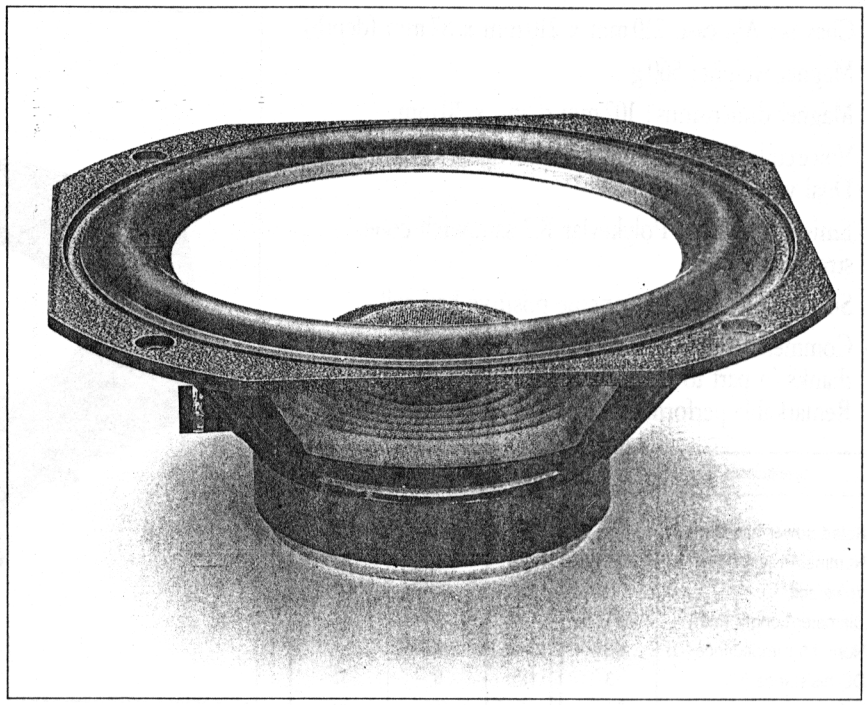
# FOCAL® 8V 012DB - BASS-MIDRANGE

- Chassis: Alu cast. 210 mm x 210 mm x 87 mm (depth).
- Magnet weight: 560 g.
- Magnet dimensions: 102 mm diam. x 30 mm.
- Voice coil: Nomex® former, 26 mm diam., 11.5 mm high. Dual voice coil.
- Emissive surface: Polyglass cone, straight profile.
- Suspension: Large very soft Neoprene positive half roll.
- Comment: Very cost effective in 2-way systems (about 45 l. vented) using dual voice coil filtering.



| Specifications | |
|---|---|
| **Rated power handling** | |
| Nominal/Program (W) | 70/110 |
| **Voice coil** | |
| Diameter/Length (mm) | 26/11.5 |
| Nom./Mini impedance (Ω) | 4/3.4 |
| DC resistance (Ω) | 3 |
| Inductance (mH) | 0.54 |
| Former | Nomex® |
| Layers | 4 |
| Wire | Copper |
| **Cone** | Polyglass |
| **Surround** | Rubber |
| **Magnet** | |
| Diameter (mm) | 100 |
| Weight (g) | 552 |
| Flux density = B (T) | 1.1 |
| Gap height (mm) | 6 |
| **Sensitivity** | |
| 2.8 V/1 m (dB) | 93.5 |
| **Net weight** (kg) | 1.900 |
| **Xmax** (mm) | 2.75 |

| Parameter | Value | Units |
|---|---|---|
| Fs | 30.02 | Hz |
| Vas | .1014 | $m^3$ |
| Qts | .253 | |
| Qes | .261 | |
| Qms | 7.768 | |
| Rcc | 3 | Ω |
| D | .168 | m |
| Sd | .0222 | $m^2$ |
| Cas | 7.22 E-07 | $m^5/N$ |
| Mas | 38.93 | $kg/m^4$ |
| Ras | 945.24 | Ω.ac |
| Cms | .0014695 | m/N |
| Mms | .0191 | kg |
| Rms | .46 | kg/s |
| Ces | 461.5 | μF |
| Les | 60.9 | mH |
| Res | 89.23 | Ω |
| Bl | 6.44 | N/A |
| Γ | 336.58 | $ms^{-2}A^{-1}$ |
| N | 1.01 | % |
| No | 92.06 | dB/1W/1m |

### Vented cabinet: Vb (l)

| Align. | Rg: 0 Ω | 0.2 Ω | 0.4 Ω | 0.6 Ω | 0.8 Ω |
|---|---|---|---|---|---|
| 4 | 25.86 | 29.30 | 32.93 | 36.76 | 40.79 |
| 5.7 | 36.85 | 41.75 | 46.93 | 52.39 | 58.12 |
| 8 | 51.73 | 58.60 | 65.87 | 73.53 | 81.57 |

