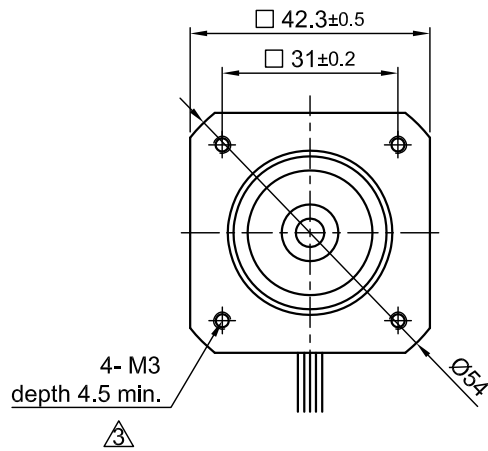
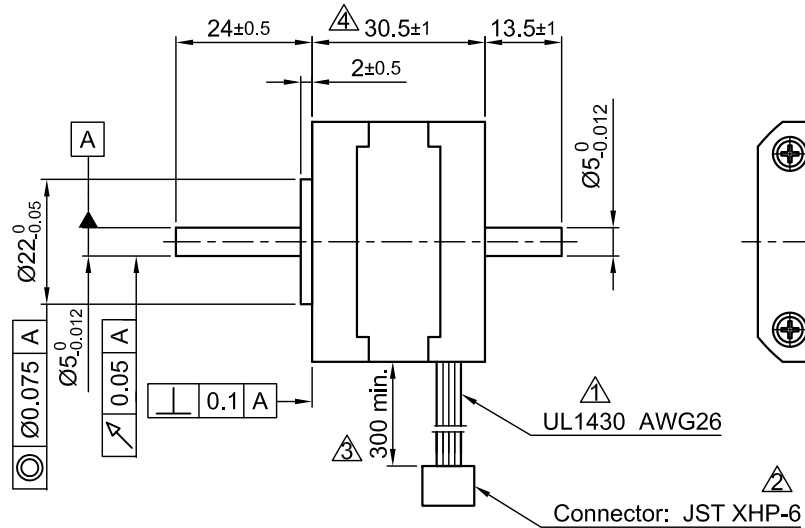


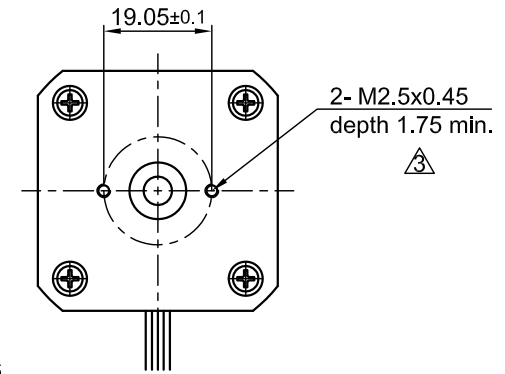
Front view and mounting



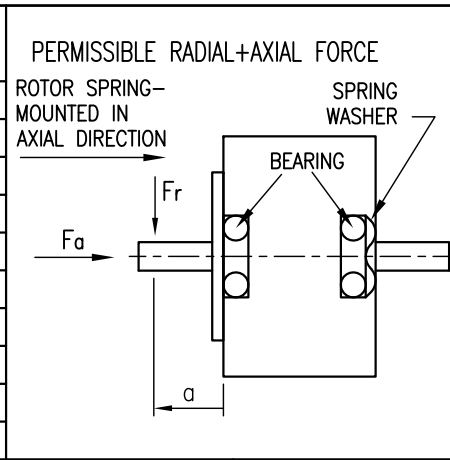
Side view



Rear view



SPECIFICATION	UNIPOLAR OR BIPOLAR-1 WINDING	BIPOLAR SERIAL
VOLTAGE (VDC)	10.5	15.0
AMPS/PHASE	0.35	0.25
RESISTANCE/PHASE (Ohms)@25°C	30±15%	60±15%
INDUCTANCE/PHASE (mH) @1KHz	21.7±20%	86.8±20%
HOLDING TORQUE (Nm) [lb-in]	0.16 [1.416]	0.226 [2.0]
DETENT TORQUE (Nm) [lb-in]	5.9x10 <sup>-3</sup> [5.222x10 <sup>-2</sup> ]	
STEP ANGLE (°)	1.8	
STEP ACCURACY (NON-ACCUM)	±5%	
ROTOR INERTIA (Kg-m <sup>2</sup> ) [lb-in <sup>2</sup> ]	3.8x10 <sup>-6</sup> [1.3x10 <sup>-3</sup> ]	
WEIGHT (Kg) [lb]	0.2 [0.44]	

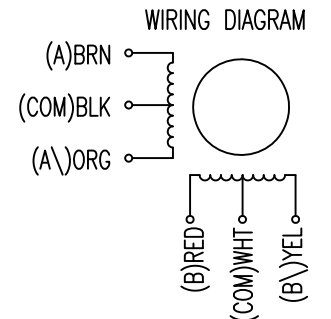


TYPE OF CONNECTION (EXTERN)			MOTOR		
UNIPOLAR	BIPOLAR		CONNECTOR PIN NO.	LEADS	WINDING
	1WINDING	SERIAL			
A	A	A	1	BRN	A
COM	COM		5	BLK	COM
A\		A\	3	ORG	A\
B	B	B	2	RED	B
COM	COM		6	WHT	COM
B\		B\	4	YEL	B\

for >speed ←  
for <speed ←

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

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



TEMPERATURE RISE: MAX.80°C (MOTOR STANDSTILL; FOR 2 PHASE ENERGIZED)	AXIAL-FORCE Fa (N)	Fa=7			
AMBIENT TEMPERATURE -10~ 50°C [14°F ~ 122°F]	DISTANCE a (mm)	5	10	15	20
INSULATION RESISTANCE 100 MOhm (UNDER NORMAL TEMPERATURE AND HUMIDITY)	RADIAL-FORCE Fr (N)	58	36	26	20
INSULATION CLASS B 130° [266°F]		AXIAL		RADIAL	
DIELECTRIC STRENGTH 500VAC FOR 1 MIN. (BETWEEN THE MOTOR COILS AND THE MOTOR CASE)	SHAFT PLAY (mm)	0.08		0.02	
AMBIENT HUMIDITY MAX. 85% (NO CONDENSATION)	AT LOAD MAX: (N)	4.5		4.5	

4	change motor length	04.10.16	A.S.
3	rework draw/change depth M2.5/M3	09.02.16	A.S.
2	BACK-EMF REMOVED+CONNECTOR	19.06.12	J.W.
REV	DESCRIPTION	DATE	DRN

**Nanotec**  
PLUG & DRIVE

Surface specification	General tolerances	Work piece edge
DIN ISO 1302	DIN ISO 2768- cH	DIN ISO 13715

APVD	S.Ha.	26.02.07
CHKD		
DRN	J.W.	29.11.06
SIGNATURE	DATE	

**STEPPING MOTOR**

DWG.NO  
ST4118S0406-B