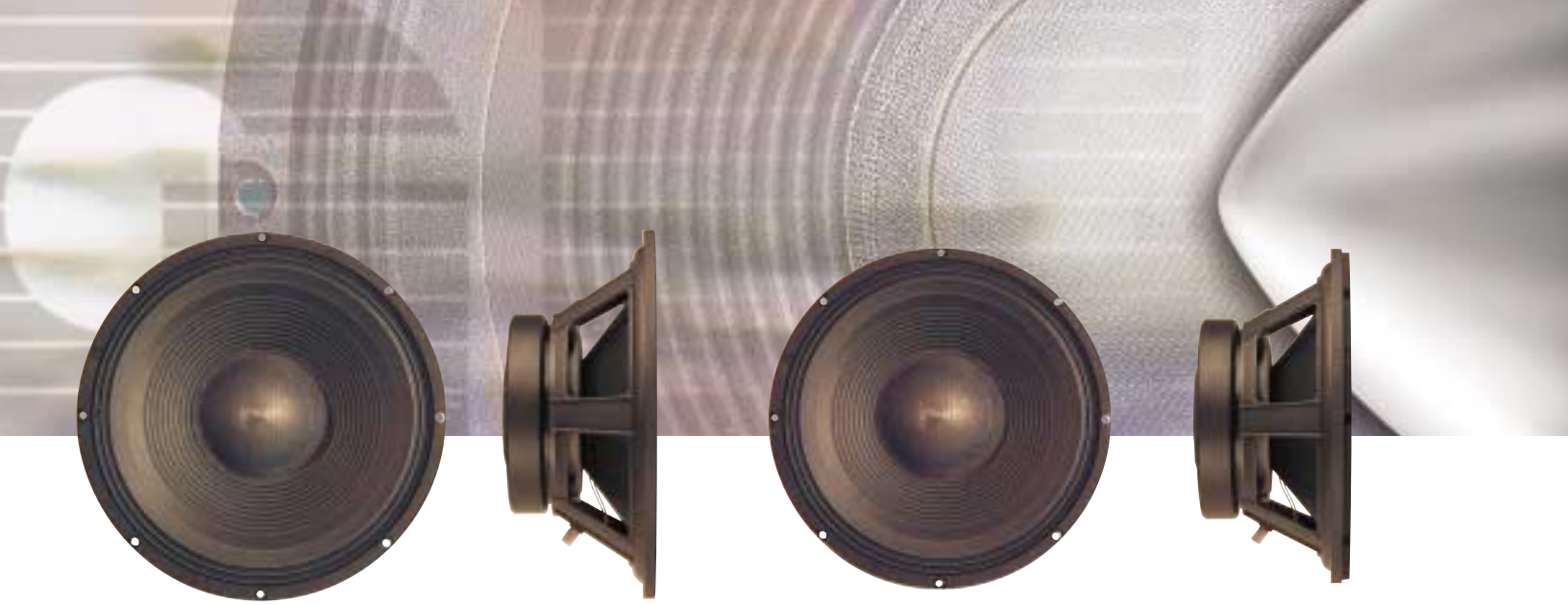


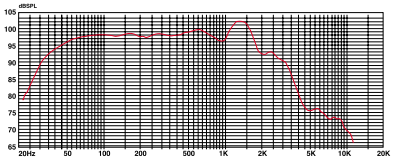
MAGNUM®

Materials of construction

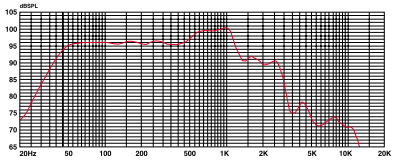
- Kapton coil former for increased rigidity and thermal protection
- **Magnum® 18HO** Polyamide-imide coated one-layer, edgewound copper voice coil for durability, increased sensitivity, and power handling
- **Magnum® 18LF** Polyamide-imide coated four-layer, copper voice coil for durability, and increased power handling
- **Magnum® 15HO** Polyamide-imide coated one-layer edgewound copper voice coil for durability, increased sensitivity, and power handling
- **Magnum® 15LF** Polyamide-imide coated two-layer copper voice coil for durability, and increased power handling
- Ferrite magnet Die-cast aluminum basket for rigidity
- Paper cone
- Cloth cone edge with deep sinusoid corrugations for extended travel
- Copper shorting ring to minimize distortion
- Aluminum phasor/heatsink to transfer heat from the motor structure and smooth response
- Screened cloth dust cap for enhanced cooling and protection

