

## ALLROUNDER 520 E

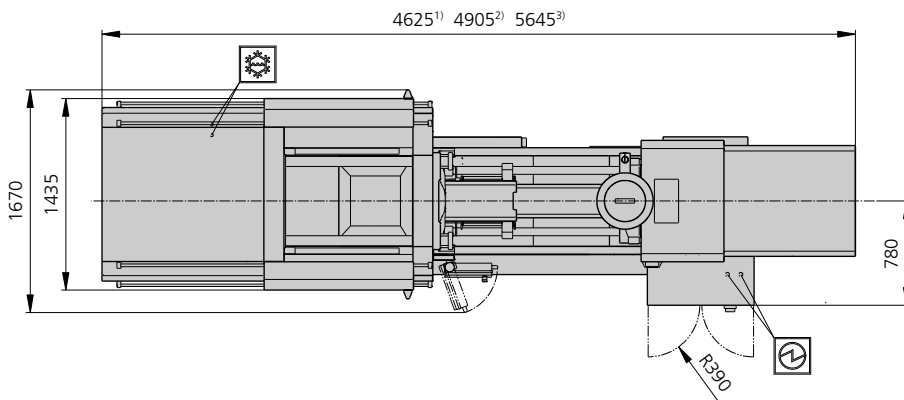
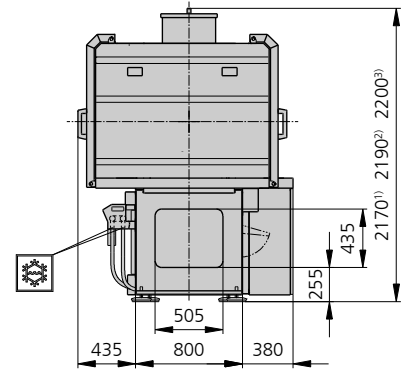
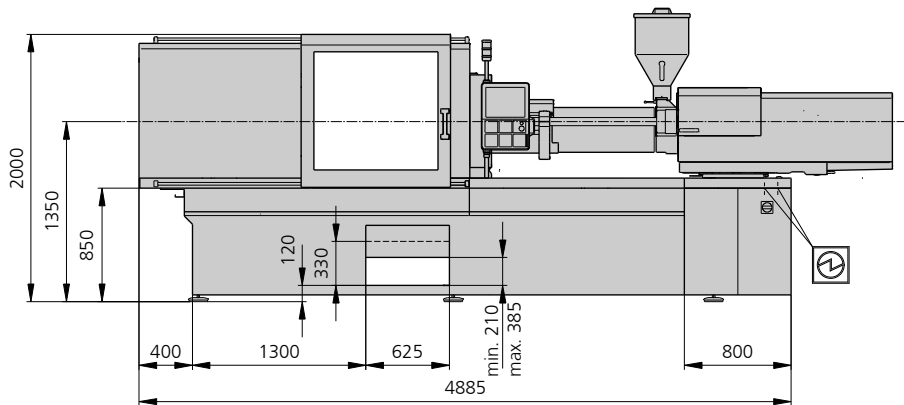
Distance between tie bars: 520 x 520 mm

Clamping force: 1500 kN

Injection unit (acc. to EUROMAP): 290, 400, 800

**ARBURG**

# MACHINE DIMENSIONS | 520 E



Electrical connection



Cooling water connection

1) injection unit 290  
 2) injection unit 400  
 3) injection unit 800

# TECHNICAL DATA | 520 E

Clamping unit		520 E
with clamping force	max. kN	1500
Opening force   stroke	max. kN   mm	---   450
Mould height, fixed   variable	min.-max. mm	---   250-550
Platen daylight fixed   variable	max. mm	---   700-1000
Distance between tie bars (w x h)	mm	520 x 520
Mould mounting platens (w x h)	max. mm	695 x 695
Weight of movable mould half	max. kg	1000
Ejector force   stroke	max. kN   mm	40   175
Dry cycle time EUROMAP <sup>2</sup>	min. s - mm	1,5 - 364

