

FANUC ROBOSHOT α -S220iA

Mechanical specifications

Item		Unit	Data						
Clamping unit	Clamping mechanism	---	Double toggle						
	Tonnage	kN	Standard 2200 (220 tonf)						
	Maximum and minimum die height	mm	Singleplaten 650 - 250 / Extended die height 750 - 250 (Option)						
	Clamping stroke	mm	550						
	Locating ring diameter	mm	ϕ 100						
	Tie bar spacing (HxV)	mm	650 x 650						
	Platen size (HxV)	mm	900 x 900						
	Minimum mold size (HxV) ^{*1)}	mm	375 x 375						
	Ejector stroke	mm	150						
	Maximum ejector force	kN	Standard 35 (3.5tonf) / Increased 80 (8.0tonf) (Option)						
Injection unit	Screw diameter	mm	32 ^{*7)}	36 ^{*7)}	40 ^{*7)}	44 ^{*7)}	48 ^{*7)}	52 ^{*7)}	
	Injection stroke	mm	150	176	176	176	176	208	
	Maximum injection volume	cm ³	121	179	221	268	318	442	
	Inj.speed 200mm/s	Maximum injection pressure ^{*2)}	MPa	190	190	190	190	190	160 ^{*8)}
		Maximum pack pressure ^{*2)}	MPa	160	160	160	160	160	130 ^{*8)}
		Maximum injection rate ^{*3)}	cm ³ /s	160	203	251	304	361	424
		Maximum injection speed ^{*3)}	mm/s	200					
		Maximum screw rotation speed	min ⁻¹	300					
	Inj.speed 330mm/s	Maximum injection pressure ^{*2) *4)} (High pressure filling mode)	MPa	380	345	280	---	---	---
		Maximum injection pressure ^{*2)}	MPa	280	280	260	220	190	160 ^{*8)}
		Maximum pack pressure ^{*2)}	MPa	280	280	260	220	190	160 ^{*8)}
		Maximum injection rate ^{*3)}	cm ³ /s	265	335	414	501	597	700
		Maximum injection speed ^{*3)}	mm/s	330					
	Maximum screw rotation speed	min ⁻¹	400						
	Nozzle touch force	kN	30 (3.0 tonf)						
	Screw & Barrel	Number of pyrometers	Barrel	3					
Nozzle			1						
Total heater wattage	kW	12.0	13.0	14.9	15.9	17.9	20.2		
Machine weight ^{*5)}	t	Inj.speed 200mm/s 8.7 (Approximately) Inj.speed 330mm/s 8.7 (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. The maximum pack pressure will be changed.

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/cm².

*7) After shipment, the machine equipped with screw diameter ϕ 32- ϕ 36mm cannot install ϕ 40- ϕ 52mm.

After shipment, the machine equipped with screw diameter ϕ 40- ϕ 52mm cannot install ϕ 32- ϕ 36mm.

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

Installation conditions

Item		Data
Input power source		3-phase AC200V \pm 10% 50/60Hz \pm 1Hz 3-phase AC220V \pm 10% 60Hz \pm 1Hz
Main breaker ^{*9)}	Inj.speed 200mm/s	175A (With peripheral devices) ^{*10)}
		75A (With no peripheral device) ^{*10)}
	Inj.speed 330mm/s	225A (With peripheral devices) ^{*10)}
		125A (With no peripheral device) ^{*10)}
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.

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

*10) 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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