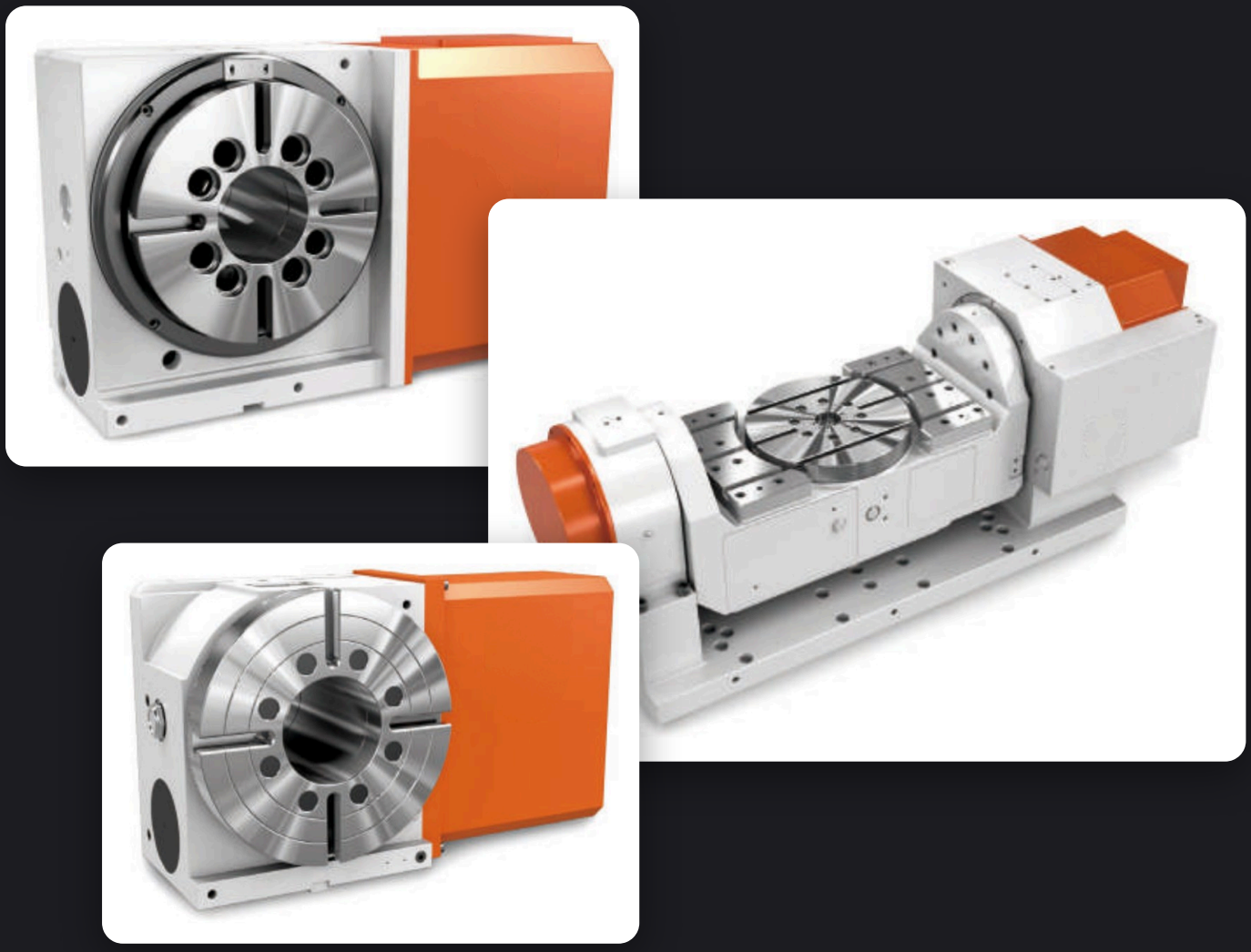
PRODUCT CATALOGUE

Roller Gear Cam Rotary Tables

4th & 5th Axis Zero-Backlash Precision Rotary Tables — Product Catalogue

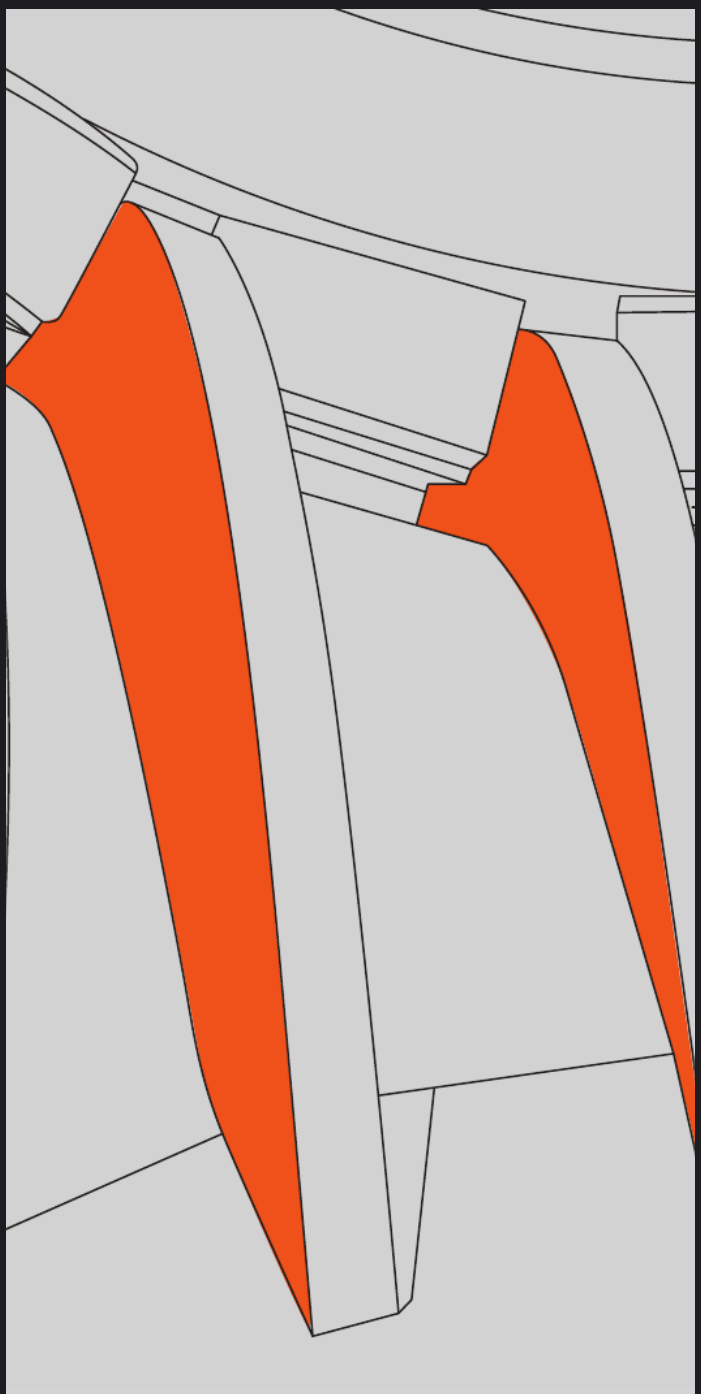
RTC · RTD · RDS / RDH · RDX · RTA / RTAD · RTB



Zero Backlash · High Precision · High Rigidity · High Torque

The multi-lead cam design features multiple evenly spaced, independent cam profiles. This configuration ensures that the roller remains in constant, precise contact with the cam surface at any rotation angle. The result is exceptional indexing performance with zero backlash, high positioning accuracy and minimal wear, meeting the rigorous demands of high-precision rotary tables.

Innovative Multi-lead Cam Technology



Multi-Lead Cam Profile Design

Through mathematical modeling and dynamic analysis, the multi-lead cam profile design achieves exceptional continuity and integrity. The cam ribs require no manual trimming, significantly reducing operational vibration and abnormal noise.



Conventional Single-Lead Cam Design

Traditional single-lead cam systems often suffer from outdated programming and limitations in precision grinding, leading to issues such as grinding wheel wear, inconsistent feed and interrupted cam surfaces. These imperfections increase the risk of mechanical interference and accelerate component wear.



The built-in cross roller bearing stably supports the rotating shaft on the center line of rotation. The structure provides strong locking force and keeps the shaft center from deflecting.

Integrated Bearing One-Piece Structure

Built-in spindle



Bearing One-Piece Structure

- Integrated design of spindle, turret and bearing
- No assembly tolerance stack-up
- High rigidity and extremely low backlash
- Reduced carbon emissions from manufacturing and parts transportation



Bearing Separation Structure

- Spindle-turret combination design
- Compatible with standard commercial bearings
- Reduced cumulative assembly tolerance
- Excellent rigidity and extremely low backlash



Single Turret Structure

- Turret machined independently
- Can be machined to customer drawings

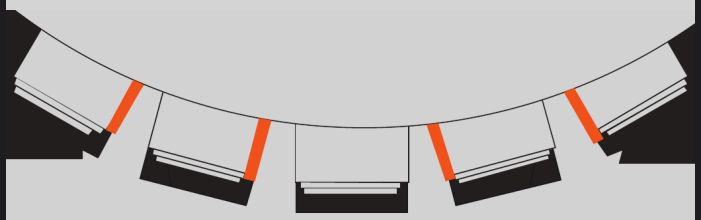
Rotary Table Drive Characteristics Comparison

Roller gear cams transmit motion through rolling contact under full-time preload. Compared with the sliding contact of a conventional worm gear, they offer clear advantages in accuracy retention, wear resistance and rigidity.

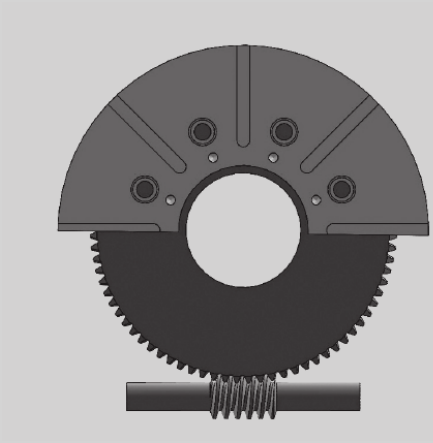


Roller Gear Cam

- Full Time Preload
- Rolling Contact
- Ultra-low Wear
- Ultra-low Backlash
- High Stability

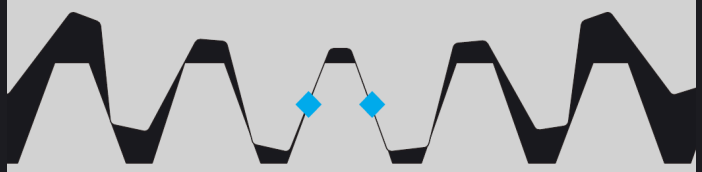


Zero backlash and high accuracy are maintained under long-term use.



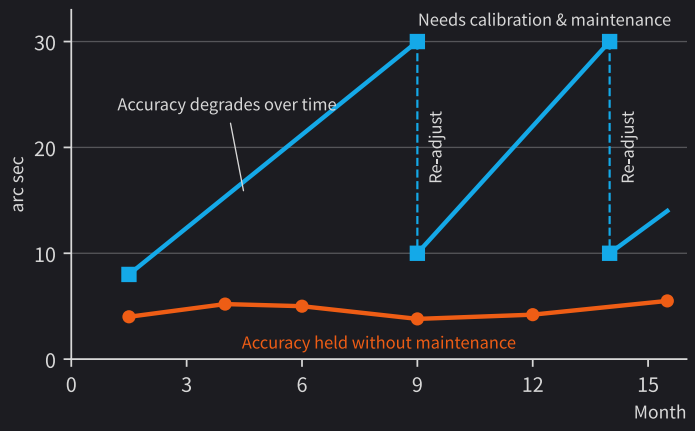
Worm Gear

- No Preload
- Slide Contact
- Low Durability
- Has Backlash
- Low Stability



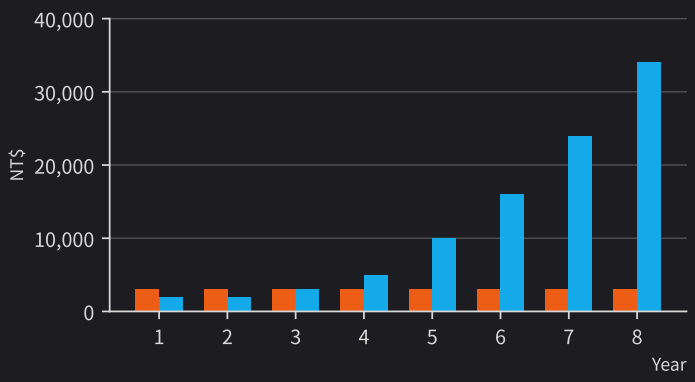
After long-term rotation, worm gear precision diminishes and the gap must be readjusted.

Roller Gear Cam Worm Gear



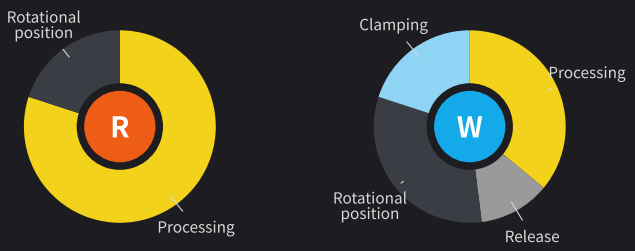
Accuracy After Long-term Use

Even after 5 years of operation without maintenance, a roller gear cam keeps its original precision. Worm gear precision diminishes after long-term rotation and requires regular maintenance.



