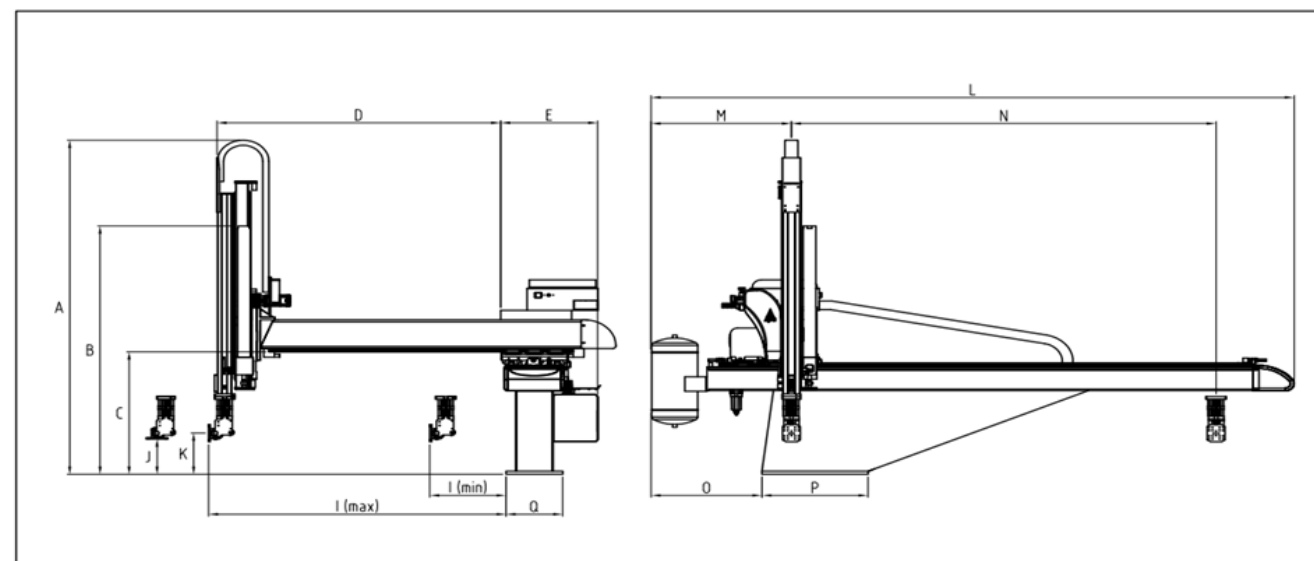


General Specification

Power Source	Working Pressure	Max. Allowed Pressure	Drive System	Swivel	Control System
1 φ AC 220V ± 10V 50/60 HZ	5Kgf/cm ² 0.49Mpa	8Kgf/cm ² 0.8Mpa	AC Servo Motor	90° Fixed Pneumatic	TRC/LNC

Main Specification

Model	TN1500WS-S3	TN1700WS-S3	TN1900WS-S3
Power Capacity(KVA)	2.7		
Recommended I.M.M.(ton)	650-1000	850-1300	1000-1600
Traverse Stroke(mm)	2400	2700	
Crosswise Stroke(mm)	1240	1320	1480
Vertical Stroke(mm)	1500	1700	1900
Max. Loading(Kg)	25		
Dry Take Out Time(sec)	2.6	2.9	3.3
Dry Cycle Time(sec)	12	14	19
Air Consumption(NL/cycle)	25	27	34
Net Weight(kg)	800	850	920



Model	A	B	C	D	E	I(max)	I(min)	J	K	L	M	N	O	P	Q
Tn1500	2320	1725		1605			1675			3640		2400			
Tn1700	2380	1825	850	1685	550	435	1755	240	280		790		630	600	320
Tn1900	2500	1895		1845			1915			3960		2700			

All statements here subject to change without advance notice.

