

CNC Trunnion Tilting Rotary Table

G T F A E - 4 1 0 X B

Flat supplemental base for standard 3 axis M/C

new optimization model

Five axis

Trunnion type for lower gravity

Worm gear transmission

Tilting motor mounted at the back of table

X

hydraulic clamp by air booster converter built-in

S

superior pneumatic clamp

H

hydraulic brake

Worktable diameter Ø210, Ø320, Ø410, Ø500.

The hydraulic brake equipped with radial and axial bearings.(P.18)

Full gear depth transmitted by dual lead worm drive, resulting in higher efficiency and lower backlash.(P.20)

Built-in air-booster for appointed models.

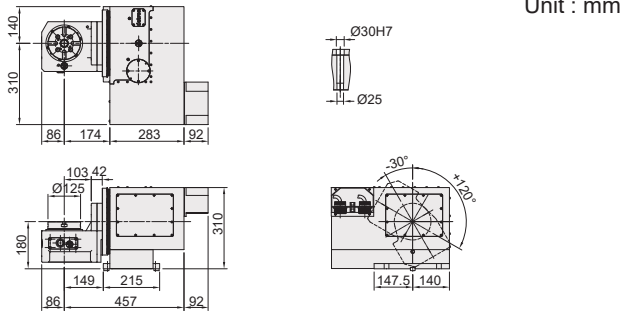
SPECIFICATIONS

MODEL		Unit	GTFAS-125S		GTFAE-210S		GTFAE-320XB/H		GTFAE-410XB		
Worktable diameter		mm / inch	Ø125 / Ø4.92		Ø210 / Ø8.27		Ø320 / Ø12.60		Ø410 / Ø16.14		
Center bore diameter		mm / inch	Ø30H7 / Ø1.18H7		Ø40H7 / Ø1.57H7		Ø50H7 / Ø1.97H7		Ø70H7 / Ø2.76H7		
Height of table (horizontal)		mm / inch	180 / 7.09		375 / 14.76		365 / 14.37 317 / 12.48		411 / 16.18		
Height of center (vertical)		mm / inch	180 / 7.09		375 / 14.76		365 / 14.37 317 / 12.48		411 / 16.18		
Width of T-slot		mm / inch	12H7 / 0.47H7		12H7 / 0.47H7		12H7 / 0.47H7		14H7 / 0.55H7		
Clamping method /pressure		MPa / psi	*P: 0.5~0.6 / 72.5~87		*P: 0.55~0.7 / 79.7~101.5		*P:0.6~0.7/87~101.5 *H:5/725		*P: 0.6~0.7 / 87~101.5		
Servo motor spec			refer to page 74								
Transmission ratio			R	T	R	T	R	T	R	T	
			1:60	1:90	1:90	1:90	1:100	1:120	1:120	1:150	
Max. table speed / at specified servo motor speed		min ⁻¹	33.3 / 2000	22.2 / 2000	33.3 / 3000	22.2 / 2000	25 / 2500	16.6 / 2000	16.6 / 2000	11.1 / 1666	
Clamping torque		N.m / ft. lbs.	140 / 103.26	900 / 663.8	400 / 295	600/442.48	750/553.17	1500/1106.25	1600/1180	2000/1475	
Allowable loading capacity	In Horizontal 	kg / lb	30 / 66		100 / 220		200 / 440		200 / 440		
	In Tilting (0~90°) 	kg / lb	30 / 66		70 / 154.3		100 / 220		150 / 330		
Allowable unbalancing work moment	WxL 	N.m / ft. lbs.	27 / 19.91		53 / 39.06		100 / 73.70		200 / 147.40		
FxL When table clamped	F 	N / lbs	2800 / 629.5		14000 / 3141.60		16000 / 3590.40		20000 / 4488.0		
	FxL 	N.m / ft. lbs.	140 / 103.26		400 / 295		750 / 553.17		1600 / 1180		
	FxL 	N.m / ft. lbs.	900 / 663.8		600 / 442.48		1500 / 1106.25		2000 / 1475		
Allowable loading inertia	($\frac{W.D^2}{8}$) 	kg.m ²	0.06		0.55		2.6		4.3		
Resolution		deg.	0.001		0.001		0.001		0.001		
Indexing accuracy		sec	40"	60"	20"	60"	20"	60"	15"	60"	
Repeatability		sec	6"	8"	6"	8"	6"	8"	6"	8"	
Tilting angle range		deg.	-30 ~ +120		-120 ~ +30		-120 ~ +30		-120 ~ +30		
Net weight (servo motor excluded)		kg / lb	142 / 312.4		455 / 1001		700 / 1540 610 / 1342		940 / 2068.0		
Allowable cutting torque		N.m / ft. lbs.	85 / 62.69		260 / 191.6		550 / 401.5		780 / 569.4		
Allowable Max. rotary joint quantity		Port	-		4		6		6		

