

1.1. TECHNICAL INFORMATION

MACHINE TYPE		PENTA 65/185 EXPORT		PENTA 65/185 SUPER	
INJECTION	SCREW	A	B	A	B
Screw diameter	mm in	34 1.34	38 1.50	34 1.34	38 1.50
* Shot volume (theoretical)	cm ³ cu.in	155 9.46	196 11.96	155 9.46	196 11.96
* Shot weight (polystyrene)	g oz	145 5.12	185 6.53	145 5.12	185 6.53
** Plasticizing capacity	kg/h lbs/h	72 159	85 187	78(130●) 172(287●)	92(155●) 203(342●)
* Dry cycles per minute	n.	52		60	
Max. injection rate (per second)	cm ³ cu.in	65 3.97	81 4.94	110 6.71	140 8.54
Max. injection pressure	kg/cm ² p.s.i.	2000 28447	1600 22757	2000 28447	1600 22757
Screw diameter ratio	L/D	22	20	22	20
Screw speed	rpm	0 ÷ 350		0 ÷ 410(680●)	
Hopper capacity	liters U.S.gal.	38 10.04		38 10.04	
MOULD CLAMP					
Clamping force	ton	65		65	
Moving platen stroke	mm in	160 ÷ 315 6.3 ÷ 12.4		160 ÷ 315 6.3 ÷ 12.4	
Platen dimensions	mm in	480 x 480 18.9 x 18.9		480 x 480 18.9 x 18.9	
Distance between tie-bars	mm in	315 x 315 12.4 x 12.4		315 x 315 12.4 x 12.4	
* Max. projected moulding area	cm ² sq.in	260 40.30		260 40.30	
Max. mould dimensions	mm in	313 x 480 12.32 x 18.9		313 x 480 12.32 x 18.9	
Hydraulic ejector stroke	mm in	105 4.13		105 4.13	
Max. daylight between platens	mm in	665 26.18		665 26.18	
Min. and max. mould height	mm in	120 ÷ 350 4.72 ÷ 13.78		120 ÷ 350 4.72 ÷ 13.78	
GENERAL					
Electric heater	kW	5,25 (9□)		9□	
Motor power	HP kW	15 11		20 14.72	
Oil tank capacity	liters U.S.gal.	180 47.55		180 47.55	
Dimensions: length - width - height	m in	4,40 x 1,28 x 1,81 173.23 x 50.39 x 71.26		4,40 x 1,28 x 1,81 173.23 x 50.39 x 71.26	
Machine weight	kg in	3500 7716		3550 7826	

* The injection capacity, cycles and max. projected moulding area depend on the type of materials used and the mould design.

** Plasticizing capacity calculated on the basis of continuous rotation of the screw.

PENTA 95/250 EXPORT		PENTA 95/250 SUPER		PENTA 135/355 EXPORT		PENTA 135/355 SUPER	
A	B	A	B	A	B	A	B
38 1.50	42 1.65	38 1.50	42 1.65	42 1.65	48 1.89	42 1.65	48 1.89
216 13.18	267 16.29	216 13.18	267 16.29	291 17.76	380 23.19	291 17.76	380 23.19
202 7.13	250 8.82	202 7.13	250 8.82	272 9.59	355 12.52	272 9.59	355 12.52
70 154	85 187	70(105•) 154(231•)	85(125•) 187(276•)	100 200	125 276	120(160•) 265(353•)	140(185•) 309(408•)
50		50		38		45	
76 4.64	92 5.61	150 9.15	180 10.98	117 7.14	153 9.34	196 11.96	256 15.62
1950 27736	1600 22757	1950 27736	1600 22757	1950 27736	1475 20979	1950 27736	1475 20979
22	20	22	20	22	19	22	19
0 - 275		0 - 330(530•)		0 - 315		0 - 375(535•)	
54 14.27		54 14.27		65 17.17		65 17.17	
95		95		135		135	
185 + 370 7.28 + 14.57		185 + 370 7.28 + 14.57		210 + 420 8.27 + 16.53		210 + 420 8.27 + 16.53	
540 × 540 21.26 × 21.26		540 × 540 21.26 × 21.26		650 × 605 23.82 × 23.82		605 × 605 23.82 × 23.82	
365 × 365 14.37 × 14.37		365 × 365 14.37 × 14.37		400 × 400 15.75 × 15.75		400 × 400 15.75 × 15.75	
380 58.90		380 58.90		540 83.70		540 83.70	
363 × 540 14.29 × 21.26		363 × 540 14.29 × 21.26		398 × 605 15.67 × 23.82		398 × 605 15.67 × 23.82	
130 5.12		130 5.12		150 5.9		150 5.9	
770 30.31		770 30.31		895 35.24		895 35.24	
140 + 400 5.51 + 15.75		140 + 400 5.51 + 15.75		175 + 475 6.89 + 18.70		175 + 475 6.89 + 18.70	
6,9 (12□)		12□		9,9 (16,5□)		16,5□	
20 14.7		25 18.4		25 18.5		30 22	
220 58.12		220 58.12		270 71.33		270 71.33	
5,12 × 1,39 × 2,03 201.57 × 54.72 × 80		5,12 × 1,39 × 2,03 201.57 × 54.72 × 80		5,77 × 1,62 × 2,1 227.17 × 63.78 × 82.7		5,77 × 1,62 × 2,1 227.17 × 63.78 × 82.7	
4020 8863		4270 9414		5200 11464		5450 12015	

• Capacity and speed of screw obtained with hydraulic motor driven by two pumps.

•• Capacity and speed of screw obtained with hydraulic motor driven by three pumps.

□ Ceramic heater bands.

