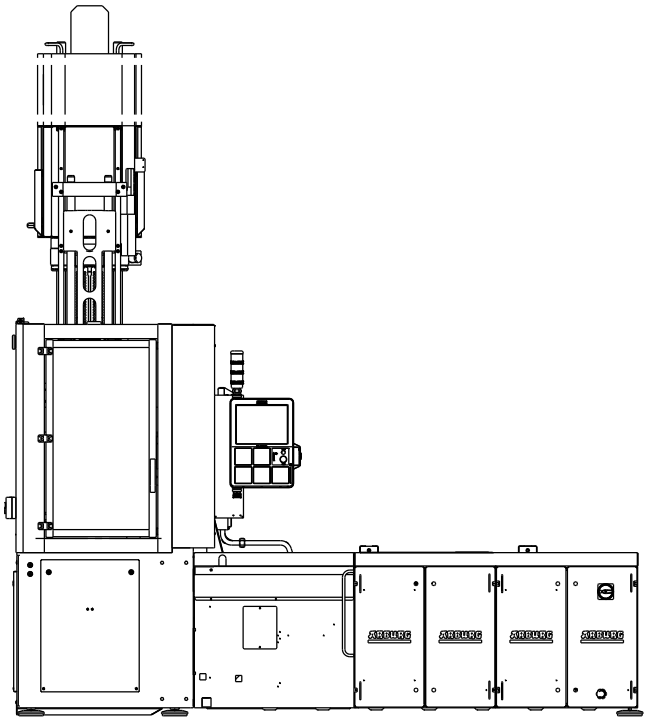
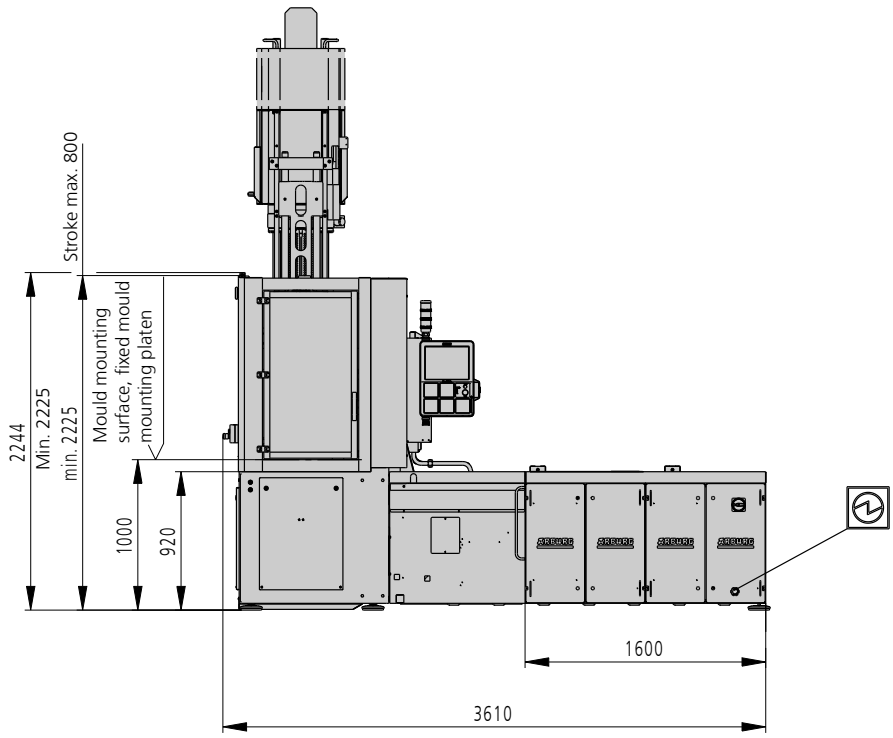


