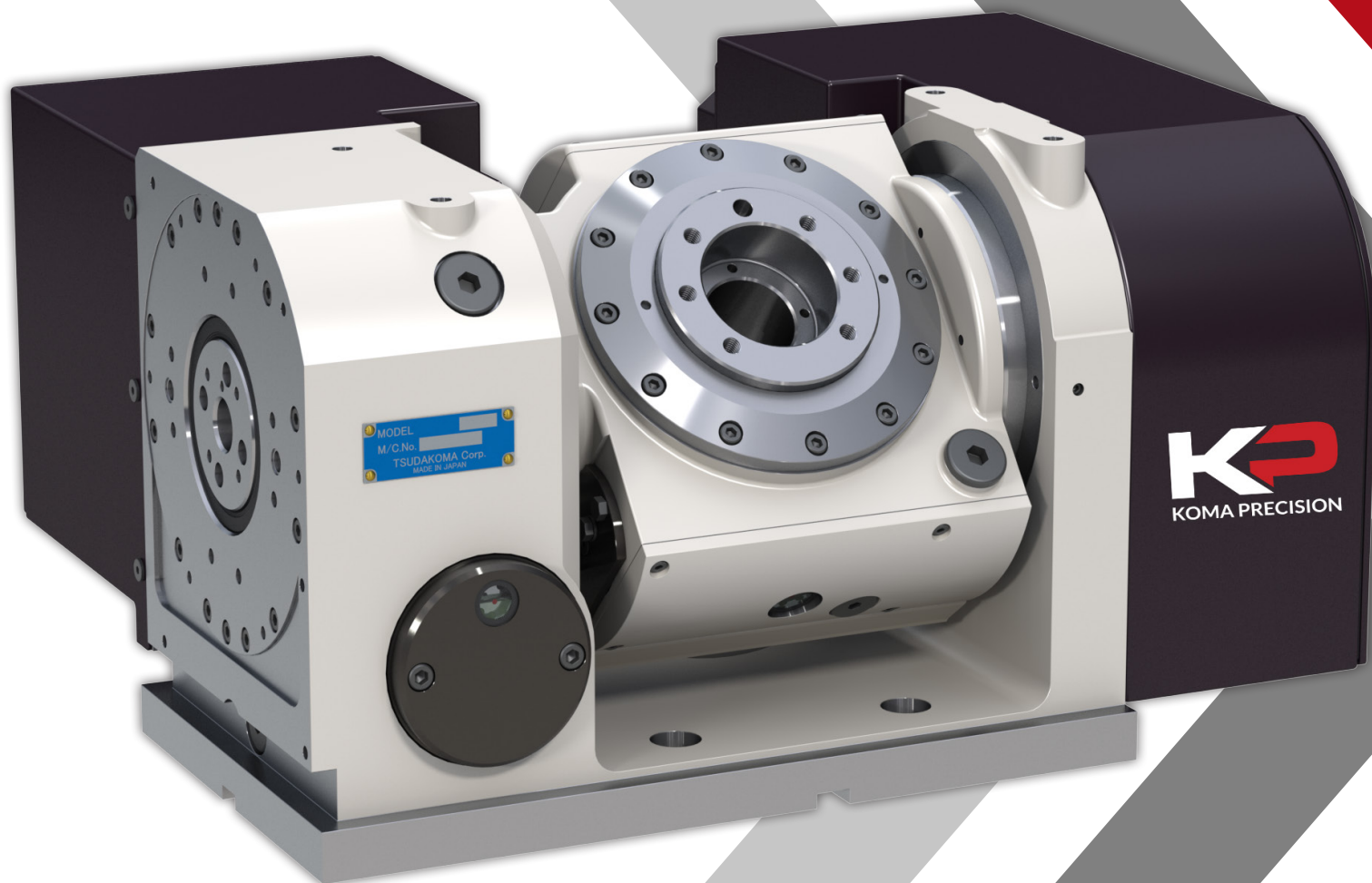




TSUDAKOMA

Rotary Table

Selection Guide

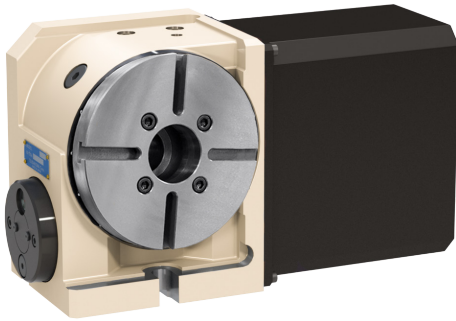
KOMA PRECISION

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



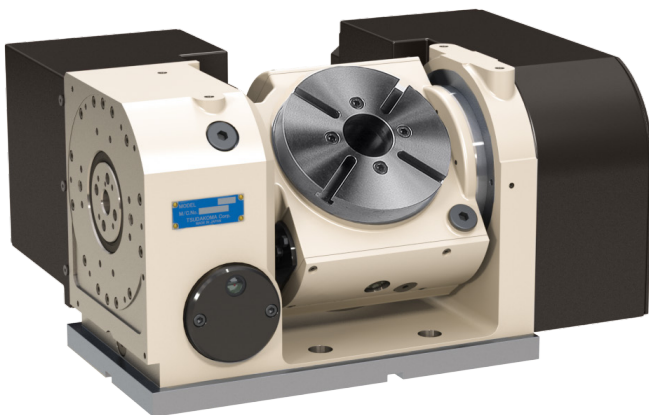
RWA SERIES



RBS SERIES



RWB SERIES



TWA SERIES



TBS SERIES

VX-1000				
RWE SERIES	RWE-160R	RWE-200R		
RWA SERIES	RWA-160	RWA-200R	RWA-250R	
RBS SERIES	RBS-160R	RBS-250R		
RWB SERIES	RWB-320R			
TWA SERIES	TWA-130	TWA-160		
TBS SERIES	TBS-130	TBS-160		
VX-1500				
RWE SERIES	RWE-160R	RWE-200R		
RWA SERIES	RWA-160	RWA-200R	RWA-250R	RWA-320R
RBS SERIES	RBS-160R	RBS-200R	RBS-320R	
RWB SERIES	RWB-320R	RWB-400R		
