

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

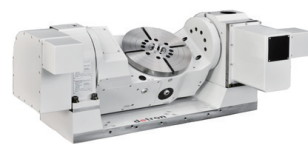
Table size

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.



Option type, motor mounted at the front side



customized base available according to demand

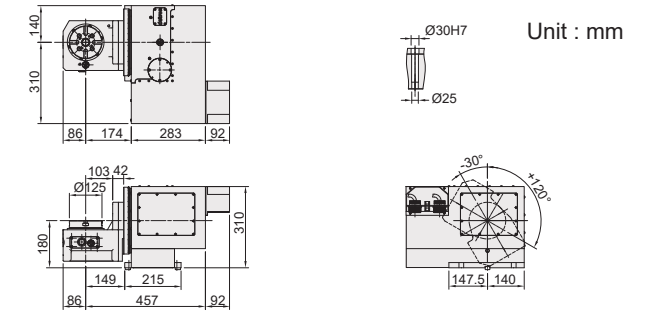
SPECIFICATIONS

MODEL	Unit	GTFAS-125S	GTFAE-210S	GTFAE-320XB/H	GTFAE-410XB	GTFAE-500XB					
Worktable diameter	mm / inch	Ø125 / Ø4.92	Ø210 / Ø8.27	Ø320 / Ø12.60	Ø410 / Ø16.14	Ø500 / Ø19.69					
Center bore diameter	mm / inch	Ø30H7 / Ø1.18H7	Ø40H7 / Ø1.57H7	Ø50H7 / Ø1.97H7	Ø70H7 / Ø2.76H7	Ø70H7 / Ø2.76H7					
Height of table (horizontal)	mm / inch	180 / 7.09	375 / 14.76	365 / 14.37 317 / 12.48	411 / 16.18	460 / 18.11					
Height of center (vertical)	mm / inch	180 / 7.09	375 / 14.76	365 / 14.37 317 / 12.48	411 / 16.18	460 / 18.11					
Width of T-slot	mm / inch	12H7 / 0.47H7	12H7 / 0.47H7	12H7 / 0.47H7	14H7 / 0.55H7	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	*P: 0.6 ~ 0.7 / 87~101.5					
Servo motor spec		refer to page 69									
Transmission ratio		R 1:60	T 1:90	R 1:90	T 1:90	R 1:100	T 1:120	R 1:120	T 1:150	R 1:120	T 1:180
Max. table speed	min ⁻¹	33.3	22.2	33.3	22.2	25	16.6	16.6	11.1	16.6	11.1
Allowable loading capacity	In Horizontal	kg / lb	30 / 66	100 / 220	200 / 440	200 / 440	300 / 660				
	In Tilting (0~90°)	kg / lb	30 / 66	70 / 154.3	100 / 220	150 / 330	250 / 550				
Allowable unbalancing work moment	WxL	Nm / ft. lbs.	27 / 19.91	53 / 39.06	100 / 73.70	200 / 147.40	300 / 221.0				
	F	N / lbs	2800 / 629.5	14000 / 3141.60	16000 / 3590.40	20000 / 4488.0	30000 / 6732.0				
Allowable load (when table clamped)	FxL	Nm / ft. lbs.	140 / 103.26	400 / 295	750 / 553.17	1600 / 1180	2500 / 1843.75				
	FxL	Nm / ft. lbs.	900 / 663.8	600 / 442.48	1500 / 1106.25	2000 / 1475	3000 / 2212.5				
Allowable loading inertia	$\frac{W D^2}{8}$	kg.m ²	0.06	0.55	2.6	4.3	9.6				
Resolution	deg.	0.001	0.001	0.001	0.001	0.001					
Indexing accuracy	sec	40" 60"	20" 60"	20" 60"	15" 60"	15" 60"					
Repeatability	sec	6" 8"	6" 8"	6" 8"	6" 8"	6" 8"					
Tilting angle range	deg.	-30 ~ +120	-120 ~ +30	-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	1270 / 2794					
Allowable cutting torque	Nm / ft. lbs.	85 / 62.69	260 / 191.6	550 / 401.5	780 / 569.4	1700 / 1241					
Allowable Max. rotary joint quantity	Port	-	4	6	6	6					

