

ALLROUNDER 1800 T

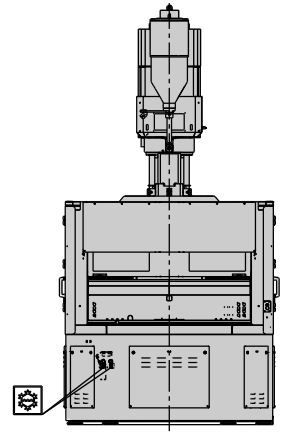
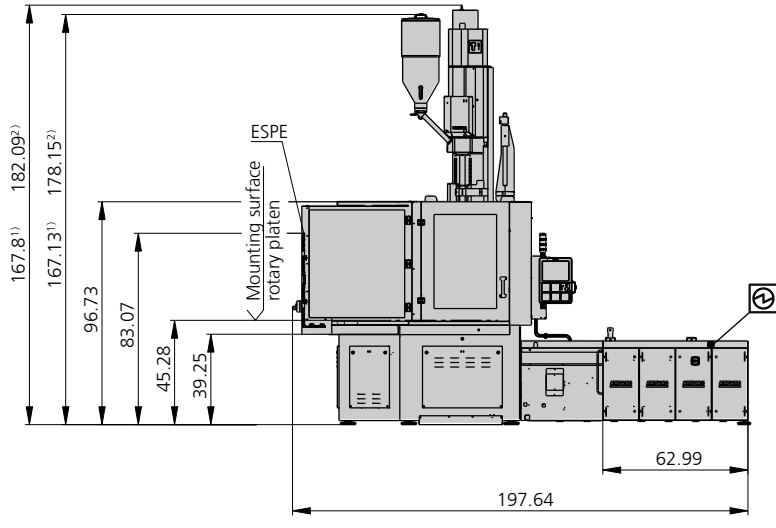
Table diameter: 70.87" (1800 mm)

Clamping force: 220, 280, 355 tons

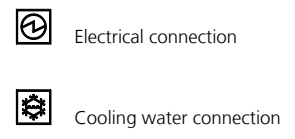
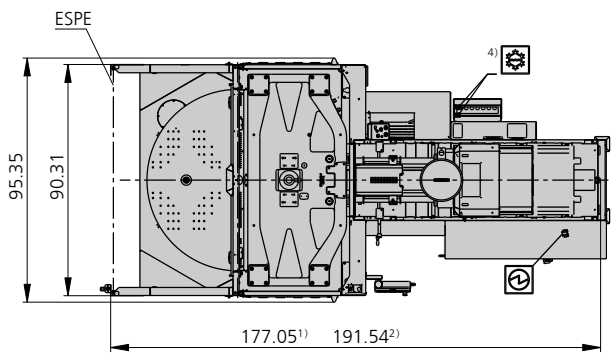
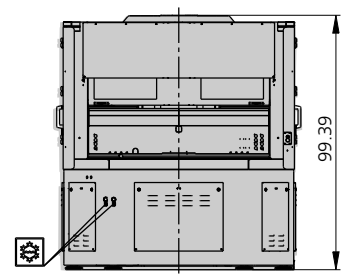
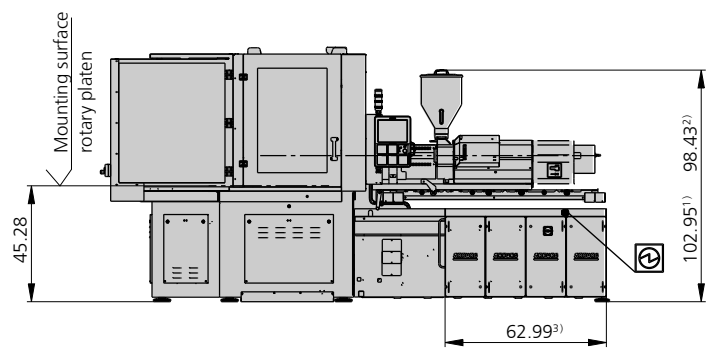
Injection unit: 8.2 oz, 15.3 oz, 29.1 oz, 45.4 oz

