

NC Rotary Tables

Basic model

Rear motor mounting type

RNA-B RNA-161R,B · 201R,B
251R,B · 321R,B

RNCV-B RNCV-401R,B

One of the most popular rear motor mounting type. Suitable for mounting on a compact machine tool for space saving.



RNA-251R,B

Specifications

Unit: mm

| | | RNA-161R,B | RNA-201R,B | RNA-251R,B | RNA-321R,B | RNCV-401R,B | |
|----------------------------------|---|-------------------------|-------------------------|------------------|------------------|---------------------------------------|----------|
| RBA-K RNCK | Handedness | R | ○ | ○ | ○ | ○ | |
| | | L | — | — | — | — | |
| RCH RNC | Spindle diameter | φ100 | φ120 | φ140 | φ180 | — | |
| RCV RNCV | Table diameter *1 | φ160 or 200 (Option) | φ200 or 250 (Option) | φ250 (Option) | φ320 (Option) | φ400 | |
| Multi-Spindle RN-N | Center height | 135 | 160 | 160 | 210 | 255 | |
| RZ | Center bore | Nose diameter | φ55H7×45 | φ65H7×45 | φ80H7×45 | φ115H7×45 | φ40H7×21 |
| | | Through-bore | φ40 | φ45 | φ50 | φ85 | φ40 |
| TN | Table T-slot width *1 | 12H8 | 12H8 | 12H8 | 14H8 | 14H8 | |
| TTNC | Guide block width | 14h7 | 18h7 | 18h7 | 18h7 | 18h7 | |
| | Servo motors (for FANUC) | αiF2 | αiF4 | αiF4 | αiF8 | αiF12 | |
| THNC | Inertia converted into motor shaft ×10 ⁻³ kg·m ² | 0.56 | 0.56 | 0.64 | 0.97 | 4.01 | |
| | | | | | | | |
| Multi-Spindle TTNC-N | Net weight | 55 | 58 | 77 | 95 | 165 | 330 |
| RC RH | Speed reduction ratio | 1/72 | 1/72 | 1/90 | 1/120 | 1/180 | |
| | Table max. rpm (Motor rpm: 3,000min ⁻¹) | 41.6 | 41.6 | 33.3 | 25 | 11.1 | |
| RUA | Indexing accuracy (the sum) | 25 | 20 | 20 | 20 | 15 | |
| TSUA | Repeatability | 4 | 4 | 4 | 4 | 4 | |
| | Clamp system | Pneumatic | Pneumatic | Pneumatic | Pneumatic | Hydraulic or air-hydraulic (optional) | |
| RTV RTT | Clamp torque / pneumatic pressure 0.49MPa | 500 | 800 | 1,000 | 1,500 | 1,764 (Hydraulic pressure 3.5Mpa) | |
| NC Controllers | Strength of worm gears | 206 | 288 | 596 | 939 | 1,666 | |
| Accessories | Allowable work weight Vertical setting () : with tailstock | 100 (200) | 125 (250) | 125 (250) | 175 (350) | 200 (500) | |
| Options Technical Information | F | N | 10,800 | 14,400 | 14,400 | 24,800 | 39,200 |
| | FxL | N·m | 500 | 800 | 1,000 | 1,500 | 1,764 |
| | FxL | N·m | 780 | 1,900 | 1,900 | 4,700 | 2,450 |
| | Allowable work inertia $J = \frac{W \cdot D^2}{8}$ | kg·m ² | 0.64 | 1.25 | 1.95 | 4.48 | 9.7 |

☞ Servo motors of other manufacturers **P.70**

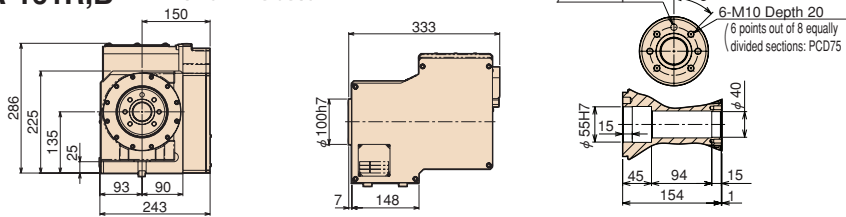
☞ When assembling a faceplate or a fixture with the main spindle (RNA-B-series) **P.80**

*1 The tolerance of the table T-slot width is applicable to four standard slots arranged crosswise. ☞ Dimensions **P.64**

