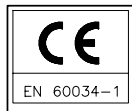


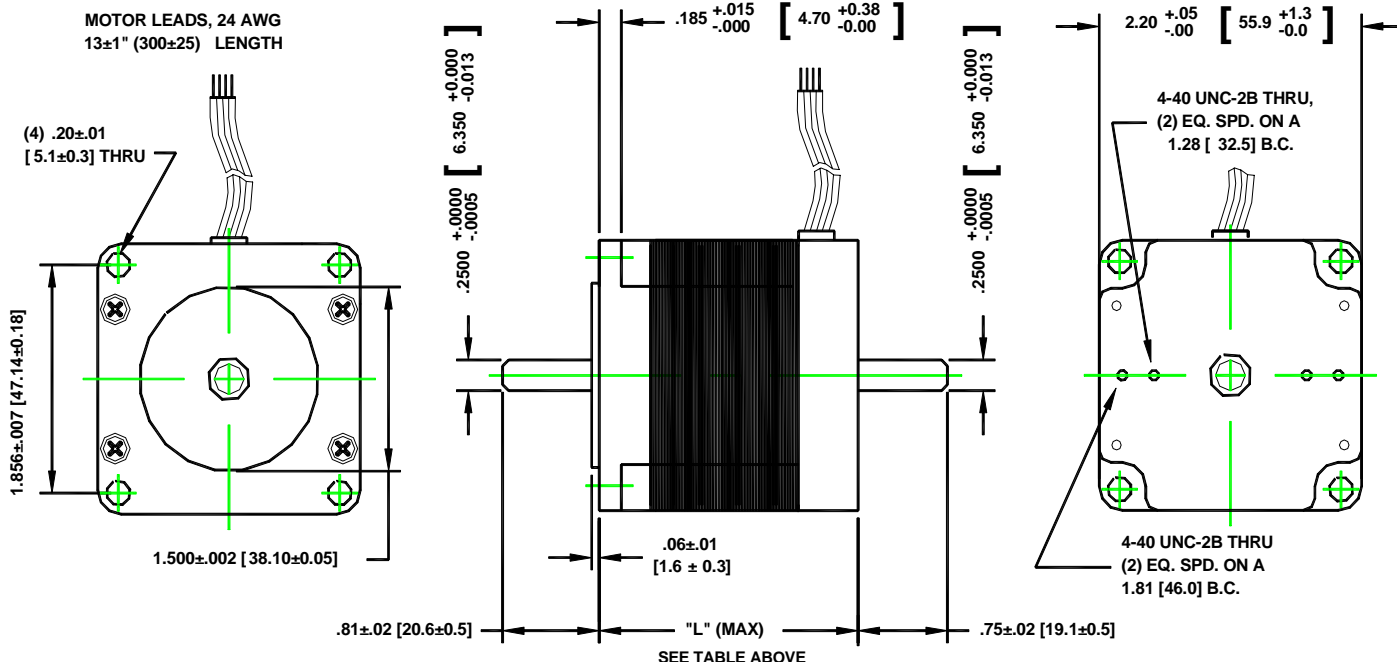
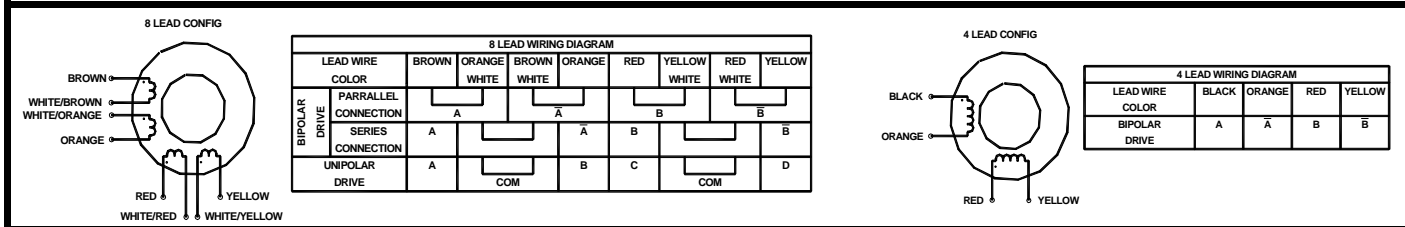
# IH23 High Performance Step Motor

