AI Electric Injection Molding Machine

FANUC ROBOSHOT S-2000*i*

15B/30B/50B/100B/150B/250B/300B

(CE Mark version)

Specifications

- Specifications and installation conditions
- External dimensions
- Standard and optional features
  (Mechanical unit, Control unit, Software, Barrel/Screw)
- Floor plan/Utility

RSHOT S-2000*i*B(CE)-07
2008.10

FANUC ROBOSHOT S-2000*i*15B

Mechanical specifications

Item			Unit	Data		
Clamp unit	Clamping mechanism		---	Double toggle		
	Tonnage		kN	Standard 150 (15tonf)		
	Maximum and minimum die height		mm	Standard 260-130		
	Clamping stroke		mm	160		
	Locating ring diameter		mm	ϕ60		
	Tie bar spacing (H×V)		mm	260×235		
	Platen size (H×V)		mm	355×340		
	Minimum mold size (H×V) *1)		mm	150×135		
	Ejector stroke		mm	50		
	Maximum ejector force		kN	7 (0.7tonf)		
Injection unit	Screw diameter		mm	14	16	18
	Injection stroke		mm	56	56	75
	Maximum injection volume		cm^3	9	11	19
	Inj.speed 525mm/s	Maximum injection pressure *2)	MPa	250	250	230
		Maximum pack pressure *2)	MPa	250	230	190
		Maximum injection rate *3)	cm^3/s	80	105	133
		Maximum injection speed *3)	mm/s	525		
		Maximum screw rotation speed	min^{-1}	450		
	Inj.speed 700mm/s	Maximum injection pressure *2)	MPa	250	250	230
		Maximum pack pressure *2)	MPa	250	230	190
		Maximum injection rate *3)	cm^3/s	107	140	178
		Maximum injection speed *3)	mm/s	700		
		Maximum screw rotation speed	min^{-1}	450		
	Nozzle touch force		kN	5 (0.5tonf)		
Screw & Barrel	Number of pyrometers		Barrel	3		
			Nozzle	1		
	Total heater wattage		kW	2.4	2.8	3.1
Machine Weight *4)			t	1.38 (Inj.speed 525mm/s) /1.43(Inj.speed 700mm/s) (Approximately)		

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

*2) 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 molding condition.

*3) 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.

*4) The machine without option.

*5) The pressure conversion is 1MPa=10kgf/$cm^{2.}$

Installation conditions

Item		Data
Input power source		3-phase AC200V±10% 50/60Hz±1Hz 3-phase AC220V±10% 60Hz±1Hz
Main breaker	Inj.speed 525mm/s	40A *7)
	Inj.speed 700mm/s	50A *7)
Earth resistance *8)		Below 100Ω
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.

*6) Connect power cable to the machine's main breaker directly.

*7) Main breaker for power supply only to machine.

*8) Be sure to ground the machine as explained in the operator's manual.

All specifications are subject to change without notice.

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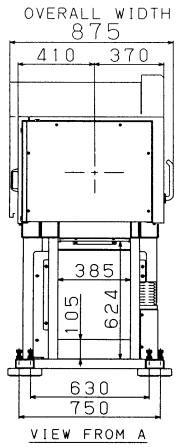
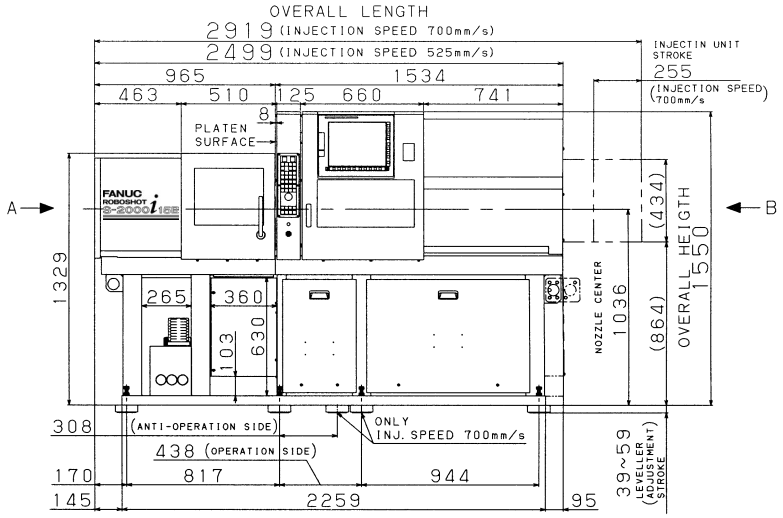
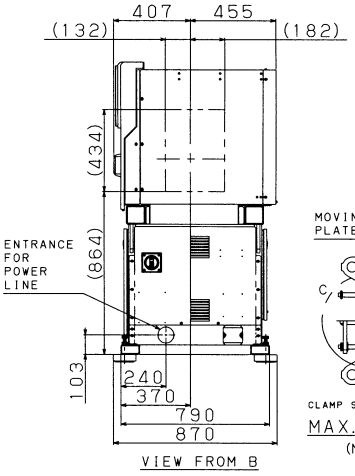
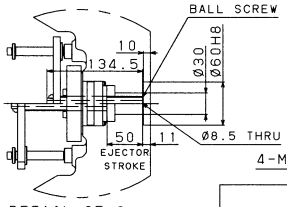
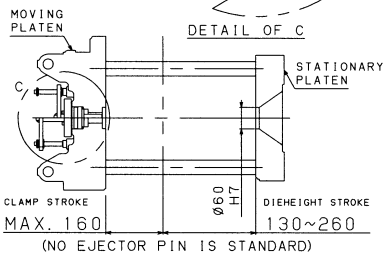
ROBOSHOT S-2000i 15B

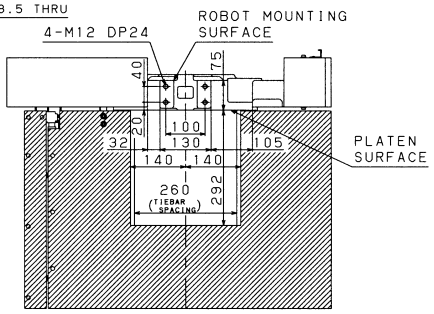


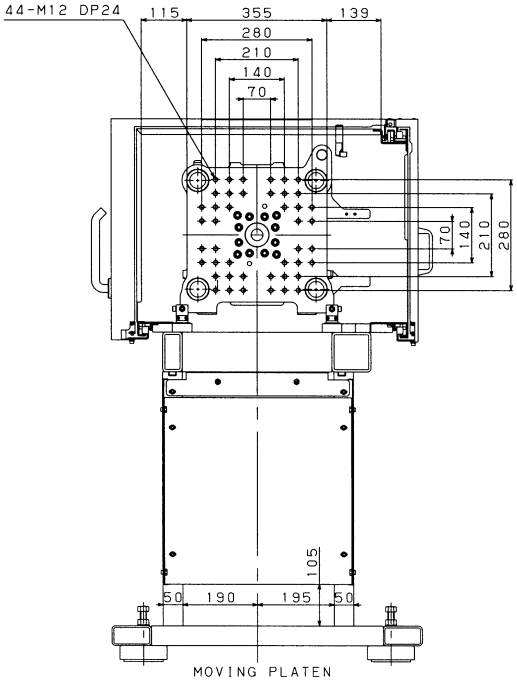


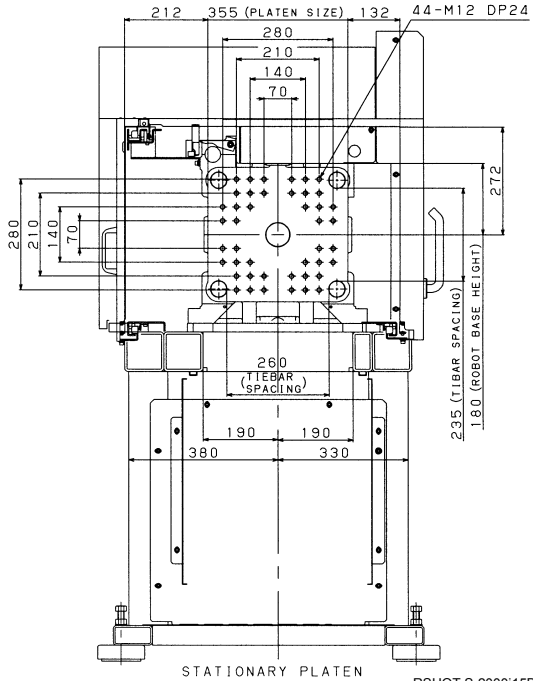












FANUC ROBOSHOT S-2000*i*30B

Mechanical specifications

Item			Unit	Data				
Clamp unit	Clamping mechanism		---	Double toggle				
	Tonnage		kN	Standard 300 (30tonf)				
	Maximum and minimum die height		mm	Standard 330-150				
	Clamping stroke		mm	230				
	Locating ring diameter		mm	ϕ100				
	Tie bar spacing (H×V)		mm	310×290				
	Platen size (H×V)		mm	440×420				
	Minimum mold size (H×V) *1)		mm	175×165				
	Ejector stroke		mm	60				
	Maximum ejector force		kN	8 (0.8tonf)				
Injection unit	Screw diameter		mm	14	16	18	20	22
	Injection stroke		mm	56	56	75	75	75
	Maximum injection volume		cm^3	9	11	19	24	29
	Inj.speed 525mm/s	Maximum injection pressure (High pressure filling mode) *2),*3)	MPa	---	---	300	270	220
		Maximum injection pressure *3)	MPa	250	250	230	200	180
		Maximum pack pressure *3)	MPa	250	250	210	180	160
		Maximum injection rate *4)	cm^3/s	80	105	133	164	199
		Maximum injection speed *4)	mm/s	525				
		Maximum screw rotation speed	min^{-1}	450				
	Inj.speed 700mm/s	Maximum injection pressure (High pressure filling mode) *2),*3)	MPa	---	---	300	270	220
		Maximum injection pressure *3)	MPa	250	250	230	200	180
		Maximum pack pressure *3)	MPa	250	250	210	180	160
		Maximum injection rate *4)	cm^3/s	107	140	178	219	266
		Maximum injection speed *4)	mm/s	700				
		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	2.4	2.8	3.1	3.5	3.8
Machine Weight *5)			t	1.88 (Inj.speed 525mm/s) /1.95 (Inj.speed 700mm/s) (Approximately)				

*1) Smaller mold 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 molding 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/cm2.

Installation conditions

Item		Data
Input power source		3-phase AC200V±10% 50/60Hz±1Hz 3-phase AC220V±10% 60Hz±1Hz
Main breaker	Inj.speed 525mm/s	50A *8)
	Inj.speed 700mm/s	60A *8)
Earth resistance *9)		Below 100Ω
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.

*7) Connect power cable to the machine's main breaker directly.
*8) Main breaker for power supply only to machine.
*9) Be sure to ground the machine as explained in the operator's manual.

All specifications are subject to change without notice.

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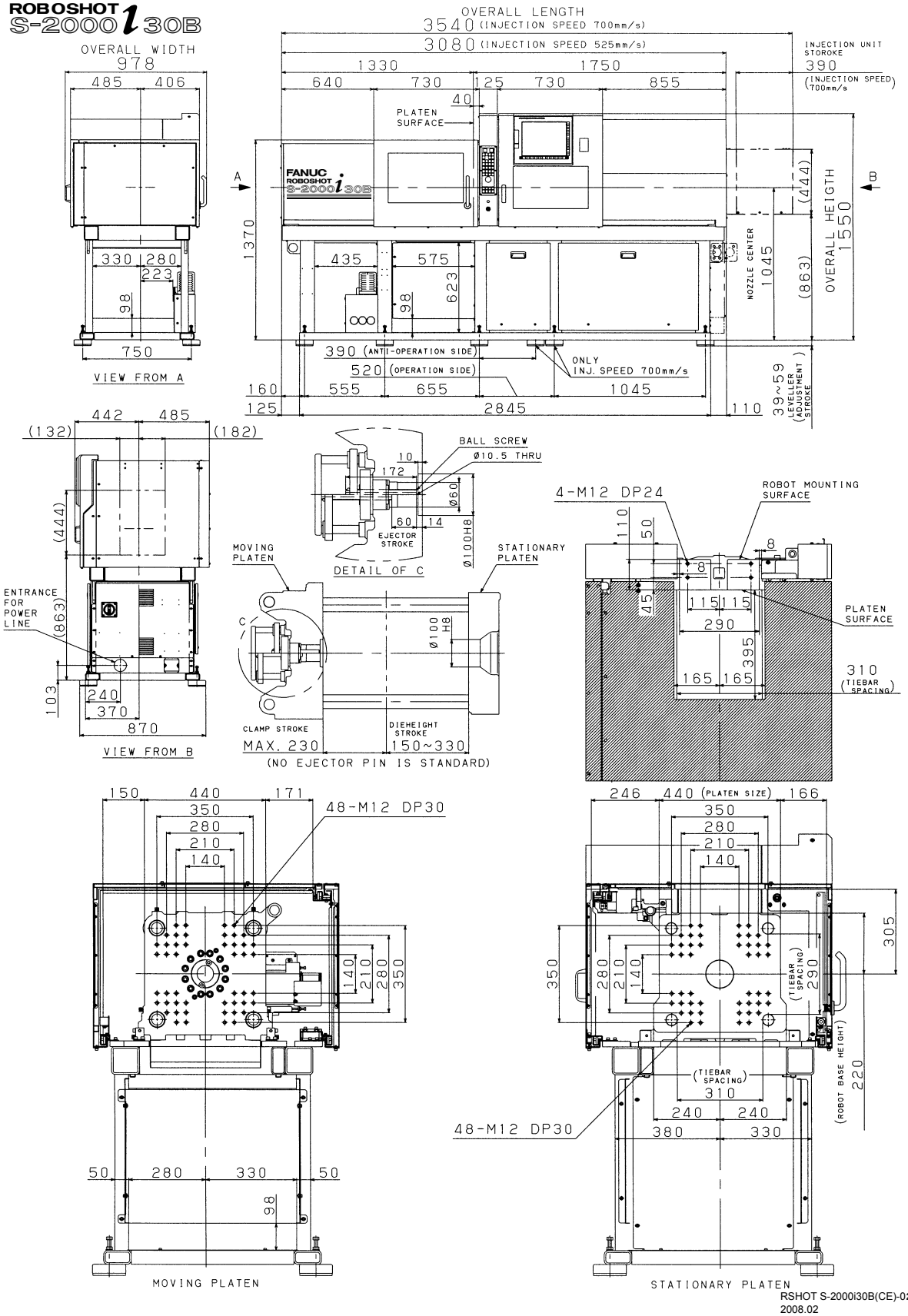
ROBOSHOT S-2000i 30B



FANUC ROBOSHOT S-2000*i*50B

Mechanical specifications

Item			Unit	Data				
Clamp unit	Clamping mechanism		---	Double toggle				
	Tonnage		kN	Standard 500 (50tonf) / Clamp force variation 650 (65tonf)(Option)				
	Maximum and minimum die height		mm	Standard 350-150 / Extended die height 400-200(Option)				
	Clamping stroke		mm	250				
	Locating ring diameter		mm	ϕ125				
	Tie bar spacing (H×V)		mm	360×320				
	Platen size (H×V)		mm	500×470				
	Minimum mold size (H×V) *1)		mm	205×185				
	Ejector stroke		mm	70				
	Maximum ejector force		kN	20 (2.0tonf)				
Injection unit	Screw diameter		mm	20	22	26	28	32*7)
	Injection stroke		mm	75	75	95	95	95
	Maximum injection volume		cm^3	24	29	50	58	76
	Inj.speed 200mm/s	Maximum injection pressure *3)	MPa	280	260	210	190	150
		Maximum pack pressure *3)	MPa	280	240	190	160	130
		Maximum injection rate *4)	cm^3/s	63	76	106	123	161
		Maximum injection speed *4)	mm/s	200				
		Maximum screw rotation speed	min^{-1}	300				
	Inj.speed 330mm/s	Maximum injection pressure (High pressure filling mode) *2),*3)	MPa	340	320	270	250	---
		Maximum injection pressure *3)	MPa	280	260	210	190	150
		Maximum pack pressure *3)	MPa	280	240	190	160	130
		Maximum injection rate *4)	cm^3/s	104	125	175	203	265
		Maximum injection speed *4)	mm/s	330				
		Maximum screw rotation speed	min^{-1}	450				
	Inj.speed 500mm/s	Maximum injection pressure (High pressure filling mode) *2),*3)	MPa	340	320	270	240	---
		Maximum injection pressure *3)	MPa	280	260	210	190	---
		Maximum pack pressure *3)	MPa	280	240	190	160	---
		Maximum injection rate *4)	cm^3/s	157	190	265	308	---
		Maximum injection speed *4)	mm/s	500				
		Maximum screw rotation speed	min^{-1}	450				
	Nozzle touch force		kN	15 (1.5tonf)				
Screw & Barrel	Number of pyrometers		Barrel	3				
			Nozzle	1				
	Total heater wattage		kW	3.5	3.8	6.5	7.2	8.4
Machine Weight *5)			t	2.8 (Inj.speed 200mm/s,330mm/s) / 2.9 (Inj.speed 500mm/s) (Approximately)				

*1) Smaller mold 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 molding 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/cm2.