MACHINE TYPE		PENTA 195/555 EXPORT		PENTA 195/555 SUPER	
INJECTION	SCREW	A	B	A	B
Screw diameter	mm in	48 1.89	56 2.18	48 1.89	56 2.18
* Shot volume (theoretical)	cm ³ cu.in	434 26.48	591 36.07	434 26.48	591 36.07
* Shot weight (polystyrene)	g oz	406 14.32	555 19.58	406 14.32	555 19.58
** Plasticizing capacity	kg/h lbs/h	120 265	165 363	135(185•) 298(408•)	190(250•) 419(551•)
* Dry cycles per minute	n.	30		36	
Max. injection rate (per second)	cm ³ cu.in	140 8.54	190 11.59	226 13.79	308 18.80
Max. injection pressure	kg/cm ² p.s.i.	1950 27736	1450 20624	1950 27736	1450 20624
Screw diameter ratio	L/D	22	19	22	19
Screw speed	rpm	0 ÷ 250		0 ÷ 290(410•)	
Hopper capacity	liters U.S.gal.	90 23.78		90 23.78	
MOULD CLAMP					
Clamping force	ton	195		195	
Moving platen stroke	mm in	235 ÷ 470 9.25 ÷ 18.50		235 ÷ 470 9.25 ÷ 18.50	
Platen dimensions	mm in	700 x 700 27.56 x 27.56		700 x 700 27.56 x 27.56	
Distance between tie-bars	mm in	465 x 465 18.31 x 18.31		465 x 465 18.31 x 18.31	
* Max. projected moulding area	cm ² sq.in	780 12.90		780 120.90	
Max. mould dimensions	mm in	463 x 700 18.23 x 27.56		463 x 700 18.23 x 27.56	
Hydraulic ejector stroke	mm in	175 6.89		175 6.89	
Max. daylight between platens	mm in	1020 40.16		1020 40.16	
Min. and max. mould height	mm in	190 ÷ 550 7.48 ÷ 21.65		190 ÷ 550 7.48 ÷ 21.65	
GENERAL					
Electric heater	kW	11,4 (20,4□)		20,4□	
Motor power	HP kW	30 22		40 29.5	
Oil tank capacity	liters U.S.gal.	370 97.74		370 97.74	
Dimensions: length - width - height	m in	6,51 x 1,71 x 2,15 256.30 x 67.32 x 84.65		6,51 x 1,71 x 2,15 256.30 x 67.32 x 84.65	
Machine weight	kg in	7200 15873		7500 16535	

* The injection capacity, cycles and max. projected moulding area depend on the type of materials used and the mould design.

** Plasticizing capacity calculated on the basis of continuous rotation of the screw.

PENTA 270/870 EXPORT		PENTA 270/870 SUPER		PENTA 395/1380 EXPORT		PENTA 395/1380 SUPER	
A	B	A	B	A	B	A	B
56 2.20	65 2.56	56 2.20	65 2.56	65 2.56	76 2.99	65 2.56	76 2.99
689 42.05	930 56.75	689 42.05	930 56.75	1078 65.78	1474 89.95	1078 65.78	1474 89.95
645 22.75	870 30.69	645 22.75	870 30.69	1010 35.63	1380 48.68	1010 35.63	1380 48.68
130 287	160 353	150(220•) 331(485•)	180(260•) 397(573•)	165• 364•	180• 397•	165•(260••) 364•(573••)	180•(295••) 397•(650••)
25		28		17		22	
188 11.47	253 15.43	298 18.19	400 24.41	210 12.81	280 17.09	355•• 21.66••	485•• 29.60••
1950 27736	1450 20624	1950 27736	1450 20624	1950 27736	1450 20624	1950 27736	1450 20624
23	20	23	20	23	20	23	20
20 + 210		20 + 230(330•)		20 + 160•		20 + 160•(20 + 270••)	
107 28.27		107 28.27		150 39.63		150 39.63	
270		270		395		395	
280 + 560 11.02 + 22.05		280 + 560 11.02 + 22.05		360 + 715 14.17 + 28.15		360 + 715 14.17 + 28.15	
820 × 820 32.28 × 32.28		820 × 820 32.28 × 32.28		970 × 970 38.19 × 38.19		970 × 970 38.19 × 38.19	
545 × 545 21.46 × 21.46		545 × 545 21.46 × 21.46		632 × 632 24.88 × 24.88		632 × 632 24.88 × 24.88	
1080 167.40		1080 167.40		1580 244.90		1580 244.90	
543 × 820 21.38 × 32.28		543 × 820 21.38 × 32.28		630 × 970 24.80 × 38.19		630 × 970 24.80 × 38.19	
200 7.87		200 7.87		275 10.83		275 10.83	
1180 46.46		1180 46.46		1435 56.50		1435 56.50	
170 + 620 6.69 + 24.41		170 + 620 6.69 + 24.41		240 + 720 9.45 + 28.35		240 + 720 9.45 + 28.35	
16 (28□)		28□		20,8□		36□	
40 29.5		50 36.8		50 37		75 55.1	
380 100.39		380 100.39		580 153.22		580 153.22	
7,80 × 1,71 × 2,35 307.09 × 66.32 × 92.52		7,80 × 1,71 × 2,35 307.09 × 66.32 × 92.52		9,18 × 2,15 × 2,50 361.42 × 84.65 × 98.43		9,18 × 2,15 × 2,50 361.42 × 84.65 × 98.43	
9850 21716		10650 23479		19500 42990		19500 42990	

- Capacity and speed of screw obtained with hydraulic motor driven by two pumps.
- Capacity and speed of screw obtained with hydraulic motor driven by three pumps.

□ Ceramic heater-bands.

