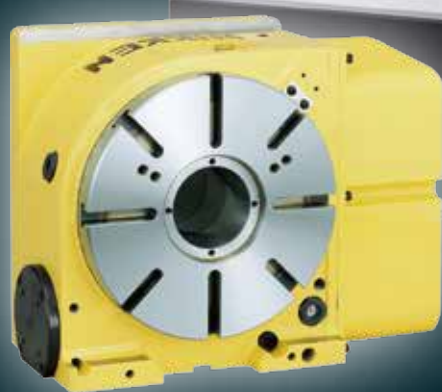


**NIKKEN**

# CNC ROTARY TABLE for OKUMA



**CNC260OSP4**



**5AX-350OSP4**

**NIKKEN KOSAKUSHO WORKS, LTD.**  
CAT.NO.8502 ©

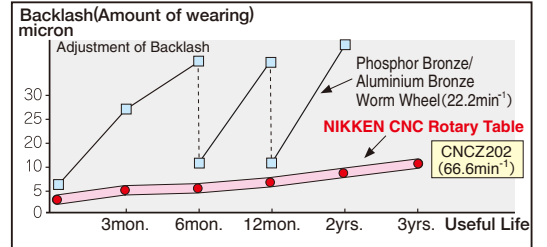
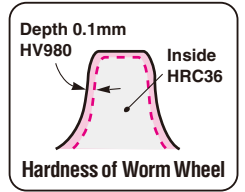
# ANTI-WEARING, HIGH RIGIDITY and HIGH SPEED ROTATION

## Worldwide Field-proven NIKKEN CNC Rotary Table



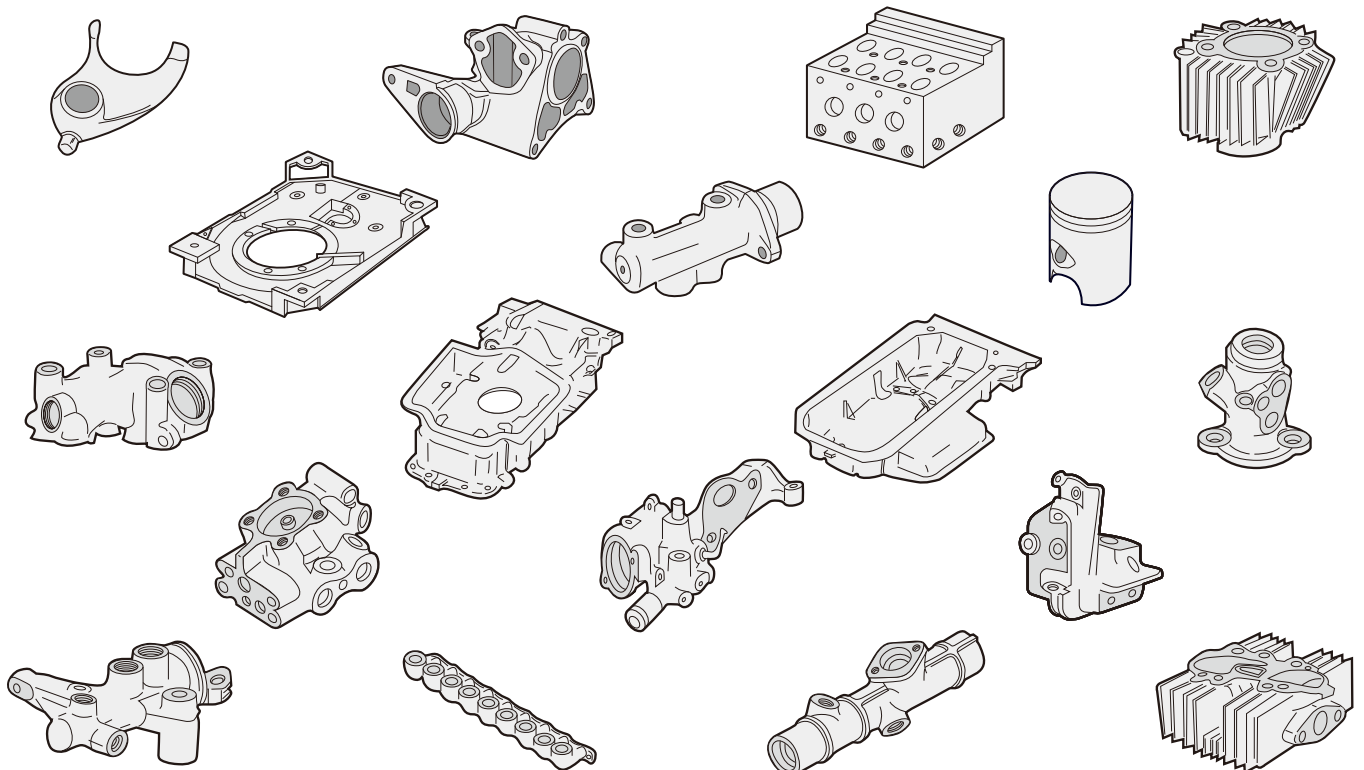
### Worm Wheel

Material is special NIKKEN order made steel. Specially hardened and furthermore ion-nitrided on the tooth. Thus, the problem of the sliding friction is solved. The hardness of the tooth surface and inside is shown at right hand side.



It is not exaggeration that the most important parts of the CNC rotary table is worm system. Please choose NIKKEN CNC rotary table with special worm system for our anti-wearing, high rigidity and high speed rotation.

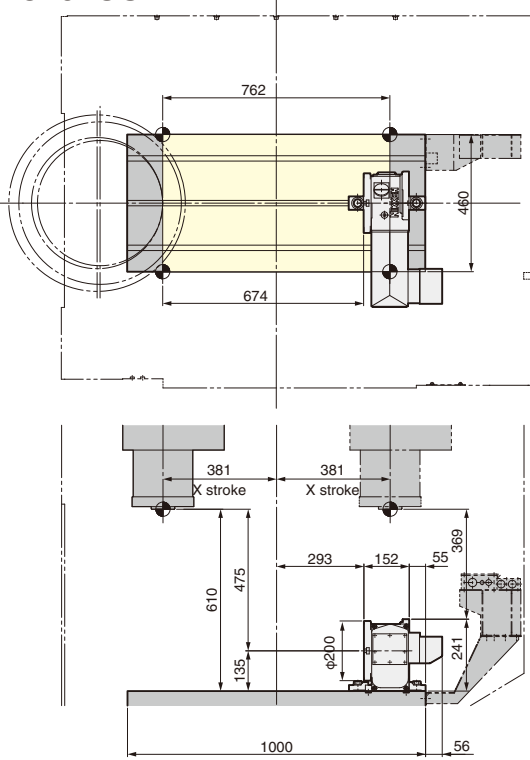
## Samples



# CNC ROTARY TABLE for MB-46VAE/VBE, GENOS, M 460-VE

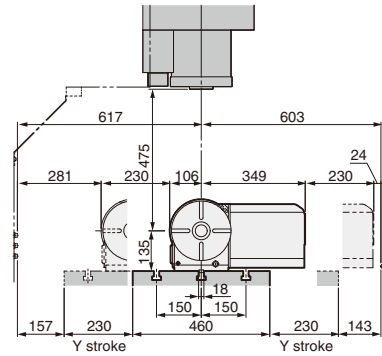


## CNC202OSP4

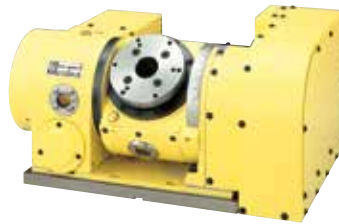
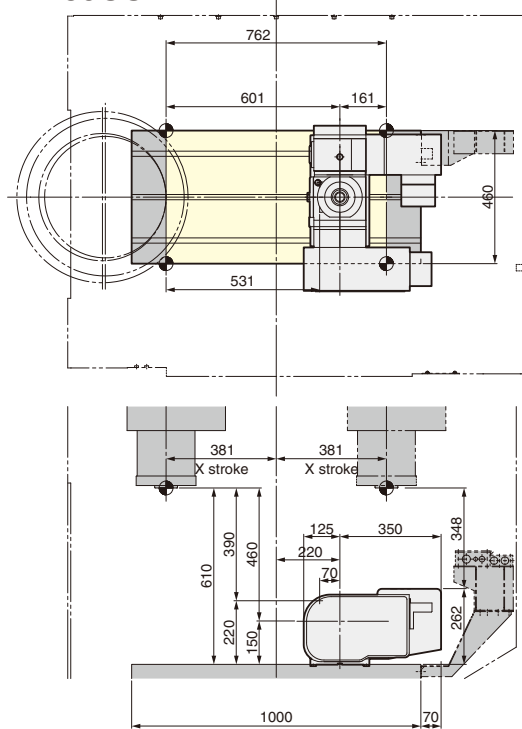


### φ200mm type CNC ROTARY TABLE

- Diameter of Table :φ200mm
  - MAX. Work Load :200kg (Horizontal) 100kg (Vertical)
  - MAX. Rotation Speed :22.2 (min<sup>-1</sup>), **44.4 (min<sup>-1</sup>)\*1**
  - Indexing Accuracy :±20sec.
  - Brake Torque :303Nm (Pneumatic)
  - Net Weight :55kg
  - Servo Motor :BL-ME24M-50SN
  - Spindle Hole :φ60mm<sub>H7</sub>×φ40mm Through Hole
- \*1:High speed Z series.Servo motor : 2,000min<sup>-1</sup>

