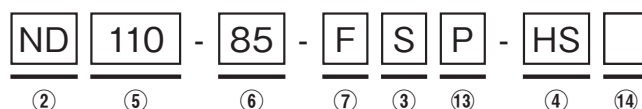
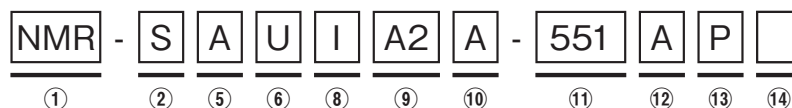


τ DISC ND-s HS Series Model and motor type description

Motor type



Model



①	NMR…Direct drive motor Series			
②	Middle product classification (1)	Motor type	ND…ND-s Series / ND-s HS Series	
		Model	S…ND-s Series/ ND-s HS Series	
③	Middle product classification (2)	S…ND-s Series/ ND-s HS Series/ DD-s Series/ HD-s Series		
④	Middle product classification (3)	HS…ND-s HS Series		
⑤	Nominal diameter *1	With flange	Flange less	
		A…110 (Actual range 110 to 119mm)	R…140 (Actual range 140 to 149mm)	S…180 (Actual range 170 to 189mm)
⑥	Nominal height *1	With flange	Flange less	
		U…85 (Actual range 80 to 99mm)	E…70/95 (Actual range 70 to 95mm)	F…95 (Actual range 96 to 119mm)
⑦	Motor flange	F…With flange	L…Flange less	
⑧	Encoder type	I…Incremental encoder		
⑨	Power supply voltage	A2…200 VAC		
⑩	Order of design	A→B→C…Starting from A		
⑪	Rated output	Example) 551 … 55 1 =55×10 ¹ =550W		
		└ Exponent part of the power of 10 └ Significant figures		
⑫	Brake (with or without)	A…Without brake		
⑬	Table surface rotation accuracy	Without…Standard specification		P…High accuracy specification (option)
⑭	Special model code	Without…Standard specification	-R + sequential number…Quasi standard spec	-S + sequential number…Special model spec

*1 The motor type is represented by a numerical value. Nominal dimensions may be different from actual dimensions. For details, refer to the dimensions.

* Dimensions are subject to change without prior notice to improve the product. Before designing, download the latest dimensions from the CKD Nikki Denso website.

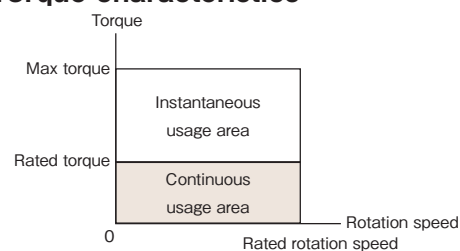
About the encoder type

The encoder type of the ND-s HS Series is the incremental encoder only.

Common specifications

Ambient operating temperature	0 to 40°C
Ambient operating humidity	85% or less; no condensation
Installation location	Do not install in a harmful atmosphere containing corrosive gas, grinding oil, metal dust, oil, etc. Install indoors, do not exposed to direct sunlight.
Installation direction	Horizontal with the rotor facing upward. *If the installation direction is not horizontal with the rotor facing upward, consult with our sales staff.
Cooling method	Natural air cooling
Insulation class	Class F
Withstand voltage	1,500 VAC, 1 minute
Protection class	IP42
Height above sea level	1,000 m or less
Vibration resistance	1G (3 directions, 2 hours each)
Shock resistance	30G (3 directions, 2 times each)

Torque characteristics



* If the locking operation or an equivalent operation (ultra low speed rotation or reciprocation within a very small range of angles) is performed continuously, the electronic thermal value may be reduced for motor protection.
When you plan to perform the above operation, contact our sales staff.

