

Linear Motor ____

DPD Series Performance Parameters

Basic performance	The units	DPD56C2	DPD56C4	DPD56C6	DPD86C2	DPD86C4	DPD86C6	DPD116C2	DPD116C4	DPD116C6
Peak thrust(1s)	N	285	576	858	588	1092	1677	690	1620	2496
Sustained thrust	N	95	192	286	196	364	559	230	540	832
Peak Power @25°C(1s)	W	285	576	858	588	1092	1677	690	1620	2496
Continuous Power @25°C	W	95	192	286	196	364	559	230	540	832
Electrical performance										
Peak current (rms)(1s)	A	6.6	12.6	18.9	6.6	12.2	19.2	6.6	12.1	19.2
Continuous current (rms)	A	2.2	4.2	6.3	2.2	4	6.4	2.2	4	6.4
Thrust constant	N/A	43.2	45.7	45.4	89.1	91	87.3	104.5	135	130
Back EMF constant (line to line)	V _{pk} /(m/s)	38.6	38.3	36.9	74.8	74.1	71.4	113.6	106.2	105.9
Resistance @25°C(line to line)	Ohm	4.53	2.6	1.7	7.86	4.08	3.2	10.5	5.7	3.5
Inductance @1kHz(line to line)	mH	21	11.46	7.4	41	20.1	13.5	65.46	29	21.87
Electrical time constant	ms	4.64	4.41	4.35	5.22	4.93	4.22	6.23	5.09	6.25
DC voltage	VDC					330		,		
Thermal performance										
Coil temperature	°C					120				
Thermal Resistance @105°C	°C/W	1.3	0.6	0.4	0.6	0.3	0.2	0.5	0.2	0.1
Mechanical behavior										
Magnetic pole pitch	mm					30				
Motor Coil Quality	kg	0.82	1.44	2.1	1.18	2.4	3.51	1.79	3.35	4.92
Attractive force between motor coil and magnetic track	kN	0.75	1.47	2.17	1.45	2.85	4.19	2.15	4.2	6.28
Track quality	kg/m		3			5.3			9.5	
Cooling method		Natural cooling								