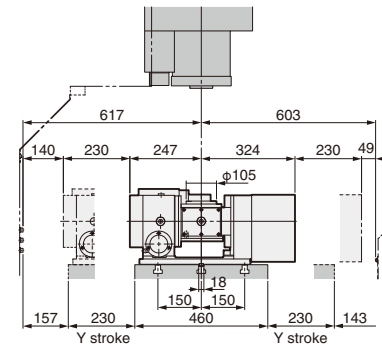


## 5AX-130OSP4

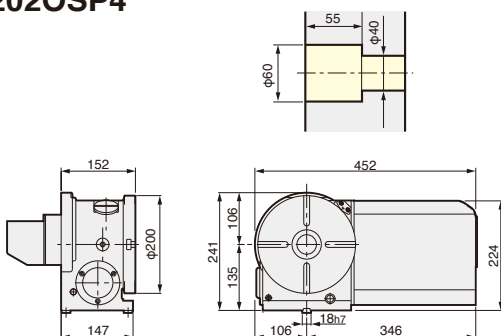


### φ130mm type 5AX TILTING ROTARY TABLE

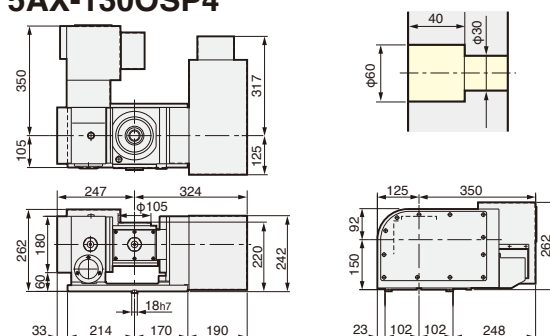
- Diameter of Table :φ130mm (With φ130 sub table)
- MAX. Work Load :25kg (Horizontal) 15kg (Vertical)
- MAX. Rotation Speed :22.2min<sup>-1</sup> (Rotary), 11.1min<sup>-1</sup> (Tilting)
- Indexing Accuracy :±30sec. (Rotary), 60sec. (Tilting)
- Brake Torque :205Nm (Rotary), 303Nm (Tilting) (Pneumatic)
- Net Weight :115kg
- Servo Motor :BL-ME24M-50SN (Rotary)  
BL-ME24M-50SN (Tilting)
- Spindle Hole :φ60mm<sub>H7</sub>×φ30mm Through Hole
- Tilting Angle :0°~105°



## CNC202OSP4



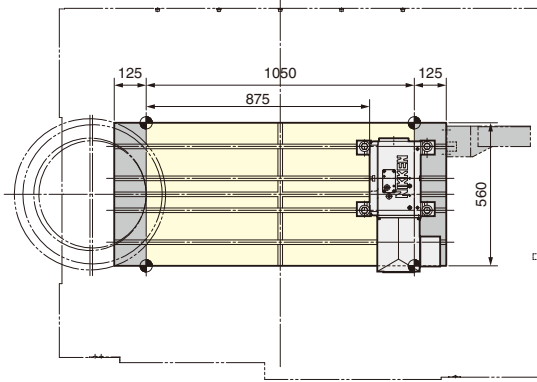
## 5AX-130OSP4



# CNC ROTARY TABLE for MB-56VAE/VBE, GENOS M 560-V

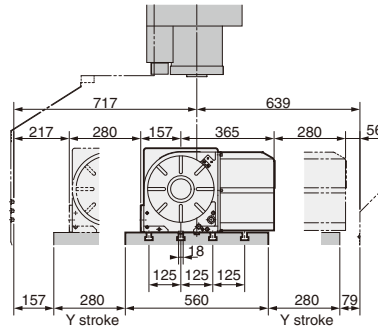
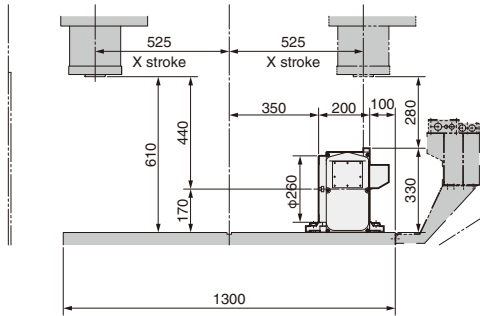


## CNC260OSP4

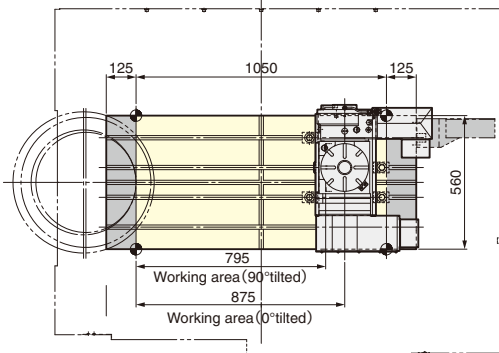


### φ260mm type CNC ROTARY TABLE

- Diameter of Table : φ260mm
  - MAX. Work Load :350kg (Horizontal) 175kg (Vertical)
  - MAX. Rotation Speed :16.6min<sup>-1</sup>, **33.3min<sup>-1</sup>\*1**
  - Indexing Accuracy :±20sec.
  - Brake Torque :588Nm (Pneumatic)
  - Net Weight :115kg
  - Servo Motor :BL-ME40M-40TN
  - Spindle Hole :φ80mm<sub>H7</sub> Through Hole
- \*1:High speed Z series. Servo motor:2000min<sup>-1</sup>.

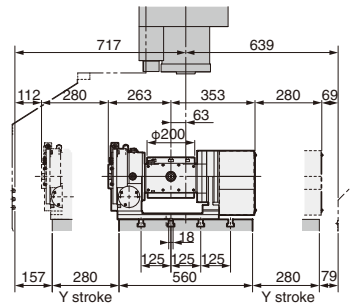
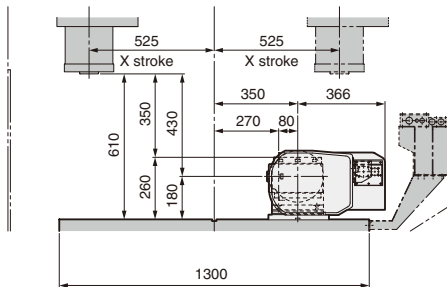


## 5AX-201OSP4

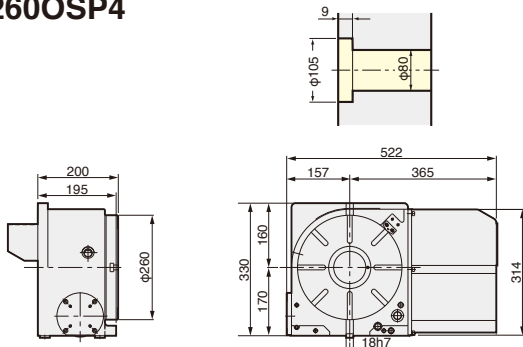


### φ200mm type 5AX TILTING ROTARY TABLE

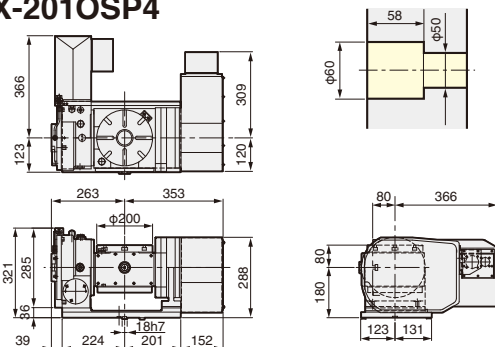
- Diameter of Table :φ200mm
- MAX. Work Load :60kg (Horizontal) 40kg (Vertical)
- MAX. Rotation Speed :22.2min<sup>-1</sup> (Rotary), 16.6min<sup>-1</sup> (Tilting)
- Indexing Accuracy :±20sec. (Rotary), 60sec. (Tilting)
- Brake Torque :588Nm (Rotary), 612Nm (Tilting) (Hydraulic)
- Net Weight :160kg
- Servo Motor :BL-ME24M-50SN (Rotary)  
BL-ME24M-50SN (Tilting)
- Spindle Hole :φ60mm<sub>H7</sub>×φ50mm Through Hole
- Tilting Angle :0°~105°



## CNC260OSP4



## 5AX-201OSP4

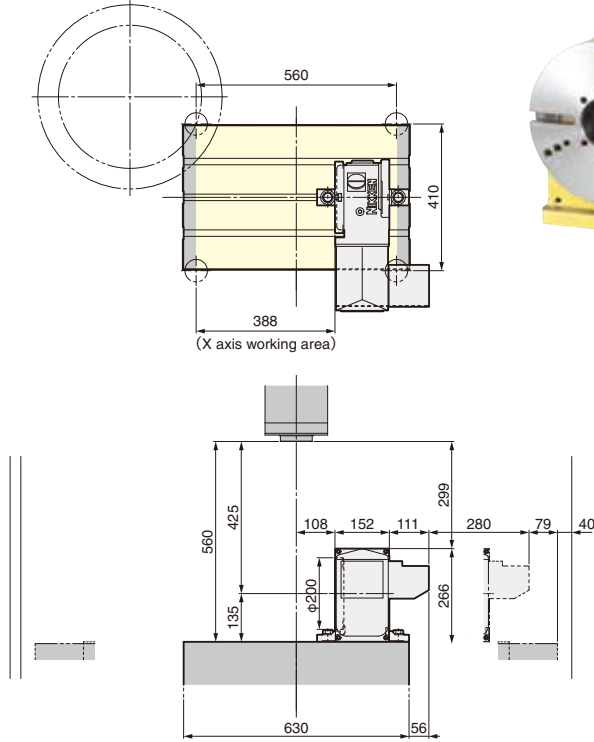




# CNC ROTARY TABLE for MILLAC-44V II

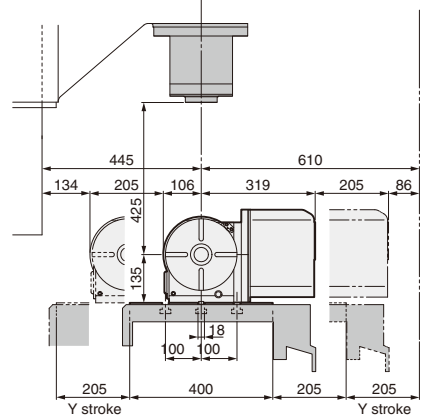


## CNC202OSP4(FA)

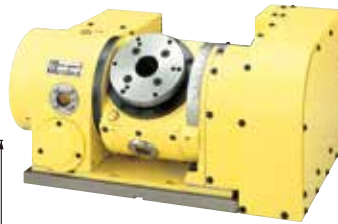
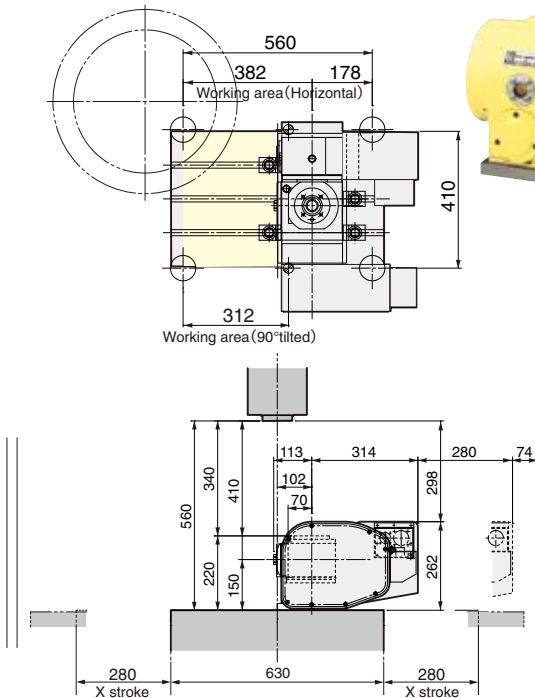


