Global Network

Sumitomo Heavy Industries, Ltd.

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S031EN01-2309JD

SE-EV-S

All-electric Small-sized Molding Machine

Sumitomo SHI DEMAG

SE-EV-S

All-electric Small-sized Injection Molding Machine

The machines in this series have acquired JIS B 6711:2021 (equivalent to ISO 20430:2020) certification.

We support the enhancement of our customers' corporate value through providing high performance, high quality, and safe injection molding machines.

www.shi.co.jp/plastics/

Technical Data

SE30EV-S	(300kN)
SE50EV-S	(500kN)
SE75EV-S	(750kN)
SE100EV-S	(1000kN)
SE130EV-S	(1300kN)
SE180EV-S	(1800kN)

Sumitomo Heavy Industries, Ltd.

Main Specifications

■ Clamping unit

Item	Unit	SE30EV-S	SE50EV-S	SE75EV-S
Clamping system		Double toggle (5 points)	Double toggle (5 points)	Double toggle (5 points)
Clamping force (max.)	kN	300	500	750
Clearance between tie-bars (H x V)	mm	310 x 290	360 x 360	420 x 420
Platen size (H x V)	mm	440 x 420	500 x 500	580 x 580
Daylight	mm	530	600	710
(Mold height extension 50 mm)		(580)	(650)	(760)
(Mold height extension 100 mm)		—	—	—
Mold opening stroke	mm	230	250	300
Platen speed max.	mm/s	1200	1200	1200
Mold height (min. - max.)	mm	130～300	160～350	160～410
(Mold height extension 50 mm)		(130～350)	(160～400)	(160～460)
(Mold height extension 100 mm)		—	—	—
Locating hole diameter	mm	ø60	ø100	ø100
(When the option is selected)		(ø26)	—	—
Ejector system (ejecting points)		Motor driven type (1 point)	Motor driven type (5 points)	Motor driven type (5 points)
Ejector ejection force	kN	7.8	21	26
(When ejector compression device is selected)		—	(49)	(49)
(When ejector force power up is selected)		—	—	—
Ejector speed (max.)	mm/s	333	333	333
(When ejector compression device/ejector force power up is selected)		—	(250)	(250)
Ejector stroke	mm	50	70	80
(When ejector stroke extension is selected)		—	(100)	(100)
(When ejector compression device/ejector force power up is selected)		—	(60)	(70)

■ Injection unit

		C35				C65			
		MN		S		S			
Screw diameter	mm	14 *6·*8	16 *6·*8	18	20	18	20	22	25
Injection pressure (max.) *1,*2	MPa	223	266	224	181	274	265	220	170
Holding pressure (max.) *1,*2	MPa	223	266	224	181	274	265	220	170
(When high speed filling specification is selected) *7		—				—			
Theoretical injection capacity	cm^3	6	11	14	18	19	24	29	38
Injection weight (GPPS)	g	5.8	11	13	17	18	23	28	36
Plasticizing rate *3, *4	kg/h	5.1	9.5	11	14	10	13	18	26
Injection rate	cm^3/s	92	120	152	188	139	172	209	269
(When high load filling specification is selected) *7		(76)	(100)	(127)	(157)	(139)	(172)	(209)	(269)
(When high speed filling specification is selected) *7		—				—			
Screw stroke	mm	40	58			78			
Injection speed (max.)	mm/s	600				550			
(When high load filling specification is selected) *7		(500)				(550)			
(When high speed filling specification is selected) *7		—				—			
Screw speed (max.)	min^{-1}	460	430			400			
Number of temperature control zone		5		4		4		5	
Heater capacity	kW	2.2	2.6	3.2	3.6	3.2	3.6	3.9	4.3
Nozzle contact force	kN	7.8				14			
(When low nozzle contact force is selected)		—				—			
Injection unit moving stroke	mm	135～185				135～210			
Nozzle protrusion	mm	30				30			
Hopper capacity (When the standard hopper is selected)	L	(6)		(15)		(15)			

C65						C110						C160						C110						C160						C250				
MN		S				MN		S				S						MN		S				S						S		M		
14 *6	16 *6	18	20	22	25	16 *6	18 *6	20 *6	22	25	28	18 *6	20 *6	22 *6	25	28	32	16 *6	18 *6	20 *6	22	25	28	18 *6	20 *6	22 *6	25	28	32	22 *6	25 *6	28	32	36
223	266	274	265	220	170	266	274	265	274	212	174	274	265	274	274	218	167	266	274	265	274	212	174	274	265	274	274	218	167	274	274	284	217	171
223	266	274	265	220	170	266	274	265	274	212	174	274	265	274	274	218	167	266	274	265	274	212	174	274	265	274	274	218	167	274	274	284	217	171
—						—						—						—						—						(274)	(274)	(284)	(217)	(171)
6	11	20	25	30	38	11	19	24	40	51	64	19	24	39	51	64	84	11	19	24	40	51	64	19	24	39	51	64	84	39	51	86	113	143
5.8	11	19	24	28	37	11	18	23	38	49	61	18	23	37	49	61	80	11	18	23	38	49	61	18	23	37	49	61	80	37	49	83	108	137
4.4	8.8	10	13	18	26	8.8	10	13	18	26	37	10	13	18	26	37	53	8.8	10	13	18	26	37	10	13	18	26	37	53	18	26	37	53	76
84	110	140	173	209	270	100	127	157	190	245	308	101	125	152	196	246	322	100	127	157	190	245	308	101	125	152	196	246	322	133	171	216	281	356
(84)	(110)	(140)	(173)	(209)	(270)	(100)	(127)	(157)	(190)	(245)	(308)	(89)	(109)	(133)	(171)	(215)	(281)	(100)	(127)	(157)	(190)	(245)	(308)	(89)	(109)	(133)	(171)	(215)	(281)	(133)	(171)	(216)	(281)	(356)
—						—						—						—						—						(247)	(319)	(400)	(522)	(661)
40	58	78				58	78	104				78	104					58	78	104				78	104					104	140			
550						500						400						500						400						350				
(550)						(500)						(350)						(500)						(350)						(350)				
—						—						—						—						—						(650)				
400						400						400						400						400						400				
4		5				4		5				4	5					4		5				4	5					5				
2.3	2.7	3.1	3.5	3.8	4.2	2.7	3.1	3.5	3.8	4.2	4.8	3.1	3.5	3.8	4.2	4.8	5.4	2.7	3.1	3.5	3.8	4.2	4.8	3.1	3.5	3.8	4.2	4.8	5.4	3.8	4.2	6.5	7.5	8.4
14						14						43						14						43						43				
—						—						—	(14)					—						—						—				
170～250						170～250						250						200～300						200～300						200～300				
30						30						30						30						30						30	45			
(15)						(15)						(15)						(15)						(15)						(30)				

■ Machine dimensions and weight

Machine dimensions (L x W x H) *5	mm	3185 x 1005 x 1491	3682 x 1113 x 1575	4260 x 1183 x 1575
(Fast cycle specification)		(3207 x 1116 x 1491)	—	—
(Mold height extension 50 mm)		(3235 x 1005 x 1491)	(3732 x 1113 x 1575)	(4310 x 1183 x 1575)
(Mold height extension 100 mm)		—	—	—
Machine weight	t	2.0	2.7	3.5

Machine dimensions (L x W x H) *5	mm	3682 x 1113 x 1575	4260 x 1183 x 1575
(Fast cycle specification)		—	—
(Mold height extension 50 mm)		(3732 x 1113 x 1575)	(4310 x 1183 x 1575)
(Mold height extension 100 mm)		—	—
Machine weight	t	2.7	3.6

Machine dimensions (L x W x H) *5	mm	3682 x 1113 x 1575	4260 x 1183 x 1575
(Fast cycle specification)		—	—
(Mold height extension 50 mm)		(3732 x 1113 x 1575)	(4310 x 1183 x 1575)
(Mold height extension 100 mm)		—	—
Machine weight	t	2.8	3.7

*1 The max. injection pressure and max. hold pressure are calculated values and represent machine output, not resin pressure.
*2 The max. injection pressure and max. hold pressure are not sustained pressure levels.
*3 The plasticizing rate is shown for a machine equipped with SD Screw. *4 50% of the value in the table is the threshold value when the SL Screw is selected.
*5 The total length of the machine is to the front end of the injection unit when mounting the screw of the smallest diameter.
The total height of the machine does not include the dimensions of leveling pads and hopper. *6 SL Screw cannot be selected.
*7 High load specification and high filling specification cannot be selected at the same time. *8 Only available for connector machine.
● Specifications are subject to change without notice for performance improvement.

