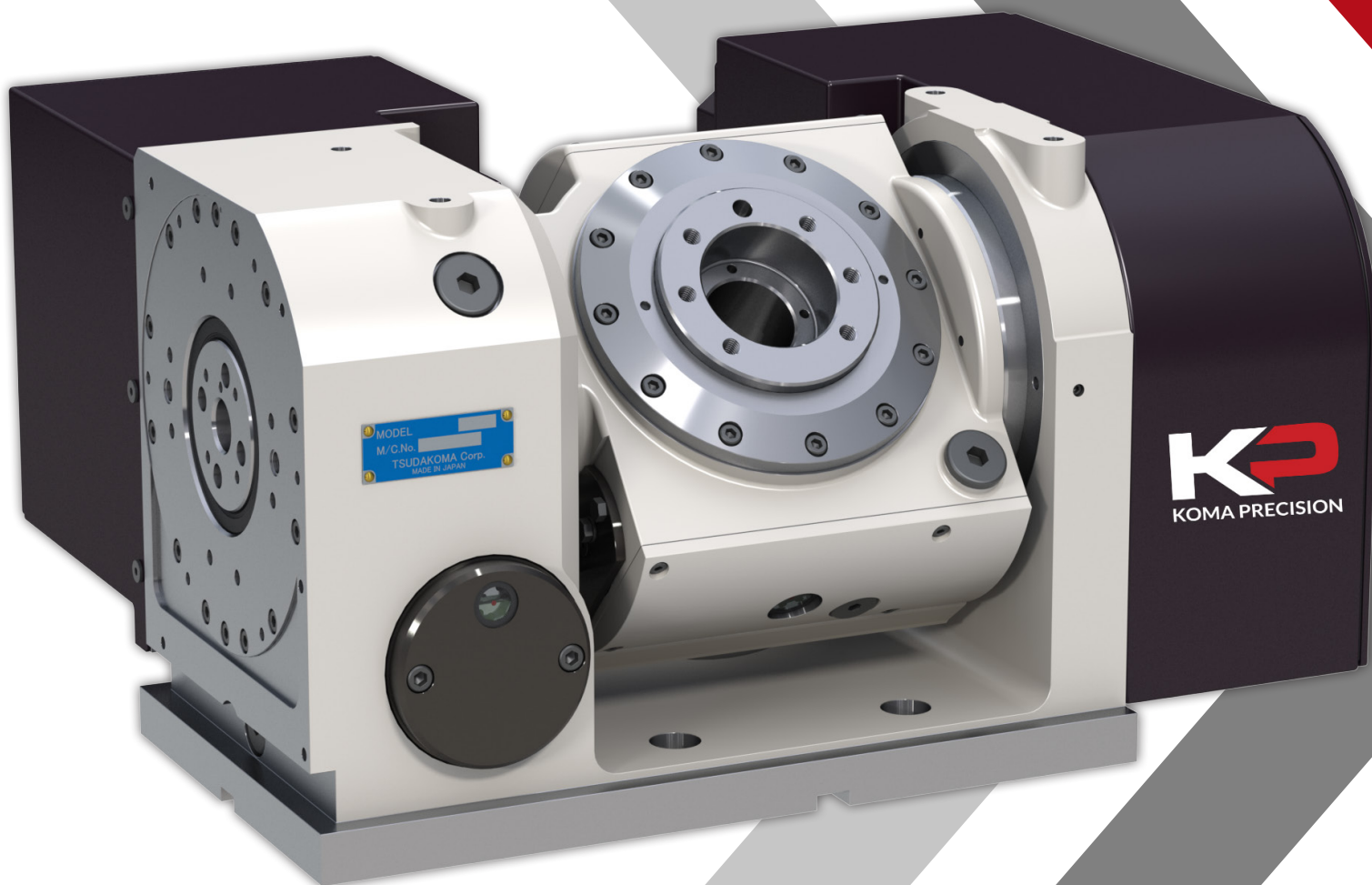




TSUDAKOMA

Rotary Table

Selection Guide

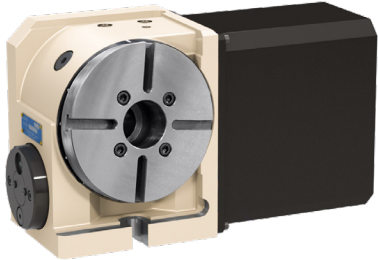
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For over thirty-five years Koma Precision has been the foremost source for the finest the world has to offer in machine tool Productivity Innovation.