### φ200mm type CNC ROTARY TABLE

- Diameter of Table :φ200mm
  - MAX. Work Load :200kg (Horizontal) 100kg (Vertical)
  - MAX. Rotation Speed :22.2min<sup>-1</sup>, 4.4min<sup>-1</sup>\*1
  - Indexing Accuracy :±20sec.
  - Brake Torque :303Nm (Pneumatic)
  - Net Weight :55kg
  - Servo Motor :BL-ME24M-50SN (αiF4/5000)
  - Spindle Hole :φ60mm<sub>H7</sub>×φ40mm Through Hole
- \*1:High speed Z series. Servo motor:2000min<sup>-1</sup>.

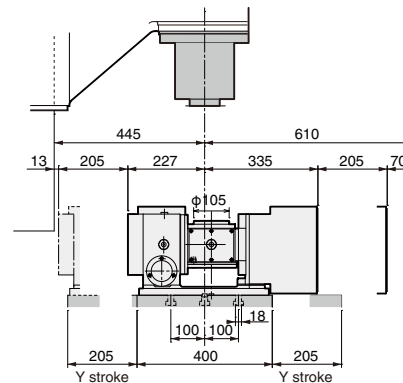


## 5AX-130OSP4(FA)



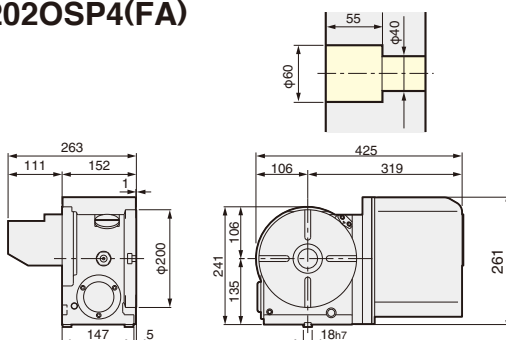
### φ130mm type 5AX TILTING ROTARY TABLE

- Diameter of Table :φ130mm
- MAX. Work Load :25kg (Horizontal) 15kg (Vertical)
- MAX. Rotation Speed :22.2min<sup>-1</sup> (Rotary), 11.1min<sup>-1</sup> (Tilting)
- Indexing Accuracy :±30sec. (Rotary), 60sec. (Tilting)
- Brake Torque :205Nm (Rotary), 303Nm (Tilting) (Pneumatic)
- Net Weight :115kg
- Servo Motor :BL-ME24M-50SN (αiF2/5000) (Rotary)  
BL-ME24M-50SN (αiF2/5000) (Tilting)
- Spindle Hole :φ60mm<sub>H7</sub>×φ30mm Through Hole
- Tilting Angle :0°~105°

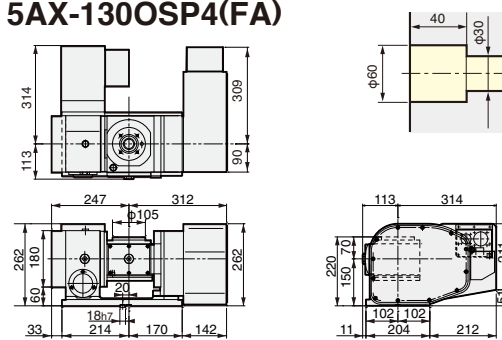


Y axis stroke (Column side) is 185mm required.

## CNC202OSP4(FA)



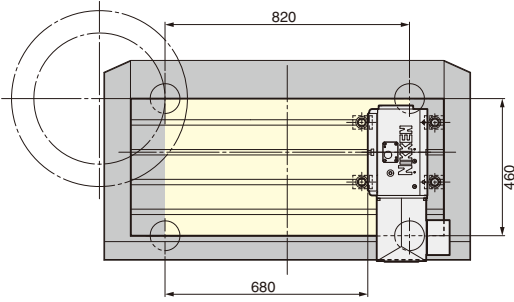
## 5AX-130OSP4(FA)



# CNC ROTARY TABLE for MILLAC-468V II

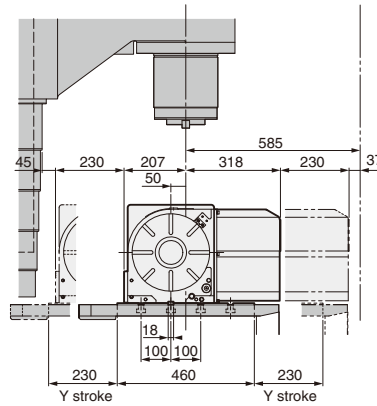
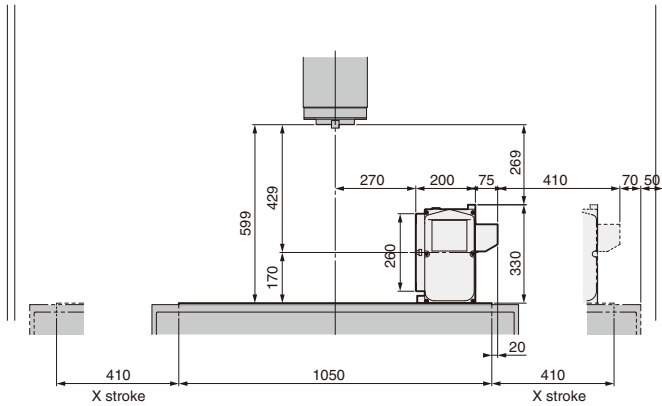


## CNC260OSP4(FA)

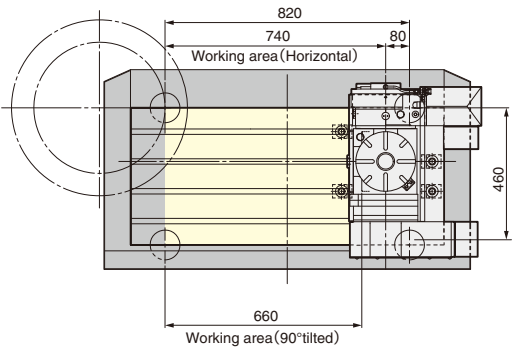


### φ260mm type CNC ROTARY TABLE

- Diameter of Table :φ260mm
  - MAX. Work Load :350kg (Horizontal) 175kg (Vertical)
  - MAX. Rotation Speed :16.6min<sup>-1</sup>, **33.3min<sup>-1</sup>\***
  - Indexing Accuracy :±20sec.
  - Brake Torque :588Nm (Pneumatic)
  - Net Weight :115kg
  - Servo Motor :BL-ME40M-40TN (αiF4/5000)
  - Spindle Hole :φ80mm<sub>H7</sub> Through Hole
- \*1:High speed Z series. Servo motor:2000min<sup>-1</sup>.

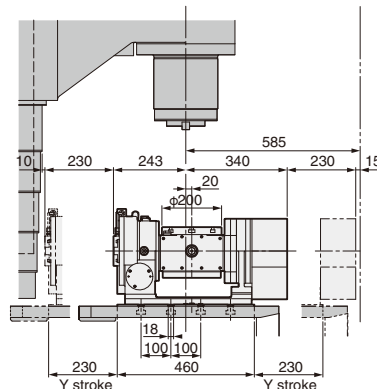
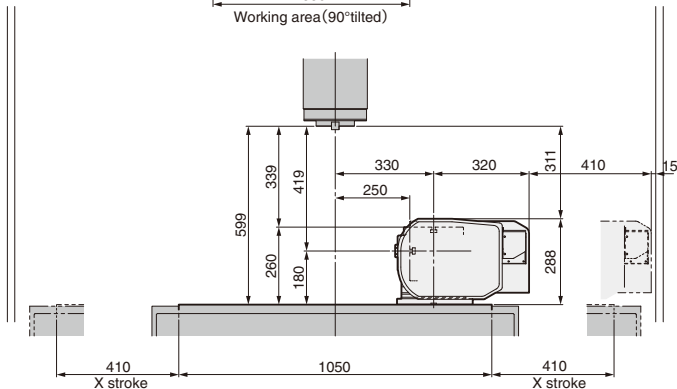


## 5AX-201OSP4(FA)

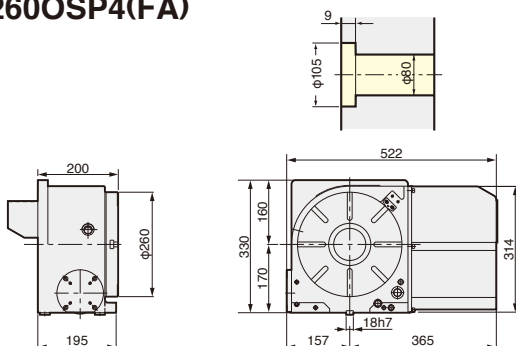


### φ200mm type 5AX TILTING ROTARY TABLE

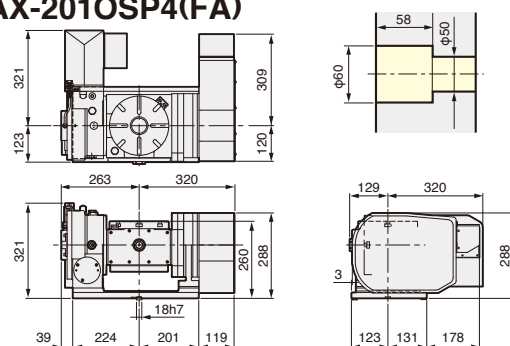
- Diameter of Table :φ200mm
- MAX. Work Load :60kg (Horizontal) 40kg (Vertical)
- MAX. Rotation Speed :22.2min<sup>-1</sup> (Rotary), 16.6min<sup>-1</sup> (Tilting)
- Indexing Accuracy :±20sec. (Rotary), 60sec. (Tilting)
- Brake Torque :588Nm (Rotary), 612Nm (Tilting) (Hydraulic)
- Net Weight :160kg
- Servo Motor :BL-ME24M-50SN (αiF2/2500) (Rotary)  
BL-ME24M-50SN (αiS4/4000) (Tilting)
- Spindle Hole :φ60mm<sub>H7</sub>×φ50mm Through Hole
- Tilting Angle :0°~105°



