

MV154 series

Technical data

Models

MV154 / MV154L				
Economic		Performance		
MV154E / 9	MV154E / 12	MV154P / 9	MV154P / 12	MV154P/15
MV154EL / 9	MV154EL / 12	MV154PL / 9	MV154PL / 12	MV154PL/15

Technical Data		MV 154 E / MV 154 EL		MV 154 P / MV 154 PL			Standard / Option				
		Economic		Performance			MV 154 / MV 154 L				
							E		P		
		9	12	9	12	15	9	12	9	12	15
Work range											
Table size (mm)		900 x 500 / 1,200 x 500					●	●	●	●	●
Travel	X (mm)	700 / 1,020					●	●	●	●	●
	Y (mm)	500					●	●	●	●	●
	Z (mm)	500					●	●	●	●	●
Table load capacity (kg)		500					●	●	●	●	●
Feed drive											
Feed force	X (N)	4,189		4,712 (F) / 4,320 (T)			●	●	●	●	●
	Y (N)	4,189		4,712 (F) / 4,320 (T)			●	●	●	●	●
	Z (N)	6,283		11,519 (F) / 9,477 (T)			●	●	●	●	●
Rapid movement X/Y/Z (mm/min.)		32		40			●	●	●	●	●
Acceleration X/Y/Z (m/s²)	F	5 / 5 / 3		7 / 6 / 5			●	●	●	●	●
	T	-		6 / 5 / 5			×	×	●	●	●
Dia. & pitch of the ball screw		ø45 / P=12 / 12 / 12		ø45 / P=16/ 16/ 12			●	●	●	●	●
Position accuracy											
ISO 230-2 / JIS in X/Y/Z (mm)		0.015 ⁽¹⁾ / 0.008					●	●	●	●	●
		0.008 ⁽¹⁾ / 0.004 (Linear encoder)					○	○	○	○	○
Main spindle											
Spindle model		40 Taper					●	●	●	●	●
Spindle taper		ISO 40 or BT 40					●	●	●	●	●
Max. spindle speed		9,000	12,000	9,000	12,000	15,000	●	●	●	●	●
Spindle base speed	F	1,125	1,500	1,125	1,500	1,400	●	●	●	●	●
	T	-	-				1,580	×	×	●	●
Spindle output KW (S6-40%)	F	15		18.5		22	●	●	●	●	●
	T	-		17 ⁽²⁾		30	×	×	●	●	●
Spindle output torque Nm (S6-40%)	F	127	96	157	118	150	●	●	●	●	●
	T	-	-	144 ⁽²⁾	108 ⁽²⁾	183	×	×	●	●	●
Spindle transmission	F	Belt				Coupling Split	●	●	●	●	●
	T						●	●	●	●	●
Spindle diameter (mm)		ø70					●	●	●	●	●
Tool changer											
Tool selection		Random					●	●	●	●	●
Magazine positions		24					●	●	●	●	●
		32					○	○	○	○	○
Max. tool diameter (mm)		80 / (75)					●	●	●	●	●
<w/o adjacent tool (mm)		125					●	●	●	●	●
Max. tool length (mm)		280					●	●	●	●	●
Max. tool weight (kg)		7					●	●	●	●	●
CTC time - ISO 10791-9 (sec.)		4 (60Hz)					●	●	●	●	●

Main spindle (SKF made)

Belt spindle - 9,000 min⁻¹ & 12,000 min⁻¹
 Split spindle - 15,000 min⁻¹ (HEIDENHAIN only)
 Coupling spindle - 15,000 min⁻¹ (FANUC only)

Control

(F) : FANUC - 0i M-C (For E type)
 - 18i M-B (For P type)
 (T) : HEIDENHAIN - iTNC 530 (For P type)

● = Standard ○ = Option ✕ = N / A ◎ = Option but recommended

Technical Data

	MV 154 E / MV 154 EL		MV 154 P / MV 154 PL			Standard / Option				
	Economic		Performance			MV 154 / MV 154 L				
	9	12	9	12	15	E		P		
						9	12	9	12	15
Coolant system										
Coolant tank capacity (Liter)			400			●	●	●	●	●
Pump capacity						●	●	●	●	●
- Nozzle coolant			60 L / min. , 2 bar			●	●	●	●	●
- Through spindle coolant			25 L / min. , 8 bar			●	●	●	●	●
- Wash down			60 L / min. , 2 bar			●	●	●	●	●
Machine size					2,935 (F)					
Height (mm)			2,750		2,830 (T)	●	●	●	●	●
Floor space W x D (mm)			2,200 x 2,360 / 2,535 x 2,465			●	●	●	●	●
Weight (kg)			6,400 / 6,850			●	●	●	●	●
Connections										
Main power			400V / 50 HZ			●	●	●	●	●
Power consumption (KVA)	20		25		30	●	●	●	●	●

Standard / Option accessories:

	Standard / Option				
	MV 154 / MV 154 L				
	E		P		
	9	12	9	12	15
■ FANUC 0iM-C	●	●	✕	✕	✕
■ FANUC 18iM-B	✕	✕	○	●	●
■ FANUC 3 "O" package (RISC, Data Servo, AI nano HPCC)	✕	✕	○	○	○
■ HEIDENHAIN iTNC530	✕	✕	●	●	●
■ HEIDENHAIN Option2	✕	✕	○	○	○
■ ECO cooling system	●	●	●	●	✕
■ Spindle oil chiller (6,000 Kcal)	○	○	○	○	●
■ 24 position tool magazine	●	●	●	●	●
■ 32 position tool magazine	○	○	○	○	○
■ HSK 63A tooling system	✕	✕	✕	✕	○
■ 4 th axis preparation	●	●	●	●	●
■ ø200 mm rotary table & tail stock	○	○	○	○	○
■ Linear encoder absolute 0.1 µm	○	○	○	○	○
■ Spindle nose thermal compensation package (Z direction < 15 µm) ⁽³⁾	✕	✕	○	○	○
■ Tool length / breakage measurement	○	○	○	○	○
■ Coolant system	●	●	●	●	●
■ 8 bar through spindle coolant	●	●	●	●	●
■ 20 bar through spindle coolant	○	○	◎	◎	◎
■ Coolant wash down & wash gun	●	●	●	●	●
■ Chip conveyor	●	●	●	●	●
■ Stainless steel chip pan	●	●	●	●	●
■ Mist collector	○	○	○	○	○
■ Dual work light	●	●	●	●	●
■ Machine status light	●	●	●	●	●
■ CE & EMC	●	●	●	●	●