

General Specification

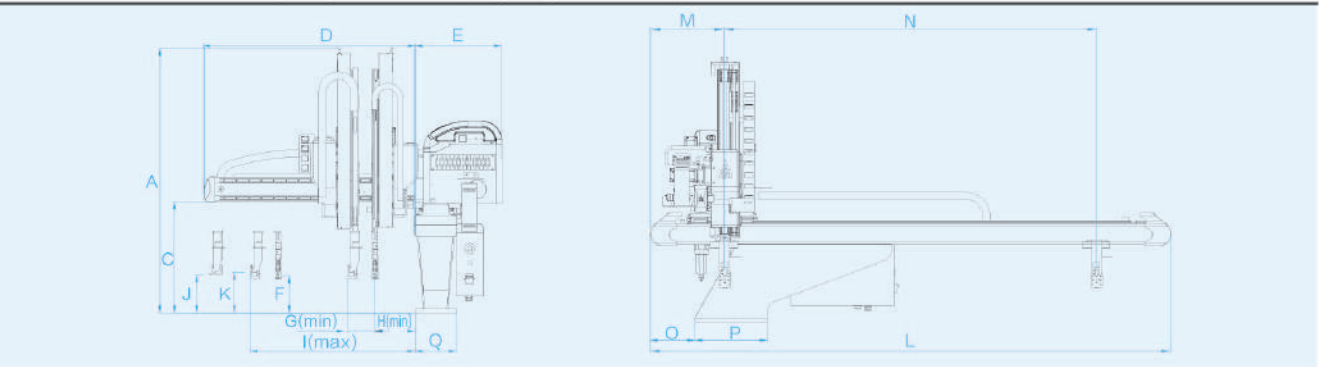
Power Source	Working Pressure	Max.Allowed Pressure	Drive System	Swivel
1 Φ AC220V ± 20V 50/60HZ	5Kgf/cm² 0.49Mpa	8Kgf/cm² 0.8Mpa	S5–AC Servo Motor S3–AC Servo Motor	90° Fixed Pneumatic

/ Main Specification

Model	R700I(W)S-S3	R700I(W)D-S5	R900I(W)S-S3	R900I(W)D-S5
Power Capacity (KVA)	1.5	2.4	1.5	2.4
Recommended I.M.M. (ton)	50–200	50–200	200–350	200–350
Traverse Stroke (mm)	1500	1500	1500	1500
Crosswise Stroke (mm)	P:540(510)	P:360(290) R:360(290)	P:720(690)	P:540(470) R:540(470)
Vertical Stroke (mm)	700	700	900	900
Max.Loading (Kg)	3	3	5	5
Dry Take Out Time (sec)	1.2	1.2	1.6	1.6
Dry Cycle Time (sec)	4.7	4.7	5.7	5.7
Air Consumption (NI/cycle)	4	4	4	4
Net Weight (Kg)	210–230	230–250	250–270	280–300

- * All statements here subject to change without advance notice.
- * Dry cycle time is tested by robot stay on waiting position for 2s.
- * Repeat precision for R700–900 ±0.1mm.

/ R700–900I(W)S–S3/I(W)D–S5



Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
R700IS-S3	1540	/	540	850	420	/	/	/	660	195	210	2230(2530)	360	1500(1800)	220	350	200
R700ID-S5	1540	/	540	850	420	225	150	150	660	195	210	2230(2530)	360	1500(1800)	220	350	200
R900IS-S3	1720	/	540	1030	420	/	/	/	840	195	210	2230(2530)	360	1500(1800)	220	350	200
R900ID-S5	1720	/	540	1030	420	225	150	150	840	195	210	2230(2530)	360	1500(1800)	220	350	200
R700WS-S3	1260	/	540	850	420	/	/	/	620	185	200	2230(2530)	360	1500(1800)	220	350	200
R700WD-S5	1260	/	540	850	420	195	135	195	620	185	200	2230(2530)	360	1500(1800)	220	350	200
R900WS-S3	1320	/	540	1030	420	/	/	/	800	185	200	2230(2530)	360	1500(1800)	220	350	200
R900WD-S5	1320	/	540	1030	420	195	135	195	800	185	200	2230(2530)	360	1500(1800)	220	350	200

All statements here subject to change without advance notice.

