

FANUC ROBOSHOT α -S450iA

Mechanical specifications

Item		Unit	Data					
Clamping unit	Clamping mechanism	---	Double toggle					
	Tonnage	kN	Standard 4500 (450 tonf) / Increased 5000 (500 tonf)(Option)					
	Maximum and minimum die height	mm	Doubleplaten 1000 - 350					
	Clamping stroke	mm	900					
	Locating ring diameter	mm	φ150					
	Tie bar spacing (HxV)	mm	920x920					
	Platen size (HxV)	mm	1300x1300					
	Minimum mold size (HxV) *1)	mm	535x535					
	Ejector stroke	mm	250					
	Maximum ejector force	kN	150 (15.0tonf)					
Injection unit	Screw diameter	mm	68	72	80	90	100	
	Injection stroke	mm	260	260	360	360	360	
	Maximum injection volume	cm ³	944	1059	1810	2290	2827	
	Inj.speed 180mm/s	Maximum injection pressure *2)	MPa	280	280	250	200	160
		Maximum pack pressure *2)	MPa	280	250	200	160	130
		Maximum injection rate *3)	cm ³ /s	654	733	905	1145	1414
		Maximum injection speed *3)	mm/s	180				
		Maximum screw rotation speed	min ⁻¹	200				
	Nozzle touch force	kN	30 (3.0tonf)					
	Screw & Barrel	Number of pyrometers	Barrel	Nozzle adaptor 1 + Barrel 4				
Nozzle			1					
	Total heater wattage	kW	29.1	31.3	33.9	37.9	41.1	
Machine weight	*4)	t	29.7 (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 machine without option.

*5) The pressure conversion is 1MPa=10kgf/cm².

*6) 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 *7)	Inj.speed 180mm/s	500A (With peripheral devices) *8)
		250A (With no peripheral device) *8)
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.

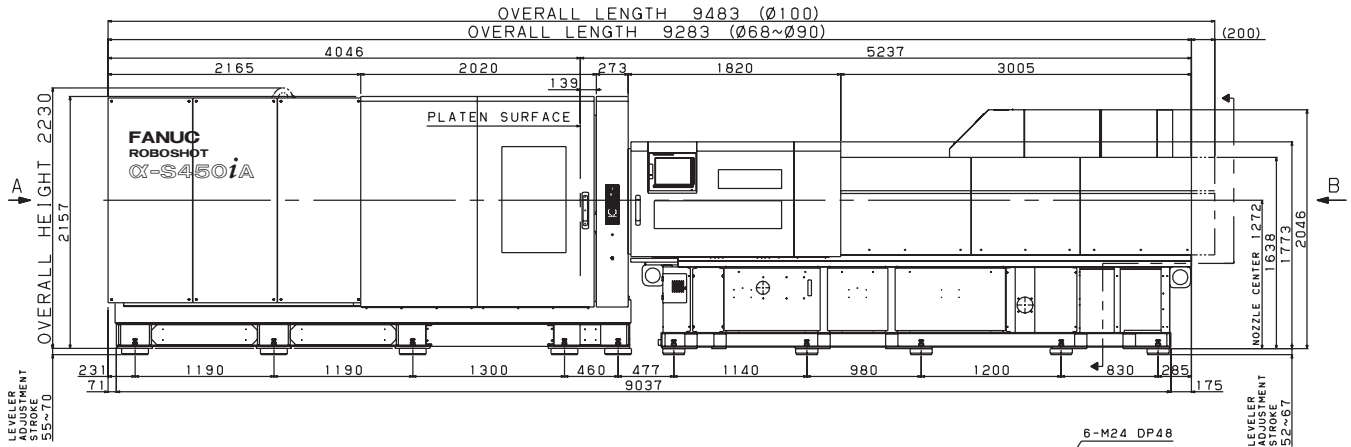
*7) Connect power cable to the machine's main breaker directly. The breaker is ground fault type with 100mA of sensitivity.

