

Mechanical specifications

Item		Unit	Data					
Clamping unit	Clamping mechanism	---	Double toggle					
	Tonnage	kN	Standard 1500 (150tonf) / Increased 1800 (180tonf) [Option]					
	Maximum and minimum die height	mm	Double platen 500 - 200 / Extended die height 600 - 200 [Option] Single platen 575 - 275 / Extended die height 675 - 275 [Option]					
	Clamping stroke	mm	440					
	Locating ring diameter	mm	φ100					
	Tie bar spacing (H×V)	mm	560 × 510					
	Platen size (H×V)	mm	800 × 750					
	Minimum mold size (H×V) *1	mm	325 × 300					
	Maximum mold weight (Moving-Stationary) *2	kg	Double platen 800 - 800 / Single platen 1060 - 800					
	Ejector stroke	mm	150					
Injection unit	Maximum ejector force	kN	Standard 35 (3.5tonf) / Increased 80 (8tonf) [Option]					
	Screw diameter	mm	32	36	40	44	48	52 *12
	Injection stroke	mm	150	150	150	176	176	208
	Maximum injection volume *3	cm³	121	153	188	268	318	442
	Inj.speed 200mm/s	Max. inj. prs.(W/C) *4 *7	MPa	310	310	260	220	190
		Max. inj. prs.(General Purpose) *4 *8	MPa	280	280	260	220	190
		Maximum injection rate *5	cm³/s	160	203	251	304	361
		Maximum injection speed *5	mm/s	200				
		Maximum screw rotation speed	min ⁻¹	300				
	Inj.speed 270mm/s (High duty)	Max. inj. prs.(High prs.mode) *4 *6	MPa	380	345	320	280	---
		Max. inj. prs.(W/C) *4 *7	MPa	310	310	280	260	230
		Max. inj. prs.(General Purpose) *4 *8	MPa	280	280	280	260	230
		Maximum injection rate *5	cm³/s	217	274	339	410	488
		Maximum injection speed *5	mm/s	270				
		Maximum screw rotation speed	min ⁻¹	400				
	Inj.speed 350mm/s	Max. inj. prs.(High prs.mode) *4 *6	MPa	380	345	---	---	---
		Max. inj. prs.(W/C) *4 *7	MPa	310	310	280	240	190
		Max. inj. prs.(General Purpose) *4 *8	MPa	280	280	260	220	190
		Maximum injection rate *5	cm³/s	281	356	439	532	633
		Maximum injection speed *5	mm/s	350				
		Maximum screw rotation speed	min ⁻¹	400				
	Nozzle touch force / Increased *9		kN	30 (3tonf) / 50 (5tonf) [Option]				
	Screw & Barrel	Number of pyrometers	Barrel	3				
			Nozzle	1				
		Total heater wattage	kW	12.0	13.0	14.9	15.9	17.9
	Machine Weight *10		t	Inj.speed 200mm/s (Double platen) Approx. 7.05 / (Single platen) Approx. 6.8 Inj.speed 270mm/s (High duty) (Double platen) Approx. 7.2 / (Single platen) Approx. 6.95 Inj.speed 350mm/s (Double platen) Approx. 7.2 / (Single platen) Approx. 6.95				

*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 The maximum injection volume is a calculated value. (Cross-sectional area x injection stroke)

*4 Maximum pack pressure is equal to maximum injection pressure. Maximum injection pressure and maximum pack pressure are the output of the injection unit, not the resin pressure. Maximum injection pressure and maximum pack pressure are the maximum values that can be set.

*5 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.

*6 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.

*7 Maximum injection pressure(W/C) are the values when the wear-resistant and anti-corrosion Barrel etc. is installed. Maximum injection pressure and maximum pack pressure may vary depends on the installed screw and Barrel specifications.

*8 Maximum injection pressure (General Purpose) are the values when the general purpose Barrel etc. is installed. Maximum injection pressure and maximum pack pressure may vary depends on the installed screw and Barrel specifications.

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

*10 The machine weight is the value when the option is not installed. Total weight may vary depending on equipment.