ARBURG

MACHINE DIMENSIONS UP TO 220 TONS | 1800 T

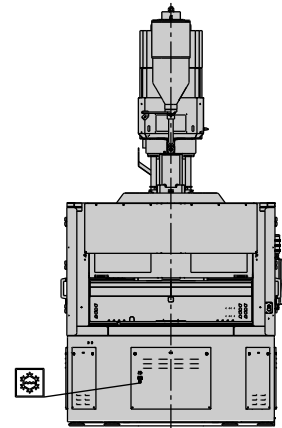
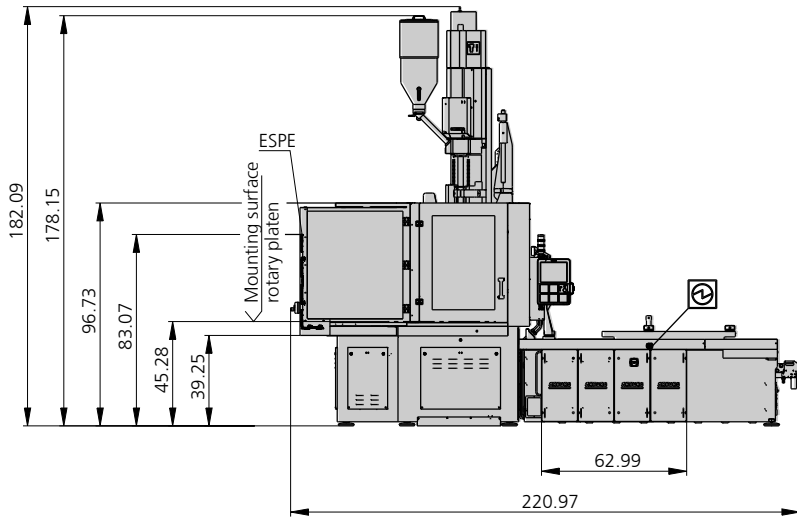


Horizontal version

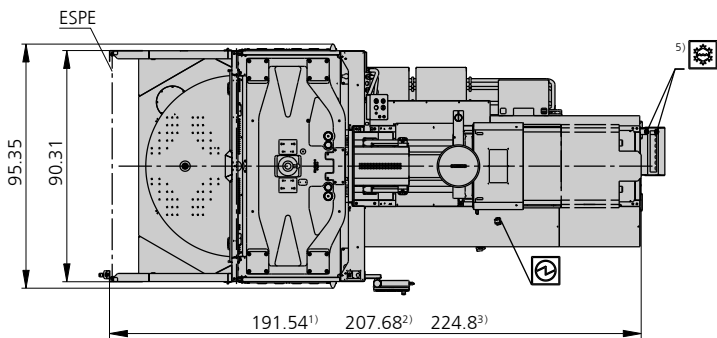
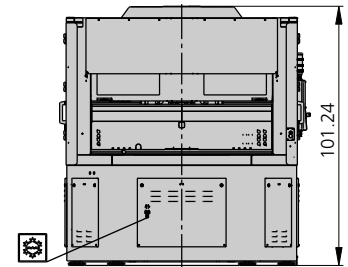
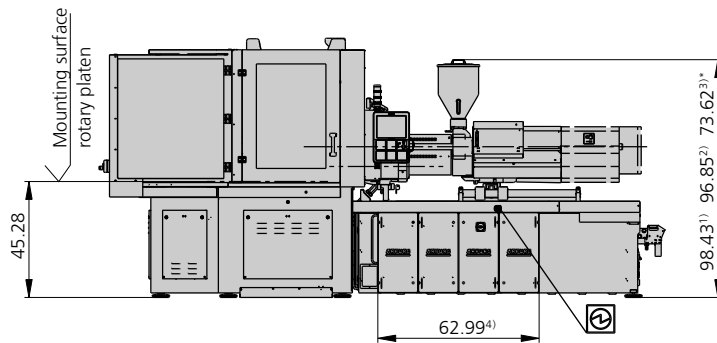


ESPE - Electro-sensitive protective equipment (Light curtain)
 1) Injection unit 8.2 oz
 2) Injection unit 15.3 oz
 3) Length of control cabinet and position of electrical connection may vary due to optional equipment installed
 4) Position of cooling water connection may vary due to optional equipment installed


MACHINE DIMENSIONS FROM 280 TONS | 1800 T



Horizontal version



 Electrical connection

 Cooling water connection

ESPE - Electro-sensitive protective equipment (Light curtain)

* without feed hopper

1) Injection unit 15.3 oz

2) Injection unit 29.1 oz

3) Injection unit 45.4 oz

4) Length of control cabinet and position of electrical connection may vary due to optional equipment installed

5) Position of cooling water connection may vary due to optional equipment installed

TECHNICAL DATA | 1800 T

Clamping unit			1800 T
with clamping force	max. tons		220
Opening force stroke	max. tons inch		12.65 11.81
Mold height, fixed variable	min. inch		15.75 ---
Platen daylight fixed variable	max. inch		27.56 ---
Table diameter	inch		71
Angle of rotation, left/right			180°
Rotation time for 180°	min. s		3.2
Weight on rotary table	max. lbs		3630
Weight of movable mold half	max. lbs		1760
Ejector force stroke	max. tons inch		2.75 6.89
Dry cycle time EUROMAP ²	2 pumps	min. s - inch	4.9 - 11.42
	Accum.	min. s - inch	---