*8) 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

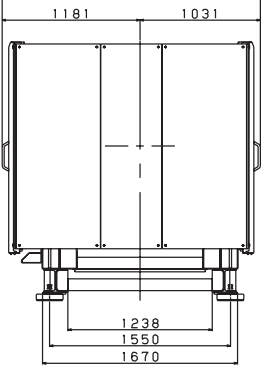
With no peripheral device: When only the molding machine is used

All specifications are subject to change without notice.

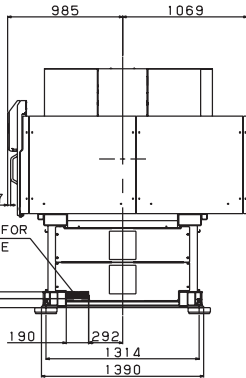
FANUC ROBOSHOT α -S450iA



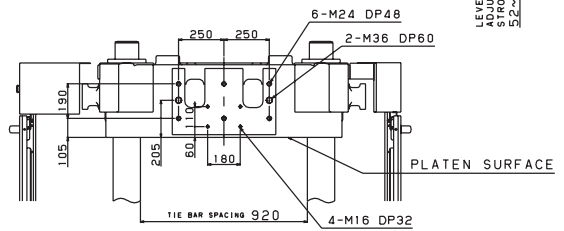
OVERALL WIDTH 2212



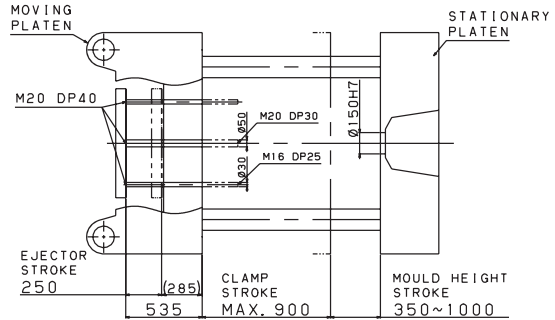
VIEW FROM A



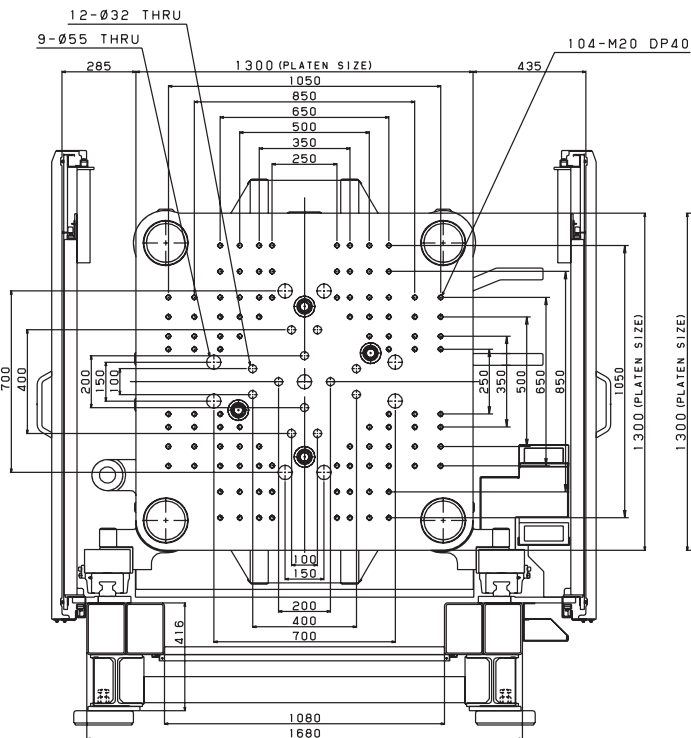
VIEW FROM B



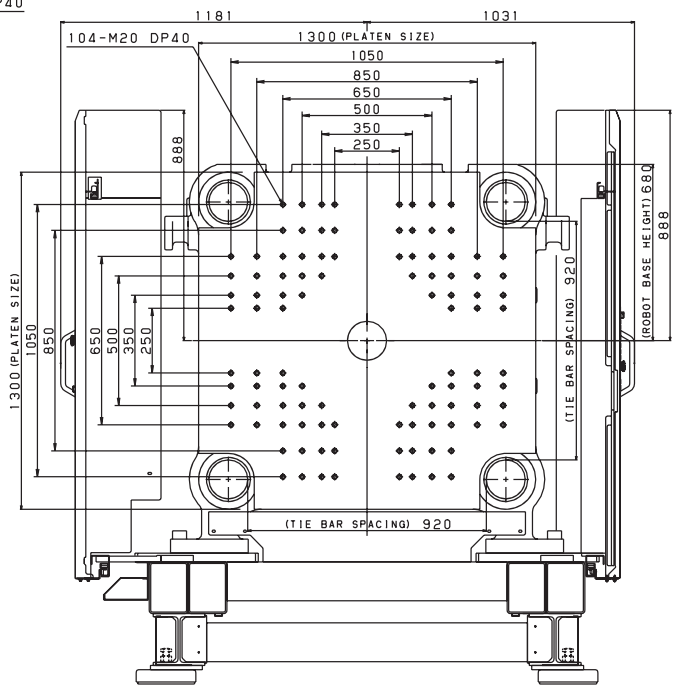
ROBOT MOUNTING SURFACE



(STANDARD ACCESSORY
4- ϕ 30 EJECTOR PINS AND
4- ϕ 50 EJECTOR PINS)



MOVING PLATEN



STATIONARY PLATEN

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Mechanical specifications

Item		Unit	Data				
Clamping unit	Clamping mechanism	---	Double toggle				
	Tonnage	kN	Standard 4500 (450 tonf) / Increased 5000 (500 tonf)(Option)				
	Maximum and minimum die height	mm	Doubleplaten 1000 - 350				
	Clamping stroke	mm	900				
	Locating ring diameter	mm	φ150				
	Tie bar spacing (HxV)	mm	920x920				
	Platen size (HxV)	mm	1300x1300				
	Minimum mold size (HxV) *1)	mm	535x535				
	Ejector stroke	mm	250				
	Maximum ejector force	kN	150 (15.0tonf)				
Injection unit (Small capacity injection)	Screw diameter	mm	56	64	68	72 *6)	
	Injection stroke	mm	260	260	260	260	
	Maximum injection volume	cm ³	640	836	944	1059	
	Inj.speed 200mm/s (High duty) *7)	Maximum injection pressure *2)	MPa	225	175	155	135