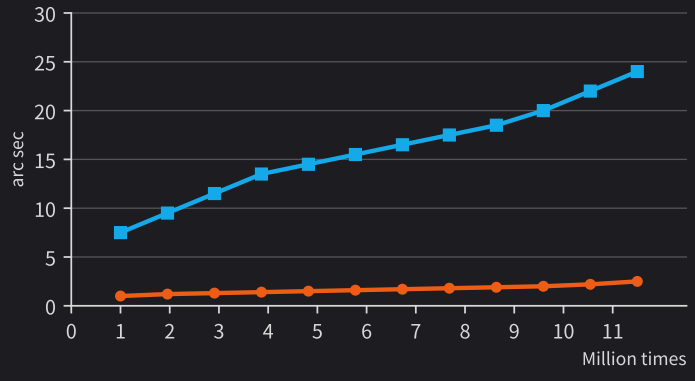
Maintenance Cost

Roller gear cams need no backlash adjustment, greatly reducing maintenance cost. Worm gears must be readjusted 1–2 times a year, adding adjustment cost and losses from machine downtime.



Rotational Positioning Time

With zero backlash and high rigidity, a roller gear cam saves clamping and releasing time. A worm gear must be clamped and released at every position, which takes extra time.

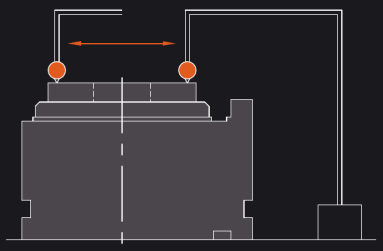


Precision After 12 Million Rotations

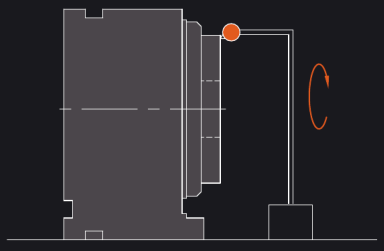
After 12 million rotations, a roller gear cam's positioning accuracy changes by only about 1 arc-second — excellent stability. A worm gear's precision steadily worsens with wear after just 1 million rotations.

※ Charts are illustrative comparisons; actual values vary with model and operating conditions.

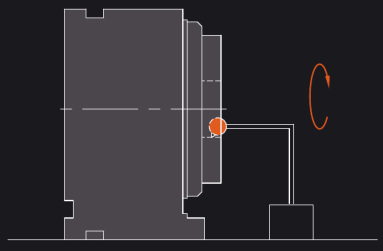
Accuracy Tolerance Chart for 4th Axis



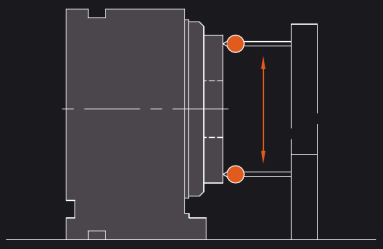
NO.1



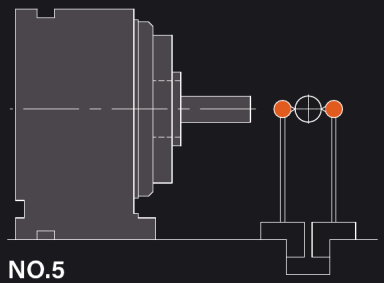
NO.2



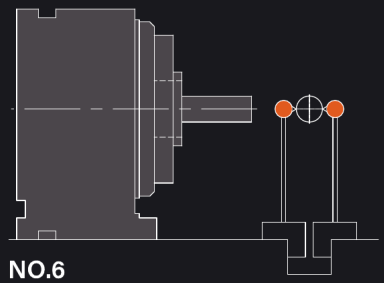
NO.3



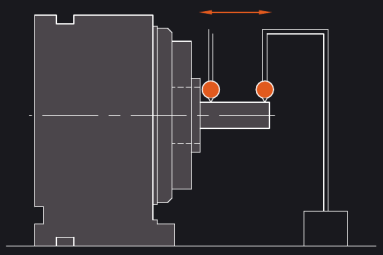
NO.4



NO.5



NO.6

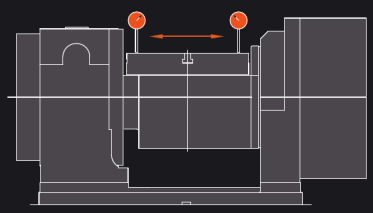


NO.7

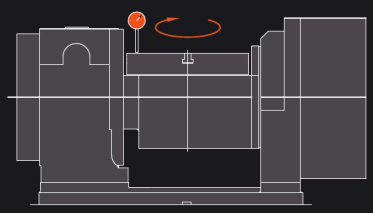
Description of Inspection	NO.	Allowable Value (mm)		
		Table Dia. Ø125~Ø200	Table Dia. Ø250~Ø500	Table Dia. Ø630~Ø800 and above
Parallelism between table surface and frame bottom surface (horizontal)	1	0.01	0.015	0.02
Runout of table surface	2	0.01	0.01	0.02
Runout of table reference bore	3	0.01	0.01	0.01
Squareness of table surface	4	0.02	0.02	0.02
Parallelism between rotating center and center of guide blocks	5	0.02	0.02	0.02
Deviation between rotating center and center of guide blocks	6	0.02	0.02	0.02
Parallelism between rotating center and frame bottom surface	7	0.02	0.02	0.025
Indexing Accuracy (arc-sec)	8	See catalogue data of each model		
Repeatability Accuracy (arc-sec)	9			

※ Designs and specifications are subject to change without notice. Please contact us for detailed specifications.

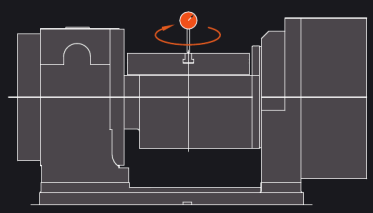
Accuracy Tolerance Chart for 5th Axis



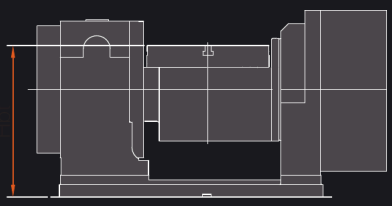
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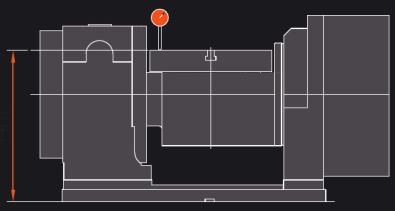
NO.2



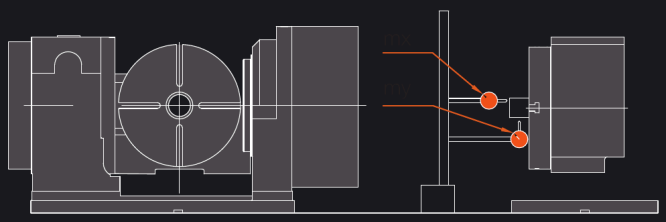
NO.3



NO.4



NO.5



NO.6

Description of Inspection	NO.	Allowable Value
Parallelism between table surface and frame bottom surface	1	0.02 mm
Runout of table surface	2	0.02 mm
Runout of table center bore	3	0.01 mm
Height between bottom surface and table surface	4	Hbc ±0.5
Height between bottom surface and tilting center	5	Hbc ±0.5
T-slot / jig plate straightness	6	0.015/300 mm
Indexing Accuracy	7	Rotating / Tilting Axis: See catalogue data of each model
Repeatability Accuracy	8	Rotating / Tilting Axis

※ Designs and specifications are subject to change without notice. Please contact us for detailed specifications.

MODEL CODE

RT C - 170 H R 4P S

1 2 3 4 5 6 7

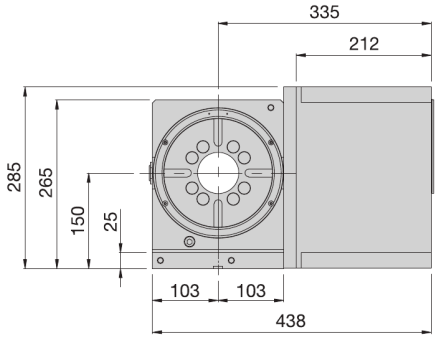
1. 4th Axis Standard Type
2. Model Specifications (Bearing One-Piece Roller Gear Cam)
3. Rotary Table Diameter
4. Brake Input Source (Pneumatic/Hydraulic)
5. Motor Configuration (Right/Left)
6. Number of Distributors
7. Special Protective Sheet Metal Housing

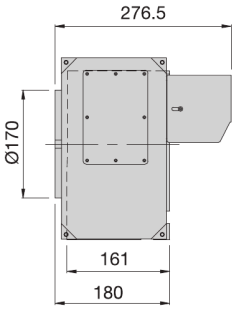


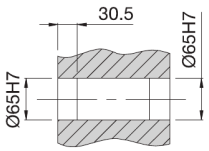
High Precision | High Rigidity | High Torque | Big Spindle Bore | Vertical & Horizontal Mounting | Hydraulic Clamping

Specification		Unit	RTC-170HR	RTC-200HR	RTC-250HR	RTC-320HR
Table Diameter		mm	Ø170	Ø200	Ø250	Ø320
Center Height (Vertical)		mm	150	165	210	255
Table Surface Height (Horizontal)		mm	180	185	220	240
Reference Hole Diameter		mm	Ø65H7	Ø75H7	Ø110H7	Ø165H7
Through Hole Diameter		mm	Ø65H7	Ø75H7	Ø110H7	Ø165H7
Table Width		mm	12H7	12H7	12H7	14H7
Degree of Reference Channel Width		mm	14h7	18h7	18h7	18h7
MIN. Increment		deg.	0.001°	0.001°	0.001°	0.001°
Max. Rotation Speed (Motor 3000 min⁻¹) Values are Determined by the Motor		rpm	50	50	50	50
Gear Ratio			1/60	1/60	1/60	1/60
Indexing Accuracy		arc-sec	15	15	12	12
Repeatability Accuracy		arc-sec	4	4	4	4
Servo Motor (Customer's choice)	FANUC		αiF 4	αiF 4	αiF 8	αiF 12
	MITSUBISHI		HG104S	HG104S	HG154S	HG204S
	SIEMENS		1FK7060	1FK7060	1FK7063	1FK7083
	YASKAWA		SGM7G-09A	SGM7G-09A	SGM7G-13A	SGM7G-30A
Clamp System			Hydraulic H	Hydraulic H	Hydraulic H	Hydraulic H
Pneumatic / Hydraulic Pressure		kg/cm²	35	35	35	35
Pneumatic / Hydraulic Clamping Torque		kg.m	60	80	95	230
MAX. Allowable Load on the Table	Vertical	kg	90	145	200	320
	Vertical with Tailstock	kg	180	290	400	650
	Horizontal	kg	180	290	400	650
MAX. Allowable Thrust Load on the Table (When clamped)	Allowable Axial Load	kgf	2100	3200	4300	5200
	Max. Output Torque	kgf.m	60	80	95	230
	Allowable Bending Torque	kgf.m	122	314	490	635
Max. Allowable Moment of Inertia J=(W·D²) / 8		kgf.m²	1.4	3.26	6.12	10.4
Net. Weight (Servo Motor Excluded)		kg	70	100	170	280

※ Maximum speed varies with different motor brand specifications.
※ The above does not include servo motors, encoders, drives and hydraulic units.

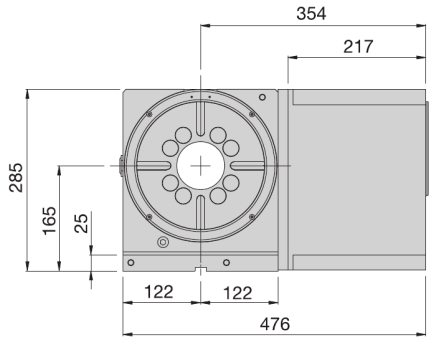


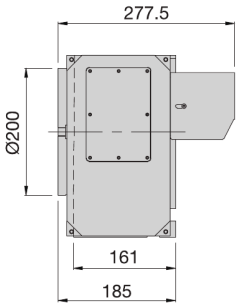


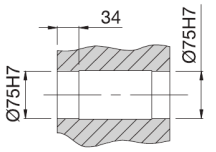


(Center Hole Dimension)

RTC-170HR

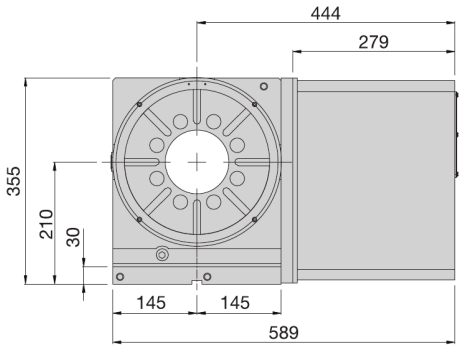


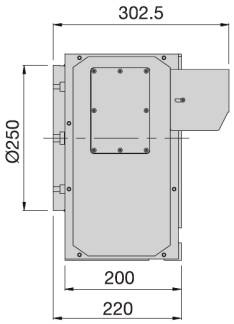


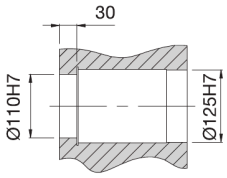


(Center Hole Dimension)

RTC-200HR

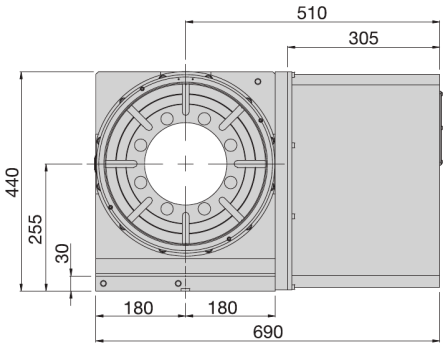


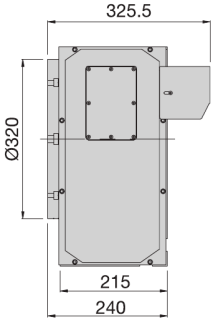


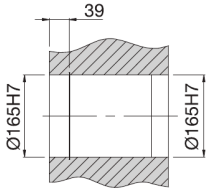


(Center Hole Dimension)

RTC-250HR







(Center Hole Dimension)

RTC-320HR

※ Actual appearance and dimensions are subject to the manufacturer's final specifications.

