



Introducing..... "M" series



Electro mechanical specifications

	M1-8	M4-10	M4-12	M4-15	M4-12-LF	M4-15-LF
Nominal chassis diameter (in/mm)	8/200	10/250	12/305	15/381	12/305	15/381
Nominal Impedance (ohms)	8	8	8	8	8	8
Continuous Power Handling (A.E.S)	80	200	200	200	250	250
Frequency range (Hz-kHz) -6dB	60-5	70 - 4	50-6	50-4	45-5	40-4
Average Sensitivity (dB 1W/1m)	95	96	98.5	101	96	98.5
Resonance (Hz)	90	65	71	54	63	62
Voice coil diameter (mm/inch)	38/1.5	60.5/2.4	60.5/2.4	60.5/2.4	60.5/2.4	60.5/2.4
Coil winding height (mm/inch)	10.5/4.1	12/4.7	13/5.1	13/5.1	19/7.5	17/6.7
Moving mass inc. air load (grams)	19.5	34	43	77	57	78
Magnet diameter (mm/inch)	115/4.6	170/6.29	170/6.29	170/6.29	170/6.29	170/6.29
Magnet weight (oz/kg)	20/0.572	60/1.701	60/1.701	60/1.701	60/1.701	60/1.701
Flux density (Tesla)	1	1.12	1.12	1.12	1.05	1.05
Magnetic gap depth (mm/inch)	6.0/0.23	9.5/0.37	9.5/0.37	9.5/0.37	9.5/0.37	9.5/0.37

Mounting information

	M1-8	M4-10	M4-12	M4-15	M4-12-LF	M4-15-LF
Overall diameter (mm/inch)	209/8.22	260/10.23	308.5/12.15	392/15.43	308.5/12.15	392/15.43
Flange Thickness (mm/inch)	9/0.35	9/0.35	9.0/0.35	9.0/0.35	9.2/0.36	9.0/0.35
Baffle hole, front mount (mm/inch)	186/7.32	230/9.06	284/11.18	352/13.85	284/11.18	352/13.85
Baffle hole, rear mount (mm/inch)	184/7.24	229/9.0	282/11.10	350/13.75	282/11.10	350/13.75
Fixing holes and diameter (mm)	8x5.5	4x7.1	8x7.1	8x7.1	8x7.1	8x7.1
Fixing hole PCD (mm)	200	247	298	373	298	373
Fixing holes and diameter (inch)	8X0.22	4x0.28	8x0.28	8x0.28	8x0.28	8x0.28
Fixing hole PCD (inch)	7.87	9.75	11.73	14.69	11.73	14.69
Depth (mm/inch)	90/3.54	112/4.40	135/5.31	155/6.10	143.5/5.65	160/6.3
Weight (kg/lb)	1.7/3.75	5.35/11.77	5.65/12.45	6.1/13.24	5.84/12.84	6.4/14.08
Shipping weight (kg/lb)	2.1/4.62	5.95/13.09	6.45/14.19	7.1/15.62	6.64/14.60	7.4/16.28
Packing Carton Dimensions (mm)	235x235x165	288x288x195	340x340x222	415x415x250	340x340x222	415x415x250

Theile-small parameters

	M1-8	M4-10	M4-12	M4-15	M4-12-LF	M4-15-LF
Resonant frequency fs (Hz)	85	62	70.6	54.5	62.7	62.6
D.C resistance Re (ohms)	5.18	5.36	6.22	6.22	6.26	6.17
Qms	15.9	10.65	10.01	16.06	11.1	15.11
Qes	0.825	0.279	0.471	0.658	0.479	0.685
Qts	0.784	0.272	0.45	0.632	0.459	0.655
Mms (grams)	19.49	34.06	43.1	77	57.2	78
Cms (microns per Newton)	180	193	117	110	113	83
BL product (Tesla metres)	8.08	15.97	15.9	15.82	17.2	16.67
Vas (litres)	11.51	31.25	46.2	120	45	90
Reference efficiency ho (%)	0.83	2.59	3.37	2.88	2.21	3.13
Piston area Sd (m2)	0.021	0.034	0.053	0.088	0.053	0.088
Xmax (mm)	2.6	1.8	2	2	5.5	4.5