All-Axis Servo Driven Type
Swing Type
Side Entry Type
For Vertical Molding Machine
Stock System
Product Series Guide P11

FRA-1530S/D/DS

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

CE
For CE supported languages, please contact our sales department.

PAT.

JSME Medal for New Technology
The JMF's Energy-Efficient Machinery Award
MACHINE DESIGN AWARD
reddot award 2019 winner

- Clamping force 150 - 300 tf
- High precision (Advanced vibration control)
- Optimized design + Power-saving
- LOW Low posture (Double speed mechanism)
- All-axis servo-driven
- Remote monitoring

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

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 smartphone-like touch controls.

Standard Specifications

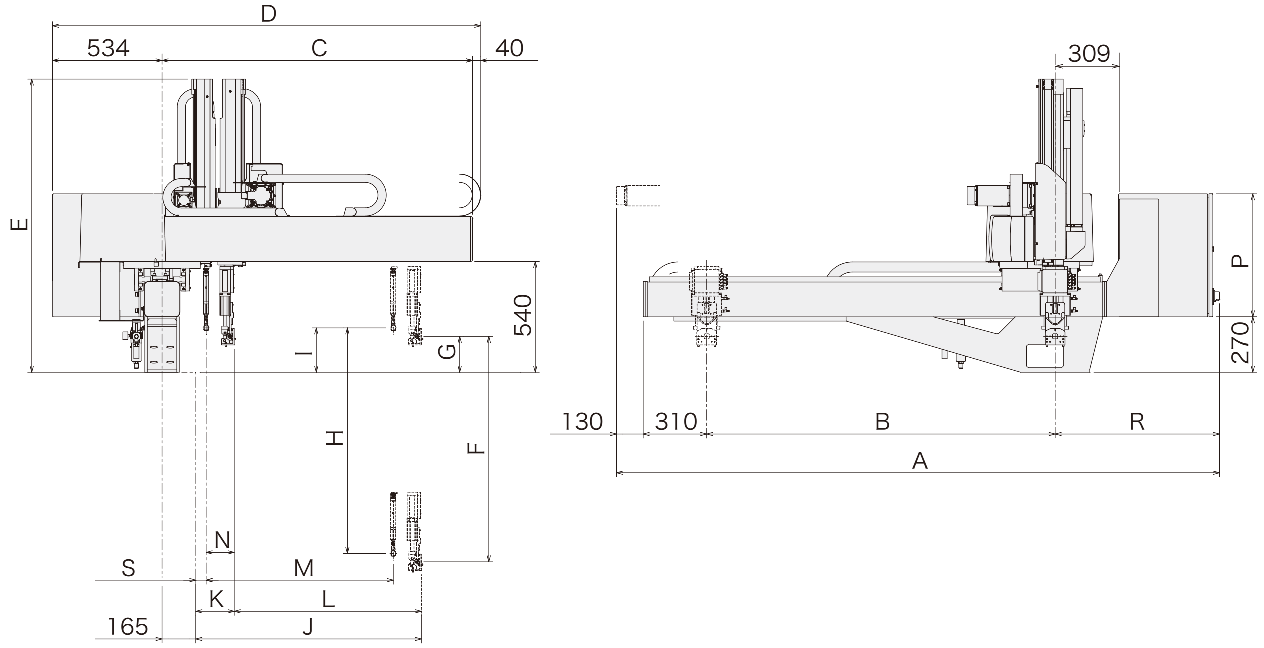
Power supply	Drive method	Controller model	Working air pressure	Flip angle
3-phase 200 VAC/220 VAC/230 VAC (50/60 Hz)	Digital servo motor 3/5-axis	E-touch V	0.49 MPa	90°

Model	Power consumption	Traverse stroke [mm]	Kick stroke [mm] Main arm	Kick stroke [mm] Sub arm	Vertical stroke [mm] Main arm	Vertical stroke [mm] Sub arm	Air consumption [NL/cycle]	Payload [kg]	Noise [dBA]	Target IMM clamp capacity [tf]
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 1.9 ECO Vacuum ON	5 ⟨11⟩	72.7	150-300
FRA-1530D			668	668		850 (1100) (1300) (1550)				
FRA-1530DS	3.8 kVA 200 VAC 10.8 A		544	544			11.6 ECO Vacuum OFF 3.6 ECO Vacuum ON			

