

TOSHIBA MACHINE

NEW PRODUCT

VERTICAL ARTICULATED ROBOT

TV800

EZCell

PROGRAMMING SUPPORT TOOL
EASY OPERATION!
EASY PROGRAMMING!
EASY CONVERSION FROM CAD/CAM DATA!

RETURN OF INVESTMENT

HIGH RIGIDITY
HIGH DURABILITY
FAST CYCLE TIME
LIGHT WEIGHT DESIGN
USER FRIENDLY SOFTWARE

Robot Specifications



Model	TV800	
Type	Vertical Articulated Robot	
Number of controlled axis	6 axis	
Arm Length	Total Length	800mm
	1st Arm	380mm
	2nd Arm	420mm
Reach	892mm	
Working envelope	Axis 1(J1)	±170°
	Axis 2(J2)	-100~+150°
	Axis 3(J3)	-127~+167°
	Axis 4(J4)	±190°
	Axis 5(J5)	±120°
	Axis 6(J6)	±360°
Maximum speed*1	Axis 1(J1)	237°/s
	Axis 2(J2)	240°/s
	Axis 3(J3)	288°/s
	Axis 4(J4)	350,5°/s
	Axis 5(J5)	484°/s
	Axis 6(J6)	576°/s
Composite	8.06m/sec	
Maximum payload mass	5kg	
Standard cycle time*2	0.4~0.5sec	
Allowable moment of inertia at end	Axis 4,5	0.3kg·m ²
	Axis 6	0.05kg·m ²
Positioning repeatability*3	±0.02mm(X-Y-Z)	
Position detecting system	Absolute system/AC servo motor	
Robot body	Mass	48kg
	Color	Light gray/White

*1:The acceleration/deceleration rates may be limited depending on motion patterns, load mass and offset amount.

*2:Continuous operation is not possible beyond the effective load ratio on the standard cycle time motion pattern.

Horizontal 300mm, Vertical 25mm, round-trip

*3:At constant temperature

Controller Specifications



Controller
TS3100

TEACH PENDANT(OPTION)

Model	TS3100
No.of axis	Maximum eight-axis simultaneous control
Operation mode	PTP,CP(linear·Circular),Short-cut,Arch motion
Storage capacity	Total: 12800 points + 25600 steps 1 program: 2000 points + 3000 steps
No.of programs	Max.256(247 user files + 9 system files)
Programming language	SCOL(proprietary,similar to BASIC)
Teaching unit(option)	Teach pendant TP1000, with 5-meter cable (Program can be written on PC)
External I/O	32 inputs/32 outputs
Hand control signals	8 inputs/8 outputs
External operation signal(exclusive)	Inputs:Cycle operation start,stop,reset,etc Outputs:Servo-On status, emergency stop, ready for operation, malfunction alarm, etc
Serial communication port	RS-232C: 2 ports, Ethernet: 1 port*4
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 AC200V~250V 50/60Hz 4.4kVA
Outer dimensions and mass	420W×230H×298D(mm), 17kg
PC software(option)	TSPC···Program editor,Teaching,Remote operation,etc
Options	I/O extension, I/O cables, Field-Network(CC-Link,DeviceNet,Profibus)*4