TWA SERIES	TWA-130	TWA-160	TWA-200	TN-320
TBS SERIES	TBS-130	TBS-160		
V.PLUS-800				
RWA SERIES	RWA-160R	RWA-200R	RWA-250R	
RBS SERIES	RBS-160R	RBS-250R		
RWB SERIES	RWB-320			
TWA SERIES	TWA-160			
TBS SERIES	TBS-160			



VX-1000



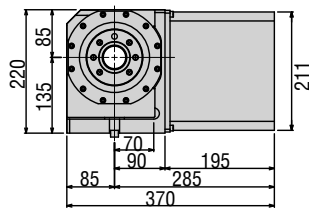
VX-1500



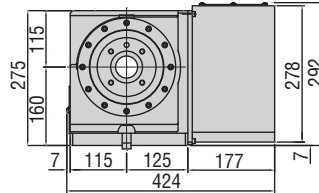
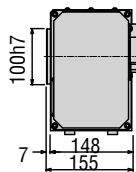
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RWA & RWE-Series

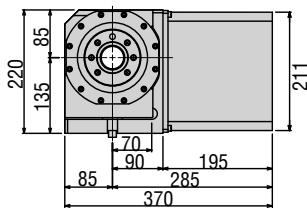
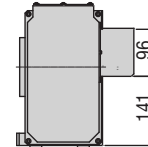
(Drawings Not To Scale)



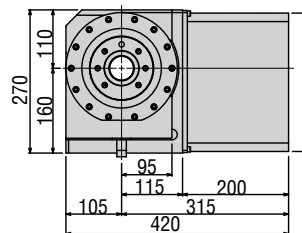
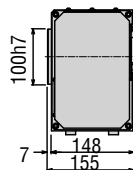
RWE-160R