Injection unit		290			400			800			
with screw diameter	mm	30	35	40	35	40	45	45	50	55	
Effective screw length	L/D	23,3	20	17,5	23	20	18	22	20	18	
Screw stroke	max. mm	150			160			200			
Calculated stroke volume	max. cm <sup>3</sup>	106	144	188	154	201	254	318	392	474	
Shot weight	max. g PS	97	132	172	141	184	232	291	359	434	
Material throughput	max. kg/h PS	17	20,5	24,5	25	29	35	46	53	59	
	max. kg/h PA6.6	8,5	10,5	12,5	12,5	15	17,5	23	27	30	
Injection pressure	max. bar	2500	2000	1530	2500	2000	1580	2470	2000	1650	
Holding pressure	max. bar	2180	1600	1220	2090	1600	1260	1970	1600	1320	
Injection flow <sup>2</sup>	Standard	max. cm <sup>3</sup> /s	98	134	176	126	164	208	174	216	260
	Version	max. cm <sup>3</sup> /s	128	176	230	162	214	270	228	282	340
Screw circumferential speed <sup>2</sup>	max. m/min	28	33	37	27	31	35	28	31	34	
Screw torque	max. Nm	320	380	430	480	550	610	900	1000	1100	
Nozzle contact force   retraction stroke	max. kN   mm	50   300			60   300			70   400			
Heating capacity   zones	kW	6,4   5			9,4   5			19,9   8			
Feed hopper	l	50			50			50			

Drive and connection		290	400	800
with injection unit				
Net weight of machine	kg	7000	7100	7900
Sound press. level   Insecurity <sup>4</sup>	dB(A)	58   3		
Electrical connection <sup>3</sup>	kW	20	27	45
	Total	63	80	100
	Machine		---	
	Heating		---	
Cooling water connection	max. °C	30		
	min. Δp bar	1,5   DN 25		

## Machine type

with EUROMAP size designation <sup>1</sup>

520 E 1500-290 | 400 | 800

### Upon request: other machine types and mould installation heights, 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) - size of injection unit = max. stroke volume (cm<sup>3</sup>) x max. injection pressure (kbar).

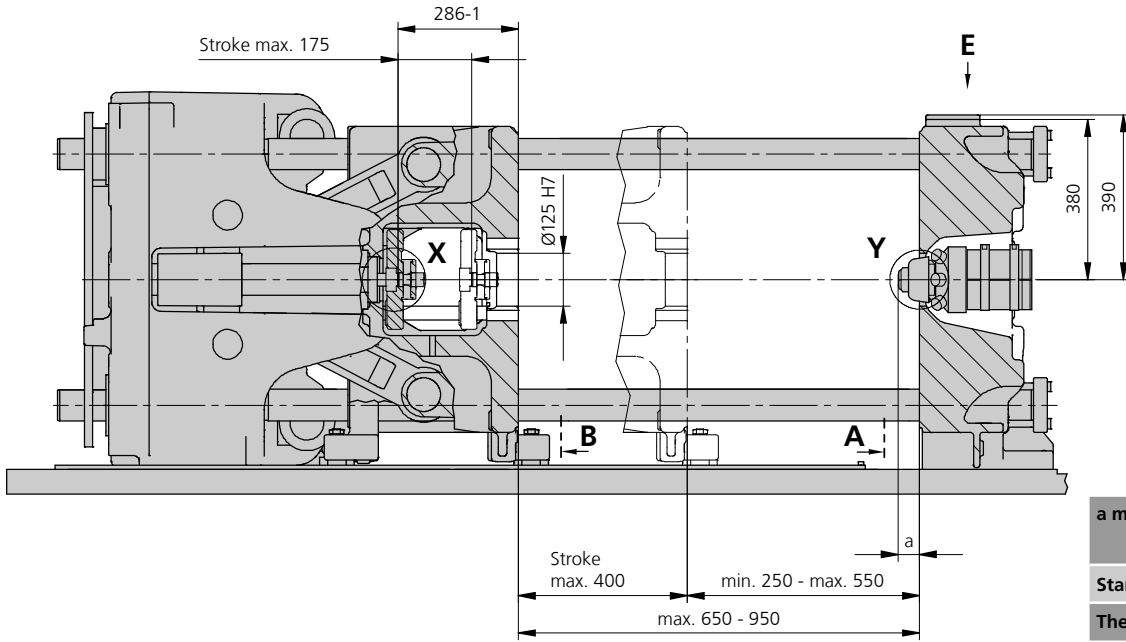
2) Specifications depend on the drive variant / drive configuration.

3) Specifications relate to 400 V/50 Hz.

4) Detailed info in the operating instr.

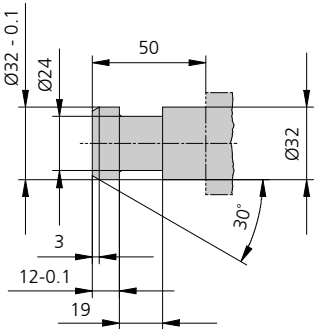
[ ] Specifications apply to alternative equipment.

