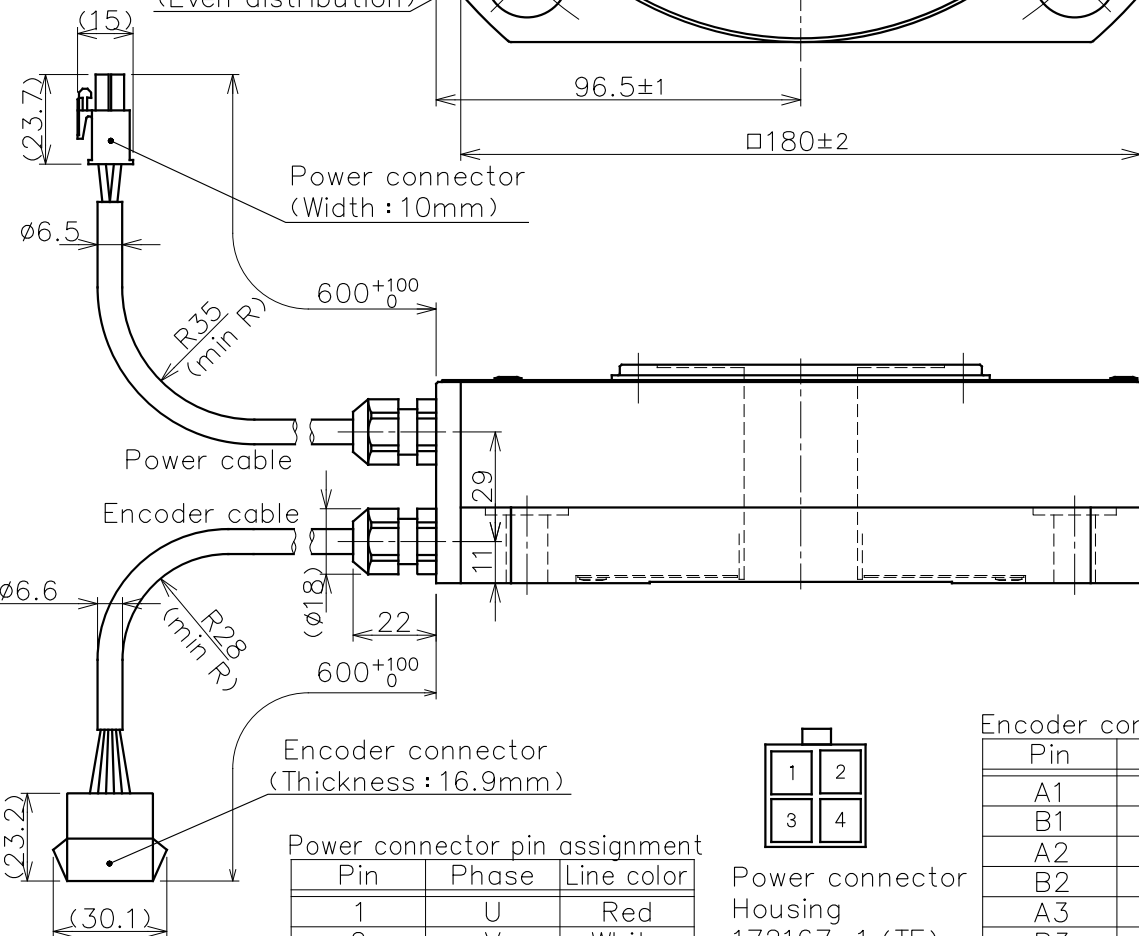
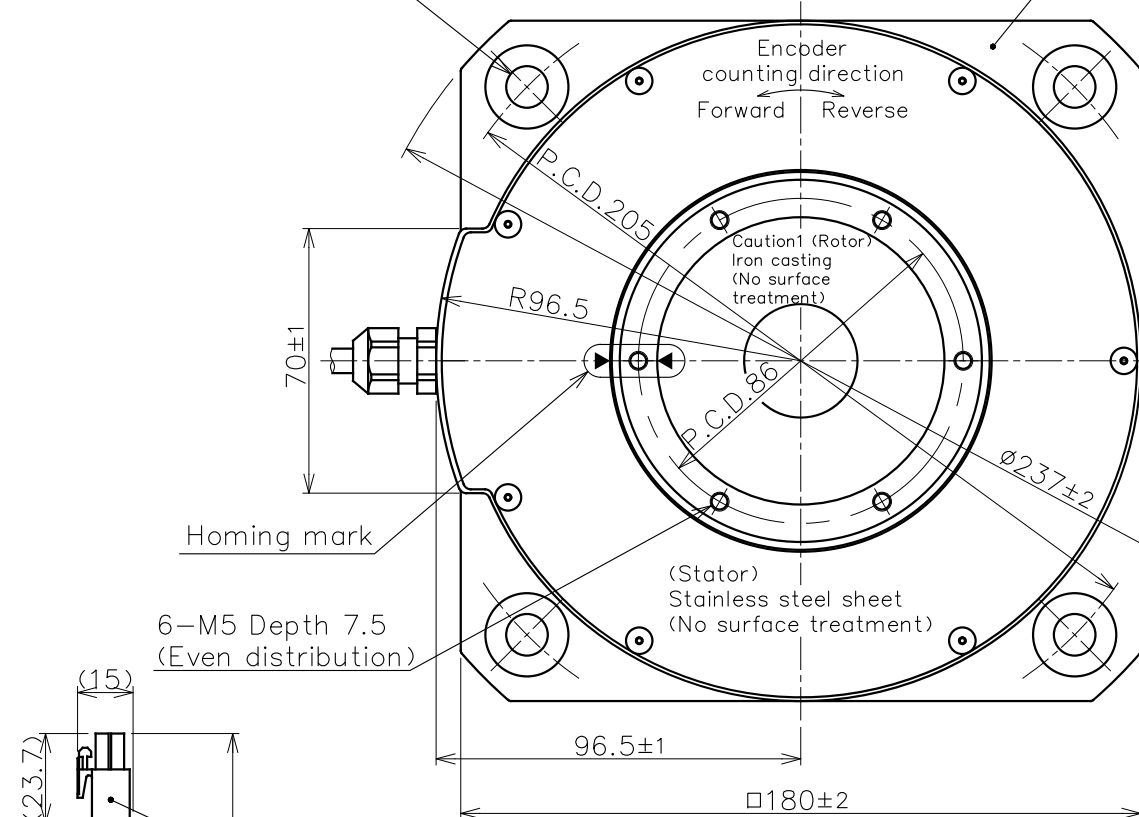