### Vented cabinet: F-3 (Hz)

| Align. | Rg: 0 Ω | 0.2 Ω | 0.4 Ω | 0.6 Ω | 0.8 Ω |
|---|---|---|---|---|---|
| 4 | 59.44 | 55.85 | 52.68 | 49.86 | 47.33 |
| 5.7 | 49.79 | 46.78 | 44.13 | 41.77 | 39.65 |
| 8 | 42.03 | 39.49 | 37.25 | 35.25 | 33.47 |

### Vented cabinet: Fb (Hz)

| | Rg: 0 Ω | 0.2 Ω | 0.4 Ω | 0.6 Ω | 0.8 Ω |
|---|---|---|---|---|---|
| Fb | 46.36 | 43.56 | 41.09 | 38.89 | 36.92 |

### Sealed cabinet: Vb (l)

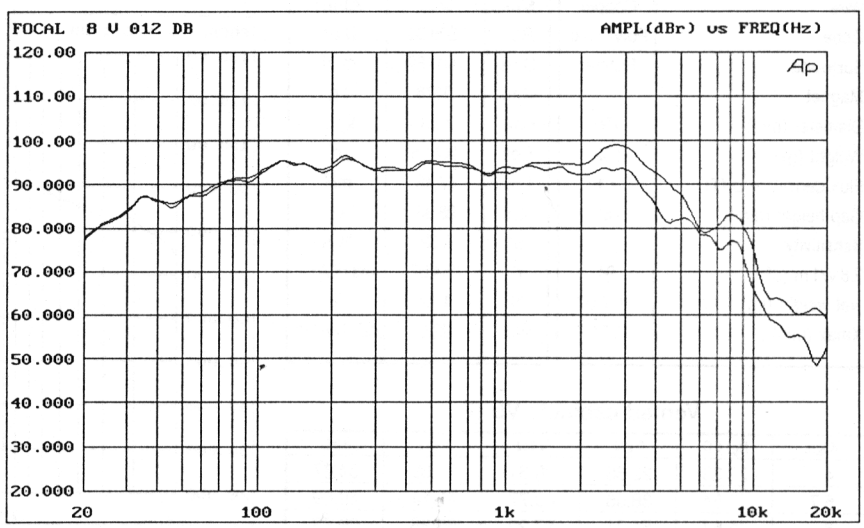
| Damping | Rg: 0 Ω | 0.2 Ω | 0.4 Ω | 0.6 Ω | 0.8 Ω |
|---|---|---|---|---|---|
| .5 | 34.72 | 41.20 | 48.77 | 57.67 | 68.23 |
| .577 | 24.02 | 28.10 | 32.71 | 37.93 | 43.88 |
| .707 | 14.83 | 17.13 | 19.67 | 22.46 | 25.54 |

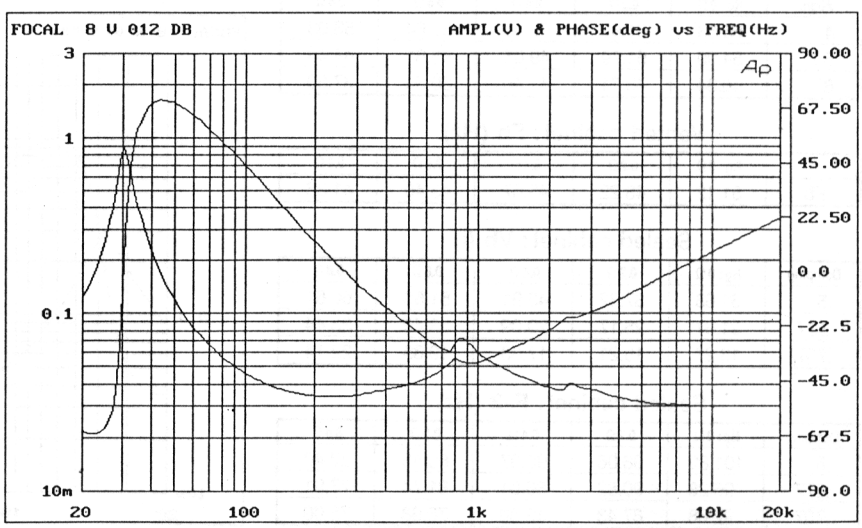
### Sealed cabinet: F-3 (Hz)

| Damping | Rg: 0 Ω | 0.2 Ω | 0.4 Ω | 0.6 Ω | 0.8 Ω |
|---|---|---|---|---|---|
| .5 | 92.36 | 86.77 | 81.85 | 77.47 | 73.55 |
| .577 | 87.33 | 82.05 | 77.39 | 73.25 | 69.54 |
| .707 | 84.06 | 78.98 | 74.50 | 70.51 | 66.94 |

® Registered to DUPONT de NEMOURS

### On axis and 30° off axis frequency response




### Impedance magnitude and phase versus frequency