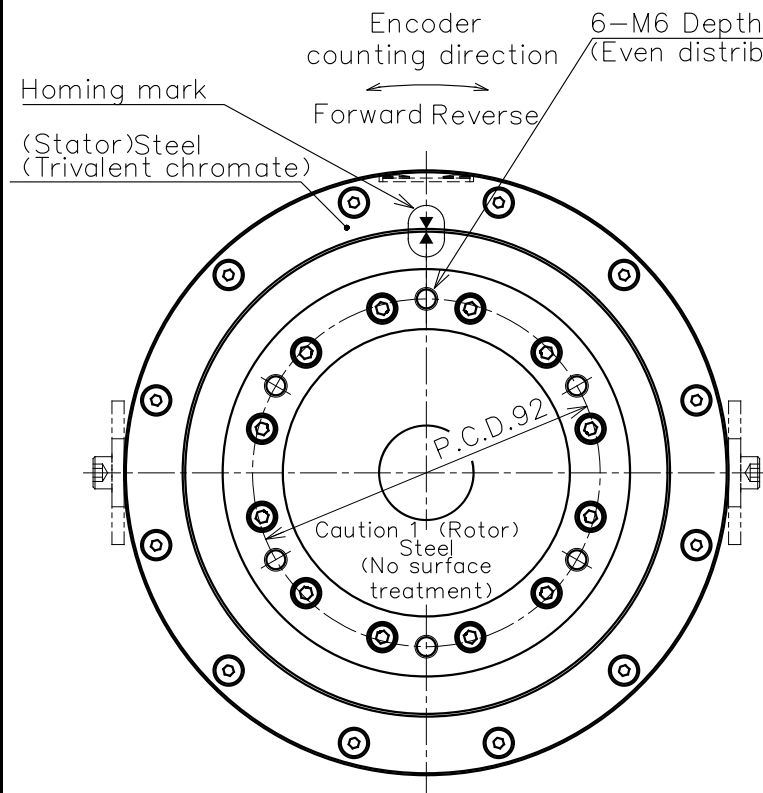


(Product no)	(Model)	Parallelism H (mm)
2 4 8 - 0 2 0 0	DD160-146-LSP5 (ABS) DD16-681L04CNN-P	0.04
2 4 8 - 0 9 2 0	DD160-146-LSP5H (ABS) DD16-681L04CNN-PH	0.02