Injection unit			8.2 oz			15.3 oz		
with screw diameter	mm		35	40	45	45	50	55
Effective screw length	L/D		23	20	18	22	20	18
Screw stroke	max. inch		6.30			7.87		
Calculated stroke volume	max. cu. inch		9.4	12.3	15.5	19.4	23.9	28.9
Shot weight	max. oz / PS		5.0	6.5	8.2	10.3	12.7	15.3
Material throughput	max. lbs/h PS		55.0	63.8	77.0	101.2	116.6	129.8
	max. lbs/h PA6.6		27.5	33.0	38.5	50.6	59.4	66.0
Injection pressure	max. psi		36250	29000	22910	35815	29000	23925
Holding pressure	max. psi		36250	29000	22910	35815	29000	23925
Injection flow ²	2 pumps	max. cu. inch/s	7.8	10.2	12.9	10.6	13.1	15.9
	Accum.	max. cu. inch/s	30.0	39.2	49.7	32.3	40.0	48.3
Screw circumferential speed ²	2 pumps	max. ft./min	154	174	197	177	197	217
	Accum.	max. ft./min	52	62	69	49	56	62
Screw torque	max. ft./lbs		354	406	450	650		
Nozzle contact force retraction stroke	max. tons inch		6.60 15.75			7.70 15.75		
Heating capacity zones	kW		9.40 5			19.90 8		
Feed hopper	lbs		80			---		

Drive and connection			2 pumps		Accum.	
with injection unit			8.2 oz	15.3 oz	8.2 oz	15.3 oz
Net weight of machine	lbs		40040	40700	---	
Sound press. level Ref. only ⁴	dB(A)		---		---	
Oil filling	gal.		68.69		68.69	
Drive power ²	max. kW		22	30	---	
Electrical connection ³		kW	36	55	---	
	Total	A	120 ---	160 ---	---	
	Machine	A	--- 50	--- 60	---	
	Heat	A	30 ---	60 ---	---	
Cooling water connection	max. °F		77		77	
	min. Δp psi		22 1"		22 1"	

Machine type

with EUROMAP size designation ¹

1800 T 220 tons 8.2 oz | 15.3 oz

Upon request: other machine types and mold 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 (tons) - Large injection unit = max. stroke volume (cu. inch) x max. injection pressure (psi)
 - 2) Specifications depend on the drive variant / drive configuration.
 - 3) Specifications relate to 230V/60 cycles | 460V/60 cycles.
 - 4) Detailed info in the operating instr.
- [] Specifications apply to alternative equipment.

TECHNICAL DATA | 1800 T

Clamping unit			1800 T		
with clamping force	max. tons		280		
Opening force stroke	max. tons inch		12.65 11.81		
Mold height, fixed variable	min. inch		15.75 ---		
Platen daylight fixed variable	max. inch		27.56 ---		
Table diameter	inch		71		
Angle of rotation, left/right			180°		
Rotation time for 180°	min. s		3.2		
Weight on rotary table	max. lbs		3630		
Weight of movable mold half	max. lbs		1760		
Ejector force stroke	max. tons inch		2.75 6.89		
Dry cycle time EUROMAP ²	2 pumps	min. s - inch	4.9 - 11.42		
	Accum.	min. s - inch	---		

Injection unit			15.3 oz			29.1 oz		
with screw diameter	mm		45	50	55	55	60	70
Effective screw length	L/D		22	20	18	22	20	17
Screw stroke	max. inch		7.87			9.25		
Calculated stroke volume	max. cu. inch		19.4	23.9	28.9	34.0	40.5	55.1
Shot weight	max. oz / PS		10.3	12.7	15.3	18.0	21.4	29.1
Material throughput	max. lbs/h PS		101.2	116.6	129.8	189.2	211.2	253.0
	max. lbs/h PA6.6		50.6	59.4	66.0	94.6	105.6	127.6
Injection pressure	max. psi		35815	29000	23925	34510	29000	21315
Holding pressure	max. psi		35815	29000	23925	34510	29000	21315
Injection flow ²	2 pumps	max. cu. inch/s	14.8	18.3	22.2	14.5	17.3	23.7
	Accum.	max. cu. inch/s	32.3	40.0	48.3	43.6	51.7	70.5
Screw circumferential speed ²	2 pumps	max. ft./min	177	197	217	131	141	167
	Accum.	max. ft./min	49	56	62	62	69	82
Screw torque	max. ft./lbs		650			1115	1211	1417
Nozzle contact force retraction stroke	max. tons inch		7.70 15.75			9.90 21.65		
Heating capacity zones	kW		19.90 8			22.90 8		
Feed hopper	lbs		---			---		

Drive and connection			2 pumps		Accum.	
with injection unit			15.3 oz	29.1 oz	15.3 oz	29.1 oz
Net weight of machine	lbs		46200	47300	---	
Sound press. level Ref. only ⁴	dB(A)		---		---	
Oil filling	gal.		79.26		79.26	
Drive power ²	max. kW		45	45	---	
Electrical connection ³	kW		68	71	---	
	Total	A	---		---	
	Machine	A	80 150	80 150	---	
	Heat	A	60 ---	60 ---	---	
Cooling water connection	max. °F		77		77	
	min. Δp psi		22 1"		22 1"	

Machine type

with EUROMAP size designation ¹

1800 T 280 tons 15.3 oz | 29.1 oz

Upon request: other machine types and mold installation heights, screws, drive powers etc.

