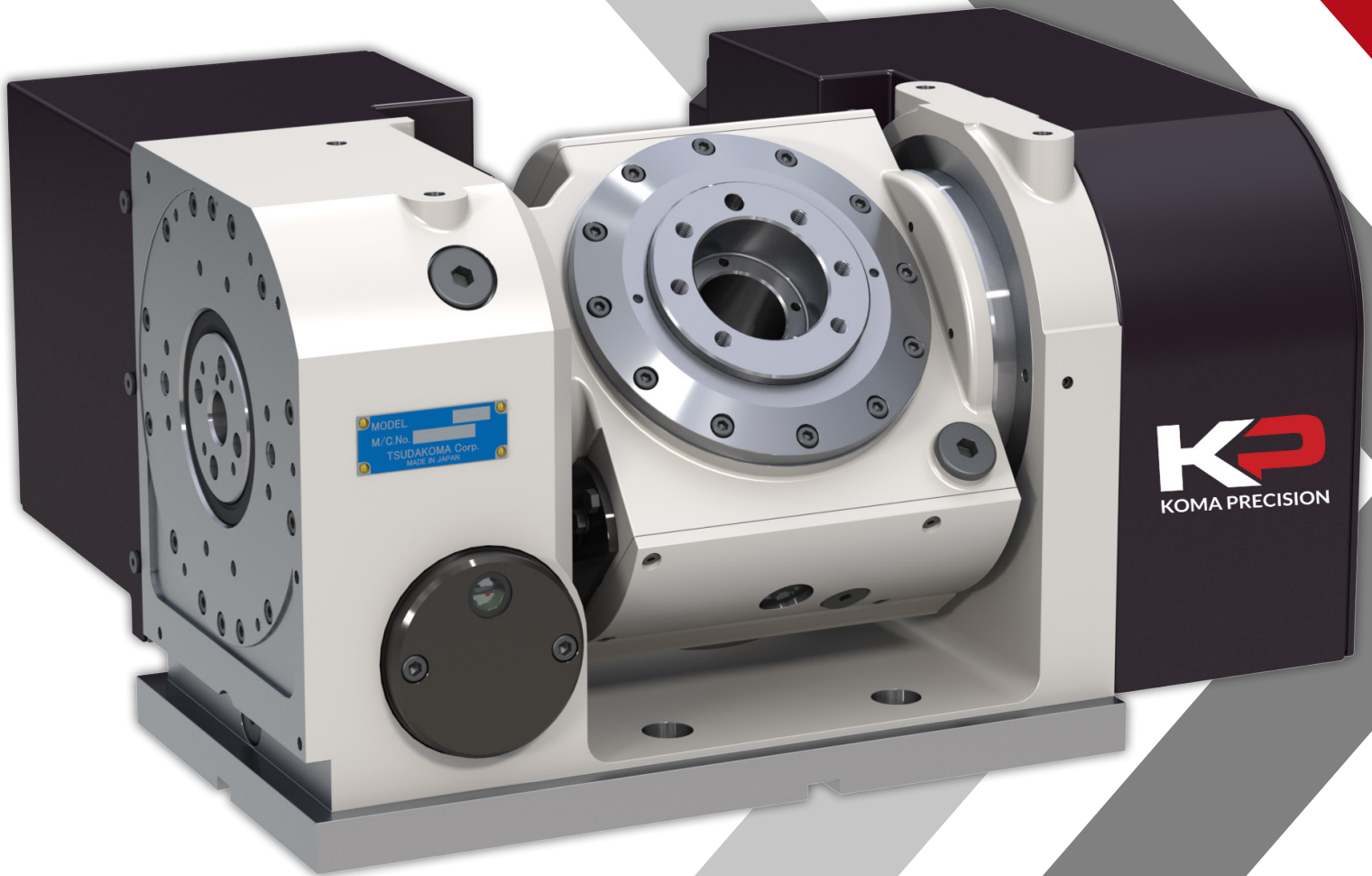




TSUDAKOMA

Rotary Table

Selection Guide

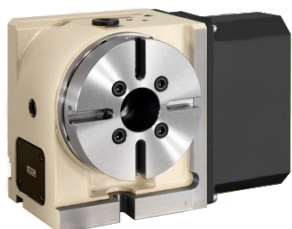
KOMA PRECISION

For over thirty-five years Koma Precision has been the foremost source for the finest the world has to offer in machine tool Productivity Innovation.