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.



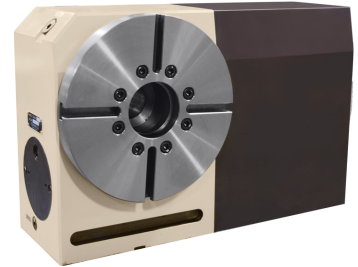
ROTARY TABLES



RWE SERIES



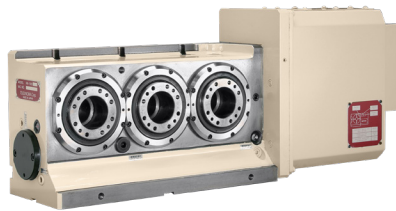
RWA SERIES



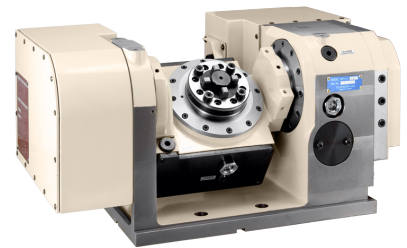
RBS SERIES



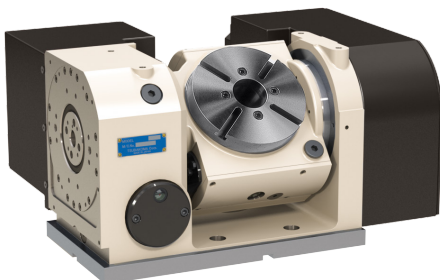
RWB SERIES



RN MULTI SERIES



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



TWA SERIES



TBS SERIES



GX 480				
RWE SERIES	RWE-160R			
RWA SERIES	RWA-160R			
RBS SERIES	RBS-160R			
RWB SERIES	RWB-250R			
RN MULTI SERIES	RN-100R-2			
TWA SERIES	TN-101	TWA-130	TWA-160	
TBS SERIES	TBS-130	TBS-160		
5 TH AXIS TILTING	RTT-111 CA			



GX 600				
RWE SERIES	RWE-160R	RWE-200R		
RWA SERIES	RWA-160R	RWA-200R	RWA-250R	
RBS SERIES	RBS-160R	RBS-250R		
RWB SERIES	RWB-250R			
RN MULTI SERIES	RN-100R-2	RN-100R-3	RN-100R-4	
TWA SERIES	TN-101	TWA-130	TWA-160	
TBS SERIES	TBS-130	TBS-160		
5 TH AXIS TILTING	RTT-111 CA			

GX 710 & GX 1000



GX 710				
RWE SERIES	RWE-160R	RWE-200R		
RWA SERIES	RWA-160R	RWA-200	RWA-250	
RBS SERIES	RBS-160R	RBS-250		
RWB SERIES	RWB-250R			
RN MULTI SERIES	RN-100R-2	RN-100R-3	RN-100R-4	
TWA SERIES	TN-101	TWA-130	TWA-160	
TBS SERIES	TBS-130	TBS-160		
5 TH AXIS TILTING	RTT-111 CA			



GX 1000				
RWA SERIES	RWA-250R	RWA-320R		
RBS SERIES	RBS-250R	RBS-320R		
RWB SERIES	RWB-250R	RWB-320R		
RN MULTI SERIES	RN-100R-2	RN-100R-3	RN-100R-4	
TWA SERIES	TWA-130	TWA-160	TWA-200	
TBS SERIES	TBS-130	TBS-160		
5 TH AXIS TILTING	RTT-111 CA			



GX 1300				
RWA SERIES	RWA-250R	RWA-320R		
RBS SERIES	RBS-250R	RBS-320R		
RWB SERIES	RWB-250R	RWB-320R	RWB-400R	
RN MULTI SERIES	RN-100R-2	RN-100R-3	RN-100R-4	
TWA SERIES	TWA-130	TWA-160	TWA-200	TN-320
TBS SERIES	TBS-130	TBS-160		
5 TH AXIS TILTING	RTT-111 CA			



