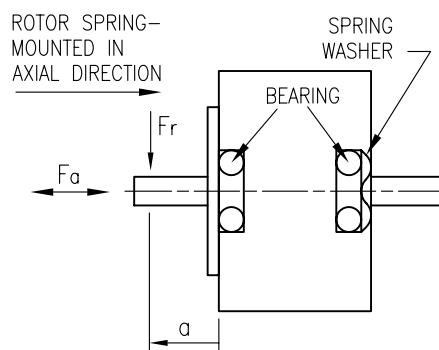


SPECIFICATION	CONNECTION	UNIPOLAR OR BIPOLAR-1 WINDING	BIPOLAR	
			SERIAL	PARALLEL
VOLTAGE (VDC)		2.97		
AMPS/PHASE		4.5	3.18	6.36
RESISTANCE/PHASE (Ohms)@25°C		0.66±15%	1.32±15%	0.33±15%
INDUCTANCE/PHASE (mH) @1KHz		3.0±20%	12±20%	3.0±20%
HOLDING TORQUE (Nm) [lb-in]		4.2 [37.17]	5.94 [52.57]	5.94 [52.57]
DETENT TORQUE (Nm) [lb-in]		0.21 [1.8585]		
STEP ANGLE (°) ± STEP ACCURACY		1.8 ± 5% (NON-ACCUM)		
BACK-EMF (V) (300 U/min)			46.3	
ROTOR INERTIA (Kg-m ²) [lb-in ²]		1.9x10 ⁻⁴ [0.65]		
WEIGHT (Kg) [lb]		2.8 [6.174]		
TEMPERATURE RISE: MAX.80°C (MOTOR STANDSTILL; FOR 2 PHASE ENERGIZED)				
AMBIENT TEMPERATURE -20°~ 50°C [-4°F ~ 122°F]				
INSULATION RESISTANCE 100 MOhm (UNDER NORMAL TEMPERATURE AND HUMIDITY)				
INSULATION CLASS B 130° [266°F] (PROTECTION IP30-WITH TERMINAL BOX IP54)				
DIELECTRIC STRENGTH 500VAC FOR 1 MIN. (BETWEEN THE MOTOR COILS AND THE MOTOR CASE)				
AMBIENT HUMIDITY MAX. 85% (NO CONDENSATION)				

PERMISSIBLE RADIAL+AXIAL FORCE

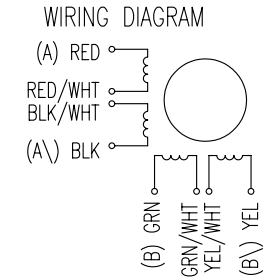


	AXIAL-FORCE Fa (N)			
	Fa=65			
DISTANCE a (mm)	5	10	15	20
RADIAL-FORCE Fr (N)	535	355	256	200
		AXIAL	RADIAL	
SHAFT PLAY (mm)		0.075	0.025	
AT LOAD MAX: (N)		10	5.0	

UNIPOLAR	TYPE OF CONNECTION (EXTERN)			MOTOR	
	1WINDING	BIPOLAR SERIAL	PARALLEL	LEADS	WINDING
A	A	A	A	RED	A
COM				RED/WHT	
A\		A\	A\	BLK/WHT	A\
B	B	B	B	BLK	B
COM				GRN	
B\		B\	B\	GRN/WHT	B\
				YEL/WHT	
				YEL	

FULL STEP 2 PHASE-Ex., WHEN FACING MOUNTING END (X)

STEP	A	B	A\	B\	
1	+	+	-	-	CCW
2	-	+	+	-	
3	-	-	+	+	CW
4	+	-	-	+	



NANOTEC:				SCALE FREE	APVD	S.Ha.	09.01.07	STEPPING MOTOR
1	TOLERANCE, DIMENSION, ROTOR INERTIA	19.10.07	J.W.	X ±0.5	CHKD			
REV	DESCRIPTION	DATE	APVD	1PL ±0.2	DRN	J.W.	13.06.06	DWG.NO
				2PL ±0.1	SIGNATURE		DATE	ST8918M4508
				ANGLE ±30'				