# MOULD INSTALLATION DIMENSIONS | 520 E

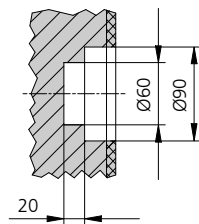


a max.	Injection unit	
		290
Standard	40	50
Thermoset	20	50

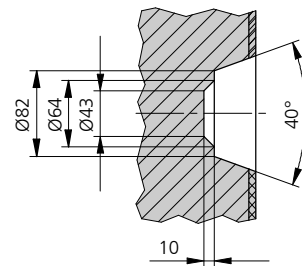
## Ejector bolt | X



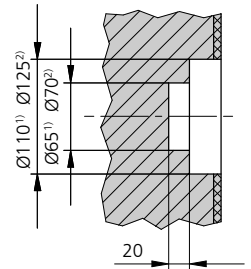
## Bore in mould (if required) | Y



Injection unit 290

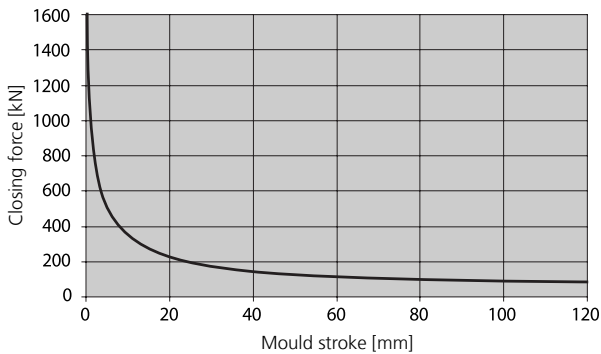


Injection unit 400 / 800



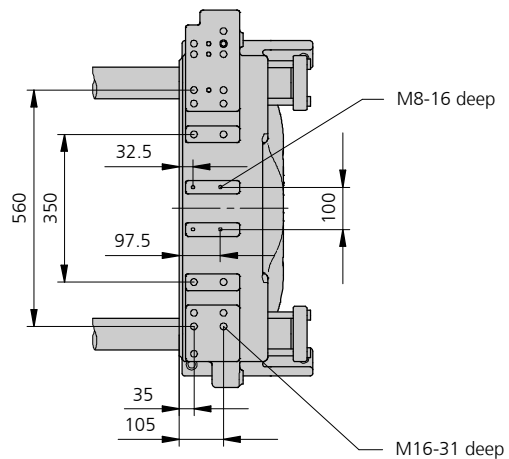
Injection unit 400<sup>(1)</sup> / 800<sup>(2)</sup>  
Thermoset version

## Closing force for spring moulds\*



\* automatic clamping force control requirement

## Robotic system mounting | E





# SHOT WEIGHTS | 520 E

## Theoretical shot weights for the most important injection moulding materials

Injection units according to EUROMAP		290			400			800		
Screw diameter	mm	30	35	40	35	40	45	45	50	55
Polystyrene	max. g PS	97	132	172	141	184	232	291	359	434
Styrene heteropolymerizates	max. g SB	95	129	168	137	179	227	284	350	424
	max. g SAN, ABS <sup>1)</sup>	93	126	165	135	176	223	278	344	416
Cellulose acetate	max. g CA <sup>1)</sup>	109	148	194	158	207	262	327	404	488
Celluloseacetobutyrate	max. g CAB <sup>1)</sup>	101	138	180	147	192	243	304	375	454
Polymethyl methacrylate	max. g PMMA	100	136	178	145	190	240	300	371	449
Polyphenylene ether, mod.	max. g PPE	90	122	160	131	171	216	270	333	403
Polycarbonate	max. g PC	102	139	181	148	193	244	305	377	456
Polysulphone	max. g PSU	105	143	187	153	199	252	316	390	471
Polyamides	max. g PA 6.6   PA 6 <sup>1)</sup>	96	131	171	140	183	231	289	357	431
	max. g PA 6.10   PA 11 <sup>1)</sup>	90	122	160	131	171	216	270	333	403
Polyoximethylene (Polyacetal)	max. g POM	120	163	213	174	227	287	359	443	536
Polyethylene terephthalate	max. g PET	115	157	205	167	219	277	346	427	517
Polyethylene	max. g PE-LD	73	100	130	106	139	176	219	271	328
	max. g PE-HD	76	103	134	110	143	181	227	280	339
Polypropylene	max. g PP	77	105	137	112	146	185	232	286	346
Fluoropolymerides	max. g FEP, PFA, PCTFE <sup>1)</sup>	155	211	276	225	294	372	465	574	695
	max. g ETFE	136	185	242	196	256	324	408	504	609
Polyvinyl chloride	max. g PVC-U	117	159	208	170	222	281	351	434	525
	max. g PVC-P <sup>1)</sup>	108	147	192	157	205	260	324	401	485

1) average value

**ARBURG GmbH + Co KG**  
 Arthur-Hehl-Strasse  
 72290 Lossburg  
 Tel.: +49 7446 33-0  
 www.arburg.com  
 contact@arburg.com