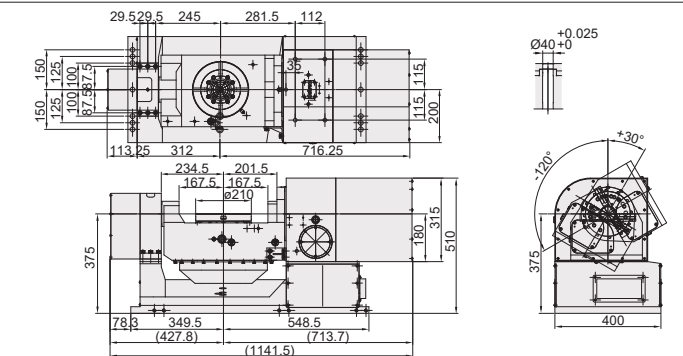
Note: 1. P: Pneumatic H:Hydraulic R: Rotary Axis T: Tilt Axis

DIMENSIONAL DRAWINGS

GTFAS-125S



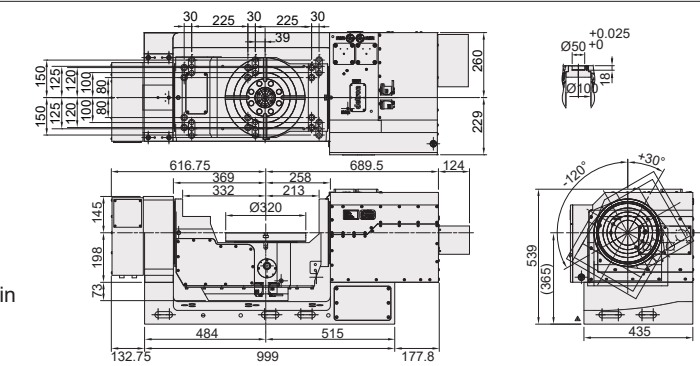
GTFAE-210S



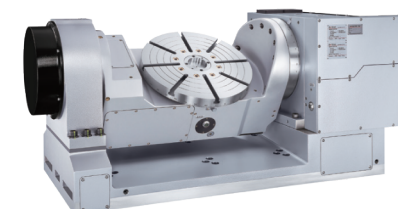
GTFAE-320XB



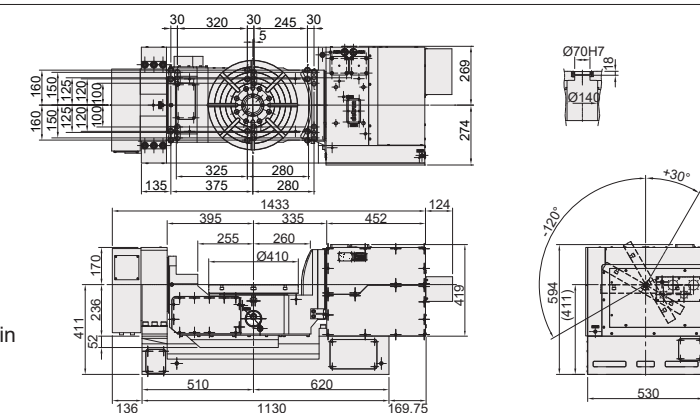
air-oil converter built-in



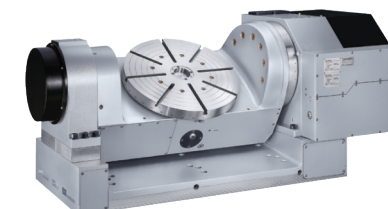
GTFAE-410XB



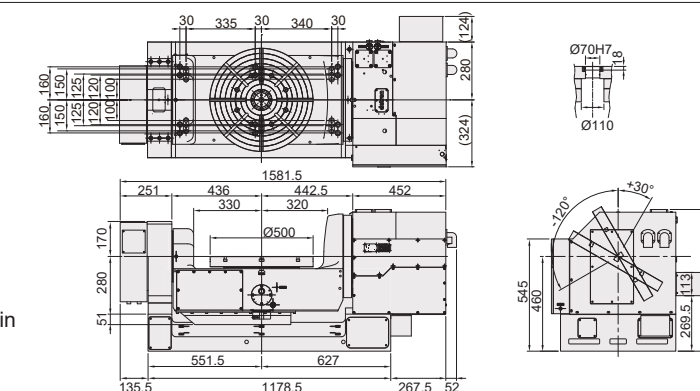
air-oil converter built-in



GTFAE-500XB



air-oil converter built-in



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.