GX 1600				
RWA SERIES	RWA-250R	RWA-320R		
RBS SERIES	RBS-250R	RBS-320R		
RWB SERIES	RWB-250R	RWB-320R	RWB-400R	
RN MULTI SERIES	RN-100R-2	RN-100R-3	RN-100R-4	
TWA SERIES	TWA-160	TWA-200	TN-320	
TBS SERIES	TBS-160			

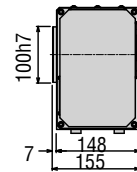
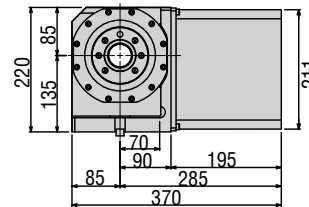
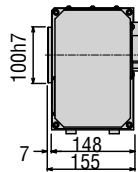
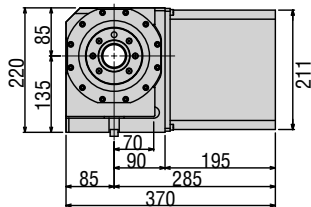
ROTARY TABLE DIMENSIONS



RWE, RWA & RN Multi Series

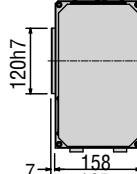
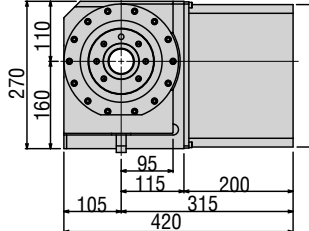
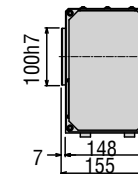
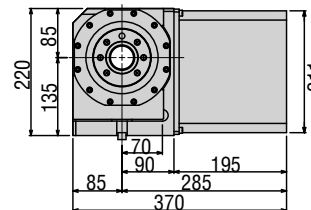
(Drawings Not To Scale)

RWE-160



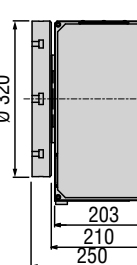
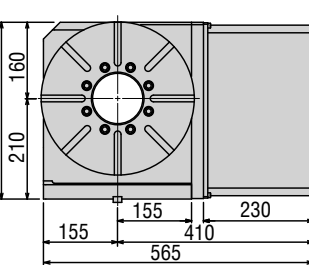
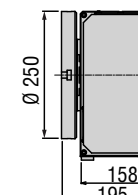
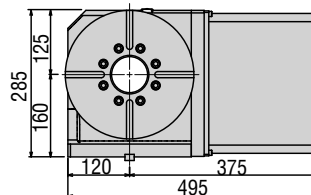
RWE-200

RWA-160

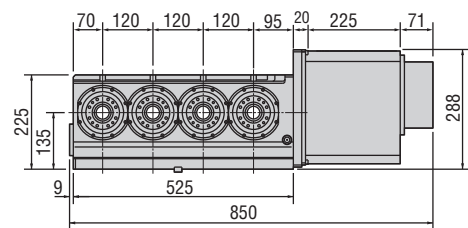
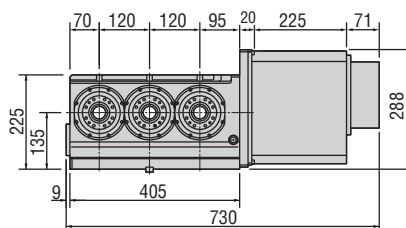
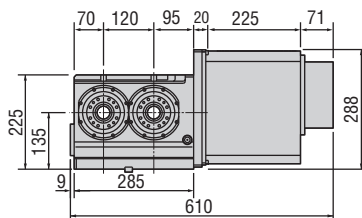