## CNC260OSP4(FA)



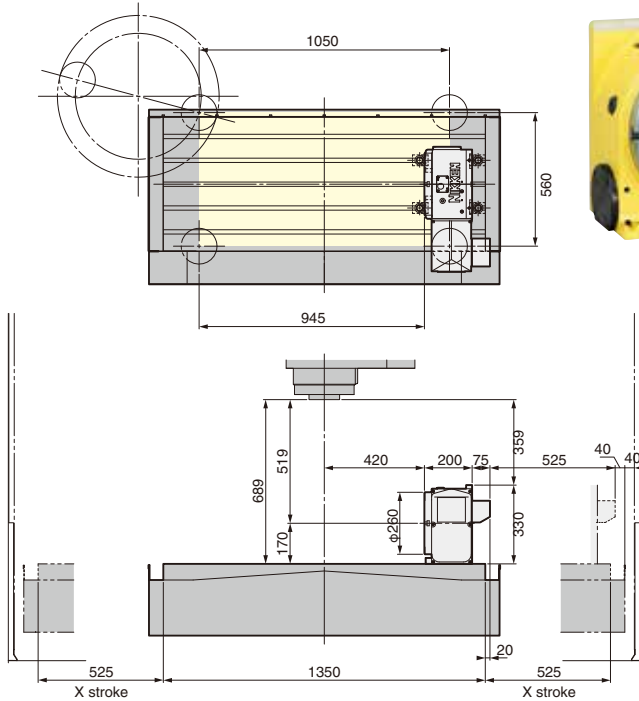
## 5AX-201OSP4(FA)



# CNC ROTARY TABLE for MILLAC-561V II

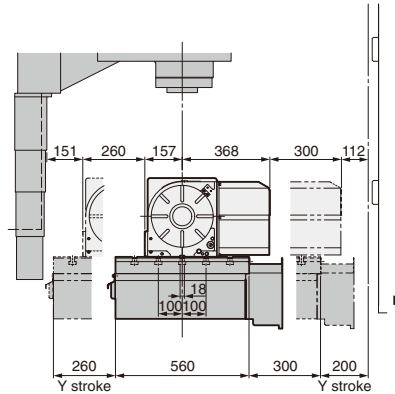


## CNC260OSP4(FA)

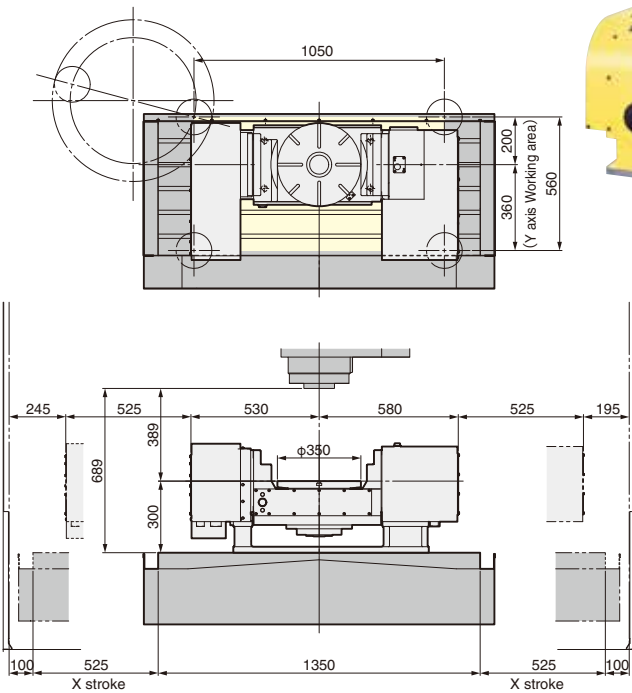


### φ260mm type CNC ROTARY TABLE

- Diameter of Table :φ260mm
  - MAX. Work Load :350kg(Horizontal)175kg(Vertical)
  - MAX. Rotation Speed :16.6min<sup>-1</sup>, **33.3min<sup>-1</sup>\*1**
  - Indexing Accuracy :±20sec.
  - Brake Torque :588Nm
  - Net Weight :115kg
  - Servo Motor :BL-ME40M-40TN (αiF4/5000)
  - Spindle Hole :φ80mm<sub>H7</sub> Through Hole
- \*1:High speed Z series. Servo motor:2000min<sup>-1</sup>.

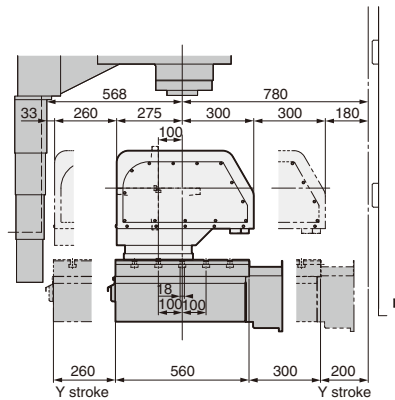


## 5AX-350OSP4(FA)

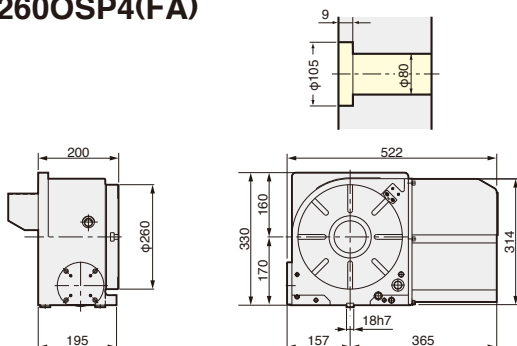


### φ350mm type 5AX TILTING ROTARY TABLE

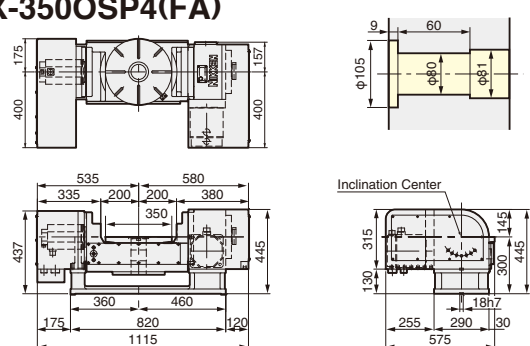
- Diameter of Table :φ350mm
- MAX. Work Load :200kg
- MAX. Rotation Speed :22.2min<sup>-1</sup>(Rotary), 22.2min<sup>-1</sup>(Tilting)
- Indexing Accuracy :±20sec. (Rotary), 60sec. (Tilting)
- Brake Torque :1568Nm(Rotary), 1568Nm(Tilting) (Hydraulic)
- Net Weight :420kg
- Servo Motor :BL-ME80M-40TN (αiF8/3000)  
BL-ME100M-30SN (αiF12/3000)
- Spindle Hole :φ80mm<sub>H7</sub>×φ80mm Through Hole
- Tilting Angle :0°~105°



## CNC260OSP4(FA)



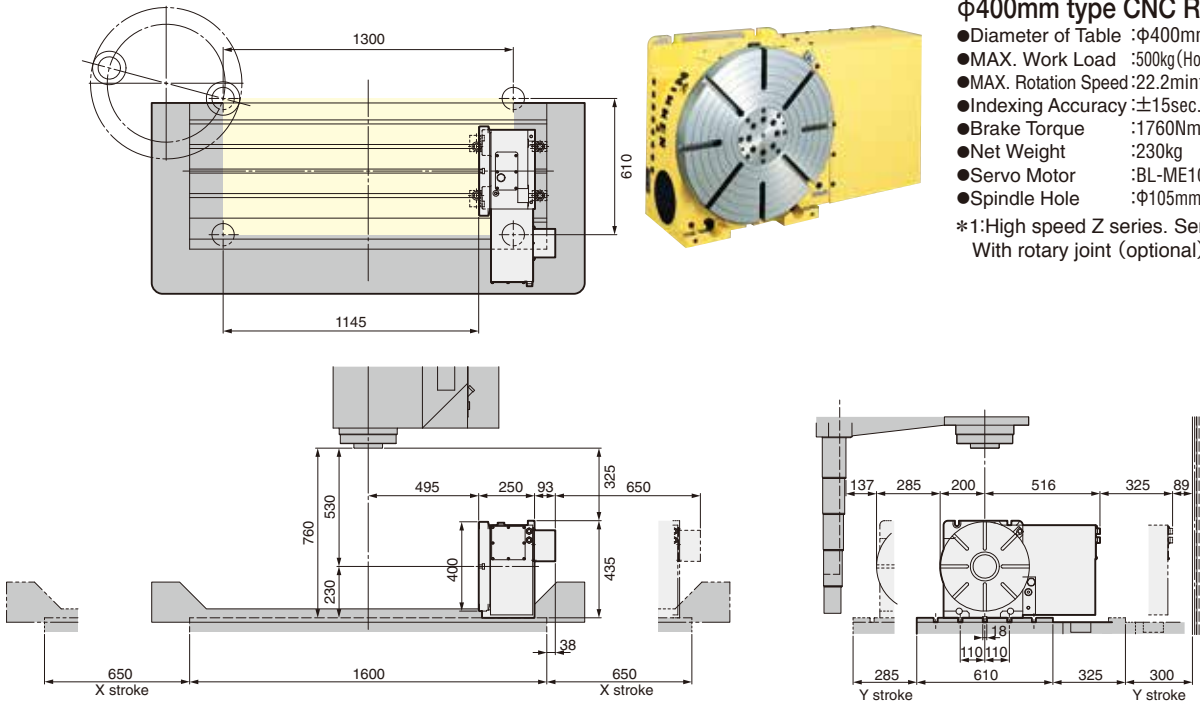
## 5AX-350OSP4(FA)



