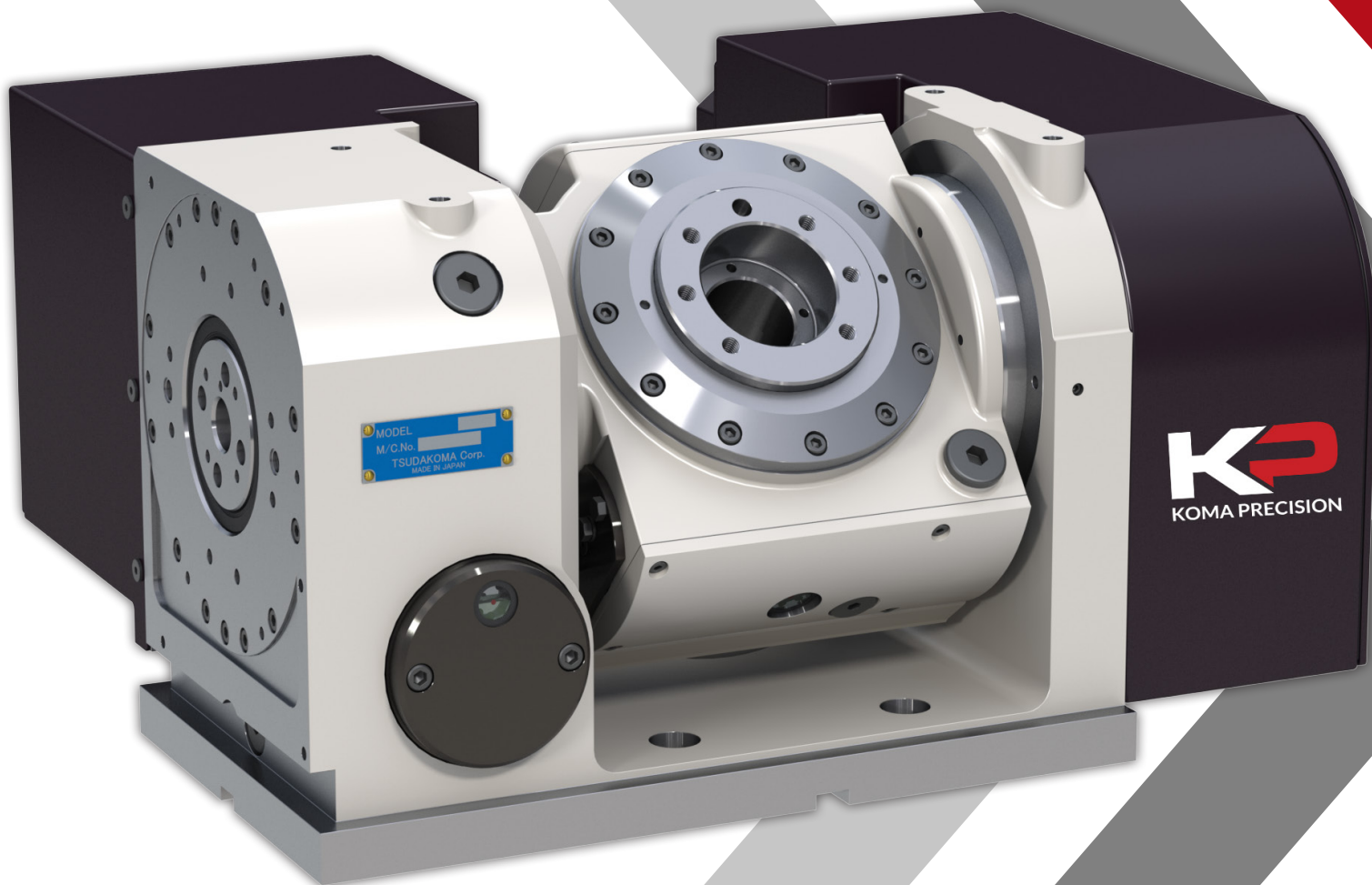




NTC

America Corporation



TSUDAKOMA

Rotary Table

Selection Guide

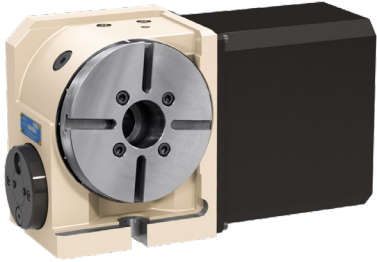
KOMA PRECISION

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.