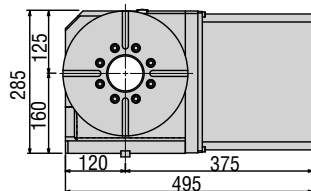
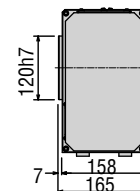
RWE-200R



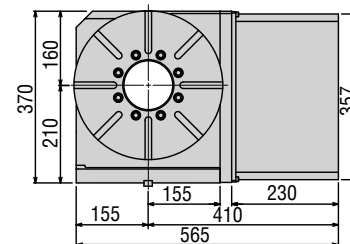
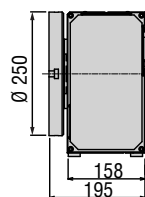
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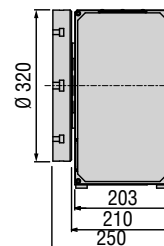
RWA-200R



RWA-250R



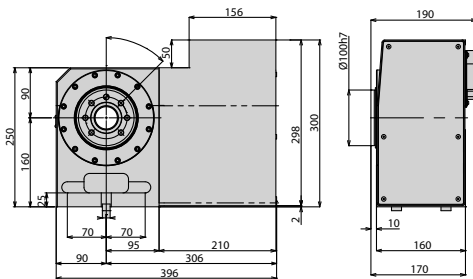
RWA-320R



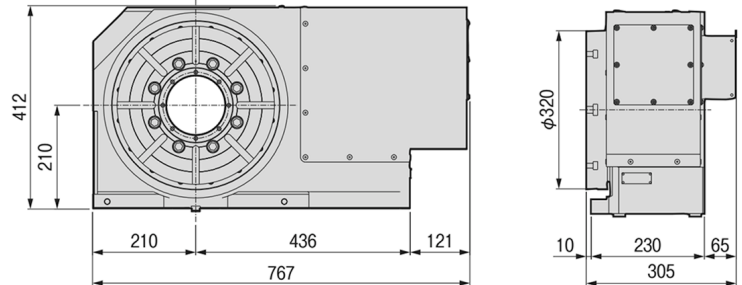
RBS & RWB-Series

(Drawings Not To Scale)

