

TS-S/TS-X/TS-P

TS-S basic specifications

Item	Model	TS-S
Basic specifications	Number of controllable axes	Single-axis
	Controllable robots	TRANSERVO series
	Power capacity	70 to 110VA
	Dimensions	W30 × H162 × D82mm
	Weight	Approx. 0.2kg
Input power supply	Control power supply	DC24V +/-10% maximum
	Motor power supply	DC24V +/-10% maximum
Axis control	Control method	Closed loop vector control method
	Operating method	I/O point tracing (Positioning operation by specifying point number) / Remote command
	Operation types	Positioning, merge-positioning, push, and jog operations
	Position detection method	Resolver
	Resolution	20480 P/rev
Origin search method	Incremental	
Points	Points	255 points
	Point type setting	(1) Standard setting: Set speed and acceleration in percent of the respective maximum settings. (2) Custom setting: Set speed and acceleration in SI units.
	Point teaching method	Manual data input (coordinates input), Teaching, Direct teaching
External input/output	I/O interface	Selectable from the following: NPN, PNP, CC-Link, DeviceNet
	Input	Servo ON (SERVO), reset (RESET), start (START), interlock (/LOCK) origin search (ORG), manual mode (MANUAL), jog motion - (JOG-), jog motion + (JOG+), Point number selection (PIN0 to PIN7)
	Output	Servo status (SRV-S), alarm (/ALM), operation end (END), operation in-progress (BUSY), control outputs (OUT0 to 3), Point number output 0 to 7 (POUT0 to POUT7)
	External communications	RS-232C 1CH
Options	Safety circuit	Emergency stop input, emergency stop contact output (1 system: When the HT1 is used.)
	Handy terminal	HT1, HT1-D (with enable switch)
General specifications	Support software for PC	TS-Manager
	Operating temperature / Operating humidity	0°C to 40°C, 35% to 85%RH (non-condensing)
	Storage temperature/ Storage humidity	-10°C to 65°C, 10% to 85%RH (non-condensing)
	Atmosphere	Indoor location not exposed to direct sunlight. No corrosive, flammable gases, oil mist, or dust particles
	Anti-vibration	All XYZ directions 10 to 57Hz unidirectional amplitude 0.075mm 57 to 150Hz 9.8m/s ²
	Protective functions	Positioning detection error, power module error, temperature abnormality, overload, overvoltage, low voltage, gross position error

TS-X / TS-P basic specifications

Item	Model	TS-X / TS-P				
		100V AC input		200V AC input		
Driver model		TS-X105 / TS-P105	TS-X110 / TS-P110	TS-X205 / TS-P205	TS-X210 / TS-P210	TS-X220 / TS-P220
Number of controllable axes		Single-axis				
Controllable robots		TS-X: Single-axis robot FLIP-X series TS-P: Linear motor single-axis robot PHASER series				
Power capacity		400VA	600VA	400VA	600VA	1400VA
Dimensions		W58 × H162 × D131mm				W70 × H162 × D131mm
Weight		Approx. 0.9kg				Approx. 1.1kg
Input power supply	Control power supply	Single phase AC100 to 115V +/-10% 50/60Hz				
	Motor power supply	Single phase AC100 to 115V +/-10% 50/60Hz				
Single phase AC200 to 230V +/-10% 50/60Hz	Control power supply	Single phase AC200 to 230V +/-10% 50/60Hz				
	Motor power supply	Single phase AC200 to 230V +/-10% 50/60Hz				
Control method		Closed loop vector control method				
Operating method		I/O point tracing (Positioning operation by specifying point number) / Remote command				
Operation types		Positioning, merge-positioning, push, and jog operations				
Position detection method		TS-X: Resolver with multi-rotation absolute function TS-P: Magnetic type linear scale				
Resolution		TS-X: 16384 P/rev TS-P: 1μm				
Origin search method		TS-X: Absolute / Incremental TS-P: Incremental / Semi-absolute				
Points	Number of points	255 points				
	Point type setting	(1) Standard setting: Set speed and acceleration in percent of the respective maximum settings. (2) Custom setting: Set speed and acceleration in SI units.				
	Point teaching method	Manual data input (coordinates input), Teaching, Direct teaching				
External input/output	I/O interface	Selectable from the following: NPN, PNP, CC-Link, DeviceNet				
	Input	Servo ON (SERVO), reset (RESET), start (START), interlock (/LOCK) origin search (ORG), manual mode (MANUAL), jog motion - (JOG-), jog motion + (JOG+), Point number selection (PIN0 to PIN7)				
	Output	Servo status (SRV-S), alarm (/ALM), operation end (END), operation in-progress (BUSY), control outputs (OUT0 to 3), Point number output 0 to 7 (POUT0 to POUT7)				
	External communications	RS-232C 1CH				
Options	Power supply for brake	DC24V +/-10% 300mA (prepared by the customer)				
General specifications	Safety circuit	Emergency stop input, main power input ready output, emergency stop contact output (1 system: When the HT1 is used.)				
	Handy terminal	HT1, HT1-D (with enable switch)				
	Support software for PC	TS-Manager				
	Operating temperature / Operating humidity	0°C to 40°C, 35% to 85%RH (non-condensing)				
	Storage temperature / Storage humidity	-10°C to 65°C, 10% to 85%RH (non-condensing)				
	Atmosphere	Indoor location not exposed to direct sunlight. No corrosive, flammable gases, oil mist, or dust particles				
Anti-vibration	All XYZ directions 10 to 57Hz unidirectional amplitude 0.075mm 57 to 150Hz 9.8m/s ²					
Protective functions	Positioning detection error, power module error, temperature abnormality, overload, overvoltage, low voltage, gross position error					
Protective structure	IP20					