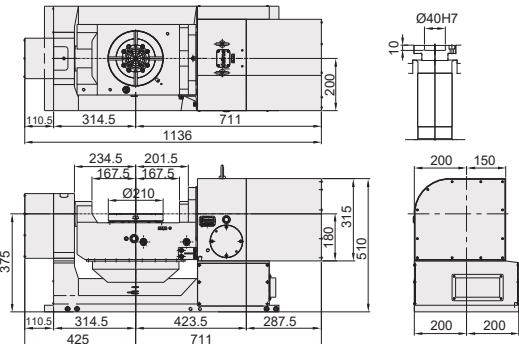
Note: 1. P: Pneumatic H:Hydraulic R: Rotary Axis T: Tilt Axis
2. For the motor model selection of GTFAS125S, please contact us.
3. FxL When table clamped is a reference data, the users should consider proper safety factor or contact detron for details.

DIMENSIONAL DRAWINGS

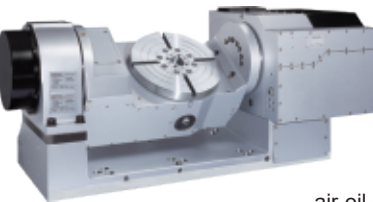
GTFAS-125S



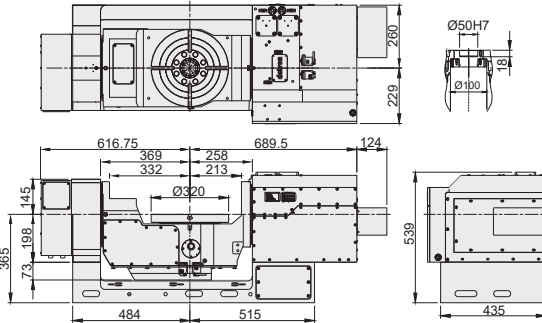
GTFAE-210S



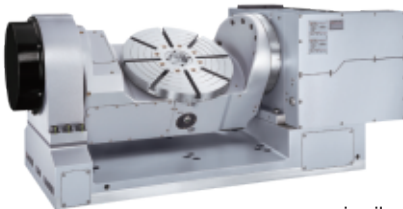
GTFAE-320XB



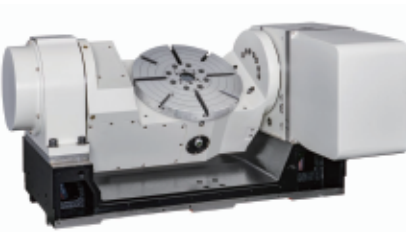
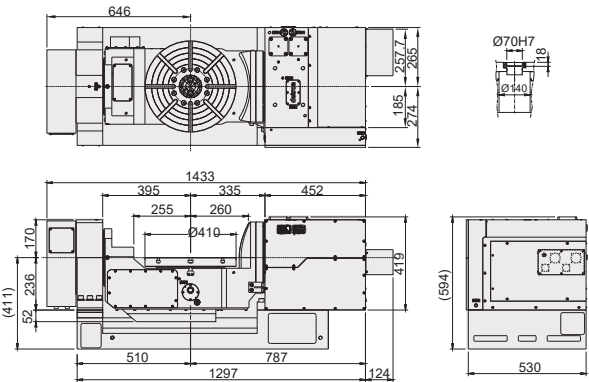
air-oil converter built-in



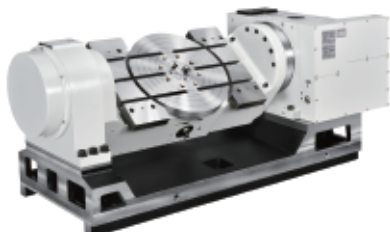
GTFAE-410XB



air-oil converter built-in



▲ Optional: Motor Cover At Front (GTFA350H)



▲ GTFAE-410HBSL With Customized Base

Note: 1. The length of servo guard may vary with servo motor type. (the metal sheet dimensions shown at above are based on Fanuc motor)
2. Allowable wheel torque at table speed of 1 min⁻¹.
3. According to application engineering, optical encoder is recommended for tilting axis.
4. Customized table Ø630mm and dual drive at tilting axis are available.