

FEH series

5-AXIS TILTING SWIVELING ROTARY TABLE

Hydraulic Brake (Tilting Axis)
Pneumatic Brake (Swiveling Axis)

Models over 255 are designed with hydraulic brake on two axes.

- Table diameter provides a choice of Ø125, Ø170, Ø210, Ø255, Ø320 and Ø400mm.
- Employs high rigidity, extra large radial and axial bearing.
- Upon customer request, models with Ø170, Ø210, Ø250 can be equipped with Japanese made worm / worm gear.
- For models over 255, the tilting axis employs the latest full circumference brake, featuring even braking force without runout. Maximum clamping area, higher clamping force, no vibration and no braking delay is required. High torque combined with compact, rigid and enclosed structure ensure high cutting quality.
- For models over 170, all support units employ the full circumference brake and large hole Japanese-made roller bearing.



FEH-125 FEH-170
FEH-210 FEH-255
FEH-320 FEH-400

Model Identification of Rotary Table

FEH-125

Flat Bottom Table Diameter
5-Axis Hyd. Brake on Tilting Axis

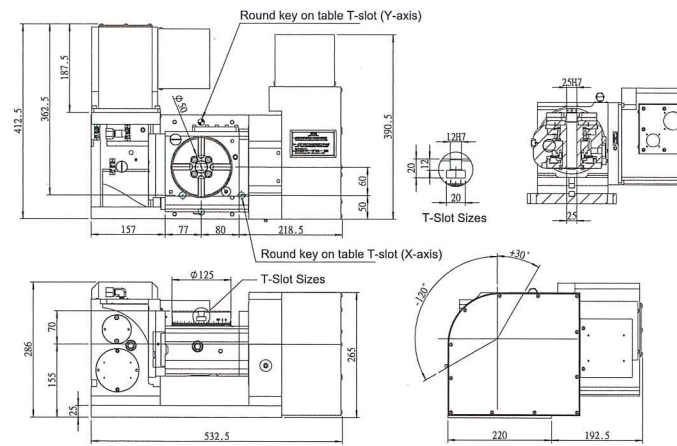
MODEL	UNIT	FEH-125	FEH-170	FEH-210	FEH-255	FEH-320	FEH-400						
Table diameter	mm	Ø125	Ø170	Ø210	Ø255	Ø320	Ø400						
Center hole diameter	mm	Ø25H7	Ø40H7	Ø40H7	Ø80H7	Ø120H7	Ø120H7						
Through-hole diameter	mm	Ø25	Ø40	Ø40	Ø80	Ø120	Ø120						
90° vertical height	mm	155	190	190	235	270	300						
0° horizontal height	mm	225	260	260	315	370	400						
T-slot width of table	mm	12H7	12H7	12H7	12H7	14H7	14H7						
Guide key width on tilting axis	mm	Ø14h7	Ø18h7	Ø18h7	Ø18h7	Ø18h7	Ø18h7						
Min. setting angle	deg.	0.001	0.001	0.001	0.001	0.001	0.001						
Servo motor model	Motor Brand	FANUC	α2i/β4is	α2i/β4is	α4i/β8is	α4i/β8is	α4i/β8is	α4i/β8is	α8i/β12is	α4i/β8is	α8i/β12is	α12i/β22is	α8i/β12is
	Mitsubishi	HF-105T	HF-KP73 HG-KR73 HF-105S	HF-104T HF-154T	HF-104S	HF-104T HF-154T	HF-104S	HF-154S	HF-104S	HF-204	HF-154S	HF-354S	HF-224S
Positioning accuracy	sec.	60	40	60	20	60	20	50	15	50	15	50	15
Repeatability	sec.	8	6	8	6	8	6	8	6	8	6	8	6
Clamping torque	Pneu. 5-7kg/cm ²	N.m	-	80	-	250	-	250	-	-	-	-	-
	Hyd.	N.m	150 (20~25 kg/cm ²)	-	400 (20~25 kg/cm ²)	-	400 (20~25 kg/cm ²)	-	1000 (25~30 kg/cm ²)	700 (25~30 kg/cm ²)	1300 (25~30 kg/cm ²)	1180 (25~30 kg/cm ²)	2000 (25~30 kg/cm ²)
Teeth ratio	-	1:60	1:60	1:90	1:90	1:90	1:90	1:120	1:120	1:120	1:120	1:120	1:120
Max. table speed (FANUC α motor)	rpm	44.4	44.4	33.3	33.3	33.3	33.3	22.2	22.2	16.6	16.6	11.1	11.1
Allowable load capacity	0° Horizontal	kg	45	65	80	110	200	230					
	0-90° Vert.	kg	30	50	65	75	110	150					
Allowable cutting force (Clamped status)	F	N	4500	7000	9000	16000	20000	30000					
	FxL	N.m	250	300	300	750	1180	2000					
	FxL	N.m	260	350	380	700	1180	2500					
Allowable torque on worm gear	N.m	85	170	250	380	780	1200						
Tilting angle	kg/cm ²	+30~-120	+30~-120	+30~-120	+30~-120	+30~-120	+30~-120						
Allowable inertia $J = \frac{W \cdot D^2}{8}$	deg.	0.14	0.25	0.25	0.9	2.7	9.7						
Weight (Motor excluded)	kg	105	170	175	350	600	770						