Individual specifications

Motor type *1			ND110-85-FS(P)-HS		ND140-70-LS(P)-HS		ND140-95-LS(P)-HS		ND180-95-LS(P)-HS		
Model *1			NMR-SAUIA2A-551A(P)		SREIA2A-661A(P)		SRFIA2A-102A(P)		SSEIA2A-162A(P)		
Flange type			With flange		Flange less		Flange less		Flange less		
Power supply used			VAC		200		200		200		
Outside diameter			mm		112		145		145		
Height *2			mm		86(85.8)		73(72.8)		98(97.8)		
Rated torque			N·m		5.9		8		9.6		
Max torque			N·m		14.1		19.2		22		
Rated rotation speed			rps		15		11		11		
Rated output			W		556		753		663		
Rated current			A		3.4		5		5.6		
Encoder type			Incremental		Incremental		Incremental		Incremental		
Detection pulse			ppr		1,280,000		1,600,000		1,600,000		
Detection resolution			arcsec		1.02		0.810		0.810		
Allowable moment load *3			N·m		6.1		17.3		17.3		
Allowable axial load *3			kN		1.1		2.4		2.4		
Table surface rotation accuracy *4			Radial run out (no load)		μm		30(Standard) / 10(High accuracy spec)		40(Standard) / 10(High accuracy spec)		
			Axial run out (no load)		μm		30(Standard) / 10(High accuracy spec)		40(Standard) / 10(High accuracy spec)		
Absolute positioning accuracy *5			arcsec		±15(When the absolute position compensation function option is used)						
Repeated positioning accuracy(when reciprocating)			arcsec		±2		±1		±1		
Rotor moment of inertia			kg·m ²		0.00061		0.00084		0.00134		
Weight			kg		3.1		4.1		5.9		
Magnetic pole detection method					Selection of magnetic pole sensor detection or automatic magnetic pole detection		Selection of magnetic pole sensor detection or automatic magnetic pole detection		Selection of magnetic pole sensor detection or automatic magnetic pole detection		
Paired driver			VPH Series		NCR-H□		2401□-A-□□□		2801□-A-□□□		
			VCII Series		NCR-□DA□		A2A-401J		A2A-801J		
							A2A-801J		A2A-152J		
							A2A-152J		A2A-152J		

*1 Shown in parentheses are the motor type and model of the High accuracy specification (option).

*2 Shown in parentheses is the value of the High accuracy specification (option).

*3 The life of the bearing and the run out accuracy differ depending on the load.

For the points to note with regard to the allowable loads, refer to "About the allowable loads of τ DISC" on p.44.

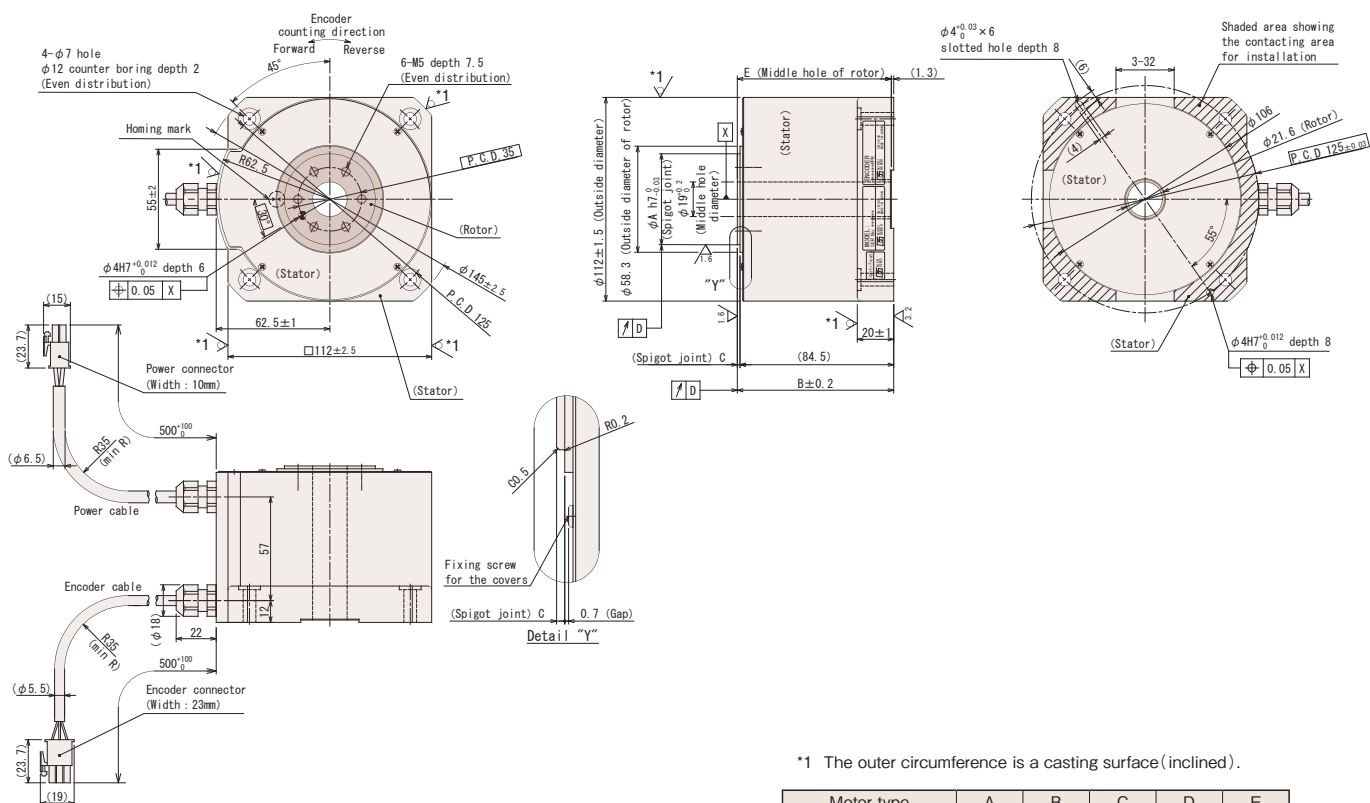
*4 For details, refer to "High accuracy specification option for τ DISC table surface rotation accuracy" on p.43.