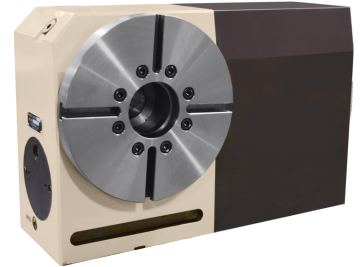
ROTARY TABLES



RWE SERIES



RWA SERIES



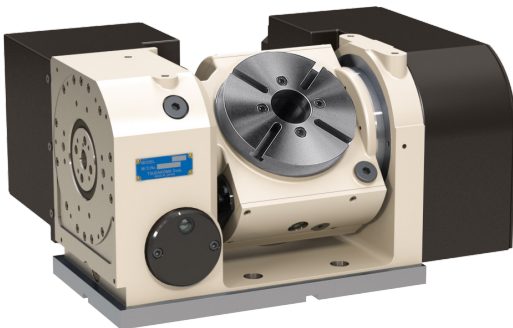
RBS SERIES



RWB SERIES



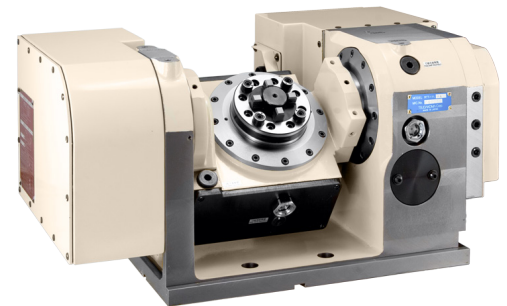
RN-MULTI SERIES



TWA SERIES



TBS SERIES



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

NTC ULTRA ZV5400				
RWE SERIES	RWE-200R			
RWA SERIES	RWA-200R	RWA-250R	RWA-320R	
RBS SERIES	RBS-250	RBS-320		
RWB SERIES	RWB-250R	RWB-320R		
RN MULTI SERIES	RN-100R-2	RN-100R-3	RN-100R-4	
TWA SERIES	TWA-130	TWA-160		
TBS SERIES	TBS-130	TBS-160		
5th AXIS TILTING	RTT-111, CA			
NTC ULTRA ZV5500				
RWE SERIES	RWE-200R			
RWA SERIES	RWA-200R	RWA-250R	RWA-320R	
RBS SERIES	RBS-250	RBS-320		
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		
5th AXIS TILTING	RTT-111, CA			



ZV5400



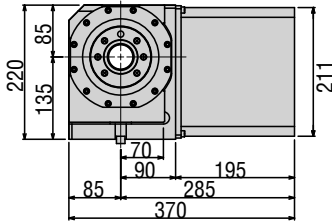
ZV5500

ROTARY TABLE DIMENSIONS

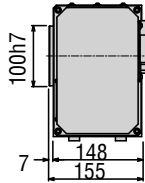


RWA & RWE-Series

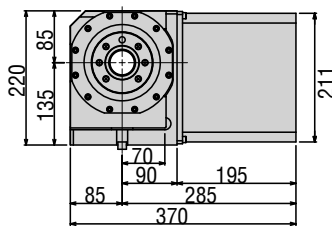
(Drawings Not To Scale)



