Product Specifications

Full length 1,200 mm 1,200 mm 750 mm 7			
Second arm	Arm Length	Full length	1,200 mm
Morking Envelope		First arm	750 mm
Morking Envelope		Second arm	450 mm
Morking Envelope Axis 3 (Z-axis) 0 ~ 300 mm Axis 4 (Z-axial rotation) ±360° Axis 1 187.5 °/sec Axis 3 (Z-axis) 2,000 mm/sec Axis 4 (Z-axial rotation) 1,700 °/ssec Composite (Axis 1 and 2 composite) 5.7 m/sec Allowable moment of inertia *1 0.2 kg·m2 Standard Cycle Time *2 (With 2 kg load) 0.58 sec X-Y ±0.05 mm Positioning repeatability *3 Z (axis 3) ±0.03 mm ±0.014 deg Hand wiring 8 inputs and 8 outputs Hand pneumatic joint *4 96×3 pcs Position detection Absolute Robot controller cable 3.5 m Power supply 1.4 kVA Mass	Working Envelope	Axis 1	±125 °
Axis 3 (Z-axis) 0 ~ 300 mm Axis 4 (Z-axial rotation) ±360° Axis 1 187.5 °/sec Axis 2 217.5 °/sec Axis 3 (Z-axis) 2,000 mm/sec Axis 4 (Z-axial rotation) 1,700 °/ssec Composite (Axis 1 and 2 composite) 5.7 m/sec Maximum payload mass *1 10 kg Allowable moment of inertia *1 0.2 kg·m2 Standard Cycle Time *2 (With 2 Kg load) 0.58 sec X-Y ±0.05 mm Positioning repeatability *3 Z (axis 3) ±0.03 mm C (axis 4, rotation) ±0.014 deg Hand wiring 8 inputs and 8 outputs Hand pneumatic joint *4		Axis 2	±155°
Maximum Speed *1 187.5 °/sec Axis 2 217.5 °/sec Axis 3 (Z-axis) 2,000 mm/sec 1,700 °/ssec 2,000 mm/sec Composite (Axis 1 and 2 composite) 5.7 m/sec Maximum payload mass *1 10 kg Allowable moment of inertia *1 0.2 kgm2 Standard Cycle Time *2 (With 2 Kg load) 0.58 sec X-Y ±0.05 mm Positioning repeatability *3 2 (axis 3) ±0.03 mm C (axis 4, rotation) ±0.014 deg Hand wiring 8 inputs and 8 outputs Hand pneumatic joint *4 \$\text{\$\text{\$0\$} \$\text{\$\		Axis 3 (Z-axis)	0 ~ 300 mm
Maximum Speed *1 Axis 2 277.5 °/sec Axis 3 (2-axis) 2,000 mm/sec Axis 4 (Z-axial rotation) 1,700 °/ssec Composite (Axis 1 and 2 composite) 5.7 m/sec Allowable moment of inertia *1 10 kg Allowable moment of inertia *1 0.2 kg·m2 Standard Cycle Time *2 (With 2 Kg load) 0.58 sec X-Y ±0.05 mm Z (axis 3) ±0.03 mm C (axis 4, rotation) ±0.014 deg Hand wiring 8 inputs and 8 outputs Hand pneumatic joint *4 \$\text{\$\text{\$0\$} \text{\$\text{\$3\$}\$ pcs Position detection Absolute Robot controller cable 3.5 m Power supply 1.4 kVA Mass 40 kg		Axis 4 (Z-axial rotation)	±360°
Maximum Speed *1 Axis 3 (Z-axis) 2,000 mm/sec Axis 4 (Z-axial rotation) 1,700 °/ssec Composite (Axis 1 and 2 composite) 5.7 m/sec Load Maximum payload mass *1 10 kg Allowable moment of inertia *1 0.2 kg·m2 Standard Cycle Time *2 (With 2 kg load) 0.58 sec X-Y ±0.05 mm Positioning repeatability *3 Z (axis 3) ±0.03 mm C (axis 4, rotation) ±0.014 deg Hand wiring 8 inputs and 8 outputs Hand pneumatic joint *4 φ6×3 pcs Position detection Absolute Robot controller cable 3.5 m Power supply 1.4 kVA Mass 40 kg	Maximum Speed *1	Axis 1	187.5 °/sec
Maximum Speed *1 1,700 °/ssec Composite (Axis 1 and 2 composite) 5.7 m/sec Load Maximum payload mass *1 10 kg Allowable moment of inertia *1 0.2 kg·m2 Standard Cycle Time *2 (With 2 Kg load) 0.58 sec X-Y ±0.05 mm Z (axis 3) ±0.03 mm C (axis 4, rotation) ±0.014 deg Hand wiring 8 inputs and 8 outputs Hand pneumatic joint *4 \$\text{\$\text{\$0\$}\$ apcs}\$ Position detection Absolute Robot controller cable 3.5 m Power supply 1.4 kVA Mass 40 kg		Axis 2	217.5 °/sec
Axis 4 (Z-axial rotation) 1,700 °/ssec		Axis 3 (Z-axis)	2,000 mm/sec
Load (Axis I and 2 composite) Maximum payload mass *1 Allowable moment of inertia *1 0.2 kg·m2 (With 2 Kg load) 7. Y **2.005 mm **2.005 mm **2.003 mm **2.0014 deg Hand wiring Hand wiring Hand pneumatic joint *4 Position detection Robot controller cable Power supply Mass **5.7 m/sec 5.7 m/sec 6.7 m/sec 6.7 m/sec 10 kg 40.02 kg·m2 10.02 kg·m2 20.03 mm 20.014 deg 8 inputs and 8 outputs 40 kg		Axis 4 (Z-axial rotation)	1,700 °/ssec
Allowable moment of inertia *1 O.2 kg·m2 Standard Cycle Time *2 (With 2 Kg load) 7			5.7 m/sec
Allowable moment of inertia *1 0.2 kg·m2	Lond	Maximum payload mass *1	10 kg
Positioning repeatability *3 Z (axis 3) C (axis 4, rotation) Hand wiring Hand pneumatic joint *4 Position detection Robot controller cable Power supply Mass X-Y ±0.05 mm ±0.014 deg 8 inputs and 8 outputs P6×3 pcs Absolute 3.5 m 1.4 kVA	Load	Allowable moment of inertia *1	0.2 kg·m2
Positioning repeatability *3 Z (axis 3) ±0.03 mm ±0.014 deg 8 inputs and 8 outputs Hand pneumatic joint *4 φ6×3 pcs Position detection Robot controller cable Power supply Mass 1.4 kVA 40 kg	Standard Cycle Time *2	(With 2 Kg load)	0.58 sec
C (axis 4, rotation)±0.014 degHand wiring8 inputs and 8 outputsHand pneumatic joint *4φ6×3 pcsPosition detectionAbsoluteRobot controller cable3.5 mPower supply1.4 kVAMass40 kg	Positioning repeatability *3	X-Y	±0.05 mm
Hand wiring8 inputs and 8 outputsHand pneumatic joint *4φ6×3 pcsPosition detectionAbsoluteRobot controller cable3.5 mPower supply1.4 kVAMass40 kg		Z (axis 3)	±0.03 mm
Hand pneumatic joint *4φ6×3 pcsPosition detectionAbsoluteRobot controller cable3.5 mPower supply1.4 kVAMass40 kg		C (axis 4, rotation)	±0.014 deg
Position detectionAbsoluteRobot controller cable3.5 mPower supply1.4 kVAMass40 kg	Hand wiring		8 inputs and 8 outputs
Robot controller cable3.5 mPower supply1.4 kVAMass40 kg	Hand pneumatic joint *4		φ6×3 pcs
Power supply 1.4 kVA 40 kg	Position detection		Absolute
Mass 40 kg	Robot controller cable		3.5 m
· · · · · · · · · · · · · · · · · · ·	Power supply		1.4 kVA
TSI 3000	Mass		40 kg
Controllers TSL3000E	Controllers		TSL3000 TSL3000E

