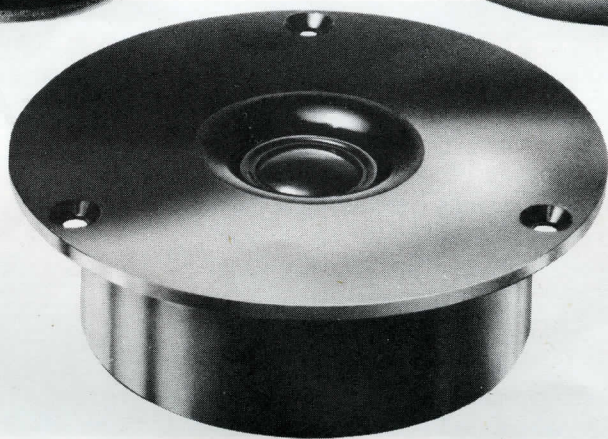
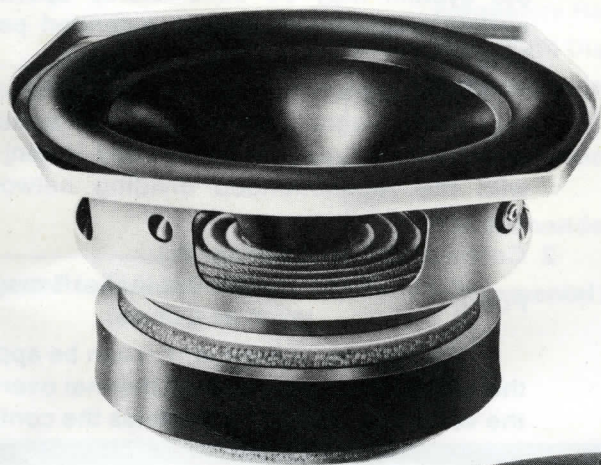


KEF UNITS



KEF products incorporate the most advanced techniques ever developed for loudspeaker production. Every KEF diaphragm is manufactured from plastics or in the case of the larger KEF units, from metal and plastics. Conventional paper cones are not used at all. These special constructions obviate the wide variations in performance associated with ordinary loudspeakers and give considerably reduced colouration due to the absence of unwanted resonances within the diaphragm itself.

KEF design and build all their own drive units. Every vital component is made in KEF factories under stringent quality control. The units are fitted with large super-power magnet systems built to close mechanical tolerances and fabricated in KEF workshops.

Every speaker is acoustically compared with a laboratory maintained system to ensure strict control of production, consistency, reliability and sound quality.

KEF users include many great musicians, recording engineers, and highly critical audiophiles in all parts of the world. Leading press reviewers have consistently praised KEF speakers for their high technical quality and sound. In spite of so many accolades, research goes on at the KEF laboratories in an effort to improve on the already high standards. Using the most modern technical facilities and sophisticated instrumentation to investigate the properties of new materials, KEF's aim is simply to make more natural sounding reproducers with ever increasing ruggedness and reliability.

KEF offer you an excellent choice of loudspeakers whatever your requirements. No matter whether you select the largest or smallest system all KEF's products have the same high standard of engineering and attention to detail which earned them the title – KEF THE SPEAKER ENGINEERS.



KEF is an internationally recognised producer of high quality loudspeakers. This success has been due to the uncompromising engineering standards which the company set itself from the very beginning, coupled with a vigorous policy of expansion through its export markets. This success was officially acknowledged in 1970 with the attainment of the Queen's Award to Industry and the BNEC's Award for Export Achievement.

KEF design philosophy is founded on the premise that the studied use of plastics and metal alloys can improve sound reproduction, reliability and consistency beyond the potential of traditional materials.

Why KEF replace paper diaphragms with plastics.

- 1 Plastics are acoustically 'dead' and inherently free from resonances. The plastic materials used for KEF's diaphragms add no sound of their own to the sounds being reproduced. Result – lower colouration; clear, true sound.
- 2 Reduction of colouration and unwanted resonances produces an amazingly smooth, even frequency response. Result – all parts of the range are accurately balanced, and the sound is smooth and 'easy on the ear'.
- 3 With conventional loudspeakers, any delayed sound reflections within the cabinet are heard through the paper cone, causing a muddled, boxy sound quality, particularly prominent with small systems. KEF's plastic diaphragms form a barrier to these delayed sounds. Result – a clean, clear sound, completely free from 'boom' even with the smallest cabinets.
- 4 Plastics are predictable, give less variation in performance due to changes in temperature and humidity, and less physical and chemical deterioration with age. Result – unique consistency.