# CNC ROTARY TABLE for MILLAC-611V II



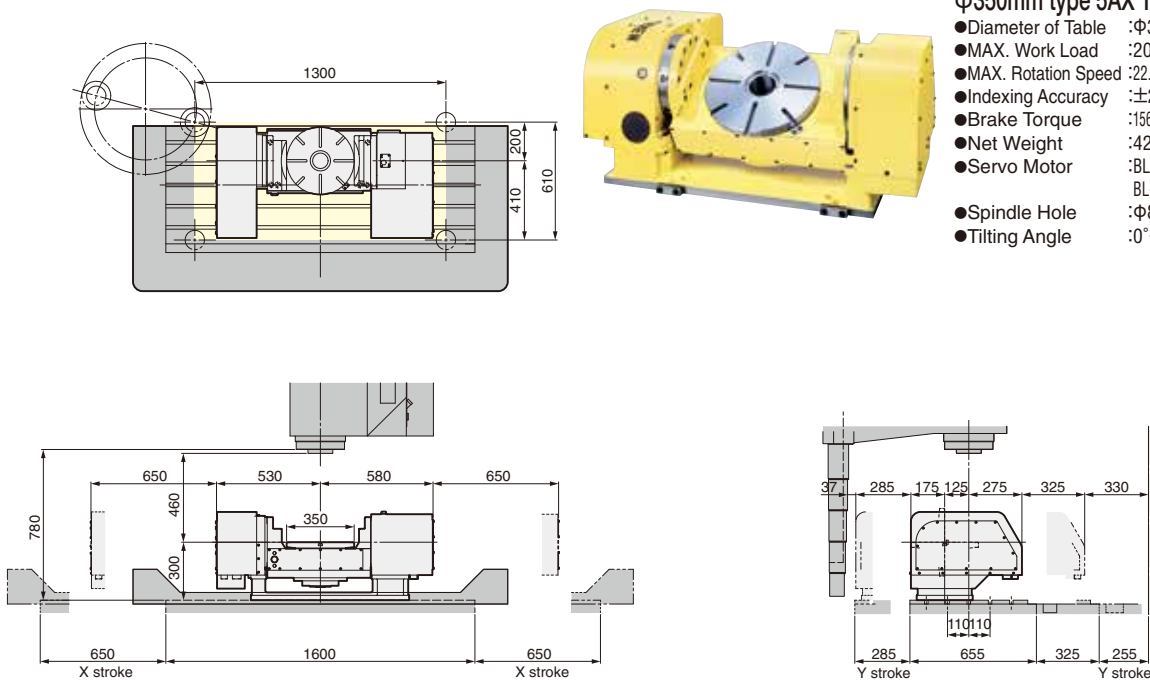
## CNC401OSP4(FA)



### φ400mm type CNC ROTARY TABLE

- Diameter of Table :φ400mm
  - MAX. Work Load :500kg (Horizontal)250kg (Vertical)
  - MAX. Rotation Speed :22.2min<sup>-1</sup>, **44.4min<sup>-1</sup>\*1**
  - Indexing Accuracy :±15sec.
  - Brake Torque :1760Nm (Hydraulic)
  - Net Weight :230kg
  - Servo Motor :BL-ME100M-30SN (αIF12/3000)
  - Spindle Hole :φ105mm<sub>H7</sub>×φ105mm Through Hole
- \*1:High speed Z series. Servo motor:2000min<sup>-1</sup>.  
With rotary joint (optional)

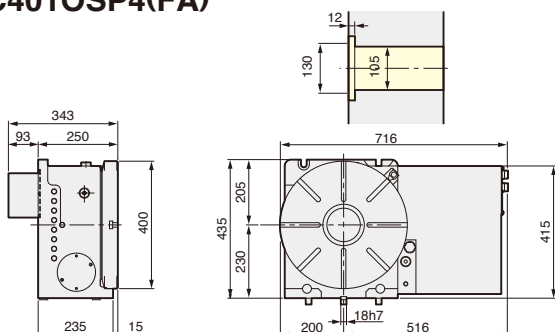
## 5AX-350OSP4(FA)



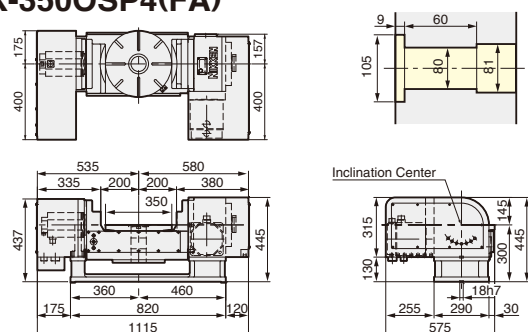
### φ350mm type 5AX TILTING ROTARY TABLE

- Diameter of Table :φ350mm
- MAX. Work Load :200kg
- MAX. Rotation Speed :22.2min<sup>-1</sup> (Rotary), 22.2min<sup>-1</sup> (Tilting)
- Indexing Accuracy :±20sec. (Rotary), 60sec. (Tilting)
- Brake Torque :1568Nm (Rotary), 1568Nm (Tilting) (Hydraulic)
- Net Weight :420kg
- Servo Motor :BL-ME80M-40TN (αIF8/3000) (Rotary)  
BL-ME100M-30SN (αIF12/3000) (Tilting)
- Spindle Hole :φ80mm<sub>H7</sub>×φ80mm Through Hole
- Tilting Angle :0°~105°

## CNC401OSP4(FA)



## 5AX-350OSP4(FA)

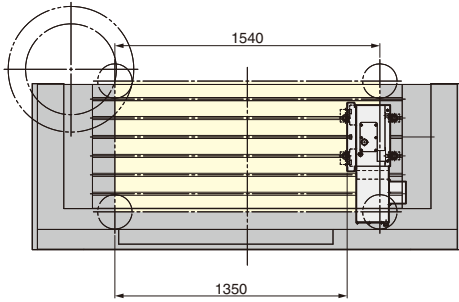




# CNC ROTARY TABLE for MILLAC-761V II

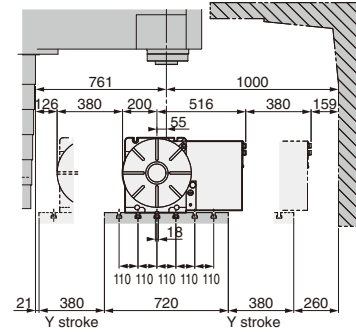
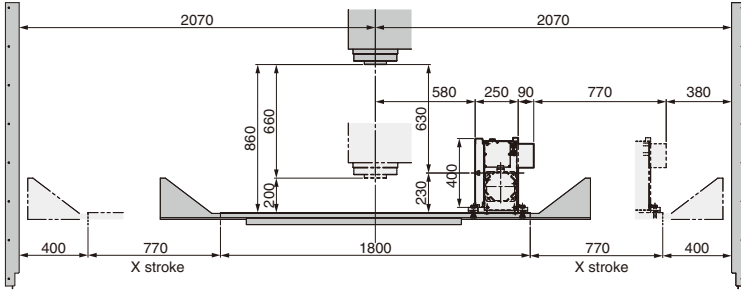


## CNC401OSP4(FA)

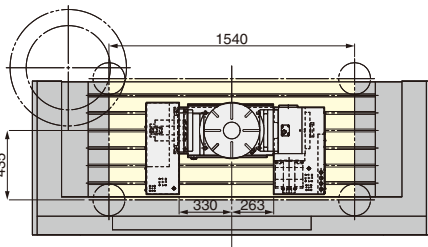


### φ400mm type CNC ROTARY TABLE

- Diameter of Table :φ400mm
  - MAX. Work Load :500kg (Horizontal) 250kg (Vertical)
  - MAX. Rotation Speed :22.2min<sup>-1</sup>, **44.4min<sup>-1</sup>\*1**
  - Indexing Accuracy :±15sec.
  - Brake Torque :1760Nm (Hydraulic)
  - Net Weight :230kg
  - Servo Motor :BL-ME100M-30SN (αiF12/3000)
  - Spindle Hole :φ105mm<sub>H7</sub>×φ105mm Through Hole
- \*1:High speed Z series. Servo motor:2000min<sup>-1</sup>.  
With rotary joint (optional)

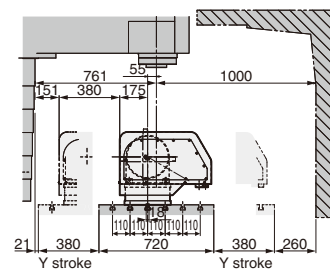
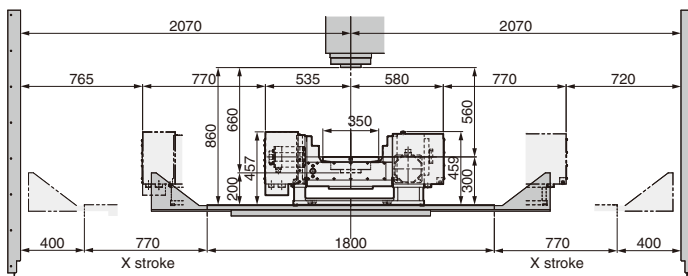


