

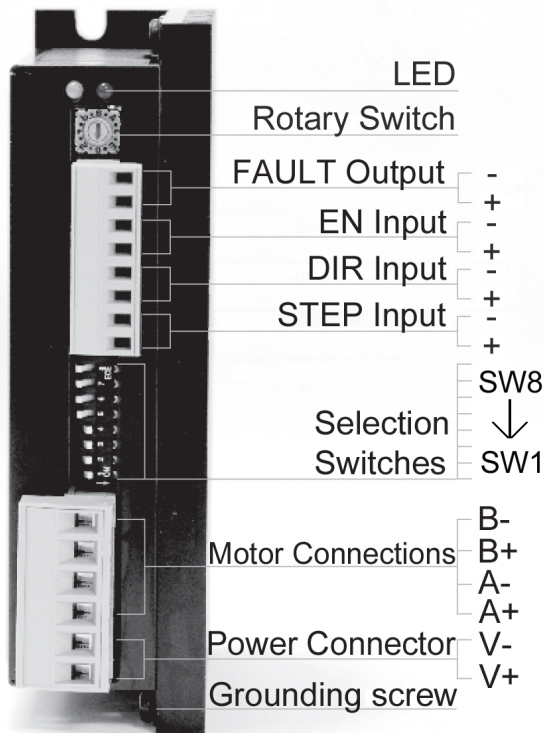
SR8

Step Motor Drive

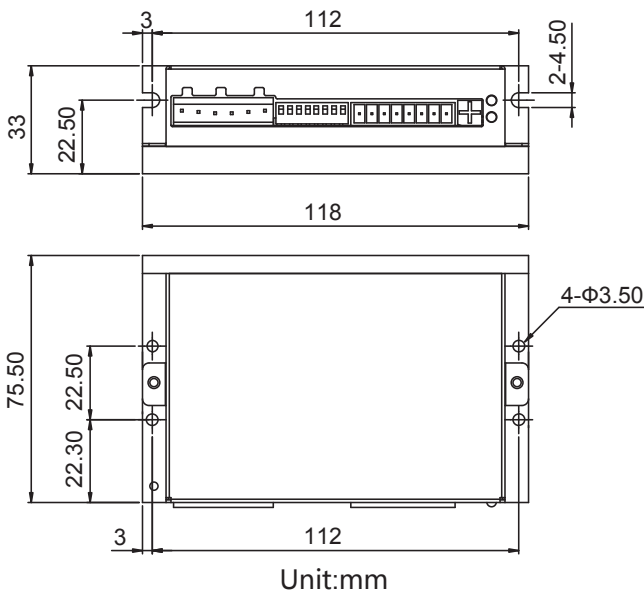
Description

The SR8 series drive is a cost-effective, high performance 2 phase step drive. The design is based on advanced digital current control technology, and features high torque, low noise, and low vibration. The running current and microstep resolution are switch selectable.

Connections - Inputs & Outputs



Mechanical Drawings

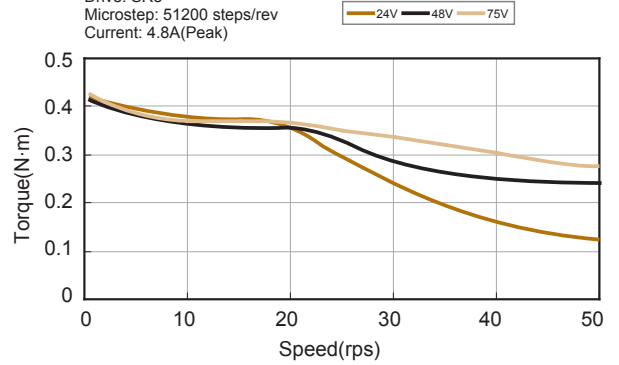


Torque Curves

The torque curves below were generated from some of the recommended motors.

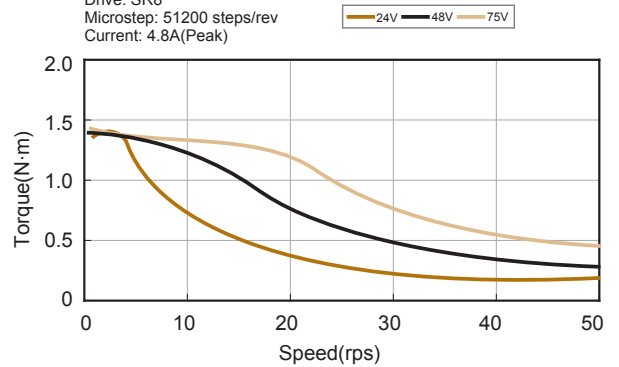
23HS0416-01

Drive: SR8
Microstep: 51200 steps/rev
Current: 4.8A(Peak)



