

# 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

Single-Axis Servo Driven Type

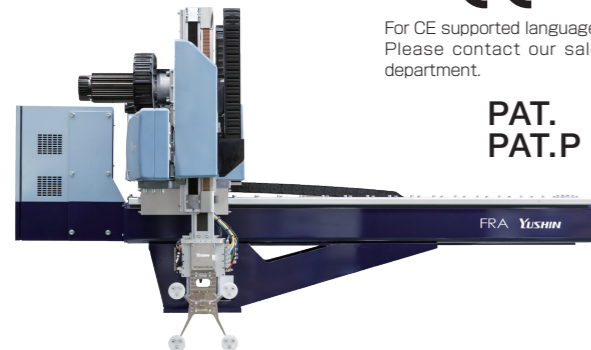
Swing Type

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 300 - 600 tf

High end 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

Single-Axis Servo Driven Type

Swing Type

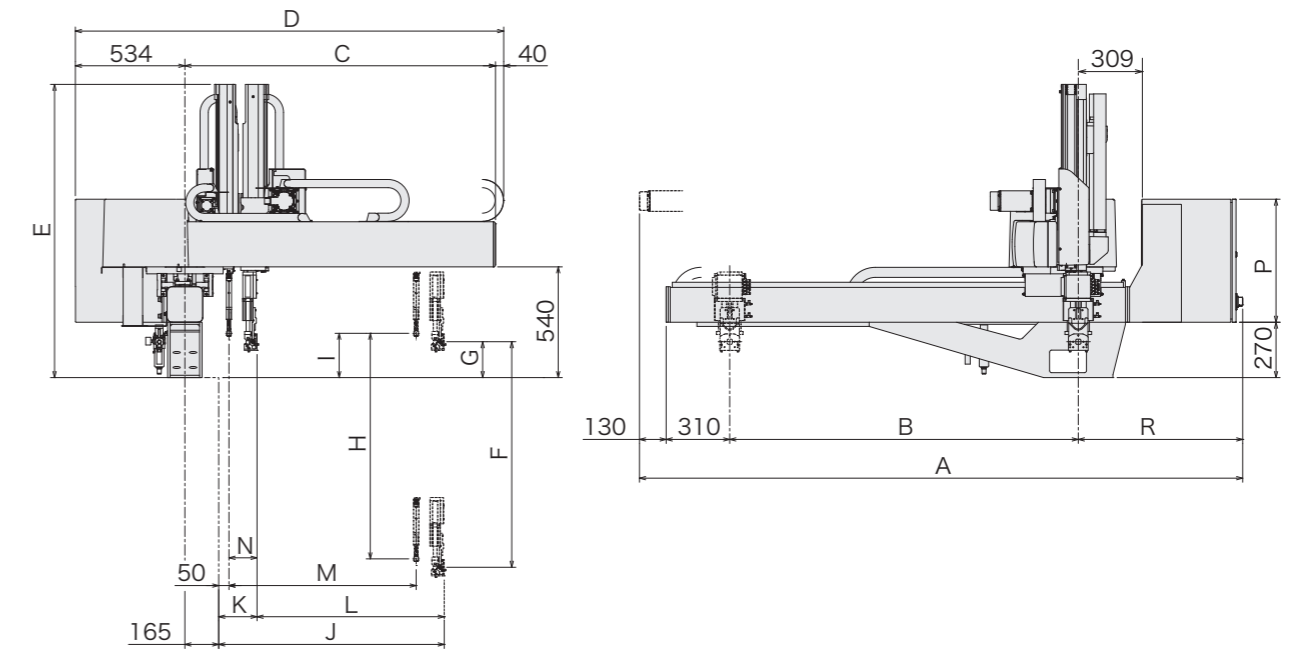
Side Entry Type

For Vertical Molding Machine

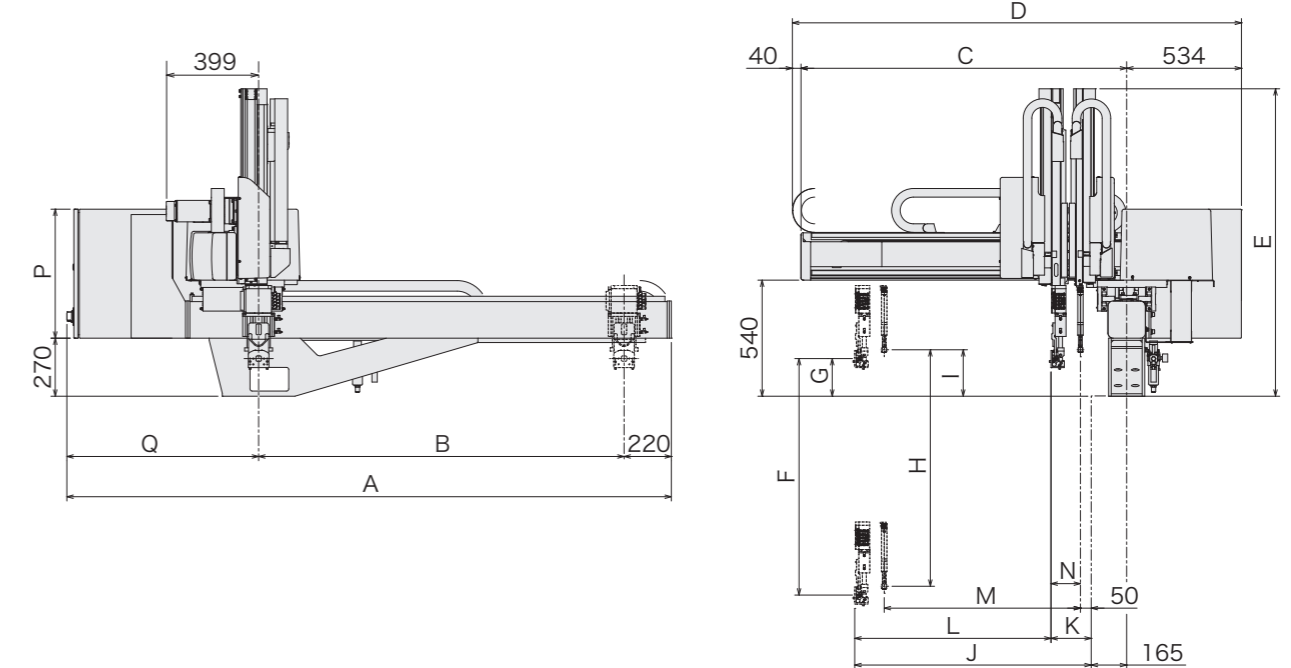
Stock System

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 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-3060S	2.3 kVA 200 VAC 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>	300-600
FRA-3060D			913	913	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.  
( ) : 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	P	Q	R	
	C2 type	C1 type																	
FRA-3060S	2942 (3142) (3442)	2910 (3110) (3410)	1700 (1900) (2200)	1515	2089	1430 (1534) (1662) (1782)	1100 (1300) (1550) (1800: Release side only)	175	—	—	1100	127	973	—	—	C2 type	600	892	802
FRA-3060D	2812 (3012) (3312) (3612)	2780 (2980) (3280) (3580)	1700 (1900) (2200) (2500)	1515	2089	1430 (1534) (1662) (1782)	1100 (1300) (1550) (1800: Release side only)	175	1100	216	1100	187	913	913	137	C1 type	500	860	770

A (Operator Side)		G	K	L	M	N
C2 type	C1 type					
2812 (3012) (3312) (3612)	2780 (2980) (3280) (3580)	175	127 (185) (127)	973 (915) (973)	—	—
		1100 (168.5) (148.5)	187 (187)	913 (855) (215)	913 (885)	137 (195) (165)

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

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