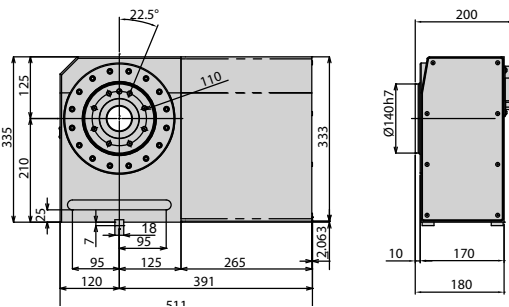
RBS-160



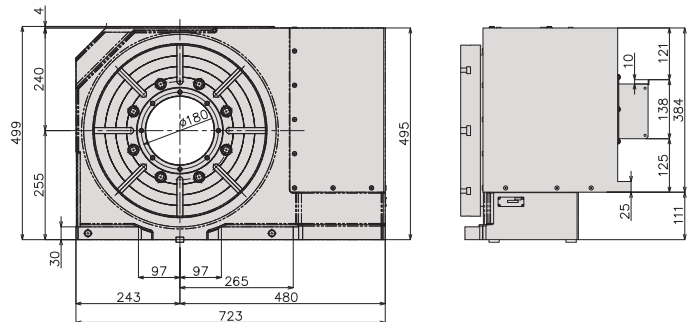
RWB-320



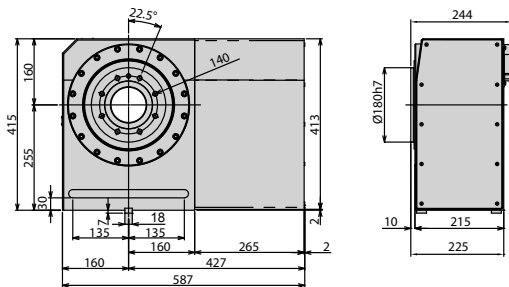
RBS-250



RWB-400



RBS-320



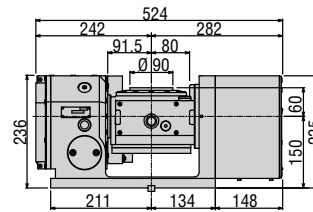
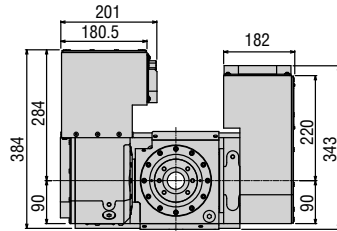
ROTARY TABLE DIMENSIONS



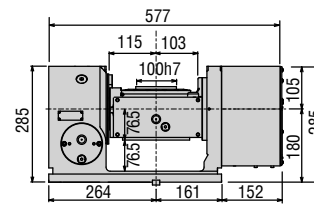
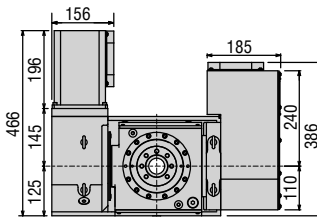
TWA & TBS-Series

(Drawings Not To Scale)

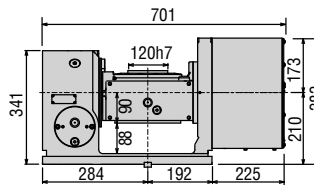
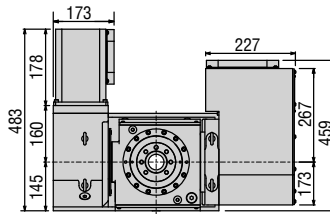
TWA-130



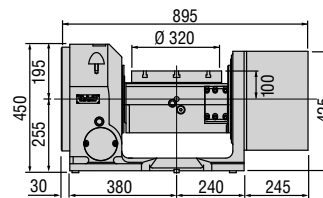
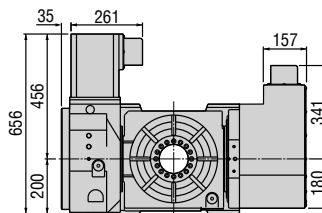
TWA-160



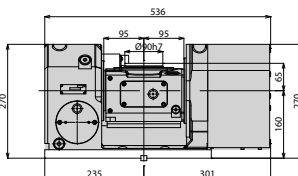
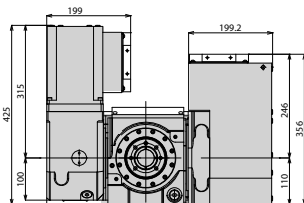
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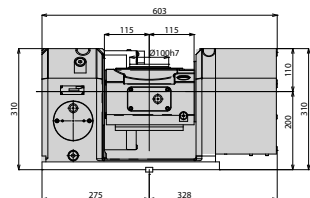
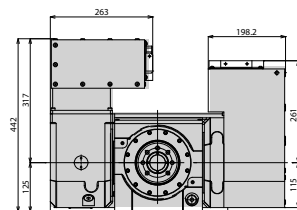
TN-320



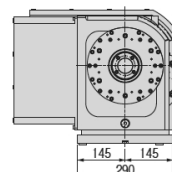
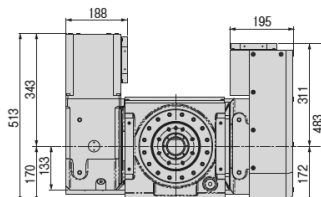
TBS-130