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TECHNICAL DATA | 1800 T

Clamping unit			1800 T	
with clamping force		max. tons	355	
Opening force stroke		max. tons inch	12.65 11.81	
Mold height, fixed variable		min. inch	15.75 ---	
Platen daylight fixed variable		max. inch	27.56 ---	
Table diameter		inch	71	
Angle of rotation, left/right			180°	
Rotation time for 180°		min. s	3.2	
Weight on rotary table		max. lbs	3630	
Weight of movable mold half		max. lbs	1760	
Ejector force stroke		max. tons inch	2.75 6.89	
Dry cycle time EUROMAP ²	2 pumps	min. s - inch	4.9 - 11.42	
	Accum.	min. s - inch	---	

Injection unit			29.1 oz			45.4 oz		
with screw diameter		mm	55	60	70	60	70	80
Effective screw length		L/D	22	20	17	23	20	17.5
Screw stroke		max. inch	9.25			11.02		
Calculated stroke volume		max. cu. inch	34.0	40.5	55.1	48.3	65.8	85.8
Shot weight		max. oz / PS	18.0	21.4	29.1	25.5	34.7	45.4
Material throughput		max. lbs/h PS	189.2	211.2	253.0	275.0	319.0	385.0
		max. lbs/h PA6.6	94.6	105.6	127.6	136.4	162.8	193.6
Injection pressure		max. psi	34510	29000	21315	36250	29000	22185
Holding pressure		max. psi	34510	29000	21315	36250	29000	22185
Injection flow ²	2 pumps	max. cu. inch/s	14.5	17.3	23.7	13.7	18.7	24.4
	Accum.	max. cu. inch/s	43.6	51.7	70.5	69.1	93.9	122.7
Screw circumferential speed ²	2 pumps	max. ft./min	131	141	167	141	167	190
	Accum.	max. ft./min	62	69	82	69	82	92
Screw torque		max. ft./lbs	1115	1211	1417	1580	1846	1882
Nozzle contact force retraction stroke		max. tons inch	9.90 21.65			12.10 23.62		
Heating capacity zones		kW	22.90 8			31.40 8		
Feed hopper		lbs	---			---		

Drive and connection			2 pumps		Accum.	
with injection unit			29.1 oz	45.4 oz	29.1 oz	45.4 oz
Net weight of machine		lbs	47300	48400	---	
Sound press. level Ref. only ⁴		dB(A)	---		---	
Oil filling		gal.	79.26	105.68	105.68	
Drive power ²		max. kW	45	55	---	
Electrical connection ³		kW	71	89	---	
	Total	A	---	---	---	
	Machine	A	80 150	90 200	---	
	Heat	A	60 ---	80 ---	---	
Cooling water connection		max. °F	77		77	
		min. Δp psi	22 1"		22 1"	

Machine type
with EUROMAP size designation ¹
1800 T 355 tons 29.1 oz | 45.4 oz

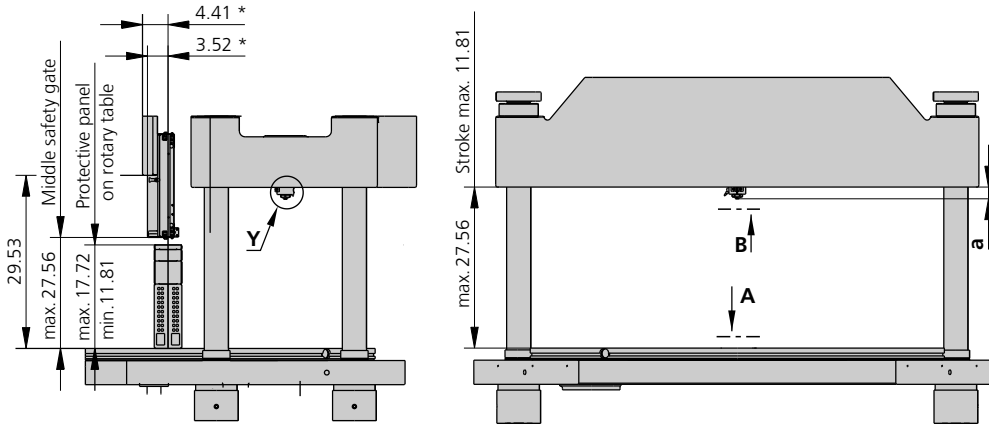
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1800 T