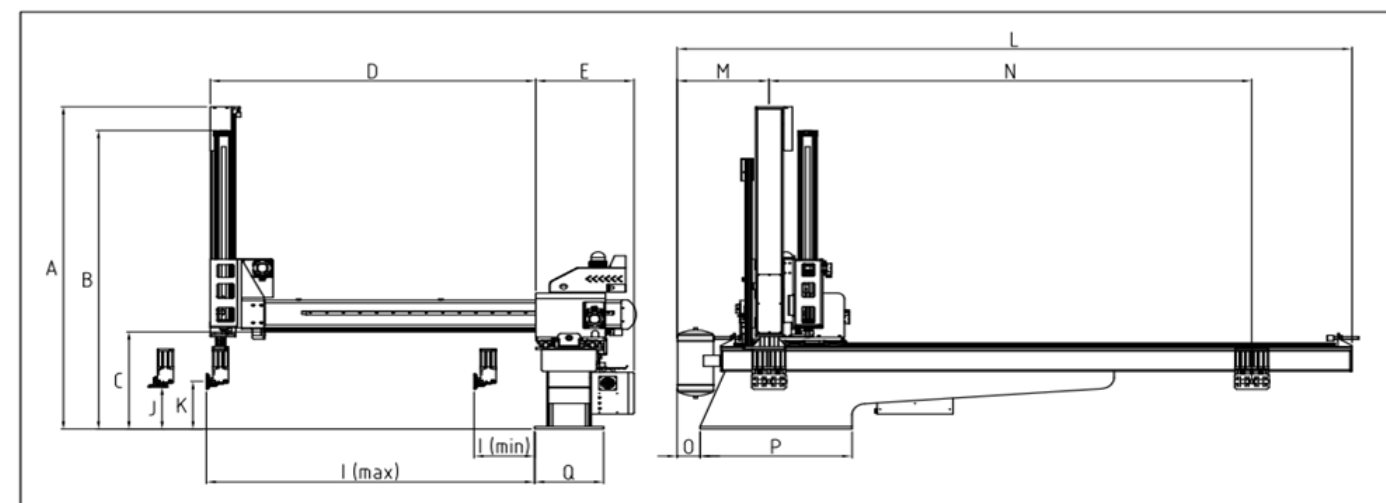
General Specification

Power Source	Working Pressure	Max. Allowed Pressure	Drive System	Swivel
3 φ AC 220V ± 10V 50/60 HZ	5 Kgf/cm ² 0.49 Mpa	8Kgf/cm ² 0.8Mpa	AC Servo Motor	90° Fixed Pneumatic

Main Specification

Model	TN2200WS-S3	TN2500WS-S3	TN3000WS-S3	TN4000WS-S3
Power Capacity(KVA)	5.4	5.4	5.4	7.2
Recommended I.M.M.(ton)	1300-2500	1600-3000	2000-3000	3000-6000
Traverse Stroke(mm)	3500	3500	4500	6000
Crosswise Stroke(mm)	1700	1950	2260	2350
Vertical Stroke(mm)	2200	2500	3000	4000
Max. Loading(Kg)	35	40	50	80
Dry Take Out Time(sec)	4	4.5	5.2	7
Dry Cycle Time(sec)	21	23	24	28
Air Consumption(NL/cycle)	63	104	120	140
Net Weight(kg)	1600	2500	2800	3500

Model denoted: **W**: Telescopic type **S**: Product arm
S3: 3Axis AC Servo Motor
PS: This series can not add runner arm

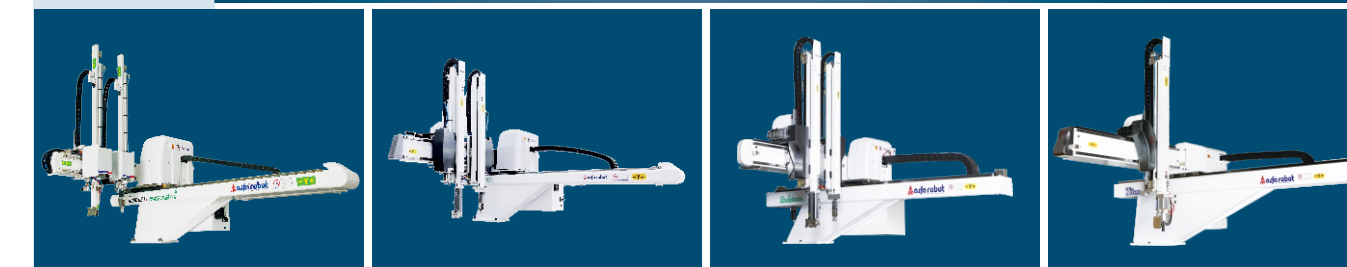


Model	A	B	C	D	E	I(max)	I(min)	J	K	L	M	N	O	P	Q
TN2200	2900	2250		2125			2125	425	340	380					
TN2500	3010	2400	885	2390	715	2390	440	380	430		4895	3500			
TN3000	3250	2700		2700		440	380	5945		680	4500		170	1100	500
TN4000	3800	3200		2790		440	-	7705			6000				

All statements here subject to change without advance notice.

