

### 968 ZO BENCHMARK

Machine Type	968.250 ZO B750	968.400 ZO B750	968.560 ZO B750	968.700 ZO B850	968.1000 ZO B900
<b>Clamping system</b>	<b>fully hydraulic</b>	<b>fully hydraulic</b>	<b>fully hydraulic</b>	<b>fully hydraulic</b>	<b>fully hydraulic</b>
EUROMAP size indication 1.)	2500-3400	4000 - 7000	5600 – 10000	7000 – 16000	10000 – 16000
Injection unit - standard size	No. 3A	4A	5A	5A	5A
Injection unit - optional size	No. 2A and 4A	3A and 5A	4A and 6A	4A and 6A	4A and 6A
<b>Injection Unit - System: A - size:</b>	<b>No. 3A</b>	<b>4A</b>			
Injection piston diameter	mm 85   95	105   115	115   125	125   140	125   140
Injection pressure	bar 2160   1730	2150   1800	2060   1740	2070   1650	2070   1650
Injection volume	cm <sup>3</sup> 1600   2000	3300   4000	5000   6000	8000   10000	8000   10000
Piston stroke	mm 290	390	490	650	650
Injection force	kN 1227	1886	2100	2544	2544
Injection volume, calc., 1.)	cm <sup>3</sup> /s 127   159	190   230	205   245	205   260	205   260
Screw diameter	mm 45	55	65	75	75
Screw length	L : D 10:1	10:1	10:1	10:1	10:1
Screw speed	/min. 20 - 170	20 - 200	20 - 150	20 - 130	20 - 130
Screw, torque, max.	Nm 1260	1370	1940	2370	2370
Heating capacity temp. control	kW 2 x 4,5	2 x 4,5	3 x 4,5	3 x 4,5	3 x 4,5
Nozzle contact force	kN 75	75	75	118	118
Strip width	mm 65 x 8	60 x 10	70 x 12	80 x 15	80 x 15
<b>Clamping Unit</b>					
Clamping force	kN 2500 (2700) 2.)	4000 (4500) 2.)	5600 (6300) 2.)	7000 (8000) 2.)	10000 (11000) 2.)
Transfer force	kN 2500	4000	5600	7000	10000
Transfer stroke	mm fully hydraulic	fully hydraulic	fully hydraulic	fully hydraulic	fully hydraulic
Opening force	kN 65,5	93	94	128	128
Opening stroke	mm 500-800	500-830	500-910	600-1000	630-1030
Opening speed	mm/s 450	460	450	350	480
Closing speed	mm/s 650	650	450	350	480
Mould height, min. 4.)	mm 160	180	180	200	200
Space bet. heating pl., max. 1.), 4.)	mm 960	1010	1090	1200	1230
Clearance between tie bars	mm 510 x 680	603 x 830	683 x 950	781 x 1036	850 x 1134
Heating platen, standard	mm 560 x 630	670 x 780	810 x 980	900 x 1000	1000 x 1200
<b>Hydraulic core lifting device</b>					
Lifting force when hydr. lifting device fixed platen extends	kN 38	58	58	93	93
Lifting force when hydr. lifting device fixed platen retracts	kN 63	98	98	156	156
Lifting force when hydr. lifting device movable platen extends	kN 79	125	125	195	195
Lifting force when hydr. lifting device movable platen retracts	kN 49	76	76	115	115
Stroke hydr. lifting device fixed platen	mm 0 - 400	0 - 600	0 - 600	0 - 600	0 - 600
Stroke hydr. lifting device movable platen	mm 0 - 400	0 - 400	0 - 400	0 - 400	0 - 500
<b>General Data</b>					
Pump drive	bar 250 (265)	251 (283)	253 (285)	250 (283)	252 (277)
	l/min 65	103	103	103	143
	kW 22	30	30	30	45
Total connected load 5.)	kW 49	70	90	100	125
Machine dimension L x W x H, 1.)	mm 2845 x 1660 x 3440	3205 x 1740 x 3660	3510 x 1770 x 4010	4300 x 1850 x 5150	4380 x 2230 x 4870
Oil tank capacity	l 250	300/450	300/450	600	600
Weight with hydraulic oil, 1.)	kg 9600	14900/15900	19400/20400	27000	44000

Subject to technical modifications.

