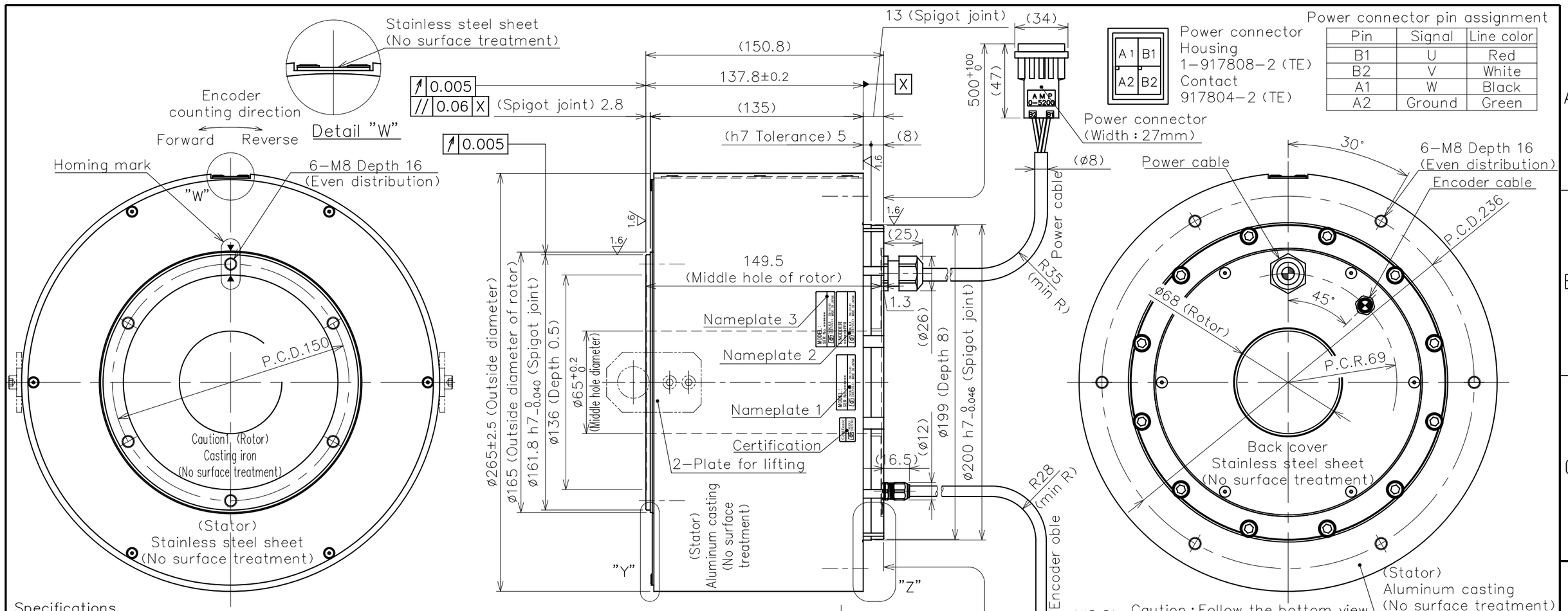





Power connector
Housing
1−917808−2 (TE)
Contact
917804−2 (TE)

Power connector pin assignment

| Pin | Signal | Line color |
|---|---|---|
| B1 | U | Red |
| B2 | V | White |
| A1 | W | Black |
| A2 | Ground | Green |

Encoder connector pin assignment

| Pin | Signal | |
|---|---|---|
| A1 | EP5 | |
| B1 | GND | |
| A2 | EP5 | |
| B2 | GND | |
| A3 | SD1 | |
| B3 | SD1* | |
| A4 | N.C. | |
| B4 | N.C. | |
| A5 | N.C. | |
| B5 | N.C. | |
| A6 | Reserved | (Caution 3) |
| B6 | Reserved | (Caution 3) |
| A7 | Reserved | (Caution 3) |
| B7 | Reserved | (Caution 3) |
| A8 | N.C. | |
| B8 | FG | |

Un−used PINS : A4, A5, A8, B4 and B5

Specifications

| Items | Unit | Specifications |
|---|---|---|
| Rated torque | N·m | 80 |
| Max torque | N·m | 190 |
| Rated current | A | 10 |
| Rated rotation speed | rps | 2 |
| Rated output | W | 1,005 |
| 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 | 450 ♦ |
| Allowable axial load | N | 30,000 ♦ |
| Radial runout (No load) | mm | 0.005 |
| Axial runout (No load) | mm | 0.005 |
| Parallelism | mm | 0.06 (OP : −) ■ |
| Absolute position accuracy | arc second | ±50 (OP : ±10) |
| Repeat accuracy (Back and forth) | arc second | ±1 |
| Rotor moment of inertia | kg·m² | 0.08 |
| Mass | kg | 34 |
| Magnetic pole detection | Absolute position detection | |
| Power Source | ACV | 3−phase 200V AC |
| Paired servo driver | kW | 1.5 |
| Duty type | − | Continuous (S1) |
| Mounting attitude | Horizontal (Rotor facing up and down direction) | ☆ |
| Protection class | IP | 44 |
| Operating temperature | ℃ | 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 |

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.

♦ The life of bearing and runout accuracy are different by load condition.
■ The value adjustment of parallelism is available as option.
For the details of specification value, please consult with our sales.
☆ Please make sure to consult with us if the mounting is other than horizontal attitude.

Nameplate list

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

| Rev. mark Entry no. | Rev. note | APPROVED DATE | CHECKED DATE | DESIGNED DATE |
|---|---|---|---|---|

NOTE File name : SE−79530.dwg

| Approved | Checked | Designed |
|---|---|---|

NIKKI DENSO CKD NIKKI DENSO CO., LTD

Entry no. R1−7176 6
Surface treatment: Refer drawing
Material: Refer drawing
Scale 1 / 2.5
Third angle projection

Product no. 2480−0060
Model: DISC motor DD250−138−LSP5 (ABS) DD25−102L02CNN−P
Title: Dimensions (ABS) _High precision
Drawing No. SE−79530
REV.