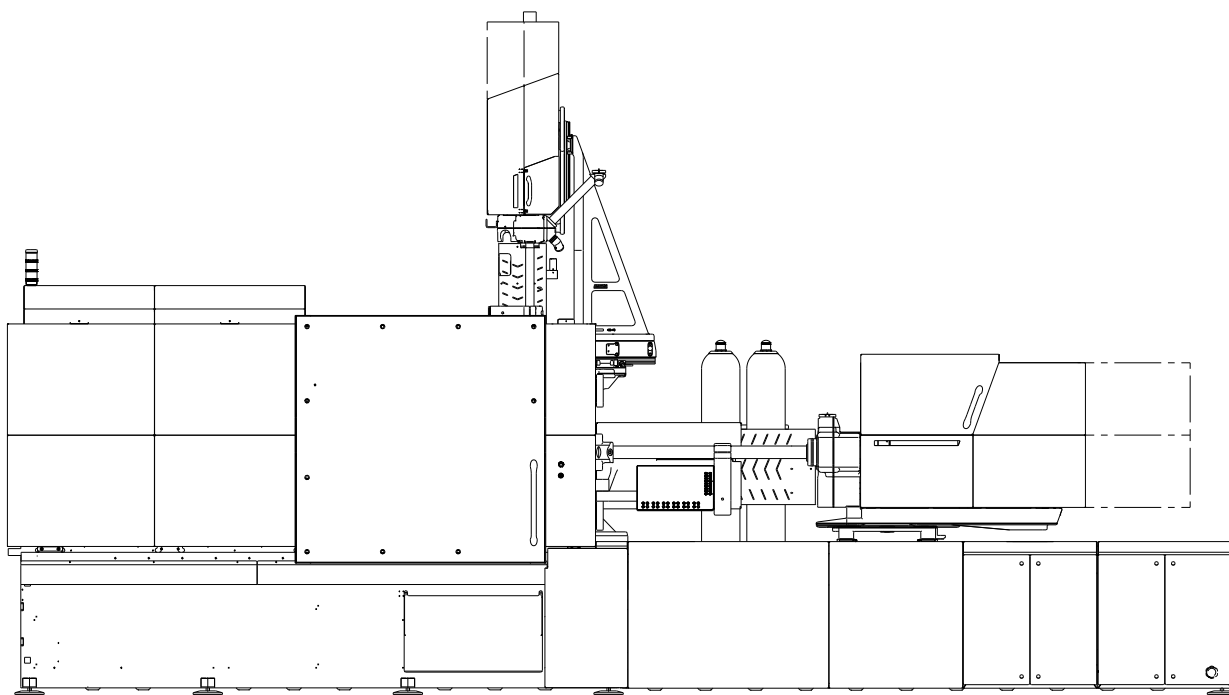




ALLROUNDER 630 S

**Clamp-Design
Multi-component**

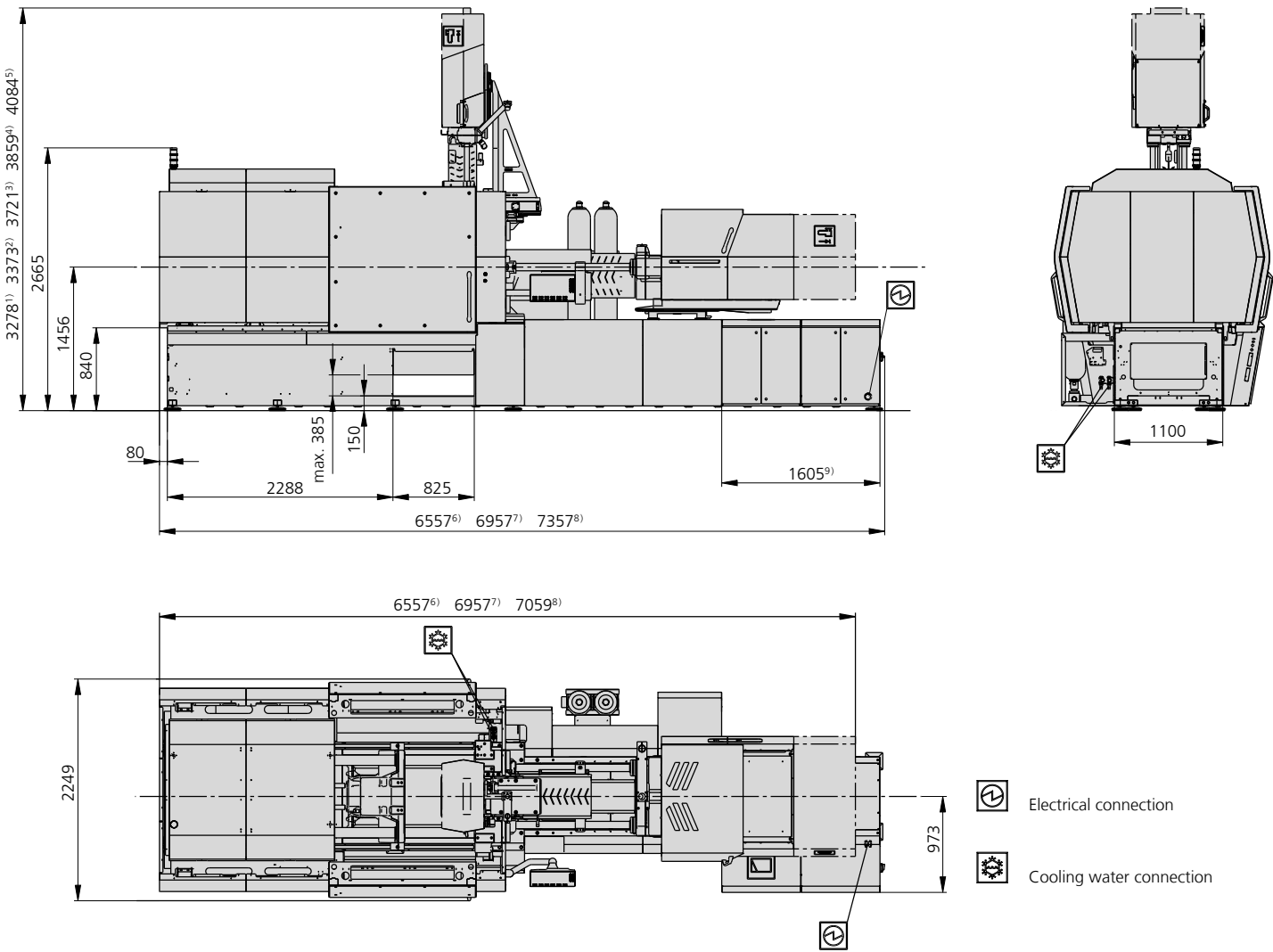
Distance between tie bars: 630 x 630 mm

Clamping force: 2500 kN

Injection unit: 800, 1300, 2100 – horizontal
70, 100, 170, 290, 400 – vertical

ARBURG

MACHINE DIMENSIONS | 630 S MULTI-COMPONENT



1) Injection unit 70
2) Injection unit 100
3) Injection unit 170
4) Injection unit 290
5) Injection unit 400
6) Injection unit 800
7) Injection unit 1300
8) Injection unit 2100
9) Subject to performance variant and injection unit size

TECHNICAL DATA | 630 S MULTI-COMPONENT

Clamping unit		630 S
with clamping force	max. kN	2500
Opening force stroke	max. kN mm	725 600
Mould height, fixed variable	min. mm	700 [300-700]
Platen daylight fixed variable	max. mm	1300 [900-1300]
Distance between tie bars (w x h)	mm	630 x 630
Mould mounting platens (w x h)	max. mm	900 x 900
Weight of movable mould half	max. kg	2500
Ejector force stroke	max. kN mm	90 225
Dry cycle time EUROMAP ²	min. s - mm	1,7 - 441

