

Mechanical specifications

Item			Unit	Data						
Clamping unit	Clamping mechanism		---	Double toggle						
	Tonnage		kN	Standard 500 (50tonf) / Increased 650 (65tonf) [Option]						
	Maximum and minimum die height		mm	Double platen 350 - 150 / Extended die height 400 - 150 [Option] Single platen 410 - 210 / Extended die height 460 - 210 [Option]						
	Clamping stroke		mm	250						
	Locating ring diameter		mm	φ100						
	Tie bar spacing (H×V)		mm	360 × 320						
	Platen size (H×V)		mm	500 × 470						
	Minimum mold size (H×V) *1		mm	205 × 185						
	Maximum mold weight (Moving-Stationary) *2		kg	Double platen 220 - 220 / Single platen 300 - 220						
	Ejector stroke		mm	70						
Maximum ejector force		kN	Standard 20 (2tonf) / Increased 60 (6tonf) [Option]							
Injection unit	Screw diameter		mm	18	20	22	26	28	32 *12	
	Injection stroke		mm	75	75	75	95	95	95	
	Maximum injection volume *3		cm³	19	24	29	50	58	76	
	Inj.speed 350mm/s	Max. inj. prs.(High prs.mode) *4 *6	MPa	300	360	340	290	250	190	
		Max. inj. prs.(W/C) *4 *7	MPa	280	310	290	240	220	180	
		Max. inj. prs.(General Purpose) *4 *8	MPa	260	280	260	210	190	150	
		Maximum injection rate *5	cm³/s	89	109	133	185	215	281	
		Maximum injection speed *5	mm/s	350						
		Maximum screw rotation speed	min ⁻¹	450						
	Inj.speed 550mm/s	Max. inj. prs.(High prs.mode) *4 *6	MPa	300	330	---	---	---	---	
		Max. inj. prs.(W/C) *4 *7	MPa	280	310	280	200	170	---	
		Max. inj. prs.(General Purpose) *4 *8	MPa	260	280	260	190	170	---	
		Maximum injection rate *5	cm³/s	139	172	209	292	338	---	
		Maximum injection speed *5	mm/s	550						---
		Maximum screw rotation speed	min ⁻¹	450						---
	Nozzle touch force / Increased *9		kN	15 (1.5tonf) / 30 (3tonf) [Option]						
	Screw & Barrel	Number of pyrometers	Barrel	3						
			Nozzle	1						
		Total heater wattage		kW	3.2	3.6	3.9	6.5	7.2	8.4
	Machine Weight *10			t	Inj.speed 350mm/s (Double platen) Approx. 2.9 / (Single platen) Approx. 2.85 Inj.speed 550mm/s (Double platen) Approx. 2.9 / (Single platen) Approx. 2.85					