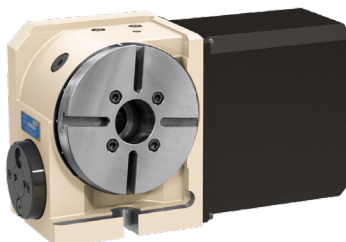
With over 30,000 rotary table installations, Koma is the largest distributor of Tsudakoma NC rotary tables and indexers in the world. With over 12,000 angle heads and live tools installed, Koma is the world's largest supplier for Alberti - the originator and the foremost innovator of productivity tooling.



ROTARY TABLES



RWE INDEXERS



RWE SERIES



RWA SERIES



TBS SERIES



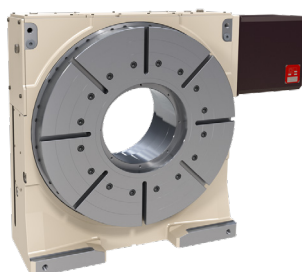
TWA SERIES



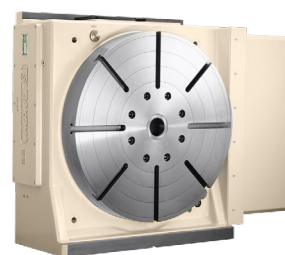
RBS SERIES



RWB SERIES



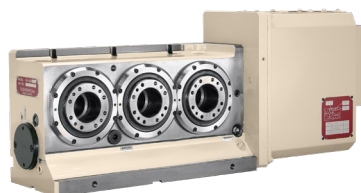
RCV-SERIES



RNCM SERIES



**5TH AXIS TILTING
RTT-111 CA**



RN-MULTI SERIES



MCV 50 | MCV 5000/5500L

RWE SERIES	RWE-160	RWE-200		
RWA SERIES	RWA-160	RWA-200	RWA-250	
RBS SERIES	RBS-160R	RBS-250R		
RN MULTI SERIES	RN-100R-2	RN-100R-3	RN-100R-4	
5TH AXIS TILTING	RTT-111 CA			
TWA Series	TWA-130	TWA-160		
TBS Series	TBS-130	TBS-160		



SM400H | SM4000H | PCV430

RWE SERIES	RWE-160	RWE-200		
RWA SERIES	RWA-160	RWA-200		
5TH AXIS TILTING	RTT-111 CA			
TWA Series	TWA-130			



PV6400 | MCV 400

RWE SERIES	RWE-160	RWE-200		
RWA SERIES	RWA-160	RWA-200	RWA-250	
RBS SERIES	RBS-160R	RBS-250R		
5 TH AXIS TILTING	RTT-111 CA			
TWA Series	TWA-130	TWA-160		
TBS Series	TBS-130			



LCV/MCV 660 | 6700

RWA SERIES	RWA-320			
RBS SERIES	RBS-320			
RWB SERIES	RWB-320	RWB-400	RWB-500	
RN MULTI SERIES	RN-100R-2	RN-100R-3	RN-100R-4	
TWA Series	TWA-200	TN-320		



MCV 850				
RWA SERIES	RWA-320			
RBS SERIES	RBS-320			
RWB SERIES	RWB-500			
RN MULTI SERIES	RN-100R-2	RN-100R-3	RN-100R-4	
RNCM SERIES	RNCM-401	RNCM-501	RNCM-631	
TWA Series	TN-320			



MCV 1060			
RWB SERIES	RWB-400	RWB-500	
RCV SERIES	RCV-800		
RN MULTI SERIES	RN-100R-2	RN-100R-3	RN-100R-4
RNCM SERIES	RNCM-631		
TWA Series	TN-320		

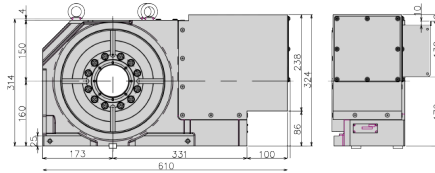
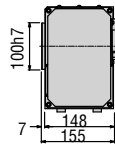
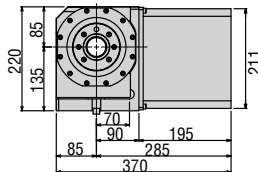
ROTARY TABLE DIMENSIONS



RWA, RWB & RBS Series ROTARY TABLES

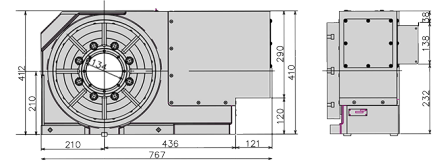
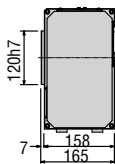
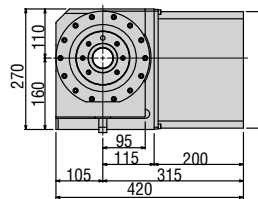
(Drawings Not To Scale)