- \*1 Standard size
- \*2 Clamping force increase
- \*3 independent of mould height
- \*4 with standard heating platens
- \*5 depending on equipment

### 968 ZO

Machine Type	
<b>Clamping system</b>	
EUROMAP size indication 1.)	
Injection unit - standard size	No.
Injection unit - optional size	No.
<b>Injection Unit - System: A - size:</b>	<b>No.</b>
Injection piston diameter	mm
Injection pressure	bar
Injection volume	cm <sup>3</sup>
Piston stroke	mm
Injection force	kN
Injection volume, calc., 1.)	cm <sup>3</sup> /s
Screw diameter	mm
Screw length	L : D
Screw speed	/min.
Screw, torque, max.	Nm
Heating capacity temp. control	kW
Nozzle contact force	kN
Strip width	mm
<b>Clamping Unit</b>	
Clamping force	kN
Transfer force	kN
Transfer stroke	mm
Opening force	kN
Opening stroke	mm
Opening speed	mm/s
Closing speed	mm/s
Mould height, min. 4.)	mm
Space bet. heating pl., max. 1.), 4.)	mm
Clearance between tie bars	mm
Heating platen, standard	mm
<b>Hydraulic core lifting device</b>	
Lifting force when hydr. lifting device fixed platen extends	kN
Lifting force when hydr. lifting device fixed platen retracts	kN
Lifting force when hydr. lifting device movable platen extends	kN
Lifting force when hydr. lifting device movable platen retracts	kN
Stroke hydr. lifting device fixed platen	mm
Stroke hydr. lifting device movable platen	mm
<b>General Data</b>	
Pump drive	bar
	l/min
	kW
Total connected load 5.)	kW
Machine dimension L x W x H, 1.)	mm
Oil tank capacity	l
Weight with hydraulic oil, 1.)	kg

968.100 ZO	968.160 ZO	968.250 ZO
<b>fully hydraulic</b>	<b>fully hydraulic</b>	<b>fully hydraulic</b>
1000 - 850	1600 - 1700	2500 - 3400
1A	2A	3A
2A	1A and 3A	2A and 4A
<b>1A</b>	<b>2A</b>	<b>3A</b>
55   65	75   85	85   95
2390   1710	2150   1670	2160   1730
350   500	800   1000	1600   2000
150	180	290
567	950	1227
49   68	79   102	127   159
25	35	45
10:1	10:1	10:1
20 - 170	20 - 170	20 - 170
380	540	1260
1 x 4,5	2 x 4,5	2 x 4,5
47	47	75
43 x 6	50 x 7	65 x 8
1000 (1100) 2.)	1600 (1700) 2.)	2500 (2700) 2.)
1000	1600	2500
fully hydraulic	fully hydraulic	fully hydraulic
38	58	80
450	500	550
300	300	350
470	420	450
100	140	160
550	640	710
305 x 415	410 x 570	510 x 680
320 x 400	450 x 510	560 x 630
14,5	24,5	38
24,5	40,2	63
24,5	40,2	63
14,5	24,5	38
0 - 200	0 - 250	0 - 250
0 - 200	0 - 250	0 - 250
263 (289)	260 (276)	250 (265)
28	41	65
7,5	15	22
20	38	49
1950 x 1432 x 2925	2600 x 1560 x 3045	2550 x 1620 x 3430
100	150	180
4100	7000	9500

