

Machine Specifications

ITEM	SIRIUS-UM			SIRIUS-UL ⁺ [SIRIUS-UL ⁺ s]		SIRIUS-UX		
	20,000	20,000	32,000	20,000	14,000	12,000	15,000	
Travel								
Stroke (X / Y / Z)	mm(inch)	750 (29.53") / 500 (19.70") / 450 (17.72")		1,050 (41.34") / 600 (23.62") / 550 (21.65") [350(13.78")]		1,500 (59.06") / 750 (29.53") / 650 (25.59")		
Distance from Table Surface to Spindle Gauge Plane	mm(inch)	150 (5.91") ~ 600 (23.62")		150 (5.91") ~ 700 (27.56") [120 (4.72") ~ 470 (18.50")]		175 (6.89") ~ 825 (32.48")		
Distance between Columns to Spindle Center	mm(inch)	182 (7.17")		154 (5.28") [242 (9.53")]		437 (17.21")		
Distance between Columns	mm(inch)	950 (37.40")		1,076 (42.36")		1,800 (70.87")		
Table								
Working Surface	mm(inch)	850 (33.46") x 500 (19.70")		1,200 (47.24") x 600 (23.62")		1,650 (64.96") x 750 (29.53")		
Table Loading Capacity	kg,(lb _s)	800 (1,764)		800 (1,764)		2,500 (5,512)		
Table Surface Configuration (T slots WxP – No. of slots)	mm(inch)	18 x 100 (0.71" x 3.94") - 5ea		18 x 100 (0.71" x 3.94") - 5ea		18 x 125 (0.71" x 4.92") - 5ea		
Spindle								
Max. Spindle Speed	rpm	20,000		32,000	20,000	14,000	12,000	15,000
Spindle Motor	kW(HP)	18.5/11 (25/15)	22/18.5 (30/25)	18.5/13 (25/17)	22/18.5 (30/25)	37/22 (50/30)	30 / 25 (40 / 34)	
Type of Spindle Taper Hole	-	ISO#40, 7 / 24 Taper		HSK-E40	ISO#40, 7 / 24 Taper		ISO#50, 7 / 24 Taper	
Spindle Bearing Inner Diameter	mm(inch)	Ø70 (2.76")		Ø45 (1.77")	Ø70 (2.76")		Ø100 (3.94")	
Method of Spindle Lubrication	-	Air Oil	Oil Jet		Oil Jet		Oil Jet	
Method of Spindle Cooling	-	Jacket Cooling			Jacket Cooling		Jacket Cooling	
Feedrate								
Rapid Speed (X / Y / Z)	m/min(ipm)	24 (944.88) / 24 (944.88) / 24 (944.88)		36 (1,417) / 36 (1,417) / 36 (1,417) [30 (1,181) / 30 (1,181) / 30 (1,181)]		20 (787.40) / 20 (787.40) / 20 (787.40)		
Feedrate (X / Y / Z)	mm/min(ipm)	1 ~ 24,000 (0.04 ~ 945)		1 ~ 24,000 (0.04 ~ 945)		10,000 (393.70)		
ATC								
Type of Tool Shank	-	MAS-403 BBT-40 (OPT.: CAT-40, HSK-A63)		HSK-E40	MAS-403 BBT-40 (OPT.: CAT-40, HSK-A63)		BBT-50 (OPT.: CAT-50)	
Type of Pull Stud	-	MAS P40T-1 (45°)		-	MAS P40T-1 (45°)		90° Type	
[Tool Storage Capacity]	ea	24 (OPT : 30)		30 (OPT : 40)		40 (OPT.: 60)		
Max. Tool Diameter [With / Without Adjacent Tools]	mm(inch)	Ø90 (3.54") / Ø127 (5.0")		Ø90 (3.54") / Ø170 (6.69")		Ø120 (4.72") / Ø200 (7.87")		
Max. Tool Length	mm(inch)	300 (11.81")		300 (11.81") [250 (9.84")]		400 (15.75")		
Max. Tool Weight	kg,(lb _s)	8 (17.64)		8 (17.64)		20 (44.09)		
Method of Tool Selection	-	Fixed Address		Memory random		Fixed Address		
Method of Operation (Magazine / Swing arm)	-	Servo Motor / -		Servo Motor / Servo Motor		Servo Motor / Servo Motor		
Motor								
Feed Motor (X / Y / Z)	kW(HP)	1.6 (2.1) / 1.6 (2.1) / 3.0 (4.0)		4.0 (5.4) / 4.0 (5.4) / 7.0 (9.4)		7.0 (9.4) / 7.0 (9.4) / 7.0 (9.4)		
Coolant Motor (Spindle / Chip Flushing / Coolant Gun)	kW(HP)	0.4 (0.54) / 0.4 (0.54) / -		0.75 (1.0) / - / 0.75 (1.0)		0.4 (0.54) / 0.4 (0.54) / -		
Spindle Cooler (50 / 60Hz) – Inverter Type	kW(HP)	2.8 / 3.2 (3.8 / 4.3)	5.0 / 5.6 (6.7 / 7.5)		5.0 / 5.6 (6.7 / 7.5)		8.0 (10.7) / 8.9 (11.9)	5.0 (6.7) / 5.6 (7.5) + 8.0 (10.7) / 8.9 (11.9)
Power Source								
Electric Power Supply	kVA	55		55		70		
Compressed Air Supply (Pressure x Consumption)	-	0.5 ~ 0.7MPa x 690N ℓ/min		0.5 ~ 0.7MPa x 690N ℓ/min		0.5 ~ 0.7MPa x 690N ℓ/min		
Tank Capacity								
Spindle Cooling / Lubrication	ℓ (gal)	40 (10.57) / 12(3.17)		40 (10.57) / 12(3.17)		40 (10.57) / 12 (3.17)		
Coolant	ℓ (gal)	210 (55.48)		430 (113.59)		290 (76.61)		
Machine Size								
Height	mm(inch)	2,960 (116.54")		3,170 (124.80") [2,810 (110.63")]		3,550 (139.76")		
Floor Space (Length x Width)	mm(inch)	2,150 (84.64") x 2,570 (101.18")		3,537 (139.25") x 2,742(107.95")		3,770 (148.43") x 3,330 (131.10")		
Weight	kg,(lb _s)	8,000(17,638)		11,800 (26,014) 11,500 (25,353)		15,000 (33,069)		
NC Controller	Fanuc 31i-B							