

DPG Series Performance Parameters

Basic performance	The units	DPG35C1	DPG35C2	DPG35C3	DPG45C1	DPG45C2	DPG45C3	DPG55C1	DPG55C2	DPG55C3	DPG55C4
Peak thrust (1s)	N	87.7	170	250	181.5	396	594	274.5	594	900	1098
Sustained thrust	N	25.3	51	76	54.5	110	165	82.4	165	250	329.4
Peak Power @25°C (1s)	W	751	1793	2252	935	1870	2805	1202	2283	3424	4566
Continuous Power @25°C	W	62	124	188	84	168	252	108	205	308	411
Electrical performance											
Peak current (rms) (1s)	A	10	10	10	15	18	18	18	18	18	18
Continuous current (rms)	A	3	3	3	5.5	5.5	5.5	5.8	5.8	5.8	5.8
Thrust constant	N/A	8.4	17.0	25.0	12.1	22.0	33.0	16.5	33.0	50.0	65.9
Back EMF constant (line to line)	V _{pk} /(m/s)	4.5	12.5	22.1	8.7	19.6	31.4	14.1	24.6	42.4	59.5
Resistance @25°C(line to line)	Ohm	1.2	2.3	3.5	1.5	3	4.4	1.9	3.7	5.5	7.3
Inductance @1kHz(line to line)	mH	4.7	11.2	16.5	5.2	15	24.7	10.6	22.2	32	42.6
Electrical time constant	ms	3.9	4.9	4.7	3.6	5.1	5.6	5.6	6.0	5.8	5.8
DC voltage	V _{DC}	330									
Thermal performance											
Coil temperature	°C	120									
Thermal Resistance @105°C	°C/W	1.90	2.30	1.58	1.40	1.10	0.73	1.11	0.73	0.34	0.29
Mechanical behavior											
Magnetic pole pitch	mm	32									
Motor Coil Quality	kg	0.3	0.5	0.8	0.4	0.8	1.1	0.6	1.1	1.6	2
Attractive force between motor coil and magnetic track	kN	0.2	0.3	0.4	0.3	0.5	0.7	0.5	0.8	1.1	1.4
Track quality	kg/m	1.6			2.2			2.9			
Cooling method		Natural cooling									