

# α-S100iA Mechanical specifications



● 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/cm<sup>2</sup>.

\*7) The moulding condition might be limited by the resin. (Contact sales for detail)

Clamping unit						
Clamping mechanism Double toggle						●
Tonnage [kN   tonf]						1000   100 (1250   125)
Maximum and minimum die height Doubleplaten [mm]						450-150 (550-150)
Maximum and minimum die height Singleplaten [mm]						520-220 (620-220)
Clamping stroke [mm]						350
Locating ring diameter [mm]						Ø 125
Tie bar spacing, HxV [mm]						460 x 410
Platen size, HxV [mm]						660 x 610
Minimum mould size, HxV [mm] *1						265 x 240
Ejector stroke [mm]						100
Maximum ejector force [kN   tonf]						25   2.5 Increased 60   6.0 (Option)
Injection unit						
Screw diameter [mm]						22   26   28   32   36   40
Injection stroke [mm]						75   95   95   128   144   144
Max. injection volume [cm <sup>3</sup> ]						29   50   58   103   147   181 <sup>7</sup>
Nozzle touch force [kN   tonf]						15   1.5
Max. Injection Speed mm/s *4						
Max. injection pressure (high-pressure filling mode) [MPa] *2 *3						-   -   -   -   -   -
Max. injection pressure [MPa] *3						260   260   240   220   190   160 <sup>7</sup>
Max. pack pressure [MPa] *3						260   260   220   200   170   140
Max. injection rate [cm <sup>3</sup> /s] *4						76   106   123   161   204   251
Max. screw rotation speed [min <sup>-1</sup> ]						300
Machine weight Doubleplaten   Singleplaten [t] *5						4.4   ≈ 4.25
Max. Injection Speed mm/s *4						
Max. injection pressure (high-pressure filling mode) [MPa] *2 *3						340   340   320   270   220   -
Max. injection pressure [MPa] *3						260   260   240   220   190   160 <sup>7</sup>
Max. pack pressure [MPa] *3						260   260   220   200   170   140 <sup>7</sup>
Max. injection rate [cm <sup>3</sup> /s] *4						125   175   203   265   336   415 <sup>7</sup>
Max. screw rotation speed [min <sup>-1</sup> ]						450
Machine weight Doubleplaten   Singleplaten [t] *5						4.4   ≈ 4.25
Max. Injection Speed mm/s *4						
Max. injection pressure (high-pressure filling mode) [MPa] *2 *3						340   320   280   -   -   -
Max. injection pressure [MPa] *3						260   260   240   220   170   -
Max. pack pressure [MPa] *3						260   260   220   200   170   -
Max. injection rate [cm <sup>3</sup> /s] *4						190   265   308   402   509   -
Max. screw rotation speed [min <sup>-1</sup> ]						450
Machine weight Doubleplaten   Singleplaten [t] *5						4.55   ≈ 4.4
Screw and Barrel						
Number of heater [Barrel]						3
Number of heater [Nozzle]						1
Total heater wattage [kW]						3.8   6.5   7.2   8.4   9.1   9.9

# **α-S100*i*A Dimensions**