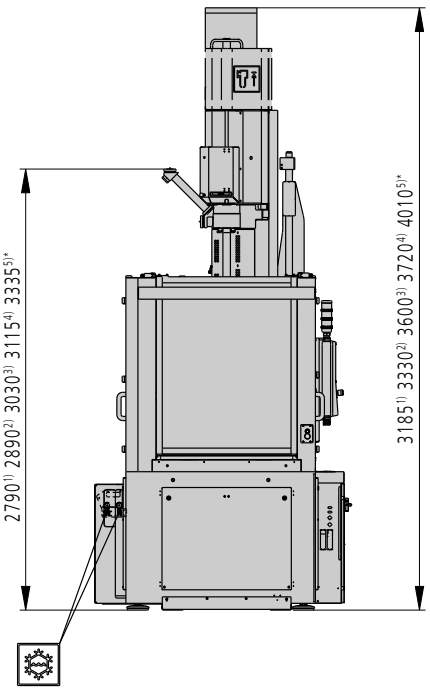
ALLROUNDER 420 V

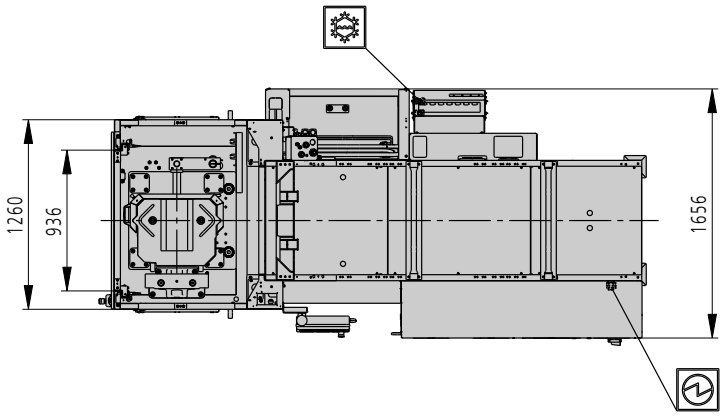
Distance between tie bars: 420 x 420 mm
Clamping force: 800, 1000 kN
Injection unit (according to EUROMAP): 70, 100, 170, 290, 400

ARBURG

INSTALLATION DIMENSIONS | 420 V







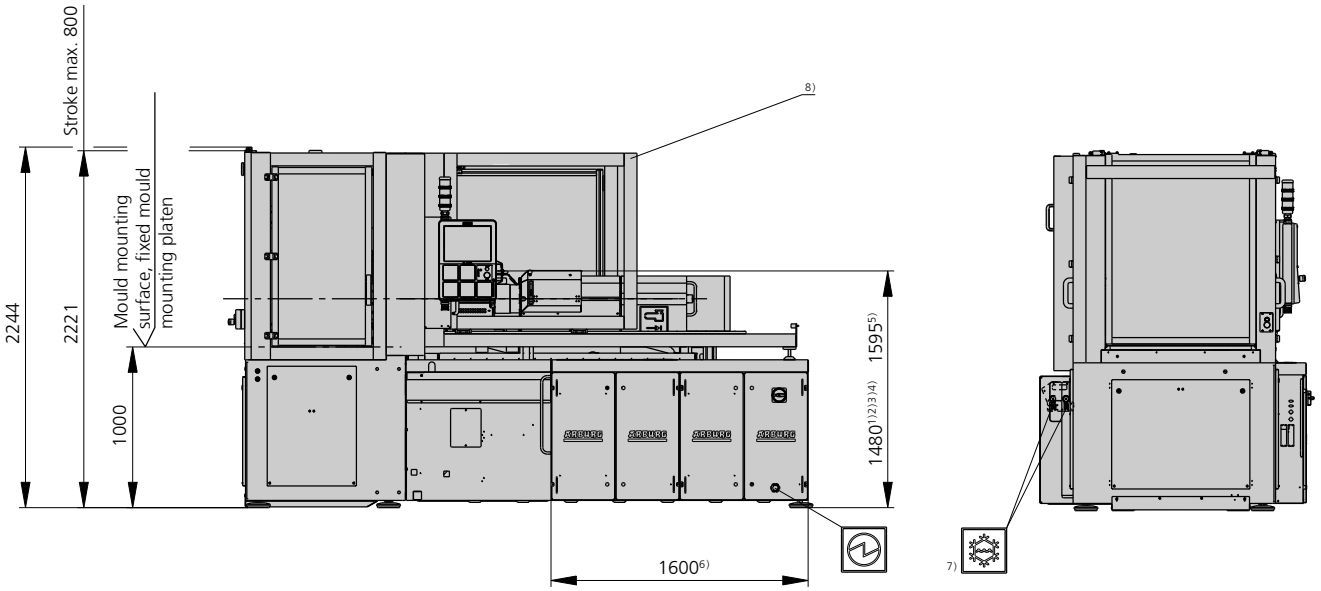
Electrical connection [6]