		Maximum pack pressure *2)	MPa	195	150	130	120
		Maximum injection rate *3)	cm ³ /s	493	643	726	814
		Maximum injection speed *3)	mm/s	200			
		Maximum screw rotation speed	min ⁻¹	400			300
	Inj.speed 240mm/s	Maximum injection pressure *2)	MPa	225	175	155	135
		Maximum pack pressure *2)	MPa	195	150	130	120
		Maximum injection rate *3)	cm ³ /s	591	772	872	977
		Maximum injection speed *3)	mm/s	240			
		Maximum screw rotation speed	min ⁻¹	400			300
	Nozzle touch force	kN	30 (3.0tonf)				
	Screw & Barrel	Number of pyrometers	Barrel	4			
Nozzle			1				
Total heater wattage		kW	23.9	27.2	27.8	27.2	
Machine weight	*4)	t	24(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 machine without option.

*5) The pressure conversion is 1MPa=10kgf/cm².

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

*7) 200mm/s specification (High duty) is recommended for high viscosity resin molding or longer injection/pack process molding. (Please contact sales for details.)

Installation conditions

Item		Data
Input power source		3-phase AC200V±10% 50/60Hz±1Hz 3-phase AC220V±10% 60Hz±1Hz
Main breaker *8)	Inj.speed 200mm/s (High duty)	250A (With peripheral devices) *9)
		150A (With no peripheral device) *9)
	Inj.speed 240mm/s	250A (With peripheral devices) *9)
		150A (With no peripheral device) *9)
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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