### 968 ZO Compact

968.250 ZO C	968.400 ZO C
<b>fully hydraulic</b>	<b>fully hydraulic</b>
2500 - 3400	4000 - 7000
3A	4A
2A and 4A	3A and 5A
<b>3A</b>	<b>4A</b>
75   85	105   115
2150   1670	2150   1800
800   1000	3300   4000
180	390
950	1886
79   102	190   230
35	55
10:1	10:1
20 - 170	20 - 200
540	1370
2 x 4,5	2 x 4,5
47	75
50 x 7	60 x 10
2500 (2700) 2.)	4000 (4500) 2.)
2500	4000
fully hydraulic	fully hydraulic
58	93
500	600
300	296
425	320
100	180
600	780
410 x 680	490 x 830
560 x 630	670 x 780
24,5	58
40,2	98
40,2	98
24,5	58
0 - 300	0 - 300
0 - 250	0 - 300
250	251 (283)
41	103
15	30
38	70
2440 x 1235 x 3330	3165 x 1410 x 3980
250	325
8840	13900

### 956 ZO C-Frame

Machine Type		956.025 ZO	956.050 ZO	956.100 ZO	956.160 ZO
<b>Clamping system</b>		<b>fully hydraulic</b>	<b>fully hydraulic</b>	<b>fully hydraulic</b>	<b>fully hydraulic</b>
EUROMAP size indication 1.)		250 - 200	500 - 510	1000 - 850	1600 - 1700
Injection unit - standard size	No.	1 C1	2 C1	3 C	4 C
Injection unit - optional size	No.	2 C1	1 C1 + 3 C	2 C1 + 4 C	3 C + 5 C
<b>Injection Unit - System: A - size:</b>		<b>1 C1</b>	<b>2 C1</b>	<b>3 C</b>	<b>4 C</b>
Injection piston diameter	mm	32   40	45   55	55   65	75   85
Injection pressure	bar	2420   1550	2350   1570	2900   2080	2150   1680
Injection volume	cm <sup>3</sup>	85   130	220   330	350   500	800   1000
Piston stroke	mm	105	140	150	180
Injection force	kN	195	373	691	951
Injection volume, calc., 1.)	cm <sup>3</sup> /s	48   75	50   74	40   56	54   70
Screw diameter	mm	25	35	25	35
Screw length	L : D	10	10	10	10
Screw speed	/min.	20 - 170	20 - 170	20 - 170	20 - 170
Screw, torque, max.	Nm	380	480	380	480
Heating capacity temp. control	kN	1 x 4,5	1 x 4,5	1 x 4,5	1 x 4,5
Strip width	mm	43 x 6	50 x 7	43 x 6	50 x 7
<b>Clamping Unit</b>					
Clamping force	kN	250	500	1000	1600
Transfer force	kN	250	500	1000	1600
Transfer stroke	mm	fully hydraulic	fully hydraulic	fully hydraulic	fully hydraulic
Opening force	kN	8	20	20	38,2
Opening stroke	mm	300	350	450	450
Opening speed	mm/s	120	110	110	305
Closing speed	mm/s	120	240	240	475
Mould height, min. 4.)	mm	100   70	130 (100)	100	140
Space bet. heating pl., max. 1.), 4.)	mm	400	480	550	590
Clearance between tie bars	mm	C-frame	C - frame	C - frame	C - frame
Heating platen, standard	mm	320 x 320	320 x 400	400 x 500	450 x 510
<b>Hydraulic core lifting device</b>					
Lifting force when hydr. lifting device fixed platen extends	kN	16	16	24,5	24,5
Lifting force when hydr. lifting device fixed platen retracts	kN	10	10	14,5	14,5
Lifting force when hydr. lifting device movable platen extends	kN	16	16	24,5	24,5
Lifting force when hydr. lifting device movable platen retracts	kN	10	10	14,5	14,5
Stroke hydr. lifting device fixed platen	mm	150	150	200	200
Stroke hydr. lifting device movable platen	mm	150	150	200	200
<b>General Data</b>					
Pump drive	bar	250	296	253	260
	l/min	47	28	28	28
	kW	7,5	7,5	7,5	7,5
Total connected load 5.)	kW	20	20	20	30
Machine dimension L x W x H, 1.)	mm	1410 x 1220 x 2850	1450 x 1550 x 3100	1550 x 2050 x 3500	2300 x 2300 x 4020
Oil tank capacity	l	180	180	230	300
Weight with hydraulic oil, 1.)	kg	2450	3000	8000	11500

Subject to technical modifications.