The specifications, dimensions and design characteristics shown in this catalogue are subject to change without prior notice.

Dimensional Drawings:

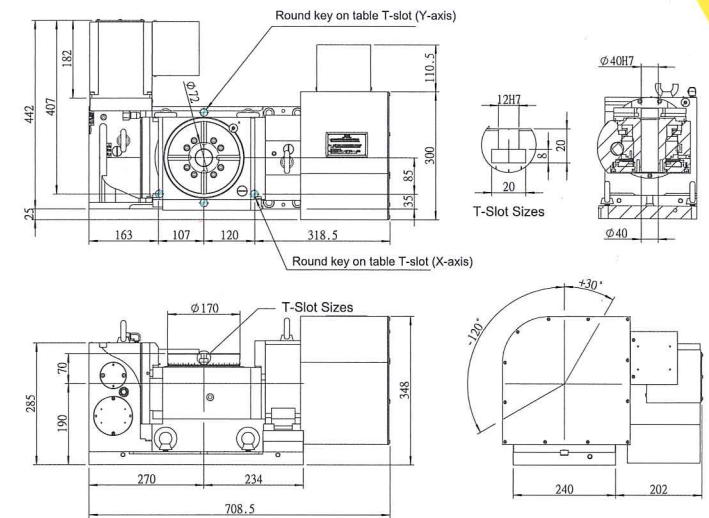
FEH-125

Unit: mm



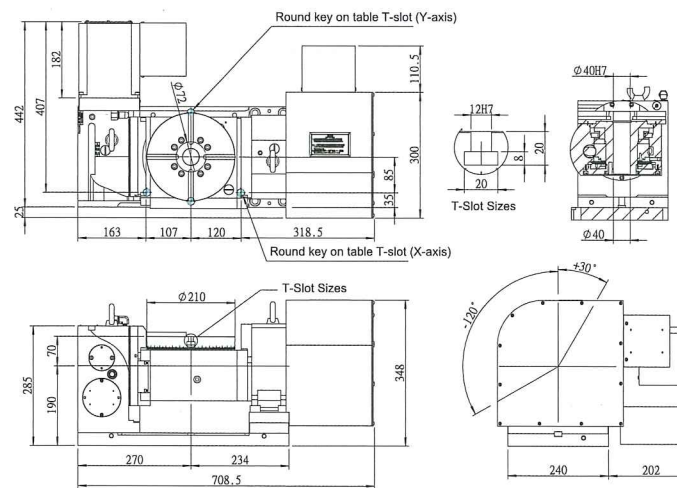
FEH-170

Unit: mm