*5 For details, refer to "τ DISC absolute position compensation function option" on p.42.

■ τ DISC ND-s HS Series Dimensions

○ ND110-85-FS(P)-HS

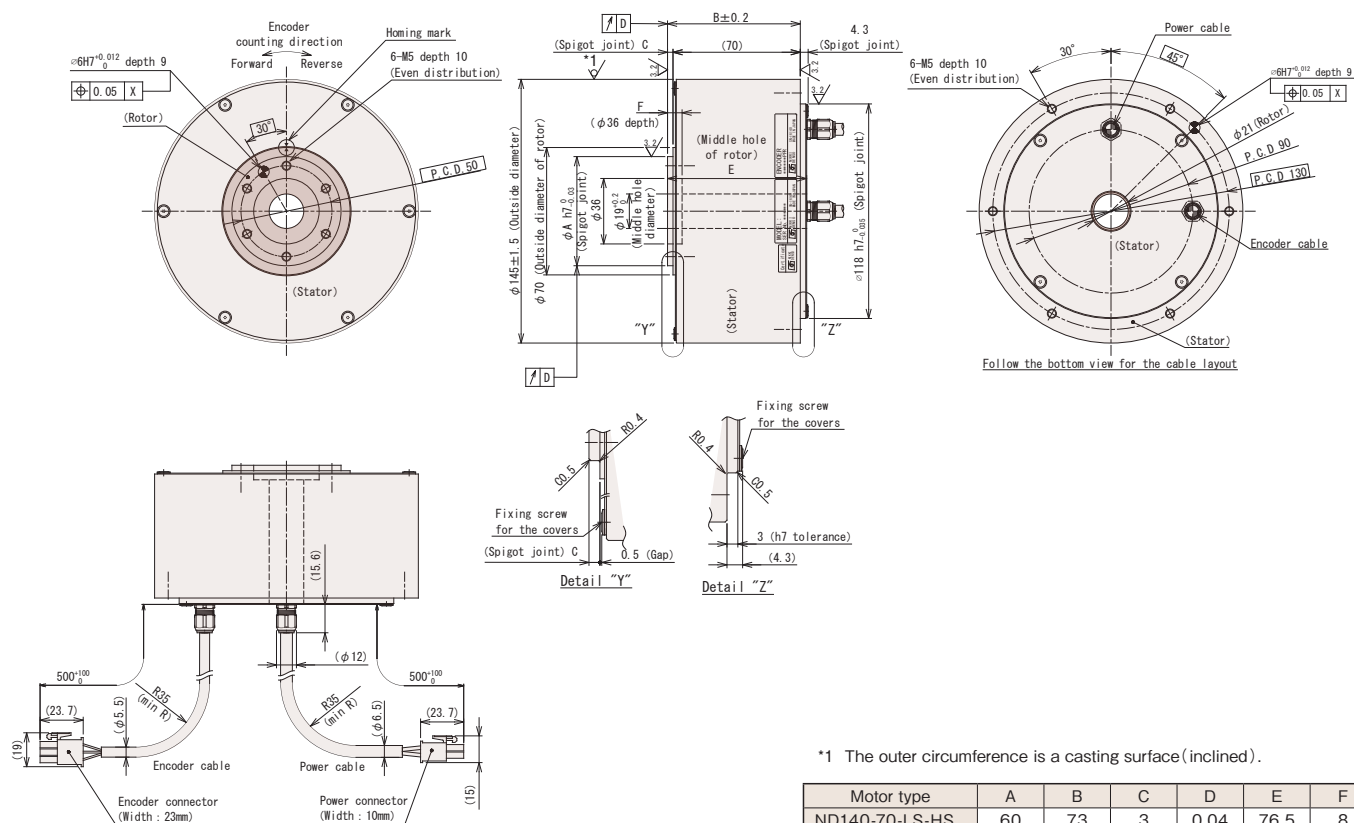
NMR-SAU1A2A-551A(P)



*1 The outer circumference is a casting surface (inclined).