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

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

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

Installation conditions

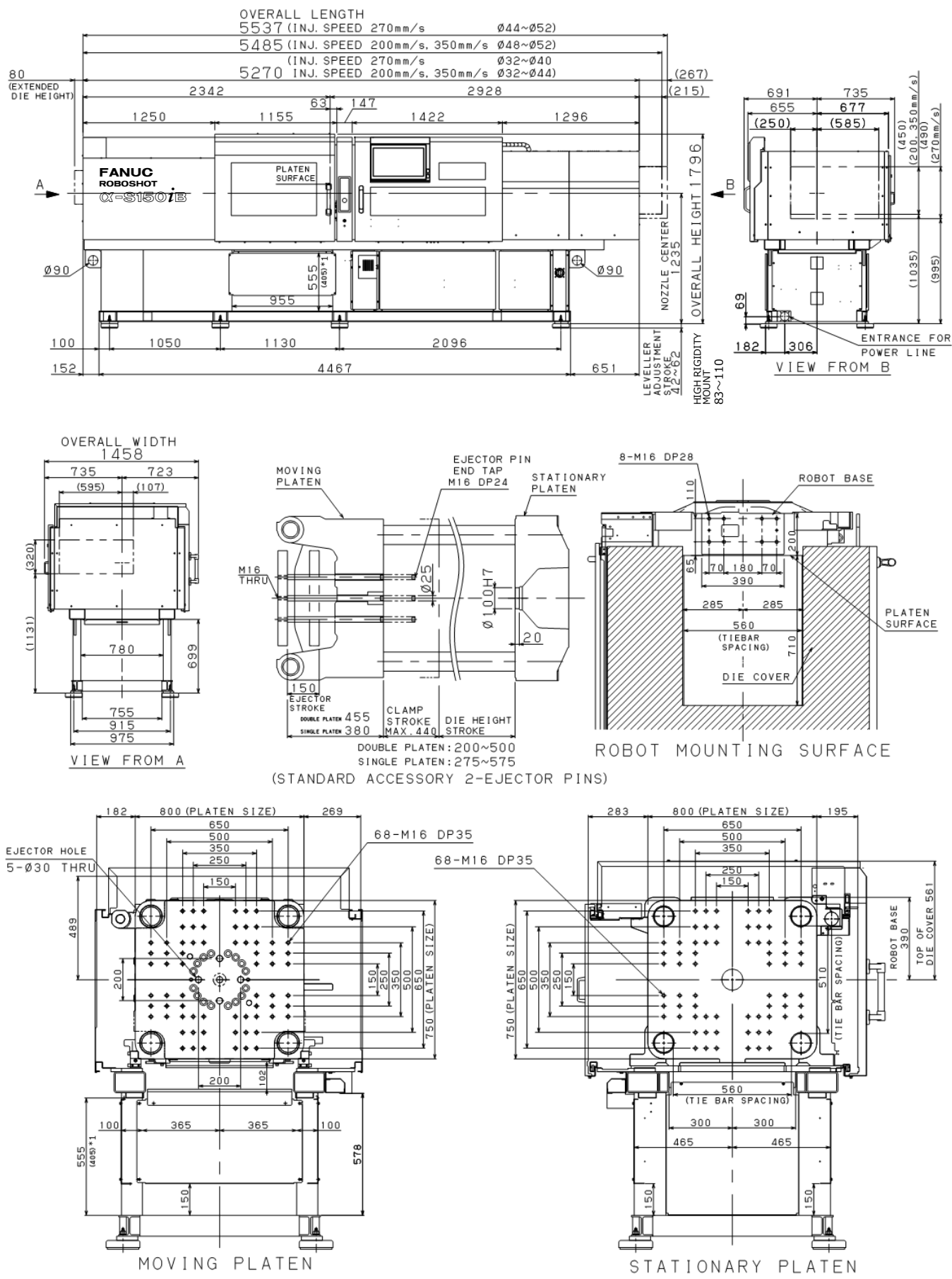
Item		Data
Input power source		3-phase AC200V±10% 50/60Hz±1Hz 3-phase AC220V±10% 60Hz±1Hz
Main breaker *14	Inj.speed 200mm/s	175A (With peripheral devices) *15 75A (With no peripheral device) *15
	Inj.speed 270mm/s (High duty)	225A (With peripheral devices) *15 125A (With no peripheral device) *15
	Inj.speed 350mm/s	225A (With peripheral devices) *15 125A (With no peripheral device) *15
	Ground	Follow relevant laws and standards of the country where the machine is installed when performing grounding.
Installing environment	Temperature	0~40°C (20~25°C recommended)
	Humidity	Below 75% (Below 95% under short term operation)
	Vibration	Below 0.5G
	Atmosphere	Take care of corrosive gas.