- \*1 Standard size
- \*2 Clamping force increase
- \*3 independent of mould height
- \*4 with standard heating platens
- \*5 depending on equipment

Machine Type		957.050 ZO HB
<b>Clamping system</b>		
EUROMAP size indication 1.)		
Injection unit - standard size	No.	2 C1
Injection unit - optional size	No.	1 C1 + 3 C
<b>Injection Unit - System: A - size:</b>		
Injection piston diameter	mm	45   55
Injection pressure	bar	2350   1570
Injection volume	cm <sup>3</sup>	220   330
Piston stroke	mm	140
Injection force	kN	373
Injection volume, calc., 1.)	cm <sup>3</sup> /s	50   74
Screw diameter	mm	35
Screw length	L : D	10:1
Screw speed	/min.	20 - 170
Screw, torque, max.	Nm	480
Heating capacity temp. control	kW	1 x 4,5
Strip width	mm	50 x 7
<b>Clamping Unit</b>		
Clamping force	kN	500
Transfer force	kN	500
Transfer stroke	mm	fully hydraulic
Opening force	kN	49
Opening stroke	mm	350
Opening speed	mm/s	238
Closing speed	mm/s	403
Mould height, min. 4.)	mm	130 (100)
Space bet. heating pl., max. 1.), 4.)	mm	480
Heating platen, standard	mm	320 x 400
<b>Hydraulic core lifting device</b>		
Lifting force when hydr. lifting device fixed platen extends	kN	16
Lifting force when hydr. lifting device fixed platen retracts	kN	10
Lifting force when hydr. lifting device movable platen extends	kN	16
Lifting force when hydr. lifting device movable platen retracts	kN	10
Stroke hydr. lifting device fixed platen	mm	150
Stroke hydr. lifting device movable platen	mm	150
<b>General Data</b>		
Pump drive	bar	250
	l/min	28
	kW	7,5
Total connected load 5.)	kW	20
Machine dimension L x W x H, 1.)	mm	1210 x 1775 x 3120
Oil tank capacity	l	220
Weight with hydraulic oil, 1.)	kg	4100

957.050 ZO	957.100 ZO
<b>fully hydraulic</b>	<b>fully hydraulic</b>
500 - 850	1000 - 850
3 K	3 K
-	-
3 K	3 K
55   65	55   65
2400   1720	2400   1720
350   500	350   500
150	150
569	569
49   68	49   68
35	35
10:1	10:1
20 - 170	20 - 170
380	380
1 x 4,5	1 x 4,5
50 x 7	50 x 7
500	1000
500	1000
fully hydraulic	fully hydraulic
22	30
300	450
245	185
182	182
150	200
450	650
320 x 400	450 x 510
16	24,5
10	14,5
16	24,5
10	14,5
150	200
150	200
250	250
28	28
7,5	7,5
20	20
1660 x 1165 x 3660	1300 x 2170 x 4050
220	220
4500	7800

- \*1 Standard size
- \*2 Clamping force increase
- \*3 independent of mould height
- \*4 with standard heating platens
- \*5 depending on equipment

Subject to technical modifications.

