

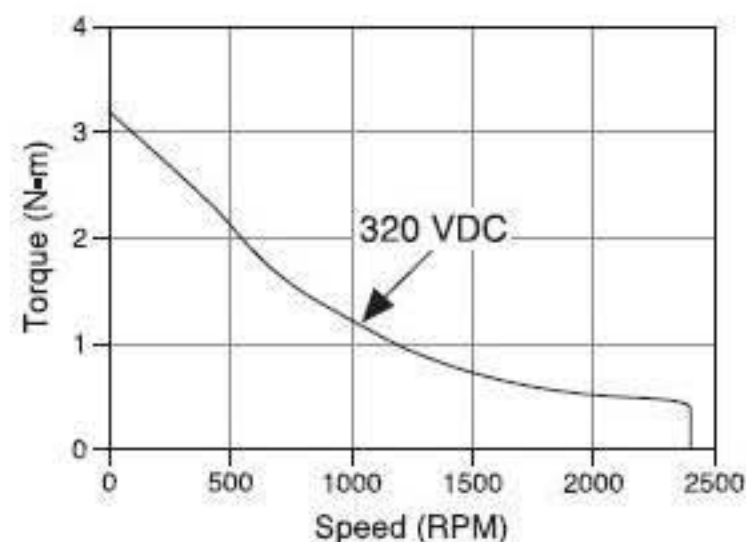
NEMA 34 Motor		<a href="#">Back to Detailed Specs</a>
Electrical		
Step angle		1.8 deg
Steps per revolution		200
Angular accuracy		±3%
Phases		2
Industry Standards		
Industrial standards		CE, cUR, UR
RoHS Compliance		Yes
Physical		
Operating temperature		-20 to 40 °C
Rated ambient temperature		40 °C
Shaft load (20,000 hours at 1,500 rpm)		
Radial		
N31, N32		65 lb (29.5 kg)
N33		110 lb (49.9 kg)
Axial		
N31, N32, N33		305 lb (138.3 kg)
Recommended heat sink size		10 x 10 x 1/4 in. aluminum plate
Recommended encoder		780252-01

NI Part Number	Manufacturer Part Number	Dual Shaft	Drive	Amps/Phase	Holding Torque oz-in. (N . m)	Rotor Inertia oz-in.-s <sup>2</sup> (kg-m <sup>2</sup> x 10 <sup>-3</sup> )	Phase Inductance mH	Phase Resistance Ω ±10%	Detent Torque oz-in. (N . m)	Thermal Resistance °C/watt	Max Speed rpm
780085-01	N31HRLG-LNK-NS-00	no	P70360	0.86	641 (4.52)	0.0202 (0.1430)	138	16.2	18.0 (0.127)	2.65	2400
780086-01	N31HRLG-LEK-M2-00	yes									
780087-01	N32HRLG-LNK-NS-0	no		0.95	1240 (8.76)	0.0380 (0.2680)	206	17.6	36.0 (0.254)	2.00	1800
780088-01	N32HRLG-LEK-M2-00	yes									
780089-01	N33HRLG-LNK-NS-0	no		1.24	1710 (12.08)	0.0567 (0.4000)	144	13.0	54.0 (0.381)	1.61	1800
780090-01	N33HRLG-LEK-M2-00	yes									
780091-01	N31HRHJ-LNK-NS-0	no	P70530	5.5	645 (4.55)	0.0202 (0.1430)	3.5	0.42	18.0 (0.127)	2.65	3000
780092-01	N31HRHJ-LEK-M2-0	yes									
780093-01	N32HRHJ-LNK-NS-0	no		5.1	1195 (8.43)	0.0380 (0.2700)	6.5	0.63	36.0 (0.254)	2.00	3000
780094-01	N32HRHJ-LEK-M2-0	yes									
780095-01	N33HRHJ-LNK-NS-0	no		5.0	1710 (12.07)	0.0567 (0.4000)	9.0	0.83	54.0 (0.381)	1.61	3000
780096-01	N33HRHJ-LEK-M2-0	yes									