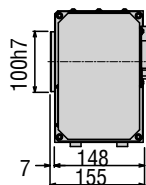
RWE-160R



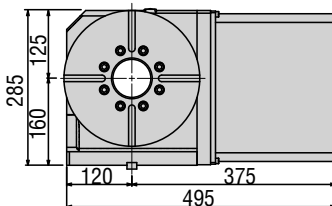
RWE-200R



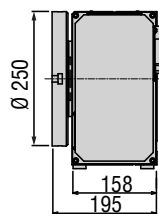
RWA-160R



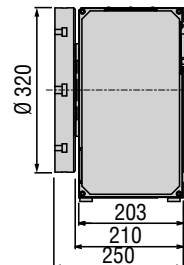
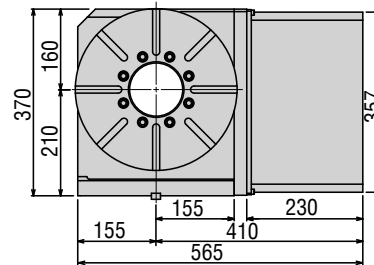
RWA-200R



RWA-250R



RWA-320R

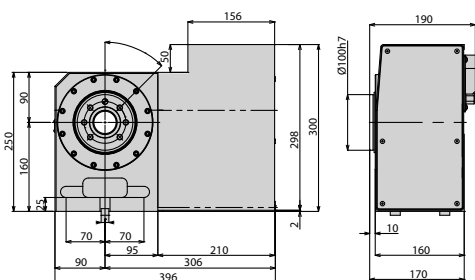


Please contact Koma Precision to confirm NTC/Tsudakoma Rotary Table working envelope.

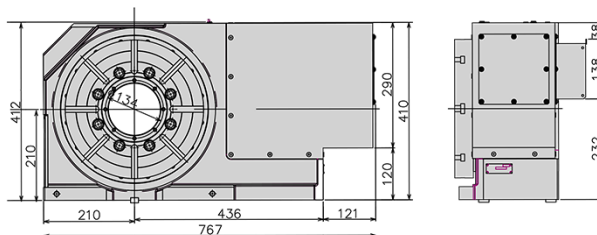
RBS, RWB & RN-Multi Series

(Drawings Not To Scale)

