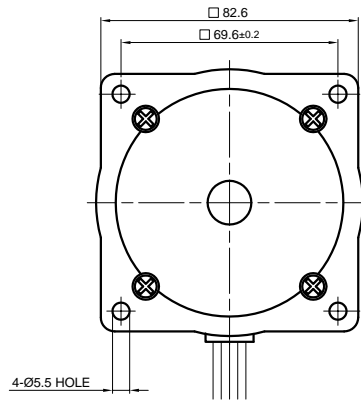
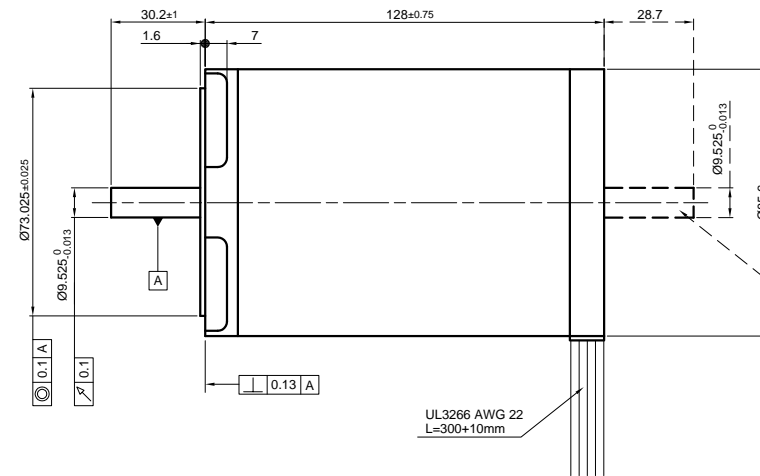


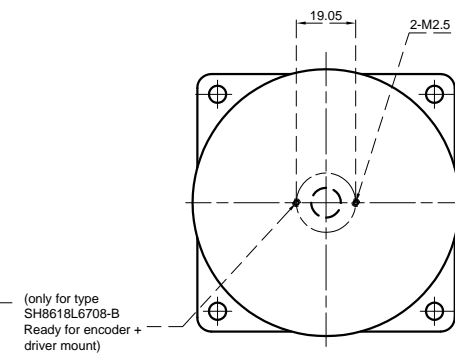
Front view and mounting



Side view

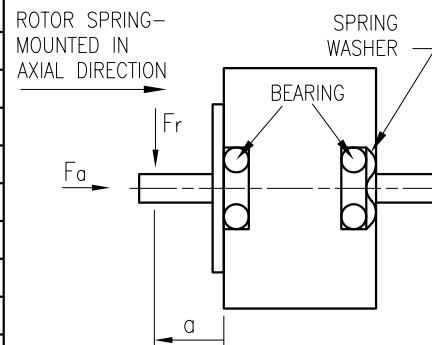


Rear view



| SPECIFICATION | CONNECTION | UNIPOLAR OR BIPOLAR-1 WINDING | BIPOLAR | |
|--|------------|----------------------------------|--------------|--------------|
| | | | SERIAL | PARALLEL |
| VOLTAGE (VDC) | | 3.0 | 4.27 | 2.18 |
| AMPS/PHASE | | 6.7 | 4.74 | 9.47 |
| RESISTANCE/PHASE (Ohms)@25°C | | 0.45±15% | 0.9±15% | 0.23±15% |
| INDUCTANCE/PHASE (mH) @1KHz | | 2.2±20% | 8.8±20% | 2.2±20% |
| HOLDING TORQUE (Nm) [lb-in] | | 4.0 [35.4] | 5.66 [50.09] | 5.66 [50.09] |
| DETENT TORQUE (Nm) [lb-in] | | 0.12 [1.062] | | |
| STEP ANGLE (°) | | 1.8 | | |
| STEP ACCURACY (NON-ACCUM) | | ±5% | | |
| ROTOR INERTIA (Kg-m ²) [lb-in ²] | | 1.8x10 ⁻⁴ [0.615] | | |
| WEIGHT (Kg) [lb] | | 3.7 [8.159] | | |
| 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° [260°F] | | | | |
| DIELECTRIC STRENGTH 500VAC FOR 1 MIN. (BETWEEN THE MOTOR COILS AND THE MOTOR CASING) | | | | |
| AMBIENT HUMIDITY MAX. 85% (NO CONDENSATION) | | | | |

PERMISSIBLE RADIAL+AXIAL FORCE



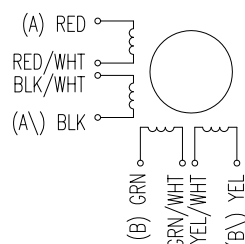
| | AXIAL-FORCE Fa (N) | | | |
|---------------------|--------------------|-----|--------|-----|
| | Fa=25 | | | |
| DISTANCE a (mm) | 5 | 10 | 15 | 20 |
| RADIAL-FORCE Fr (N) | 228 | 169 | 139 | 100 |
| SHAFT PLAY (mm) | AXIAL | | RADIAL | |
| | 0.075 | | 0.025 | |
| AT LOAD MAX: (N) | 10 | | 5.0 | |

| UNIPOLAR | TYPE OF CONNECTION (EXTERN) | | | MOTOR | |
|----------|-----------------------------|-------------------|----------|---------|---------|
| | 1WINDING | BIPOLAR SERIAL | PARALLEL | LEADS | WINDING |
| A | A | A | A | RED | A |
| COM | | | | RED/WHT | |
| A\ | | A\ | A\ | BLK/WHT | A\ |
| B | B | B | B | BLK | B |
| COM | | | | GRN | |
| B\ | | B\ | B\ | GRN/WHT | B\ |
| | | | | YEL/WHT | |
| | | | | YEL | |

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

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

WIRING DIAGRAM



| | | | | | | | | | | | |
|-----|-------------|------|------|-------------|--|------------|------|-----------|------|----------|----------------|
| | | | | NANOTEC: | | SCALE FREE | | APVD | S.K. | 20.07.06 | STEPPING MOTOR |
| | | | | SH8618L6708 | | X | ±0.5 | CHKD | | | |
| | | | | | | 1PL | ±0.2 | DRN | J.W. | 20.07.06 | DWG.NO |
| REV | DESCRIPTION | DATE | APVD | | | 2PL | ±0.1 | SIGNATURE | | DATE | SH8618L6708 |
| | | | | | | ANGLE | ±30' | | | | |