RWA-200

RWA-250



RWA-320



RN-100R-2,3,4

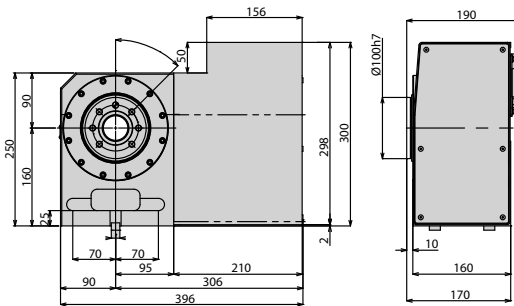
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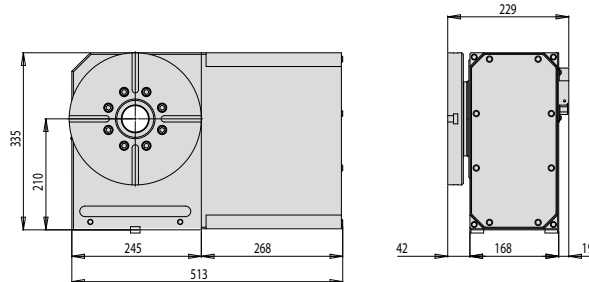
RBS, & RTT-111,CA

(Drawings Not To Scale)

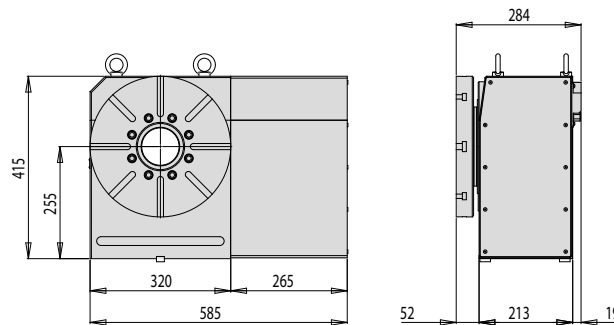
RBS-160



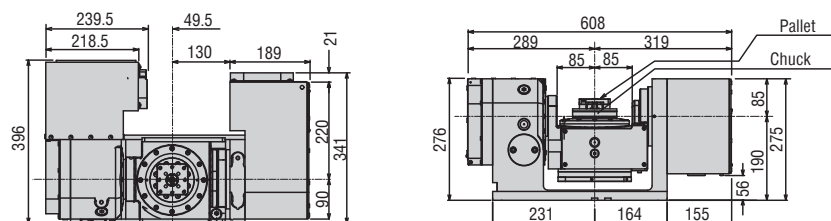
RBS-250



RBS-320



RTT-111,CA



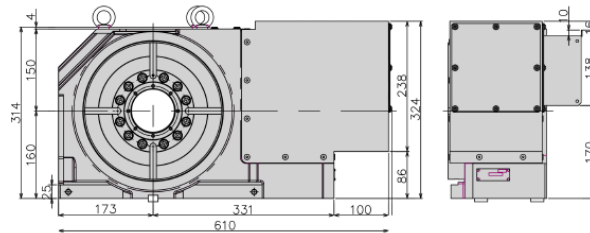
ROTARY TABLE DIMENSIONS



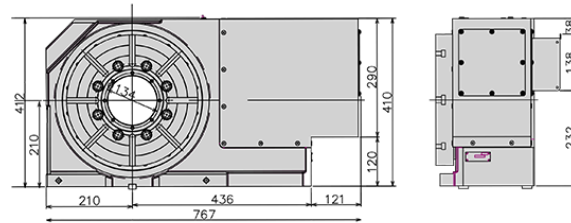
RWB & TBS Series

(Drawings Not To Scale)

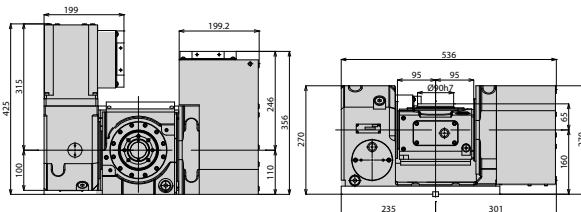
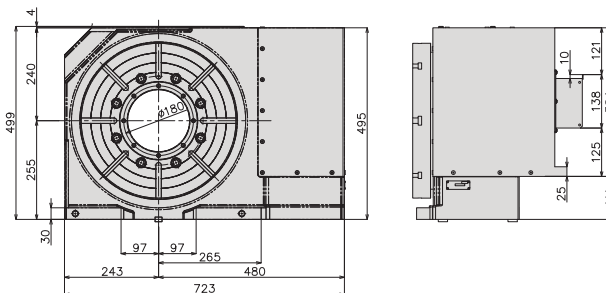
RWB-250