*7) After shipment, the machine equipped with screw diameter ϕ20-ϕ28mm cannot install ϕ32mm.
The machine equipped with screw diameter ϕ32mm can install ϕ26-ϕ32mm and cannot install ϕ20mm and ϕ22mm.
The molding condition might be limited by the resin.(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	Inj.speed 200mm/s	40A *9)
	Inj.speed 330mm/s	50A *9)
	Inj.speed 500mm/s	100A *9)
Earth resistance *10)		Below 100Ω
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.

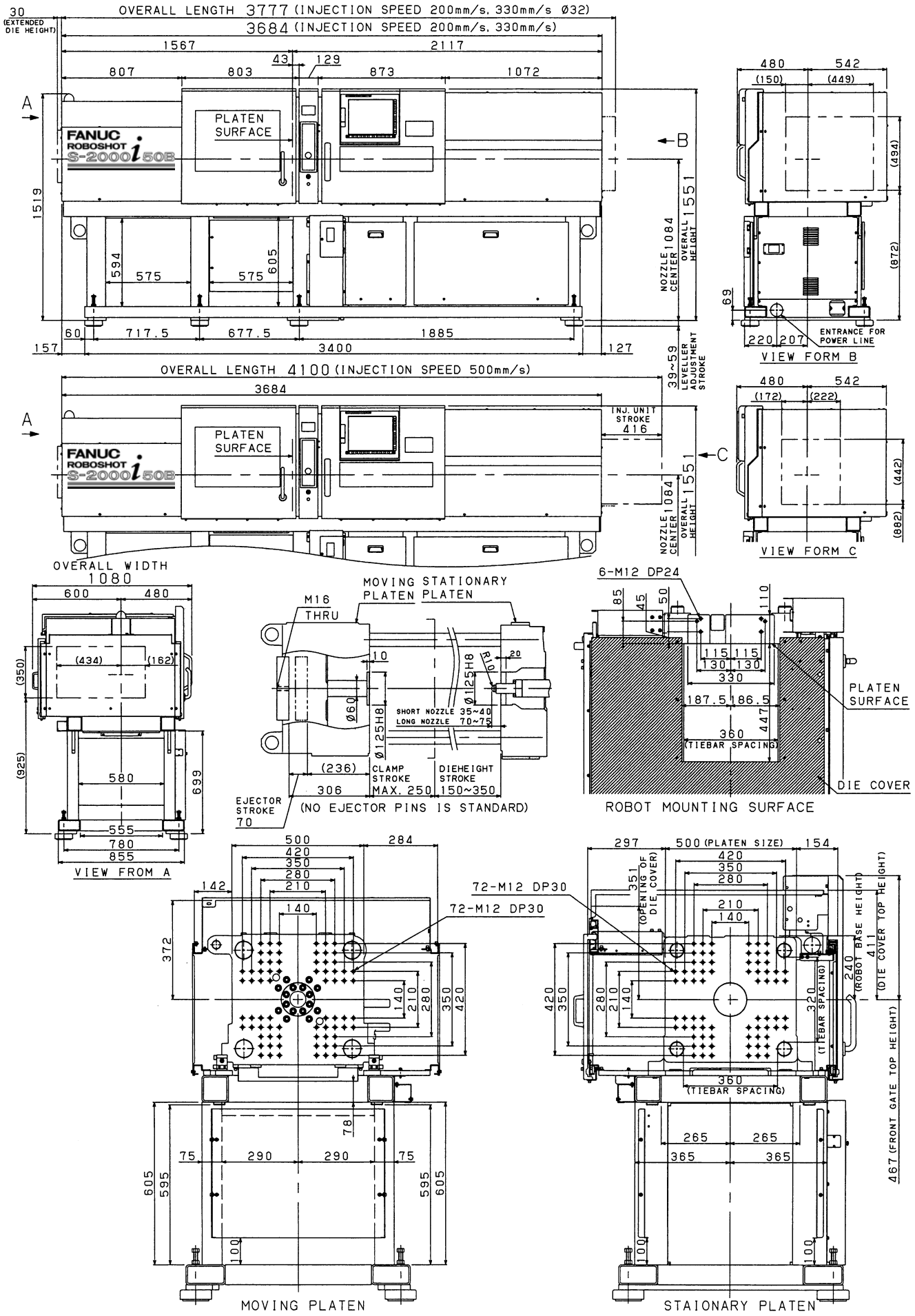
*8) Connect power cable to the machine's main breaker directly.

*9) Main breaker for power supply only to machine.

*10) Be sure to ground the machine as explained in the operator's manual.
Follow the regulations of grounding per each country.

All specifications are subject to change without notice.

FANUC
ROBOSHOT i S-2000 i 50B



FANUC ROBOSHOT S-2000*i*100B

Mechanical specifications

Item			Unit	Data					
Clamp unit	Clamping mechanism		---	Double toggle					
	Tonnage		kN	Standard 1000 (100tonf) / Clamp force variation 1250 (125tonf)(Option)					
	Maximum and minimum die height		mm	Standard 450-150 / Extended die height 550-250(Option)					
	Clamping stroke		mm	350					
	Locating ring diameter		mm	ϕ125					
	Tie bar spacing (H×V)		mm	460×410					
	Platen size (H×V)		mm	660×610					
	Minimum mold size (H×V) *1)		mm	265×240					
	Ejector stroke		mm	100					
	Maximum ejector force		kN	25 (2.5tonf)					
Injection unit	Screw diameter		mm	22	26	28	32	36	40 *7)
	Injection stroke		mm	75	95	95	128	144	144
	Maximum injection volume		cm^3	29	50	58	103	147	181
	Inj.speed 200mm/s	Maximum injection pressure *3)	MPa	260	260	240	220	190	160
		Maximum pack pressure *3)	MPa	260	260	220	200	170	140
		Maximum injection rate *4)	cm^3/s	76	106	123	161	204	251
		Maximum injection speed *4)	mm/s	200					
		Maximum screw rotation speed	min^{-1}	300					
	Inj.speed 330mm/s	Maximum injection pressure (High pressure filling mode) *2),*3)	MPa	320	320	300	250	220	---
		Maximum injection pressure *3)	MPa	260	260	240	220	190	160
		Maximum pack pressure *3)	MPa	260	260	220	200	170	140
		Maximum injection rate *4)	cm^3/s	125	175	203	265	336	415
		Maximum injection speed *4)	mm/s	330					
		Maximum screw rotation speed	min^{-1}	450					
	Inj.speed 500mm/s	Maximum injection pressure (High pressure filling mode) *2),*3)	MPa	320	320	280	---	---	---
		Maximum injection pressure *3)	MPa	260	260	240	220	170	---
		Maximum pack pressure *3)	MPa	260	260	220	200	170	---
		Maximum injection rate *4)	cm^3/s	190	265	308	402	509	---
		Maximum injection speed *4)	mm/s	500					
		Maximum screw rotation speed	min^{-1}	450					
	Nozzle touch force		kN	15 (1.5tonf)					
Screw & Barrel	Number of pyrometers		Barrel	3					
			Nozzle	1					
	Total heater wattage		kW	3.8	6.5	7.2	8.4	9.1	10.1
Machine Weight *5)			t	4.2 (Inj.speed 200mm/s,330mm/s) / 4.35 (Inj.speed 500mm/s) (Approximately)					

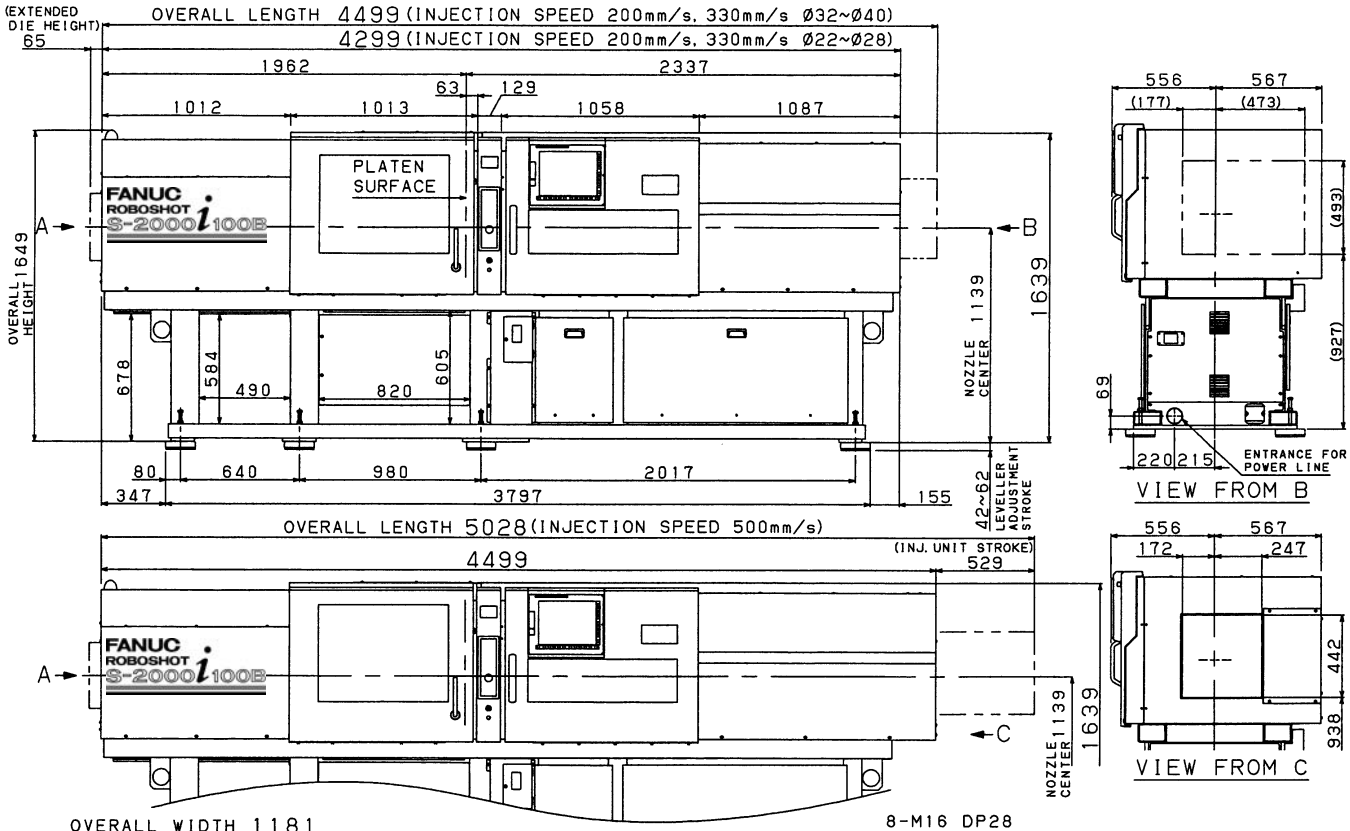
*1) Smaller mold than this size may limit clamp force.
*2) The maximum injection pressure setting at high pressure filling mode option.
There is a limitation in injection time setting and pack time setting, when high pressure filling mode option is selected.(Contact sales for detail)
High pressure resistance 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 molding 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/cm2.
*7) The molding condition might be limited by the resin.(Contact sales for detail)

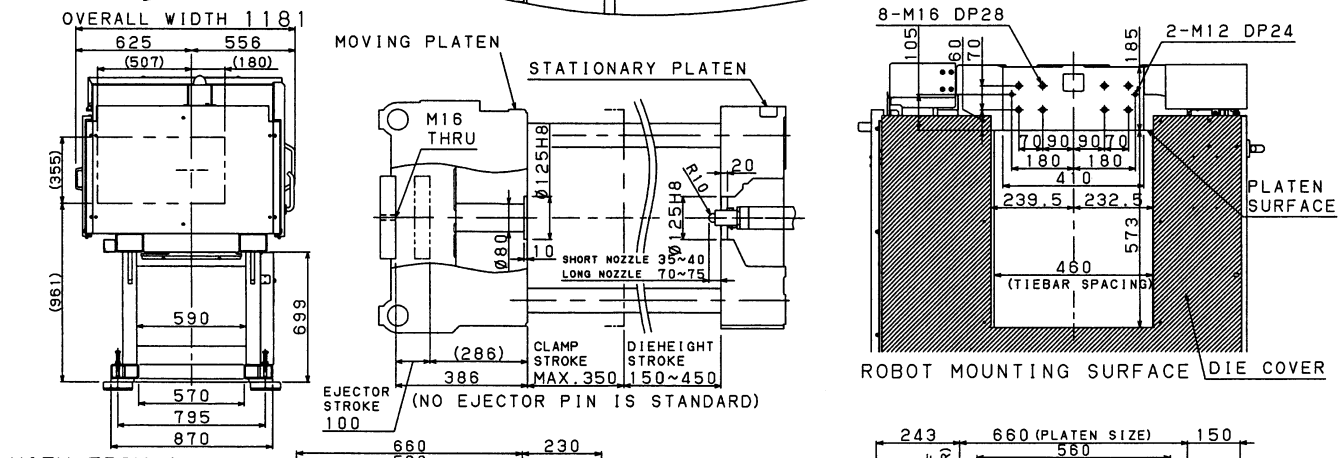
Installation conditions

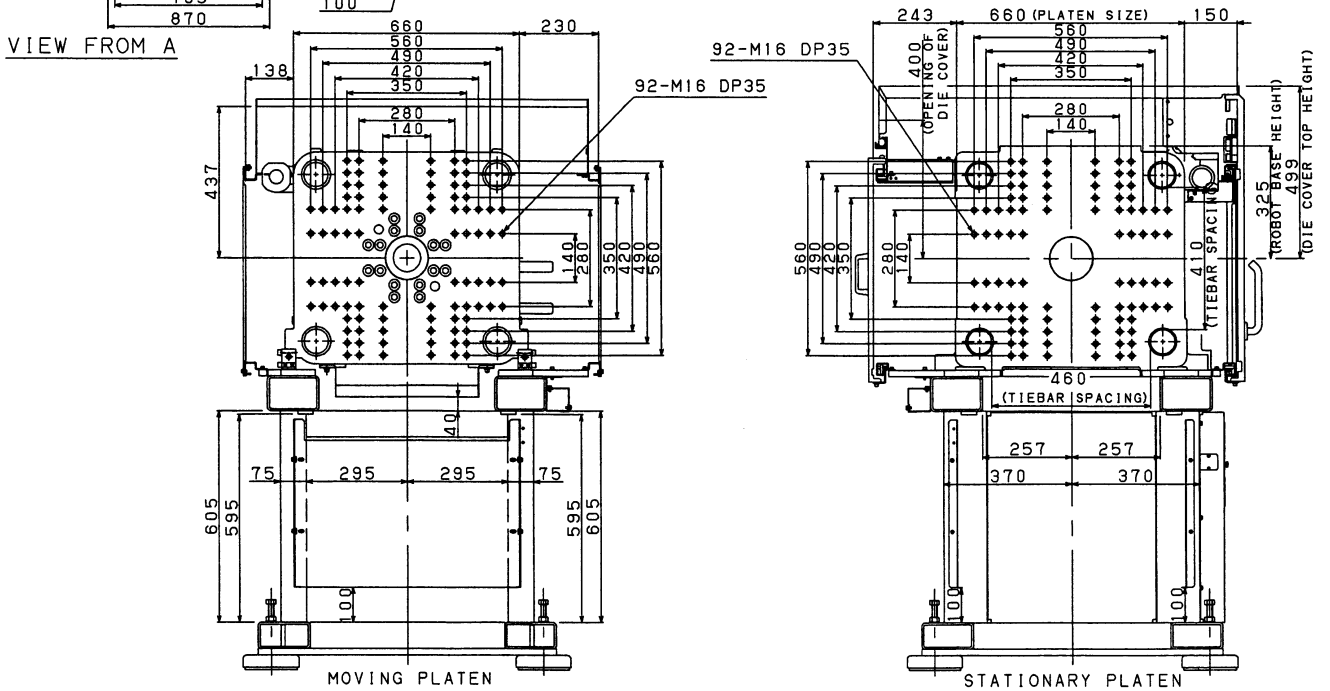
Item		Data
Input power source		3-phase AC200V±10% 50/60Hz±1Hz 3-phase AC220V±10% 60Hz±1Hz
Main breaker	Inj.speed 200mm/s,330mm/s	50A *9)
	Inj.speed 500mm/s	125A *9)
Earth resistance *10)		Below 100Ω
Installing environment	Temperature	0～40℃(20～25℃ recommended)
	Humidity	Below 75% (Below 95% under short term operation)
	Vibration	Below 0.5G
	Atmosphere	Take care of corrosive gas.

*8) Connect power cable to the machine's main breaker directly
*9) Main breaker for power supply only to machine.
*10) Be sure to ground the machine as explained in the operator's manual.
Follow the regulations of grounding per each country.
All specifications are subject to change without notice.