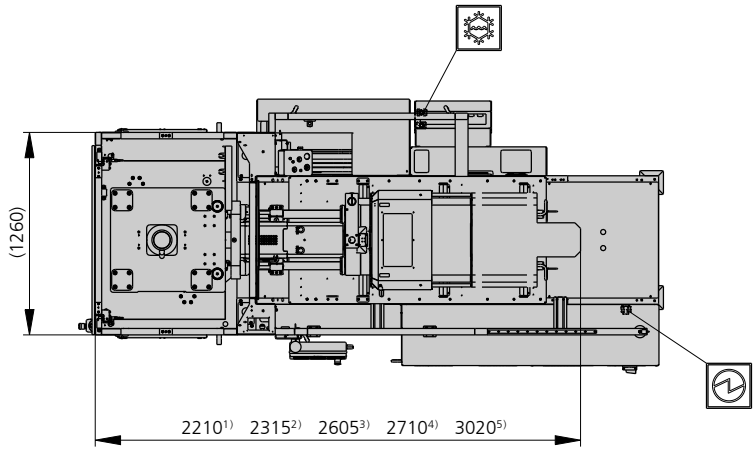
Cooling water connection [7]

1) Injection unit 70
2) Injection unit 100
3) Injection unit 170
4) Injection unit 290
5) Injection unit 400
6) The control cabinet length and position of the electrical connectioncan vary due to optional equipment
7) Position of cooling water connections can vary due to optional equipment
* Dimensions relate to a min. mould installation height of 300 mm. If a larger size is used, the dimensions will increase accordingly. If ARBURG electro-mechanical dosage (AED) is used, the total height will be different

INSTALLATION DIMENSIONS | 420 V

Horizontal version





1) Injection unit 70
2) Injection unit 100
3) Injection unit 170
4) Injection unit 290
5) Injection unit 400
6) The control cabinet length and position of the electrical connection can vary due to optional equipment
7) Position of cooling water connections can vary due to optional equipment
8) 1-4) Additional protection

TECHNICAL DATA | 420 V

Clamping unit			**420 V**
with clamping force	max.	kN	800
Opening force | stroke	max.	kN | mm	105 | 300
Mould height, fixed | variable	min.	mm	300 | ---
Platen daylight fixed | variable	max.	mm	600 | ---
Distance between tie bars (w x h)		mm	420 x 420
Mould mounting platens (w x h)		mm	650 x 650
Weight of movable mould half	max.	kg	400
Ejector force | stroke	max.	kN | mm	45 | 175
Dry cycle time EUROMAP [2]	min.	s - mm	--- - ---

Injection unit			**70**			**100**		
with screw diameter		mm	18	22	25	20	25	30
Effective screw length		L/D	24,5	20	17,5	25	20	16,7
Screw stroke	max.	mm		90			100	
Calculated stroke volume	max.	cm³	23	34	44	31	49	71
Shot weight	max.	g PS	21	31	40	29	45	65
Material throughput	max.	kg/h PS	4,1	5,5	6,5	5,5	8	9,5
	max.	kg/h PA6.6	2,1	2,8	3,3	2,8	4	4,9
Injection pressure	max.	bar	2500	2000	1550	2500	2000	1390
Holding pressure	max.	bar	2500	2000	1550	2500	2000	1390
Injection flow [2]	max.	cm³/s	42	62	80	64	100	146
Screw circumferential speed [2]	max.	m/min	24	30	34	28	35	42
Screw torque	max.	Nm	90	110	120	120	150	180
Nozzle contact force | retraction stroke	max.	kN | mm		50 | 250			50 | 280	
Heating capacity | zones		kW		4,2 | 4			6,7 | 5	
Feed hopper		l		25			50	

Drive and connection					
with injection unit				70	100
Net weight of machine			kg	4600	4700
Sound press. level | Insecurity [4]			dB(A)		71 | 3
Oil filling			l		200
Drive power [2]		max.	kW		18,5
Electrical connection [3]			kW		36
	Total		A		100
	Machine		A		---
	Heating		A		---
Cooling water connection		max.	°C		25
		min.	Δp bar		1,5 | DN 25

Machine type
with EUROMAP size designation [1]
420 V 800-70 | 100

Upon request: other machine models and mould installation heights, plasticising screws, drive powers, etc.
All specifications relate to the basic machine version. Deviations are possible depending on variants, process settings and material type. Depending on the drive, certain combinations, e.g. max. injection pressure and max. injection flow may be mutually exclusive.