MODEL CODE

RT D - 125 H R 4P S

1 2 3 4 5 6 7

1. 4th Axis Standard Type
2. Model Specifications (High Rigidity Roller Gear Cam)
3. Rotary Table Diameter
4. Brake Input Source (Pneumatic/Hydraulic)
5. Motor Configuration (Right/Left)
6. Number of Distributors
7. Special Protective Sheet Metal Housing

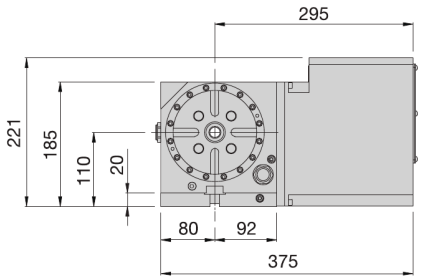


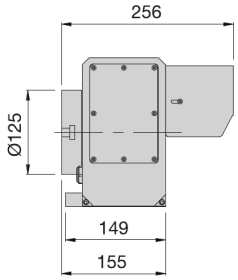
High Precision | High Speed | High Transmission | Extremely low wear consumption | Vertical & Horizontal Mounting | "Cross roller" bearing

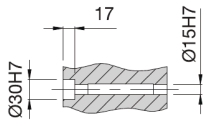
Specification		Unit	RTD-125PR/HR	RTD-170PR/HR RTD-170PL/HL	RTD-200HR/HL	RTD-250HR
Table Diameter		mm	Ø125	Ø170	Ø200	Ø250
Center Height (Vertical)		mm	110	135	160	185
Table Surface Height (Horizontal)		mm	155	195	205	215
Reference Hole Diameter		mm	Ø30H7	Ø60H7	Ø60H7	Ø90H7
Through Hole Diameter		mm	Ø15H7	Ø45H7	Ø45H7	Ø60H7
Table Width		mm	12H7	12H7	12H7	12H7
Degree of Reference Channel Width		mm	14h7	14h7	18h7	18h7
MIN. Increment		deg.	0.001°	0.001°	0.001°	0.001°
Max. Rotation Speed (Motor 3000 min⁻¹) Values are Determined by the Motor		rpm	75	83	50	50
Gear Ratio			1/40	1/36	1/60	1/60
Indexing Accuracy		arc-sec	30	16	15	12
Repeatability Accuracy		arc-sec	6	4	4	4
Servo Motor (Customer's choice)	FANUC		αiF 2 βiS 4	αiF 4 βiS 8	αiF 4 βiS 8	αiF 8 βiS 12
	MITSUBISHI		HG75S	HG104S	HG104S	HG154S
	SIEMENS		1FK7042	1FK7060	1FK7060	1FK7063
	YASKAWA		SGM7G-05 A	SGM7G-09 A	SGM7G-09 A	SGM7G-13 A
Clamp System			Pneumatic P / Hydraulic H	Pneumatic P / Hydraulic H	Hydraulic H	Hydraulic H
Pneumatic / Hydraulic Pressure		kg/cm²	5/14	5/35	35	35
Pneumatic / Hydraulic Clamping Torque		kg.m	14/18	26/45	80	95
MAX. Allowable Load on the Table	Vertical	kg	50	90	145	200
	Vertical with Tailstock	kg	100	180	290	400
	Horizontal	kg	100	180	290	400
MAX. Allowable Thrust Load on the Table (When clamped)	Allowable Axial Load	kgf	970	2100	3200	4300
	Max. Output Torque	kgf.m	14	26/60	80	95
	Allowable Bending Torque	kgf.m	41	122	314	490
Max. Allowable Moment of Inertia J=(W·D²) / 8		kgf.m²	0.2	1.4	3.26	6.12
Net. Weight (Servo Motor Excluded)		kg	35	60	80	118

※ Maximum speed varies with different motor brand specifications.
※ The above does not include servo motors, encoders, drives and hydraulic units.

RTD-125PR
RTD-125HR

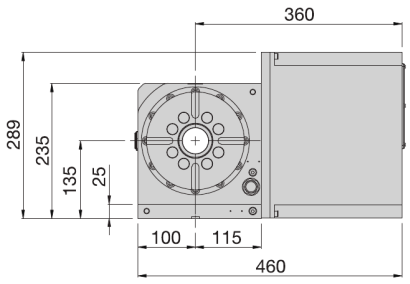


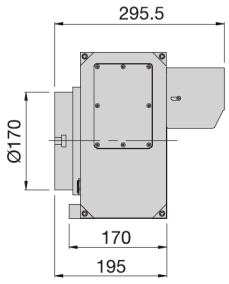


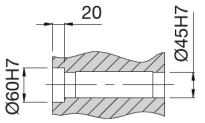


(Center Hole Dimension)

RTD-170PR
RTD-170HR

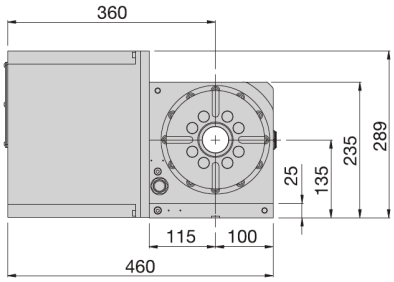


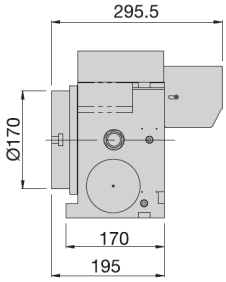


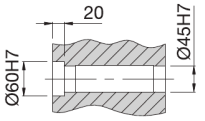


(Center Hole Dimension)

RTD-170PL
RTD-170HL

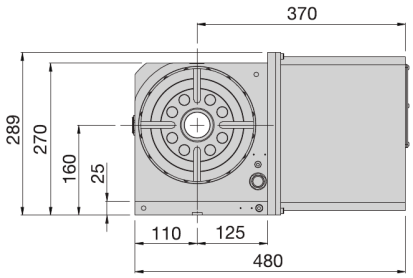


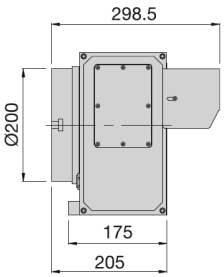


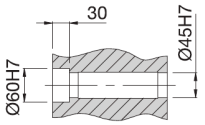


(Center Hole Dimension)

RTD-200HR

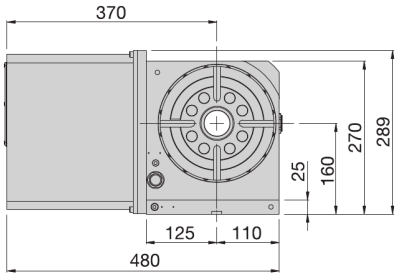


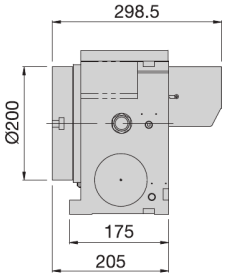


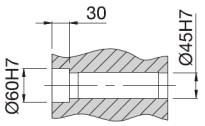


(Center Hole Dimension)

RTD-200HL

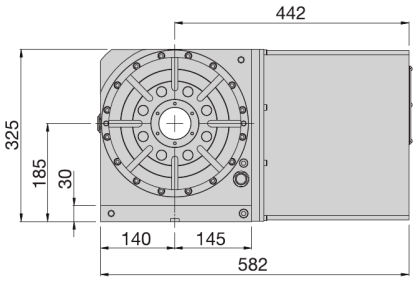


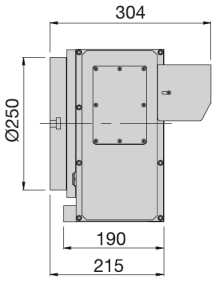


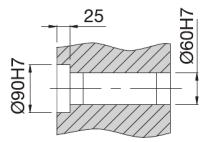


(Center Hole Dimension)

RTD-250HR







(Center Hole Dimension)

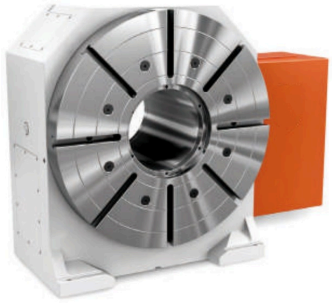
※ Actual appearance and dimensions are subject to the manufacturer's final specifications.

MODEL CODE

RT D - 320 H R 4P S

1 2 3 4 5 6 7

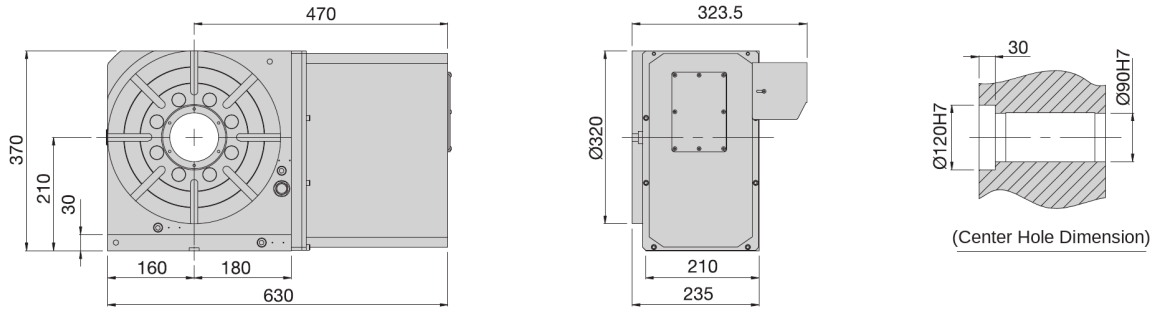
1. 4th Axis Standard Type
2. Model Specifications (High Rigidity Roller Gear Cam)
3. Rotary Table Diameter
4. Brake Input Source (Pneumatic/Hydraulic)
5. Motor Configuration (Right/Left)
6. Number of Distributors
7. Special Protective Sheet Metal Housing



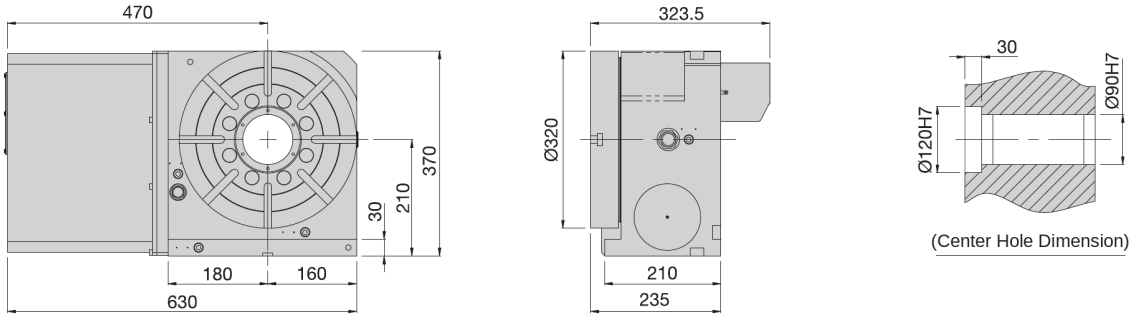
High Precision | High Speed | High Transmission | "Cross roller" bearing | Extremely low wear consumption | Vertical & Horizontal Mounting

Specification		Unit	RTD-320HR RTD-320HL	RTD-400HR	RTD-500HR	RTD-630HR
Table Diameter		mm	Ø320	Ø400	Ø500	Ø630
Center Height (Vertical)		mm	210	255	310	400
Table Surface Height (Horizontal)		mm	235	240	300	380
Reference Hole Diameter		mm	Ø120H7	Ø165H7	Ø150H7	Ø250H7
Through Hole Diameter		mm	Ø90H7	Ø165H7	Ø200H7	Ø220H7
Table Width		mm	14H7	14H7	14H7	18H7
Degree of Reference Channel Width		mm	18h7	18h7	18h7	18h7
MIN. Increment		deg.	0.001°	0.001°	0.001°	0.001°
Max. Rotation Speed (Motor 3000 min⁻¹) Values are Determined by the Motor		rpm	50	50	25	25
Gear Ratio			1/60	1/60	1/120	1/120
Indexing Accuracy		arc-sec	12	12	12	12
Repeatability Accuracy		arc-sec	4	4	4	4
Servo Motor (Customer's choice)	FANUC		αiF 12 βiS 22	αiF 12 βiS 22	αiF 12 βiS 22	αiF 22 βiS 22
	MITSUBISHI		HG204S	HG204S	HG204S	HF354S
	SIEMENS		1FK7083	1FK7083	1FK7083	1FK7101
	YASKAWA		SGM7G-30 A	SGM7G-30 A	SGM7G-30 A	-
Clamp System			Hydraulic H	Hydraulic H	Hydraulic H	Hydraulic H
Pneumatic / Hydraulic Pressure		kg/cm²	35	35	35	35
Pneumatic / Hydraulic Clamping Torque		kg.m	230	250	420	450
MAX. Allowable Load on the Table	Vertical	kg	260	320	475	960
	Vertical with Tailstock	kg	520	650	950	1920
	Horizontal	kg	520	650	950	2000
MAX. Allowable Thrust Load on the Table (When clamped)	Allowable Axial Load	kgf	5200	8500	9900	11000
	Max. Output Torque	kgf.m	230	420	850	750
	Allowable Bending Torque	kgf.m	635	990	1300	1632
Max. Allowable Moment of Inertia J=(W·D²) / 8		kgf.m²	10.4	24	42.7	99
Net. Weight (Servo Motor Excluded)		kg	180	295	450	800

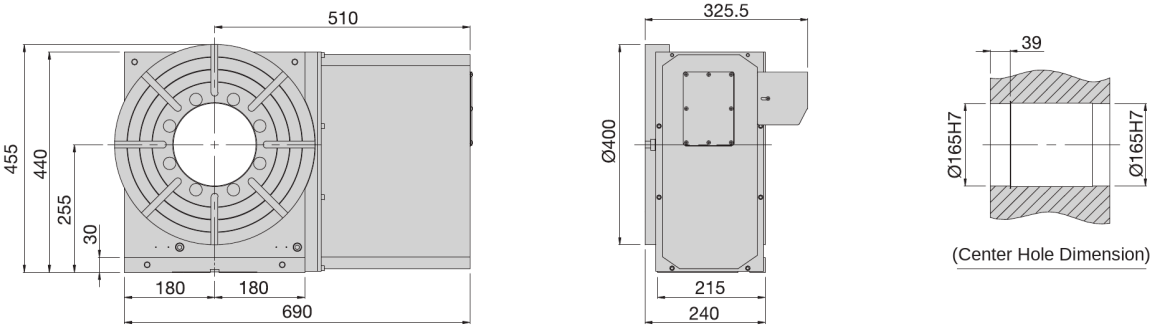
※ Maximum speed varies with different motor brand specifications.
※ The above does not include servo motors, encoders, drives and hydraulic units.