*Parallelism is indicated in the product serial No. column

$\parallel$ H X
0.005



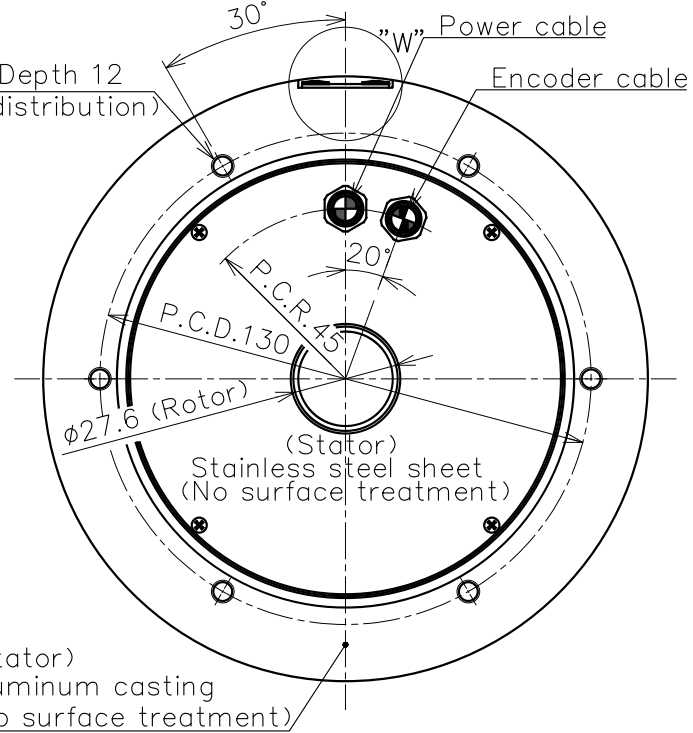
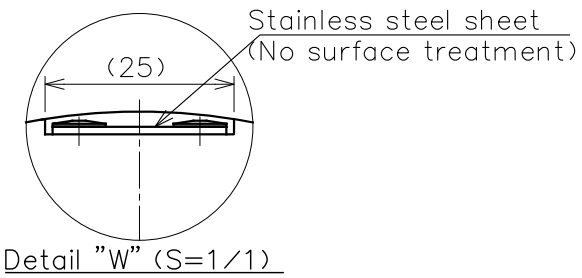
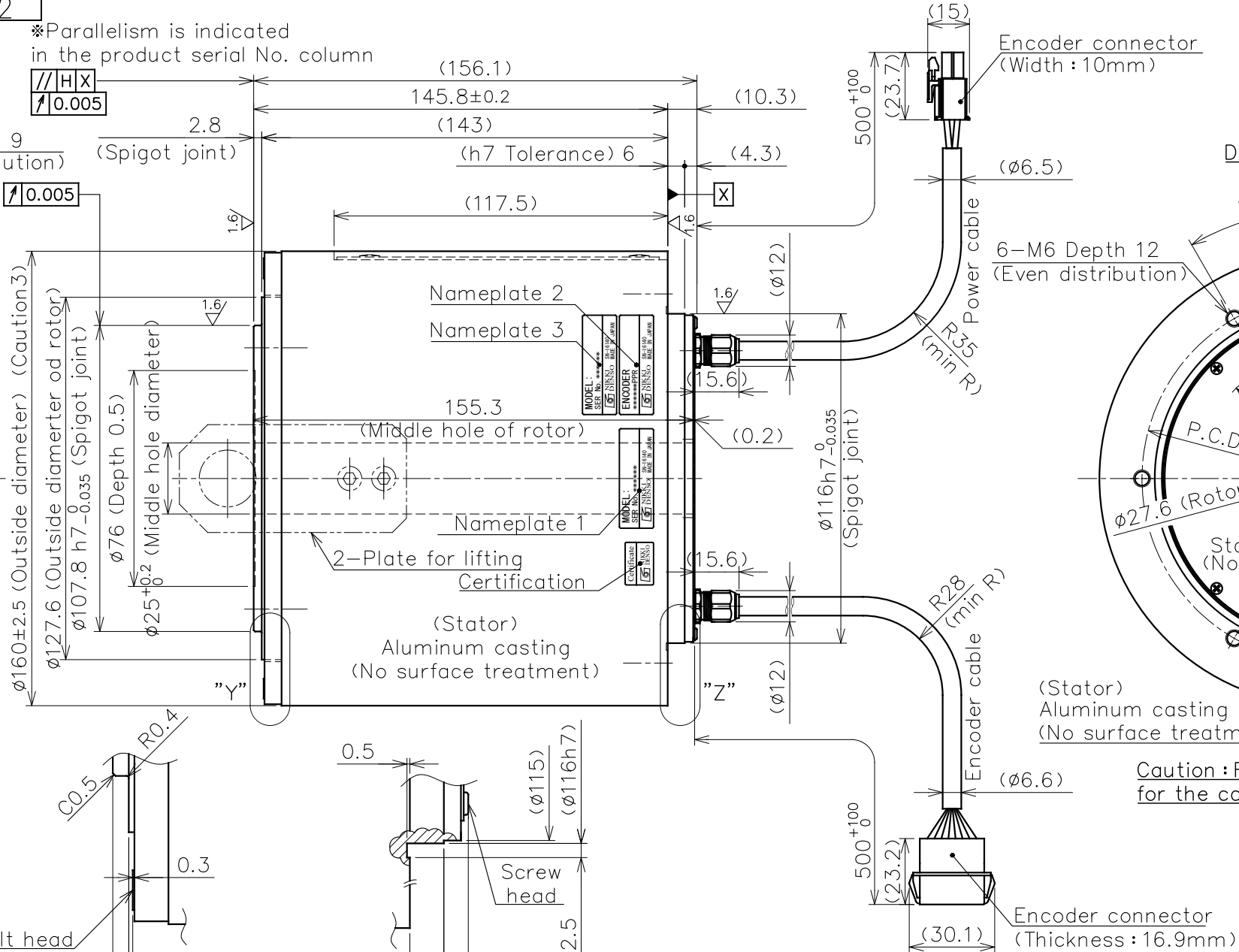
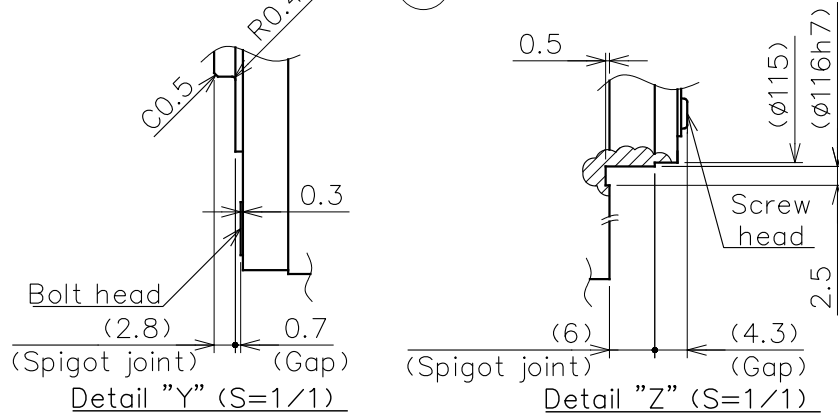
Specifications

