

The High-Speed Benchmark.

El-Exis SP.

Maximum performance - Highest output



THE HIGH-SPEED BENCHMARK



El-Exis SP

The best combination for the fastest applications.

For more than 25 years, Sumitomo (SHI) Demag has been constantly defining new limits in high-speed applications with the El-Exis series. The fourth generation of the El-Exis SP is the most advanced and fastest injection moulding machine on the market. The intelligent drive system knows no compromises between maximum performance and minimum energy consumption. Designed for more than 200,000,000 cycles, the El-Exis SP has been developed to be absolutely reliable in highly dynamic applications for many years to come. Your high-speed applications are in the best hands with us!



El-Exis SP

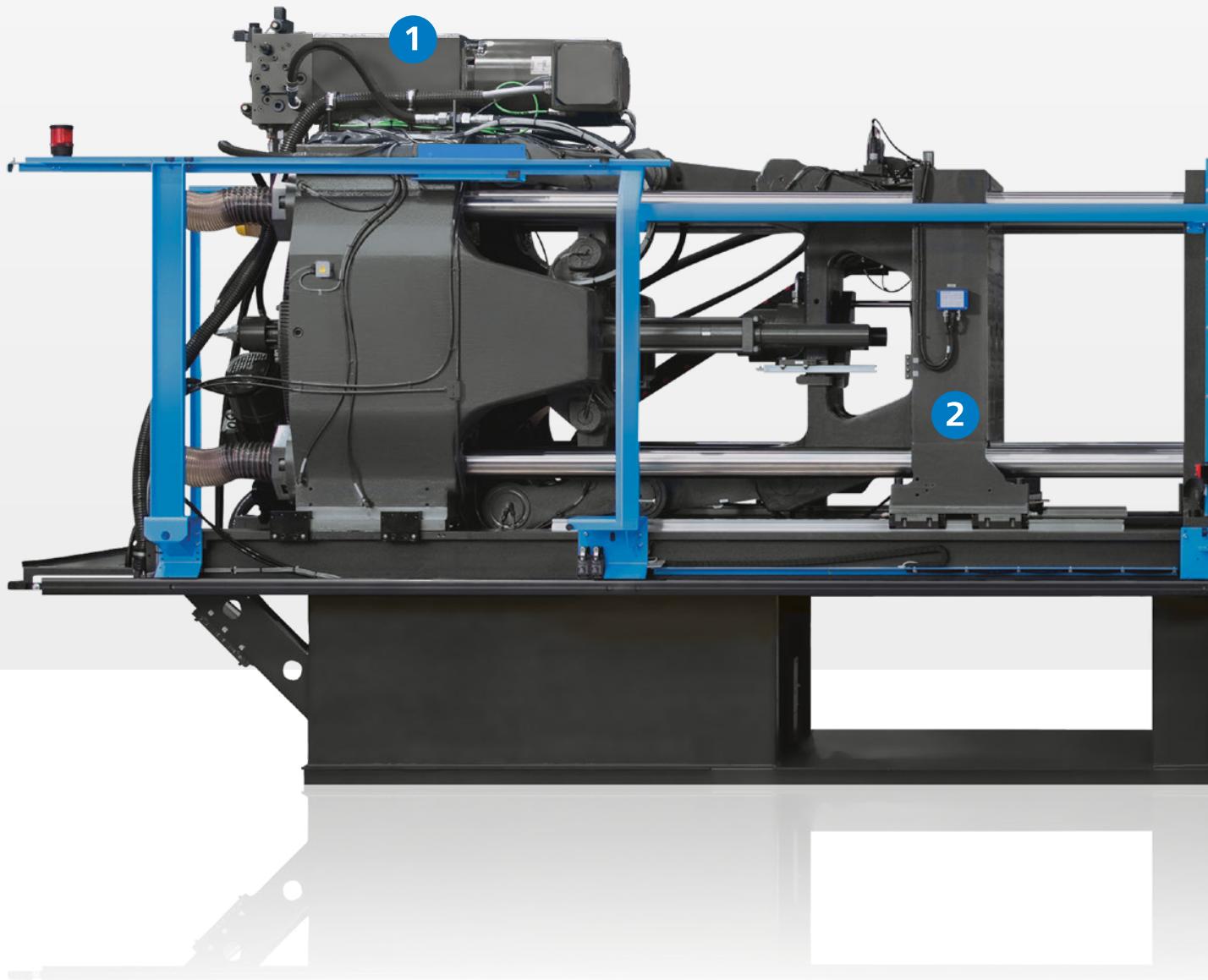
Your benefits at a glance.

1 – High-speed drive technology

The unique hybrid drive concept of the El-Exis SP has already proven itself thousands of times. It offers the best solution for the highest speeds with maximum dynamics.

2 – Highly durable design

Not only equipped for high-speed applications, but developed for them : mould platens are specially designed for the loads created in high-speed applications. Our activeProtect mould safety system with profile monitoring guarantees the fastest response , even in highly dynamic applications.



3 – Intuitive control

The intuitive control of the El-Exis SP offers a multitude of possibilities for process monitoring and control. Due to the logical and simple programming environment with predefined flexible machine sequences, the full potential of the El-Exis SP can be utilised.

4 – Intelligent accumulator control

Hydraulic accumulators allow injection speeds of up to 1000 mm/s and acceleration rates of up to 4G. At the same time, intelligent accumulator control ensures the most efficient use of resources.



Repeatability

Quality down to the last detail.

Process consistency 24/7

The El-Exis SP impresses in all respects with its unsurpassed consistency. Once the cycle is defined and set up, it is reproduced with the highest accuracy, 24 hours a day, seven days a week.

Zero process deviations is our top priority. Thanks to the extremely high stability, repeatability and accuracy in the injection moulding process the El-Exis SP for high-speed applications has the lowest reject rate in the market.

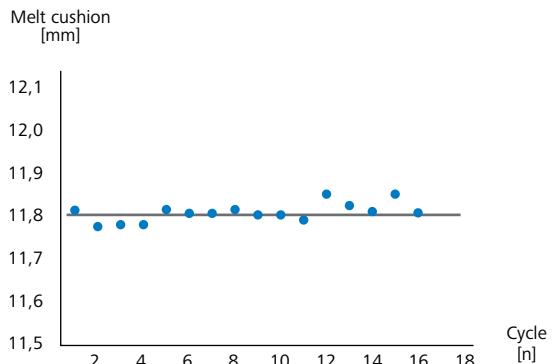


Diagram: Melt cushion repeatability

**CONSTANT PERFORMANCE.
HIGHEST QUALITY.**

Higher Platen rigidity

The platens of the El-Exis SP are designed to exceed the highest demands in the packaging industry. A 50% lower deflection compared to conventional platens guarantees the perfect fit of the mould. In addition, the tolerances of the platen parallelism of the El-Exis SP are three times more precise than the EUROMAP standard. With increased platen rigidity and extremely high platen parallelism, the El-Exis SP reduces mould wear, ensures low reject rates during the process, extends your process window and improves the quality of the moulded parts. Engineering art for the most demanding requirements.

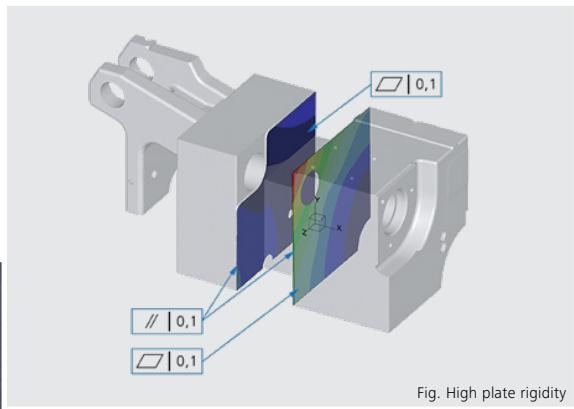
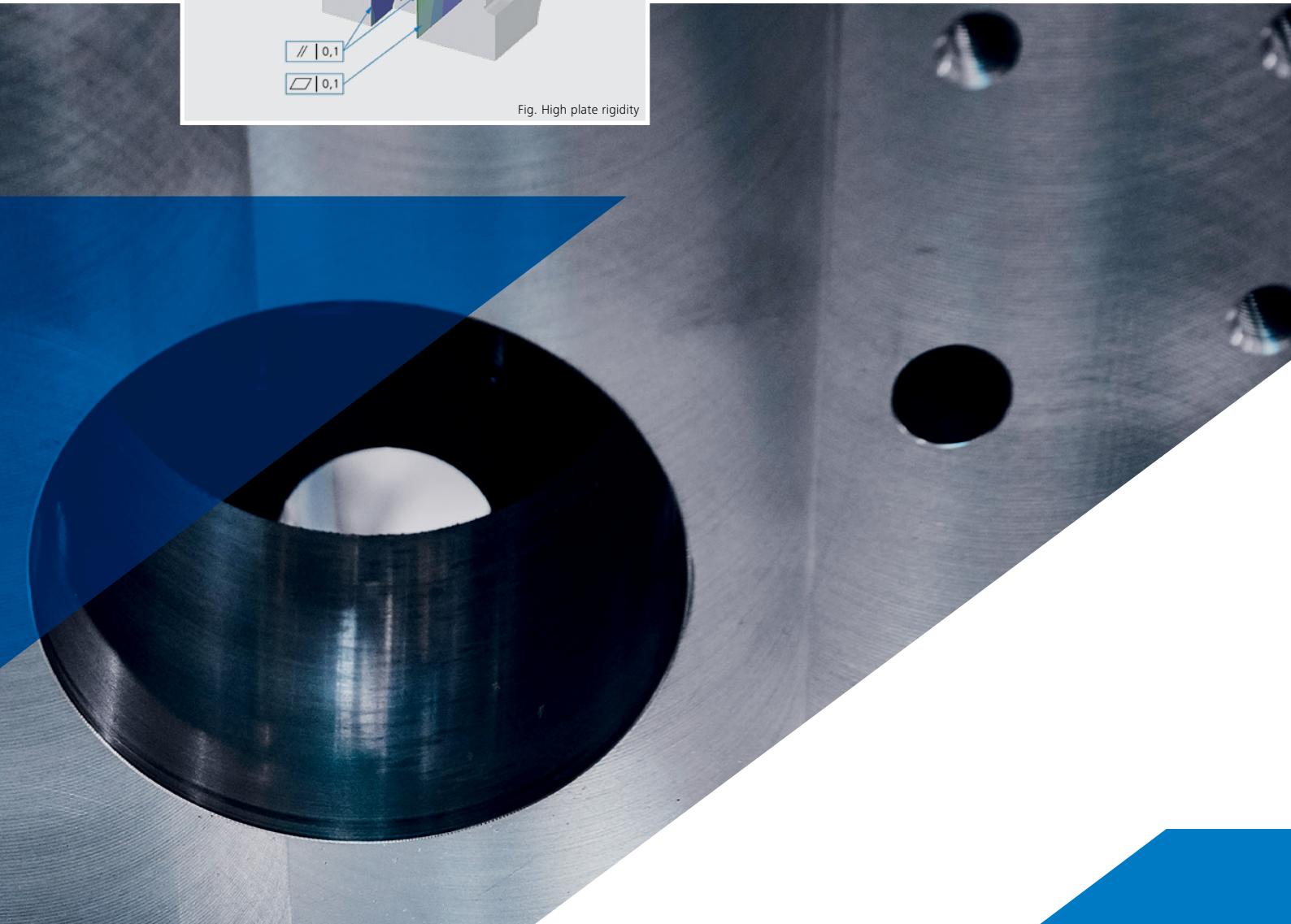


Fig. High plate rigidity



Efficiency

Productivity in every dimension.

Shortest cycle time

In packaging production, the output rate is a key parameter. The higher the output per hour, the lower the price per manufactured part. With the El-Exis SP you always have short cycle times with high part quality.

25 years of experience with high-speed applications and thousands of installed machines speak for themselves.

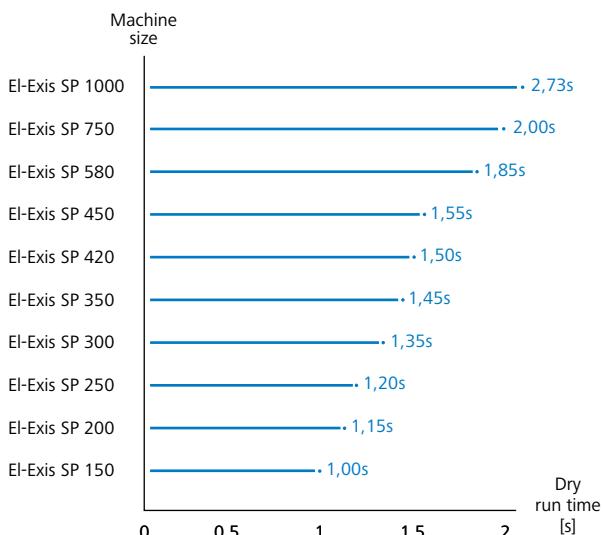


Diagram: Dry run figures according to Euromap



**MAXIMUM PRODUCTIVITY.
MINIMUM CONSUMPTION.**

Up to 20% energy savings

One of the most convincing features of the fourth generation of the El-Exis SP is its energy efficient technology, which allows energy savings of up to 20%. Depending on the cycle time and the process parameters, the machine calculates the optimum charging condition of the hydraulic accumulators for each application. Therefore, only the required power is produced for each cycle.

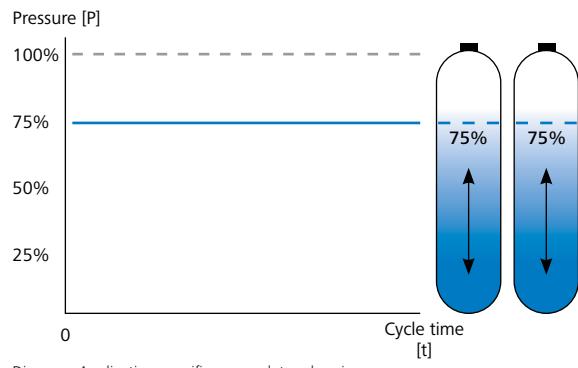


Diagram: Application-specific accumulator charging



Caps

Maximum performance in minimum time.

Over 172,000 closing caps per hour

To produce standardized closing systems, maximum mould speeds with short strokes and optimal dosing performance have to be possible. El-Exis SP meets these requirements and has a record of reliable and safe operation with cycles far below 2.5 seconds over many years. Thanks to the extremely fast clamping unit and the highly dynamic ejector, maximum production output can be achieved.

Special solutions have been optimized specifically for this application, such as the water distribution for mould cooling. Together with our partners we develop the optimal complete solution for you, which gives you the decisive competitive advantage!

**FASTEST CYCLE TIME.
MAXIMUM REPEATABILITY.**



Application example –
Production of 29/25mm closing caps

Cavities	Machine size	Cycle time	capacity
24	150/600	2.3-2.7s	~ 37.500/h
32	150/600	2.3-2.7s	~ 50.000/h
48	250/630	2.3-2.7s	~ 75.000/h
72	350/820	2.3-2.7s	~ 112.500/h
96	420/820	2.3-2.7s	~ 150.000/h



Thin-walled container

Fast, dynamic and efficient.

Perfect solutions for in-mould labelling

For the production of thin-walled packaging the El-Exis SP leverages all its advantages: With it you will realize, thanks to particularly high injection dynamics and axis speeds; you can achieve any required filling time at the lowest cycle time. The mould clamping platens of the El-Exis SP have significantly higher rigidity than conventional mould platens, giving the user a wider process window and minimizing tool wear.

The extremely accurate clamping unit is ideally suited for in-mould labelling (IML) processes due to its high accuracy. We have developed solutions for IML applications with side removal, including a highly accessible operator side, specifically for your applications.

„Speed stamping“ technology

With the El-Exis SP you can use the stamping function, with which even before complete locking of the mould, melt is fed to the cavity. The clamping movement of the machine supports the spreading of the melt in the cavity, reduces the need for injection pressure and thus the required clamping force. As a result, wall thickness and moulded part weight can be significantly reduced.



**GREATEST STABILITY.
LOWEST REJECT RATE.**

Application example –
400g cup with in-mould labelling

Cavities	Machine size	Cycle time	capacity
6	650/1020	3.7s	~ 5.800/h
8	800/1120	4.2s	~ 6.800/h



Fig. 400g cup



Bucket

Production 24/7.

Dynamic top performances for every size

Containers such as buckets and boxes not only require large opening strokes and rigid mould platens, but also an injection unit that controls the injection flow very precisely. The El-Exis SP is the optimal solution for buckets both large and small.

Thanks to the hybrid drive technology and the short demoulding times, the El-Exis SP achieves the fastest cycle times and highest plasticisation performance, even with large opening strokes.

2-component technology

For buckets produced with injection-moulded handles, we offer the optimal 2-component solution and make the highest part quality possible. Depending on the application, we offer the second injection unit in various configurations and sizes.

**FASTEAST CYCLE TIME.
MAXIMUM PRODUCTIVITY.**

Application example –
1280ml bucket with handle

Cavities	Machine size	Cycle time	capacity
4 & 4	580/1020	5.5s	~ 2.600/h



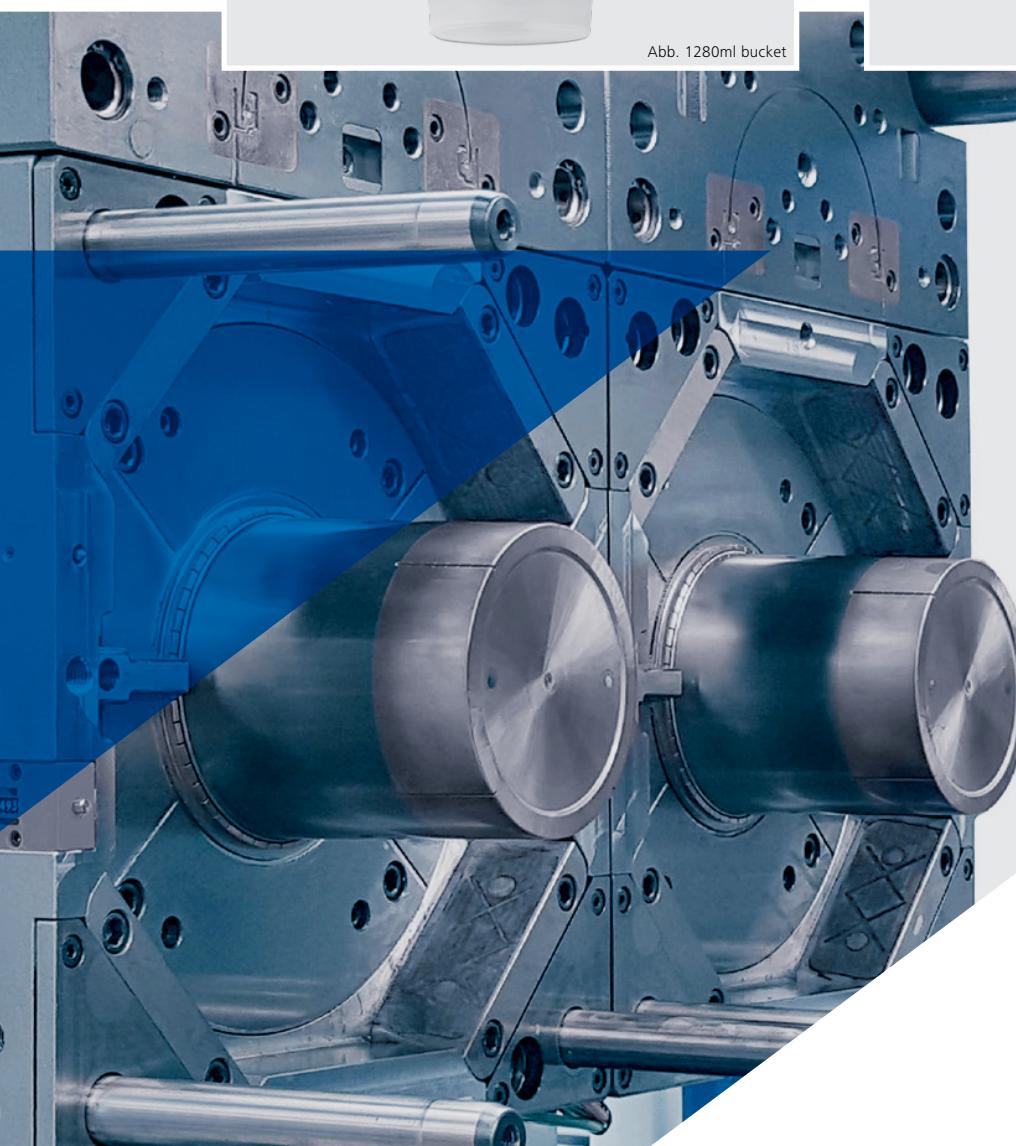
Abb. 1280ml bucket

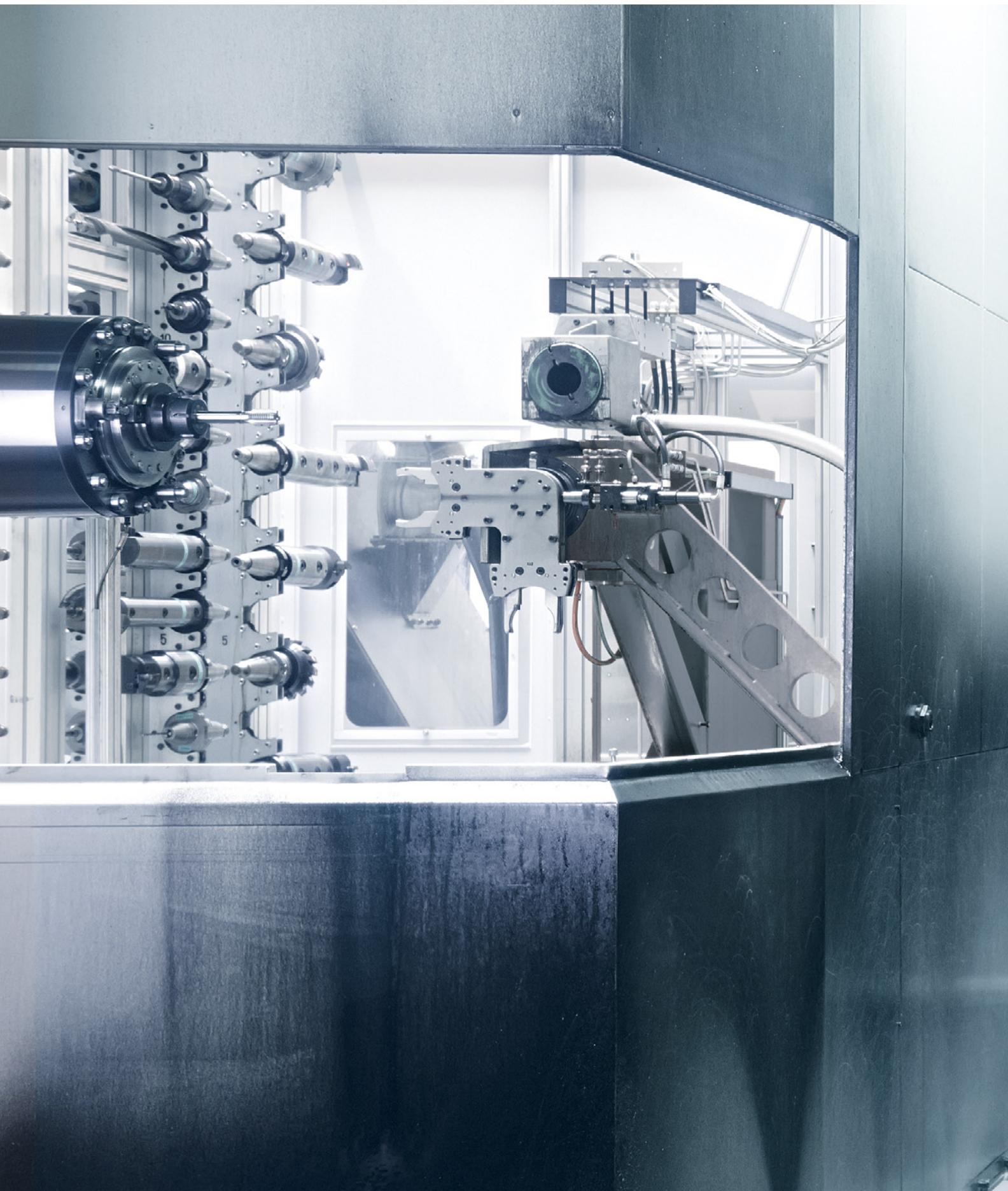
Application example –
5.6l bucket with handle

Cavities	Machine size	Cycle time	capacity
2 & 2	650/1020	8.3s	~ 870/h



Abb. 5,6l bucket





TECHNICAL DATA.



