

1 All-Axis Servo Driven Type Take-Out Robot

FRA-3060S/D/DS

Separate catalog available

FRA-3060S/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

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.

Clamping force 300 - 600 tf

High precision (Advanced vibration control)

Optimized design + Power-saving

Low posture (Double speed mechanism)

All-axis servo-driven

Remote monitoring



All-Axis Servo Driven Type

Swing Type

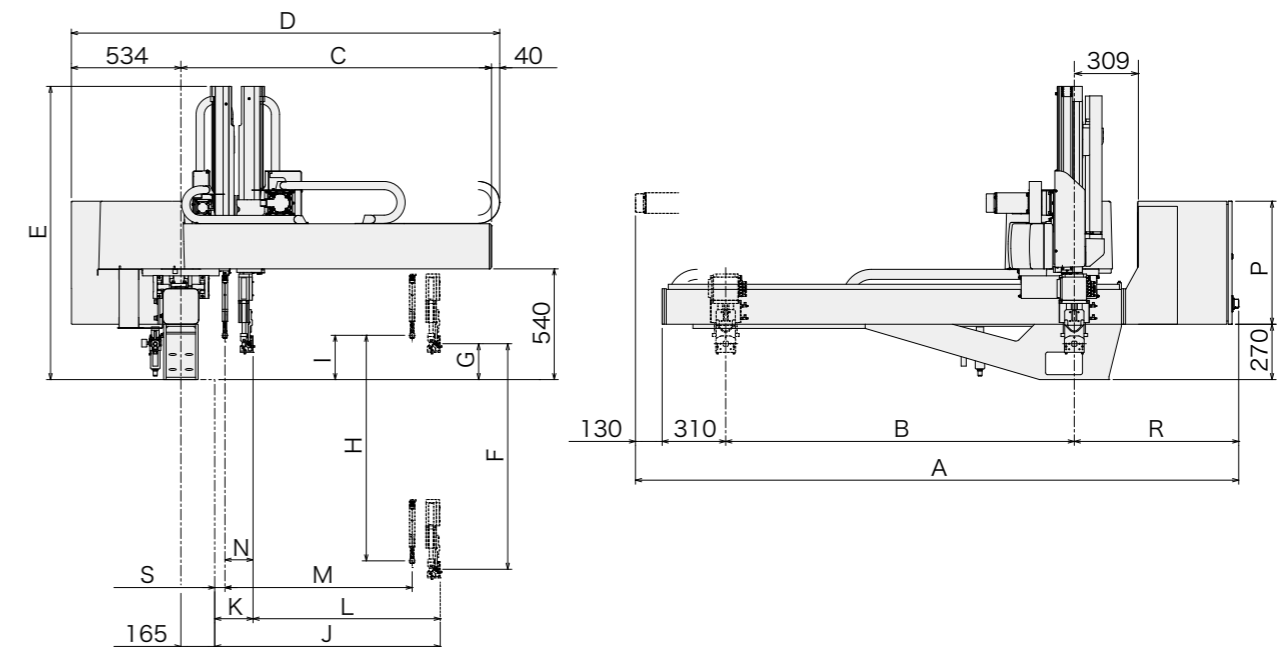
Side Entry Type

For Vertical Molding Machine

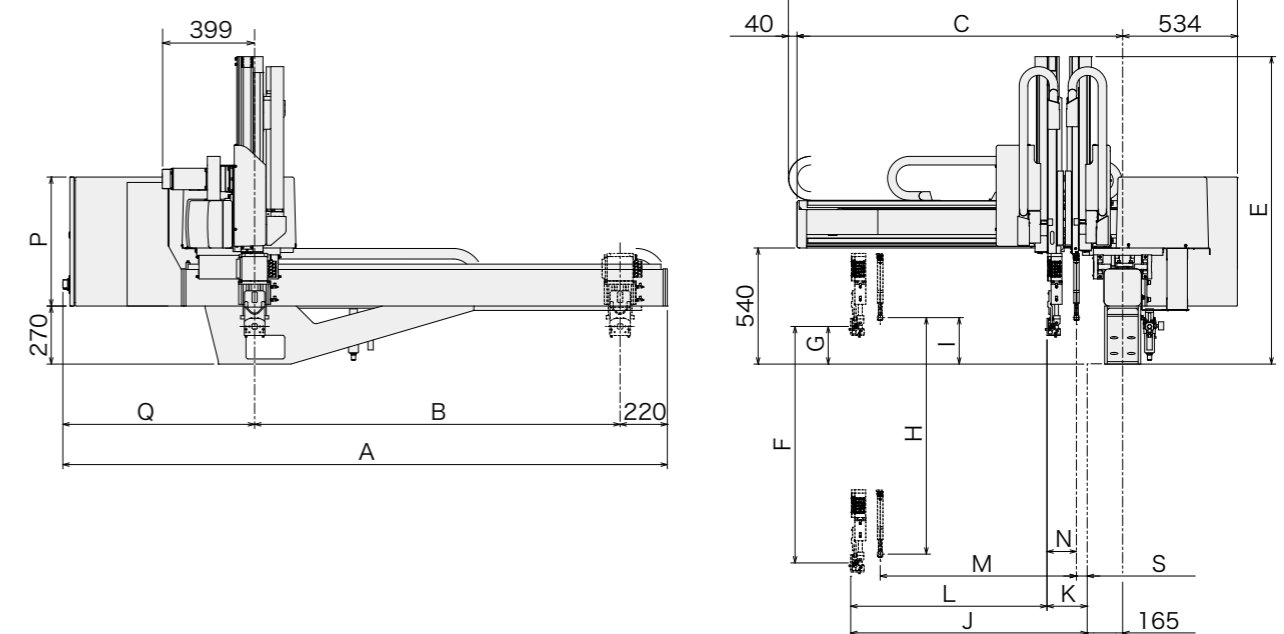
Stock System

Product Series Guide [P11]

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



■ Operator Side Discharge Direction [mm]



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 smartphone-like touch controls.

■ Standard Specifications

Power supply		Drive method		Controller model		Working air pressure		Flip angle		
3 phase AC200/220/230 V (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]		Vertical stroke [mm]		Air consumption [NL/cycle]	Payload [kg]	Noise [dBA]	Target IMM clamp capacity [tf]
			Main arm	Sub arm	Main arm	Sub arm				
