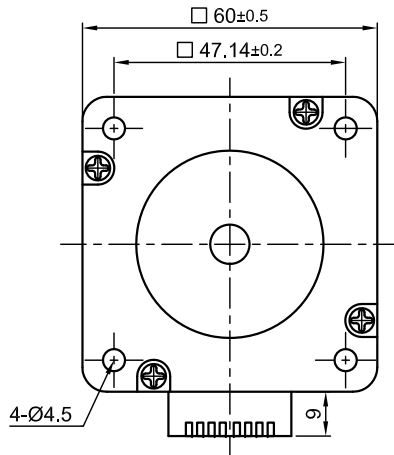
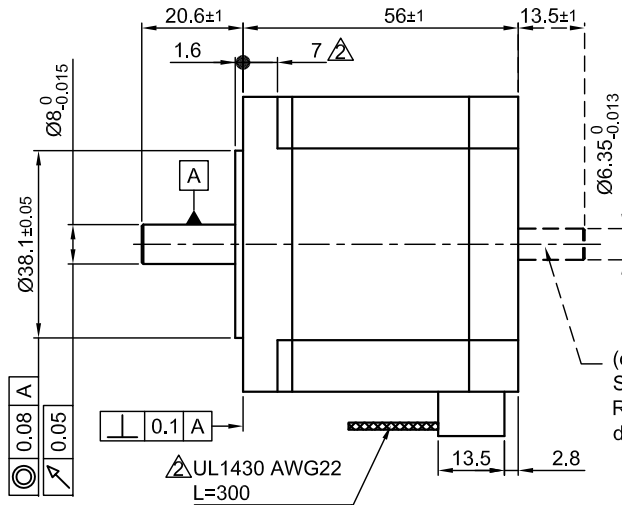


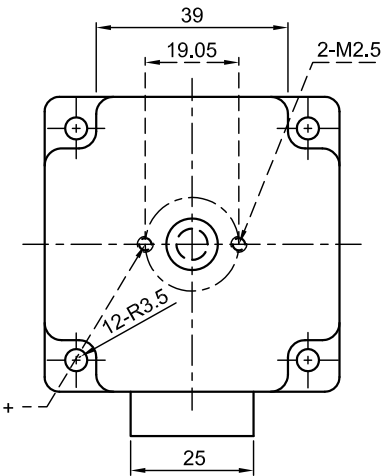
Front view and mounting



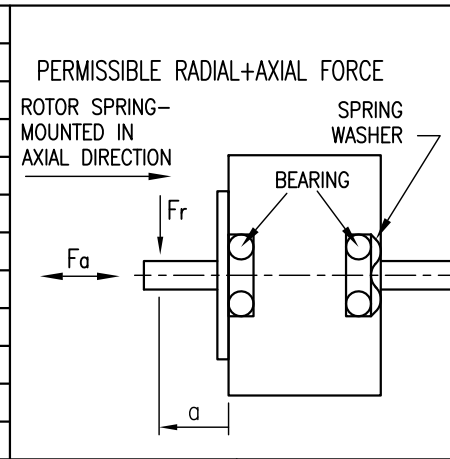
Side view



Rear view



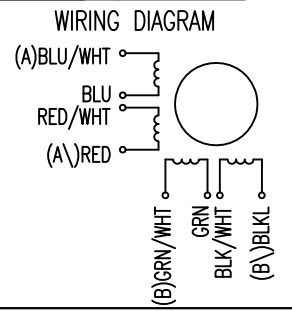
| SPECIFICATION | CONNECTION | UNIPOLAR OR BIPOLAR-1 WINDING | |
|--|------------------------------|-------------------------------|--------------|
| | | SERIAL | PARALLEL |
| VOLTAGE (VDC) | 4.0 | | |
| AMPS/PHASE | 2.0 | 1.41 | 2.82 |
| RESISTANCE/PHASE (Ohms)@25°C | 2.0±15% | 4.0±15% | 1.0±15% |
| INDUCTANCE/PHASE (mH) @1KHz | 5.6±20% | 22.4±20% | 5.6±20% |
| HOLDING TORQUE (Nm) [lb-in] | 1.38 [12.21] | 1.95 [17.26] | 1.95 [17.26] |
| DETENT TORQUE (Nm) [lb-in] | 0.035 [0.311] | | |
| STEP ANGLE (°) ± ACCURACY | 1.8±5% (NON-ACCUM) | | |
| BACK-EMF (V) (300 U/min) | 31 | | |
| ROTOR INERTIA (Kg-m ²) [lb-in ²] | 4.0x10 ⁻⁵ [0.154] | | |
| WEIGHT (Kg) [lb] | 0.77 [1.7] | | |



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

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

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



| TEMPERATURE RISE: MAX.80°C (MOTOR STANDSTILL; FOR 2 PHASE ENERGIZED) | AXIAL-FORCE Fa (N) | |
|--|---------------------|---------------|
| | Fa=14 | |
| 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) | 163 112 85 63 |
| 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 |

| | | | | | | | | | |
|-----|-----------------------------|----------|------|-------------|------------|-----------|-------|----------|------------------------------|
| 2 | ROTOR INERTIA+LENGTH+UL NO. | 04.08.09 | J.W. | | SCALE FREE | APVD | S.Ha. | 16.01.07 | <p>STEPPING MOTOR</p> |
| 1 | NEW TECHNICAL DATE | 19.07.07 | J.W. | | X ±0.5 | CHKD | | | |
| REV | DESCRIPTION | DATE | APVD | ST6018M2008 | 1PL ±0.2 | DRN | J.W. | 13.07.06 | ST6018M2008 |
| | | | | | 2PL ±0.1 | SIGNATURE | | DATE | |
| | | | | | ANGLE ±30' | | | | |