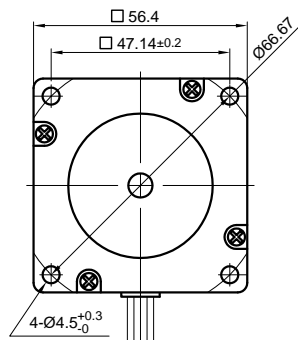
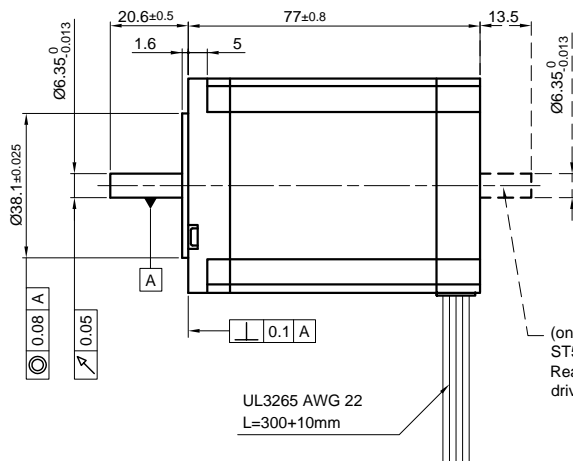


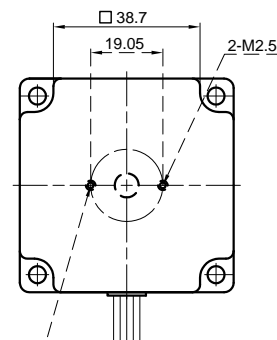
Front view and mounting



Side view



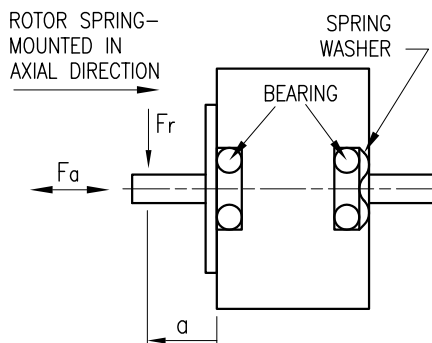
Rear view



(only for type ST5818L2008-B Ready for encoder + driver mount)

| SPECIFICATION  | CONNECTION | UNIPOLAR OR BIPOLAR-1 WINDING | BIPOLAR     |             |
|--|------------|-------------------------------|-------------|-------------|
|  |            |                               | SERIAL      | PARALLEL    |
| VOLTAGE (VDC)  |            | 4.8                           |             |             |
| AMPS/PHASE   |            | 2.0                           | 1.41        | 2.83        |
| RESISTANCE/PHASE (Ohms)@25°C   |            | 2.4±15%                       | 4.8±15%     | 1.2±15%     |
| INDUCTANCE/PHASE (mH) @1KHz  |            | 5.1±20%                       | 20.4±20%    | 5.1±20%     |
| HOLDING TORQUE (Nm) [lb-in]  |            | 1.2 [10.62]                   | 1.7 [15.05] | 1.7 [15.05] |
| DETENT TORQUE (Nm) [lb-in]   |            | 0.049 [0.434]                 |             |             |
| STEP ANGLE (°)   |            | 1.8                           |             |             |
| STEP ACCURACY (NON-ACCUM)  |            | ±5%                           |             |             |
| ROTOR INERTIA (Kg-m <sup>2</sup> ) [lb-in <sup>2</sup> ]                           |            | 0.43x10 <sup>-4</sup> [0.147] |             |             |
| WEIGHT (Kg) [lb]   |            | 1.1 [2.426]                   |             |             |
| 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)  |            |                               |             |             |

PERMISSIBLE RADIAL+AXIAL FORCE



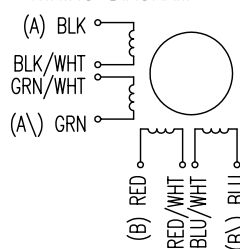
|                     | AXIAL-FORCE Fa (N) |       |        |    |
|---------------------|--------------------|-------|--------|----|
|                     | 5                  | 10    | 15     | 20 |
| AXIAL-FORCE Fa (N)  | Fa=10              |       |        |    |
| DISTANCE a (mm)     | 130                | 90    | 70     | 52 |
| RADIAL-FORCE Fr (N) |                    |       |        |    |
|                     |                    | AXIAL | RADIAL |    |
| SHAFT PLAY (mm)     |                    | 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        | BLK     | A       |
| COM      |                             |                |          | BLK/WHT |         |
| A\       |                             | A\             | A\       | GRN/WHT | A\      |
| B        | B                           | B              | B        | GRN     | B       |
| COM      |                             |                |          | RED     |         |
| B\       |                             | B\             | B\       | RED/WHT | B\      |
|          |                             |                |          | BLU/WHT |         |
|          |                             |                |          | BLU     |         |

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

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

WIRING DIAGRAM



| REV | DESCRIPTION | DATE | APVD | NANOTEC:    | SCALE FREE | APVD      | S.Ha. | 16.01.07    | STEPPING MOTOR |
|-----|-------------|------|------|-------------|------------|-----------|-------|-------------|----------------|
|     |             |      |      | ST5818L2008 | X ±0.5     | CHKD      |       |             |                |
|     |             |      |      |             | 1PL ±0.2   | DRN       |       | 26.04.06    |                |
|     |             |      |      |             | 2PL ±0.1   | SIGNATURE |       | DWG.NO      |                |
|     |             |      |      |             | ANGLE ±30' |           |       | ST5818L2008 |                |