○ ND140-70-LS(P)-HS

NMR-SRE1A2A-661A(P)

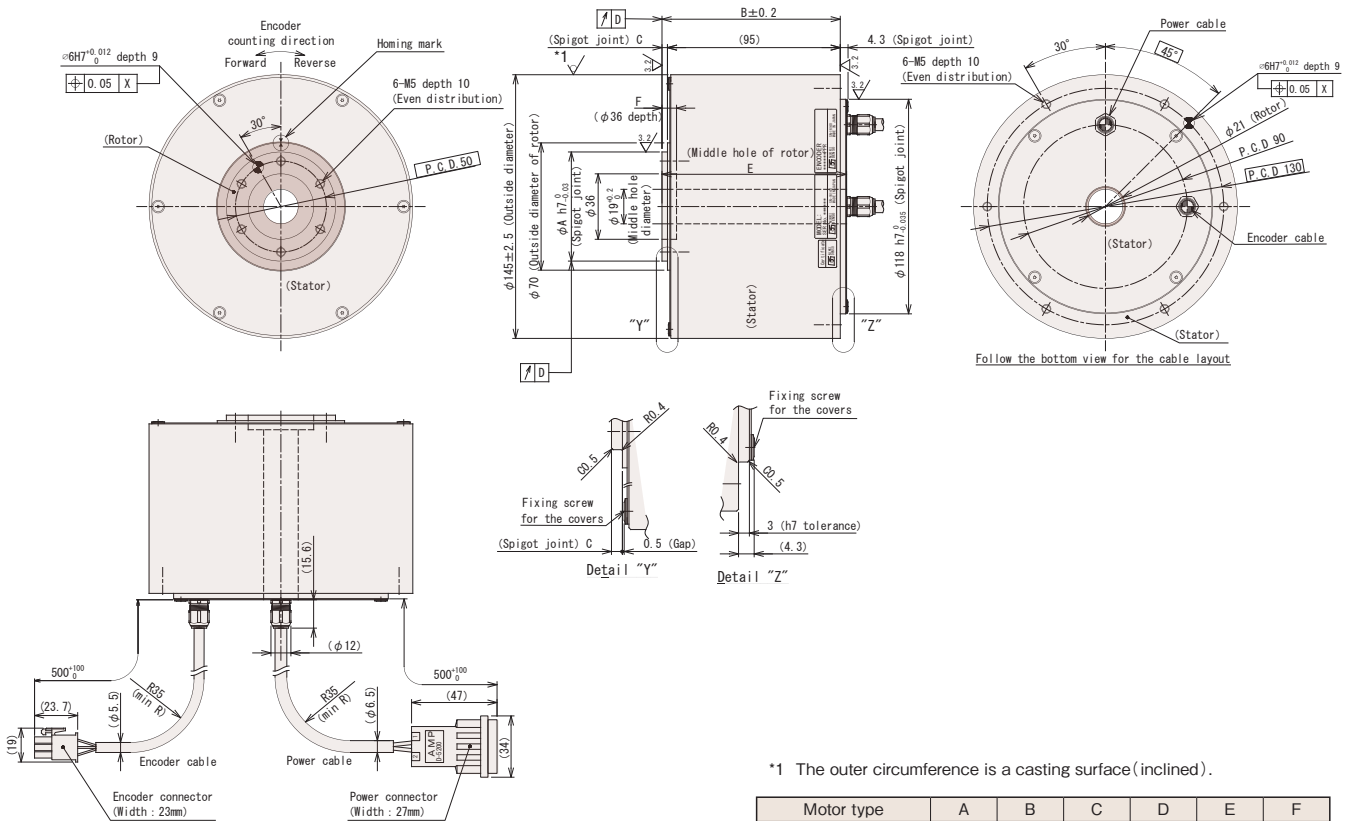


*1 The outer circumference is a casting surface (inclined).

■ τ DISC ND-s HS Series Dimensions

○ ND140-95-LS(P)-HS

NMR-SRFIA2A-102A(P)



○ ND180-95-LS(P)-HS

NMR-SSEIA2A-162A(P)

