

1 All-Axis Servo Driven Type Take-Out Robot

FRA-1530S/D/DS

Separate catalog available

FRA-1530S/D/DS

IoT technique contributes to high-precision take-out and improved productivity
Latest technology helps solve problems at the production site

All-Axis Servo Driven Type

Single-Axis Servo Driven Type

Swing Type

Side Entry Type

For Vertical Molding Machine

Stock System

Product Series Guide [P11]



For CE supported languages. Please contact our sales department.

PAT. PAT.P

Clamping force 150 - 300 tf

High end

High precision (Advanced vibration control)

Optimized design + Power-saving

Low posture (Double speed mechanism)

All-axis servo-driven

Remote monitoring



JSME Medal for New Technology



The JMF's Energy-Efficient Machinery Award



MACHINE DESIGN AWARD



reddot award 2019 winner

Active Vibration Control

The FRA senses its own vibrations and eliminates them automatically. Equipped with the world's most advanced vibration control technology that enables a variety of operations with speed and accuracy such as insert molding, which demand repeatability.

IoT system "INTU LINE"

INTU LINE displays production counts, uptime ratio, operation status, cycle times, error counts, stoppage log, and production floor photos. When trouble occurs, the FRA's IoT system shares your robot's error data with Yushin to help service personnel diagnose the problem.

New controller "E-touch V"

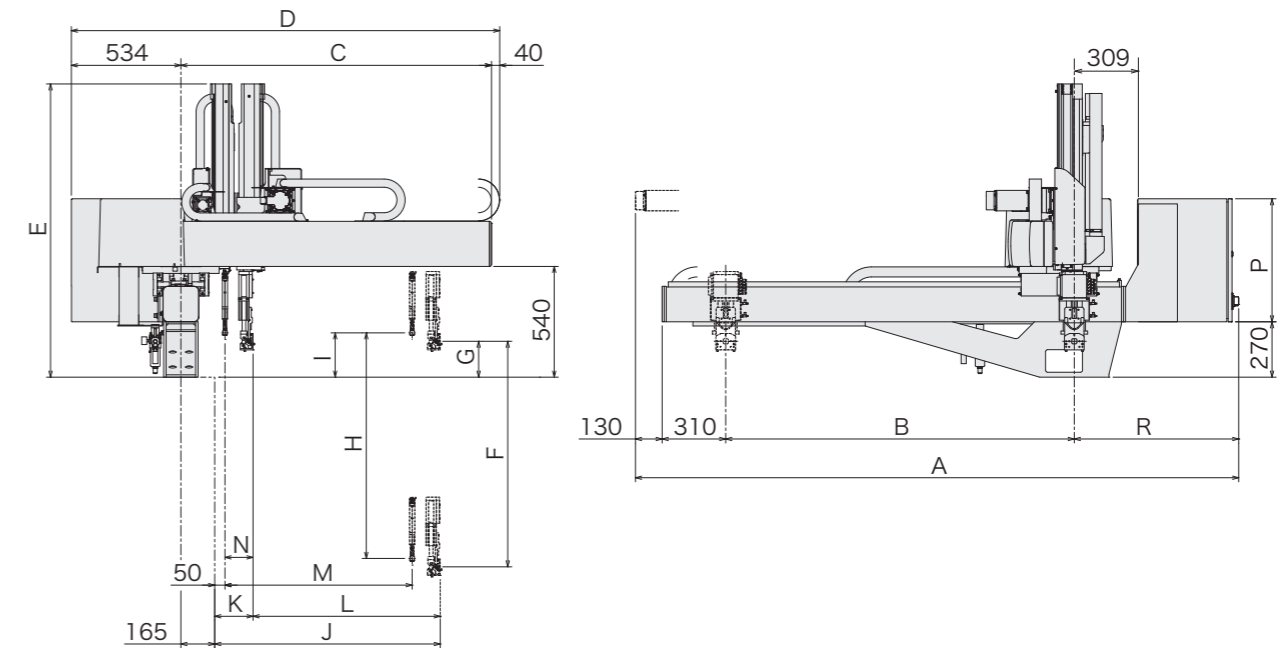
The E-touch V is designed with ergonomics in mind and is presented in a vertical, dual screen format with main and sub screens, allowing the use of smart-phone-like touch controls.