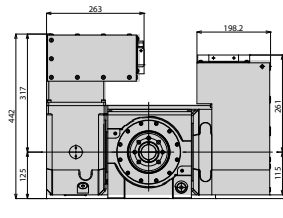
RWB-320



RWB-400



TBS-130



TBS-160

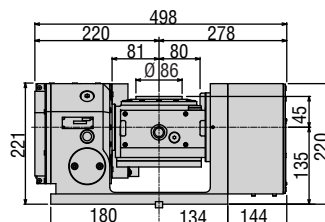
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(Drawings Not To Scale)

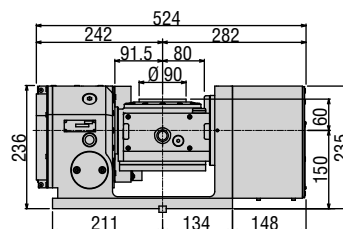
Technical drawing of the 1000 Series Motor showing front and side views with dimensions:

- Front View (Left):**
 - Total width: 177
 - Total height: 384
 - Base height: 100
 - Motor body height: 284
- Side View (Right):**
 - Total width: 178
 - Total height: 381
 - Base height: 100
 - Motor body height: 220



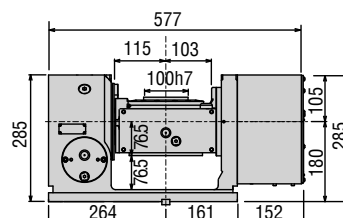
Technical drawing of the 1000 Series Motor showing front and side views with dimensions:

- Front View Dimensions:
 - Total width: 201
 - Width to centerline: 180.5
 - Total height: 384
 - Height to centerline: 284
 - Base height: 90
- Side View Dimensions:
 - Top flange width: 182
 - Height to centerline: 220
 - Total height: 343
 - Base height: 90



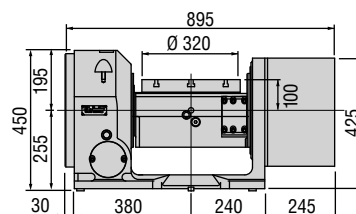
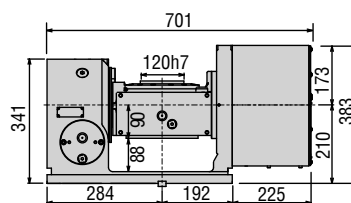
Technical drawing of the safe showing front, side, and top views with dimensions in mm:

- Front View:** Total height 466 mm, top section height 156 mm, middle section height 196 mm, bottom section height 125 mm. The door is 145 mm high and features a circular dial and a handle.
- Side View:** Total height 396 mm, top section height 185 mm, middle section height 240 mm, bottom section height 110 mm.



Technical drawing of the safe showing front, side, and top views with dimensions in mm:

- Front View:** Total height 483 mm, bottom section height 145 mm, top section height 178 mm, bottom section width 173 mm, top section width 173 mm.
- Side View:** Total height 459 mm, bottom section height 173 mm, top section height 267 mm, total width 227 mm.