Main Specifications

Clamping unit

Item	Unit	SE100EV-S	SE130EV-S	SE180EV-S
Clamping system		Double toggle (5 points)	Double toggle (5 points)	Double toggle (5 points)
Clamping force (max.)	kN	1000	1300	1800
Clearance between tie-bars (H x V)	mm	460 x 460	510 x 510	560 x 560
Platen size (H x V)	mm	650 x 650	720 x 720	800 x 795
Daylight	mm	800	850	950
(Mold height extension 50 mm)		(850)	(900)	(1000)
(Mold height extension 100 mm)		(900)	(950)	(1050)
Mold opening stroke	mm	350	400	450
Platen speed max.	mm/s	1200	1200	1200
Mold height (min. - max.)	mm	180～450	180～450	200～500
(Mold height extension 50 mm)		(180～500)	(180～500)	(200～550)
(Mold height extension 100 mm)		(180～550)	(180～550)	(200～600)
Locating hole diameter	mm	ø100	ø100	ø120
(When the option is selected)		—	—	(ø100 / ø110)
Ejector system (ejecting points)		Motor driven type (5 points)	Motor driven type (5 points)	Motor driven type (5 points)
Ejector ejection force	kN	32	32	45
(When ejector compression device is selected)		(49)	(49)	(49)
(When ejector force power up is selected)		(59)	(59)	(59)
Ejector speed (max.)	mm/s	333	333	333
(When ejector compression device/ejector force power up is selected)		(333)	(333)	(333)
Ejector stroke	mm	100	100	120
(When ejector stroke extension is selected)		(150)	(150)	(150)
(When ejector compression device/ejector force power up is selected)		(80)	(80)	(100)

Injection unit

		C110	C160	C250	C360	C160	C250	C360	C450	C250	C360	C450	C560
		MN	S	S	S	M	S	M	S	M	S	M	M	S	M	M	M	S	M	M	M	M	M	M	M
Screw diameter	mm	16 *6	18 *6	20 *6	22	25	28	18 *6	20 *6	22 *6	25	28	32	22 *6	25 *6	28	32	36	25 *6	28 *6	32	36	40	28 *6	32 *6	36	40	45	32 *6	36 *6	40	45	50
Injection pressure (max.) *1,*2	MPa	266	274	265	274	212	174	274	265	274	274	218	167	274	274	284	217	171	274	284	273	215	175	284	273	259	209	165	273	259	274	216	175
Holding pressure (max.) *1,*2	MPa	266	274	265	274	212	174	274	265	274	274	218	167	274	274	284	217	171	274	284	273	215	175	284	273	259	209	165	273	259	274	216	175
(When high speed filling specification is selected) *7		—						—						(274)	(274)	(284)	(217)	(171)	—					—					(218)	(207)	(219)	(173)	(140)
Theoretical injection capacity	cm^3	11	19	24	40	51	64	19	24	39	51	64	84	39	51	86	113	143	51	86	129	163	201	86	128	163	201	254	128	162	201	254	314
Injection weight (GPPS)	g	11	18	23	38	49	61	18	23	37	49	61	80	37	49	83	108	137	49	83	124	156	193	83	123	156	193	244	123	156	193	244	302
Plasticizing rate *3, *4	kg/h	8.8	10	13	18	26	37	10	13	18	26	37	53	18	26	37	53	76	26	37	53	76	101	18	26	37	53	76	26	37	53	76	101
Injection rate	cm^3/s	100	127	157	190	245	308	101	125	152	196	246	322	133	171	216	281	356	171	215	281	356	440	133	171	216	281	356	171	215	281	356	440
(When high load filling specification is selected) *7		(100)	(127)	(157)	(190)	(245)	(308)	(89)	(109)	(133)	(171)	(215)	(281)	(133)	(171)	(216)	(281)	(356)	(171)	(215)	(281)	(356)	(440)	(133)	(171)	(216)	(281)	(356)	(171)	(215)	(281)	(356)	(440)
(When high speed filling specification is selected) *7		—						—						(247)	(319)	(400)	(522)	(661)	—					—					(402)	(508)	(628)	(795)	(981)
Screw stroke	mm	58	78		104			78		104				104		140			104	140		160												
Injection speed (max.)	mm/s	500						400						350					350														
(When high load filling specification is selected) *7		(500)						(350)						(350)					(350)														
(When high speed filling specification is selected) *7		—						—						(650)					—														
Screw speed (max.)	min^{-1}	400						400						400					400														
Number of temperature control zone		4		5				4		5				5					5														
Heater capacity	kW	2.7	3.1	3.5	3.8	4.2	4.8	3.1	3.5	3.8	4.2	4.8	5.4	3.8	4.2	6.5	7.5	8.4	4.2	6.5	7.5	8.4	10.3	3.8	4.2	6.6	7.6	8.5	4.2	6.5	7.6	8.5	10.3	6.6	7.6	8.5	10.3	11.5	7.6	8.5	10.3	11.5	12.6
Nozzle contact force	kN	14						43						43					43														
(When low nozzle contact force is selected)		—						—						—					—														
Injection unit moving stroke	mm	220～320						220～320						220～320					320														
Nozzle protrusion	mm	30						30						30		45			30	45													
Hopper capacity (When the standard hopper is selected)	L	(15)						(15)						(30)					(30)														

Machine dimensions and weight

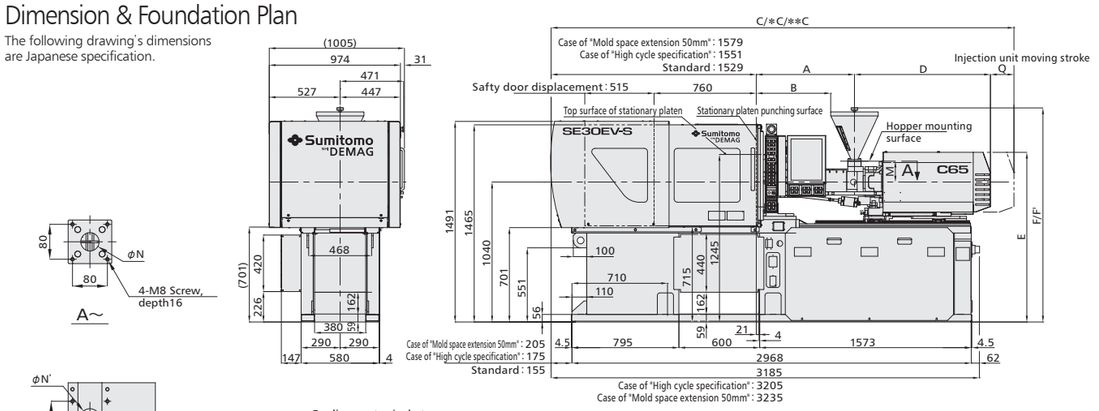
		SE100EV-S	SE130EV-S	SE180EV-S
Machine dimensions (L x W x H) *5	mm	4568 x 1226 x 1691	4793 x 1326 x 1750	5198 x 1396 x 1831
(Fast cycle specification)		—	—	—
(Mold height extension 50 mm)		(4668 x 1226 x 1691)	(4893 x 1326 x 1750)	(5298 x 1396 x 1831)
(Mold height extension 100 mm)		(4668 x 1226 x 1691)	(4893 x 1326 x 1750)	(5298 x 1396 x 1831)
Machine weight	t	4.3 / 4.4 / 4.5 / 4.6	5.3 / 5.4 / 5.5 / 5.5	7.0 / 7.1 / 7.1 / 7.4

*1 The max. injection pressure and max. hold pressure are calculated values and represent machine output, not resin pressure.
*2 The max. injection pressure and max. hold pressure are not sustained pressure levels.
*3 The plasticizing rate is shown for a machine equipped with SD Screw. *4 50% of the value in the table is the threshold value when the SL screw is selected.
*5 The total length of the machine is to the front end of the injection unit when mounting the screw of the smallest diameter.
The total height of the machine does not include the dimensions of leveling pads and hopper. *6 SL Screw cannot be selected.
*7 High load specification and high filling specification cannot be selected at the same time.
● Specifications are subject to change without notice for performance improvement.

SE30EV-S

Dimension & Foundation Plan

The following drawing's dimensions are Japanese specification.



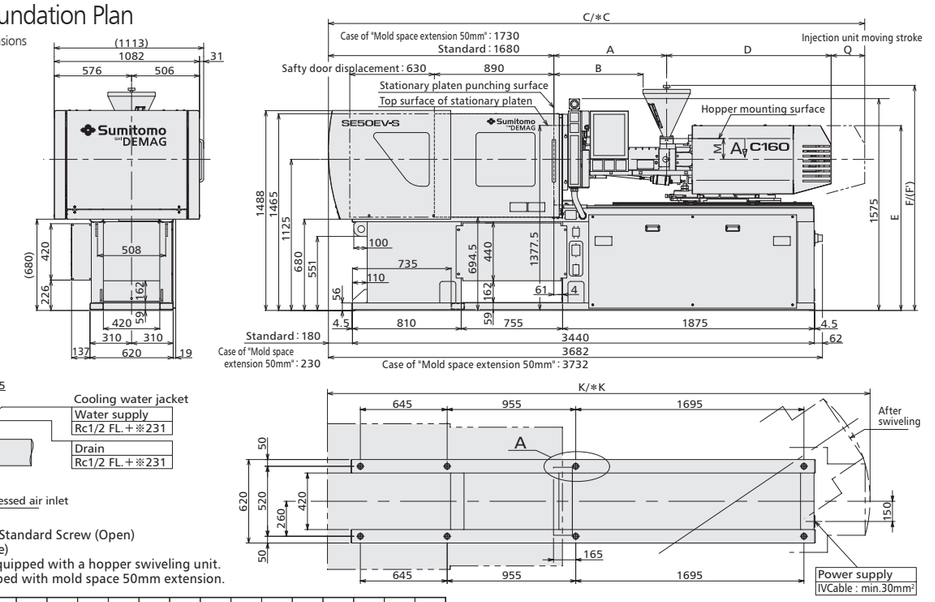
Injection unit	Screw Diameter / Type *MN	SL	O	N	A	B	C	*C	**C	D	E	F	(F')	K	*K	M	(M')	N	(N')	Q
C35	14				391	274	2933	2983	2955	852	1242	1463	—	3262	3312	146.5	—	36	—	145
	16				446	329	3028	3078	3050											185
		18			380	203	2912	2962	2934			1761				325		56		135
		20			400	223	2932	2982	2954											
			18		455	278	3037	3087	3059	868										
			20		510	333	3092	3142	3114			1591	1570			155	134	42	45	185
				18	565	388	3147	3197	3169											
				20	620	443	3202	3252	3224											
C65		18			380	203	3055	3105	3077	1011	1261			3478	3528					135
		20			400	223	3075	3125	3097			1761	—			325	—	56	—	
		22			435	258	3175	3225	3197											200
		25			490	313	3240	3290	3262											
			18		455	278	3205	3255	3227											
			20		510	333	3260	3310	3282											210
			22		565	388	3315	3365	3337											
			25		620	443	3370	3420	3392			1591	1570			155	134	42	45	
				18	565	388	3315	3365	3337											
				20	620	443	3370	3420	3392											
				22	675	498	3425	3475	3447											
				25	730	553	3455	3505	3477											185

SL : SL Screw (Open) O : Standard Screw (Open) N : Standard screw (Needle) MN : MN Screw (Open)
( ) Shows dimension equipped with a hopper swiveling unit.
*Shows dimension equipped with mold space 50mm extension.
**Shows dimension equipped with high cycle specification.
*MN type can only be installed on a connector machine.
When equipped with screwϕ25n please remove nozzle when turning plasticizing unit.

