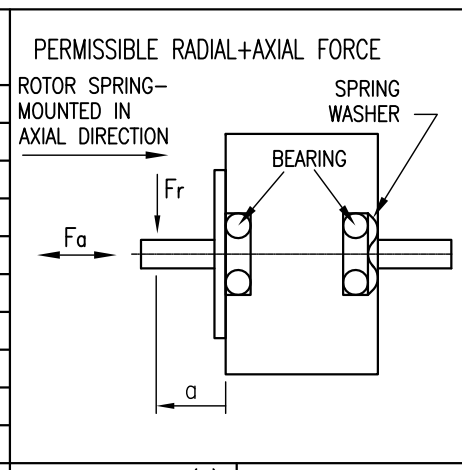


(only for type ST4209L1704-B Ready for encoder + driver mount)

Connector Type: JST XHP-4
Contact: SXH-001T-P0.6

| CONNECTION | BIPOLAR |
|--|-------------------------------|
| SPECIFICATION | |
| VOLTAGE (VDC) | 2.77 |
| AMPS/PHASE | 1.68 |
| RESISTANCE/PHASE (Ohms)@25°C | 1.65±15% |
| INDUCTANCE/PHASE (mH) @1KHz | 5.0±20% Δ |
| HOLDING TORQUE (Nm) [lb-in] | 0.44 [3.894] |
| DETENT TORQUE (Nm) [lb-in] | 1.32x10 ⁻² [0.117] |
| STEP ANGLE (°)+ ACCURACY | 0.9±5% |
| BACK-EMF (V) (300 U/min) | 6 Δ |
| ROTOR INERTIA (Kg-m ²) [lb-in ²] | 6.8x10 ⁻⁶ [0.0232] |
| WEIGHT (Kg) [lb] | 0.35 [0.772] |

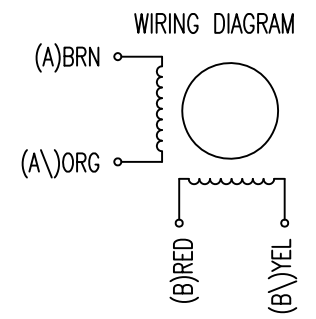


| TYPE OF CONNECTION (EXTERN) | MOTOR | | | |
|-----------------------------|---------|-------------------|-------|---------|
| | BIPOLAR | CONNECTOR PIN NO. | LEADS | WINDING |
| A — | 1 | BRN | A | |
| A\ — | 2 | ORG | A\ | |
| B — | 3 | RED | B | |
| B\ — | 4 | YEL | B\ | |

| 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 |
| INSULATION RESISTANCE 100 MOhm (UNDER NORMAL TEMPERATURE AND HUMIDITY) | | RADIAL-FORCE Fr (N) | | 58 | 36 |
| 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) | | 0.075 | 0.025 |
| AMBIENT HUMIDITY MAX. 85% (NO CONDENSATION) | | AT LOAD MAX: (N) | | 10 | 5.0 |

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

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



| | | | |
|-----|-------------------------|----------|------|
| 3 | VALUE OF BACK-EMF | 20.06.11 | LB |
| 2 | NEW VALUE OF INDUCTANCE | 21.04.09 | J.W. |
| 1 | NEW UL NO. | 03.09.08 | J.W. |
| REV | DESCRIPTION | DATE | APVD |

Nanotec
PLUG & DRIVE

ST4209L1704

| | | | |
|------------|-----------|-------|----------|
| SCALE FREE | APVD | S.Ha. | 26.02.07 |
| X ±0.5 | CHKD | | |
| 1PL ±0.2 | DRN | J.W. | 21.06.06 |
| 2PL ±0.1 | SIGNATURE | DATE | |
| ANGLE ±30' | | | |

STEPPING MOTOR

DWG.NO
ST4209L1704