RN-Multi & RWE-Series

Table Model		RN-100-2,3,4			RWE-160	RWE-200
Versions available		R, L			R, L	R, L
Spindle outer diameter		80h7			100h7	120h7
Table diameter (optional)		(115)			(160, 200)	(200, 250)
Center height		135			135	160
Center bore	Nose Diameter	50H7			55H7	65H7
	Thru Diameter	30			40	45
Table T-slot width (with face plate)		-			(12H8)	(12H8)
Minimum spindle center distance		120			-	-
Guide block width		18h7			14h7	18h7
Servo motor (Fanuc)*		Alpha 4i			Alpha 2i	Alpha 4i
Maximum motor speed rpm		5,000			5,000	5,000
Speed reduction ratio		1/36			1/72	1/72
Number of spindles		2	3	4	-	-
Maximum table speed rpm		138.9			69.4	69.4
Inertia converted into motor shaft $\times 10^{-3} \text{kg}\cdot\text{m}^2$		.64	.92	1.06	.09	.17
Clamp system		Pneumatic			Pneumatic Disc Clamp	
Clamp torque @72psi Nm (ft. lbs.)		80 (59)			250 (180)	400 (295)
Indexing accuracy arc sec.		± 30			± 12.5	± 10
Net Weight kg (lbs.)		70-110(154-242)			40 (88)	61 (135)
Allowable wheel torque Nm (ft. lbs.)		176 (130)			206 (152)	288 (212)
Allowable work inertia $\text{kg}\cdot\text{m}^2$		.10			.64	1.25
Allowable work weight	 kg (lbs) [w/ tailstock]	25 (55) [50 (110)]			100 (220) [200 (441)]	125 (275) [250 (551)]
	 kg (lbs)	50 (110)			-	-
Allowable load when table clamped	 N (lbf)	5,880 (1,317)			10,800 (2,419)	14,400 (3,226)
	 Nm (ft. lbs.)	80 (59)			500 (369)	800 (590)
	 Nm (ft. lbs.)	156 (115)			780 (575)	1,900 (1,400)

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

RWA & RBS-Series

Table Model		RWA-160	RWA-200	RWA-250	RWA-320	RBS-160	RBS-250	RBS-320
Versions available		R, L	R, L	R, L	R, L	R	R	R
Spindle outer diameter		100h7	120h7	140h7	180h7	100h7	140h7	180h7
Table diameter (optional)		(160, 200)	(200, 250)	250	320	(160, 200)	250	320
Center height		135	160	160	210	160	210	255
Center bore	Nose Diameter	55H7	65H7	80H7	115H7	55H7	80H7	115H7
	Thru Diameter	40	45	50	85	40	50	85
Table T-slot width (with face plate)		(12H8)	(12H8)	12H8	14H7	12H8	12H8	14H8
Minimum spindle center distance		-	-	-	-	-	-	-
Guide block width		14h7	18h7	18h7	18h7	14h7	18h7	18h7
Servo motor (Fanuc)*		Alpha 2i	Alpha 4i	Alpha 8i (8is)	Alpha 8i (22is)	Alpha 4i	Alpha 8i	Alpha 12i
Maximum motor speed rpm		5,000	5,000	4,000 (4,000)	4,000 (4,000)	5,000	4,000	4,000
Speed reduction ratio		1/72	1/72	1/90 (1/45)	1/120 (1/45)	1/36	1/36	1/36
Number of spindles		-	-	-	-	-	-	-
Maximum table speed rpm		69.4	69.4	44.4 (88.9)	33.3 (88.9)	138.9	111.1	111.1
Inertia converted into motor shaft x 10 ⁻³ kg.m ²		.09	.17	.41 (.44)	.52 (1.66)	0.19	0.42	2.24
Clamp system		Pneumatic Dual Taper				Pneumatic Disc Clamp		
Clamp torque @72psi Nm (ft. lbs.)		500 (369)	800 (590)	1,000 (737)	1,500 (1,106)	700 (516)	1480 (1076)	2580 (1901)
Indexing accuracy arc sec.		±12.5	±10	±10	±10	±12.5	±10	±10
Net Weight kg (lbs.)		38 (84)	61 (134)	80 (176)	145 (319)	44 (97)	62 (136)	107 (235)
Allowable wheel torque Nm (ft. lbs.)		206 (152)	288 (212)	596 (439)	939 (692)	206 (152)	288 (212)	565 (416)
Allowable work inertia kg.m ²		.64	1.25	1.95	4.48	.48	1.25	1.95
Allowable work weight	 kg (lbs) [w/ tailstock]	100 (220) [175 (385)]	125 (275) [250 (550)]	125 (275) [250 (550)]	175 (385) [375 (825)]	75 (165) [150 (330)]	100 (220) [250 (550)]	100 (220) [250 (550)]
	 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)	7,840 (1,762)	13,720 (3,085)	250 (550)
	 Nm (ft. lbs.)	500 (369)	800 (590)	1,000 (737)	1,500 (1,106)	250 (180)	400 (295)	13,720 (3,073)
	 Nm (ft. lbs.)	780 (575)	1,900 (1,400)	1,900 (1,400)	4,700 (3,464)	392 (290)	980 (723)	600 (442)