FANUC
ROBOSHOT *i* S-2000*i* 100B







FANUC ROBOSHOT S-2000*i*150B

Mechanical specifications

Item			Unit	Data					
Clamp unit	Clamping mechanism		---	Double toggle					
	Tonnage		kN	Standard 1500 (150tonf) / Clamp force variation 1800 (180tonf)(Option)					
	Maximum and minimum die height		mm	Standard 490-200 / Extended die height 590-300(Option)					
	Clamping stroke		mm	440					
	Locating ring diameter		mm	ϕ160					
	Tie bar spacing (H×V)		mm	560×510					
	Platen size (H×V)		mm	800×750					
	Minimum mold size (H×V) *1)		mm	325×300					
	Ejector stroke		mm	150					
	Maximum ejector force		kN	35 (3.5tonf)					
Injection unit (Std.capacity)	Screw diameter		mm	32	36	40	44	48	52
	Injection stroke		mm	150	150	150	176	176	208
	Maximum injection volume		cm^3	121	153	188	268	318	442
	Inj.speed 200mm/s	Maximum injection pressure *2)	MPa	280	280	260	220	190	160*7)
		Maximum pack pressure *2)	MPa	280	280	220	190	160	130*7
		Maximum injection rate *3)	cm^3/s	161	204	251	304	362	425
		Maximum injection speed *3)	mm/s	200					
		Maximum screw rotation speed	min^{-1}	300					
	Inj.speed 330mm/s	Maximum injection pressure *2)	MPa	280	280	260	220	190	160
		Maximum pack pressure *2)	MPa	280	280	260	220	190	160
		Maximum injection rate *3)	cm^3/s	265	336	415	502	597	701
		Maximum injection speed *3)	mm/s	330					
		Maximum screw rotation speed	min^{-1}	400					
	Nozzle touch force		kN	30 (3.0tonf)					
	Screw & Barrel	Number of pyrometers	Barrel	3					
			Nozzle	1					
		Total heater wattage	kW	12.0	13.0	14.9	15.9	17.9	20.2
Injection unit (Small capacity)	Screw diameter		mm	22	26	28	32	36	40*7)
	Injection stroke		mm	75	95	95	128	144	144
	Maximum injection volume		cm^3	29	50	58	103	147	181
	Maximum injection pressure (High pressure filling mode) *2),*4)		MPa	320	320	300	250	220	---
	Maximum injection pressure *2)		MPa	260	260	240	220	190	160
	Maximum pack pressure *2)		MPa	260	260	220	200	170	140
	Maximum injection rate *3)		cm^3/s	125	175	203	265	336	415
	Maximum injection speed *3)		mm/s	330					
	Maximum screw rotation speed		min^{-1}	450					
	Nozzle touch force		kN	15 (1.5tonf)					
	Screw & Barrel	Number of pyrometers	Barrel	3					
			Nozzle	1					
		Total heater wattage	kW	3.8	6.5	7.2	8.4	9.1	10.1
Machine weight *5)			t	7.4 (Inj.speed 200mm/s) / 7.6 (Inj.speed 330mm/s) 7.1(Small capacity injection)(Approximately)					

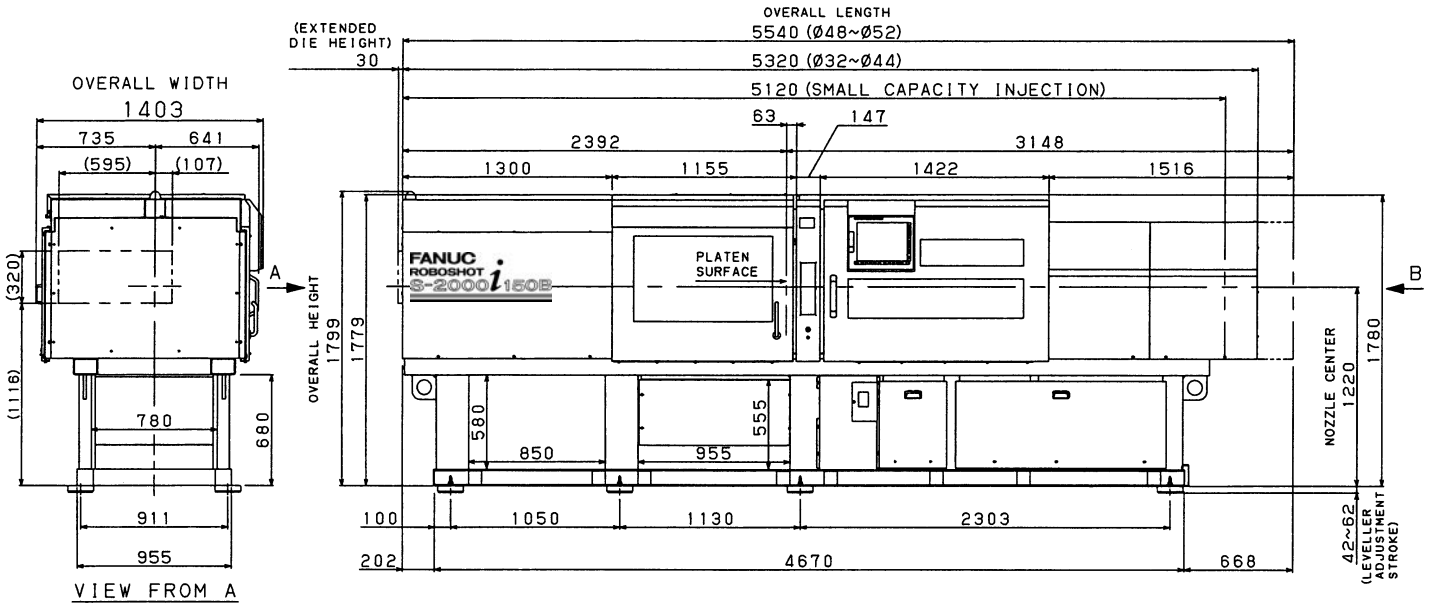
*1) Smaller mold than this size may limit clamp force.
*2) The maximum injection pressure and maximum pack pressure is not melt pressure but injection unit output.
The maximum injection pressure and maximum pack pressure is the maximum value can be set.
The maximum injection pressure and maximum pack pressure might be limited depending on the molding condition.
*3) 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.
*4) 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)
*5) The machine without option.
*6) The pressure conversion is 1MPa=10kgf/cm2.
*7) The molding condition might be limited by the resin.(Contact sales for detail)

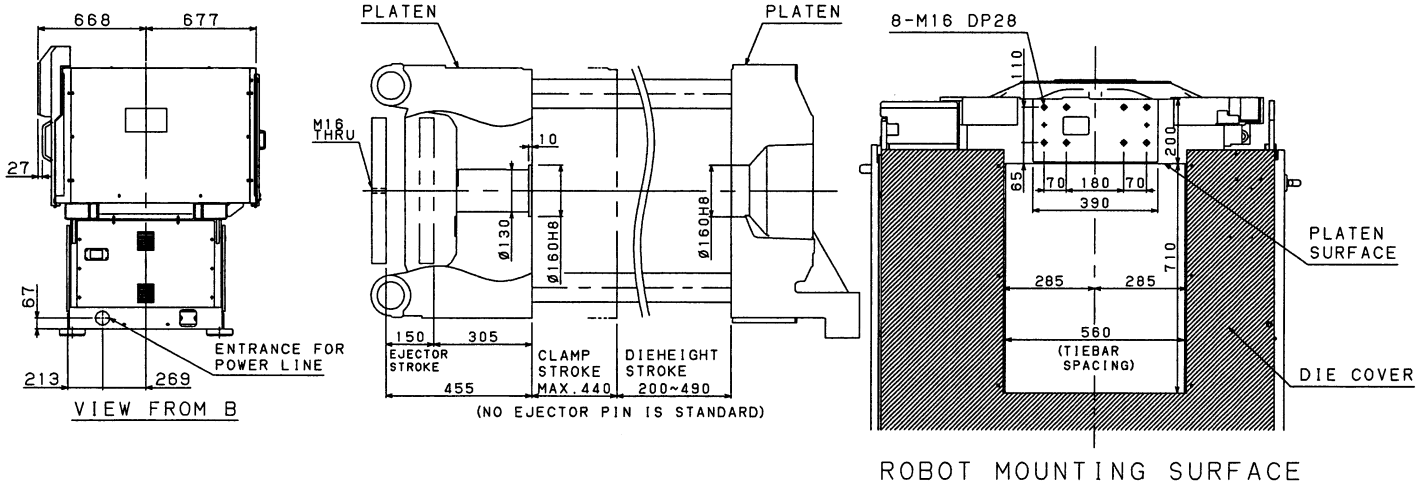
Installation conditions

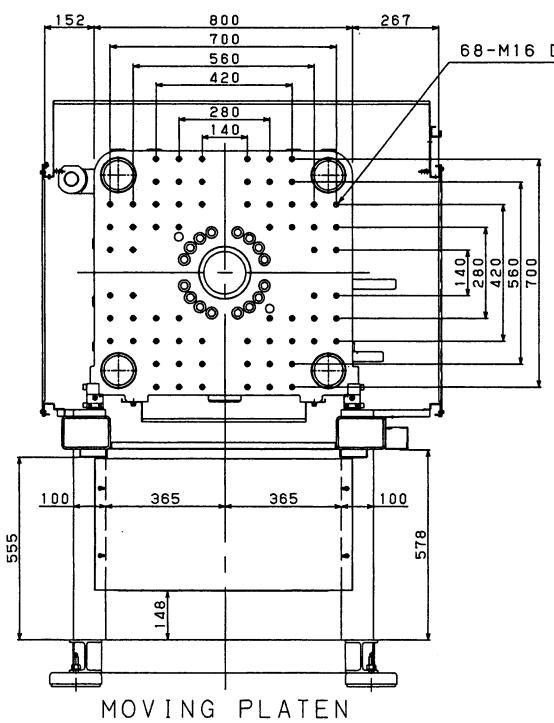
Item		Data
Input power source		3-phase AC200V±10% 50/60Hz±1Hz 3-phase AC220V±10% 60Hz±1Hz
Main breaker	Standard injection unit Inj.speed 200mm/s	75A *9)
	Standard injection unit Inj.speed 330mm/s	125A *9)
	Small capacity injection unit	75A *9)
Earth resistance *10)		Below 100Ω
Installing environment	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.

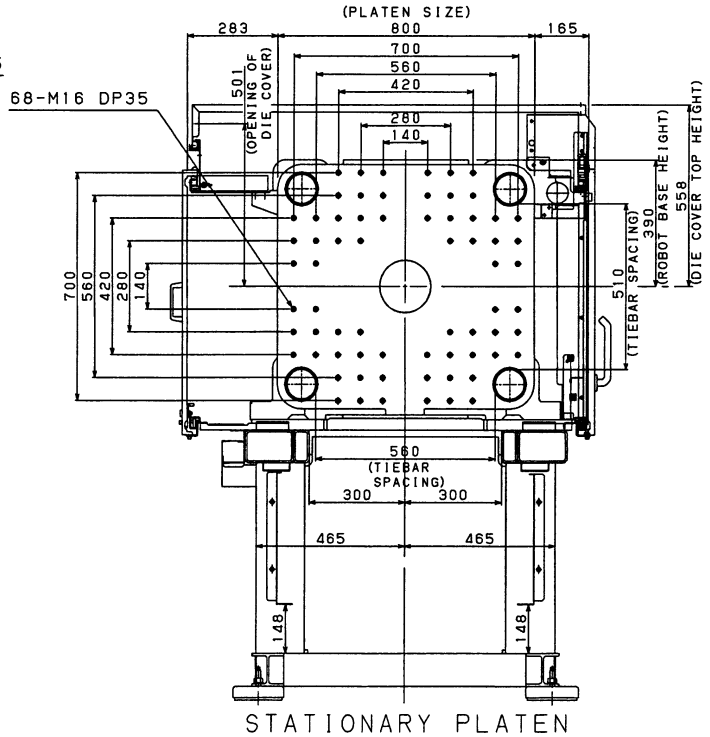
*8) Connect power cable to the machine's main breaker directly.
*9) Main breaker for power supply only to machine.
*10) Be sure to ground the machine as explained in the operator's manual.
Follow the regulations of grounding per each country.
All specifications are subject to change without notice.

FANUC
ROBOSHOT *i* S-2000*i* 150B









FANUC ROBOSHOT S-2000*i*250B

Mechanical specifications

Item			Unit	Data					
Clamp unit	Clamping mechanism		---	Double toggle					
	Tonnage		kN	Standard 2500 (250tonf) / Clamp force variation 3000 (300tonf)(Option)					
	Maximum and minimum die height		mm	Standard 650-300 / Extended die height 750-400(Option)					
	Clamping stroke		mm	600					
	Locating ring diameter		mm	ϕ160					
	Tie bar spacing (H×V)		mm	710×635					
	Platen size (H×V)		mm	1030×960					
	Minimum mold size (H×V) *1)		mm	420×385					
	Ejector stroke		mm	200					
	Maximum ejector force		kN	80 (8.0tonf)					
Injection unit	Screw diameter		mm	32	36	40	44	48	52
	Injection stroke		mm	150	150	150	176	176	208
	Maximum injection volume		cm^3	121	153	188	268	318	442
	Inj.speed 330mm/s	Maximum injection pressure *2)	MPa	280	280	260	220	190	160
		Maximum pack pressure *2)	MPa	280	280	260	220	190	160
		Maximum injection rate *3)	cm^3/s	265	336	415	502	597	701
		Maximum injection speed *3)	mm/s	330					
		Maximum screw rotation speed	min^{-1}	400					
	Nozzle touch force		kN	30 (3.0tonf)					
Screw & Barrel	Number of pyrometers		Barrel	3					
			Nozzle	1					
	Total heater wattage		kW	12.0	13.0	14.9	15.9	17.9	20.2
Machine weight *4)			t	13.7 (Approximately)					

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

*2) 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 molding condition.

*3) 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.

*4) The machine without option.

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

Installation conditions

Item		Data
Input power source		3-phase AC200V±10% 50/60Hz±1Hz 3-phase AC220V±10% 60Hz±1Hz
Main breaker		125A *7)
Earth resistance *8)		Below 100Ω
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.

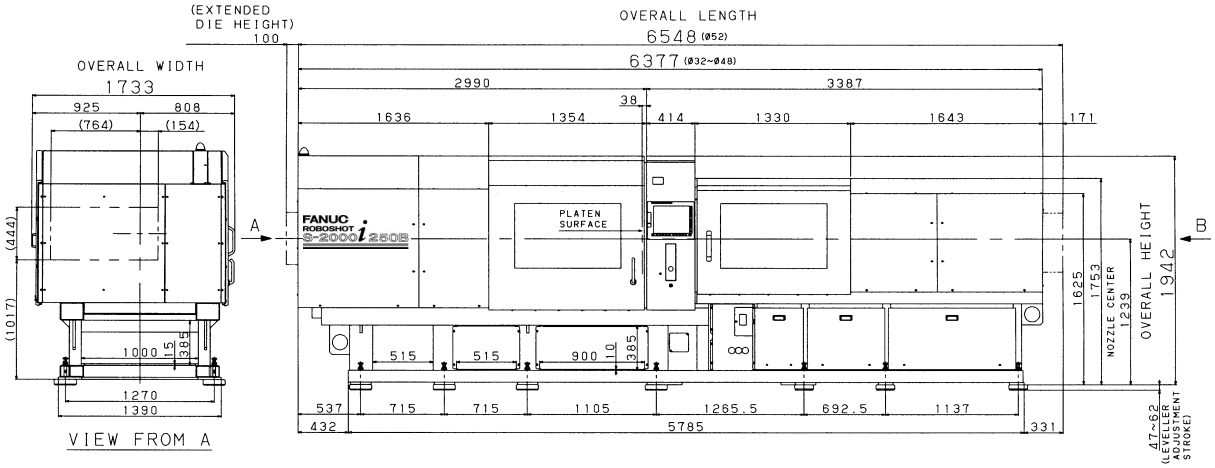
*6) Connect power cable to the machine's main breaker directly.

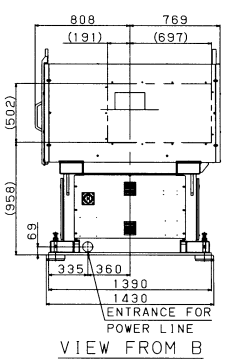
*7) Main breaker for power supply only to machine.

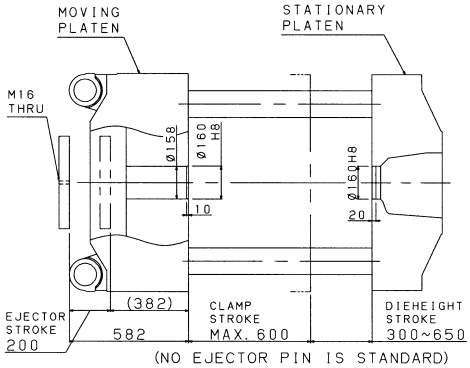
*8) Be sure to ground the machine as explained in the operator's manual.
Follow the regulations of grounding per each country.