Injection unit		70			100			170		
with screw diameter	mm	18	22	25	20	25	30	25	30	35
Effective screw length	L/D	24,5	20	17,5	25	20	16,7	24	20	17
Screw stroke	max. mm	90			100			120		
Calculated stroke volume	max. cm ³	23	34	44	31	49	71	59	85	115
Shot weight	max. g PS	21	31	40	29	45	65	54	77	105
Material throughput	max. kg/h PS	4,1	5,5	6,5	5,5	8	9,5	10	13,5	16
	max. kg/h PA6.6	2,1	2,8	3,3	2,8	4	4,9	5	7	8
Injection pressure	max. bar	2500	2000	1550	2500	2000	1390	2500	2000	1470
Holding pressure	max. bar	2500	2000	1550	2500	2000	1390	2500	2000	1470
Injection flow ²	max. cm ³ /s	138	208	268	172	268	388	216	312	424
Screw circumferential speed ²	max. m/min	49	60	68	34	43	51	43	52	60
Screw torque	max. Nm	90	110	120	120	150	180	210	250	290
Nozzle contact force retraction stroke	max. kN mm	50 150			50 180			50 210 300 ⁶		
Heating capacity zones	kW	4,2 4			6,7 5			9 5		

Drive and connection		800				
with horizontal/vertical injection unit		70	100	170	290	400
Net weight of machine	kg	13850	13850	14020	14010	14190
Sound press. level Insecurity ⁴	dB(A)	< 70				
Oil filling	l	360				
Drive power ²	max. kW	75				
Electrical connection ³	kW	102	104	107	105	107
	Total	---				
	Machine	160	160	160	160	160
	Heating	40	50	50	50	63
Cooling water connection	max. °C	30				
	min. Δp bar	1,5 DN32				

Machine type	
with EUROMAP size designation ¹	
630 S 2500-800/70 800/100 800/170 800/290 800/400	

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 (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 information in the operating instructions.
- 6) The second value applies to a vertical arrangement of the injection unit
- [] Specifications apply to alternative equipment.

TECHNICAL DATA | 630 S MULTI-COMPONENT

Clamping unit		630 S
with clamping force	max. kN	2500
Opening force stroke	max. kN mm	725 600
Mould height, fixed variable	min. mm	700 [300-700]
Platen daylight fixed variable	max. mm	1300 [900-1300]
Distance between tie bars (w x h)	mm	630 x 630
Mould mounting platens (w x h)	max. mm	900 x 900
Weight of movable mould half	max. kg	2500
Ejector force stroke	max. kN mm	90 225
Dry cycle time EUROMAP ²	min. s - mm	1,7 - 441

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 ³	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	2500	2000	1530	2500	2000	1580	2470	2000	1650
Injection flow ²	max. cm ³ /s	316	430	562	492	642	814	530	656	792
Screw circumferential speed ²	max. m/min	41	48	54	29	34	38	51	57	62
Screw torque	max. Nm	320	380	430	480	550	610	880		
Nozzle contact force retraction stroke	max. kN mm	60 240 300 ⁶			60 400 300 ⁶			70 300		
Heating capacity zones	kW	7,7 5			9,7 5			19,9 8		

Drive and connection		1300				
with horizontal/vertical injection unit		70	100	170	290	400
Net weight of machine	kg	14460	14460	14630	14620	141300
Sound press. level Insecurity ⁴	dB(A)	< 70				
Oil filling	l	460				
Drive power ²	max. kW	75				
Electrical connection ³	kW	105	107	110	108	110
	Total	---				
	Machine	160	160	160	160	160
	Heating	50	50	63	63	63
Cooling water connection	max. °C	30				
	min. Δp bar	1,5 DN32				

Machine type	
with EUROMAP size designation ¹	
630 S 2500-1300/70 1300/100 1300/170 1300/290 1300/400	

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 (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 information in the operating instructions.
- 6) The second value applies to a vertical arrangement of the injection unit
- [] Specifications apply to alternative equipment.

