

CNC Trunnion Tilting Rotary Table

GTFA-650EHB

Five axis

Trunnion type for lower gravity

Worm gear transmission

new optimization model

Table size

E

Enlarged worktable

R

Reduced worktable

X

hydraulic clamp by air booster converter built-in

S

superior pneumatic clamp

H

hydraulic brake

Tilting motor mounted at the back of table



- 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

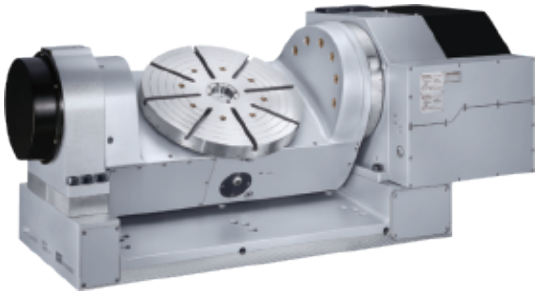
MODEL		Unit	GTFAE-500XB		GTFA-650EHB		GTFAI-650EHB GTFAI-720EHB			
Worktable diameter		mm / inch	Ø500 / Ø19.69		Ø650x520W / Ø26x20W		Ø650x520W / Ø26x20W Ø720 / Ø28			
Center bore diameter		mm / inch	Ø70H7 / Ø2.76H7		Ø70H7 / Ø2.76H7		Ø70H7 / Ø2.76H7			
Height of table (horizontal)		mm / inch	460 / 18.11		295 / 12		250 / 9.8			
Height of center (vertical)		mm / inch	460 / 18.11		345 / 14		300 / 11.8			
Width of T-slot		mm / inch	14H7 / 0.55H7		18H7 / 0.7H7		18H7 / 0.7H7			
Clamping method /pressure		MPa / psi	*P: 0.6~0.7 / 87~101.5		*H:4 / 580		*H:4 / 580			
Servo motor spec			refer to page 74							
Transmission ratio			R 1:120		T 1:180		R 1:72		T 1:120	
Max. table speed / at specified servo motor speed		min ⁻¹	16.6 / 2000		11.1 / 2000		25 / 1800		25 / 3000	
Clamping torque		N.m / ft. lbs.	2500/1843.75		3000/2212.5		2000		3400	
Allowable loading capacity	In Horizontal 	kg / lb	300 / 660		300 / 660		300 / 660			
	In Tilting (0~90°) 	kg / lb	250 / 550		300 / 660		300 / 660			
Allowable unbalancing work moment	WxL 	N.m / ft. lbs.	300 / 221.0		300 / 221		300 / 221			
FxL When table clamped	F 	N / lbs	30000 / 6744		30000 / 6744		30000 / 6744			
	FxL 	N.m / ft. lbs.	2500 / 1844		2000 / 1475		2000 / 1475			
	FxL 	N.m / ft. lbs.	3000 / 2213		3400 / 2508		3400 / 2508			
Allowable loading inertia	$\frac{W.D^2}{8}$ 	kg.m ²	9.6		9.4		9.4			
Resolution		deg.	0.001		0.001		0.001			
Indexing accuracy		sec	15" 60"		15" 60"		15" 60"			
Repeatability		sec	6" 8"		6" 8"		6" 8"			
Tilting angle range		deg.	-120 ~ +30		-90 ~ +110		-90 ~ +110			
Net weight (servo motor excluded)		kg / lb	1270 / 2794		1228		1178			
Allowable cutting torque		N.m / ft. lbs.	1700 / 1254		1700 / 1254		1700 / 1254			
Allowable Max. rotary joint quantity		Port	6		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.

