



NMV5000 DCG

Vertical Machining Cent

Machine Specifications

	Item	NMV5000 DCG
Travel	X-axis travel <longitudinal movement of spindle head>	730 (28.7)
	Y-axis travel <cross movement of spindle head>	510 (20.1)
	Z-axis travel <vertical movement of spindle head>	510 (20.1)
	B-axis travel	+160° - -180°
	C-axis travel	360°
	Distance from table surface to spindle gauge plane	130 - 640 (5.1 - 25.2) <horizontal table position>
Table	Working surface	Φ500 (Φ19.7)
	Max. workpiece swing diameter	Φ700 (Φ27.5)
	Max. workpiece height	450 (17.7)
	Table loading capacity	300 (660) <equal distribution>
	Table surface configuration	14 mm (0.6 in.) T-slot×5
Spindle	Max. spindle speed	12,000 [20,000]
	Type of spindle taper hole	BT40 [HSK-A63]
	Rapid traverse rate	X, Y: 50,000 (1,968.5) Z: 40,000 (1,574.8)
Feedrate	Rapid traverse rate	B-axis <MSX-701III>: 35 [50] B-axis <MSX-711III>: 50 C-axis <Milling mode>: 120 C-axis <Turning mode>: [500] [1,200]
	Feedrate	<With AI contour control> X, Y: 50,000 (1,968.5) Z: 40,000 (1,574.8) B: 13. [33.33] min ⁻¹ C: 120 min ⁻¹ <Without AI contour control> X, Y, Z: 6,000 (236.2) B: 5.55 min ⁻¹ C: 16.6 min ⁻¹
	Jog feedrate	X, Y, Z: 0 - 5,000 (0 - 196.9)
ATC	Type of tool shank	BT40 [DIN40] [CAT40] [HSK-A63]
	Type of retention knob	MORI SEIKI 90° type [45° (MAS-I)] [60° (MAS-II)] [HSK-A63]
	Tool storage capacity	31 [61, 91, 121, 181]
	Max. tool diameter <with adjacent tools>	Φ90 (Φ3.5)
	Max. tool diameter <without adjacent tools>	Φ125 (Φ4.9)
	Max. tool length	300 (11.8)
	Max. tool mass	8 (17.6)
	Method of tool selection	Fixed address, shorter route access
	Tool changing time <tool-to-tool>	1.8
Motor	Spindle drive motor	12,000 min ⁻¹ : 18.5/15 (24.7/20) <30 min/cont> [12,000 min ⁻¹ : 22/18.5 (30/24.7) <15 min/cont>] [20,000 min ⁻¹ : 22/11 (30/15) <15 min/cont>] [20,000 min ⁻¹ : 22/18.5 (30/24.7) <15 min/cont>]
	Table rotation motor <Direct Drive Motor> <max/cont>	B-axis <35 min ⁻¹ >: 14.9/10.3 (19.9/13.7) B-axis <[50 min ⁻¹] MSX-711III is standard>: [15.1/14.7(20.1/19.6)] C-axis: Milling mode <120 min ⁻¹ >: 5.4/5.2(7.2/6.9) C-axis: Turning mode [<500 min ⁻¹ >: 16.8/15.1(22.4/20.1)] C-axis: Turning mode [<1,200 min ⁻¹ >: 35.0/28.0(46.7/37.3)]
	Feed motor	X: 4 (5.3) Y: 4 (5.3) Z: 3 (4.0)×2
	Coolant pump motor	1.2 (1.6)
Power sources	Electrical power supply <cont>	46
	Compressed air supply	0.5 (72.5), 500 (132) <ANR> <A compressed air supply may be needed, depending on options and peripheral equipment.>
Tank capacity	Coolant tank capacity	450 (118.8)
	Machine height <from floor>	3,264 (128.5) <at shipment : 3,100 (122.0)>

Machine size	Floor space <width>x<depth>	mm (in.)	2,691×3,965 (105.9×156.1) <excluding chip conveyor>
	Mass of machine	kg (lb.)	12,400 (27,280)

[] Option

- Max. spindle speed: Depending on restrictions imposed by the workpiece clamping device, fixture and tool used, it may not be possible to rotate at the maximum spindle speed.
- Please use a flange tool when cutting at 20,000 min⁻¹ and higher.
- Power sources, machine size: the actual values may differ from those specified in the catalogue, depending on the optional features and peripheral equipment.
- ANR: ANR refers to a standard atmospheric state; i. e., temperature at 20 °C (68 °F); absolute pressure at 101.3 kPa (14.7 psi); and relative humidity 65 %.

NC Unit Spec. 