TECHNICAL DATA | 630 S MULTI-COMPONENT

Clamping unit		630 S
with clamping force	max. kN	2500
Opening force stroke	max. kN mm	725 600
Mould height, fixed variable	min. mm	700 [300-700]
Platen daylight fixed variable	max. mm	1300 [900-1300]
Distance between tie bars (w x h)	mm	630 x 630
Mould mounting platens (w x h)	max. mm	900 x 900
Weight of movable mould half	max. kg	2500
Ejector force stroke	max. kN mm	90 225
Dry cycle time EUROMAP ²	min. s - mm	1,7 - 441

Injection unit		1300			2100			
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. mm	240			280			
Calculated stroke volume	max. cm ³	558	664	904	792	1078	1407	
Shot weight	max. g PS	510	607	826	723	984	1286	
Material throughput	max. kg/h PS	86	96	115	125	145	175	
	max. kg/h PA6.6	43	48	58	62	74	88	
Injection pressure	max. bar	2380	2000	1470	2500	2000	1530	
Holding pressure	max. bar	2380	2000	1470	2500	2000	1530	
Injection flow ²	max. cm ³ /s	714	848	1156	1132	1540	2012	
Screw circumferential speed ²	max. m/min	41	48	54	29	34	38	
Screw torque	max. Nm	1510	1640	1920	2140	2500	2550	
Nozzle contact force retraction stroke	max. kN mm	90 550			110 600			
Heating capacity zones	kW	22,9 8			31,1 8			

Drive and connection		2100				
with horizontal/vertical injection unit		70	100	170	290	400
Net weight of machine	kg	14560	14560	14730	14720	14900
Sound press. level Insecurity ⁴	dB(A)	< 70				
Oil filling	l	530				
Drive power ²	max. kW	75				
Electrical connection ³	kW	113	116	118	117	119
	Total	---				
	Machine	160	160	160	160	160
	Heating	63	63	80	63	80
Cooling water connection	max. °C	30				
	min. Δp bar	1,5 DN32				

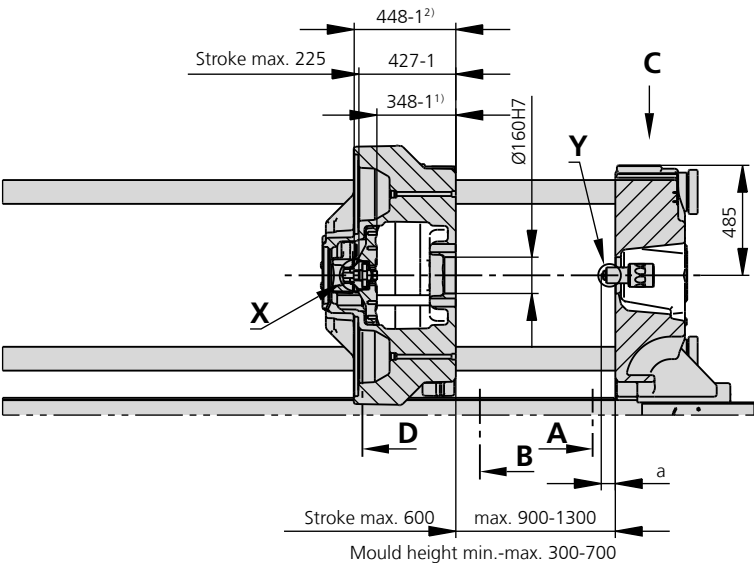
Machine type	
with EUROMAP size designation ¹	
630 S 2500-2100/70 2100/100 2100/170 2100/290 2100/400	

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.

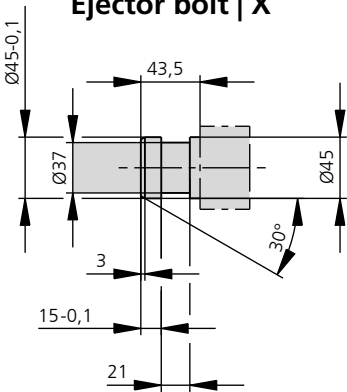
- 1) Clamping force (kN) - size of injection unit = max. stroke volume (cm³) x max. injection pressure (kbar).
- 2) Specifications depend on the drive variant / drive configuration.
- 3) Specifications relate to 400 V/50 Hz.
- 4) Emission sound pressure level at the workplace. Detailed information in the operating instructions.
- 6) The second value applies to a vertical arrangement of the injection unit
- [] Specifications apply to alternative equipment.