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Sumitomo (SHI) Demag		El-Exis SP 150				
International size description		1500-475	1500-675		1500-920	
Clamping unit		150 / 500				
Clamping force / locking force, max.	[kN]			1500 / 1650		
Mould opening stroke, max.	[mm]			500		
Mould height, min. / max.:						
>Standard OP0210	[mm]			250 / 560		
>Increased OP0211	[mm]			250 / 660		
Distance between tie bars (h x v)	[mm]			500 / 500		
Min. permissible mould diameter (k)	[mm]			300		
Mould weight / mov. / fixed, max.	[kg]			2200 / 1150 / 1700		
Ejector stroke/force forw./force back.:						
>Standard OP0219	[mm / kN / kN]			70 / 65 / 32		
Injection unit		475		675		920
Screw diameter	[mm]	35	40	40	45	45
L/D ratio OP0612 / OP0627		25	25	25	25	25
Injection pressure, max. (up to 400 °C)	[bar]	2423	2051	2418	2180	2426
Injection volume, max.	[cm³]	177	231	255	323	358
Injection speed, max.:						
>Version accumulator OP0361	[mm/s]	1000	1000	1000	1000	1000
Injection rate, max.:						
>Version accumulator OP0361	[cm³/s]	962	1257	1257	1590	1590
Plasticising rate, max. (PE): ¹⁾						1963
>Electr. screw drive OP0313	[g/s]	34	51	45	60	54
Nozzle stroke, max.: ²⁾						
>Manual mode	[mm]	634	565	732	531	899
>Automatic mode	[mm]	349	425	545	526	526
Nozzle sealing force / speed, max.:						
>Standard	[kN / mm/s]	110 / -	110 / -	110 / -	110 / -	110 / -
General data		150/500-475		150/500-675		150/500-920
Oil tank capacity	[l]	400		400		400
Installed electrical rating:						
>Pump capacity single pump ³⁾	[kW]	18,5 / 30		18,5 / 30		18,5 / 30
>Electr. screw drive OP0313	[kW]	26,4		35,8		54
>Heating capacity of screw cylinder	[kW]	12,9	13,9	13,9	15,7	15,7
Dry cycle time (Euromap 6):						22,3
>Standard	[s-mm]	1,00 - 350		1,00 - 350		1,00 - 350
Net weight ⁴⁾	[kg]	8200		8300		9000
Motor end projection, max. (h):						
>Electr. screw drive OP0313	[mm]	179 / 853	322 / 853	323 / 1034	525 / 1034	613 / 1442
These technical specifications are based on information that was correct at time of printing and is subject to change without notice. These parameters are based on a 400 V supply voltage. Other supply voltages will affect the machine parameters.						

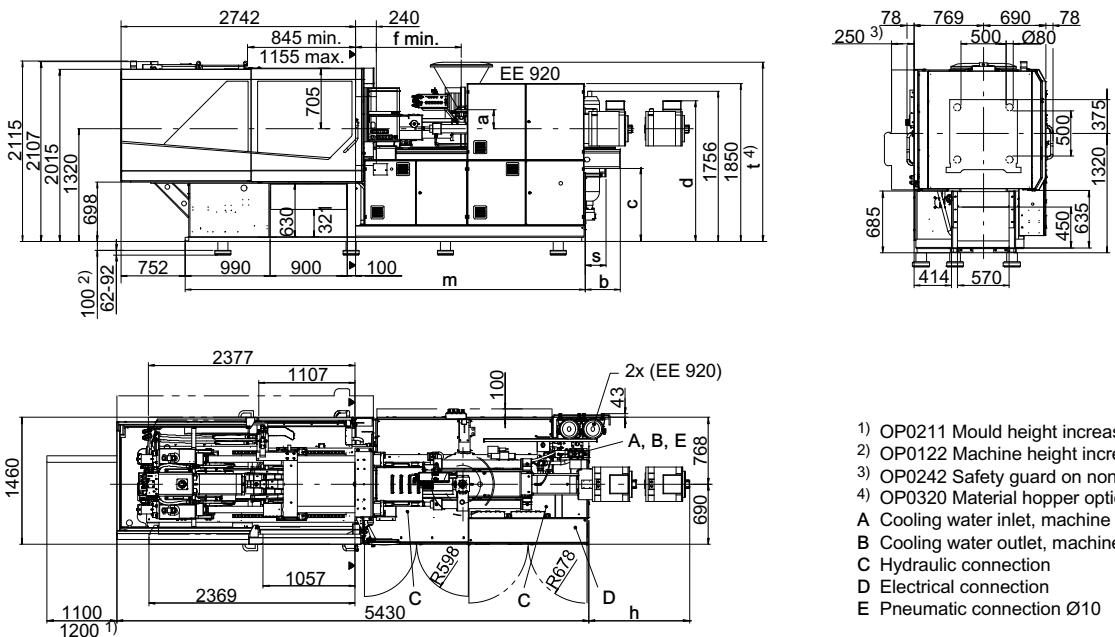
¹⁾ Plasticising rate depends on processing conditions and the material used.

²⁾ The max. nozzle stroke is valid for standard open nozzle (OP0650).

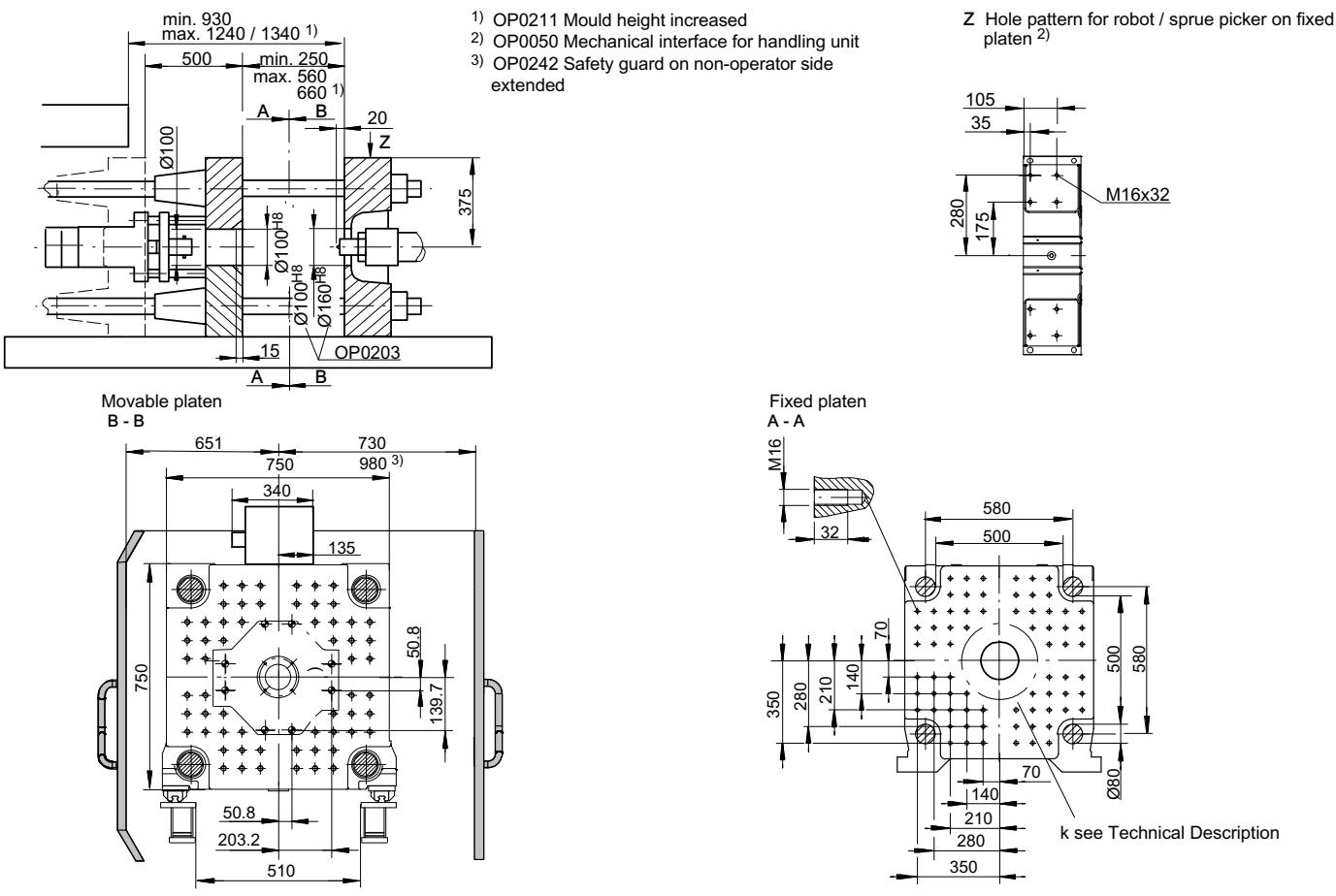
³⁾ Pump standard OP0105 / Pump increased OP0106

⁴⁾ Machine weight for standard machine without hydraulic-oil, weight may vary depending on equipment.

Machine dimensions El-Exis SP 150



Platen dimensions - Hole pattern according to EUROMAP (OP0204, OP0205) El-Exis SP 150



◆ Bore diameter throughout 27

Sumitomo (SHI) Demag		Ei-Exis SP 200										
International size description		2000-675	2000-920		2000-1600							
Clamping unit		200 / 560										
Clamping force / locking force, max. [kN]		2000 / 2200										
Mould opening stroke, max. [mm]		575										
Mould height, min. / max.:												
>Standard OP0210	[mm]	310 / 660										
>Increased OP0211	[mm]	310 / 760										
Distance between tie bars (h x v)	[mm]	560 / 560										
Min. permissible mould diameter (k)	[mm]	350										
Mould weight / mov. / fixed, max. [kg]		3300 / 1800 / 2500										
Ejector stroke/force forw./force back.:												
>Standard OP0219	[mm / kN / kN]	110 / 65 / 32										
Injection unit		675 920 1600										
Screw diameter	[mm]	40	45	45	50	50	60					
L/D ratio OP0612 / OP0627		25	25	25	25	25	25					
Injection pressure, max. (up to 400 °C) [bar]		2418	2180	2426	2150	2426	2106					
Injection volume, max. [cm³]		255	323	358	442	530	763					
Injection speed, max.:												
>Version accumulator OP0361	[mm/s]	1000	1000	1000	1000	1000	1000					
Injection rate, max.:												
>Version accumulator OP0361	[cm³/s]	1257	1590	1590	1963	1963	2827					
Plasticising rate, max. (PE): ¹⁾												
>Electr. screw drive OP0313	[g/s]	45	60	54	71	60	100					
Nozzle stroke, max.: ²⁾												
>Manual mode	[mm]	748	547	912	713	1080	755					
>Automatic mode	[mm]	555	536	536	523	589	564					
Nozzle sealing force / speed, max.:												
>Standard	[kN / mm/s]	110 / -	110 / -	110 / -	110 / -	110 / -	110 / -					
General data		200/560-675		200/560-920		200/560-1600						
Oil tank capacity	[l]	400		400		400						
Installed electrical rating:												
>Pump capacity single pump ³⁾	[kW]	18,5 / 30		30 / 45		30 / 45						
>Electr. screw drive OP0313	[kW]	35,8		54		68,8						
>Heating capacity of screw cylinder	[kW]	13,9	15,7	15,7	22,3	22,3	27,9					
Dry cycle time (Euromap 6):												
>Standard	[s-mm]	1,15 - 392		1,15 - 392		1,15 - 392						
Net weight ⁴⁾	[kg]	12400		12400		12400						
Motor end projection, max. (h):												
>Electr. screw drive OP0313	[mm]	123 / 850	325 / 850	413 / 1255	608 / 1255	922 / 2007	1252 / 2007					

These technical specifications are based on information that was correct at time of printing and is subject to change without notice. These parameters are based on a 400 V supply voltage. Other supply voltages will affect the machine parameters.

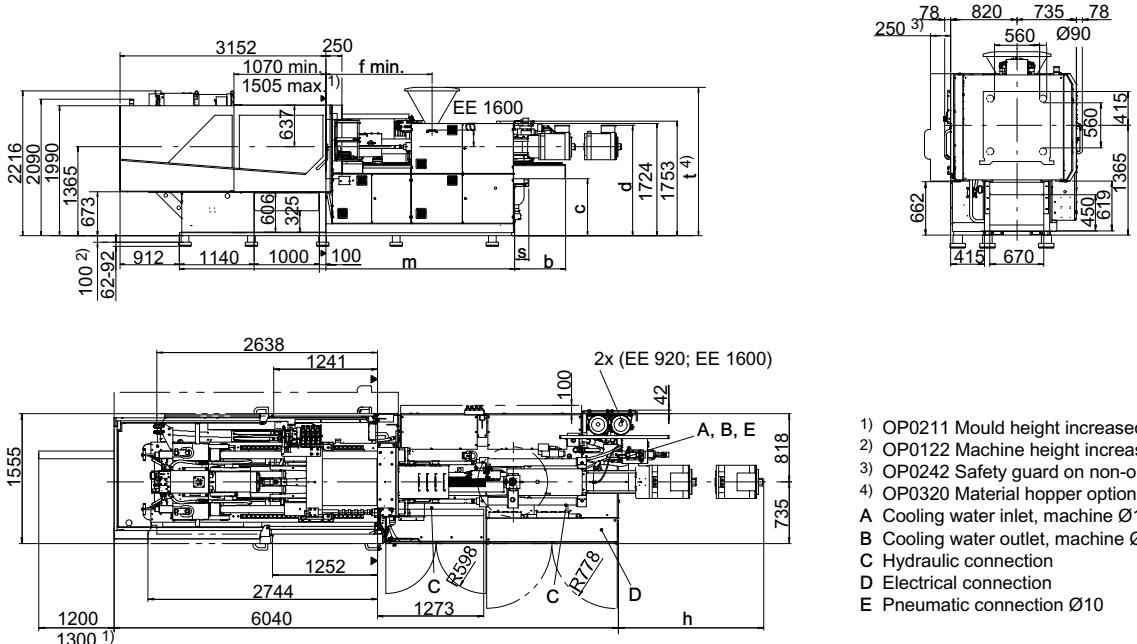
¹⁾ Plasticising rate depends on processing conditions and the material used.

²⁾ The max. nozzle stroke is valid for standard open nozzle (OP0650).

³⁾ Pump standard OP0105 / Pump increased OP0106

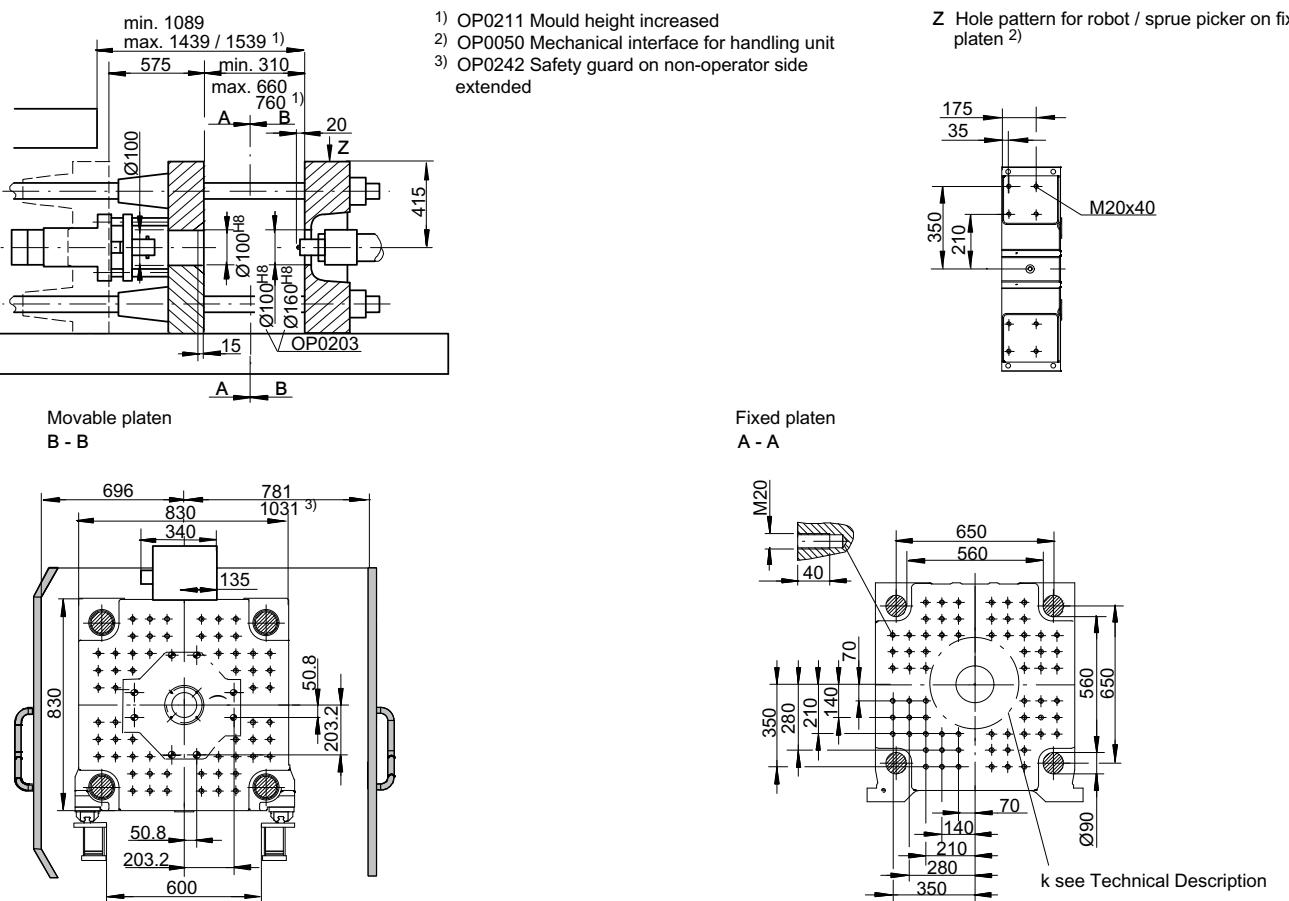
⁴⁾ Machine weight for standard machine without hydraulic-oil, weight may vary depending on equipment.

Machine dimensions El-Exis SP 200



- 1) OP0211 Mould height increased
- 2) OP0122 Machine height increase
- 3) OP0242 Safety guard on non-operator side extended
- 4) OP0320 Material hopper optional
- A Cooling water inlet, machine Ø19
- B Cooling water outlet, machine Ø19
- C Hydraulic connection
- D Electrical connection
- E Pneumatic connection Ø10

Platen dimensions - Hole pattern according to EUROMAP (OP0204, OP0205) El-Exis SP 200



◆ Bore diameter throughout 27

Sumitomo (SHI) Demag		Ei-Exis SP 250				
International size description		2500-920	2500-1600		2500-2500	
Clamping unit		250 / 630				
Clamping force / locking force, max.	[kN]			2500 / 2750		
Mould opening stroke, max.	[mm]			670		
Mould height, min. / max.:						
>Standard OP0210	[mm]			330 / 710		
>Increased OP0211	[mm]			330 / 830		
Distance between tie bars (h x v)	[mm]			630 / 630		
Min. permissible mould diameter (k)	[mm]			400		
Mould weight / mov. / fixed, max.	[kg]			4300 / 2305 / 3300		
Ejector stroke/force forw./force back.:						
>Standard OP0219	[mm / kN / kN]			140 / 81 / 40		
Injection unit		920	1600	2500		
Screw diameter	[mm]	45	50	50	60	70
L/D ratio OP0612 / OP0627		25	25	25	25	25
Injection pressure, max. (up to 400 °C)	[bar]	2426	2150	2426	2106	2420
Injection volume, max.	[cm³]	358	442	530	763	891
Injection speed, max.:						
>Version accumulator OP0361	[mm/s]	1000	1000	1000	1000	1000
Injection rate, max.:						
>Version accumulator OP0361	[cm³/s]	1590	1963	1963	2827	2827
Plasticising rate, max. (PE): ¹⁾						
>Electr. screw drive OP0313	[g/s]	54	71	60	100	88
Nozzle stroke, max.: ²⁾						
>Manual mode	[mm]	880	681	1060	735	1164
>Automatic mode	[mm]	626	613	679	654	654
Nozzle sealing force / speed, max.:						
>Standard	[kN / mm/s]	110 / -	110 / -	110 / -	110 / -	110 / -
General data		250/630-920	250/630-1600	250/630-2500		
Oil tank capacity	[l]	550	550	550		
Installed electrical rating:						
>Pump capacity single pump ³⁾	[kW]	30 / 45	30 / 45	45 / 55		
>Electr. screw drive OP0313	[kW]	54	68,8	78,9		
>Heating capacity of screw cylinder	[kW]	15,7	22,3	22,3	27,9	32,2
Dry cycle time (Euromap 6):						
>Standard	[s-mm]	1,20 - 441	1,20 - 441	1,20 - 441		
Net weight ⁴⁾	[kg]	14645	14645	14645		
Motor end projection, max. (h):						
>Electr. screw drive OP0313	[mm]	165 / 975	360 / 975	552 / 1617	882 / 1617	941 / 2105
These technical specifications are based on information that was correct at time of printing and is subject to change without notice. These parameters are based on a 400 V supply voltage. Other supply voltages will affect the machine parameters.						

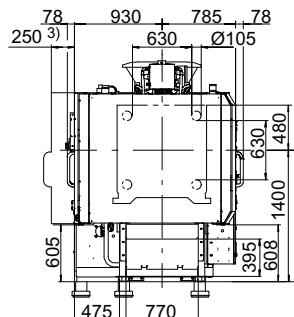
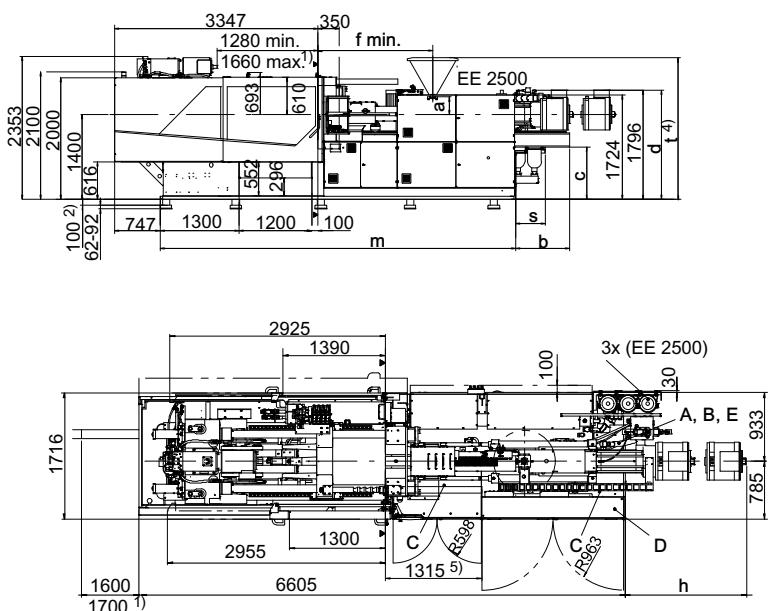
¹⁾ Plasticising rate depends on processing conditions and the material used.

²⁾ The max. nozzle stroke is valid for standard open nozzle (OP0650).

³⁾ Pump standard OP0105 / Pump increased OP0106

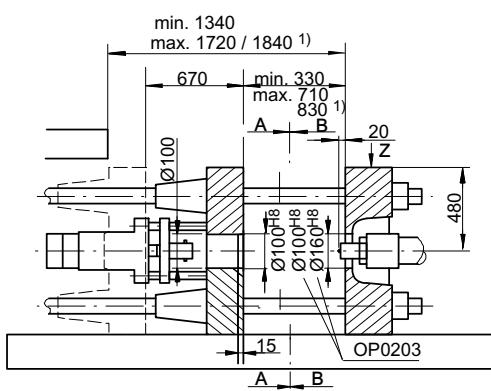
⁴⁾ Machine weight for standard machine without hydraulic-oil, weight may vary depending on equipment.