SE50EV-S

Dimension & Foundation Plan

The following drawing's dimensions are Japanese specification.



SL : SL Screw (Open) O : Standard Screw (Open)
N : Standard screw (Needle)
( ) Shows dimension equipped with a hopper swiveling unit.
*Shows dimension equipped with mold space 50mm extension.

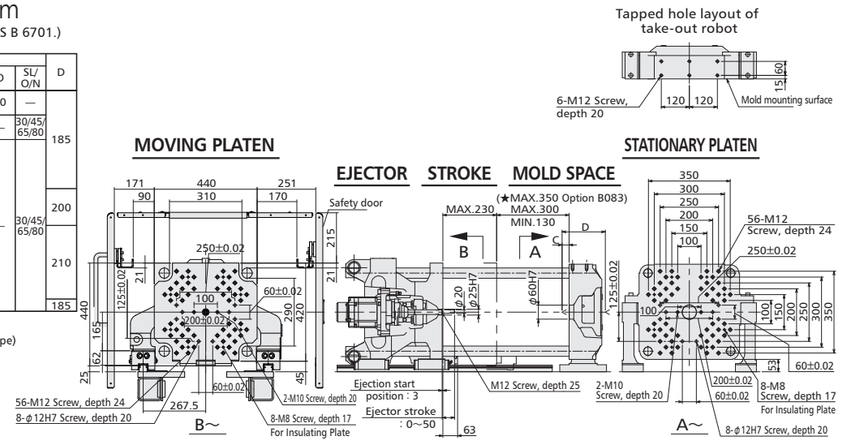
Injection unit	Screw Diameter / Type MN	SL	O	N	A	B	C	*C	D	E	F	(F')	K	*K	M	(M')	N	(N')	Q
C65S	14				391	214	3262	3312	1011	1346	1676	1655	3798	3848	155	134	42	45	180
	16				446	269	3317	3367											
		18			380	203	3251	3301			1846	—			325	—	56	—	170
		20			400	223	3271	3321											
		22			435	258	3296	3346											240
		25			490	313	3421	3471											
			18		455	278	3396	3446											
			20		510	333	3451	3501											
			22	18	565	388	3506	3556			1676	1655			155	134	42	45	250
			25	20	620	443	3561	3611											
				22	675	498	3616	3666											
				25	730	553	3671	3721											
C110S	16				446	269	3423	3473	1117	1366	1676	1655	3904	3954	115	134	42	45	180
	22				435	258	3402	3452											170
	25				490	313	3537	3587			1846	—			325	—	56	—	
	28				545	368	3592	3642											
		18			455	278	3502	3552											
		20			510	333	3557	3607											
		22			565	388	3612	3662											
		25			620	443	3667	3717											250
		28			675	498	3722	3772											
			18		565	388	3612	3662											
			20		620	443	3667	3717											
			22		675	498	3722	3772											
			25		730	553	3777	3827											
			28		785	608	3832	3882											
C160S	25				490	313	3646	3696	1226	1376	1676	1655	4056	4106	155	134	42	45	250
	28				545	368	3701	3751			1846	—			325	—	56	—	
	32				600	423	3756	3806											
		18			455	278	3611	3661											
		20			510	333	3666	3716											
		22			565	388	3721	3771											
		25			620	443	3776	3826											
		28			675	498	3831	3881											
		32			730	553	3886	3936											
			18		565	388	3721	3771											
			20		620	443	3776	3826											
			22		675	498	3831	3881											
			25		730	553	3886	3936											
			28		785	608	3941	3991											
			32		840	663	3996	4046											

Mold Mounting Diagram

(Mold Mounting Diagrams comply with JIS B 6701.)

Injection unit	Screw Diameter / Type MN	SL	O	N	C FTCⅡ	FTCⅢ	O	SL/O/N	D
C35	14				—	65	30	—	185
	16								
		18			50	—	—	30/45/65/80	
		20							
			18						
			20						
				18					
				20					
C65		18			50	—	—	30/45/65/80	200
		20							
		22							210
		25							
			18						
			20						
			22	18					
			25	20					
				22					
				25					185

FTCⅡ : FTCⅡ Nozzle (Open type)
FTCⅢ : FTCⅢ Nozzle (Open type · Connector type)
SL : SL SCREW (Open)
O : Open Nozzle
N : Needle type shut off nozzle

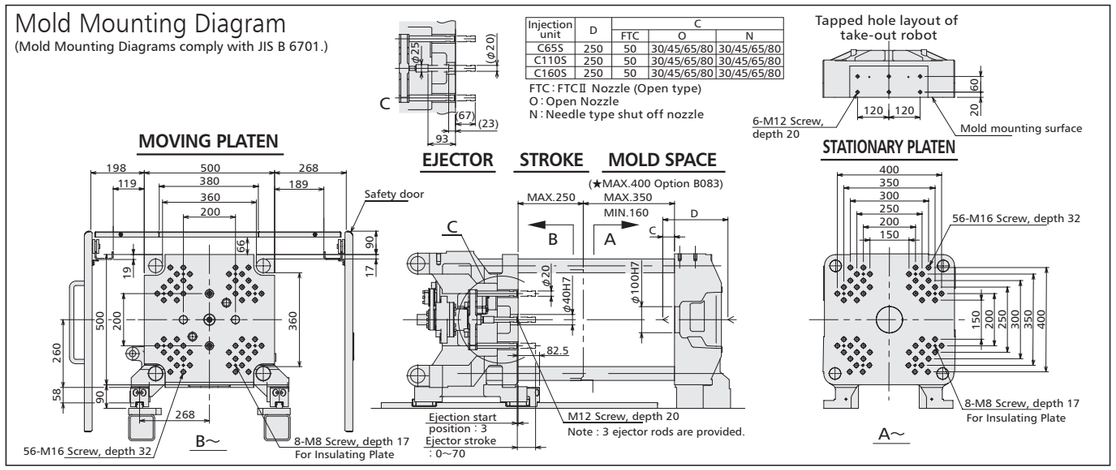


Mold Mounting Diagram

(Mold Mounting Diagrams comply with JIS B 6701.)

Injection unit	D	C FTC	C O	C N
C65S	250	50	30/45/65/80	30/45/65/80
C110S	250	50	30/45/65/80	30/45/65/80
C160S	250	50	30/45/65/80	30/45/65/80

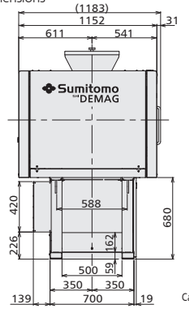
FTC : FTCⅡ Nozzle (Open type)
O : Open Nozzle
N : Needle type shut off nozzle

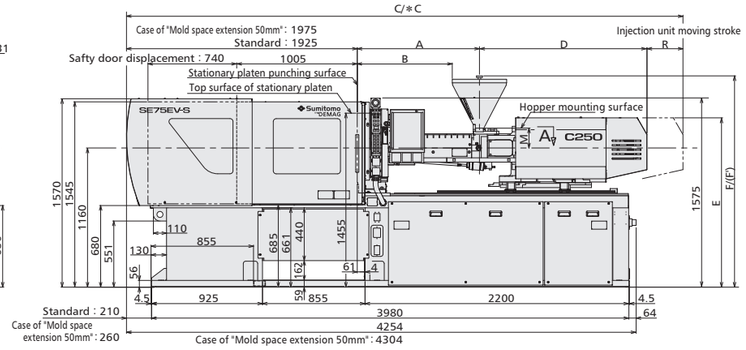


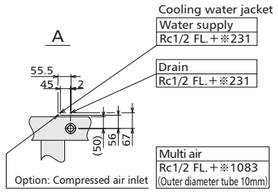
SE75EV-S

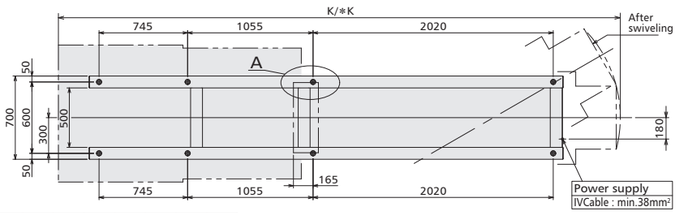
Dimension & Foundation Plan

The following drawing's dimensions are Japanese specification.

