

# **α-S50iA** Mechanical specifications



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

\*1) Smaller mold 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 molding 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/cm<sup>2</sup>.

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

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]		Ø 125				
Tie bar spacing, H×V [mm]		360 x 320				
Platen size, H×V [mm]		500 x 470				
Minimum mold 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 <sup>3</sup> ]		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 <sup>3</sup> /s] *4		104	125	175	203	265
Max. screw rotation speed [min <sup>-1</sup> ]		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 <sup>3</sup> /s] *4		157	190	265	308	-
Max. screw rotation speed [min <sup>-1</sup> ]		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

# **α-S50iA Dimensions**

