



## SV-M010CK

Axis with keyway, Incremental, 100 W



## SPECIFICATIONS

|                              |  |  |  |                            |
|------------------------------|--|--|--|----------------------------|
| Model                        | SV-M010CK  |  |  |                            |
| General specifications       | Type   | Standard motor, Incremental Type (INC)                       |  |                            |
|                              | Applicable servo amplifiers  | SV-010**   |  |                            |
|                              | Rated output   | 100 W  |  |                            |
|                              | Rated torque   | 0.318 N m  |  |                            |
|                              | Instantaneous maximum torque   | 1.11 N m   |  |                            |
|                              | Rated current  | 0.84 Arms  |  |                            |
|                              | Instantaneous maximum current  | 2.9 Arms   |  |                            |
|                              | Rated rotation speed   | 3000 min <sup>-1</sup>                                       |  |                            |
|                              | Highest rotation speed   | 6000 min <sup>-1</sup>                                       |  |                            |
|                              | Torque constant  | 0.413 N m/Arms   |  |                            |
|                              | Rotor moment of inertia  | 0.0665 × 10 <sup>-4</sup> kg·m <sup>2</sup>                  |  |                            |
|                              | Rated power rate   | 15.2 kW/s  |  |                            |
|                              | Rated angle acceleration   | 47800 rad/s <sup>2</sup>                                     |  |                            |
|                              | Excitation method  | Permanent magnet   |  |                            |
|                              | Allowable load moment of inertia ratio   | 20 times   |  |                            |
|                              | Resolution   | 20bit  |  |                            |
|                              | Operating environment  | Operating ambient temperature                                | 0 to +40°C (No freezing)   |                            |
|                              |  | Ambient storage temperature                                  | -20 to +60°C (No freezing)   |                            |
|                              |  | Ambient operating/storage humidity                           | 20 to 80%RH (no condensation)  |                            |
|                              |  | Vibration resistance   | 49 m/s <sup>2</sup> with the servo motor flange used as reference surface<br>(3 directions: up/down, right/left, and forward/backward) |                            |
|                              |  | Shock resistance   | 490 m/s <sup>2</sup> for two times with the servo motor flange used as reference surface   |                            |
|                              |  | Enclosure rating   | Totally enclosed, self-cooling, IP65 (excluding connectors and shaft opening)  |                            |
|                              | Operating environment  | Indoors (No corrosive gas, flammable gas, oil mist, or dust) |  |                            |
|                              | Operating environment  | Altitude   | 1,000 m max. above sea level   |                            |
|                              | Approved standards   | UL/CSA standards   |  |                            |
|                              |  | CE marking   | Low-voltage directive  | EN60034-1, EN60034-5       |
|                              |  |  | EMI  | EN55011 Class A, EN61800-3 |
| EMS                          |  |  | EN61800-3  |                            |
| North American EMI standards |  | FCC Part15 B, ICES-003. Class A                              |  |                            |
| Insulation class             | Class B  |  |  |                            |
| Insulation withstand voltage | 1500 VAC for 1 minute  |  |  |                            |
| Insulation resistance        | 10 MΩ min. with 500 VDC megohmmeter  |  |  |                            |
| Weight                       | Approx 0.4kg   |  |  |                            |
| Note                         | <p>Rates torque of 50 W to 750 W is the continuous permissible torque values in the following conditions:<br/>         -Ambient temperature: 40°C<br/>         -Attached aluminium heatsink:<br/>         50 W to 100 W: 200 × 200 × 6 [mm]<br/>         200 W to 750 W: 250 × 250 × 6 [mm]</p> <p>Rates torque of 1 kW to 5 kW is the continuous permissible torque values in the following conditions:<br/>         -Ambient temperature: 40°C<br/>         -Attached iron heatsink:<br/>         1 kW to 2 kW: 400 × 400 × 20 [mm]<br/>         3 kW, 5 kW: 550 × 550 × 30 [mm]</p> |  |  |                            |

Dimensions

\* Download CAD file or product manual for larger image/text and more detail.

SV-M010CK