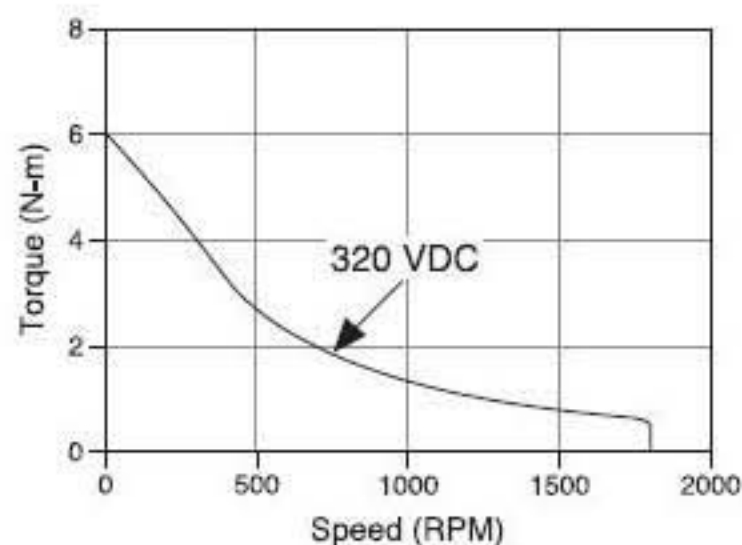
**Torque versus Speed**

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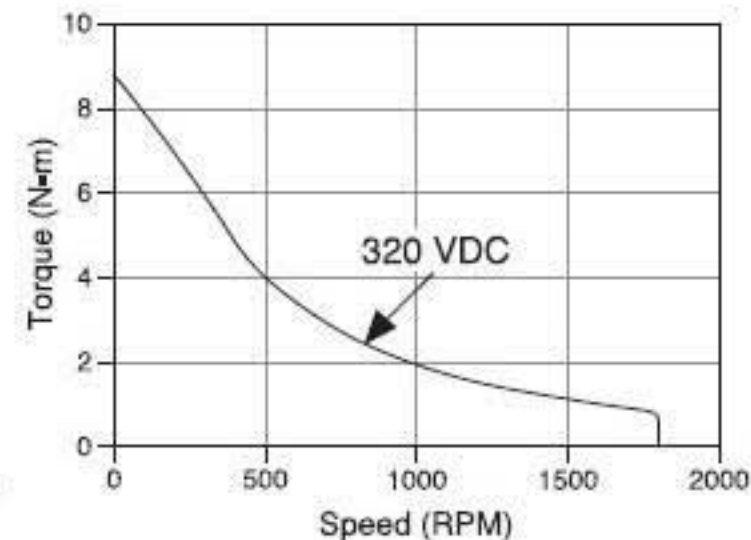
**780085-01 and 780086-01**  
Torque versus Speed at 0.81 A



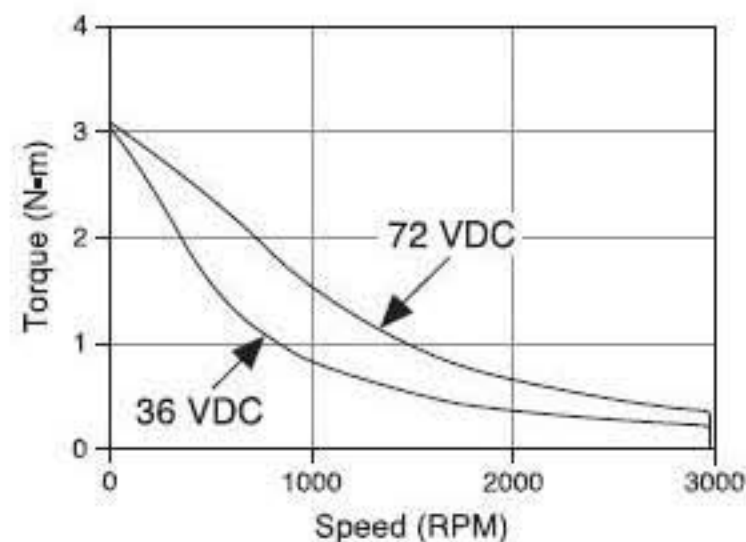
**780087-01 and 780088-01**  
Torque versus Speed at 0.88 A