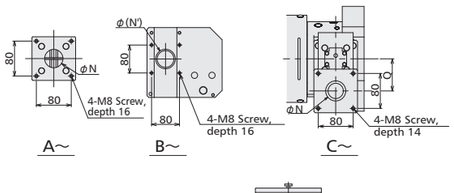


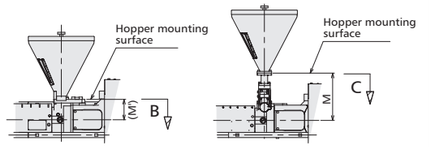






Injection unit	Screw Diameter / Type MN	SL	O	N	A	B	C	∗C	D	E	F	(F')	K	∗K	M	(M')	N	(N')	Q	R
C110S	16				446	269	3718	3768	1117	1401	1711	1690	4200	4250	155	134	42	45	—	230
		22			435	258	3687	3737												
		25			490	313	3742	3792			1876	—			325	—	56	—	73.5	210
		28			545	368	3797	3847												
			18		455	278	3697	3747												200
			20		510	333	3762	3812												210
			22		565	388	3907	3957												
			25		620	443	3962	4012												
			28		675	498	4017	4067			1711	1690			155	134	42	45	—	300
				18	565	388	3907	3957												
				20	620	443	3962	4012												
				22	675	498	4017	4067												
				25	730	553	4072	4122												
				28	785	608	4127	4177												
C160S		25			490	313	3851	3901	1226	1411			4352	4402						
		28			545	368	3906	3956			1876	—			325	—	56	—	73.5	210
		32			600	423	3961	4011												
			18		455	278	3806	3856												200
			20		510	333	3871	3921												210
			22		565	388	4016	4066												
			25		620	443	4071	4121												
			28		675	498	4126	4176												
			32		730	553	4181	4231			1711	1690			155	134	42	45	—	300
				18	565	388	4016	4066												
				20	620	443	4071	4121												
				22	675	498	4126	4176												
				25	730	553	4181	4231												
				28	785	608	4236	4286												
				32	840	663	4291	4341												
C250M		28			489	262	4031	4081	1397	1411			4700	4750						
		32			579	352	4201	4251			1941	—			325	—	56	—	73.5	200
		36			669	442	4291	4341			1888				272				105	
			22		565	338	4187	4237												
			25		620	393	4242	4292												
			28		699	472	4321	4371												
			32		789	562	4411	4461												300
				22	675	448	4297	4347												
				25	730	503	4352	4402			1776	1761			155	140	52	55	—	
				28	839	612	4461	4511												
			36		879	652	4501	4551												
				32	929	702	4551	4601												
				36	1019	792	4641	4691												





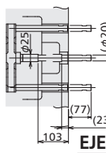
When equiped hopper swiveling unit

When selected SL screw unit

SL : SL Screw (Open) O : Standard Screw (Open) N : Standard screw (Needle)
( ) Shows dimension equipped with a hopper swiveling unit.
∗Shows dimension equipped with mold space 50mm extension.

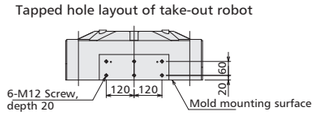
Mold Mounting Diagram

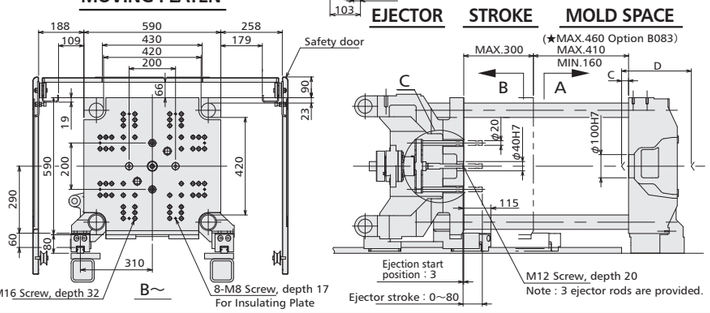
(Mold Mounting Diagrams comply with JIS B 6701.)



Injection unit	D	C		
		FTC	O	N
C110S	300	50	30/45/65/80	30/45/65/80
C160S	300	50	30/45/65/80	30/45/65/80
C250M	300	65	45/65/85	45/60/80

FTC : FTCⅡ Nozzle (Open type)
O : Open Nozzle
N : Needle type shut off nozzle

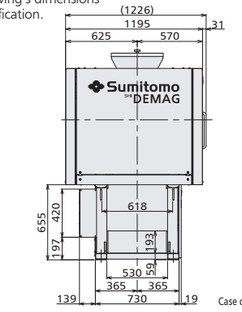


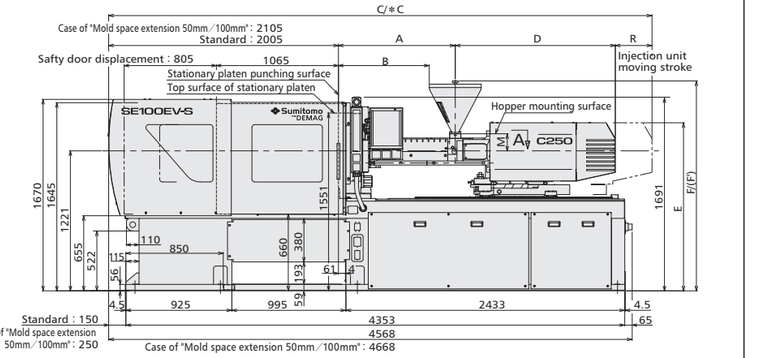


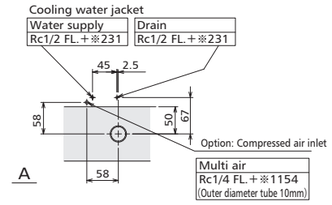
SE100EV-S

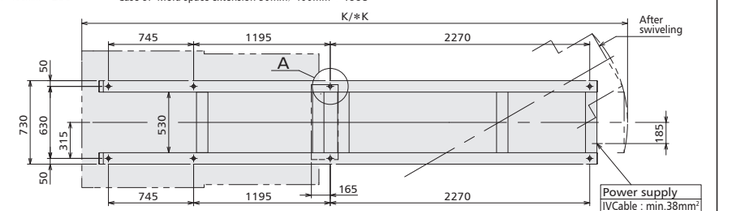
Dimension & Foundation Plan

The following drawing's dimensions are Japanese specification.

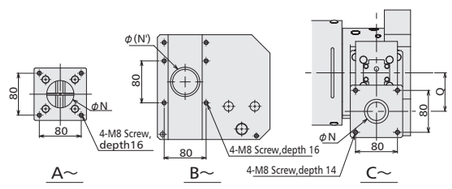


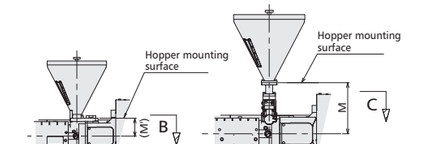






Injection unit	Screw Diameter / Type MN	SL	O	N	A	B	C	∗C	D	E	F	(F')	K	∗K	M	(M')	N	(N')	Q	R
C110S	16				446	269	3799	3899	1117	1462	1772	1751	4570	4670	155	134	42	45	—	230
		22			435	258	3788	3888												
		25			490	313	3843	3943			1942	—			325	—	56	—	74	230
		28			545	368	3898	3998												
			18		455	278	3798	3898												220
			20		510	333	3863	3963												230
			22		565	388	4008	4108												
			25		620	443	4063	4163												
			28		675	498	4118	4218			1772	1751			155	134	42	45	—	320
				18	565	388	4008	4108												
				20	620	443	4063	4163												
				22	675	498	4118	4218												
				25	730	553	4173	4273												
				28	785	608	4228	4328												
C160S		25			490	313	3951	4051	1226	1472			4692	4792						
		28			545	368	4006	4106			1942	—			325	—	56	—	74	230
		32			600	423	4061	4161												
			18		455	278	3906	4006												220
			20		510	333	3971	4071												230
			22		565	388	4116	4216												
			25		620	443	4171	4271												
			28		675	498	4226	4326			1772	1751			155	134	42	45	—	320
			32		730	553	4281	4381												
				18	565	388	4116	4216												
				20	620	443	4171	4271												
				22	675	498	4226	4326												
				25	730	553	4281	4381												
				28	785	608	4336	4436												
				32	840	663	4391	4491												
C250M		28			489	262	4131	4231	1397	1472			4930	5030						
		32			579	352	4301	4401			2007	—			325	—	56	—	74	220
		36			669	442	4391	4491			1954				272				105	
			22		565	338	4287	4387												
			25		620	393	4342	4442												
			28		699	472	4421	4521												
			32		789	562	4511	4611			1837	1822			155	140	52	55	—	320
				22	675	448	4397	4497												
				25	730	503	4452	4552												
				28	839	612	4561	4661												
			36		879	652	4601	4701												
				32	929	702	4651	4751												
				36	1019	792	4741	4841												
C360M		32			579	352	4368	4468	1464	1497	2007		5005	5105	325		56		74	
		36			669	442	4458	4558			1954	—			272	—		—	105	
		40			749	522	4538	4638												
			25		620	393	4409	4509												
			28		699	472	4488	4588												
			32		789	562	4578	4678												
			36		879	652	4668	4768			1837	1822			155	140	52	55	—	320
				25	730	503	4519	4619												
				28	839	612	4628	4728												
				32	929	702	4718	4818												
			40		999	772	4788	4888												
				36	1019	792	4808	4908												
				40	1109	882	4898	4998												





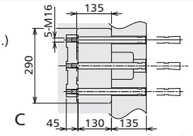
When equiped hopper swiveling unit

When selected SL screw unit

SL : SL Screw (Open) O : Standard Screw (Open) N : Standard screw (Needle)
( ) Shows dimension equipped with a hopper swiveling unit.
∗Shows dimension equipped with mold space 50mm or 100mm extension.