1) Clamping force (kN) - large injection unit = max. stroke volume (cm³) x max. injection pressure (kbar)
2) Specifications depend on the drive variant / drive configuration.
3) Specifications relate to 400 V/50 Hz.
4) Emission sound pressure level at the workplace. Detailed info in the operating instructions.
[ ] Specifications apply to alternative equipment.

TECHNICAL DATA | 420 V

Clamping unit			**420 V**
with clamping force	max.	kN	1000
Opening force | stroke	max.	kN | mm	105 | 300
Mould height, fixed | variable	min.	mm	300 | ---
Platen daylight fixed | variable	max.	mm	600 | ---
Distance between tie bars (w x h)		mm	420 x 420
Mould mounting platens (w x h)		mm	650 x 650
Weight of movable mould half	max.	kg	400
Ejector force | stroke	max.	kN | mm	45 | 175
Dry cycle time EUROMAP [2]	min.	s - mm	--- - ---

Injection unit			**170**			**290**			**400**		
with screw diameter		mm	25	30	35	30	35	40	35	40	45
Effective screw length		L/D	24	20	17	23,3	20	17,5	23	20	18
Screw stroke	max.	mm		120			150			160	
Calculated stroke volume	max.	cm³	59	85	115	106	144	188	154	201	254
Shot weight	max.	g PS	54	77	105	97	132	172	141	184	232
Material throughput	max.	kg/h PS	10	13,5	16	17	20,5	24,5	25	29	35
	max.	kg/h PA6.6	5	7	8	8,5	10,5	12,5	12,5	15	17,5
Injection pressure	max.	bar	2500	2000	1470	2500	2000	1530	2500	2000	1580
Holding pressure	max.	bar	2500	2000	1470	2500	2000	1530	2500	2000	1580
Injection flow [2]	max.	cm³/s	66	96	132	72	100	130	128	168	212
Screw circumferential speed [2]	max.	m/min	35	42	49	33	39	44	47	53	60
Screw torque	max.	Nm	210	250	290	320	380	430	480	550	610
Nozzle contact force | retraction stroke	max.	kN | mm		50 | 300			60 | 300			60 | 400	
Heating capacity | zones		kW		9 | 5			7,7 | 5			9,7 | 4	
Feed hopper		l		25			25			50	

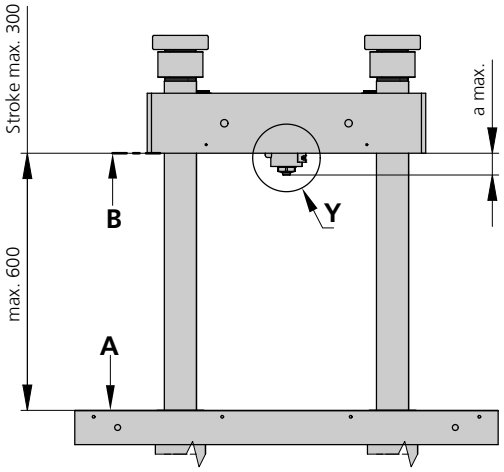
Drive and connection					
with injection unit			170	290	400
Net weight of machine		kg	4600	4700	5000
Sound press. level | Insecurity [4]		dB(A)		71 | 3	
Oil filling		l		200	
Drive power [2]	max.	kW	18,5	18,5	22
Electrical connection [3]		kW		36	
	Total	A		100	
	Machine	A		---	
	Heating	A		---	
Cooling water connection	max.	°C		25	
	min.	Δp bar		1,5 | DN 25	