Items	Unit	Specifications
Rated torque	N·m	27
Max torque	N·m	62.5
Rated current	A	5.0
Rated rotation speed	rps	4
Rated output	W	678
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	280
Allowable axial load	N	22,500
Radial runout (No load)	mm	0.005
Axial runout (No load)	mm	0.005
Parallelism	mm	Indicated in drawing the top
Absolute position accuracy	arc second	±50 (OP: ±10)
Repeat accuracy (Back and forth)	arc second	±1
Rotor moment of inertia	kg·m ²	0.0074
Mass	kg	13.5
Magnetic pole detection	Absolute position detection	
Power Source	ACV	3-phase 200V AC
Paired servo driver	kW	0.8
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

- No surface treatment on the rotor. Please remove the anticorrosive coating before using the motor.
- 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.
- Motor outer periphery is the casting surface, and certain irregularity may be found.
- Please do not wire the pin (A6~B7) which is reserved for encoder manufacturer to avoid the encoder troubles.
- Parallelism guaranteed value for the upper surface portion of rotor spigot joint is the value when the motor rotor and stator are matching at the homing mark while motor is stopping. Axial runout is not included in this value.

- ★ 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.



Caution: Follow the bottom view for the cable layout

Nameplate list	
Index	Details
Nameplate1	Motor serial No.
Nameplate2	Encoder type, Resolution
Nameplate3	Encoder software

Power connector pin assignment			
Pin	Signal	Line color	
1	U	Red	
2	V	White	
3	W	Black	
4	Ground	Green	
Housing: 172167-1 (TE)			
Contact: 170364-1 (TE)			

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
JST			
Housing: J21DPM-16V-KY			
Contact: SJ2M-002GF-M1.0N			

NOTE File name: SE-79470.dwg

Entry no. R.1-7.1.7.6.6

Approved Checked Designed

Surface treatment Refer drawing

Material Refer drawing

Scale 1/2

Third angle projection

Rev. mark Entry no. Rev. note

APPROVED CHECKED DESIGNED

DATE DATE DATE

NIKKI DENSO CKD NIKKI DENSO CO., LTD

Product no. Indicated in drawing the top

Model

DISC motor DD160-146-LSP5 (H) (ABS) DD16-681L04CNN-P (H)

Title

Dimensions (ABS) High precision Parallelism

Drawing No.

REV.

SE-79470