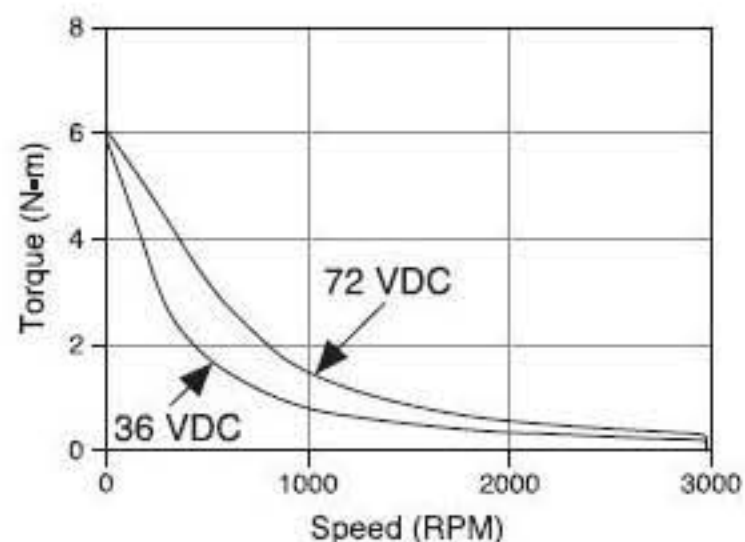
**780089-01 and 780090-01**  
Torque versus Speed at 1.24 A



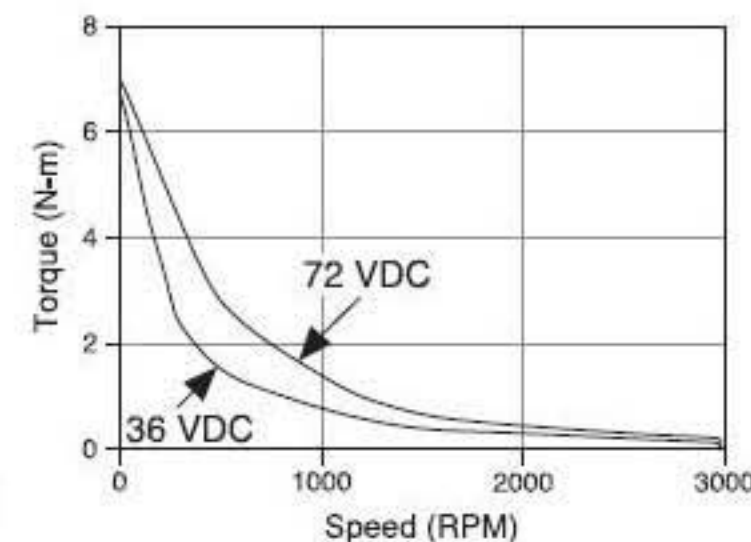
**780091-01 and 780092-01**  
Torque versus Speed at 5 A