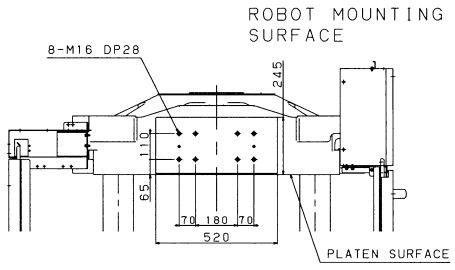
All specifications are subject to change without notice.

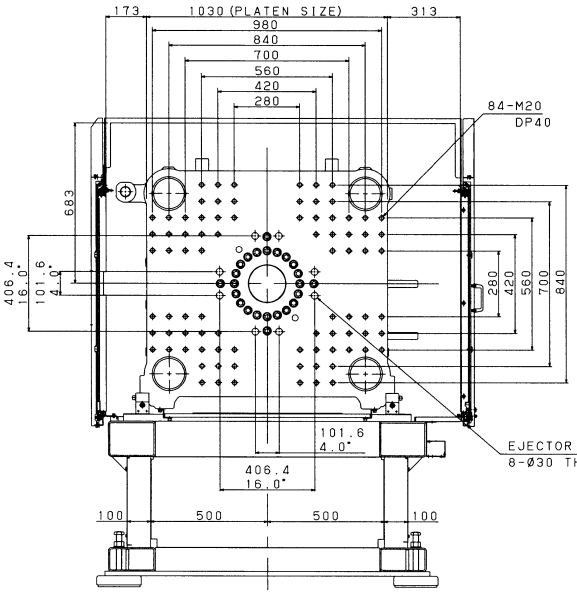
FANUC
ROBOSHOT S-2000i 250B

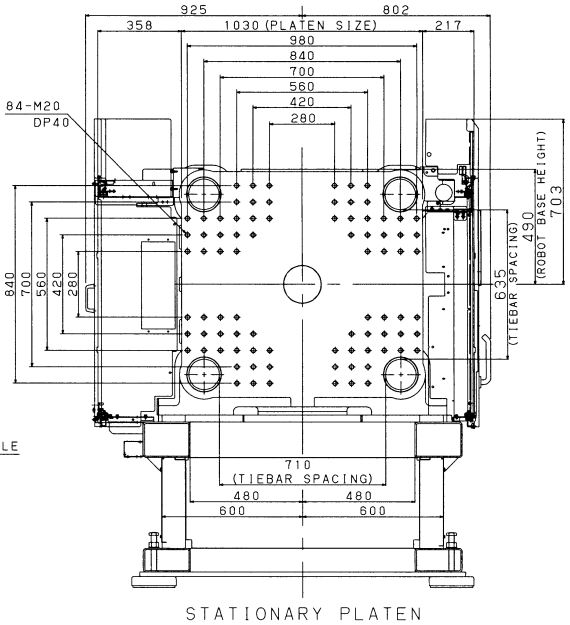












FANUC ROBOSHOT S-2000*i*300B

Mechanical specifications

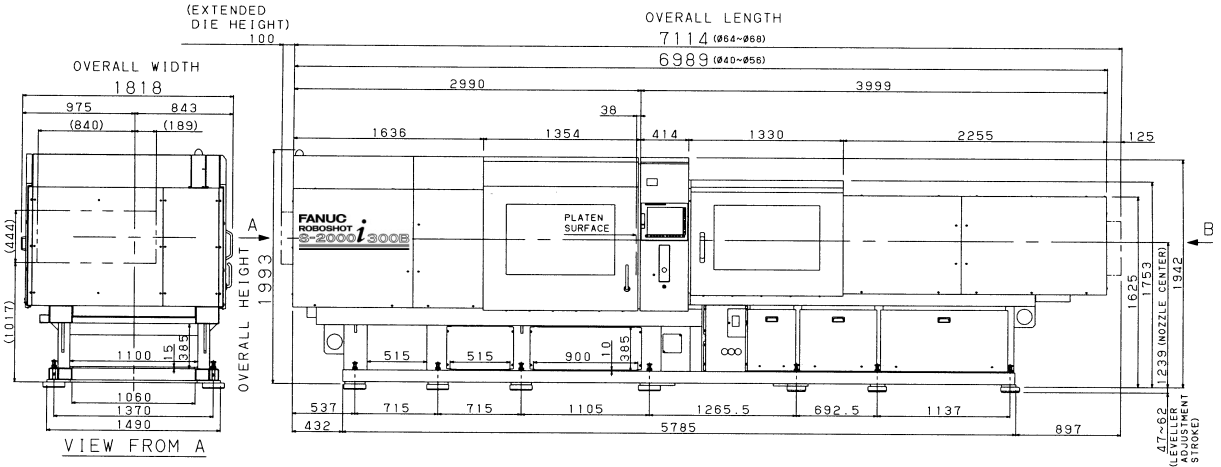
Item			Unit	Data						
Clamp unit	Clamping mechanism		---	Double toggle						
	Tonnage		kN	Standard 3000 (300tonf) / Clamp force variation 3500 (350tonf)(Option)						
	Maximum and minimum die height		mm	Standard 650-300 / Extended die height 750-400(Option)						
	Clamping stroke		mm	600						
	Locating ring diameter		mm	ϕ160						
	Tie bar spacing (H×V)		mm	810×710						
	Platen size (H×V)		mm	1130×1030						
	Minimum mold size (H×V) *1)		mm	470×420						
	Ejector stroke		mm	200						
	Maximum ejector force		kN	80 (8.0tonf)						
Injection unit	Screw diameter		mm	40	44	48	52	56	64	68
	Injection stroke		mm	150	176	176	208	260	260	260
	Maximum injection volume		cm^3	188	268	318	442	640	836	944
	Inj.speed 240mm/s	Maximum injection pressure *2)	MPa	280	280	270	240	225	175	155
		Maximum pack pressure *2)	MPa	280	260	240	220	195	150	130
		Maximum injection rate *3)	cm^3/s	302	365	434	510	591	772	872
		Maximum injection speed *3)	mm/s	240						
		Maximum screw rotation speed	min^{-1}	400						
	Nozzle touch force		kN	30 (3.0tonf)						
Screw & Barrel	Number of pyrometers		Barrel	3				4		
			Nozzle	1						
	Total heater wattage		kW	15.4	16.8	18.3	20.1	22.9	26.2	26.2
Machine weight *4)			t	14.6 (Approximately)						

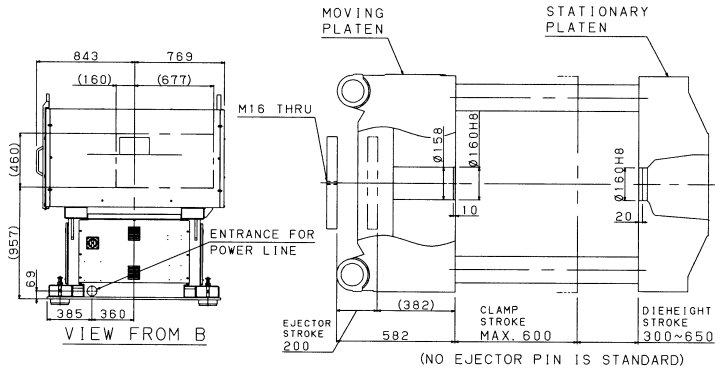
*1) Smaller mold than this size may limit clamp force.
*2) The maximum injection pressure and maximum pack pressure is not melt pressure but injection unit output.
The maximum injection pressure and maximum pack pressure is the maximum value can be set.
The maximum injection pressure and maximum pack pressure might be limited depending on the molding condition.
*3) 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.
*4) The machine without option.
*5) The pressure conversion is 1MPa=10kgf/cm2.

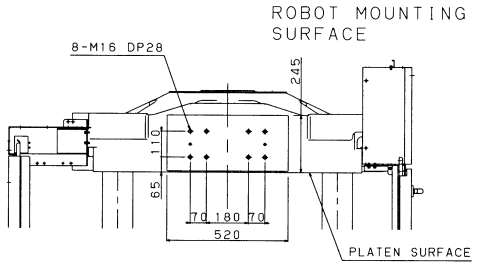
Installation conditions

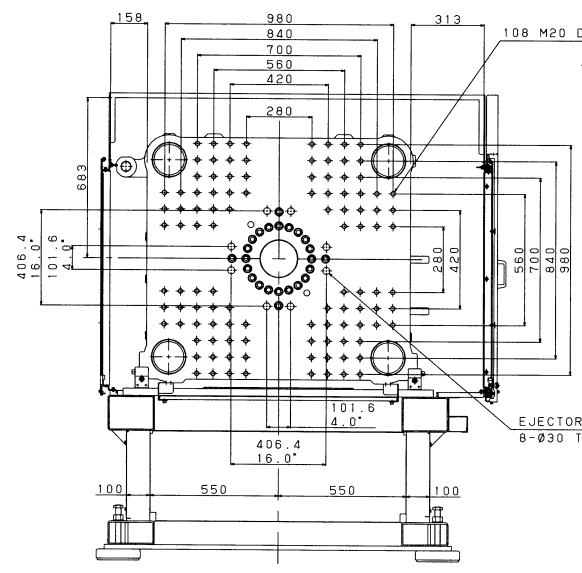
Item		Data
Input power source		3-phase AC200V±10% 50/60Hz±1Hz 3-phase AC220V±10% 60Hz±1Hz
Main breaker		150A *7)
Earth resistance *8)		Below 100Ω
Installing environment	Temperature	0～40℃(20～25℃ recommended)
	Humidity	Below 75% (Below 95% under short term operation)
	Vibration	Below 0.5G
	Atmosphere	Take care of corrosive gas.

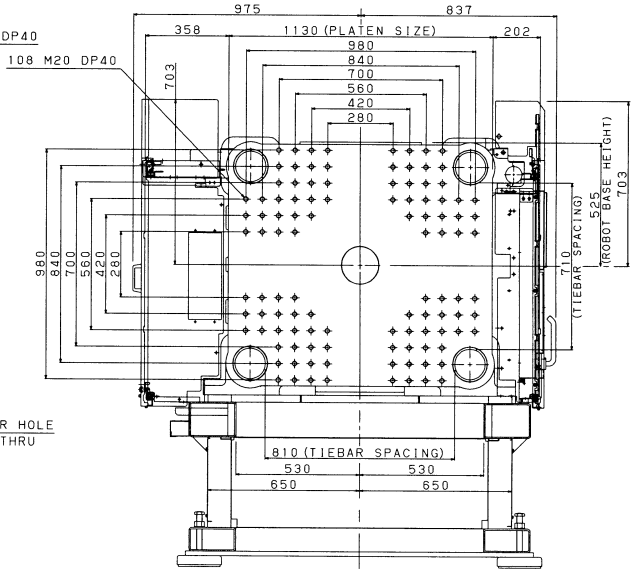
*6) Connect power cable to the machine's main breaker directly.
*7) Main breaker for power supply only to machine.
*8) Be sure to ground the machine as explained in the operator's manual.
Follow the regulations of grounding per each country.
All specifications are subject to change without notice.


(EXTENDED DIE HEIGHT)
100
OVERALL LENGTH
7114 (Ø64~Ø58)
6989 (Ø40~Ø56)
OVERALL WIDTH
1818
975
843
(840)
(189)
2990
3999
38
1636
1354
414
1330
2255
125
PLATEN SURFACE
A
B
OVERALL HEIGHT
1993
(444)
(1017)
1100
115
385
1060
1370
1490
515
515
900
10
385
8
1625
1753
1942
239 (NOZZLE CENTER)
537
715
715
1105
1265.5
692.5
1137
432
5785
897
47~62
(LEVELLER ADJUSTMENT STROKE)
VIEW FROM A


843
769
(160)
(677)
M16 THRU
(460)
(957)
ENTRANCE FOR POWER LINE
69
385
360
VIEW FROM B
MOVING PLATEN
STATIONARY PLATEN
Ø158
Ø160H8
Ø160H8
10
20
(382)
EJECTOR STROKE
200
582
CLAMP STROKE
MAX. 600
DIEHEIGHT STROKE
300~650
(NO EJECTOR PIN IS STANDARD)


ROBOT MOUNTING SURFACE
8-M16 DP28
245
110
65
70 180 70
520
PLATEN SURFACE


158
980
840
700
560
420
313
108 M20 DP40
280
683
406.4
16.0"
101.6
4.0"
280
420
560
700
840
980
101.6
4.0"
406.4
16.0"
EJECTOR HOLE
8-Ø30 THRU
100
550
550
100
MOVING PLATEN


975
837
358
1130 (PLATEN SIZE)
202
108 M20 DP40
703
980
840
700
560
420
280
525
(ROBOT BASE HEIGHT)
703
710
(TIEBAR SPACING)
810 (TIEBAR SPACING)
530
530
650
650
STATIONARY PLATEN

Standard and Optional features (Mechanical unit)

Std：Standard feature
●:Option with no retrofitting capability
○:Option with retrofitting capability NOTE 1)

Refer to page 20~23 for the barrel/screw options

No	Item		15B	30B	50B	100B	150B	250B	300B
Injection unit									
1	Safety gate,covers	① Slide type safety gate	Std	Std	Std	Std	Std	Std	Std
2		② Injection unit top cover (Covering mechanical portion away from dust)	Std	Std	Std	Std	Std	Std	Std
3	Injection unit swivel	Swivels the injection unit to the operator's side in changing screw / barrel. With the safety stopper.	Std	Std	Std	Std	Std	Std	Std
4	Closed loop feed throat temperature control	Using the solenoid valve with strainer. Effective in reducing the deviation of the metering time	Std	Std	Std	Std	Std	Std	Std
5	Feed throat surface temperature	Thermometer mounted on the side of the water jacket	○	○	○	○	○	○	○
6	Increased nozzle touch force	3.0 ton type（ Increased to 3.0 ton from standard 1.5 ton）Sprue break function is not available	––	––	○	○	––	––	––
		5.0 ton type（Increased to 5.0 ton from standard 3.0ton）Sprue break function is not available	––	––	––	––	○Note2)	○	○
7	Hopper	① 15 litter aluminum or stainless hopper with shutter (φ28 or smaller diameter)	○	○	○	○	○	––	––
		② 30 litter aluminum or stainless hopper with shutter (φ32 or larger diameter)	––	––	––	○	○	○	○
		③ 50 litter aluminum or stainless hopper with shutter (φ32 or larger diameter)	––	––	––	○	○	○	○
8	Feed throat safety block	With safty pin	Std	Std	Std	Std	Std	Std	Std
9	Thermal insulation cover	Heat cover with the thermal insulator (Thermal insulation cover cannot be used on ceramic heater)	○	○	○	○	○	○	○
Clamp unit									
10	Safety gate,covers	Operator's side safety gate (Immediate stop by the gate open.)	Std	Std	Std	Std	Std	Std	Std
11		Non-operator's side safety gate (Immediate stop by the gate open.)	Std	Std	Std	Std	Std	Std	Std
12		Die cover for safety and die protection（slide type）	Std	Std	Std	Std	Std	––	––
13		Clamp unit top cover for safety (Covering mechanical portion away from dust)	Std	Std	Std	Std	Std	Std	Std
14		Parts drop area covers for safety	Std	Std	Std	Std	Std	Std	Std
15	Mechanical safety	With small window for checking safety device function for 50B to 300B	Std	Std	Std	Std	Std	Std	Std
16	Ejector servo motor equipped with brake	Keep position when safety gate open and emergency stop condition	Std	Std	Std	Std	Std	Std	Std
17	Platen support	Improves parallelism at mold open/close and preciseness at mold touch	Std	Std	Std	Std	Std	Std	Std
18	Robot mounting holes	Refer to the other page for the detail dimension	Std	Std	Std	Std	Std	Std	Std
19	Clamp force variation	65 ton package	––	––	○	––	––	––	––
		125 ton package	––	––	––	●	––	––	––
		180 ton package	––	––	––	––	○	––	––
		300 ton package	––	––	––	––	––	●	––
		350 ton package	––	––	––	––	––	––	●
20	Extended die height No clamp stroke change	Additional 50mm of maximum die height（350→400㎜） Additional 50mm of minimum die height(150→200mm)	––	––	○	––	––	––	––
		Additional 100mm of maximum die height（450→550㎜） Additional 100mm of minimum die height(150→250mm)	––	––	––	○	––	––	––
		Additional 100mm of maximum die height（490→590㎜） Additional 100mm of minimum die height(200→300mm)	––	––	––	––	●	––	––
		Additional 100mm of maximum die height（650→750㎜） Additional 100mm of minimum die height(300→400mm)	––	––	––	––	––	●	●
21	Air ejector	Independent 3 outputs control (One on the stationary platen / Two on the moveable platen)	Std	Std	Std	Std	Std	Std	Std
22	Heat insulation plates	Heat insutation plates for the platen surface / Thickness 5mm and 10mm are available.	○	○	○	○	○	○	○
Auxiliary unit									
23	Built in plumping	4 flows type (with flow control valves)	○	○	○	○	○	○	○
24	Alarm lamp Note 4)	Yellow colored with selectable blinking/no blinking.	Std	Std	Std	Std	Std	Std	Std
25	Multiple color signal tower Note 4)	Three different colors with selectable flashing/no flashing. LED type. Mounted on clamp top cover	○	○	○	○	○	○	○
26	Memory card	128MB compact flash card for 300 molding condition files storage and screen dump capability	○	○	○	○	○	○	○
27	Memory card adaptor	Exclusive card adapter for memory card slot. Memory card can be inserted to the slot withot protruding.	○	○	○	○	○	○	○
Overall									
28	Audible buzzer		Std	Std	Std	Std	Std	Std	Std
29	Machine mount		Std	Std	Std	Std	Std	Std	Std
30	Emergency stop buttons	Emergency stop buttons on both operator and non-operator side	Std	Std	Std	Std	Std	Std	Std
31	Central lubrication	Electric type automatic lubrication system performas periodrical automatic lubrication which is demanded to maintain the machine accuracy for long term. Twin liburication systems consist of one system for clamp and another system for injection ball screw enables setting of libration period individually. （The lubrication system for the 200mm/sec injection speed version of 50B, 100B, and 150B is the single system for clamp and injection ball screw.） Grease shortage or tube disconnection can be detected by valve switch. Cartridge grease provides easy rifill. One spare cartridge is attached.	Std	Std	Std Note 3)	Std Note 3)	Std Note 3)	Std	Std
32	Grease cartridge for maintenance	Specially developed high performance grease for central lubrication（1or 6 units）	○	○	○	○	○	○	○
33	Tool kit	Select from followings ① Grease gun only ② Tool set (Std.) : Hex wrench set (1.5-14mm), Spanners(nozzle detaching,width 19/24/32), + screwdriver and Tool box ③ Tool set (Full) : Hex wrench set (1.5-19mm), Spanners(nozzle detaching,width 17/19/24/27/32/36), Screwdriver,T-shape hex wrench (5mm),Precision screwdriver(2.3mm) and tool box ④ Grease gun+Tool set (Std.) ⑤ Grease gun+Tool set (Full)	○	○	○	○	○	○	○
34	Fuse kit	Fuse set for control unit and heater	○	○	○	○	○	○	○
35	Touch up paint	For painting repair (200cc can)	○	○	○	○	○	○	○
36	Euromap 67 interface	Harting connecter (50 pins)	Std	Std	Std	Std	Std	Std	Std

Note 1）The retrofit option after the machine shipment requires additional construction and tuning fee.