Machine type
with EUROMAP size designation [1]
420 V 800-170 | 290 | 400

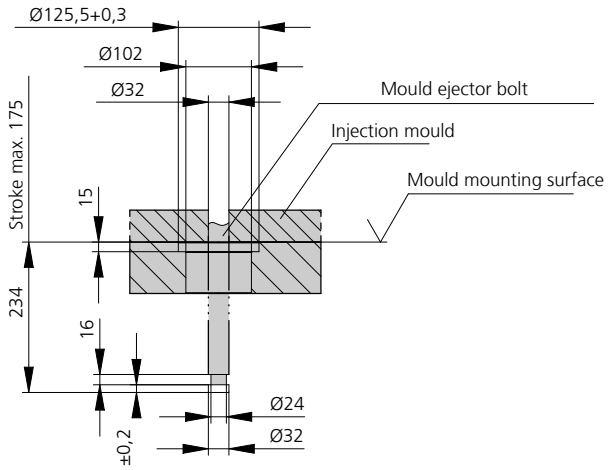
Upon request: other machine models and mould installation heights, plasticising screws, drive powers, etc.
All specifications relate to the basic machine version. Deviations are possible depending on variants, process settings and material type. Depending on the drive, certain combinations, e.g. max. injection pressure and max. injection flow may be mutually exclusive.

1) Clamping force (kN) - large injection unit = max. stroke volume (cm³) x max. injection pressure (kbar)
2) Specifications depend on the drive variant / drive configuration.
3) Specifications relate to 400 V/50 Hz.
4) Emission sound pressure level at the workplace. Detailed info in the operating instructions.
[ ] Specifications apply to alternative equipment.

MOULD INSTALLATION DIMENSIONS | 420 V



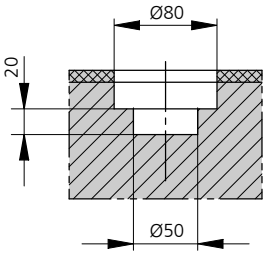
Ejector bolt



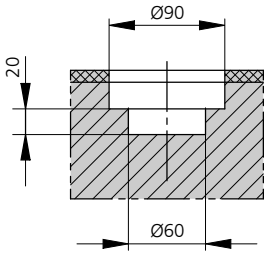
a max.	Injection position for injection unit				
	70	100	170	290	400
Standard	35				50
Thermoset	15				50