	18HO	18LF	15HO	15LF
Nominal Basket Diameter	18", 457.2mm	18", 457.2mm	15", 381mm	15", 381mm
Impedance	8Ω	8Ω	8Ω	8Ω
Power Rating	650WRMS	800WRMS	650WRMS	700WRMS
Resonance	30Hz	32Hz	33Hz	37Hz
Usable Frequency Range	27Hz—2.5kHz	28Hz—1.6kHz	35Hz—1.5kHz	28Hz—1.4kHz
Sensitivity	see guide on web	see guide on web	see guide on web	see guide on web
Magnet Weight	3.1kg, 109oz.	3.1kg, 109oz.	3.1kg, 109oz.	3.1kg, 109oz.
Gap Height	0.375", 9.5mm	0.375", 9.5mm	0.375", 9.5mm	0.375", 9.5mm
Voice Coil Diameter	4", 101.6mm	4", 101.6mm	4", 101.6mm	4", 101.6mm
Mounting information				
Recommended Enclosure Volume	112—224 liters 4—8 cu.ft.	112—280 liters 4—10 cu.ft.	56—112 liters 2—4 cu.ft.	84—168 liters 3—6 cu.ft.
Volume Displaced by Driver	7.5 liters, 0.27 cu.ft.	7.5 liters, 0.27 cu.ft.	4.5 liters, 0.159 cu.ft.	4.5 liters, 0.159 cu.ft.
Overall Diameter	18", 457.2mm	18", 457.2mm	15.21", 386.4mm	15.21", 386.4mm
Baffle Hole Diameter	16.56", 420mm	16.56", 420mm	14.0", 355.5mm	14.0", 355.5mm
Front Sealing Gasket	*fitted as standard*	*fitted as standard*	*fitted as standard*	*fitted as standard*
Rear Sealing Gasket	*fitted as standard*	*fitted as standard*	*fitted as standard*	*fitted as standard*
Mounting Holes Diameter	0.25", 6.4mm	0.25", 6.4mm	0.275", 7mm	0.275", 7mm
Mounting Hole B.C.D.	17.25", 438.2mm	17.25", 438.2mm	14.56", 369.9mm	14.56", 369.9mm
Depth	8.15", 207mm	8.15", 207mm	6.42", 163mm	6.42", 163mm
Shipping Weight	29.0lbs, 13.1kg	29.0lbs, 13.1kg	26.0lbs, 11.8kg	26.0lbs, 11.8kg
Thiele-Small parameters				
Resonant Frequency	(fs) 30Hz	(fs) 32Hz	(fs) 33Hz	(fs) 37Hz
Impedance	(Re) 6Ω	(Re) 6.1Ω	(Re) 6.3Ω	(Re) 4.95Ω
Coil Inductance	(Le) 1.35mH	(Le) 2.65mH	(Le) 1.28mH	(Le) 1.21mH
Electromagnetic Q	(Qes) 0.30	(Qes) 0.33	(Qes) 0.28	(Qes) 0.48
Mechanical Q	(Qms) 9.07	(Qms) 7.33	(Qms) 7.48	(Qms) 9.42
Total Q	(Qts) 0.30	(Qts) 0.32	(Qts) 0.27	(Qts) 0.45
Compliance Equivalent Volume	(Vas) 411 liters 14.51 cu.ft.	(Vas) 254 liters 8.97 cu.ft.	(Vas) 241 liters 8.51 cu.ft.	(Vas) 163 liters 5.76 cu.ft.
Peak Diaphragm Displacement Volume	(Vd) 566cc	(Vd) 754cc	(Vd) 411cc	(Vd) 677cc
Mechanical Compliance of Suspension	(Cms) 0.2076mm/N	(Cms) 0.1258mm/N	(Cms) 0.2343mm/N	(Cms) 0.1579mm/N
BL Product	(BL) 21.64 T-M	(BL) 27.23 T-M	(BL) 21.28 T-M	(BL) 16.88 T-M
Diaphragm Mass inc. Airload	(Mms) 135 grams	(Mms) 200 grams	(Mms) 98.1 grams	(Mms) 119 grams
Equiv. Resistance of Mechanical Suspension Loss	(Rms) 2.1866N*sec/M	(Rms) 5.4365N*sec/M	(Rms) 2.7354N*sec/M	(Rms) 2.919N*sec/M
Efficiency Bandwidth Product	(EBP) 96.5	(EBP) 96.2	(EBP) 116.6	(EBP) 76.8
Voice Coil Overhang	(Xmax) 4.8mm	(Xmax) 6.4mm	(Xmax) 4.8mm	(Xmax) 7.9mm
Surface Area of Cone	(Sd) 1188cm²	(Sd) 1188cm²	(Sd) 856cm²	(Sd) 856cm²
Impedance at Resonance	(Zmax) 148Ω	(Zmax) 185Ω	(Zmax) 175Ω	(Zmax) 122Ω
Maximum Mechanical Limit	(Xmech) 28.58mm	(Xmech) 31.75mm	(Xmech) 28.58mm	(Xmech) 30.94mm
X10	(X10) 6.2mm	(X10) 6.5mm	(X10) 6.6mm	(X10) 11.3mm

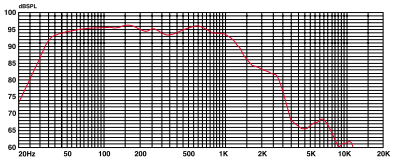
18HO



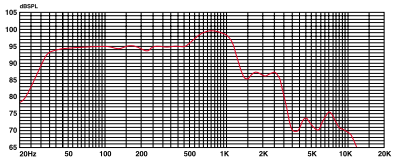
15HO



18LF



15LF



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