



Size 23 Stepper Motors

2 Phase Unipolar, 1.8° Step Angle

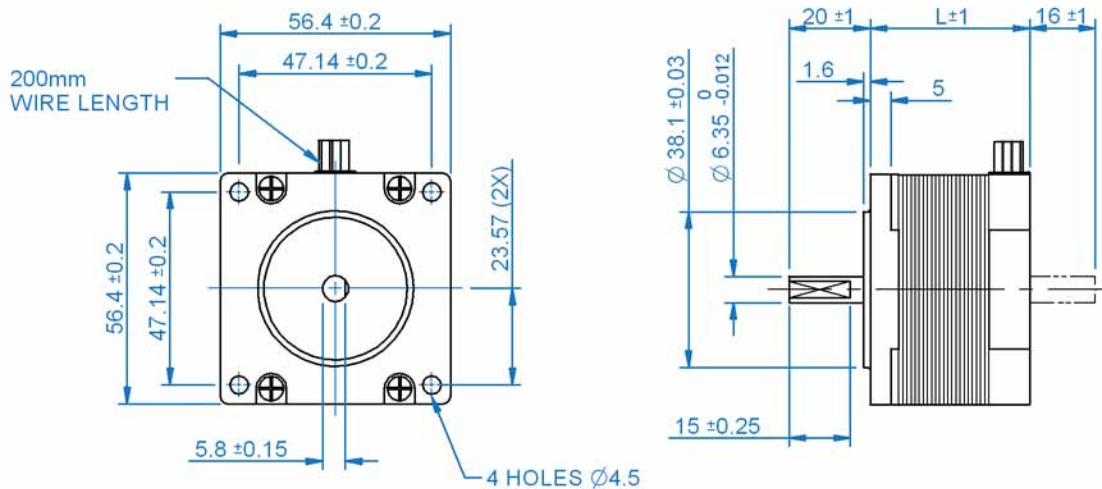
RoHS Compliant

Modified Standards Available On Request:

- Low volume, shaft and wire modifications
- Other wiring and performance options
- Bipolar wiring option available

Associated products:

- Reli-a-Flex® couplings
- Leadscrews



All dimensions in millimetres

| Type Number | | Step Angle Deg. | Rated Voltage V/Phase | Rated Current A/Phase | Winding Resistance Ω/Phase | Inductance mH/Phase | Holding Torque Nm | Motor Length L | Rotor Inertia x10 ⁻⁷ kg.m ² | Mass g | Winding Type |
|--------------|---------------|-----------------|-----------------------|-----------------------|----------------------------|---------------------|-------------------|----------------|---|--------|--------------|
| Single Shaft | Dual Shaft | | | | | | | | | | |
| RSM23N1E2-LC | RSM23N11E2-LC | 1.8 | 2.8 | 2 | 1.4 | 1.4 | 0.39 | 39 | 120 | 450 | 2 |
| RSM23N2E5-LC | RSM23N12E5-LC | 1.8 | 3.6 | 2 | 1.8 | 2.5 | 0.9 | 54 | 260 | 700 | 2 |

Technical Specification:

- Shaft end play0.075mm max. at load 9.8N
- Shaft radial play0.025mm max. at load 4.9N
- Insulation resistance100MΩ min. (at 500V DC)
- Dielectric strength500v AC (1 minute)
- Overhang load52.9N
- Allowable thrust load19.6N
- Operating temperature range-20 to 50°C
- Permissible temperature rise80° max. (resistance method)

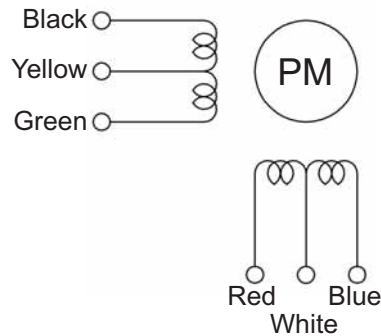
Note : Do not allow the surface temperature of the motor case to rise above 90°C during operation.

Tel : +44 (0) 1484 601002
www.rpmechatronics.co.uk

Fax : +44 (0) 1484 601061
sales@rpmechatronics.co.uk

Wiring Diagram:

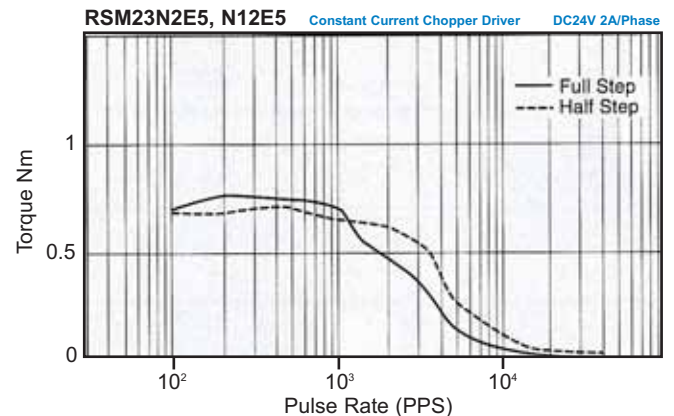
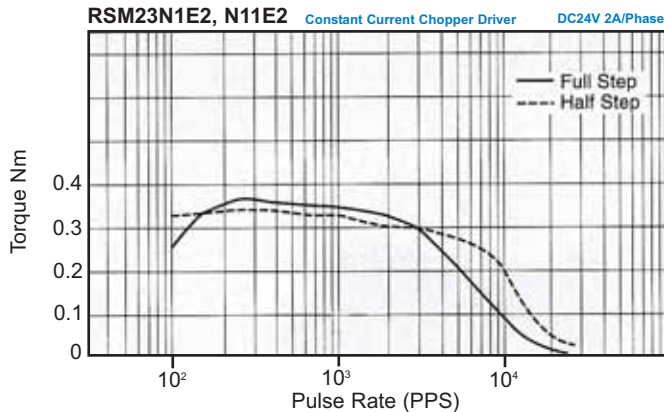
UNIPOLAR



CW rotation mounting end

| Step | Black | Red | Green | Blue | Yellow | White |
|------|-------|-----|-------|------|--------|-------|
| 0 | ON | ON | | | COM | COM |
| 1 | | ON | ON | | COM | COM |
| 2 | | | ON | ON | COM | COM |
| 3 | ON | | | ON | COM | COM |
| 0 | ON | ON | | | COM | COM |

Pulse Rate vs Torque Characteristics:



Available Accessories:

AU9110 : 2-Phase Full/Half Step



Features:

- Unipolar driver
- Full/half step
- Output current range variable up to 2.0A/phase
- Input options:
 - 1 pulse input (pulse string and direction signal) and
 - 2 pulse input (CW pulse string and CCW pulse string)
- Input/output photo-couplers
- Power source +24V DC, $\pm 10\%$ 3A max. (total current consumed)
- External dimensions 72 x 64 x 32mm

AU9114 : 2-Phase Micro Step Driver



Features:

- Unipolar driver
- 1/8 (1600 steps) and 1/16 (3200 steps) micro steps
- Motor output current range 0.5A to 2.0A per phase
- Input options:
 - 1 pulse input (pulse string and direction signal) and
 - 2 pulse input (CW pulse string and CCW pulse string)
- Input/output photo-couplers
- Power source +24V DC, $\pm 10\%$ 3A max. (total current consumed)
- External dimensions 72 x 64 x 35mm

Full drive specifications available on request