* Other motors & RPM available

Dimensions = mm

Specifications subject to change without notice

RWB -Series

Model		RWB-250	RWB-320	RWB-400
Versions available		R, L	R, L	R, L
Table diameter		250	320	400
Center height		160	210	255
Center bore	Nose Diameter	105	150	200
	Thru Diameter	80	120	160
Table T-slot width (with faceplate)		12H7	14H7	
Guide block width		18h7		
Servo motor (Fanuc)*		Alpha 8i	Alpha 12i	Alpha 12i
Maximum motor speed rpm		4,000	4,000	4,000
Speed reduction ratio		1/90	1/90	1/90
Maximum table speed rpm		44.4	44.4	44.4
Inertia converted into motor shaft x 10 ⁻³ kg·m ²		1.27	3.53	4.63
Clamp system		Hydraulic		
Clamp torque @500psi Nm (ft. lbs.)		1,300 (958)	3,100 (2,284)	5,500 (4,053)
Indexing accuracy arc sec.		±7		
Net Weight kg (lbs.)		125 (286)	250 (550)	360 (792)
Allowable wheel torque Nm (ft. lbs.)		1,011 (745)	2,127 (1,567)	3,958 (2,917)
Allowable work inertia kg·m ²		7.0	19.2	36.0
Allowable work weight	 kg (lbs) [w/ tailstock]	175 (385) [350 (770)]	250 (550) [500 (1,100)]	300 (660) [600 (1,320)]
	 kg (lbs)	350 (770)	500 (1,100)	600 (1,320)
Allowable load when table clamped	 N (lbf)	35,000 (7,700)	89,000 (19,580)	109,000 (23,980)
	 Nm (ft. lbs.)	1,300 (958)	2,100 (2,284)	5,500 (4,053)
	 Nm (ft. lbs.)	1,500 (1,105)	5,300 (3,906)	7,800 (5,748)

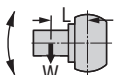
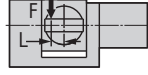
* Other motors & RPM available

** Booster optional

Dimensions = mm

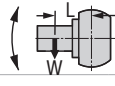
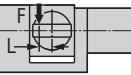
Specifications subject to change without notice

TWA-Series

Model		TN-101		TWA-130		TWA-160		TWA-200		TN-320	
Tilt Range		-17° ~ +107°		-17° ~ +107°		-30° ~ +110°		-30° ~ +110°		-30° ~ +110°	
Spindle outer diameter		86h7		90h7		100h7		120h7		-	
Table diameter (optional)		(135)		(135)		160 (200)		200 (250)		320	
Table height at 0° position		180 (205 w/face plate)		210 (235 w/face plate)		235 (260 w/face plate)		270 (300 w/face plate)		355	
Center height at 90° position		135		150		180		210		255	
Center bore	Nose Diameter (w/face plate)	55H7 (40H7)		55H7 (40H7)		55H7 (50H7)		65H7 (60H7)		105H7	
	Thru Diameter	35		35		40		45		100	
Table T-slot width		12H7 (w/face plate)		12H8 (w/face plate)		12H8 (w/face plate)		12H8 (w/face plate)		14H7	
Guide block width		14h7		14h7		18h7		18h7		18h7	
Servo motor (Fanuc)*		Rotary	Tilt	Rotary	Tilt	Rotary	Tilt	Rotary	Tilt	Rotary	Tilt
		Alpha 2i	Alpha 2i	Alpha 2i	Alpha 2i	Alpha 2i	Alpha 2i	Alpha 4i	Alpha 4i	Alpha 8i	Alpha 8i
Maximum motor speed	rpm	5,000	5,000	5,000	5,000	5,000	5,000	4,000	4,000	4,000	4,000
Speed reduction ratio		1/60	1/120	1/60	1/120	1/72	1/120	1/45	1/90	1/120	1/240
Maximum table speed	rpm	83.3	41.7	83.3	41.7	69.4	41.7	88.9	44.4	33.3	16.7
Inertia converted into motor shaft	$\times 10^{-3}\text{kg}\cdot\text{m}^2$	.072	.078	.074	.072	.17	.18	.38	.45	.82	.45
Clamp system		Pneumatic		Pneumatic Dual Taper						Hydraulic @500 psi **	
Clamp torque @72psi	Nm (ft. lbs.)	200 (147)	300 (221)	500 (369)	500 (369)	500 (369)	800 (590)	800 (590)	1,000 (737)	[2,200] [[1,621]]	[2,200] [[1,621]]
Indexing accuracy	arc sec.	±20	-	±20	-	±15	-	±15	-	±10	-
Tilting accuracy	arc sec.	-	±22.5	-	±22.5	-	±22.5	-	±22.5	-	±22.5
Net Weight	kg (lbs.)	65 (143)		76 (167)		127 (279)		190 (418)		440 (968)	
Allowable wheel torque - rotary	Nm (ft. lbs.)	152 (112)		152 (112)		200 (147)		450 (332)		931 (686)	
Allowable work inertia	kg·m ²	.08		.08		.19		.59		1.53	
Allowable work weight	0° tilt angle 	kg (lbs)	35 (77)	35 (77)		60 (132)		120 (264)		150 (330)	
	0° ~ 90° tilt angle 	kg (lbs)	20 (44)	20 (44)		40 (88)		70 (154)		100 (220)	
Allowable work moment		Nm (ft. lbs.)	24 (17.7)	24 (17.7)		39.2 (28.9)		53.7 (39.6)		163.3 (120.4)	
Allowable load when table clamped		N (lbf)	3,920 (878)	3,920 (878)		7,840 (1,756)		13,720 (3,073)		19,600 (4,390)	
		Nm (ft. lbs.)	200 (147)	500 (369)		500 (369)		800 (590)		2,200 (1,621)	
		Nm (ft. lbs.)	300 (221)	500 (369)		800 (590)		1,000 (737)		2,200 (1,621)	