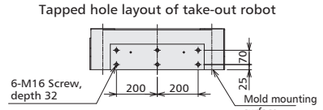
Mold Mounting Diagram

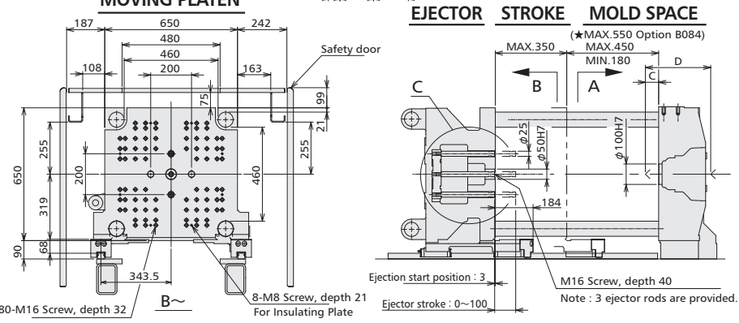
(Mold Mounting Diagrams comply with JIS B 6701.)



Injection unit	D	C		
		FTC	O	N
C110S	320	50	30/45/65/80	30/45/65/80
C160S	320	50	30/45/65/80	30/45/65/80
C250M	320	65	45/65/85	45/60/80
C360M	320	65	45/65/85	45/60/80

FTC : FTCⅡ Nozzle (Open type)
O : Open Nozzle
N : Needle type shut off nozzle

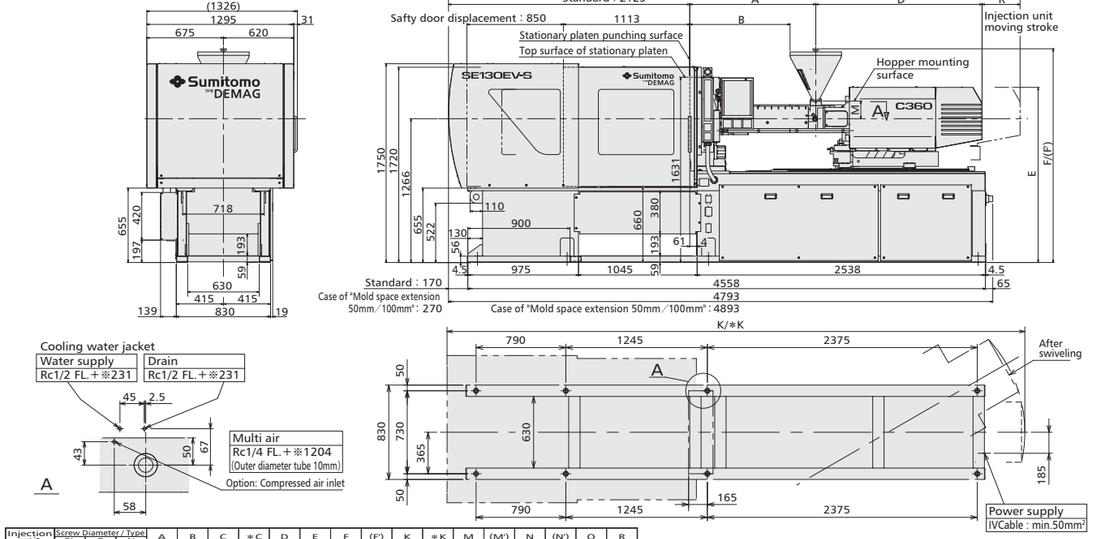




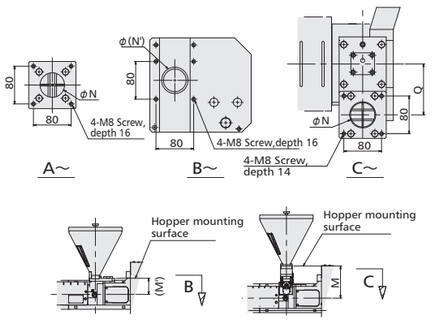
SE130EV-S

Dimension & Foundation Plan

The following drawing's dimensions are Japanese specification.



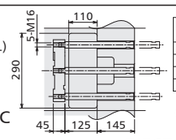
Injection unit	Screw Diameter / Type SL	O	N	A	B	C	∗C	D	E	F	(F')	K	∗K	M	(M')	N	(N')	Q	R
C160S	25			490	313	4091	4191	1226		1987	—			325	—	56	—	74	250
	28			545	368	4146	4246												
	32			600	423	4201	4301												
		18		455	278	4091	4191	1281		1842	1821			180	159				230
		20		510	333	4101	4201												240
		22		565	388	4156	4256												
		25		620	443	4306	4406												
		28		675	498	4361	4461		1517			4881	4981						
		32		730	553	4416	4516									42	45	—	
			18	565	388	4251	4351	1226		1817	1796			155	134				335
			20	620	443	4306	4406												
			22	675	498	4361	4461												
			25	730	553	4416	4516												
			28	785	608	4471	4571												
			32	840	663	4526	4626												
C250M	28			489	262	4251	4351			2052	—			325	—	56	—	74	240
	32			579	352	4361	4461			1999				272				105	300
	36			669	442	4526	4626												335
		22		565	388	4327	4427												240
		25		620	393	4477	4577												
		28		699	472	4556	4656												
		32		789	562	4646	4746	1397	1517			4940	5040						
			22	675	448	4532	4632			1882	1867			155	140	52	55	—	335
			25	730	503	4587	4687												
			28	839	612	4696	4796												
		36		879	652	4736	4836												
			32	929	702	4786	4886												
			36	1019	792	4876	4976												
C360M	32			579	352	4468	4568			2052				325				74	300
	36			669	442	4593	4693			1999	—			272	—	56	—	105	
	40			749	522	4673	4773												
		25		620	393	4544	4644												335
		28		699	472	4623	4723												
		32		789	562	4713	4813												
		36		879	652	4803	4903	1464	1542			5195	5295						
			25	730	503	4654	4754			1882	1867			155	140	52	55	—	
			28	839	612	4763	4863												
			32	929	702	4853	4953												
		40		999	772	4923	5023												
			36	1019	792	4943	5043												
			40	1109	882	5033	5133												
C450M	36			669	402	4701	4801			2094	—			272	—	56	—	105	
	40			749	482	4781	4881												
	45			839	572	4871	4971												
		28		699	432	4731	4831												335
		32		789	522	4821	4921												
		36		879	612	4911	5011												
		40		999	732	5031	5131	1572	1542			5301	5401						
			28	839	572	4871	4971			1977	1962			155	140	52	55	—	
			32	929	662	4961	5061												
			36	1019	752	5051	5151												
		45		1089	822	5121	5221												
			40	1109	842	5141	5241												
			45	1199	932	5231	5331												



SL : SL Screw (Open) O : Standard Screw (Open) N : Standard screw (Needle)
( ) Shows dimension equipped with a hopper swiveling unit.
∗Shows dimension equipped with mold space 50mm or 100mm extension.

Mold Mounting Diagram

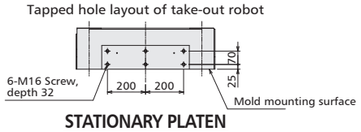
(Mold Mounting Diagrams comply with JIS B 6701.)



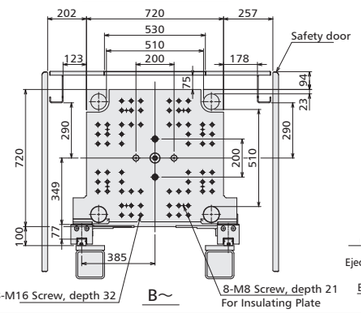
Injection unit	D	C		
		FTC	O	N
C160S	335	50	30/45/65/80	30/45/65/80
C250M	335	65	45/65/85	45/60/80
C360M	335	65	45/65/85	45/60/80
C450M	335	65	45/65/85	45/60/80

FTC : FTCⅡ Nozzle (Open type)
O : Open Nozzle N : Needle type shut off nozzle

Tapped hole layout of take-out robot

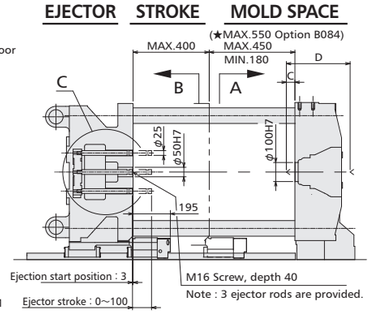


MOVING PLATEN

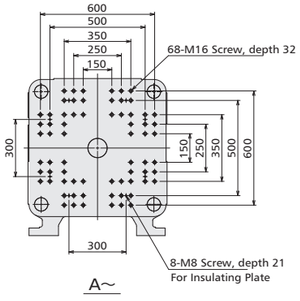


EJECTOR STROKE MOLD SPACE

(★MAX.550 Option B084)