*14 Connect power cable to the machine's main breaker directly. The breaker is ground fault type with 100mA of sensitivity.

*15 With peripheral devices : When the molding machine equipped "External outlet", "Mold heater controller" or "Integrated hotrunner controller". ("Mold heater controller" and "Intefrated hotrunner controller" cannot be selected simultaneously.)
With no peripheral device : When only the molding machine is used.

*16 Please contact sales for details about the value of sound generated in this machine.

FANUC ROBOSHOT α-S150iB



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

Mechanical specifications

Item		Unit	Data						
Clamping unit	Clamping mechanism	---	Double toggle						
	Tonnage	kN	Standard 1500 (150tonf) / Increased 1800 (180tonf) [Option]						
	Maximum and minimum die height	mm	Double platen 500 - 200 / Extended die height 600 - 200 [Option] Single platen 575 - 275 / Extended die height 675 - 275 [Option]						
	Clamping stroke	mm	440						
	Locating ring diameter	mm	φ100						
	Tie bar spacing (H×V)	mm	560 × 510						
	Platen size (H×V)	mm	800 × 750						
	Minimum mold size (H×V)	*1 mm	325 × 300						
	Maximum mold weight (Moving-Stationary)	*2 kg	Double platen 800 - 800 / Single platen 1060 - 800						
	Ejector stroke	mm	150						
Maximum ejector force		kN	Standard 35 (3.5tonf) / Increased 80 (8tonf) [Option]						
Screw diameter		mm	22	26	28	32	36	40 *14	44 *14
Injection stroke		mm	75	95	95	128	144	144 (160*12)	160
Maximum injection volume		*3 cm³	29	50	58	103	147	181 (201*12)	243
Inj.speed 200mm/s (High duty)	Max. inj. prs.(High prs.mode)	*4 *6 MPa	---	---	---	270	220	---	---
	Max. inj. prs.(W/C)	*4 *7 MPa	---	---	---	250	200	180	---
	Max. inj. prs.(General Purpose)	*4 *8 MPa	---	---	---	220	200	180	---
	Maximum injection rate	*5 cm³/s	---	---	---	160	203	251	---
	Maximum injection speed	*5 mm/s	---	---	---	200			---
	Maximum screw rotation speed	min ⁻¹	---	---	---	450			---
Inj.speed 350mm/s	Max. inj. prs.(High prs.mode)	*4 *6 MPa	340	340	320	270	220	---	---
	Max. inj. prs.(W/C)	*4 *7 MPa	290	290	270	250	190	160	---
	Max. inj. prs.(General Purpose)	*4 *8 MPa	260	260	240	220	190	160	---
	Maximum injection rate	*5 cm³/s	133	185	215	281	356	439	---
	Maximum injection speed	*5 mm/s	350					---	
	Maximum screw rotation speed	min ⁻¹	450					---	
Inj.speed 350mm/s (High prs.)	Max. inj. prs.(W/C)	*4 *7 MPa	---	---	---	290	260	210	170
	Max. inj. prs.(General Purpose)	*4 *8 MPa	---	---	---	230	220	210	170
	Maximum injection rate	*5 cm³/s	---	---	---	281	356	439	532
	Maximum injection speed	*5 mm/s	---					350	
	Maximum screw rotation speed	min ⁻¹	---					450	
	Max. inj. prs.(High prs.mode)	*4 *6 MPa	340	---	---	---	---	---	---
Inj.speed 550mm/s	Max. inj. prs.(W/C)	*4 *7 MPa	290	260	220	170	---	---	---
	Max. inj. prs.(General Purpose)	*4 *8 MPa	260	260	220	170	---	---	---
	Maximum injection rate	*5 cm³/s	209	292	338	442	---	---	---
	Maximum injection speed	*5 mm/s	550					---	
	Maximum screw rotation speed	min ⁻¹	450					---	
	Max. inj. prs.(W/C)	*4 *7 MPa	290	290	270	210	---	---	---
Inj.speed 650mm/s	Max. inj. prs.(General Purpose)	*4 *8 MPa	260	260	240	210	---	---	---
	Maximum injection rate	*5 cm³/s	247	345	400	522	---	---	---
	Maximum injection speed	*5 mm/s	650					---	
	Maximum screw rotation speed	min ⁻¹	450					---	
	Max. inj. prs.(High prs.mode)	*4 *6 MPa	340	320	280	210	---	---	---
	Maximum injection rate	*5 cm³/s	285	398	461	603	---	---	---
Inj.speed 750mm/s *11	Maximum injection speed	*5 mm/s	750					---	
	Maximum screw rotation speed	min ⁻¹	450					---	
	Nozzle touch force / Increased	*9 kN	15 (1.5tonf) / 30 (3tonf) [Option]						
Screw & Barrel	Barrel		3						
	Nozzle		1						
	Total heater wattage	kW	3.9	6.5	7.2	8.4	9.1	9.9 (10.6*12)	11.3
Machine Weight		*10 t	Inj.speed 200mm/s (High duty) (Double platen) Approx. 6.4 / (Single platen) Approx. 6.15 Inj.speed 350mm/s (Double platen) Approx. 6.4 / (Single platen) Approx. 6.15 Inj.speed 350mm/s (High prs.) (Double platen) Approx. 6.5 / (Single platen) Approx. 6.25 Inj.speed 550mm/s (Double platen) Approx. 6.4 / (Single platen) Approx. 6.15 Inj.speed 650mm/s (Double platen) Approx. 6.6 / (Single platen) Approx. 6.35 Inj.speed 750mm/s *11 (Double platen) Approx. 6.6 / (Single platen) Approx. 6.35						

