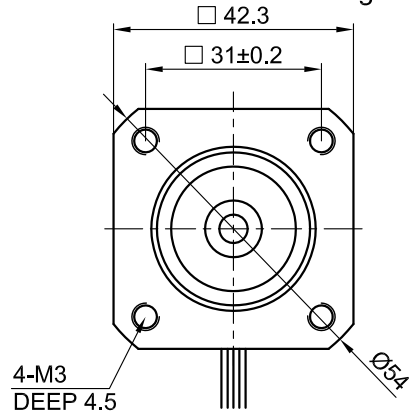
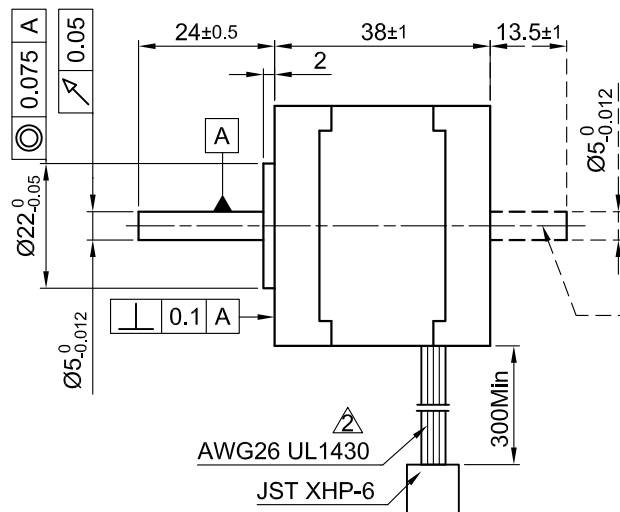


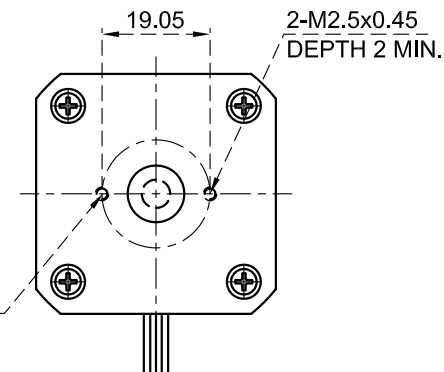
Front view and mounting



Side view

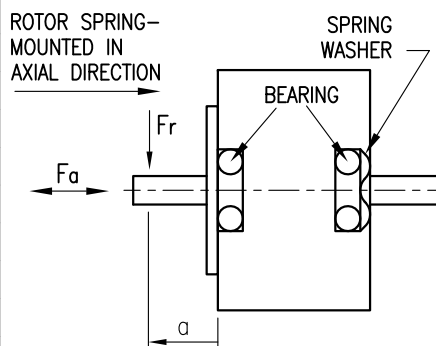


Rear view



| SPECIFICATION | UNIPOLAR OR BIPOLAR-1 WINDING | BIPOLAR SERIAL |
|--|--|-------------------|
| VOLTAGE (VDC) | 5.1 | 7.3 |
| AMPS/PHASE | 0.9 | 0.64 |
| RESISTANCE/PHASE (Ohms)@25°C | 5.7±15% | 11.4±15% |
| INDUCTANCE/PHASE (mH) @1KHz | 5.0±20% Δ | 20.0±20% Δ |
| HOLDING TORQUE (Nm) [lb-in] | 0.28 [2.478] | 0.396 [3.505] |
| DETENT TORQUE (Nm) [lb-in] | 9.8x10 ⁻³ [8.673x10 ⁻²] | |
| STEP ANGLE (°)+ ACCURACY | 1.8±5% | |
| BACK-EMF (V) (300 U/min) | 14.3 Δ | |
| ROTOR INERTIA (Kg-m ²) [lb-in ²] | 5.7x10 ⁻⁶ [1.95x10 ⁻²] | |
| WEIGHT (Kg) [lb] | 0.24 [0.53] | |

PERMISSIBLE RADIAL+AXIAL FORCE



| | | | | | |
|--|---------------------|-------|----|--------|----|
| 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 | 15 | 20 |
| INSULATION RESISTANCE 100 MOhm (UNDER NORMAL TEMPERATURE AND HUMIDITY) | RADIAL-FORCE Fr (N) | 58 | 36 | 26 | 20 |
| 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 | | 0.02 | |
| AMBIENT HUMIDITY MAX. 85% (NO CONDENSATION) | AT LOAD MAX: (N) | 4.5 | | 4.5 | |

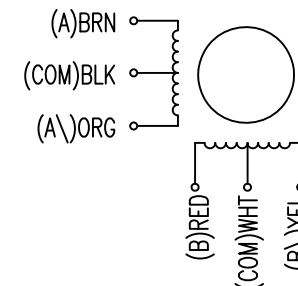
| TYPE OF CONNECTION (EXTERN) | | | MOTOR | | |
|-----------------------------|----------|--------|-------------------|-------|---------|
| UNIPOLAR | BIPOLAR | | CONNECTOR PIN NO. | LEADS | WINDING |
| | 1WINDING | SERIAL | | | |
| A --- | A --- | A --- | 1 | BRN | A |
| COM --- | COM --- | --- | 5 | BLK | COM |
| A\ --- | --- | A\ --- | 3 | ORG | A\ |
| B --- | B --- | B --- | 2 | RED | B |
| COM --- | COM --- | --- | 6 | WHT | 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 | CW |
|------|---|---|----|----|-----|----|
| 1 | + | + | - | - | ↓ | ↑ |
| 2 | - | + | + | - | ↓ | ↑ |
| 3 | - | - | + | + | ↓ | ↑ |
| 4 | + | - | - | + | ↓ | ↑ |

WIRING DIAGRAM



| | | | |
|-----|--------------------------|----------|------|
| 2 | VALUE OF BACK-EMF+UL NO. | 20.06.11 | LB |
| 1 | INDUCTANCE | 26.04.07 | J.W. |
| REV | DESCRIPTION | DATE | APVD |

Nanotec
PLUG & DRIVE

ST4118M0906

| | | | |
|------------|-----------|-------|----------|
| SCALE FREE | APVD | S.Ha. | 26.02.07 |
| X ±0.5 | CHKD | | |
| 1PL ±0.2 | DRN | J.W. | 29.11.06 |
| 2PL ±0.1 | SIGNATURE | | |
| ANGLE ±30' | | | |

STEPPING MOTOR

DWG.NO

ST4118M0906