RWA-160R



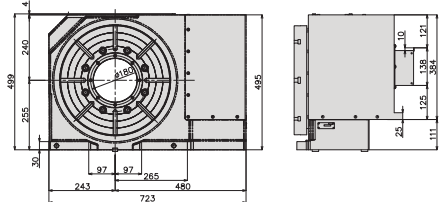
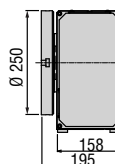
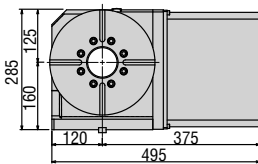
RWB-250

RWA-200R



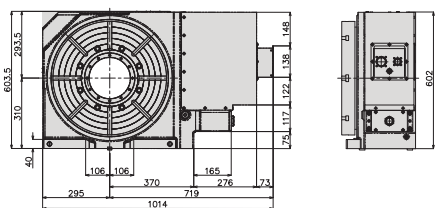
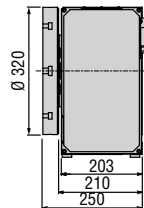
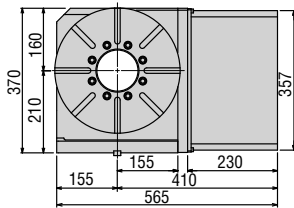
RWB-320

RWA-250R

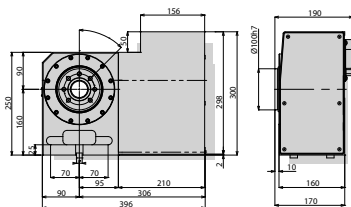


RWB-400

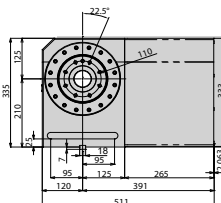
RWA-320R



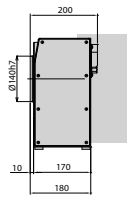
RWB-500



RBS-160



RBS-250



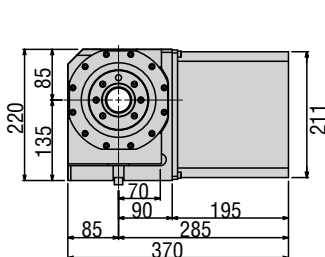
RBS-320

Please contact Koma Precision to confirm SMEC / Tsudakoma Rotary Table working envelope.

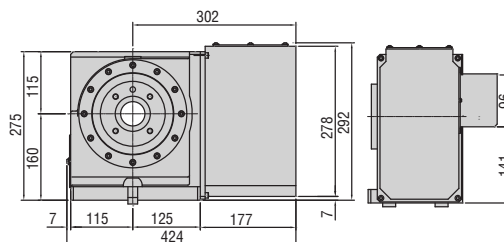
RWE, RNCM, RWE TPC, RN-MULTI, & RCV-Series ROTARY TABLES

(Drawings Not To Scale)

