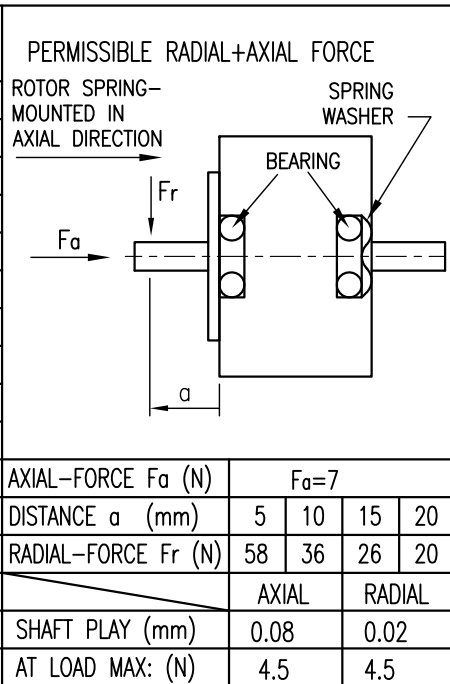


| SPECIFICATION | UNIPOLAR OR BIPOLAR-1 WINDING | BIPOLAR SERIAL |
|--|--|----------------|
| VOLTAGE (VDC) | 5.3 | 7.5 |
| AMPS/PHASE | 0.7 | 0.49 |
| RESISTANCE/PHASE (Ohms)@25°C | 7.6±15% | 15.2±15% |
| INDUCTANCE/PHASE (mH) @1KHz | 6.8±20% | 27.2±20% |
| HOLDING TORQUE (Nm) [lb-in] | 0.16 [1.416] | 0.226 [2.0] |
| DETENT TORQUE (Nm) [lb-in] | 5.9x10 ⁻³ [5.222x10 ⁻²] | |
| STEP ANGLE (°) | 1.8 | |
| STEP ACCURACY (NON-ACCUM) | ±5% | |
| ROTOR INERTIA (Kg-m ²) [lb-in ²] | 3.8x10 ⁻⁶ [1.3x10 ⁻³] | |
| WEIGHT (Kg) [lb] | 0.2 [0.44] | |
| 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) | | |



| AXIAL-FORCE Fa (N) | Fa=7 | | | |
|---------------------|-------|--------|----|----|
| DISTANCE a (mm) | 5 | 10 | 15 | 20 |
| RADIAL-FORCE Fr (N) | 58 | 36 | 26 | 20 |
| | AXIAL | RADIAL | | |
| SHAFT PLAY (mm) | 0.08 | 0.02 | | |
| AT LOAD MAX: (N) | 4.5 | 4.5 | | |

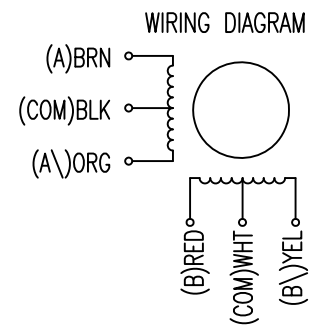
| TYPE OF CONNECTION (EXTERN) | | | MOTOR | | |
|-----------------------------|----------|--------|-------------------|-------|---------|
| UNIPOLAR | BIPOLAR | | CONNECTOR PIN NO. | LEADS | WINDING |
| | 1WINDING | SERIAL | | | |
| A --- | A --- | A --- | 1 | BRN | A |
| COM --- | COM --- | --- | 5 | 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 | + | - | - | + | ↓ | ↑ |



| REV | DESCRIPTION | DATE | DRN | Nanotec® PLUG & DRIVE | | | APVD | S.Ha. | 26.02.07 | STEPPING MOTOR | |
|-----|-------------------------------------|----------|------|---------------------------------------|--|----------------------------------|-----------|-------|----------|----------------|--|
| 2 | change motor length | 04.10.16 | A.S. | Surface specification DIN ISO 1302 | General tolerances DIN ISO 2768- cH | Work piece edge DIN ISO 13715 | CHKD | | | DWG.NO | |
| 1 | rework draw/change depth M3/UL/con. | 09.02.16 | A.S. | | | | DRN | J.W. | 29.11.06 | ST4118S0706-A | |
| REV | DESCRIPTION | DATE | DRN | Surface specification DIN ISO 1302 | General tolerances DIN ISO 2768- cH | Work piece edge DIN ISO 13715 | SIGNATURE | DATE | DWG.NO | | |