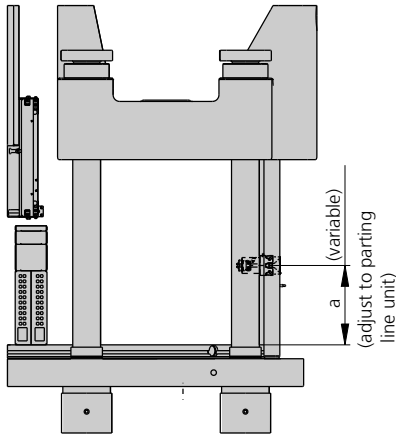
MOLD INSTALLATION DIMENSIONS UP TO 220 TONS | 1800 T



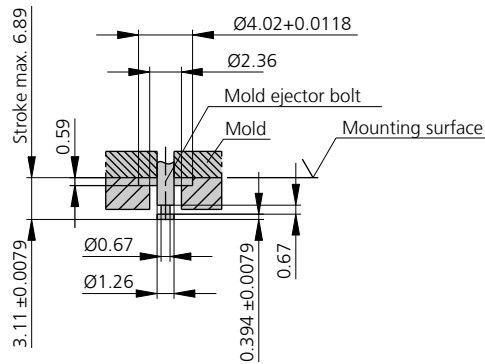
*Dimensions from center of table
(hindering edges of guard + safety gate)

a max.	Injection unit
	8.2 / 15.3 oz
Standard	1.97
Thermoset	1.97

Horizontal version



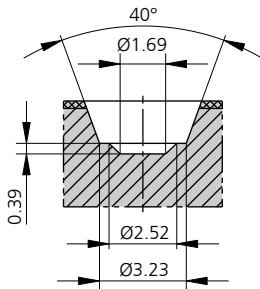
Ejector Bolt



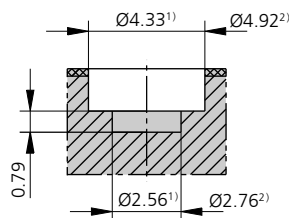
	Injection unit	
	8.2 oz	15.3 oz
a min.	11.81	11.81
a max.	15.75	19.69
b min.	3.94	4.72
c min.	10.63	10.63

Counter bore in the mold (if required) | Y

Injection unit 8.2 oz / 15.3 oz



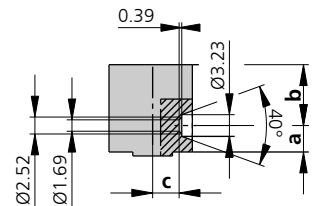
Injection unit 8.2¹⁾ oz / 15.3²⁾ oz
in thermoset execution



1) Injection unit 8.2 oz
2) Injection unit 15.3 oz

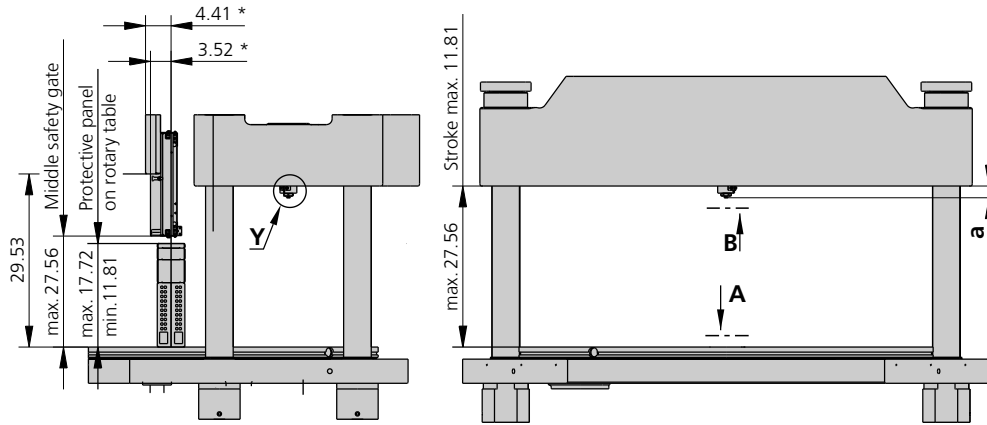
Counter bore in the mold (if required)

