 and 100W
Distortion into 4 Ohms @ 100Hz (with 22kHz low-pass)	-
Crosstalk (@ 1kHz - 10V - 4 Ohms)	> 68dB
Damping factor into 4 Ω at 100Hz	250
Input impedance	13kΩ
Input sensitivity	0.2V - 5.2V
High-pass crossover	50Hz - 500Hz 500Hz - 5kHz
Low-pass crossover	50Hz - 500Hz 500Hz - 5kHz
Bandpass crossover	50Hz - 500Hz 500Hz - 5kHz
Subsonic crossover	-
Direct mode	Yes
Bass boost level	-
Bass Boost center frequency	-
Variable phase (SUB)	-
Remote control	Yes (channels 3-4)
Maximum gauge of the power cables	35mm ² / 2 AWG
Standby consumption	1.5A
Fuse(s)	2*40A
Protections	Short-circuit Thermal overload (80°C) High voltage Polarity reversal
Dimensions (H x L x D)	59 x 429 x 254mm



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Due to constant technological advances, Focal reserves its right to modify specifications without notice. Images may not conform exactly to specific product.

FPS HIGH-CAP



1 for FPS 1500



2 for FPS 2160



2 for FPS 2300RX



2 for FPS 4160



Aluminum frame
Same finish as the FPS

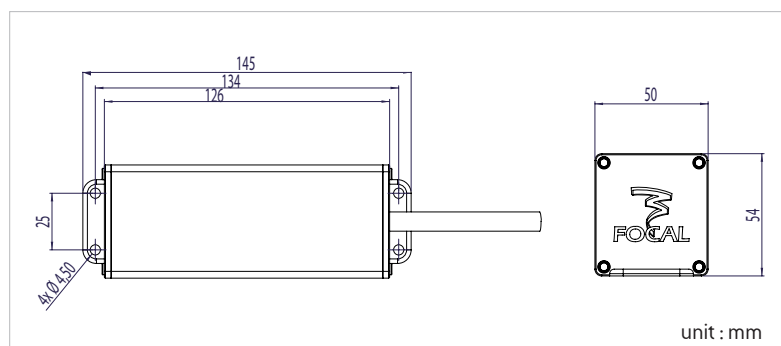
High temperature class capacitor
105°C / 80V – 4x3300uF

Pre-wired box
Plug & Play connection

Woven protection sheath
Installation safety



Space requirement:



Advantages:

- Enhanced dynamic behavior
- Improved speaker control
- Punchier sound
- Serial low resistance capacitors



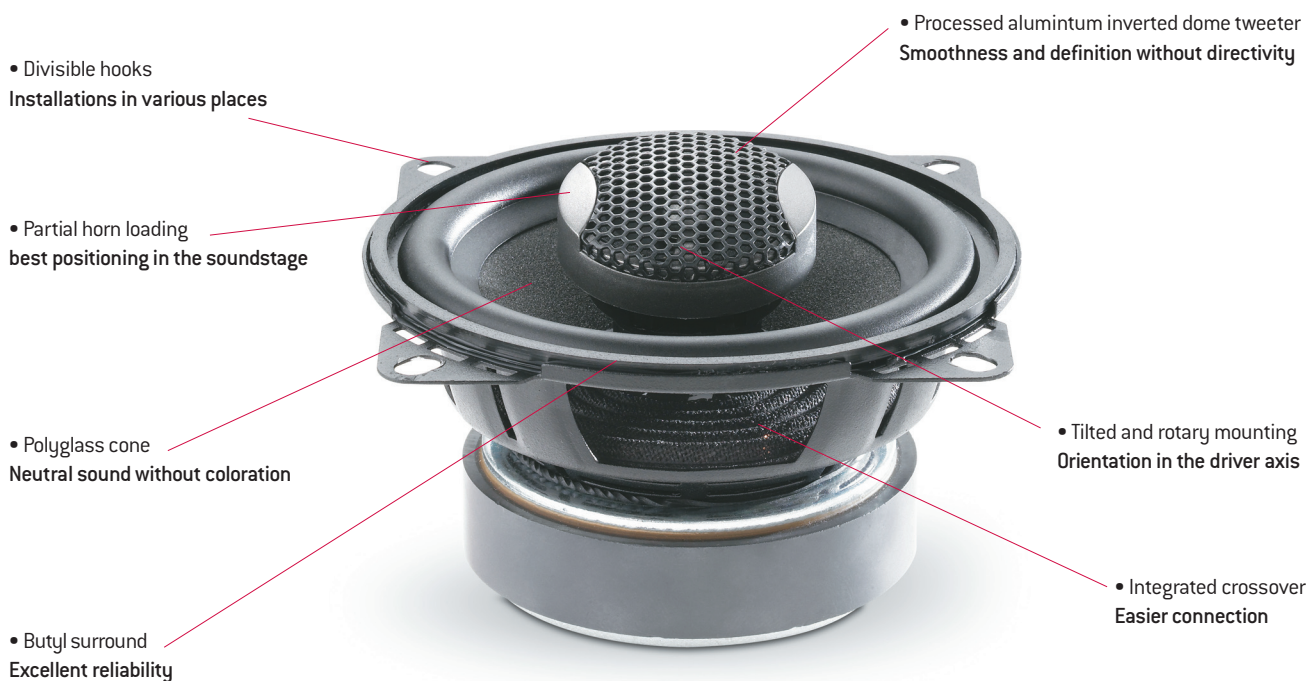
INTEGRATION



IC 100	100mm (4")	coaxial kit
IC 130	130mm (5")	coaxial kit
IC 165	165mm (6.5")	coaxial kit
IC 570	130x180mm (5x7")	coaxial kit
IS 130	130mm (5")	2 way kit
IS 165	165mm (6.5")	2 way kit
IS 200	200mm (7 ⁷ / ₈ ")	2 way kit
I 100 VRS	100mm (4")	2 way kit
I 130 VRS	130mm (5")	2 way kit
I 165 VRS	165mm (6.5")	2 way kit
TNI 1.5	tweeter	
IBUS 20	Active sealed box + 20cm (8")	



2-way coaxial kit



ADVANTAGES

- High sensitivity
- Shallow mounting depth: 49mm
- Great improvement from original car speakers
- Dynamics and neutrality
- Soundstage orientation

TECHNICAL CHARACTERISTICS

Diameter: 4" (100mm)

Voice-coil diameter: 1" (25.5mm)

Voice-coil height: 0 1/3" (8.4mm)

Magnet: 2 13/16" (72mm)

Processed Aluminum inverted dome tweeter

Integrated crossover: 6dB

Max. power: 100W

Nom. power: 50W rms

Sensitivity (2.83V/1m): 90,3 dB

Frequency response: 90 Hz - 20 kHz

Accessories: Supplied grilles

Integration IC 100



2-way coaxial kit

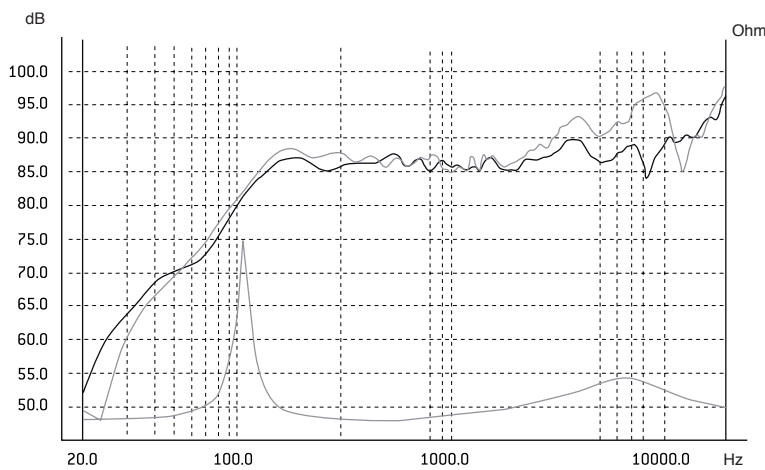


- Polyglass cone
- Reduced height
- Adjustable inverted dome tweeter

SPECIFICATIONS

Nominal power	50W	
Maximum power	100W	
Sensitivity (2.83V/1m)	90.3dB	
Cone	Polyglass	
Surround	Butyl	
Nom. impedance	9 Ohms	
DC resistance	2.8 Ohms	
VC diameter	25.5mm	1"
VC height	8.4mm	0 1/3"
Former	Kapton	
Layers	2	
Wire	Copper	
Inductance	0.09mH	
Xmax	2.5mm	0 1/8"
Magnet d x h	72 x 15mm	2 13/16 x 0 9/16"
Magnet weight	160g	0.35 lb
Flux density	-	
Gap height	3mm	0 1/8"
Net weight	500g	1.1lb

FREQUENCY RESPONSE / IMPEDANCE

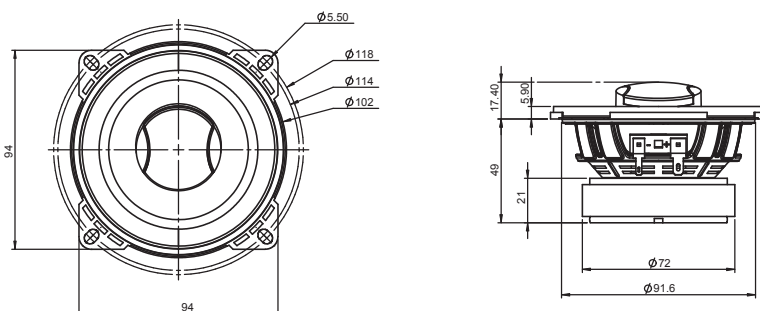


PARAMETERS

Fs	114Hz	
Vas	1.37 l	
Qts	0.81	
Qes	0.87	
Qms	11.33	
Re	2.8 Ohms	
Sd	54.11cm ²	
Cas	9.74 E-8m ⁵ /N	
Mas	197.44kg/m ⁴	
Ras	12566.49 Ohms.ac	
Cms	333μm/N	
Mms	5.78g	
Rms	0.368kg/s	
Ces	435.83mF	
Les	4.41mH	
Res	36.4 Ohms	
BI	3.64N/A	
SPL	85.55dB (Re)	

MECHANICAL DRAWING

Unit: mm





2-way coaxial kit



ADVANTAGES

- High sensitivity
- Shallow mounting depth: 49mm
- Great improvement from original car speakers
- Dynamics and neutrality
- Soundstage orientation

TECHNICAL CHARACTERISTICS

Diameter: 5" (130mm)

Voice-coil diameter: 1" (25.5mm)

Voice-coil height: 0 1/3" (8.4mm)

Magnet: 2 13/16" (72mm)

Processed Aluminum inverted dome tweeter

Integrated crossover: 6dB

Max. power: 120W

Nom. power: 60W rms

Sensitivity (2.83V/1m): 91.8dB

Frequency response: 75Hz – 20kHz

Accessories: Supplied grilles

Integration IC 130



2-way coaxial kit

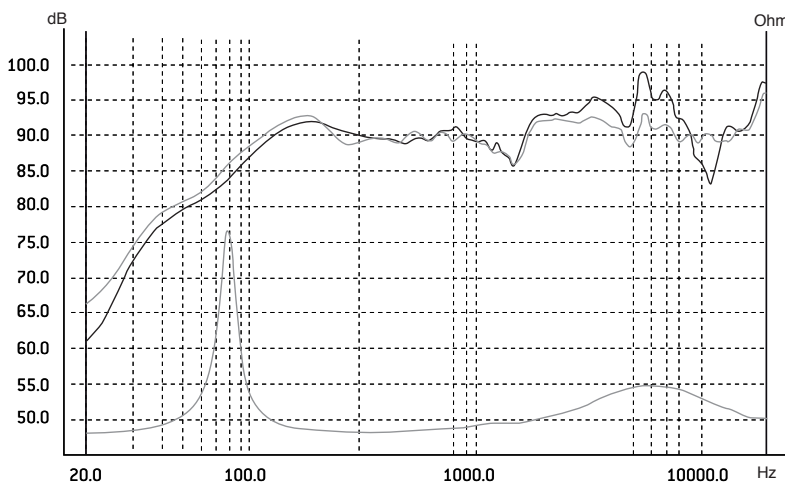


- Polyglass cone
- Reduced height
- Adjustable inverted dome tweeter

SPECIFICATIONS

Nominal power	60W	
Maximum power	120W	
Sensitivity (2.83V/1m)	91.8dB	
Cone	Polyglass	
Surround	Butyl	
Nom. impedance	7 Ohms	
DC resistance	2.8 Ohms	
VC diameter	25.5mm	1"
VC height	8.4mm	0 1/3"
Former	Kapton	
Layers	2	
Wire	Copper	
Inductance	0.21mH	
Xmax	2.5mm	0 1/8"
Magnet d x h	72 x 15mm	2 13/16 x 0 9/16"
Magnet weight	160g	0.35 lb
Flux density	-	
Gap height	3mm	0 1/8"
Net weight	550g	1.1lb

FREQUENCY RESPONSE / IMPEDANCE

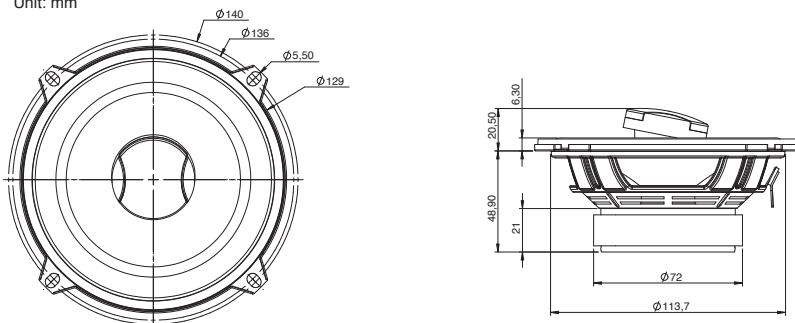


PARAMETERS

Fs	96.03Hz
Vas	3.82 l
Qts	0.779
Qes	0.88
Qms	6.76
Re	2.8 Ohms
Sd	84.95cm ²
Cas	2.72 E-8m ⁵ /N
Mas	101.02kg/m ⁴
Ras	9016.84 Ohms.ac
Cms	377µm/N
Mms	7.29g
Rms	0.651kg/s
Ces	520.88mF
Les	5.27mH
Res	21.51 Ohms
BI	3.74N/A
SPL	87.69dB (Re)

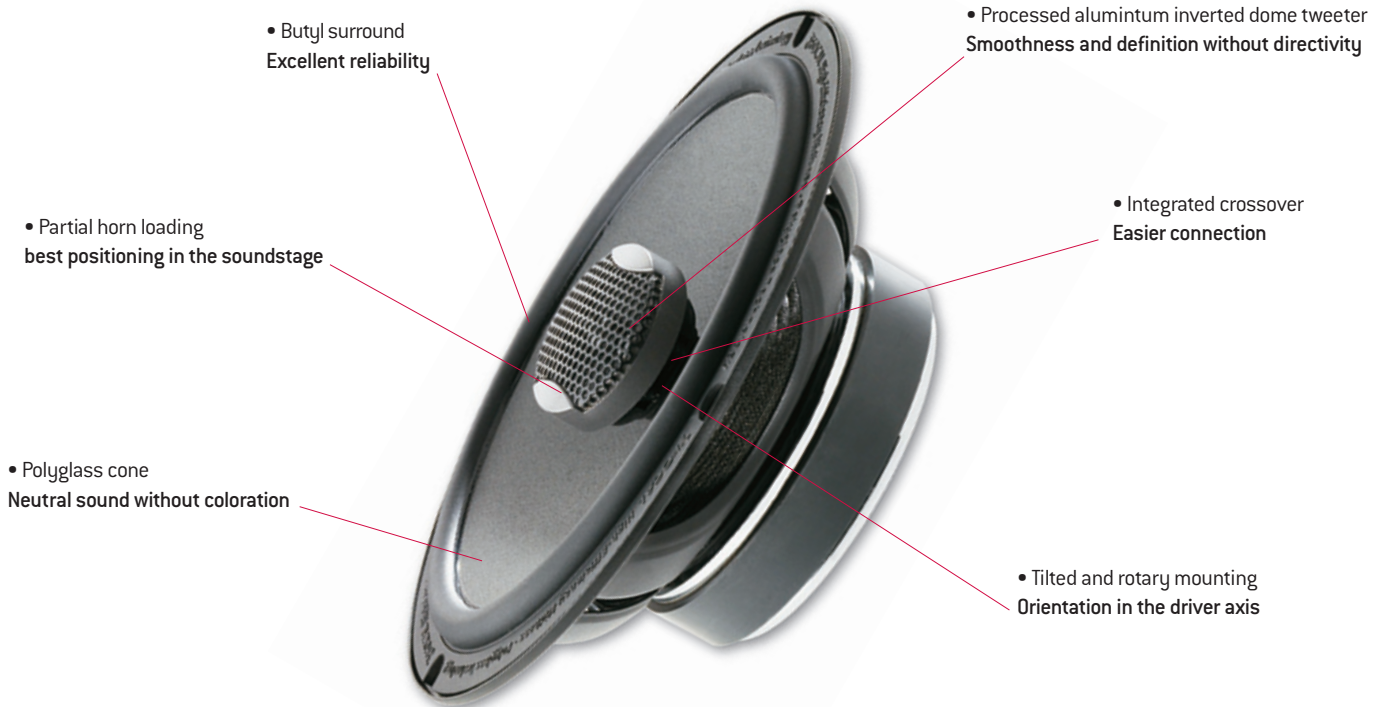
MECHANICAL DRAWING

Unit: mm





2-way coaxial kit



Woofers crossover



ADVANTAGES

- High sensitivity
- High soundstage
- Partial horn loading tweeter
- Dynamics and neutrality
- Mounting depth : 2" (49.9mm)

TECHNICAL CHARACTERISTICS

Diameter: 6¹/₂" (165mm)

Voice-coil diameter: 1" (25mm)

Voice-coil height: 0¹/₄" (7mm)

Magnet: 3³/₁₆" (90mm)

Processed Aluminum inverted dome tweeter

Integrated crossover: 6/6dB/oct

Max. power: 140W

Nom. power: 70W rms

Sensitivity (2.83V/1m): 93.2dB

Frequency response: 60Hz – 20kHz

Accessories: Supplied grilles

Integration IC 165



2-way coaxial kit

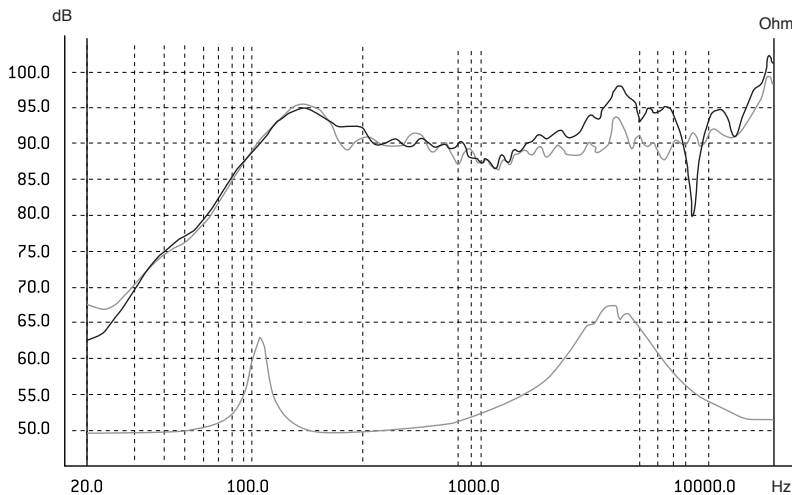


- Polyglass cone
- Reduced height
- Adjustable inverted dome tweeter

SPECIFICATIONS

Nominal power	70W	
Maximum power	140W	
Sensitivity (2.83V/1m)	93.2dB	
Cone	Polyglass	
Surround	Butyl	
Nom. impedance	5 Ohms	
DC resistance	3.0 Ohms	
VC diameter	25.5mm	1"
VC height	7mm	0 1/4"
Former	Kapton	
Layers	2	
Wire	Copper	
Inductance	0.16mH	
Xmax	2mm	0 1/16"
Magnet d x h	90 x 15mm	3 9/16 x 0 9/16"
Magnet weight	250g	0.55 lb
Flux density	-	
Gap height	3mm	0 1/8"
Net weight	900g	1.98lb