Note 2）Not available for 150B small capacity injection.

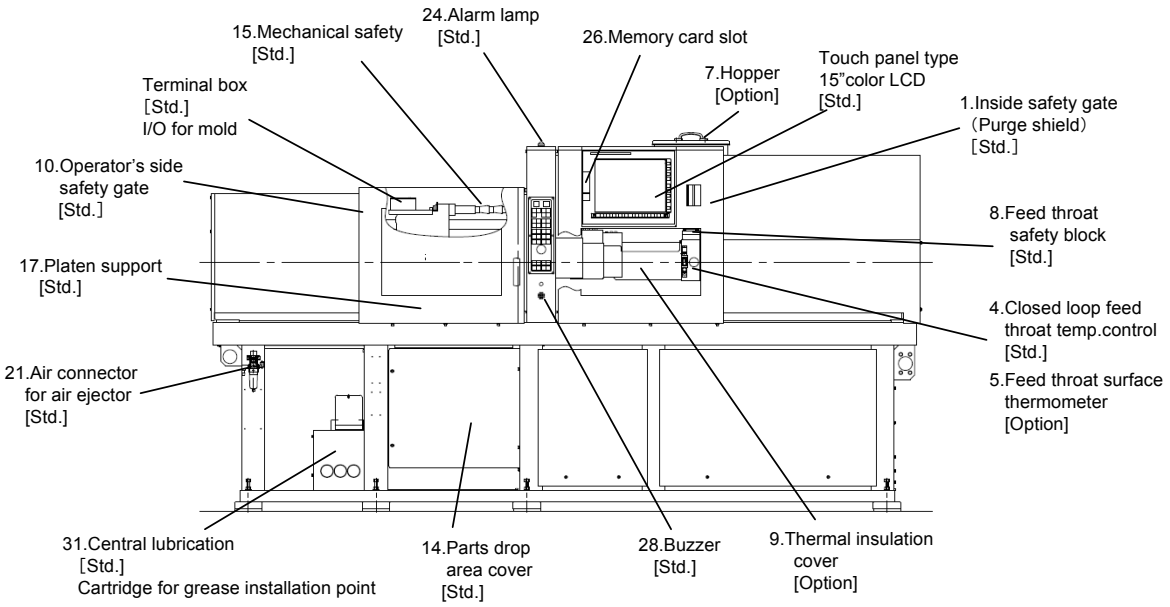
Note 3）The lubrication system for the 200mm/sec injection speed version of 50B, 100B, and 150B is the single system for clamp and injection ball screw.

Note 4）The alarm lamp cannot be installed with the multiple color signal tower.

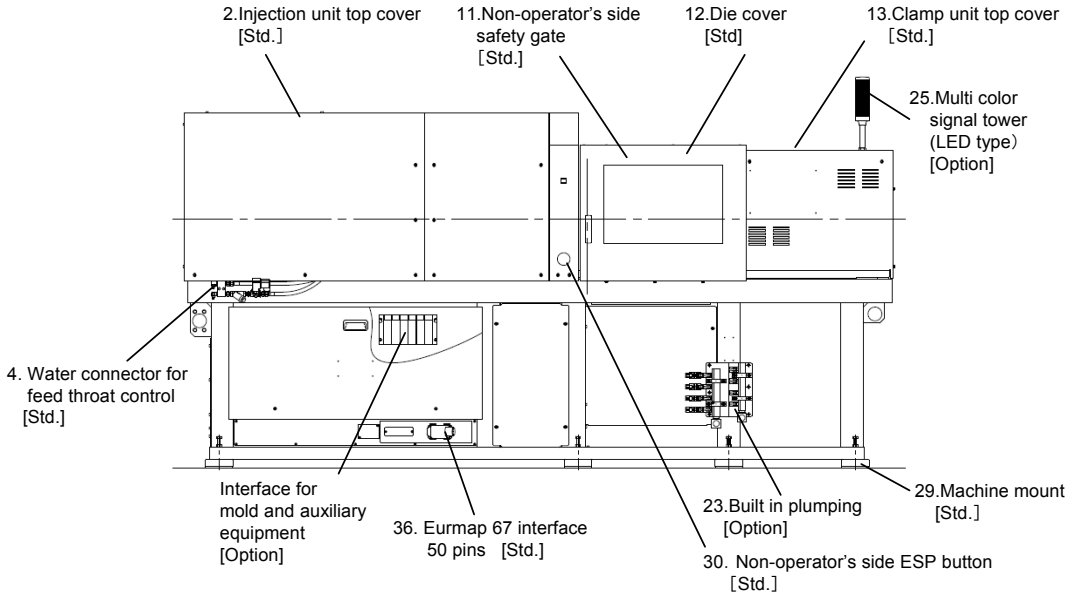
Standard and optional features location

ROBOSHOT S-2000*i*15B/30B

Operator's side



Non-operator's side

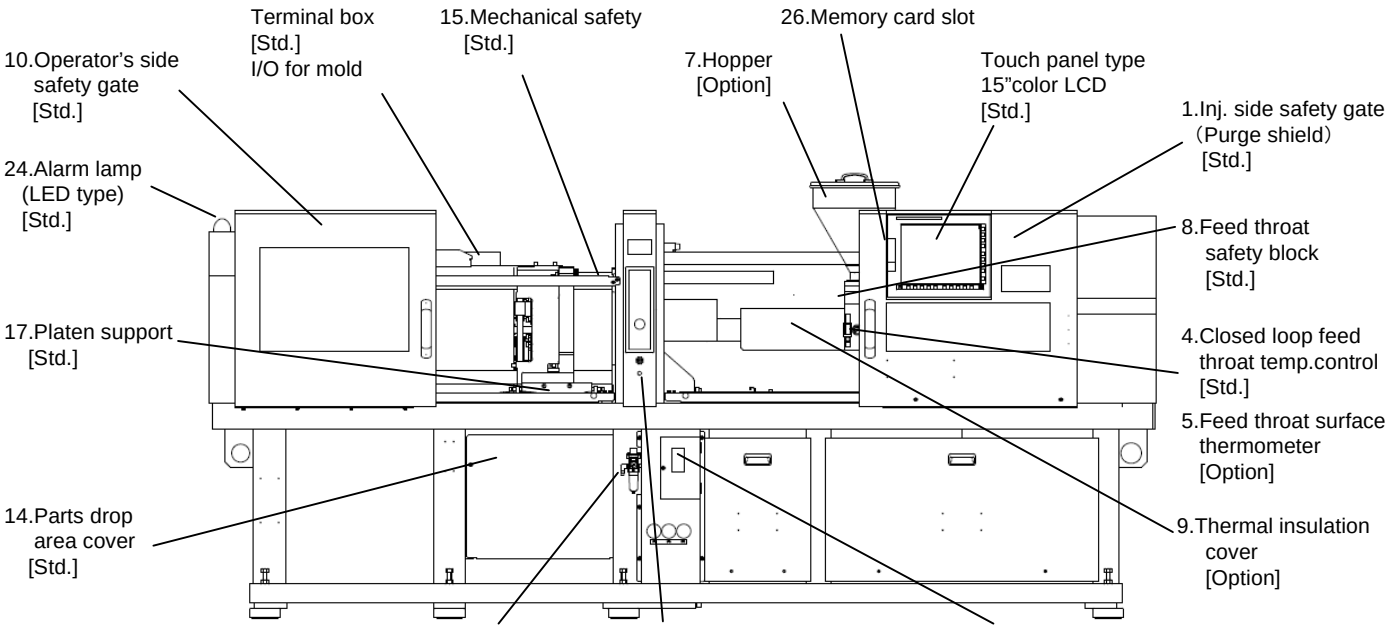


The numbers in above drawing meet with the numbers in page 16 table.

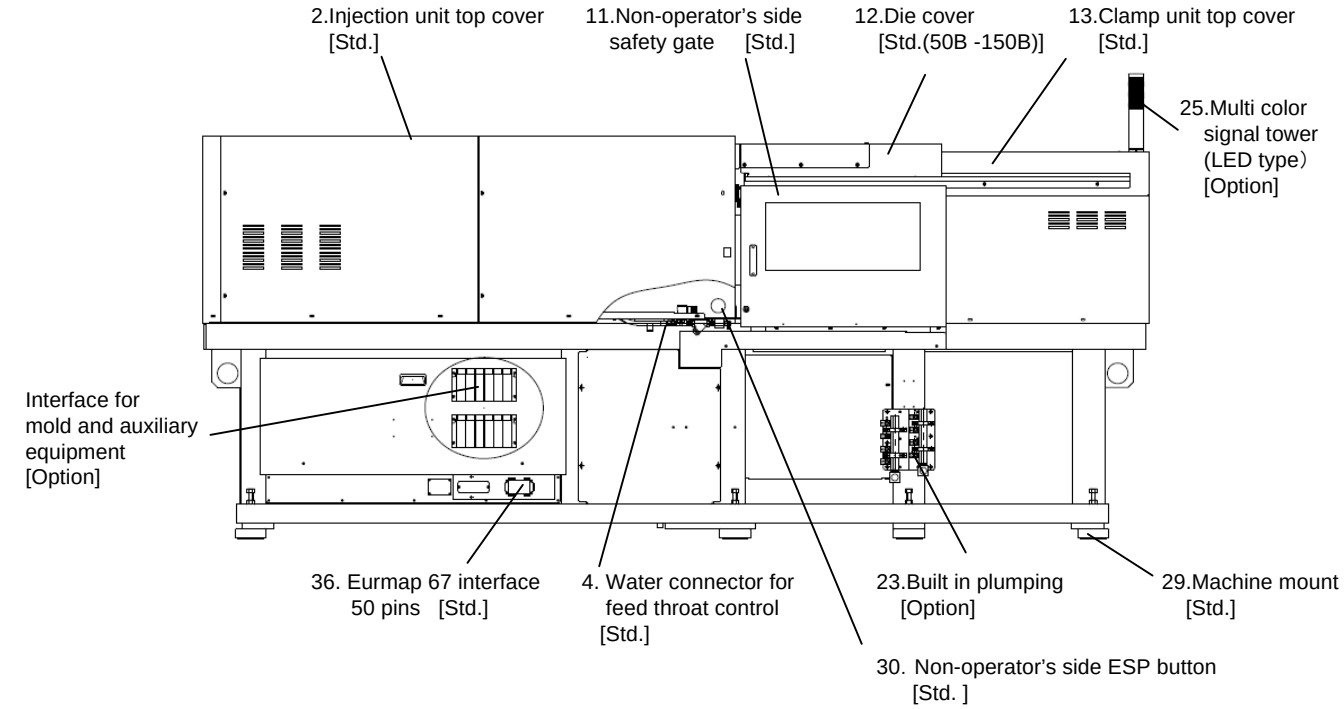
Standard and optional features location

ROBOSHOT S-2000*i*50B/100B/150B/250B/300B

Operator's side



Non-operator's side



The numbers in above drawing meet with those in the table in page 16.

Standard / Optional features (Control unit and Software)

No	Description	15B/30B/50B/100B 150B/250B/300B
Display and Input		
1	Display unit (15" color LCD & with touch panel)	Standard
2	3 mode display switch function. (Stadard/Maximum/4 divided screen)	Standard
3	Multi languages (Japanese, English, Chinese, Korean, German, French, Italian Spanish, Portuguese, Finnish, Czech)	Standard
4	SI unit(kN,MPa etc.) capability	Standard
5	Screen saver	Standard
6	Input lock function with password	Standard
7	Custom menu (Customization of menu buttons)	Standard
Artificial Intelligence		
8	AI pressure profile trace control（Repeat pressure curve at good parts molding）	Standard
9	AI metering control（Automatically adjust recovery process at good parts molding）	Standard
10	AI mold protection Clamp immediately stops when an error is found in open or close process.	Standard
11	AI ejector Ejector immediately stops when an error is found in ejection process.	Standard
Injection and Extruder control		
12	Injection 10 steps /Pack 6 steps /Maximum pack speed digital control	Standard
13	Injection/Pack switch over（Switch over by Position, Pressure or time）	Standard
14	Injection response（ FFF(F cube), A, B, C, user setting）	Standard
15	Constant injection acceleration ratio	Standard
16	HR mode (Selectable 8 modes pressure response)	Standard
17	High precision V-P switch over	Standard
18	Precision metering control , Back flow monitor function Parts quality stabilization by check valve close control. Confirms check valve motion by curve.	Standard
19	6 steps of screw RPM and back pressure control／Suck back function	Standard
20	Extruder delay timer	Standard
21	Auto purge (Normal+Refresh purge. Loadcell calibration is also available.)	Standard
22	Sprue break function (Selectable nozzle advance/retract timing)	Standard
23	Injection pressure alarm	Standard
24	Cavity pressure or signal input transfer and Cavity pressure alarm No cavity sensor or amplifier is included.	Option
25	Pre-suck back function Decompression before extruder for fast cycle molding application.	Option
26	Automatic start up parameter change Molding cycles with switching parameters from initial to mass production.	Option
Clamp/Ejector		
27	Clamp close 6 steps /open 5 steps digital control (Step can be specified)	Standard
28	Mold set mode（Mold load/unload mode）	Standard
29	Automatic die height adjustment (0kN - Maximum clamp force)	Standard
30	2 stage ejector	Standard
31	Ejector delay timer	Standard
32	Maximum 10 pulses ejection	Standard
33	Ejection in clamp opening	Standard
34	Pre-injection (Simultaneous clamp and ejector. Step can be specified up to 6 steps.) Gas venting and fast cycle	Standard
35	Clamp open/open close acceleration control (Cycle time reduction by optimum clmap open/close pattern)	Standard
36	Pre-ejector function（In-mold degating）	Standard
37	Simultaneous clamp open and extruder (Cycle time reduction)	Option
38	Pre-ejector 2 function (Complex motion capability addition to the standard pre-ejector)	Option
39	Ejector compression function Note 2)	Option
Temperature control		
40	High precision PID loop temperature control (0.01 degree resolution)	Standard
41	Nozzle/Barrel temperature digital setting and display	Standard
42	Closed loop feed throat temperature control（Solenoid valve ON/OFF control）	Standard
43	PID parameters auto tuning function（tuning after heat up end）	Standard
44	Self-tuning function (tuning during heat up)	Standard
45	Synchronous nozzle/barrel heat up	Standard
46	Selectable temperature control ON/OFF at alarm occurrence or production end	Standard
47	Soak timer	Standard
48	Temperature alarm detection（Upper/lower band setting）	Standard
49	Heater management（Built in calendar timer）	Standard
50	Temperature holding by lower temperature	Standard
51	Residence time monitor	Standard
52	Thermocouple break detection	Standard
53	Heater disconnection detection（Heat up ratio detection by software）	Standard
54	Manned/Unmanned operation	Standard
55	Shutdown sequence Stops machine at alarm/production end. Manual activation is also available.	Option
56	Heater disconnection detection (Current detection by special hardware)	Option
Monitor/Alarm/Diagnosis		
57	Multi wave monitor (Injection pressure, injection speed, screw position, screw rotation, Back flow, clamp position, ejector position, clamp load and ejector load)	Standard
58	Injection pressure monitor （5 points pressure monitor: Reject and alarm）	Standard
59	Power consumption monitor (Estimates power consumption of main body of ROBOSHOT)	Standard
60	Process monitor（Parts discrimination for 24 items, Trend chart for last 2000 shots）	Standard
61	Self-diagnostic message/ Alarm message	Standard
62	Alarm log (2500 logs). Bad parts log is an option.	Standard
63	Production management (Production number, Start up NG, Consecutive bad cycles)	Standard
64	Container management (Parts in the container is counted and full signal is provided. Manual container of resetting full signal is also available.)	Standard
65	Last change log (3250 logs), Operation log (3250 logs)	Standard
66	Counter stop function (Stops production counter temporarily by manual operation)	Standard
67	Production information entry (Mold ID, Mold number, Parts number and so on)	Standard
68	Sample function (Provides a sample signal by manual operation)	Option
69	Automatic sample function (Provides a sample signal per specific shots or time)	Option