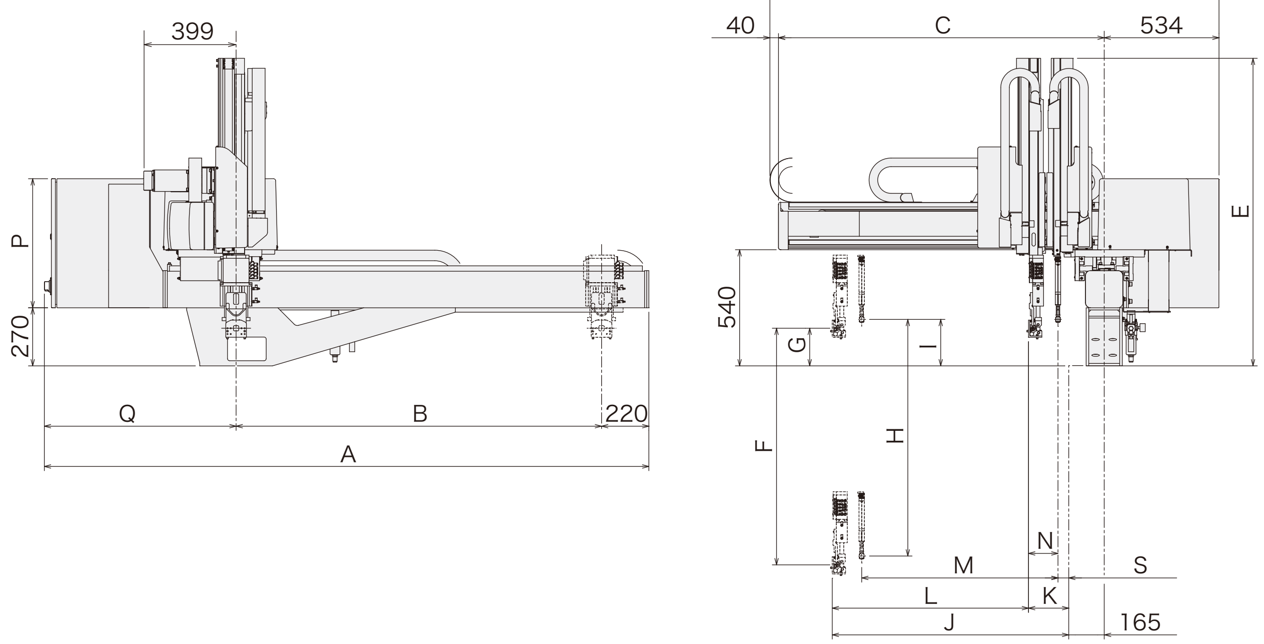
S type : Robot is equipped with main arm only. D type : Robot is equipped with main arm and sub arm. DS type : Robot is equipped with two main arms.
( ) : Modified stroke ⟨ ⟩ : Increased maximum payload
Payload includes the end-of-arm tool.
Traverse beam stanchion is standard equipment for traverse stroke over 1900 mm.

Separate catalog available

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



Operator Side Discharge Direction [mm]



[mm]

Model	A[Rear Side] C2 type	A[Rear Side] C1 type	B	C	D	E	F	G	H	I	J	K	L	M	N	S
FRA-1530S	(2342) 2742	(2310) 2710	(1100) 1500	1265	1839	1254 (1430) (1534) (1662)	850 (1100) (1300) (1550)	293	—	—	850	122	728	—	—	50
FRA-1530D	(2942) (3142)	(2910) (3110)	(1700) (1900)						850 (1100) (1300) (1550)	335		182	668	668	132	
FRA-1530DS	(3442) (3742)	(3410) (3710)	(2200) (2500)							293		306	544	544	178	128

	P	Q	R
C2 type	600	892	802
C1 type	500	860	770

A[Operator Side] C2 type	A[Operator Side] C1 type
(2212) 2612 (2812) (3012) (3312) (3612)	(2180) 2580 (2780) (2980) (3280) (3580)

( ) : Modified stroke
⟨ ⟩ : With increased wrist flip torque
{ } : With horizontal wrist rotation unit
《 》 : With centralized automatic (manual) lubrication system

G
⟨175⟩ {175}

I
⟨175⟩ {175}

K	L	M	N
⟨122⟩ {185} 《122》	⟨728⟩ {665} 《728》	—	—
⟨182⟩ {245} 《215》	⟨668⟩ {605} 《635》	⟨668⟩ {605} 《635》	⟨132⟩ {195} 《165》
⟨306⟩ {417} 《338》	⟨554⟩ {434} 《512》	⟨554⟩ {434} 《512》	⟨178⟩ {289} 《210》

FRA-1530S/D/DS
All-Axis Servo Driven Type Take-Out Robot