FREQUENCY RESPONSE / IMPEDANCE

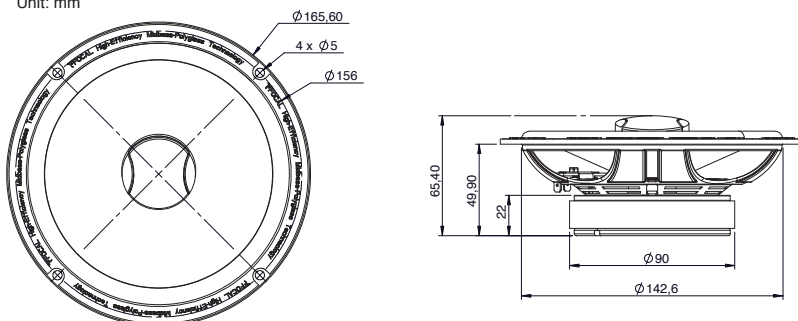


PARAMETERS

Fs	95.31Hz
Vas	6.89 l
Qts	0.98
Qes	1.18
Qms	5.98
Re	3.01 Ohms
Sd	136.85cm ²
Cas	4.26 E-8m ⁵ /N
Mas	59.49kg/m ⁴
Ras	6047.9 Ohms.ac
Cms	247µm/N
Mms	11.31g
Rms	1.133kg/s
Ces	656.81mF
Les	4.35mH
Res	15.30 Ohms
BI	4.16N/A
SPL	88.90dB (Re)

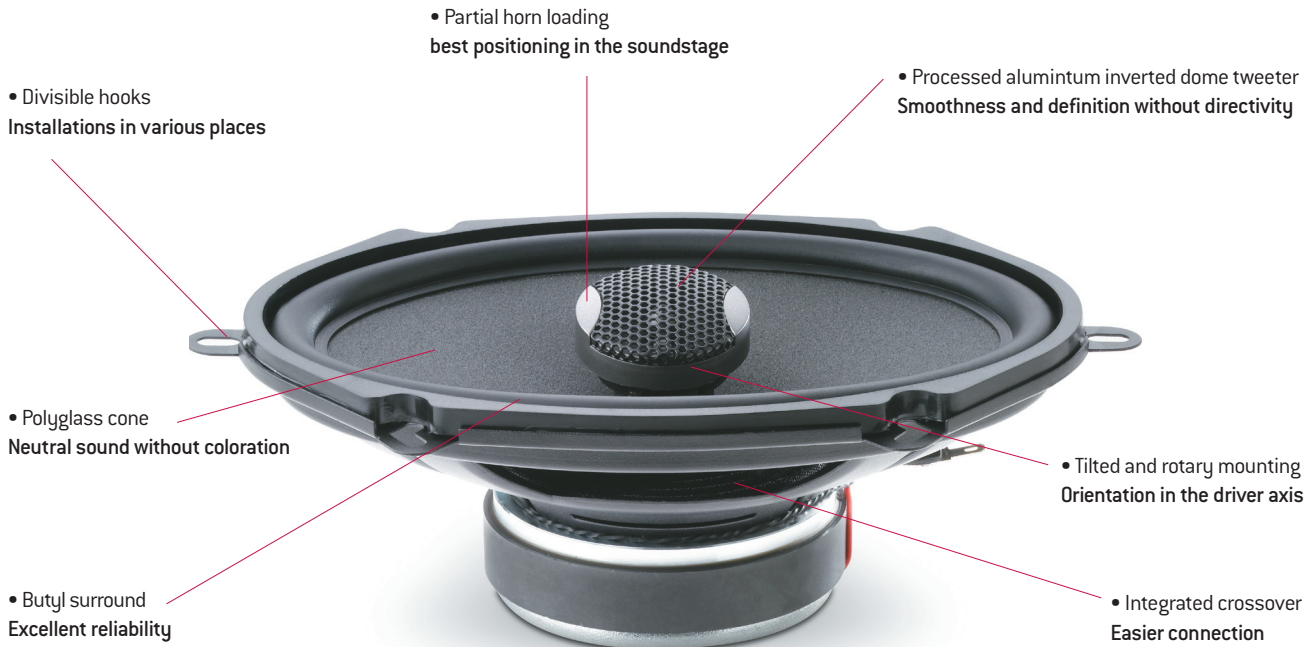
MECHANICAL DRAWING

Unit: mm





2-way coaxial kit



ADVANTAGES

- High sensitivity
- Shallow mounting depth: 49mm
- Great improvement from original car speakers
- Dynamics and neutrality
- Soundstage orientation

TECHNICAL CHARACTERISTICS

Diameter: 5x7" (130x180mm)

Voice-coil diameter: 1" (25.5mm)

Voice-coil height: 0 7/16" (11mm)

Magnet: 3 1/3" (85mm)

Processed Aluminum inverted dome tweeter

Integrated crossover: 6dB

Max. power: 120W

Nom. power: 60W rms

Sensitivity (2.83V/1m): 94.1dB

Frequency response: 65Hz – 20kHz

Grilles not supplied

Integration IC 570



2-way coaxial kit

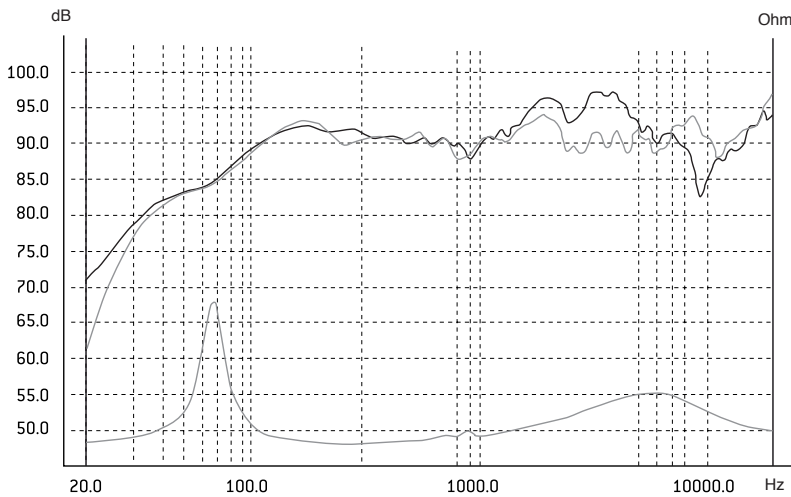


- Polyglass cone
- Reduced height
- Adjustable inverted dome tweeter

SPECIFICATIONS

Nominal power	60W	
Maximum power	120W	
Sensitivity (2.83V/1m)	94.1dB	
Cone	Polyglass	
Surround	Butyl	
Nom. impedance	10 Ohms	
DC resistance	2.8 Ohms	
VC diameter	25.5mm	1"
VC height	11mm	0 7/16"
Former	Kapton	
Layers	2	
Wire	Copper	
Inductance	0.11mH	
Xmax	3mm	0 1/8"
Magnet d x h	85 x 15mm	3 1/3 x 0 9/16"
Magnet weight	190g	0.42 lb
Flux density	-	
Gap height	5mm	0 3/16"
Net weight	950g	2.09lb

FREQUENCY RESPONSE / IMPEDANCE

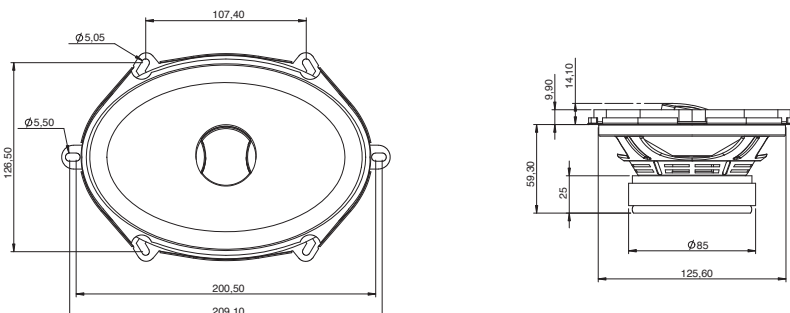


PARAMETERS

Fs	74.12Hz
Vas	10.65 l
Qts	0.725
Qes	0.81
Qms	6.92
Re	2.8 Ohms
Sd	153.93cm ²
Cas	7.58 E-8m ⁵ /N
Mas	60.81kg/m ⁴
Ras	4092.43 Ohms.ac
Cms	320µm/N
Mms	14.41g
Rms	0.97kg/s
Ces	621.17mF
Les	7.42mH
Res	23.92 Ohms
BI	4.82N/A
SPL	89.13dB (Re)

MECHANICAL DRAWING

Unit: mm





2-way kit



Tilted mounting
Easy installation



Processed Aluminum inverted dome tweeter
Smoothness and definition without directivity



ADVANTAGES

- High sensitivity
- Partial horn loading tweeter
- Dynamics and neutrality
- Mounting depth: 1^{15/16}" [48.9mm]
- 2 tweeter support types

TECHNICAL CHARACTERISTICS

Diameter: 5" [130mm]

Voice-coil diameter: 1" [25.5mm]

Voice-coil height: 0 1/3" [8.4mm]

Magnet: 2 13/16" [72mm]

Processed Aluminum inverted dome tweeter

Integrated crossover: 6/6dB/oct

Max. power: 120W

Nom. power: 60W rms

Sensitivity (2.83V/1m): 91.9dB

Frequency response: 75Hz – 20kHz

Accessories: Supplied grilles

Integration IS 130



2-way kit

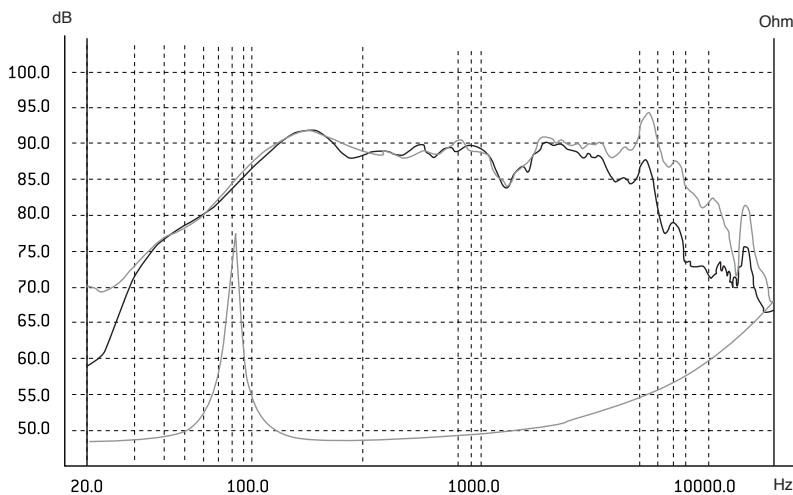


- Polyglass cone
- Reduced height

SPECIFICATIONS

Nominal power	60W	
Maximum power	120W	
Sensitivity (2.83V/1m)	91.9dB	
Cone	Polyglass	
Surround	Butyl	
Nom. impedance	8 Ohms	
DC resistance	2.8 Ohms	
VC diameter	25.5mm	1"
VC height	8.4mm	0 1/3"
Former	Kapton	
Layers	2	
Wire	Copper	
Inductance	0.10mH	
Xmax	2.5mm	0 1/8"
Magnet d x h	72 x 15mm	2 13/16 x 0 9/16"
Magnet weight	160g	0.35 lb
Flux density	-	
Gap height	3mm	0 1/8"
Net weight	500g	1.1lb

FREQUENCY RESPONSE / IMPEDANCE

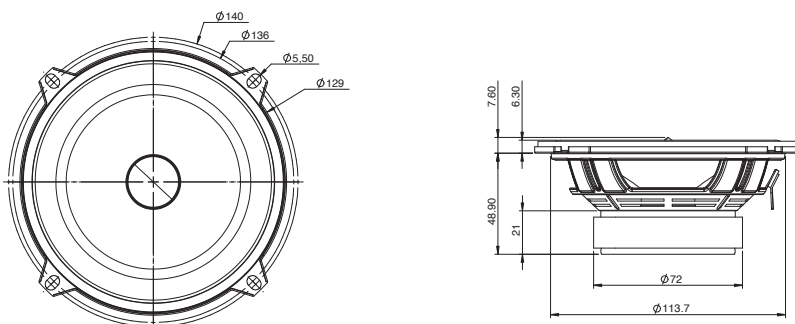


PARAMETERS

Fs	87.54Hz
Vas	4.39 l
Qts	0.81
Qes	0.88
Qms	10.2
Re	2.8 Ohms
Sd	84.95cm ²
Cas	3.13 E-8m ⁵ /N
Mas	105.73 kg/m ⁴
Ras	5701.61 Ohms.ac
Cms	433µm/N
Mms	7.63g
Rms	0.411kg/s
Ces	571.40mF
Les	5.78mH
Res	32.45 Ohms
BI	3.65N/A
SPL	87.09dB (Re)

MECHANICAL DRAWING

Unit: mm





2-way kit



Tilted mounting
Easy installation



ADVANTAGES

- High sensitivity
- Partial horn loading tweeter
- Dynamics and neutrality
- Mounting depth: 2" (49.9mm)
- 2 tweeter support types

TECHNICAL CHARACTERISTICS

Diameter: 7¹/₂" (165mm)

Voice-coil diameter: 1" (25mm)

Voice-coil height: 0¹/₄" (7mm)

Magnet: 3³/₁₆" (90mm)

Processed Aluminum inverted dome tweeter

Integrated crossover: 6/6dB/oct

Max. power: 140W

Nom. power: 70W rms

Sensitivity (2.83V/1m): 92.6dB

Frequency response: 60Hz – 20kHz

Accessories: Supplied grilles

Integration IS 165



2-way kit

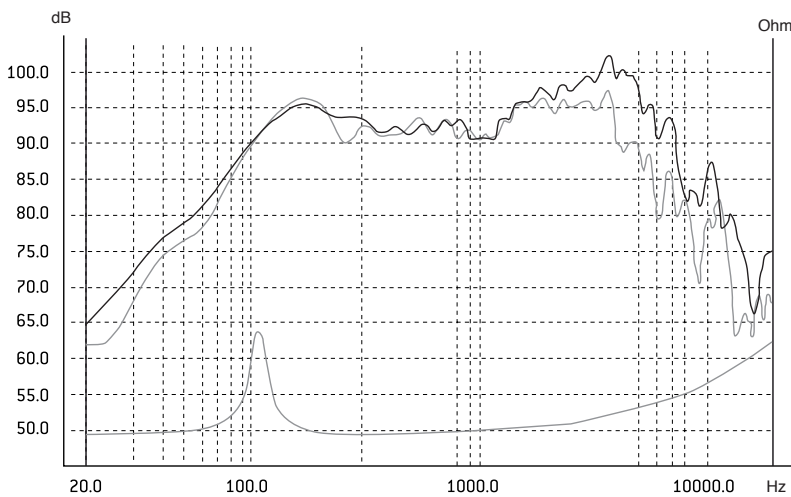


- Polyglass cone
- Reduced height

SPECIFICATIONS

Nominal power	70W	
Maximum power	140W	
Sensitivity (2.83V/1m)	92.6dB	
Cone	Polyglass	
Surround	Butyl	
Nom. impedance	6 Ohms	
DC resistance	3.1 Ohms	
VC diameter	25.5mm	1"
VC height	7mm	0 1/3"
Former	Kapton	
Layers	2	
Wire	Copper	
Inductance	0.16mH	
Xmax	2mm	0 1/16"
Magnet d x h	90 x 15mm	3 9/16 x 0 9/16"
Magnet weight	250g	0.55 lb
Flux density	-	
Gap height	3mm	0 1/8"
Net weight	900g	1.98lb

FREQUENCY RESPONSE / IMPEDANCE

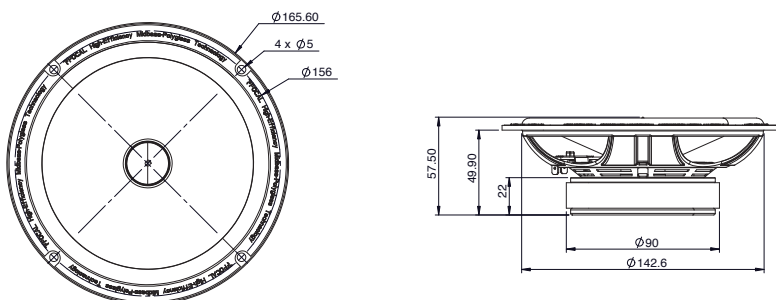


PARAMETERS

Fs	94.36Hz
Vas	6.71 l
Qts	1
Qes	1.2
Qms	5.84
Re	3.11 Ohms
Sd	136.85cm ²
Cas	4.78 E-8m ⁵ /N
Mas	59.49 kg/m ⁴
Ras	6038.99 Ohms.ac
Cms	255µm/N
Mms	11.14g
Rms	1.131kg/s
Ces	652.91mF
Les	4.36mH
Res	15.15 Ohms
BI	4.14N/A
SPL	88.50dB (Re)

MECHANICAL DRAWING

Unit: mm





2-way kit



Woofer crossover



ADVANTAGES

- High sensitivity
- Partial horn loading tweeter
- Dynamics and neutrality
- Mounting depth: 2^{1/2}" (63.5mm)
- 2 tweeter support types

TECHNICAL CHARACTERISTICS

Diameter: 7^{7/8}" (200mm)

Voice-coil diameter: 1" (25mm)

Voice-coil height: 0^{1/2}" (12mm)

Magnet: 3^{9/16}" (90mm)

Processed Aluminum inverted dome tweeter

Integrated crossover: 6/6dB/oct

Max. power: 160W

Nom. power: 80W rms

Sensitivity (2.83V/1m): 91.4dB

Frequency response: 40Hz – 20kHz

Accessories: Supplied grilles

Integration IS 200



2-way kit

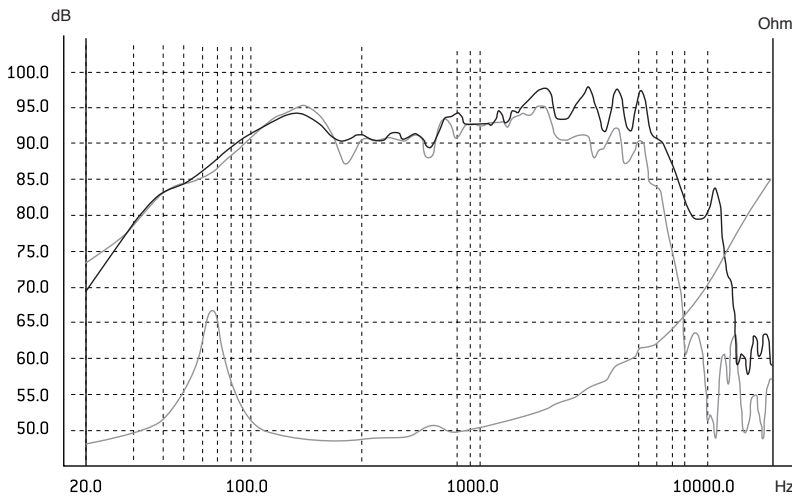


- Polyglass cone
- Reduced height

SPECIFICATIONS

Nominal power	80W	
Maximum power	160W	
Sensitivity (2.83V/1m)	91.4dB	
Cone	Polyglass	
Surround	Butyl	
Nom. impedance	11 Ohms	
DC resistance	3.1 Ohms	
VC diameter	25.5mm	1"
VC height	12.2mm	0 1/2"
Former	Kapton	
Layers	2	
Wire	Copper	
Inductance	0.16mH	
Xmax	3.6mm	0 1/8"
Magnet d x h	90 x 17mm	3 9/16 x 0 2/3"
Magnet weight	280g	0.62 lb
Flux density	-	
Gap height	5mm	0 1/8"
Net weight	1050g	2.31lb