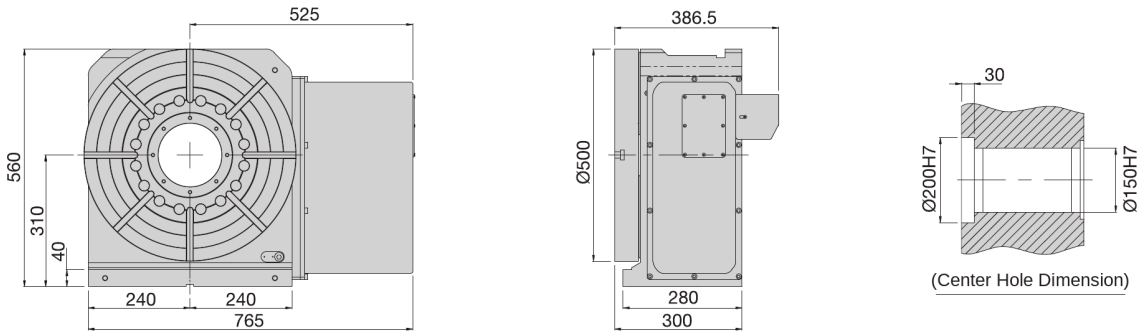
RTD-320HR



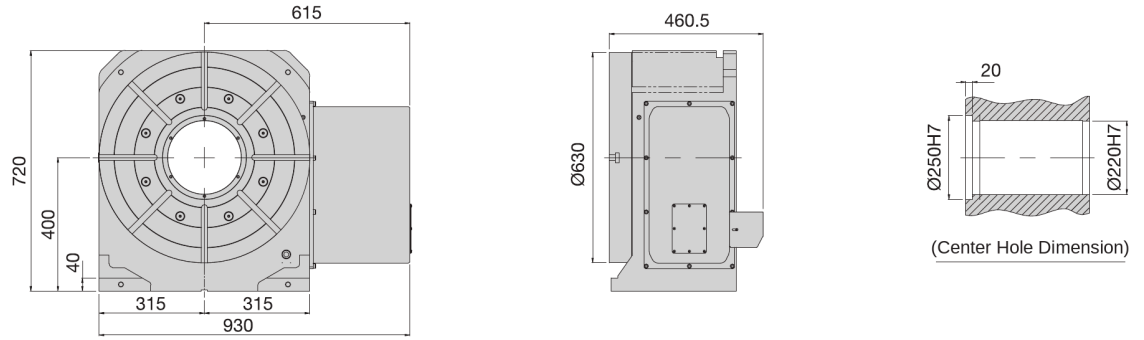
RTD-320HL



RTD-400HR



RTD-500HR



RTD-630HR

※ Actual appearance and dimensions are subject to the manufacturer's final specifications.

MODEL CODE

RD S/H - 200 H R 4P S

1 2 3 4 5 6 7

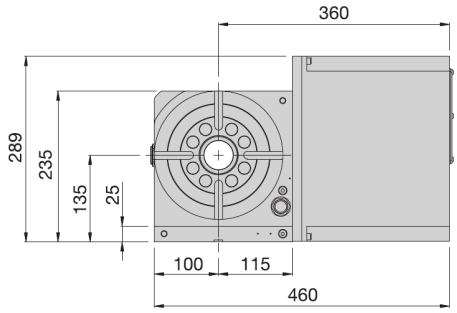
1. 4th Axis Superior Type
2. Model Specifications S - Extended Table / H - Special Center Height
3. Rotary Table Diameter
4. Brake Input Source (Pneumatic/Hydraulic)
5. Motor Configuration (Right/Left)
6. Number of Distributors
7. Special Protective Sheet Metal Housing

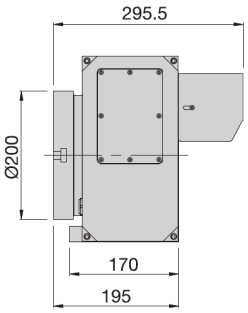


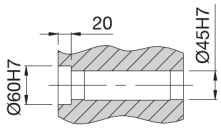
High Precision | High Speed | Newly optimized model | Vertical & Horizontal Mounting | Special Center Height Roller Gear Cam

Specification		Unit	RDS-200PR RDS-200HR	RDH-200PR RDH-200HR	RDS-250HR RDS-250HL	RDS-300HR
Table Diameter		mm	Ø200	Ø200	Ø250	Ø300
Center Height (Vertical)		mm	135	160	160	185
Table Surface Height (Horizontal)		mm	195	195	205	215
Reference Hole Diameter		mm	Ø60H7	Ø60H7	Ø60H7	Ø90H7
Through Hole Diameter		mm	Ø45H7	Ø45H7	Ø45H7	Ø60H7
Table Width		mm	12H7	12H7	12H7	12H7
Degree of Reference Channel Width		mm	14h7	18h7	18h7	18h7
MIN. Increment		deg.	0.001°	0.001°	0.001°	0.001°
Max. Rotation Speed (Motor 3000 min⁻¹) Values are Determined by the Motor		rpm	83	83	50	50
Gear Ratio			1/36	1/36	1/60	1/60
Indexing Accuracy		arc-sec	16	16	15	12
Repeatability Accuracy		arc-sec	4	4	4	4
Servo Motor (Customer's choice)	FANUC		αiF 4 βiS 8	αiF 4 βiS 8	αiF 4 βiS 8	αiF 8 βiS 12
	MITSUBISHI		HG104S	HG104S	HG104S	HG154S
	SIEMENS		1FK7060	1FK7060	1FK7060	1FK7063
	YASKAWA		SGM7G-09A	SGM7G-09A	SGM7G-09A	SGM7G-13A
Clamp System			Pneumatic P / Hydraulic H	Pneumatic P / Hydraulic H	Hydraulic H	Hydraulic H
Pneumatic / Hydraulic Pressure		kg/cm²	5/35	5/35	35	35
Pneumatic / Hydraulic Clamping Torque		kg.m	26/45	26/45	80	95
MAX. Allowable Load on the Table	Vertical	kg	90	90	145	200
	Vertical with Tailstock	kg	180	180	290	400
	Horizontal	kg	180	180	290	400
MAX. Allowable Thrust Load on the Table (When clamped)	Allowable Axial Load	kgf	2100	2100	3200	4300
	Max. Output Torque	kgf.m	26/60	26/60	80	95
	Allowable Bending Torque	kgf.m	122	122	314	490
Max. Allowable Moment of Inertia J=(W·D²) / 8		kgf.m²	1.4	1.4	3.26	6.12
Net. Weight (Servo Motor Excluded)		kg	65	65	89	130

RDS-200PR
RDS-200HR

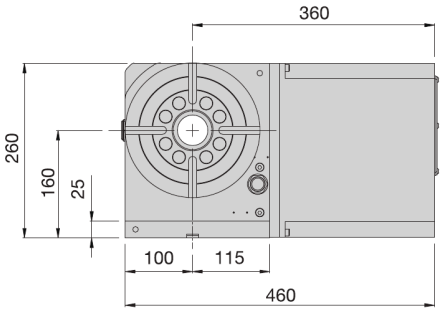


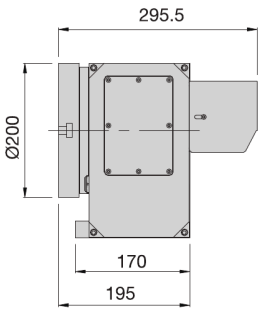


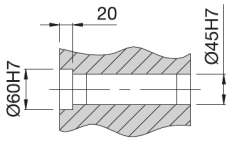


(Center Hole Dimension)

RDH-200PR
RDH-200HR

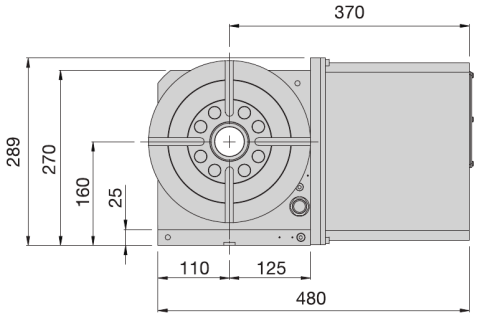


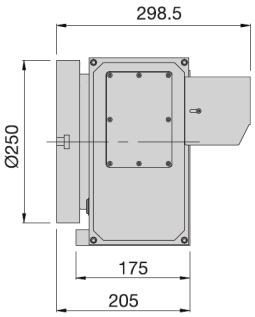


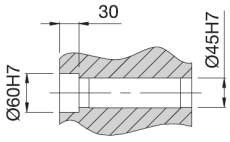


(Center Hole Dimension)

RDS-250HR

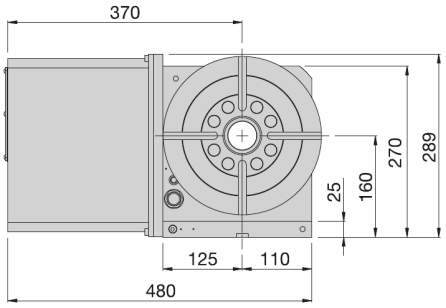


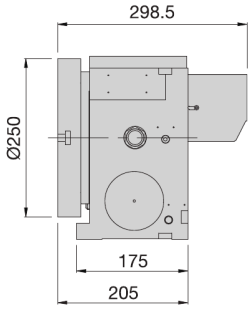


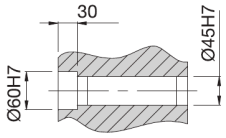


(Center Hole Dimension)

RDS-250HL

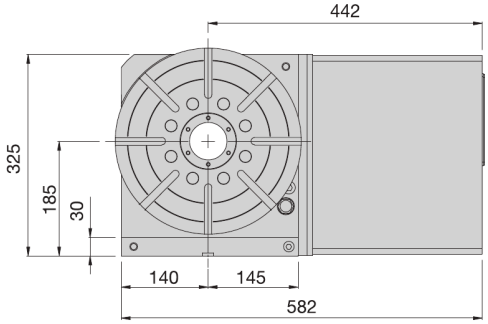


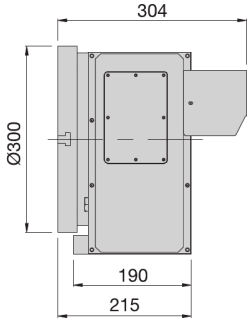


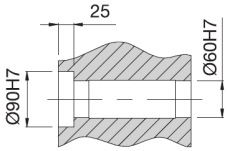


(Center Hole Dimension)

RDS-300HR







(Center Hole Dimension)

※ Actual appearance and dimensions are subject to the manufacturer's final specifications.

