ELECTRICAL AND MECHANICAL CHARACTERISTICS

T_{amb}=25ºC, In micro step mode @ Max. voltage 4.2V, unless other specified.

Parameter	Symbol	Test Conditions	Min.	Typ.	Max	Units
Electrical Characteristics						
Operating Temperature	T_a		-40		105	ºC
Coil Resistance	R_b		260	280	300	Ω
Operating Current	I_m	f_a=200Hz		15	20	mA
Start-Stop Frequency	f_{ss}	$J_L=0.2x10^{-6}kgm^2$	125			Hz
Maximum Driving Frequency	f_{mm}	$J_L=0.2x10^{-6}kgm^2$	600			Hz
Mechanical Characteristics						
Dynamic Torque	M200 M400	f_a=200Hz f_a=400Hz	1.0 0.7	1.2 0.85	1.4 1.0	MNm mNm
Static Torque	Ms	U_b=5V	3.5	4.0		mNm
Equivalent Motor Inertia @ Output	Jm			4.225 E-7		Kgm^2
Gear ratio				1:180		
Step size in full step mode				1		Degree
Step size in partial step mode				1/3		Degree
Step size in micro step mode				1/12		Degree
Backlash				0.5	1.0	Degree
Noise						
Noise Level	SPL	@ 100 °/sec @ 200 °/sec @ 400 °/sec		34 41 44		dBA dBA dBA
Others						
Angle of Rotation	f_l	Motors with internal Stop			315	Degree

Force allowed on the pointer shaft:						
Axial force (push)	Fa				150	N
Axial force (pull)	Fa				70	N
Perpendicular force	Fq				12	N
Imposed acceleration	α_p				100 0	Rad/s2

Note: f_a – full-step frequency J_L – Load inertia