

# FANUC ROBOSHOT $\alpha$ -S30iA

## Mechanical specifications

Item		Unit	Data					
Clamping unit	Clamping mechanism	---	Double toggle					
	Tonnage	kN	Standard 300 (30tonf)					
	Maximum and minimum die height	mm	Standard 330 - 150					
	Clamping stroke	mm	230					
	Locating ring diameter	mm	φ60					
	Tie bar spacing (HxV)	mm	310 x 290					
	Platen size (HxV)	mm	440 x 420					
	Minimum mold size (HxV) <sup>*1)</sup>	mm	175 x 165					
	Ejector stroke	mm	60					
	Maximum ejector force	kN	8 (0.8tonf)					
Injection unit	Screw diameter	mm	14	16	18	20	22	
	Injection stroke	mm	56	56	75	75	75	
	Maximum injection volume	cm <sup>3</sup>	9	11	19	24	29	
	Inj.speed 525mm/s	Maximum injection pressure (High pressure filling mode) <sup>*2),*4)</sup>	MPa	---	330	300	---	---
		Maximum injection pressure <sup>*2)</sup>	MPa	250	250	260	270	220
		Maximum pack pressure <sup>*2)</sup>	MPa	250	250	260	250	200
		Maximum injection rate <sup>*3)</sup>	cm <sup>3</sup> /s	80	105	133	164	199
		Maximum injection speed <sup>*3)</sup>	mm/s	525				
		Maximum screw rotation speed	min <sup>-1</sup>	450				
	Inj.speed 800mm/s	Maximum injection pressure (High pressure filling mode) <sup>*2),*4)</sup>	MPa	---	330	300	---	---
		Maximum injection pressure <sup>*2)</sup>	MPa	250	250	260	270	220
		Maximum pack pressure <sup>*2)</sup>	MPa	250	250	260	250	200
		Maximum injection rate <sup>*3)</sup>	cm <sup>3</sup> /s	123	160	203	251	304
		Maximum injection speed <sup>*3)</sup>	mm/s	800				
		Maximum screw rotation speed	min <sup>-1</sup>	450				
	Nozzle touch force		kN	9 (0.9tonf)				
	Screw & Barrel	Number of pyrometers	Barrel	3				
Nozzle			1					
Total heater wattage		kW	2.4	2.8	3.1	3.5	3.8	
Machine Weight <sup>*5)</sup>		t	Inj.speed 525mm/s 2.0 (Approximately) Inj.speed 800mm/s 2.0 (Approximately)					

\*1) Smaller mold than this size may limit clamp force.

\*2) The maximum injection pressure and maximum pack pressure is not melt pressure but injection unit output.

The maximum injection pressure and maximum pack pressure is the maximum value can be set.

The maximum injection pressure and maximum pack pressure might be limited depending on the molding condition.

\*3) Maximum injection rate and maximum injection speed is a theoretical value.

Maximum injection rate and maximum injection speed can not be guaranteed when the injection pressure is maximum.

\*4) The maximum injection pressure setting at high pressure filling mode option.

There is a limitation in injection time setting and pack time setting, when high pressure filling mode option is selected.(Contact sales for detail)

High pressure resistance barrel and nozzle are necessary, when high pressure filling option is selected.(Contact sales for detail)

\*5) The machine without option.

\*6) The pressure conversion is 1MPa=10kgf/cm<sup>2</sup>.

\*7) The molding condition might be limited by the resin.(Contact sales for detail)

## Installation conditions

Item		Data
Input power source		3-phase AC200V±10% 50/60Hz±1Hz 3-phase AC220V±10% 60Hz±1Hz
Main breaker <sup>*8)</sup>	Inj.speed 525mm/s	100A (With peripheral devices) <sup>*9)</sup>
		50A (With no peripheral device) <sup>*9)</sup>
	Inj.speed 800mm/s	100A (With peripheral devices) <sup>*9)</sup>
		50A (With no peripheral device) <sup>*9)</sup>
Ground		Follow relevant laws and standards of the country where the machine is installed when performing grounding.
Installing environment	Temperature	0 ~ 40°C (20 ~ 25°C recommended)
	Humidity	Below 75% (Below 95% under short term operation)
	Vibration	Below 0.5G
	Atmosphere	Take care of corrosive gas.

\*8) Connect power cable to the machine's main breaker directly. The breaker is ground fault type with 100mA of sensitivity.

\*9) With peripheral devices: When peripheral devices "External outlet + Mold heater controller" or "External outlet + Integrated hotrunner controller" are used in addition to the molding machine

With no peripheral device: When only the molding machine is used

All specifications are subject to change without notice.

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