^{*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} The maximum injection volume is a calculated value. (Cross-sectional area x injection stroke)

^{*4} Maximum pack pressure is equal to maximum injection pressure. Maximum injection pressure and maximum pack pressure are the output of the injection unit, not the resin pressure. Maximum injection pressure and maximum pack pressure are the maximum values that can be set.

^{*5} 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.

^{*6} 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.

^{*7} High pressure resistance barrel and nozzle are necessary, when high pressure filling mode option is selected. (Contact sales for detail)

^{*8} Maximum injection pressure (W/C) are the values when the wear-resistant and anti-corrosion Barrel etc. is installed. Maximum injection pressure and maximum pack pressure may vary depends on the installed screw and Barrel specifications.

^{*9} Maximum injection pressure (General Purpose) are the values when the general purpose Barrel etc. is installed. Maximum injection pressure and maximum pack pressure may vary depends on the installed screw and Barrel

^{*10} Sprue break cannot be used with increased nozzle touch force option.

^{*11} The machine weight is the value when the option is not installed. Total weight may vary depending on equipment.

^{*12} Select high filling mode for injection speed 750 mm/s specification.

^{*13} When the injection speed 350mm/s (High pressure) specification with screw diameter of φ40 is selected, the screw stroke is 160mm and the maximum injection volume is 201cm³, the total heater wattage is 10.6kW.

^{*14} The pressure conversion is 1MPa=10kgf/cm².

^{*15} The molding condition might be limited by the resin. (Contact sales for detail)

^{*16} In case of the replacement to different screw diameter after shipment, some covers may be needed to replace. (Contact sales for detail)

Installation conditions

Item		Data
Input power source		3-phase 200VAC±10% 50/60Hz±1Hz 3-phase 220VAC±10% 60Hz±1Hz
Main breaker ^{*16}	Inj.speed 200mm/s (High duty)	150A (With peripheral devices) ^{*17} 60A (With no peripheral device) ^{*17}
	Inj.speed 350mm/s	150A (With peripheral devices) ^{*17} 60A (With no peripheral device) ^{*17}
	Inj.speed 350mm/s (High prs.)	150A (With peripheral devices) ^{*17} 60A (With no peripheral device) ^{*17}
	Inj.speed 550mm/s	150A (With peripheral devices) ^{*17} 60A (With no peripheral device) ^{*17}
	Inj.speed 650mm/s	225A (With peripheral devices) ^{*17} 125A (With no peripheral device) ^{*17}
	Inj.speed 750mm/s ^{*11}	225A (With peripheral devices) ^{*17} 125A (With no peripheral device) ^{*17}
	Ground	Follow relevant laws and standards of the country where the machine is installed when performing grounding.
Installing environment	Temperature	0~40°C (20~25°C recommended)
	Humidity	Below 75% (Below 95% under short term operation)
	Vibration	Below 0.5G
	Atmosphere	Take care of corrosive gas.