Machine Type	968.250 T	968.400 T	968.560 T	968.700 T	968.1000 T
<b>Clamping system</b>	<b>fully hydraulic</b>	<b>fully hydraulic</b>	<b>fully hydraulic</b>	<b>fully hydraulic</b>	<b>fully hydraulic</b>
EUROMAP size indication 1.)	2500 - 3400	4000 - 7000	5600 - 10000	7000 - 16000	10000 - 16000
Injection unit - standard size	No. 3B	No. 4B	No. 5B	No. 6B	No. 7B
Injection unit - optional size	No. 2B and 4B	No. 3B and 5B	No. 4B and 6B	No. 5B and 7B	No. 6B and 8B
<b>Injection Unit - System: A - size:</b>	<b>No. 3B</b>	<b>No. 4B</b>	<b>No. 5B</b>	<b>No. 6B</b>	<b>No. 7B</b>
Injection piston diameter	mm 85   95	mm 105   115	mm 115   125	mm 125   140	mm 150   160
Injection pressure	bar 2080   1660	bar 2070   1720	bar 2020   1710	bar 2060   1640	bar 2000   1760
Injection volume	cm <sup>3</sup> 1600   2000	cm <sup>3</sup> 3300   4000	cm <sup>3</sup> 5000   6000	cm <sup>3</sup> 8000   10000	cm <sup>3</sup> 12500   14200
Piston stroke	mm 290	mm 390	mm 490	mm 650	mm 710
Injection force	kN 1178	kN 1791	kN 2093	kN 2529	kN 3538
Injection volume, calc., 1.)	cm <sup>3</sup> /s 130   160	cm <sup>3</sup> /s 208   249	cm <sup>3</sup> /s 213   252	cm <sup>3</sup> /s 208   261	cm <sup>3</sup> /s 214   244
Screw diameter	mm 45	mm 55	mm 65	mm 75	mm 85
Screw length	L : D 10:1	L : D 10:1	L : D 10:1	L : D 10:1	L : D 10:1
Screw speed	/min. 20 - 170	/min. 20 - 170	/min. 20 - 170	/min. 20 - 170	/min. 20 - 170
Screw, torque, max.	Nm 1370	Nm 1370	Nm 1940	Nm 2370	Nm 4480
Heating capacity temp. control	kW 2 x 4,5	kW 2 x 4,5	kW 3 x 4,5	kW 3 x 4,5	kW 3 x 4,5
Nozzle contact force	kN 93	kN 153	kN 153	kN 128	kN 200
Strip width	mm 65 x 8	mm 65 x 10	mm 75 x 12	mm 85 x 15	mm 95 x 18
<b>Clamping Unit</b>					
Clamping force	kN 2500 (2700) 2.)	kN 4000 (4500) 2.)	kN 5600 (6300) 2.)	kN 7000 (8000) 2.)	kN 10000 (11000) 2.)
Transfer force	kN 2500	kN 4000	kN 5600	kN 7000	kN 10000
Transfer stroke	mm fully hydraulic	mm fully hydraulic	mm fully hydraulic	mm fully hydraulic	mm fully hydraulic
Opening force	kN 40 (98)	kN 63 (166)	kN 123 (251)	kN 192 (392)	kN 192 (392)
Opening stroke	mm 600	mm 700	mm 800	mm 900	mm 900
Opening speed	mm/s 684	mm/s 683	mm/s 350	mm/s 225	mm/s 480
Closing speed	mm/s 474	mm/s 416	mm/s 335	mm/s 215	mm/s 480
Mould height, min. 4.)	mm 160	mm 180	mm 180	mm 200	mm 200
Space bet. heating pl., max. 1.), 4.)	mm 760	mm 880	mm 980	mm 1100	mm 1230
Clearance between tie bars	mm 510 x 680	mm 603 x 830	mm 683 x 950	mm 781 x 1036	mm 850 x 1134
Heating platen, standard	mm 560 x 630	mm 670 x 780	mm 810 x 980	mm 900 x 1000	mm 1000 x 1200
<b>Hydraulic core lifting device</b>					
Lifting force when hydr. lifting device fixed platen extends	kN 63	kN 98	kN 98	kN 156	kN 156
Lifting force when hydr. lifting device fixed platen retracts	kN 38	kN 58	kN 58	kN 93	kN 93
Lifting force when hydr. lifting device movable platen extends	kN 38	kN 58	kN 58	kN 93	kN 93
Lifting force when hydr. lifting device movable platen retracts	kN 63	kN 98	kN 98	kN 156	kN 156
Stroke hydr. lifting device fixed platen	mm 0 - 400	mm 0 - 600	mm 0 - 600	mm 0 - 600	mm 0 - 600
Stroke hydr. lifting device movable platen	mm 0 - 400	mm 0 - 400	mm 0 - 400	mm 0 - 400	mm 0 - 500
<b>General Data</b>					
Pump drive	bar 250 (265)	bar 252 (284)	bar 245 (275)	bar 250 (283)	bar 252 (277)
	l/min 65	l/min 103	l/min 103	l/min 103	l/min 146
	kW 22	kW 30	kW 30	kW 30	kW 45
Total connected load 5.)	kW 49	kW 70	kW 90	kW 100	kW 125
Machine dimension L x W x H, 1.)	mm 4970 x 1765 x 3365	mm 5665 x 1965 x 3910	mm 6000 x 1940 x 4055	mm 6800 x 2140 x 4595	mm 7005 x 2230 x 4695
Oil tank capacity	l 300 + 130	l 450 + 160	l 450 + 260	l 450 + 160	l 600
Weight with hydraulic oil, 1.)	kg 11000	kg 18000	kg 23000	kg 34000	kg 42000