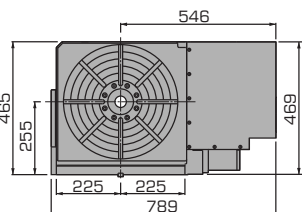
RWE-160R



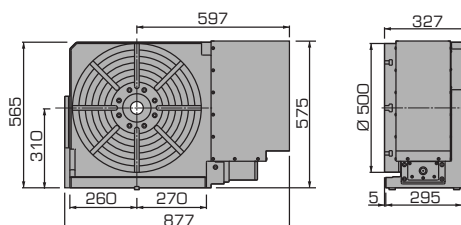
RWE-200R



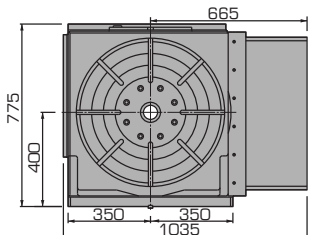
RNCM-401



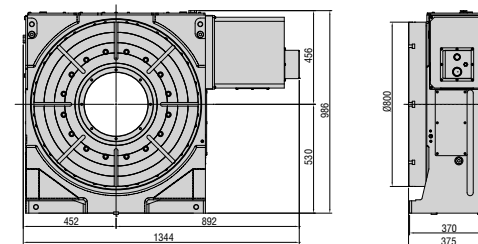
RNCM-501



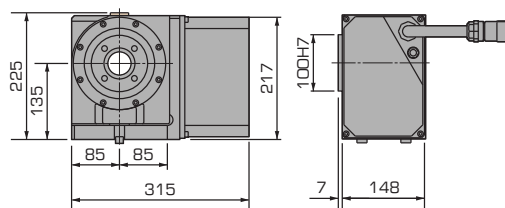
RNCM-631



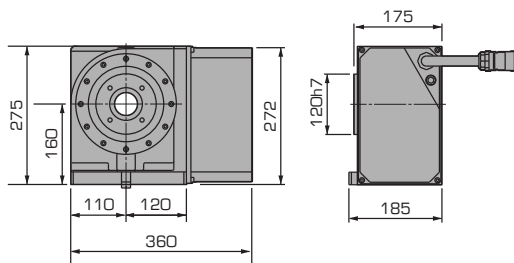
RCV-800R



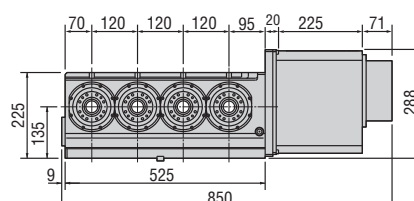
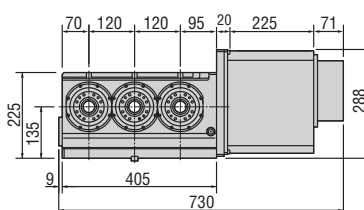
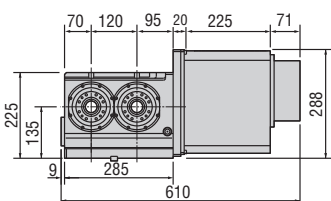
RWE-160 TPC



RWE-200 TPC



RN-100R-2,3,4



Please contact Koma Precision to confirm SMEC / Tsudakoma Rotary Table working envelope.

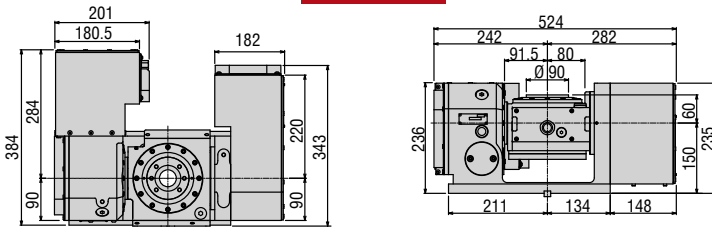
ROTARY TABLE DIMENSIONS



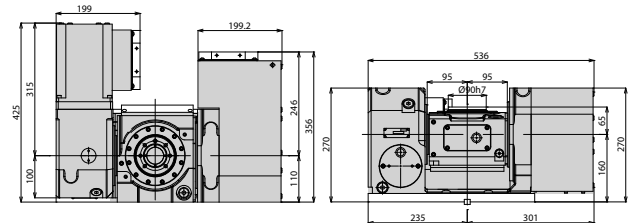
TWA, TBS Series & RTT-111,CA ROTARY TABLES

(Drawings Not To Scale)

