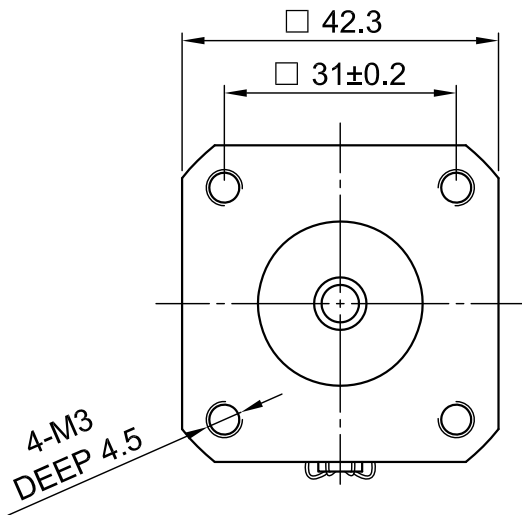
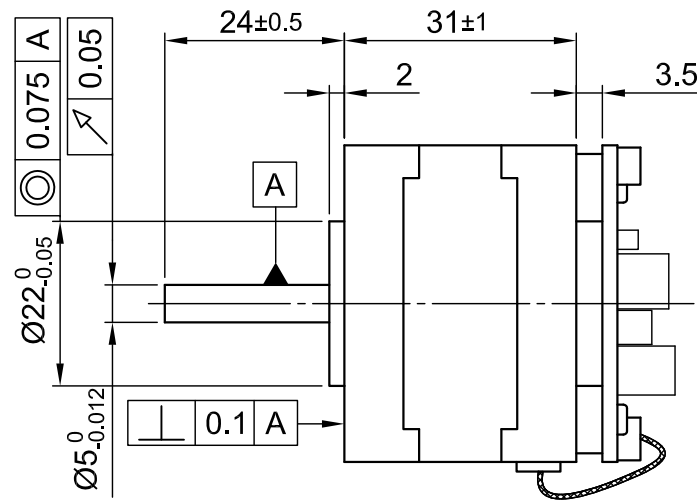


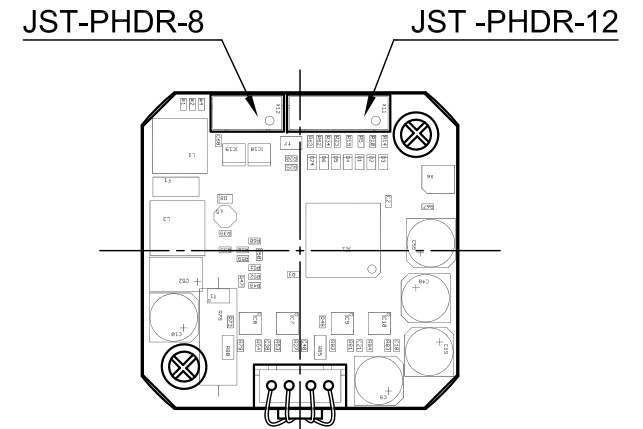
Front view and mounting



Side view



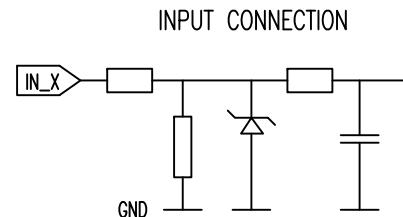
Rear view



| SPECIFICATION               | CONNECTION | BIPOLAR                                       |
|-----------------------------|------------|---|
| SUPPLY VOLTAGE (VDC)        |            | 12 TO 24                                      |
| RATED CURRENT MOTOR (A)     |            | 1.4   |
| PEAK ALLOWED CURRENT (A)    |            | 1.8 MAX.                                      |
| HOLDING TORQUE (Nm) [lb-in] |            | 0.2 [1.77]                                    |
| DETENT TORQUE (Nm) [lb-in]  |            | 6.0x10 <sup>-3</sup> [5.31x10 <sup>-3</sup> ] |
| STEP ANGLE (°) ± ACCURACY   |            | *1.8 TO MICROSTEP                             |
| WEIGHT (Kg) [lb]            |            | 0.21 [0.46]                                   |

\*ADJUSTABLE WITH NANOPRO.

|  |                     |              |
|--|---------------------|--------------|
| OVERTEMPERATURE PROTECTION(ELECTRONICS): 80°                                       | AXIAL-FORCE Fa (N)  | Fa=7         |
| AMBIENT TEMPERATURE 0 ~ 40°C   | 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      |

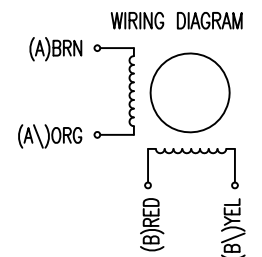


| JST-PHDR-8 |              |
|------------|--------------|
| PIN No.    | Function     |
| 1          | GND          |
| 2          | GND          |
| 3          | Rx-          |
| 4          | Rx+          |
| 5          | Tx-          |
| 6          | Tx+          |
| 7          | GND          |
| 8          | UB 12-24 VDC |

| JST-PHDR-12 |           |
|-------------|-----------|
| PIN No.     | Function  |
| 1           | GND       |
| 2           | Input 1   |
| 3           | Input 2   |
| 4           | Input 3   |
| 5           | Input 4   |
| 6           | Input 5   |
| 7           | Input 6   |
| 8           | Analog In |
| 9           | Output 1  |
| 10          | Output 2  |
| 11          | Output 3  |
| 12          | GND       |

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

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



PD2-04118S1404-2

|            |           |      |          |
|------------|-----------|------|----------|
| SCALE FREE | APVD      | S.H. | 06.09.10 |
| X ±0.5     | CHKD      |      |          |
| 1PL ±0.2   | DRN       | GYQ  | 06.09.10 |
| 2PL ±0.1   | SIGNATURE | DATE |          |
| ANGLE ±30' |           |      |          |

STEPPING MOTOR

DWG.NO

PD2-04118S1404-2

|     |                          |          |      |
|-----|--------------------------|----------|------|
| 1   | TYPE OF CONNECTOR+WEIGHT | 16.01.11 | J.W. |
| REV | DESCRIPTION              | DATE     | APVD |