

**Encoder counting direction**  
Forward Reverse

**Homing mark**  
8-M12 Depth 24  
(Even distribution)

**8-M12 Depth 24  
(Even distribution)**

**Power connector (Caution4)**

**Power cable**

**Encoder cable**

**Power cable**

**8-M12 Depth 24  
(Even distribution)**

**Dimensions (ABS)**

**Detail "X"**  
**Detail "Y"**  
**Detail "Z"**

**Caution**  
1.No surface treatment on the rotor. Please remove the anticorrosive coating before using the motor.  
2.Allowable axial load and allowable moment load indicated in the spec. sheet are the maximum allowable load when each load is independently activated.  
Please make sure to consult us in case of combined load at the axial load, radial load, and moment load to be activated, or life of the motor.  
3.Please do not wire the pin (A6-B7) which is reserved for encoder manufacturer to avoid the encoder troubles.  
4.Pass thru hole must be Ø50 or larger.  
5.Motor outer periphery is the casting surface, and certain irregularity may be found.

**Specifications**

| Items                            | Unit  | Specifications                 |
|----------------------------------|---|--------------------------------|
| Rated torque                     | N·m   | 750                            |
| Max torque                       | N·m   | 1700                           |
| Rated current                    | A   | 33                             |
| Rated rotation speed             | rps   | 1                              |
| Rated output                     | kW  | 4.712                          |
| Encoder type                     | —   | Optical absolute (single-turn) |
| The signal output                | —   | Serial communication           |
| Interpolation unit               | —   | Built-in motor                 |
| Detection pulse                  | ppr   | 6,815,744                      |
| Electrical detection resolution  | arc second                                      | 0.191                          |
| Allowable moment load            | N·m   | 3000                           |
| Allowable axial load             | kN  | 55                             |
| Radial runout (No load)          | mm  | 0.04                           |
| Axial runout (No load)           | mm  | 0.04                           |
| Parallelism                      | mm  | 0.1                            |
| Absolute position accuracy       | arc second                                      | ±50 (OP: ±10)                  |
| Repeat accuracy (Back and forth) | arc second                                      | ±1                             |
| Rotor moment of inertia          | kg·m <sup>2</sup>                               | 0.915                          |
| Mass                             | kg  | 140                            |
| Magnetic pole detection          | —   | Absolute position detection    |
| Power Source                     | ACV   | 3-phase 200V AC                |
| Paired servo driver (VCI)        | kW  | 7.5                            |
| Duty type                        | —   | Continuous (S1)                |
| Mounting attitude                | Horizontal (Rotor facing up and down direction) | ★                              |
| Protection class                 | IP  | 44                             |
| Operating temperature            | °C  | 0~40                           |
| Humidity (Non-condensing)        | %   | 85 or lower                    |
| Vibration resistance             | G   | 1                              |
| Withstand voltage                | AC 1500V for 1 min only                         |                                |
| Insulation resistance            | Ω   | 100M or higher                 |

**Nameplate list**

| Index      | Details                  |
|------------|--------------------------|
| Nameplate1 | Motor serial No.         |
| Nameplate2 | Encoder type, Resolution |
| Nameplate3 | Encoder software         |

**Encoder connector pin assignment**

| Typing side | Pin  | Signal | Pin      | Signal   |
|-------------|------|--------|----------|----------|
| B1 → B8     | A1   | +5V    | A5       | N.C.     |
| B1          | B1   | GND    | B5       | N.C.     |
| A2          | +5V  | A6     | Reserved | Caution3 |
| B2          | GND  | B6     | Reserved | Caution3 |
| A3          | SD1  | A7     | Reserved | Caution3 |
| B3          | SD1* | B7     | Reserved | Caution3 |
| A4          | N.C. | A8     | N.C.     |          |
| B4          | N.C. | B8     | FG       |          |

**Power connector pin assignment**

| Pin | Signal | Line color |
|-----|--------|------------|
| D   | Power  | Red        |
| A   | U      | Red        |
| B   | V      | White      |
| C   | W      | Black      |
| D   | Ground | Green      |

**Adaptor : N/MS3101B22-22P (JAE)  
Clamp : N/MS3057-12A (JAE)**

**Dimensions (ABS)**

**Third angle projection**

**NOTE**

| File name | SE-79620.dwg |
|-----------|--------------|
| Approved  |              |
| Checked   |              |
| Designed  |              |

**Surface treatment**

**Refer drawing**

**Material**

**Refer drawing**

**Scale**

**Product no.**

**Model**

**Title**

**Drawing No.**

**REV.**