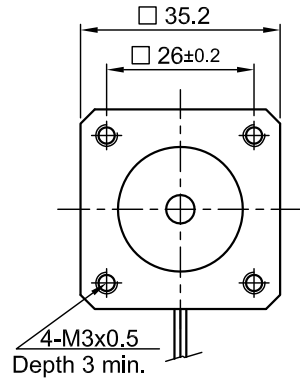
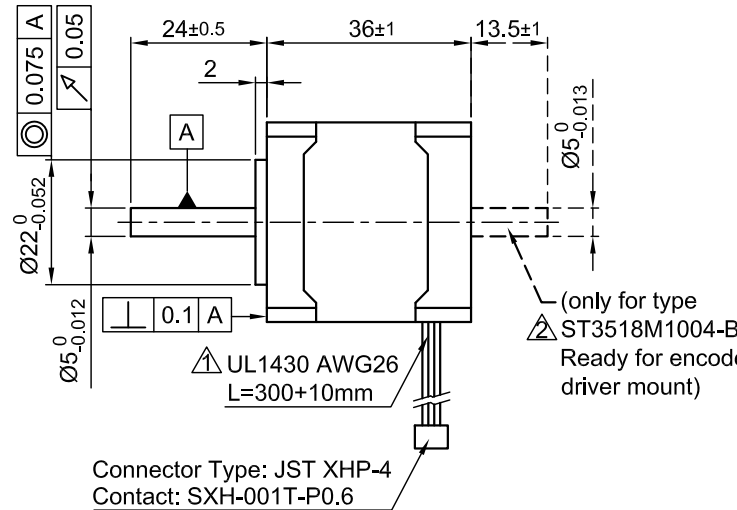


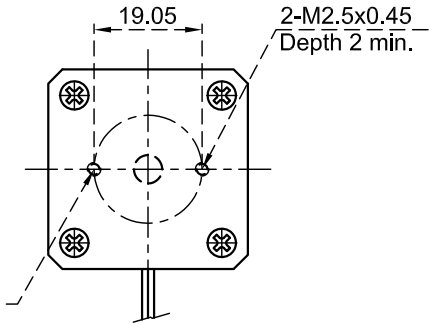
Front view and mounting



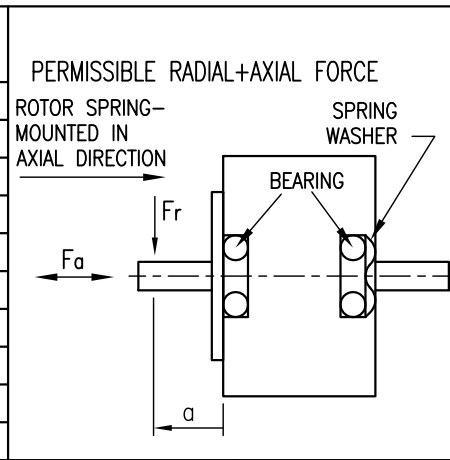
Side view



Rear view



| SPECIFICATION  | BIPOLAR                       |
|--|-------------------------------|
| VOLTAGE (VDC)  | 2.7                           |
| AMPS/PHASE   | 1.0                           |
| RESISTANCE/PHASE (Ohms)@25°C                             | 2.7±15%                       |
| INDUCTANCE/PHASE (mH) @1KHz                              | 4.3±20%                       |
| HOLDING TORQUE (Nm) [lb-in]                              | 0.14 [1.239]                  |
| DETENT TORQUE (Nm) [lb-in]                               | 7x10 <sup>-3</sup> [0.062]    |
| STEP ANGLE (°)+ ACCURACY                                 | 1.8±5%                        |
| BACK-EMF (V) (300 U/min)                                 | 3.0 min.                      |
| ROTOR INERTIA (Kg-m <sup>2</sup> ) [lb-in <sup>2</sup> ] | 1.4x10 <sup>-6</sup> [0.0048] |
| WEIGHT (Kg) [lb]   | 0.18 [0.4]                    |

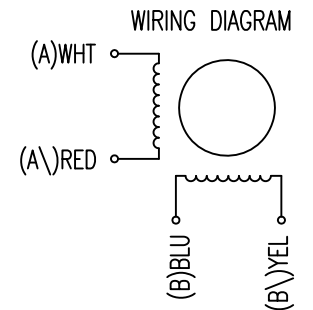


| TYPE OF CONNECTION (EXTERN) | MOTOR   |                   |       |
|-----------------------------|---------|-------------------|-------|
|                             | BIPOLAR | CONNECTOR PIN NO. | LEADS |
| A —                         | 1       | WHT               | A     |
| A\ —                        | 2       | RED               | A\    |
| B —                         | 3       | BLU               | B     |
| B\ —                        | 4       | YEL               | B\    |

|  |                     |       |    |        |    |
|--|---------------------|-------|----|--------|----|
| TEMPERATURE RISE: MAX.80°C (MOTOR STANDSTILL; FOR 2 PHASE ENERGIZED)               | AXIAL-FORCE Fa (N)  | Fa=10 |    |        |    |
| 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    |    |

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

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



|     |                     |          |      |
|-----|---------------------|----------|------|
| 3   | BACK-EMF ADD.       | 03.07.11 | J.W. |
| 2   | ITEM NUMBER MISTYPE | 16.02.10 | J.W. |
| 1   | UL NO.              | 05.03.09 | J.W. |
| REV | DESCRIPTION         | DATE     | APVD |



ST3518M1004

|            |           |       |          |
|------------|-----------|-------|----------|
| SCALE FREE | APVD      | S.Ha. | 08.12.08 |
| X ±0.5     | CHKD      |       |          |
| 1PL ±0.2   | DRN       | J.W.  | 08.12.08 |
| 2PL ±0.1   | SIGNATURE |       | DATE     |
| ANGLE ±30' |           |       |          |

STEPPING MOTOR

DWG.NO

ST3518M1004