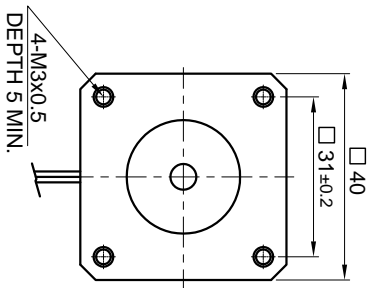
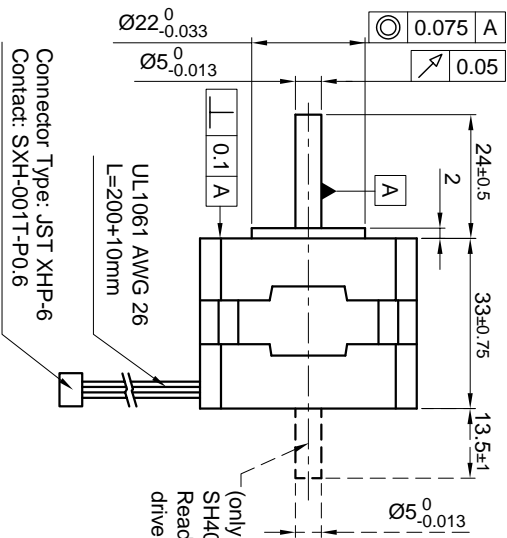


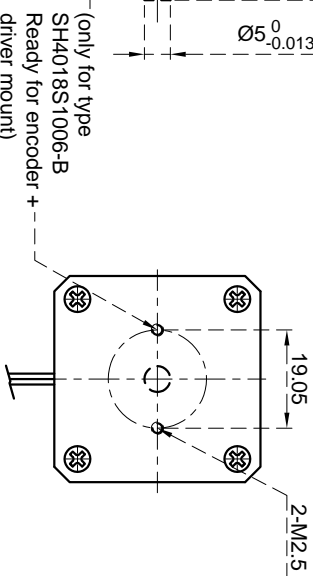
Front view and mounting



Side view

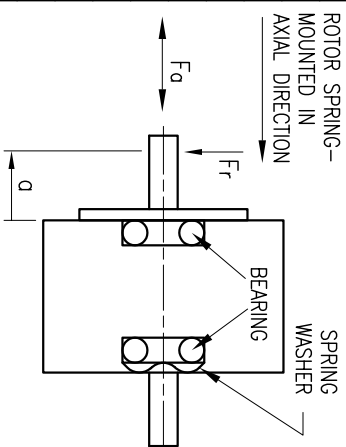


Rear view



CONNECTION	UNIPOLAR OR BIPOLAR-1 WINDING	BIPOLAR SERIAL
SPECIFICATION		
VOLTAGE (VDC)	4.0	7.78
AMPS/PHASE	0.95	0.35
RESISTANCE/PHASE (Ohms)@25°C	4.2±15%	22±15%
INDUCTANCE/PHASE (mH) @1KHz	3.0±20%	30.4±20%
HOLDING TORQUE (Nm) [lb-in]	0.1 [0.885]	0.141 [1.248]
DETENT TORQUE (Nm) [lb-in]		3.0x10 <sup>-3</sup> [0.0266]
STEP ANGLE (°)		1.8
STEP ACCURACY (NON-ACCUM)		±5%
ROTOR INERTIA (Kg-m <sup>2</sup> ) [lb-in <sup>2</sup> ]		1.9x10 <sup>-6</sup> [6.49x10 <sup>-3</sup> ]
WEIGHT (Kg) [lb]		0.2 [0.441]
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

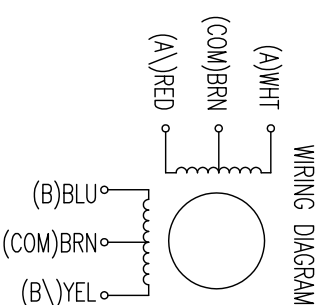


AXIAL-FORCE Fd (N)	FR	Fd=7		
DISTANCE a (mm)	5	10	15	20
RADIAL-FORCE Fr (N)	58	36	26	20
SHAFT PLAY (mm)	0.075	0.075	0.025	
AT LOAD MAX: (N)	10	5.0		

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

for >speed →  
for <speed ←

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



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

REV	DESCRIPTION	DATE	APVD

NANOTEC:	
SH4018S1006	

SCALE	FREE	APVD	SIGNATURE	DATE
X	±0.5	S.K.		04.07.06
1pL	±0.2	CHKD		
2pL	±0.1	DRN	J.W.	03.07.06
ANGLE	±30°			

STEPPING MOTOR	
DWG.NO	SH4018S1006