

THE FACTORY AUTOMATION COMPANY

Perfectly automated
injection moulding with the

NEW

FANUC ROBOSHOT α -S450iA



4500
kN
Clamping force

2 injection units with
7 screw sizes with up to
2827
cm³
Injection
volume

920 x 920
mm
Tie bar distance

1000
mm
die height



FANUC ROBOSHOT

HIGH-PRECISION ELECTRICAL INJECTION MOULDING

- maximum precision
- proven reliability
- excellent repeatability
- optimum process control
- extremely short cycle times

WWW.FANUC.EU/ROBOSHOT

α-S450iA Mechanical specifications

Clamping unit					
Clamping mechanism Double toggle			●		
Tonnage [kN tonf]			4500 450 (Option 5000 500)		
Maximum and minimum die height Doubleplaten [mm]			1000/350		
Maximum and minimum die height Singleplaten [mm]			-		
Clamping stroke [mm]			900		
Locating ring diameter [mm]			φ200		
Tie bar spacing, H×V [mm]			920×920		
Platen size, H×V [mm]			1300×1300		
Minimum mould size, H×V [mm] *1			535×535		
Ejector stroke [mm]			250		
Maximum ejector force [kN tonf]			150 15.0		
Small Capacity Injection Model					
Injection unit					
Screw diameter [mm]	56	64	68	72*6	
Injection stroke [mm]	260	260	260	260	
Max. injection volume [cm³]	640	836	944	1059	
Nozzle touch force [kN tonf]	30 3.0				
Max. Injection Speed mm/s *3	200 (High duty) *7				
Max. injection pressure [MPa] *2	225	175	155	135	
Max. pack pressure [MPa]*2	195	150	130	120	
Max. injection rate [cm³/s] *3	493	643	726	814	
Max. screw rotation speed [min ⁻¹]	400				
Max. Injection Speed mm/s *3	240				
Max. injection pressure [MPa]*2	225	175	155	135	
Max. pack pressure [MPa] *2	195	150	130	120	
Max. injection rate [cm³/s] *3	591	772	872	977	
Max. screw rotation speed [min ⁻¹]	400				
Screw and Barrel					
Number of heater [Barrel]	4				
Number of heater [Nozzle]	1				
Total heater wattage [kW]	23.9	27.2	27.8	27.2	
Machine weight (t) *4	≈ 24				
Standard Model					
Injection unit					
Screw diameter [mm]	68	72	80	90	100
Injection stroke [mm]	260	260	360	360	360
Max. injection volume [cm³]	944	1059	1810	2290	2827
Nozzle touch force [kN tonf]	30 3.0				
Max. Injection Speed mm/s *3	180				
Max. injection pressure [MPa] *2	280	280	250	200	160
Max. pack pressure [MPa]*2	280	250	200	160	130
Max. injection rate [cm³/s] *3	654	733	905	1145	1414
Max. screw rotation speed [min ⁻¹]	200				
Screw and Barrel					
Number of heater [Barrel]	Nozzle adaptor 1 + Barrel 4				
Number of heater [Nozzle]	1				
Total heater wattage [kW]	29.1	31.3	33.9	37.9	41.1
Machine weight (t) *4	≈ 29.7				

● standard - not available [] with hardware and/or software option

*1) Smaller mould 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 moulding 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 moulding 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.