- \*1 Standard size
- \*2 Clamping force increase
- \*3 independent of mould height
- \*4 with standard heating platens
- \*5 depending on equipment

Subject to technical modifications.

Machine Type	969.100 Z (S1)	969.160 Z (S1)	969.250 Z	969.300 Sealmaster	969.400 Sealmaster
<b>Clamping system</b>	fully hydraulic	fully hydraulic	fully hydraulic	fully hydraulic	fully hydraulic
<b>Tie bar arrangement</b>	square	rectangular	square	square	square
EUROMAP size indication 1.)	1000 - 850	1600 - 1700	2500 - 3400	3000 - 1700	4000 - 1700
Injection unit - standard size	No. 1B	No. 2B	No. 3B	No. 1B	No. 2B
Injection unit - optional sizeNr.	No. 0B and 2B	No. 1B and 3B	No. 2B and 4B	No. 2B and 2B HP	No. 1B and 3B
<b>Injection Unit - System: A - size:</b>	No. 1B	No. 2B	No. 3B	No. 1B	No. 2B
Injection piston diameter	mm 55   65	mm 75   85	mm 85   95	mm 55   65	mm 75   85
Injection pressure	bar 2200   1550	bar 2200   1700	bar 2000   1660	bar 2200   1580	bar 2200   1700
Injection volume	cm <sup>3</sup> 350   500	cm <sup>3</sup> 800   1000	cm <sup>3</sup> 1600   2000	cm <sup>3</sup> 350   500	cm <sup>3</sup> 800   1000
Piston stroke	mm 150	mm 180	mm 290	mm 150	mm 180
Injection force	kN 523	kN 951	kN 1178	kN 523	kN 951
Injection volume, calc., 1.)	cm <sup>3</sup> /s 52   74	cm <sup>3</sup> /s 79   100	cm <sup>3</sup> /s 132   165	cm <sup>3</sup> /s 78   108	cm <sup>3</sup> /s 100   129
Screw diameter	mm 25	mm 35	mm 45	mm 25	mm 35
Screw length	L : D 10:1	10:1	10:1	10:1	10:1
Screw speed	/min. 20 - 170	20 - 170	20 - 170	20 - 170	20 - 170
Screw, torque, max.	Nm 380	Nm 480	Nm 1370	Nm 380	Nm 480
Heating capacity temp. control	kW 1 x 4,5	kW 2 x 4,5	kW 2 x 4,5	kW 1 x 4,5	kW 2 x 4,5
Nozzle contact force	kN 58	kN 58	kN 93	kN 58	kN 58
Strip width	mm 40 x 6	mm 45 x 7	mm 45 x 6	mm 40 x 6	mm 45 x 7
<b>Clamping Unit</b>					
Clamping force	kN 1000 (1100) 2.)	kN 1600 (1700) 2.)	kN 2500 (2700) 2.)	kN 3000	kN 4000
