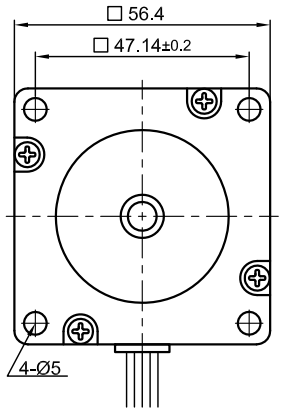
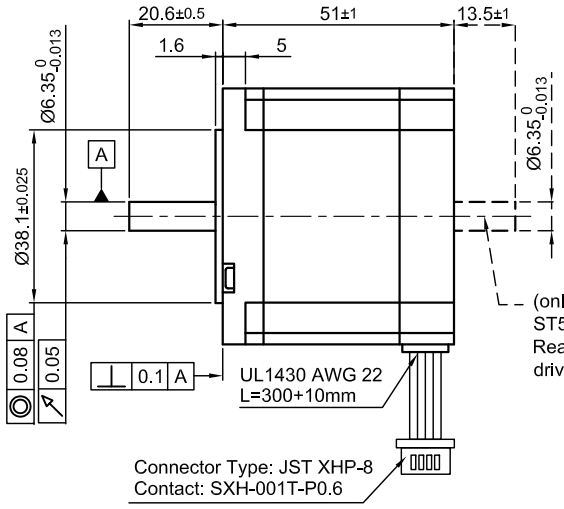
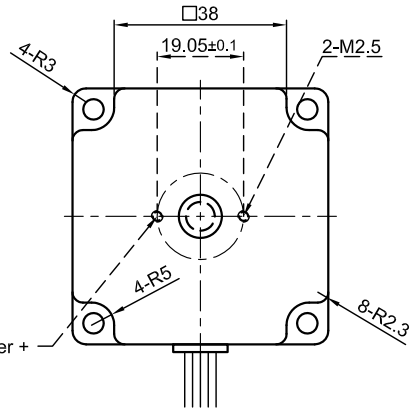
Front view and mounting




Side view

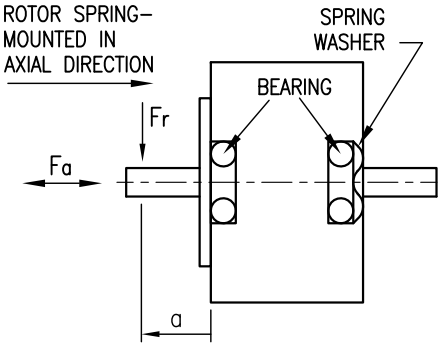



Rear view




| SPECIFICATION \ CONNECTION | UNIPOLAR OR BIPOLAR–1 WINDING | BIPOLAR SERIES | BIPOLAR PARALLEL |
|---|---|---|---|
| VOLTAGE (VDC) | 6.6 | | |
| AMPS/PHASE | 1.0 | 0.71 | 1.41 |
| RESISTANCE/PHASE (Ohms)@25°C | 6.6±15% | 13.2±15% | 3.3±15% |
| INDUCTANCE/PHASE (mH) @1KHz | 13±20% | 52±20% | 13±20% |
| HOLDING TORQUE (Nm) [lb–in] | 0.72 [6.37] | 1.01 [8.92] | 1.01 [8.92] |
| DETENT TORQUE (Nm) [lb–in] | $3.6x10^{-2}$ [0.286] | | |
| STEP ANGLE (°) ± ACCURACY | 0.9±5% (NON–ACCUM) | | |
| BACK–EMF (V) (300 U/min) | TDM. | | |
| ROTOR INERTIA (Kg–$m^2$) [lb–$in^2$] | $2.75x10^{-5}$ [$9.4x10^{-2}$ ] | | |
| WEIGHT (Kg) [lb] | 0.65 [1.433] | | |

PERMISSIBLE RADIAL+AXIAL FORCE




| AXIAL–FORCE Fa (N) | Fa=10 | | | |
|---|---|---|---|---|
| DISTANCE a (mm) | 5 | 10 | 15 | 20 |
| RADIAL–FORCE Fr (N) | 130 | 90 | 70 | 52 |

| | AXIAL | RADIAL |
|---|---|---|
| SHAFT PLAY (mm) | 0.075 | 0.025 |
| AT LOAD MAX: (N) | 10 | 5.0 |

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)

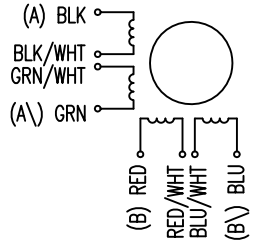
AMBIENT HUMIDITY MAX. 85% (NO CONDENSATION)

| TYPE OF CONNECTION (EXTERN) | | | | MOTOR | | |
|---|---|---|---|---|---|---|
| UNIPOLAR | BIPOLAR 1WINDING | BIPOLAR SERIAL | BIPOLAR PARALLEL | CONNECTOR PIN NO. | LEADS | WINDING |
| A | A | A | A | 1 | BLK | A |
| COM | A | | | 3 | BLK/WHT | |
| A\ | | A\ | A\ | 2 | GRN/WHT | A\ |
| B | B | B | B | 4 | GRN | |
| COM | B | | | 5 | RED | B |
| B\ | | B\ | B\ | 7 | RED/WHT | |
| | | | | 6 | BLU/WHT | B\ |
| | | | | 8 | BLU | |

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 |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

Nanotec® PLUG & DRIVE

ST5909S1008

| SCALE FREE | |
|---|---|
| X | ±0.5 |
| 1PL | ±0.2 |
| 2PL | ±0.1 |
| ANGLE | ±30' |

| | | |
|---|---|---|
| APVD | S.Ha. | 08.08.11 |
| CHKD | | |
| DRN | J.W. | 08.08.11 |
| SIGNATURE | | DATE |

STEPPING MOTOR

DWG.NO

ST5909S1008