MACHINE TYPE		PENTA 550/2270 EXPORT		PENTA 550/2270 SUPER	
INJECTION	SCREW	A	B	A	B
Screw diameter	mm in	76 2.99	90 3.54	76 2.99	90 3.54
* Shot volume (theoretical)	cm ³ cu.in	1725 105.27	2440 148.90	1725 105.27	2440 148.90
* Shot weight (polystyrene)	g oz	1620 57.14	2270 80.07	1620 57.14	2270 80.07
** Plasticizing capacity	kg/h lbs/h	210 463	280 617	210•(280••) 463•(617••)	280•(395••) 617•(871••)
* Dry cycles per minute	n.	15		18	
Max. injection rate (per second)	cm ³ cu.in	340 20.75	475 28.99	500 30.51	700 42.72
Max. injection pressure	kg/cm ² p.s.i.	1900 27024	1400 19913	1900 27024	1400 19913
Screw diameter ratio	L/D	23	19	23	19
Screw speed	rpm	20 ÷ 140•		20 ÷ 140•(20 ÷ 205••)	
Hopper capacity	liters U.S.gal.	330 87.18		330 87.18	
MOULD CLAMP					
Clamping force	ton	550		550	
Moving platen stroke	mm in	420 ÷ 840 16.54 ÷ 33.07		420 ÷ 840 16.54 ÷ 33.07	
Platen dimensions	mm in	1170 x 1170 46.06 x 46.06		1170 x 1170 46.06 x 46.06	
Distance between tie-bars	mm in	765 x 765 30.12 x 30.12		765 x 765 30.12 x 30.12	
* Max. projected moulding area	cm ² sq.in	2200 341.00		2200 341.00	
Max. mould dimensions	mm in	762 x 1170 30.00 x 46.06		762 x 1170 30.00 x 46.06	
Hydraulic ejector stroke	mm in	340 13.39		340 13.39	
Max. daylight between platens	mm in	1700 66.93		1700 66.93	
Min. and max. mould height	mm in	280 ÷ 860 11.02 ÷ 33.86		280 ÷ 860 11.02 ÷ 33.86	
GENERAL					
Electric heater	kW	27		46L ¹	
Motor power	HP kW	75 55.2		100 74	
Oil tank capacity	liters U.S.gal.	780 206.05		780 206.05	
Dimensions: length - width - height	m in	10 x 2,24 x 2,90 393.70 x 88.19 x 114.17		10 x 2,24 x 2,90 393.70 x 88.19 x 114.17	
Machine weight	kg in	26000 57320		28000 61729	

* The injection capacity, cycles and max. projected moulding area depend on the type of materials used and the mould design.
 ** Plasticizing capacity calculated on the basis of continuous rotation of the screw.

PENTA 720/3650 EXPORT		PENTA 720/3650 SUPER	
A	B	A	B
90 3.54	105 4.13	90 3.54	105 4.13
2863 174.71	3897 237.81	2863 174.71	3897 237.81
2685 94.71	3650 128.75	2685 94.71	3650 128.75
170 375	200 441	170•(325••) 375•(717••)	200•(375••) 441•(827••)
14		15	
366 22.33	498 30.39	625 38.14	845 51.57
1900 27024	1400 19913	1900 27024	1400 19913
22.5	19	22.5	19
20 ÷ 105		20 ÷ 105•(20 ÷ 180••)	
330 87.18		330 87.18	
720		720	
455 ÷ 910 17.91 ÷ 35.83		455 ÷ 910 17.91 ÷ 35.83	
1260 × 1260 49.61 × 49.61		1260 × 1260 49.61 × 49.61	
825 × 825 32.48 × 32.48		825 × 825 32.48 × 32.48	
2880 446.40		2880 446.40	
823 × 1260 32.40 × 49.61		823 × 1260 32.40 × 49.61	
375 14.76		375 14.76	
1835 72.24		1835 72.24	
300 ÷ 925 11.81 ÷ 36.42		300 ÷ 925 11.81 ÷ 36.42	
35		52,5☐	
100 73.6		125 91.9	
940 248.32		940 248.32	
11,22 × 2,24 × 3,1 441.73 × 88.19 × 122.05		11,22 × 2,24 × 3,1 441.73 × 88.19 × 122.05	
34500 76059		35500 78264	

- Capacity and speed of screw obtained with hydraulic motor driven by two pumps.
- Capacity and speed of screw obtained with hydraulic motor driven by three pumps.

☐ Ceramic heater-bands.