TBS-160



TBS-250



RWA & RWE-Series Rotary Tables

Table Model		RWA-160	RWA-200	RWA-250 (S)	RWA-320 (S)	RWE-160	RWE-200
Versions available		R, L	R, L	R, L	R, L	R, L	R, L
Spindle outer diameter		100h7	120h7	140h7	180h7	100h7	120h7
Table diameter (optional)		(160, 200)	(200, 250)	250	320	(160, 200)	(200, 250)
Center height		135	160	160	210	135	160
Center bore	Nose Diameter	55H7	65H7	80H7	115H7	55H7	65H7
	Thru Diameter	40	45	50	85	40	45
Table T-slot width (with face plate)		(12H8)	(12H8)	12H8	14H7	(12H8)	(12H8)
Guide block width		14h7	18h7	18h7	18h7	14h7	18h7
Servo motor (Fanuc)*		Alpha 2i	Alpha 4i	Alpha 8i (8is)	Alpha 8i (22is)	Alpha 2i	Alpha 4i
Maximum motor speed rpm		5,000	5,000	4,000 (4,000)	4,000 (4,000)	5,000	5,000
Speed reduction ratio		1/72	1/72	1/90 (1/45)	1/120 (1/45)	1/72	1/72
Maximum table speed rpm		69.4	69.4	44.4 (88.9)	33.3 (88.9)	69.4	69.4
Inertia converted into motor shaft x 10 ⁻³ kg·m ²		.09	.17	.41 (.44)	.52 (1.66)	.09	.17
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)	250 (180)	400 (295)
Indexing accuracy arc sec.		±12.5	±10	±10	±10	±12.5	±10
Net Weight kg (lbs.)		38 (84)	61 (134)	80 (176)	145 (319)	40 (88)	61 (135)
Allowable wheel torque Nm (ft. lbs.)		206 (152)	288 (212)	596 (439)	939 (692)	206 (152)	288 (212)
Allowable work inertia kg·m ²		.64	1.25	1.95	4.48	.64	1.25
Allowable work weight	 kg (lbs) [w/ tailstock]	100 (220) [175 (385)]	125 (275) [250 (550)]	125 (275) [250 (550)]	175 (385) [375 (825)]	100 (220) [200 (441)]	125 (275) [250 (551)]
	 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)	10,800 (2,419)	14,400 (3,226)
	 Nm (ft. lbs.)	500 (369)	800 (590)	1,000 (737)	1,500 (1,106)	500 (369)	800 (590)
	 Nm (ft. lbs.)	780 (575)	1,900 (1,400)	1,900 (1,400)	4,700 (3,464)	780 (575)	1,900 (1,400)

* Other motors & RPM available

** Booster optional

Dimensions = mm

Specifications subject to change without notice

RBS & RWB Series Rotary Tables

Table Model		RBS-160	RBS-250	RBS-320	RWB-320	RWB-400
Versions available		R	R	R	R, L	R, L
Table diameter		100h7	140h7	180h7	320	400
Center height		(160, 200)	250	320	210	255
Center bore	Nose Diameter	160	210	255	150	200
	Thru Diameter	55H7	80H7	115H7	120	160
Table T-slot width		40	50	85	14H7	14H7
Guide block width		14h7	18h7	18h7	18h7	
Servo motor (Fanuc)*		Alpha 4i	Alpha 8i	Alpha 12i	Alpha 12i	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
Maximum table speed rpm		138.9	111.1	111.1	44.4	44.4
Inertia converted into motor shaft $\times 10^{-3}\text{kg}\cdot\text{m}^2$		0.19	0.42	2.24	3.53	4.63
Clamp system**		Pneumatic Disc Clamp			Hydraulic	
Clamp torque @ 72 [500psi] Nm (ft. lbs.)		700 (516)	1480 (1076)	2580 (1901)	3,100 (2,284)	5,500 (4,053)
Indexing accuracy arc sec.		± 12.5	± 10	± 10	± 7	
Net Weight kg (lbs.)		44 (97)	62 (136)	107 (235)	250 (550)	360 (792)
Allowable wheel torque Nm (ft. lbs.)		206 (152)	288 (212)	565 (416)	2,127 (1,567)	3,958 (2,917)
Allowable work inertia $\text{kg}\cdot\text{m}^2$		.48	1.25	1.95	19.2	36
Allowable work weight	 kg (lbs) [w/ tailstock]	75 (165) [150 (330)]	100 (220) [250 (550)]	100 (220) [250 (550)]	550 (250) [1,100 (500)]	660 (300) [1,320 (600)]
	 kg (lbs)	-	-	-	1,100 (500)	1,320 (600)
Allowable load when table clamped	 N (lbf)	7,840 (1,762)	13,720 (3,085)	250 (550)	89,000 (19,580)	109,000 (23,980)
	 Nm (ft. lbs.)	250 (180)	400 (295)	13,720 (3,073)	3,100 (2,284)	5,500 (4,053)
	 Nm (ft. lbs.)	392 (290)	980 (723)	600 (442)	5,300 (3,906)	7,800 (5,748)

