

RAL Series-RAL-20

| SPECIFICATIONS |

DISCRIPTION	UNIT	RAL-12	RAL-12M	RAL-16	RAL-16M	RAL-20	RAL-20M
Capacity							
Table Diameter	mm	1,250		1,600		2,000	
Max. Swing	mm	1,600		2,000		2,500	
Max. Turning Diameter	mm	1,500		1,900		2,400	
Distance from RAM to table	mm	700 ~ 1,500		1,065 ~ 1,865		1,075 ~ 1,875	
Max. Turning Height	mm	1,250		1,600			
Max. Workpiece weight	kg	6,000		10,000		13,000	
RAM Size	mm	230x240		240x270			
Min. ID for RAM Pass	mm	285		310			
Spindle							
Table Speed (2 steps)	rpm	1 ~ 120 , 1 ~ 300		1 ~ 70 , 1 ~ 250		1 ~ 50 , 1 ~ 200	
Max. Torque of table	N.m	10,655		18,790		23,270	
Live Spindle Speed	rpm	-	24 ~ 2,400	-	50 ~ 2,250	-	50 ~ 2,250
Travel / Rapid Traverse							
X-axis Travel	mm	-200 ~ +950		-200 ~ +1,125		-250 ~ +1,380	
Z-axis Travel	mm	900		1,000			
Crossrail Travel	mm			800			
Crossrail Step	mm x step			200 x 5			
X-axis Rapid Traverse	m/min			12			
Z-axis Rapid Traverse	m/min			10			
ATC							
ATC Capacity	-	12	18	12	18	12	18
Max. Tool Length	mm			400			
Max. Weight of Tool Holder	kg			50			
Max. Weight of magazine	kg	450	550	450	550	450	550
Type of Tool Shank	-			BT50			
Tool shank size	mm			25 or 32			
Motor							
Spindle Motor	kW	AC 30/37		AC 37/45			
Total Power Capacity	kVA	50		60			
X/Z-axis Servo Motor	kW			6			
Live Spindle Motor	kW	-	AC 7.5 / 11	-	AC 11 / 15	-	AC 11 / 15
CF-axis Servo Motor	kW	-	7	-	7	-	7
Machine Dimension							
Floor Space (LxW)	mm	5,900 x 3,800		6,500 x 4,600		7,800 x 5,100	
Machine Height (H)	mm	5,020	5,360	5,690	5,880	5,740	5,930
Machine Weight	kg	20,000	20,500	28,000	28,500	42,000	42,500

All the specifications in the catalog are subject to change without notice.

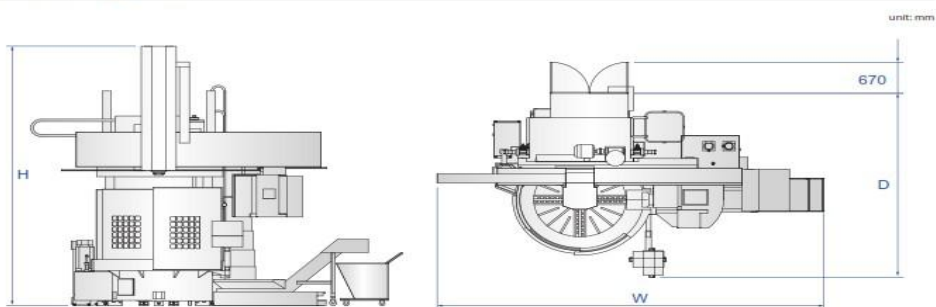
Standard Accessories

- | | | |
|-------------------------------------|---|------------------------------------|
| • FANUC 0i-TD Controller | • Auto Lubrication System | • Tools and Tool Box |
| • Independent 4 Jaw Manual Chuck | • Tool Holder BT-50 (O.D. + I.D.) x 1 pcs | • Hydraulic Unit |
| • 12 Tools of ATC for RAL series | • Chip Conveyor | • Table Lubricant Oil Cooling Unit |
| • 18 Tools of ATC for RAL(M) series | • Heat Exchanger For Electrical Cabinet | • Anchor Bolt and Pad |
| • Machine Cover (Semi-Opened) | • Work Light and Signal Tower Light | • Operation Manual |
| • Oil / Water Separator | • High Pressure Pump (3 Bar) | |

Optional Accessories

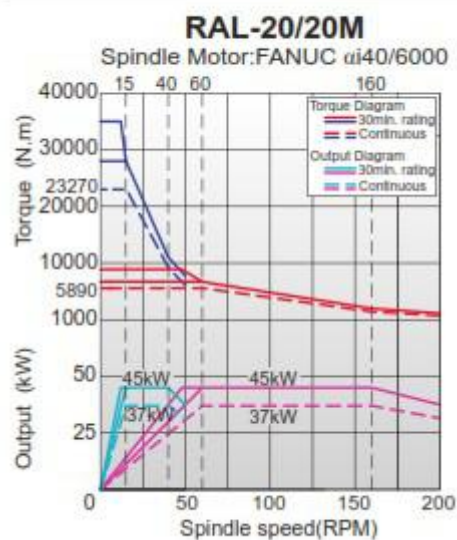
- | | | |
|--|---------------------------|-------------------------------|
| • Air Conditioner For Electrical Cabinet | • X / Z-axis Linear Scale | • High Pressure Pump (6 Bar) |
| • Transformer for Power Source | • Tool Probe | • High Pressure Pump (10 Bar) |
| • Additional Tool Holders | • Parts Probe | • CF-axis |
| • Coolant Through Spindle | • 3 Jaw Power Chuck | • CAT Tool Magazine |

Machinery Dimension



RAL-12/12M W 5,900 D 3,130 H 5,020/5,360 RAL-16/16M W 6,500 D 3,930 H 5,690/5,880 RAL-20/20M W 7,800 D 4,430 H 5,740/5,930

Table Torque Diagram



Live Spindle Torque Diagram

