

VERTICAL ARTICULATED ROBOT

TVM Series



TVM900

TVM1200

TVM1500

For TVM Series
Controller **NEW**

TSL3200E

VERTICAL ARTICULATED ROBOT TVM Series

Toshiba 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.



Robot Specifications

Models	TVM900	TVM1200	TVM1500	
Number of Controlled Axes		6 Axes		
Arm Length (mm)	Total	900	1200	1500
	1st Arm	450	600	750
	2nd Arm	450	600	750
Reach (mm)	1124	1418	1715	
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)	234		
	Axis 2 (J2)	191		165
	Axis 3 (J3)		270	
	Axis 4 (J4)		420	
	Axis 5 (J5)		336	
	Axis 6 (J6)		720	
Composite (m/s)	8.8	10.8	12.3	
Allowable Moment of Inertia (kgm ²)	Axis 4 (J4)	1.80		
	Axis 5 (J5)	1.80		
	Axis 6 (J6)	0.30		
Robot Body Mass (kg)	122	125	131	
Protection Grade	IP65			
Optional Specifications	Ceiling mount (planned) Cleanroom design (planned)			

*1: Speed and acceleration rates are limited depending on motion patterns, load mass and load offset values.

Controller

For TVM Series **NEW**

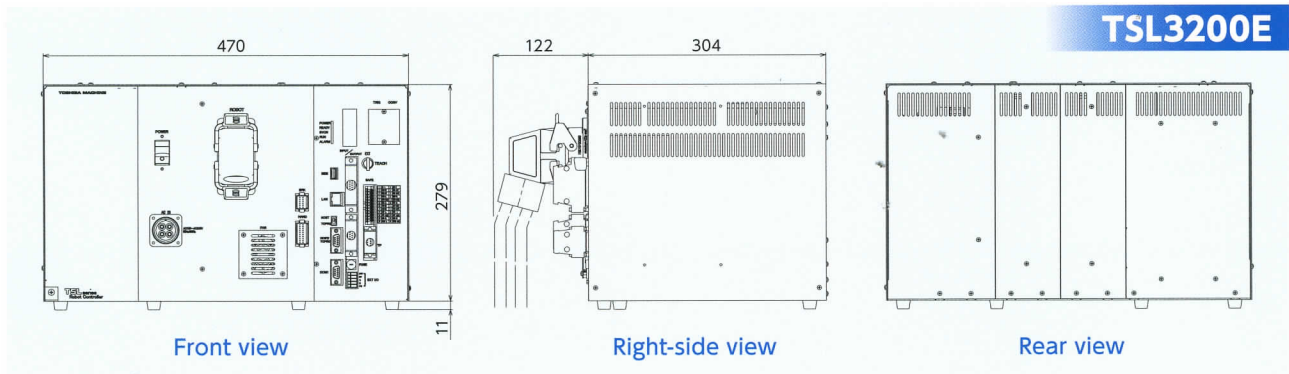
TSL3200E

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: 128000 point data + 25600 steps 1 program: 2000point data + 3000 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 selection necessary)
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, 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 support (Optional)	TSAssist : Program editor, Teaching, Remote Operation, Simulation, etc.
Options	Additional Axes, I/O Extension, I/O Cables, Field Network (PROFIBUS, DeviceNet, CC-Link, EtherNet/IP, EtherCAT), Conformance to various industrial Standards.

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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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Before operating the industrial robot, read through and completely understand the instruction man