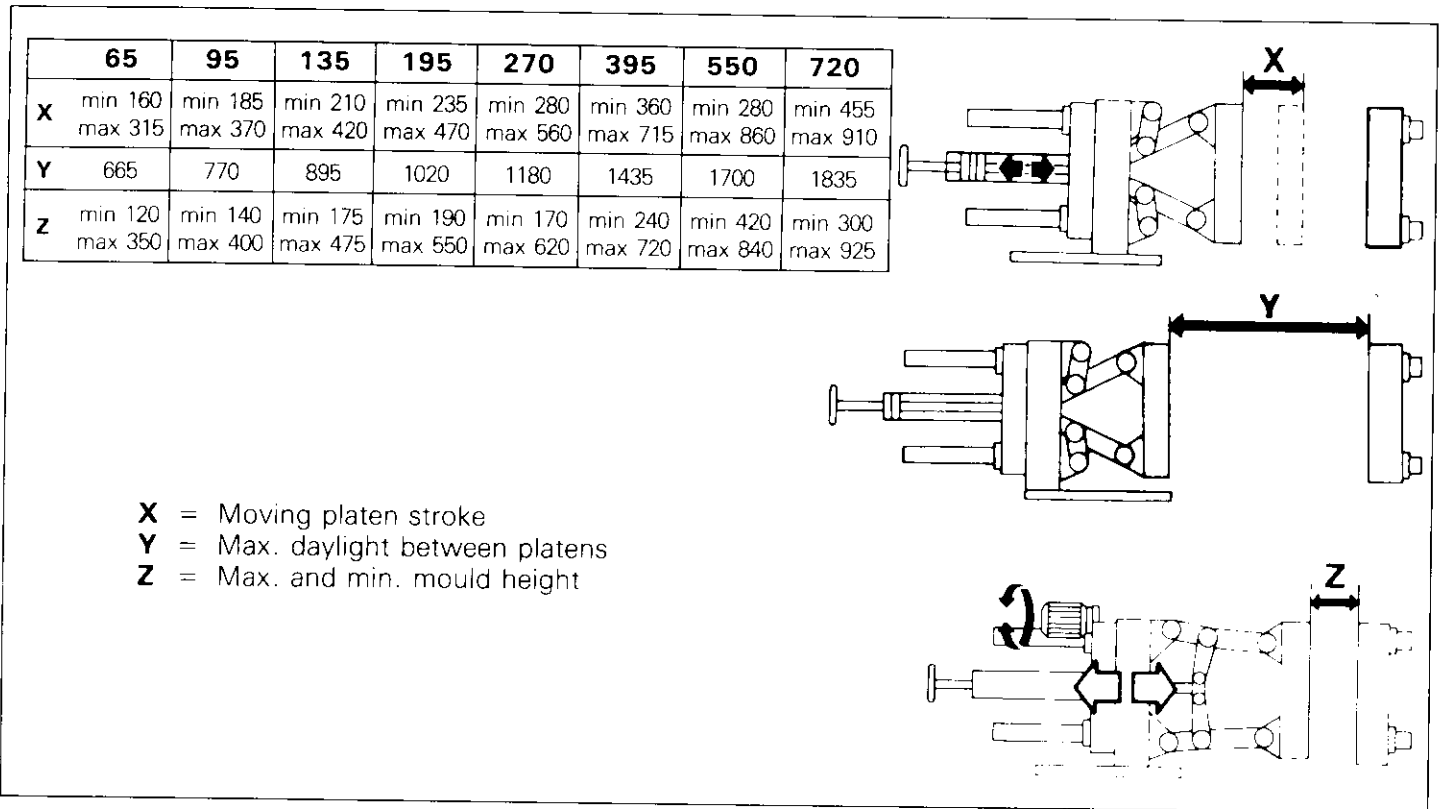


Figure 2. Moving platen stroke, mould height and max. daylight between platens (mm)

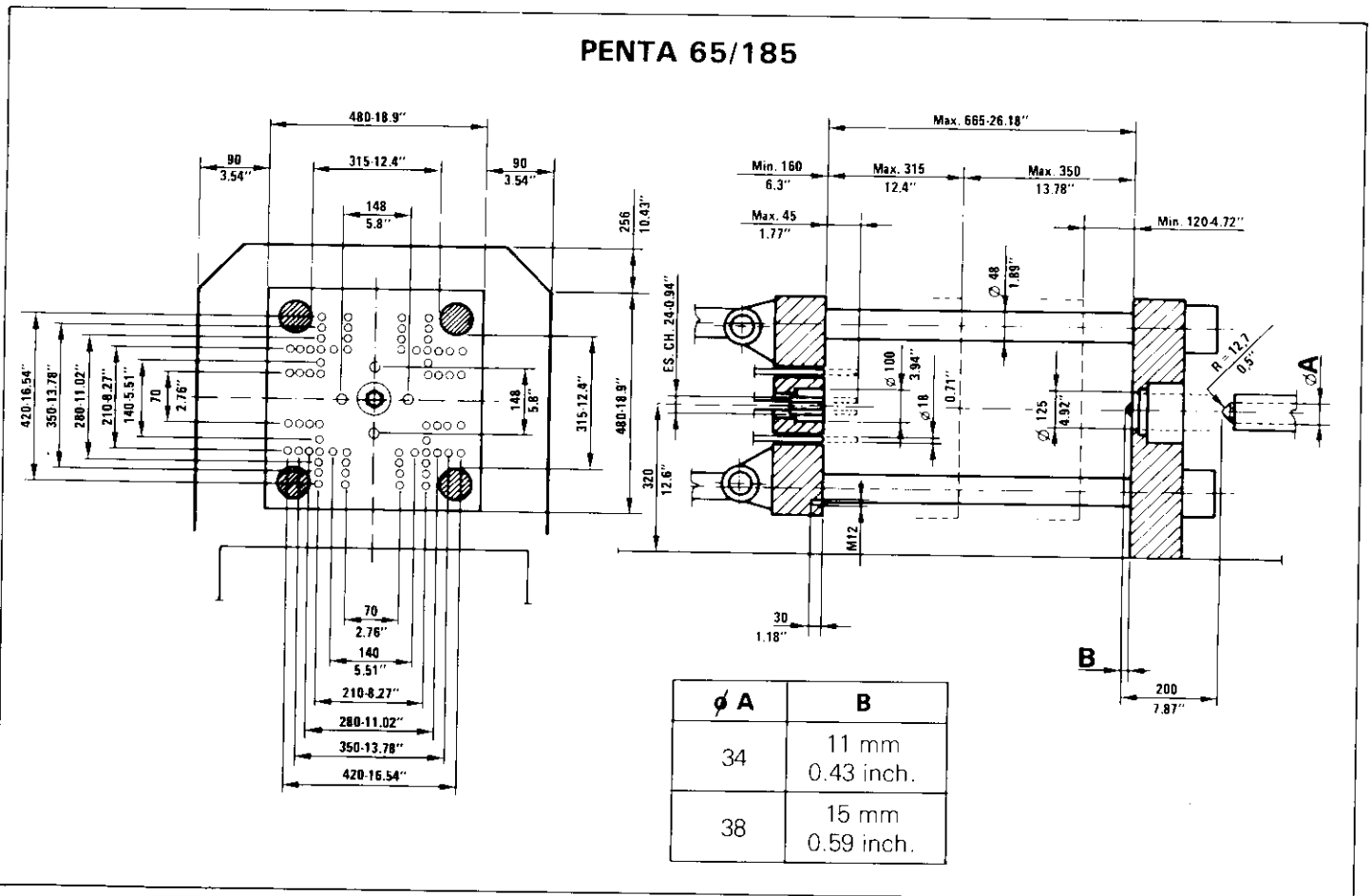


Figure 3. Platen dimensions (mm, inch.)