Cut-out in injection mould (if required) | Y

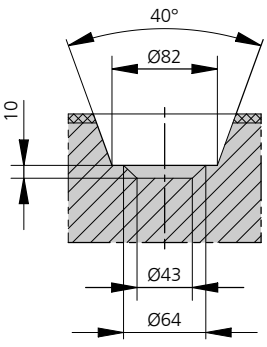
70 injection unit



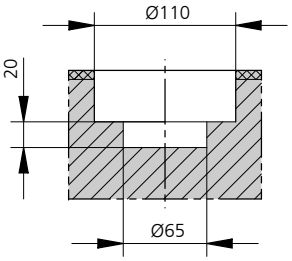
Injection unit 100 / 170 / 290



400 injection unit

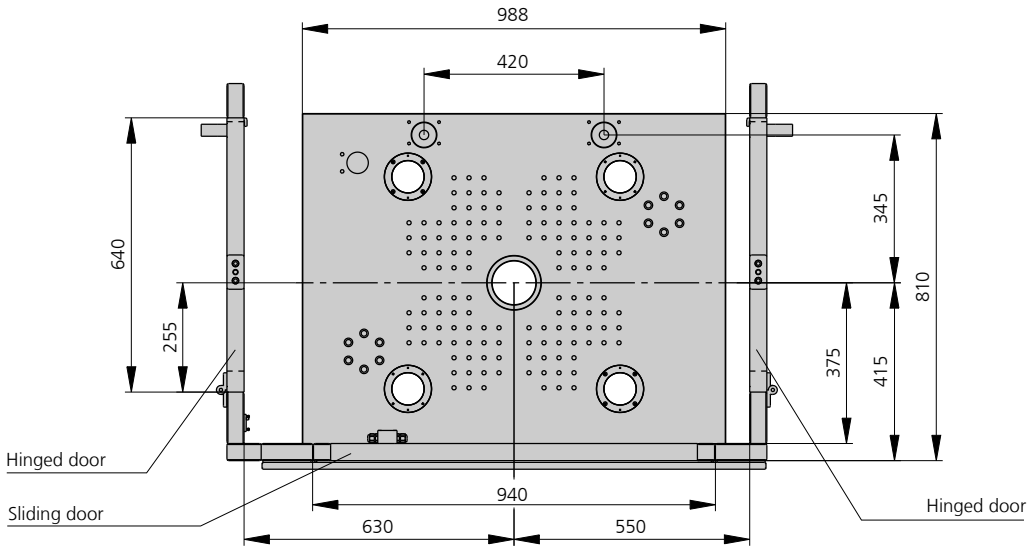


400 injection unit
with thermoset version

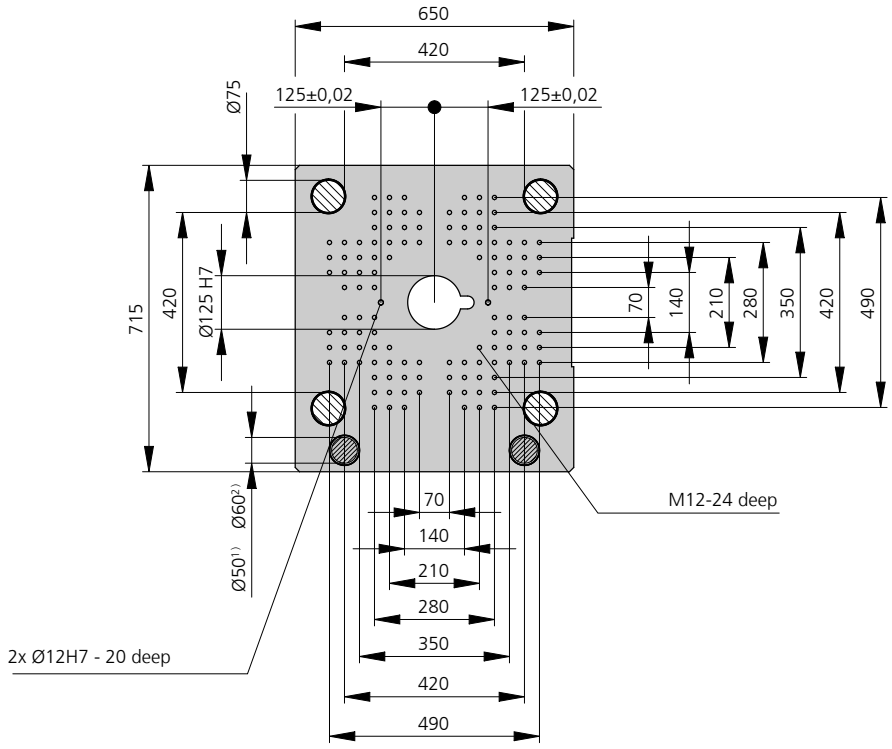


MOULD INSTALLATION DIMENSIONS | 420 V

Fixed mould mounting platen | A



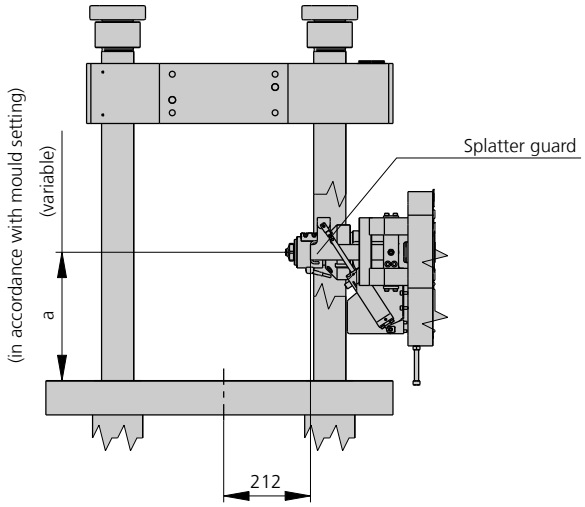
Moving mould mounting platen | B



1) Injection unit 70/100/170/290
2) Injection unit 400

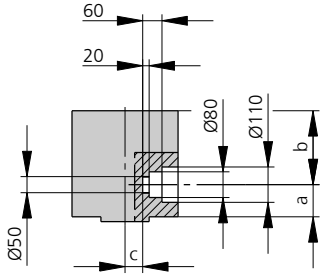
INSTALLATION DIMENSIONS | 420 V

Horizontal version

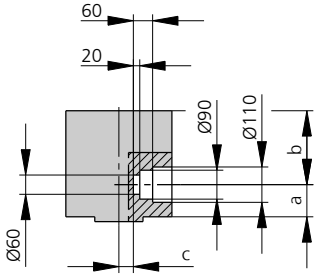


	Injection position for injection unit				
	70	100	170	290	400
a min.	200				300
a max.	320				400
b min.	100				
c min.	135				145