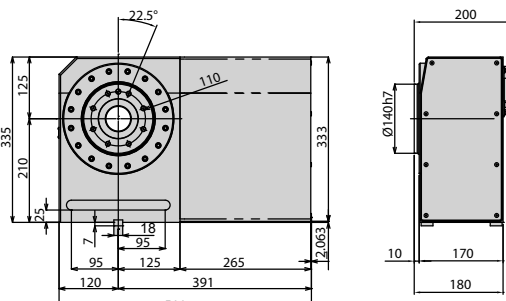
RBS-160



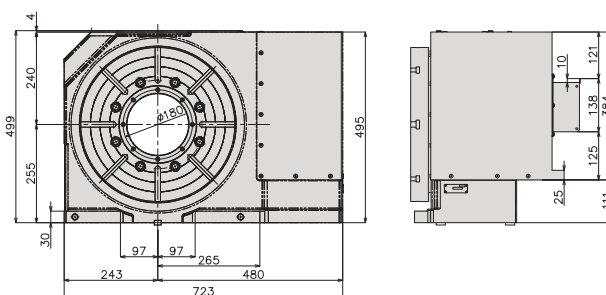
RWB-320R



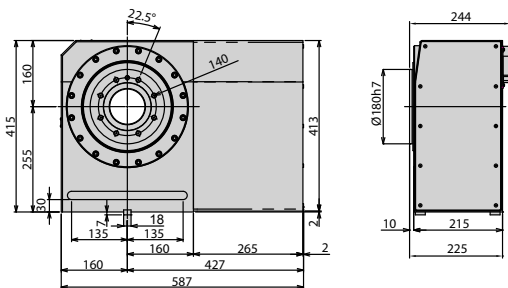
RBS-250



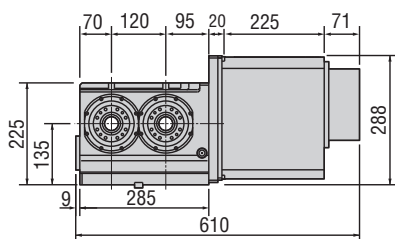
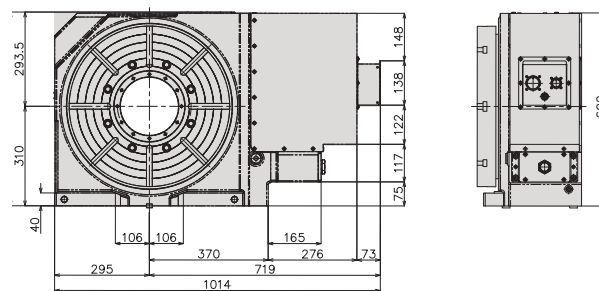
RWB-400R



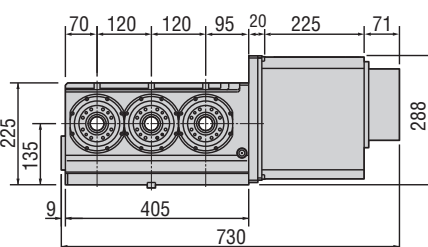
RBS-320



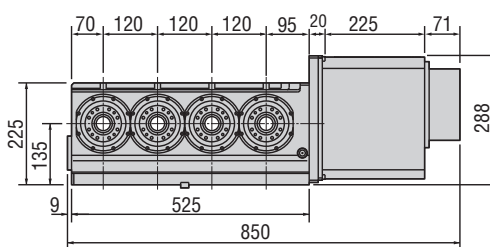
RWB-500R



RN-100,R-2



RN-100,R-3



RN-100,R-4

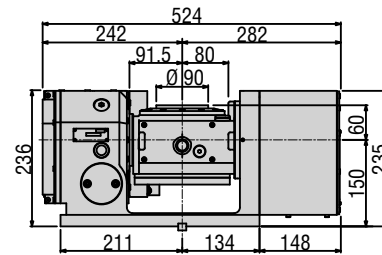
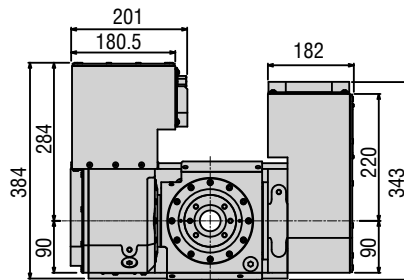
Please contact Koma Precision to confirm NTC/Tsudakoma Rotary Table working envelope.

ROTARY TABLE DIMENSIONS

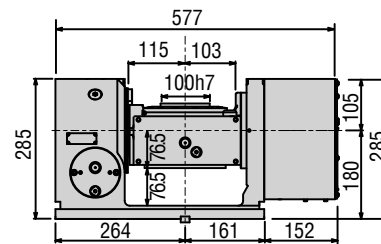
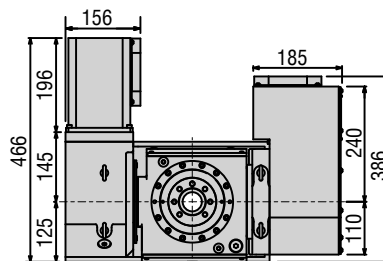


TWA-Series (Drawings Not To Scale)

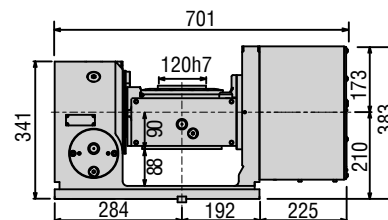
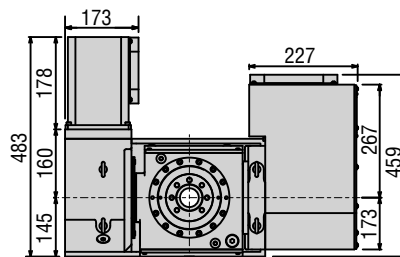
TWA-130