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

TBS-Series & RTT-111,CA

Model		TBS-130		TBS-160		RTT-111,CA	
Tilt Range		-30° ~ +110°		-30° ~ +110°		-17° ~ +107°	
Spindle outer diameter		90h7		100h7			
Table diameter (optional)		(135)		(160 or 200)			
Table height at 0° position		225 (250 w/faceplate)		270 (300 w/faceplate)		190	
Center height at 90° position		160		200		190	
Center bore	Nose Diameter (w/face plate)	55H7 (40H7)		55H7 (50H7)		-	
	Thru Diameter	40		40		-	
Table T-slot width		12H8		12H8		14H7	
Guide block width		14h7		18h7		14H7	
Servo motor (Fanuc)*	Rotary		Tilt		Tilt	Rotary	Tilt
	Alpha 2i	Alpha 2i	Alpha 2i	Alpha 4i	Alpha 2i	Alpha 2i	Alpha 2i
Maximum motor speed	rpm	5,000	5,000	5,000	5,000	5,000	5,000
Speed reduction ratio		1/48	1/60	1/60	1/60	1/60	1/120
Maximum table speed	rpm	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	.074	.72
Clamp system		Pneumatic				Hydraulic @500 psi **	
Clamp torque @72psi	Nm (ft. lbs.)	700 (516)	700 (516)	700 (516)	700 (516)	[2,200] [[1,621]]	[2,200] [[1,621]]
Indexing accuracy	arc sec.	±10	-	±10	-	±20	-
Tilting accuracy	arc sec.	-	±17.5	-	±17.5	-	±30
Net Weight	kg (lbs.)	125 (276)		160 (353)		98 (216)	
Allowable wheel torque - rotary	Nm (ft. lbs.)	-		-		152 (112)	
Allowable work inertia	kg.m ²	.08		.19		.08	
Allowable work weight	0° tilt angle 	kg (lbs.)	35 (77)	60 (132)	35 (77)		
	0° ~ 90° tilt angle 	kg (lbs.)	20 (44)	40 (88)	20 (44)		
Allowable work moment		Nm (ft. lbs.)	61.1	59.6	57 (42)		
Allowable load when table clamped		N (lbf)	3,920 (878)	10,800	3,920 (878)		
		Nm (ft. lbs.)	700 (516)	700 (516)	500 (369)		
		Nm (ft. lbs.)	700 (516)	700 (516)	500 (369)		

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



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