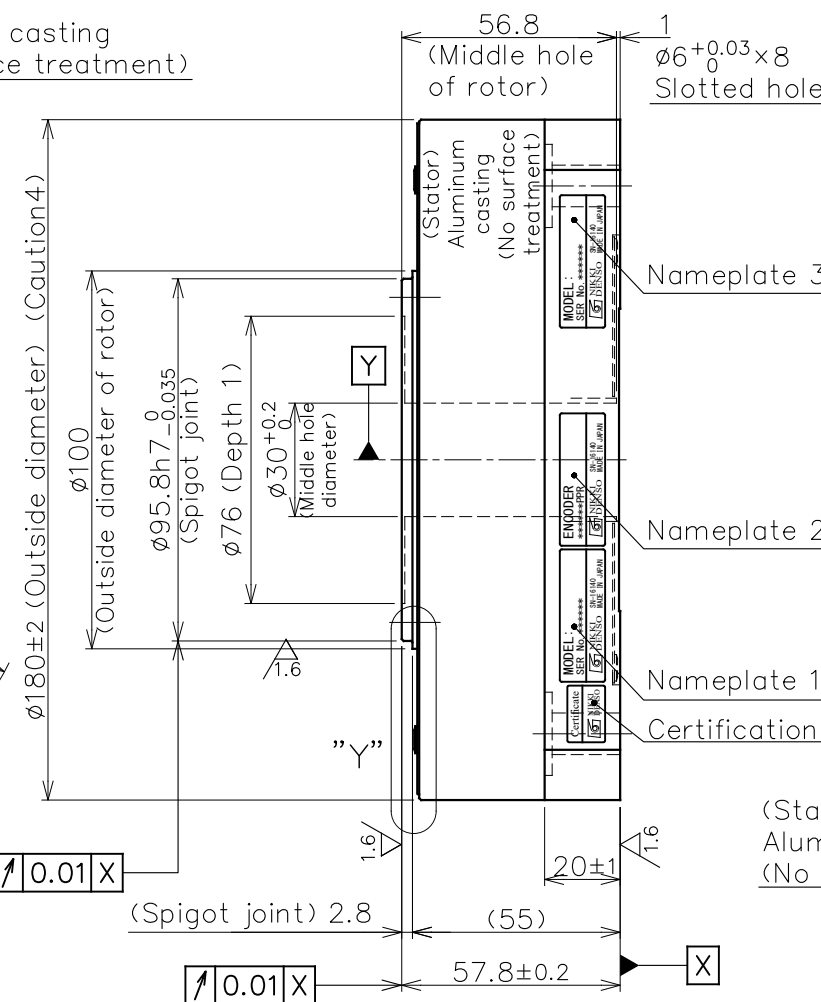