FREQUENCY RESPONSE / IMPEDANCE

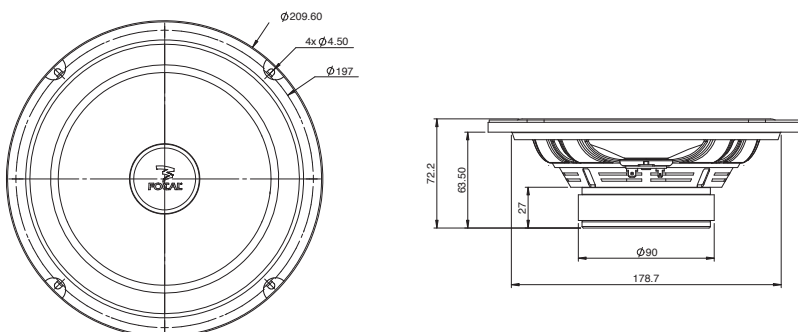


PARAMETERS

Fs	65.76Hz
Vas	17.65 l
Qts	1.1
Qes	1.45
Qms	4.61
Re	3.06 Ohms
Sd	213.82cm ²
Cas	1.26 E-8m ⁵ /N
Mas	46.63 kg/m ⁴
Ras	4179.39 Ohms.ac
Cms	275µm/N
Mms	21.314g
Rms	1.911kg/s
Ces	1169.78mF
Les	5.01mH
Res	9.72 Ohms
Bl	4.31 N/A
SPL	87.20 dB (Re)

MECHANICAL DRAWING

Unit: mm





2-way kit

- Polyglass cone
- Neutral sound without coloration
- Butyl surround
- Resilient material, promoting long life
- 1" (25mm) Kapton® voice-coil former
- High power handling
- Zamak chassis
- Strong rigid and non-magnetic chassis

- Adjustable tweeter level
- Level setting according to tweeter slot
- Air core inductors with a low serial resistance
- Less efficiency loss, insensitive to parasite
- Real 12/12 dB/oct. crossover
- Optimum coupling of woofer and tweeter
- Polypropylene capacitor
- Neutral reproduction of high frequencies

- Neodymium magnet
- Shallow woofer, easy installation
- Voice-coil cooling system
- Optimum reliability, performance consistency
- Engraved serial number
- Certificate of authenticity

- TNB inverted dome tweeter
- Detailed and non directive
- Double push-pull Neodymium magnet
- High linear tweeter
- Voice coil on aluminum former
- High dissipation characteristics



ADVANTAGES

- Easy installation, shallow mounting woofer (1⁵⁶" / 39.5mm)
- Outstanding musicality in this price level
- All Focal technologies

TECHNICAL CHARACTERISTICS

Woofer: 4" (100mm)
Voice-coil: 1" (25mm)
Neodymium magnet
TNB tweeter: 1 3/4" (45mm)
Aluminum/magnesium inverted dome tweeter

2-way component crossover: 12/12dB/oct. (5.9kHz)
Adjustable tweeter level: (0, -3, -6dB)
Max. power: 80W
Nom. power: 40W rms

Sensitivity (2.83V/1m): 91dB
Frequency response: 90Hz – 28kHz
Accessories: supplied grilles

Integration 100 VRS

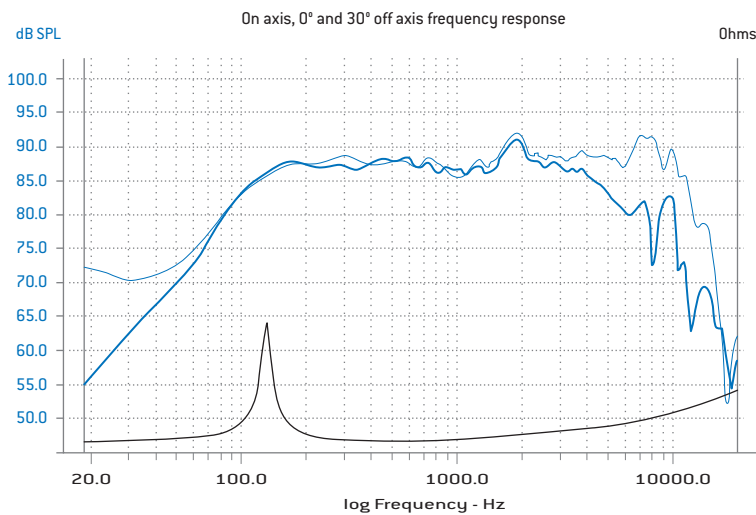


- Zamak chassis
- Polyglass cone, Butyl surround
- Neodymium magnet

SPECIFICATIONS

Nominal power	40W	
Maximum power	80W	
Sensitivity	91 dB	
Cone	Polyglass	
Surround	Butyl	
Nom. impedance	4 Ohms	
DC resistance	3.2 Ohms	
VC diameter	25mm	1"
VC height	8mm	0 ⁵ / ₁₆ "
Former	Kapton®	
Layers	2	
Wire	Copper	
Inductance	0.2mH	
Xmax	2mm	0 ¹ / ₁₆ "
Magnet d x h	-	
Magnet weight	-	
Flux density	1.1T	
Gap height	3mm	0 ⁵ / ₁₈ "
Net weight	350g	0.77lb

FREQUENCY RESPONSE / IMPEDANCE

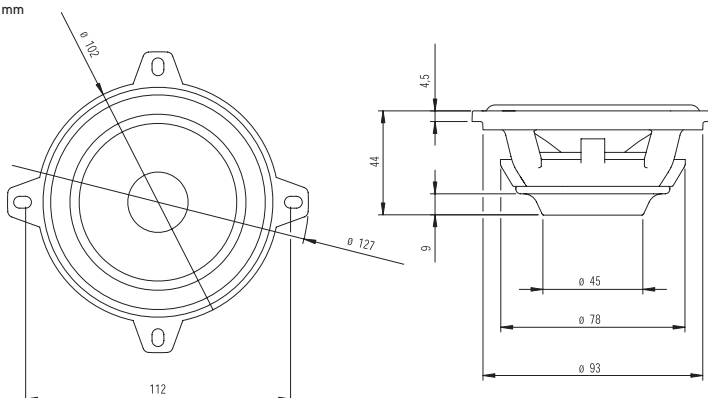


PARAMETERS

Fs	117.66Hz	
Vas	1.43 l	0.05Ft ³
Qts	0.811	
Qes	0.880	
Qms	10.410	
Re	3.55 Ohms	
Sd	52.81cm ²	8.18in ²
Cas	1.02 E-08m ⁵ /N	
Mas	179.28kg/m ⁴	
Ras	12731.89 Ohms.ac	
Cms	3.66 E-04m/N	
Mms	5.00g	0.01lb
Rms	0.355kg/s	
Ces	335.31mF	
Les	5.46mH	
Res	41.99 Ohms	
BI	3.86N/A	
SPL	86.08 dB/W/m	

MECHANICAL DRAWING

Unit: mm



Integration 130 VRS



2-way kit

- Butyl surround
Promoting long life
- Shallow mounting (1 15/16"/48.5mm)
Easy integration in the most exiguous spaces
- Polyglass cone
Neutral sound without coloration



- Zamak basket
Strong rigid chassis, non magnetic, non resonant
- 1 1/4" (32mm) voice coil on Kapton® former
High power handling
- N38 neodymium magnet
High magnetic field for a high sensitivity
- Voice coil cooling system
Optimized reliability, no dynamic compression

- Air core inductors with a low serial resistance
Insensitive to parasites, better sensitivity
- Adjustable tweeter level
Tweeter level setting according to the positioning
- Polypropylene/Aluminum capacitor
Natural reproduction of high frequencies

- Aluminum/magnesium inverted dome TNB tweeter
Smooth and detailed treble, large and precise sound stage
- Dual push-pull neodymium magnet
Excellent linearity of the tweeter
- Voice coil on aluminum former
High dissipation characteristics

ADVANTAGES

- Easy installation for all kind of vehicles (shallow mounting: 1 15/16" / 48.5mm)
- Hi-Fi sound for an optimized realism
- Large and precise sound stage
- The essentials of Focal sound

TECHNICAL CHARACTERISTICS

Woofer: 5" (130mm)
Voice-coil: 1 1/4" (32mm)
Neodymium magnet: N38
TNB tweeter: 1 3/4" (45mm)
Aluminum/magnesium inverted dome tweeter

2-way component crossover: 12/18dB/oct. (4kHz)
Adjustable tweeter level: (0, -3, -6dB)
Max. power: 100W
Nom. power: 50W rms

Sensitivity (2.83V/1m): 91dB
Frequency response: 80Hz – 28kHz
Accessories: supplied grilles

Integration 130 VRS

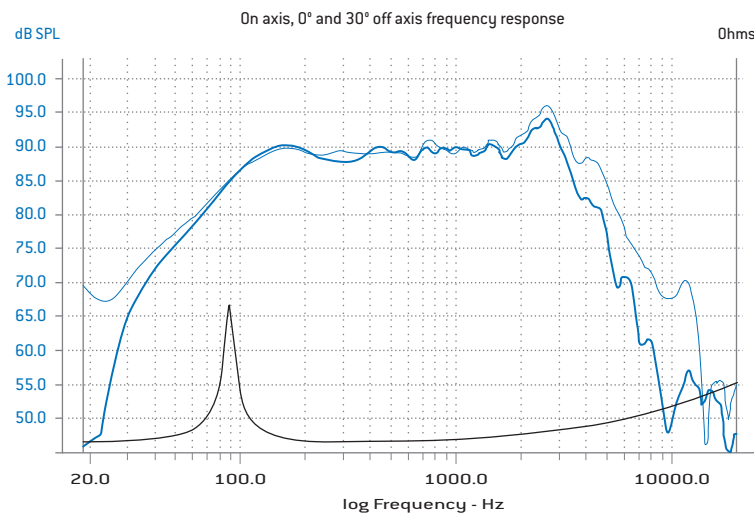


- Zamak chassis
- Polyglass cone, Butyl surround
- Neodymium magnet

SPECIFICATIONS

Nominal power	50W	
Maximum power	100W	
Sensitivity	91dB	
Cone	Polyglass	
Surround	Butyl	
Nom. impedance	4 Ohms	
DC resistance	2.8 Ohms	
VC diameter	32mm	1 1/4"
VC height	10mm	0 3/8"
Former	Kapton®	
Layers	2	
Wire	Copper	
Inductance	0.3mH	
Xmax	3mm	0 1/8"
Magnet d x h	-	
Magnet weight	-	
Flux density	1T	
Gap height	4mm	
Net weight	550g	1.21lb

FREQUENCY RESPONSE / IMPEDANCE

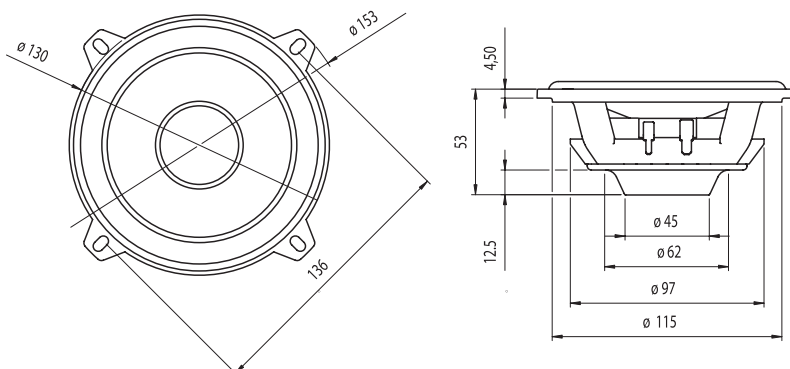


PARAMETERS

Fs	93,15Hz
Vas	3.04 l
Qts	0.657
Qes	0.7
Qms	10.7
Re	2.9 Ohms
Sd	95.03cm ²
Cas	2.16 E-8m ⁵ /N
Mas	135.09kg/m ⁴
Ras	7389.04 Ohms.ac
Cms	2.39 E-04m/N
Mms	12.2g
Rms	0.667kg/s
Ces	427.15mF
Les	6.83mH
Res	43.80 Ohms
BI	5.34N/A
SPL	91.68 dB/W/m

MECHANICAL DRAWING

Unit: mm



Integration 165 VRS



2-way kit

- Butyl surround
- Promoting long life**
- Shallow mounting (2 3/16" / 56mm)
- Easy integration in the most exiguous spaces**
- Polyglass cone
- Neutral sound without coloration**



- Zamak basket
- Strong rigid chassis, non magnetic, non resonant**
- 1 1/4" (32mm) voice coil on Kapton® former
- High power handling**
- N38 neodymium magnet
- High magnetic field for a high sensitivity**

- Air core inductors with a low serial resistance
- Insensitive to parasites, better sensitivity**
- Adjustable tweeter level
- Tweeter level setting according to the positioning**
- Polypropylene/Aluminum capacitor
- Natural reproduction of high frequencies**

- Aluminum/magnesium inverted dome TNB tweeter
- Smooth and detailed treble, large and precise sound stage**

- Dual push-pull neodymium magnet
- Excellent linearity of the tweeter**
- Voice coil on aluminum former
- High dissipation characteristics**

ADVANTAGES

- Easy installation for all kind of vehicles (shallow mounting: 2 3/16" / 56mm)
- Hi-Fi sound for an optimized realism
- Large and precise sound stage
- The essentials of Focal sound

TECHNICAL CHARACTERISTICS

Woofer: 6 1/2" (165mm)
Voice-coil: 1 1/4" (32mm)
Neodymium magnet: N38
TNB tweeter: 1 3/4" (45mm)
Aluminum/magnesium inverted dome tweeter

2-way component crossover: 12/18dB/oct. (4.9kHz)
Adjustable tweeter level: (0, -3, -6dB)
Max. power: 120W
Nom. power: 60W rms

Sensitivity (2.83V/1m): 93dB
Frequency response: 70Hz – 28kHz
Accessories: supplied grilles

Integration 165 VRS

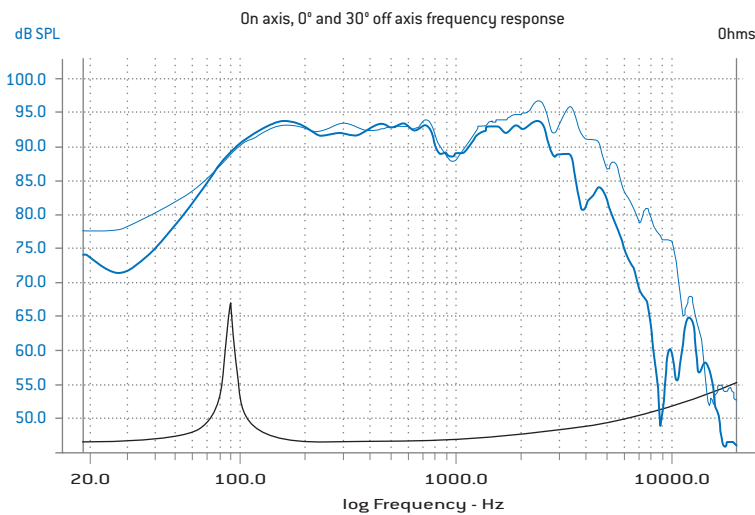


- Zamak chassis
- Polyglass cone, Butyl surround
- Neodymium magnet

SPECIFICATIONS

Nominal power	60W	
Maximum power	120W	
Sensitivity	93dB	
Cone	Polyglass	
Surround	Butyl	
Nom. impedance	4 Ohms	
DC resistance	2.7 Ohms	
VC diameter	32mm	1 1/4"
VC height	10mm	0 3/8"
Former	Kapton®	
Layers	2	
Wire	Copper	
Inductance	0.22mH	
Xmax	3mm	0 1/8"
Magnet d x h	-	
Magnet weight	350g	0.77lb
Flux density	1T	
Gap height	4mm	
Net weight	600g	1.32lb

FREQUENCY RESPONSE / IMPEDANCE

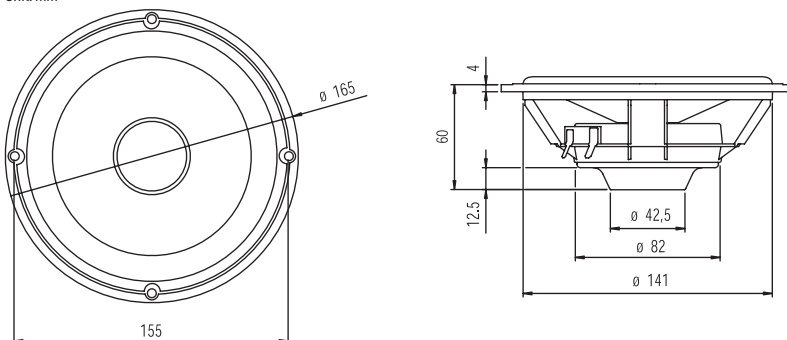


PARAMETERS

Fs	88.63Hz	
Vas	6 l	0.212Ft ³
Qts	0.659	
Qes	0.7	
Qms	11.31	
Re	2.7 Ohms	
Sd	132.73cm ²	20.57in ²
Cas	4.27 E-8m ⁵ /N	
Mas	75.49kg/m ⁴	
Ras	3717.03 Ohms.ac	
Cms	2.42 E-04m/N	
Mms	13.3g	0.03lb
Rms	0.655kg/s	
Ces	465.56mF	
Les	6.93mH	
Res	43.62 Ohms	
BI	5.34N/A	
SPL	89.6 dB/W/m	

MECHANICAL DRAWING

Unit: mm



Integration Tweeter TNI 1.5



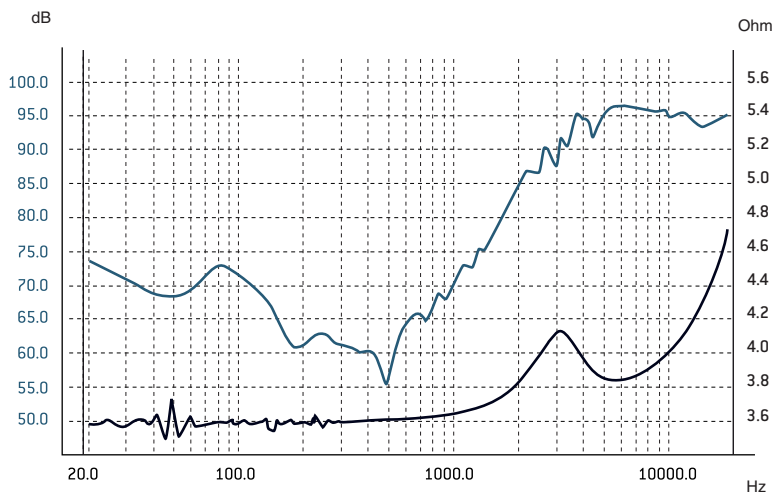
Three different mounting possibilities:

- Flush mounting
- Surface mounting
- Tilted mounting

SPECIFICATIONS

Nominal power	15W
Maximum power	100W
Sensitivity (2.83V/1m)	94dB
Integrated crossover	6dB/oct.
Cone	Alu
Surround	Cloth
Nom. impedance	4 Ohms
DC resistance	3.7 Ohms
VC diameter	20mm \uparrow 3/16"
Former	Kapton®
Layers	2
Magnet	Neodymium
Flux density	-
Gap height	2.5mm 0 1/8"
Net weight	60g 0.3lb