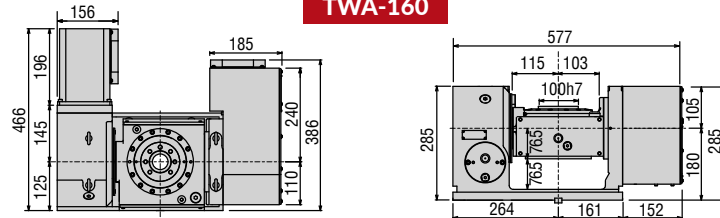
TWA-130



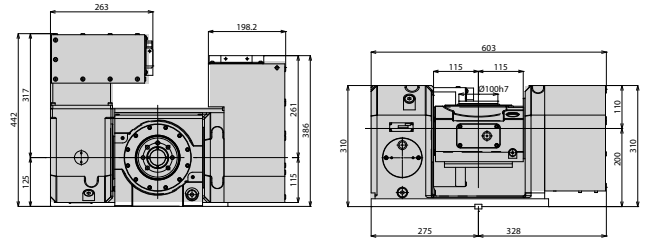
TBS-130



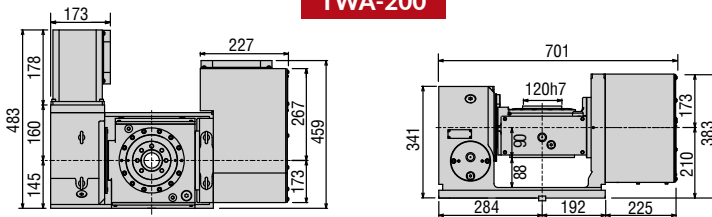
TWA-160



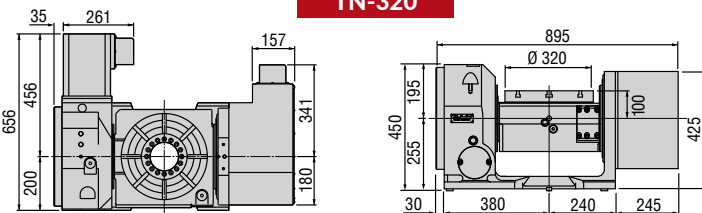
TBS-160



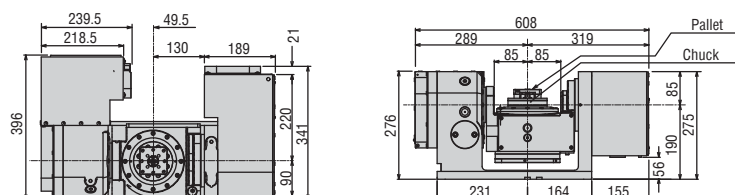
TWA-200



TN-320



RTT-111 CA



Please contact Koma Precision to confirm SMEC / Tsudakoma Rotary Table working envelope.

RN-Multi, RWE & RBS-Series Rotary Tables

Table Model		RN-100-2,3,4			RWE-160	RWE-200	RBS-160	RBS-250	RBS-320
Versions available		R, L			R, L	R, L	R	R	R
Spindle outer diameter		80h7			100h7	120h7	100h7	140h7	180h7
Table diameter (optional)		(115)			(160, 200)	(200, 250)	(160, 200)	250	320
Center height		135			135	160	160	210	255
Center bore	Nose Diameter	50H7			55H7	65H7	55H7	80H7	115H7
	Thru Diameter	30			40	45	40	50	85
Table T-slot width (with face plate)		-			(12H8)	(12H8)	12H8	12H8	14H8
Minimum spindle center distance		120			-	-	-	-	-
Guide block width		18h7			14h7	18h7	14h7	18h7	18h7
Servo motor (Fanuc)*		Alpha 4i			Alpha 2i	Alpha 4i	Alpha 4i	Alpha 8i	Alpha 12i
Maximum motor speed	rpm	5,000			5,000	5,000	5,000	4,000	4,000
Speed reduction ratio		1/36			1/72	1/72	1/36	1/36	1/36
Number of spindles		2	3	4	-	-	-	-	-
Maximum table speed	rpm	111.1			69.4	69.4	138.9	111.1	111.1
Inertia converted into motor shaft	$\times 10^{-3} \text{kg}\cdot\text{m}^2$	.64	.92	1.06	.09	.17	.09	.17	.41
Clamp system		Pneumatic			Pneumatic Disc Clamp		Pneumatic Disc Clamp		
Clamp torque @72psi	Nm (ft. lbs.)	80 (59)			250 (180)	400 (295)	700 (516)	1480 (1076)	2580 (1901)
Indexing accuracy	arc sec.	± 30			± 12.5	± 10	± 12.5	± 10	± 10
Net Weight	kg (lbs.)	70-110(154-242)			40 (88)	61 (135)	44 (97)	62 (136)	107 (235)
Allowable wheel torque	Nm (ft. lbs.)	176 (130)			206 (152)	288 (212)	206 (152)	288 (212)	565 (416)
Allowable work inertia	kg·m ²	.10			.64	1.25	.48	1.25	1.95
Allowable work weight	 kg (lbs) [w/ tailstock]	25 (55) [50 (110)]			100 (220) [200 (441)]	125 (275) [250 (551)]	75 (165) [150 (330)]	100 (220) [250 (550)]	100 (220) [250 (550)]
	 kg (lbs)	50 (110)			-	-	-	-	-
Allowable load when table clamped	 N (lbf)	5,880 (1,317)			10,800 (2,419)	14,400 (3,226)	7,840 (1,762)	13,720 (3,085)	250 (550)
	 Nm (ft. lbs.)	80 (59)			500 (369)	800 (590)	250 (180)	400 (295)	13,720 (3,073)
	 Nm (ft. lbs.)	156 (115)			780 (575)	1,900 (1,400)	392 (290)	980 (723)	600 (442)

