

Big bore type

RCB RCB-350·450·550

Main spindle with highly rigid bearings and table with high overall rigidity enable machining of hard materials such as aircraft components. Machining at a position closer to the face plate is made possible by inserting the workpiece through the large bore.



Unit: mm

Specifications

		RCB-350	RCB-450	RCB-550
Handedness	R	○	○	○
	L	—	—	—
	K	○	○	○
Table diameter		φ350	φ450	φ550
Center height		255	310	350
Center bore	Nose diameter	φ245H7	φ295H7	φ345H7
	Through-bore	φ216	φ265	φ315
Table T-slot width		14H7	14H7	18H7
Guide block width		18h7	18h7	18h7
Servo motors (for FANUC)		αiF12	αiF22	αiF22
Inertia converted into motor shaft $\times 10^{-3} \text{kg} \cdot \text{m}^2$		3.48	6.14	5.84
Net weight kg		330	520	720
Speed reduction ratio		1/90	1/90	1/120
Table max. rpm min^{-1} (Motor rpm: $2,000 \text{min}^{-1}$)		22.2	22.2	16.6
Indexing accuracy (the sum) sec		15	15	15
Clamp system		Hydraulic	Hydraulic	Hydraulic
Clamp torque /hydraulic pressure 3.5MPa N·m		3,300	4,700	6,500
Strength of worm gears N·m		1,942	3,276	4,716
Allowable work weight	Vertical setting  kg	400 (800)	700 (1,400)	1,000 (2,000)
	() : with tailstock			
Allowable load (when table is clamped)	F  N	50,000	85,000	150,000
	F × L  N·m	3,300	4,700	6,500
	F × L  N·m	3,600	7,300	15,000
Allowable work inertia $J = \frac{W \cdot D^2}{8}$  $\text{kg} \cdot \text{m}^2$		6.1	17.7	37.8

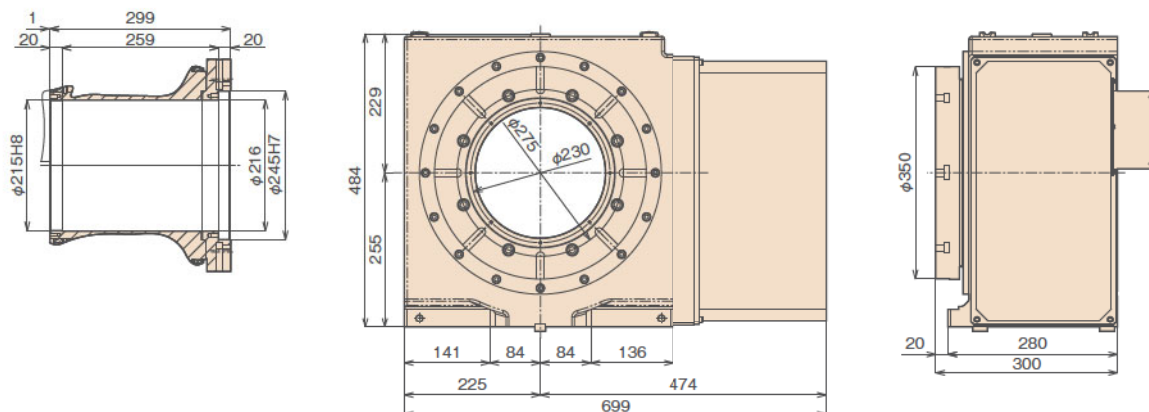
Tech.Info. Servo motors of other manufacturers **P.68** When assembling a faceplate or a fixture with the main spindle **P.79**