MODEL CODE

RD X - 255 H R 4P S

1 2 3 4 5 6 7

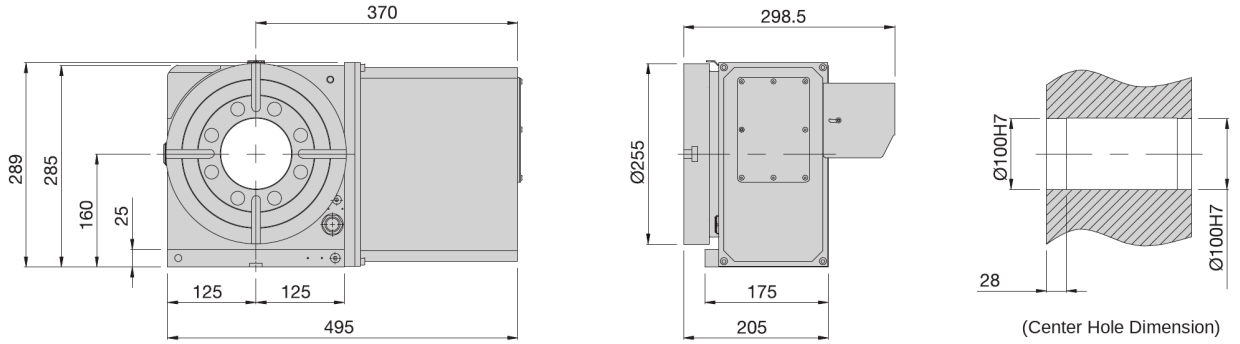
1. 4th Axis Superior Type
2. Model Specifications Large Bore
3. Rotary Table Diameter
4. Brake Input Source (Pneumatic/Hydraulic)
5. Motor Configuration (Right/Left)
6. Number of Distributors
7. Special Protective Sheet Metal Housing



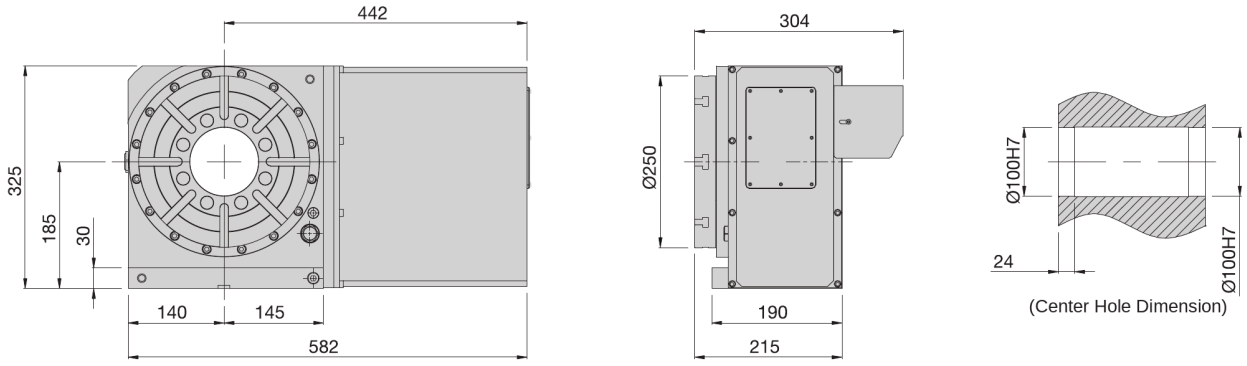
High Precision | High Speed | Large Bore | Newly optimized model | Vertical & Horizontal Mounting | Special Center Height Roller Gear Cam

Specification		Unit	RDX-255HR	RDX-250HR	RDX-320HR
Table Diameter		mm	Ø255	Ø250	Ø320
Center Height (Vertical)		mm	160	185	210
Table Surface Height (Horizontal)		mm	205	215	235
Reference Hole Diameter		mm	Ø100H7	Ø100H7	Ø120H7
Through Hole Diameter		mm	Ø100H7	Ø100H7	Ø120H7
Table Width		mm	12H7	12H7	14H7
Degree of Reference Channel Width		mm	18h7	18h7	18h7
MIN. Increment		deg.	0.001°	0.001°	0.001°
Max. Rotation Speed (Motor 3000 min⁻¹) Values are Determined by the Motor		rpm	50	50	50
Gear Ratio			1/60	1/60	1/60
Indexing Accuracy		arc-sec	12	12	12
Repeatability Accuracy		arc-sec	4	4	4
Servo Motor (Customer's choice)	FANUC		αiF 4 βiS 8	αiF 8 βiS 12	αiF 12 βiS 22
	MITSUBISHI		HG104S	HG154S	HG204S
	SIEMENS		1FK7060	1FK7063	1FK7083
	YASKAWA		SGM7G-09A	SGM7G-13A	SGM7G-30A
Clamp System			Hydraulic H	Hydraulic H	Hydraulic H
Pneumatic / Hydraulic Pressure		kg/cm²	35	35	35
Pneumatic / Hydraulic Clamping Torque		kg.m	80	95	230
MAX. Allowable Load on the Table	Vertical	kg	155	200	260
	Vertical with Tailstock	kg	310	400	520
	Horizontal	kg	310	400	520
MAX. Allowable Thrust Load on the Table (When clamped)	Allowable Axial Load	kgf	3200	4300	5200
	Max. Output Torque	kgf.m	80	95	230
	Allowable Bending Torque	kgf.m	314	490	635
Max. Allowable Moment of Inertia J=(W·D²)/8		kgf.m²	1.3	6.12	10.4
Net. Weight (Servo Motor Excluded)		kg	100	118	180

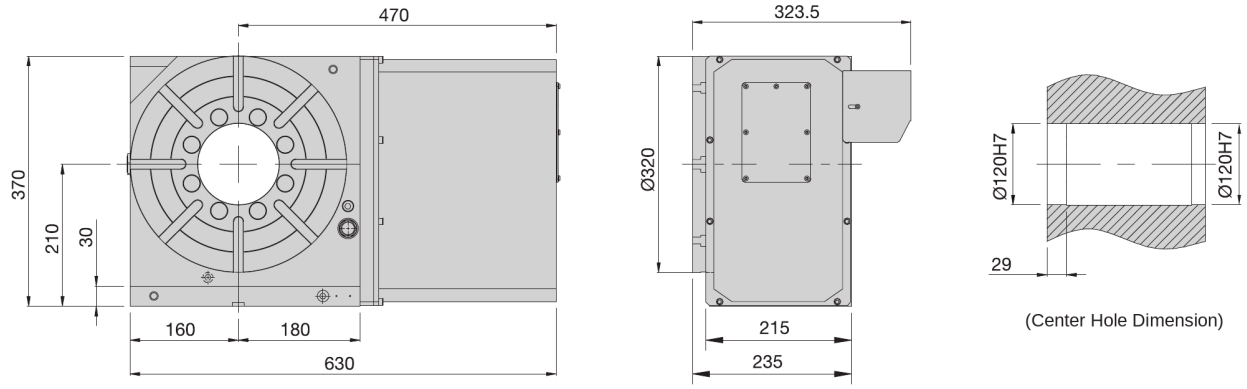
※ Maximum speed varies with different motor brand specifications.
※ The above does not include servo motors, encoders, drives and hydraulic units.



RDX-255HR



RDX-250HR



RDX-320HR

※ Actual appearance and dimensions are subject to the manufacturer's final specifications.

MODEL CODE

RT A/AD - 100 V 4P 215H

1 2 3 4 5 6

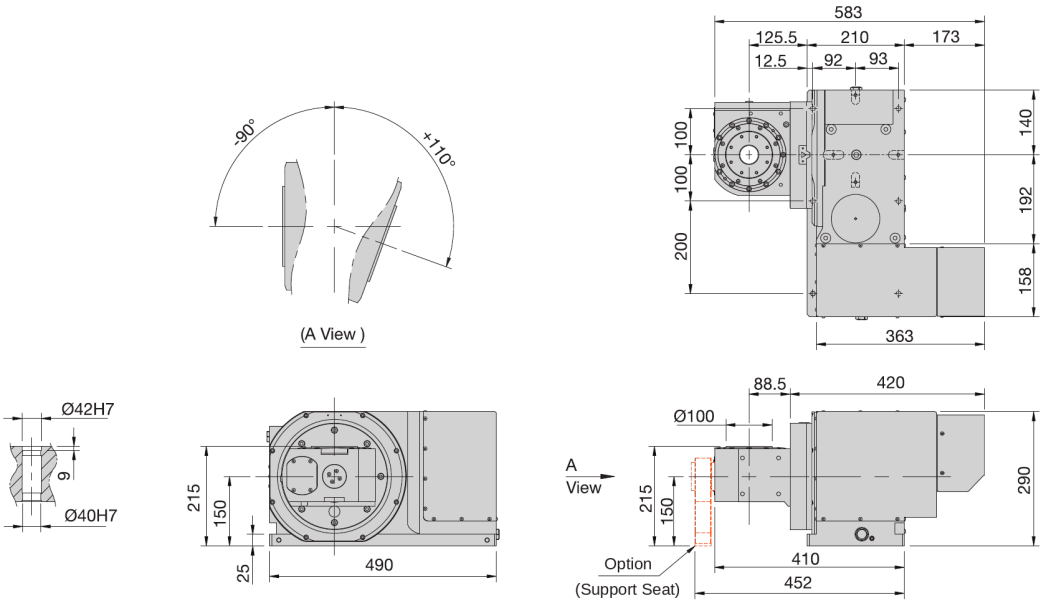
1. 5th Axis
2. Model Specifications Cantilever Type / Double Table Cantilever Type
3. Rotary Table Diameter
4. Motor Configuration B - Rear-Mounted Type / I - Horizontal Type / V - Vertical Type
5. Number of Distributors
6. Table Height



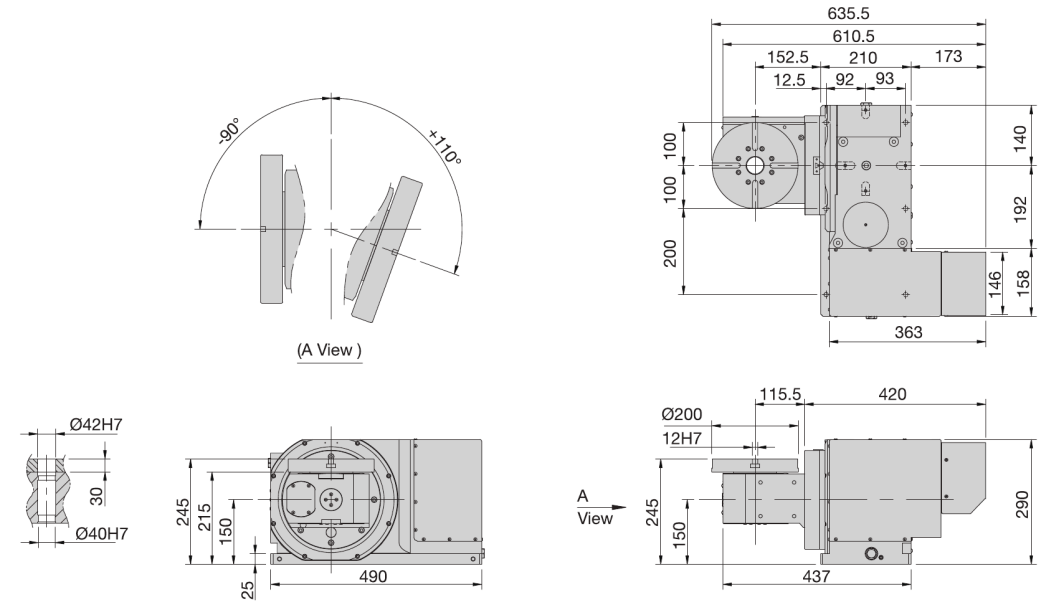
Zero Backlash | High Precision | High Efficiency | High Rigidity | Resistance | Low Thermal Deformation

Specification		Unit	RTA-100V/125/170		RTA-200V/210/220		RTAD-200V/100/170	
			Rotating Axis	Tilting Axis	Rotating Axis	Tilting Axis	Rotating Axis	Tilting Axis
Table Diameter		mm	Ø100 (Ø125 / Ø170)		Ø200 (Ø210 / Ø220)		Ø200 (Ø100 / Ø170)	
Center Height (Vertical)		mm	150		150		150	
Table Surface Height (Horizontal)		mm	215 (240)		245		245 (240)	
Reference Hole Diameter		mm	Ø42H7		Ø42H7		Ø42H7	
Through Hole Diameter		mm	Ø40H7		Ø40H7		Ø40H7	
Table Width		mm	12H7		12H7		12H7	
Degree of Reference Channel Width		mm	18h7		18h7		18h7	
MIN. Increment		deg.	0.001°		0.001°		0.001°	
Swing Angle		deg.	360°	-90°~+110°	360°	-90°~+110°	360°	-90°~+180°
Max. Rotation Speed (Motor 3000 min⁻¹) Values are Determined by the Motor		rpm	62.5	50	62.5	50	75	50
Gear Ratio			1/48	1/60	1/48	1/60	1/40	1/60
Indexing Accuracy Tilting axis accuracy depends on the optical scale specification.		arc-sec	20	15	20	15	20	15
Repeatability Accuracy Tilting axis accuracy depends on the optical scale specification.		arc-sec	8	4	8	4	8	4
Servo Motor (Customer's choice)	FANUC		αiF 2 βiS 4	αiF 4 + **B** βiS 8 + **B**	αiF 2 βiS 4	αiF 4 + **B** βiS 8 + **B**	αiF 2 βiS 4	αiF 4 + **B** βiS 8 + **B**
	MITSUBISHI		HG75S	HG104S + **B**	HG75S	HG104S + **B**	HG75S	HG104S + **B**
	SIEMENS		1FK7034	1FK7060 + **B**	1FK7034	1FK7060 + **B**	1FK7034	1FK7060 + **B**
MAX. Allowable Load on the Table	Level	kg	30		30		30	
	Tilt	kg	30		30		30	
MAX. Allowable Thrust Load on the Table (When clamped)	Allowable Axial Load	kgf	620		620		620	
	Max. Output Torque	kgf.m	22		22		22	
	Allowable Bending Torque	kgf.m	30		30		30	
Max. Allowable Moment of Inertia J=(W·D²)/8		kgf.m²	0.1		0.1		0.1	
Net. Weight (Servo Motor Excluded)		kg	128		140		160	

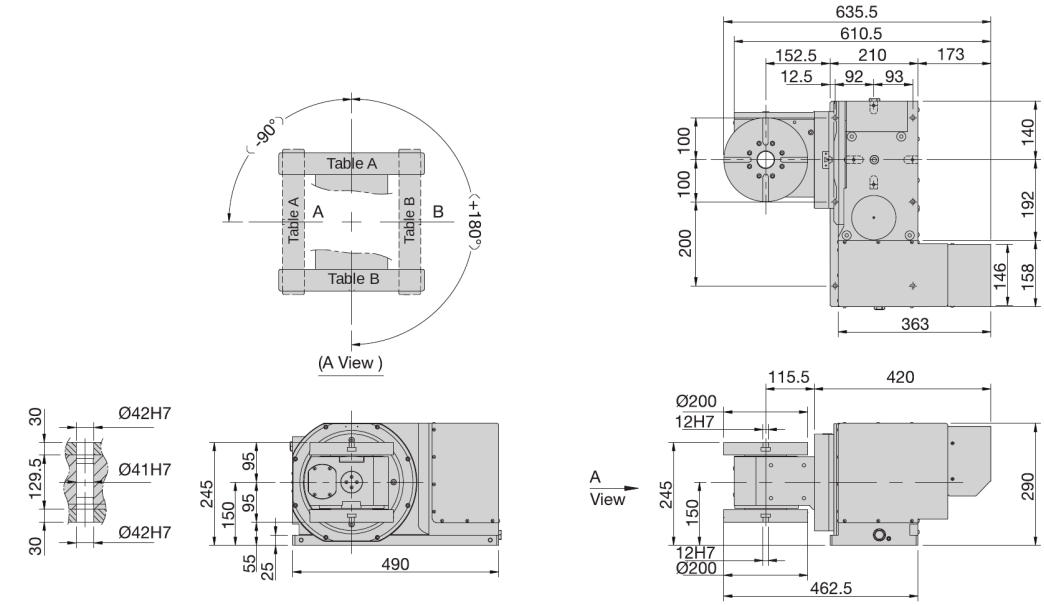
※ Maximum speed varies with different motor brand specifications.
※ **B** is Servo motor with brake.
※ Angular encoder (Option): Optical scale recommended for the tilting axis.
※ Optional two-in-two-out hydraulic distributor.
※ The above does not include servo motors, encoders, drives and hydraulic units.