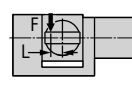
* Other motors & RPM available

** Booster optional

Dimensions = mm

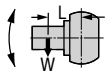
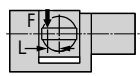
Specifications subject to change without notice

TWA-Series Rotary Tables

Table 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 • ** Booster optional • Dimensions = mm • Specifications subject to change without notice

TBS-Series Rotary Tables

Table Model			TBS-130		TBS-160		TBS-250	
Tilt Range			-30° ~ +110°		-30° ~ +110°		-30° ~ +110°	
Spindle outer diameter			90h7		100h7		140h7	
Table diameter (optional)			(135)		(160 or 200)		(250)	
Table height at 0° position			225 (250 w/faceplate)		270 (300 w/faceplate)		290 (320 w/faceplate)	
Center height at 90° position			160		200		235	
Center bore	Nose Diameter (w/face plate)		55H7 (40H7)		55H7 (50H7)		80H7 (75H7)	
	Thru Diameter		40		40		50	
Table T-slot width			12H8		12H8		-	
Guide block width			14h7		18h7		18h7	
Servo motor (Fanuc)*			Rotary	Tilt	Rotary	Tilt	Rotary	Tilt
			Alpha 2i	Alpha 2i	Alpha 2i	Alpha 4i	Alpha 8i	Alpha 8i
Maximum motor speed		rpm	5,000	5,000	5,000	5,000	4,000	4,000
Speed reduction ratio			1/48	1/60	1/60	1/60	1/45	1/60
Maximum table speed		rpm	104.2	83.3	83.3	83.3	88.9	66.7
Inertia converted into motor shaft		x 10 ⁻³ kg·m ²	.074	.072	.17	.18	.465	.465
Clamp system			Pneumatic					
Clamp torque @72psi		Nm (ft. lbs.)	700 (516)	700 (516)	700 (516)	700 (516)	1,000 (737)	1,000 (737)
Indexing accuracy		arc sec.	±10	-	±10	-	±10	-
Tilting accuracy		arc sec.	-	±17.5	-	±17.5	-	±20
Net Weight		kg (lbs.)	125 (276)		160 (353)		280 (617)	
Allowable wheel torque - rotary		Nm (ft. lbs.)	-		-		-	
Allowable work inertia		kg·m ²	.08		.19		1.05	
Allowable work weight	0° tilt angle	 kg (lbs)	35 (77)		60 (132)		135 (298)	
	0° ~ 90° tilt angle	 kg (lbs)	20 (44)		40 (88)		85 (187)	
Allowable work moment		Nm (ft. lbs.)	61.1		59.6		186.7	
Allowable load when table clamped		N (lbf)	3,920 (878)		10,800		14,400 (64,054)	
		Nm (ft. lbs.)	700 (516)		700 (516)		1,000 (737)	
		Nm (ft. lbs.)	700 (516)		700 (516)		1,000 (737)	

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



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