^{*1:} Speed and acceleration/deceleration rates may be limited depending on the motion pattern, load mass and amount of offset.

^{*2:} Horizontal 300 mm, vertical 25 mm, round-trip with coarse positioning. Continuous operation is not possible beyond the effective load ratio.

^{*3:} Positioning repeatable accuracy in one-direction movement, when the environmental temperature is constant 20°C., not absolute positioning accuracy. Positioning repeatability for X-Y and C are for when Z-axis is at the upper-most position. Trajectory accuracy is not ensured.

^{*4:} Pneumatic joints are provided on the base. Pipes are to be provided by the customers..

Controller Specifications

Controllor opcomodations		
	TSL3000 Controller	
Series	THL, THE, BAIII	
Teach Pendant	TP1000, TP3000	
Dawar Cupply	Single phase	
Power Supply	190-240VAC @ 50/60Hz	
Max Power Capacity	0.7 ~ 1.4 kVA	
Dimensions	150W x 266H x 304D	
Mass	7kg	
	256 programs	
Storage	6400 points	
	12800 steps	
	TSL3000E	
CE Version	Dimensions change:	
	320W x 266H x 304D 13kg	
USER I/O Count	8/8	
SYSTEM I/O Count	13/9	
SYSTEM INPUTS	Alarm reset, strobe, program reset, step reset, cycle reset, output reset, start, external	
	servo on, stop, cycle mode, break, low speed, servo off	
SYSTEM OUTPUTS	Servo ready, battery alarm, acknowledge, external mode on, system ready, autorun,	
	alarm, cycle end, low speed on	
Fieldbus SLAVE options	DeviceNet, Profibus, CC-Link, Ethernet I/P, EtherCat, ProfiNet	
	TR48-DIOC Module	
Extended I/O Options	Add 28In/20Out	
	Up to 2 modules can be added to controller	
Communications	RS232C (2), Ethernet (TCP/IP), USB	
	Torque control (individual axis), gain control (individual axis), interrupt functions, SPURT	
Standard SCOL Functions	function, coordinate calculations, payload command, multi-tasking, AREA output	
	function, NCBOY additional axis control, self-diagnostics	
Optional SCOL Functions	Pulse output control, conveyor tracking, vision+conveyor tracking	
External Control Standard	HOST Protocol, .dll library, LabView integration support	
Functions	3. s	