TOSHIBA MACHINE

NEW PRODUCT



- Low cost Excellent performance at affordable prices.
- Improved weight capacity and allwable inertia Expanded applicability of multi-hand with improved weight capacity and allowable inertia.
- Energy-efficient

Up to 20% reduction in required power-supply capacity compared with our previous models. Low-power consumption robots ideal for energy conservation era.





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Model		THL300
Туре		Horizontal multi-joint
No. of controlled axes		4
Arm length		300mm (125mm+175mm)
Working	Axis 1	±125°
envelope	Axis 2	±145°
	Axis 3 (Z-axis)	0~160mm
	Axis 4 (Z-axis rotation)	±360°
Maximum *1	Axis 1	660°/s
speed	Axis 2	660°/s
	Axis 3 (Z-axis)	1120mm/s
	Axis 4 (Z-axis rotation)	1500°/s
	Composite	5,1m/s
Cycle time (with 2kg load) *2		0,48s
Maximum payload mass		5kg
Allowable moment of inertia		0₌05kg · m²
Positioning*3	X—Y	±0.01mm
repeatabi l ity	Z (Axis 3)	±0.015mm
	Axis θ (Z-axis rotation)	±0,007°
Hand wiring		8 inputs/8 outputs
Hand pneumatic joints *4		φ4 ×3 pcs
Position detection		Absolute
Robot controller cable		3"5m
Power capacity		0.7kVA
Mass		12kg

- *1 : Acceleration/deceleration rates may be limited according to the motion pattern, load mass and amount of offset.
 *2 : When the environment temperature is constant 20°C. Positioning repeatable accuracy in one-direction movement. Not absolute positioning accuracy.
 *3 : Horizontal 300mm, vertical 25mm, round-trip. Continous operation is not possible beyond the effective load ratio.
- *4 : Pneumatic joints are provided on the base. Please refer to the drawings for the details of the pneumatic joints. Pipes to be are provided by the customers.

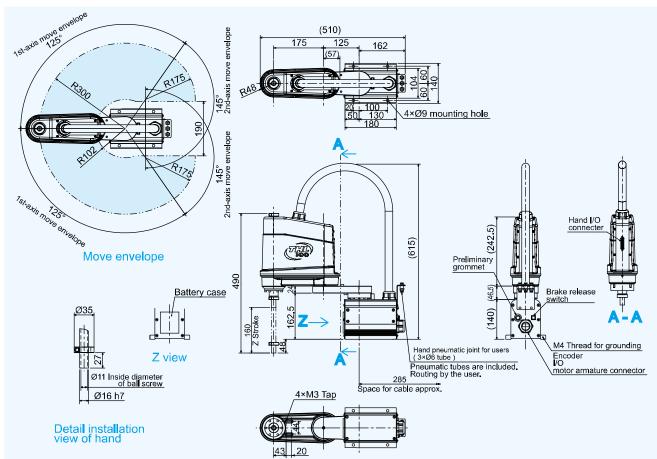
Controller Specifications



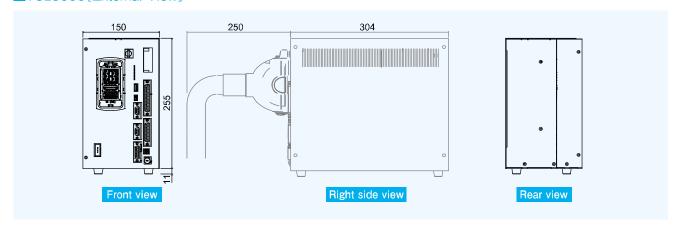
Model	TSL3000
No. of controlled axes	4 axes
Motion modes	PTP, CP(Continuous Path ; Linear, Circular),
	Short-Cut, Arch Motion
Storage capacity	Approx. Total: 6400 point + 12800 steps
	1 program : 2000 point + 3000 steps
No. of registrable programs	Maximum 256
Programming language	SCOL(similar to BASIC)
Teaching unit	Teach pendant TP1000
(Option)	(Cable length 5m, 3-point enable switch)
External I/O signals	8 inputs / 8 outputs(Plus or minus common selectable
Hand control signals	8 inputs / 8 outputs
External operation	Input : cycle operation mode, start, stop. (13 signals)
signal	output : Servo ON, emergency stop, etc. (10 signals)
Serial communication ports	RS232C : 2 ports
Other functions	Torque control,Interruptive functions, self-diagnosis,
	I/O control and communications during motion,
	Coordinate calculations, Built-in PLC, etc.
Power supply	Single phase AC190V~250V , 50/60Hz(±1Hz)
Outer Dimensions and Mass	150(W)×256(H)×304(D)[mm] , 6.5kg
PC Software for Programming	TSPC : Program editor, teaching,
Support(Option)	remote operation, etc₌
Option	I/O extension, Field-network
	(CC-Link,Devive-Net,Profibus)*5

*5:CC-Link is a registered trademark of CC-Link Partner Association. DeviceNet is registered trademark of ODVA. Profibus is a registered trademark of Profibus User Organization.

THL300[External View]



TSL3000 [External View]



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

■The contents included in this catalog are subject to change without prior notice to reflect improvements.