Machine dimensions El-Exis SP 250



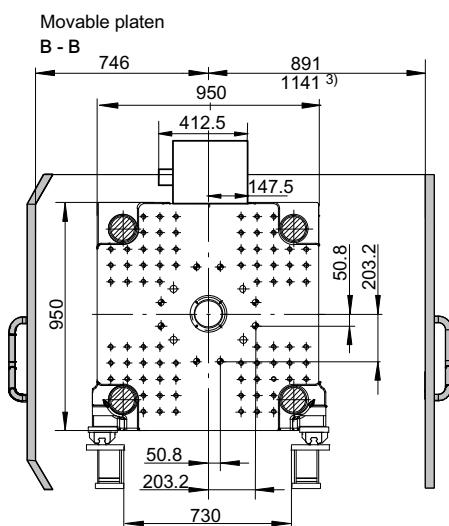
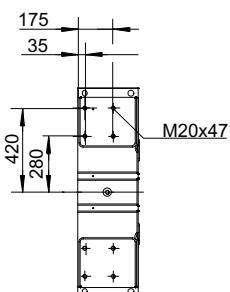
- 1) OP0211 Mould height increased
 - 2) OP0122 Machine height increase
 - 3) OP0242 Safety guard on non-operator side extended
 - 4) OP0320 Material hopper optional
 - 5) OP287 Stop bar
- A Cooling water inlet, machine Ø19
B Cooling water outlet, machine Ø19
C Hydraulic connection
D Electrical connection
E Pneumatic connection Ø10

Platen dimensions - Hole pattern according to EUROMAP (OP0204, OP0205) El-Exis SP 250

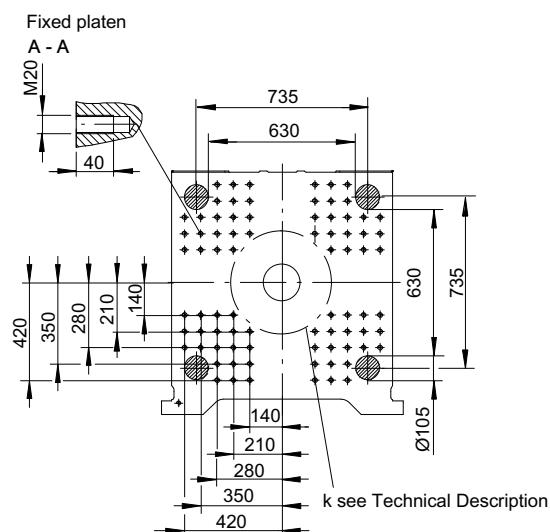


- 1) OP0211 Mould height increased
2) OP0050 Mechanical interface for handling unit
3) OP0242 Safety guard on non-operator side extended

Z Hole pattern for robot / sprue picker on fixed platen ²⁾



◆ Bore diameter throughout 27



Sumitomo (SHI) Demag		Ei-Exis SP 300				
International size description		3000-920	3000-1600		3000-2500	
Clamping unit		300 / 720				
Clamping force / locking force, max.	[kN]			3000 / 3300		
Mould opening stroke, max.	[mm]			730		
Mould height, min. / max.:						
>Standard OP0210	[mm]			320 / 715		
>Increased OP0211	[mm]			320 / 920		
Distance between tie bars (h x v)	[mm]			720 / 720		
Min. permissible mould diameter (k)	[mm]			400		
Mould weight / mov. / fixed, max.	[kg]			4700 / 2300 / 3600		
Ejector stroke/force forw./force back.:						
>Standard OP0219	[mm / kN / kN]			150 / 81 / 40		
Injection unit		920 1600 2500				
Screw diameter	[mm]	45	50	50	60	60
L/D ratio OP0612 / OP0627		25	25	25	25	25
Injection pressure, max. (up to 400 °C)	[bar]	2426	2150	2426	2106	2420
Injection volume, max.	[cm³]	358	442	530	763	891
Injection speed, max.:						
>Version accumulator OP0361	[mm/s]	1000	1000	1000	1000	1000
Injection rate, max.:						
>Version accumulator OP0361	[cm³/s]	1590	1963	1963	2827	2827
Plasticising rate, max. (PE): ¹⁾						
>Electr. screw drive OP0313	[g/s]	54	71	60	100	88
Nozzle stroke, max.: ²⁾						
>Manual mode	[mm]	880	681	1060	735	1164
>Automatic mode	[mm]	626	613	679	654	654
Nozzle sealing force / speed, max.:						
>Standard	[kN / mm/s]	110 / -	110 / -	110 / -	110 / -	110 / -
General data		300/720-920			300/720-1600	
Oil tank capacity	[l]	550		550		550
Installed electrical rating:						
>Pump capacity single pump ³⁾	[kW]	30 / 45		30 / 45		45 / 55
>Electr. screw drive OP0313	[kW]	54		68,8		78,9
>Heating capacity of screw cylinder	[kW]	15,7	22,3	22,3	27,9	27,9
Dry cycle time (Euromap 6):						32,2
>Standard	[s-mm]	1,35 - 504		1,35 - 504		1,35 - 504
Net weight ⁴⁾	[kg]	16700		16700		16700
Motor end projection, max. (h):						
>Electr. screw drive OP0313	[mm]	165 / 940	360 / 940	552 / 1592	882 / 1592	941 / 2141
These technical specifications are based on information that was correct at time of printing and is subject to change without notice. These parameters are based on a 400 V supply voltage. Other supply voltages will affect the machine parameters.						

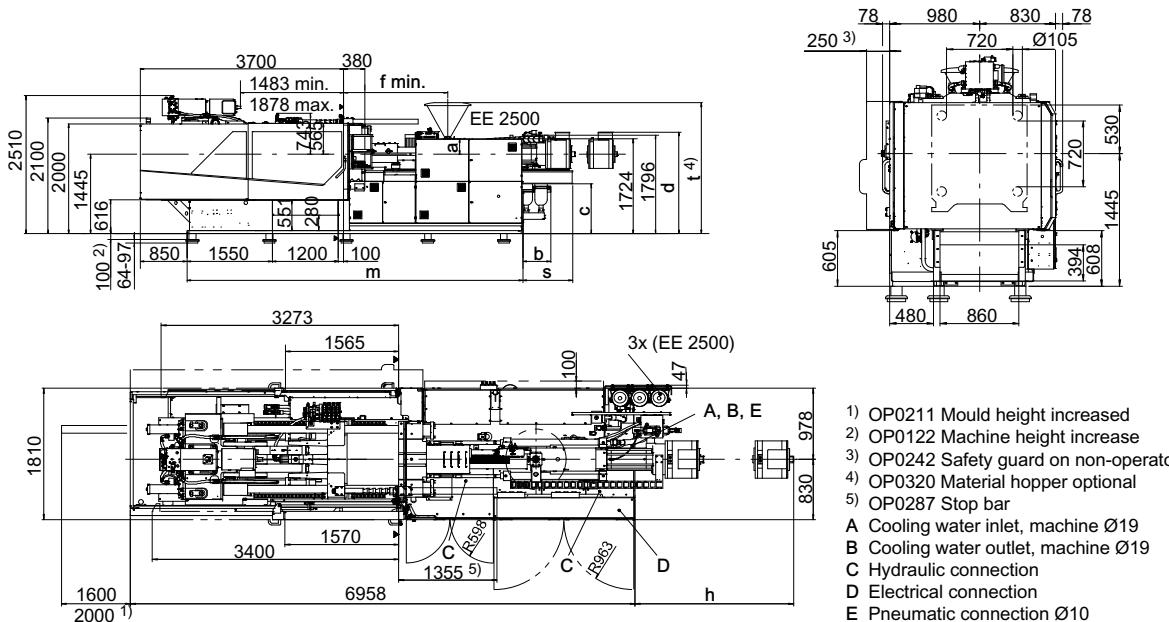
¹⁾ Plasticising rate depends on processing conditions and the material used.

²⁾ The max. nozzle stroke is valid for standard open nozzle (OP0650).

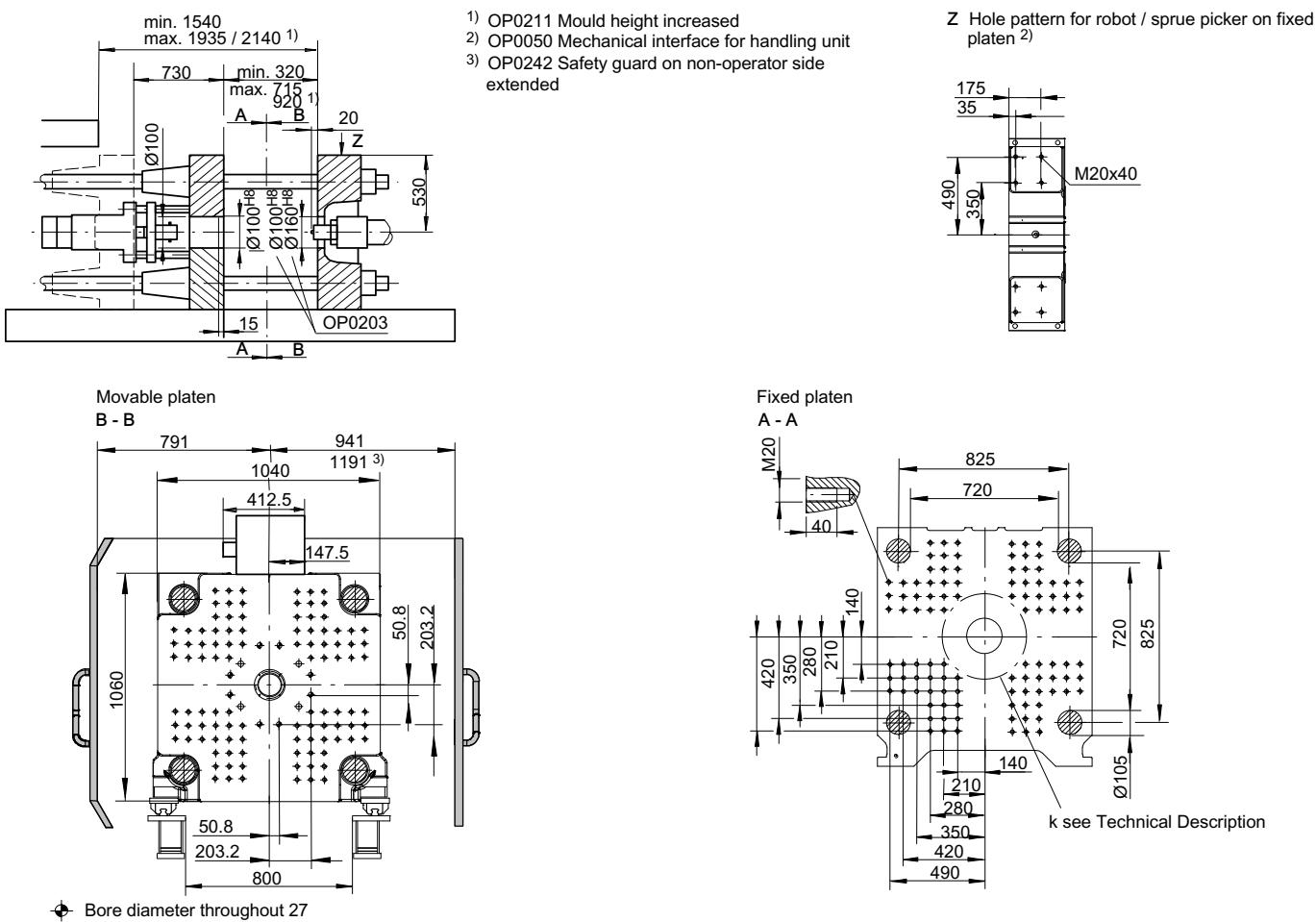
³⁾ Pump standard OP0105 / Pump increased OP0106

⁴⁾ Machine weight for standard machine without hydraulic-oil, weight may vary depending on equipment.

Machine dimensions El-Exis SP 300



Platen dimensions - Hole pattern according to EUROMAP (OP0204, OP0205) El-Exis SP 300



Sumitomo (SHI) Demag		Ei-Exis SP 350			
International size description		3500-1600		3500-2500	
Clamping unit		350 / 820			
Clamping force / locking force, max. [kN]		3500 / 3850			
Mould opening stroke, max. [mm]		770			
Mould height, min. / max.:					
>Standard OP0210 [mm]		350 / 795			
>Increased OP0211 [mm]		350 / 1020			
Distance between tie bars (h x v) [mm]		820 / 820			
Min. permissible mould diameter (k) [mm]		420			
Mould weight / mov. / fixed, max. [kg]		6600 / 3240 / 5100			
Ejector stroke/force forw./force back.:					
>Standard OP0219 [mm / kN / kN]		180 / 106 / 46			
Injection unit		1600		2500	
Screw diameter [mm]		50	60	60	70
L/D ratio OP0612 / OP0627		25	25	25	25
Injection pressure, max. (up to 400 °C) [bar]		2426	2106	2420	2074
Injection volume, max. [cm³]		530	763	891	1212
Injection speed, max.:					
>Version accumulator OP0361 [mm/s]		1000	1000	1000	1000
Injection rate, max.:					
>Version accumulator OP0361 [cm³/s]		1963	2827	2827	3848
Plasticising rate, max. (PE):¹⁾					
>Electr. screw drive OP0313 [g/s]		60	100	88	126
Nozzle stroke, max.:²⁾					
>Manual mode [mm]		1031	706	1204	849
>Automatic mode [mm]		774	706	749	734
Nozzle sealing force / speed, max.:					
>Standard [kN / mm/s]		110 / -	110 / -	110 / -	110 / -
General data		350/820-1600		350/820-2500	
Oil tank capacity [l]		760		760	
Installed electrical rating:					
>Pump capacity single pump ³⁾ [kW]		30 / 45		45 / 55	
>Electr. screw drive OP0313 [kW]		68,8		78,9	
>Heating capacity of screw cylinder [kW]		22,3	27,9	27,9	32,2
Dry cycle time (Euromap 6):					
>Standard [s-mm]		1,45 - 574		1,45 - 574	
Net weight ⁴⁾ [kg]		26210		26210	
Motor end projection, max. (h):					
>Electr. screw drive OP0313 [mm]		295 / 1400	650 / 1400	295 / 1400	650 / 1400

¹⁾ Plasticising rate depends on processing conditions and the material used.

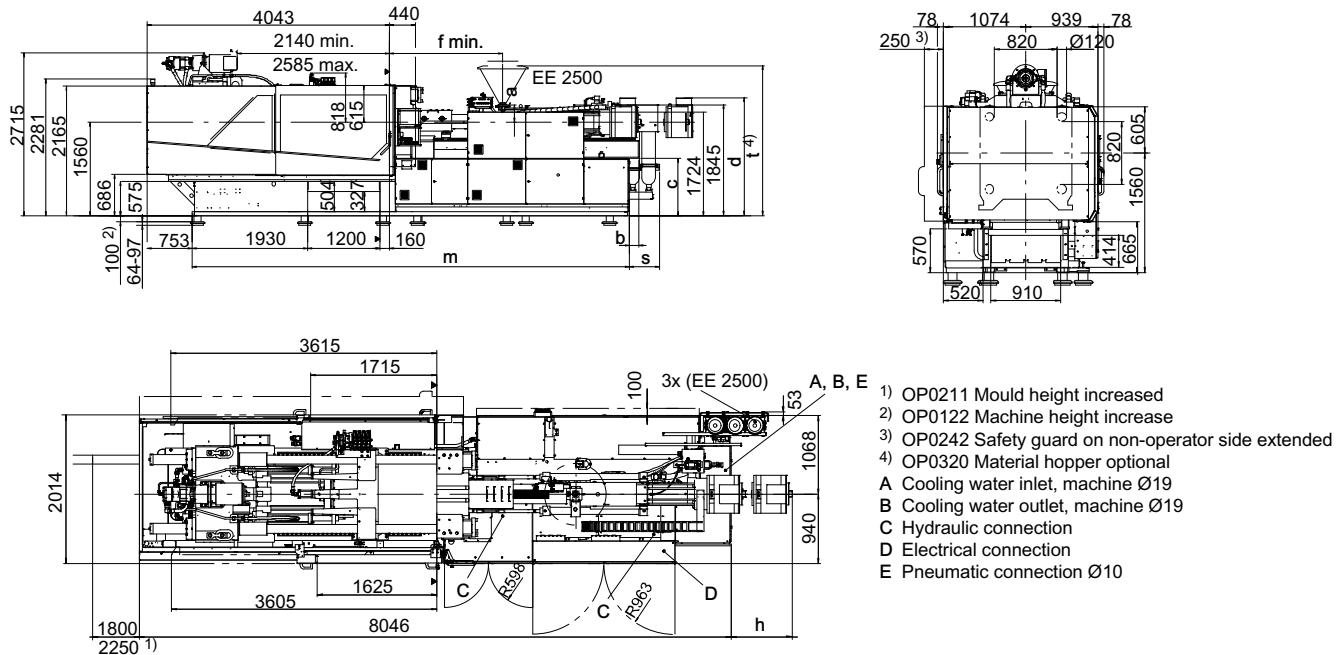
²⁾ The max. nozzle stroke is valid for standard open nozzle (OP0650).

³⁾ Pump standard OP0105 / Pump increased OP0106

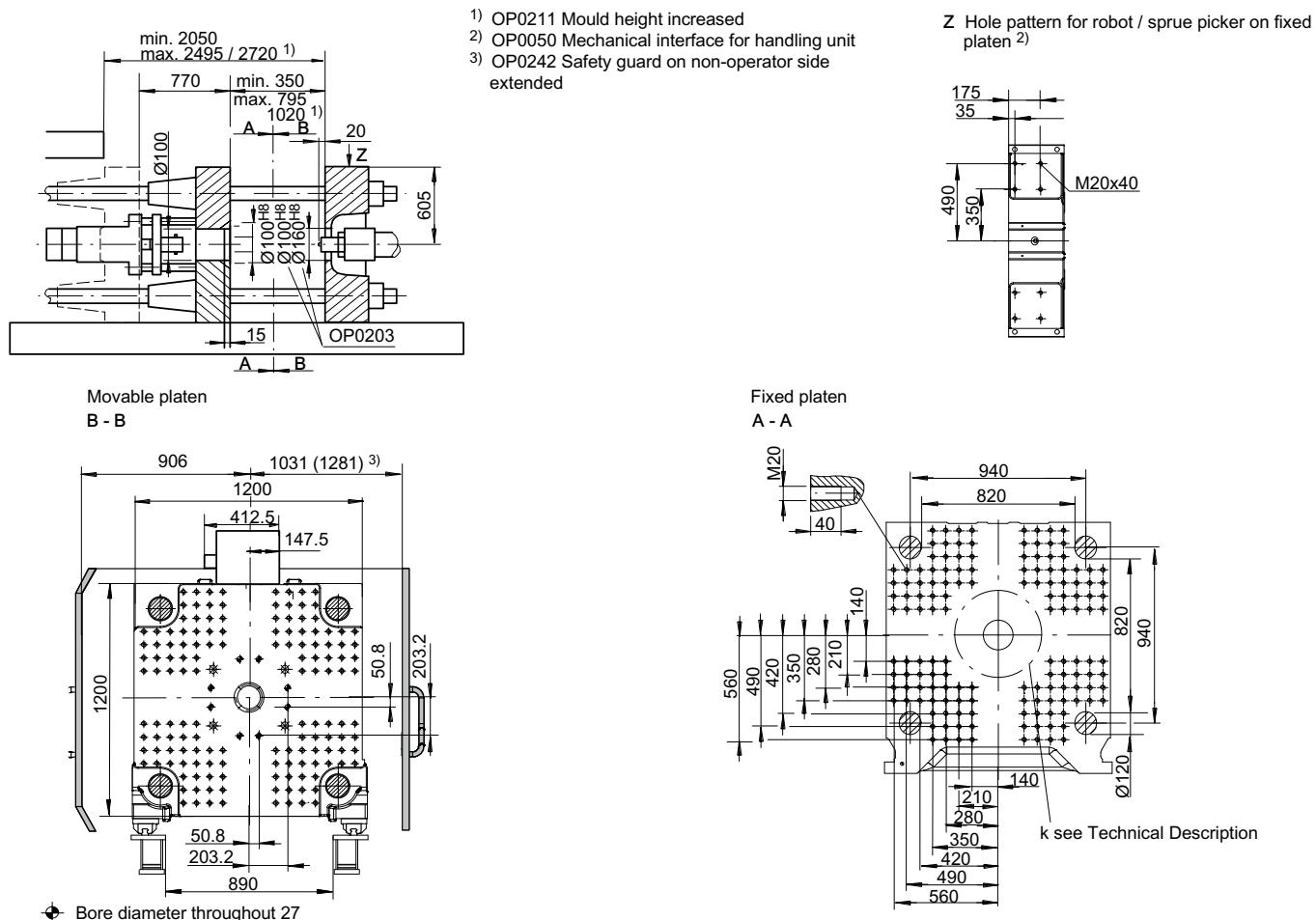
⁴⁾ Machine weight for standard machine without hydraulic-oil, weight may vary depending on equipment.

These technical specifications are based on information that was correct at time of printing and is subject to change without notice. These parameters are based on a 400 V supply voltage. Other supply voltages will affect the machine parameters.

Machine dimensions El-Exis SP 350



Platen dimensions - Hole pattern according to EUROMAP (OP0204, OP0205) El-Exis SP 350



Sumitomo (SHI) Demag		El-Exis SP 350	
International size description		3500-3000	
Clamping unit		350 / 820	
Clamping force / locking force, max.	[kN]	3500 / 3850	
Mould opening stroke, max.	[mm]	770	
Mould height, min. / max.:			
>Standard OP0210	[mm]	350 / 795	
>Increased OP0211	[mm]	350 / 1020	
Distance between tie bars (h x v)	[mm]	820 / 820	
Min. permissible mould diameter (k)	[mm]	420	
Mould weight / mov. / fixed, max.	[kg]	6600 / 3240 / 5100	
Ejector stroke/force forw./force back.:			
>Standard OP0219	[mm / kN / kN]	180 / 106 / 46	
Injection unit		3000	
Screw diameter	[mm]	70	80
L/D ratio OP0612 / OP0627		23	24
Injection pressure, max. (up to 400 °C)	[bar]	2432	2051
Injection volume, max.	[cm³]	924	1206
Injection speed, max.:			
>Version accumulator OP0361	[mm/s]	1000	900
Injection rate, max.:			
>Version accumulator OP0361	[cm³/s]	3848	4524
Plasticising rate, max. (PE): ¹⁾			
>Electr. screw drive OP0313	[g/s]	108	150
Nozzle stroke, max.: ²⁾			
>Manual mode	[mm]	802	668
>Automatic mode	[mm]	802	668
Nozzle sealing force / speed, max.:			
>Standard	[kN / mm/s]	110 / -	110 / -
General data		350/820-3000	
Oil tank capacity	[l]	760	
Installed electrical rating:			
>Pump capacity single pump ³⁾	[kW]	55 / 75	
>Electr. screw drive OP0313	[kW]	117	
>Heating capacity of screw cylinder	[kW]	30,6	42,6
Dry cycle time (Euromap 6):			
>Standard	[s-mm]	1,45 - 574	
Net weight ⁴⁾	[kg]	20110 / 9000 - 29110	
Motor end projection, max. (h):			
>Electr. screw drive OP0313	[mm]	0 / 579	281 / 899

These technical specifications are based on information that was correct at time of printing and is subject to change without notice. These parameters are based on a 400 V supply voltage. Other supply voltages will affect the machine parameters.

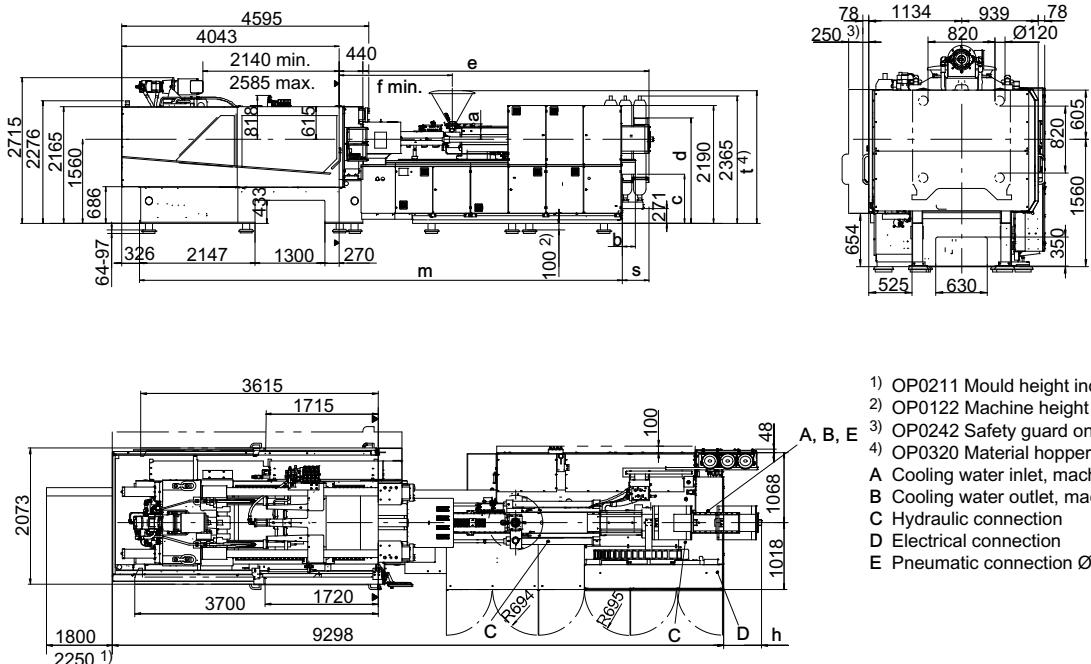
1) Plasticising rate depends on processing conditions and the material used.

