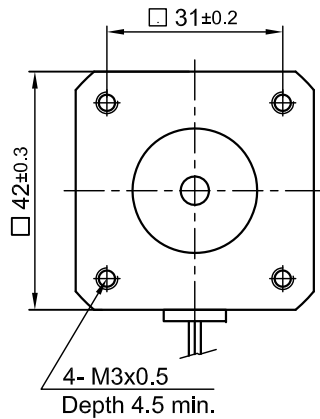
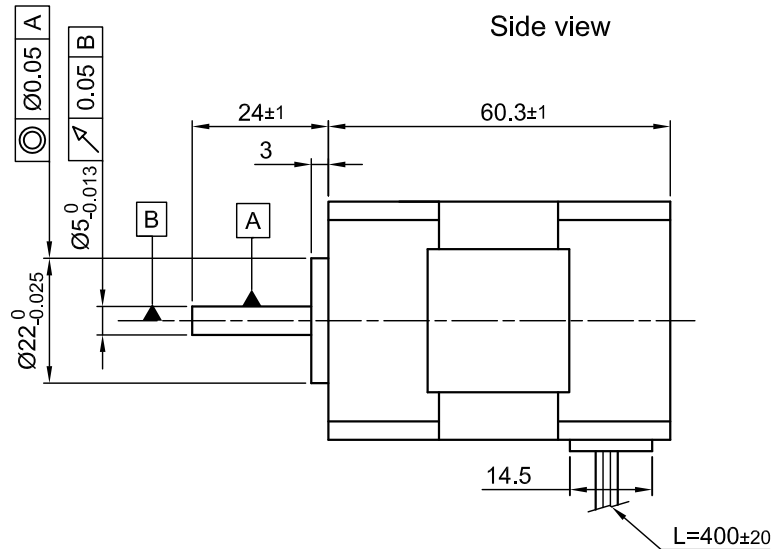


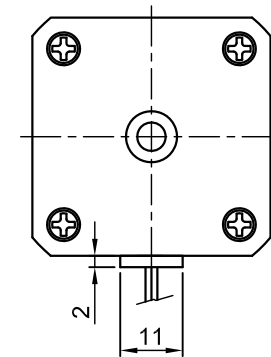
Front view and mounting



Side view

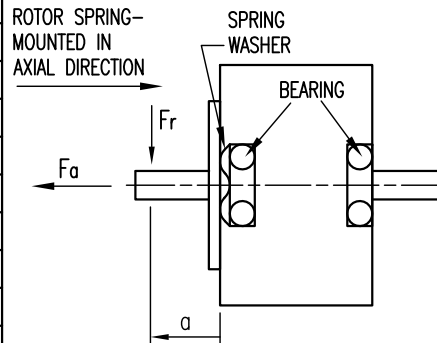


Rear view



| SPECIFICATION  | CONNECTION | STAR      |
|--|------------|-----------|
| NO. OF POL./PHASE  |            | 10/3      |
| VOLTAGE RATED (VDC)  |            | 24        |
| CURRENT RATED/PEAK (AMP)   |            | 3/ 9.2    |
| RESISTANCE/PHASE TO PHASE (Ohms) @20°C   |            | 1.1 ±10%  |
| INDUCTANCE/PHASE TO PHASE (mH) @1KHz   |            | 0.96 ±20% |
| TORQUE RATED/PEAK (Nm)   |            | 0.16/0.5  |
| TORQUE CONSTANT (Nm/A)   |            | 0.0541    |
| POWER RATED (W)  |            | 50        |
| SPEED RATED/NO LOAD (RPM)  |            | 3000/3800 |
| ROTOR INERTIA [g.cm <sup>2</sup> ]   |            | 101       |
| WEIGHT (Kg)  |            | 0.45      |
| TEMPERATURE RISE: MAX.80°C   |            |           |
| 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

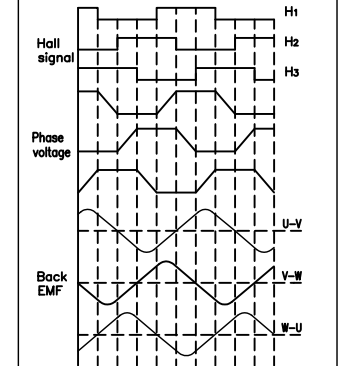


| AXIAL-FORCE Fa (N)  | Fr=10 |        |
|---------------------|-------|--------|
| DISTANCE a (mm)     | 20    |        |
| RADIAL-FORCE Fr (N) | 28    |        |
|                     | AXIAL | RADIAL |
| SHAFT PLAY (mm)     | 0.08  | 0.02   |
| AT LOAD MAX: (N)    | 4.5   | 4.5    |

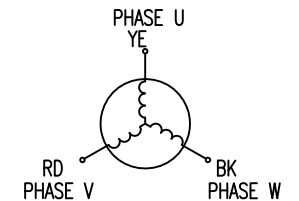
WIRING DIAGRAM

|                          | COLOR | FUNCTION | LEAD GAUGE   |
|--------------------------|-------|----------|--------------|
| MOTOR<br>10 POL.         | YE    | U        | UL1332 AWG18 |
|                          | RD    | V        |              |
|                          | BK    | W        |              |
| HALL<br>30 IMPL.<br>REV. | RD    | +5V      | UL1430 AWG26 |
|                          | BU    | H1       |              |
|                          | GN    | H2       |              |
|                          | WH    | H3       |              |
|                          | BK    | GND      |              |

CW from shaft side



STAR CONNECTION



|     |             |          |      | <b>Nanotec</b> <sup>®</sup><br>PLUG & DRIVE |  |                                  | APVD      | M.P. | 06.05.15 | <b>BRUSHLESS DC MOTOR</b> |
|-----|-------------|----------|------|---|--|----------------------------------|-----------|------|----------|---------------------------|
| A   | -           | 22.09.15 | A.S. | Surface specification<br>DIN ISO 1302       | General tolerances<br>DIN ISO 2768- cH | Work piece edge<br>DIN ISO 13715 | CHKD      |      |          |                           |
| REV | DESCRIPTION | DATE     | DRN  |   |  |                                  | DRN       | A.S. | 06.05.15 |                           |
|     |             |          |      |   |  |                                  | SIGNATURE |      | DATE     | DB41M024030-A             |