Injection unit 8.2 oz / 15.3 oz

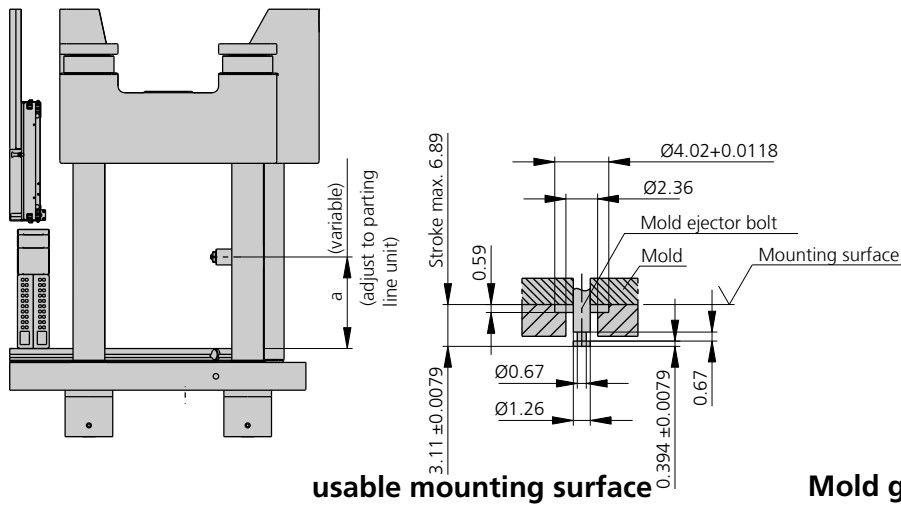


MOLD INSTALLATION DIMENSIONS UP TO 220 TONS | 1800 T

Moving mold mounting platen | B

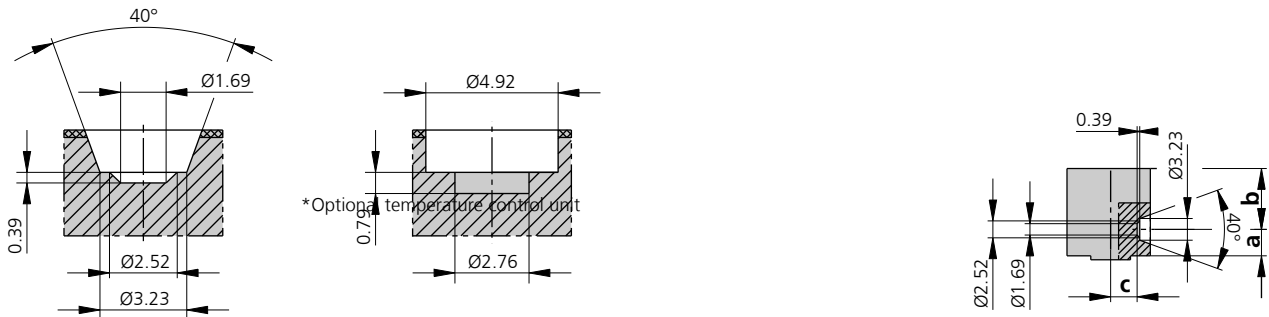


Mold mounting platen rotary table | A

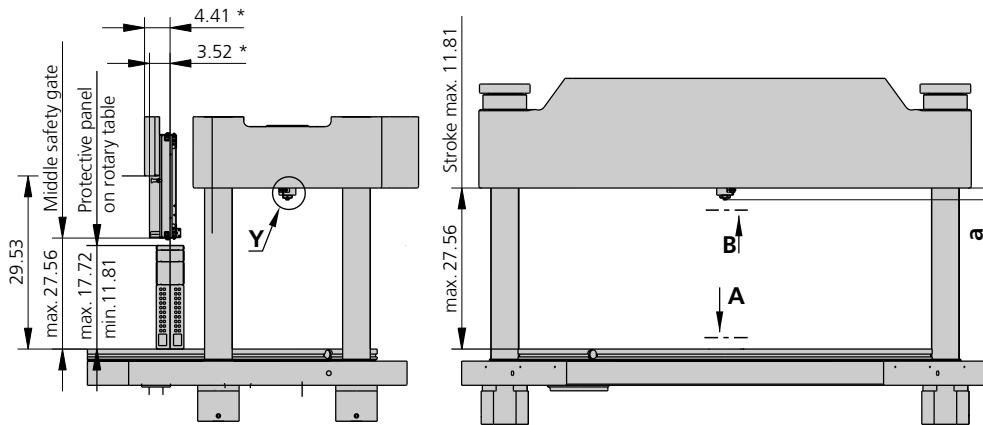


usable mounting surface

Mold grid size for 2-station mold



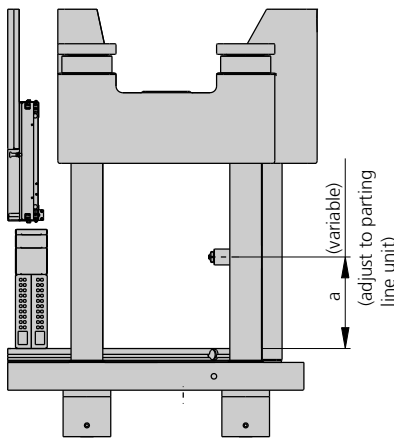
MOLD INSTALLATION DIMENSIONS FROM 280 TONS | 1800 T