RTA-100V



RTA-200V



RTAD-200V

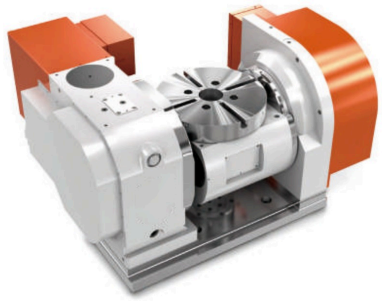
※ Actual appearance and dimensions are subject to the manufacturer's final specifications.

MODEL CODE

RT B - 250 V L 4P 310H DE

1 2 3 4 5 6 7 8

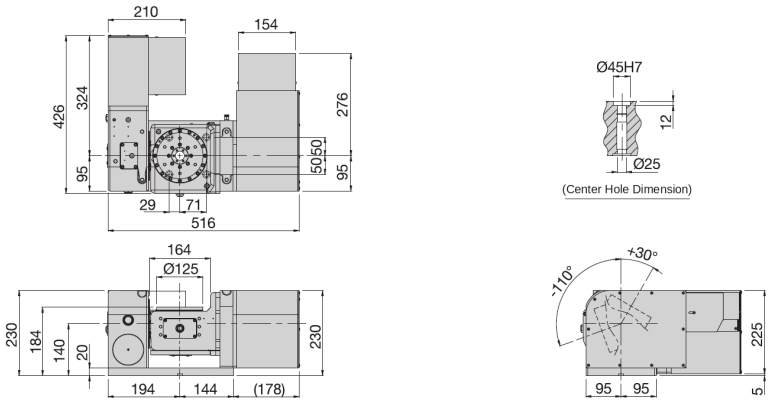
1. 5th Axis
2. Model Specifications Trunnion Tilting Type
3. Rotary Table Diameter
4. Motor Configuration B - Rear-Mounted Type / I - Horizontal Type / V - Vertical Type
5. Rotational Range [L - Enlarged Range / S - Compact Range (Reduced)]
6. Number of Distributors
7. Table Height
8. Base Type (DE - Flat Base / DX - Customized Base)



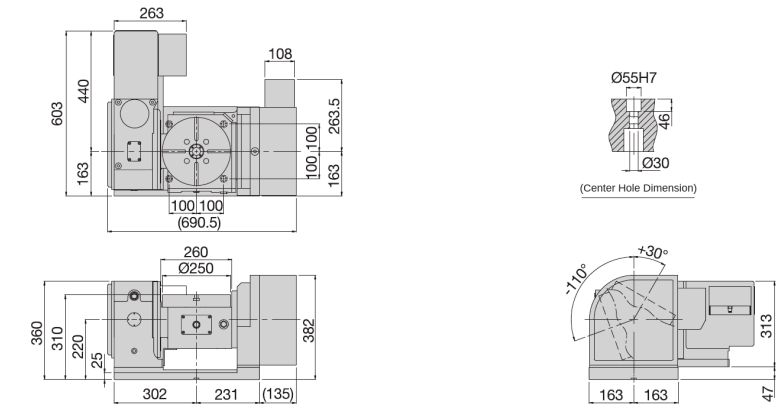
Zero Backlash | High Precision | High Speed | High Rigidity | High Torque

Specification		Unit	RTB-125IDE		RTB-250VDE		RTB-250VLDE		RTB-350VLDE	
			Rotating Axis	Tilting Axis	Rotating Axis	Tilting Axis	Rotating Axis	Tilting Axis	Rotating Axis	Tilting Axis
Table Diameter		mm	Ø125		Ø250		Ø250		Ø350	
Center Height (Vertical)		mm	140		220		290		290	
Table Surface Height (Horizontal)		mm	185		310		290		290	
Reference Hole Diameter		mm	Ø50H7		Ø55H7		Ø75H7		Ø75H7	
Through Hole Diameter		mm	Ø30H7		Ø30H7		Ø30H7		Ø55H7	
Table Width		mm	12H7		12H7		12H7		12H7	
Degree of Reference Channel Width		mm	14h7		18h7		18h7		18h7	
MIN. Increment		deg.	0.001°		0.001°		0.001°		0.001°	
Swing Angle		deg.	360°	+30°~-110°	360°	+30°~-110°	360°	+30°~-110°	360°	+30°~110°
Max. Rotation Speed (Motor 3000 min⁻¹) Values are Determined by the Motor		rpm	62.5	50	66.6	31.25	50	31.25	50	31.25
Gear Ratio			1/48	1/60	1/45	1/96	1/60	1/96	1/60	1/96
Indexing Accuracy Tilting axis accuracy depends on the optical scale specification.		arc-sec	20	15	15	15	15	15	15	15
Repeatability Accuracy Tilting axis accuracy depends on the optical scale specification.		arc-sec	8	4	4	4	4	4	4	4
Clamp System			Air P / Hyd. H	Air P / Hyd. H	Hyd. H	Hyd. H	Hyd. H	Hyd. H	Hyd. H	Hyd. H
Pneumatic / Hydraulic Pressure		kg/cm²	6/25	6/25	35	35	35	35	35	35
Pneumatic / Hydraulic Clamping Torque		kg.m	5/20	5/20	60	180	60	180	60	180
Servo Motor (Customer's choice)	FANUC		αiF 1/αiF 2 βiS 2	αiF 2 + **B** βiS 2 + **B**	αiF 4	αiF 4 + **B**	αiF 4 βiS 8	αiF 8 + **B** βiS 8 + **B**/ βiS 12+**B**	αiF 4 βiS 8	αiF 8 + **B** βiS 8 + **B**/ βiS 12+**B**
	MITSUBISHI		HG105S	HG105S+**B**	HG75S	HG104S+**B**	HG75S	HG104S+**B**	HG154S	HG154S+**B**
	SIEMENS		1FK7040	1FK7040+**B**	1FK7034	1FK7060+**B**	1FK7034	1FK7060+**B**	1FK7060	1FK7060+**B**
MAX. Allowable Load on the Table	Level	kg	35		120		120		120	
	Tilt	kg	20		80		80		90	
MAX. Allowable Thrust Load on the Table (When clamped)	Allowable Axial Load	kgf	400		1632		1632		1632	
	Max. Output Torque	kgf.m	14		92		92		92	
	Allowable Bending Torque	kgf.m	30		92		92		92	
Max. Allowable Moment of Inertia J= (W·D²)/8		kgf.m²	0.1		0.4		0.4		0.4	
Net. Weight (Servo Motor Excluded)		kg	120		320		460		480	

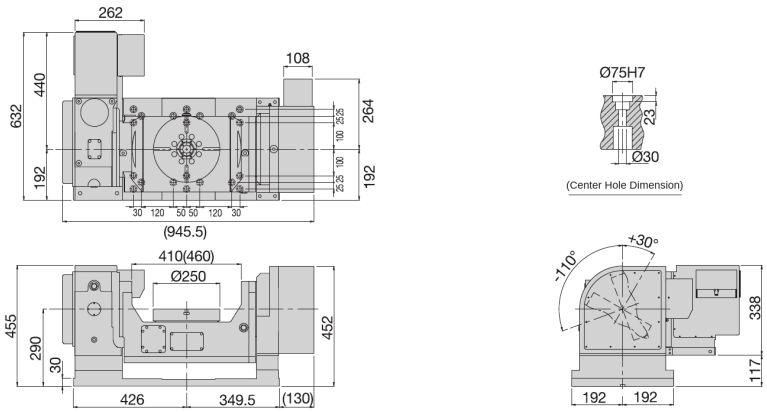
RTB-125IDE



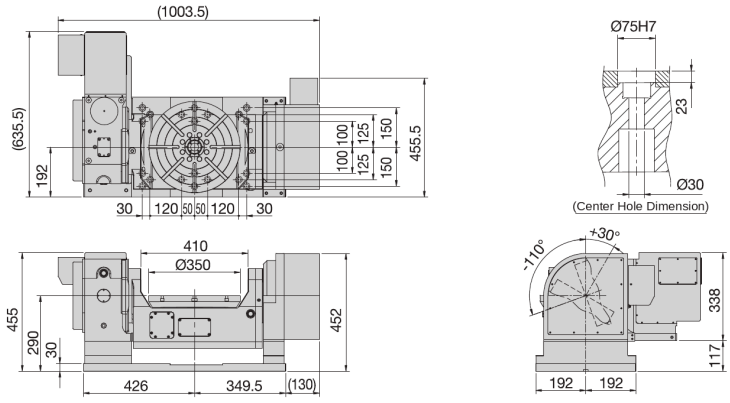
RTB-250VDE



RTB-250VLDE



RTB-350VLDE



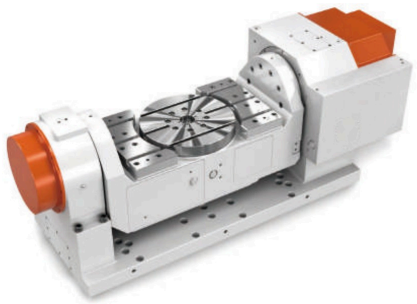
※ Maximum speed varies with different motor brand specifications.
※ **B** is Servo motor with brake.
※ Angular encoder (Option): Optical scale recommended for the tilting axis.
※ Optional two-in-two-out hydraulic distributor.
※ The above does not include servo motors, encoders, drives and hydraulic units.
※ Actual appearance and dimensions are subject to the manufacturer's final specifications.

MODEL CODE

RT B - 320 B S L 4P 365H DE

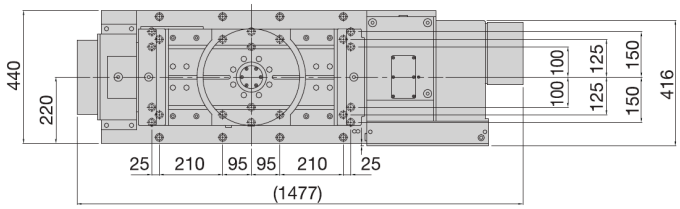
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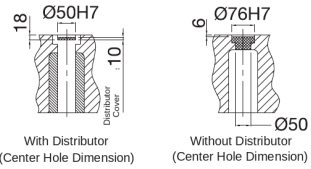
1. 5th Axis
2. Model Specifications (Trunnion Tilting Type)
3. Rotary Table Diameter
4. Motor Configuration (B - Rear-Mounted Type / I - Horizontal Type / V - Vertical Type)
5. Extended Table
6. Rotational Range [L - Enlarged Range / S - Compact Range (Reduced)]
7. Number of Distributors
8. Table Height
9. Base Type (DE - Flat Base / DX - Customized Base)

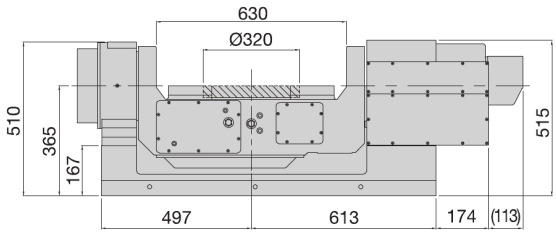


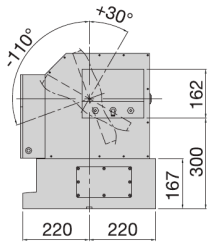
Zero Backlash | High Precision | High Speed | High Rigidity | High Torque

