

Roller Gear Cam Drive Tilting Rotary Table

R C T F E - 2 6 0 H



flat supplemental
base for standard
3 axis M/C

five axis
union type for
gravity

roller cam drive

hydraulic clamp

table diameter	table height	table length	table width
120	75	180	80
140	75	210	80
160	75	240	80
180	75	270	80
200	75	300	80
220	75	330	80
240	75	360	80
260	75	390	80
280	75	420	80
300	75	450	80
320	75	480	80
340	75	510	80
360	75	540	80
380	75	570	80
400	75	600	80
420	75	630	80
440	75	660	80
460	75	690	80
480	75	720	80
500	75	750	80
520	75	780	80
540	75	810	80
560	75	840	80
580	75	870	80
600	75	900	80
620	75	930	80
640	75	960	80
660	75	990	80
680	75	1020	80
700	75	1050	80
720	75	1080	80
740	75	1110	80
760	75	1140	80
780	75	1170	80
800	75	1200	80
820	75	1230	80
840	75	1260	80
860	75	1290	80
880	75	1320	80
900	75	1350	80
920	75	1380	80
940	75	1410	80
960	75	1440	80
980	75	1470	80
1000	75	1500	80
1020	75	1530	80
1040	75	1560	80
1060	75	1590	80
1080	75	1620	80
1100	75	1650	80
1120	75	1680	80
1140	75	1710	80
1160	75	1740	80
1180	75	1770	80
1200	75	1800	80
1220	75	1830	80
1240	75	1860	80
1260	75	1890	80
1280	75	1920	80
1300	75	1950	80
1320	75	1980	80
1340	75	2010	80
1360	75	2040	80
1380	75	2070	80
1400	75	2100	80
1420	75	2130	80
1440	75	2160	80
1460	75	2190	80
1480	75	2220	80
1500	75	2250	80
1520	75	2280	80
1540	75	2310	80
1560	75	2340	80
1580	75	2370	80
1600	75	2400	80
1620	75	2430	80
1640	75	2460	80
1660	75	2490	80
1680	75	2520	80
1700	75	2550	80
1720	75	2580	80
1740	75	2610	80
1760	75	2640	80
1780	75	2670	80
1800	75	2700	80
1820	75	2730	80
1840	75	2760	80
1860	75	2790	80
1880	75	2820	80
1900	75	2850	80
1920	75	2880	80
1940	75	2910	80
1960	75	2940	80
1980	75	2970	80
2000	75	3000	80
2020	75	3030</	

- Worktable diameter Ø260, Ø350.
- Rolling contact reserves high rigidity, high speed and long endurance.
- Least drive energy wear-out and more than 80% transmission rate.
- Backlash-free from rolling motion achieves high accuracy.