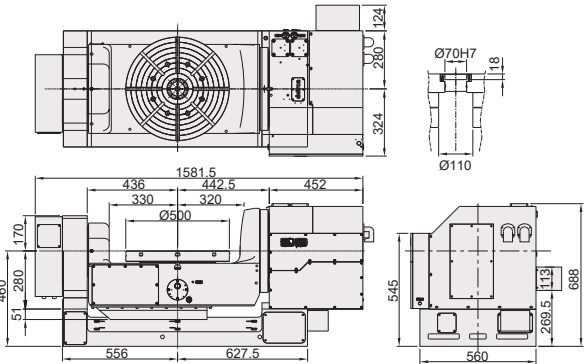
DIMENSIONAL DRAWINGS

Unit : mm

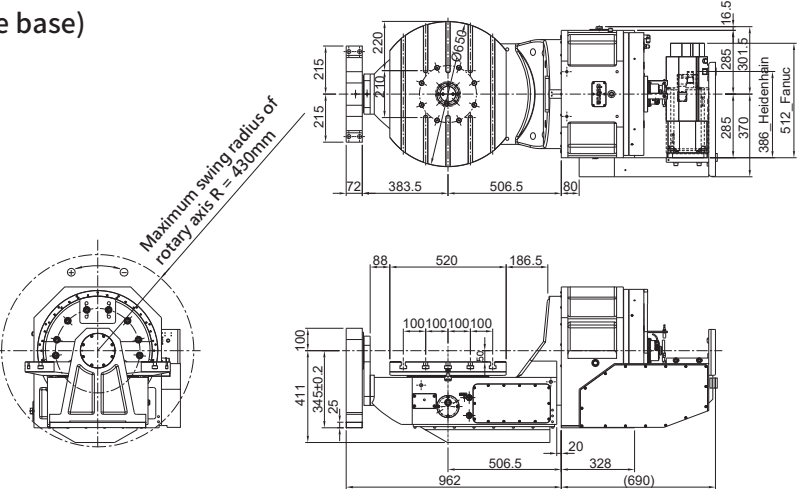
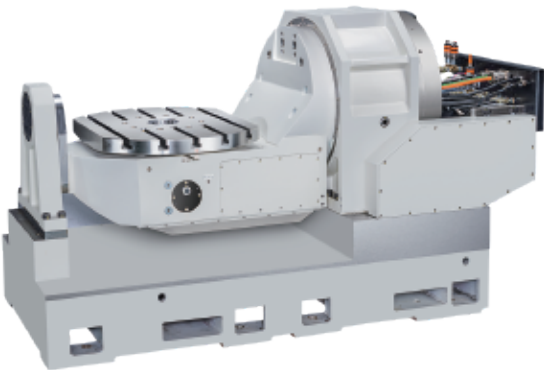
GTFAE-500XB



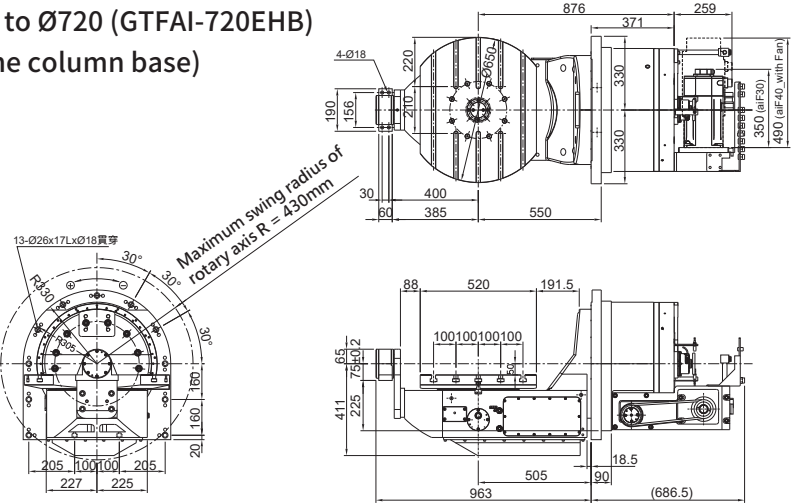
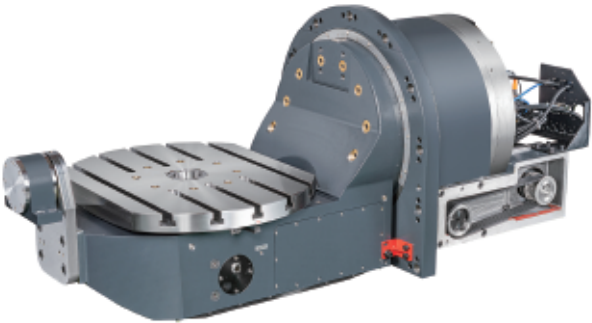
With 2 sets of built-in air-booster



GTFA-650EHB (Tilting axis fixed on machine base)



GTFAI-650EHB Worktable can be enlarged to Ø720 (GTFAI-720EHB)
(Tilting axis fixed on machine column 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.