FREQUENCY RESPONSE / IMPEDANCE

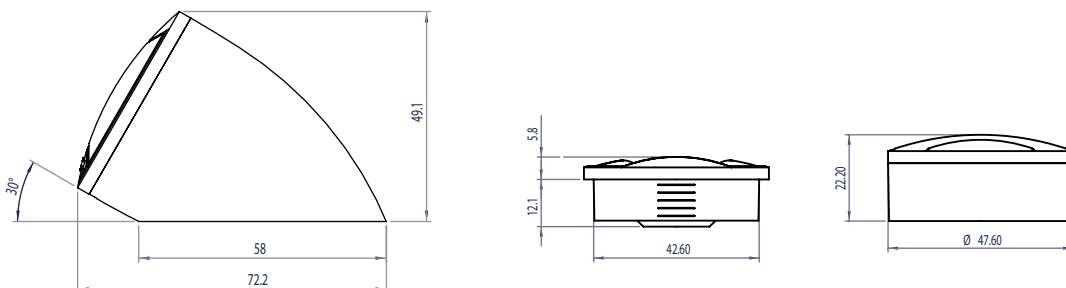


PARAMETERS

Fs	2950Hz
Re	3.7 Ohms
Sd	4.9cm ²
Res	4.1 Ohms
SPL	91dB/W/m

MECHANICAL DRAWING

Unit: mm



Integration IBUS 20



Flat amplified bass enclosure

- Flat 20 cm (8") Subwoofer
Dynamic bass

- Compact Aluminum chassis
Low height, high rigidity

- Built-in amplifier
Brings power
to the subwoofer

- High and low level inputs
Directly connected to the speaker outputs
of your car radio
- 50 to 150Hz adjustable low-pass filter,
0-180° phase selector
Adjust your enclosure in harmony with
your audio system



- Remote control
Keep the control



Plug & Play cables supplied



ADVANTAGES

- Ready to use (Plug & Play ISO cables supplied)
- Easy integration in the trunk or under a seat
- High and low level inputs
- Intensifies the bass frequencies
of your audio system
- Remote control
- Easy to use

TECHNICAL CHARACTERISTICS

Type: Active enclosure with 20cm (8") subwoofer
Max. power: 150W
Nom. power: 75W
Frequency response: 45Hz - 150Hz

Height: 71.5mm (2.8")
Length: 344mm (13.5")
Width: 250mm (9.8")

PERFORMANCE



PC 100	100mm (4")	coaxial kit
PC 130	130mm (5")	coaxial kit
PC 165	165mm (6.5")	coaxial kit
PC 690	165 x 237mm (6x9")	coaxial kit
PS 130	130mm (5")	2 way kit
PS 165	165mm (6.5")	2 way kit
P130 V15	130mm (5")	2 way kit
P165 V15	165mm (6.5")	2 way kit
P165 V30	165mm (6.5")	2 way kit
P165 V33	165mm (6.5")	3 way kit
Tweeter TNP		
Sub P 30	30cm (12")	Subwoofer
Sub P 25 DB	25cm (10")	Subwoofer double voice coil
Sub P 30 DB	30cm (12")	Subwoofer double voice coil
SB P 25	25cm (10")	Subwoofer box
SB P 30	30cm (12")	Subwoofer box
FPP 1000	1 x 350W rms into 4 ohms	1 channel
FPP 2100	2 x 100W rms into 4 ohms	2 channels
FPP 4100	4 x 90W rms into 4 ohms	4 channels
FPP 5300	4 x 80 + 1 x 240W rms into 4 ohms	5 channels

Performance PC 100



2-way coaxial kit



ADVANTAGES

- Partial horn loading tweeter
- High sensitivity
- High soundstage
- Dynamics and neutrality

TECHNICAL CHARACTERISTICS

Diameter: 4" (100mm)
Voice-coil diameter: 1" (25mm)
Voice-coil height: 0^{3/8}" (9.5mm)
Magnet: 2^{13/16}" (72mm)
Processed Aluminum inverted dome tweeter

Integrated crossover: 6dB/oct
Rotating tweeter
Max. power: 100 Watts
Nom. power: 50 Watts rms

Sensitivity (2.83V/1m): 90.9dB
Frequency response: 100Hz – 20kHz
Accessories: Supplied grilles

Performance PC 100



4" Performance Coaxial Kit

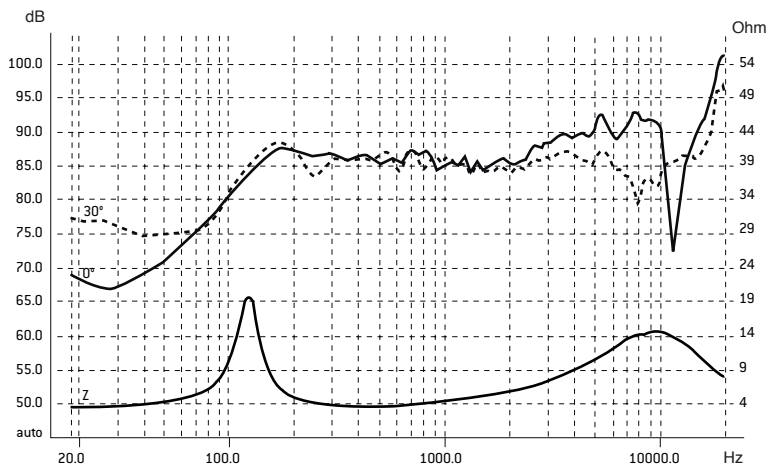


- Polyglass cone
- Aluminum basket
- Adjustable inverted dome tweeter

SPECIFICATIONS

Nominal power	50W	
Maximum power	100W	
Sensitivity	90.9dB	
Cone	Polyglass	
Surround	Butyl	
Nom. impedance	4 Ohms	
DC resistance	3 Ohms	
VC diameter	25mm	
VC height	9.5mm	
Former	Kapton	
Layers	2	
Wire	Copper	
Inductance	0.14mH	
Xmax	2.25mm	0 ^{1/16} in
Magnet d x h	72 x 15mm	2 ^{13/16} x 0 ^{9/16} in
Magnet weight	160g	0.35 lb
Flux density	-	
Gap height	5mm	0 ^{3/16} in
Net weight	650g	1.43 lb

FREQUENCY RESPONSE / IMPEDANCE

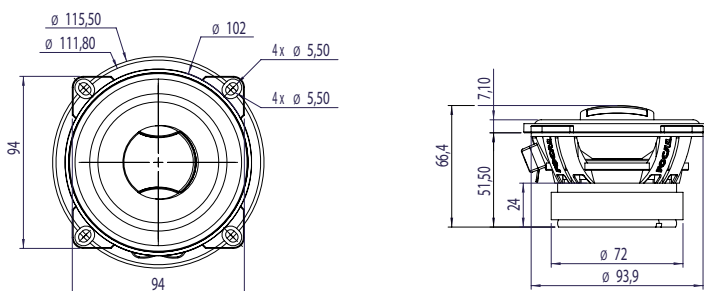


PARAMETERS

Fs	120.96Hz
Vas	1.18 l
Qts	0.63
Qes	0.7
Qms	6.01
Re	3 Ohms
Sd	54.11 cm ²
Cas	8.40 E-8 m ⁵ /N
Mas	205.98 kg/m ⁴
Ras	26047.88 Ohms.ac
Cms	287 μm/N
Mms	6.03g
Rms	0.763 kg/s
Ces	307.0 mF
Les	5.64 mH
Res	25.76 Ohms
BI	4.44 N/A
SPL	86.60 dB/W/m

MECHANICAL DRAWING

Unit: mm



Performance PC 130



2-way coaxial kit



ADVANTAGES

- Partial horn loading tweeter
- High sensitivity
- High soundstage
- Dynamics and neutrality

TECHNICAL CHARACTERISTICS

Diameter: 5" (130mm)
Voice-coil diameter: 1" (25mm)
Voice-coil height: 0^{7/16}" (11mm)
Magnet: 3^{1/3}" (80mm)
Processed Aluminum inverted dome tweeter

Integrated crossover: 6dB/oct
Rotating tweeter
Max. power: 120 Watts
Nom. power: 60 Watts rms

Sensitivity (2.83V/1m): 91.6dB
Frequency response: 80Hz – 20kHz
Accessories: Supplied grilles

Performance PC 130



5" Performance Coaxial Kit

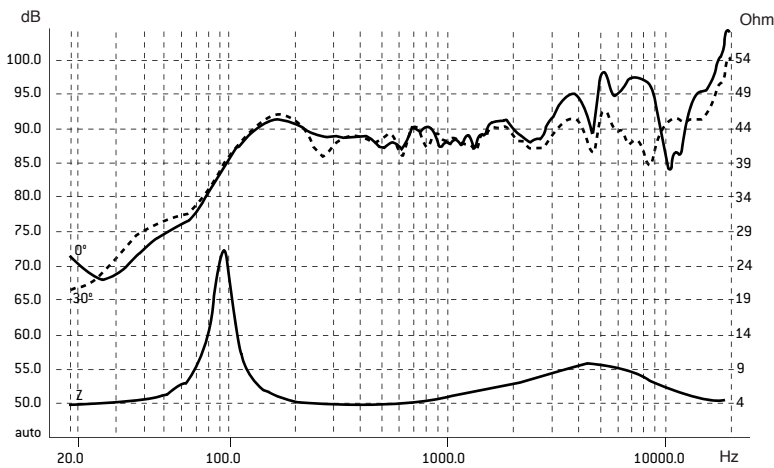


- Polyglass cone
- Aluminum basket
- Adjustable inverted dome tweeter

SPECIFICATIONS

Nominal power	60W	
Maximum power	120W	
Sensitivity	91.6dB	
Cone	Polyglass	
Surround	Butyl	
Nom. impedance	4 Ohms	
DC resistance	3.22 Ohms	
VC diameter	25mm	
VC height	11mm	
Former	Kapton	
Layers	2	
Wire	Copper	
Inductance	0.15mH	
Xmax	3mm	0 ¹ / ₈ in
Magnet d x h	85 x 17mm	3 ¹ / ₃ x 0 ² / ₃ in
Magnet weight	215g	0.47 lb
Flux density	-	
Gap height	5mm	0 ³ / ₁₆ in
Net weight	950g	2.09 lb

FREQUENCY RESPONSE / IMPEDANCE

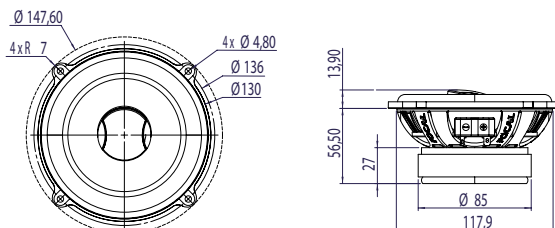


PARAMETERS

Fs	101.14Hz	
Vas	2.96 l	
Qts	0.73	
Qes	0.81	
Qms	7.74	
Re	3.22 Ohms	
Sd	86.59cm ²	
Cas	2.11E-8 m ⁵ /N	
Mas	117.5 kg/m ⁴	
Ras	9647.19 Ohms.ac	
Cms	281µm/N	
Mms	8.81g	
Rms	0.729kg/s	
Ces	395.85mH	
Les	6.26mH	
Res	30.77 Ohms	
Bl	4.72N/A	
SPL	87.60dB/W/m	

MECHANICAL DRAWING

Unit: mm



Performance PC 165



2-way coaxial kit



ADVANTAGES

- Partial horn loading tweeter
- High sensitivity
- High soundstage
- Dynamics and neutrality

TECHNICAL CHARACTERISTICS

Diameter: 6¹/₂" (165mm)

Voice-coil diameter: 1" (25mm)

Voice-coil height: 0⁷/₁₆" (10.5mm)

Magnet: 3¹/₈" (80mm)

Processed Aluminum inverted dome tweeter

Integrated crossover: 6dB/oct

Rotating tweeter

Max. power: 120 Watts

Nom. power: 60 Watts rms

Sensitivity [2.83V/1m]: 93.6dB

Frequency response: 60Hz – 20kHz

Accessories: Supplied grilles

Performance PC 165



6 1/2" Performance Coaxial Kit

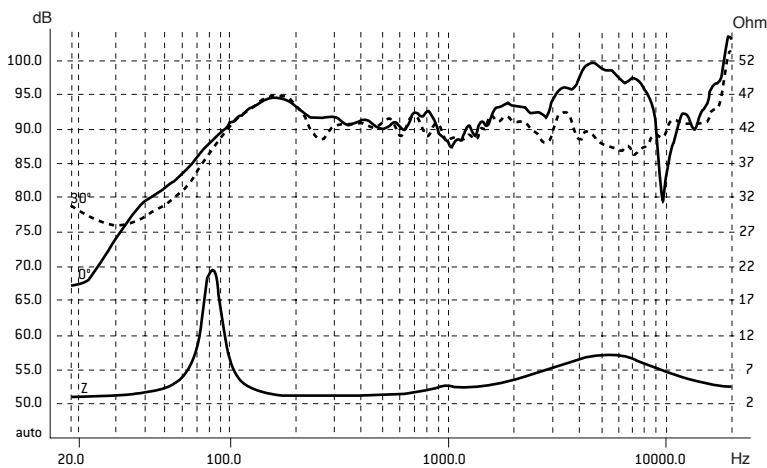


- Polyglass cone
- Aluminum basket
- Adjustable inverted dome tweeter

SPECIFICATIONS

Nominal power	80W	
Maximum power	160W	
Sensitivity	92.5dB	
Cone	Polyglass	
Surround	Butyl	
Nom. impedance	4 Ohms	
DC resistance	2.65 Ohms	
VC diameter	25mm	
VC height	11mm	
Former	Kapton	
Layers	2	
Wire	Copper	
Inductance	0.15mH	
Xmax	3.25mm	0 ^{1/8} in
Magnet d x h	85 x 17mm	3 ^{1/3} x 0 ^{2/3} in
Magnet weight	215g	0.47 lb
Flux density	-	
Gap height	5mm	0 ^{1/16} in
Net weight	1000g	2.20 lb

FREQUENCY RESPONSE / IMPEDANCE

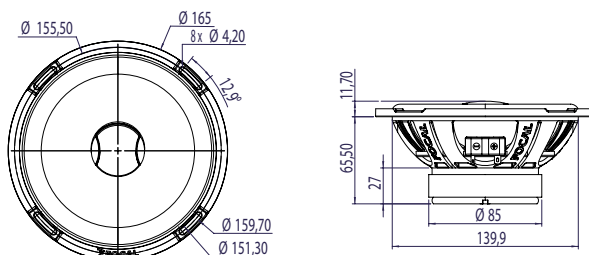


PARAMETERS

Fs	68.14Hz
Vas	9.96 l
Qts	0.73
Qes	0.81
Qms	7.22
Re	2.65 Ohms
Sd	132.73cm ²
Cas	7.09E-8m ⁵ /N
Mas	76.91kg/m ⁴
Ras	4560.69 Ohms.ac
Cms	402 μm/N
Mms	13.55g
Rms	0.803kg/s
Ces	713.93mF
Les	7.64mH
Res	23.62 Ohms
Bl	4.36 N/A
SPL	87.70 dB/W/m

MECHANICAL DRAWING

Unit: mm



Performance PC 690



2-way coaxial kit

- Processed Aluminum inverted dome tweeter
Smoothness and definition without directivity
- Partial horn loading
Best positioning of the soundstage

- Butyl surround
Excellent reliability

- Polyglass cone
Neutral sound without coloration

- Tilted and rotary mounting
Orientation in the driver axis

- Integrated crossover
Easier connection

- Chrome magnet
Nice look



ADVANTAGES

- Partial horn loading tweeter
- High sensitivity
- High soundstage
- Dynamics and neutrality

TECHNICAL CHARACTERISTICS

Diameter: 6 x 9" (165 x 237mm)

Voice-coil diameter: 1^{3/16}" (30mm)

Voice-coil height: 0^{7/16}" (10.5mm)

Magnet: 3^{9/16}" (90mm)

Processed Aluminum inverted dome tweeter

Integrated crossover: 6dB/oct

Rotating tweeter

Max. power: 160 Watts

Nom. power: 80 Watts rms

Sensitivity (2.83V/1m): 93.6dB

Frequency response: 55Hz – 20kHz

Accessories: Supplied grilles

Performance PC 690



6" x 9" Performance Coaxial Kit

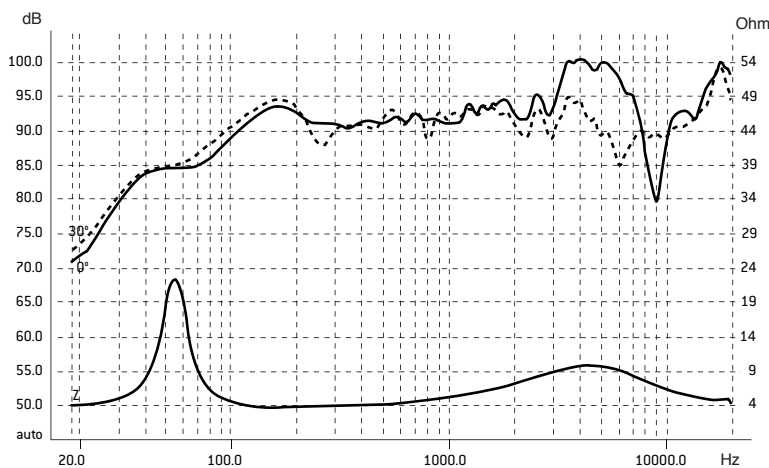


- Polyglass cone
- 90mm magnet
- Adjustable inverted dome tweeter

SPECIFICATIONS

Nominal power	80W	
Maximum power	160W	
Sensitivity	93.6dB	
Cone	Polyglass	
Surround	Butyl	
Nom. impedance	4 Ohms	
DC resistance	3.10 Ohms	
VC diameter	25mm	
VC height	10mm	
Former	Kapton	
Layers	2	
Wire	Copper	
Inductance	0.16mH	
Xmax	2.25mm	0 ^{1/16} in
Magnet d x h	90 x 17mm	3 ^{9/16} x 0 ^{2/3} in
Magnet weight	320g	0.71 lb
Flux density	-	
Gap height	5mm	0 ^{3/16} in
Net weight	1250g	2.76 lb

FREQUENCY RESPONSE / IMPEDANCE

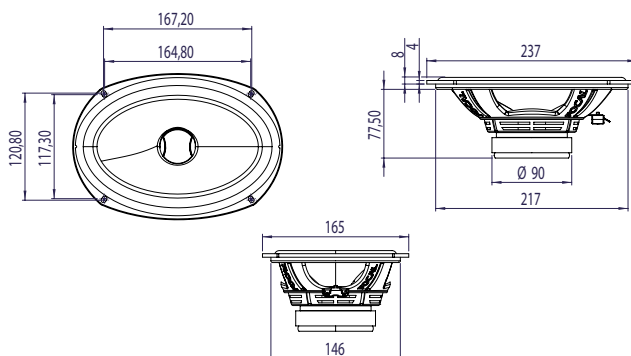


PARAMETERS

Fs	56.36Hz
Vas	24.88 l
Qts	0.7
Qes	0.76
Qms	8.33
Re	3.10 Ohms
Sd	206.12cm ²
Cas	1.77E-7m ⁵ /N
Mas	45.03 kg/m ⁴
Ras	1914.17 Ohms.ac
Cms	417µm/N
Mms	19.13g
Rms	0.813g/s
Ces	692.31mF
Les	11.52mH
Res	33.98 Ohms
BI	5.26 N/A
SPL	89.50 dB/W/m

MECHANICAL DRAWING

Unit: mm



Performance PS 130



2-way kit

- Processed Aluminum inverted dome tweeter
Smoothness and definition without directivity
- Chrome magnet
Nice look

- Polyglass cone
Neutral sound without coloration

- Aluminum chassis
Rigid and non-magnetic
- Phase plug
Better dispersion

- Partial horn loading
Best positioning of the soundstage

- Butyl surround
Excellent reliability

- Separable crossover
Easy integration

- Tilted mounting
Easier installation



ADVANTAGES

- Partial horn loading tweeter
- High sensitivity
- Dynamics and neutrality
- Three tweeter cut-off frequencies
- Three tweeter integration possibilities