Option Air-hydraulic Booster **P.67**

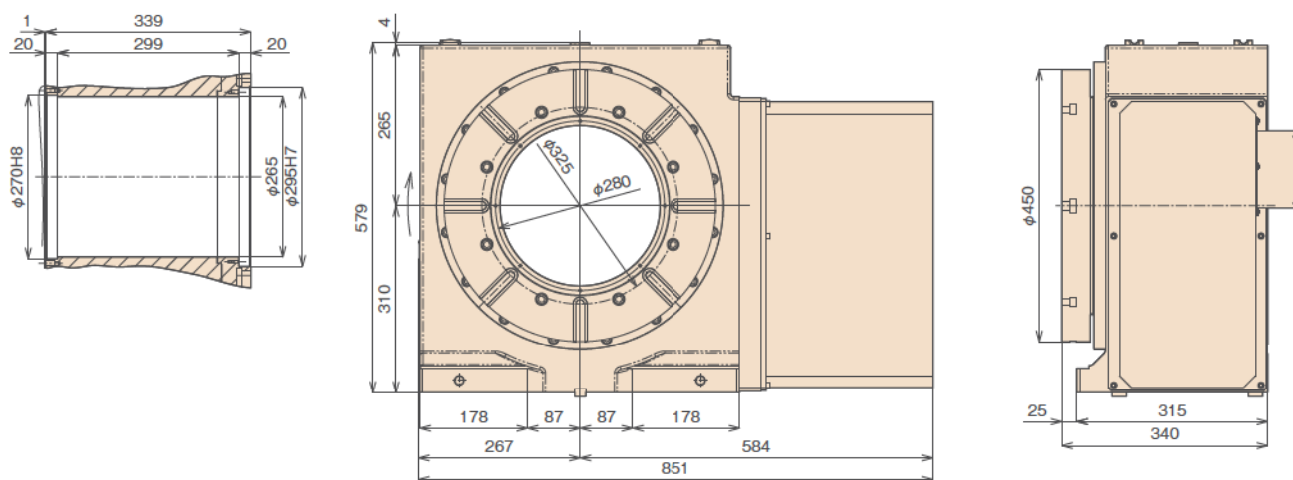
Dimensions

Unit: mm

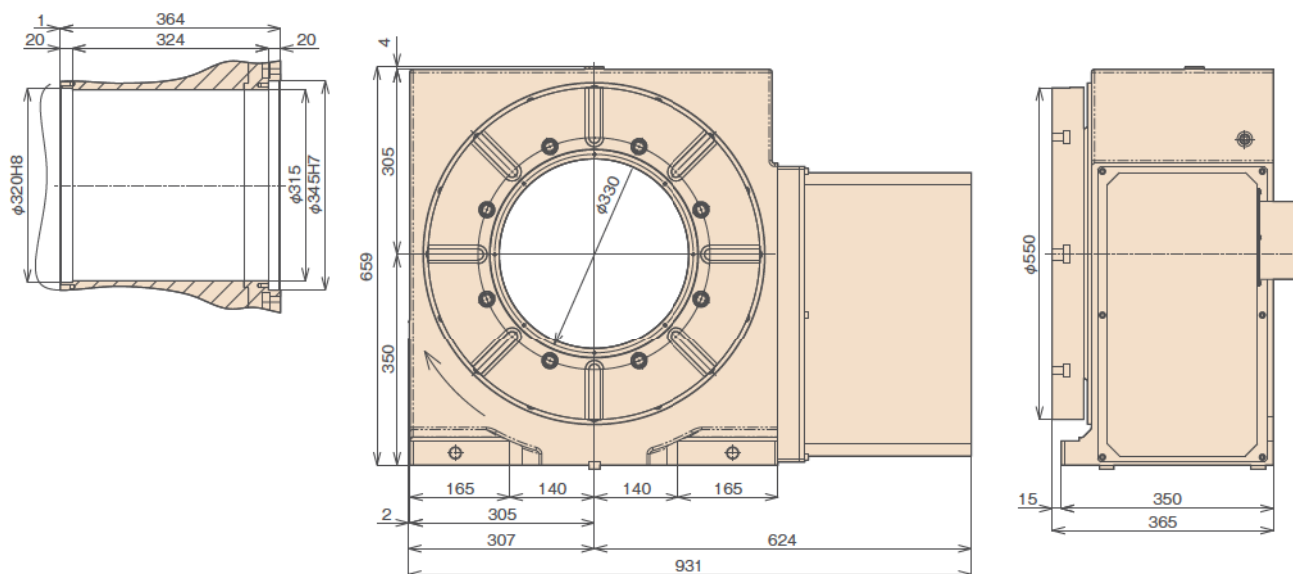
RCB-350R



RCB-450R



RCB-550R



Note: The above dimensions are for FANUC servo motors. The dimensions of servo motors of other manufacturers may be larger.

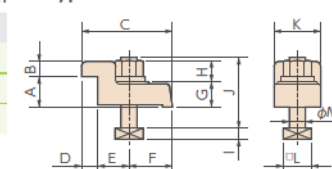
Clamping block and bolt

Unit: mm

	Type	Q'ty	T-slot pitch	T-slot width	A	B	C	D	E	F	G	H	I	J	K	L	M
RCB-350	I	4	107 to 197	18	30	15	90	16	31	43	25	21	11	70	46	28	16
RCB-450	I	4	113 to 242	18	40	20	110	18	42	50	25	21	11	70	46	28	16
RCB-550	I	4	163 to 282	18	40	20	110	18	42	50	25	21	11	70	46	28	16

Note: When using a machine with a T-slot pitch other than the above, use suitable clamping blocks and bolts that are available on the market, or order custom-made ones from TSUDAKOMA. (Option)

Type I



RBS

RBH

Multi-Spindle
RBM

TBS

RWE/RWA
RN

RWH

RWA-B
RNCV-B

RWB

RWB-K
RNCK

RCB

RCH
RNC

RCV

Multi-Spindle
RWM

TWA/TN

TWB
TTNC

Multi-Spindle
TWM

RDS

RTV
RTT

TDS
TDB

NC Controllers

Accessories

Options

Technical
Information