2) The max. nozzle stroke is valid for standard open nozzle (OP0650).

3) Pump standard OP0105 / Pump increased OP0106

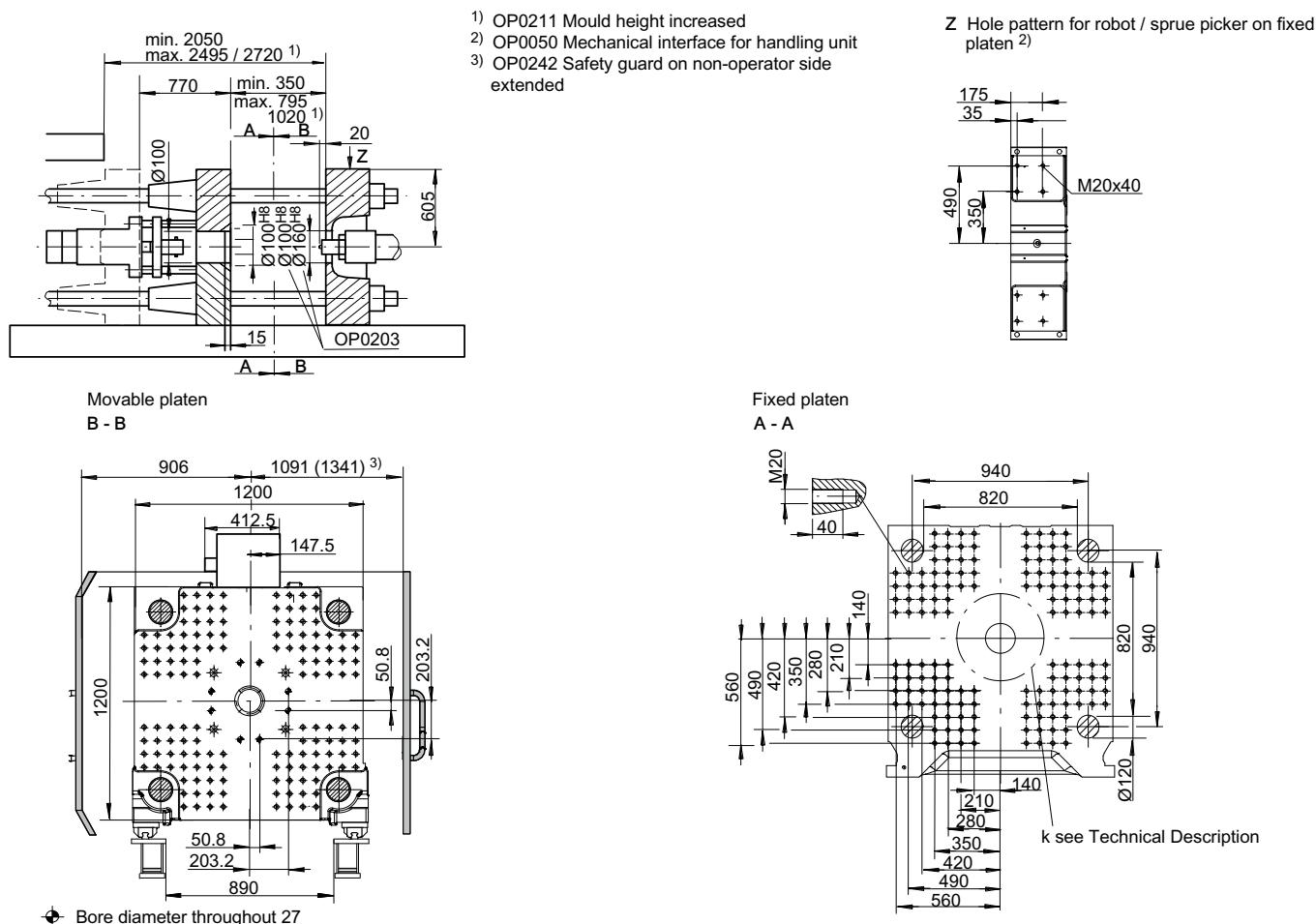
4) Machine weight for standard machine without hydraulic-oil, weight may vary depending on equipment. Injection unit / Clamping unit

Machine dimensions El-Exis SP 350



- 1) OP0211 Mould height increased
- 2) OP0122 Machine height increase
- 3) OP0242 Safety guard on non-operator side extended
- 4) OP0320 Material hopper optional
- A Cooling water inlet, machine Ø19
- B Cooling water outlet, machine Ø19
- C Hydraulic connection
- D Electrical connection
- E Pneumatic connection Ø10

Platen dimensions - Hole pattern according to EUROMAP (OP0204, OP0205) El-Exis SP 350



Sumitomo (SHI) Demag		Ei-Exis SP 350			
International size description		3500-4200		3500-6300	
Clamping unit		350 / 820			
Clamping force / locking force, max. [kN]		3500 / 3850			
Mould opening stroke, max. [mm]		770			
Mould height, min. / max.:					
>Standard OP0210 [mm]		350 / 795			
>Increased OP0211 [mm]		350 / 1020			
Distance between tie bars (h x v) [mm]		820 / 820			
Min. permissible mould diameter (k) [mm]		420			
Mould weight / mov. / fixed, max. [kg]		6600 / 3240 / 5100			
Ejector stroke/force forw./force back.:					
>Standard OP0219 [mm / kN / kN]		180 / 106 / 46			
Injection unit		4200		6300	
Screw diameter [mm]		80	95	95	110
L/D ratio OP0612 / OP0627		24	23	23	24
Injection pressure, max. (up to 400 °C) [bar]		2391	2094	2434	2006
Injection volume, max. [cm³]		1433	2020	2339	3136
Injection speed, max.:					
>Version accumulator OP0361 [mm/s]		900	800	800	700
Injection rate, max.:					
>Version accumulator OP0361 [cm³/s]		4524	5671	5671	6652
Plasticising rate, max. (PE):¹⁾					
>Electr. screw drive OP0313 [g/s]		125	200	173	229
Nozzle stroke, max.:²⁾					
>Manual mode [mm]		1065	672	1205	668
>Automatic mode [mm]		1065	672	1136	668
Nozzle sealing force / speed, max.:					
>Standard [kN / mm/s]		110 / -	110 / -	110 / -	110 / -
General data		350/820-4200		350/820-6300	
Oil tank capacity [l]		760		730	
Installed electrical rating:					
>Pump capacity single pump ³⁾ [kW]		55 / 75		55 / 75	
>Electr. screw drive OP0313 [kW]		90		115	
>Heating capacity of screw cylinder [kW]		42,6	59,3	59,3	79,1
Dry cycle time (Euromap 6):					
>Standard [s-mm]		1,45 - 574		1,45 - 574	
Net weight ⁴⁾ [kg]		20110 / 11400 - 31510		20110 / 12900 - 33010	
Motor end projection, max. (h):					
>Electr. screw drive OP0313 [mm]		0 / 297	55 / 672	0 / 209	31 / 649

These technical specifications are based on information that was correct at time of printing and is subject to change without notice. These parameters are based on a 400 V supply voltage. Other supply voltages will affect the machine parameters.

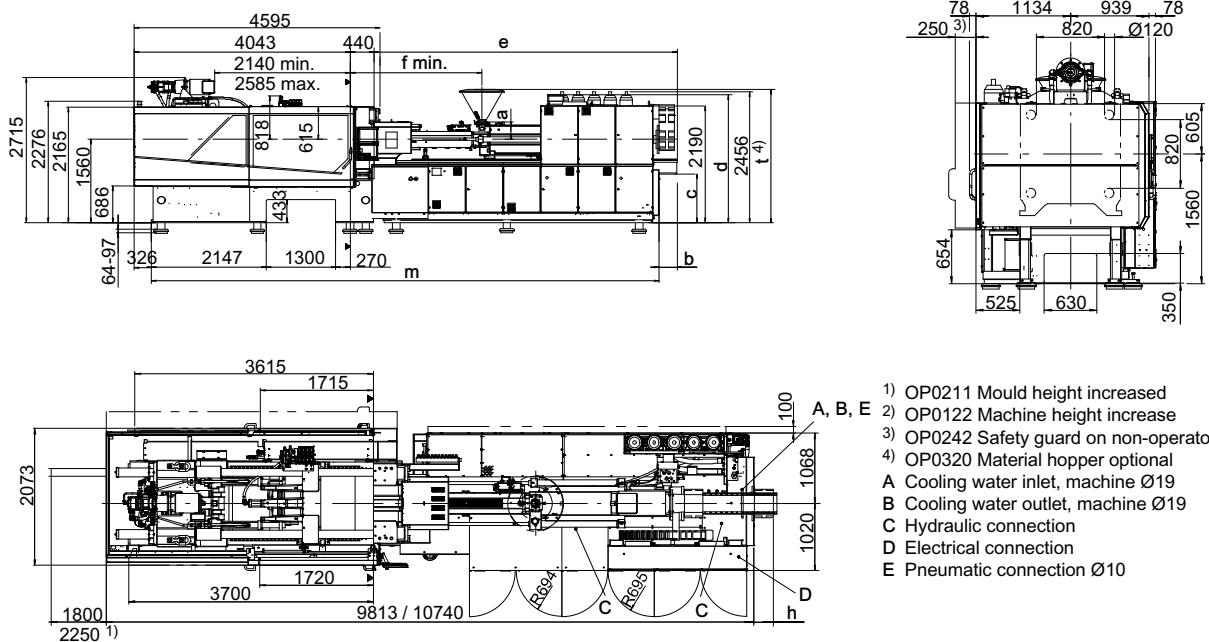
1) Plasticising rate depends on processing conditions and the material used.

2) The max. nozzle stroke is valid for standard open nozzle (OP0650).

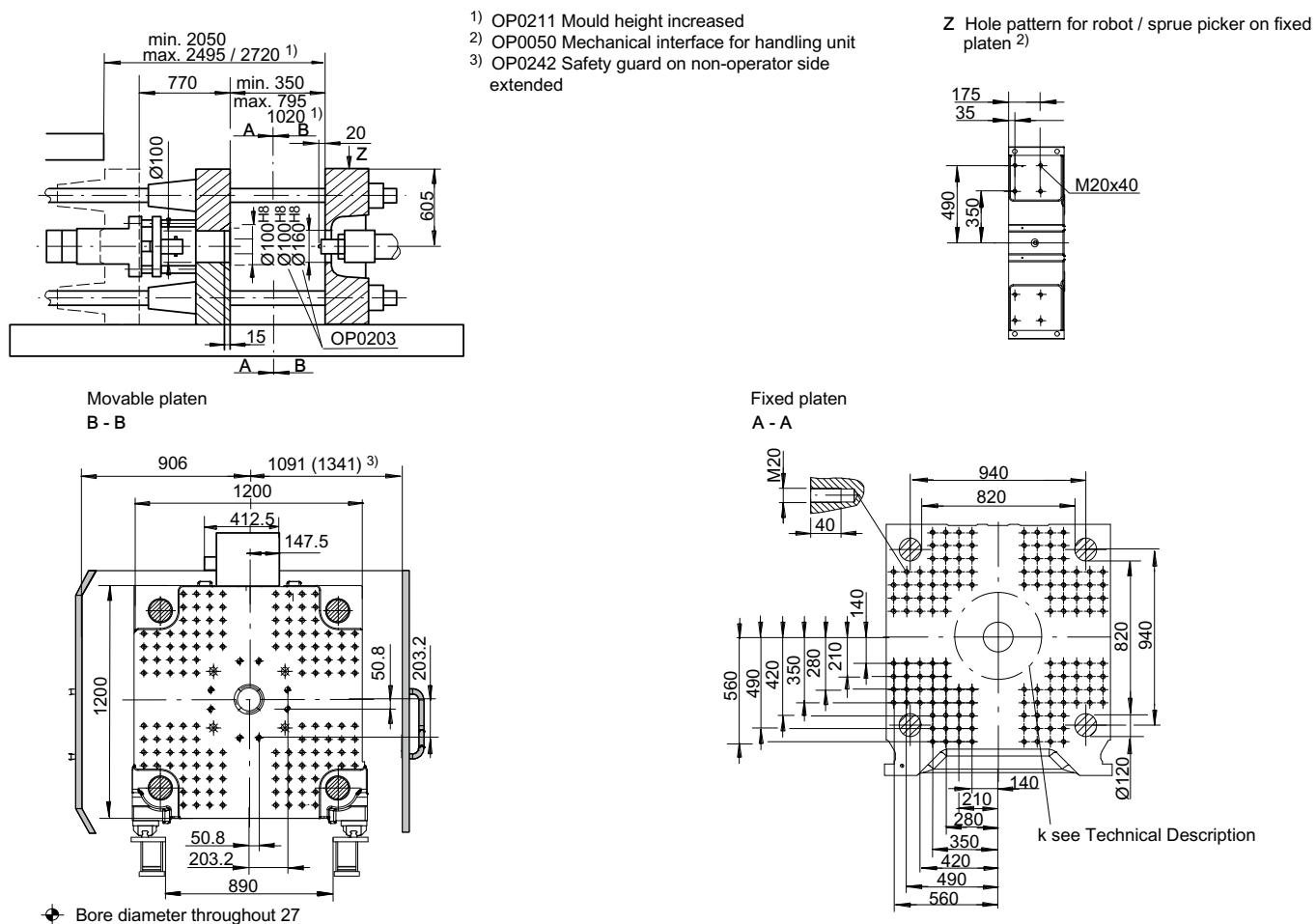
3) Pump standard OP0105 / Pump increased OP0106

4) Machine weight for standard machine without hydraulic-oil, weight may vary depending on equipment. Injection unit / Clamping unit

Machine dimensions El-Exis SP 350



Platen dimensions - Hole pattern according to EUROMAP (OP0204, OP0205) El-Exis SP 350



Sumitomo (SHI) Demag		Ei-Exis SP 420			
International size description		4200-1600		4200-2500	
Clamping unit		420 / 820			
Clamping force / locking force, max.	[kN]		4200 / 4620		
Mould opening stroke, max.	[mm]		770		
Mould height, min. / max.:					
>Standard OP0210	[mm]		350 / 795		
>Increased OP0211	[mm]		350 / 1020		
Distance between tie bars (h x v)	[mm]		820 / 820		
Min. permissible mould diameter (k)	[mm]		420		
Mould weight / mov. / fixed, max.	[kg]		6600 / 3240 / 5100		
Ejector stroke/force forw./force back.:					
>Standard OP0219	[mm / kN / kN]		180 / 106 / 46		
Injection unit		1600		2500	
Screw diameter	[mm]	50	60	60	70
L/D ratio OP0612 / OP0627		25	25	25	25
Injection pressure, max. (up to 400 °C)	[bar]	2426	2106	2420	2074
Injection volume, max.	[cm³]	530	763	891	1212
Injection speed, max.:					
>Version accumulator OP0361	[mm/s]	1000	1000	1000	1000
Injection rate, max.:					
>Version accumulator OP0361	[cm³/s]	1963	2827	2827	3848
Plasticising rate, max. (PE): ¹⁾					
>Electr. screw drive OP0313	[g/s]	60	100	88	126
Nozzle stroke, max.: ²⁾					
>Manual mode	[mm]	1031	706	1204	849
>Automatic mode	[mm]	774	706	749	734
Nozzle sealing force / speed, max.:					
>Standard	[kN / mm/s]	110 / -	110 / -	110 / -	110 / -
General data		420/820-1600		420/820-2500	
Oil tank capacity	[l]	760		760	
Installed electrical rating:					
>Pump capacity single pump ³⁾	[kW]	30 / 45		45 / 55	
>Electr. screw drive OP0313	[kW]	68,8		78,9	
>Heating capacity of screw cylinder	[kW]	22,3	27,9	27,9	32,2
Dry cycle time (Euromap 6):					
>Standard	[s-mm]	1,50 - 574		1,50 - 574	
Net weight ⁴⁾	[kg]	26210		25210	
Motor end projection, max. (h):					
>Electr. screw drive OP0313	[mm]	295 / 1400	650 / 1400	0 / 850	175 / 850

These technical specifications are based on information that was correct at time of printing and is subject to change without notice. These parameters are based on a 400 V supply voltage. Other supply voltages will affect the machine parameters.

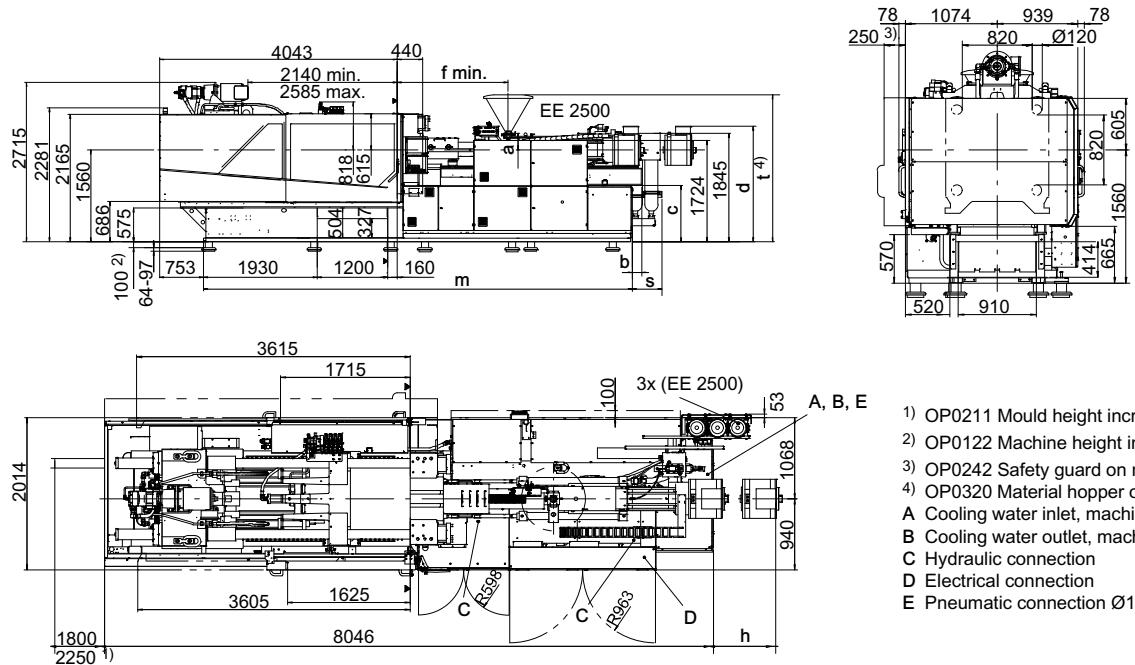
1) Plasticising rate depends on processing conditions and the material used.

2) The max. nozzle stroke is valid for standard open nozzle (OP0650).

3) Pump standard OP0105 / Pump increased OP0106

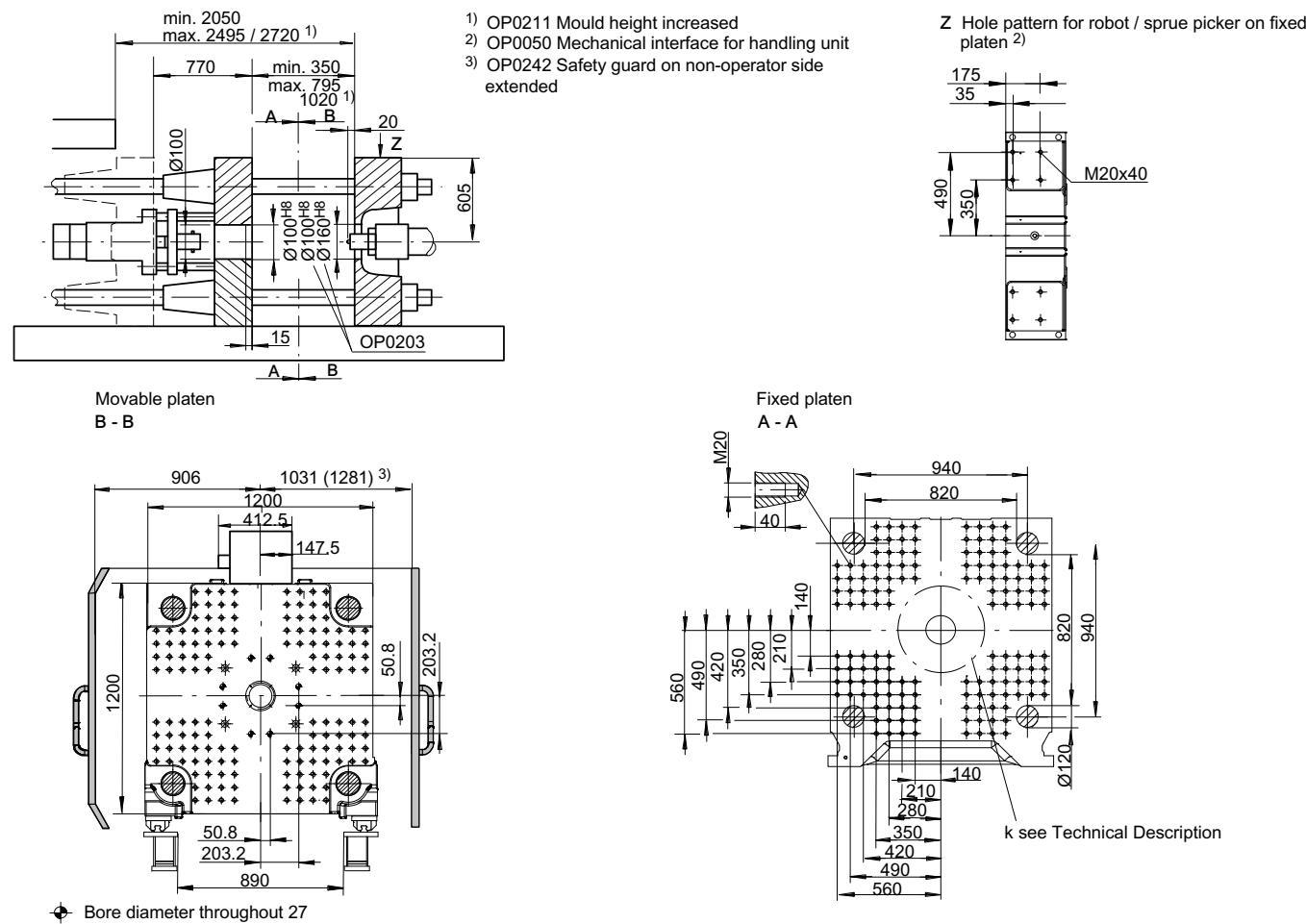
4) Machine weight for standard machine without hydraulic-oil, weight may vary depending on equipment.

