

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

#### Caution

- 1.No surface treatment on the hatching area of rotating position (top surface and spigot joint)  
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.If the rated torque of 3.4Nm (Max. torque 8.5Nm) output is required for VC2 or VPH servo driver, please pair with the servo driver of 200W output.

Power connector pin assignment

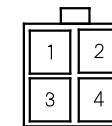
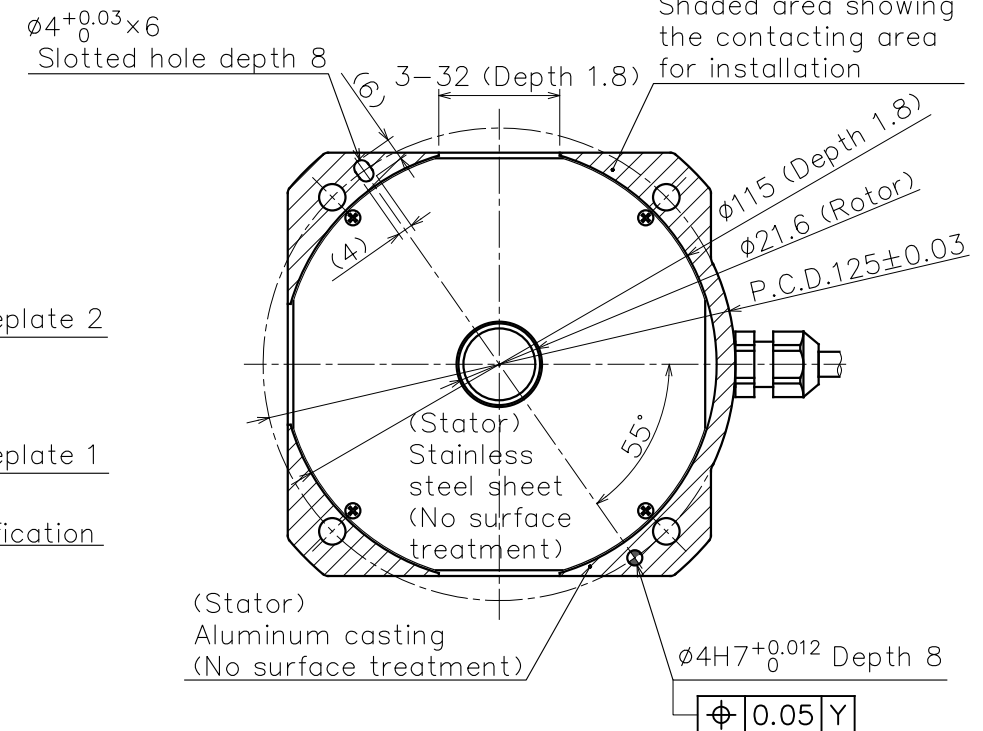
Pin	Phase	Line color
1	U	Red
2	V	White
3	W	Black
4	Ground	Green

Encoder connector pin assignment

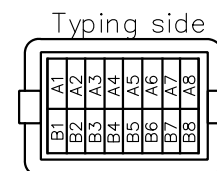
Pin	Signal	Pin	Signal
A1	EP5	A5	N.C.
B1	GND	B5	N.C.
A2	EP5	A6	Reserved
B2	GND	B6	Reserved
A3	SD1	A7	Reserved
B3	SD1*	B7	Reserved
A4	N.C.	A8	N.C.
B4	N.C.	B8	FG

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

- ◆ 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.



Power connector  
Housing  
172167-1 (TE)  
Pin  
170364-1 (TE)



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

#### Specifications

Items	Unit	Specifications	
Power Source	ACV	Single Phase 100V	
Paired servo driver		100W (VCH,VPH)	200W (VPS)
Rated torque	N・m	3.0	3.4
Max torque	N・m	7.5	8.5
Rated current	A	2.0	2.3
Rated rotation speed	rps	5	
Rated output	W	106	
Encoder type	Optical absolute (single-turn)		
The signal output	Serial communication		
Detection pulse	ppr	2,097,152	
Electrical detection resolution	arc second	0.618	
Allowable moment load	N・m	6.1	
Allowable axial load	N	1,100	
Radial runout (No load)	mm	0.01	
Axial runout (No load)	mm	0.01	
Rotor moment of inertia	kg・m <sup>2</sup>	0.00039	
Mass	kg	2.2	
Magnetic pole detection	Absolute position detection		
Duty type	—	Continuous (S1)	
Mounting attitude	Horizontal	(Rotor facing upward)	
Protection class	IP	42	
Operating temperature	℃	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	

NOTE File name : SE-79050.dwg			Entry no. R1-7,1,7,6,1	Product no. 2,4,7-9,2,2,1
Approved	Checked	Designed	Surface treatment	Model
			Refer drawing	Disc motor NO110-65-FSP (ABS 100V) NMR-SAEJA1A-101AP
			Material	Title
			Refer drawing	Dimensions (ABS 100V) High precision
			Scale 1/2	Drawing No.
			Third angle projection	REV.
Rev. mark	Rev. note	Approved Date	Checked Date	Designed Date
Entry No.				

NIKKI DENSO CKD NIKKI DENSO CO., LTD

SE-79050