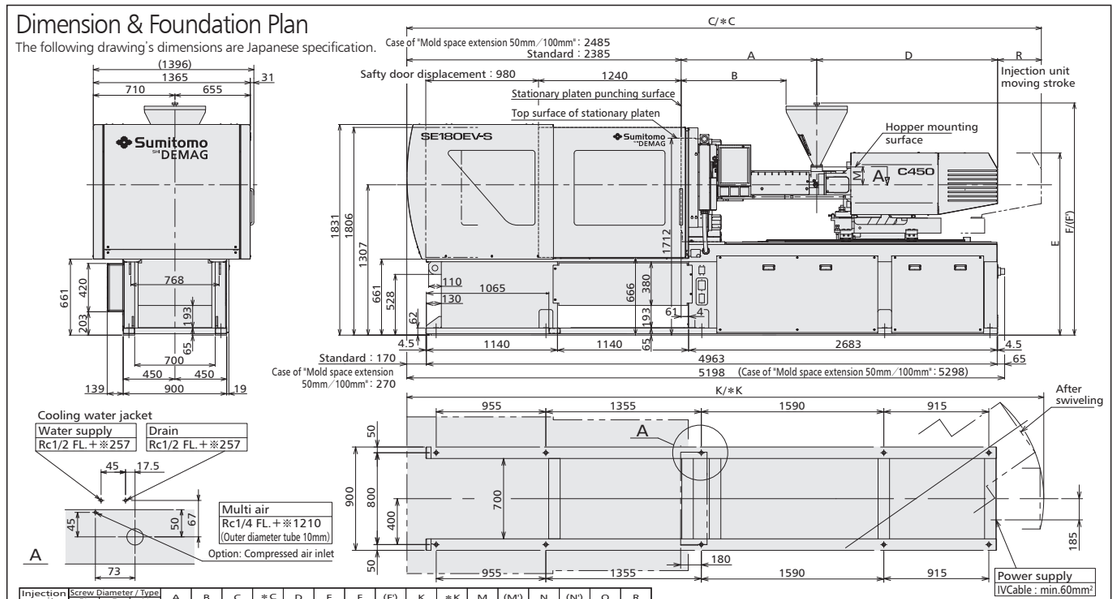
STATIONARY PLATEN



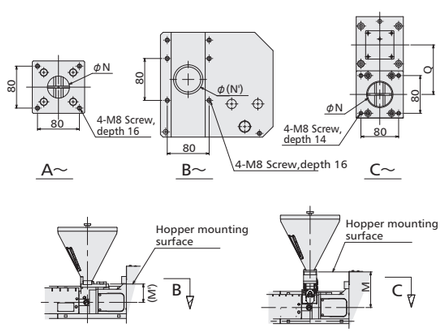
SE180EV-S

Dimension & Foundation Plan

The following drawing's dimensions are Japanese specification.



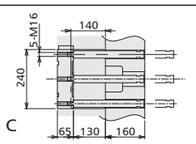
Injection unit	Screw Diameter / Type SL	O	N	A	B	C	∗C	D	E	F	(F')	K	∗K	M	(M')	N	(N')	Q	R
C250M	28			499	272	4531	4631			2093	—			325	—	56	—	74	250
	32			589	362	4681	4781												310
	36			679	452	4831	4931			2040				272				105	370
		22		565	338	4617	4717												270
		25		620	393	4762	4862												360
		28		709	482	4871	4971												
		32		799	572	4961	5061	1397	1558										360
			22	675	448	4837	4937												
			25	730	503	4892	4992												380
			28	819	592	4981	5081												
			36	889	662	5051	5151												360
			32	909	682	5071	5171												380
			36	999	772	5161	5261												
C360M	32			589	362	4750	4850			2093				325				74	310
	36			679	452	4900	5000				—				—	56	—		370
	40			729	502	4960	5060			2040				272				105	380
		25		620	393	4829	4929												
		28		709	482	4918	5018												360
		32		799	572	5030	5130												
		36		889	662	5120	5220	1464	1583			5460	5560						
			25	730	503	4959	5059			1923	1908			155	140	52	55	—	380
			28	819	592	5048	5148												
			32	909	682	5140	5240												
		40		979	752	5210	5310												
			36	999	772	5230	5330												
			40	1089	862	5320	5420												
C450M	36			679	412	5008	5108												
	40			729	462	5068	5168			2040	—			272	—	56	—	105	370
	45			819	552	5158	5258												380
		28		709	442	5026	5126												
		32		799	532	5116	5216												360
		36		889	622	5228	5328												
		40		979	712	5318	5418	1572	1583			5566	5666						
			28	819	592	5156	5256			2018	2003			155	140	52	55	—	380
			32	909	642	5246	5346												
			36	999	732	5338	5438												
		45		1069	802	5408	5508												
			40	1089	822	5428	5528												
			45	1179	912	5518	5618												
C560M	40			729	462	5144	5244			2040	—			272	—	56	—	105	380
	45			819	552	5234	5334												
		32		790	532	5194	5294												360
		36		889	622	5284	5384												
		40		979	712	5394	5494												
		45		1069	802	5484	5584												
			32	909	642	5324	5424	1650	1613			5813	5913						
			36	999	732	5414	5514			2018	2003			155	140	52	55	—	380
			40	1089	822	5504	5604												
		50		1159	892	5574	5674												
			45	1179	912	5594	5694												
			50	1269	1002	5684	5784												



SL : SL Screw (Open) O : Standard Screw (Open) N : Standard screw (Needle)
( ) Shows dimension equipped with a hopper swiveling unit.
∗Shows dimension equipped with mold space 50mm or 100mm extension.

Mold Mounting Diagram

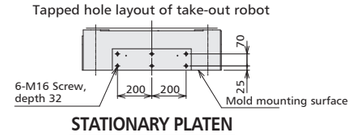
(Mold Mounting Diagrams comply with JIS B 6701.)



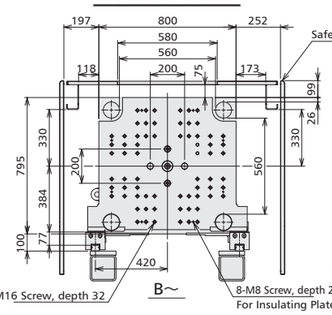
Injection unit	D	C	
		O	N
C250M	380	65/85/100	65/80/100
C360M	380	65/85/100	65/80/100
C450M	380	65/85/100	65/80/100
C560M	380	65/85/100	65/80/100

O : Open Nozzle
N : Needle type shut off nozzle

Tapped hole layout of take-out robot

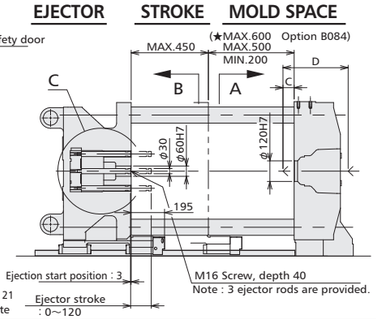


MOVING PLATEN

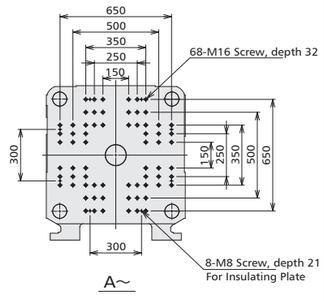


EJECTOR STROKE MOLD SPACE

(★MAX.600 Option B084)



STATIONARY PLATEN



Standard Equipment

Plasticizing and injection unit
1. Injection program control function (Multi-stage control)
2. Holding pressure program control function (Multi-stage control)
3. Screw pull back function (Before starting dosing/After dosing is completed)
4. Digital display function of screw position (0.01 mm setting)
5. Holding time 0.01 seconds setting function
6. V-P switchover function (Pressure/Position)
7. Filling delay timer function
8. Pursing device with interlock (Select the position where the interlock function is unused or the injection device is retracted)
9. Heating cylinder temperature control max. 5 zones *2
10. Heating cylinder temperature switching function (Molding/Lowered temperature/Pursing)
11. Standard capacity heater (More than C250)
12. Zone 1 high-capacity heater (Less than C160)
13. Screw cold start prevention function (With variable interlock timer and minimum melting time display)
14. Remote setting function for sprue break stroke (Reverse timing selection with delay timer, Nozzle contact detection, Movement time setting)
15. Screw rotation speed digital display function
16. Purging cover device (With limit switch)
17. Injection unit swivel device (With nozzle alignment adjustment mechanism)
18. Remaining cooling time display function
19. Dosing start delay timer function
20. Injection speed/Holding pressure rise speed selection function (10 modes)
21. Screw forward speed setting function during holding pressure
22. Screw pull back delay control function
23. Synchro dosing function
24. Screw reverse rotation control function
25. Independent temperature control device of nozzle
26. Standard energy saving heating cylinder cover (Two-layer structure)
27. Water cooling jacket temperature control device
28. Mold open operation function during dosing (Shut off nozzle drive control)
29. Filling pressure multi-stage control function
30. Resin residence prevention function
31. One-touch manual dosing function
32. High-precision, high-pressure nozzle contact device (Nozzle contact force 3-step variable)
33. Stainless steel purge resin saucer
34. SL Screw: Auto-tuning function of synchronization rate (SL Screw is a selection specification)
35. Deceleration pattern of V/P switchover (Slow landing) (Only for SE30EV-S)

Control unit
1. 15-inch TFT color LCD screen
2. Touch panel type setting input device
3. Molding condition storage function
4. Operation support function
5. Molding support function
6. Waveform display function (Waveform memory function, Display value reading function, Data storage by trigger, etc.)
7. Screen hard copy function
8. Take-out robot connection circuit device *1
9. Screen switching function in up to 15 languages
10. Maintenance management function (Inspection time, Grease greasing time, Item, Operation method display)
11. Automatic start/stop function (Lowered temperature/Heater start/Molding machine stop) *1
12. Process display function
13. SSR heater drive circuit device
14. Industrial unit input function (Speed, Position, Pressure and rotation speed)
15. Molding machine status output signal (5 CH) *1
16. USB connection circuit device (Memory)
17. Protection function of saved conditions
18. Abnormal processing selection function
19. Initial reject/Short stop reject function
20. Screen color change function
21. Numerical and character input keypad layout change function (Select from 2 types)
22. Take-out robot entry permission signal
23. Clean control cabinet (Only for SE30EV-S)
24. OPC UA server

