

α-S50iA Mechanical specifications



Clamping unit					
Clamping mechanism	Double toggle ●				
Tonnage [kN tonf]	500 50 (650 65)				
Maximum and minimum die height Doubleplaten [mm]	350-150 (400-150)				
Maximum and minimum die height Singleplaten [mm]	410-210 (460-210)				
Clamping stroke [mm]	250				
Locating ring diameter [mm]	∅ 125				
Tie bar spacing, H×V [mm]	360 x 320				
Platen size, H×V [mm]	500 x 470				
Minimum mould size, H×V [mm] *1	205 x 185				
Ejector stroke [mm]	70				
Maximum ejector force [kN tonf]	20 2.0				
Injection unit					
Screw diameter [mm]	20	22	26	28	32 *7
Injection stroke [mm]	75	75	95	95	95
Max. injection volume [cm ³]	24	29	50	58	76
Nozzle touch force [kN tonf]	15 1.5				
Max. Injection Speed mm/s *4	330				
Max. injection pressure (high-pressure filling mode) [MPa] *2 *3	360	340	290	250	-
Max. injection pressure [MPa] *3	280	260	210	190	150
Max. pack pressure [MPa] *3	280	240	190	160	130
Max. injection rate [cm ³ /s] *4	104	125	175	203	265
Max. screw rotation speed [min ⁻¹]	450				
Machine weight Doubleplaten Singleplaten [t] *2	2.9 ≈ 2.85				
Max. Injection Speed mm/s *4	500				
Max. injection pressure (high-pressure filling mode) [MPa] *2 *3	360	340	275	240	-
Max. injection pressure [MPa] *3	280	260	210	190	-
Max. pack pressure [MPa] *3	280	240	190	160	-
Max. injection rate [cm ³ /s] *4	157	190	265	308	-
Max. screw rotation speed [min ⁻¹]	450				
Machine weight Doubleplaten Singleplaten [t] *2	3.1 ≈ 3.05				
Screw and Barrel					
Number of heater [Barrel]	3				
Number of heater [Nozzle]	1				
Total heater wattage [kW]	3.5	3.8	6.5	7.2	8.4

● standard - not available () with hardware and/or software option

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

*2) 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)

*3) 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.

*4) 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.

*5) The machine without option.

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

*7) After shipment, the machine equipped with screw diameter φ20-φ28mm cannot install φ32mm.

- The machine equipped with screw diameter φ32mm can install φ26-φ32mm and cannot install φ20mm and φ22mm.

- The moulding condition might be limited by the resin. (Contact sales for detail)

α-S50iA Dimensions