Machine dimensions El-Exis SP 420



- 1) OP0211 Mould height increased
 - 2) OP0122 Machine height increase
 - 3) OP0242 Safety guard on non-operator side extended
 - 4) OP0320 Material hopper optional
- A Cooling water inlet, machine Ø19
 B Cooling water outlet, machine Ø19
 C Hydraulic connection
 D Electrical connection
 E Pneumatic connection Ø10

Platen dimensions - Hole pattern according to EUROMAP (OP0204, OP0205) El-Exis SP 420



Sumitomo (SHI) Demag		Ei-Exis SP 420
International size description		4200-3000
Clamping unit		420 / 820
Clamping force / locking force, max. [kN]		4200 / 4620
Mould opening stroke, max. [mm]		770
Mould height, min. / max.:		
>Standard OP0210 [mm]		350 / 795
>Increased OP0211 [mm]		350 / 1020
Distance between tie bars (h x v) [mm]		820 / 820
Min. permissible mould diameter (k) [mm]		420
Mould weight / mov. / fixed, max. [kg]		6600 / 3240 / 5100
Ejector stroke/force forw./force back.:		
>Standard OP0219 [mm / kN / kN]		180 / 106 / 46
Injection unit		3000
Screw diameter [mm]	70	80
L/D ratio OP0612 / OP0627	23	24
Injection pressure, max. (up to 400 °C) [bar]	2432	2051
Injection volume, max. [cm³]	924	1206
Injection speed, max.:		
>Version accumulator OP0361 [mm/s]	1000	900
Injection rate, max.:		
>Version accumulator OP0361 [cm³/s]	3848	4524
Plasticising rate, max. (PE):¹⁾		
>Electr. screw drive OP0313 [g/s]	108	150
Nozzle stroke, max.:²⁾		
>Manual mode [mm]	802	668
>Automatic mode [mm]	802	668
Nozzle sealing force / speed, max.:		
>Standard [kN / mm/s]	110 / -	110 / -
General data		420/820-3000
Oil tank capacity [l]		760
Installed electrical rating:		
>Pump capacity single pump ³⁾ [kW]		55 / 75
>Electr. screw drive OP0313 [kW]		117
>Heating capacity of screw cylinder [kW]	30,6	42,6
Dry cycle time (Euromap 6):		
>Standard [s-mm]		1,50 - 574
Net weight ⁴⁾ [kg]		20110 / 9000 - 29110
Motor end projection, max. (h):		
>Electr. screw drive OP0313 [mm]	0 / 579	281 / 899

These technical specifications are based on information that was correct at time of printing and is subject to change without notice. These parameters are based on a 400 V supply voltage. Other supply voltages will affect the machine parameters.

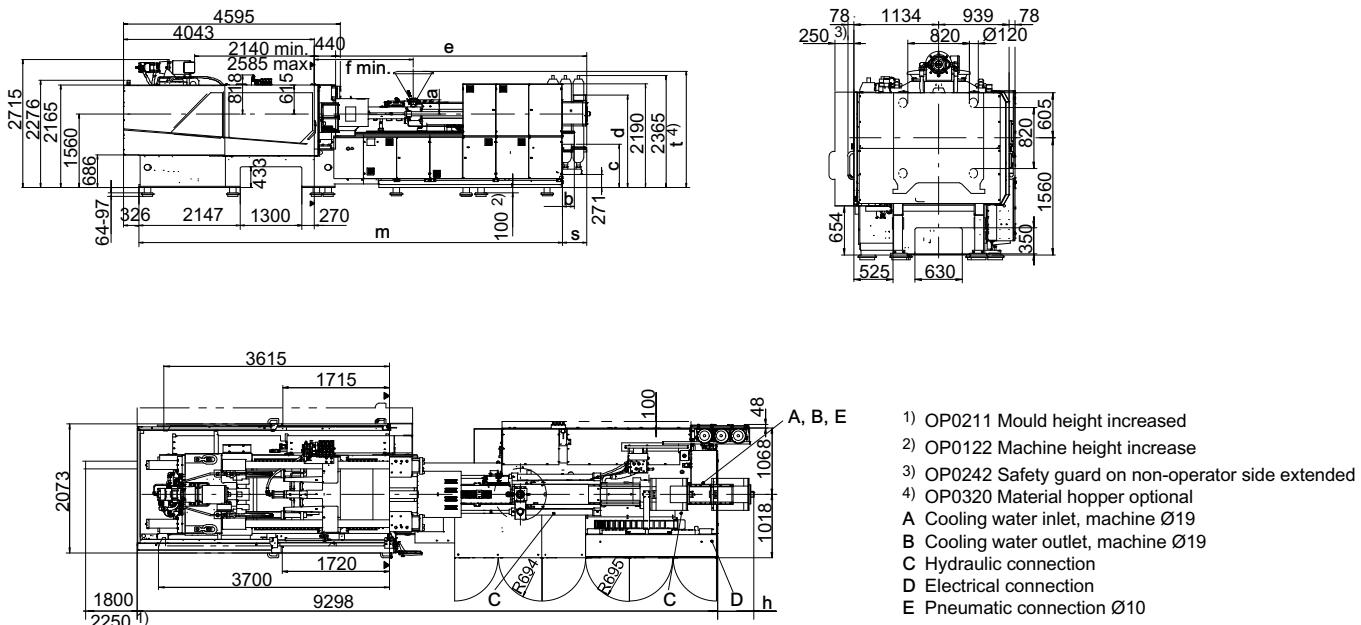
¹⁾ Plasticising rate depends on processing conditions and the material used.

²⁾ The max. nozzle stroke is valid for standard open nozzle (OP0650).

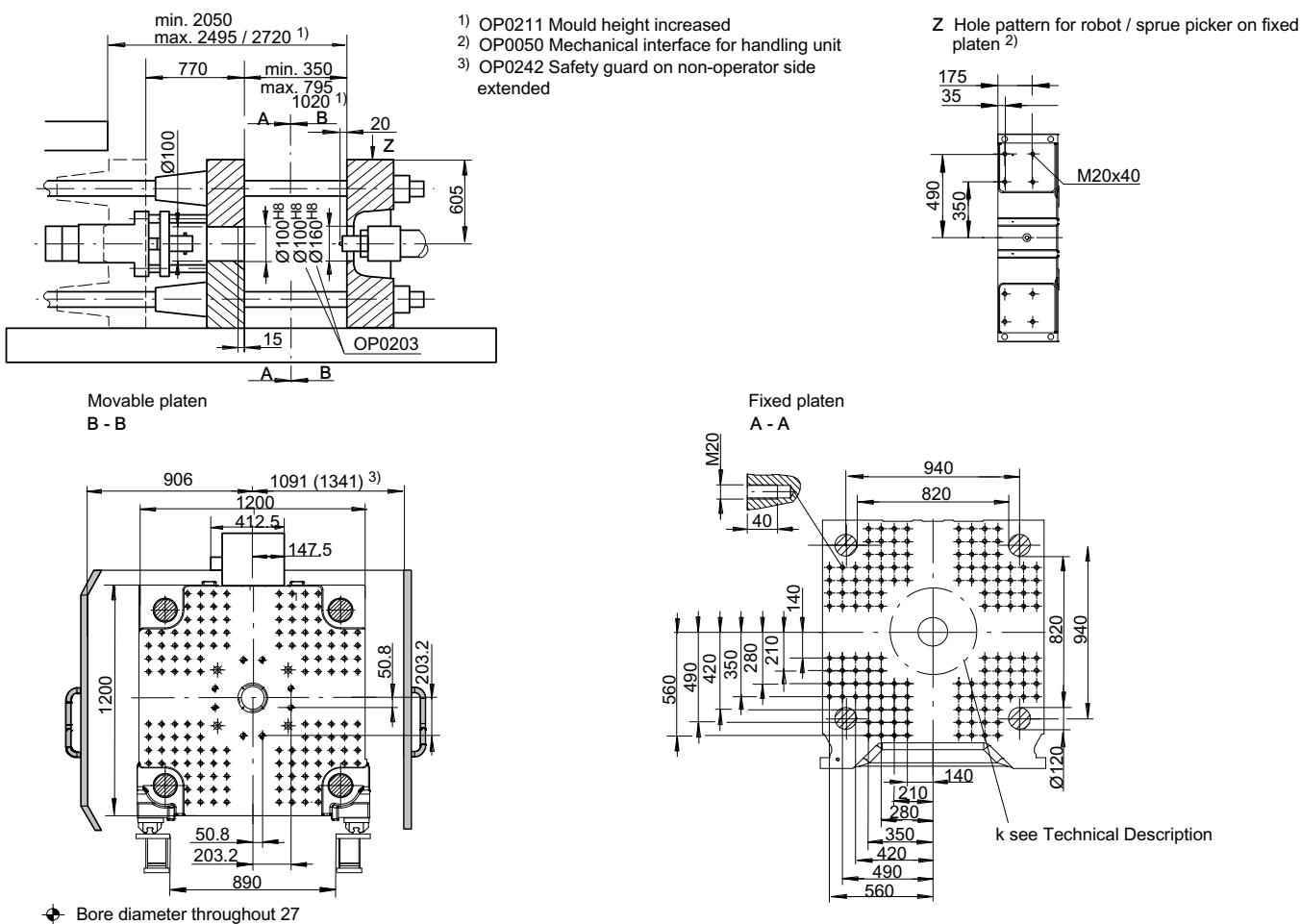
³⁾ Pump standard OP0105 / Pump increased OP0106

⁴⁾ Machine weight for standard machine without hydraulic-oil, weight may vary depending on equipment. Injection unit / Clamping unit

Machine dimensions El-Exis SP 420



Platen dimensions - Hole pattern according to EUROMAP (OP0204, OP0205) El-Exis SP 420



Sumitomo (SHI) Demag		Ei-Exis SP 420			
International size description		4200-4200		4200-6300	
Clamping unit		420 / 820			
Clamping force / locking force, max. [kN]		4200 / 4620			
Mould opening stroke, max. [mm]		770			
Mould height, min. / max.:					
>Standard OP0210	[mm]	350 / 795			
>Increased OP0211	[mm]	350 / 1020			
Distance between tie bars (h x v)	[mm]	820 / 820			
Min. permissible mould diameter (k)	[mm]	420			
Mould weight / mov. / fixed, max. [kg]		6600 / 3240 / 5100			
Ejector stroke/force forw./force back.:					
>Standard OP0219	[mm / kN / kN]	180 / 106 / 46			
Injection unit		4200		6300	
Screw diameter	[mm]	80	95	95	110
L/D ratio OP0612 / OP0627		24	23	23	24
Injection pressure, max. (up to 400 °C) [bar]		2391	2094	2434	2006
Injection volume, max. [cm³]		1433	2020	2339	3136
Injection speed, max.:					
>Version accumulator OP0361	[mm/s]	900	800	800	700
Injection rate, max.:					
>Version accumulator OP0361	[cm³/s]	4524	5671	5671	6652
Plasticising rate, max. (PE): ¹⁾					
>Electr. screw drive OP0313	[g/s]	125	200	173	229
Nozzle stroke, max.: ²⁾					
>Manual mode	[mm]	1065	672	1205	668
>Automatic mode	[mm]	1065	672	1136	668
Nozzle sealing force / speed, max.:					
>Standard	[kN / mm/s]	110 / -	110 / -	110 / -	110 / -
General data		420/820-4200		420/820-6300	
Oil tank capacity	[l]	760		730	
Installed electrical rating:					
>Pump capacity single pump ³⁾	[kW]	55 / 75		55 / 75	
>Electr. screw drive OP0313	[kW]	90		115	
>Heating capacity of screw cylinder	[kW]	42,6	59,3	59,3	79,1
Dry cycle time (Euromap 6):					
>Standard	[s-mm]	1,50 - 574		1,50 - 574	
Net weight ⁴⁾	[kg]	20110 / 11400 - 31510		20110 / 12900 - 33010	
Motor end projection, max. (h):					
>Electr. screw drive OP0313	[mm]	0 / 850	175 / 850	- / 209	31 / 649

These technical specifications are based on information that was correct at time of printing and is subject to change without notice. These parameters are based on a 400 V supply voltage. Other supply voltages will affect the machine parameters.

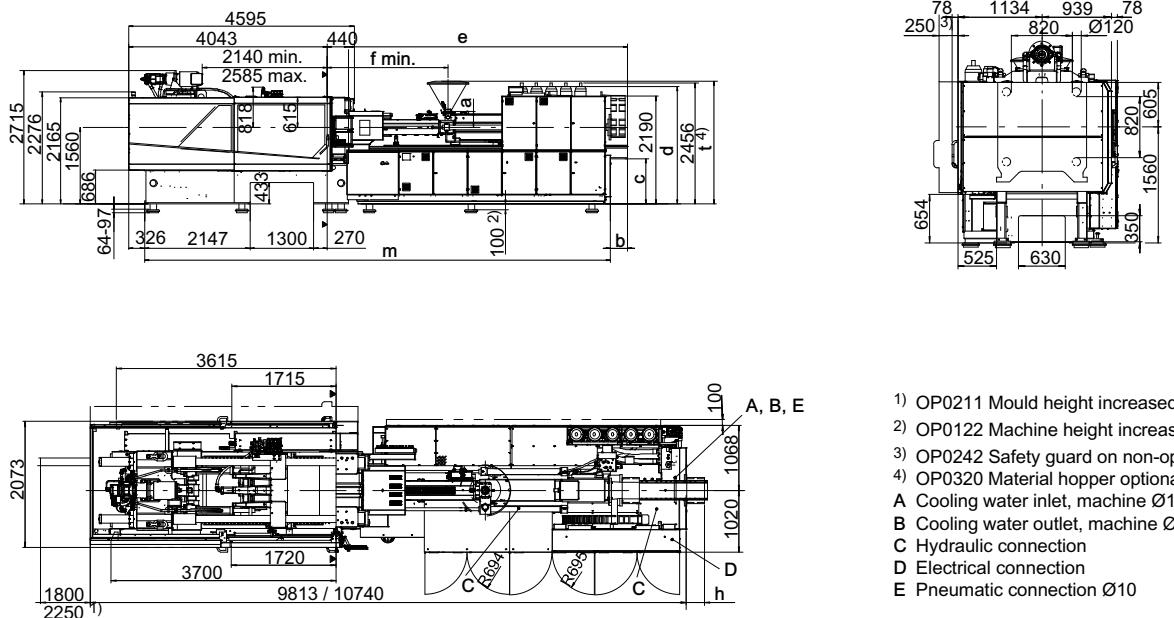
1) Plasticising rate depends on processing conditions and the material used.

2) The max. nozzle stroke is valid for standard open nozzle (OP0650).

3) Pump standard OP0105 / Pump increased OP0106

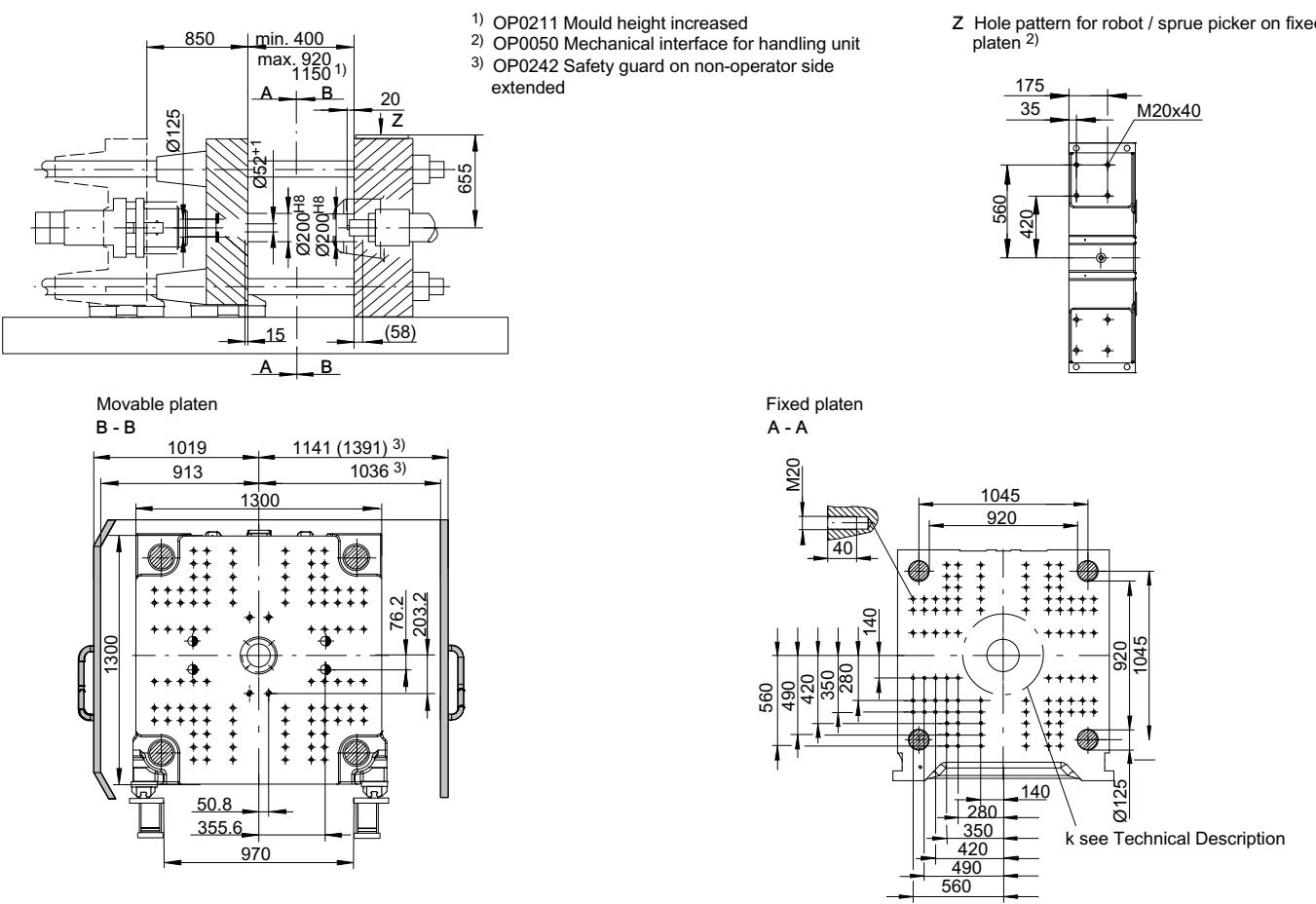
4) Machine weight for standard machine without hydraulic-oil, weight may vary depending on equipment. Injection unit / Clamping unit

Machine dimensions El-Exis SP 420



- 1) OP0211 Mould height increased
 - 2) OP0122 Machine height increase
 - 3) OP0242 Safety guard on non-operator side extended
 - 4) OP0320 Material hopper optional
- A Cooling water inlet, machine Ø19
 B Cooling water outlet, machine Ø19
 C Hydraulic connection
 D Electrical connection
 E Pneumatic connection Ø10

Platen dimensions - Hole pattern according to EUROMAP (OP0204, OP0205) El-Exis SP 420



Sumitomo (SHI) Demag	Ei-Exis SP 450			
International size description	4500-2500			
Clamping unit	450 / 920			
Clamping force / locking force, max. [kN]	4500 / 4950			
Mould opening stroke, max. [mm]	850			
Mould height, min. / max.:				
>Standard OP0210 [mm]	360 / 880			
>Increased OP0211 [mm]	360 / 1110			
Distance between tie bars (h x v) [mm]	920 / 920			
Min. permissible mould diameter (k) [mm]	420			
Mould weight / mov. / fixed, max. [kg]	8700 / 4305 / 6700			
Ejector stroke/force forw./force back.:				
>Standard OP0219 [mm / kN / kN]	200 / 106 / 46			
Injection unit	2500			
Screw diameter [mm]	60			
L/D ratio OP0612 / OP0627	25			
Injection pressure, max. (up to 400 °C) [bar]	2420			
Injection volume, max. [cm³]	891			
Injection speed, max.:				
>Version accumulator OP0361 [mm/s]	1000			
Injection rate, max.:				
>Version accumulator OP0361 [cm³/s]	2827			
Plasticising rate, max. (PE):¹⁾				
>Electr. screw drive OP0313 [g/s]	88			
Nozzle stroke, max.:²⁾				
>Manual mode [mm]	895			
>Automatic mode [mm]	807			
Nozzle sealing force / speed, max.:				
>Standard [kN / mm/s]	110 / -			
General data				
450/920-2500				
Oil tank capacity [l]	760			
Installed electrical rating:				
>Pump capacity single pump ³⁾ [kW]	45 / 55			
>Electr. screw drive OP0313 [kW]	78,9			
>Heating capacity of screw cylinder [kW]	27,9			
Dry cycle time (Euromap 6):				
>Standard [s-mm]	1,55 - 644			
Net weight ⁴⁾ [kg]	29245 / 9000 - 38245			
Motor end projection, max. (h):				
>Electr. screw drive OP0313 [mm]	0 / 616			
75 / 616				

These technical specifications are based on information that was correct at time of printing and is subject to change without notice. These parameters are based on a 400 V supply voltage. Other supply voltages will affect the machine parameters.

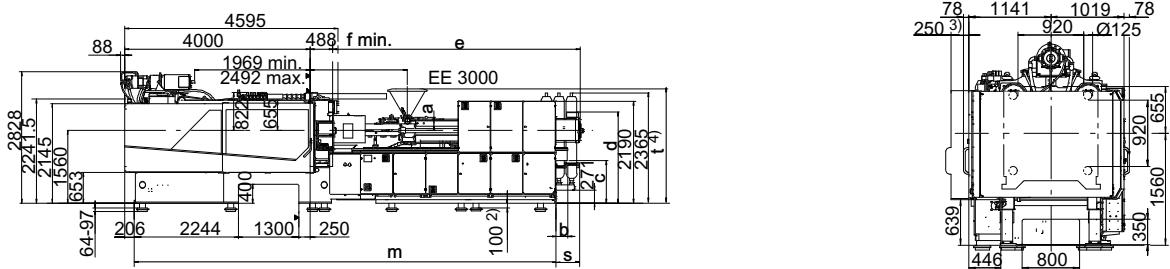
¹⁾ Plasticising rate depends on processing conditions and the material used.

²⁾ The max. nozzle stroke is valid for standard open nozzle (OP0650).