Monitor unit
1. Actual value display function
2. Heater breakage monitoring device
3. Auxiliary equipment abnormality monitoring function (3 ch) *1
4. Abnormality monitoring function (Maximum cushion, Minimum cushion, Filling pressure, Mold protection, Cycle time, Dosing time)
5. Abnormality monitoring condition automatic setting function
6. Abnormal history display function (Abnormal item/Occurrence time display)
7. Quality control function (Statistical function of actual values, various graph functions, 100,000 shot storage and data confirmation function)
8. Production number management function (Molded product discrimination function, Automatic production completion, Stocker feed signal, Data logging, Production counter with reset)
9. Auto start function (Heater, External output signal)
10. Heating cylinder temperature monitoring function (All zones)
11. Self diagnosis function
12. Abnormal alarm buzzer
13. Shot counter
14. Processing function when cycle monitoring is abnormal (Heater processing mode change)
15. All process display screen function
16. Monitoring function to prevent forgetting to set monitoring
17. Ejector protrusion torque monitoring function
18. Maintenance time notification function (Maintenance time notification based on the number of shots / Elapsed time)
19. Injection pressure monitoring function (5 points)
20. Cycle analysis function

Clamp unit
1. Mold opening/closing position and speed program control function (5-stage/3-stage switching)
2. Mold protection function
3. Low pressure mold clamp function
4. Mold opening/closing pause function
5. Remote control function of clamp force
6. Remote control function of mold space
7. Ejector remote setting function (2-speed control, Pressure, Stroke, Delay timer, Multiple time protrusions)
8. Current value input function (Ejector protrusion position)
9. Current value input function (Mold open limit position)
10. Clamp mode selection function (Lockup)
11. Ejector protrusion interlock function (Ejector can be operated only at the mold opening completion position in manual mode)
12. Ejector protrusion function during mold opening
13. Ejector protrusion function during mold clamp
14. Mold plate return confirmation device (Input signal to molding machine) (Metal outlet connection) *1
15. Mold opening/closing signal (Spear control signal) *1
16. Valve gate drive circuit device (Control circuit only) *1
17. Stand by mode function for mold installation (Low mold opening/closing speed)
18. Toggle cover with polycarbonate window
19. Emergency stop push button switch (Operation side/Non-operation side)
20. Safety door with polycarbonate window
21. Screw holes for mounting the take-out robot
22. Grease centralized greasing device for mold clamp/injection unit
23. Mold clamp safety device (Electric/Mechanical)
24. Mold opening/closing low vibration or high speed mode selection function
25. Movable platen support device (Linear guide type)
26. Center Press Platen mechanism
27. Product drop confirmation connection circuit *1
28. Multi-toggle function (Multi-stage clamp force setting)
29. Tie bar plating specification
30. Ejector motor device with brake
31. S-MOVE function (Low vibration control)
32. Ejector standby position function
33. Control device for mold installation space with servo motor
34. Dust-proof cover on top of toggle (Fixed type)
35. Dry cycle mode function

Others
1. Auto grease supply unit (Cartridge grease type)
2. 3-way take-out frame
3. Mold cooling water block device (2 systems) (Flow indicator and valve are options)
4. Standard spare parts (Fuses, Air filters)

Standard Equipment

Zero-molding features	
1. Zero-molding main screen: Simple process setting	18. Zero-molding: Clamp force feed back function
2. Zero-molding main screen : Production monitor (Production number/Process/Abnormality/Actual results)	19. Clamp force multi-stage control function (Cross-head position control)
3. Specifications/Function confirmation screen (Standard functions/Optional functions/Abnormality handling/Specification list/Monitoring device)	20. Multi-toggle function (Gas vent function/Deformation prevention function)
4. Minimum mold clamp force detection function (Automatic measurement)	21. Zero-molding: Molding condition support monitor function (Peak clamp force, Pack pressure, Status display)
5. Setup support: Mold installation screen (Mold height, Mold contact, Clamp force, Mold open/close in preparations, Ejector setting)	22. Actual value monitor switching function (Actual/Process/Power/Waveform/Temperature graph)
6. Setup support: Mold condition setting screen (Open/close, Ejector multi-stage setting)	23. Monitoring setting: Function to automatically set all at once
7. Setup support: Mold opening limit/Ejector protrusion position teaching function (Current value input)	24. Molding condition access restriction function (Condition range, Screen display, Password function)
8. Setup support: Protection setting screen (Mold protection, Ejector protection)	25. Automatic condition change function for molding start (By short shot method)
9. Setup support: Multi-purging function (Gate purging, Resin replacement purging, Slight time stop purging, Low-viscosity resin purging, Resin viscosity measurement)	26. Protection: Screw protection function
10. Setup support: Temperature condition reference/Calling function	27. Energy saving mode function of holding pressure (with automatic energy saving control function)
11. Setup support: Resin residence alarm/Monitoring function	28. Waveform display function: Simple display by process (Injection, Holding pressure, Dosing, Mold opening, Mold closing, Ejector, Mold height)
12. Setup support: Nozzle/Heating cylinder temperature rise mode function (Step/Nozzle delay/Process temperature control)	29. Waveform display function: Waveform save completion message
13. Zero-molding Molding condition setting screen: Z-Screen (Filling, Holding pressure, Dosing, time, Temperature, Mold clamp force)	30. Waveform display function: Automatic waveform save function (Always/Trigger/Abnormal)
14. Zero-molding: FFC control (with guidance function)	31. Quality control function: Waveform monitoring function
15. Zero-molding: FFC control, mode setting function	32. Quality control function: Molding process monitor logging function (Temperature, Temperature control output, Peak clamp force, Pack pressure)
16. Zero-molding: Function to check the filling position and short shot position by flow front check	33. Production control function: Function to set the number of cavities and manage the number of products
17. Screw reversal decompression control function	34. Production control function: Operation status management function (operating time, motor load factor, power consumption monitor)

*1 All input and output signals are no-voltage contact signals. Power is not supplied with output signals.
*2 The number of zone varies depending on the screw diameter and screw type.
- Specifications are subject to change without notice for performance improvement.
- Standard specification models of the SE-EV-A series comply with the safety standards of Japan, China and the nations of Southeast Asia.
  They can also be modified to comply with the safety standards of Korea (KCs Mark), USA, Brazil, the nations of Oceania and Canada. For more information, contact us.

Optional Equipment

Plasticizing selection
1. Ion-nitride screw assembly
2. Hard chromium plating screw assembly
3. Wear and corrosion resistant A screw assembly
4. Wear and corrosion resistant B screw assembly
5. Wear and corrosion resistant C screw assembly
6. High-temperature screw assembly (Max. temp. 450 °C)
7. SD Screw
8. SM Screw
9. SL Screw
10. Screw tip set Rotation type
11. Screw tip set Rotation type TiN coating
12. Screw tip Corrosion and wear resistant A Non-rotation type
13. Screw tip Corrosion and wear resistant B Non-rotation type
14. Screw tip Corrosion and wear resistant C Non-rotation type
15. Open nozzle
16. Needle nozzle (Needle is operated by pneumatic.)
17. FTCII nozzle (Open nozzle: ø18 mm- ø36 mm, Less than SE130EV-S)
18. Cylinder nozzle
19. Zone 1 high capacity heater (More than C250)
20. High capacity heater
21. Extension nozzle
22. High insulated cylinder cover

Plasticizing and injection unit
1. Resin temperature finder (Only for needle nozzle type)
2. Standard type hopper
3. V/P switchover by mold cavity pressure
4. Needle valve nozzle drive circuit
5. FTC nozzle electric control circuit (Built-in)
6. High temperature heater control circuit (Up to 499 °C)
7. Hopper swivel mounting plate
8. Plating resin inlet of cooling water jacket
9. High efficiency nozzle control (Depression of nozzle contact force)
10. High duty injection *3
11. GS Loader control circuit
12. Nozzle pressing force reduction (Nozzle pressing force: 14 kN) (Only for SE50EV-S C160)

Control and monitor unit
1. Leak circuit breaker (AC200V, 220V 3ø3W+E) (Japan and Asia only)
2. Mold temperature monitor (2 zones on movable platen, Without thermocouple, Type K)
3. Mold temperature monitor (1 zone on movable platen and 1 zone on fixed platen, Without thermocouple, Type K)
4. Mold temperature monitor (2 zones on movable platen and 2 zones on fixed platen, Without thermocouple, Type K)
5. Production control (2-directional rejection chute)
6. Mold temperature controller (K=CA, 2 zones on movable platen)
7. Mold temperature controller (K=CA, 1 zone on movable platen and 1 zone on fixed platen)
8. Mold temperature controller (K=CA, 2 zones on movable platen and 2 zones on fixed platen) (Only for SE75EV - SE180EV)
9. Automatic starting system (Heater+Water supply+External output signal) *1
10. Revolving alarm lamp
11. Multi function 3-color LED alarm lamp
12. 4-line closed circuit water connection lines (With flow detector, Stop valve, Cooling water stop valve, Filter)
13. 2-line closed circuit water connection lines (With flow detector, Stop valve, Cooling water stop valve, Filter)
14. Personal computer connection circuit, Ethernet
15. Spare power supply outlet selection

Control and monitor unit
16. Electric power supply receptacles (Operation side)
17. Name plate: Blue
18. Name plate: Black
19. Motion07
20. MotionGB
21. Korea Certification Mark
22. Addition of the motor breaker