50–800 T

Recommended I.M.M.

3–10kg

Loading

± 0.1 mm

Repeat Precision

1.2 sec

Min. take out time

4.7sec

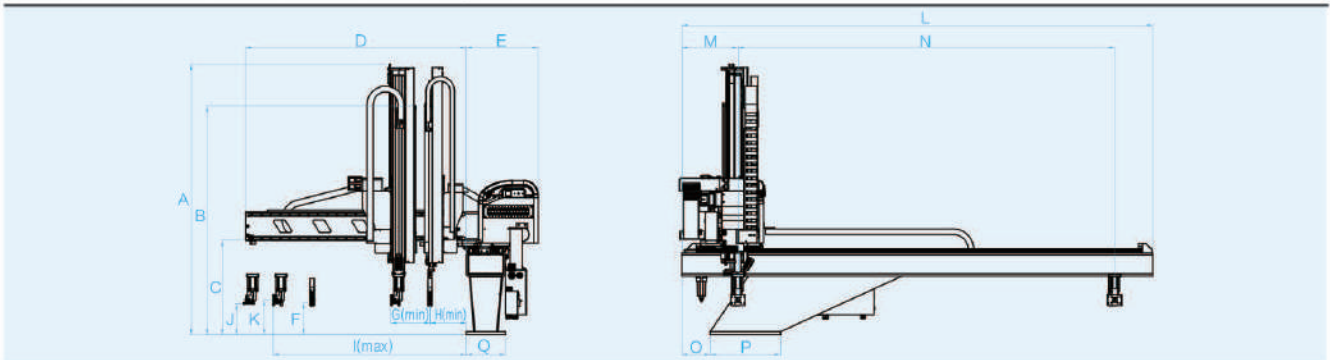
Min. dry cycle time

/ Main Specification

Model	R1100WS-S3	R1100WD-S5	R1300WS-S3	R1300WD-S5	R1500WS-S3	R1500WD-S5
Power Capacity (KVA)	2.3	3.2	2.3	3.2	2.3	3.2
Recommended I.M.M. (ton)	300–450	300–450	450–550	450–550	550–800	550–800
Traverse Stroke (mm)	1800	1800	2000	2000	2400	2400
Crosswise Stroke (mm)	S3: P:800	S5:P:600 R:600	P:800	P:600 R:600	P:1000	P:750 R:750
Vertical Stroke (mm)	1100	1100	1300	1300	1500	1500
Max.Loading (Kg)	10	10	10	10	10	10
Dry Take Out Time (sec)	1.8	2.3	2.2	2.7	2.3	3.3
Dry Cycle Time (sec)	7.5	7.5	7.8	7.8	14	14
Air Consumption (NI/cycle)	13	13	13	13	13	13
Net Weight (Kg)	380–430	380–430	400–450	400–450	480–540	480–540

- * All statements here subject to change without advance notice.
- * Dry cycle time is tested by robot stay on waiting position for 2s.
- * Repeat precision for R1100–1500 ±0.2mm.

/ R1100–1500WS–S3/WD–S5



Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
R1100WS-S3	1570	1280	600	1227	460	/	/	/	1055	200	220	2440	360	1800	180	450	250
R1100WD-S5	1570	1280	600	1227	460	200	223	232	1055	200	220	2440	360	1800	180	450	250
R1300WS-S3	1690	1400	600	1227	460	/	/	/	1055	200	220	2600	360	2000	180	450	250
R1300WD-S5	1690	1400	600	1227	460	200	223	232	1055	200	220	2600	360	2000	180	450	250
R1500WS-S3	1750	1470	600	1407	460	/	/	/	1235	200	220	3080	360	2400	180	450	250
R1500WD-S5	1750	1470	600	1407	460	200	253	232	1235	200	220	3080	360	2400	180	450	250