Transfer force	kN 1000	kN 1600	kN 2500	kN 3000	kN 4000
Transfer stroke	mm fully hydraulic	mm fully hydraulic	mm fully hydraulic	mm fully hydraulic	mm fully hydraulic
Opening force	kN 38	kN 58	kN 78,5	kN 47,2	kN 55,9
Opening stroke	mm 450	mm 500	mm 600	mm 500	mm 700
Opening speed	mm/s 300	mm/s 300	mm/s 350	mm/s 300	mm/s 600
Closing speed	mm/s 470	mm/s 420	mm/s 450	mm/s 420	mm/s 600
Mould height, min. 4.)	mm 100	mm 140	mm 160	mm 130	mm 180
Space bet. heating pl., max. 1.), 4.)	mm 550	mm 640	mm 760	mm 630	mm 880
Clearance between tie bars	mm 410 x 410	mm 410 x 570	mm 580 x 580	mm 480 x 480	mm 565 x 565
Heating platen, standard	mm 320 x 400	mm 450 x 510	mm 560 x 630	mm 570 x 570	mm 670 x 670
<b>Hydraulic core lifting device</b>					
Lifting force when hydr. lifting device fixed platen extends	kN 15,5	kN 24,5	kN 63	kN 24,5	kN 40
Lifting force when hydr. lifting device fixed platen retracts	kN 10	kN 14,5	kN 38	kN 14,5	kN 24,5
Lifting force when hydr. lifting device movable platen extends	kN 15,5	kN 24,5	kN 63	kN 24,5	kN 40
Lifting force when hydr. lifting device movable platen retracts	kN 10	kN 14,5	kN 38	kN 14,5	kN 24,5
Stroke hydr. lifting device fixed platen	mm 0 - 300	mm 0 - 350	mm 0 - 400	mm 0 - 350	mm 0 - 400
Stroke hydr. lifting device movable platen	mm 0 - 300	mm 0 - 350	mm 0 - 400	mm 0 - 350	mm 0 - 400
<b>Central ejector</b>					
Lifting force	kN 20,1	kN 49	kN 49	kN 49	kN 49
Stroke	mm 60	mm 80	mm 80	mm 80	mm 80
<b>General Data</b>					
Pump dive	bar 250	bar 260 (276)	bar 250 (265)	bar 279	bar 287
	l/min 28	l/min 41	l/min 65	l/min 41	l/min 103
	kW 7,5	kW 15	kW 22	kW 15	kW 30
Total connected load 5.)	kW 20	kW 38	kW 49	kW 38	kW 50
Machine dimension L x W x H, 1.)	mm 3970 x 1325 x 2135	mm 4950 x 1560 x 2900	mm 5650 x 1660 x 2530	mm 4570 x 1460 x 2390	mm 5265 x 1775 x 2590
Oil tank capacity	l 100	l 150	l 180	l 150	l 300
Weight with hydraulic oil, 1.)	kg 5550	kg 7770	kg 12450	kg 7620	kg 19000