MOULD INSTALLATION DIMENSIONS | 630 S MULTI-COMPONENT

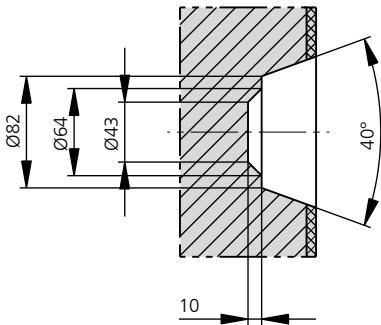


a max.	injection unit	
	800	1300/2100
	50	60

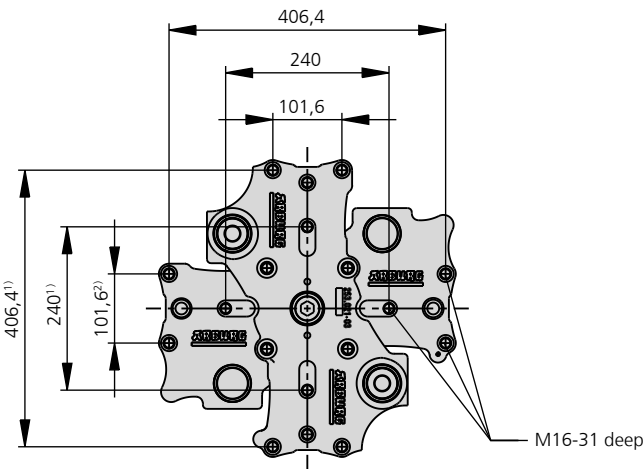
Ejector bolt | X



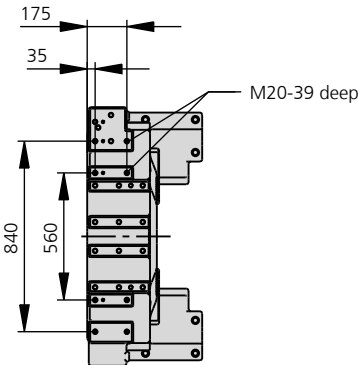
Bore in mould (if required) | Y



Ejector plate | D



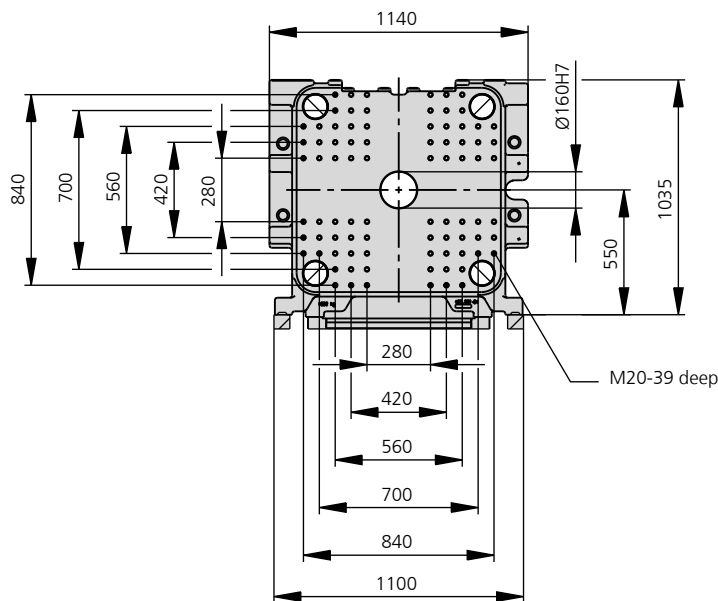
Robotic system mounting | C



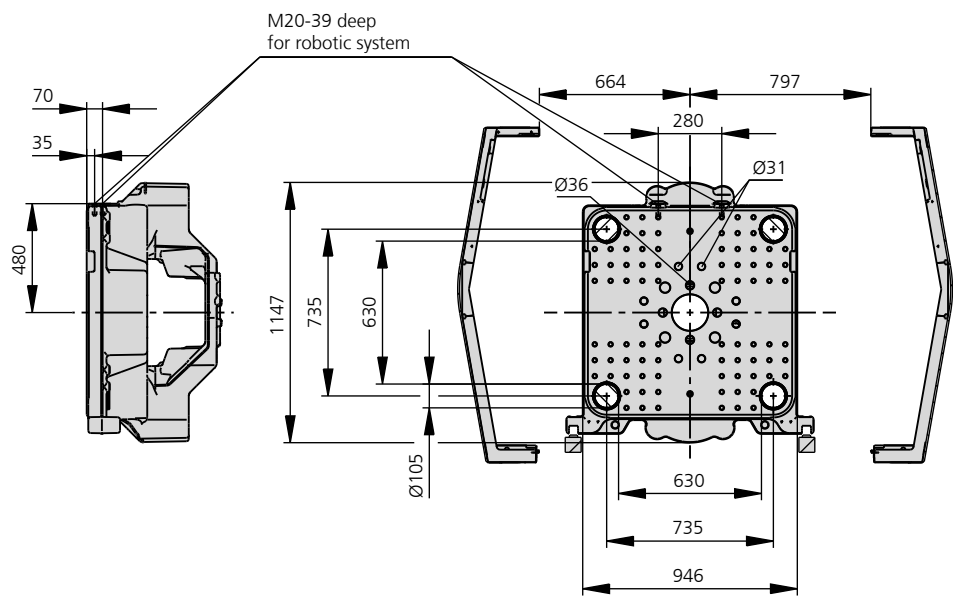
1) Position of ejector plate

MOULD INSTALLATION DIMENSIONS | 630 S MULTI-COMPONENT

Fixed mould mounting platen | A

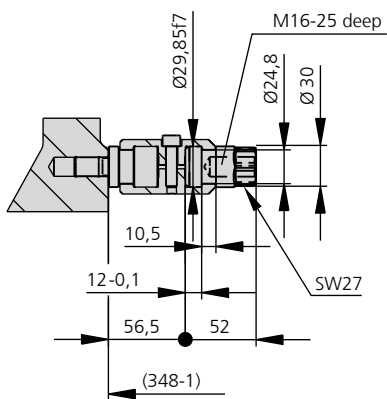


Moving mould mounting platen | B

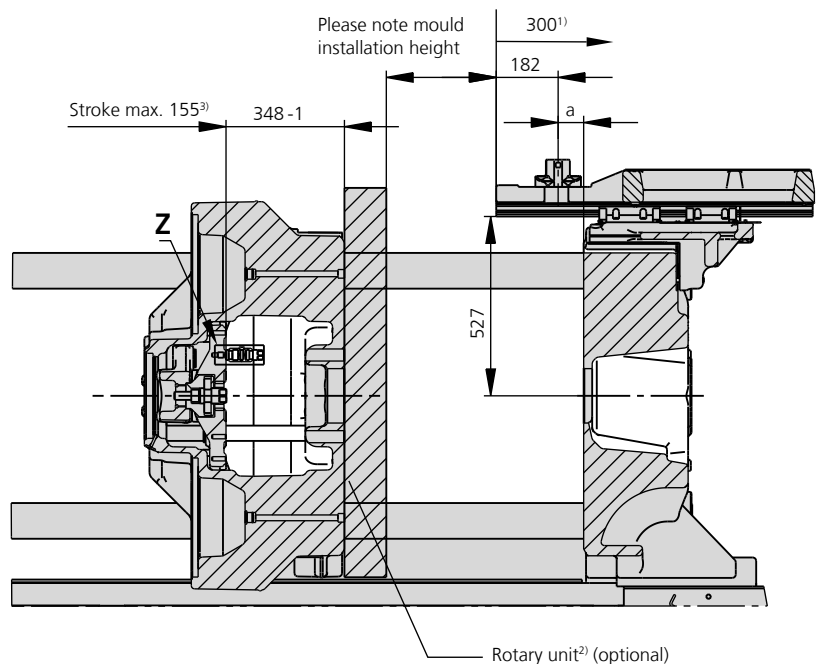


DEVICE FOR PARTING LINE INJECTION | 630 S MULTI-COMPONENT

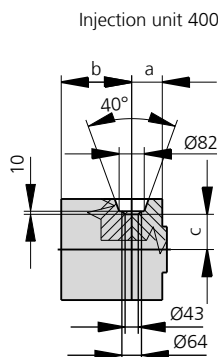
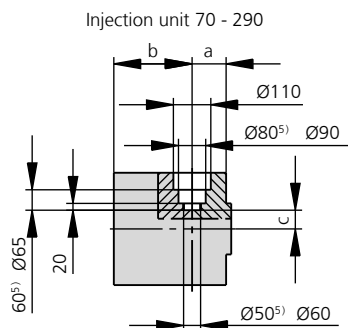
Ejector coupling | Z



Mount for vertical injection unit on carrier



Bore in mould (if required)



	Injection positions for injection units		
	70 / 100	170 / 290	400
a min.	75	75	75
a max.	250	250	250
b min.	75 / 80⁴)	75 / 80⁴)	75 / 80⁴)
c min.	290⁵) 265	265	265

1) Travel from injection position (a min.) to mould change position