³⁾ Pump standard OP0105 / Pump increased OP0106

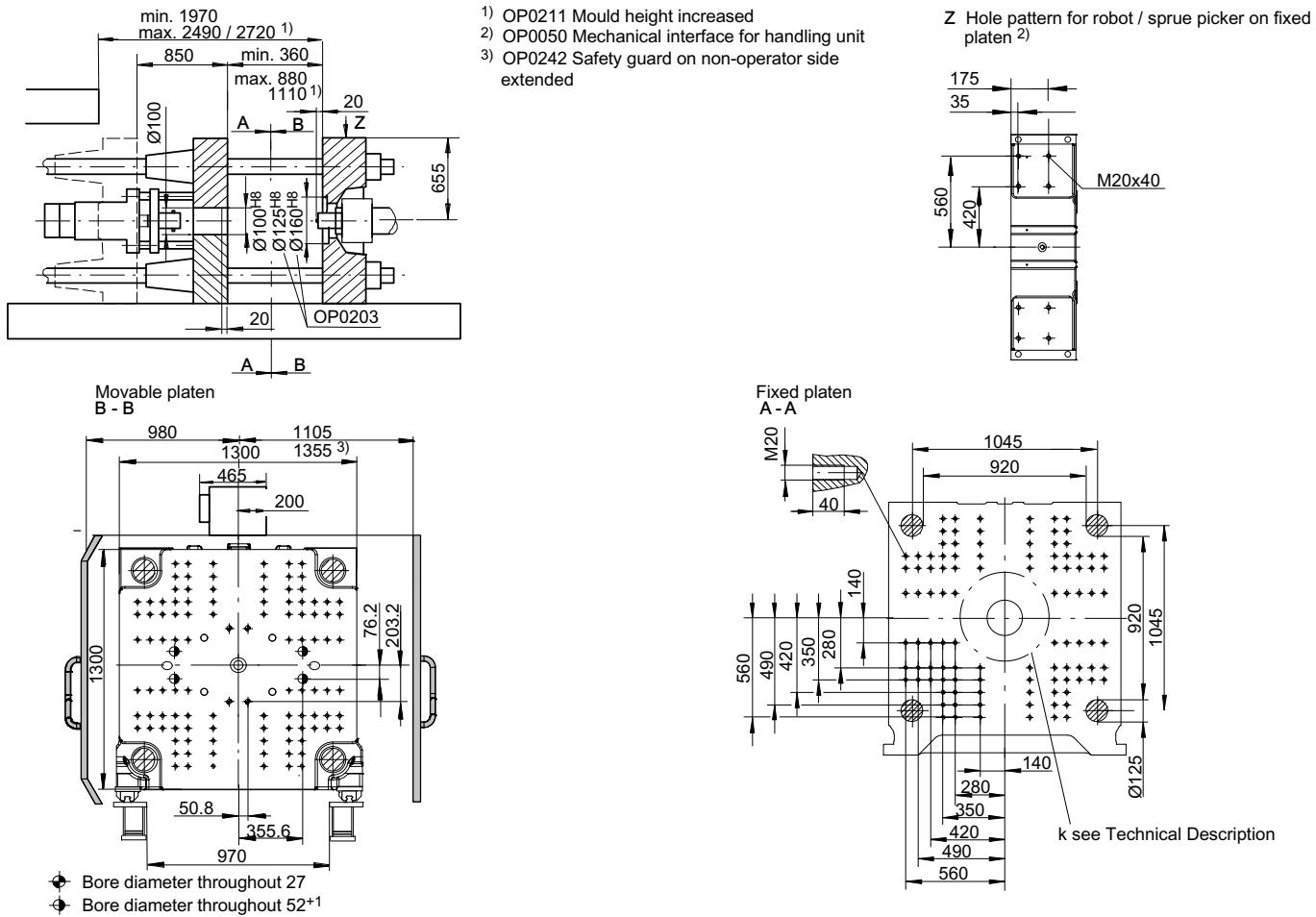
⁴⁾ Machine weight for standard machine without hydraulic-oil, weight may vary depending on equipment. Injection unit / Clamping unit

Machine dimensions El-Exis SP 450



- 1) OP0211 Mould height increased
 - 2) OP0122 Machine height increase
 - 3) OP0242 Safety guard on non-operator side extended
 - 4) OP0320 Material hopper optional
 - 5) OP0287 Stop bar
- A Cooling water inlet, machine Ø19
 B Cooling water outlet, machine Ø19
 C Hydraulic connection
 D Electrical connection
 E Pneumatic connection Ø10

Platen dimensions - Hole pattern according to EUROMAP (OP0204, OP0205) El-Exis SP 450



Sumitomo (SHI) Demag	Ei-Exis SP 450	
International size description	4500-3000	
Clamping unit	450 / 920	
Clamping force / locking force, max. [kN]	4500 / 4950	
Mould opening stroke, max. [mm]	850	
Mould height, min. / max.:		
>Standard OP0210 [mm]	360 / 880	
>Increased OP0211 [mm]	360 / 1110	
Distance between tie bars (h x v) [mm]	920 / 920	
Min. permissible mould diameter (k) [mm]	420	
Mould weight / mov. / fixed, max. [kg]	8700 / 4305 / 6700	
Ejector stroke/force forw./force back.:		
>Standard OP0219 [mm / kN / kN]	200 / 106 / 46	
Injection unit	3000	
Screw diameter [mm]	70	80
L/D ratio OP0612 / OP0627	23	24
Injection pressure, max. (up to 400 °C) [bar]	2432	2051
Injection volume, max. [cm³]	924	1206
Injection speed, max.:		
>Version accumulator OP0361 [mm/s]	1000	
Injection rate, max.:		
>Version accumulator OP0361 [cm³/s]	3848	4524
Plasticising rate, max. (PE):¹⁾		
>Electr. screw drive OP0313 [g/s]	108	
Nozzle stroke, max.:²⁾		
>Manual mode [mm]	1035	718
>Automatic mode [mm]	1035	718
Nozzle sealing force / speed, max.:		
>Standard [kN / mm/s]	110 / -	110 / -
General data	450/920-3000	
Oil tank capacity [l]	760	
Installed electrical rating:		
>Pump capacity single pump ³⁾ [kW]	55 / 75	
>Electr. screw drive OP0313 [kW]	117	
>Heating capacity of screw cylinder [kW]	30,6	42,6
Dry cycle time (Euromap 6):		
>Standard [s-mm]	1,55 - 644	
Net weight ⁴⁾ [kg]	29245 / 9000 - 38245	
Motor end projection, max. (h):		
>Electr. screw drive OP0313 [mm]	0 / 581	233 / 901

These technical specifications are based on information that was correct at time of printing and is subject to change without notice. These parameters are based on a 400 V supply voltage. Other supply voltages will affect the machine parameters.

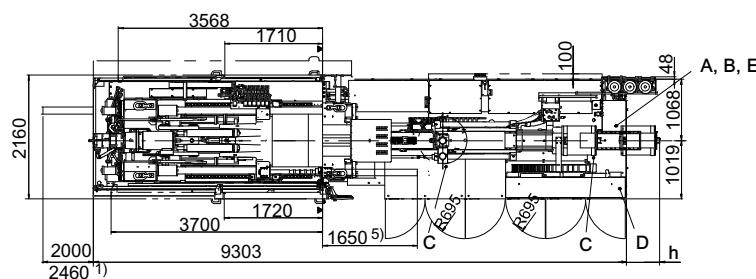
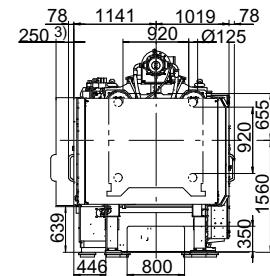
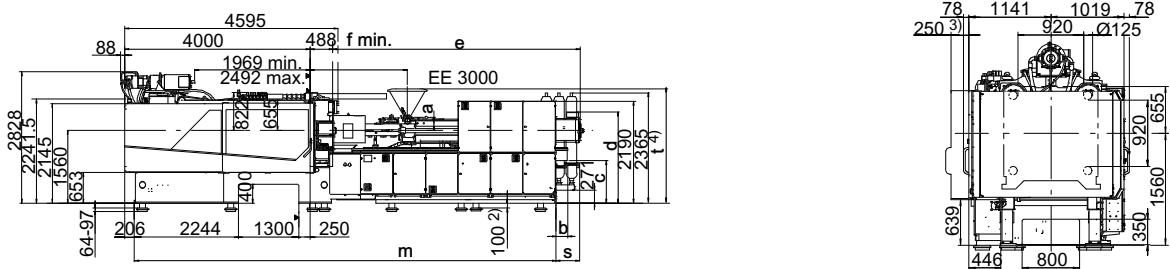
¹⁾ Plasticising rate depends on processing conditions and the material used.

²⁾ The max. nozzle stroke is valid for standard open nozzle (OP0650).

³⁾ Pump standard OP0105 / Pump increased OP0106

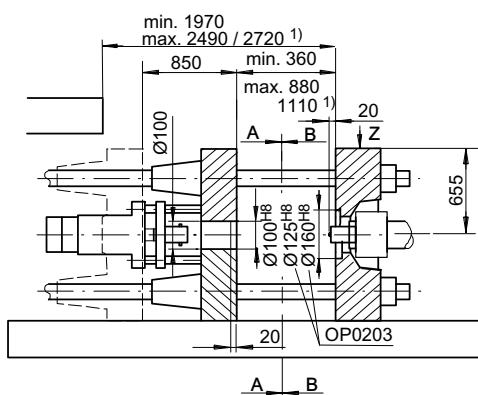
⁴⁾ Machine weight for standard machine without hydraulic-oil, weight may vary depending on equipment. Injection unit / Clamping unit

Machine dimensions El-Exis SP 450

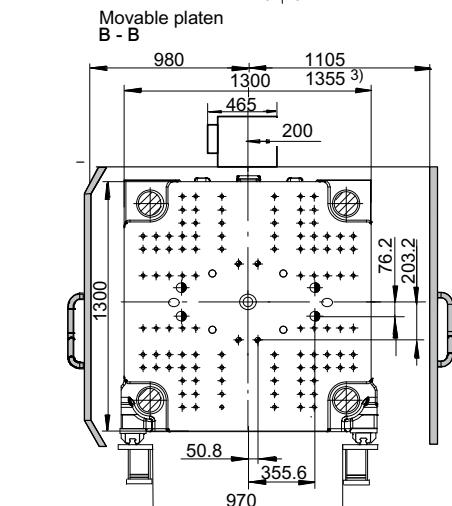


- 1) OP0211 Mould height increased
 - 2) OP0122 Machine height increase
 - 3) OP0242 Safety guard on non-operator side extended
 - 4) OP0320 Material hopper optional
 - 5) OP0287 Stop bar
- A Cooling water inlet, machine Ø19
 B Cooling water outlet, machine Ø19
 C Hydraulic connection
 D Electrical connection
 E Pneumatic connection Ø10

Platen dimensions - Hole pattern according to EUROMAP (OP0204, OP0205) El-Exis SP 450

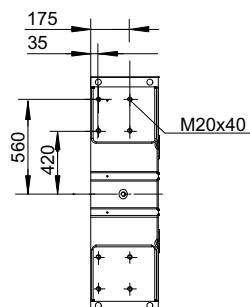


- 1) OP0211 Mould height increased
- 2) OP0050 Mechanical interface for handling unit
- 3) OP0242 Safety guard on non-operator side extended

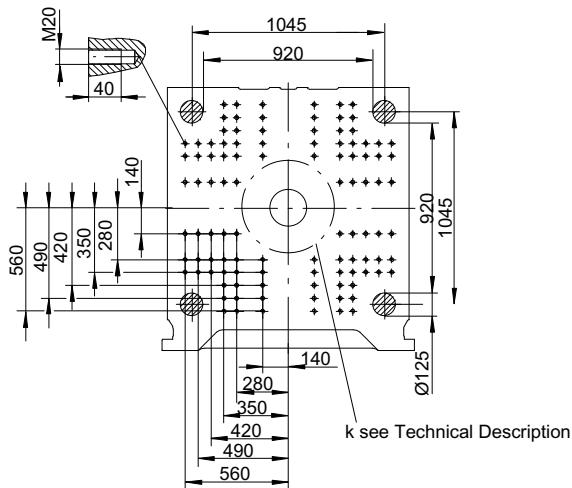


◆ Bore diameter throughout 27
 ◆ Bore diameter throughout 52⁺¹

Z Hole pattern for robot / sprue picker on fixed platen ²⁾



Fixed platen
A-A



Sumitomo (SHI) Demag		Ei-Exis SP 450			
International size description		4500-4200		4500-6300	
Clamping unit		450 / 920			
Clamping force / locking force, max. [kN]		4500 / 4950			
Mould opening stroke, max. [mm]		850			
Mould height, min. / max.:					
>Standard OP0210 [mm]		360 / 880			
>Increased OP0211 [mm]		360 / 1110			
Distance between tie bars (h x v) [mm]		920 / 920			
Min. permissible mould diameter (k) [mm]		420			
Mould weight / mov. / fixed, max. [kg]		8700 / 4305 / 6700			
Ejector stroke/force forw./force back.:					
>Standard OP0219 [mm / kN / kN]		200 / 106 / 46			
Injection unit		4200		6300	
Screw diameter [mm]		80	95	95	110
L/D ratio OP0612 / OP0627		24	23	23	24
Injection pressure, max. (up to 400 °C) [bar]		2391	2094	2434	2006
Injection volume, max. [cm³]		1433	2020	2339	3136
Injection speed, max.:					
>Version accumulator OP0361 [mm/s]		900	800	800	700
Injection rate, max.:					
>Version accumulator OP0361 [cm³/s]		4524	5671	5671	6652
Plasticising rate, max. (PE):¹⁾					
>Electr. screw drive OP0313 [g/s]		125	200	173	229
Nozzle stroke, max.:²⁾					
>Manual mode [mm]		1115	722	1255	718
>Automatic mode [mm]		1115	722	1199	718
Nozzle sealing force / speed, max.:					
>Standard [kN / mm/s]		110 / -	110 / -	110 / -	110 / -
General data		450/920-4200		450/920-6300	
Oil tank capacity [l]		760		730	
Installed electrical rating:					
>Pump capacity single pump ³⁾ [kW]		55 / 75		55 / 75	
>Electr. screw drive OP0313 [kW]		90		115	
>Heating capacity of screw cylinder [kW]		42,6	59,3	59,3	79,1
Dry cycle time (Euromap 6):					
>Standard [s-mm]		1,55 - 644		1,55 - 644	
Net weight ⁴⁾ [kg]		29245 / 11400 - 40645		29245 / 12500 - 41745	
Motor end projection, max. (h):					
>Electr. screw drive OP0313 [mm]		0 / 299	7 / 674	0 / 211	0 / 651

These technical specifications are based on information that was correct at time of printing and is subject to change without notice. These parameters are based on a 400 V supply voltage. Other supply voltages will affect the machine parameters.

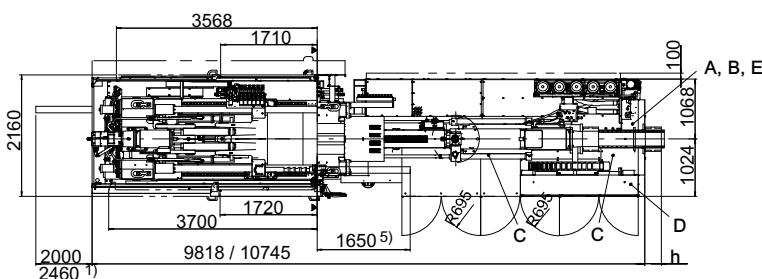
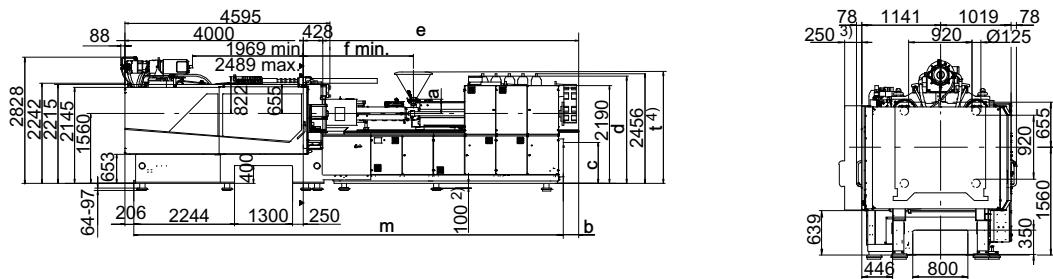
1) Plasticising rate depends on processing conditions and the material used.

2) The max. nozzle stroke is valid for standard open nozzle (OP0650).

3) Pump standard OP0105 / Pump increased OP0106

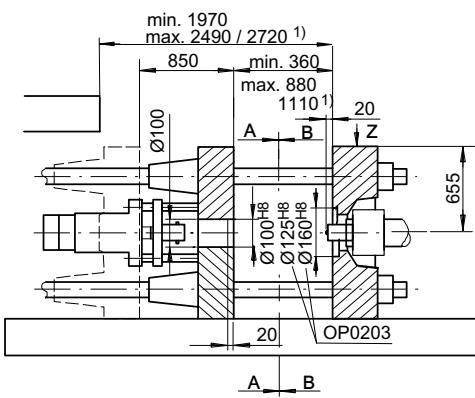
4) Machine weight for standard machine without hydraulic-oil, weight may vary depending on equipment. Injection unit / Clamping unit

Machine dimensions El-Exis SP 450

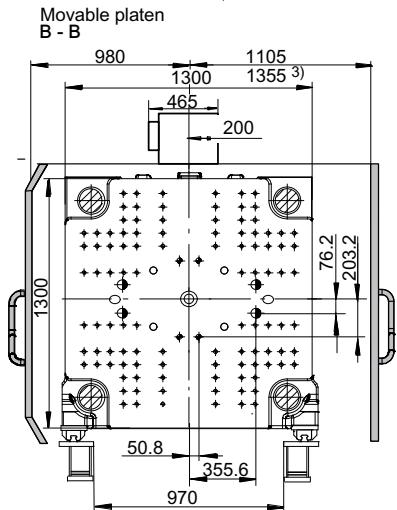
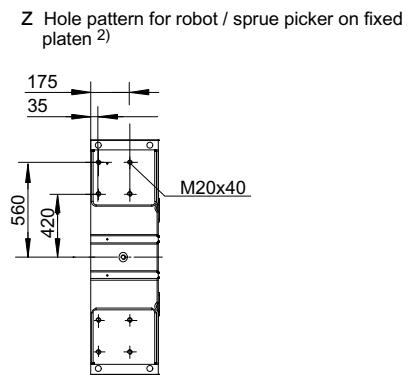


- 1) OP0211 Mould height increased
 - 2) OP0122 Machine height increase
 - 3) OP0242 Safety guard on non-operator side extended
 - 4) OP0320 Material hopper optional
 - 5) OP0287 Stop bar
 - A Cooling water inlet, machine Ø19
 - B Cooling water outlet, machine Ø19
 - C Hydraulic connection
 - D Electrical connection
 - E Pneumatic connection Ø10

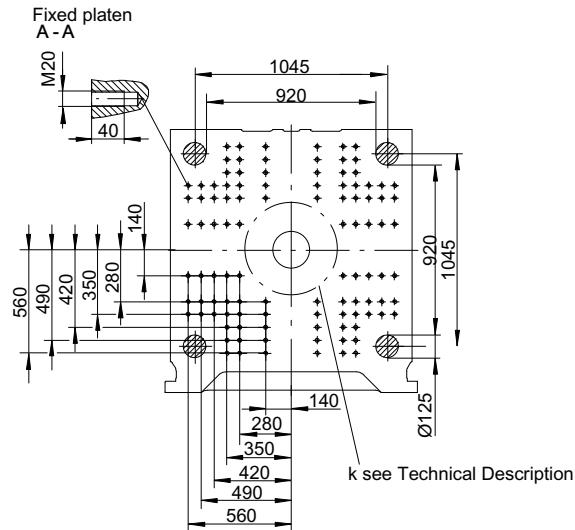
Platen dimensions - Hole pattern according to EUROMAP (OP0204, OP0205) EI-Exis SP 450



- 1) OP0211 Mould height increased
 - 2) OP0050 Mechanical interface for handling unit
 - 3) OP0242 Safety guard on non-operator side extended



- Bore diameter throughout 27
- Bore diameter throughout 52⁺¹



Sumitomo (SHI) Demag		El-Exis SP 580	
International size description		5800-3000	
Clamping unit		580 / 1020	
Clamping force / locking force, max.	[kN]	5800 / 6380	
Mould opening stroke, max.	[mm]	930	
Mould height, min. / max.:			
>Standard OP0210	[mm]	370 / 940	
>Increased OP0211	[mm]	370 / 1170	
Distance between tie bars (h x v)	[mm]	1020 / 1020	
Min. permissible mould diameter (k)	[mm]	500	
Mould weight / mov. / fixed, max.	[kg]	11200 / 5330 / 8600	
Ejector stroke/force forw./force back.:			
>Standard OP0219	[mm / kN / kN]	220 / 165 / 84	
Injection unit		3000	
Screw diameter	[mm]	70	80
L/D ratio OP0612 / OP0627		23	24
Injection pressure, max. (up to 400 °C)	[bar]	2432	2051
Injection volume, max.	[cm³]	924	1206
Injection speed, max.:			
>Version accumulator OP0361	[mm/s]	1000	900
Injection rate, max.:			
>Version accumulator OP0361	[cm³/s]	3848	4524
Plasticising rate, max. (PE): ¹⁾			
>Electr. screw drive OP0313	[g/s]	108	150
Nozzle stroke, max.: ²⁾			
>Manual mode	[mm]	1110	793
>Automatic mode	[mm]	1110	793
Nozzle sealing force / speed, max.:			
>Standard	[kN / mm/s]	110 / -	110 / -
General data		580/1020-3000	
Oil tank capacity	[l]	760	
Installed electrical rating:			
>Pump capacity single pump ³⁾	[kW]	55 / 75	
>Electr. screw drive OP0313	[kW]	117	
>Heating capacity of screw cylinder	[kW]	30,6	42,6
Dry cycle time (Euromap 6):			
>Standard	[s-mm]	1,85 - 714	
Net weight ⁴⁾	[kg]	29970 / 9000 - 38970	
Motor end projection, max. (h):			
>Electr. screw drive OP0313	[mm]	0 / 576	153 / 896

These technical specifications are based on information that was correct at time of printing and is subject to change without notice. These parameters are based on a 400 V supply voltage. Other supply voltages will affect the machine parameters.

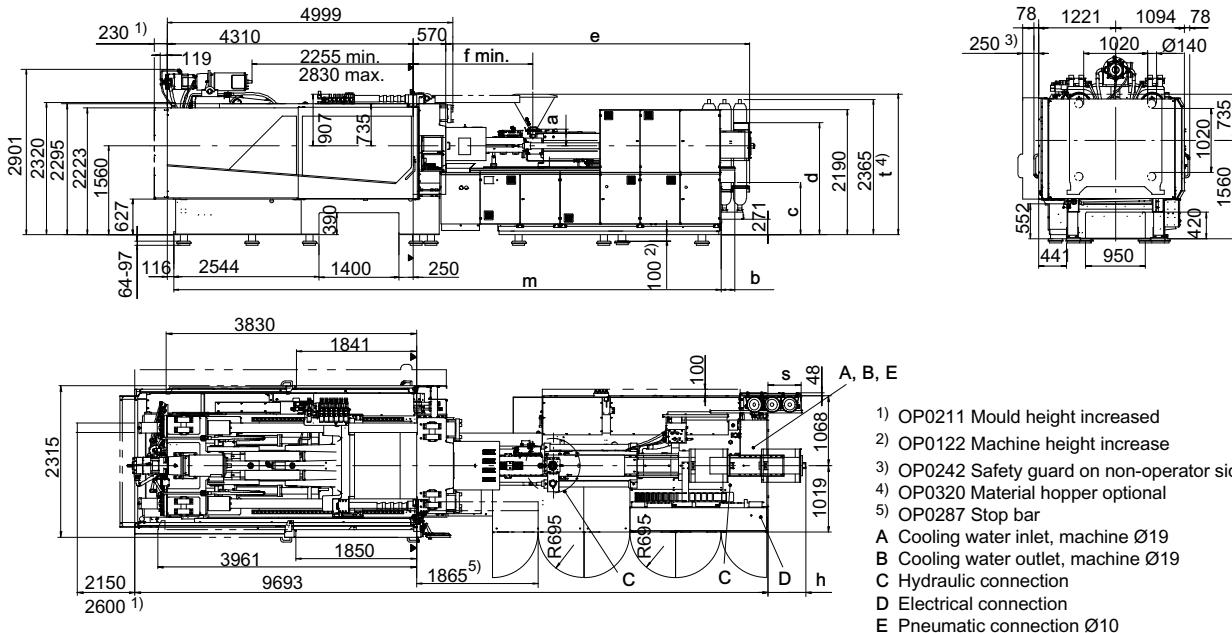
1) Plasticising rate depends on processing conditions and the material used.

2) The max. nozzle stroke is valid for standard open nozzle (OP0650).

