

α-S300iB (small capacity)

Mechanical specifications



Clamping unit

Clamping mechanism		Double toggle						
Tonnage	kN tonf	3000 300 / Increased (3500 350)						
Maximum and minimum die height Single platen	mm	650-300 / Increased (750-300)						
Clamping stroke	mm	600						
Locating ring diameter	mm	Ø 160						
Tie bar spacing, HxV	mm	810 x 710						
Platen size, HxV	mm	1130 x 1030						
Minimum mould size, HxV *1	mm	470 x 420						
Maximum mould weight Single platen (Moving-Stationary) *2	kg	2400-2400						
Ejector stroke	mm	200						
Maximum ejector force	kN tonf	80 8.0						

Injection unit

Screw diameter	mm	32	36	40	44	48	52 *11	56 *11
Injection stroke	mm	150	150	150	176	176	208	260
Max. injection volume	cm ³	121	153	188	268	318	442	640
Nozzle touch force *6	kN tonf	30 3.0 / Increased (50 5.0)						

Max. Injection Speed mm/s *4

	mm/s	280 (high duty)						
Max. injection pressure (high-pressure filling mode) *3 *5	MPa	380	345	320	280	-	-	-
Max. injection & Hold Pressure 1 *3 *6	MPa	310	310	280	260	230	200	172
Max. injection & Hold Pressure 2 *3 *7	MPa	280	280	280	260	230	200	172
Max. injection rate *4	cm ³ /s	225	285	351	425	506	594	689
Max. screw rotation speed	min ⁻¹	400						

Machine weight Double platen | Single platen *9

t	13.7						
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Max. Injection Speed *4

	mm/s	350						
Max. injection pressure (high-pressure filling mode) *3 *5	MPa	380	345	-	-	-	-	-
Max. injection & Hold Pressure 1 *3 *6	MPa	310	310	280	240	190	160	140
Max. injection & Hold Pressure 2 *3 *7	MPa	280	280	260	220	190	160	140
Max. injection rate *4	cm ³ /s	281	356	439	532	633	743	862
Max. screw rotation speed	min ⁻¹	400						

Machine weight Double platen | Single platen *9

t	13.7						
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Screw and Barrel

Number of heater zones	Barrel	3						
Number of pyrometers	Nozzle	1						
Total heater wattage	kW	12.0	13.0	14.9	15.9	17.9	20.2	23.5

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

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

*2) If the weight of a mold exceeds maximum mold weight, the molding condition may be limited.

*3) Maximum injection pressure and maximum hold pressure are the output of the injection unit, not the resin pressure.
- Maximum injection pressure and maximum hold pressure are the maximum values that can be set.

*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 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]

*6) Maximum injection pressure 1 and maximum hold pressure 1 are the values when the wear-resistant and anti-corrosion cylinder etc. is installed.
- Maximum injection pressure and maximum hold pressure may vary depends on the installed screw and cylinder specifications.

*7) Maximum injection pressure 2 and maximum hold pressure 2 are the values when the general purpose cylinder etc. is installed.
- Maximum injection pressure and maximum hold pressure may vary depends on the installed screw and cylinder specifications.

*8) Sprue break cannot be used with increased nozzle touch force option.

