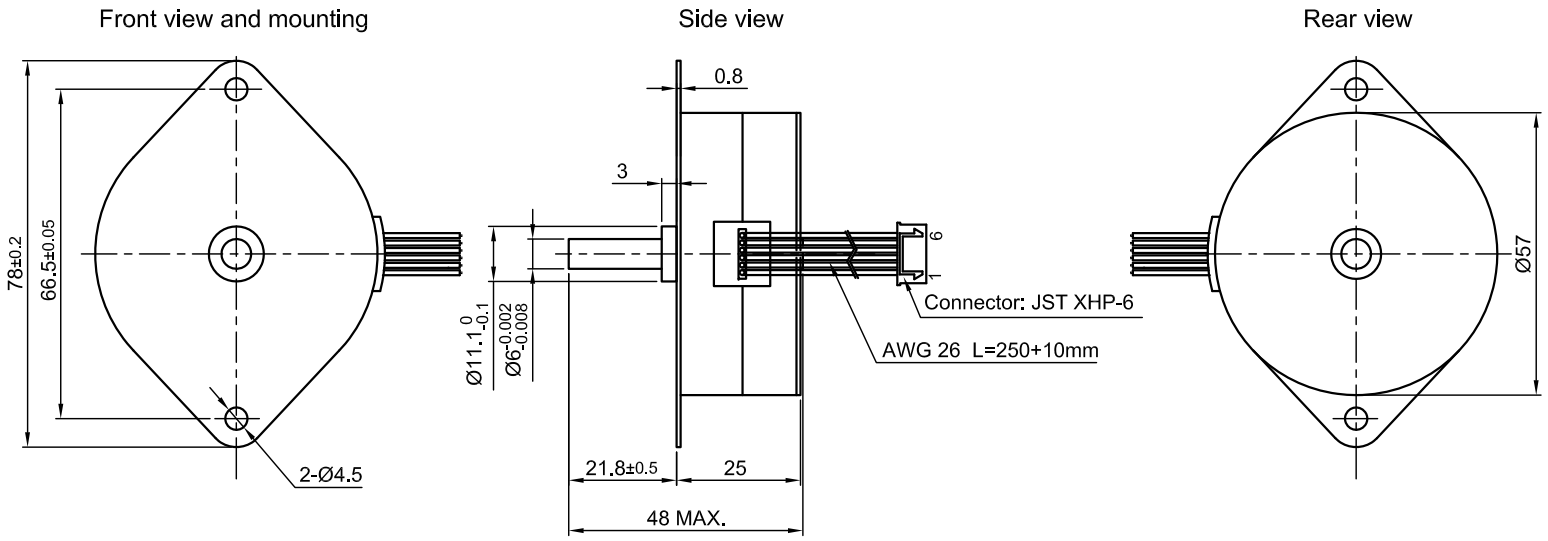
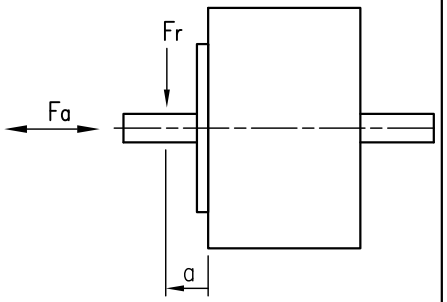


SPECIFICATION \ CONNECTION	UNIPOLAR OR BIPOLAR-1 WINDING	BIPOLAR SERIAL
VOLTAGE (VDC)	12	17
AMPS/PHASE	0.12	0.085
RESISTANCE/PHASE (Ohms)@25°C	100±10%	200±10%
INDUCTANCE/PHASE (mH) @1KHz	107±20% 1	428±20% 1
HOLDING TORQUE (Nm) [lb-in]	0.15 [1.328]	0.21 [1.878]
DETENT TORQUE (Nm) [lb-in]	0.0425 [0.376]	
STEP ANGLE (°)	7.5	
STEP ACCURACY (NON-ACCUM)	±8%	
ROTOR INERTIA (Kg-m²) [lb-in²]	$1.25x10^{-6}$ [$4.27x10^{-3}$]	
WEIGHT (Kg) [lb]	0.27 [0.595]	

PERMISSIBLE RADIAL+AXIAL FORCE



TEMPERATURE RISE: MAX.80°C (MOTOR STANDSTILL; FOR 2 PHASE ENERGIZED)	AXIAL-FORCE Fa (N)	Fa=2.0
AMBIENT TEMPERATURE -20°~ 50°C [-4°F ~ 122°F]	DISTANCE a (mm)	1/2 SCHAFTLENGTH
INSULATION RESISTANCE 100 MOhm (UNDER NORMAL TEMPERATURE AND HUMIDITY)	RADIAL-FORCE Fr (N)	Fr=5.0
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 / 0.06
AMBIENT HUMIDITY MAX. 85% (NO CONDENSATION)	AT LOAD MAX: (N)	4.5 / 4.5

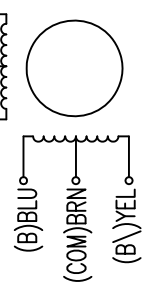
TYPE OF CONNECTION (EXTERN)			MOTOR		
UNIPOLAR	BIPOLAR 1WINDING	BIPOLAR SERIAL	CONNECTOR PIN NO.	LEADS	WINDING
A	A	A	1	WHT	A
COM	COM		5	BLK	COM
A\		A\	3	RED	A\
B	B	B	2	BLU	B
COM	COM		6	BRN	COM
B\		B\	4	YEL	B\

for >speed
for <speed

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

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

WIRING DIAGRAM



REV	DESCRIPTION	DATE	APVD
1	NEW VALUES OF INDUCTANCE	J.W.	03.06.08

NANOTEC:

SP5575M0106-A

SCALE FREE		APVD	S.Ha.	12.03.07
X	±0.5	CHKD		
1PL	±0.2	DRN	J.W.	06.03.07
2PL	±0.1	SIGNATURE		DATE
ANGLE	±30'			

STEPPING MOTOR

DWG.NO

SP5575M0106-A