SPECIFICATIONS

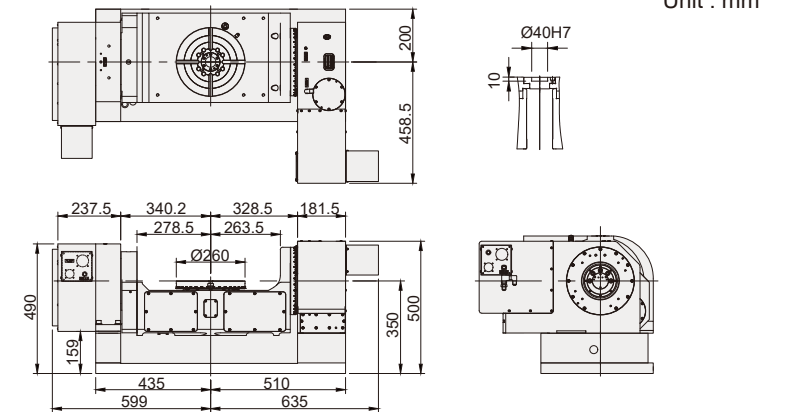
MODEL		Unit	RCTFE-260HL		RCTFE-350H		RCTFE-500HL	
Worktable diameter		mm / inch	Ø260 / Ø10.23		Ø350 / Ø13.78		Ø500 / Ø19.68	
Center bore diameter		mm / inch	Ø40H7 / Ø1.57H7		Ø50H7 / Ø1.968H7		Ø70H7 / Ø2.76H7	
Height of table (horizontal)		mm / inch	350 / 13.78		312 / 12.29		400 / 15.74	
Height of center (vertical)		mm / inch	350 / 13.78		337 / 13.27		450 / 17.71	
Width of T-slot		mm / inch	12H7 / 0.47H7		12H7 / 0.47H7		14H7 / 0.55H7	
Servo motor spec			refer to page 78					
Clamping method /pressure			R	T	R	T	R	T
		MPa / psi	Hydraulic 2.5	Hydraulic 5	Hydraulic 5		Hydraulic 5	
Transmission ratio			1:48	1:90	1:60	1:72	1:90	1:150
Max. table speed / at specified servo motor speed		min ⁻¹	50 / 3000	33.3 / 3000	50 / 3000	25 / 2000	30 / 3000	20 / 3000
Clamping torque		N.m / ft. lbs.	600 / 443	1400 / 1033	700 / 516	1800 / 1328	2500/1844	3000/2213
Allowable loading capacity	In Horizontal 	kg / lb	100 / 220		200 / 441		500 / 1102	
	In Tilting (0~90°) 	kg / lb	75 / 165		100 / 220		350 / 772	
Allowable unbalancing work moment	WxL 	N.m / ft. lbs.	80 / 59		100 / 74		300 / 221	
FxL When table clamped	F 	N / lbs	14000 / 3147		20000 / 4496		38000 / 8543	
	FxL 	N.m / ft. lbs.	600 / 443		700 / 516		2500 / 1844	
	FxL 	N.m / ft. lbs.	1400 / 1033		1800 / 1328		3000 / 2213	
Standard loading inertia	$(\frac{W.D^2}{8})$ 	kg.m ²	1.6		2.6		9.6	
Resolution		deg.	0.001		0.001		0.001	
Indexing accuracy		sec	20	60	20	60	20	60
Repeatability		sec	6	8	6	8	6	8
Tilting angle range		deg.	-120 ~ +30		-120 ~ +30		-120 ~ +30	
Net weight (servo motor excluded)		kg / lb	626 / 1380		556 / 1226		1360 / 2998	
Cam allowable torque		N.m / ft. lbs.	280 / 207		800 / 590		1600 / 1180	
Allowable Max. rotary joint quantity		Port	4		6		6	

Note: 1. **R**: Rotary Axis **T**: Tilt Axis

2. FxL When table clamped is a reference data, the users should consider proper safety factor or contact detron for details.

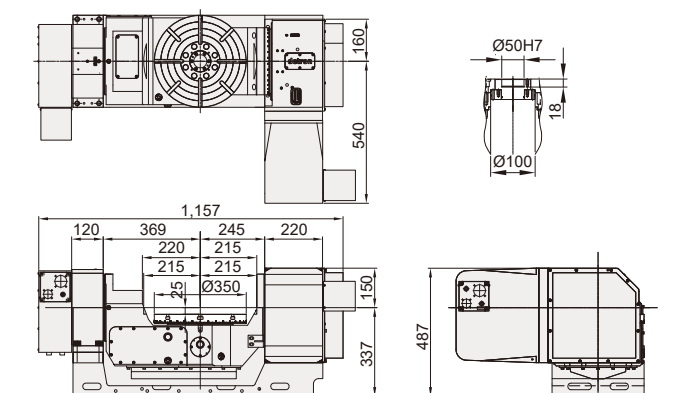
DIMENSIONAL DRAWINGS

RCTFE-260HL



Unit : mm

RCTFE-350H



RCTFE-500HL