## 5AX-350OSP4(FA)

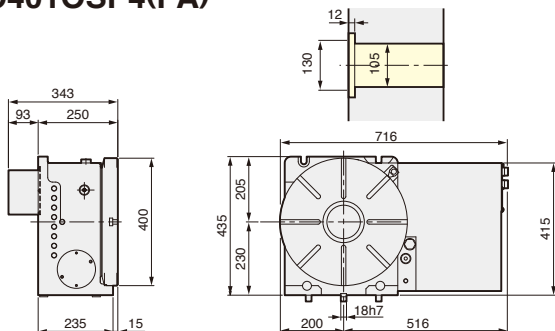


### φ350mm type 5AX TILTING ROTARY TABLE

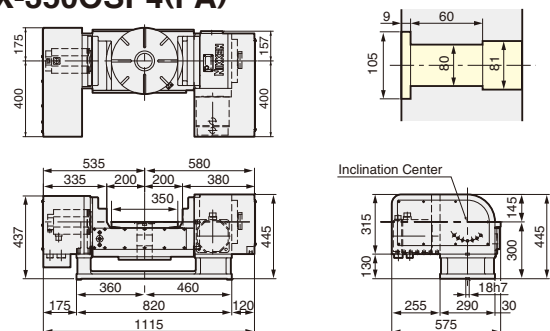
- Diameter of Table :φ350mm
- MAX. Work Load :200kg
- MAX. Rotation Speed :22.2min<sup>-1</sup> (Rotary), 22.2min<sup>-1</sup> (Tilting)
- Indexing Accuracy :±20sec. (Rotary), 60sec. (Tilting)
- Brake Torque :1568Nm (Rotary), 1568Nm (Tilting) (Hydraulic)
- Net Weight :420kg
- Servo Motor :BL-ME80M-40TN (αiF8/3000) (Rotary)  
BL-ME100M-30SN (αiF12/3000) (Tilting)
- Spindle Hole :φ80mm<sub>H7</sub>×φ80mm Through Hole
- Tilting Angle :0°~105°



## CNC401OSP4(FA)



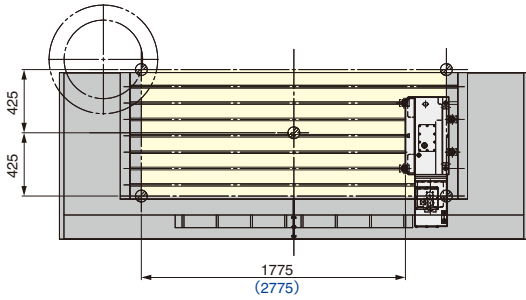
## 5AX-350OSP4(FA)



# CNC ROTARY TABLE for M-852V II

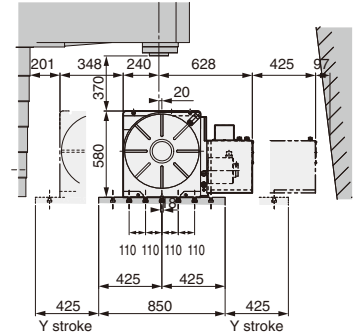
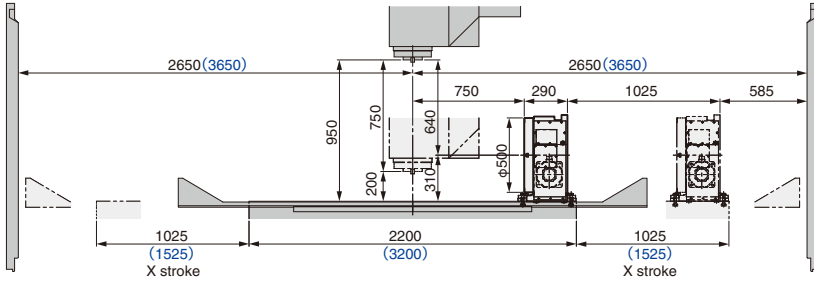


## CNC501OSP4(FA)



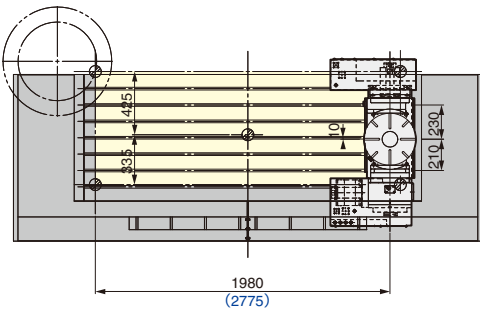
### φ500mm type CNC ROTARY TABLE

- Diameter of Table :φ500mm
  - MAX. Work Load :500kg (Horizontal) 250kg (Vertical)
  - MAX. Rotation Speed :22.2min<sup>-1</sup>, **44.4min<sup>-1</sup>\*1**
  - Indexing Accuracy :±15sec.
  - Brake Torque :1764Nm (Hydraulic)
  - Net Weight :470kg
  - Servo Motor :BL-ME100M-30SN (α iF12/3000)
  - Spindle Hole :φ160mm<sub>H7</sub> × φ105mm Through Hole
- \*1: High speed Z series. Servo motor: 2000min<sup>-1</sup>.



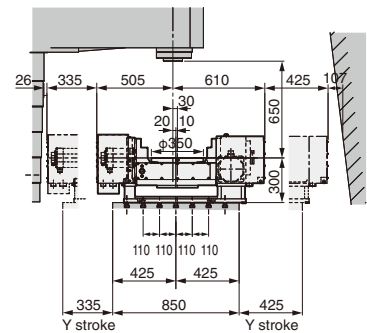
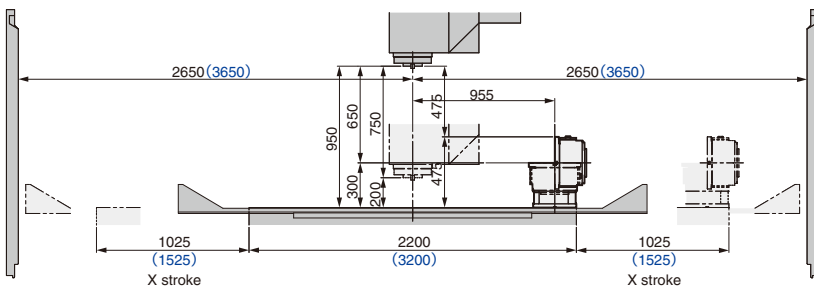
( ) Figures in blue are in case of 3050mm stroke.

## 5AX-350OSP4(FA)



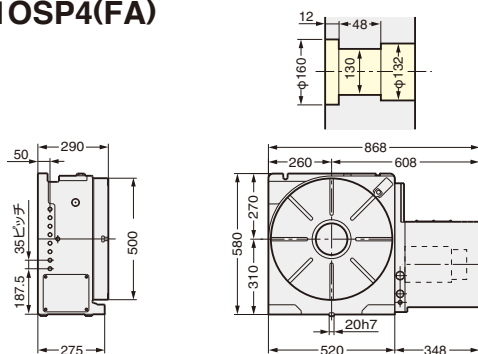
### φ350mm type 5AX TILTING ROTARY TABLE

- Diameter of Table :φ350mm
- MAX. Work Load :200kg
- MAX. Rotation Speed :22.2min<sup>-1</sup> (Rotary), 22.2min<sup>-1</sup> (Tilting)
- Indexing Accuracy :±20sec. (Rotary), 60sec. (Tilting)
- Brake Torque :1568Nm (Rotary), 1568Nm (Tilting) (Hydraulic)
- Net Weight :420kg
- Servo Motor :BL-ME80M-40TN (α iF8/3000) (Rotary)  
BL-ME100M-30SN (α iF12/3000) (Tilting)
- Spindle Hole :φ80mm<sub>H7</sub> × φ80mm Through Hole
- Tilting Angle :0°~105°

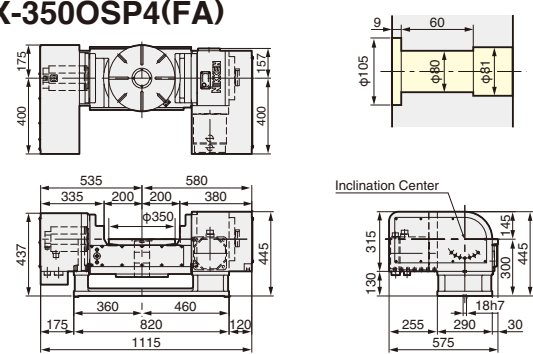


( ) Figures in blue are in case of 3050mm stroke.

## CNC501OSP4(FA)



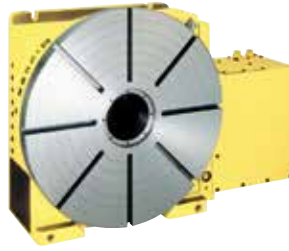
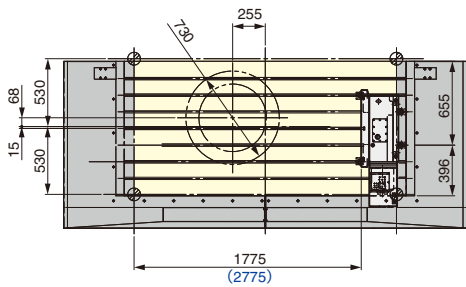
## 5AX-350OSP4(FA)



# CNC ROTARY TABLE for M-1052V II

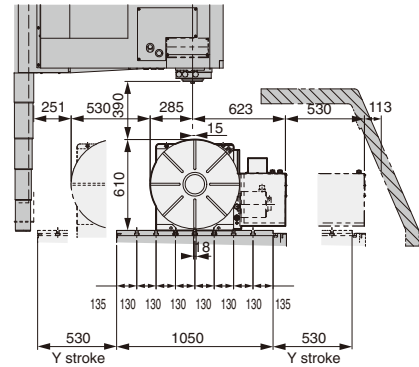
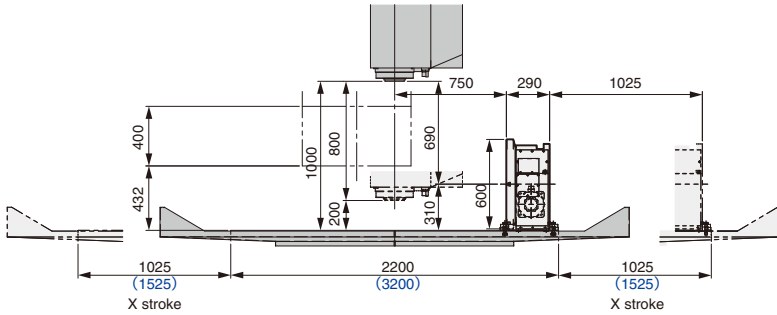


## CNC601OSP4(FA)



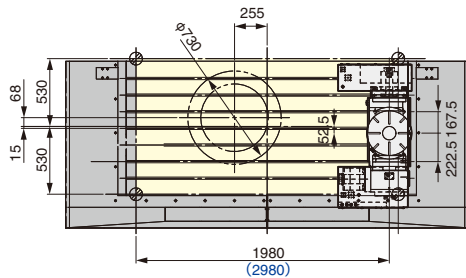
### φ600mm type CNC ROTARY TABLE

- Diameter of Table :φ600mm
  - MAX. Work Load :800kg (Horizontal) 400kg (Vertical)
  - MAX. Rotation Speed :11.1min<sup>-1</sup>, 22.2min<sup>-1</sup>\*1
  - Indexing Accuracy :±15sec.
  - Brake Torque :4655Nm (Hydraulic)
  - Net Weight :500kg
  - Servo Motor :BL-ME100M-30SN (αiF12/3000)
  - Spindle Hole :Φ130mm<sub>H7</sub> × Φ130mm Through Hole
- \*1: High speed Z series. Servo motor: 2000min<sup>-1</sup>.