^{*16} Connect power cable to the machine's main breaker directly. The breaker is ground fault type with 100mA of sensitivity.

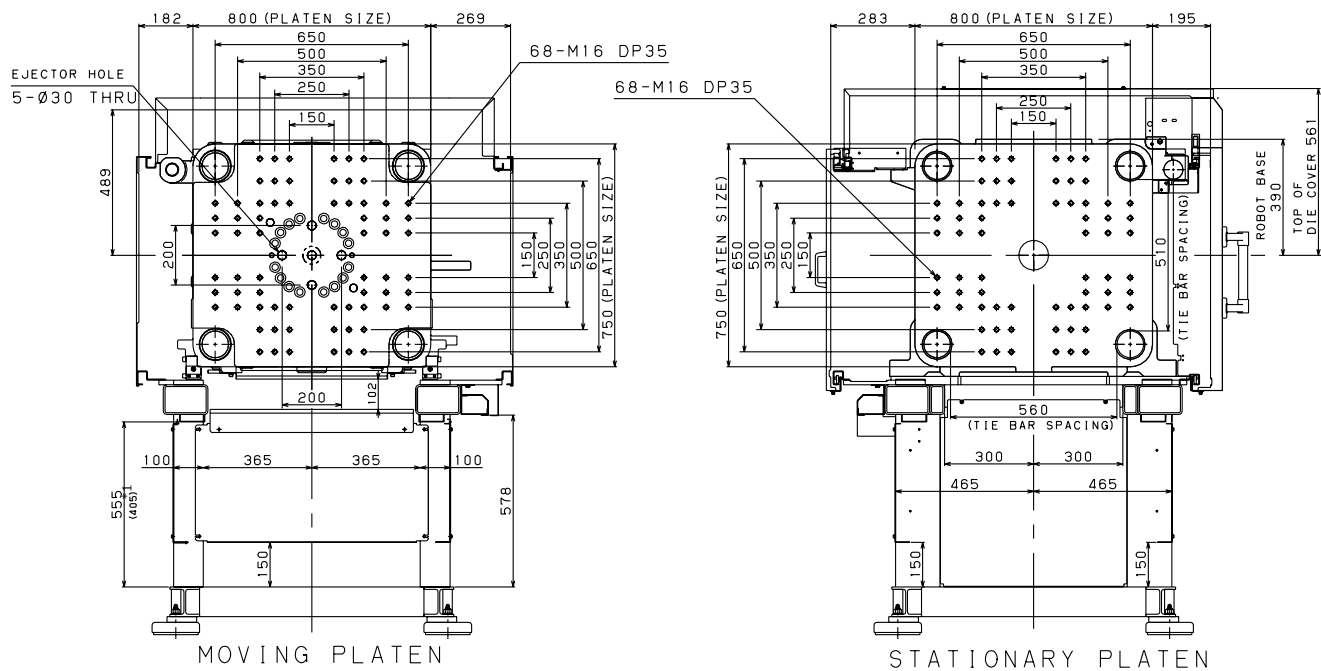
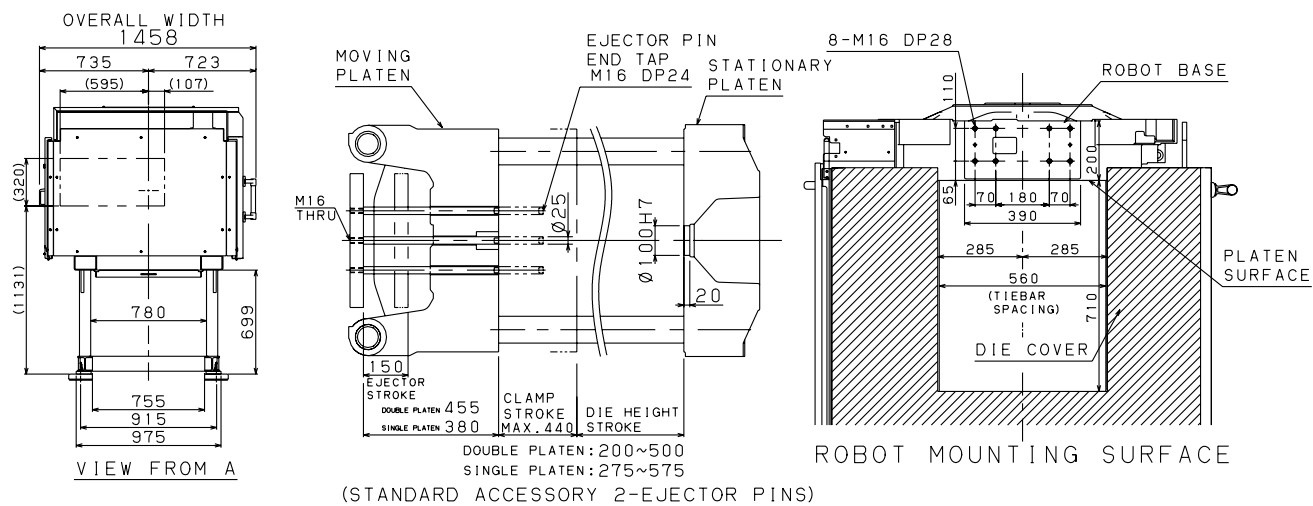
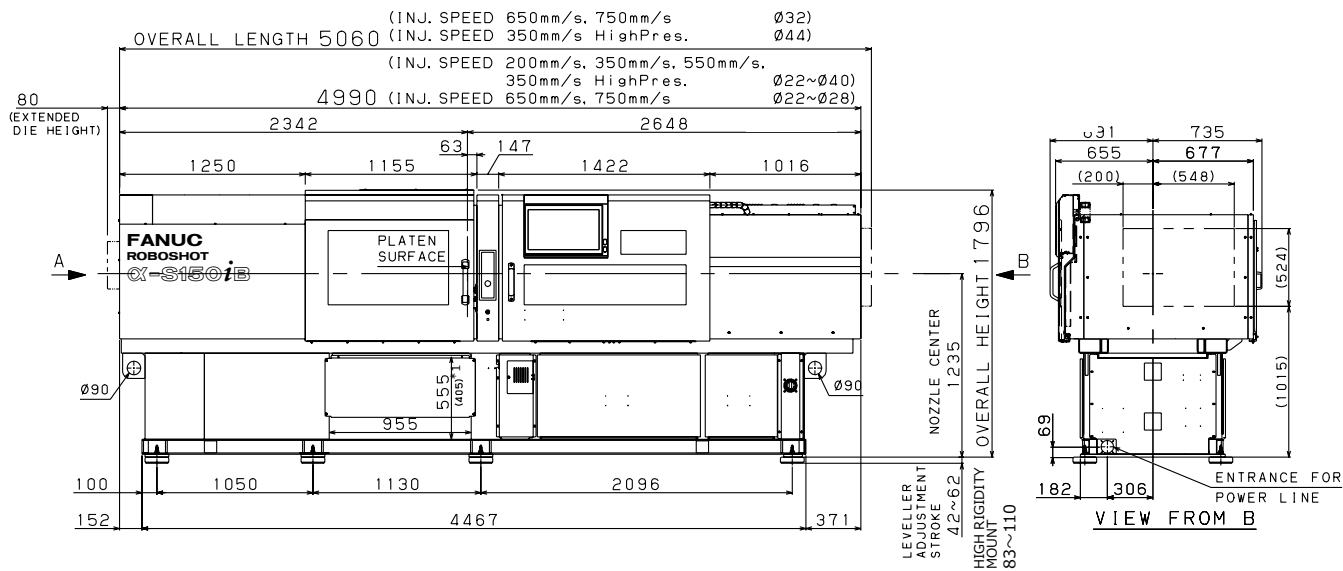
^{*17} With peripheral devices : When the molding machine equipped "External outlet", "Mold heater controller" or "Integrated hotrunner controller". ("Mold heater controller" and "Intefrated hotrunner controller" cannot be selected simultaneously.)

With no peripheral device : When only the molding machine is used.

^{*18} Please contact sales for details about the value of sound generated in this machine.

All specifications are subject to change without notice.

FANUC ROBOSHOT α -S150iB Small capacity injection specification



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