

Roller Gear Cam Drive
Tilting Rotary Table

RCF-170S/H RCF-210S/H
RCF-255H RCF-320H

RCF - 3 2 0 H



- Worktable diameter Ø170, Ø210, Ø255, Ø320
- 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.

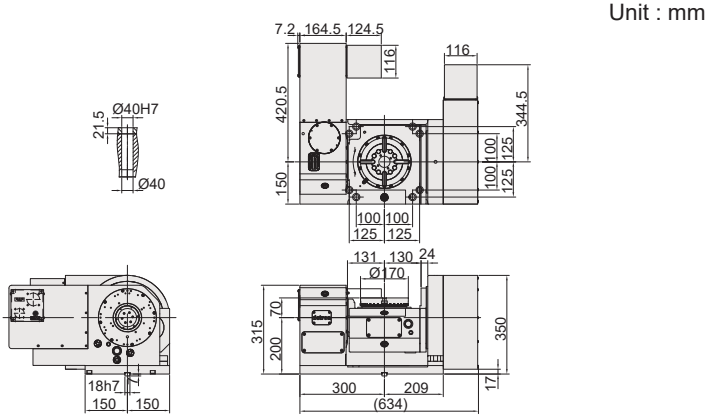
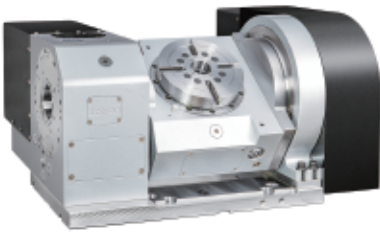
SPECIFICATIONS

MODEL		Unit	RCF-170S/H		RCF-210S/H		RCF-255H		RCF-320H		
Worktable diameter		mm / inch	Ø170 / Ø6.69		Ø210 / Ø8.27		Ø255 / Ø10.04		Ø320 / Ø12.59		
Center bore diameter		mm / inch	Ø40H7 / Ø1.57H7		Ø65H7 / Ø2.56H7		Ø140H7x15L/Ø5.51H7x15L		Ø140H7x15L/Ø5.51H7x15L		
Height of table (horizontal)		mm / inch	270 / 10.6		286 / 11.26		335 / 13.18		355 / 13.97		
Height of center (vertical)		mm / inch	200 / 7.87		210 / 8.27		235 / 9.25		255 / 10.03		
Width of T-slot		mm / inch	12H7 / 0.47H7		12H7 / 0.47H7		12H7 / 0.47H7		14H7 / 0.55H7		
Width of guide block		mm / inch	18 / 0.71		18 / 0.71		18 / 0.71		18 / 0.71		
Clamping method /pressure		MPa / psi	P:0.55~0.7/79.8~101.5 H:2.5/363		P:0.55~0.7/79.8~101.5 H:2.5/363		Hydraulic 5 / 725		Hydraulic 5 / 725		
Servo motor spec			refer to page 74								
Transmission ratio			R	T	R	T	R	T	R	T	
			1:60	1:90	1:60	1:90	1:60	1:90	1:60	1:48	
Max. table speed / at specified servo motor speed		min ⁻¹	50 / 3000	33.3 / 3000	50 / 3000	33.3 / 3000	44.4 / 3000	33.3 / 3000	44.4 / 2664	33.3 / 1600	
Clamping torque		N.m / ft. lbs.	300 / 221 600 / 443	400 / 295 700 / 516	400 / 295 600 / 443	600 / 443 800 / 590	1270 / 937	1270 / 937	1270 / 937	1270 / 937	
Allowable loading capacity	In Horizontal 	kg / lb	75 / 165		100 / 220		120 / 265		200 / 440		
	In Tilting (0~90°) 	kg / lb	50 / 110		70 / 154		90 / 198		150 / 330		
Allowable unbalancing work moment	WxL 	N.m / ft. lbs.	40 / 29.5		62 / 45.7		92 / 67.8		130 / 95.8		
FxL When table clamped	F 	N / lbs	7000 / 1571		14000 / 3142		20000 / 4488		20000 / 4488		
	FxL 	N.m / ft. lbs.	300 / 221 600 / 443		400 / 295 600 / 443		1270 / 937		1270 / 937		
	FxL 	N.m / ft. lbs.	400 / 295 700 / 516		600 / 443 800 / 590		1270 / 937		1600 / 1180		
Standard loading inertia ($\frac{W.D^2}{8}$) 		kg.m ²	0.2		0.4		0.94		2.6		
Resolution		deg.	0.001		0.001		0.001		0.001		
Indexing accuracy		sec	20"	60"	20"	60"	20"	50"	20"	50"	
Repeatability		sec	6"	8"	6"	8"	6"	8"	6"	8"	
Tilting angle range		deg.	-30 ~ +120		-30 ~ +120		-30 ~ +120		-30 ~ +120		
Net weight (servo motor excluded)		kg / lb	221 / 487		250 / 551		355 / 782		488(3D)		
Cam allowable torque		N.m / ft. lbs.	280 / 207		280 / 207		800 / 590		800 / 590		
Allowable Max. rotary joint quantity		Port	4		4		6		6		