4- $\phi 11$ Hole  
 $\phi 22$  Counter boring depth 2  
(Even distribution)

(Stator)  
Aluminum casting  
(No surface treatment)



**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.Motor outer periphery is the casting surface, and certain irregularity may be found.



Nameplate list

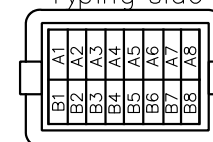
| Index       | Details                  |
|-------------|--------------------------|
| Nameplate 1 | Motor serial No.         |
| Nameplate 2 | Encoder type, Resolution |
| Nameplate 3 | Encoder software         |

Encoder connector pin assignment

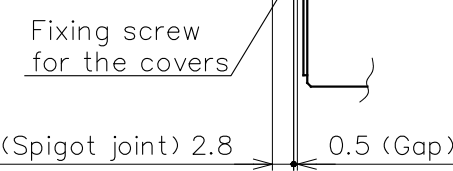
| Pin | Signal | Pin | Signal   |
|-----|--------|-----|----------|
| A1  | EP5    | A5  | N.C.     |
| B1  | GND    | B5  | N.C.     |
| A2  | EP5    | A6  | Reserved |
| B2  | GND    | B6  | Reserved |
| A3  | SD1    | A7  | Reserved |
| B3  | SD1*   | B7  | Reserved |
| A4  | N.C.   | A8  | N.C.     |
| B4  | N.C.   | B8  | FG       |

Un-used PINS : A4, A5, A8, B4 and B5

Typing side



Encoder connector  
Housing (JST)  
J21DPM-16V-KY  
Contact (JST)  
SJ2M-002GF-M1.0N



Detail "Y"

◆ The life of bearing and runout accuracy are different by load condition.  
★ Please make sure to consult with us if the mounting is other than horizontal attitude.

Specifications

| Items                           | Unit                           | Specifications          |
|---------------------------------|--------------------------------|-------------------------|
| Rated torque                    | N·m                            | 17                      |
| Max torque                      | N·m                            | 40                      |
| Rated current                   | A                              | 5.0                     |
| Rated rotation speed            | rps                            | 5                       |
| Rated output                    | W                              | 534                     |
| Encoder type                    | Optical absolute (single-turn) |                         |
| The signal output               | Serial communication           |                         |
| Interpolation unit              | Built-in motor                 |                         |
| Detection pulse                 | ppr                            | 2,097,152               |
| Electrical detection resolution | arc second                     | 0.618                   |
| Allowable moment load           | N·m                            | 20.5                    |
| Allowable axial load            | N                              | 2,000                   |
| Radial runout (No load)         | mm                             | 0.01                    |
| Axial runout (No load)          | mm                             | 0.01                    |
| Rotor moment of inertia         | kg·m <sup>2</sup>              | 0.0027                  |
| Mass                            | kg                             | 5.3                     |
| Magnetic pole detection         | Absolute position detection    |                         |
| Power Source                    | ACV                            | 3-phase 200V AC         |
| Paired servo driver             | VCII or VPS                    | 800W                    |
| Duty type                       | —                              | Continuous (S1)         |
| Mounting attitude               | Horizontal                     | (Rotor facing upward) ★ |
| Protection class                | IP                             | 42                      |
| Operating temperature           | °C                             | 0~40                    |
| Humidity (Non-condensing)       | %                              | 0~85                    |
| Vibration resistance            | G                              | 1                       |
| Withstand voltage               | AC 1500V                       | for 1 min only          |
| Insulation resistance           | Ω                              | 100M or higher          |

| Rev. mark | Rev. note | Approved | Checked | Designed |
|-----------|-----------|----------|---------|----------|
| Entry No. |           |          |         |          |

|          |                          |                         |                           |
|----------|--------------------------|-------------------------|---------------------------|
| NOTE     | File name : SE-79230.dwg | Entry no. R.1-7.1.7.6.3 | Product no. 2.4.7-9.2.8.0 |
| Approved | Checked                  | Designed                | Surface treatment         |
|          |                          |                         | Refer drawing             |
|          |                          |                         | Material                  |
|          |                          |                         | Refer drawing             |
|          |                          |                         | Scale                     |
|          |                          |                         | 1/2                       |
|          |                          |                         | Third angle projection    |

|             |                                                 |
|-------------|-------------------------------------------------|
| Model       | DISC motor ND180-55-FSP (ABS) NMR-SDMJA2A-531AP |
| Title       | Dimensions (ABS) High precision                 |
| Drawing No. | SE-79230                                        |
| REV.        |                                                 |