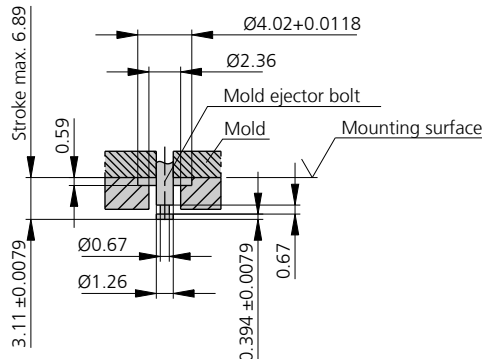
*Dimensions from center of table
(hindering edges of guard + safety gate)

a max.	Injection unit
	15.3 oz
Standard	1.97
Thermoset	1.97

Horizontal version

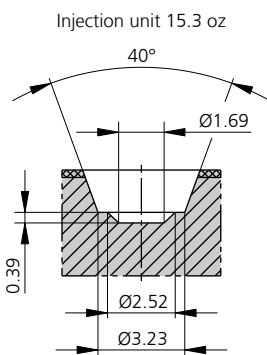


ejector bolt

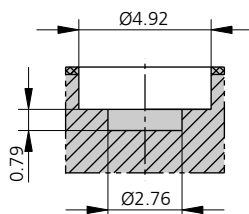


	Injection unit		
	15.3	29.1	45.5
a min.	11.81	13.78	15.75
a max.	19.96	17.72	19.69
b min.	4.72	4.72	4.72
c min.	10.63	6.69	5.12

Counter Bore in mold (if required) | Y

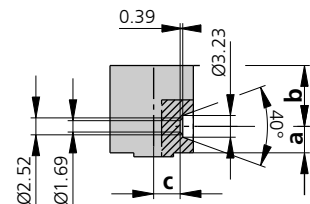


Injection unit 15.3 oz
in thermoset execution



Counter bore in mold (if required)

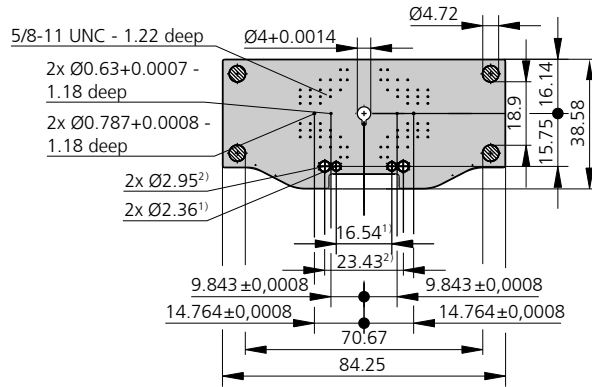
Injection unit 15.3oz / 29.1oz / 45.5oz



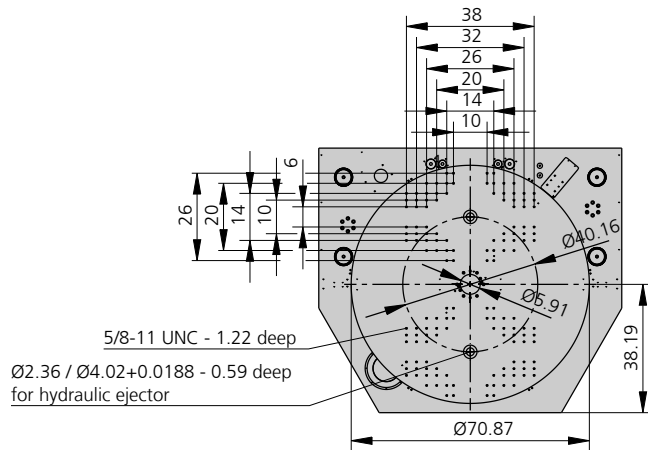
1) Injection unit 15.3 oz
2) Injection unit 29.1 oz

