

α -S150iB (small capacity)

Mechanical specifications

Clamping unit

Clamping mechanism			5 Point double toggle					
Tonnage	kN tonf		1500 150 / Increased (1800 180)					
Maximum and minimum die height Double platen	mm		500-200 / Increased (600-200)					
Maximum and minimum die height Single platen	mm		575-275 / Increased (675-275)					
Clamping stroke	mm		440					
Locating ring diameter	mm		\varnothing 160					
Tie bar spacing, HxV	mm		560 x 510					
Platen size, HxV	mm		800 x 750					
Minimum mould size, HxV *1	mm		325 x 300					
Maximum mould weight Double platen Single platen (Moving-Stationary) *2	kg		800-800 1060-800					
Ejector stroke	mm		150					
Maximum ejector force	kN tonf		35 3.5 / Increased (80 8.0)					

Injection unit

Screw diameter	mm	22	26	28	32	36	40 *11	44 *11				
Injection stroke	mm	75	95	95	128	144	144 [160*13]	160				
Max. injection volume	cm ³	29	50	58	103	147	181 [201*13]	243				
Nozzle touch force *6	kN tonf		15 1.5 / Increased (30 3.0)									
Max. Injection Speed *4	mm/s	200 (high duty)										
Max. injection pressure (high-pressure filling mode) *3 *5	MPa	-	-	-	270	220	-	-				
Max. injection & Hold Pressure 1 *3 *6	MPa	-	-	-	250	200	180	-				
Max. injection & Hold Pressure 2 *3 *7	MPa	-	-	-	220	200	180	-				
Max. injection rate *4	cm ³ /s	-	-	-	160	203	251	-				
Max. screw rotation speed	min ⁻¹	-	-	-	450							
Machine weight Double platen Single platen *9	t	6.4 \approx 6.15										
Max. Injection Speed *4	mm/s	350										
Max. injection pressure (high-pressure filling mode) *3 *5	MPa	340	340	320	270	220	-	-				
Max. injection & Hold Pressure 1 *3 *6	MPa	290	290	270	250	190	160	-				
Max. injection & Hold Pressure 2 *3 *7	MPa	260	260	240	220	190	160	-				
Max. injection rate *4	cm ³ /s	133	185	215	281	356	439	-				
Max. screw rotation speed	min ⁻¹	450										
Machine weight Double platen Single platen *9	t	6.4 \approx 6.15										
Max. Injection Speed *4	mm/s	350 (high pressure)										
Max. injection & Hold Pressure 1 *3 *6	MPa	-	-	-	290	260	210	170				
Max. injection & Hold Pressure 2 *3 *7	MPa	-	-	-	230	220	210	170				
Max. injection rate *4	cm ³ /s	-	-	-	281	356	439	532				
Max. screw rotation speed	min ⁻¹	450										
Machine weight Double platen Single platen *9	t	6.5 \approx 6.25										
Max. Injection Speed *4	mm/s	550										
Max. injection pressure (high-pressure filling mode) *3 *5	MPa	340	-	-	-	-	-	-				
Max. injection & Hold Pressure 1 *3 *6	MPa	290	260	220	170	-	-	-				
Max. injection & Hold Pressure 2 *3 *7	MPa	260	260	220	170	-	-	-				
Max. injection rate *4	cm ³ /s	209	292	338	442	-	-	-				
Max. screw rotation speed	min ⁻¹	450										
Machine weight Double platen Single platen *9	t	6.4 \approx 6.15										

Screw and Barrel

Number of heater zones	Barrel		3					
Number of pyrometers	Nozzle		1					
Total heater wattage	kW	3.9	6.5	7.2	8.4	9.1	9.9 [10.6*13]	11.3

● 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.

