

# NC Rotary Tables

## Basic model

### Standard type

**RNA** RNA-161·201·251·321

**RN** RN-100

The RNA series, an improvement on the best-selling RN series, has remarkably improved cost efficiency due to its high-speed operation for use in drill and tapping machines.



RNA-201R

## Specifications

Unit: mm

		RNA-161	RNA-201	RNA-251	RNA-321	RN-100		
RBA-K RNCK	Handedness	R	○	○	○	○		
		L	○	○	○	○		
RCH RNC	Spindle diameter	φ100	φ120	φ140	φ180	φ80		
RCV RNCV	Table diameter *1	φ160 or 200 (Option)	φ200 or 250 (Option)	φ250 (Option)	φ320 (Option)	φ135 (Option)		
Multi-Spindle RN-N	Center height	135	160	160	210	110		
RZ	Center bore	Nose diameter	φ55H7×45	φ65H7×45	φ80H7×45	φ115H7×45	φ50H7×45	
		Through-bore	φ40	φ45	φ50	φ85	φ30	
TN	Table T-slot width *1	12H8	12H8	12H8	14H8	10H8		
TTNC	Guide block width	14h7	18h7	18h7	18h7	14h7		
	Servo motors (for FANUC)	αiF2	αiF4	αiF4	αiF8	αiF2		
THNC	Inertia converted into motor shaft ×10 <sup>-3</sup> kg·m <sup>2</sup>	0.09	0.09	0.17	0.41	0.23		
Multi-Spindle TTNC-N	Net weight	kg	40	45	61	80	150	28
RC RH	Speed reduction ratio	1/72	1/72	1/90 *2	1/120 *2	1/36		
	Table max. rpm (Motor rpm: 3,000min <sup>-1</sup> )	min <sup>-1</sup>	41.6	41.6	33.3	25	83.3	
RUA	Indexing accuracy (the sum)	sec	25	20	20	20	45	
TSUA	Repeatability	arc sec	4	4	4	4	4	
	Clamp system		Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	
RTV RTT	Clamp torque /pneumatic pressure 0.49MPa	N·m	500	800	1,000	1,500	80	
NC Controllers	Strength of worm gears	N·m	206	288	596	939	176	
Accessories	Allowable work weight	Vertical setting	kg	100 (200)	125 (250)	125 (250)	175 (350)	25 (50)
		Horizontal setting	kg	200	250	250	350	50
Options	Allowable load (when table is clamped)	F	N	10,800	14,400	14,400	24,800	5,880
		F×L	N·m	500	800	1,000	1,500	80
		F×L	N·m	780	1,900	1,900	4,700	156
		J = $\frac{W \cdot D^2}{8}$	kg·m <sup>2</sup>	0.64	1.25	1.95	4.48	0.10

☞ Servo motors of other manufacturers **P.70** ☞ When assembling a faceplate or a fixture with the main spindle **P.80**

\*1 The tolerance of the table T-slot width is applicable to four standard slots arranged crosswise. ☞ Dimensions **P.64**

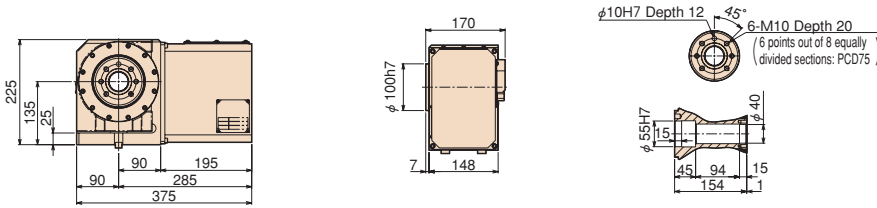
\*2 High speed models are available. Ask us for further information.

RNA-251: 321 (speed reduction ratio: 1:45) RNA-320: αiF12 or an equivalent motor should be used.

