

Parameter	Unit	HR70 A4-44	HR70 A4-32	HR70 A4-22	HR70 C4-64	HR70 C4-44	HR70 C4-32	HR70 E4-44	HR70 E4-32	HR70 E4-22
Voltage gradient no load	volts/krpm	44	32	22	64	44	32	44	32	22
Max.Motor EMF	line-line volts	350	260	180	510	350	260	350	260	180
Max. Speed	RPM	8000	8000	8000	8000	8000	8000	8000	8000	8000
Continuous stall torque TENV	Nm	0.6	0.6	0.6	1.2	1.2	1.2	1.8	1.8	1.8
	lb-in	5.3	5.3	5.3	10.6	10.6	10.6	16	16	16
Peak Stall Torque	Nm	2.2	2.2	2.2	4.5	4.5	4.5	6.6	6.6	6.6
	lb-in	19	19	19	40	40	40	58	58	58
Continuous stall current rms	Amps	1.17	1.6	2.3	1.6	2.3	3.2	3.5	4.8	7
Rotor Polar Moment of Inertia	Kg.cm <sup>2</sup>	0.32	0.32	0.32	0.47	0.47	0.47	0.62	0.62	0.62
(Inclusive of resolver inertia)	lb-in Sec <sup>2</sup>	0.00028	0.00028	0.00028				0.00053	0.00053	0.00053
Cogging Torque	Nm	0.027	0.027	0.027	0.039	0.039	0.039	0.057	0.057	0.057
	lb-in	0.24	0.24	0.24	0.35	0.35	0.35	0.5	0.5	0.5
Torque constant Kt (line-line)	Nm/Amp	0.51	0.375	0.258	0.75	0.51	0.375	0.51	0.375	0.258
	lb-in/Amp	4.5	3.3	2.28	6.6	4.5	3.3	4.5	3.3	2.28
Resistance (line-line)	Ohms	18	9.2	3.9	12.5	5.3	2.9	2.9	1.7	0.79
Inductance (line-line)	Millihenrys	27	13.9	6.5	25	11.6	6	7.5	4	1.9
Insulation Class		F	F	F	F	F	F	F	F	F
Max. ambient temperature	°C	40	40	40	40	40	40	40	40	40
	°F	104	104	104	104	104	104	104	104	104
Thermal time constant	Minutes	15	15	15	25	25	25	30	30	30
Thermal resistance	°C/Watt	2.4	2.4	2.4	1.7	1.7	1.7	1.28	1.28	1.28
	°F/Watt	5	5	5	3.6	3.6	3.6	2.7	2.7	2.7
Static friction torque	Nm	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
	lb-in	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
Motor weight	Kg	2.0	2.0	2.0	2.6	2.6	2.6	3.2	3.2	3.2
	lb	4.4	4.4	4.4	5.7	5.7	5.7	7.1	7.1	7.1