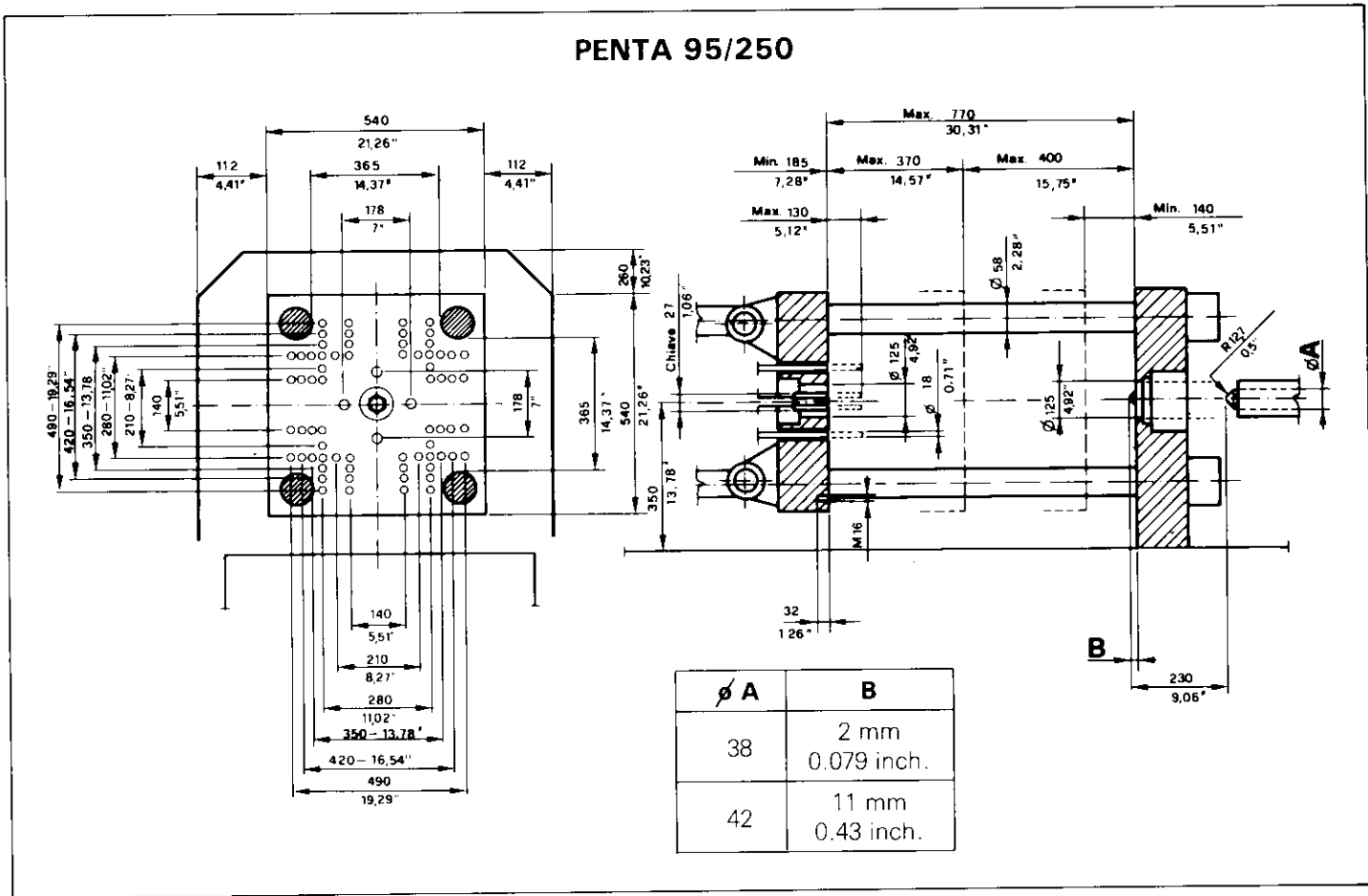


Figure 3/a. Platen dimensions (mm, inch.)