TECHNICAL CHARACTERISTICS

Diameter: 5" (130mm)
Voice-coil diameter: 1" (25mm)
Voice-coil height: 0^{2/16"} (11mm)
Magnet: 3^{1/3"} (85mm)

Processed Aluminum inverted dome tweeter
Integrated crossover: 6/6dB/oct
Max. power: 120 watts
Nom. power: 60 watts rms

Sensitivity (2.83V/1m): 91.4dB
Frequency response: 80Hz – 20kHz
Accessories: Supplied grilles

Performance PS 130



5" Performance woofer

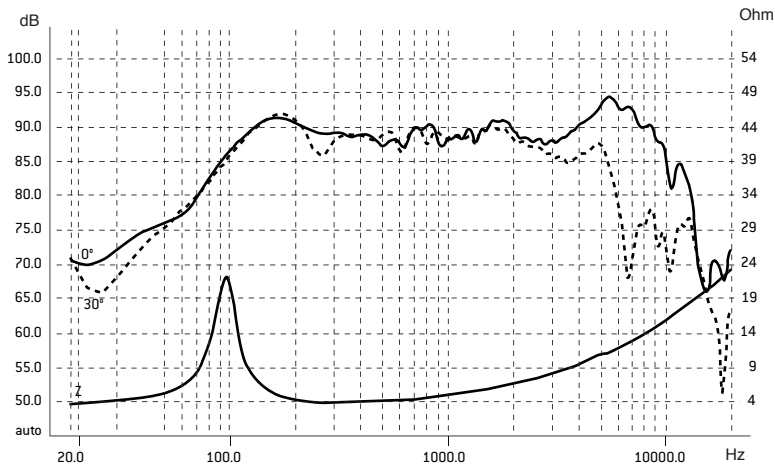


- Polyglass cone
- Aluminum basket
- Butyl surround

SPECIFICATIONS

Nominal power	60W	
Maximum power	120W	
Sensitivity	91.4dB	
Cone	Polyglass	
Surround	Butyl	
Nom. impedance	4 Ohms	
DC resistance	3.20 Ohms	
VC diameter	25mm	
VC height	11mm	
Former	Kapton	
Layers	2	
Wire	Copper	
Inductance	0.15mH	
Xmax	3mm	0 ^{1/18} in
Magnet d x h	85 x 17mm	3 ^{1/3} x 0 ^{2/3} in
Magnet weight	215g	0.47 lb
Flux density	-	
Gap height	5mm	0 ^{3/16} in
Net weight	950g	2.09 lb

FREQUENCY RESPONSE / IMPEDANCE

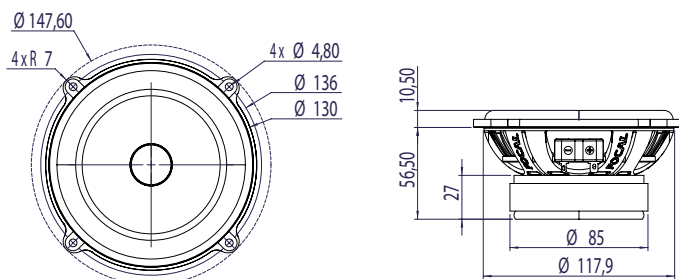


PARAMETERS

Fs	95.56Hz	
Vas	2.95 l	
Qts	0.65	
Qes	0.72	
Qms	6.26	
Re	3.20 Ohms	
Sd	86.59cm ²	
Cas	2.36E-8m ⁵ /N	
Mas	117.63 kg/m ⁴	
Ras	11282.71 Ohms.ac	
Cms	315µm/N	
Mms	8.82g	
Rms	0.846kg/s	
Ces	374.75mF	
Les	7.40mH	
Res	27.82 Ohms	
BI	4.85N/A	
SPL	87.40dB/W/m	

MECHANICAL DRAWING

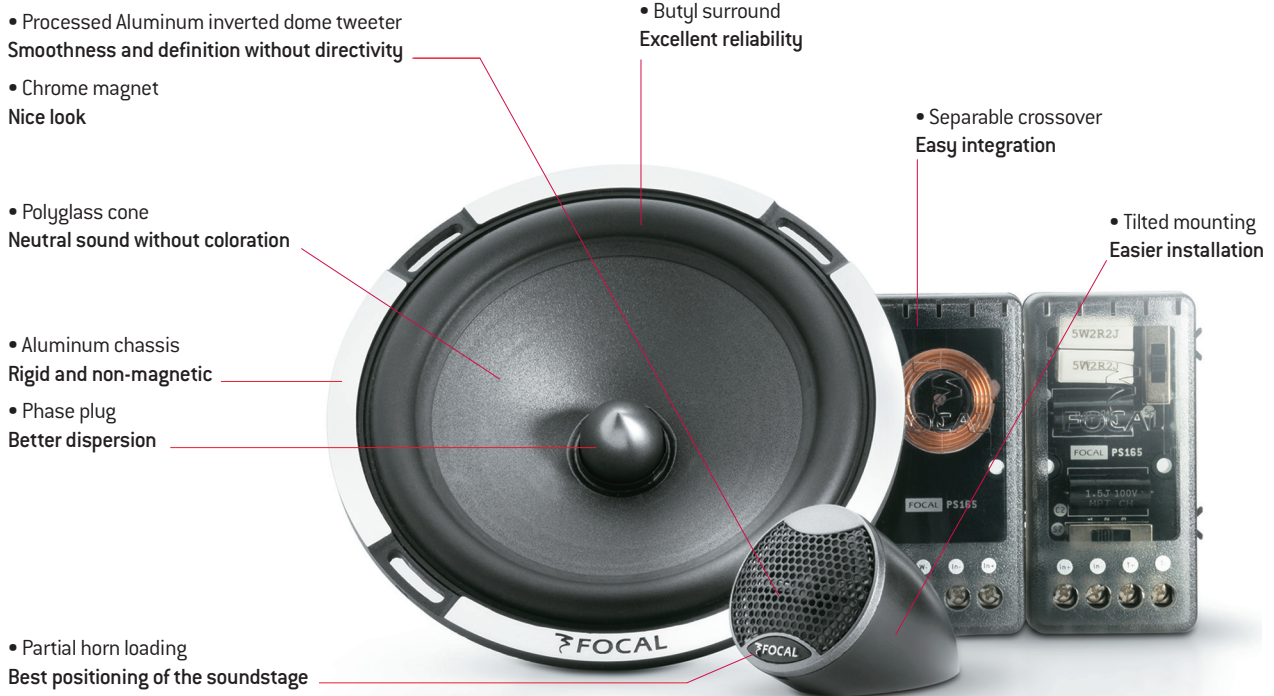
Unit: mm



Performance PS 165



2-way kit



ADVANTAGES

- Partial horn loading tweeter
- High sensitivity
- Dynamics and neutrality
- Adjustable tweeter levels
- Three tweeter cut-off frequencies
- Three tweeter integration possibilities

TECHNICAL CHARACTERISTICS

Diameter: 6¹/₂" (165mm)
Voice-coil diameter: 1" (25mm)
Voice-coil height: 0⁷/₁₆" (11.5mm)
Magnet: 3¹/₃" (85mm)

Processed Aluminum inverted dome tweeter
Integrated crossover: 6/6dB/oct
Max. power: 120 Watts
Nom. power: 60 Watts rms

Sensitivity (2.83V/1m): 92.5dB
Frequency response: 60Hz – 20kHz
Accessories: Supplied grilles

Performance PS 165



6 1/2" Performance woofer

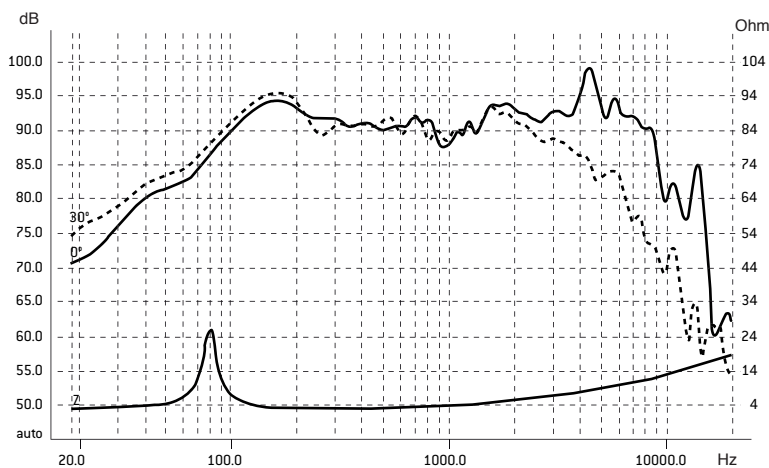


- Polyglass cone
- Aluminum basket
- Butyl surround

SPECIFICATIONS

Nominal power	80W	
Maximum power	160W	
Sensitivity	92.5dB	
Cone	Polyglass	
Surround	Butyl	
Nom. impedance	4 Ohms	
DC resistance	2.65 Ohms	
VC diameter	25mm	
VC height	11mm	
Former	Kapton	
Layers	2	
Wire	Copper	
Inductance	0.15mH	
Xmax	3.25mm	0 ^{1/8} in
Magnet d x h	85 x 17mm	3 ^{1/3} x 0 ^{2/3} in
Magnet weight	215g	0.47 lb
Flux density	-	
Gap height	5mm	0 ^{3/16} in
Net weight	1000g	2.20 lb

FREQUENCY RESPONSE / IMPEDANCE

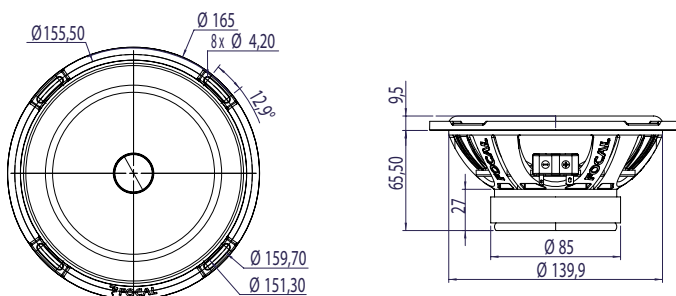


PARAMETERS

Fs	68.14Hz
Vas	9.96 l
Qts	0.73
Qes	0.81
Qms	7.22
Re	2.65 Ohms
Sd	132.73cm ²
Cas	7.09E-8m ⁵ /N
Mas	76.91kg/m ⁴
Ras	4560.69 Ohms.ac
Cms	402µm/N
Mms	13.55g
Rms	0.803kg/s
Ces	713.93mF
Les	7.64mH
Res	23.62 Ohms
Bl	4.36N/A
SPL	87.70dB/W/m

MECHANICAL DRAWING

Unit: mm



Performance P130V15



2-way kit

- Butyl surround
- Promoting long life**
- Paint DIN basket 20% glass fiber filled ABS material
- Easy mounting, strong rigid basket**

- Polyglass cone
- Neutral sound without coloration**
- Acoustically transparent dust cap
- Better reproduction of mid frequencies**
- 1" [25mm] Kapton®, voice-coil former
- High power handling**
- Voice-coil cooling system
- Reliability, better sound quality**

- 6/12dB/oct. crossover
- Optimized woofer and tweeter integration**
- Adjustable tweeter level
- For a better adaptation of level/ placement in vehicle**
- Polypropylene capacitor
- Natural reproduction of high frequencies**



- Aluminum/magnesium inverted dome tweeter
- Optimized match between Polyglass woofer non directive**
- Double push-pull Neodymium magnet
- Very linear tweeter**
- Aluminum voice-coil former
- Excellent heat dissipation characteristics**

ADVANTAGES

- Outstanding musicality
- All Focal technologies

TECHNICAL CHARACTERISTICS

Woofer: 5 ¹/₈" [130mm]
Voice-coil: 1" [25mm]
Magnet: 3 ⁵/₁₆" [85mm]
Tweeter: 1 ³/₄" [45mm]

Aluminum/magnesium inverted dome
Separate crossover: 2-way 6/12dB/oct. [4.5kHz]
Adjustable tweeter level: 0, -3, -6 dB/oct
Max. power: 120W
Nom. power: 60W

Sensitivity [2.83 V/1m]: 91dB
Frequency response: 75Hz – 28kHz
Accessories: supplied grilles

Performance P130V15

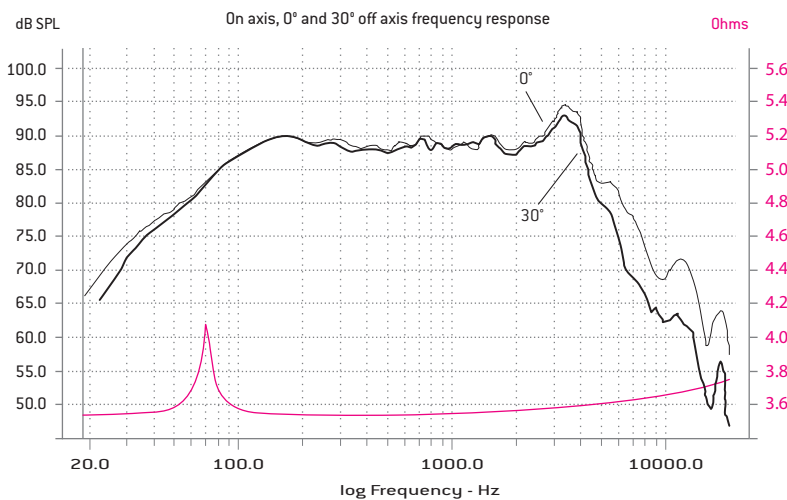


- Polyglass cone
- 80% ABS / 20% fiberglass basket
- Butyl surround

SPECIFICATIONS

Nominal power	60W	
Maximum power	120W	
Sensitivity (2.83V/m)	91dB	
Cone	Polyglass	
Surround	Butyl	
Nom. impedance	4 Ohms	
DC resistance	3.3 Ohms	
VC diameter	25mm	1 in
VC height	10mm	0.4 in
Former	Kapton®	
Layers	2	
Wire	Copper	
Inductance	0.18mH	
Xmax	2.5mm	0.1 in
Magnet d x h	85 x 15mm	3.35 x 0.59 in
Magnet weight	300g	0.66 lb
Flux density	0.95T	
Gap height	5mm	0.20 in
Net weight	850g	1.87 lb

FREQUENCY RESPONSE / IMPEDANCE

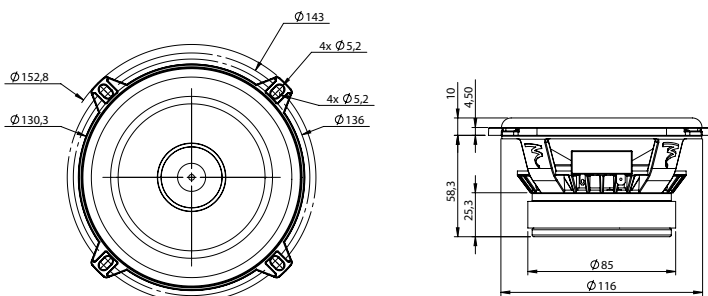


PARAMETERS

Fs	81Hz	
Vas	3.70 l	0.13Ft³
Qts	0.786	
Qes	0.83	
Qms	15	
Re	3.3 Ohms	
Sd	86.59cm²	13.42in²
Cas	2.63E-08m⁵/N	
Mas	146.71kg/m⁴	
Ras	4977.71 Ohms.ac	
Cms	3.51E-04m/N	
Mms	11g	0.022 lb
Rms	373g/s	
Ces	494.20mF	
Les	7.81mH	
Res	59.64 Ohms	
BI	4.72N/A	
SPL	85.58dB/W/m	

MECHANICAL DRAWING

Unit: mm



SUGGESTED APPLICATION

Load	V (l)	F-3 (Hz)	Ql
Sealed	30	65	7

Performance P165V15



2-way kit

- Acoustically transparent dust cap
Better reproduction of mid frequencies
- Polyglass cone
Neutral sound without coloration
- Butyl surround
Promoting long life

- Aluminum basket
Easy mounting, strong rigid basket
- 25 mm [1"] Kapton®, voice-coil former
High power handling
- Voice-coil cooling system
Reliability, better sound quality

- Polypropylene capacitor
Natural reproduction of high frequencies
- 6/12dB/octave crossover
Optimized woofer and tweeter integration
- Adjustable tweeter level
For a better adaptation of level/
placement in vehicle

- "Diamond cutting"
aluminum protection cover
Better esthetic



- Aluminum/magnesium inverted dome tweeter
Optimized match between woofer and tweeter, non directive
- Double push-pull Neodymium magnet
Very linear tweeter
- Aluminum voice-coil former
Excellent heat dissipation characteristics

IT MAKES THE DIFFERENCE

- An outstanding musicality in this price level
- All Focal technologies from the beginning of the range

TECHNICAL CHARACTERISTICS

Woofer : 165 mm [6 1/2"]
Voice-coil : 25 mm [1"]
Magnet : 85 mm [3 5/16"]
Tweeter : 45 mm [1 3/4"]

Aluminum/magnesium inverted dome
Separate crossover : 2-way 6/12 dB/oct (4.5 kHz)
Adjustable tweeter level : 0 – 3 – 6 dB/oct
Max. power : 140W
Nom. power : 70W

Sensitivity (2,8 V/1m) : 93 dB
Frequency response : 60 Hz – 28 kHz
Accessories : Grilles supplied

Performance P165V15



- Polyglass cone
- Aluminium basket
- Butyl surround



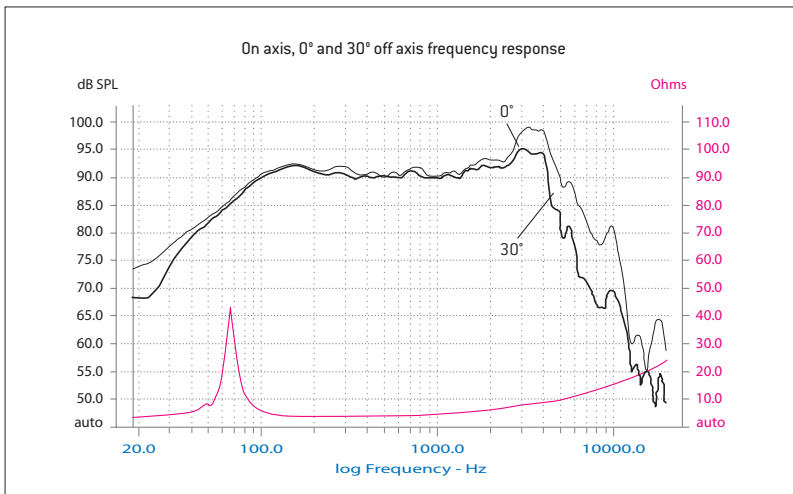
Specifications

Nominal power	70W	
Maximum power	140W	
Sensitivity	93 dB	
Cone	Polyglass	
Surround	Butyl	
Nom. impedance	4 Ohms	
DC resistance (in parallel)	3.3 Ohms	
VC diameter	25 mm	1 in
VC height	10 mm	0.4 in
Former	Kapton®	
Layers	2	
Wire	Copper	
Inductance	0.18 mH	
Xmax	2.5 mm	0.1 in
Magnet (d x h)	85 x 15 mm	3.35 x 0.59 in
Magnet weight	300 g	0.66 lb
Flux density	0.95 T	
Gap height	5 mm	0.20 in
Net weight	850 g	1.87 lb