Standard Specifications

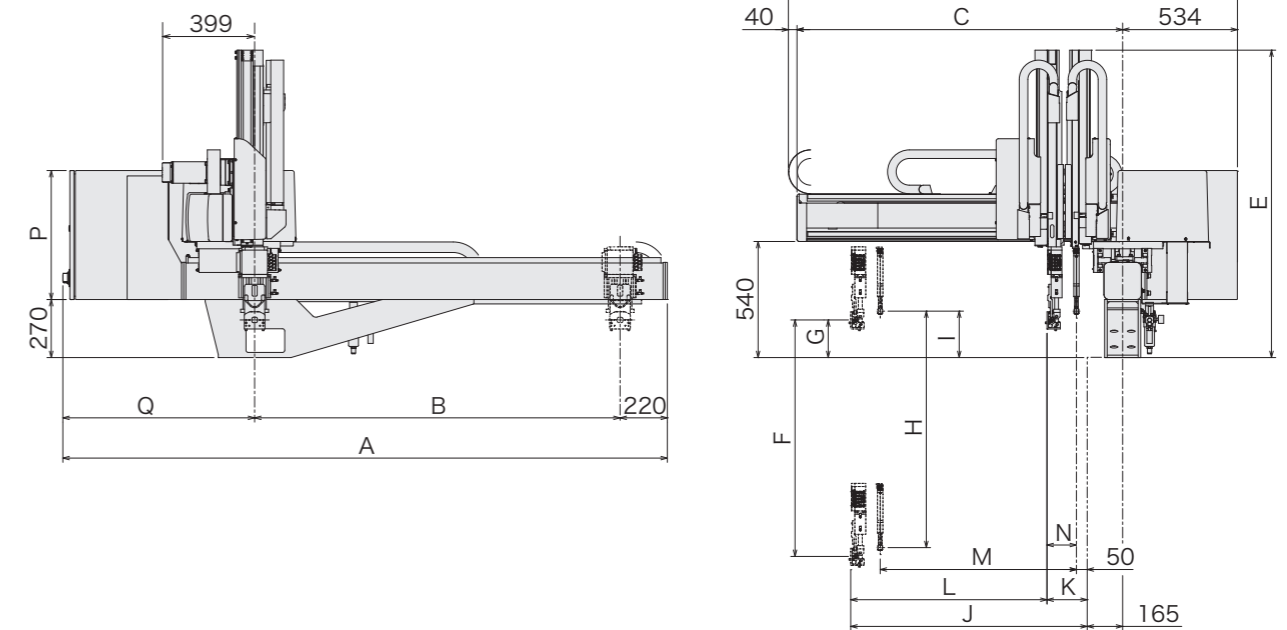
Power supply	Drive method	Controller model	Working air pressure	Flip angle					
200/220/230 VAC (50/60 Hz) 3 phase	Digital servo motor 3/5-axis	E-touch V	0.49MPa	90°					
Model	Power consumption	Traverse stroke (mm)	Kick stroke (mm)		Vertical stroke (mm)		Air consumption (NL/cycle)	Payload (kg)	Target IMM clamp capacity (tf)
			Main arm	Sub arm	Main arm	Sub arm			
FRA-1530S	2.3 kVA 200 VAC 6.5 A	(1100) 1500 (1700) (1900) (2200) (2500)	728	—	850 (1100) (1300) (1550)	—	5.9 (ECO Vacuum OFF)	5 <11>	150-300
FRA-1530D		668	668	850 (1100) (1300) (1550)	—	1.9 (ECO Vacuum ON)			

S type : Robot is equipped with main arm only. D type : Robot is equipped with main arm and sub arm.
() : Modified stroke < > : Increased maximum payload
Payload includes the end-of-arm tool.

Rear (Non-operator) Side Discharge Direction (mm)



Operator Side Discharge Direction (mm)



(mm)

Model	A(Rear Side)		B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	
	C2 type	C1 type																	
FRA-1530S	(2342) 2742 (2942)	(2310) 2710 (2910)	(1100) 1500 (1700)			1254 (1430)	850 (1100)		—	—		122	728	—	—	C2 type	600	892	802
FRA-1530D	(3142) (3442) (3742)	(3110) (3410) (3710)	(1900) (2200) (2500)	1265	1839	(1534) (1662)	(1300) (1550)	293	850 (1100) (1300) (1550)	335	850	182	668	668	132	C1 type	500	860	770

A(Operator Side)

C2 type	C1 type
(2212)	(2180)
(2612)	(2580)
(2812)	(2780)
(3012)	(2980)
(3312)	(3280)
(3612)	(3580)

() : Modified stroke
< > : With increased wrist flip torque
| | : With horizontal wrist rotation unit
< > : With centralized automatic (manual) lubrication system

K	L	M	N
<122>	<728>	—	—
{185}	{665}	—	—
<122>	<728>	—	—
<182>	<668>	<668>	<132>
{245}	{605}	{605}	{195}
<215>	<635>	<635>	<165>

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