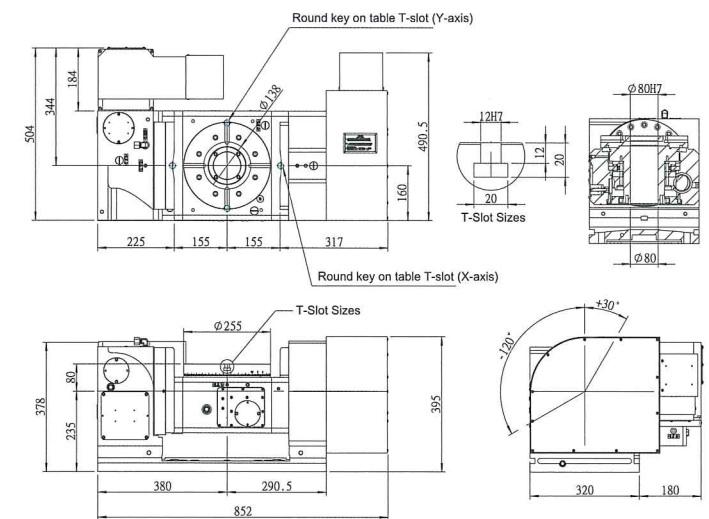
FEH-210

Unit: mm



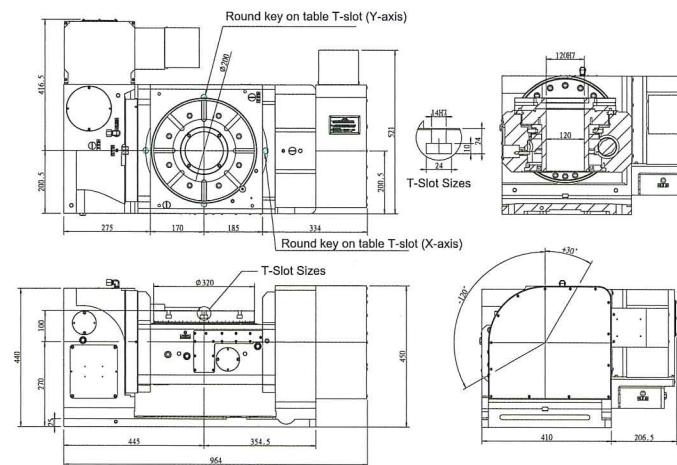
FEH-255

Unit: mm



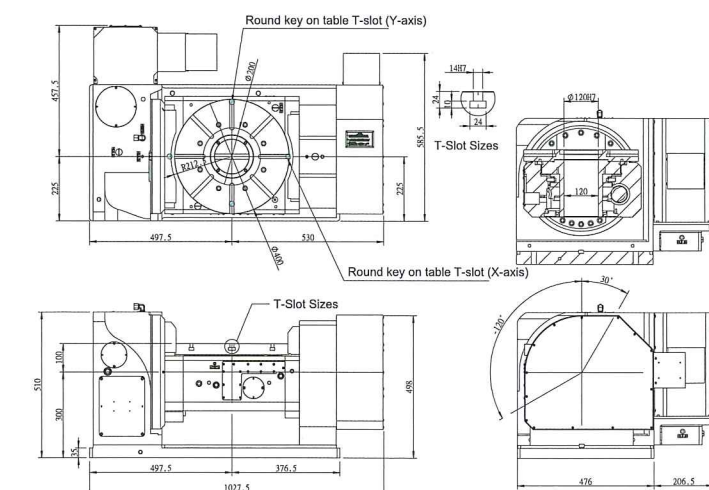
FEH-320

Unit: mm



FEH-400

Unit: mm



* PAINTING COLOR: Choice of shining silver or yellow color.