



## Standard Three Axes Servo Driven Robot

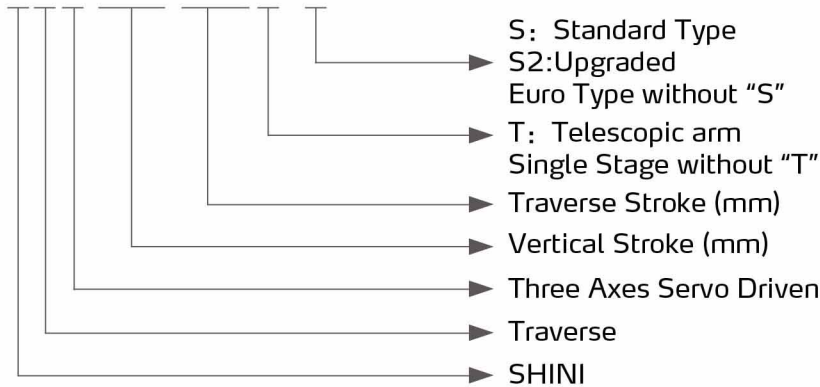
ST3-700-1400-S2



Refer carefully to this manual before operation.

## ■ Coding Principle

ST3-xxxx-xxxxT-S



Home Page

## ■ Features

- Precision  
All linear movements are driven by heavy duty servo motors with cooperation of precise linear guide rails and high power V belts; fast, silent, and precise. Wrist mechanism employs pneumatic driven rack and pinion system, which accomplishes smooth, stabled and precise flipping motion. Vertical arm with telescopic design efficiently minimizes the cycle time and height of the robot.
- Safety  
Position limit sensors and blocks effectively prevent mechanical and electrical malfunctions. Control board with short circuit function.
- Intelligence  
8.0 inch high definition TFT touch screen. 3-point switch for safer robot operation. CPU modularization, the operator, main control modular and extension modular has independent CPU, improve the system's respond and keep it safety. The hardware used multi-layer PCB and multi-rank high precision electrical modular, strong anti - interference ability. Hardware protect function, each signal output with intelligent detection, avoid short-circuit, overload and high temperature. Base on the VARAN BUS technology, the system can be extended, strong adaptability and flexibility. Teach modules with stacking and matrix locate functions, support conditional judgment, loop control, signal waiting and others logic instructions.
- User Friendly  
Multi-languages system and reserved auxiliary equipment slots able to support our global clients' need.



ST3-700-1400T-S2



ST3-1400-2200MT-S



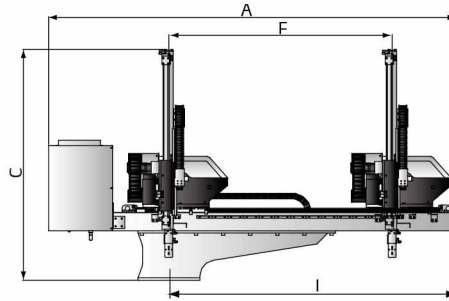
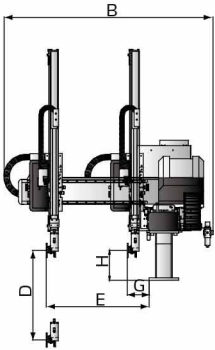
ST3-1800-2400LT-S

## ■ Application

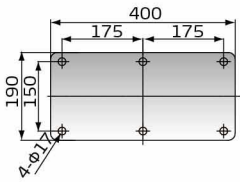
The ST3-S series robot is designed for rapid and precise removal of products from injection molding machine, and place them at desired locations. Apply to 2-plate mold or hot runner system. Capable of arranging, stacking, quality checking and in mold placement. Suitable for injection molding machine with clamping force under 3600 tons.

# ST3-S Series

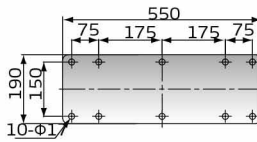
## Outline Drawings



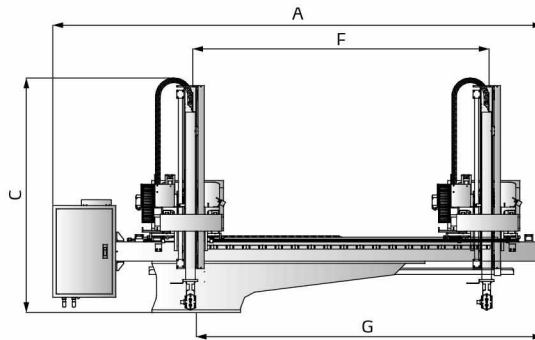
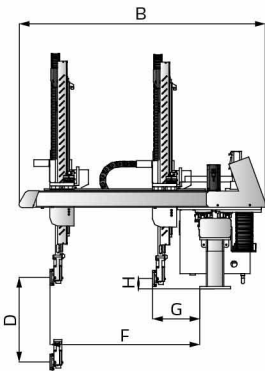
Three Axes Servo



