TOSHIBA MACHINE

TOSHIBA MACHINE’S VERTICAL ARTICULATED ROBOT

TV800

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 axes: 6 axes
Total Length: 860mm
1st Arm: 380mm
2nd Arm: 420mm
Reach: 892mm
Axis 1(J1): ±170°
Axis 2(J2): -100°~+150°
Axis 3(J3): ±127°~±167°
Axis 4(J4): ±180°
Axis 5(J5): ±120°
Axis 6(J6): ±360°
Maximum speed: 237°/sec
Axis 1(J1): 237°/sec
Axis 2(J2): 240°/sec
Axis 3(J3): 288°/sec
Axis 4(J4): 350.5°/sec
Axis 5(J5): 484°/sec
Axis 6(J6): 576°/sec
Composite: 8.06m/sec
Maximum payload mass: 5kg
Standard cycle time (t): 0.4~0.5sec
Allowable moment of inertia at end: Axis 4: 4.5 kg·m²
Axis 6: 0.05kg·m²
Positioning repeatability (t): ±0.02mm (X-Y-Z)
Position detecting system: Absolute system/AC servo motor
Robot body mass: 45.5kg
Color: Light gray/White

Controller Specifications

Model: T821
No. of axes: 6 axes
Maximum axes simultaneous control
Operation mode: PTP OP/Linear Circ. Short-cut Arch. Motion
Storage capacity: Total: 12800 points + 25600 steps
1 program: 2000 points + 3000 steps
No. of programs: Max. 256x247 user files + 9 system files
Programming language: SCOL (proprietary, similar to BASIC)
Teaching unit (option): Teach pend.: TP1000, TP3000
[Program can be written on PC]
External I/O: 32 inputs/32 outputs
Hand control signal: 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
Other functions: Torque control/Intensive functions, self-diagnosis, I/O control and communications during motion, Coordinate calculations, Build-in PLC, etc.
Power supply: Single phase AC200V~240V 50/60Hz 4.4kVA
Outer dimensions and mass: 420W×230D×380H(mm): 17kg
PC software (option): T8PC: Program editor, Teaching, Remote operation, etc.
Options: I/O expansion, 10 cables, Field Network/CC-LINK/DeviceNet/Pribus

*“Pribus” is a registered trademark of Profibus User Organization.

*1: The acceleration/deceleration rates may be limited depending on motion patterns, load mass and load amount.
*2: Continuous operation is not possible beyond the effective load range on the standard cycle time motion pattern.
*3: At constant temperature.