2) See separate facts and figures for information
3) Dimension for off-centre ejection with vertical ejector coupling
4) Dimensions in conjunction with hydraulic nozzle
5) Injection unit 70

SHOT WEIGHTS | 630 S MULTI-COMPONENT

Theoretical shot weights for the most important injection moulding materials

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
Fluoropolymerides	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			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 ¹⁾	93	126	165	135	176	223	278	344	416
Cellulose acetate	max. g CA ¹⁾	109	148	194	158	207	262	327	404	488
Celluloseacetobutyrate	max. g CAB ¹⁾	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 ¹⁾	96	131	171	140	183	231	289	357	431
	max. g PA 6.10 PA 11 ¹⁾	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 ¹⁾	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 ¹⁾	108	147	192	157	205	260	324	401	485

1) average value

SHOT WEIGHTS | 630 S MULTI-COMPONENT

Theoretical shot weights for the most important injection moulding materials

Injection units according to EUROMAP		1300			2100			
Screw diameter	mm	55	60	70	60	70	80	
Polystyrene	max. g PS	510	607	826	723	984	1286	
Styrene heteropolymerizates	max. g SB	498	593	807	707	962	1256	
	max. g SAN, ABS ¹⁾	488	581	791	693	943	1231	
Cellulose acetate	max. g CA ¹⁾	574	683	930	814	1108	1447	
Celluloseacetobutyrate	max. g CAB ¹⁾	534	635	865	757	1030	1346	
Polymethyl methacrylate	max. g PMMA	527	627	854	747	1017	1329	
Polyphenylene ether, mod.	max. g PPE	473	563	767	671	914	1194	
Polycarbonate	max. g PC	536	638	868	760	1034	1351	
Polysulphone	max. g PSU	554	659	897	785	1069	1396	
Polyamides	max. g PA 6.6 PA 6 ¹⁾	507	603	821	719	978	1278	
	max. g PA 6.10 PA 11 ¹⁾	473	563	767	671	914	1194	
Polyoximethylene (Polyacetal)	max. g POM	630	749	1020	893	1215	1588	
Polyethylene terephthalate	max. g PET	607	723	984	861	1172	1531	
Polyethylene	max. g PE-LD	385	458	624	546	744	971	
	max. g PE-HD	398	473	644	564	768	1003	
Polypropylene	max. g PP	406	484	658	576	784	1025	
Fluoropolymerides	max. g FEP, PFA, PCTFE ¹⁾	816	971	1322	1157	1575	2058	
	max. g ETFE	716	852	1160	1015	1382	1805	
Polyvinyl chloride	max. g PVC-U	616	734	998	874	1190	1554	
	max. g PVC-P ¹⁾	569	678	922	808	1099	1436	

1) average value

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