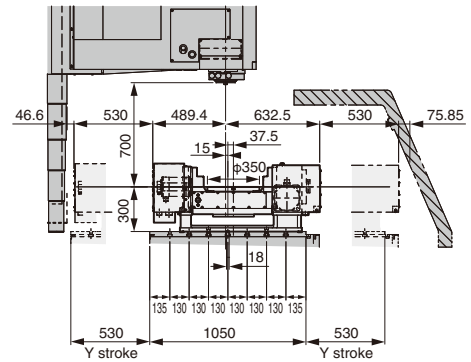
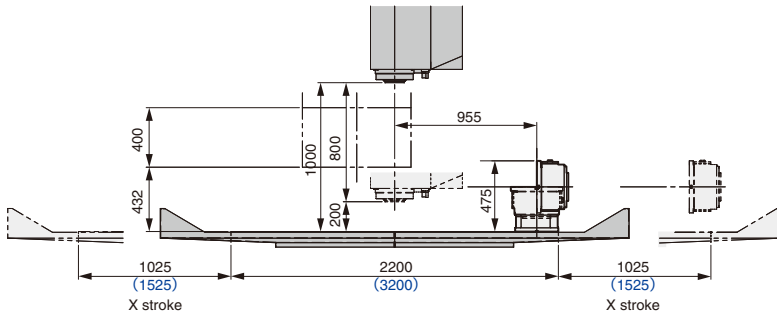
( ) Figures in blue are in case of 3050mm stroke.

## 5AX-350OSP4(FA)



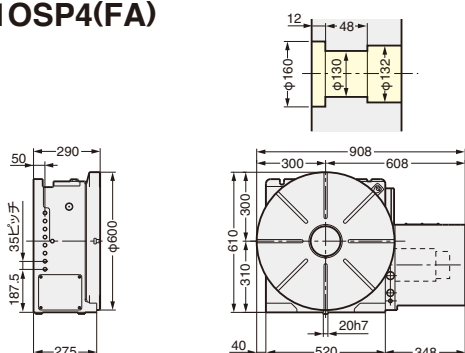
### φ350mm type 5AX TILTING ROTARY TABLE

- Diameter of Table :φ350mm
- MAX. Work Load :200kg
- MAX. Rotation Speed :22.2min<sup>-1</sup> (Rotary), 22.2min<sup>-1</sup> (Tilting)
- Indexing Accuracy :±20sec. (Rotary), 60sec. (Tilting)
- Brake Torque :1568Nm (Rotary), 1568Nm (Tilting) (Hydraulic)
- Net Weight :420kg
- Servo Motor :BL-ME80M-40TN (αiF8/3000) (Rotary)  
BL-ME100M-30SN (αiF12/3000) (Tilting)
- Spindle Hole :φ80mm<sub>H7</sub> × φ80mm Through Hole
- Tilting Angle :0°~105°

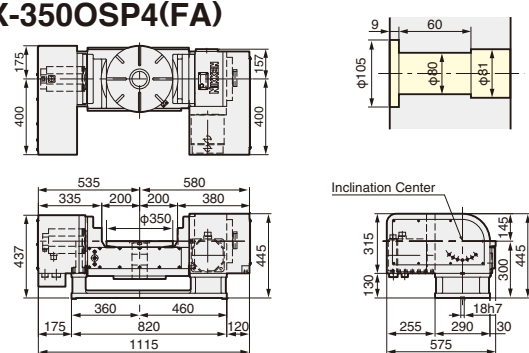


( ) Figures in blue are in case of 3050mm stroke.

## CNC601OSP4(FA)



## 5AX-350OSP4(FA)



# SCROLL CHUCK & POWER CHUCK



Chuck Plate

Scroll Chuck



Holes for bolts of Front Mounting

- Scroll Chucks with chuck plate marked \* are NIKKEN Scroll Chuck of Front Mounting (Fig.1)
- NIKKEN Scroll Chuck is used for X-4B, X-6E & X-9F.
- The chuck plates for the scroll chucks without \* can be used for the scroll chuck based on JIS B6151 SC/TC standard.

## List of Scroll Chuck & Chuck Plate

Scroll Chuck Table Model	4"	5"	6"	7"	9"	10"	12"
CNC105	X-4B						
CNC180		X-5C*	X-6B*				
CNC202		X-5C*	X-6B*	X-7A*			
CNC260, 302			X-6G*	X-7L*	X-9H, X-9J <sup>1)</sup>		
CNC321, 401				X-7N, 7K <sup>2)</sup>	X-9K, 9D <sup>2)</sup>	X-10G, 10D <sup>2)</sup>	X-12F, 12G <sup>2)</sup>
CNC501, 601					X-9D	X-10	X-12B
NST250		X-5B	X-6A	X-7B			
NST300		X-5B	X-6A	X-7B	X-9A	X-10B-1	X-12A-1
NST500				X-7G	X-9B	X-10C	X-12
5AX-130	X-4B						
5AX-201	X-4B	X-5C*	X-6B*	X-7A*			
5AX-230			X-6B*	X-7A*	X-9F		
5AX-350				X-7M	X-9J	X-10E-1	X-12D-1
NSVZ180			X-6E				
NSVZ300			X-6A	X-7B	X-9A	X-10B-1	
NSVX400				X-7D	X-9C	X-10A	X-12C

- ★Chuck plate marked \*1 is used for φ300 table.
- ★Chuck plates marked \*2 are used for φ400 table.

## Chucking Range

Chuck Size	Range	
	External	Internal
4"	2~ 89	36~ 78
5"	3~104	42~ 92
6"	3~135	52~119
7"	3~153	56~134
9"	4~190	64~169
10"	10~229	72~208
12"	10~258	82~238

This is the actual gripping range not jaw stroke.

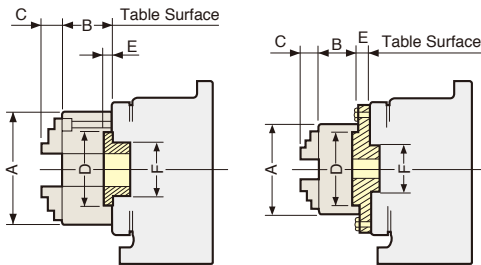


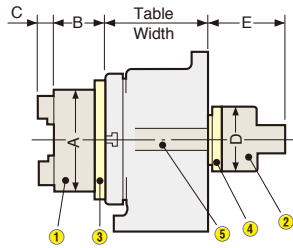
Fig. 1

Fig. 2

## Front End Dimensions with Scroll Chuck & Chuck Plate

Chuck Size	Chuck Plate Code No.	A	B	C	D	E	F	Fig. No.		
4"	X-4B	112	58	31.75	80	13	60	2		
5"	X-5B	132	60	37.25	100	16	60	2		
	X-5C*							3.5	1	
	X-6A							16	2	
6"	X-6B*	167	66	44.25	130	4	60	1		
	X-6E							15	2	
	X-6G*							4	80	1
	X-7A*, X-7L*							4	60, 80	1
	X-7B							16	60	2
7"	X-7D, 7M	192	75	46.25	155	18	75	2		
	X-7G							16	80	
	X-7K, 7N							18	75	
								16	105	
								16	105	
9"	X-9A, 9B, -9C, 9G	233	82	55.25	190	18	60,75 80,105	2		
	X-9D, 9F							20	130,60	
	X-9H							25	80	
	X-9J, 9K							18	80,105	
								18	80,105	
10"	X-10, 10A-10C	274	86	53.25	230	20	130,70,75 60,80	2		
	X-10B-1, 10E-1							25	105	
	X-10D, 10G							20	105	
								20	105	
12"	X-12, 12B -12C, 12G	310	92	59.25	260	20	75,130 80,105	2		
	X-12D-1, 12F-1							25	80,105	
								25	80,105	

- ★The maker of the scroll chuck was changed. This table shows the chuck plate of the new maker. Please refer to CAT NO.8168 or older for the chuck plate of the old maker.
- ★The dimension from the table surface to the jaw is; [ \* ]:B+C Others: E+B+C



- 1 Power Chuck
- 2 Rotary Cylinder
- 3 Chuck Adapter
- 4 Cylinder Adapter
- 5 Connecting Rod

When power chuck or rotary cylinder is installed on 5AX table, it must be High Column type.

## Power Chuck & Rotary Cylinder

Chuck Size	Power Chuck Code No.	Rotary Cylinder Code No.	A	B	C	D	E	MIN. Table φ
4"	HO1MA-4	HH4C-80	110	70	27	115	215	φ 100
		HO5CH-100				130	220	
5"	HO1MA-5	HH4C-80	135	70	27	115	215	φ 150
		HO5CH-150				186	235	
6"	HO1MA-6	HH4C-100	165	94	43	135	240	φ 180
		HO5CH-175				210	240	
8"	HO1MA-8	HH4C-125	210	110	43	160	250	φ 250
		HO5CH-250				290	295	
10"	HO1MA-10	HH4C-125	254	120	43	160	250	φ 300
		HO5CH-300				340	310	
12"	HO1MA-12	HH4C-140	304	140	53	180	260	φ 320
		HO5CH-300				340	310	

- ★HOWA power chucks and rotary cylinders (Higher:hydraulic, Lower:Air) are listed. Other maker's one can be mounted, please specify the Code No.
- ★Above power chucks are not applicable to NST Table. Please contact with us for mounting.
- ★Rotary cylinder for 5AX- table is NIKKEN made.
- ★NIKKEN air/hydraulic rotary cylinder is also available.