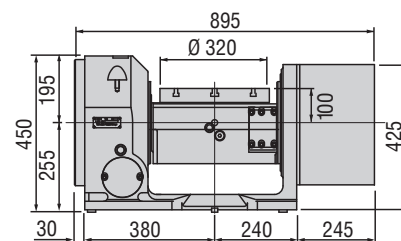
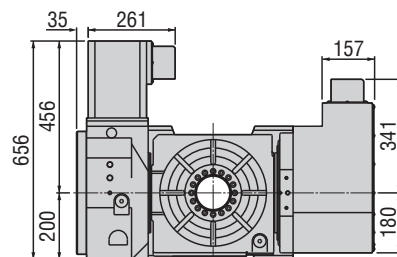
TWA-160



TWA-200



TN-320



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

RN-Multi, RBS & RWB-Series

Table Model		RN-100-2,3,4	RBS-250	RBS-320	RWB-250	RWB-320
Versions available		R, L	R	R	R, L	R, L
Spindle outer diameter		80h7	140h7	180h7	-	-
Table diameter (optional)		(115)	250	320	250	320
Center height		135	210	255	160	210
Center bore	Nose Diameter	50H7	80H7	115H7	105	150
	Thru Diameter	30	50	85	80	120
Table T-slot width (with faceplate)		-	12H8	14H8	12H7	14H7
Minimum spindle center distance		120	-	-	-	-
Guide block width		18h7	18h7	18h7	18h7	18h7
Servo motor (Fanuc)*		Alpha 4i	Alpha 8i	Alpha 12i	Alpha 8i	Alpha 12i
Maximum motor speed	rpm	5,000	4,000	4,000	4,000	4,000
Speed reduction ratio		1/36	1/36	1/36	1/90	1/90
Number of spindles		2 3 4	-	-	-	-
Maximum table speed	rpm	138.9	111.1	111.1	44.4	44.4
Inertia converted into motor shaft	$\times 10^{-3} \text{kg-m}^2$	.64 .92 1.06	0.42	2.24	1.27	3.53
Clamp system		Pneumatic		Pneumatic		Hydraulic**
Clamp torque	Nm (ft. lbs.)	80 (59)	1480 (1076)	2580 (1901)	1,300 (958)	3,100 (2,284)
Indexing accuracy	arc sec.	±30	±7.5	±7.5	±7	
Net Weight	kg (lbs.)	70-110 (154-242)	100 (220)	200 (440)	125 (286)	250 (550)
Allowable wheel torque	Nm (ft. lbs.)	176 (130)			1,011 (745)	2,127 (1,567)
Allowable work inertia	kg-m ²	.10	1.95	4.48	7.0	19.2
Allowable work weight	 kg (lbs) [w/ tailstock]	25 (55) [50 (110)]	125 (275) [250 (550)]	175 (385) [350 (770)]	175 (385) [250 (550)]	250 (550) [500 (1,100)]
	 kg (lbs)	50 (110)	250 (550)	350 (770)	350 (770)	1,100 (500)
Allowable load when table clamped	 N (lbf)	5,880 (1,317)	14,400 (3,226)	24,800 (5,555)	35,000 (7,700)	89,000 (19,580)
	 Nm (ft. lbs.)	80 (59)	1,000 (737)	1,500 (1,106)	1,300 (958)	3,100 (2,284)
	 Nm (ft. lbs.)	156 (115)	1,900 (1,400)	4,700 (3,464)	1,500 (1,105)	5,300 (3,906)

* Other motors & RPM available

** Booster optional

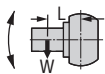
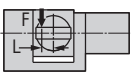
Dimensions = mm