Parameters

Fs	72.64 Hz	
Vas	8.52 l	0,3 Ft³
Qts	0.803	
Qes	0.86	
Qms	12.23	
Re (in parallel)	3.2 Ohms	
Sd	132.73 cm²	20.57 in²
Cas	6.07E-08 m⁵/N	
Mas	79.12 kg/m⁴	
Ras	2952.83 Ohms.ac	
Cms	3.44E-04 m/N	
Mms	13.94 g	0.031 lb
Rms	520 g/s	
Ces	587 mF	
Les	8.18 mH	
Res	45.65 Ohms	
Bl	4.87 N/A	
SPL	87.64 dB/W/m	

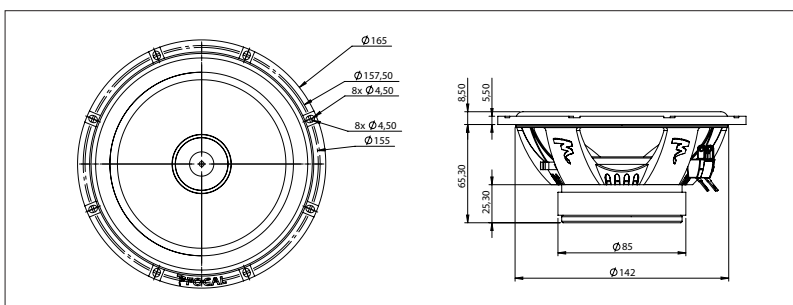
Suggested Application



Suggested application

Load	V (l)	F-3 (Hz)	Ql
Sealed	30	65	7

Mechanical Drawing



Performance P165V30



2-way kit

- 1" (25 mm) voice coil on Kapton® former
- High power handling**
- Polyglass cone
- Neutral sound without coloration**
- Semi-rigid dust cap
- Harmonic control**

- Butyl surround
- Excellent resistance**
- Engraved serial number
- Authenticity certificate**

- Aluminum chassis
- Rigid and non-magnetic**
- Diamond cutting finish
- For much style**



- Very low-resistance air core inductor
- Less efficiency loss, insensitive to parasite**
- Adjustable tweeter level
- Level adaptation according to its location**

- Voice-coil integrated cooling system
- Constant performance, optimum reliability**
- Streamlined decompressed magnet
- Perfect magnetic locking up, no ventilation noise**

- TNB inverted dome tweeter
- Details without directivity**
- Push-pull Neodymium dual magnet
- Very high tweeter linearity**
- Voice-coil on aluminum former
- Optimum thermal dissipation**
- Directivity part
- Broadens the soundstage**

- Polypropylene capacitor
- Natural treble reproduction**
- Smoked cap
- Much sobriety**
- Golden binding post terminals
- Insured link reliability**

IT MAKES THE DIFFERENCE

- Lively reproduction
- High sensitivity
- 30 years of Focal know-how
- Special Edition model

TECHNICAL CHARACTERISTICS

Woofers : 165 mm (6 1/2")

Voice-coil : 25 mm (1")

Magnet : 85 mm (3 1/3")

TNB inverted dome

Separate crossover : 6/12 or 12/18 dB/oct (3.7kHz or 5kHz)

Adjustable tweeter level : 0 – 3 dB/oct

Max. power : 160W

Nom. power : 80W

Sensitivity (2,8 V/1m) : 92 dB

Frequency response : 55Hz – 28kHz

Accessories : Grilles supplied

Performance P165V30



- High sensitivity
- Focal's 30th Anniversary



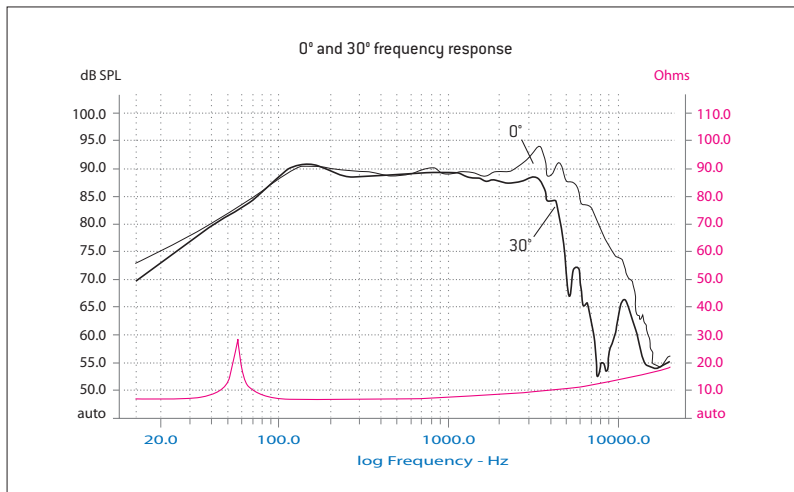
Specifications

Nominal power	80W	
Maximum power	160W	
Sensitivity	92 dB	
Cone	Polyglass	
Surround	Butyl	
Nom. impedance	4 Ohms	
DC resistance (in parallel)	3.19 Ohms	
VC diameter	25 mm	1 in
VC height	15 mm	0 ^{9/16} in
Former	Kapton®	
Layers	2	
Wire	Copper	
Inductance	0.22 mH	
Xmax	5 mm	0 ^{3/16} in
Magnet (d x h)	85 x 17 mm	3 ^{1/3} in x 0 ^{2/3} in
Magnet weight	850 g	1.7 lb
Flux density	1T	
Gap height	5 mm	0 ^{3/16} in
Net weight	1.1 g	2.2 lb

Parameters

Fs	72.23 Hz	
Vas	8.46 l	0,3 Ft ³
Qts	0.76	
Qes	0.81	
Qms	12.10	
Re (in parallel)	3.19 Ohms	
Sd	132.73 cm ²	
Cas	6.02E-08 m ⁵ /N	
Mas	80.66 kg/m ⁴	
Ras	3025.19 Ohms.ac	
Cms	3.42E-04 m/N	
Mms	14.21 g	0.03 lb
Rms	0.533 kg/s	
Ces	559.50 mF	
Les	8.68 mH	
Res	47.65 Ohms	
Bl	5.04 N/A	
SPL	87.79 dB/W/m	

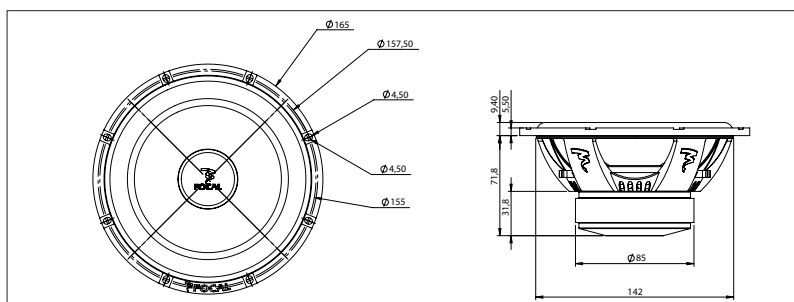
Suggested Application



Suggested application

Load	V (l)	FB (Hz)	F-3 (Hz)	Ql
Sealed	30	-	70	7

Mechanical Drawing



Performance P165V33



3-way kit

- Aluminum basket
- Strong rigid chassis, non-magnetic**
- 1" (25mm) voice coil on Kapton® former
- High power handling**
- 3^{1/3}" (85mm) magnet
- High efficiency for more dynamics**
- Butyl surround
- Promoting long life**
- Polyglass cone
- Neutral sound without coloration**



- Air core inductor with a low serial resistance
- Insensitive to parasite, better sensitivity**
- Polypropylene/aluminum capacitor
- Natural reproduction of high frequencies**

- Shallow mounting midrange (1^{1/2}" / 39.5mm)
- Easy installation on the dashboard or on the A-pillar**

- Aluminum/magnesium inverted dome TNB tweeter
- Smooth and detailed treble, large and precise sound stage**
- Neodymium magnet
- High linearity tweeter**
- Voice coil on aluminum former
- Excellent heat dissipation characteristic**

- Adjustable tweeter level
- Optimization of the tweeter level according to the location**
- 12/12/12dB/oct. crossover
- Optimum coupling of tweeter, midrange and woofer**

ADVANTAGES

- Shallow mounting midrange for an optimized and easy installation
- Highest fidelity reproduction for an absolute realistic sound
- Large and precise sound stage
- Important dynamics

TECHNICAL CHARACTERISTICS

Woofer: 6^{1/2}" (165mm)
Voice coil: 1" (25mm)
Magnet: 3^{1/3}" (85mm)
Midrange: 4" (100mm)
Neodymium magnet
Tweeter TNB: 1^{3/4}" (45mm)

Aluminum/magnesium inverted dome tweeter
3-way crossover: 12/12/12dB/oct. (400Hz – 4kHz)
Adjustable tweeter level: 0, -3, -6 dB/oct
Max power: 160W
Nom. power: 80W rms

Sensitivity (2.83 V/1m): 93dB
Frequency response: 55Hz – 28kHz
Accessories: supplied grilles

Performance P165V33

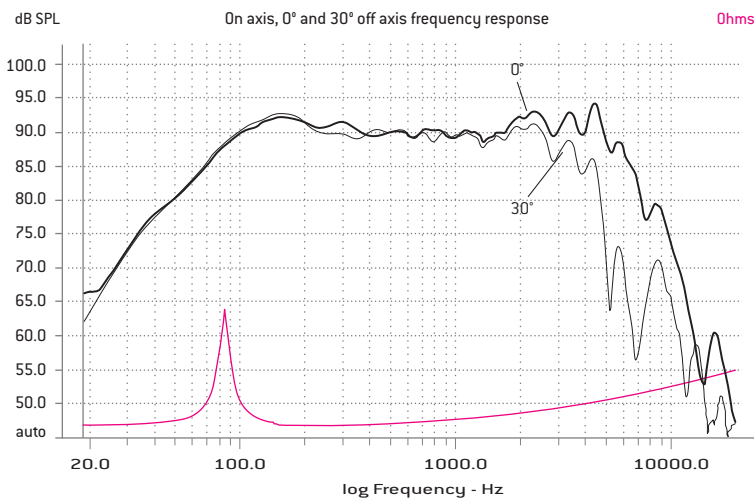


- Aluminum basket
- Polyglass cone, Butyl surround
- 1" (25mm) Kapton® voice-coil former

SPECIFICATIONS

Nominal power	80W
Maximum power	160W
Sensitivity	93dB
Cone	Polyglass
Surround	Butyl
Nom. impedance	4 Ohms
DC resistance	3.1 Ohms
VC diameter	25mm 1"
VC height	13mm 0.4"
Former	Kapton®
Layers	2
Wire	Copper
Inductance	0.22mH
Xmax	3.5mm
Magnet d x h	85 x 15mm 3 1/3 x 9/16 in
Magnet weight	750g 1.65 lb
Flux density	0.9T
Gap height	5mm
Net weight	950g 2.1 lb

FREQUENCY RESPONSE / IMPEDANCE

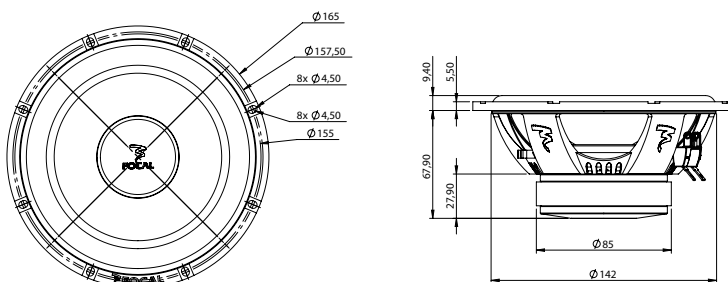


PARAMETERS

Fs	83.24Hz
Vas	6.85 l 0.242F ³
Qts	0.830
Qes	0.900
Qms	10.720
Re	3.1 Ohms
Sd	132.73cm ² 20.57in ²
Cas	4.88E-08m ⁵ /N
Mas	74.92kg/m ⁴
Ras	3655.43 Ohms.ac
Cms	2.77E-04m/N
Mms	13.20g 0.03 lb
Rms	644g/s
Ces	555.10mF
Les	6.59mH
Res	36.92 Ohms
Bl	4.88N/A
SPL	88.27dB/W/m

MECHANICAL DRAWING

Unit: mm



SUGGESTED APPLICATION

Load	V (l)	Fb (Hz)	F-3 (Hz)	Ql
Sealed	30	-	65	7

Performance Tweeter TNP



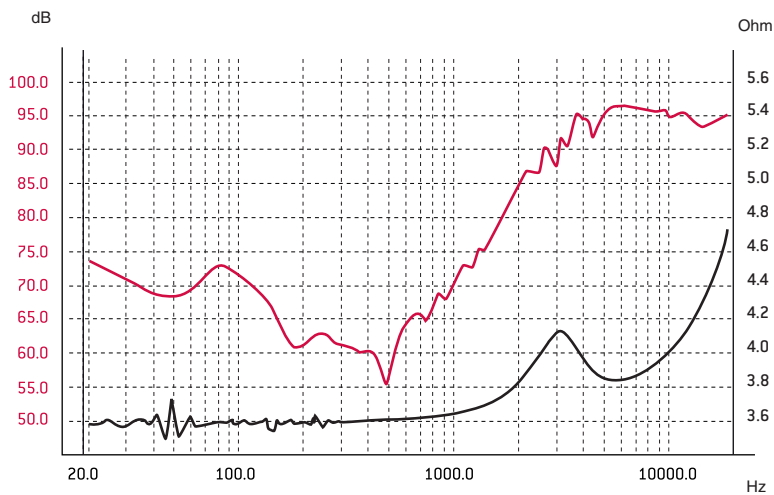
Three different mounting possibilities:

- Flush mounting
- Surface mounting
- Tilted mounting

SPECIFICATIONS

Nominal power	15W
Maximum power	100W
Sensitivity (2.83V/1m)	94dB
Cone	Alu
Surround	Cloth
Nom. impedance	4 Ohms
DC resistance	3.7 Ohms
VC diameter	20mm 1 3/16"
Former	Kapton®
Layers	2
Magnet	Neodymium
Flux density	-
Gap height	2.5mm 0 1/8"
Net weight	60g 0.31b

FREQUENCY RESPONSE / IMPEDANCE

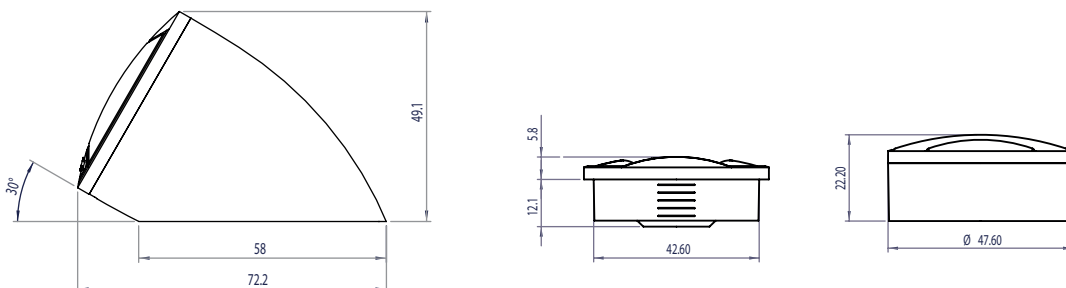


PARAMETERS

Fs	2950Hz
Re	3.7 Ohms
Sd	4.9cm ²
Res	4.1 Ohms
SPL	91dB/W/m

MECHANICAL DRAWING

Unit: mm



Performance Sub P30



12" (30cm) subwoofer

• Butyl surround
Excellent reliability



• Rubber magnet cap
Protects the magnet from shocks

• 5^{11/16"} (145mm) magnet
High efficiency

• Spider decompression
Voice-coil ventilation

• 2" (50mm) voice-coil on Kapton former
High power handling

ADVANTAGES

- For sealed or vented box
- Great dynamics
- The Focal sound

TECHNICAL CHARACTERISTICS

Diameter: 12" (300mm)

Voice-coil diameter: 2" (50mm)

Voice-coil height: 0^{3/4"} (18.5mm)

Magnet: 5^{11/16"} (145mm)

Max. power: 500 watts

Nom. power: 250 watts rms

Sensitivity (2.83V/1m): 90.8dB

Frequency response: 35Hz – 500Hz

Impedance: 4 Ohm

Performance Sub P 30



12" (30cm) subwoofer

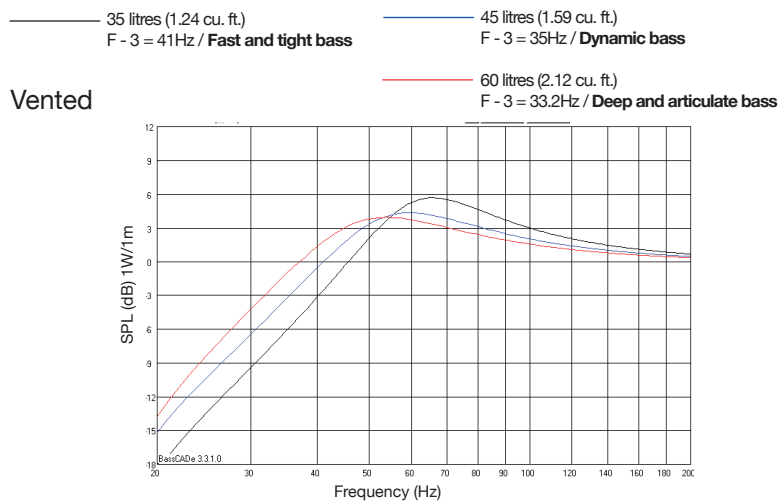


- Polypropylene cone
- For sealed or vented box

SPECIFICATIONS

Nominal power	250W	
Maximum power	500W	
Sensitivity	90.8dB	
Cone	Polypropylene	
Surround	Butyl	
Nom. impedance	4 Ohms	
DC resistance	3.6 Ohms	
VC diameter	50mm	
VC height	18.5mm	
Former	Kapton	
Layers	4	
Wire	Copper	
Inductance	1.12mH	
Xmax	5.25mm	0 3/16"
Magnet d x h	145x20mm	5 11/16 x 0 13/16"
Magnet weight	1000g	2.2lb
Flux density	-	
Gap height	8mm	
Net weight	4050g	8.93lb

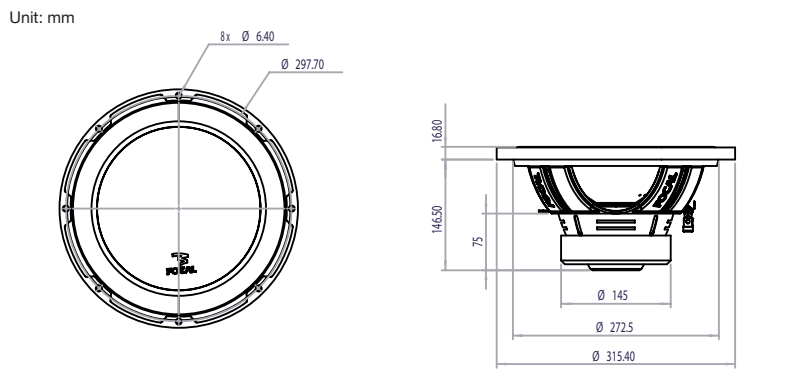
SUGGESTED APPLICATION



PARAMETERS

Fs	31.28Hz	
Vas	63.92 l	
Qts	0.51	
Qes	0.55	
Qms	6.59	
Re	3.6 Ohms	
Sd	510.7cm ²	
Cas	4.55E-7m ⁵ /N	
Mas	56.87kg/m ⁴	
Ras	1695.98 Ohms.ac	
Cms	1.75E-4m/N	
Mms	148.32g	
Rms	4.423kg/s	
Ces	777.34mF	
Les	33.3mH	
Res	43.13 Ohms	
BI	13.81 N/A	
SPL	87.35 dB/W/m	

MECHANICAL DRAWING



SUGGESTED APPLICATION

Load	Volume	Port diameter	Port length
Vented	35	8 (3 1/8")	20 (7 7/8")
Vented	45	8 (3 1/8")	22 (8 2/3")
Vented	60	8 (3 1/8")	17 (6 11/16")