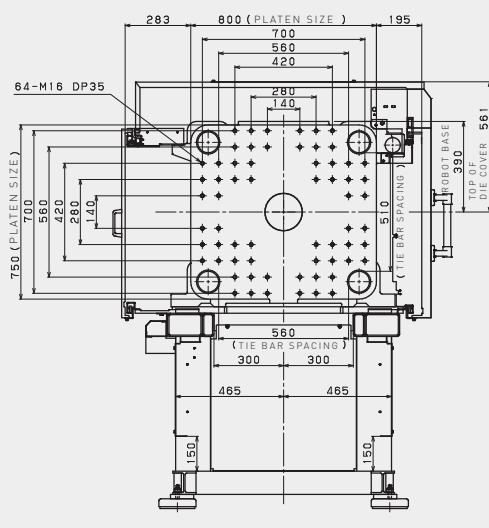
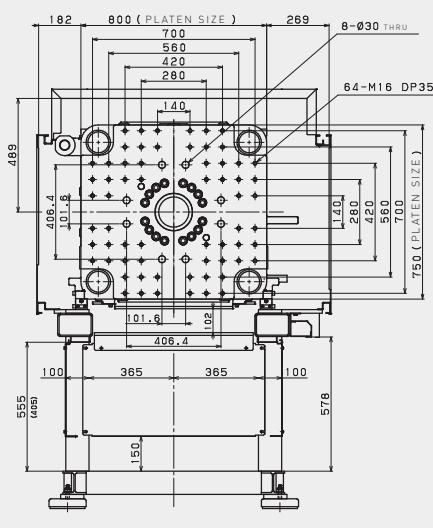
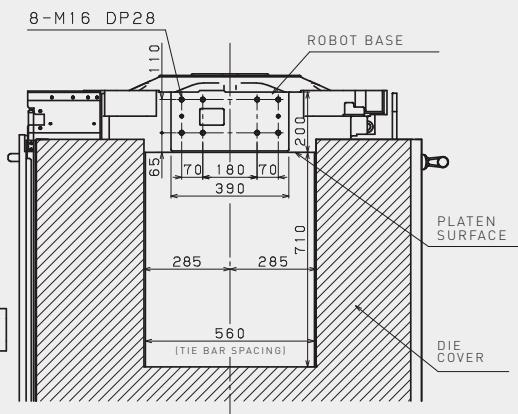
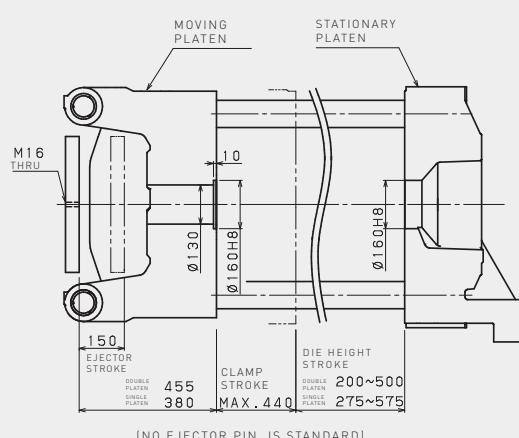
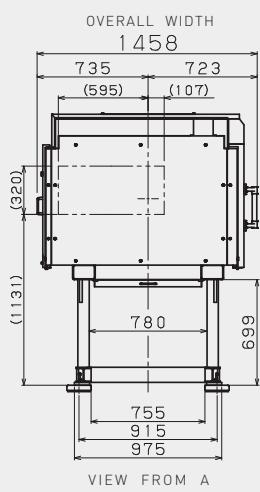
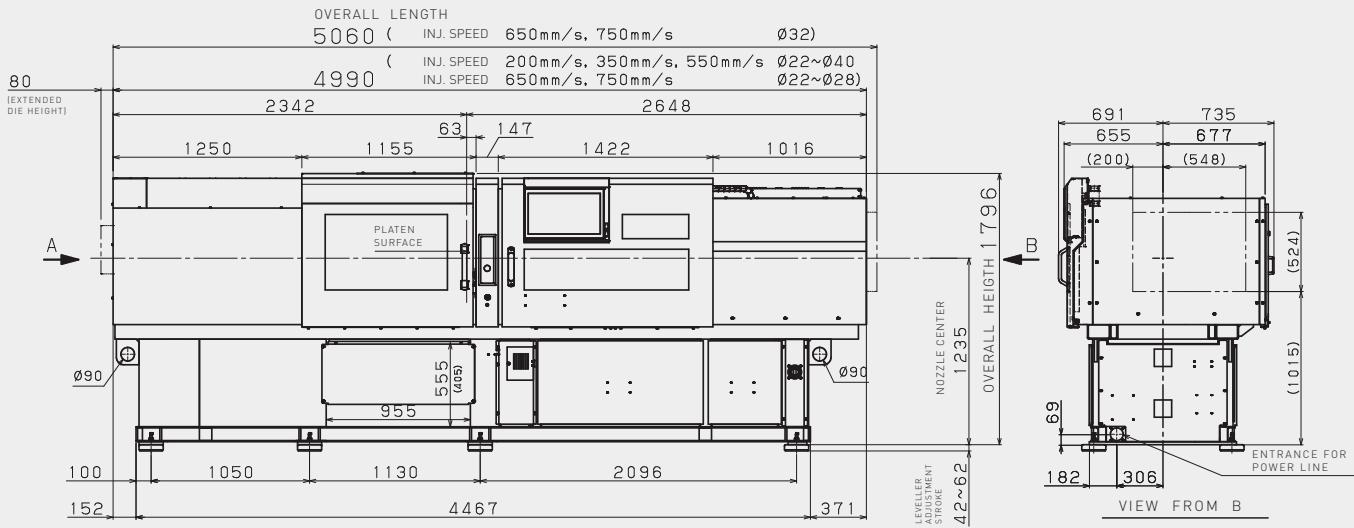
*11) The molding condition might be limited by the resin. [Contact sales for detail]

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

*13) When the injection speed 350mm/s (high pressure) specification with screw diameter of φ 40 is selected,

the screw stroke is 160mm and the maximum injection volume is 201cm³, the total heater wattage is 10.6 kW.

α -S150iB (small capacity) Dimensions / Clamp layout



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