* Other motors & RPM available

Dimensions = mm

Specifications subject to change without notice

RWA-Series Rotary Tables

Table Model		RWA-160	RWA-200	RWA-250	RWA-320
Versions available		R, L	R, L	R, L	R, L
Spindle outer diameter		100h7	120h7	140h7	180h7
Table diameter (optional)		(160, 200)	(200, 250)	250	320
Center height		135	160	160	210
Center bore	Nose Diameter	55H7	65H7	80H7	115H7
	Thru Diameter	40	45	50	85
Table T-slot width (with face plate)		(12H8)	(12H8)	12H8	14H7
Guide block width		14h7	18h7	18h7	18h7
Servo motor (Fanuc)*		Alpha 2i	Alpha 4i	Alpha 8i (8is)	Alpha 8i (22is)
Maximum motor speed	rpm	5,000	5,000	4,000 (4,000)	4,000 (3,000)
Speed reduction ratio		1/72	1/72	1/90 (1/45)	1/120 (1/45)
Maximum table speed	rpm	69.4	69.4	44.4 (88.9)	33.3 (66.6)
Inertia converted into motor shaft	$\times 10^{-3} \text{kg} \cdot \text{m}^2$	.09	.17	.41 (.44)	.52 (1.66)
Clamp system		Pneumatic Dual Taper			
Clamp torque @72psi	Nm (ft. lbs.)	500 (369)	800 (590)	1,000 (737)	1,500 (1,106)
Indexing accuracy	arc sec.	± 12.5	± 10	± 10	± 10
Net Weight	kg (lbs.)	38 (84)	61 (134)	80 (176)	145 (319)
Allowable wheel torque	Nm (ft. lbs.)	206 (152)	288 (212)	596 (439)	939 (692)
Allowable work inertia	kg $\cdot\text{m}^2$	.64	1.25	1.95	4.48
Allowable work weight	 kg (lbs) [w/ tailstock]	100 (220) [175 (385)]	125 (275) [250 (550)]	125 (275) [250 (550)]	175 (385) [375 (825)]
	 kg (lbs)	200 (440)	250 (550)	250 (550)	350 (770)
Allowable load when table clamped	 N (lbf)	10,800 (2,419)	14,400 (3,226)	14,400 (3,226)	24,800 (5,555)
	 Nm (ft. lbs.)	500 (369)	800 (590)	1,000 (737)	1,500 (1,106)
	 Nm (ft. lbs.)	780 (575)	1,900 (1,400)	1,900 (1,400)	4,700 (3,464)

* Other motors & RPM available

Dimensions = mm

Specifications subject to change without notice

RWB Series Rotary Tables

Table Model		RWB-250	RWB-320	RWB-400	RWB-500
Versions available		R, L	R, L	R, L	R, L
Table diameter		250	320	400	500
Center height		160	210	255	310
Center bore	Nose Diameter	105	150	200	220
	Thru Diameter	80	120	160	182
Table T-slot width (with face plate)		12H7	14H7	14H7	18H7
Guide block width		18h7			
Servo motor (Fanuc)*		Alpha 8i	Alpha 12i		
Maximum motor speed	rpm	4,000			
Speed reduction ratio		1/90	1/90	1/90	1/180
Maximum table speed	rpm	44.4	44.4	44.4	22.2
Inertia converted into motor shaft	x 10 ⁻³ kg·m ²	1.27	3.53	4.28	3.00
Clamp system		Hydraulic**			
Clamp torque @500psi	Nm (ft. lbs.)	1,300 (958)	3,100 (2,284)	5,500 (4,053)	6,100 (4,496)
Indexing accuracy	arc sec.	±7			
Net Weight	kg (lbs.)	125 (286)	250 (550)	360 (792)	620 (1,364)
Allowable wheel torque	Nm (ft. lbs.)	1,011 (745)	2,127 (1,567)	3,958 (2,917)	3,276 (2,414)
Allowable work inertia	kg·m ²	7.0	19.2	36	112
Allowable work weight	 kg (lbs) [w/ tailstock]	175 (385) [250 (550)]	250 (550) [500 (1,100)]	300 (660) [600 (1,320)]	600 (1,320) [1,200 (2,460)]
	 kg (lbs)	350 (770)	1,100 (500)	1,320 (600)	2,640 (1,200)
Allowable load when table clamped	 N (lbf)	35,000 (7,700)	89,000 (19,580)	109,000 (23,980)	240,000 (52,800)
	 Nm (ft. lbs.)	1,300 (958)	3,100 (2,284)	5,500 (4,053)	7,600 (5,601)
	 Nm (ft. lbs.)	1,500 (1,105)	5,300 (3,906)	7,800 (5,748)	17,000 (12,529)

