Controller

For TVM Series

TSL3200E

CE compliant



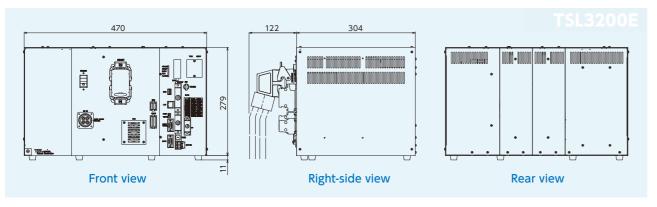
■Controller Specifications

Model	TSL3200E		
Number of Control axes	Maximum 6 axes		
Motion Modes	PTP,CP(Continuous Path; Linear, Circular), Short-cut		
Storage Capacity	Approx. Total: 128,000 point data + 25,600 steps		
	1 program: 2,000point data + 3,000 steps		
Number of Registrable Programs	Maximum 256		
External Memory	USB memory		
Programming Language	SCOL language (similar to Basic)		
Teaching Pendant (Optional)	TP3000, TP1000-6ax, (Programs can also be written on PC)		
I/O Signals	8 inputs / 8 outputs (Plus or minus common selectable)		
Hand Control Signals	Maximum 8 inputs / 8 outputs		
PLC function	Built-in PLC		
Communication Ports	RS232C : 2 Ports, Ethernet : 1 Port, USB 1 Port (for external memory)		
Functions	Interruptive functions, self-diagnosis, I/O Control and Communications during motion,		
	Coordinate Calculations, Built-in PLC, Conveyor Synchronization (optional), etc.		
Power Supply	Single phase AC 190 to 240V, 50/60 Hz		
Outer Dimensions and Mass	470(W) × 290(H) × 304(D) mm, 19kg (including rubber feet)		
PC software for Programming	TSAssist : Program editor,		
support (Optional)	Teaching, Remote Operation, Simulation, etc.		
Options	Additional Axes (max, 2 axes), I/O Extension, I/O Cables, Field Network (PROFIBUS, DeviceNet,		
	CC-Link, EtherNet/IP, EtherCAT, PROFINET) Conformance to various industrial Standards.		

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DeviceNet and EtherNet/IP are registered trademarks of ODVA. Profibus and PROFINET are registered trademark of PROFIBUS User

Organization. EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.





EASY INTRODUCTION OF BIN-PICKING AUTOMATION SYSTEM

Teach pendant Optional

TP1000-6ax

Standard Teach pendant



TP3000

Teach pendant equipped with graphic operation keys



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System Robot S E R V I C E S 1300 172 272 www.mapserv.com.au

Shibaura Machine



VERTICAL ARTICULATED ROBOT TVM Series

Shibaura Machine's vertical articulated Robot TVM series achieves high inertia and strong payload capabilities up to 20 kg, while at the same time the robot body has a reduced weight. In addition to three variations in arm lengths, the operating range can be further expanded by mounting the robot on an optional linear actuator.

The Robot TVM series, in combination with its function-rich controller and software solutions such as programming-support PC software and 3D vision bin-picking package, is applicable to a wide range of automation needs and contribute to efficiency, and cost and labor saving.



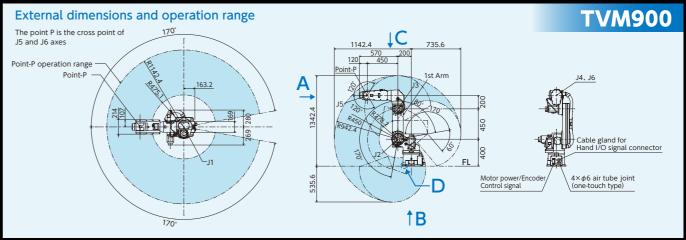
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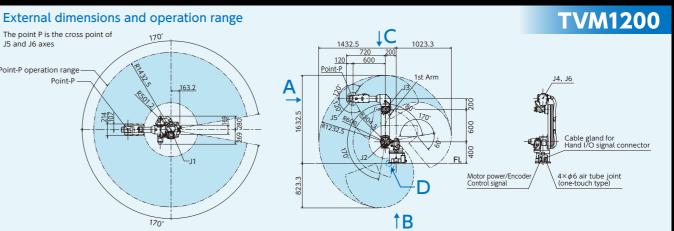
■Robot Specifications

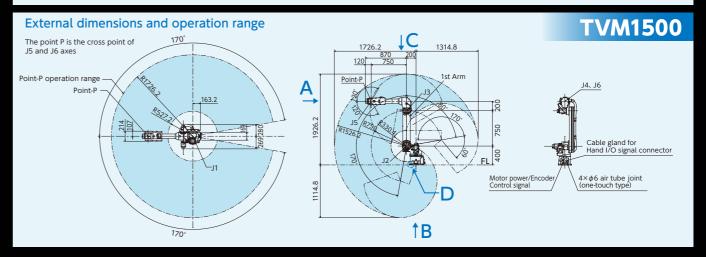
Models		TVM900	TVM1200	TVM1500	
Number of Controlled Axes		6 Axes			
Arm Length (mm)	Total	900	1,200	1,500	
	1st Arm	450	600	750	
	2nd Arm	450	600	750	
Reach (mm)		1,142	1,432	1,726	
Rated Load Mass (kg)		5			
Maximum Load Mass (kg)		20	15	10	
Working Envelope (deg)	Axis 1 (J1)	±170			
	Axis 2 (J2)	+170~-80			
	Axis 3 (J3)	+170~-60			
	Axis 4 (J4)	±190			
	Axis 5 (J5)	±120			
	Axis 6 (J6)	±360			
Maximum - Speed - (deg/s)*1	Axis 1 (J1)	223			
	Axis 2 (J2)	191 165			
	Axis 3 (J3)	270			
	Axis 4 (J4)	412			
	Axis 5 (J5)	336			
	Axis 6 (J6)	720			
	Composite (m/s)	8.7	10.7	12.0	
Allowable Moment of Inertia (kgm²)	Axis 4 (J4)	1.80			
	Axis 5 (J5)	1.80			
	Axis 6 (J6)	0.30			
Positioning repeatability	X-Y-Z	±0.05 (mm) for each component*2			
Robot Body Mass (kg)		122	125	131	
Power Supply		6.9 kVA			
Protection Grade		IP65			
Hand Control Signals and Pipes		8 inputs, 8 outputs ϕ 6 × 4 lines			
Optional Specifications		Hollow 3rd Arm, I/O panel with built-in three-way solenoid valves, I/O panel Ethemet port, Ceiling mount, Cleanroom design			

*2: One way positioning repeatability when the environment temperature is constant at 20 degrees Celsius

TVM Series External view







For all TVM Series External view

