

THE ROBOSHOT

ALPHA SERIES

TONNAGE: S165-iB

Screw Diameter:
32, 36, 40, 44,
48, 52

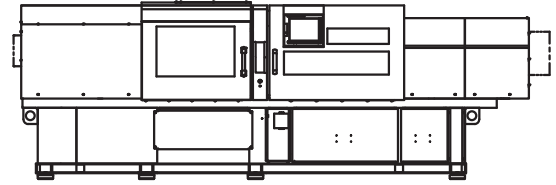
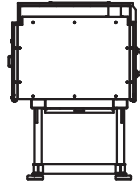
TECHNICAL SPECIFICATIONS

Screw Diameter		32	36	40	44	48	52
	ENGLISH						
	METRIC						
General							
Overall Dimensions (L x W x H)	in mm	196.5 x 55.4 x 71.5 4,990 x 1,408 x 1,815					
Machine Weight	lbs kg	14,330 6,500					
Nominal Input Power Source	Ph/Volt	3 Phase, 200 - 220V *					
Breaker Size Machine Only	Amp	125					
Breaker Size with Aux Outlets	Amp	225					
Min Transformer w/std breaker	kva	50					
Min Transformer w/increased breaker	kva	80					
Injection Unit Specifications							
Screw Diameter ***	in mm	1.26 32	1.42 36	1.57 40	1.73 44	1.89 48	2.05 52
Injection Capacity, Maximum GPPS	oz gms	4.01 114	5.08 144	6.27 178	8.90 252	10.59 300	14.69 416
Theoretical Displacement	in ³ cm ³	7.4 121	9.3 153	11.5 188	16.3 268	19.4 318	27.0 442
Max Injection Pressure (S165-iB)	psi bar	39,825 2,800	39,825 2,800	36,981 2,600	31,292 2,200	27,025 1,900	22,758 1,600
Max Pack Pressure (S165-iB)	psi bar	39,825 2,800	39,825 2,800	36,981 2,600	31,292 2,200	27,025 1,900	22,758 1,600
Max Injection Velocity (S165-iB)	in/sec cm/sec	13.78 35	13.78 35	13.78 35	13.78 35	13.78 35	13.78 35
Max Injection Rate (S165-iB)	in ³ /sec cm ³ /sec	17.17 281	21.74 356	26.83 440	32.47 532	38.64 633	45.35 743
Max injection pressure** (High pressure filling mode) - (S165-iB-HD)	psi bar	54,058 3,800	49,070 3,450	45,514 3,200	39,825 2,800	----	----
Max Injection Pressure (S165-iB-HD)	psi bar	39,825 2,800	39,825 2,800	39,825 2,800	36,981 2,600	32,713 2,300	28,447 2,000
Max Pack Pressure (S165-iB-HD)	psi bar	39,825 2,800	39,825 2,800	39,825 2,800	36,981 2,600	32,713 2,300	28,477 2,000
Max Injection Velocity (S165-iB-HD)	in/sec cm/sec	10.63 27	10.63 27	10.63 27	10.63 27	10.63 27	10.63 27
Max Injection Rate (S165-iB-HD)	in ³ /sec cm ³ /sec	13.25 217	16.77 275	20.70 339	25.05 411	29.81 488	34.98 573
Screw Stroke	in mm	5.91 150	5.91 150	5.91 150	6.93 176	6.93 176	8.19 208
Screw L/D Ratio	L/D	20:1	20:1	20:1	20:1	20:1	20:1

Notes

- 1) *Allowable fluctuation V +/- 10%, +/- 1 Hz.
- 2) ** The maximum injection pressure setting at high pressure filling mode option. The maximum pack pressure will be changed. There is a limitation in injection time setting and pack time setting, when high pressure filling mode option is selected. High pressure resistance barrel and nozzle are necessary, when high pressure filling option is selected. (Contact sales for detail)
- 3) *** Consult factory for smaller sizes.

THE ROBOSHOT SERIES (17-550 TON)



Not actual model, for visual reference only.

Screw Diameter		32	36	40	44	48	52
	ENGLISH METRIC						
Injection Unit Specifications							
Screw Speed Max	min ⁻¹	400	400	400	400	400	400
Nozzle Touch Force	ton	3.3	3.3	3.3	3.3	3.3	3.3
	kN	3.0	3.0	3.0	3.0	3.0	3.0
Number of Pyrometers (Barrel/Nozzle)	qty	3/1	3/1	3/1	3/1	3/1	3/1
Total Heat Capacity	kW	12.0	13.0	14.9	15.9	17.9	20.2
Clamp		Standard			Optional		
Clamping Force	ton	165			198		
	kN	1,500			1,800		
Platen Size (H x V)	in	31.5 x 29.5					
	mm	800 x 750					
Distance Between Tie Rods (H x V)	in	22 x 20.1					
	mm	560 x 510					
Tie Rod Diameter	in	3.54					
	mm	90					
Mold Opening Stroke	in	17.32					
	mm	440					
Maximum Daylight (single platen)	in	43.9					
	mm	1,115					
Min/Max Mold Thickness (single platen)	in	10.83 / 26.6					
	mm	275 / 675					
Maximum Daylight (double platen)	in	40.94					
	mm	1,040					
Min/Max Mold Thickness (double platen)	in	7.8 / 23.6					
	mm	200 / 600					
Minimum Mold Size	in	13.8 x 11.8					
	mm	350 x 300					
Maximum Mold Weight (single platen)	lbs	2,337 / 1,763					
	kg	1060 / 800					
Maximum Mold Weight (double platen)	lbs	1,763 / 1,763					
	kg	800 / 800					
Euromap 6 Dry Cycle Time	sec	2.13			1.74 (High speed)		
					2.17 *		
Mold locating ring inside diameter	in	4.0					
	mm	101.6					
Ejector Force	tons	3.85			8.8		
	kN	35			8.0		
Ejector Stroke Max	in	5.91					
	mm	150					

Notes

1) All machine dimensions and specifications are subject to change. Values are for reference only. All general assembly drawings or visuals included herein are for reference only. Please consult the general assembly drawing from a Milacron representative.

2) * Not available with High Speed Clamp Option