Load	Volume	F-3 (Hz)	QI
Sealed	25	47.3	0.96
Sealed	35	45.1	0.85
Sealed	45	44	0.79

Performance Sub P25 DB



Dual voice-coil 10" (25cm) subwoofer

• Butyl surround
Excellent reliability

2 x 4 Ohms dual voice-coil
Easy amplifier connection

• 5^{11/16"} (145mm) dual ferrite magnet
High efficiency

• Spider decompression
Voice-coil ventilation

• 2" (50mm) voice-coil on Kapton former
High power handling



ADVANTAGES

- For sealed or vented box
- High sensitivity
- 2 x 4 Ohms dual voice-coil
- (5^{11/16"}) 145mm dual ferrite

TECHNICAL CHARACTERISTICS

Diameter: 10" (250mm)

Voice-coil diameter: 2" (50mm)

Voice-coil height: 1" (25mm)

Magnet: 5^{11/16"} (145mm)

Max. power: 500 Watts

Nom. power: 250 Watts rms

Sensitivity (2.83V/1m): 90.9dB

Frequency response: 42Hz – 500kHz

Impedance: 2 x 4 Ohms

Performance Sub P 25 DB



Dual voice-coil 10" (25cm) subwoofer

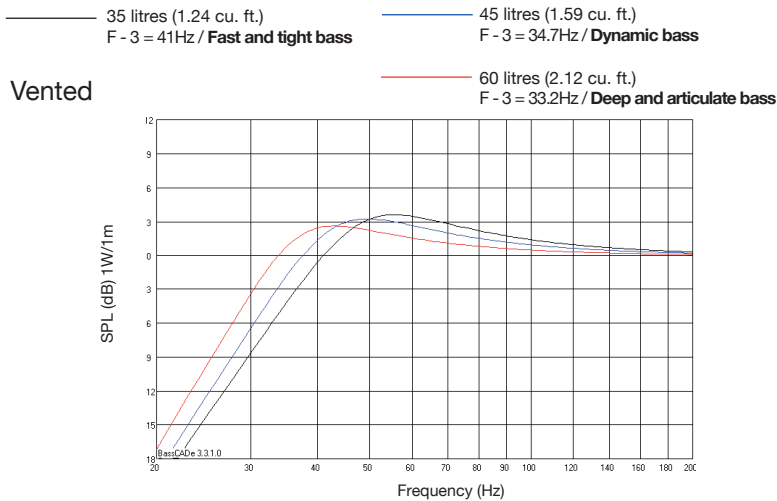


- 2x4 Ohms dual voice-coil
- [5^{11/16"}] 145mm dual ferrite
- For sealed or vented box

SPECIFICATIONS

Nominal power	250W	
Maximum power	500W	
Sensitivity	90.9dB	
Cone	Polypropylene	
Surround	Butyl	
Nom. impedance	4 Ohms	
DC resistance	2x2.4 Ohms	
VC diameter	50mm	2"
VC height	25mm	1"
Former	Kapton	
Layers	4	
Wire	Copper	
Inductance	0.27mH	
Xmax	7.5mm	0 ^{5/16"}
Magnet d x h	145x32mm	5 ^{11/16"} x1 ^{1/4"}
Magnet weight	1600g	3.53lb
Flux density	-	
Gap height	8mm	0 ^{5/16"}
Net weight	4900g	10.8lb

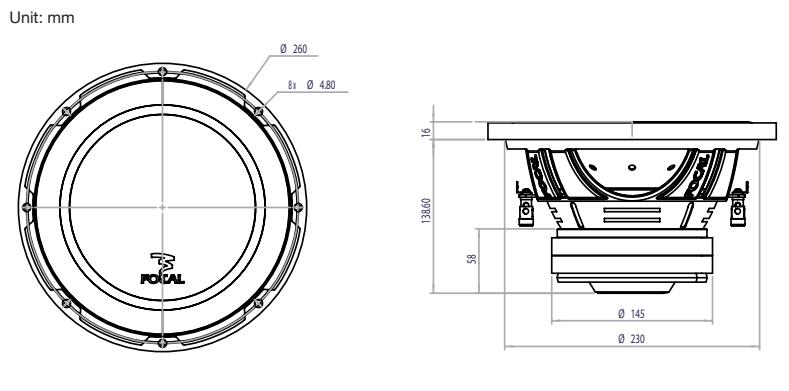
SUGGESTED APPLICATION



PARAMETERS

Fs	27.46Hz	
Vas	40.72 l	
Qts	0.431	
Qes	0.47	
Qms	5.21	
Re	1.7 Ohm	
Sd	346.36cm ²	
Cas	2.90E-7m ⁵ /N	
Mas	115.87kg/m ⁴	
Ras	3837.08 Ohms.ac	
Cms	2.42E-4m/N	
Mms	139g	
Rms	4.603kg/s	
Ces	1556.61mF	
Les	21.58mH	
Res	19.4 Ohms	
BI	9.45 N/A	
SPL	84.38 dB/W/m	

MECHANICAL DRAWING



SUGGESTED APPLICATION

Load	Volume	Port diameter	Port length
Vented	35	8 (3 ^{1/8"})	20 (7 ^{7/8"})
Vented	45	8 (3 ^{1/8"})	22 (8 ^{2/3"})
Vented	60	8 (3 ^{1/8"})	17 (6 ^{11/16"})

Load	Volume	F-3 (Hz)	QI
Sealed	15	46.2	0.83
Sealed	25	45.1	0.7
Sealed	35	45.6	0.6

Performance Sub P30 DB



Dual voice-coil 12" (30cm) subwoofer



ADVANTAGES

- For sealed or vented box
- High sensitivity
- 2 x 4 Ohms dual voice-coil
- (5^{11/16}") 145mm dual ferrite

TECHNICAL CHARACTERISTICS

Diameter: 12" (300mm)

Voice-coil diameter: 2^{3/8}" (60mm)

Voice-coil height: 1^{1/8}" (28mm)

Magnet: 5^{11/16}" (145mm)

Max. power: 600 Watts

Nom. power: 300 Watts rms

Sensitivity (2.83V/1m): 93.4dB

Frequency response: 27Hz – 500Hz

Impedance: 2 x 4 Ohms

Performance Sub P 30 DB



Dual voice-coil 12" (30cm) subwoofer

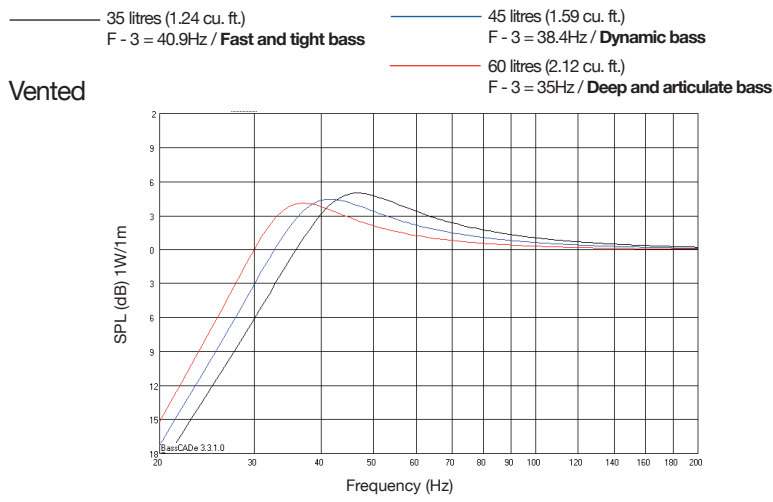


- 2x4 Ohms dual voice-coil
- [5^{11/16"}] 145mm dual ferrite
- For sealed or vented box

SPECIFICATIONS

Nominal power	300W	
Maximum power	600W	
Sensitivity	93.4dB	
Cone	Polypropylene	
Surround	Butyl	
Nom. impedance	4 Ohms	
DC resistance	2x2.4 Ohms	
VC diameter	60mm	2 ^{3/8"}
VC height	28mm	1 ^{1/8"}
Former	Kapton	
Layers	4	
Wire	Copper	
Inductance	0.91mH	
Xmax	9mm	0 ^{3/8"}
Magnet d x h	145x32mm	5 ^{11/16"} x1 ^{1/4"}
Magnet weight	1600g	3.53lb
Flux density	-	
Gap height	10mm	
Net weight	5700g	12.57lb

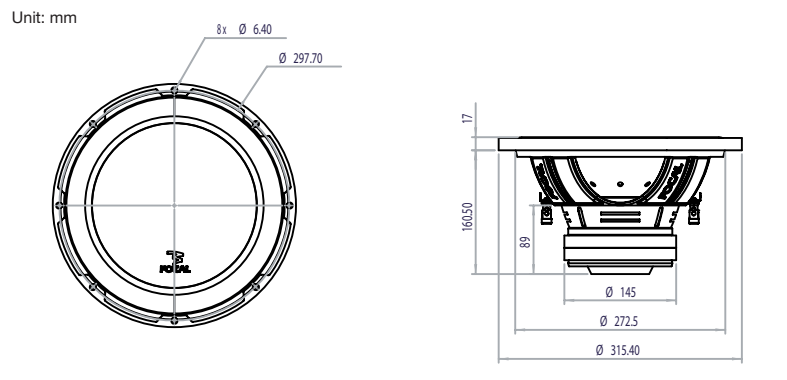
SUGGESTED APPLICATION



PARAMETERS

Fs	29.4Hz
Vas	56.76 l
Qts	0.427
Qes	0.46
Qms	6
Re	1.7 Ohm
Sd	510.7cm ²
Cas	4.04E-7m ⁵ /N
Mas	72.51kg/m ⁴
Ras	2232.52 Ohms.ac
Cms	1.55E-4m/N
Mms	189.13g
Rms	5.823kg/s
Ces	1383.43mF
Les	21.18mH
Res	23.48 Ohms
Bl	11.69 N/A
SPL	86.8 dB/W/m

MECHANICAL DRAWING



SUGGESTED APPLICATION

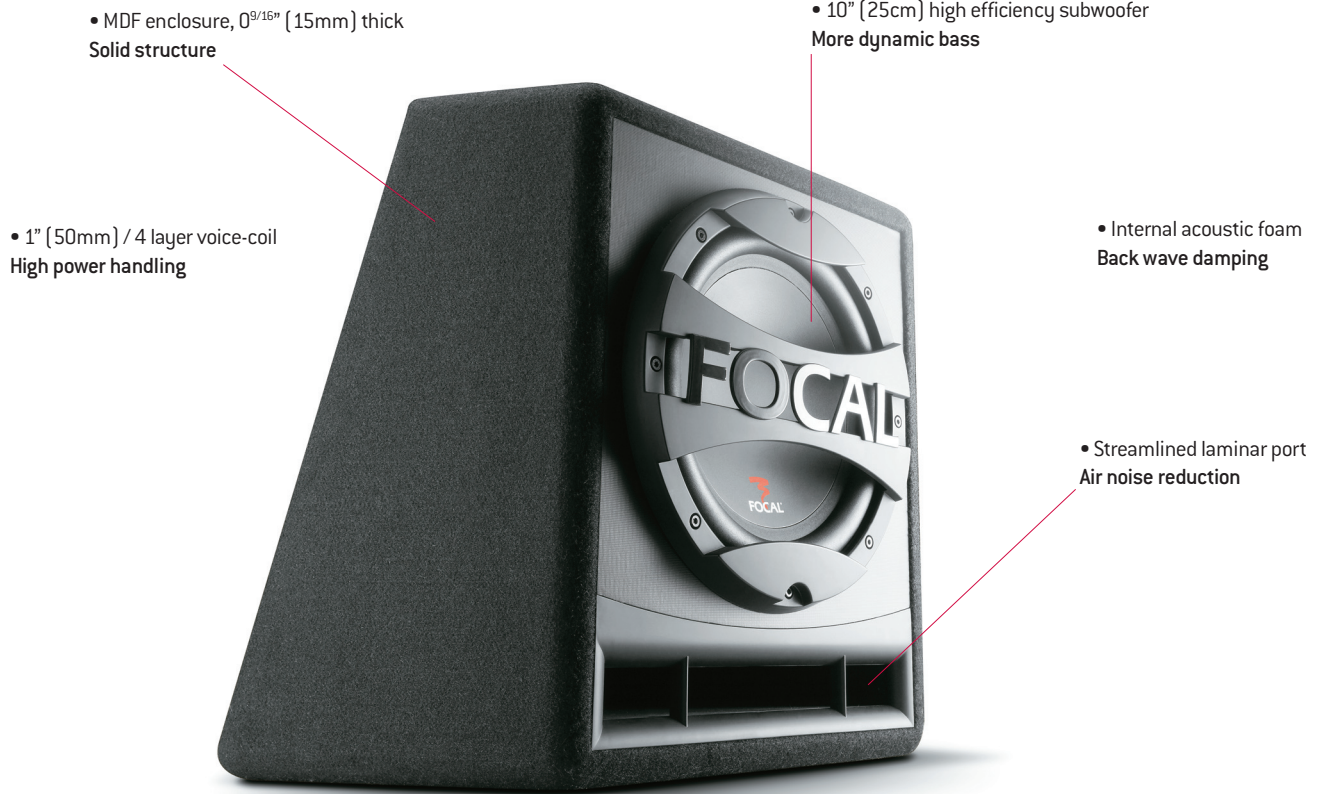
Load	Volume	Port diameter	Port length
Vented	35	8 (3 ^{1/8"})	20 (7 ^{7/8"})
Vented	45	8 (3 ^{1/8"})	17 (6 ^{11/16"})
Vented	60	10 (3 ^{15/16"})	25 (9 ^{13/16"})

Load	Volume	F-3 (Hz)	Ql
Sealed	25	49	0.77
Sealed	35	48.7	0.69
Sealed	45	49.1	0.64

Performance SB P 25



Vented enclosure with 10" (25cm) subwoofer



ADVANTAGES

- Laminar port
- Dynamics and high power handling
- Excellent performance/size ratio
- Protection grille

TECHNICAL CHARACTERISTICS

Diameter: 10" (250mm)

Voice-coil diameter: 2" (50mm)

Voice-coil height: 0^{3/4}" (18.5mm)

Magnet: 5^{11/16}" (145mm)

Max. power: 500 Watts

Nom. power: 250 Watts rms

Sensitivity (2.83V/1m): 90.2dB

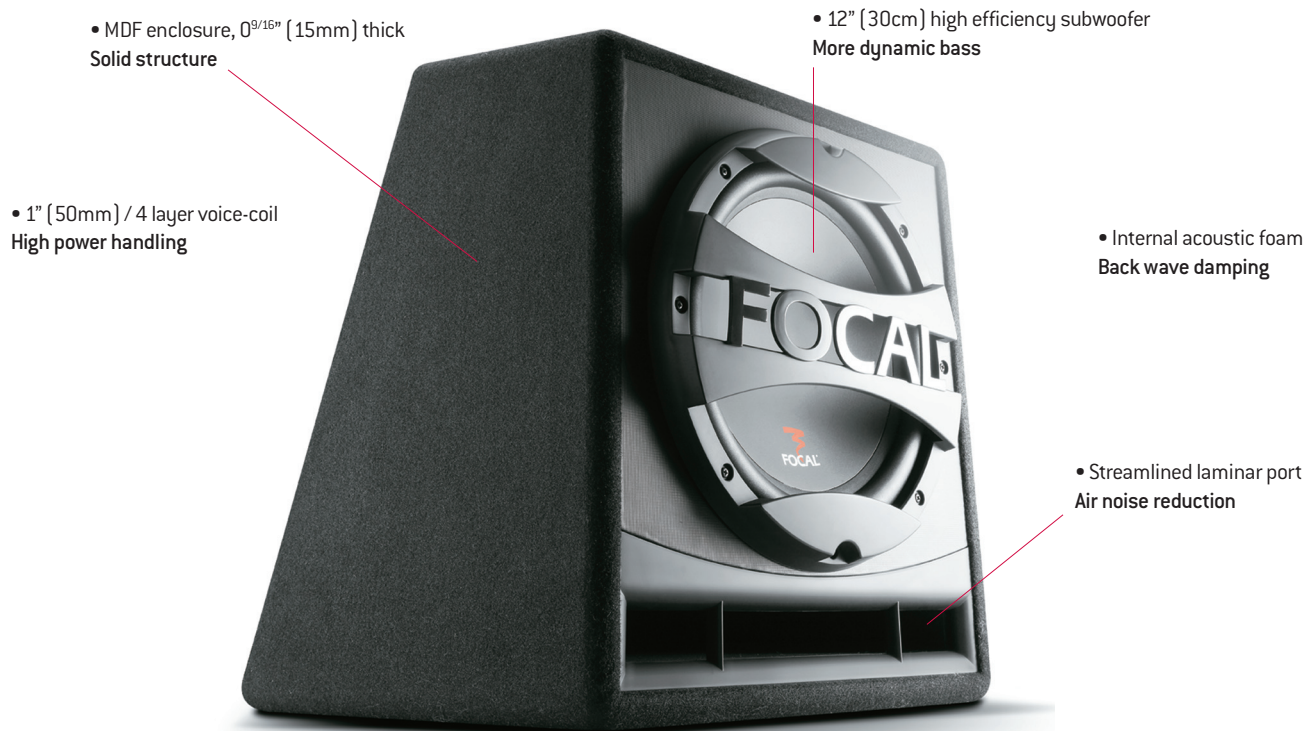
Frequency response: 42Hz – 500Hz

Impedance: 4 Ohms

Performance SB P 30



Vented enclosure with 12" (30cm) subwoofer



ADVANTAGES

- Laminar port
- Dynamics and high power handling
- Excellent performance/size ratio
- Protection grille

TECHNICAL CHARACTERISTICS

Diameter: 12" (300mm)

Voice-coil diameter: 2" (50mm)

Voice-coil height: 0³/₄" (18.5mm)

Magnet: 5¹¹/₁₆" (145mm)

Max. power: 600 Watts

Nom. power: 300 Watts rms

Sensitivity (2.83V/1m): 90.8dB

Frequency response: 40Hz – 500Hz

Impedance: 4 Ohms

FPP 1000



Quality mono amplifier

- Small size
Easy integration in a vehicle
- Subsonic and low-pass crossover
Numerous settings available
- Aluminum chassis
High thermal dissipation
- Remote control
Keep the control
- 1 inch² (25mm²) power supply terminal
No power loss
- "Auto Power On" on the high-level input
Easy wiring
- High and low-level inputs
Suits any installation
- High safety
Protection against any electrical damages
- Balanced inputs
Floating ground, no parasite nor other noises

ADVANTAGES

- Very small size according to the power supplied
- High-level input, fits the original system
- Aluminum chassis
- Remote control

TECHNICAL CHARACTERISTICS

Power into 4 Ohms: 1x350W rms

Power into 2 Ohms: 1x500W rms

Signal/noise ratio: >85dB (A)

Bass Boost: 0 to +9dB

Frequency response [-1dB]: 10Hz – 150Hz

Adaptable phase: 0 or 180°

Adjustable gain

Dimensions (HxLxD): 2^{3/8} x 14^{3/4} x 7^{11/16}"

(60x375x195mm)

Protections: Short-circuit, continuous current, thermal overload

RMS power - 14.4 V- 4 Ohms

THD+N < 1%

[CEA 2006]

300W rms



FPP 1000



Subwoofer class AB power amplifier

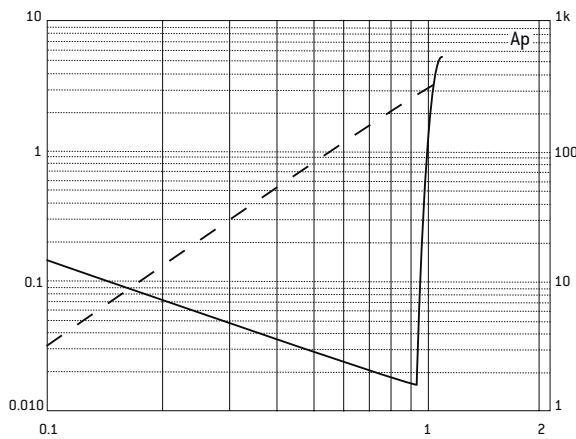


- "Auto Power On" on the high-level input
- Mono amplifier
- Remote control
- High and low level inputs