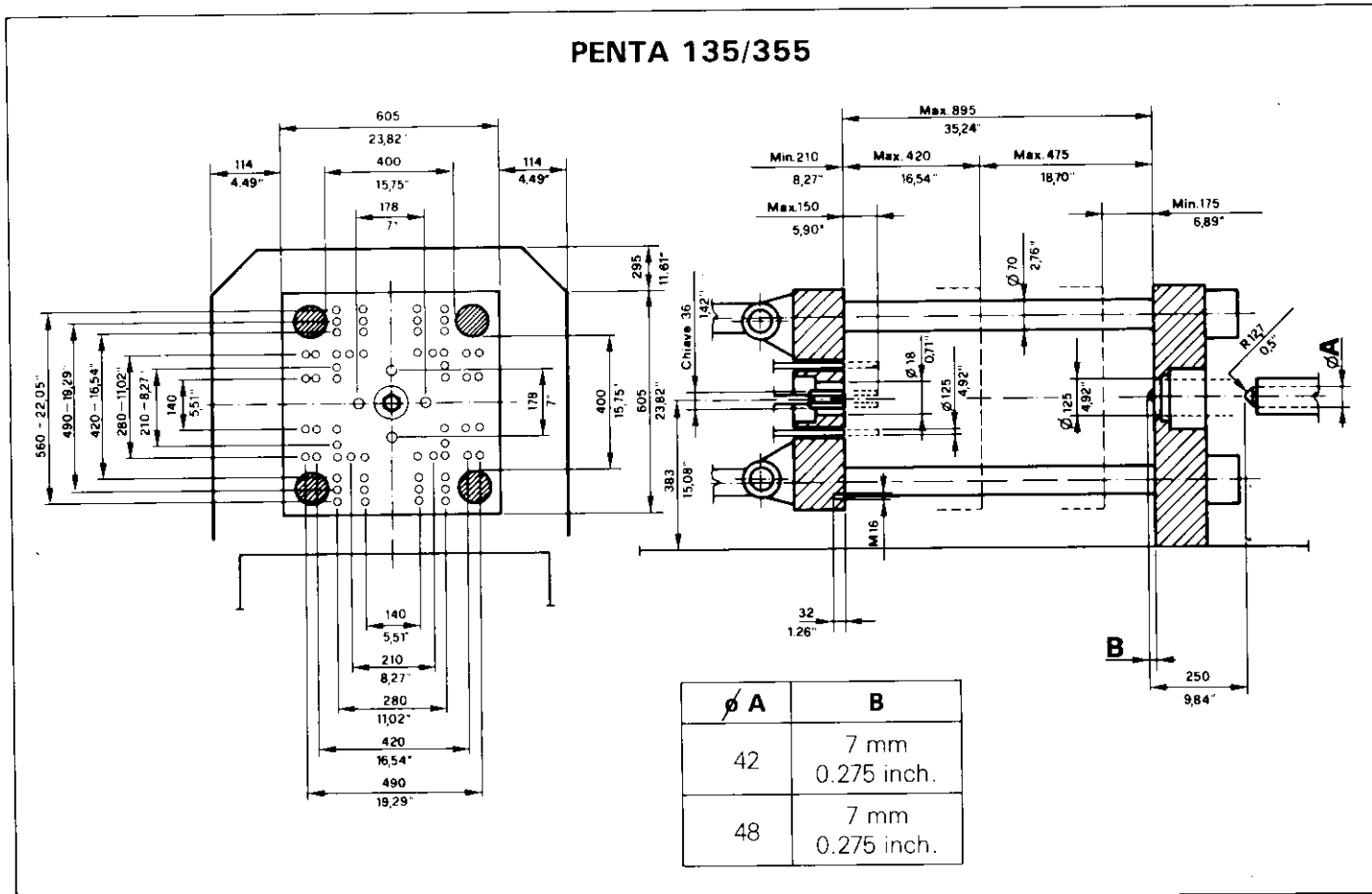


Figure 3/b. Platen dimensions (mm, inch.)

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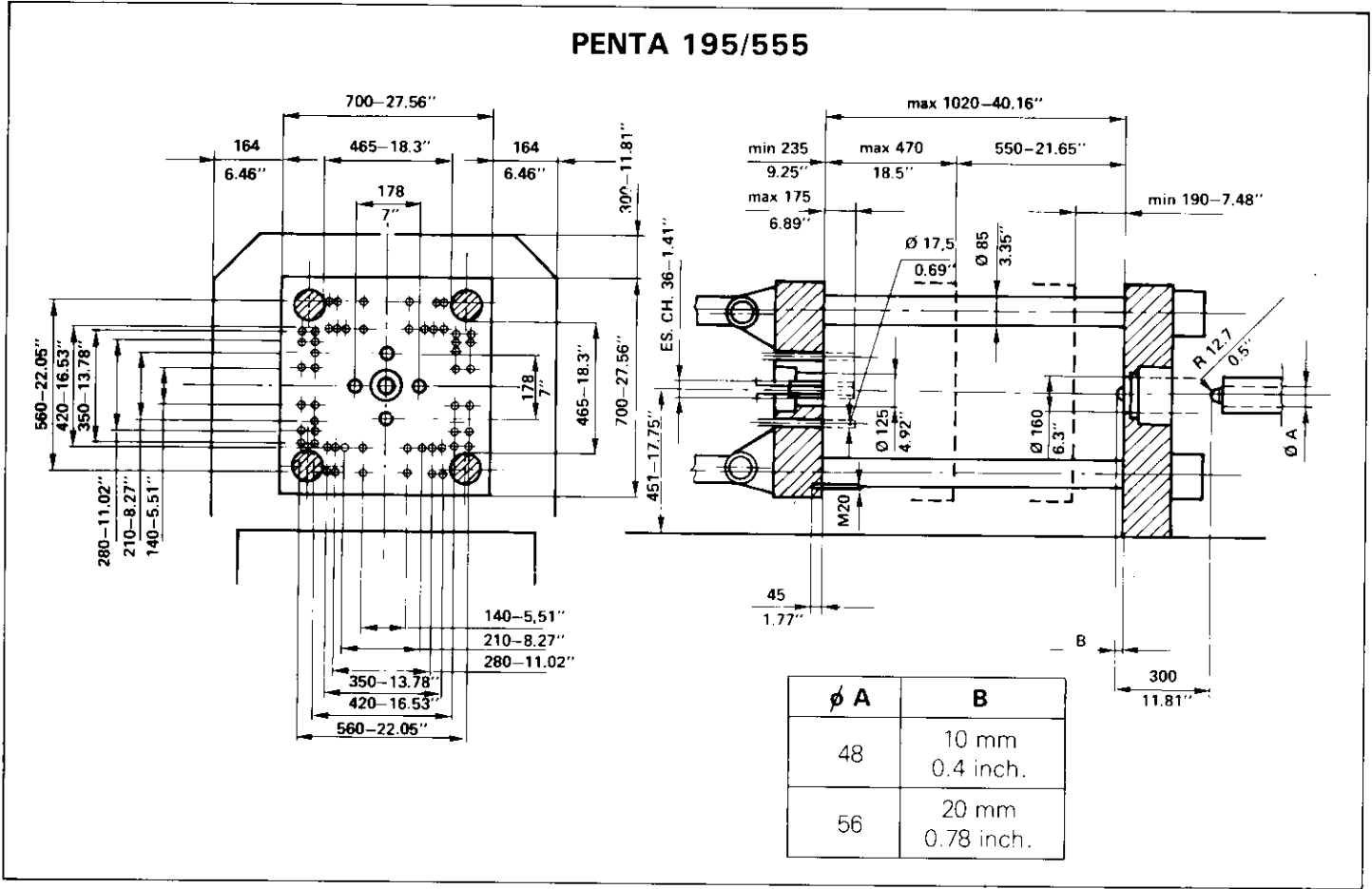


Figure 3/c. Platen dimensions (mm, inch.)