MOLD INSTALLATION DIMENSIONS FROM 280 TONS | 1800 T

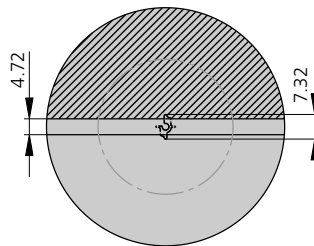
Moving mold mounting platen | B



Mold mounting platen rotary table | A

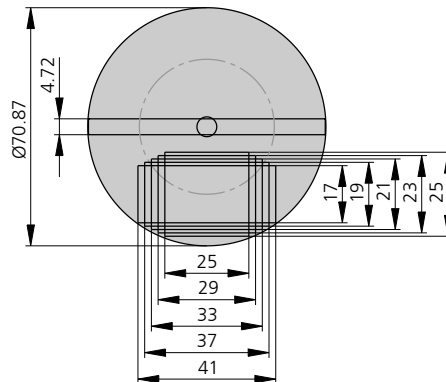


usable mounting surface



*Optional temperature control unit

Mold grid size for 2-station mold



1) Injection unit 8.2 oz
2) Injection unit 15.3 oz

SHOT WEIGHTS | 1800 T

Theoretical shot weights for the most important materials

Injection units		8.2 oz			15.3 oz			29.1 oz		
Screw diameter	inch	1.38	1.57	1.77	1.77	1.97	2.17	2.17	2.36	2.76
	mm	35	40	45	45	50	55	55	60	70
Polystyrene	max. oz PS	5.0	6.5	8.2	10.3	12.7	15.3	18.0	21.4	29.1
Styrene heteropolymerizates	max. oz SB	4.8	6.3	8.0	10.0	12.3	15.0	17.6	20.9	28.5
	max. oz SAN, ABS ¹⁾	4.8	6.2	7.9	9.8	12.1	14.7	17.3	20.6	28.1
Cellulose acetate	max. oz CA ¹⁾	5.6	7.3	9.2	11.5	14.3	17.2	20.3	24.1	32.8
Celluloseacetobutyrate	max. oz CAB ¹⁾	5.2	6.8	8.6	10.7	13.2	16.0	18.8	22.4	30.5
Polymethyl methacrylate	max. oz PMMA	5.1	6.7	8.5	10.6	13.1	15.8	18.6	22.1	30.1
Polyphenylene oxide, mod.	max. oz PPO	4.6	6.0	7.6	9.5	11.7	14.2	16.7	19.9	27.1
Polycarbonate	max. oz PC	5.2	6.8	8.6	10.8	13.3	16.1	18.9	22.5	30.6
Polysulphone	max. oz PSU	5.4	7.0	8.9	11.1	13.8	16.6	19.5	23.3	31.6
Polyamides	max. oz PA 6.6 PA 6 ¹⁾	4.9	6.5	8.2	10.2	12.6	15.2	17.9	21.3	29.0
	max. oz PA 6.10 PA 11 ¹⁾	4.6	6.0	7.6	9.5	11.7	14.2	16.7	19.9	27.1
Polyoximethylene (Polyacetal)	max. oz POM	6.1	8.0	10.1	12.7	15.6	18.9	22.2	26.4	36.0
Polyethylene terephthalate	max. oz PET	5.9	7.7	9.8	12.2	15.1	18.2	21.4	25.5	34.7
Polyethylene	max. oz PE-LD	3.7	4.9	6.2	7.7	9.6	11.6	13.6	16.2	22.0
	max. oz PE-HD	3.9	5.0	6.4	8.0	9.9	12.0	14.0	16.7	22.7
Polypropylene	max. oz PP	4.0	5.2	6.5	8.2	10.1	12.2	14.3	17.1	23.2
Fluoropolymerides	max. oz FEP, PFA, PCTFE ¹⁾	7.9	10.4	13.1	16.4	20.2	24.5	28.8	34.3	46.6
	max. oz ETFE	6.9	9.0	11.4	14.3	17.7	21.4	25.1	29.9	40.7
Polyvinyl chloride	max. oz PVC-U	6.0	7.8	9.9	12.4	15.3	18.5	21.7	25.9	35.2
	max. oz PVC-P ¹⁾	5.5	7.2	9.2	11.4	14.1	17.1	20.1	23.9	32.5

Injection units		45.4 oz		
Screw diameter	inch	2.36	2.76	3.15
	mm	60	70	80
Polystyrene	max. oz PS	25.5	34.7	45.4
Styrene heteropolymerizates	max. oz SB	24.9	33.9	44.3
	max. oz SAN, ABS ¹⁾	24.4	33.3	43.4
Cellulose acetate	max. oz CA ¹⁾	28.7	39.1	51.0
Celluloseacetobutyrate	max. oz CAB ¹⁾	26.7	36.3	47.5
Polymethyl methacrylate	max. oz PMMA	26.3	35.9	46.9
Polyphenylene oxide, mod.	max. oz PPO	23.7	32.2	42.1
Polycarbonate	max. oz PC	26.8	36.5	47.7
Polysulphone	max. oz PSU	27.7	37.7	49.2
Polyamides	max. oz PA 6.6 PA 6 ¹⁾	25.4	34.5	45.1
	max. oz PA 6.10 PA 11 ¹⁾	23.7	32.2	42.1
Polyoximethylene (Polyacetal)	max. oz POM	31.5	42.9	56.0
Polyethylene terephthalate	max. oz PET	30.4	41.3	54.0
Polyethylene	max. oz PE-LD	19.3	26.2	34.3
	max. oz PE-HD	19.9	27.1	35.4
Polypropylene	max. oz PP	20.3	27.7	36.2
Fluoropolymerides	max. oz FEP, PFA, PCTFE ¹⁾	40.8	55.6	72.6
	max. oz ETFE	35.6	48.5	63.3
Polyvinyl chloride	max. oz PVC-U	30.8	42.0	54.8
	max. oz PVC-P ¹⁾	28.5	38.8	50.7

1) average value

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