

Technical Data

Machine model:	ARBURG	221-55-250			221-75-350				221-175-350		
International size ¹⁾	<i>allrounder</i>[®]	250 – 55			350 – 75				350 – 175		
Clamping unit											
Clamping pressure/Locking pressure	kN ²⁾	250 (25 tons) / 280 (28 tons)			350 (35 tons) / 390 (39 tons)				350 (35 tons) / 390 (39 tons)		
Mould opening stroke (adjustable)	mm	60–200			60–200				60–200		
Mould height	mm	150–300			150–300				150–300		
Daylight	mm	500			500				500		
Distance between tiebars	mm	221			221				221		
Platen size (hor. × vert.)	mm	342 x 250			342 x 250				342 x 250		
Maximum mould size (vert. and hor.)	mm	220 x 250			220 x 250				220 x 250		
Max. force with hydraulic ejector	kN ²⁾	20 (2.0 tons)			27 (2.7 tons)				27 (2.7 tons)		
Max. stroke with hydraulic ejector	mm	60			60				60		
Injection unit											
Screw diameters available	mm	18	22	25	18	22	25	30	25	30	35
Screw length L/D	–	25	20.5	18	25	20.5	18	15	24	20	17
Max. effective screw stroke	mm	95			95				145		
Max. swept volume	cm ³	24	36	47	24	36	47	67	71	103	139
Max. shot volume ⁸⁾	cm ³	19	29	38	19	29	38	54	57	82	111
Max. injection force	kN ²⁾	57 (5.7 tons)			77 (7.7 tons)				122 (12.2 tons)		
Max. injection pressure	bar ³⁾	2240	1500	1160	3025	2025	1570	1090	2500	1730	1270
Nozzle pressure	kN ²⁾	37 (3.7 tons)			50 (5 tons)				61 (6.1 tons)		
Injection time for max. stroke volume	s	0.9			0.9				2.2		
Injection time for max. stroke volume with accu.	s	0.12			0.12				0.34		
Screw speed (variable) ¹⁰⁾	r.p.m.	10–450			10–450				10–360		
Screw torque ¹⁰⁾	Nm	115			155				193		
Nozzle retraction stroke	mm	150			150				180		
Cylinder heating and nozzle heater band	Watts	3150 + 310			3150 + 310				5250 + 310		
Number of heating zones	–	3 + 1			3 + 1				3 + 1		
Material hopper capacity	liters	50			50				50		
Electrics, Hydraulic, General											
Pump motor	kW	5.5			7.5				7.5		
Hydraulic oil required	liters	120			120				120		
Dry cycles ⁹⁾	s	1.5			1.5				1.5		
Total connected load ⁷⁾	kW	9			11				13.1		
Length x width of machine ⁴⁾	m	2.7 x 1.2			2.7 x 1.2				2.82 x 1.2		
Height with hor./vert. inj. unit ¹⁰⁾	m	1.83 / 2.82			1.83 / 2.82				1.83 / 3.00		
Height of hoist	m	3.34			3.34				3.34		
Weight without oil ⁴⁾	kg	930			970				1030		
Water supply and drain	"	R ¾			R ¾				R ¾		
Colour: green similar to RAL 6011											
Max. shot capacity (grams) ⁹⁾											
Screw diameter		18 mm	22 mm	25 mm	30 mm			25 mm	30 mm	35 mm	
Polystyrene	PS	20	30	39	56			60	86	117	
Polystyrene co-polymers	SB	20	30	39	56			60	86	117	
	SAN, ABS ⁶⁾	21	31	40	57			62	89	120	
Cellulose acetate	CA ⁶⁾	24	37	47	68			73	105	143	
Cellulose acetate butyrate	CAB ⁶⁾	23	35	44	64			68	98	133	
Polymethylmethacrylate	PMMA	23	34	44	63			67	97	131	
Polyphenylene oxide	PPO	20	30	40	56			60	87	118	
Polycarbonate	PC	23	35	44	64			68	99	134	
Polysulfone	PSO	24	36	46	63			71	102	138	
Polyamide	PA 6.6, PA 6 ⁶⁾	22	33	42	61			64	93	126	
	PA 6.10, PA 11 ⁶⁾	20	30	39	56			60	86	117	
Acetal	POM	27	41	53	76			80	116	157	
Polyethylene terephthalate	PETP	26	40	52	74			79	113	154	
Polyethylene	PE L.D.	18	26	35	49			52	75	102	
	PE H.D.	19	27	36	51			54	78	106	
Polypropylene	PP	18	26	34	48			52	74	101	
Polyfluorolefins (Teflon, FEP, Hostafion)	FEP, PCTFE ⁶⁾	41	62	80	116			123	177	240	
(Tefzel)	ETFE	33	50	63	92			97	140	189	
Polyvinylchloride	PVC rigid	26	40	52	74			79	113	154	
	PVC soft ⁶⁾	24	37	47	69			73	105	143	

1) 1st figure: clamping pressure [kN]

2nd figure: max. swept volume [cm³] x max. spec. injection pressure [kbar]

2) 1 N = Newton ≈ 0.1 kp; 1 kN ≈ 0.1 tons ≈ 100 kp

3) 1 bar ≈ 1 kp/cm² = 1 at; 1 kbar = 1000 bar

4) with standard equipment

6) Average

7) 380/220 V, 3-phase, 50 cycles

8) 80% of theoretical

9) According to Euromap

10) For Allrounder® with vented cylinder on request