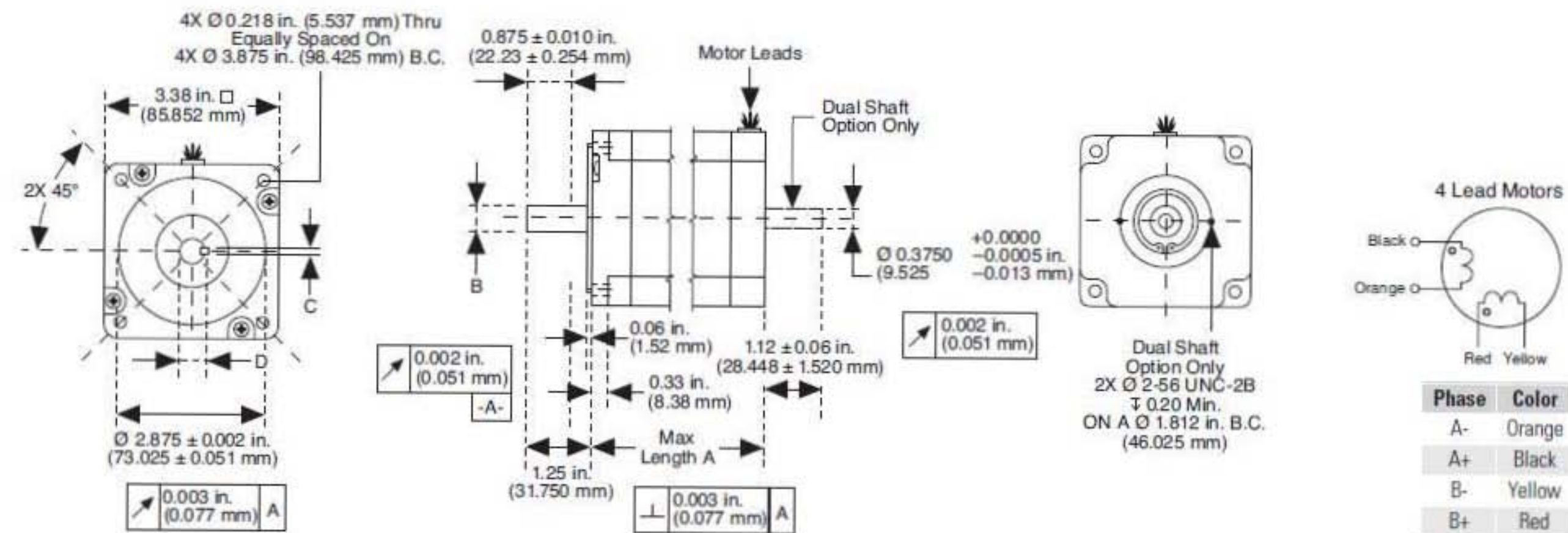


**780093-01 and 780094-01**  
Torque versus Speed at 5 A



**780095-01 and 780096-01**  
Torque versus Speed at 5 A





**Note:** Motor leads are 12.0 in. (304.8 mm) minimum.

NI Part Number	Manufacturer Part Number	Dual Shaft	Max Length A in. (mm)	B max and min in. (mm)	C max and min in. (mm)	D max and min in. (mm)	Net Weight lb (kg)
780085-01	N31HRLG-LNK-NS-00	no	3.13 (79.502)	0.5000 (12.700) 0.4995 (12.687)	0.1250 (3.175) 0.1230 (3.124)	0.555 (14.097) 0.538 (13.665)	5.0 (2.27)
780086-01	N31HRLG-LEK-M2-00	yes					
780087-01	N32HRLG-LNK-NS-00	no	4.65 (118.11)	0.5000 (12.700) 0.4995 (12.687)	0.1250 (3.175) 0.1230 (3.124)	0.555 (14.097) 0.538 (13.665)	8.4 (2.27)
780088-01	N32HRLG-LEK-M2-00	yes					
780089-01	N33HRLG-LNK-NS-00	no	6.13 (155.70)	0.6250 (15.875) 0.6245 (15.862)	0.1875 (4.763) 0.1855 (4.712)	0.705 (17.907) 0.688 (17.475)	11.9 (5.39)
780090-01	N33HRLG-LEK-M2-00	yes					
780091-01	N31HRHJ-LNK-NS-00	no	3.13 (79.502)	0.5000 (12.700) 0.4995 (12.687)	0.1250 (3.175) 0.1230 (3.124)	0.555 (14.097) 0.538 (13.665)	5.0 (2.27)
780092-01	N31HRHJ-LEK-M2-00	yes					
780093-01	N32HRHJ-LNK-NS-00	no	4.65 (118.11)	0.5000 (12.700) 0.4995 (12.687)	0.1250 (3.175) 0.1230 (3.124)	0.555 (14.097) 0.538 (13.665)	8.4 (2.27)
780094-01	N32HRHJ-LEK-M2-00	yes					
780095-01	N33HRHJ-LNK-NS-00	no	6.13 (155.70)	0.6250 (15.875) 0.6245 (15.862)	0.1875 (4.763) 0.1855 (4.712)	0.705 (17.907) 0.688 (17.475)	11.9 (5.39)
780096-01	N33HRHJ-LEK-M2-00	yes					