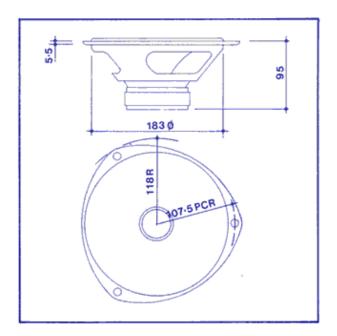


## B200·(

## Specification Number SP1075

Low/mid range unit with visco-elastic damped Bextrene diaphragm and high temperature coil assembly, suitable for use where low distortion and high power handling are required.



Net weight: 1.35 kg

Nominal impedance: 5 ohms

Nominal frequency range: 25-3,500 Hz

Typical enclosure volumes: Totally enclosed box

20-25 litres

Power handling:

Continuous sine wave 28 V RMS (see note 1)

Programme 150 W (see note 2)

Magnet:

Flux density 1.1 T (11,000 gauss)

Total flux 7.15 x 10<sup>-4</sup>Wb (71,500 Maxwells)

Voice coil:

Diameter 32.6 mm

Inductance

Max continuous service temperature (30 min) 250°C

Max intermittent temperature (5 sec) 340°C

Nominal DC Resistance, Roc 4.7 ohms (tolerance ± 5%)

Minimum impedance (in nominal frequence range)

5.3 ohms at 160 Hz

Diaphragm:

Effective area, Sp 246 cm<sup>2</sup>

Effective moving mass, Mp 24.3 g

Max linear excursion, Xo 6 mm peak-peak

Max damage limited excursion 20 mm peak-peak

Free air resonance frequency, f.:

Nominal 27 Hz

Total mechanical resistance of suspension, R<sub>MS</sub>:

1.38 mech ohms

Suspension compliance, C<sub>MS</sub>: 1.4 x 10<sup>-3</sup> m/N

Force factor, BI: 6.82 N/A

Damping:

Mechanical Q<sub>M</sub>: 3.03

Electrical Q<sub>6</sub>: 0.42

Total Q<sub>1</sub>: 0.37 (see note 3)

## Notes

Continuous Power Rating (Pc).

$$Pc = \frac{V}{E}$$

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.

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.

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.

$$Q_{M} = \frac{2\pi f_{S} M_{D}}{P}$$

$$Q_E = \frac{2\pi f_S M_c}{(BI)^2/R_c}$$

$$\frac{2\pi f_{S} M_{D}}{R_{MS}} \qquad Q_{E} = \frac{2\pi f_{S} M_{D}}{(BI)^{2}/R_{DC}} \qquad \frac{1}{Q_{T}} = \frac{1}{Q_{M}} + \frac{1}{Q_{E}}$$