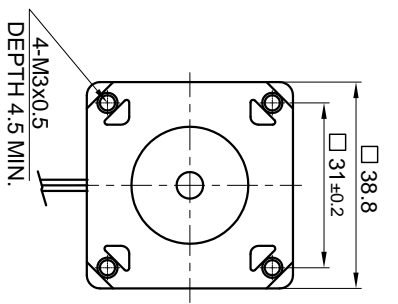
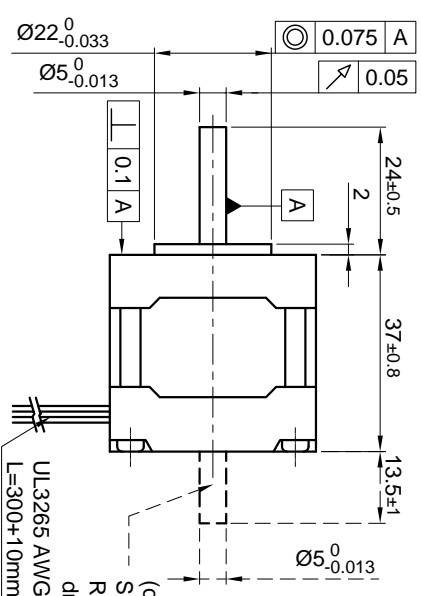


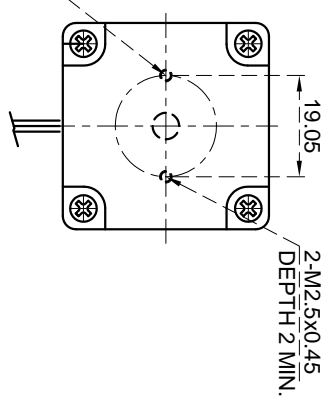
Front view and mounting



Side view

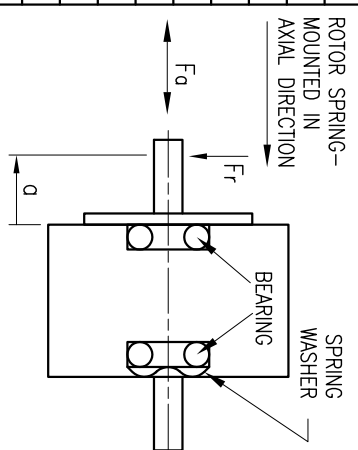


Rear view



CONNECTION	UNIPOLAR OR BIPOLAR - 1 WINDING	BIPOLAR SERIAL
SPECIFICATION		
VOLTAGE (VDC)	12	17
AMPS/PHASE	0.4	0.28
RESISTANCE/PHASE (Ohms)@25°C	30±15%	60±15%
INDUCTANCE/PHASE (mH) @1KHz	44±20%	176±20%
HOLDING TORQUE (Nm) [lb-in]	0.164 [1.451]	0.232 [2.053]
DETTENT TORQUE (Nm) [lb-in]	4.9x10 ⁻³ [4.337x10 ⁻²]	
STEP ANGLE (°)	0.9	
STEP ACCURACY (NON-ACCUM)	±5%	
ROTOR INERTIA (kg-m ²) [lb-in ²]	2.4x10 ⁻⁶ [8.2x10 ⁻³]	
WEIGHT (kg) [lb]	0.24 [0.529]	
TEMPERATURE RISE: MAX.80°C (MOTOR STANDSTILL; FOR 2 PHASE ENERGIZED)		
AMBIENT TEMPERATURE -10°~ 50°C [14°F ~ 122°F]		
INSULATION RESISTANCE 100 Mohm (UNDER NORMAL TEMPERATURE AND HUMIDITY)		
INSULATION CLASS B 130° [266°F]		
DIELECTRIC STRENGTH 500VAC FOR 1 MIN. (BETWEEN THE MOTOR COILS AND THE MOTOR CASE)		
AMBIENT HUMIDITY MAX. 85% (NO CONDENSATION)		

PERMISSIBLE RADIAL+AXIAL FORCE

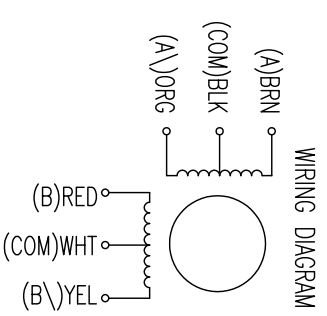


AXIAL-FORCE Fa (N)	Fa=7			
DISTANCE a (mm)	5	10	15	20
RADIAL-FORCE Fr (N)	58	36	26	20
AXIAL				
RADIAL				
SHAFT PLAY (mm)	0.075			
AT LOAD MAX: (N)	10			
				5.0

for >speed for <speed

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

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



TYPE OF CONNECTION (EXTERN)		MOTOR	
UNIPOLAR	BIPOLAR	LEADS	WINDING
A	A	BRN	A
COM	COM	BLK	COM
A\	A\	ORG	A\
B	B	RED	B
COM	COM	WHT	COM
B\	B\	YEL	B\

REV	DESCRIPTION	DATE	APVD

NANOTEC:
SH4009M0406

SCALE	FREE	APVD	CHKD	DRN	SIGNATURE	DATE
X	±0.5	S.K.				12.06.06
1PL	±0.2					
2PL	±0.1		J.W.			12.06.06
ANGLE	±30°					

STEPPING MOTOR
DWG.NO SH4009M0406