* Other motors & RPM available

** Booster optional

Dimensions = mm

Specifications subject to change without notice

ROTARY TABLE SPECIFICATIONS



RWE Series Indexers

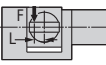
Indexer Model		RWE-160 TPC	RWE-200 TPC
Spindle outer diameter		100h7	120h7
Table diameter (optional)		(160 or 200)	(200 or 250)
Center height		135	160
Center bore	Nose Diameter (w/ face plate)	55H7 (50H7)	65H7 (60H7)
	Thru Diameter	40	45
Table T-slot width w/ face plate		12H8	12H8
Guide block width		14h7	18h7
Controller (included with table)		TPC-Jr G2	TPC-Jr G3
Maximum motor speed	rpm	3,000	
Speed reduction ratio		1/60	1/72
Maximum table speed	rpm	50	41.7
Inertia converted into motor shaft	$\times 10^{-3} \text{kg}\cdot\text{m}^2$	.19	.19
Clamp system		Pneumatic	
Clamp torque @72psi	Nm (ft. lbs.)	156 (115)	294 (217)
Indexing accuracy	arc sec.	± 22.5	
Net Weight	kg (lbs.)	40 (88)	65 (143)
Allowable wheel torque	Nm (ft. lbs.)	147 (108)	264 (195)
Allowable work inertia	$\text{kg}\cdot\text{m}^2$	.48	1.2
Allowable work weight	 kg (lbs) [w/ tailstock]	75 (165) [150 (330)]	100 (220) [250 (550)]
	 kg (lbs)	150 (330)	250 (550)
Allowable load when table clamped	 N (lbf)	7,840 (1,756)	13,720 (3,073)
	 Nm (ft. lbs.)	156 (115)	294 (217)
	 Nm (ft. lbs.)	392 (289)	980 (722)

Controller		TPC-Jr
Control axis		1 axis
Servo motor		AC servo, ABS detector
Command unit		0.001°
Dividing number	Direct indexing	1 to 999999 even indexing
	Arc indexing	1 to 999 even indexing
Max. command angle		$\pm 999.999^\circ$
Command system		INC, ABS, Shortcut ABS, INC/ABS mixed system
Input system		Includes MDI & full RS-232 communication
Program control		Workpiece No. (W0000 to 9999)
Program capacity		1000 blocks in main & sub-program together
Cable supplied (Standard)	Between rotary table & TPC-Jr (1 pc.)	
	For motor : 5m	
	Power cable : 5m	
Power Requirements (less than 100 ohm ground resistance)	Interlocking cable : 5m	
	1 Ø 200/220V $\pm 10\%$ 50/60Hz (non-CE)	
	1 Ø 230V $\pm 10\%$ 50/60Hz (CE)	
	Model	Power capacity
	Jr H2	1.2KVA
	Jr H3	2.2KVA
		Fuse Rating
		8A
		15A

Dimensions = mm

Specifications subject to change without notice

TWA, TBS Series, & RTT-111, CA Rotary Tables

Model		TWA-130		TWA-160		TWA-200		TN-320		TBS-130		TBS-160		RTT-111, CA	
Tilt Range		-17° ~ +107°		-30° ~ +110°		-30° ~ +110°		-30° ~ +110°		-30° ~ +110°		-30° ~ +110°		-17° ~ +107°	
Spindle outer diameter		90h7		100h7		120h7		-		90h7		100h7			
Table diameter (optional)		(135)		160 (200)		200 (250)		320		(135)		(160 or 200)			
Table height at 0° position		210 (235 w/faceplate)		235 (260 w/faceplate)		270 (300 w/faceplate)		355		225 (250 w/faceplate)		270 (300 w/faceplate)		190	
Center height at 90° position		150		180		210		255		160		200		190	
Center bore	Nose Diameter (w/face plate)	55H7 (40H7)		55H7 (50H7)		65H7 (60H7)		105H7		55H7 (40H7)		55H7 (50H7)		--	
	Thru Diameter	35		40		45		100		40		40		--	
Table T-slot width		12H8 (w/faceplate)		12H8 (w/faceplate)		12H8 (w/faceplate)		14H7		12H8		12H8		--	
Guide block width		14h7		18h7		18h7		18h7		14h7		18h7		14H7	
Servo motor (Fanuc)*		Rotary		Tilt		Rotary		Tilt		Rotary		Tilt		Rotary	
		Alpha 2i		Alpha 4i		Alpha 8i		Alpha 2i		Alpha 4i		Alpha 2i		Alpha 2i	
Maximum motor speed	rpm	5,000	5,000	5,000	5,000	5,000	5,000	4,000	4,000	5,000	5,000	5,000	5,000	5,000	5,000
Speed reduction ratio		1/60	1/120	1/72	1/120	1/45	1/90	1/120	1/240	1/48	1/60	1/60	1/60	1/60	1/120
Maximum table speed	rpm	83.3	41.7	69.4	41.7	111.1	55.5	33.3	16.6	104.2	83.3	83.3	83.3	83.3	41.7
Inertia converted into motor shaft	x 10 ⁻³ kg.m ²	.074	.072	.17	.18	.38	.45	.82	.45	.074	.072	.17	.18	.074	.072
Clamp system		Pneumatic Dual Taper						Hydraulic @500 psi**		Pneumatic				Pneumatic Dual Taper	
Clamp torque @72psi	Nm (ft. lbs.)	500 (369)	500 (369)	500 (369)	800 (590)	800 (590)	1,000 (737)	[2,200] [(1,621)]	[2,200] [(1,621)]	700 (516)	700 (516)	700 (516)	700 (516)	500 (369)	500 (369)
Indexing accuracy	arc sec.	±20	-	±15	-	±15	-	±10	-	±10	-	±10	-	±20	-
Tilting accuracy	arc sec.	-	±22.5	-	±22.5	-	±22.5	-	±22.5	-	±17.5	-	±17.5	-	±30
Net Weight	kg (lbs.)	76 (167)		127 (279)		190 (418)		440 (968)		125 (276)		160 (353)		98(216)	
Allowable wheel torque - rotary	Nm (ft. lbs.)	152 (112)		200 (147)		450 (332)		931 (686)		-		-		152(112)	
Allowable work inertia	kg.m ²	.08		.19		.59		1.53		.08		.19		.08	
Allowable work weight	0° tilt angle 	kg (lbs.)		35 (77)		60 (132)		120 (264)		150 (330)		35 (77)		60 (132)	
	0° ~ 90° tilt angle 	kg (lbs.)		20 (44)		40 (88)		70 (154)		100 (220)		20 (44)		40 (88)	
Allowable work moment	 Nm (ft. lbs.)	24 (17.7)		39.2 (28.9)		53.7 (39.6)		163.3 (120.4)		61.1		59.6		57 (42)	
Allowable load when table clamped	 N (lbf)	3,920 (878)		7,840 (1,756)		13,720 (3,073)		19,600 (4,390)		3,920 (878)		10,800		3,920 (878)	
	 Nm (ft. lbs.)	500 (369)		500 (369)		800 (590)		2,200 (1,621)		700 (516)		700 (516)		500 (369)	
	 Nm (ft. lbs.)	500 (369)		800 (590)		1,000 (737)		2,200 (1,621)		700 (516)		700 (516)		500 (369)	