PENTA 270/870

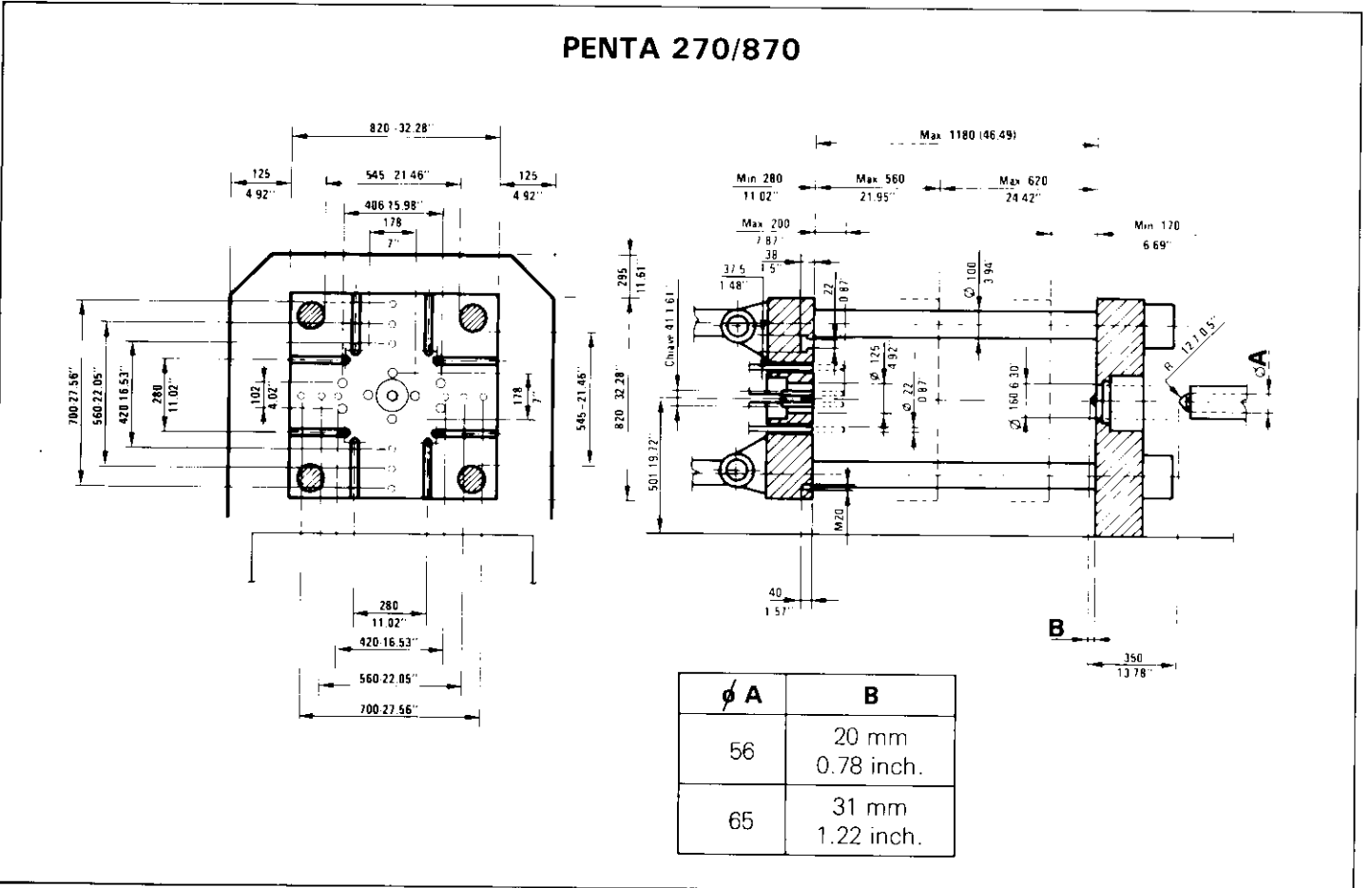


Figure 3/d. Platen dimensions (mm, inch.)