No	Description	15B/30B/50B/100B 150B/250B/300B
Output/Input of mold conditions		
70	Built-in mold files（300 files. File name and comment input） Note 3)	Standard
71	Memory card slot, USB slot (For data storage such as mold file) Note 4)	Standard
72	Molding condition setting table output File output to a memory card or USB memory by JPEG or text.	Standard
73	Screen image output (Save currently displayed screen in a memory card or USB memory)	Standard
Interface		
74	Ethernet port For MOLD24*i* and auxiliaries. HUB is an option.	Standard
75	Euromap67 interface	Standard
76	Core pull/set function of 2 systems. (4 outputs and 4 inputs)	Standard
77	Ejector interlock (1 input)	Standard
78	Ejector skip (1 input)	Standard
79	Ejector plate retract confirmation (1 input)	Standard
80	External signal ejector (4 inputs) (1 input per Eject start, advanced, retracted, middle in advance and middle in retract)	Standard
81	External signal clamp (2 inputs) (1 input per clamp advanced and clamp retracted)	Standard
82	Injection permission（1 input）	Standard
83	Shut off nozzle interface（1 output）	Standard
84	Vacuum device interface（1 input, 1 output）	Standard
85	Valve gate interface（5 inputs and 4 outputs） Maximum 4 circuits are available.	Standard
86	Alarm signal input 11 immediate stop signals, 11 cycle end stop signals	Standard
87	Parts removal detector interface (1 input and 1 output）	Standard
88	Machine status input（15 inputs）	Standard
89	Machine status output (Standard 21 outputs + optional 8 outputs)	Standard
90	Custom signal function Maximum 2048 kinds of outputs are available by AND and OR combination.	Standard
91	Custom core function Programming capability of maximum 8 core systems	Standard
92	Auxiliary device communication Data communication with auxiliary device by SPI protocol Note 4)	Standard
93	Ejector signals Used for mold built-in ejector like hydraulic ejector（Advance and retreat signals）	Option
94	Air ejector interface (3 outputs） Optional air valve and software are necessary. It is also available to purchase only software.	Option
95	Rack motor interface (2 inputs/1output) Optional motor drive circuit and software are necessary. It is also available to purchase only software.	Option
96	Maximum 4 outputs of analog output I/O box in cabinet and the software are necessary.	Option
97	Interface for monitor camera I/O box in cabinet and the software are necessary.	Option
98	Bad parts reject function Bad parts signal for specified cycles after bad parts produced or external signal is given.	Option
99	Mold ID number output function (Mold ID output by 8 points of binary data) I/O box in cabinet and the software are necessary.	Option
100	Picker data link function (MOLD ID output to picker by 8 points of binary data) I/O box in cabinet and the software are necessary.	Option
101	Shot counter output function (Current shot counter output by 4 points of binary data) I/O box in cabinet and the software are necessary.	Option
102	Barrel cooling fan control signal output (Maximum 4 outputs) I/O box in cabinet and the software are necessary.	Option
103	SPI hot runner communication Data communication with hot runner device by SPI protocol. Note 5)	Option
104	Analog inputs (5 voltage inputs, 2 current inputs) Pressure monitor and curve display Optional cavity pressure monitor board and the software are necessary	Option
105	Ejector override Shorter cycle time by simultaneous ejector retract and clamp close	Option
MOLD24*i* and Euromap63		
106	MOLD24*i* Molding plant quality management system	Option
107	Resin character evaluation system Resin flow coefficient can be measured by collaboration with MOLD24*i*.	Option
108	Euromap63 interface	Option

Note 1) The retrofit option after the machine shipment requires additional construction and tuning fee.

Note 2) Please contact FANUC for the detail because mechanical modification is required.

Note 3) Maximum file number may be below 300 in case pressure curve is saved with molding parameter.

Note 4) FANUC can provide memoy card as an option.
Commercial USB memory can be used, but it may not function properly.

Note 5) Please contact FANUC for available device.

Cylinder / Screw / Nozzle Specification

1. Cylinder / Screw / Screw Head / Nozzle

Purpose	Major polymer (Moldings)	Cylinder[3]		Screw	Screw head[5]	Nozzle
General purpose	PP, PS, PE	PAL(Bi-metal wear-resistance cylinder made by Hitachi Metals,Ltd.)	Max Setting Temp.350(c.deg.)	Nitride	Nitride	Standard Nozzle / Chrome plating Nozzle
Low friction polymer	POM (Polyacetal)	PAL(Bi-metal wear-resistance cylinder made by Hitachi Metals,Ltd.)		Nitride It is recommendable to use Double flight screw in the case of Screw Dia. 32mm and over	YPT42 (Hitachi Metals,Ltd.)	Standard Nozzle / Chrome plating Nozzle
Transparent polymer	PS, ABS, AS	PAL(Bi-metal wear-resistance cylinder made by Hitachi Metals,Ltd.)		Chrome plating	YPT42 (Hitachi Metals,Ltd.)	Chrome plating Nozzle / TiCN Nozzle
Lens spec. Ⅰ	PMMA, PC	H503(Hitachi Metals,Ltd.)		W/C + Surface treatment	W/C + Surface treatment	
Lens spec. Ⅱ	Transparent Polyolefin			W/C + Surface treatment		Nozzle for Polyolefin
Wear-resistance and anti-corrosion (W/C)	PS, ABS(with flame retardant), PC (GF reinforced), PBT, Nylon, LCP	H610(Hitachi Metals,Ltd.)	Max Setting Temp.400(c.deg.)	YPT42 (Hitachi Metals,Ltd.)	YPT42 (Hitachi Metals,Ltd.)	Standard Nozzle / Middle Dia. Nozzle
High wear-resistance and anti-corrosion (High W/C)	PPS (GF under 30%), High GF concentration resin, High Filler concentration resin, PA/ABS, Materials for MIM, CIM	C900 (KOBELCO) (Screw dia.44mm and under)		15B, 30B, 50B, 100B, 150B[4] KAM21 (Mitsubishi Materials) 150B, 250B YPT71 (Hitachi Metals,Ltd.)	KH (Toyo Kohan CO.,LTD)	Standard Nozzle / Middle Dia. Nozzle
Ultra wear-resistance and anti-corrosion (Ultra W/C)	PPS (GF 30% and over) , Silicone, 6T Nylon	KH(Toyo Kohan CO.,LTD)				
Semi-high pressure resistance	Mobile phone (Body,Button)	30B, 50B, 100B Special		YPT42 (Hitachi Metals,Ltd.)	YPT42 (Hitachi Metals,Ltd.)	Standard Nozzle
High pressure resistance	Battery case, Memory card	30B, 50B, 100B Special				
Optical high pressure resistance	Light guide panel	30B, 50B, 100B Special		W/C + Surface treatment		Standard Nozzle / TiCN Nozzle
Connector spec. Ⅰ	PPS(GF 30% and under) PBT, Nylon, LCP	C900 (KOBELCO) KH(Toyo Kohan CO.,LTD)		W/C High W/C	YPT42 (Hitachi Metals,Ltd.) KH (Toyo Kohan CO.,LTD)	Middle Dia. Nozzle / Slender Nozzle
Connector spec. Ⅱ	LCP Screw Dia. 22mm and under					Nozzle for LCP (Screw Dia.22mm and under)
Connector spec. Ⅲ	Heat resistant LCP Screw Dia. 22mm and under	C900(High temp.) (KOBELCO)	Max Setting Temp.450(c.deg.)	W/C + Surface treatment		Nozzle for LCP (Screw Dia.22mm and under)
High temperature	LCP,Polysulfone,PEI	15B, 30B, 50B, 100B, 150B[4] C900(High temp.) (KOBELCO)		YPT42 (Hitachi Metals,Ltd.)	YPT42 (Hitachi Metals,Ltd.)	Standard Nozzle / Chrome plating Nozzle
		150B, 250B, 300B H610(High temp.) (Hitachi Metals,Ltd.)				

Note 1) Materials and combination of cylinder-screw may be changed to improve without any information.

Note 2) For other molding materials(Thermo-sets, PVC, etc), other cylinder-screw manufacturers and other cylinder-screw materials are also available.

Note 3) Refer to 3.(Setting Temparature)

Note 4) Available for S150B Small capacity injection

Note 5) Screw head is Non-castle type except for [Nitride] and [W/C Surface treatment].

2. Screw Type

Choice of suitable screw type for your resin.

Screw type	Purpose
Single flight screw	General purpose
Double flight screw	POM, High distributive mixing, Homogenization of melt temp, Prevention of non-melting pellet
High plasticating screw	High cycle for PP, PS, PE, etc.
Lens	PC,PMMA(Anti-Contamination)
Transparent Polyolefin	Transparent Polyolefin(Anti-Contamination)
Smear head screw	Thermo-sets, PVC

Note 6) Custom profile or other surface treatment are also available.

3. Setting Temperature

Screw Dia.14mm - 52mm		Setting Temperature(c.deg.)					
		Nozzle	Barrel 1	Barrel 2	Barrel 3	Barrel 4	Under Hopper
Standard	Max Setting Temp. 350(c.deg.)	0～350	0～350	0～350	0～350	–	0～80
Wear-resistance and anti-corrosion	Max Setting Temp. 400(c.deg.)	0～400	0～400	0～400	0～350	–	0～80
High Temperature	Max Setting Temp. 450(c.deg.)	0～450	0～450	0～450	0～430	–	0～80

Screw Dia.56mm - 68mm		Setting Temperature(c.deg.)					
		Nozzle	Barrel 1	Barrel 2	Barrel 3	Barrel 4	Under Hopper
Standard	Max Setting Temp. 350(c.deg.)	0～350	0～350	0～350	0～350	0～350	0～80
Wear-resistance and anti-corrosion	Max Setting Temp. 400(c.deg.)	0～400	0～400	0～400	0～400	0～350	0～80
High Temperature	Max Setting Temp. 450(c.deg.)	0～450	0～450	0～450	0～450	0～430	0～80

Note 7)The temperature may not rise to the maximum setting temperature depending on the molding condition.
Especially, the rear zone (Barrel 3 or 4) temperature may not rise to the setting temperature because it is close to the cooling water line under hopper.

Note 8) By a molding condition, there is sometimes a difference in displayed Temperature and resin Temperature.

4. Nozzle Type

Nozzle type		Shape	Purpose	Application
Standard Nozzle	Short / Long	Reference Fig.1	General purpose	Screw Dia.22mm and under
		Reference Fig.4		Screw Dia.26mm and over
Slender Nozzle	Short / Long	Heater out.dia.22mm Reference Fig.2	Short sprue mold	15B, 30B, 50B, 100B Screw Dia.22mm and under
Middle Dia. Nozzle	Short / Long	Heater out.dia.28mm Reference Fig.3	Short sprue mold, Low pressure loss	15B, 30B, 50B, 100B Screw Dia.22mm and under
	Short / Long	Heater out.dia.28mm Reference Fig.5		50B, 100B Screw Dia.26mm and over
Chrome plating Nozzle		Standard one piece	Lens Molding	Standard Short, Long
TiCN Nozzle		————	Lens molding, Prevention of contamination and degradation	All Nozzle except Needle Valve Nozzle
Needle Valve Nozzle[9)] (Air driving)		Nozzle penetration 35mm	Gas injection High cycle molding Prevention of stringy and drooling	50B Screw Dia.26mm and under 100B Screw Dia.32mm and under 150B, 250B Screw Dia.48mm and under
Nozzle for LCP	Short	Nozzle penetration 35mm	LCP connector	Screw Dia.22mm and under
Nozzle for Transparent Polyolefin	Short	Nozzle penetration 35mm	Transparent polyolefin (Prevention of Stringy, Drooling and Contamination)	15B, 30B, 50B, 100B
	Long	Nozzle penetration 65mm		

Note 9) In the case of screw dia.20mm or 22mm, special Barrel is required.

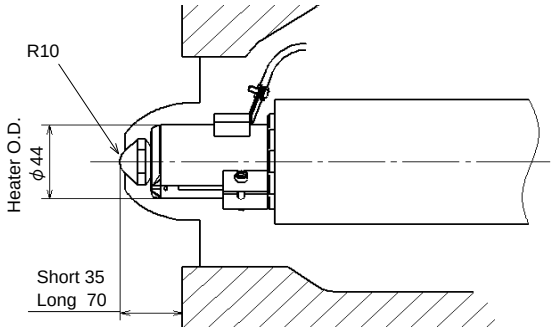


Fig.1 Standard Two Piece Nozzle Dia.22mm and under
(Orifice Dia. ϕ1.5, ϕ2, ϕ2.5, ϕ3, ϕ4)

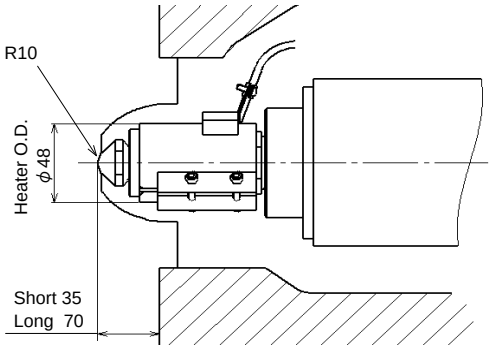


Fig.4 Standard Two Piece Nozzle Dia. 26mm and over
(Orifice Dia. ϕ1.5, ϕ2, ϕ2.5, ϕ3, ϕ4)

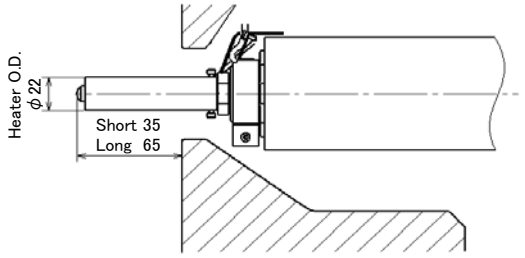


Fig.2 Slender Nozzle
(Orifice Dia. ϕ1.5, ϕ2, ϕ2.5)

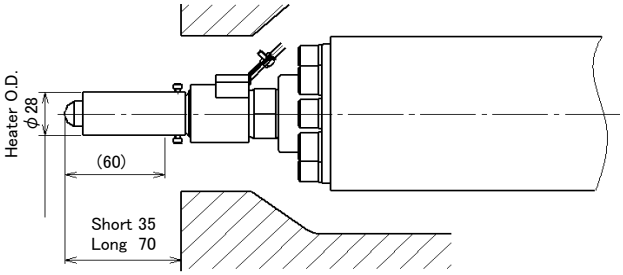


Fig.5 Middle Dia. Nozzle (Dia.26mm and over)
(Orifice Dia. ϕ1.5, ϕ2, ϕ2.5, ϕ3, ϕ4)

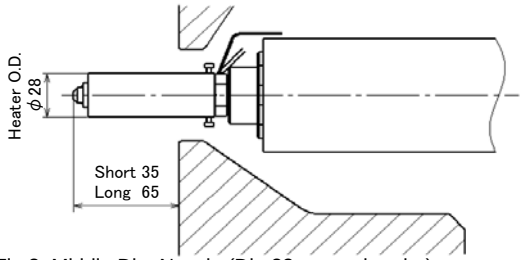


Fig.3 Middle Dia. Nozzle (Dia.22mm and under)
(Orifice Dia. ϕ1.5, ϕ2, ϕ2.5, ϕ3, ϕ4)