Clamp unit
1. Core tractor control circuit 1 system (Control circuit+Piping) *4
2. Core tractor drive circuit (No hydraulic pump) (Only for SE50EV-S - SE180EV-S)
3. Core tractor drive circuit (The ie Hydraulic Pump is included.) (Only for SE50EV-S - SE180EV-S)
4. Pneumatic core pull control circuit 1 system (Control circuit+Piping) *4
5. Rotating core control circuit (Motor drive, Less than 1.5 kW)
6. SPI take-out robot connection circuit *1
7. SPI AN-146/EUROMAP67 take-out robot connection circuit
8. Product chute
9. High precision heat insulating plate (5 mm/10 mm, Cross type)
10. Mold clamp control unit *4
11. Valve gate drive circuit (Control circuit+Pneumatic circuit) *4
12. Valve gate drive circuit (The ie Hydraulic Pump is included.)
13. Full metallic toggle cover
14. Ejector compression device (SE50EV-S - SE180EV-S: 49 kN) *6
15. Mold space extension 50 mm *7
16. Mold space extension 100 mm (Only for SE100EV-S - SE180EV-S) *8
17. Slide core return signal *1
18. Double Center Press Platens (Only for SE100EV-S - SE180EV-S) *9
19. Ejector force power up (SE100EV-S - SE180EV-S: 59 kN) *10
20. Ejector stroke extension (SE50EV-S, SE75EV-S: 100 mm, SE100EV-S - SE180EV-S: 150 mm)
21. Pneumatic control circuit *5
22. Signal for hoop molding (Only for SE30EV-S)
23. High cycle specification (Only for SE30EV-S)

Spare parts and accessories
1. Spare parts A (Mechanical parts: Lub. parts)
2. Spare parts A (Electrical parts: Thermocouple)
3. Spare parts for export (Encoder, Limit switch, Inductive proximity sensors)
4. Leveling pads (For one machine)
5. Anchor bolts (For one machine)
6. Locating ring (Transition fit) Inner diameter: ø26 mm/Outer diameter: ø60 mm (Only for SE30EV-S)
7. Locating ring (Transition fit) Inner diameter: ø100 mm/Outer diameter: ø120 mm (Only for SE180EV-S)
8. Locating ring (Transition fit) Inner diameter: ø110 mm/Outer diameter: ø120 mm (Only for SE180EV-S)
9. Mechanical parts and hooks for hosting machine
10. Tool A
11. Ejector rods
12. Grease gun
13. Grease cartridge for automatic lub (700 cc)
14. Grease cartridge for manual lub (400 cc)
15. High precision heat insulating plate (5 mm/10 mm, Cross type)
16. Mold clamp
17. Box end wrench for open nozzles
18. Offset wrench for shut-off nozzle

*1 All input and output signals are no-voltage contact signals. Power is not supplied with output signals.
*3 The injection duty is 50%. The maximum injection speed of C35 unit and C160 unit change as follows.
C35: 500 mm/s C160: 350 mm/s
*4 All input signals are no-voltage contact signals. All output signals are 24 V DC signals.
*5 All input and output signals are 24 V DC signals.
*6 The ejector stroke will be shortened, and maximum ejector speed slows down.
*7 The overall machine length is larger by 50 mm (SE100EV-S - SE180EV-S: 100 mm), and maximum mold thickness is larger by 50 mm.
*8 The overall machine length and maximum mold thickness are larger by 100 mm.
*9 You cannot choose this option with 100 mm mold thickness extension.
*10 The compression time with listed compression force is less than 20% of cycle time, and the ejector stroke will be shortened.

- Specifications are subject to change without notice for performance improvement.
- Standard specification models of the SE-EV-S series comply with the safety standards of Japan, China and the nations of Southeast Asia. They can also be modified to comply with the safety standards of Korea (KCs Mark), USA, Brazil, the nations of Oceania and Canada. For more information, contact us.

Screw Assembly

Suitable resins		Non-abrasive (wear) and corrosive resins	Resins may burn, resins with poor thermal stability	Resins with less than 30% GF, flame retardant resins	Resin with 30% - 40% GF, resins with large amount of filler (GB, CF, MR)	Resin with 40% - 60% GF, highly corrosive resins	Resin with high melting temperatures
Wear resistance		★	★	★★	★★★	★★★	★★
Corrosion resistance		★	★	★★	★★	★★★	★★
Specifications		**Nitrided**	**Chrome Plated**	**Wear and Corrosion resistant A**	**Wear and Corrosion resistant B**	**Wear and Corrosion resistant C**	**High temperature**
Material	Screw	Nitrided	Chrome Plated	Wear and Corrosion resistant A	Wear and Corrosion resistant B	Wear and Corrosion resistant B	Wear and Corrosion resistant A
	Cylinder	Nitrided	Nitrided	Wear and Corrosion resistant A	Wear and Corrosion resistant B	Wear and Corrosion resistant C	Wear and Corrosion resistant A
	Screw tip (set)	Rotating type	Rotating type	Wear and Corrosion resistant A Non-rotating type headset	Wear and Corrosion resistant B Non-rotating type headset	Wear and Corrosion resistant C Non-rotating type headset	Wear and Corrosion resistant A Non-rotating type headset
Type	SD Screw	○	○	○	○	○	○
	SM Screw	○	○	○	—	—	—

★★★Most suitable ★★Suitable ★Usable

List of Preparation Items

Main breaker capacity

Machine	Main breaker capacity
SE30EV-S	100A
SE50EV-S	100A
SE75EV-S	125A
SE100EV-S	125A
SE130EV-S	150A
SE180EV-S	175A

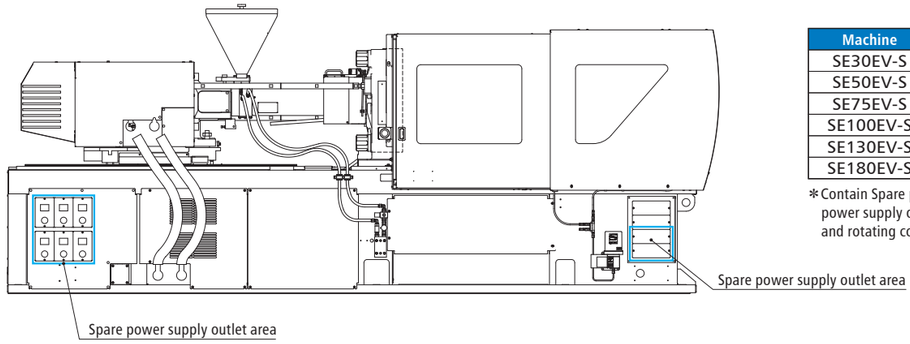
- Voltage and frequency of main power source is applicable to the areas of AC200V-50Hz/AC200V-60Hz/AC220V-60Hz.
- Connect to the mating of 3-phases 3-wires, & grounding cable.

Spare sockets (Optional)

The increased number of power sockets are available for auxiliary equipment such as auto loader and mold temperature controller to flexibly meet the requirement for customer's molding systems, to which a necessary number of sockets can be added to connect their peripheral equipment.

- A maximum of eight outlets can be selected.
- The capacities and installation positions of the outlets can be selected freely.
  One 10 A outlet, one 20 A outlet, one 30 A outlet, and one 60 A outlet are prepared.

※Restrictions are placed on the installation position of the 60 A outlet.
※The table shows the limit of total Amperage available at the same time when each type of molding machine runs.



Machine	Maximum Amperage
SE30EV-S	50A
SE50EV-S	50A
SE75EV-S	75A
SE100EV-S	75A
SE130EV-S	75A
SE180EV-S	100A

＊Contain Spare power supply outlet and power supply of mold temperature controller and rotating core.

Primary side in-line size, grounding cable size

Machine	Primary side power cable size	Primary side power terminal screw size	Grounding cable size	Grounding cable terminal screw size
SE30EV-S	30mm²	M8	22mm²	M8
SE50EV-S	30mm²	M8	22mm²	M8
SE75EV-S	38mm²	M8	22mm²	M8
SE100EV-S	38mm²	M8	22mm²	M8
SE130EV-S	50mm²	M8	30mm²	M8
SE180EV-S	60mm²	M8	30mm²	M8

- The size of electric cables listed above is based on the allowable current when the ambient temperature of piping of a single core polyvinyl cable is 40℃.
- The values listed above are calculated base on the sum of load current listed in the item of main breaker capacity. When the power must be supplied in large quantities to auxiliary equipment from the molding machine, it is required to use a large size cable. However, there may be enough room for the size of the cable currently used depending on the selection of the options.
- Voltage fluctuation of the power source must be within ±10% of the rated voltage at the power source contact point (main breaker) on the molding machine side.
- Protection network against service interruption is not provided for the control circuit of the molding machine. When the instant interruption time exceeds one cycle, the molding machine may stop running in some cases. In an area where instant service interruptions are frequent due to thunderbolts, be sure to install an uninterruptive power supply system at the plant site.

Calculated values (ref. values) of cooling water

■Cooling water line of water jacket

Machine	Band heater capacity	Required cooling water
C35 ϕ20	3.5kW	0.8L/min
C65 ϕ25	4.2kW	1.0L/min
C110 ϕ28	4.8kW	1.1L/min
C160 ϕ32	5.4kW	1.3L/min
C250 ϕ36	8.4kW	2.0L/min
C360 ϕ40	10.3kW	2.4L/min
C450 ϕ45	11.5kW	2.7L/min
C560 ϕ50	12.6kW	2.9L/min

■Mold cooling water line

	Total cooling water required for 2 lines.
All models (SE30EV-S～SE180EV-S)	10L/min

＊Cooling water required for 1 line is approx 5L/min.