Manual Tailstock



Air/Hyd. Tailstock



Hyd. Tailstock



Photo shows support table with T slot (Option).

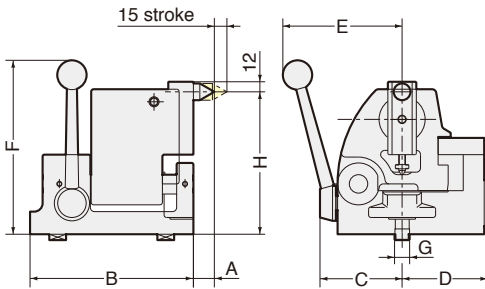
Support Table TAT

## List of Tailstock and Support Table

Table Model	Centre Height	Tailstock			
		Manual Stroke: 15mm	Air/Hyd. Tailstock Stroke: 60mm	Hyd. Tailstock Stroke: 100mm	Support Table Built-in Brake (Hyd.)
CNC105	105	P-105S	PBA-105		TAT105
CNC180, 202	135	P-125S	PBA-135		TAT170
CNC180B, 202B	180	P-170S	PBA-180	H-170S	
NST250	155	P-150S		H-150S	
CNC260, 302	170	P-170S	PBA-170	H-170S	TAT250
CNC321, 401	230	P-230S		H-230S	TAT321,401
CNC501, 601	310	P-310S			TAT501,601
NST300	208	P-210S		H-210S	
NST450, 500	288	P-280S			
5AX-130	150	P-150S	PBA-150	H-150S	
5AX-201	180	P-170S	PBA-180	H-170S	
5AX-230	240	P-230S		H-230S	
5AX-250*	250				
5AX-350	300	P-310S			
CNC100-2, 3, 4W	105		PBA-105-2,3,4W		
NSVZ180	135	P-125S	PBA-135		
NSVZ300	170	P-170S	PBA-170	H-170S	TAT250
NSVX400	240	P-230S		H-230S	TAT401

\*Please contact us about the Tailstock for 5AX-250.

## Dimension of Manual Tailstock

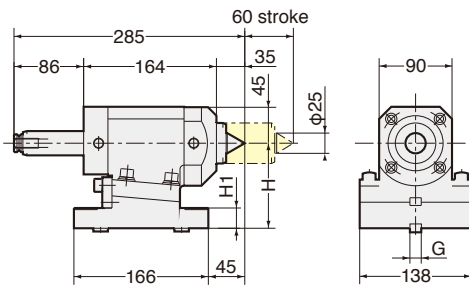


The centre height can be adjusted. Please refer to H dimension.

★ Left handed tailstocks are available for all sizes.

★ For P-150S or larger size tailstocks, 5 pcs of changeable centres are included.

## Air/Hyd. both usable Small Size Tailstock



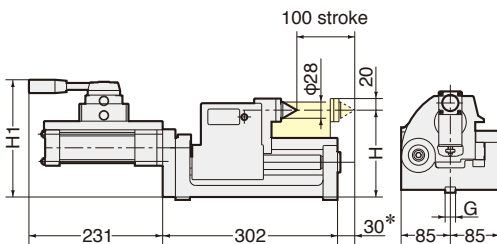
The centre height can be adjusted within 0.35mm.

★ Rotary centre is built-in.

★ MT (Morse Taper) type quill is also available. Please contact to us.

★ The different length of the stroke is available. Please contact to us.

## Hydraulic Tailstock



The centre height can be adjusted. Please refer Centre Height H on the table.

★ Rotary centre is built-in.

★ MAX. work piece diameter must be smaller than  $\phi 130$ mm, when the stroke of changing the work piece is more than 30mm marked \*.

- For Support Table TAT
- For details of CNC rotary table for tailstock, please contact to us for more details.
- In case of air/hyd. tailstock, the hydraulic unit, connecting cables and air/hyd. hoses are supplied as an option.



## CNC Rotary Table only for Vertical Use

No.	Measuring Item	Measuring Method	CNC180 202	CNC260 302	CNC321 401	CNCB350 450	CNC501 601
2	Runout of table surface		0.01mm	0.015mm	0.015mm	0.015mm	0.02mm
3	Concentricity of centre bore		0.01mm	0.01mm	0.01mm	0.01mm	0.01mm
4	Squareness of table surface (Minus deviation at upper part is not permitted.)		0.02mm	0.02mm	0.02mm	0.02mm	0.03mm
5	Parallelism between centre line of test bar and key way		At 150mm 0.02mm	0.02mm	0.02mm	0.02mm	0.02mm
6	Parallelism between frame bottom surface and table centre line		At 150mm 0.02mm	0.02mm	0.02mm	0.02mm	0.03mm
7	Indexing accuracy		±20"	20"	15"	15"	15"
8	Repeatability		4"	4"	4"	4"	4"

★ For ultra precision option: One rank higher accuracies than the above figures are inspected.

## 5AX Tilting Rotary Table

No.	Measuring Item	Measuring Method	5AX-130 150	5AX-201	5AX-250	5AX-230 350
1	Parallelism between table surface and frame bottom at tilting angle 0° (Concave)		0.015mm	0.015mm	0.02mm	0.02mm
2	Deviation of table surface at tilting angle 0°		0.01mm	0.01mm	0.02mm	0.02mm
3	Deviation of table centre hole at tilting angle 0°		0.01mm	0.01mm	0.01mm	0.01mm
4	Deviation of centre line of rotary axis at tilting angle 90°		0.02mm	0.02mm	0.02mm	0.02mm
5	Parallelism between table surface and centre line of guide key at tilting angle 90°		0.015mm	0.015mm	0.02mm	0.02mm
6	Displacement of centre when moving from 0° to 90° at tilting angle 90°		0.01mm	0.015mm	0.015mm	0.015mm
7	Indexing accuracy of rotary axis		±30"	Cumulative20"	20"	20"
8	Repeatability of rotary axis		4"	4"	4"	4"
9	Indexing accuracy of tilting axis	accumulated	60"	60"	60"	60"
10	Repeatability of tilting axis		±6"	±6"	±6"	±6"

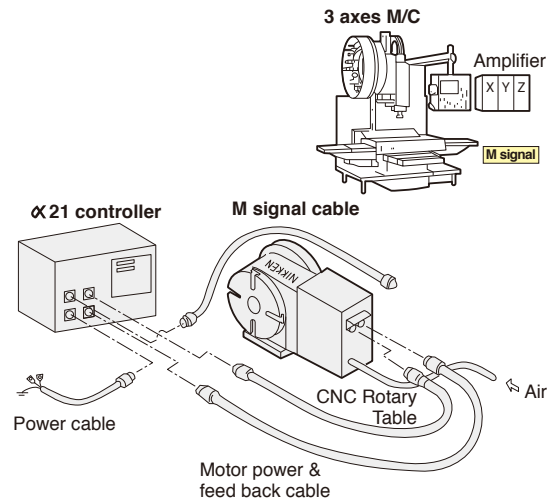
★ For ultra precision option: One rank higher accuracies than the above figures are inspected.

★ Center socket is provided at the centre bore for the table marked \*1. Concentricity of the internal center socket is shown.

## ■ CNC Rotary Table with NIKKEN Controller (M-signal series)

The CNC rotary table with **NIKKEN $\alpha$ 21** controller that can be driven by 1 off M-signal (or contact signal) from your M/C, NC Milling machine or conventional milling machine for high precision indexing, equality dividing (2~9999 dividing), or spiral cutting etc. The retrofitting can be done on your existing machine.

1. Required 1 off M-signal at the machine side.
2. The rotary table can be installed on any machines, e.g. NC milling machines or conventional machines.
3. **NIKKEN** provide the rotary table to complete with the controller, servomotor and set of cables.



## ■ Minimum Command Increment: 0.001° or 1sec.

$\alpha$ 21 controller can drive all models of NIKKEN CNC rotary table.

## ■ Single M signal provides Various Automatic Operation.

Any unequal dividing, equal dividing, arc cutting, lead cutting etc. can be done very easily.

## ■ RS232C Interface is provided as standard.

Block data/ parameter data can be up loaded/down loaded through RS232C interface. Moreover when the direct angle command interface is used, all program and management can be done on M/C side. **JAPAN PAT.**

## ■ Up Grade of Water Proof Characteristic EMC Assessment

The direct out type connection is applied for all models of CNC rotary table, and the EMC assessment is satisfied as the total system.

## ■ Digital Servo System & Absolute Encoder

Very excellent acceleration/deceleration characteristics, the powered up torque and the best suited servo parameter realize the high quality and long life.

after Power ON or after releasing the emergency stop condition is not necessary. \*

## ■ Other Optional Functions

True Closed Loop, Manual Pulse Generator, M Function (Input: 5/ Output: 5), External N Number Search, External Position Display, External Power ON/OFF, Pitch Error Compensation

## ■ More than 25,000 sets working in the field.

This fact ensures the highest reliability.

\* : The operation to establish the coordinate system is required at once, when turning on at first time just after connecting the cables.



**$\alpha$ 21 controller**  
 • Standard (400W, 750W)  
 300×280×285 10kg  
 • Single Phase AC200/220V



**$\alpha$ 21 PW controller**  
 • Power up (1.3KW, 1.8KW)  
 540×360×400 28kg  
 • 3 phase AC200/220V

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HEAD OFFICE & FACTORY

- ★ : Sales office with Service Engineer
- : Sales office
- : Service office

There are overseas Sales Branch office in 14 countries. Each sales branch office has stocks for toolings and CNC Rotary Tables, and service engineers look after the maintenance and service operation of our products. In the other region, e.g. East-South Asia, Oceania, South America, Africa, etc., there are some distributors. At the production line abroad, as there are many requirements for special tools and CNC Rotary Table to suit the special specifications, please ask us or distributors for spare tools and maintenance parts in advance.

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#### UTILLAJES OLASA,S.L. (CNC ROTARY TABLE)

Tel.+34-(0)-669-603433

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● Specifications are subject to change without notice.