Definitions of Power Ratings Used

- 1 The programme rating of any system is the undistorted power output of an amplifier with which the system may be satisfactorily operated on normal programme over an extended period of time.

The programme rating of a unit is equal to the maximum programme rating of any system with which the unit may be safely used in conjunction with the recommended dividing network and enclosure.

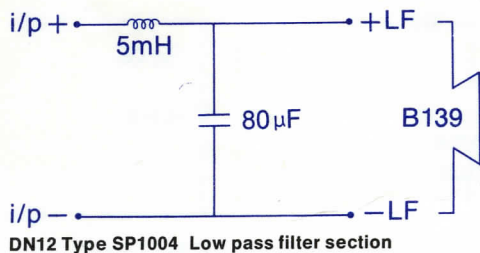
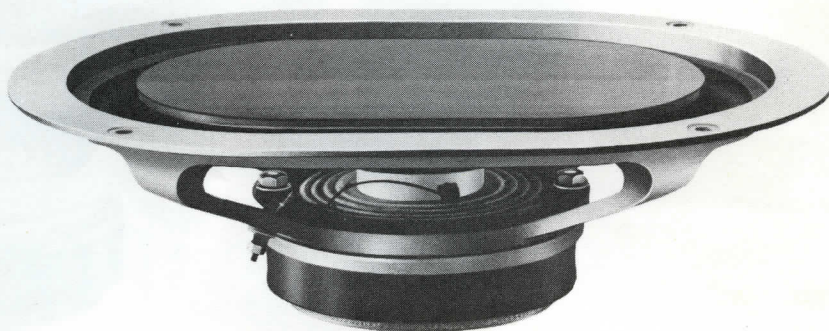
- 2 Continuous Power Rating (Pc).

$$P_c = \frac{V^2}{R} \quad \text{(For all KEF units in this leaflet R may be taken as 8 ohms)}$$

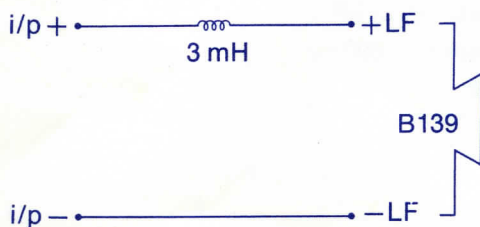
V is the rms voltage which can be applied to the unit continuously without thermal overload of the voice coil. At low frequencies the continuous power rating of the speaker may be reduced because of limitations imposed on diaphragm excursion by the acoustic loading.



LF UNIT TYPE SP6171



DN12 Type SP1004 Low pass filter section



DN8 Type SP6305 Low pass filter section

Dimensions: 33 × 24.1 cm 13 × 9.5 in

Weight: 4.5 kg 10 lb

Nominal Impedance: 8 ohms

Power Rating: 50 watts programme (3 way reflex system)
40 watts continuous (2 way TEB* system)
50 watts programme (3 way reflex system)
40 watts continuous (2 way TEB* system)

Frequency Range: 20 – 1,000 Hz

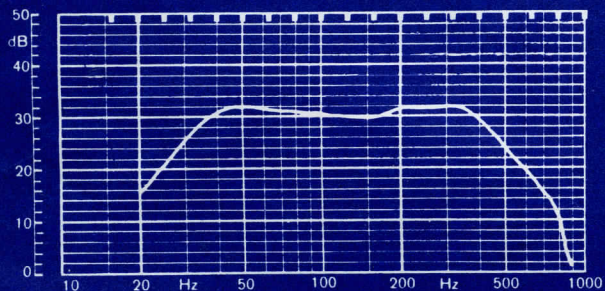
Voice Coil Diameter: 5.08 cm 2 in

Recommended Enclosure Size: 62.0 litres (3 way reflex system)
39.8 litres (2 way TEB* system)

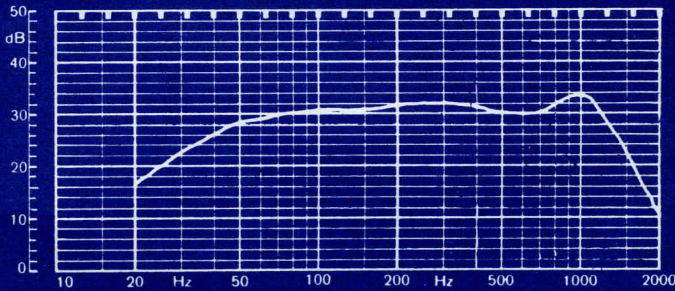
Recommended Dividing Network: DN12 SP1004 (3 way reflex system)
DN8 Type SP6305 (2 way TEB* system)