\*1 Standard size

\*2 Clamping force increase

\*3 independent of mould height

\*4 with standard heating platens

\*5 depending on equipment

Subject to technical modifications.

Machine Type	969.400 Z (S1)	969.560 Z (S1)	969.700 Z (S1)	969.1000 Z
<b>Clamping system</b>	<b>fully hydraulic</b>	<b>fully hydraulic</b>	<b>fully hydraulic</b>	<b>fully hydraulic</b>
<b>Tie bar arrangement</b>	<b>square</b>	<b>square</b>	<b>square</b>	<b>square</b>
EUROMAP size indication 1.)	4000 - 7000	5600 - 10000	7000 - 16000	10000 - 16000
Injection unit - standard size	No. 4B	No. 5B	No. 6B	No. 6B
Injection unit - optional sizeNr.	No. 3B and 5B	No. 4B and 6B	No. 5B and 7B	No. 5B and 7B
<b>Injection Unit - System: A - size:</b>	<b>No. 4B</b>	<b>No. 5B</b>	<b>No. 6B</b>	<b>No. 6B</b>
Injection piston diameter	mm 105   115	mm 115   125	mm 125   140	mm 125   140
Injection pressure	bar 2000   1700	bar 2000   1700	bar 2000   1640	bar 2000   1640
Injection volume	cm <sup>3</sup> 3300   4000	cm <sup>3</sup> 5000   6000	cm <sup>3</sup> 8000   10000	cm <sup>3</sup> 8000   10000
Piston stroke	mm 390	mm 490	mm 650	mm 650
Injection force	kN 1790	kN 2093	kN 2529	kN 2529
Injection volume, calc., 1.)	cm <sup>3</sup> /s 208   250	cm <sup>3</sup> /s 213   252	cm <sup>3</sup> /s 205   260	cm <sup>3</sup> /s 295   370
Screw diameter	mm 55	mm 65	mm 75	mm 75
Screw length	L : D 10:1	L : D 10:1	L : D 10:1	L : D 10:1
Screw speed	/min. 20 - 170	/min. 20 - 170	/min. 20 - 170	/min. 20 - 170
Screw, torque, max.	Nm 1370	Nm 1940	Nm 2370	Nm 2370
Heating capacity temp. control	kW 2 x 4,5	kW 3 x 4,5	kW 3 x 4,5	kW 3 x 4,5
Injection unit contact force	kN 153	kN 153	kN 128	kN 128
Strip width	mm 60 x 10	mm 70 x 12	mm 80 x 15	mm 80 x 15
<b>Clamping Unit</b>				
Clamping force	kN 4000 (4500) 2.)	kN 5600 (6300) 2.)	kN 7000 (8000) 2.)	kN 10000 (11000) 2.)
Transfer force	kN 4000	kN 5600	kN 7000	kN 1000
Transfer stroke	mm fully hydraulic	mm fully hydraulic	mm fully hydraulic	mm fully hydraulic
Opening force	kN 103	kN 94	kN 128	kN 200
Opening stroke	mm 700	mm 800	mm 900	mm 900
Opening speed	mm/s 450	mm/s 450	mm/s 350	mm/s 480
Closing speed	mm/s 650	mm/s 450	mm/s 350	mm/s 480
Mould height, min. 4.)	mm 180	mm 180	mm 200	mm 200
Space bet. heating pl., max. 1.), 4.)	mm 880	mm 980	mm 1100	mm 1100
Clearance between tie bars	mm 730 x 730	mm 820 x 820	mm 930 x 930	mm 1150 x 1150
Heating platen, standard	mm 670 x 780	mm 810 x 980	mm 900 x 1000	mm 1000 x 1200
<b>Hydraulic core lifting device</b>				
Lifting force when hydr. lifting device fixed platen extends	kN 63	kN 63	kN 63	kN 125,5
Lifting force when hydr. lifting device fixed platen retracts	kN 38	kN 38	kN 38	kN 76,5
Lifting force when hydr. lifting device movable platen extends	kN 63	kN 63	kN 63	kN 125,5
Lifting force when hydr. lifting device movable platen retracts	kN 38	kN 38	kN 38	kN 76,5
Stroke hydr. lifting device fixed platen	mm 0 - 400	mm 0 - 550	mm 0 - 550	mm 0 - 550
Stroke hydr. lifting device movable platen	mm 0 - 400	mm 0 - 550	mm 0 - 550	mm 0 - 550
<b>Central ejector</b>				
Lifting force	kN 49	kN 49	kN 78	kN 78
Stroke	mm 80	mm 80	mm 100	mm 100
<b>General Data</b>				
Pump drive	bar - l/min - kW 251 (283) - 103 - 30	bar - l/min - kW 250 - 103 - 30	bar - l/min - kW 250 (283) - 103 - 30	bar - l/min - kW 250 - 146 - 45
Total connected load 5.)	kW 70	kW 90	kW 100	kW 125
Machine dimension L x W x H, 1.)	mm 6250 x 1850 x 2830	mm 6700 x 1800 x 2960	mm 8530 x 1950 x 3100	mm 9500 x 1950 x 2700
Oil tank capacity	l 300	l 300	l 300	l 450
Weight with hydraulic oil, 1.)	kg 21700	kg 27000	kg 32500	kg 40000

Subject to technical modifications.

- \*1 Standard size
- \*2 Clamping force increase
- \*3 independent of mould height
- \*4 with standard heating platens
- \*5 depending on equipment



## The experts in rubber and silicone moulding

We are a globally active mechanical engineering enterprise for innovative and resource-friendly turnkey system solutions for the production of rubber and silicone moulded articles.

With our injection moulding machines, moulds and automation systems, we produce demanding products that seal up, dampen, connect, fix, insulate and protect.

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