PRELIMINARY SPECIFICATIONS

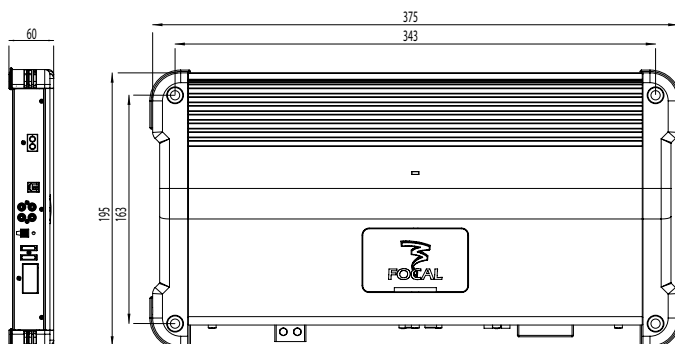
Nominal power measured into 4Ω	1x350W
Nominal power measured into 2Ω	1x500W
Power in bridged mode into 4Ω	-
Signal/noise ratio	> 85dB (A)
Damping factor into 4Ω	50 to 50Hz
Frequency response (-1dB)	10Hz – 150Hz
Input impedance	20kΩ
Input sensitivity	0.2 – 5V
Input sensitivity high level	0.4 – 9Vrms
RCA Output	Full
Low-pass crossover (sub channel)	50 – 150Hz (12 dB/oct)
Remote control (sub channel)	Yes
Adjustable bass boost level	0 to +9dB at 50Hz
Variable phase (SUB)	0 or 180°
Subsonic filter (disconnectable)	35Hz (24dB/oct)
Maximum cross section of loudspeaker cables	10mm ² 7 AWG
Maximum cross section of power cables	25mm ² 3 AWG
Protections	Short-circuit Thermal overload Overvoltage Polarity reversal
Dimensions (HxWxD)	2 ^{3/8} x 14 ^{3/4} x 7 ^{11/16} " (60 x 375 x 195mm)

THD



MECHANICAL DRAWING

Unit: mm



Rms power - 14.4V
4Ω - THD+N < 1%
(CEA 2006)

1x300W



Quality 2 channel amplifier

- Small size
Easy integration in a vehicle
- Aluminum chassis
High thermal dissipation
- High-pass and low-pass crossover
Numerous settings available
- Remote control
Keep the control
- 1 inch² (25mm²) power supply terminal
No power loss
- High and low-level inputs
Suits any installation
- "Auto Power On" on the high-level input
Easy wiring
- High safety
Protection against any electrical damages
- Balanced inputs
Floating ground, no parasite nor other noises



ADVANTAGES

- Very compact Aluminum chassis
- High-level input, fits the original system
- Secure and easily accessible settings

TECHNICAL CHARACTERISTICS

Power into 4 Ohms: 2x100W rms
 Power into 2 Ohms: 2x140W rms
 Bridged mode into 4 Ohms: 1x260W rms
 Frequency response: 10Hz–60kHz
 Signal/noise ratio: >77dB [A]

Adjustable gain
 Dimensions (HxLxD): 2x³/₈x8³/₁₆x7¹/₁₆"
 (60x234x195mm)
 Protections: Short-circuit, continuous current,
 thermal overload

RMS power - 14.4 V- 4 Ohms
 THD+N<1%
 [CEA 2006]

2x80W rms



FPP 2100



2 channel class AB power amplifier

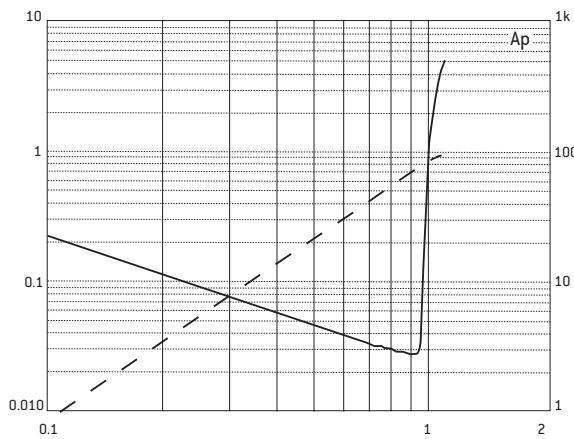


- "Auto Power On" on the high-level input
- High and low level inputs
- Stable into 2 Ohms (stereo mode)
- Pseudo-balanced RCA input

PRELIMINARY SPECIFICATIONS

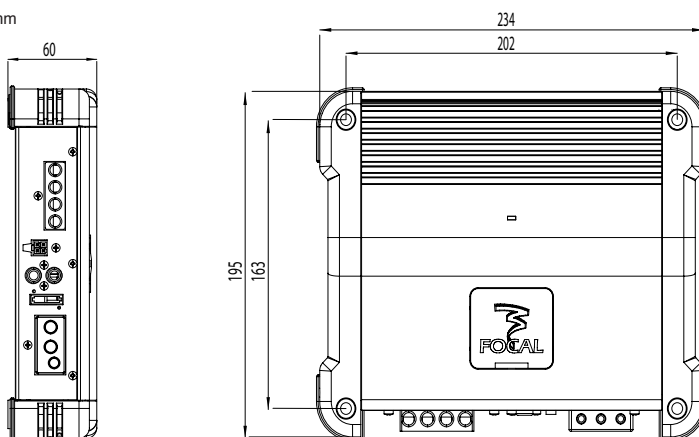
Nominal power measured into 4Ω	2x100W
Nominal power measured into 2Ω	2x140W
Power in bridged mode	1x260W
Signal/noise ratio	> 80dB A
Damping factor into 4Ω	100 at 1kHz
Frequency response (-1dB)	10Hz – 60kHz
Input impedance	20kΩ
Input sensitivity	0.2 – 5V
Input sensitivity high level	0.4 - 9Vrms
High-pass crossover (1/2 and 3/4 channels)	50 – 150Hz (12 dB/oct.)
Low-pass crossover (sub channel)	50 – 150Hz (12 dB/oct.)
Remote control (sub channel)	No
Adjustable bass boost level	No
Variable phase (SUB)	No
Subsonic filter	No
Maximum cross section of loudspeaker cables	10mm ² 7 AWG
Maximum cross section of power cables	25mm ² 3 AWG
Protections	Short-circuit Thermal overload Overvoltage Polarity reversal
Dimensions (HxWxD)	23/8x8 ³ /16x7 ¹¹ /16 (60x234x195mm)

THD



MECHANICAL DRAWING

Unit: mm



Rms power - 14.4V
4Ω - THD+N < 1% (CEA 2006) 2x80W

FPP 4100



Quality 4 channel amplifier



• Small size
Easy integration in a vehicle

• Aluminum chassis
High thermal dissipation

• High-pass and low-pass crossover
Numerous settings available

• Remote control
Keep the control

- 1 inch² (25mm²) power supply terminal
No power loss
- High and low-level inputs
Suits any installation
- "Auto Power On" on the high-level input
Easy wiring
- Fader
Benefit from the 4 channels while using only 2 inputs
- Balanced inputs
Floating ground, no parasite



ADVANTAGES

- 3 channel use with bass adjustment
- High-level input, fits the original system
- Secure and easily accessible settings
- Aluminum chassis
- Remote control

TECHNICAL CHARACTERISTICS

Power into 4 Ohms: 4x90W rms
Power into 2 Ohms: 4x140W rms
Bridged mode into 4 Ohms: 2x240W rms
Frequency response: 10Hz–60kHz
Signal/noise ratio: >80dB (A)

Adjustable gain
Dimensions (HxLxD): 2^{3/8}x14^{3/4}x7^{11/16}"
(60x375x195mm)
Protections: Short-circuit, continuous current,
thermal overload

RMS power - 14.4 V- 4 Ohms
THD+N < 1%
(CEA 2006)

4x75W rms



FPP 4100



4 channel class AB power amplifier

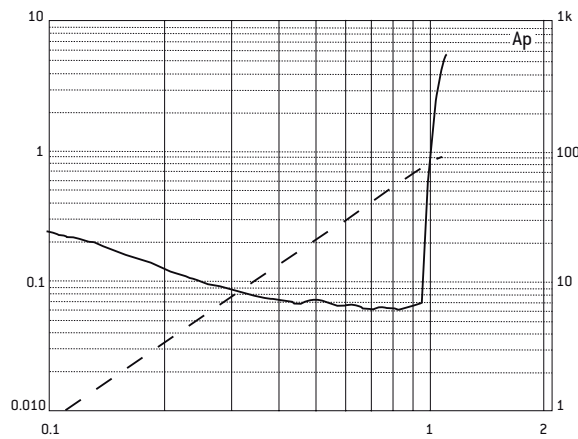


- "Auto Power On" on the high-level input
- 2,3 or 4 channel configuration
- Remote control
- Stable into 2 Ohms [4 × 140 W]
- Pseudo-balanced RCA input

PRELIMINARY SPECIFICATIONS

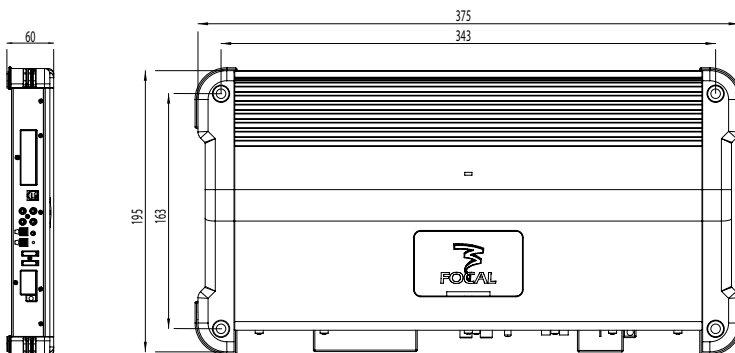
Nominal power measured into 4Ω	4x90W
Nominal power measured into 2Ω	4x140W
Power in bridged mode	2x240W
Signal/noise ratio	> 80dB A
Damping factor into 4Ω	50 at 1kHz
Frequency response (-1dB)	10Hz – 60kHz
Input impedance	20kΩ
Input sensitivity	0.2 – 5V
Input sensitivity high level	0.4 - 9Vrms
High-pass crossover (1/2 and 3/4 channels)	50 – 150Hz (12 dB/oct.)
Low-pass crossover (sub channel)	50 – 150Hz (12 dB/oct.)
Remote control	Yes
Adjustable bass boost level	No
Variable phase (SUB)	No
Subsonic filter	No
Maximum cross section of loudspeaker cables	10mm ² 7 AWG
Maximum cross section of power cables	25mm ² 3 AWG
Protections	Short-circuit Thermal overload Overvoltage Polarity reversal
Dimensions (HxWxD)	2 ³ / ₈ x 8 ³ / ₁₆ x 7 ¹¹ / ₁₆ (60x234x195mm)

THD



MECHANICAL DRAWING

Unit: mm



Rms power - 14.4V
4Ω - THD+N < 1%
(CEA 2006)

4x75W

FPP 5300



Quality 5 channel amplifier

- High-pass, low-pass and subsonic crossover
Numerous settings available
- Aluminum chassis
High thermal dissipation



- 1 inch² (25mm²) power supply terminal
No power loss
- High and low-level inputs
Suits any installation
- "Auto Power On" on the high-level input
Easy wiring
- Fader
Benefit from the 5 channels while using only 2 inputs
- Pseudo-balanced inputs
Floating ground, no parasite



- Remote control
Keep the control

ADVANTAGES

- Amplifies 5 channel with only 2 inputs
- High-level input, fits the original system
- Secure and easily accessible settings
- Aluminum chassis
- Remote control

TECHNICAL CHARACTERISTICS

Channel 1,2,3 and 4

Nom. power into 4 Ohms: 4x80W rms
Nom. power into 2 Ohms: 4x120W rms
Bridged mode into 4 Ohms: 2x200W rms
Frequency response: 10Hz-60kHz

Sub channel

Nom. power : 1x240W rms into 4 Ohms
Nom. power : 1x300W rms into 2 Ohms
Dimensions (HxLxD): 2^{3/8}x20x7^{11/16}" (60x507x195mm)
Protections: Short-circuit, direct current, thermal overload

RMS power - 14.4 V- 4 Ohms 4x60W rms
THD+N<1% + 1x160W rms
(CEA 2006)



FPP 5300



5 channel class AB power amplifier

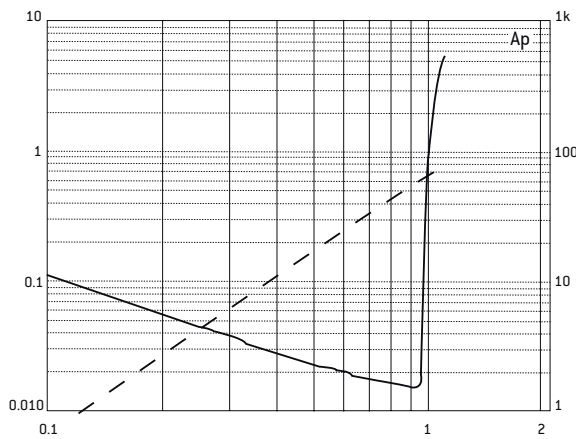


- "Auto Power On" on the high-level input
- Remote control
- Stable into 2 Ohms by channel
- Pseudo-balanced RCA input

PRELIMINARY SPECIFICATIONS

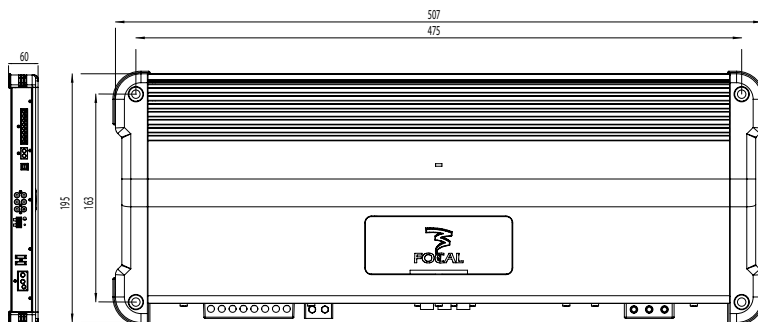
Nominal power measured into 4Ω	4 x 80W + 1 x 240W
Nominal power measured into 2Ω	4 x 120W + 1 x 300W
Power in bridged mode	2 x 200W + 1 x 240W
Signal/noise ratio	> 85dB A
Damping factor into 4Ω	50 at 1kHz
Frequency response (-1dB)	10Hz – 60kHz
Input impedance	20kΩ
Input sensitivity	0.2 – 5V
Input sensitivity high level	0.4 - 9Vrms
High-pass crossover (1/2 and 3/4 channels)	50 – 150Hz (12 dB/oct.)
Low-pass crossover (sub channel)	50 – 150Hz (12 dB/oct.)
Remote control (sub channel)	Yes
Adjustable bass boost level	0+9dB at 50Hz
Variable phase (SUB)	No
Subsonic filter	35Hz
Maximum cross section of loudspeaker cables	10mm ² 7 AWG
Maximum cross section of power cables	25mm ² 3 AWG
Protections	Short-circuit Thermal overload Overvoltage Polarity reversal
Dimensions (HxWxD)	2 ³ / ₈ x19 ¹⁵ / ₁₆ x7 ¹¹ / ₁₆ (60x507x195mm)

THD



MECHANICAL DRAWING

Unit: mm



Rms power - 14.4V
4Ω - THD+N < 1%
(CEA 2006)

4 x 60W
+ 1 x 160W

ACCESSORIES



B.A.M.	Acoustic insulation kit
B.A.M. XL	Acoustic insulation kit
B.A.M. XXXL	Acoustic insulation kit
BR	Acoustic insulation joint
Hilo	High and low level adapter

FOCAL B.A.M.

Acoustic insulation kit

3 materials, 3 functions

Honeycombed damping material

Just like the acoustic foam inside a loudspeaker, the honeycombed damping material attenuates the speaker back wave and then increases the speaker performance.



Aluminum sheet

essential component to the sandwich effect realization. This process permits to increase the performance of the viscoelastic complex.

Viscoelastic complex

Self-adhesive, the butyl complex absorbs the vibrations of the surface with which it's in contact. It highly attenuates the outside noise that gets inside the car. Less noise means more music.

Key points

- Replaces Plain chant
- Soundproof your car
- Attenuates the speaker back wave
- Content: Two 21 x 30cm sheets

Advantages

- Increases the bass level in your car
- Increases the soundproofing of outside noise



FOCAL
the Spirit of Sound

FOCAL B.A.M. XL

Acoustic insulation kit

3 materials, 3 functions

Honeycombed damping material

Just like the acoustic foam inside a loudspeaker, the honeycombed damping material attenuates the speaker back wave and then increases the speaker performance.

Aluminum sheet

essential component to the sandwich effect realization. This process permits to increase the performance of the viscoelastic complex.

Viscoelastic complex

Self-adhesive, the butyl complex absorbs the vibrations of the surface with which it's in contact. It highly attenuates the outside noise that gets inside the car. Less noise means more music.



Key points

- Replaces Plain chant
- Soundproof your car
- Attenuates the speaker back wave
- Content: 50 x 200cm sheet

Advantages

- Increases the bass level in your car
- Increases the soundproofing of outside noise



FOCAL B.A.M. XXXL

XXXL acoustic insulation kit

3 technical materials, 3 strategic functions

This acoustic insulation kit is completing and essential to a quality car audio installation. From its use depends optimum acoustic rendering of speakers, amplifiers and installed accessories. Technical materials made of honeycombed damping material, an Aluminum sheet and a viscoelastic complex (Butyl).

Honeycombed damping material

Just like the acoustic foam inside a loudspeaker, the honeycombed damping material attenuates the speaker back wave and thus increases the speaker performance.

Aluminum sheet

Aluminum provides rigidity to the Butyl/foam couple. This rigidity also permits the easy laying of BAM in difficult locations.



Viscoelastic complex

Self-adhesive, the Butyl complex absorbs the vibrations of the surface with which it's in contact. It highly attenuates the outside noise that gets inside the car.

Key points

- Soundproof your car
- Attenuates the speaker back wave
- Replaces Plain chant
- Observe carefully the laying conditions (min. temperature +15° on a clean surface)
- Content: one 0.5 x 6m sheet (3m²)

Advantages

- Money-saving **extra size**
- Capacity: about 4 doors
- Increases the bass level in your car
- Increases the soundproofing of outside noise



FOCAL B.R.

Acoustic soundproofing seal



Divisible seal made of Butyl

Permits to soundproof all parts with leak risks (door, bass enclosure, ...).

Can be stuck on any surface

Fix any object on any type of support

Key points

- Can be adapted to any shape
- Can be stuck on any surface type
- Content: one 14.76 ft (4.5m) roll – 0^{3/8}" (9mm) diam.

Advantages

- Increases bass dynamics
- Permits to stop all vibrations



FOCAL HILO

High / Low-level converter (2 channels)

Convert two high-level outputs (speaker) of a car radio in two low-level line outputs for an amplifier and also eliminates parasitic interference.

Automatically generates a remote control of the amplifier power on from the signal detection.

Can be used in passive mode without 12V supply
(In that case the remote output doesn't work)



Technical characteristics

Bandwidth: 10Hz – 140kHz
Signal/noise ratio superior to 100dB
Distortion inferior to 0.01%
Automatic remote output

Advantages

- Separated grounds, less parasitic interference
- You can connect in parallel the Hilo to the speakers while keeping them connected in the case of the use of a subwoofer for example.