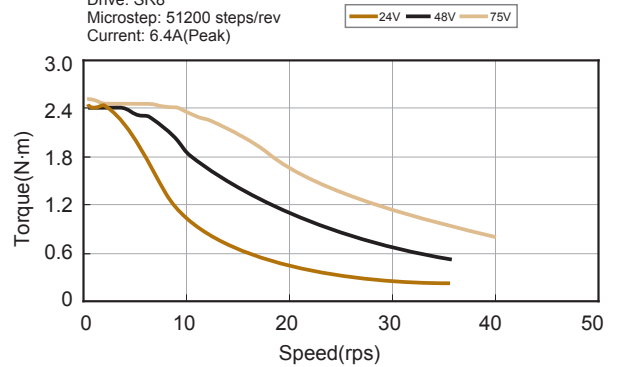
23HS3422-06

Drive: SR8
Microstep: 51200 steps/rev
Current: 4.8A(Peak)



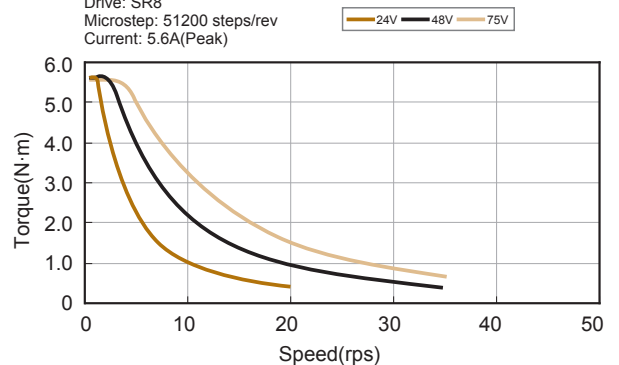
34HD0801-02

Drive: SR8
Microstep: 51200 steps/rev
Current: 6.4A(Peak)



34HD2801-05

Drive: SR8
Microstep: 51200 steps/rev
Current: 5.6A(Peak)



Specifications

Electrical Specifications

| Parameter | Min. | Typ. | Max. | Unit |
|---|------|------|------|------|
| Power Supply | 24 | - | 75 | VDC |
| Output Current (Peak) | 2.4 | - | 7.8 | amps |
| STEP/DIR Input Signal Average Forward Current | 6 | 10 | 15 | mA |
| Step Frequency | 2 | - | 2M | Hz |
| STEP Minimum Pulse Width Hi and Low | 250 | - | - | ns |
| DIR Minimum Pulse Width | 50 | - | - | us |
| Under Voltage Protection | - | 20 | - | VDC |
| Over Voltage Protection | - | 85 | - | VDC |
| STEP/DIR Input Signal Voltage | 4.0 | - | 28 | VDC |
| Driver Initialization Time | - | - | 2.5 | S |

Environmental Specifications

| | |
|----------------------------|---|
| Heat Sinking Method | Natural cooling or fan-forced cooling |
| Surrounding Air Conditions | Avoid dust, oily mist and corrosive air |
| Operating Temperature | 0 - 40°C (32 - 104°F) |
| Maximum Ambient Humidity | 90% non-condensing |
| Shock | 5.9m/s ² maximum |
| Storage Temperature | -10 - 70°C (14 - 158°F) |

Switch Selections

Running current, idle current, microstep resolution and self test are selectable by a switch or a combination of on/off settings of 2 or more switches.

Running current - 3 switches for a total of 8 settings:

| Peak | SW1 | SW2 | SW3 |
|------|-----|-----|-----|
| 2.4A | ON | ON | ON |
| 3.2A | OFF | ON | ON |
| 4A | ON | OFF | ON |
| 4.8A | OFF | OFF | ON |
| 5.6A | ON | ON | OFF |
| 6.4A | OFF | ON | OFF |
| 7A | ON | OFF | OFF |
| 7.8A | OFF | OFF | OFF |

Idle Current (**SW4**) - ON for 50% of running value, OFF for 90%

Microstep resolution - 3 switches for a total of 8 settings:

| Microstep(step/rev) | SW5 | SW6 | SW7 |
|---------------------|-----|-----|-----|
| 400 | ON | ON | ON |
| 800 | OFF | ON | ON |
| 1600 | ON | OFF | ON |
| 3200 | OFF | OFF | ON |
| 6400 | ON | ON | OFF |
| 12800 | OFF | ON | OFF |
| 25600 | ON | OFF | OFF |
| 51200 | OFF | OFF | OFF |

Self test (**SW8**) - ON for self test, OFF for none