5. Dimensions of Water jacket and Hopper attachment

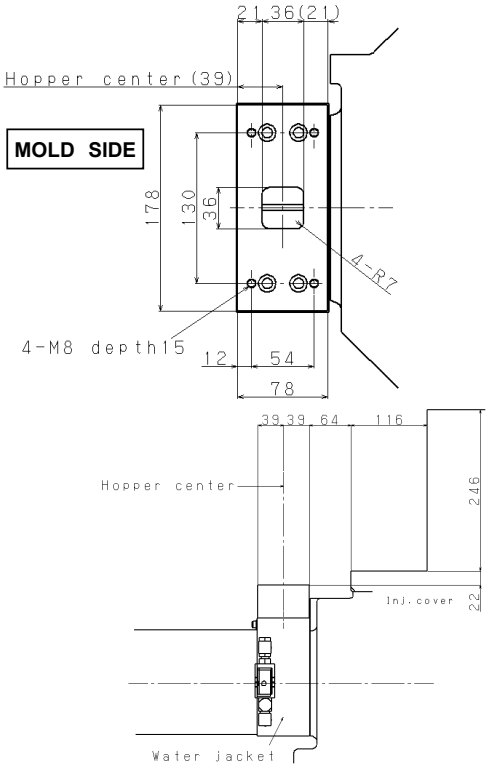


Fig.1 S−2000*i*15B/30B

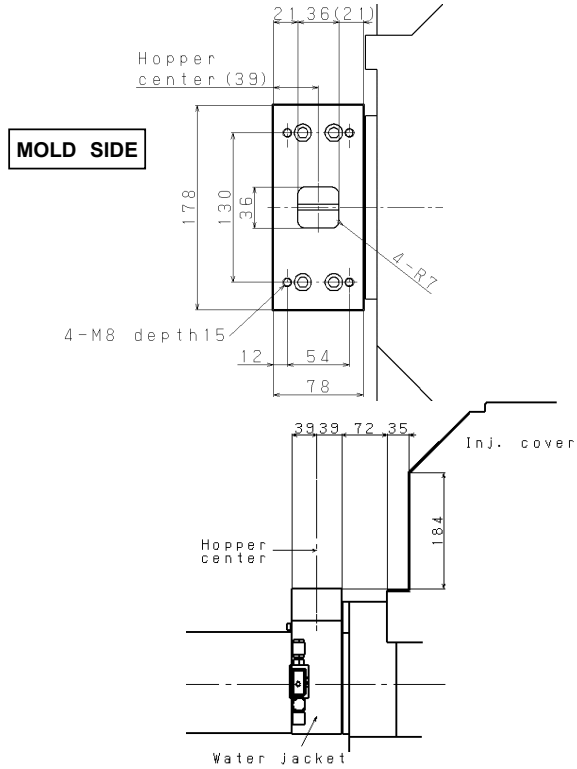


Fig.2 S−2000*i*50B/100B/150B(Small capacity injection)
Screw Dia.ϕ22 and under note1)

note1)except for High press. resist., Semi-high press. resist., Optical high press. resist. (refer to Fig.2)

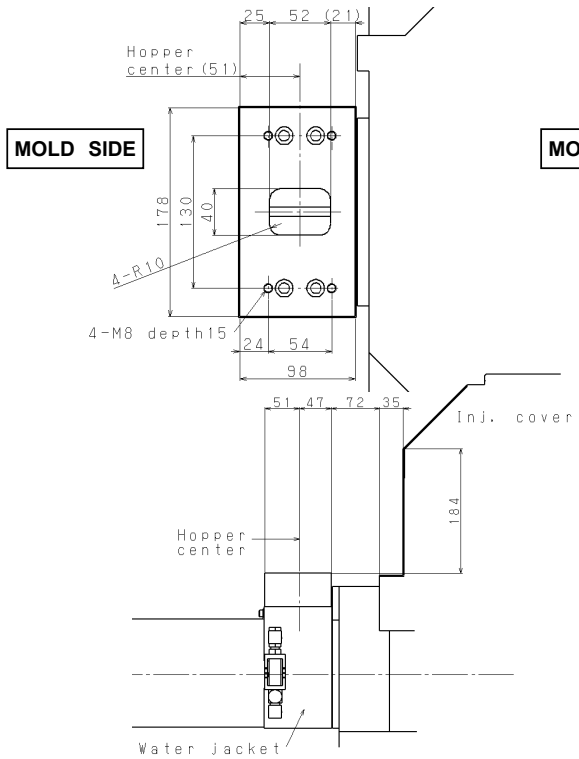


Fig.3 S−2000*i*50B/100B/150B(Small capacity injection)
Screw Dia.ϕ26, 28
Screw Dia.ϕ22 and under (High press. resist., Semi-high press. resist, Optical high press. resist.)