* Other motors & RPM available • ** Booster optional • Dimensions = mm • Specifications subject to change without notice

RNCM-Series | RCV-Series Rotary Tables

Table Model		RNCM-401	RNCM-501	RNCM-631	RCV-800R
Versions available		R, L	R, L	R, L	R
Table diameter (optional)		400	500	630	800 (1,000)
Center height		255	310	400	530
Center bore	Nose Diameter	40H7	50H7	60H6	360H7 x 45
	Thru Diameter	40	50	60	310
Table T-slot width (with face plate)		14H7	18H7	18H7	18H7
Guide block width		18h7			22h7
Servo motor (Fanuc)*		Alpha 12i			
Maximum motor speed	rpm	4,000	4,000	4,000	4,000
Speed reduction ratio		1/180	1/180	1/180	1/360
Maximum table speed	rpm	22.2	22.2	22.2	11.1
Inertia converted into motor shaft	$\times 10^{-3} \text{kg-m}^2$	2.05	3.09	5.55	4.89
Clamp system		Hydraulic**			
Clamp torque @500psi	Nm (ft. lbs.)	1,764 (1,300)	2,450 (1,806)	4,410 (3,250)	7,000 (5,159)
Indexing accuracy	arc sec.	± 7.5			
Net Weight	kg (lbs.)	300 (660)	450 (990)	800 (1,760)	1,450 (3,190)
Allowable wheel torque	Nm (ft. lbs.)	1,666 (1,228)	2,450 (1,806)	4,116 (3,033)	7,840 (5,778)
Allowable work inertia	kg-m ²	9.7	18.2	39.7	120
Allowable work weight	 kg (lbs) [w/ tailstock]	200 (440) [500 (1,100)]	250 (550) [600 (1,320)]	400 (880) [800 (1,760)]	2,000 (4,400) [4,000 (8,000)]
	 kg (lbs)	500 (1,100)	600 (1,320)	1000 (2,200)	4,000 (8,800)
Allowable load when table clamped	 N (lbf)	39,200 (8,781)	49,000 (10,976)	49,000 (10,976)	100,000 (22,400)
	 Nm (ft. lbs.)	1,764 (1,300)	2,450 (1,806)	4,410 (3,250)	7,000 (5,159)
	 Nm (ft. lbs.)	2,450 (1,806)	3,430 (2,528)	7,840 (5,778)	11,600 (8,550)

* Other motors & RPM available

** Booster optional

Dimensions = mm

Specifications subject to change without notice



Tel: 1.800.249.5662
Fax: 860.623.4132

info@komaprecision.com
www.komaprecision.com

20 Thompson Road
East Windsor, CT 06088