CNC AC Servo Beam ROBOTS

New Titan series
Suitable for IMM under 6000T



www.alfarobot.com



New Titan series

3 axis/ 5 axis Servo Motor System Function

Item	Description	LB system	Standard LT System	High-configure LT System
Pendant	Display screen size	7.0 inch	3.5 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	※	◎	◎
	Off-line edit	◎	※	※
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	5/9
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

CNC AC Servo Beam ROBOTS

New Titan series is applicable to all types of horizontal injection machine arrange from 650T to 6000T for taken-out products and sprues, driven by 3 axis AC servo motor. The arm is telescopic type and fastest take-out time is only 3.3sec, fastest dry cycle time is 12sec. Max loading is 80KG including EOAT and product. This series robots are mainly applied for the quick take-out or multi take-out application, especially for the long shape product such as bumper, door trim strip etc.



TN1500WS-S3

Automation Times, Optimal Model

Structure:

Strong rigidity, traverse-axis, kick-axis and vertical arms all apply advanced imported high rigidity linear guide, can bear high loading and high speed motion, long use-life. It applies precision planetary gear head reducer, with precision up to + 0.15mm.

Telescopic Type:

Telescopic type robot adopts high rigidity linear guide and alloy aluminum beam, together with specially designed belt, greatly shortens the height of the vertical arm. Full stroke of the structure can be achieved by half stroke of the cylinder. It not only can increase speed and stability of the vertical stroke, but also can be applicable to low workshop.

Air pressure inspection:

It can automatically inspect the air pressure and give alarm when pressure is low.

Swivel structure:

Coordinate with moving mould or fixed mould to realize take-out function. Fixed swivel angle is 90 degree.

Optional Function:

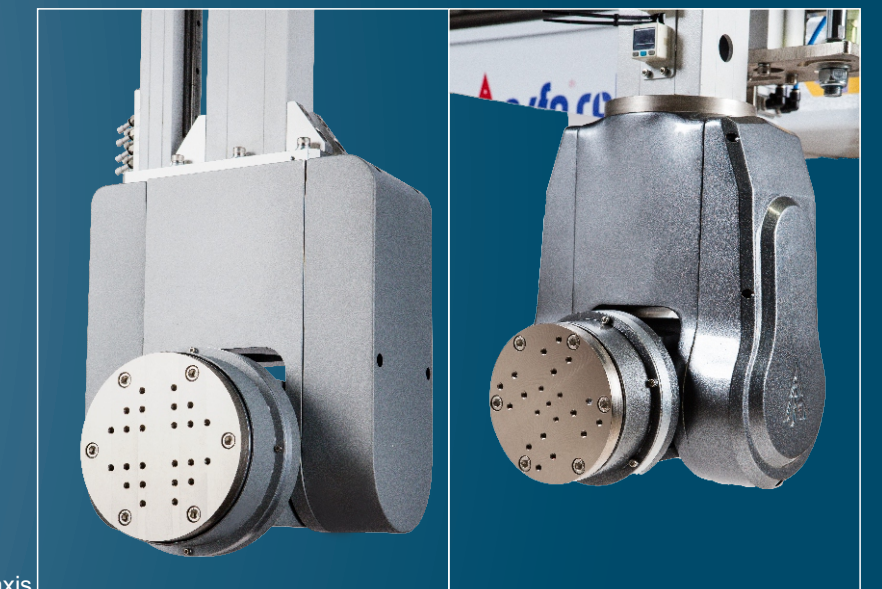
Spraying device: Spraying number of moulds and spraying time can be set. Spraying head can be installed on the arm or mould. Two devices at the most can be set.

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

Photoelectric inspection on finished products: The sensor can be installed at conveyor to avoid product hitting among products.

Air nipper: It can be fixed on the arm or on the EOAT to cut runner.

CE connectors: It can be attached with EUROMAP 12 or EUROMAP 67.



AC axis