

N4SP102 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 ² oz-in-sec ² (Kg-cm ²)	Length "L" in. (mm)	Weight Lb. (Kg)
N4SP102-08	250 (1.77)	1200 (8.47)	3000	191	0.160 (11.299)	5.65 (143.5)	10.0 (4.54)
N4SP102-12	420 (2.97)	1984 (14.01)	3000	314	0.240 (16.949)	6.65 (168.9)	13.0 (5.90)
N4SP102-16	550 (3.88)	2480 (17.51)	3000	491	0.300 (21.186)	7.65 (194.3)	15.0 (6.80)
N4SP102-20	640 (4.52)	3040 (21.47)	3000	614	0.370 (26.129)	8.65 (219.7)	17.0 (7.71)

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

bol		Unit	Model			
			N4SP102-08E	N4SP102-12E	N4SP102-16D	N4SP102-20C
Ke	Back E.M.F	Volts/KRPM	31.9	43.0	44.8	41.6
Kt	Torque Constant	oz-in/Amp (mNm/Amp)	43.1 (304.6)	58.1 (410.6)	60.6 (427.8)	56.3 (397.3)
Rt	Terminal Resistance	Ohms	1.50	1.60	1.25	1.15
L	Inductance	mH	2.93	4.0	3.25	2.4
Rth	Thermal Resistance	Deg C/Watt	2	1.3	0.98	0.79
Vt	Voltage Terminal	V dc	60	80	90	90
n _o	No load Speed @ Vt	RPM	1881	1860	2009	2163
I _o	No load Current @ Vt	Amp	0.52	0.53	0.60	0.55
T _c	Cont. Torque	oz-in (Nm)	150 (1.06)	251 (1.77)	360 (2.54)	425 (3.00)
n _c	Speed @ Vt & Tc	RPM	1717	1701	1843	1955
I _c	Current @ Vt & Tc	Amp	4.0	4.8	6.5	8.1
P _o	Power Out @ Vt & Tc	Watts	191	314	491	614
T _p	Peak Torque	oz-in (Nm)	300 (2.12)	500 (3.53)	719 (5.08)	850 (6.00)
n _p	Speed @ Vt & Tp	RPM	1554	1541	1677	1746
I _p	Current @ Vt & Tp	Amp	7.5	9.1	12.5	15.7