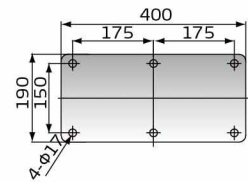
Base Flange C



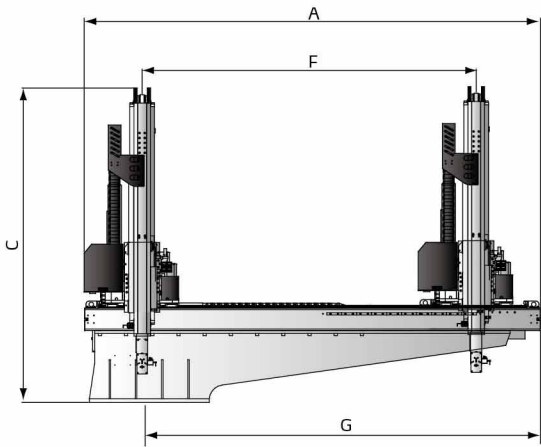
Base Flange D



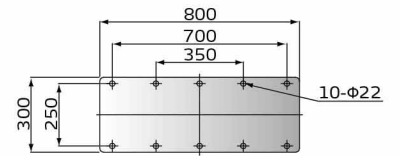
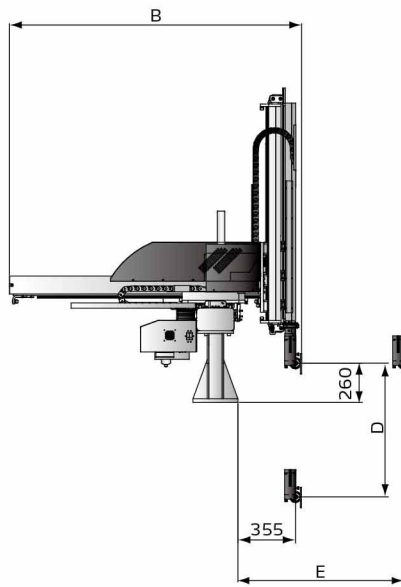
Three Axes Servo Telescopic(Stationary-beam type)



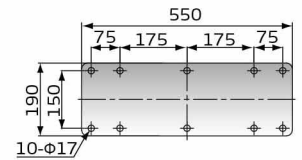
Base Flange C



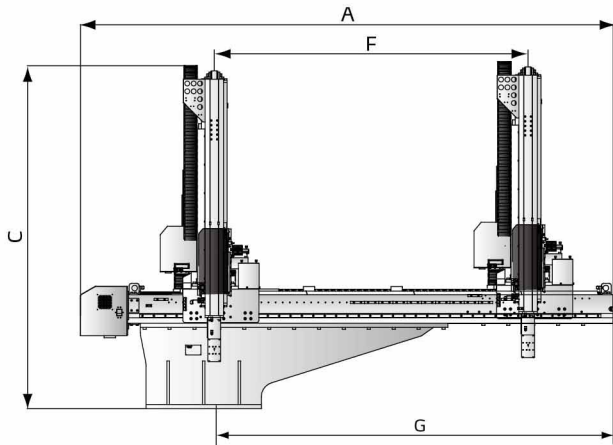
Medium Three Axes Servo Telescopic (Movable-beam type)



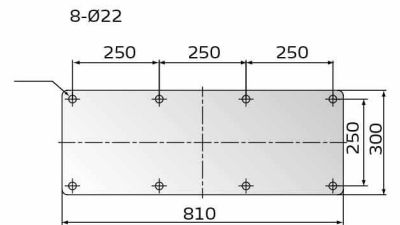
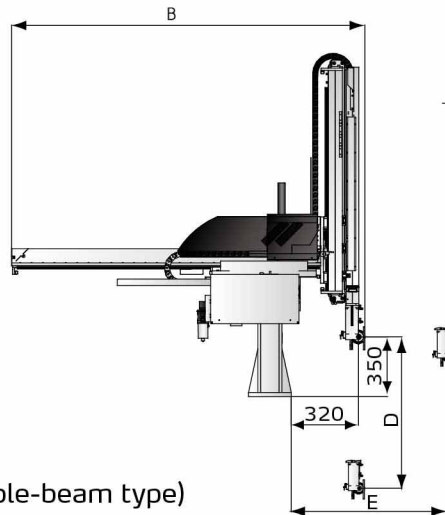
Base Flange B