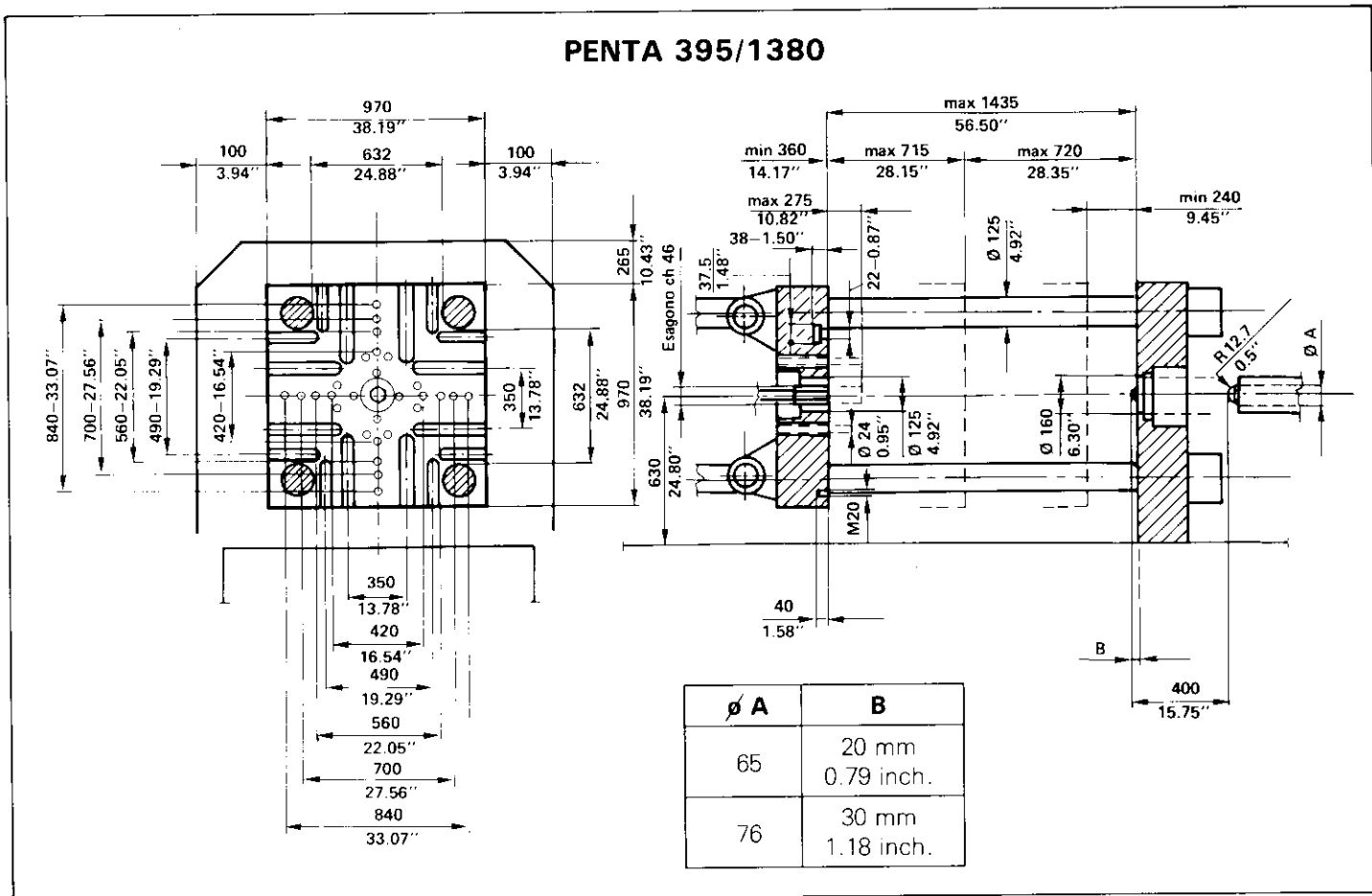


Figure 3/e. Platen dimensions (mm, inch.)

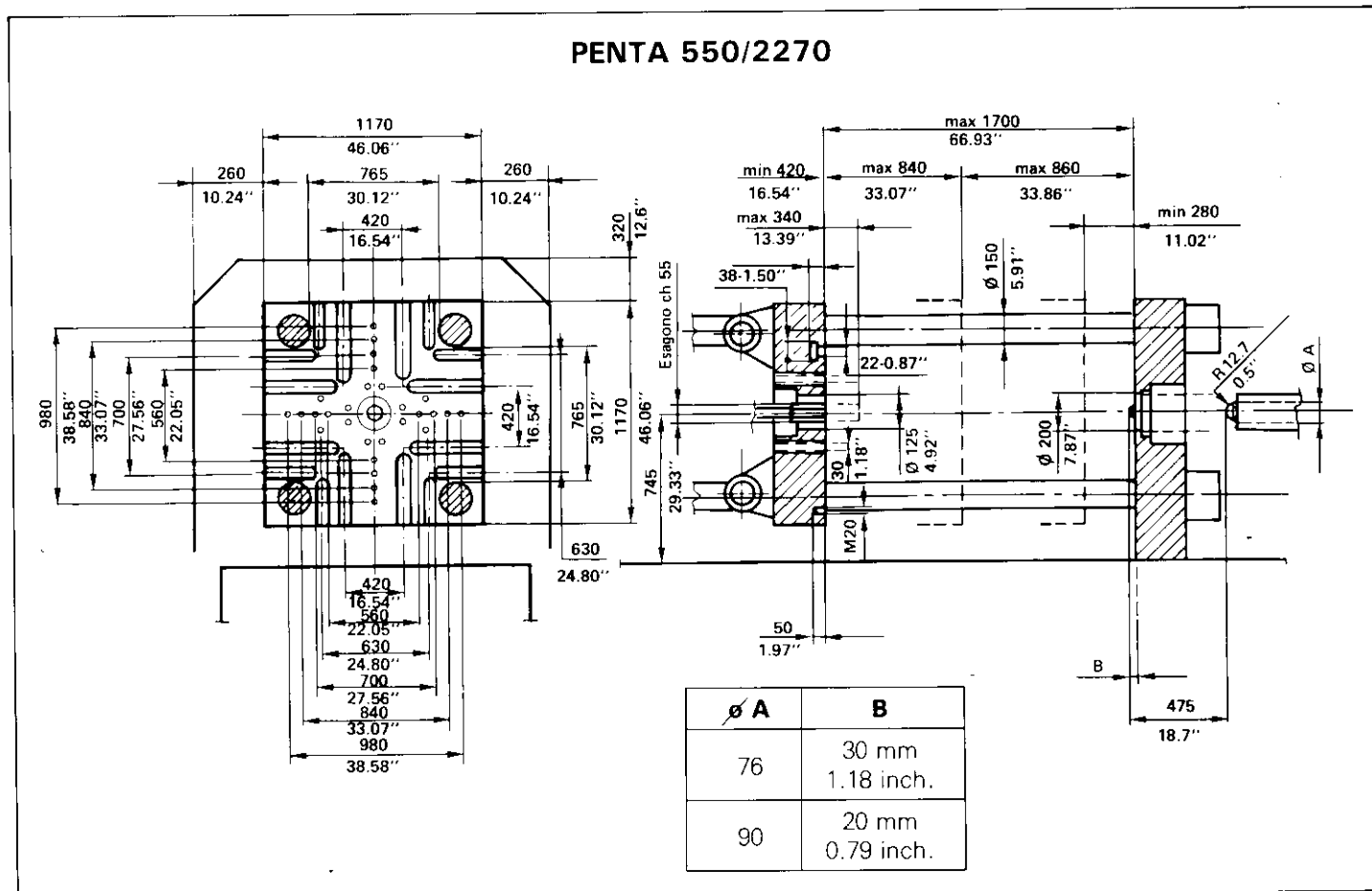


Figure 3/f. Platen dimensions (mm, inch.)