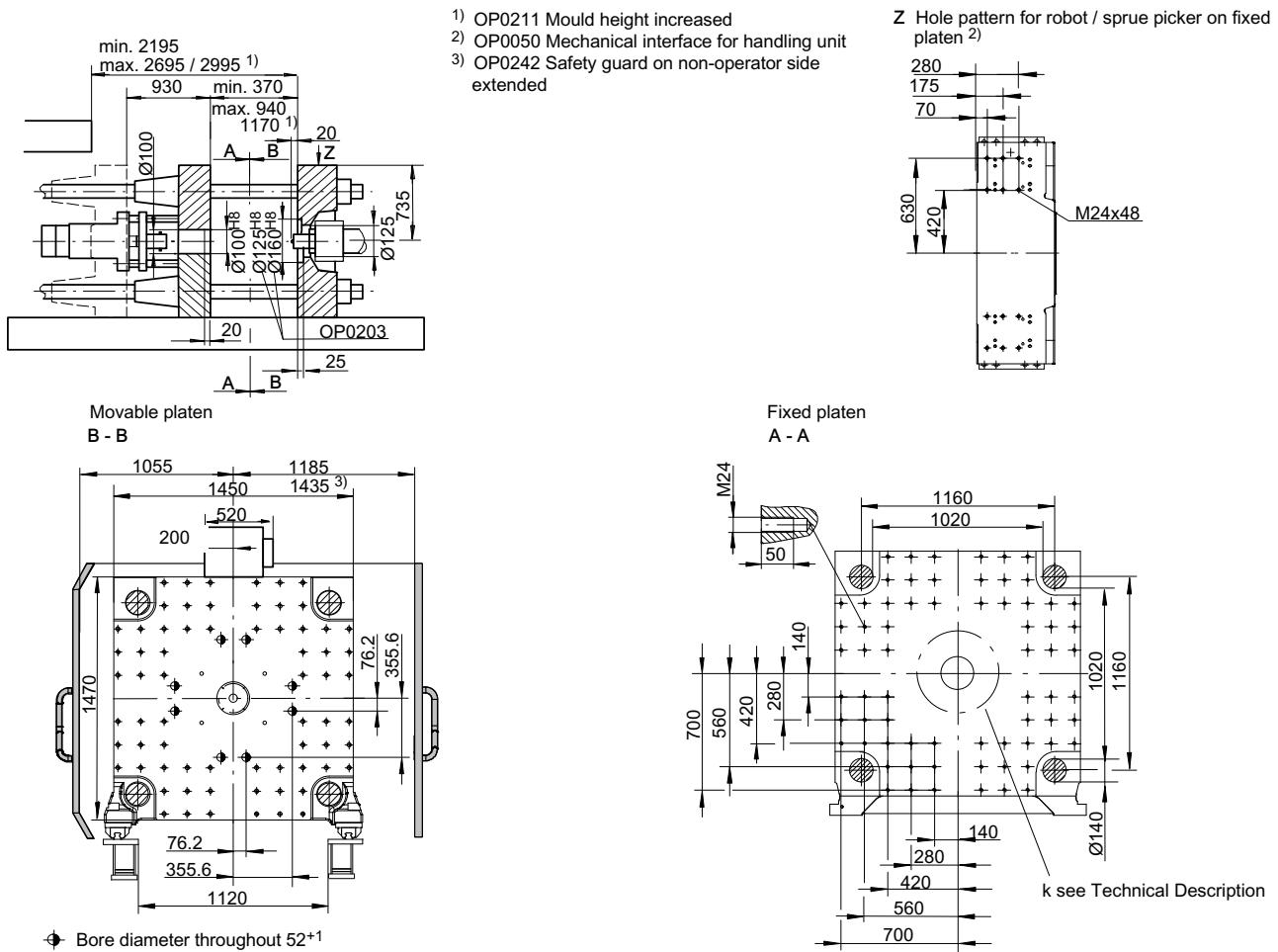
3) Pump standard OP0105 / Pump increased OP0106

4) Machine weight for standard machine without hydraulic-oil, weight may vary depending on equipment. Injection unit / Clamping unit

Machine dimensions El-Exis SP 580



Platen dimensions - Hole pattern according to EUROMAP (OP0204, OP0205) El-Exis SP 580



Sumitomo (SHI) Demag		Ei-Exis SP 580			
International size description		5800-4200		5800-6300	
Clamping unit		580 / 1020			
Clamping force / locking force, max. [kN]		5800 / 6380			
Mould opening stroke, max. [mm]		930			
Mould height, min. / max.:					
>Standard OP0210 [mm]		370 / 940			
>Increased OP0211 [mm]		370 / 1170			
Distance between tie bars (h x v) [mm]		1020 / 1020			
Min. permissible mould diameter (k) [mm]		500			
Mould weight / mov. / fixed, max. [kg]		11200 / 5330 / 8600			
Ejector stroke/force forw./force back.:					
>Standard OP0219 [mm / kN / kN]		220 / 165 / 84			
Injection unit		4200		6300	
Screw diameter [mm]		80	95	95	110
L/D ratio OP0612 / OP0627		24	23	23	24
Injection pressure, max. (up to 400 °C) [bar]		2391	2094	2434	2006
Injection volume, max. [cm³]		1433	2020	2339	3136
Injection speed, max.:					
>Version accumulator OP0361 [mm/s]		900	800	800	700
Injection rate, max.:					
>Version accumulator OP0361 [cm³/s]		4524	5671	5671	6652
Plasticising rate, max. (PE):¹⁾					
>Electr. screw drive OP0313 [g/s]		125	200	173	229
Nozzle stroke, max.:²⁾					
>Manual mode [mm]		1190	797	1330	793
>Automatic mode [mm]		1190	797	1279	793
Nozzle sealing force / speed, max.:					
>Standard [kN / mm/s]		110 / -	110 / -	110 / -	110 / -
General data		580/1020-4200		580/1020-6300	
Oil tank capacity [l]		760		730	
Installed electrical rating:					
>Pump capacity single pump ³⁾ [kW]		55 / 75		55 / 75	
>Electr. screw drive OP0313 [kW]		90		115	
>Heating capacity of screw cylinder [kW]		42,6	59,3	59,3	79,1
Dry cycle time (Euromap 6):					
>Standard [s-mm]		1,85 - 714		1,85 - 714	
Net weight ⁴⁾ [kg]		29970 / 11400 - 41370		29970 / 12500 - 42470	
Motor end projection, max. (h):					
>Electr. screw drive OP0313 [mm]		0 / 294	0 / 669	0 / 206	0 / 646

These technical specifications are based on information that was correct at time of printing and is subject to change without notice. These parameters are based on a 400 V supply voltage. Other supply voltages will affect the machine parameters.

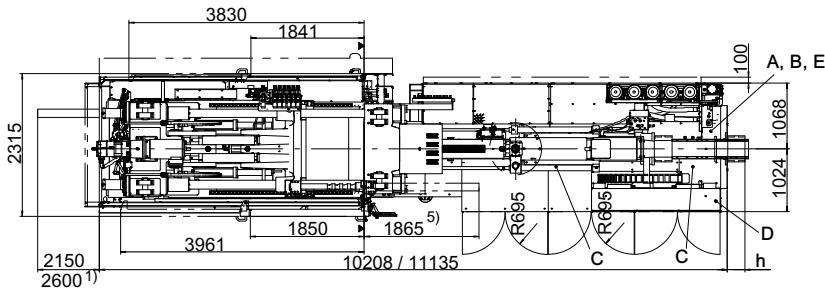
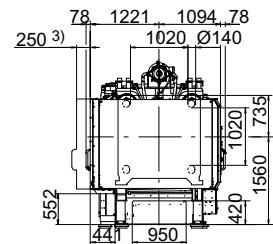
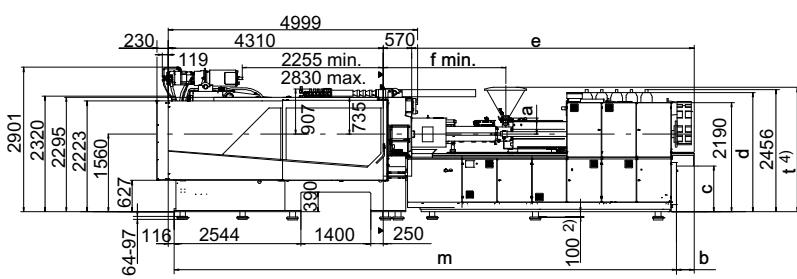
1) Plasticising rate depends on processing conditions and the material used.

2) The max. nozzle stroke is valid for standard open nozzle (OP0650).

3) Pump standard OP0105 / Pump increased OP0106

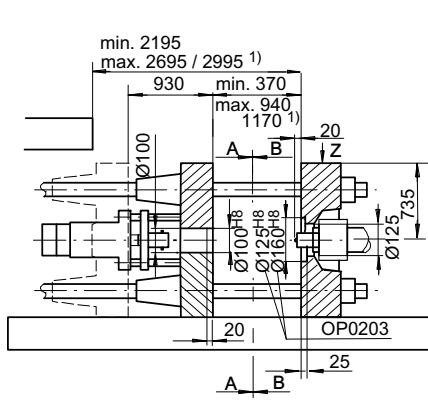
4) Machine weight for standard machine without hydraulic-oil, weight may vary depending on equipment. Injection unit / Clamping unit

Machine dimensions El-Exis SP 580



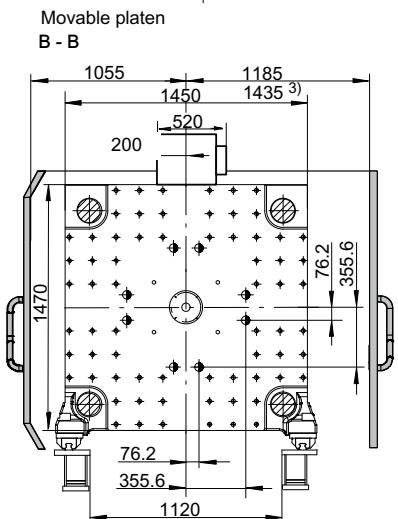
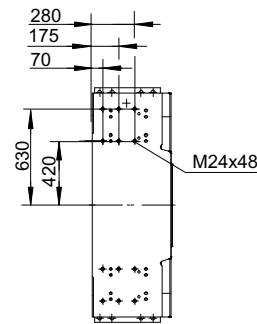
- 1) OP0211 Mould height increased
 2) OP0122 Machine height increase
 3) OP0242 Safety guard on non-operator side extended
 4) OP0320 Material hopper optional
 5) OP0287 Stop bar
- A Cooling water inlet, machine Ø19
 B Cooling water outlet, machine Ø19
 C Hydraulic connection
 D Electrical connection
 E Pneumatic connection Ø10

Platen dimensions - Hole pattern according to EUROMAP (OP0204, OP0205) El-Exis SP 580

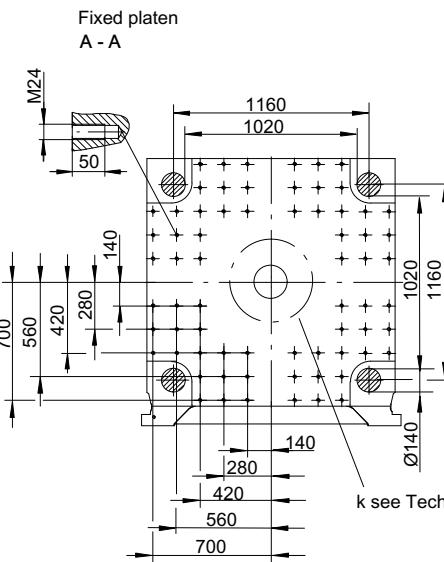


- 1) OP0211 Mould height increased
 2) OP0050 Mechanical interface for handling unit
 3) OP0242 Safety guard on non-operator side extended

Z Hole pattern for robot / sprue picker on fixed platen²⁾



◆ Bore diameter throughout 52⁺¹



Sumitomo (SHI) Demag		El-Exis SP 750	
International size description		7500-3000	
Clamping unit		750 / 1120	
Clamping force / locking force, max. [kN]		7500 / 8250	
Mould opening stroke, max. [mm]		1030	
Mould height, min. / max.:			
>Standard OP0210 [mm]		400 / 1020	
>Increased OP0211 [mm]		400 / 1250	
Distance between tie bars (h x v) [mm]		1120 / 1120	
Min. permissible mould diameter (k) [mm]		700	
Mould weight / mov. / fixed, max. [kg]		14000 / 6500 / 10800	
Ejector stroke/force forw./force back.:			
>Standard OP0219 [mm / kN / kN]		270 / 218 / 113	
Injection unit		3000	
Screw diameter [mm]		70	
L/D ratio OP0612 / OP0627		23	
Injection pressure, max. (up to 400 °C) [bar]		2432	
Injection volume, max. [cm³]		924	
Injection speed, max.:			
>Version accumulator OP0361 [mm/s]		1000	
Injection rate, max.:			
>Version accumulator OP0361 [cm³/s]		3848	
Plasticising rate, max. (PE): ¹⁾		4524	
>Electr. screw drive OP0313 [g/s]		108	
Nozzle stroke, max.: ²⁾			
>Manual mode [mm]		1170	
>Automatic mode [mm]		1170	
Nozzle sealing force / speed, max.:			
>Standard [kN / mm/s]		110 / -	
		110 / -	
General data		750/1120-3000	
Oil tank capacity [l]		760	
Installed electrical rating:			
>Pump capacity single pump ³⁾ [kW]		55 / 75	
>Electr. screw drive OP0313 [kW]		117	
>Heating capacity of screw cylinder [kW]		30,6	
Dry cycle time (Euromap 6):		42,6	
>Standard [s-mm]		2,00 - 784	
Net weight ⁴⁾ [kg]		38635 / 9000 - 47635	
Motor end projection, max. (h):			
>Electr. screw drive OP0313 [mm]		0 / 574	
		91 / 894	

1) Plasticising rate depends on processing conditions and the material used.

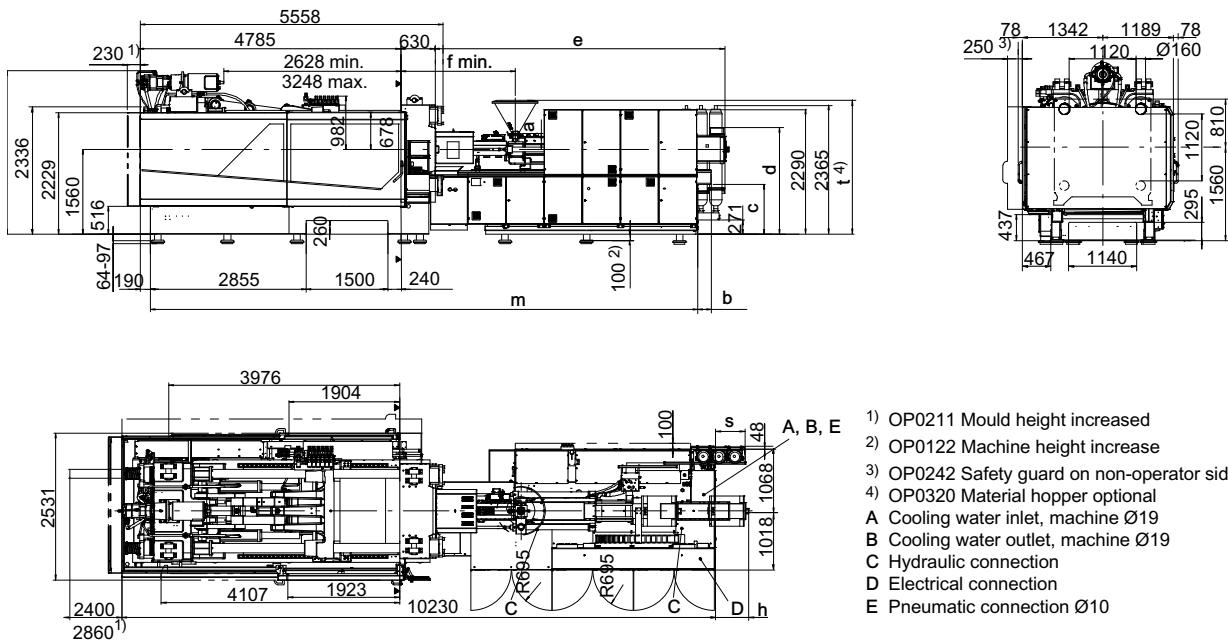
2) The max. nozzle stroke is valid for standard open nozzle (OP0650).

3) Pump standard OP0105 / Pump increased OP0106

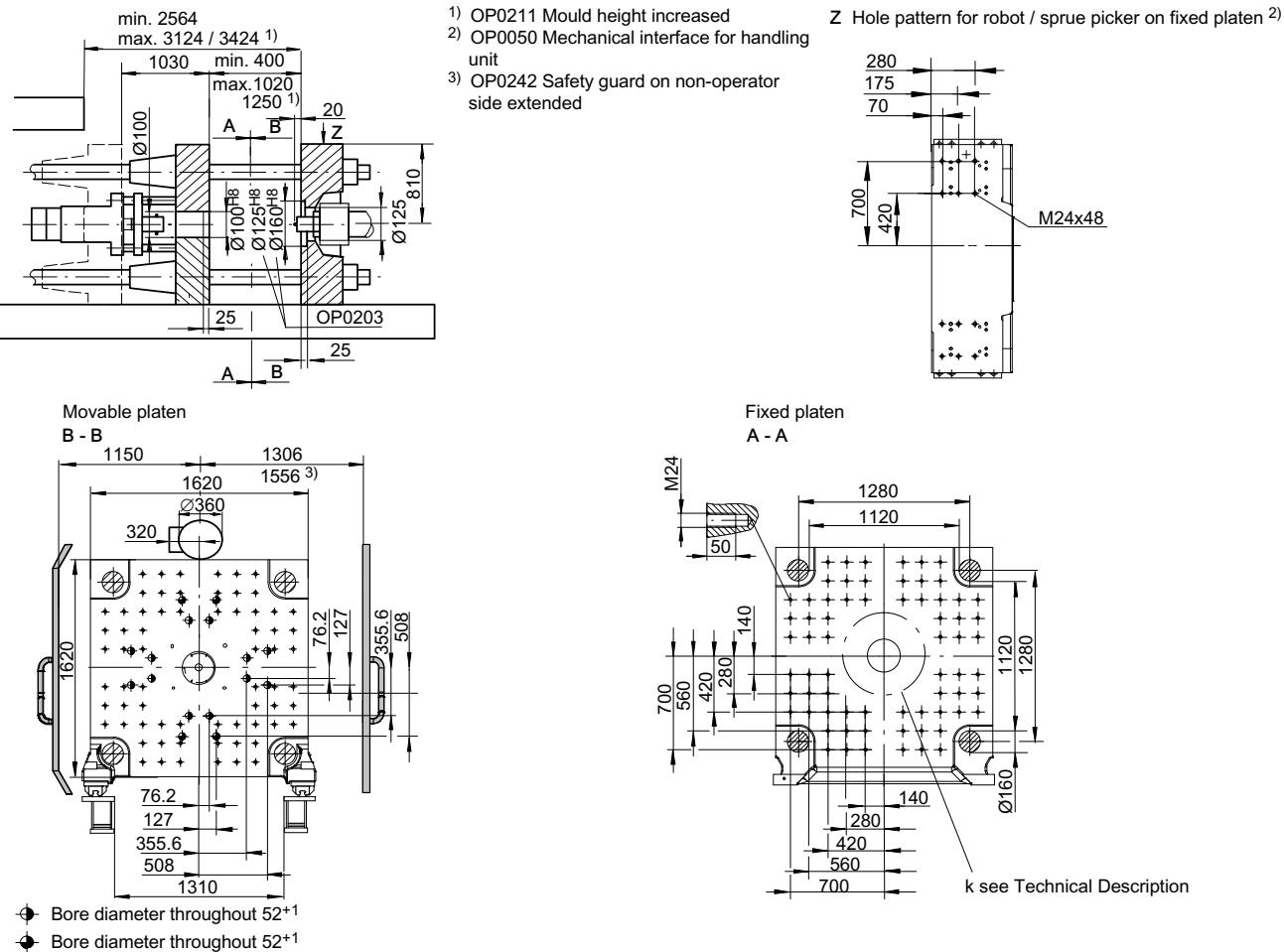
4) Machine weight for standard machine without hydraulic-oil, weight may vary depending on equipment. Injection unit / Clamping unit

These technical specifications are based on information that was correct at time of printing and is subject to change without notice. These parameters are based on a 400 V supply voltage. Other supply voltages will affect the machine parameters.

Machine dimensions El-Exis SP 750



Platen dimensions - Hole pattern according to EUROMAP (OP0204, OP0205) El-Exis SP 750



Sumitomo (SHI) Demag		Ei-Exis SP 750			
International size description		7500-4200		7500-6300	
Clamping unit		750 / 1120			
Clamping force / locking force, max. [kN]		7500 / 8250			
Mould opening stroke, max. [mm]		1030			
Mould height, min. / max.:					
>Standard OP0210	[mm]	400 / 1020			
>Increased OP0211	[mm]	400 / 1250			
Distance between tie bars (h x v)	[mm]	1120 / 1120			
Min. permissible mould diameter (k)	[mm]	700			
Mould weight / mov. / fixed, max. [kg]		14000 / 6500 / 10800			
Ejector stroke/force forw./force back.:					
>Standard OP0219	[mm / kN / kN]	270 / 218 / 113			
Injection unit		4200		6300	
Screw diameter	[mm]	80	95	95	110
L/D ratio OP0612 / OP0627		24	23	23	24
Injection pressure, max. (up to 400 °C) [bar]		2391	2094	2434	2006
Injection volume, max. [cm³]		1433	2020	2339	3136
Injection speed, max.:					
>Version accumulator OP0361	[mm/s]	900	800	800	700
Injection rate, max.:					
>Version accumulator OP0361	[cm³/s]	4524	5671	5671	6652
Plasticising rate, max. (PE): ¹⁾					
>Electr. screw drive OP0313	[g/s]	125	200	173	229
Nozzle stroke, max.: ²⁾					
>Manual mode	[mm]	1250	857	1390	853
>Automatic mode	[mm]	1250	857	1341	853
Nozzle sealing force / speed, max.:					
>Standard	[kN / mm/s]	110 / -	110 / -	110 / -	110 / -
General data		750/1120-4200		750/1120-6300	
Oil tank capacity	[l]	730		730	
Installed electrical rating:					
>Pump capacity single pump ³⁾	[kW]	55 / 75		55 / 75	
>Electr. screw drive OP0313	[kW]	90		115	
>Heating capacity of screw cylinder	[kW]	42,6	59,3	59,3	79,1
Dry cycle time (Euromap 6):					
>Standard	[s-mm]	2,00 - 784		2,00 - 784	
Net weight ⁴⁾	[kg]	38635 / 11400 - 50035		38635 / 12500 - 51135	
Motor end projection, max. (h):					
>Electr. screw drive OP0313	[mm]	0 / 292	0 / 667	0 / 204	0 / 644

¹⁾ Plasticising rate depends on processing conditions and the material used.

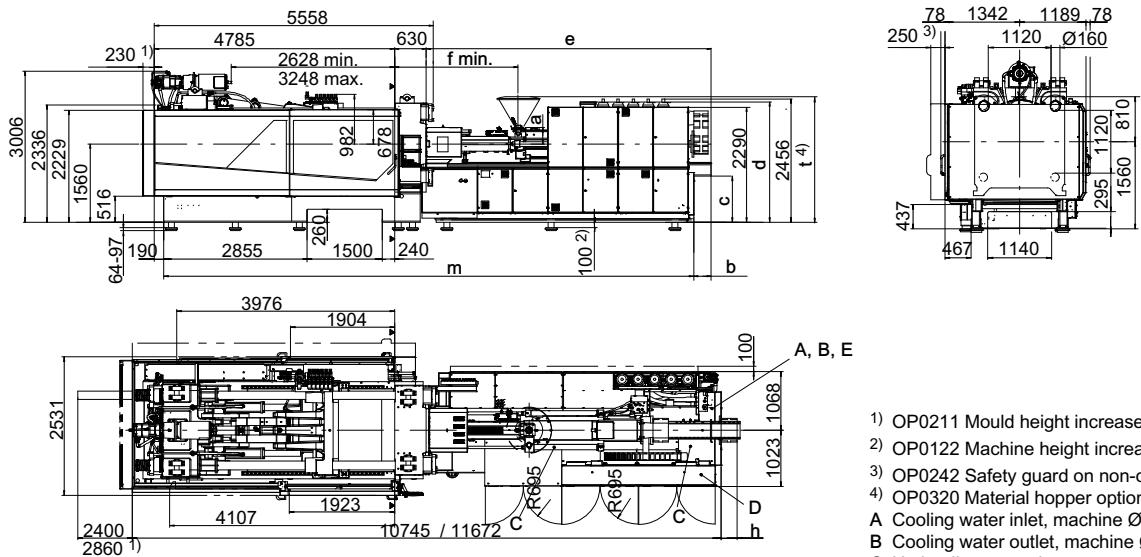
²⁾ The max. nozzle stroke is valid for standard open nozzle (OP0650).