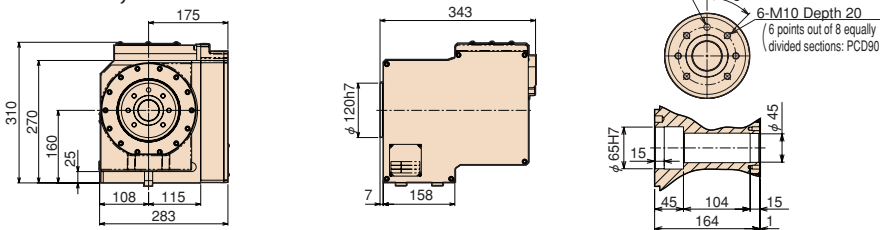
Dimensions

Unit: mm

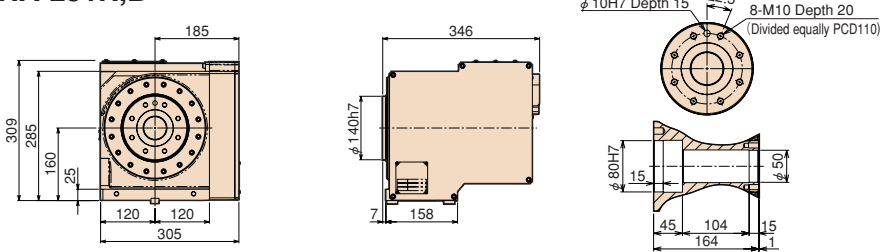
RNA-161R,B ※When αIF2 is used



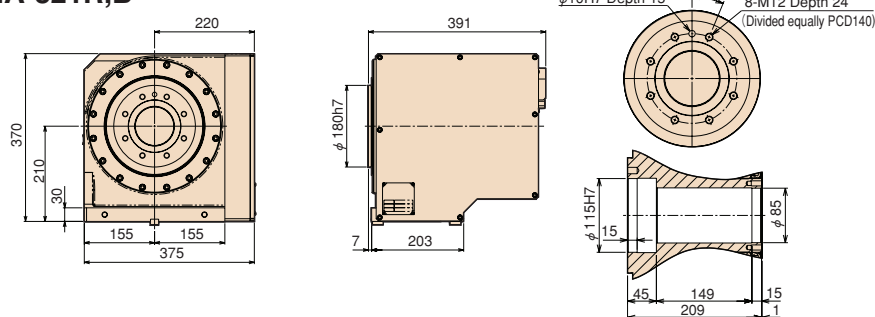
RNA-201R,B



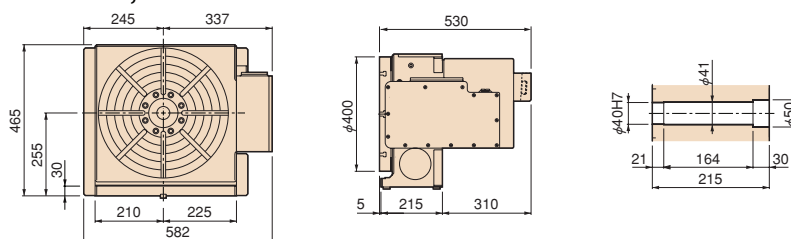
RNA-251R,B



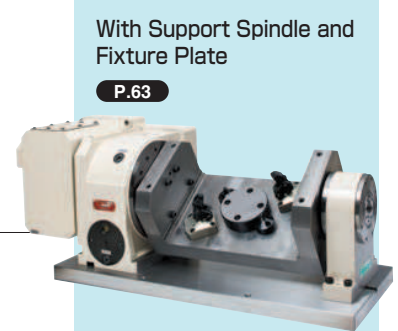
RNA-321R,B



RNCV-401R,B



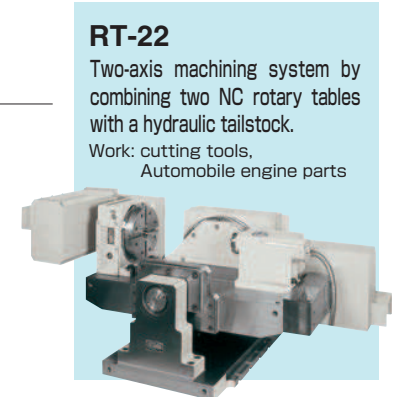
RNA-251R,B



With Support Spindle and Fixture Plate

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RNA-251R,B



RT-22

Two-axis machining system by combining two NC rotary tables with a hydraulic tailstock.
Work: cutting tools, Automobile engine parts

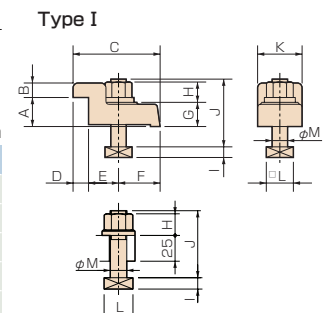
Note: The above dimensions are for FANUC servo motors. The dimensions of servo motors of other manufacturers may be larger.

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 |
|-------------|------|------|--------------|--------------|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RNA-161R,B | - | 2 | - | 14 | - | - | - | - | - | - | - | 17 | 8 | 60 | - | 23 | 12 |
| RNA-201R,B | - | 2 | - | 18 | - | - | - | - | - | - | - | 21 | 11 | 65 | - | 28 | 16 |
| RNA-251R,B | I | 4 | 50~100 | 18 | 25 | 12 | 80 | 12 | 33 | 35 | 22 | 21 | 11 | 65 | 40 | 28 | 16 |
| RNA-321R,B | I | 4 | 50~132 | 18 | 30 | 15 | 90 | 16 | 31 | 43 | 25 | 21 | 11 | 70 | 46 | 28 | 16 |
| RNCV-401R,B | I | 4 | 55~155 | 18 | 30 | 15 | 90 | 16 | 31 | 43 | 25 | 21 | 11 | 70 | 46 | 28 | 16 |

Note 1: 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. (Optional)
Note 2: Clamping blocks are not included with the RNA-161R,B and RNA-201R,B.



RG

RNA
RN

RNE

RNA-B
RNCV-B

RNCM

RBA

RBA-K
RNCX

RCH

RNC

RCV

RNCV

Multi-Spindle
RN-N

RZ

TN

TTNC

THNC

Multi-Spindle
TTNC-N

RC

RH

RUA

TSUA

RTV

RTT

NC Controllers

Accessories

Options

Technical Information