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20241011-Redstone Series



ISO-9001

Keep running, Keep Innovating

Awarded with number of patents, ALFA is the optimal choice for injection molding enterprises



Easy operation



Fast speed



Long lifetime



Low noise

3 axis/ 5 axis Servo Motor System Function

Item	Description	LB system	High-configure System
Pendant	Display screen size	7.0 inch	7.0 inch
	Touch panel	⊙	⊙
	Controller USB	⊙	⊙
	Manual operation safety switch	⊙	⊙
Storage Capacity	Number of mould data sets	100	100
Data Transmission Function	To use USB to copy same mold data from same model robot to another one to operate.	⊙	⊙
	Teach program	⊙	⊙
Operation Mode	Fixed mode	※	⊙
	Interpolation	⊙	⊙
Program Function	Linear interpolation, Circular interpolation, Simultaneous movement	⊙	⊙
	Loops, Jump, Stack, Compare, Judgement, Arithmetic calculation	⊙	⊙
Stacking Function	Waiting position in side the mold, Single step operating	⊙	⊙
	Standard stacking program	⊙	⊙
Record Function	Non-standard stacking program	⊙	⊙
	Operation record	⊙	⊙
QC Function	Alarm record	⊙	⊙
	I/O record	⊙	⊙
Safety Protective Motion	Sampling, Exclude the first few products, Remove rejected part, Production statistics	⊙	⊙
	It will alarm while position setting is out of range, and the setting is not be stored.	⊙	⊙
User	When triggering the hardware limit signal, it will stop and alarm.	⊙	⊙
	Multiple users management	⊙	⊙
Spare I/O port	Standard spare Input/ Output	15/15	10/14
EOAT Circuit	Standard circuit: 2 vacuum, 2 grip	⊙	⊙
	Option – Max. extending circuit	8 vacuum / 8 grip circuits	8 vacuum / 8 grip circuits
IMM Interface	Option – EUROMAP 12 or 67	⊙	⊙
Application	Insert, In-mold labeling (IML) etc.	⊙	⊙

⊙ standard function ※ without this function

R□□□ID / IS / WD / WS / S3 / S5
Model: 700/900/1100/1300/1500
W: Telescopic stage I: Single stage
D: Double arms(Product arm+runner arm)
S:Single arm(product arm)
S3: Three-axis servo (Traverse-Y
±/Vertical-Z±/Crosswise-X±)
S5: Five-axis servo (Traverse-Y
±/Vertical-Z±/Crosswise-X
±/A axis/B axis/C axis as optional)



Swivel structure
Coordinate with moving platen or fixed platen to realize take-out. Fixed swivel angle is 90 degrees.

Product characteristics

The main structure of the robot

The main structure of the robot, vertical arm is using high rigidity linear slide rail and aluminum alloy structure beam. It can meet the requirements of fast speed, less vibration, long service life, good parts interchangeability.

Optional function

Air pressure scissors

Air pressure scissors can be installed for runner cutting

Photoelectric inspection on finished products

The sensor can be installed at conveyor. Place finished product on the conveyor to avoid hitting among products.

Tricolor light

Installed with tricolor light, user can easily check robot operating state from distance to workshop management. It can also distinguish the condition of the robots in auto, manual or failure status.

A&C axis servo driven

The end of arm rotary mechanism can be driven by AC servo motor with multiple angle and gestures.

Middle plate inspection

Position of the middle plate should be checked after mould opened end position to avoid runner arm from hitting middle-platen.

Lubrication function

Manual central lubrication or auto lubrication can be equipped. For auto lubrication, when robot running times achieve setting value, it will lubricate automatically.

Quick EOAT changing

To realize the quick separation of the EOAT and the robot. It's simple and can save EOAT changing time.