## Dimensions

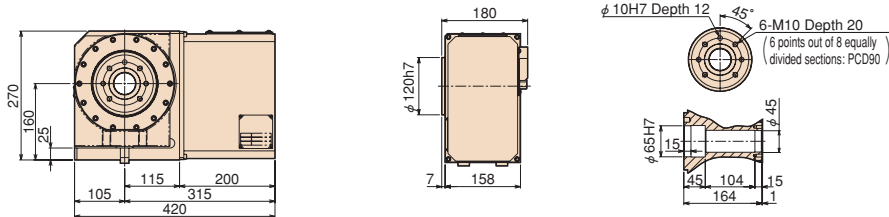
Unit: mm

### RNA-161R ※When αiF2 is used



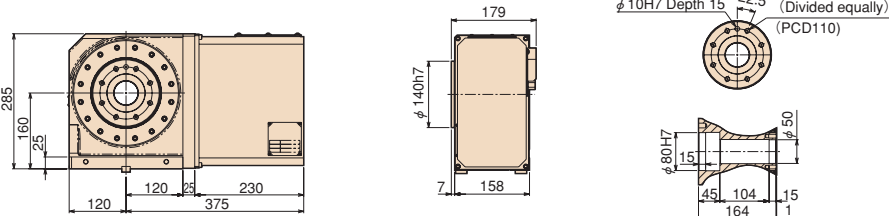
RNA-161R

### RNA-201R



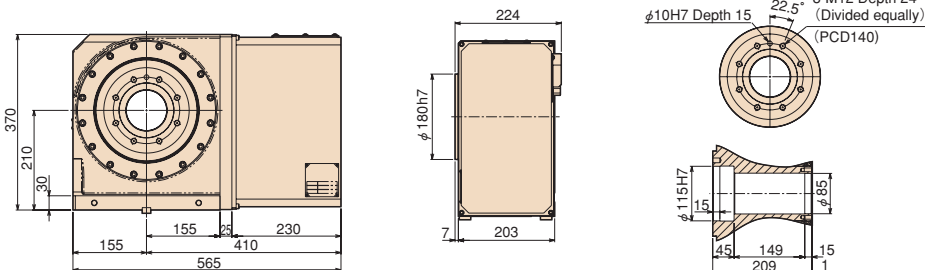
RNA-201R

### RNA-251R



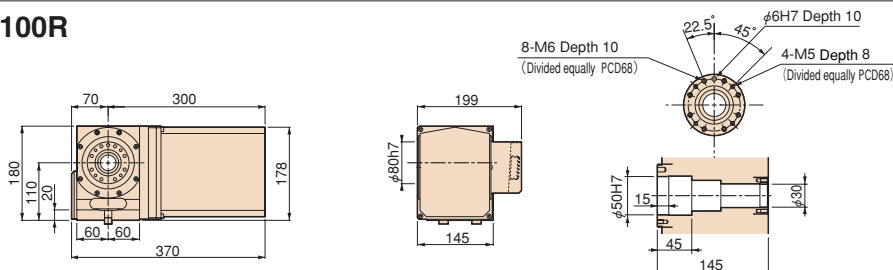
RNA-251R

### RNA-321R



RNA-321R

### RN-100R



RN-100R

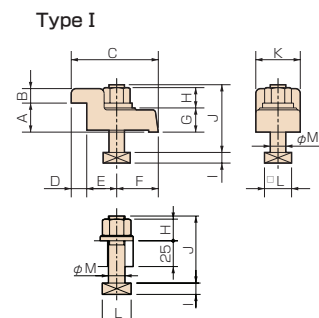
Note: The above dimensions are for FANUC servo motors. The dimensions of servo motors of other manufacturers may be larger.

## Clamping block and bolt

Unit: mm

	Type	Q'ty	T-slot pitch	T-slot width	A	B	C	D	E	F	G	H	I	J	K	L	M
RNA-161	-	2	-	14	-	-	-	-	-	-	-	17	8	60	-	23	12
RNA-201	-	2	-	18	-	-	-	-	-	-	-	21	11	65	-	28	16
RNA-251	I	4	50~100	18	25	12	80	12	33	35	22	21	11	65	40	28	16
RNA-321	I	4	50~132	18	30	15	90	16	31	43	25	21	11	70	46	28	16
RN-100	-	2	-	14	-	-	-	-	-	-	-	17	8	55	-	23	12

Note 1: When using a machine with a T-slot pitch other than the above, use suitable clamping blocks and bolts that are available on the market, or order custom-made ones from TSUDAKOMA. (Optional)  
 Note 2: Clamping blocks are not included with the RNA-161 and RNA-201 and RN-100.



RG

RNA  
RN

RNE

RNA-B  
RNCV-B

RNCM

RBA

RBA-K  
RNCK

RCH  
RNC

RCV  
RNCV

Multi-Spindle  
RN-N

RZ

TN

TTNC

THNC

Multi-Spindle  
TTNC-N

RC  
RH

RUA

TSUA

RTV  
RTT

NC Controllers

Accessories

Options

Technical  
Information