- 2.20 Inch Square (56mm) NEMA 23 Motor
- High Torque per Volume w/ High Stepping Rate
- Multiple Winding Configuration for Unipolar and Bipolar connections
- 1.8 Degree Step Angle (200 Full Steps / Rev)
- Ideal for 1/2 Step and Microstepping
- Single and Double Shaft (Encoder Ready) Configurations
- Nema Class B Insulation
- Optional Encoders and NEMA 23 "Bolt On" Brakes & Gearheads



Catalog Number	Number of Leads	Phase Connection Types	Holding Torque 2 Phases On		Voltage / phase	Current Rated / ph	Phase Res.	Phase Ind.	Inertia		Weight		Length	
			Th - Minimum	Ncm					oz-in	Vdc	Ip	Amps DC	Rt	L
IH 23 008	IH 23 001	Parallel Series Unipolar	54	76	3.3	1.4	2.30	4.6	77	0.00109	0.5	1.10	41	1.61
			54	76	6.5	0.7	9.20	18.4						
			38	54	4.6	1.0	4.60	4.6						
IH 23 009	IH 23 002	4 lead	54	76	2.2	2.2	1.00	2.1	77	0.00109	0.5	1.10	41	1.61
IH 23 010	IH 23 003	Parallel Series Unipolar	111	157	4.4	1.4	3.10	8.8	220	0.00312	0.7	1.54	55	2.17
			111	157	8.8	0.7	12.40	35.2						
			78	110	6.2	1.0	6.20	8.8						
IH 23 012	IH 23005	Parallel Series Unipolar	111	157	1.5	4.2	0.35	0.9	220	0.00312	0.7	1.54	55	2.17
			111	157	3.0	2.1	1.40	3.6						
			78	110	2.1	3.0	0.70	0.9						
IH 23 013	IH 23006	4 lead	182	258	4.2	2.1	2.00	6.5	340	0.00482	1.0	2.20	77	3.03
IH 23 014	IH 23 007	Parallel Series Unipolar	182	258	2.3	4.2	0.55	1.7	340	0.00482	1.0	2.20	77	3.03
			182	258	4.7	2.1	2.20	6.8						
			128	181	3.3	3.0	1.10	1.7						

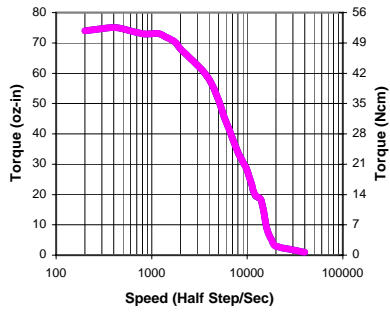
Notes: 1) Max. Terminal Voltage = 90 Vdc 2) -20 to 50 Degree C ambient operating Temperature 3) +/- 5% non-cumulative step accuracy 4) Visit [www.mcg-net.com](http://www.mcg-net.com) for more individual CAD drawings & data



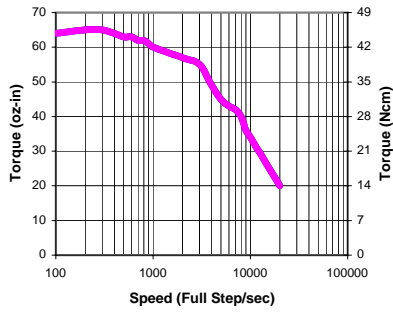
# Speed Torque Performance Curves



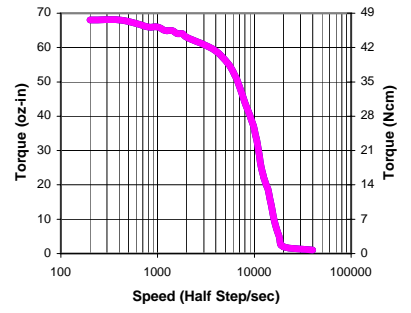
IH23001/008 @ 36 Vdc & 1.4 Amp  
Parallel Connection



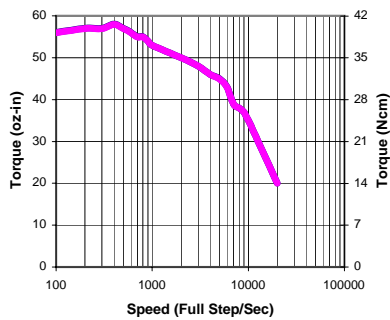
IH23001/008 @ 75 Vdc & 1.25 Amp  
Parallel Connection



