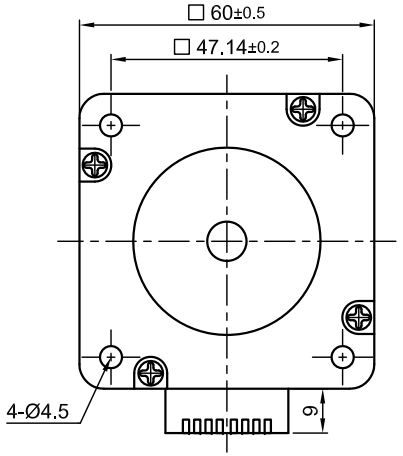
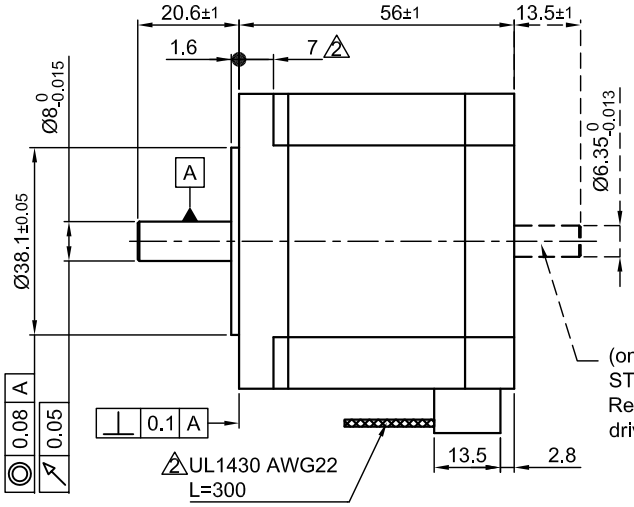
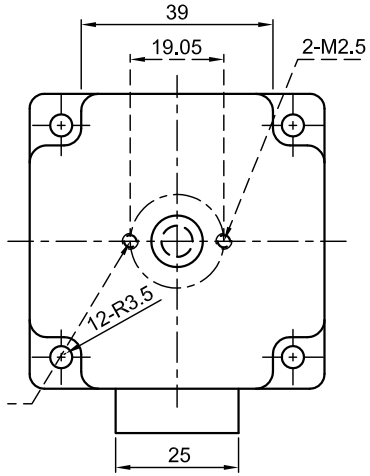
Front view and mounting



Side view

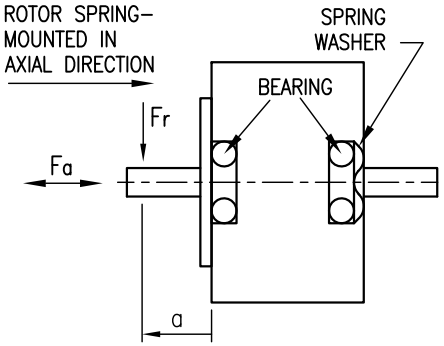


Rear view



SPECIFICATION \ CONNECTION	UNIPOLAR OR 1 BIPOLAR–1 WINDING	BIPOLAR 1 SERIAL	BIPOLAR 1 PARALLEL
VOLTAGE (VDC)	4.0		
AMPS/PHASE	2.0	1.41	2.82
RESISTANCE/PHASE (Ohms)@25°C	2.0±15%	4.0±15%	1.0±15%
INDUCTANCE/PHASE (mH) @1KHz 3	4.6±20%	18.4±20%	4.6±20%
HOLDING TORQUE (Nm) [lb–in]	1.38 [12.21]	1.95 [17.26]	1.95 [17.26]
DETENT TORQUE (Nm) [lb–in]	0.035 [0.311]		
STEP ANGLE (°) ± ACCURACY	1.8±5% (NON–ACCUM)		
BACK–EMF (V) (300 U/min)	31		
ROTOR INERTIA (Kg–m²) [lb–in²]	4.0x10⁻⁵ [0.154] 2		
WEIGHT (Kg) [lb]	0.77 [1.7]		
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=14			
DISTANCE a (mm)	5	10	15	20
RADIAL–FORCE Fr (N)	163	112	85	63

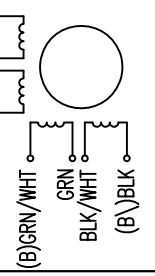
	AXIAL	RADIAL
SHAFT PLAY (mm)	0.075	0.025
AT LOAD MAX: (N)	10	5.0

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

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

STEP	A	B	A\	B\		CCW
1	+	+	–	–	↓	↑
2	–	+	+	–		
3	–	–	+	+		
4	+	–	–	+	CW	

WIRING DIAGRAM



REV	DESCRIPTION	DATE	APVD
3	NEW VALUE OF INDUCTANCE	18.12.09	J.W.
2	ROTOR INERTIA+LENGTH+UL NO.	04.08.09	J.W.
1	NEW TECHNICAL DATE	19.07.07	J.W.

Nanotec® PLUG & DRIVE

ST6018M2008

SCALE FREE		APVD	S.Ha.	16.01.07
X	±0.5	CHKD		
1PL	±0.2	DRN	J.W.	13.07.06
2PL	±0.1	SIGNATURE		DATE
ANGLE	±30'			

STEPPING MOTOR

DWG.NO

ST6018M2008