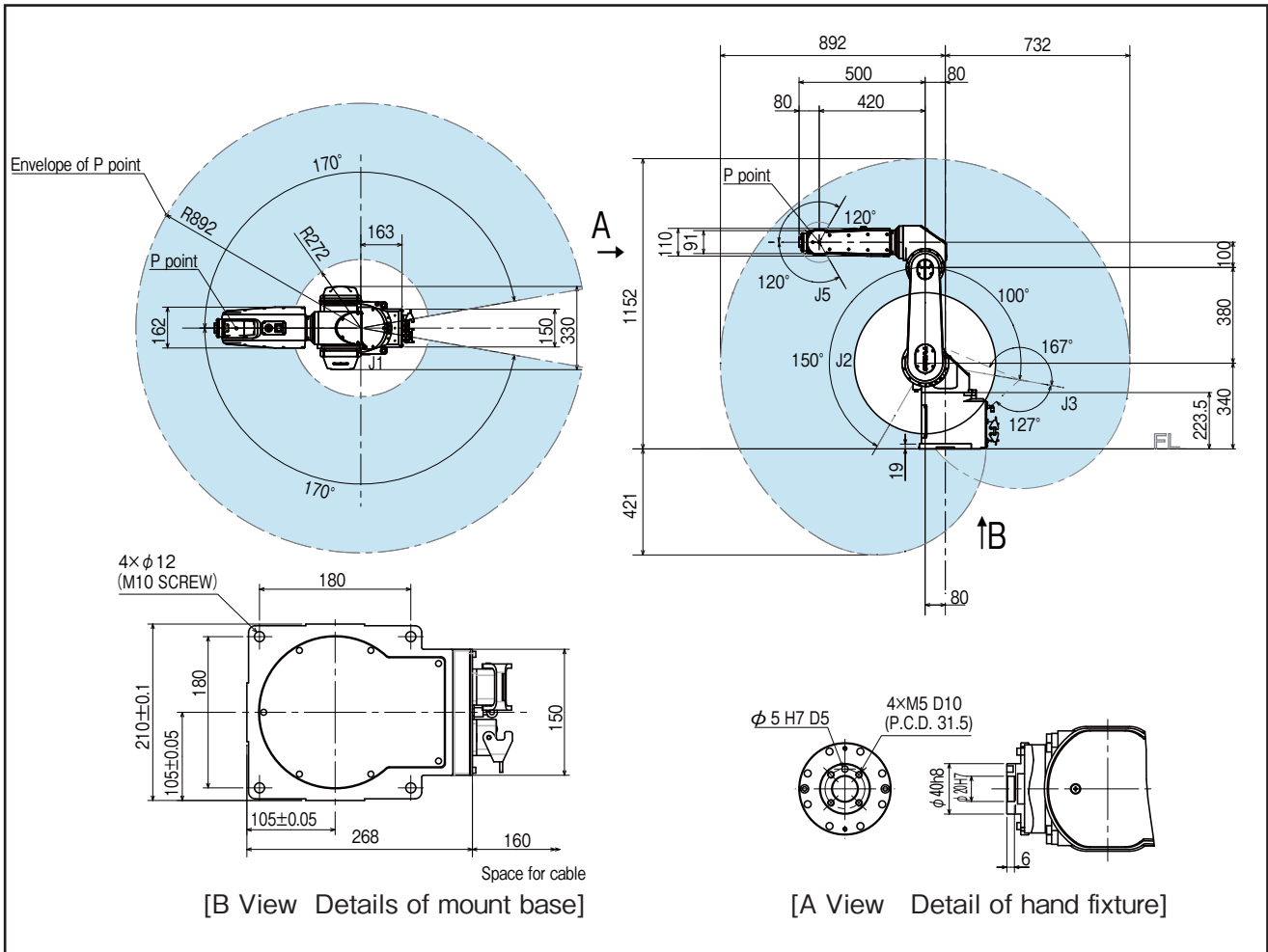
*4:Ethernet is a registered trademark of XEROX Corp. in the U.S.A.

CC-Link is a registered trademark of CC-Link Partner Association.

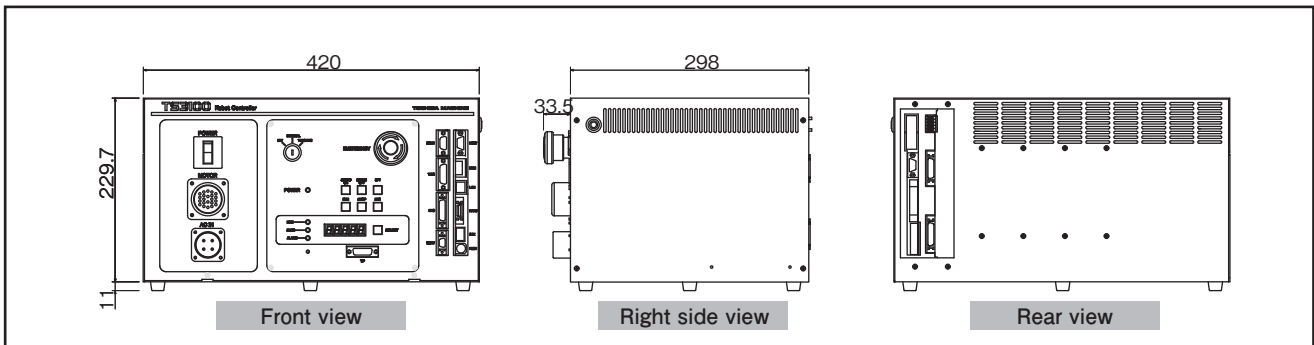
DeviceNet is a registered trademark of ODVA.

Profibus is a registered trademark of Profibus User Organization.

TV800 [External View]



TS3100 [External View]



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