

(only for type ST4209M1704-B Ready for encoder + driver mount)

CONNECTION	BIPOLAR
SPECIFICATION	
VOLTAGE (VDC)	2.77
AMPS/PHASE	1.68
RESISTANCE/PHASE (Ohms)@25°C	1.65±15%
INDUCTANCE/PHASE (mH) @1KHz	4.0±20%
HOLDING TORQUE (Nm) [lb-in]	0.36 [3.186]
DETENT TORQUE (Nm) [lb-in]	1.08x10 ⁻² [9.6x10 ⁻²]
STEP ANGLE (°)	0.9
STEP ACCURACY (NON-ACCUM)	±5%
ROTOR INERTIA (Kg-m ²) [lb-in ²]	5.4x10 ⁻⁶ [1.84x10 ⁻²]
WEIGHT (Kg) [lb]	0.28 [0.617]
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)	

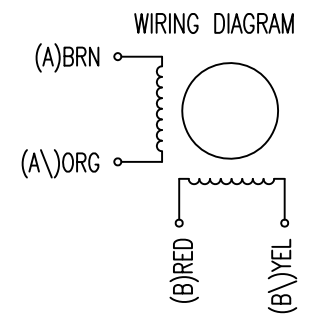
PERMISSIBLE RADIAL+AXIAL FORCE

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	0.025		
AT LOAD MAX: (N)	10	5.0		

TYPE OF CONNECTION (EXTERN)	MOTOR			
	BIPOLAR	CONNECTOR PIN NO.	LEADS	WINDING
A —	1	BRN	A	
A\ —	2	ORG	A\	
B —	3	RED	B	
B\ —	4	YEL	B\	

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

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



REV	DESCRIPTION	DATE	APVD
2	MOTOR LENGTH	09.11.09	J.W.
1	INDUCTANCE+UL NO.	20.04.09	J.W.

Nanotec
PLUG & DRIVE
ST4209M1704

SCALE FREE	APVD	S.Ha.	26.02.07
X ±0.5	CHKD		
1PL ±0.2	DRN	J.W.	28.06.06
2PL ±0.1	SIGNATURE		
ANGLE ±30'	DATE		

STEPPING MOTOR
DWG.NO ST4209M1704