Specifications subject to change without notice

RWE-Series

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

TBS-Series & RTT-111, CA

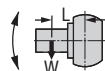
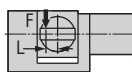
Model		TBS-130		TBS-160		RTT-111, CA	
Tilt Range		-30° ~ +110°		-30° ~ +110°		-17° ~ +107°	
Spindle outer diameter		90h7		100h7			
Table diameter (optional)		(135)		(160 or 200)			
Table height at 0° position		225 (250 w/faceplate)		270 (300 w/faceplate)		190	
Center height at 90° position		160		200		190	
Center bore	Nose Diameter (w/face plate)	55H7 (40H7)		55H7 (50H7)		--	
	Thru Diameter	40		40		--	
Table T-slot width		12H8		12H8		--	
Guide block width		14h7		18h7		14H7	
Servo motor (Fanuc)*		Rotary	Tilt	Rotary	Tilt	Rotary	Tilt
		Alpha 2i	Alpha 2i	Alpha 2i	Alpha 4i	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	$\times 10^{-3} \text{kg}\cdot\text{m}^2$	.074	.072	.17	.18	.074	.072
Clamp system		Pneumatic				Pneumatic Dual Taper	
Clamp torque @72psi	Nm (ft. lbs.)	700 (516)	700 (516)	700 (516)	700 (516)	500 (369)	500 (369)
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		.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 • Dimensions = mm • Specifications subject to change without notice

ROTARY TABLE SPECIFICATIONS



TWA-Series

Model			TWA-130		TWA-160		TWA-200		TN-320	
Tilt Range			-17° ~ +107°		-30° ~ +110°		-30° ~ +110°		-30° ~ +110°	
Spindle outer diameter			90h7		100h7		120h7		-	
Table diameter (optional)			(135)		160 (200)		200 (250)		320	
Table height at 0° position			210 (235 w/faceplate)		235 (260 w/faceplate)		270 (300 w/faceplate)		355	
Center height at 90° position			150		180		210		255	
Center bore	Nose Diameter (w/face plate)		55H7 (40H7)		55H7 (50H7)		65H7 (60H7)		105H7	
	Thru Diameter		35		40		45		100	
Table T-slot width			12H8 (w/faceplate)		12H8 (w/faceplate)		12H8 (w/faceplate)		14H7	
Guide block width			14h7		18h7		18h7		18h7	
Servo motor (Fanuc)*			Rotary	Tilt	Rotary	Tilt	Rotary	Tilt	Rotary	Tilt
			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
Speed reduction ratio			1/60	1/120	1/72	1/120	1/45	1/90	1/120	1/240
Maximum table speed		rpm	83.3	41.7	69.4	41.7	111.1	55.5	33.3	16.7
Inertia converted into motor shaft		x 10 ⁻³ kg·m ²	.074	.072	.17	.18	.38	.45	.82	.45
Clamp system			Pneumatic Dual Taper						Hydraulic @500 psi **	
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)]
Indexing accuracy		arc sec.	±20	-	±15	-	±15	-	±10	-
Tilting accuracy		arc sec.	-	±22.5	-	±22.5	-	±22.5	-	±22.5
Net Weight		kg (lbs.)	76 (167)		127 (279)		190 (418)		440 (968)	
Allowable wheel torque - rotary		Nm (ft. lbs.)	152 (112)		200 (147)		450 (332)		931 (686)	
Allowable work inertia		kg·m ²	.08		.19		.59		1.53	
Allowable work weight	0° tilt angle 	kg (lbs)	35 (77)		60 (132)		120 (264)		150 (330)	
	0° ~ 90° tilt angle 	kg (lbs)	20 (44)		40 (88)		70 (154)		100 (220)	
Allowable work moment		Nm (ft. lbs.)	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)		7,840 (1,756)		13,720 (3,073)		19,600 (4,390)	
		Nm (ft. lbs.)	500 (369)		500 (369)		800 (590)		2,200 (1,621)	
		Nm (ft. lbs.)	500 (369)		800 (590)		1,000 (737)		2,200 (1,621)	

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



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