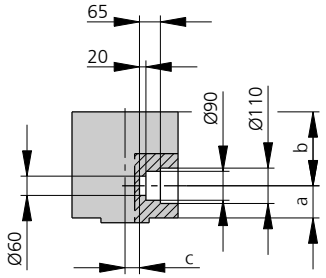
70 injection unit



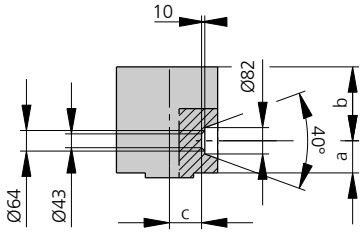
100 injection unit



Injection unit 170 / 290



400 injection unit



SHOT WEIGHTS | 420 V

Injection units according to EUROMAP		70			100			170		
Screw diameter	mm	18	22	25	20	25	30	25	30	35
Polystyrene	max. g PS	21	31	40	29	45	65	54	77	105
Styrene heteropolymerizates	max. g SB	20	31	39	28	44	63	53	76	103
	max. g SAN, ABS[1)]	20	30	39	27	43	62	52	74	101
Cellulose acetate	max. g CA[1)]	24	35	45	32	50	73	61	87	119
Celluloseacetobutyrate	max. g CAB[1)]	22	33	42	30	47	68	56	81	110
Polymethyl methacrylate	max. g PMMA	22	32	42	30	46	67	56	80	109
Polyphenylene ether, mod.	max. g PPE	19	29	37	27	42	60	50	72	98
Polycarbonate	max. g PC	22	33	42	30	47	68	57	81	111
Polysulphone	max. g PSU	23	34	44	31	49	70	58	84	115
Polyamides	max. g PA 6.6 | PA 6[1)]	21	31	40	28	44	64	53	77	104
	max. g PA 6.10 | PA 11[1)]	19	29	37	26	41	60	50	72	98
Polyoximethylene (Polyacetal)	max. g POM	26	39	50	35	55	80	66	96	130
Polyethylene terephthalate	max. g PET	25	37	48	34	53	77	64	92	126
Polyethylene	max. g PE-LD	16	24	30	22	34	49	41	59	80
	max. g PE-HD	16	24	31	22	35	50	42	60	82
Polypropylene	max. g PP	17	25	32	23	36	51	43	62	84
Fluorpolymerides	max. g FEP, PFA, PCTFE[1)]	33	50	65	46	72	103	86	124	169
	max. g ETFE	29	44	57	40	63	91	76	109	148
Polyvinyl chloride	max. g PVC-U	25	38	49	35	54	78	65	94	127
	max. g PVC-P[1)]	23	35	45	32	50	72	60	87	118

Injection units according to EUROMAP		290			400			
Screw diameter	mm	30	35	40	35	40	45	
Polystyrene	max. g PS	97	132	172	141	184	232	
Styrene heteropolymerizates	max. g SB	95	129	168	137	179	227	
	max. g SAN, ABS[1)]	93	126	165	135	176	223	
Cellulose acetate	max. g CA[1)]	109	148	194	158	207	262	
Celluloseacetobutyrate	max. g CAB[1)]	101	138	180	147	192	243	
Polymethyl methacrylate	max. g PMMA	100	136	178	145	190	240	
Polyphenylene ether, mod.	max. g PPE	90	122	160	131	171	216	
Polycarbonate	max. g PC	102	139	181	148	193	244	
Polysulphone	max. g PSU	105	143	187	153	199	252	
Polyamides	max. g PA 6.6 | PA 6[1)]	96	131	171	140	183	231	
	max. g PA 6.10 | PA 11[1)]	90	122	160	131	171	216	
Polyoximethylene (Polyacetal)	max. g POM	120	163	213	174	227	287	
Polyethylene terephthalate	max. g PET	115	157	205	167	219	277	
Polyethylene	max. g PE-LD	73	100	130	106	139	176	
	max. g PE-HD	76	103	134	110	143	181	
Polypropylene	max. g PP	77	105	137	112	146	185	
Fluorpolymerides	max. g FEP, PFA, PCTFE[1)]	155	211	276	225	294	372	
	max. g ETFE	136	185	242	196	256	324	
Polyvinyl chloride	max. g PVC-U	117	159	208	170	222	281	
	max. g PVC-P[1)]	108	147	192	157	205	260	

1) average value

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682269_EN_GB_092024 · Subject to alterations