Specification		Unit	RTB-320BSDE		RTB-420BLDE		RTB-500BDE	
			Rotating Axis	Tilting Axis	Rotating Axis	Tilting Axis	Rotating Axis	Tilting Axis
Table Diameter		mm	Ø320		Ø420		Ø500	
Center Height (Vertical)		mm	365		365		455	
Table Surface Height (Horizontal)		mm	365		365		455	
Reference Hole Diameter		mm	Ø76H7		Ø76H7		Ø70H7	
Table Width		mm	12H7		12H7		14H7	
Degree of Reference Channel Width		mm	18h7		18h7		18h7	
MIN. Increment		deg.	0.001°		0.001°		0.001°	
Swing Angle		deg.	360°	+30°~-110°	360°	+30°~-110°	360°	+30°~-110°
Max. Rotation Speed (Motor 3000 min⁻¹) Values are Determined by the Motor		rpm	50	25	50	25	33.3	25
Gear Ratio			1/60	1/120	1/60	1/120	1/90	1/120
Indexing Accuracy Tilting axis accuracy depends on the optical scale specification.		arc-sec	15	20	15	20	15	20
Repeatability Accuracy Tilting axis accuracy depends on the optical scale specification.		arc-sec	4	4	4	4	4	4
Clamp System			Hyd. H	Hyd. H	Hyd. H	Hyd. H	Hyd. H	Hyd. H
Pneumatic / Hydraulic Pressure		kg/cm²	35	35	35	35	35	35
Pneumatic / Hydraulic Clamping Torque		kg.m	90	180	90	180	220	720
Servo Motor (Customer's choice)	FANUC		αiF 8 βiS 12	αiF 8 + **B** βiS 12 + **B**	αiF 8 βiS 12	αiF 8 + **B** βiS 12 + **B**	αiF 8 βiS 12	αiF 22 + **B** βiS 22 + **B**
	MITSUBISHI		HG154S	HG154S + **B**	HG154S	HG154S + **B**	HG154S	HG354S + **B**
	SIEMENS		1FK7063	1FK7063 + **B**	1FK7063	1FK7063 + **B**	1FK7063	1FK7084 + **B**
	YASKAWA		QSY116E	QSY116J + **B**	QSY116E	QSY116J + **B**	QSY116E	QSY155J + **B**
MAX. Allowable Load on the Table	Level	kg	200		150		500	
	Tilt	kg	200		150		350	
MAX. Allowable Thrust Load on the Table (When clamped)	Allowable Axial Load	kgf	1600		1600		3000	
	Max. Output Torque	kgf.m	75		75		250	
	Allowable Bending Torque	kgf.m	150		150		300	
Max. Allowable Moment of Inertia J=(W·D²) / 8		kgf.m²	2.6		2.6		9.4	
Allowable Cutting Torque		kg.m	50		50		255	
Net. Weight (Servo Motor Excluded)		kg	725		750		1350	

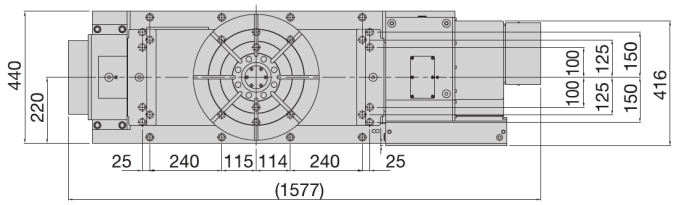


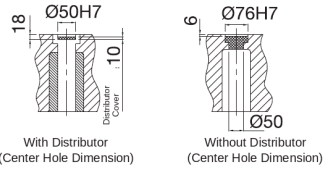


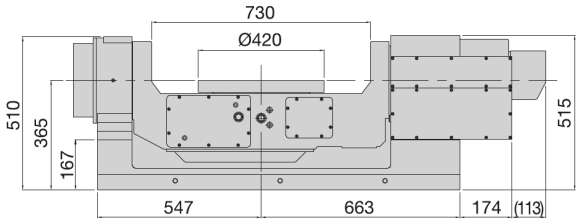


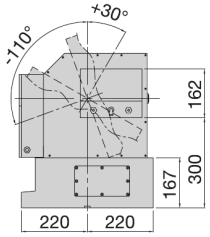


RTB-320BSDE

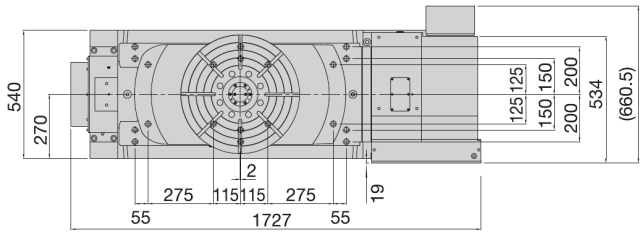


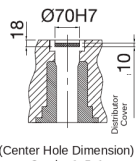


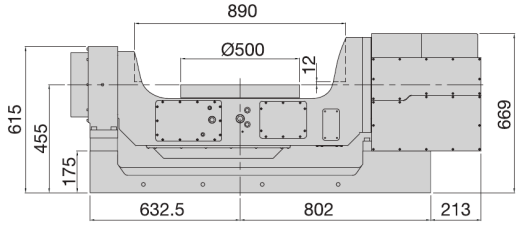


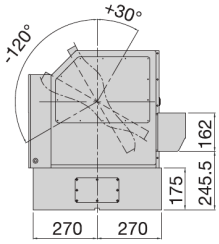


RTB-420BLDE









RTB-500BDE

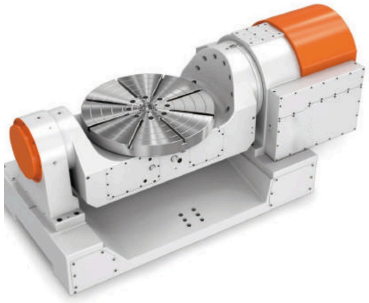
※ Maximum speed varies with different motor brand specifications.
※ **B** is Servo motor with brake.
※ Angular encoder (Option). Optical scale recommended for the tilting axis.
※ Optional two-in-two-out hydraulic distributor
※ The above does not include servo motors, encoders, drives and hydraulic units.
※ Actual appearance and dimensions are subject to the manufacturer's final specifications.

MODEL CODE

RT B - 630 B L 4P 550H DX

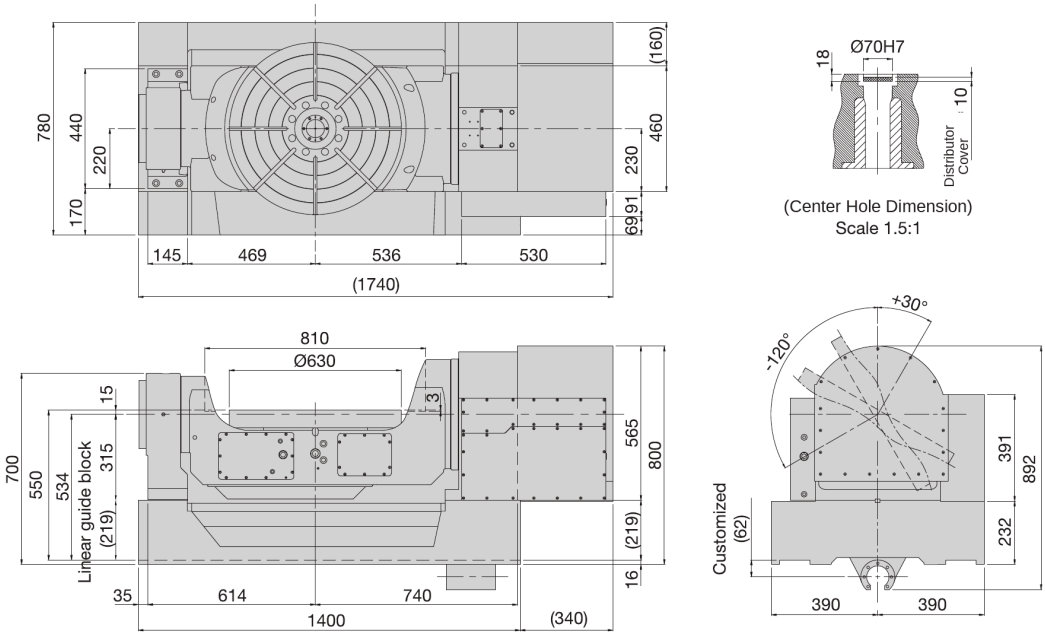
1 2 3 4 5 6 7 8

1. 5th Axis
2. Model Specifications (Trunnion Tilting Type)
3. Rotary Table Diameter
4. Motor Configuration (B - Rear-Mounted Type / I - Horizontal Type / V - Vertical Type)
5. Rotational Range [L - Enlarged Range / S - Compact Range (Reduced)]
6. Number of Distributors
7. Table Height
8. Base Type (DE - Flat Base / DX - Customized Base)

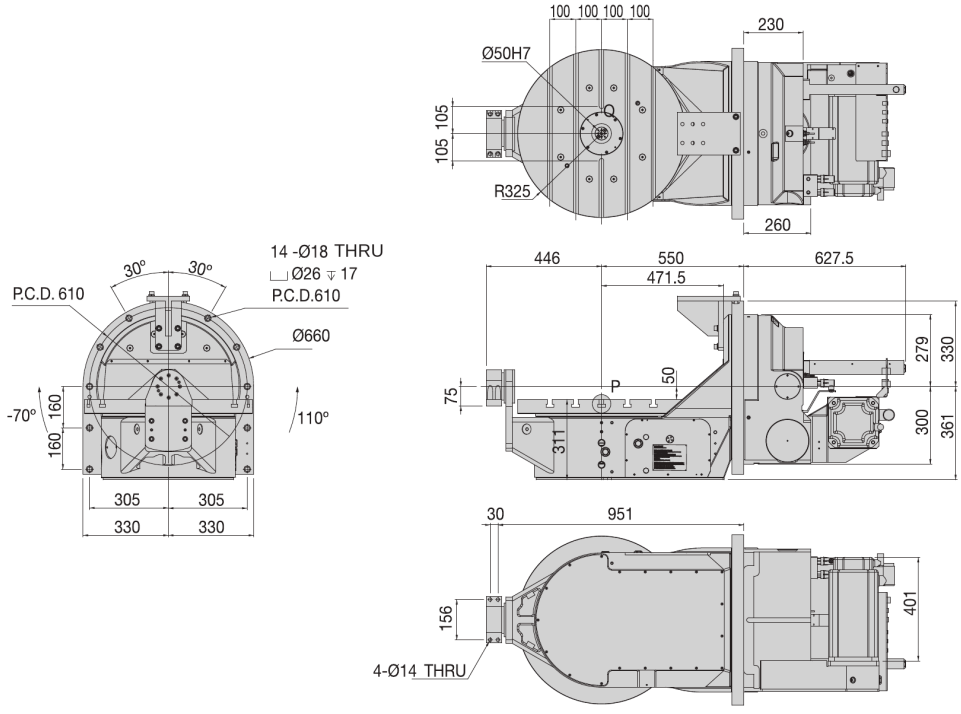


Zero Backlash | High Precision | High Speed | High Rigidity | High Torque

Specification		Unit	RTB-630BDX		RTB-650	
			Rotating Axis	Tilting Axis	Rotating Axis	Tilting Axis
Table Diameter		mm	Ø630		Ø650	
Center Height (Vertical)		mm	-		350	
Table Surface Height (Horizontal)		mm	550		300	
Reference Hole Diameter		mm	Ø70H7		Ø50H7	
Table Width		mm	14H7		18H7	
Degree of Reference Channel Width		mm	18h7		-	
MIN. Increment		deg.	0.001°		0.001°	
Swing Angle		deg.	360°	+30°~-110°	360°	-70°~+110°
Max. Rotation Speed (Motor 3000 min⁻¹) Values are Determined by the Motor		rpm	33	25	50	33.3
Gear Ratio			1/90	1/120	1/60	1/90
Indexing Accuracy Tilting axis accuracy depends on the optical scale specification.		arc-sec	15	15	15	15
Repeatability Accuracy Tilting axis accuracy depends on the optical scale specification.		arc-sec	4	4	4	4
Clamp System			Hydraulic H	Hydraulic H	Hydraulic H	Hydraulic H
Pneumatic / Hydraulic Pressure		kg/cm²	35	35	35	35
Pneumatic / Hydraulic Clamping Torque		kg.m	250	450	250	450
Servo Motor (Customer's choice)	FANUC		αiF 8	αiF 30 + **B**	αiF 12	αiF30 + **B**
	MITSUBISHI		HG154S	HG453S + **B**	HG204S	HG703S + **B**
	SIEMENS		1FK7063	1FK7101 + **B**	1FK7086	1FK7105 + **B**
	HEIDENHAIN		-	-	QSY155C	QSY190D + **B**
MAX. Allowable Load on the Table	Level 	kg	350		500	
	Tilt 	kg	350		500	
Net. Weight (Servo Motor Excluded)		kg	1200		1220	



RTB-630BDX



RTB-650

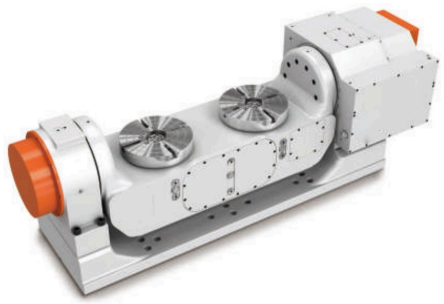
※ Maximum speed varies with different motor brand specifications.
※ **B** is Servo motor with brake.
※ Angular encoder (Option). Optical scale recommended for the tilting axis.
※ Optional two-in-two-out hydraulic distributor
※ The above does not include servo motors, encoders, drives and hydraulic units.
※ This index is designed for use with Heidenhain RCN-2380 series optical rulers.
※ The servo motor brand can be specified optionally according to the needs of the customer.
※ When the diameter of the workpiece or tool is larger than the diameter of the turntable, the load is probably within the capacity range, but the inertia of the component must be kept within the capacity value.
※ The maximum speed of the disk surface is defined as the maximum speed that can be reached at any angle within 360°. Since the roller cam mechanism is designed with zero backlash and preload characteristics, it is suitable for indexing high-precision continuous processing. In case the disk surface needs to run continuously for a long time, it is recommended that an auxiliary oil cooling system be installed in this transmission gear box mechanism.
※ This table is the standard specifications, please refer to the relevant confirmation drawings for special orders.
※ Actual appearance and dimensions are subject to the manufacturer's final specifications.