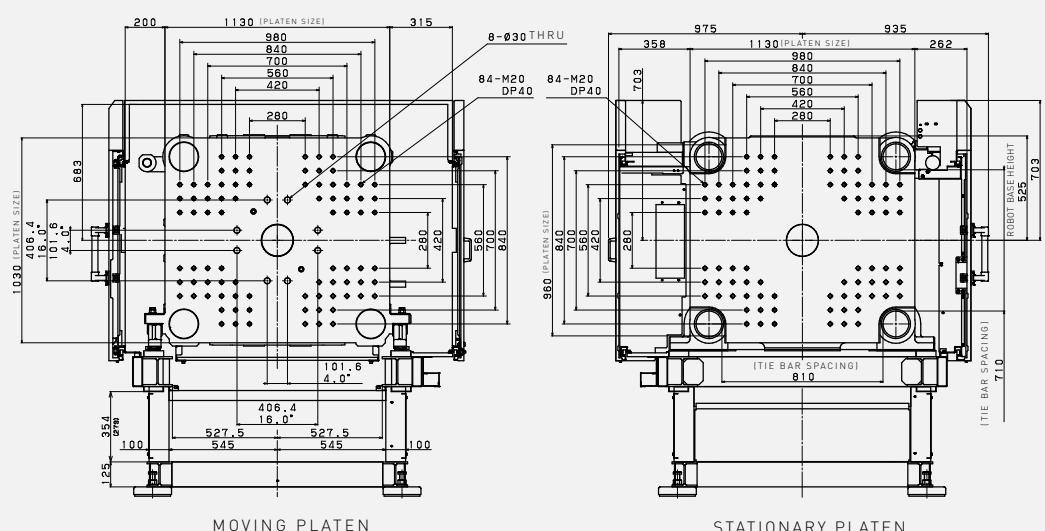
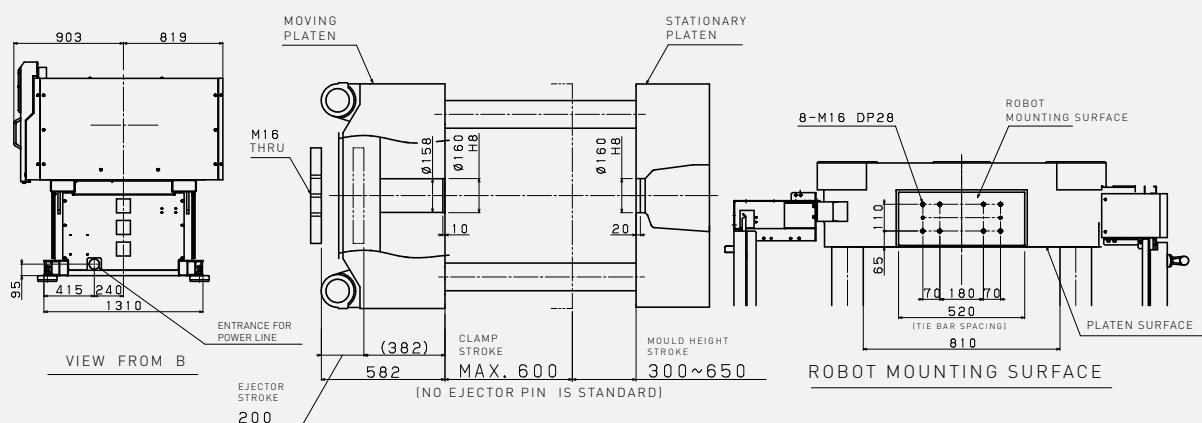
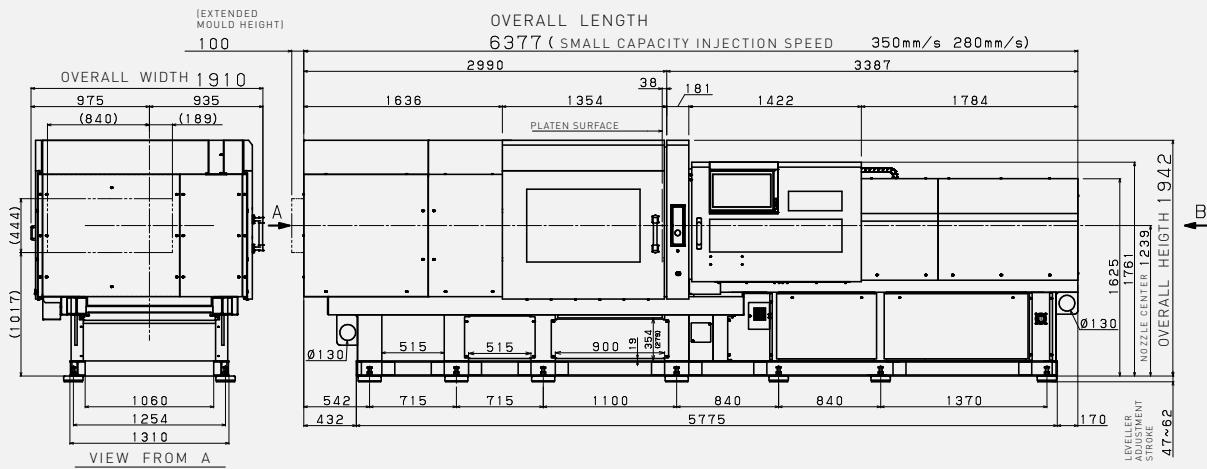
*9) The machine without option.

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

*11) The molding condition might be limited by the resin. [Contact sales for detail]

*12) In case of the replacement to different screw diameter after shipment, some covers may be needed to replace. [Contact sales for detail]

α -S300iB (small capacity) Dimensions / Clamp layout



In case of the tiebarbushless clamping specification is selected, this value is applied.