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

*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

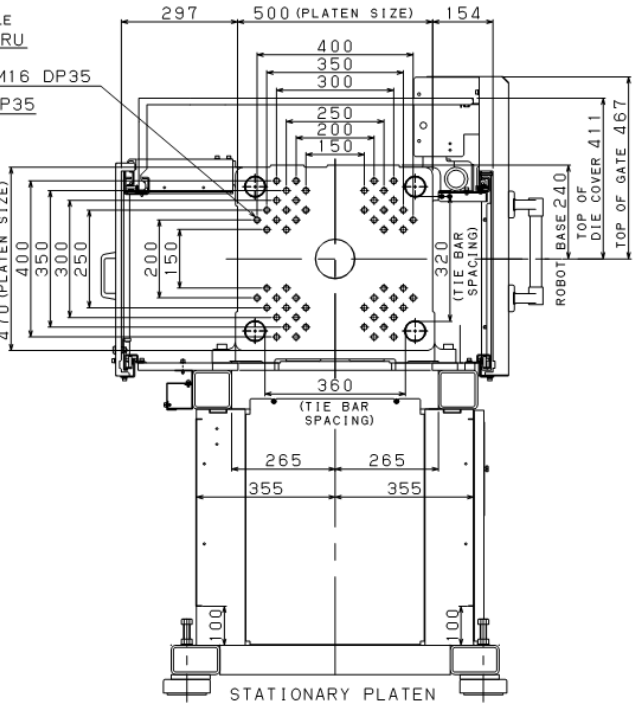
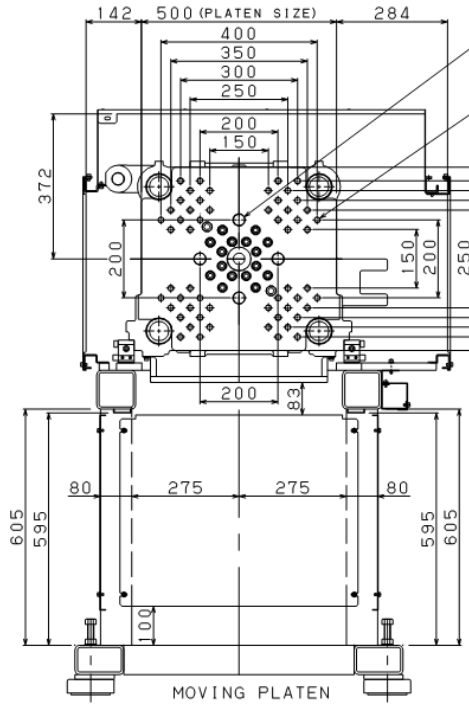
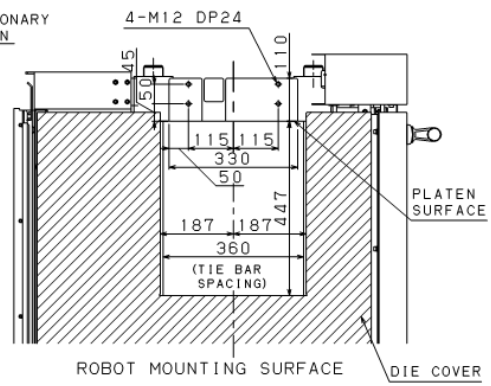
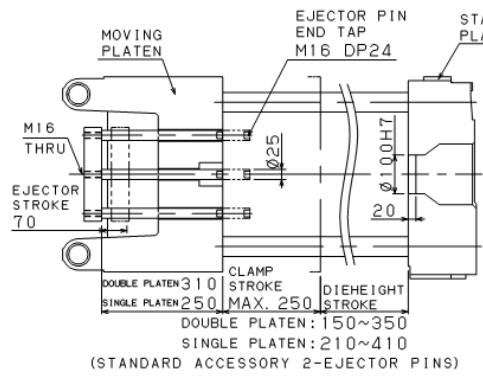
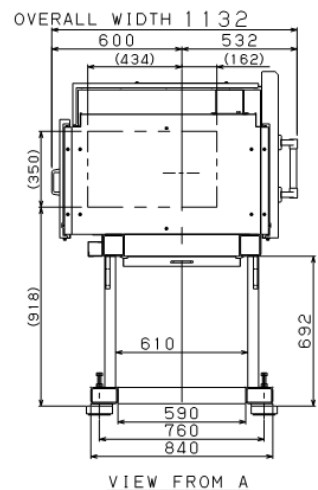
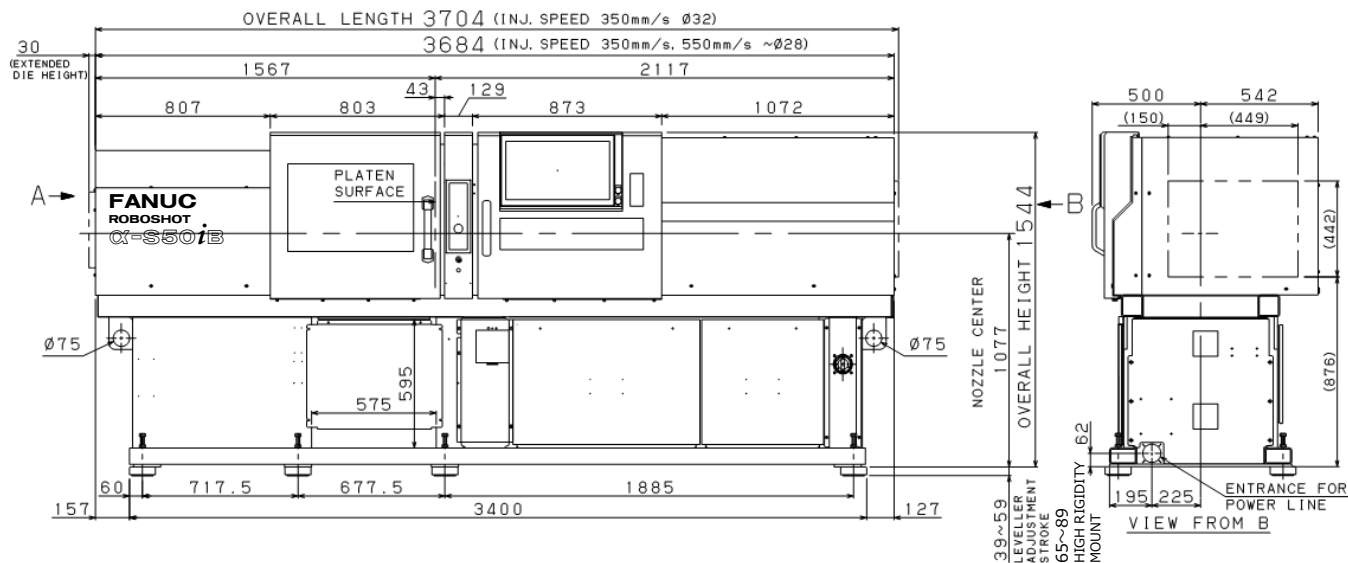
Item		Data
Input power source		3-phase AC200V±10% 50/60Hz±1Hz 3-phase AC220V±10% 60Hz±1Hz
Main breaker *14	Inj.speed 350mm/s	150A (With peripheral devices) *15 50A (With no peripheral device) *15
	Inj.speed 550mm/s	150A (With peripheral devices) *15 50A (With no peripheral device) *15
Ground		Follow relevant laws and standards of the country where the machine is installed when performing grounding.
Installing environment	Temperature	0~40℃ (20~25℃ 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-S50iB



