

NHR70C4

Brushless DC/AC Servomotors

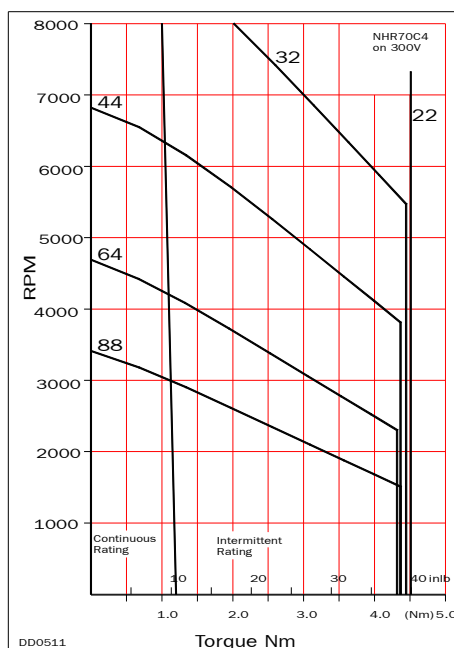
Technical Data

Parameter	Unit	-130	-88	-64	-44	-32
General						
Voltage Gradient No Load Line-Line	Volts/1000RPM	130	88	64	44	32
Max. Motor EMF Line-Line	Volts	700	700	510	350	260
Max. Speed	RPM	8000	8000	8000	8000	8000
Continuous Stall Torque TENV (110K) ³	Nm	1.2	1.2	1.2	1.2	1.2
Continuous Stall Torque when fitted to Heatsink (Size 150 x 150 x 6 mm)	Nm	1.3	1.3	1.3	1.3	1.3
Peak Stall Torque	Nm	4.5	4.5	4.5	4.5	4.5
Continuous Stall Current rms ³	Amps	0.8	1.2	1.6	2.3	3.2
Rotor Polar Moment of Inertia	kgcm ²	0.47	0.47	0.47	0.47	0.47
Maximum Current (Peak)	Amp	5.1	7.5	10.2	15.0	21.0
Cogging Torque	Nm	0.039	0.039	0.039	0.039	0.039
Torque Constant K _T rms ^{1,2}	Nm/Amp	1.53	1.02	0.75	0.51	0.375
Winding						
Resistance Line-Line ¹	Ohms	50	21.2	12.5	5.3	2.9
Inductance Line-Line	Millihenrys	50	46.4	25	11.6	6
Insulation Class		F	F	F	F	F
Max. Ambient Temperature	°C	40	40	40	40	40
Thermal Time Constant	Minutes	25	25	25	25	25
Thermal Resistance	°C/Watt	1.7	1.7	1.7	1.7	1.7
Static Friction Torque	Nm	0.002	0.002	0.002	0.002	0.002
Motor Weight	kg	2.6	2.6	2.6	2.6	2.6

Tolerance All data is subject to a tolerance of ± 10% (except motor 'Voltage Gradient' and K_T which are to +15%/-5%).

- At 25°C.
- Note that K_T is shown as a combined value for all **three phases**.
- The temperature rise ΔT on the windings is 110K and applies to all continuous torque values. The maximum ambient temperature is 40°C and therefore the temperature on the windings should not be more than 150°C. A value higher than 150°C would exceed the class F insulation temperature specification.

NHR70C4 on 300V



NHR70C4 on 560V

