

## N2SP58 Series Brushed Servomotors

Model	Cont. Stall Torque oz-in (Nm)	Max. Peak Stall Torque oz-in (Nm)	Max. Recommended Speed RPM	Rated Power Watts	Motor Inertia <sup>2</sup> oz-in-sec <sup>2</sup> (Kg-cm <sup>2</sup> )	Length "L" in. (mm)	Weight Lb. (Kg)
N2SP58-07	35 (0.25)	180 (1.27)	5000	57	0.0046 (0.325)	4.31 (109.5)	2.2 (1.0)
N2SP58-09	45 (0.32)	280 (1.98)	5000	85	0.006 (0.424)	4.82 (122.4)	2.6 (1.2)
N2SP58-12	60 (0.42)	350 (2.47)	5000	119	0.008 (0.565)	5.56 (141.2)	3.3 (1.5)
N2SP58-16	80 (0.56)	421 (2.97)	5000	170	0.011 (0.777)	6.56 (166.6)	4.9 (2.2)

**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				
		N2SP58-07D	N2SP58-09C	N2SP58-12E	N2SP58-16D	
Ke	Back E.M.F	Volts/KRPM	6.0	5.6	12.1	12.0
Kt	Torque Constant	oz-in/Amp (mNm/Amp)	8.1 (57.3)	7.6 (53.5)	16.4 (115.6)	16.2 (114.6)
Rt	Terminal Resistance	Ohms	1.00	0.62	1.75	1.30
L	Inductance	mH	1.1	0.76	2.46	2.03
Rth	Thermal Resistance	Deg C/Watt	4.9	4.4	3.8	2.9
Vt	Voltage Terminal	V dc	24	24	48	48
n <sub>o</sub>	No load Speed @ Vt	RPM	4000	4286	3967	4000
I <sub>o</sub>	No load Current @ Vt	Amp	0.55	0.60	0.28	0.32
T <sub>c</sub>	Cont. Torque	oz-in (Nm)	21 (0.15)	30 (0.21)	45 (0.32)	65 (0.46)
n <sub>c</sub>	Speed @ Vt & Tc	RPM	3558	3847	3569	3569
I <sub>c</sub>	Current @ Vt & Tc	Amp	3.2	4.6	3.0	4.3
P <sub>o</sub>	Power Out @ Vt & Tc	Watts	57	85	119	170
T <sub>p</sub>	Peak Torque	oz-in (Nm)	42 (0.30)	59 (0.42)	91 (0.64)	129 (0.91)
n <sub>p</sub>	Speed @ Vt & T <sub>p</sub>	RPM	3117	3409	3172	3139
I <sub>p</sub>	Current @ Vt & T <sub>p</sub>	Amp	5.8	8.5	5.8	8.3