³⁾ Pump standard OP0105 / Pump increased OP0106

⁴⁾ Machine weight for standard machine without hydraulic-oil, weight may vary depending on equipment. Injection unit / Clamping unit

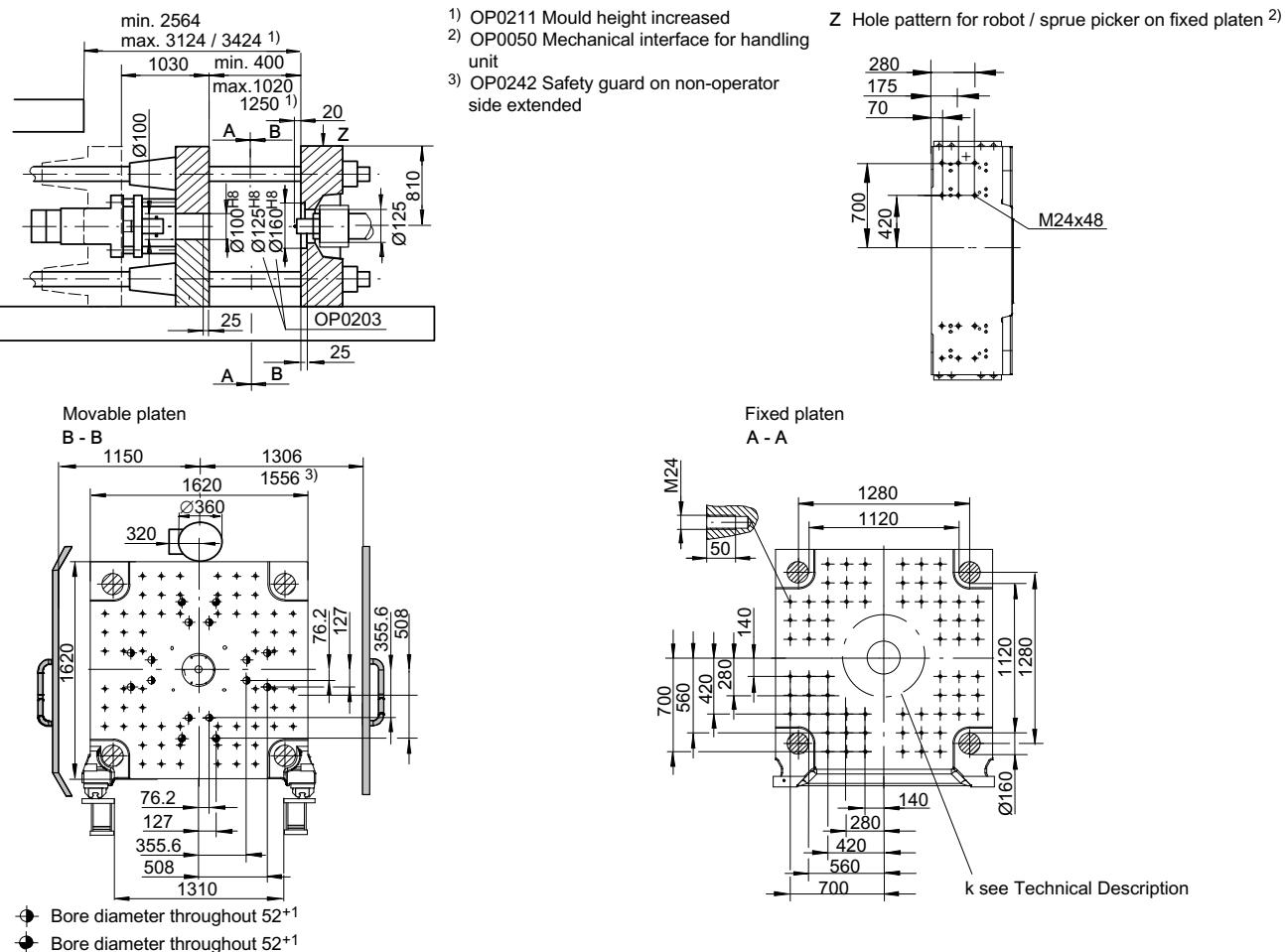
These technical specifications are based on information that was correct at time of printing and is subject to change without notice. These parameters are based on a 400 V supply voltage. Other supply voltages will affect the machine parameters.

Machine dimensions El-Exis SP 750



- 1) OP0211 Mould height increased
- 2) OP0122 Machine height increase
- 3) OP0242 Safety guard on non-operator side extended
- 4) OP0320 Material hopper optional
- A Cooling water inlet, machine Ø19
- B Cooling water outlet, machine Ø19
- C Hydraulic connection
- D Electrical connection
- E Pneumatic connection Ø10

Platen dimensions - Hole pattern according to EUROMAP (OP0204, OP0205) El-Exis SP 750



Sumitomo (SHI) Demag		El-Exis SP 1000			
International size description		10000-4200		10000-6300	
Clamping unit		1000 / 1195			
Clamping force / locking force, max. [kN]		10000 / 11000			
Mould opening stroke, max. [mm]		1250			
Mould height, min. / max.:					
>Standard OP0210	[mm]	550 / 1250			
>Increased OP0211	[mm]	600 / 1500			
Distance between tie bars (h x v)	[mm]	1195 / 1195			
Min. permissible mould diameter (k)	[mm]	700			
Mould weight / mov. / fixed, max. [kg]		14000 / 6500 / 10800			
Ejector stroke/force forw./force back.:					
>Standard OP0219	[mm / kN / kN]	270 / 218 / 113			
Injection unit		4200		6300	
Screw diameter	[mm]	80	95	95	110
L/D ratio OP0612 / OP0627		24	23	23	24
Injection pressure, max. (up to 400 °C) [bar]		2391	2094	2434	2006
Injection volume, max. [cm³]		1433	2020	2339	3136
Injection speed, max.:					
>Version accumulator OP0361	[mm/s]	900	800	800	700
Injection rate, max.:					
>Version accumulator OP0361	[cm³/s]	4524	5671	5671	6652
Plasticising rate, max. (PE): ¹⁾					
>Electr. screw drive OP0313	[g/s]	125	200	173	229
Nozzle stroke, max.: ²⁾					
>Manual mode	[mm]	1250	857	1390	853
>Automatic mode	[mm]	1250	857	1351	853
Nozzle sealing force / speed, max.:					
>Standard	[kN / mm/s]	110 / -	110 / -	110 / -	110 / -
General data		1000-4200		1000-6300	
Oil tank capacity	[l]	760		760	
Installed electrical rating:					
>Pump capacity single pump ³⁾	[kW]	55 / 75		55 / 75	
>Electr. screw drive OP0313	[kW]	90		115	
>Heating capacity of screw cylinder	[kW]	42,6	59,3	59,3	79,1
Dry cycle time (Euromap 6):					
>Standard	[s-mm]	2,73 - 838		2,73 - 838	
Net weight ⁴⁾	[kg]	56000 / 11400 - 67400		56000 / 12500 - 68500	
Motor end projection, max. (h):					
>Electr. screw drive OP0313	[mm]	0 / 292	0 / 667	0 / 204	0 / 644

1) Plasticising rate depends on processing conditions and the material used.

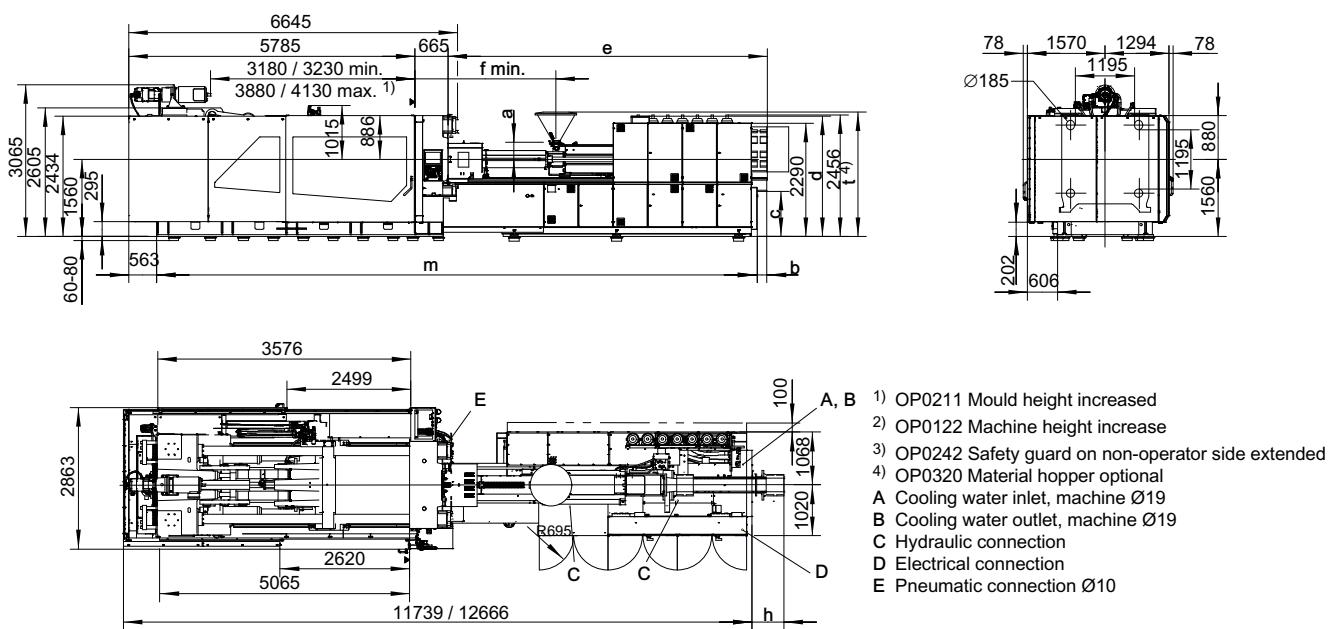
2) The max. nozzle stroke is valid for standard open nozzle (OP0650).

3) Pump standard OP0105 / Pump increased OP0106

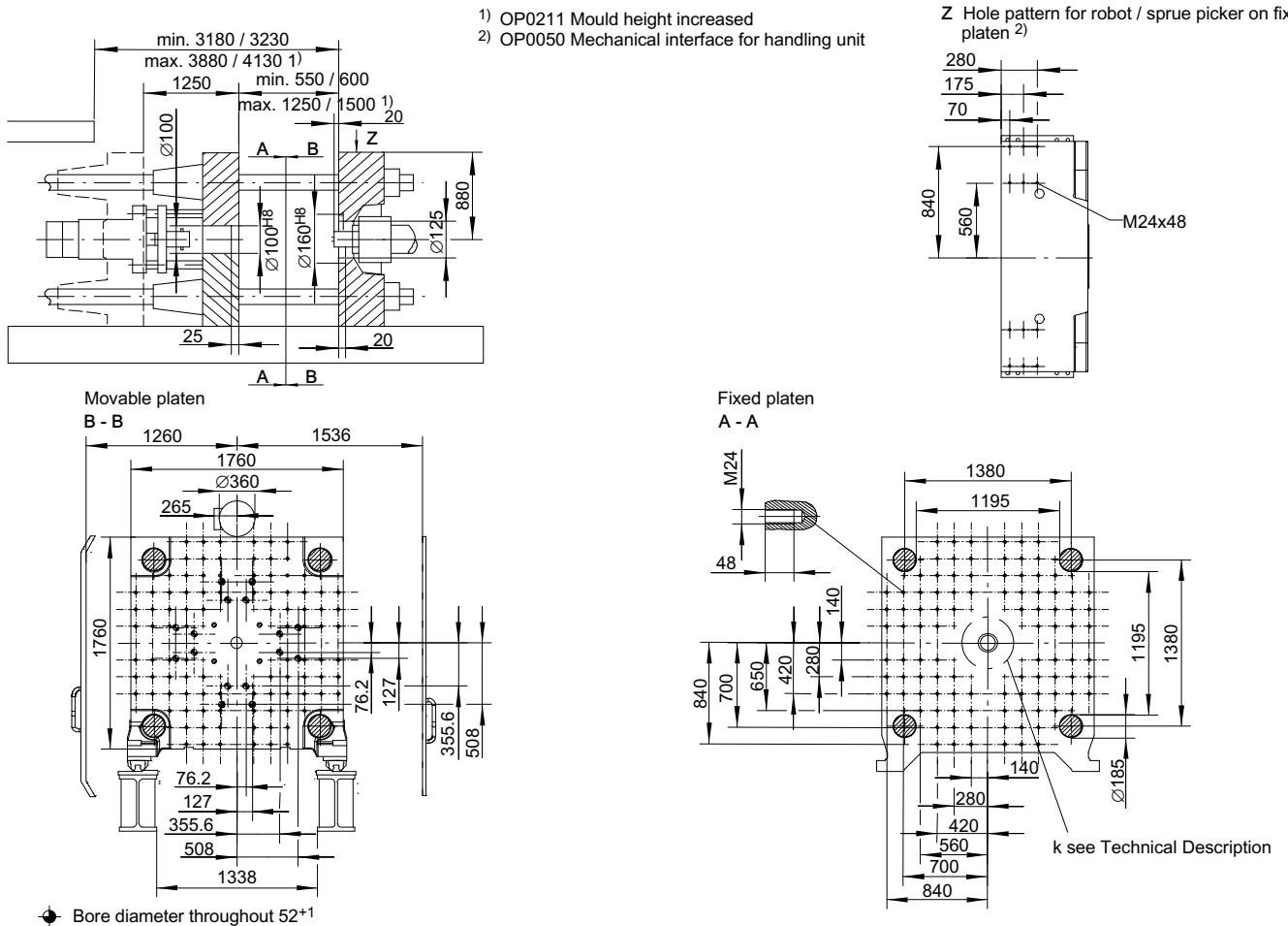
4) Machine weight for standard machine without hydraulic-oil, weight may vary depending on equipment. Injection unit / Clamping unit

These technical specifications are based on information that was correct at time of printing and is subject to change without notice. These parameters are based on a 400 V supply voltage. Other supply voltages will affect the machine parameters.

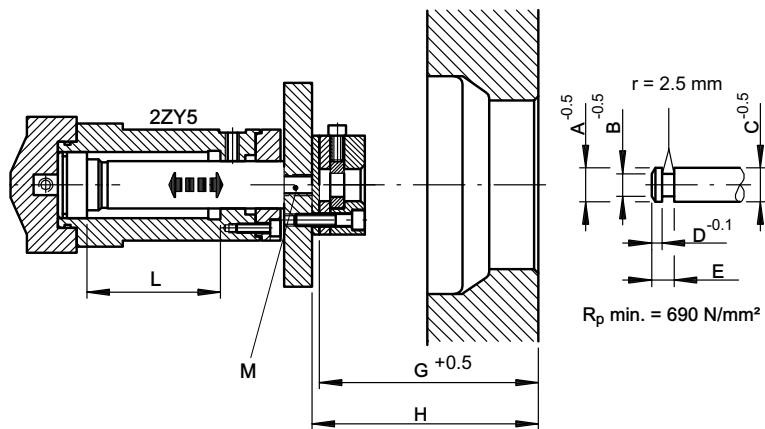
Machine dimensions El-Exis SP 1000



Platen dimensions - Hole pattern according to EUROMAP (OP0204, OP0205) El-Exis SP 1000



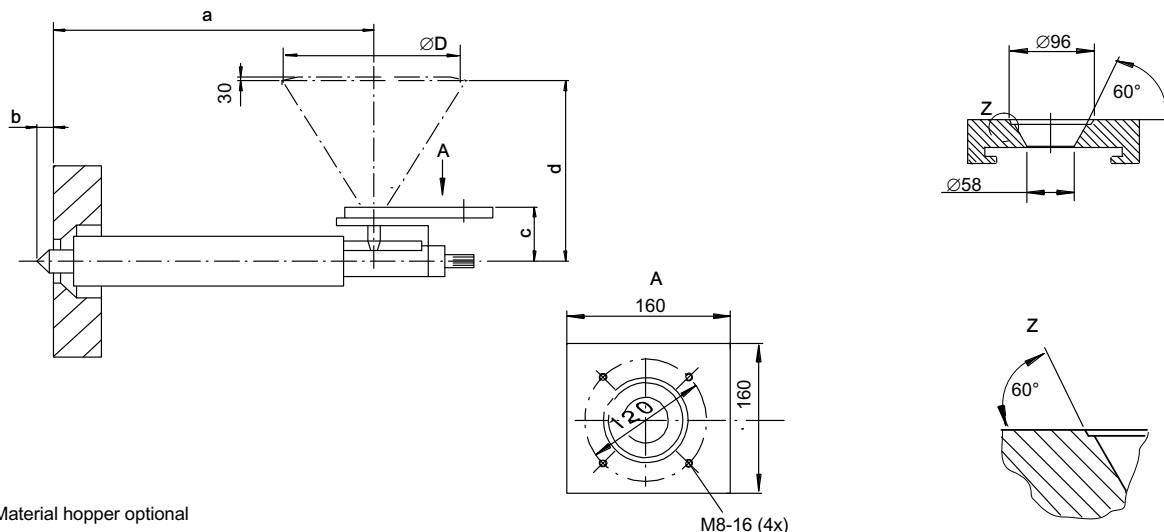
Ejector - dimensions EI-Exis SP



Machine type	Dimensions [mm]								
	A	B	C	D	E	G	H	L	M
EI-Exis SP 150	24.5	14	24.5	7.8	20	327	335	100	M16x30
EI-Exis SP 200	44.5	26	44.5	9.5	26	395	405	140	M20x35
EI-Exis SP 250	44.5	26	44.5	9.5	26	435	445	140	M20x35
EI-Exis SP 300	44.5	26	44.5	9.5	26	515	525	150	M20x35
EI-Exis SP 350	44.5	26	44.5	9.5	26	572	582	180	M24x50
EI-Exis SP 420	44.5	26	44.5	9.5	26	572	582	180	M24x50
EI-Exis SP 450	44.5	26	44.5	9.5	26	600	610	200	M24x50
EI-Exis SP 580	44.5	26	44.5	9.5	26	655 (645 *)	665 (655 *)	220 (200 *)	M24x50
EI-Exis SP 750	44.5	26	44.5	9.5	26	755.5	765	270 (200 *)	M24x50
EI-Exis SP 1000	44.5	26	44.5	9.5	26	762	772	270	M24x50

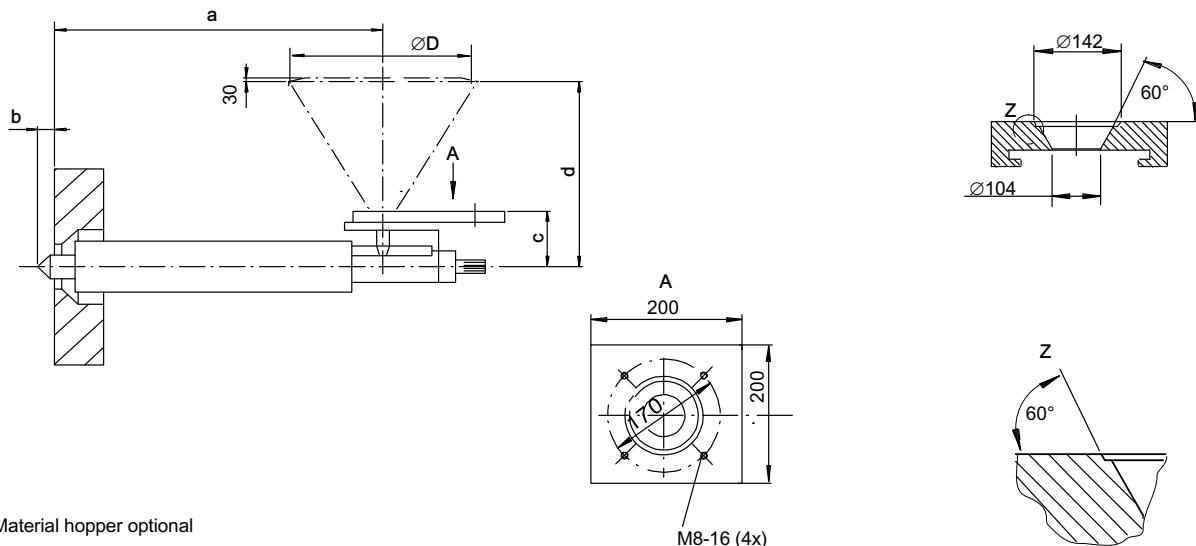
* >Force increased OP2192

Material Loading - dimensions EI-Exis SP EE 475..EE 2500



Machine type	Injection unit	Screw diameter [mm]	Dimensions [mm]				
			Standard		c	d	D
			a	b			
EI-Exis SP 150	475	35	1039	20	212	732	723
		40	1185	20			
EI-Exis SP 150	675	40	1185	20	212	732	723
EI-Exis SP 200		45	1338	20			
EI-Exis SP 150	920	45	1338	20	222	742	723
EI-Exis SP 200		50	1489	20			
EI-Exis SP 250		50	1489	20			
EI-Exis SP 300	1600	60	1770	20	257	877	825
EI-Exis SP 200		60	2064	20			
EI-Exis SP 250	2500	70	2064	20	287	907	825
EI-Exis SP 300							
EI-Exis SP 350							
EI-Exis SP 420							
EI-Exis SP 250							
EI-Exis SP 300							
EI-Exis SP 350							
EI-Exis SP 420							
EI-Exis SP 450							

Material Loading - dimensions EI-Exis SP EE 3000...EE 6300



OP0320 Material hopper optional

Machine type	Injection unit	Screw diameter [mm]	Dimensions [mm]				
			Standard		c	d	D
			a	b			
El-Exis SP 350	3000	70			292	872	825
El-Exis SP 420			1975	20			
El-Exis SP 450		80					
El-Exis SP 580			2332	20			
El-Exis SP 750							
El-Exis SP 350	4200	80			322	902	825
El-Exis SP 420			2332	20			
El-Exis SP 450		95					
El-Exis SP 580			2695	20			
El-Exis SP 750							
El-Exis SP 1000	6300	95			342	922	825
El-Exis SP 350			2695	20			
El-Exis SP 420		110					
El-Exis SP 450			3179	20			
El-Exis SP 580							
El-Exis SP 750		110					
El-Exis SP 1000							

El-Exis SP	a	b	c	d	e	f _{min}	m	s	t _{OP0320}
El-Exis SP 150/500-475	211	32	858	1628	-	987	4678	0	2085
El-Exis SP 150/500-675	211	32	858	1628	-	1099	4678	0	2085
El-Exis SP 150/500-920	211	32	858	1647	-	1241	4678	243	2095
El-Exis SP 200/560-675	211	0	0	1673	-	1168	5128	0	2130
El-Exis SP 200/560-920	211	336	903	1692	-	1251	5128	222	2140
El-Exis SP 200/560-1600	256	781	873	1692	-	1611	5128	222	2275
El-Exis SP 250/630-920	221	0	0	1727	-	1341	5858	222	2175
El-Exis SP 250/630-1600	256	420	908	1727	-	1591	5858	222	2309
El-Exis SP 250/630-2500	256	892	858	1803	-	1805	5858	492	2339
El-Exis SP 300/720-920	221	0	0	1772	-	1307	6108	236	2220
El-Exis SP 300/720-1600	256	432	953	1772	-	1566	6108	236	2354
El-Exis SP 300/720-2500	286	904	903	1848	-	1746	6108	506	2384
El-Exis SP 350/820-1600	256	0	0	1887	-	1562	7293	235	2469
El-Exis SP 350/820-2500	256	158	958	1963	-	1845	7293	506	2499
El-Exis SP 350/820-3000	292	247	916	1963	5319	2095	8972	504	2464
El-Exis SP 350/820-4200	322	347	916	2394	5677	2462	9487	-	2494
El-Exis SP 350/820-6300	342	205	916	2432	6462	2825	10414	-	2514
El-Exis SP 420/820-1600	256	0	0	1887	-	1562	7293	235	2469
El-Exis SP 420/820-2500	286	158	958	1963	-	1845	7293	506	2499
El-Exis SP 420/820-3000	292	247	916	1963	5319	2095	8972	504	2464
El-Exis SP 420/820-4200	322	347	916	2394	5677	2462	9487	-	2494
El-Exis SP 420/820-6300	342	205	916	2432	6462	2825	10414	-	2514
El-Exis SP 450/920-2500	286	0	0	1963	2466	1515	8257	504	4488
El-Exis SP 450/920-3000	292	247	916	1963	2431	2095	9097	504	5328
El-Exis SP 450/920-4200	322	347	916	2394	5737	2462	9612	-	2494
El-Exis SP 450/920-6300	342	205	916	2432	6522	2825	10539	-	2514
El-Exis SP 580/1020-3000	292	247	916	1963	5317	2095	9577	504	2464
El-Exis SP 580/1020-4200	322	347	916	2394	5675	2462	10092	-	2494
El-Exis SP 580/1020-6300	342	205	916	2432	6460	2825	11019	-	2514
El-Exis SP 750/1120-3000	292	247	916	1963	5319	2095	10040	504	2464
El-Exis SP 750/1120-4200	322	347	916	2394	5677	2462	10555	-	2494
El-Exis SP 750/1120-6300	342	205	916	2432	6462	2825	11482	-	2514
El-Exis SP 1000/1195-4200	322	347	916	2394	5677	2497	11176	-	2494
El-Exis SP 1000/1195-6300	342	205	916	2432	6462	2860	12103	-	2514

Practical values of melt correction factor for use in calculation of shot weight
for some common plastics.

Material	Melt correction factor
HD-PE	0,75
LD-PE	0,73
PP	0,73
PS	0,91
SB	0,91
ABS	0,91
SAN	0,91
PA	0,93
PA 6 +30 % GF	1,14
PC	0,97
PC/ABS	0,94
PMMA	0,97
POM	1,15
PET	1,08
PBT	1,08
CA	1,03
CAB	0,98
PVC-w	1,05
PVC-h	1,15

shot weight = melt correction factor x swept volume

The melt correction factor takes into account the change in volume at process temperature and also includes a factor for the flow characteristics of the shut off device on the end of the screw.

Certified according to VDA 6.4



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All data and information provided in this brochure has been compiled and checked with due care and diligence. We believe the contents of this brochure to be accurate, but cannot guarantee its accuracy. The description in this brochure may differ from the machine's actual condition upon delivery. 02.2020