Recommended Dividing Frequency: 400 Hz (3 way reflex system)
1000 Hz (2 way TEB* system)

Fundamental Resonance: 20 Hz



LF response in a 62 litre reflex enclosure
– DN12 Type SP1004



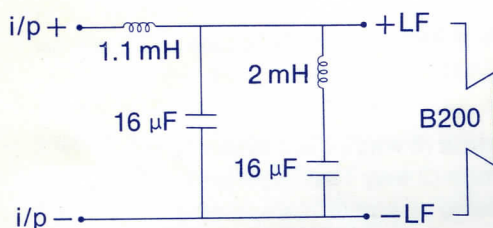
LF response in a 39.8 litre TEB* – DN8 Type SP6305

Measured at 1 metre on axis in anechoic conditions

*Totally Enclosed Box. Popularly referred to as Infinite Baffle

KEF B200

LF UNIT TYPE SP1014



DN13 Type SP1015 Low pass filter section

Diameter: 24.4 cm 9.6 in

Weight: 1.6 kg 3.62 lb

Nominal Impedance: 8 ohms

Power Rating: 25 watts programme
25 watts continuous

Frequency Range: 25 – 3,500 Hz

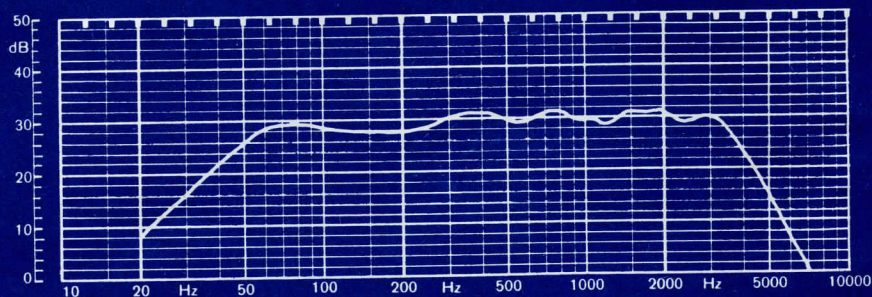
Voice Coil Diameter: 2.54 cm 1 in

Recommended Enclosure Size: 20.4 litres (2 way TEB* system)

Recommended Dividing Network: DN13 SP1015

Recommended Dividing Frequency: 3,500 Hz

Fundamental Resonance: 25 Hz



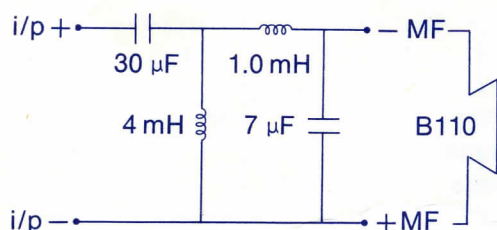
LF response in a 20.4 litre TEB* – DN13 Type SP1015

Measured at 1 metre on axis in anechoic conditions

*Totally Enclosed Box. Popularly referred to as Infinite Baffle



LF/MF UNIT TYPE SP1003



DN12 Type SP1004 Mid pass filter section

Diameter: 14 cm 5.5 in

Weight: 1.6 kg 3.62 lb

Nominal Impedance: 8 ohms

Power Rating: 50 watts programme (3 way reflex system)
20 watts programme (2 way TEB* system)
30 watts continuous (3 way reflex system)
20 watts continuous (2 way TEB* system)

Frequency Range: 55 – 3,500 Hz

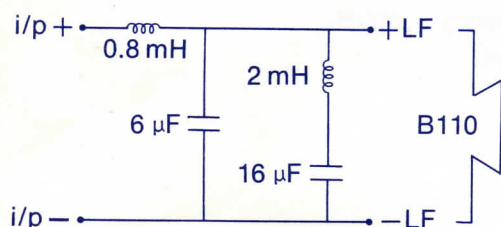
Voice Coil Diameter: 2.54 cm 1 in

Recommended Enclosure Size: 7.26 litres (2 way TEB* system)
4.25 litres (isolation chamber in
3 way reflex system)

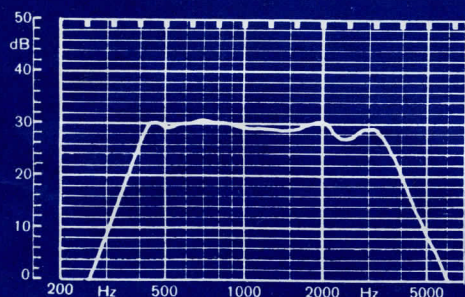
Recommended Dividing Network: DN12 SP1004 (3 way reflex system)
DN13 SP1017 (2 way TEB* system)