MODEL CODE

RT B - 250 B 2W L 4P 370H DE

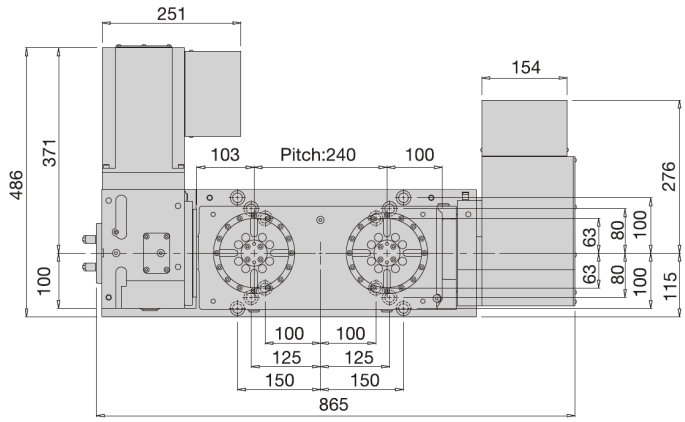
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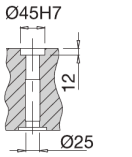
1. 5th Axis
2. Model Specifications (Trunnion Tilting Type)
3. Rotary Table Diameter
4. Motor Configuration (B - Rear-Mounted Type / I - Horizontal Type / V - Vertical Type)
5. 2 Tables
6. Rotational Range [L - Enlarged Range / S - Compact Range (Reduced)]
7. Number of Distributors
8. Table Height
9. Base Type (DE - Flat Base / DX - Customized Base)



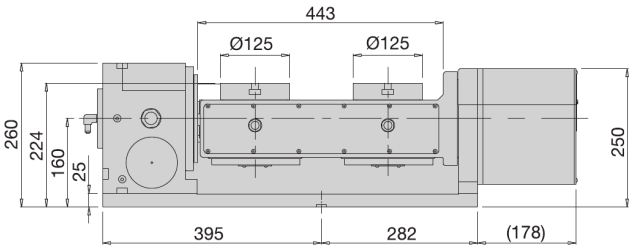
Zero Backlash | High Precision | High Speed | High Rigidity | High Torque

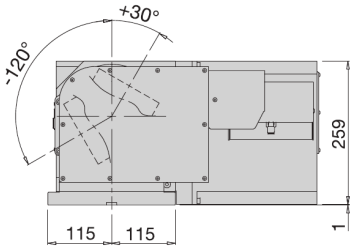
Specification		Unit	RTB-125I2W4PDE		RTB-250B2W4PDE	
			Rotating Axis	Tilting Axis	Rotating Axis	Tilting Axis
Table Diameter		mm	Ø125 *2 Tables		Ø250 *2 Tables	
Table Surface Height (Horizontal)		mm	224		370	
Reference Hole Diameter		mm	Ø25H7		Ø75H7	
Through Hole Diameter		mm	Ø25H7		-	
Table Width		mm	12H7		12H7	
Degree of Reference Channel Width		mm	18h7		18h7	
MIN. Increment		deg.	0.001°		0.001°	
Swing Angle		deg.	360°	+30°~-110°	360°	+30°~-110°
Max. Rotation Speed (Motor 3000 min⁻¹) Values are Determined by the Motor		rpm	50	83	50	25
Gear Ratio			1/60	1/36	1/90	1/120
Indexing Accuracy Tilting axis accuracy depends on the optical scale specification.		arc-sec	15	18	15	40
Repeatability Accuracy Tilting axis accuracy depends on the optical scale specification.		arc-sec	8	4	6	8
Clamp System			Hydraulic H	Hydraulic H	Hydraulic H	Hydraulic H
Pneumatic / Hydraulic Pressure		kg/cm²	5	5	35	35
Pneumatic / Hydraulic Clamping Torque		kg.m	8	14	90	250
Servo Motor (Customer's choice)	FANUC		αiF 2 βiS 2	αiF 4 + **B** βiS 8 + **B**	αiF 2 βiS 2	αiF 4 + **B** βiS 8 + **B**
	MITSUBISHI		HG-105S	HG-104S+**B**	HG-154S	HG-154S+**B**
	SIEMENS		1FK7040	1FK7060+**B**	1FK7060	1FK7063+**B**
	HEIDENHAIN		-	-	QSY116E	QSY116J+**B**
MAX. Allowable Load on the Table	Level	kg	35		100	
	Tilt	kg	20		100	
MAX. Allowable Thrust Load on the Table (When clamped)	Allowable Axial Load	kgf	286		1121	
	Max. Output Torque	kgf.m	14.3		91.7	
	Allowable Bending Torque	kgf.m	30.6		254.8	
Max. Allowable Moment of Inertia J=(W·D²) / 8		kgf.m²	0.1		0.8	
Allowable Cutting Torque		kg.m	8.7		56.1	
Net. Weight (Servo Motor Excluded)		kg	160		750	



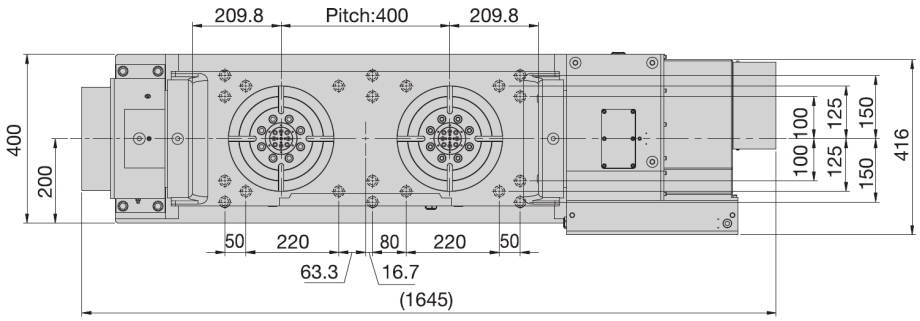


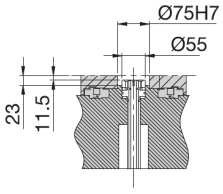
(Center Hole Dimension)



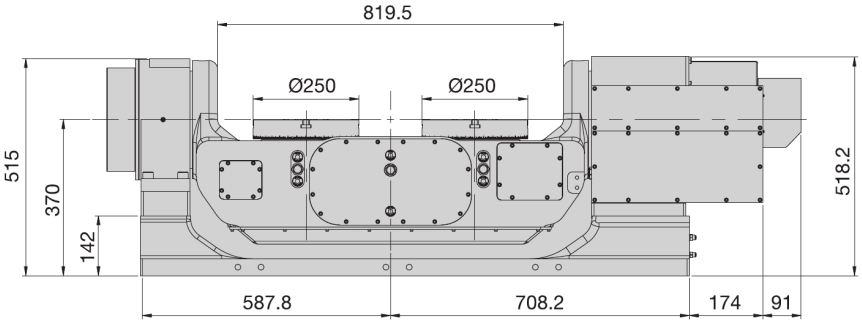


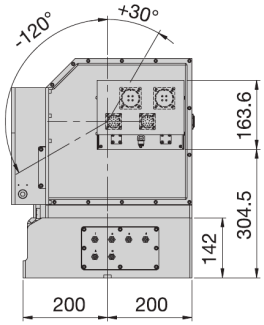
RTB-125I2W4PDE





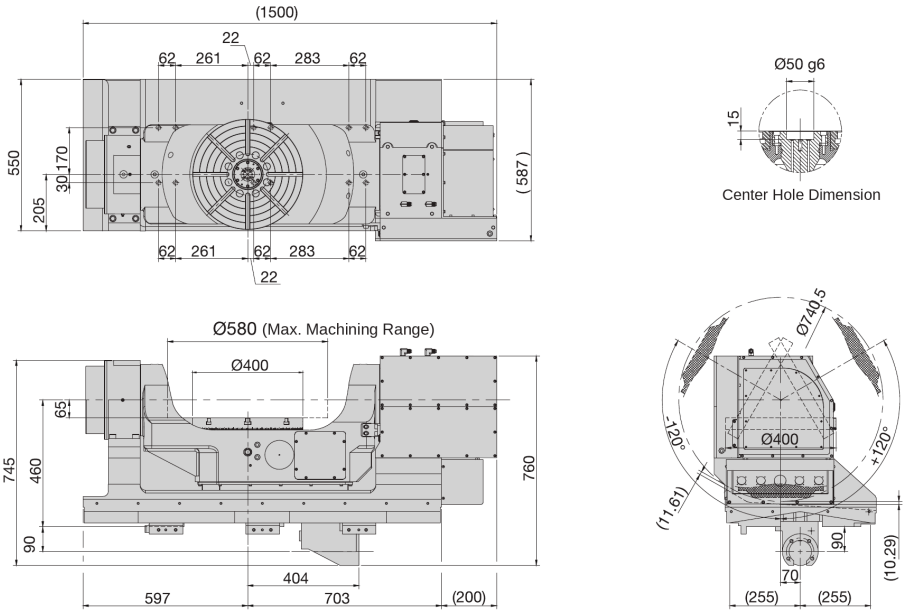
(Center Hole Dimension)





RTB-250B2W4PDE

※ Maximum speed varies with different motor brand specifications.
※ **B** is Servo motor with brake.
※ Angular encoder (Option). Optical scale recommended for the tilting axis.
※ Optional two-in-two-out hydraulic distributor
※ The above does not include servo motors, encoders, drives and hydraulic units.
※ Actual appearance and dimensions are subject to the manufacturer's final specifications.

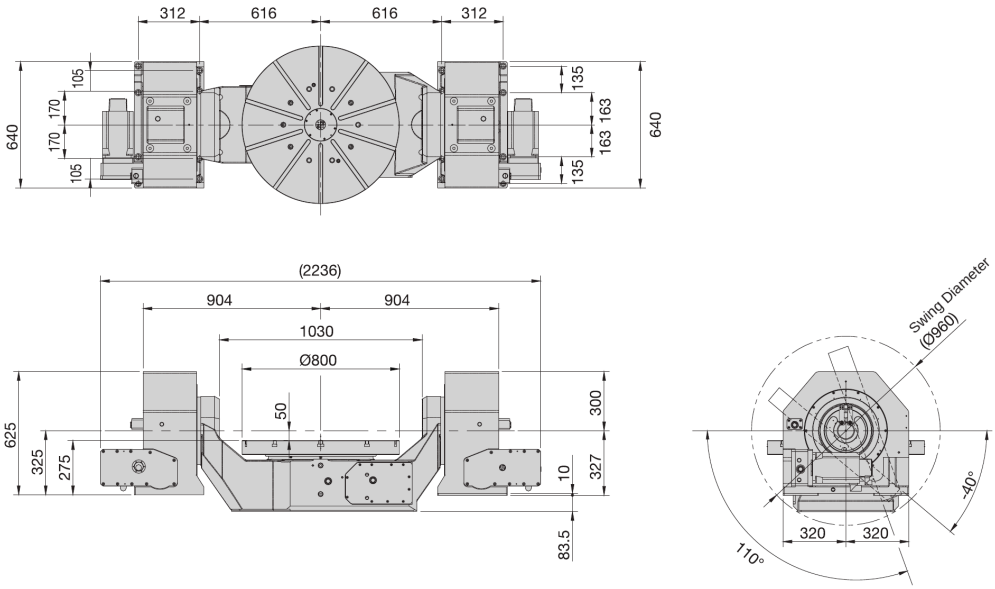


RTB-400B6PDX

Specification		Unit	RTB-400B6PDX	
			Rotating Axis	Tilting Axis
Table Diameter		mm	Ø400	
Table Surface Height (Horizontal)		mm	65	
Reference Hole Diameter		mm	Ø80g6	
Table Width		mm	14H7	
MIN. Increment		deg.	0.001°	
Swing Angle		deg.	360°	+120°~-120°
Max. Rotation Speed (Motor 3000 min⁻¹) Values are Determined by the Motor		rpm	33.33	25
Gear Ratio			1/90	1/120
Indexing Accuracy Tilting axis accuracy depends on the optical scale specification.		arc-sec	15	30
Repeatability Accuracy Tilting axis accuracy depends on the optical scale specification.		arc-sec	4	8
Clamp System			Hydraulic H	Hydraulic H
Pneumatic / Hydraulic Pressure		kg/cm²	50	50
Pneumatic / Hydraulic Clamping Torque		kg.m	162	234
Servo Motor (Customer's choice)	MITSUBISHI		HG154	HG154S+**B**
MAX. Allowable Load on the Table	Level	kg	200	
	Tilt	kg	200	
Net. Weight (Servo Motor Excluded)		kg	1080	

※ Angular encoder (Option). Optical scale recommended for the tilting axis.

※ Actual appearance and dimensions are subject to the manufacturer's final specifications.



RTB-800A

Specification		Unit	RTB-800A	
			Rotating Axis	Tilting Axis
Table Diameter		mm	Ø800	
Table Surface Height (Horizontal)		mm	275	
Reference Hole Diameter		mm	Ø50H7	
Table Width		mm	18H7	
MIN. Increment		deg.	0.001°	
Swing Angle		deg.	360°	-40°~+110°
Max. Rotation Speed (Motor 3000 min⁻¹) Values are Determined by the Motor		rpm	50	33.3
Gear Ratio			1/60	1/90
Indexing Accuracy Tilting axis accuracy depends on the optical scale specification.		arc-sec	10	10
Repeatability Accuracy Tilting axis accuracy depends on the optical scale specification.		arc-sec	4	4
Clamp System			Hydraulic H	Hydraulic H
Pneumatic / Hydraulic Pressure		kg/cm²	35	35
Pneumatic / Hydraulic Clamping Torque		kg.m	450	900
Servo Motor (Customer's choice)	FANUC		αiF22	αiF22+**B** x2
	HEIDENHAIN		QSY-155D	QSY-155D+**B** x2
MAX. Allowable Load on the Table	Level 	kg	1400	
	Tilt 	kg	1000	
Net. Weight (Servo Motor Excluded)		kg	2000	

※ Angular encoder (Option). Optical scale recommended for the tilting axis.
※ Actual appearance and dimensions are subject to the manufacturer's final specifications.