

| Machine Specification

Travel	PV66	PV1052
X/Y/Z-axis	660 / 406 / 508mm	1060 / 520 / 610mm
Distance from spindle nose to table	102-610mm	115-725mm

Table		
Dimension	762 x 406mm	1160 x 520mm
Max. load	500kg	650kg
T-slot (width x pitch x number)	18 x 100 x 3mm	18 x 100 x 5mm

Spindle		
Spindle type [OP]	Direct drive	
Spindle speed [OP]	12000rpm	
Spindle motor power	7.5kW/15kW (Cont./S3-25%)	
Spindle taper	BBT40	

Feed		
Rapid feed (X/Y/Z)	38/38/32m/min	32/32/32m/min
Cutting feed	12000mm/min	
Motor power (X/Y/Z)	1.8/1.8/2.5kW	1.4/2.5/2.5kW

ATC & magazine		
ATC type	Arm	
Number of tools	20pcs	24pcs
Max. tool diameter	75/120mm	80/125mm
Max. tool length	240mm	300mm
Max. tool weight	7kg	

Supply		
Air pressure	6kgf/cm ²	
Electric power supply	25kVA	30kVA

Net Weight		
Machine weight	2818kg	6200kg

* The specifications and information may be changed without prior notice.



No.10, Gong 10th Rd., Dajia Distr., Taichung City 437, Taiwan
T +886 4 26811215
F +886 4 26822803
sales-os@takumi.com.tw
www.takumi.com.tw



PV-02-EN-202412

| Standard & Optional

- Standard :**
- Fanuc 0iMF-Plus Type 3, 10.4"
 - 12,000rpm, BBT40, direct drive spindle
 - 20T (PV66) / 24T (PV1052)
 - Spindle air blast
 - Cutting air blast
 - Spindle oil cooler
 - Coolant tank & coolant flushing system
 - Full chip enclosure
 - Chip auger with lift up exhaust tube
 - 3-Color signal light
 - Working light
 - Heat exchange for electric cabinet
 - Leveling block and screws
 - Maintenance tools
 - Manuals
 - Washing gun & air gun
 - USB / Ethernet / RS-232C interface
 - Manual pulse generator
 - Automatic centralized lubrication system

- Optional :**
- Mitsubishi M80A TypeA, 10.4"
 - Coolant through spindle 20bar
 - Chain type / scraper type chip disposal (PV1052)
 - Workpiece measurement
 - Tool measurement
 - Oil skimmer
 - Oil mist collector
 - Oil mist cutting device
 - Transformer
 - CE certified



PV Series



High Speed Vertical Machining Center

PV66
PV1052

PV Series

The PV Series are designed for high rigidity, reliability and productivity, as demonstrated in both surface finish quality and consistent precision. The PV Series combines the highest removal with the best dynamics. It can handle a wide range of workpieces for all kind of applications.

Basic Structure



High rigidity structure

Bed, columns, saddle and other main castings are made of Meehanite grade cast iron and remove the internal stress by heat treatment to ensure the best structural stability and positioning accuracy.

The PV Series achieves high-rigidity and optimal machine structure by using FEM analysis from the design.

Hand scraping

Accuracy is ensured by hand scraped contact points. Contact surfaces such as column to base components, spindle cartridge to spindle housing, ball screw bearing block seats to bearing retainer and worktable to linear guide trucks and motor seat.

Hand scraping results in better mating surfaces of key components and will provide consistent results over a longer period of time.



User Convenience



Ergonomic swivel operation panel

The operation panel can swivel 120°, and the height is designed to be at the operator's viewpoint.



Excellent chip removal

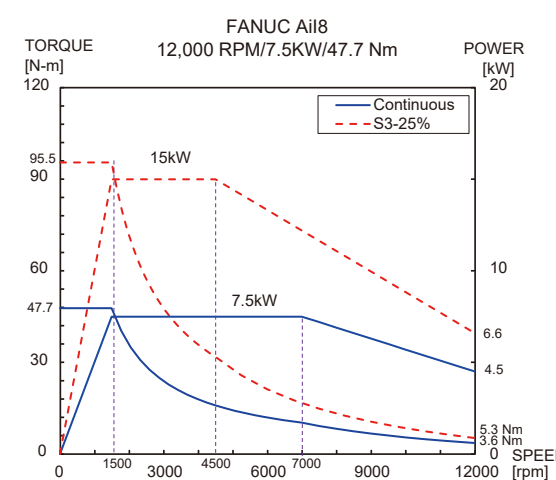
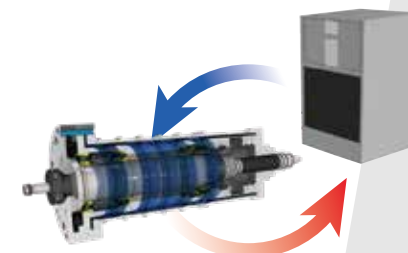
The sheet metal of the enclosure is designed with the proper slope to augment the high-volume programmable wash down, automating cleanup while saving valuable time for running parts.

Direct Spindle



Stable spindle cooling circulation

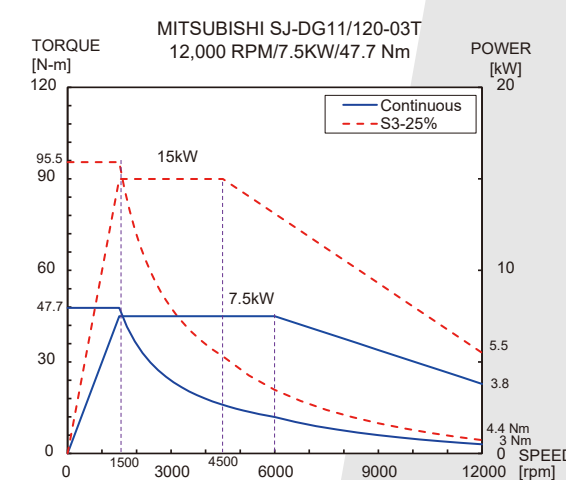
Spindle temperature is constantly controlled by oil chiller. Our test result have proven that the temperature of the circulating oil is controlled within certain variation, which minimizes thermal displacement during continuous operation at high speed.



12,000rpm Direct drive spindle (w/o CTS)

7.5/15 kW Power (Cont./S3-25%)

47.7/95.5 N.m Torque (Cont./S3-25%)

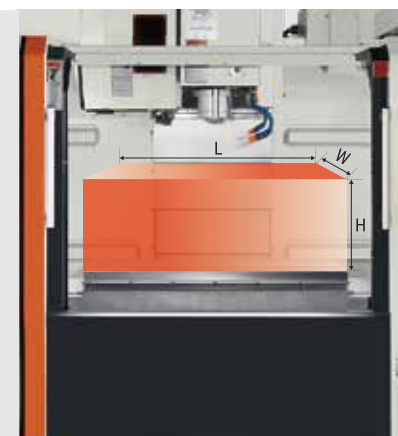


12,000rpm Direct drive spindle (w/o CTS)

7.5/15 kW Power (Cont./S3-25%)

47.7/95.5 N.m Torque (Cont./S3-25%)

Wide Machining Area



Maximum working area (L x W x H)

PV66	660 x 406 x 508mm
PV1052	1060 x 520 x 610mm

Maximum workpiece weight

PV66	500kg
PV1052	650kg