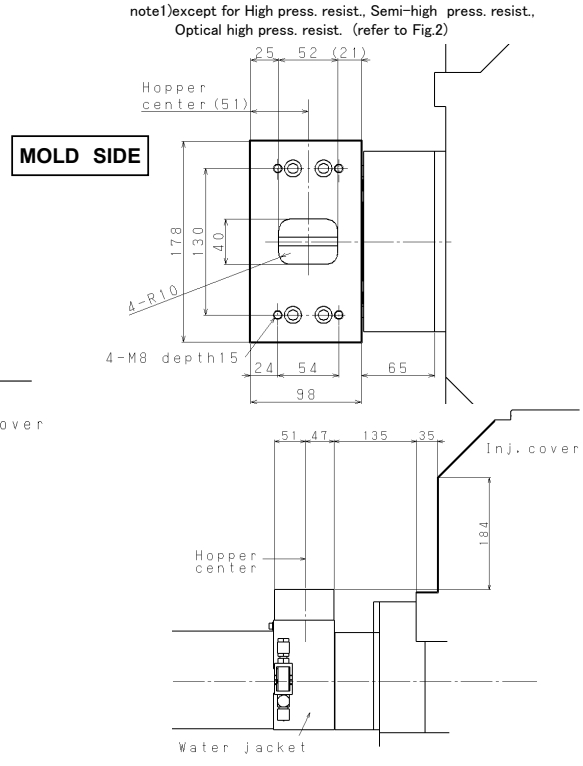


Fig.4 S−2000*i*50B/100B/150B(Small capacity injection)
Screw Dia.ϕ32, 36, 40

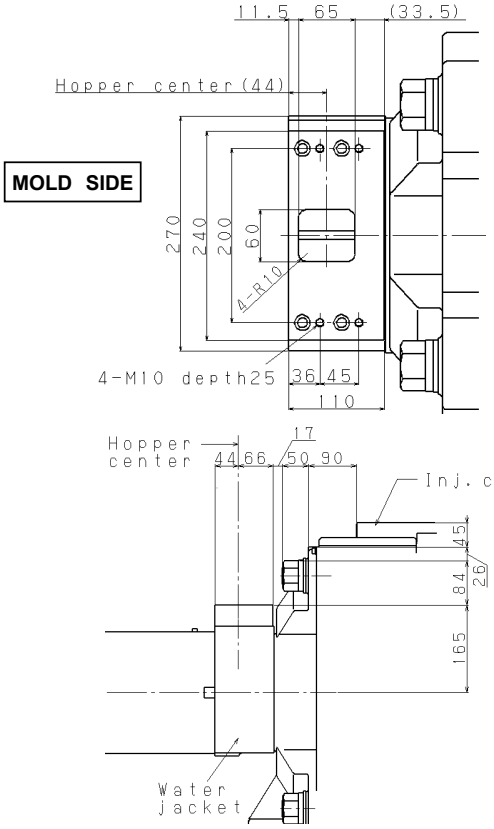


Fig.5 S−2000*i*150B/250B
Screw Dia.ϕ48 and under

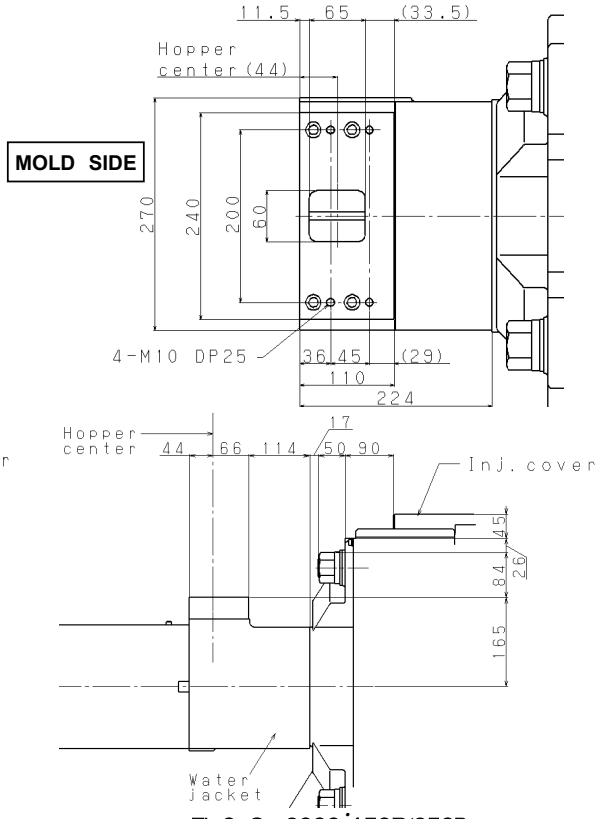


Fig.6 S−2000*i*150B/250B
Screw Dia.ϕ52

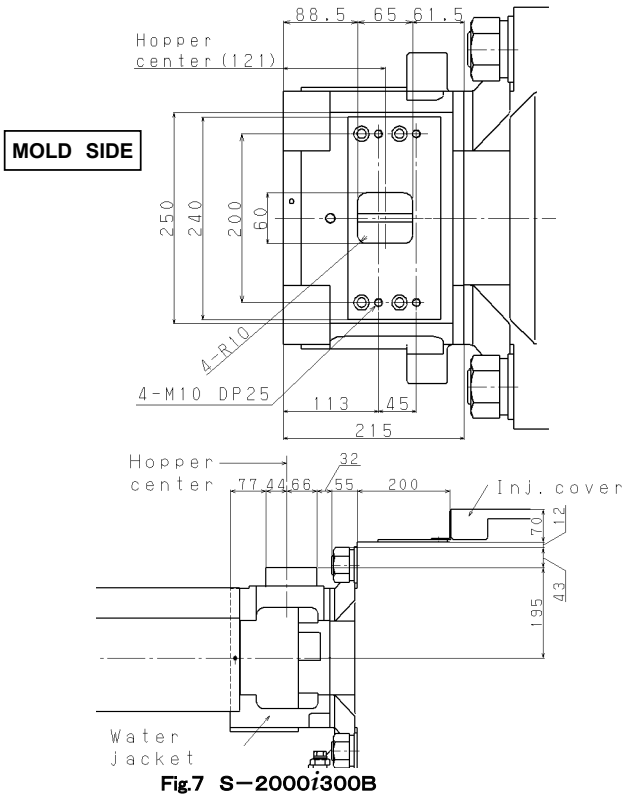


Fig.7 S−2000*i*300B

Floor Plan

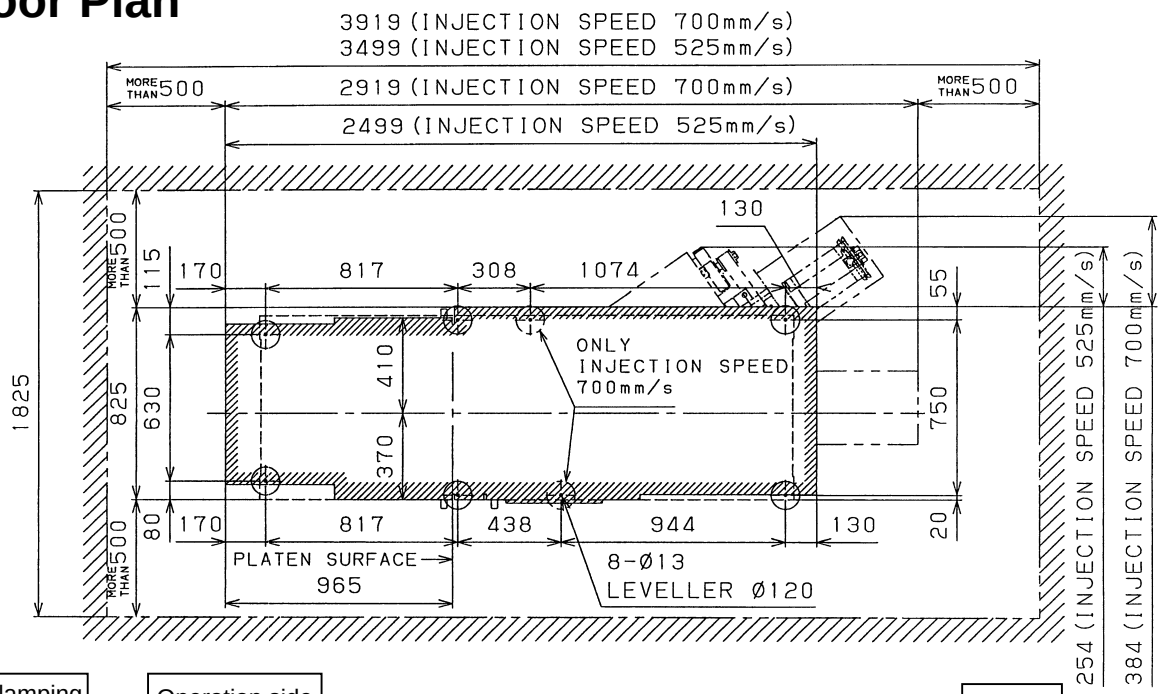


Fig.1 S-2000*i*15B

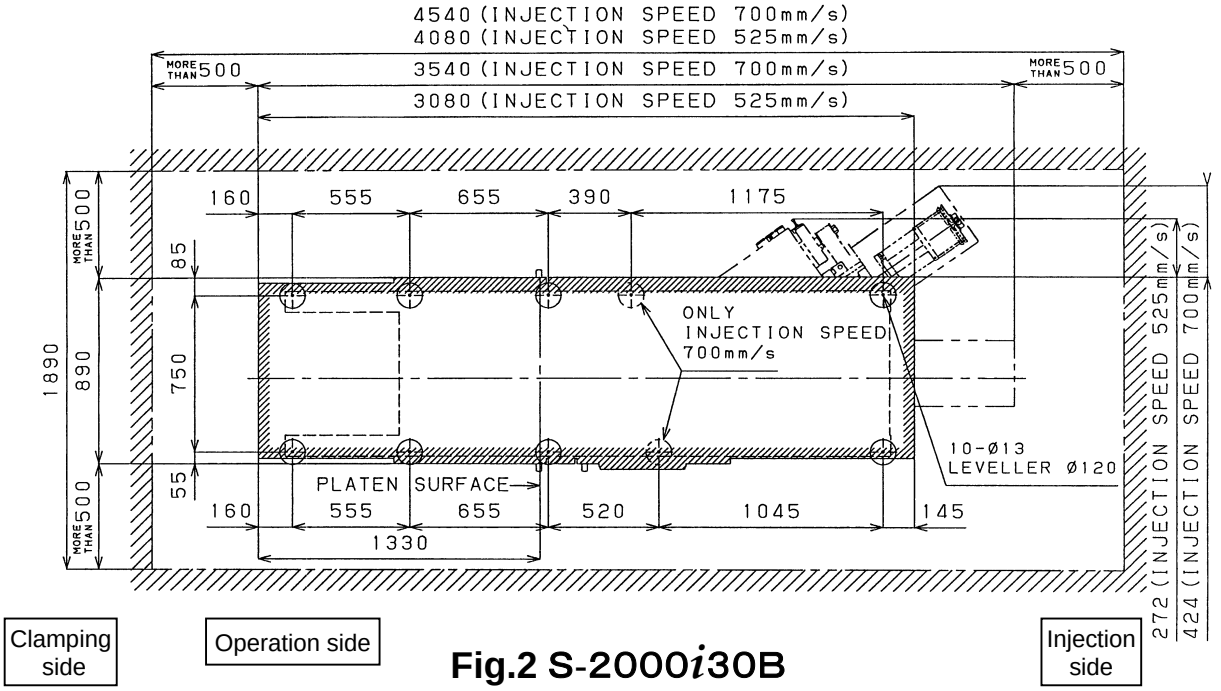


Fig.2 S-2000*i*30B

Floor Plan

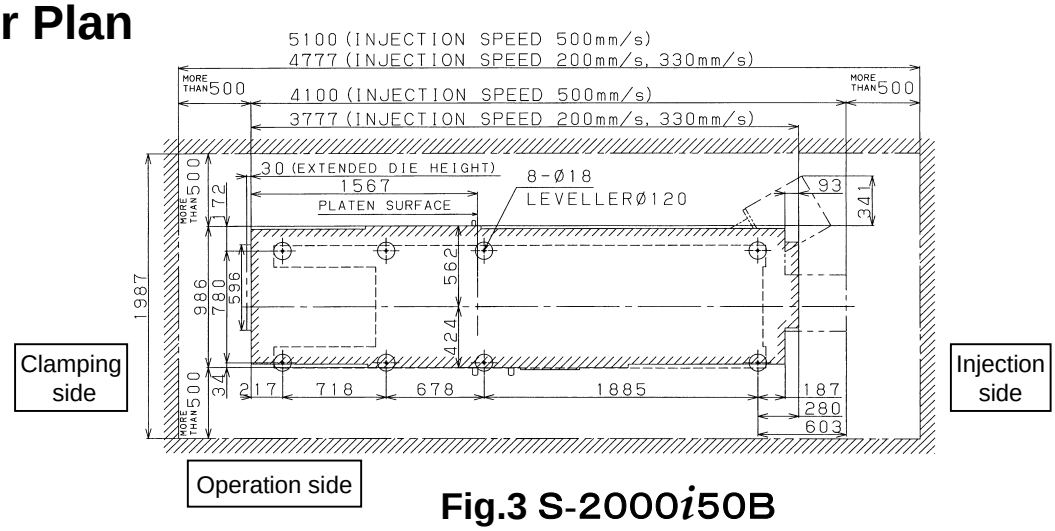


Fig.3 S-2000*i*50B

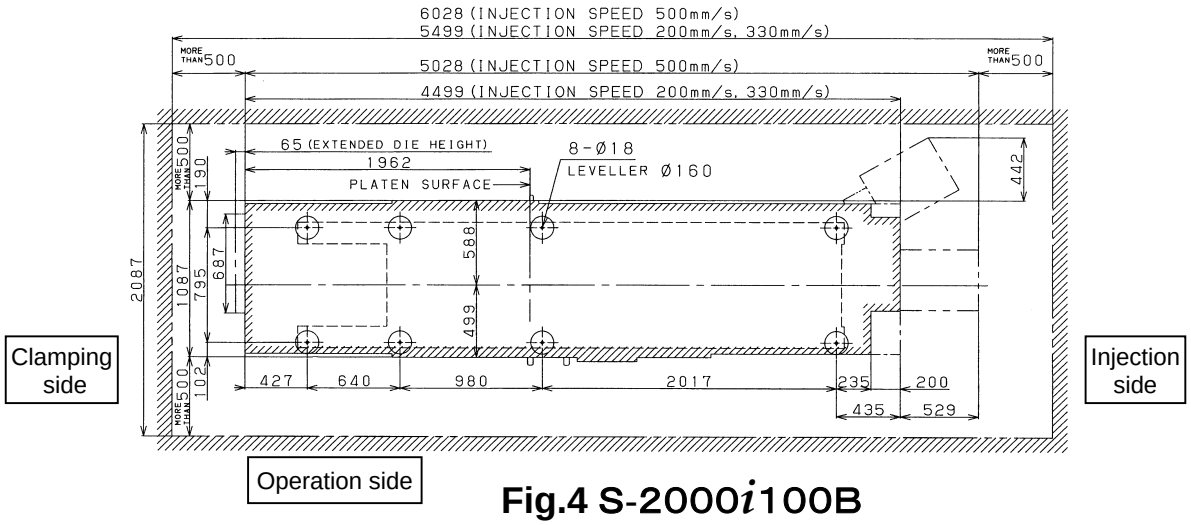


Fig.4 S-2000*i*100B

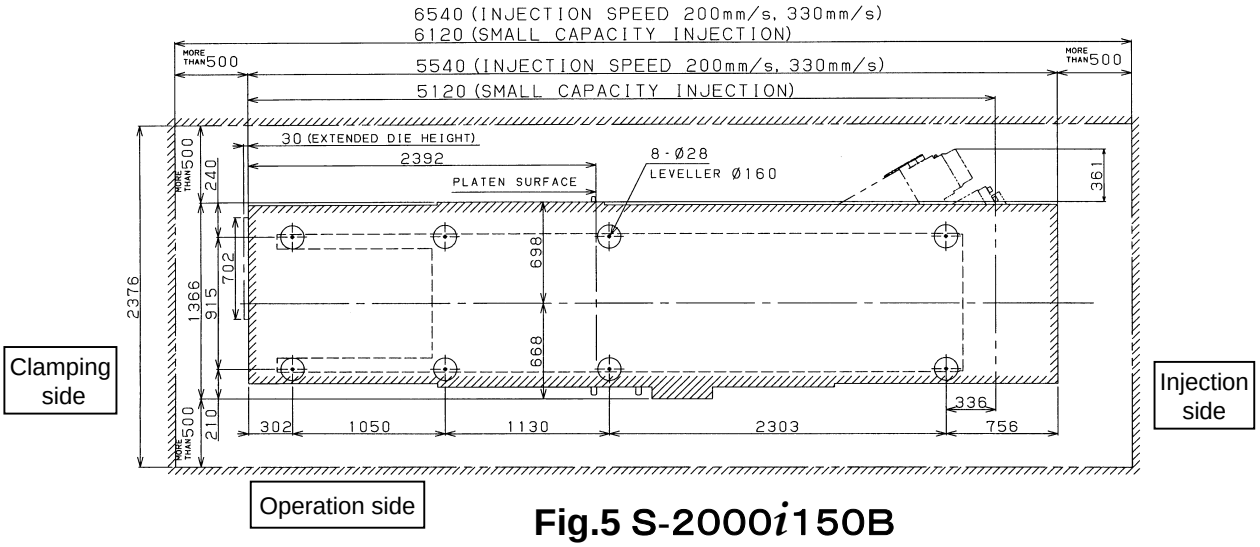
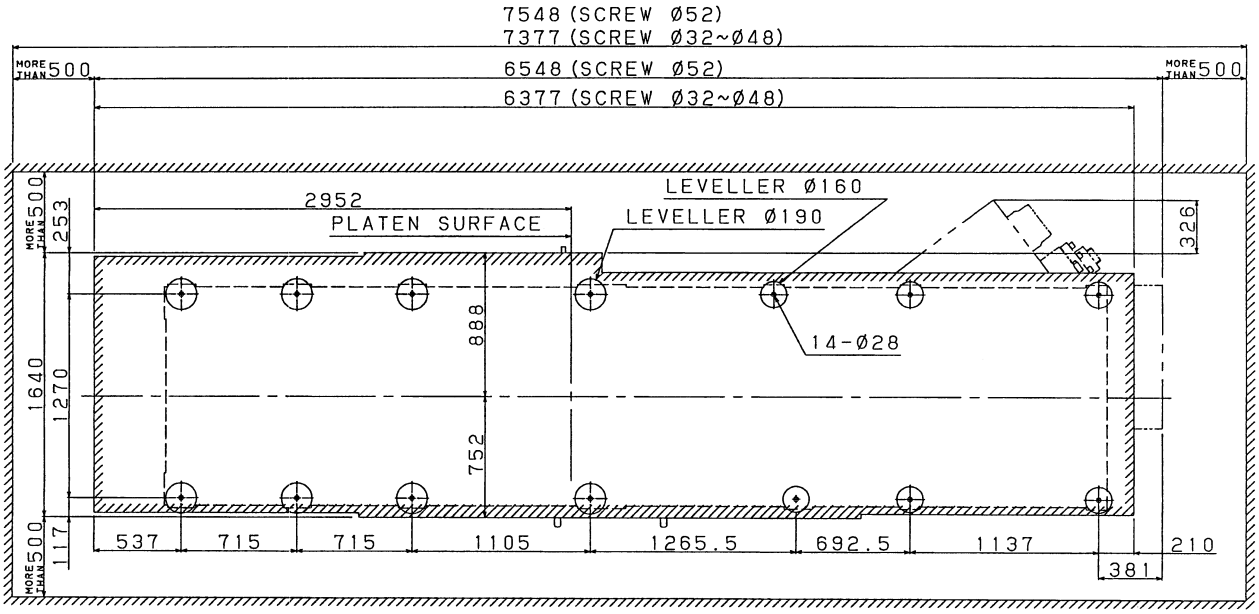


Fig.5 S-2000*i*150B

Floor Plan

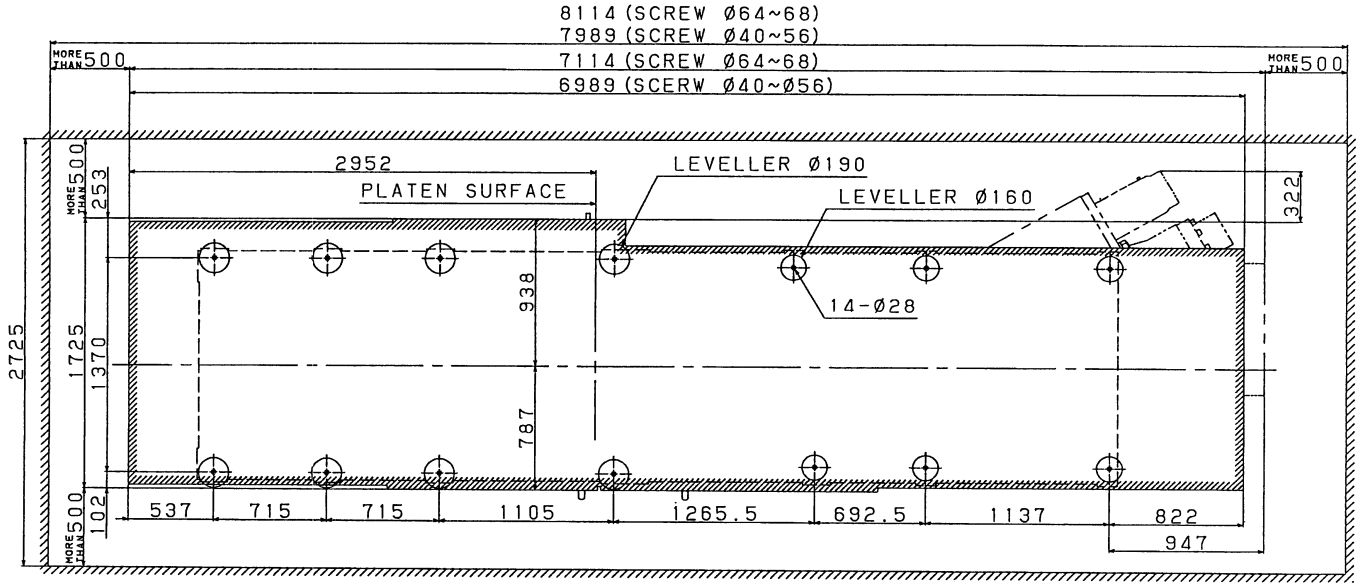


Clamping side

Operation side

Fig.6 S-2000*i*250B

Injection side



Clamping side

Operation side

Fig.7 S-2000*i*300B

Injection side

Utility

1. Main breaker and primary side power cable

Items	S－2000*i* 15B		S－2000*i* 30B
	Inj.speed 525mm/s	Inj.speed 700mm/s	Inj.speed 525mm/s
	Standard size Note1)	Standard size Note1)	Standard size Note1)
Main breaker	40A	50A	50A
Size of primary side power cable	10mm^2	10mm^2	10mm^2
Terminal size of primary side power cable	M5	M5	M5
Size of grounding cable	Over 10mm^2	Over 10mm^2	Over 10mm^2
Terminal size of grounding cable	M8	M8	M8

Items	S－2000*i* 30B	S－2000*i* 50B	
	Inj.speed 700mm/s	Inj.speed 200mm/s	Inj.speed 330mm/s
	Standard size Note1)	Standard size Note1)	Standard size Note1)
Main breaker	60A	40A	50A
Size of primary side power cable	16mm^2	10mm^2	10mm^2
Terminal size of primary side power cable	M8	M5	M5
Size of grounding cable	Over 16mm^2	Over 10mm^2	Over 10mm^2
Terminal size of grounding cable	M8	M8	M8

Items	S－2000*i* 50B	S－2000*i* 100B	
	Inj.speed 500mm/s	Inj.speed 200mm/s	Inj.speed 330mm/s
	Standard size Note1)	Standard size Note1)	Standard size Note1)
Main breaker	100A	50A	50A
Size of primary side power cable	35mm^2	10mm^2	10mm^2
Terminal size of primary side power cable	M8	M5	M5
Size of grounding cable	Over 16mm^2	Over 10mm^2	Over 10mm^2
Terminal size of grounding cable	M8	M8	M8

Items	S－2000*i* 100B	S－2000*i* 150B	
	Inj.speed 500mm/s	Inj.speed 200mm/s	Inj.speed 330mm/s
	Standard size Note1)	Standard size Note1)	Standard size Note1)
Main breaker	125A	75A	125A
Size of primary side power cable	50mm^2	25mm^2	50mm^2
Terminal size of primary side power cable	M8	M8	M8
Size of grounding cable	Over 25mm^2	Over 16mm^2	Over 25mm^2
Terminal size of grounding cable	M8	M8	M8

Items	S－2000*i* 150B	S－2000*i* 250B	S－2000*i* 300B
	Small capacity injection	Inj.speed 330mm/s	Inj.speed 240mm/s
	Standard size Note1)	Standard size Note1)	Standard size Note1)
Main breaker	75A	125A	150A
Size of primary side power cable	25mm^2	50mm^2	70mm^2
Terminal size of primary side power cable	M8	M8	M8
Size of grounding cable	Over 16mm^2	Over 25mm^2	Over 35mm^2
Terminal size of grounding cable	M8	M8	M8

Note1) Main breaker is available for only machine.
Note2) The wire size is referenced by values on EN60204 1998 attachment table 5 upon vinyl insulated wire, and 40 degrees Celsius circumstance.
Use proper wire size per each country in order to satisfy their regulations or standards

2. Cooling water (for feed throat control)

Machine type	Flux	Pressure	Connection
S－2000*i* 15B／30B	More than 3.0l/min(Normal)	0.15～0.49MPa	The socket (for I.D.=ϕ9mm horse) is attached with ROBOSHOT
S－2000*i* 50B／100B			
S－2000*i* 150B	More than 5.0l/min(Normal)		
S－2000*i* 250B			
S－2000*i* 300B			

3. Dry air (for air ejector)

Connection	The connection coupler is attached with ROBOSHOT
Required air pressure	0.5MPa
Flux	More than 200l/min(Normal).

4. INSTALLATION OF TRANSFORMER

The input power voltage specification for the ROBOSHOT S-2000*i* B series is AC200V 3ϕ. When the input voltage specification is different from the specification of the machine, install the following transformer.

Specification of transformer for ROBOSHOT S-2000*i* B series.

Connection type	Insulating 3ϕ Δ - Y	
Rating	Continuous	
Capacity	Refer to table 1	
Primary voltage tap	3ϕ 380v/400v (Normally) /415v Meet customer's input voltage.	
Secondary voltage	3ϕ 200vac	
Applied standard	EN61558-2-4;1997	
Insulation resistance	Primary – Secondary	100MΩ DC500V
	Primary – PE.,Secondary –PE	100MΩ DC500V

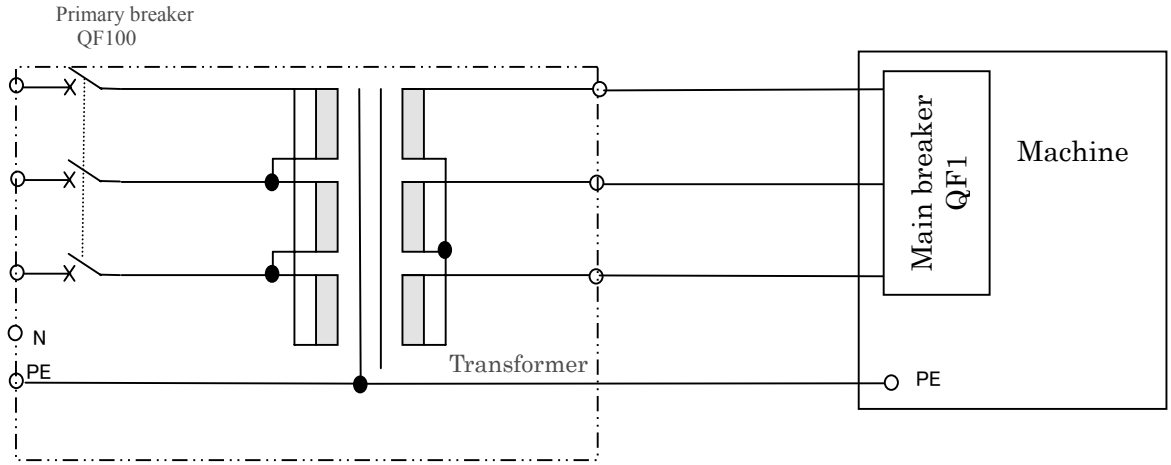


Table 1 Capacity of transformer

Machine model		Capacity (kva)	Rated current (On the transformer) QF100 (A)	Rated current (On the machine) QF1 (A)
S-2000*i*15B	Inj. speed 525mm/s	20	40	40
	Inj. speed 700mm/s	30	50	50
S-2000*i*30B	Inj. speed 525mm/s	30	50	50
	Inj. speed 700mm/s	30	50	60
S-2000*i*50B	Inj. speed 200mm/s	20	40	40
	Inj. speed 330mm/s	35	60	50
	Inj. speed 500mm/s	35	60	100
S-2000*i*100B	Inj. speed 200mm/s	30	50	50
	Inj. speed 330mm/s	35	60	50
	Inj. speed 500mm/s	45	100	125
S-2000*i*150B	Inj. speed 200mm/s	35	60	75
	Inj. speed 330mm/s	45	100	125
	Small capacity	35	60	75
S-2000*i*250B	Inj. speed 330mm/s	45	100	125
S-2000*i*300B	Inj. speed 240mm/s	55	100	150

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