FRA-3060S	2.3 kVA AC200 V 6.5 A	1700 (1900) (2200) (2500)	973	—	1100 (1300) (1550) (1800: Release side only)	—	8.3 ECO Vacuum OFF 3.1 ECO Vacuum ON	10 (13)	73.7	300-600
FRA-3060D			913	913	1100 (1300) (1550) (1800: Release side only)	—				
FRA-3060DS			794	794	1100 (1300) (1550) (1800: Release side only)	—				

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.

[mm]

Model	A[Rear Side]		B	C	D	E	F	G	H	I	J	K	L	M	N	S	P	Q	R
	C2 type	C1 type																	
FRA-3060S	2942 (3142)	2910 (3110)	1700 (1900)	1515	2089	1430 (1534) (1662) (1782)	1100 (1300) (1550) (1800: Release side only)	175	—	—	—	127	973	—	—	50	—	—	—
FRA-3060D	(3442)	(3410)	(2200)						1100 (1300) (1550) (1800: Release side only)	216	1100	187	913	913	137				
FRA-3060DS	(3742)	(3710)	(2500)						175	175		306	794	794	178	128			

A[Operator Side]		G	I	K	L	M	N
C2 type	C1 type						
2812 (3012) (3312) (3612)	2780 (2980) (3280) (3580)	<169> (149)	<169> (149)	<127> (185) (127)	<973> (915) (973)	—	—
		<187> (245) (215) (306)	<913> (855) (885) (794)	<913> (855) (885) (794)	<137> (195) (165) (178)	<137> (195) (165) (178)	<137> (195) (165) (178)

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

FRA-3060S/D/DS

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