

N4WQ58 Series Brushless Servomotors

Model	Cont. Stall Torque oz-in (Nm)	Max. Peak Stall Torque oz-in (Nm)	Max. Recommended Speed RPM	Rated Power Watts	Motor Inertia oz-in-sec ² (Kg-cm ²)	Length "L" in. (mm)	Weight Lb. (Kg)
N4WQ58-03	45 (0.32)	120 (0.85)	6000	95	0.0008 (0.054)	2.92 (74.2)	0.9 (0.43)
N4WQ58-06	90 (0.64)	270 (1.91)	6000	175	0.0014 (0.101)	3.67 (93.2)	1.5 (0.67)
N4WQ58-09	112 (0.79)	336 (2.37)	6000	240	0.0021 (0.148)	4.42 (112.3)	2.0 (0.90)
N4WQ58-12	150 (1.06)	450 (3.18)	6000	300	0.0028 (0.196)	5.17 (131.3)	2.6 (1.20)

Typical Motor Characteristics These represent a sample of our motor offerings please contact Torkmotion for custom specifications available for OEM solutions (508-786-9928)

Symbol		Unit	Model			
			N4WQ58-03J	N4WQ58-06G	N4WQ58-09E	N4WQ58-12D
Ke	Back E.M.F	Volts/KRPM	6.3	6.4	6.1	6.7
Kt	Torque Constant	oz-in/Amp (mNm/Amp)	8.5 (60.2)	8.7 (61.1)	8.3 (58.3)	9.1 (64.0)
Rt	Terminal Resistance	Ohms	1.90	0.80	0.49	0.41
L	Inductance	mH	1.63	0.67	0.4	0.3
Rth	Thermal Resistance	Deg C/Watt	1.5	1.0	0.9	0.8
Vt	Voltage Terminal	V dc	24	24	24	24
n_o	No load Speed @ Vt	RPM	3810	3750	3934	3582
I_o	No load Current @ Vt	Amp	0.35	0.50	0.70	0.45
T_c	Cont. Torque	oz-in (Nm)	45 (0.32)	91 (0.64)	112 (0.79)	150 (1.06)
n_c	Speed @ Vt & Tc	RPM	2217	2450	2844	2569
I_c	Current @ Vt & Tc	Amp	5.6	10.9	14.3	17.0
P_o	Power Out @ Vt & Tc	Watts	74	163	236	285
T_p	Peak Torque	oz-in (Nm)	91 (0.64)	150 (1.06)	180 (1.27)	200 (1.41)
n_p	Speed @ Vt & Tp	RPM	624	1584	2182	2231
I_p	Current @ Vt & Tp	Amp	10.9	17.8	22.5	22.5