Base Flange D



Large Three Axes Servo Telescopic (Movable-beam type)



Base Flange

# ST3-S Series

## Specifications

Model(ST3)	700-1200-S2	700-1400-S2	900-1600T-S2	1100-1800T-S2	950-1400HT-S2	1100-1600HT-S2	
IMM (ton)	50-80	80-160	220-260	320-400	160-220	220-260	
Traverse Stroke (mm)	1200	1400	1600	1800	1400	1600	
Crosswise Stroke (mm)	470	470	525	680	560	680	
Vertical Stroke (mm)	700	700(800)	900(1000)	1100(1200)	950	1100	
Max Load (with tool) (kg)	3	3	5	5	3	3	
Min Pick-out Time (sec)	1.3	1.3	1.3	1.5	1	1.2	
Min Cycle Time (sec)	5.2	5.2	5.5	6.2	3.9	4.2	
Air Pressure (bar)	4~6	4~6	4~6	4~6	4~6	4~6	
Max. Air Consumption (Nl/cycle)*	4	4	4	4	4	4	
Weight (kg)	240	240	270	320	340	340	
Base Type	Base C	Base C	Base C	Base D	Base C	Base C	
Dimensions (mm)	A	2270	2600	2880	3040	2640	2840
	B	1200	1350	1465	1530	1410	1530
	C	1540	1460(1560)	1330(1380)	1455(1510)	1400	1455
	D	700	700(800)	900(1000)	1100(1200)	950	1100
	E	610	610	720	950	830	950
	F	1200	1400	1600	1800	1400	1600
	G	155	155	155	190	190	190
	H	110	120	50	65	65	65
	I	1580	1820	2020	2150	1750	1950

- Notes: 1) "M" stands for middle mold detector. (suitable for three-plate mold.)  
 "EM12" stands for EUROMAP 12 communication interface.  
 "EM67" stands for EUROMAP 12 communication interface.  
 "ABS" at the end of the model code stands for models of high precision.  
 "N" stands for non-operation side, operation side without "N"
- 2) Power supply: 1Φ, 200~240V, 50/60Hz.
- 3) " \* " Max. air consumption for vacuum device 60Nl/min.



Model(ST3)	1400-2000MT-S	1600-2200MT-S	1800-2400MT-S	2000-2800MT-S	2200-3000LT-S	2600-4000LT-S	3000-4000LT-S	
IMM (ton)	450-600	700-850	850-1400	1400-1800	1800~2400	2400-3000	3000-3600	
Traverse Stroke (mm)	2000	2200	2400	2800	3000	4000	4000	
Crosswise Stroke (mm)	900	1000	1200	1200	1500	1660	1820	
Vertical Stroke (mm)	1400	1600	1800	2000	2200	2600	3000	
Max Load (with tool) (kg)	10	20	20	20	40	40	40	
Min Pick-out Time (sec)	3	3.3	3.6	3.8	4.2	4.5	5.0	
Min Cycle Time (sec)	13	14	16	17.5	24	26	28	
Air Pressure (bar)	4~6	4~6	4~6	4~6	4~6	4~6	4~6	
Max. Air Consumption (NI/cycle)*	6	6	6	6	8	8	8	
Weight (kg)	530	580	650	690	990	1010	1080	
尺寸規格 (mm)	A	3160	3460	3660	3860	4500	5500	5500
	B	1717	2000	2200	2200	2650	2820	2980
	C	1890	2100	2200	2300	2600	2800	3000
	D	1400	1600	1800	2000	2200	2600	3000
	E	1255	1355	1555	1555	1900	2050	2250
	F	2000	2200	2400	2800	3000	4000	4000
	G	355	355	355	355	320	320	320
	H	260	260	260	260	350	350	350
	I	2450	2650	2850	3250	3500	4500	4500

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## Shini Group

Addr: No. 23, Minhe St., Shulin Dist.,  
New Taipei, Taiwan

Tel: +886 2 2680 9119

Fax: +886 2 2680 9229

Email: [shini@shini.com](mailto:shini@shini.com)

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