Recommended Dividing Frequency: 3,500 Hz (2 way TEB* system)
400 and 3,500 Hz (3 way reflex system)

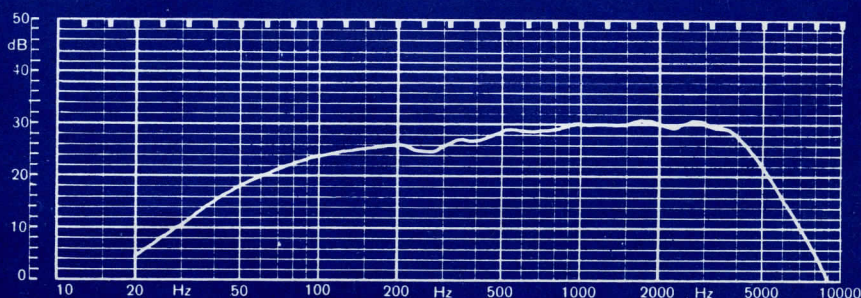
Fundamental Resonance: 30 Hz



DN13 Type SP1017 Low pass filter section



Mid response in a 4.25 litre isolation chamber, 3 way reflex enclosure
– DN12 Type SP1004



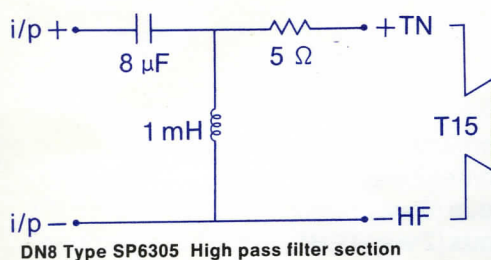
LF response in a 7.26 litre TEB* – DN13 Type SP1017

Measured at 1 metre on axis in anechoic conditions

*Totally Enclosed Box. Popularly referred to as Infinite Baffle



HF UNIT TYPE SP6236



Diameter: 9.5 cm 3.75 in

Weight: 0.9 kg 2 lb

Nominal Impedance: 8 ohms

Power Rating: 40 watts programme
10 watts continuous

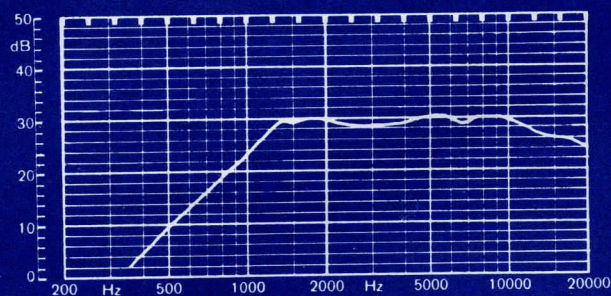
Frequency Range: 800 – 20,000 Hz

Voice Coil Diameter: 3.81 cm 1.5 in

Recommended Dividing Network: DN8 SP6305

Recommended Dividing Frequency: 1,000 Hz

Fundamental Resonance: 550 Hz

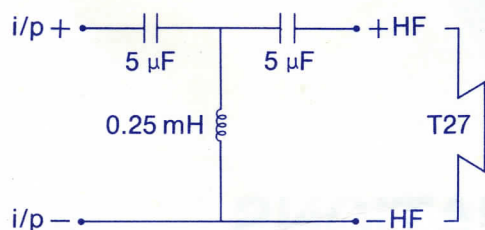
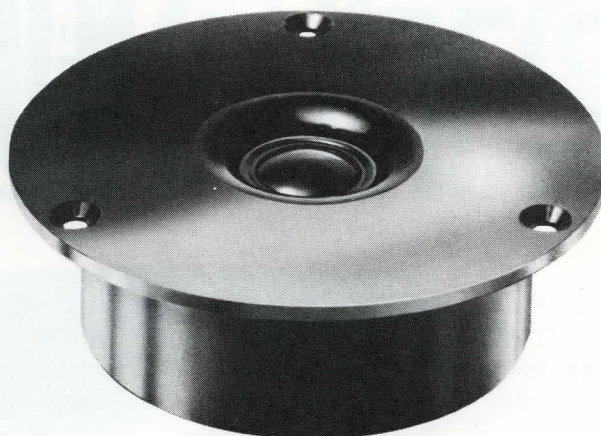


