General Specification

Power Source	Working Pressure	Max.Allowed Pressure	Drive System	Swivel
1 Φ AC220V ± 10V 50 / 60 HZ	5Kgf / cm^2 0.49Mpa	8Kgf / cm^2 0.8Mpa	AC Servo Motor AC Servo Motor	90 ° Fixed Pneumatic

Main Specification

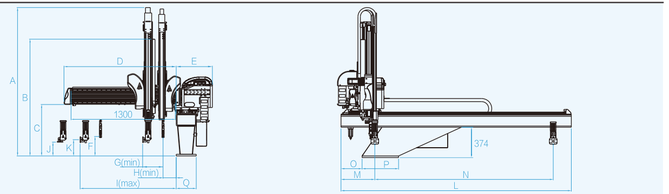
Model	R700I(W)S-S3	R700I(W)D-S5	R900I(W)S-S3	R900I(W)D-S5
Power Capacity （ KVA ）	1.5	2.4	1.5	2.4
Recommended I.M.M. （ ton ）	50-200	50-200	200-350	200-350
Traverse Stroke （ mm ）	1500	1500	1500	1500
Crosswise Stroke （ mm ）	P: 520/510	P: 360/290 R: 360/290	P:700/670	P:540/470 R: 540/470
Vertical Stroke （ 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 （ Nl/cycle）	4	4	4	4
Net Weight （ Kg）	210-230	210-230	250-300	250-300

Model	R1100WS-S3	R1100WD-S5	R1400WS-S3	R1400WD-S5
Power Capacity （ KVA ）	2.3	3.2	2.3	3.2
Recommended I.M.M. （ ton ）	300-450	300-450	550-800	550-800
Traverse Stroke （ mm ）	1800	1800	2000	2000
Crosswise Stroke （ mm ）	P:800	P:600 R:600	980	P:780 R:780
Vertical Stroke （ mm ）	1100	1100	1400	1400
Max.Loading （ Kg ）	12	12	12	12
Dry Take Out Time （ sec ）	1.8	1.8	2.2	2.2
Dry Cycle Time （ sec ）	6.5	6.5	8.1	8.1
Air Consumption （ Nl/cycle）	9	9	11	11
Net Weight （ Kg）	440	460	450	480

* All statements here subject to change without advance notice.
* Dry cycle time is tested by robot stay on waiting position for 2s.
* repeat precision is ±0.1mm，R1100-1400 is ± 0.2mm.

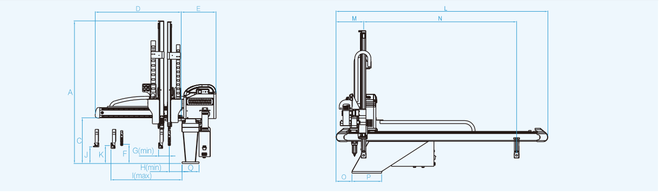
50-800 T	3-12 kg	± 0.1 mm	1.2 sec	4.5 sec
Recommended I.M.M.	Loading	Repeat Precision	Min. take out time	Dry cycle time

R1100-1400WS-S3/WD-S5



Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
R1100WS-S3 /WD-S5	1710	1350	630	1220	450	245	280	165	1020	170	200	2240	420	1800	260	450	250
R1400WS-S3 /WD-S5	1850	1460	630	1400	450	245	280	165	1200	170	200	2600	420	2000	260	450	250

R700-900IS-S3/ID-S5/WS-S3/WD-S5



Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
R700IS-S3	1540	/	530	850	420	225	130	155	660	195	200	2200	230	1500	190	350	200
R700ID-S5	1540	/	530	850	420	225	130	155	660	195	200	2200	230	1500	190	350	200
R900IS-S3	1720	/	530	1030	420	225	130	155	840	195	200	2200	230	1500	190	350	200
R900ID-S5	1720	/	530	1030	420	225	130	155	840	195	200	2200	230	1500	190	350	200
R700WS-S3	1260	/	530	850	420	195	130	195	620	170	185	2200	230	1500	190	350	200
R700WD-S5	1260	/	530	850	420	195	130	195	620	170	185	2200	230	1500	190	350	200
R900WS-S3	1320	/	530	1030	420	195	130	195	800	170	185	2200	230	1500	190	350	200
R900WD-S5	1320	/	530	1030	420	195	130	195	800	170	185	2200	230	1500	190	350	200

* All statements here subject to change without advance notice.

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202101/0-Redstone Series



REDSTONE series

Full servo Traverse beam robot

ISO-9001

Keep running, Keep Innovating

Redstone series
Full servo Traverse beam robot

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	Economical System	High-configurate System
Pendant	Display screen size	7.0 inch	7.0 inch	7.0 inch
	Touch panel	●	●	●
	Controller USB	●	●	●
	Manual operation safety switch	●	※	●
Storage Capacity	Number of mould data sets	100	100	100
Data Transmission Function	To use USB to copy same mold data from same model robot to another one to operate.	●	●	●
Operation Mode	Teach program	●	●	●
	Fixed mode	※	●	●
Interpolation	Linear interpolation, Circular interpolation, Simultaneous movement	●	●	●
Program Function	Loops, Jump, Stack, Compare, Judgement, Arithmetic calculation	●	●	●
	Waiting position in side the mold, Single step operating	●	●	●
Stacking Function	Standard stacking program	●	●	●
	Non-standard stacking program	●	●	●
Record Function	Operation record	●	●	●
	Alarm record	●	●	●
	I/O record	●	●	●
QC Function	Sampling, Exclude the first few products, Remove rejected part, Production statistics	●	●	●
Safety Protective Motion	It will alarm while position setting is out of range, and the setting is not be stored.	●	●	●
	When triggering the hardware limit signal, it will stop and alarm.	●	●	●
User	Multiple users management	●	●	●
Spare I/O port	Standard spare Input/ Output	15/15	3/2	10/14
EOAT Circuit	Standard circuit: 2 vacuum, 2 grip	●	●	●
	Option – Max. extending circuit	8 vacuum / 8 grip circuits	4 vacuum / 4 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

Product characteristics

The main structure of the robot
The main structure of the robot, crosswise and vertical arm are 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.

Special belt bypass mechanism
traverse and vertical axis using special belt bypass mechanism to prevent tooth jumping during high-speed operation, while having an excellent mute effect.





12KG AC Axis

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

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



R□□□ID / IS / WD / WS / S3 / S5
Model: 700/900/1100/1400
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)

Arm Type
Single stage/Telescopic stage

Crosswise
Alluminum side structure

Servo
3 axis/5 axis

Linear Guide
All linear guides