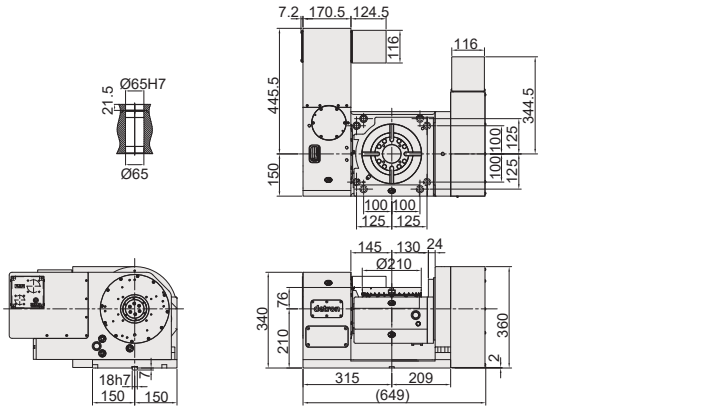
Note: 1. R: Rotary Axis T: Tilt Axis
2. FxL When table clamped is a reference data, the users should consider proper safety factor or contact detron for details.

DIMENSIONAL DRAWINGS

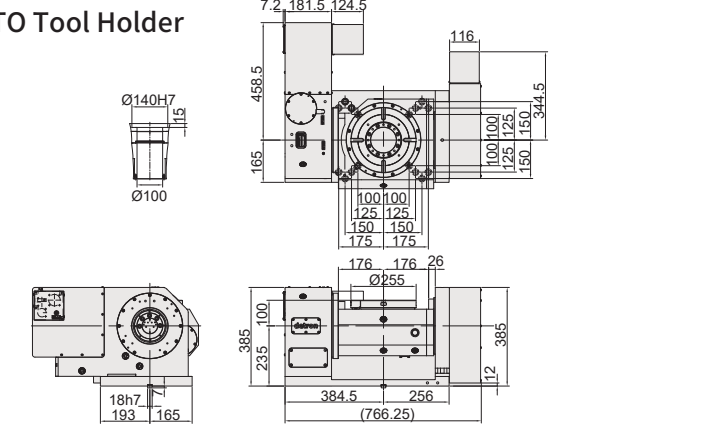
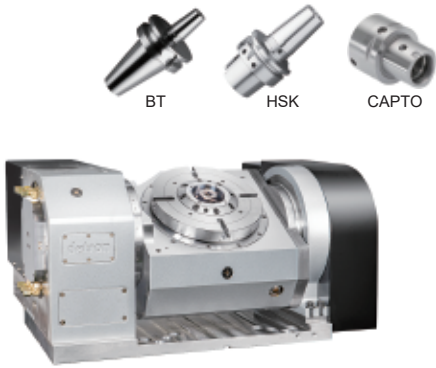
RCF-170S/H



RCF-210S/H



RCF-255H Optional Interface For BT / HSK / CAPTO Tool Holder



RCF-320H