Mechanical specifications

Item			Unit	Data								
Clamping unit	Clamping mechanism		---	Double toggle								
	Tonnage		kN	500 (50tonf)								
	Maximum and minimum die height		mm	Double platen 350 - 150 / Extended die height 400 - 150 [Option]								
	Clamping stroke		mm	250								
	Locating ring diameter		mm	φ60								
	Tie bar spacing (H×V)		mm	360 × 320								
	Platen size (H×V)		mm	500 × 470								
	Minimum mold size (H×V) *1		mm	205 × 185								
	Maximum mold weight (Moving-Stationary) *2		kg	Double platen 220 - 220								
Ejector stroke		mm	70									
Maximum ejector force		kN	Standard 20 (2tonf) / Increased 60 (6tonf) [Option]									
Injection unit	Screw diameter		mm	14	16	18	20	22	26	28	32 *11	
	Injection stroke		mm	56	56	75	75	75	95	95	95	
	Maximum injection volume *3		cm ³	9	11	19	24	29	50	58	76	
	Inj.speed 350mm/s	Max. inj. prs.(High prs.mode) *4 *6	MPa	---	330	300	360	340	290	250	190	
		Max. inj. prs.(W/C) *4 *7	MPa	250	280	280	310	290	240	220	180	
		Max. inj. prs.(General Purpose) *4 *8	MPa	250	250	260	280	260	210	190	150	
		Maximum injection rate *5	cm ³ /s	53	70	89	109	133	185	215	281	
		Maximum injection speed *5	mm/s	350								
		Maximum screw rotation speed	min ⁻¹	450								
	Inj.speed 550mm/s	Max. inj. prs.(High prs.mode) *4 *6	MPa	---	330	300	330	---	---	---	---	
		Max. inj. prs.(W/C) *4 *7	MPa	---	280	280	310	280	200	170	---	
		Max. inj. prs.(General Purpose) *4 *8	MPa	---	250	260	280	260	190	170	---	
		Maximum injection rate *5	cm ³ /s	---	110	139	172	209	292	338	---	
		Maximum injection speed *5	mm/s	---	550						---	
		Maximum screw rotation speed	min ⁻¹	---	450						---	
	Nozzle touch force		kN	9 (0.9tonf)								
	Screw & Barrel	Number of pyrometers	Barrel	3								
			Nozzle	1								
		Total heater wattage		kW	2.5	2.9	3.2	3.6	3.9	6.5	7.2	8.4
	Machine Weight *9			t	Inj.speed 350mm/s (Double platen) Approx. 3.25 Inj.speed 550mm/s (Double platen) Approx. 3.25							

*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.

Maximum injection pressure and maximum holding pressure may be limited depending on the molding conditions.

*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.

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

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

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

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

*12 After shipment, the machine equipped with screw diameter φ14-φ22mm cannot install φ26-φ32mm.

After shipment, the machine equipped with screw diameter φ26-φ32mm cannot install φ14-φ22mm.

*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 350mm/s	150A (With peripheral devices) *15 50A (With no peripheral device) *15
	Inj.speed 550mm/s	150A (With peripheral devices) *15 50A (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 "Integrated 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.

All specifications are subject to change without notice.

FANUC ROBOSHOT α -S50iB High precision clamp specification