HF response – DN8 Type SP6305

Measured at 1 metre on axis in anechoic conditions



HF UNIT TYPE SP6535



High pass filter section for DN12 Type SP1004
DN13 Type SP1017/DN13 Type SP1015

Diameter: 10.8 cm 4.25 in

Weight: .64 kg 1.4 lb

Nominal Impedance: 8 ohms

Power Rating: 50 watts programme
8 watts continuous

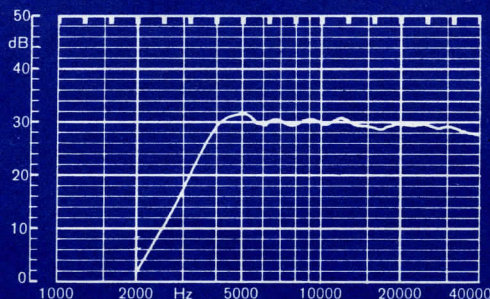
Frequency Range: 3,500 – 40,000 Hz

Voice Coil Diameter: 1.91 cm .75 in

Recommended Dividing Network: Various with application

Recommended Dividing Frequency: 3,500 Hz

Fundamental Resonance: 900 Hz



HF response – DN12 Type SP1004/DN13 Type SP1017/DN13 Type SP1015

Measured at 1 metre on axis in anechoic conditions

DIVIDING NETWORKS

DN8

Type: SP6305

Size: $6.35 \times 6.35 \times 3.17$ cm $2.5 \times 2.5 \times 1.25$ in

Weight: 85 gm 3 oz

Elements: 4

Dividing Frequency: 1,000 Hz

Combines: B139 Type SP6171 and T15 Type SP6236

DN12

Type: SP1004

Size: $15.87 \times 6.35 \times 2.85$ cm $6.25 \times 2.50 \times 1.15$ in

Weight: 177 gm 6.25 oz

Elements: 9

Dividing Frequencies: 400 and 3,500 Hz

Combines: B139 Type SP6171, B110 Type SP1003 and T27 Type SP6535

DN13

Type: SP1015

Size: $6.35 \times 6.35 \times 3.17$ cm $2.5 \times 2.5 \times 1.25$ in

Weight: 99 gm 3.50 oz

Elements: 5

Dividing Frequency: 3,500 Hz

Combines: B200 Type SP1014 and T27 Type SP6535

DN13

Type: SP1017

Size: $6.35 \times 6.35 \times 3.17$ cm $2.5 \times 2.5 \times 1.25$ in

Weight: 106 gm 3.75 oz

Elements: 6

Dividing Frequency: 3,500 Hz

Combines: B110 Type SP1003 and T27 Type SP6535

KEF dividing networks are the result of exhaustive measurements and many hours of subjective listening tests. They are designed to combine specific KEF speaker units in the combinations detailed.

KEF regret that they cannot enter into correspondence concerning alternative methods of acoustic loading or the compatibility of other speaker combinations as the final performance cannot be guaranteed.

TYPICAL SPEAKER COMBINATIONS

COMPACT TWO WAY SYSTEM

HF Unit: T27 Type SP6535

LF Unit: B110 Type SP1003

Dividing Network: DN13 SP1017

Suggested Cabinet Size: $330 \times 229 \times 146$ mm
 $13 \times 9 \times 5.75$ in

Internal Volume – TEB*: 7.26 litres

SHELF MOUNTING TWO WAY SYSTEM

HF Unit: T27 Type SP6535

LF Unit: B200 Type SP1014

Dividing Network: DN13 SP1015

Suggested Cabinet Size: $470 \times 281 \times 221$ mm
 $18.5 \times 11 \times 8.7$ in

Internal Volume – TEB*: 20.4 litres

FLOOR STANDING TWO WAY SYSTEM

HF Unit: T15 Type SP6236

LF Unit: B139 Type 6171

Dividing Network: DN8 Type 6305

Suggested Cabinet Size: $611 \times 152 \times 103$ mm
 $24 \times 15 \times 10$ in

Internal Volume – TEB*: 39.8 litres

FLOOR STANDING THREE WAY SYSTEM

HF Unit: T27 Type SP6535

MF Unit: B110 Type SP1003

LF Unit: B139 Type SP6171

Dividing Network: DN12 SP1004

Suggested Cabinet Size: $711 \times 432 \times 305$ mm
 $28 \times 17 \times 12$ in

Internal Volume – Reflex: 62 litres

*Totally Enclosed Box. Popularly referred to as Infinite Baffle.