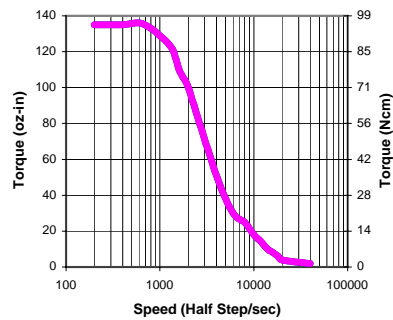
IH23002/009 @ 36 Vdc & 2.1 Amp



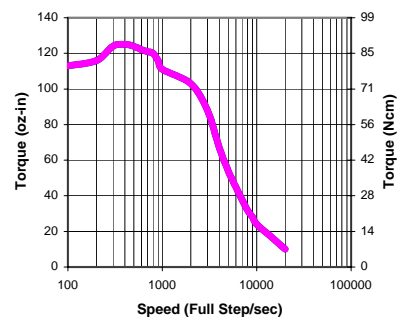
IH23002/009 @ 75 Vdc & 1.9 Amp



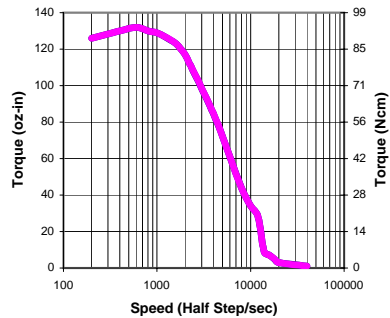
IH23003/010 @ 36 vdc & 1.4 Amp  
Parallel Connection



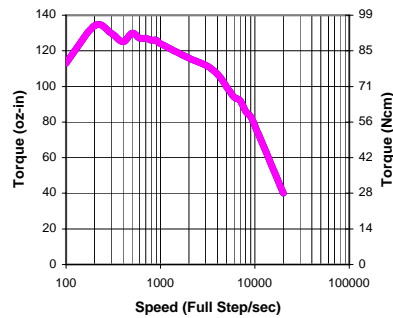
IH23003/010 @ 75 Vdc & 1.25 Amp  
Parallel Connection



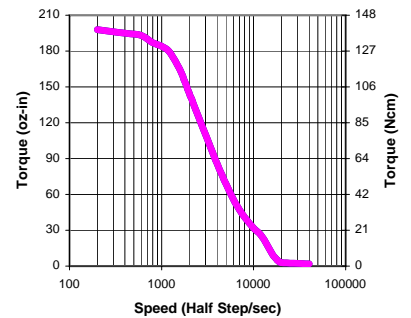
IH23005/012 @ 36 Vdc & 2.1 Amp  
Series Connection



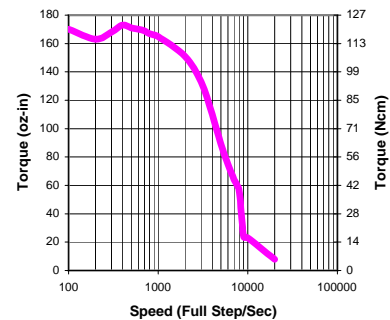
IH23005/012 @ 75 Vdc & 4.2 Amp  
Parallel Connection



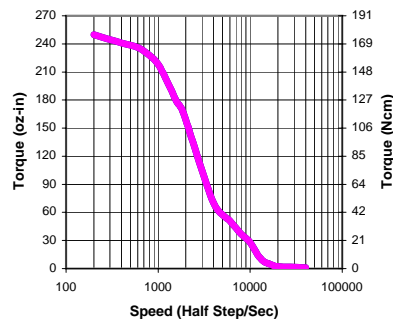
IH23006/013 @ 36 Vdc & 2.1 Amps



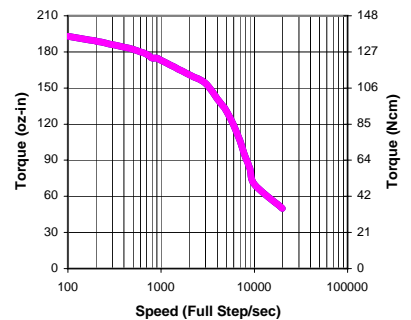
IH23006/013 @ 75 Vdc & 1.9 Amps



IH23007/014 @ 36 Vdc & 2.1 Amps  
Series Connection



IH23007/014 @ 75 Vdc & 4.3 Amps  
Parallel Connection



Curves: System performance may differ depending on the drive capability.