

Extrusion Gear Pump (EGP)

"All PSI products and components are proudly designed and manufactured in the USA."



Features Include

- Through hardened tool steel gears
- Compact / low profile design
- Leak-free operation to 5,000 psi
- All parts manufactured to ISO-9002 standards
- Heavy duty construction
- Process temperatures to 650° F
- Interchangeable parts with most gear pumps
- Transducer ports integral to housing
- Drop in replacement designs available for most competitors gear pumps

PSI combines over fifty years of design, engineering and manufacturing expertise in the production of Extrusion Gear Pumps. The EGP is a rotary volumetric pump utilizing precision ground gears to provide precise metering and constant pressure. Precise displacement ensures accurate output while providing lower shear stress, lower energy consumption, lower processing temperatures and higher output rates. The EGP is capable of processing highly filled materials, fractional melts, recycled materials, highly viscous materials and can operate at pressures up to 5,000 psi (4,000 Δ P). PSI also supplies gear pumps for chemical, injection and additive applications.

Benefits

More accurate gauge control Increased output rates Faster start-ups Lower processing temperatures Reduced scrap Increased life on extruder screw & barrel Lower energy consumption

Applications

- Sheet
- Coating
- Pipe/tubing/profile
- Compounding
- Wire and cable

- Lab lines
- Textiles (fibers and nonwovens)
- EVA, hot melt adhesive and PSA
- Pelletizing (strand and underwater)
- High pressures

- Blown film and cast film
- PVC and other highly corrosive materials
- Degradable materials

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Technical Data

Model EGP	Pump Output (lbs/hr) (kg/hr)	Capacity at SG = 1 (pph/rpm) (kph/rpm)	CC/REV	Ext Size (in) (mm)	Weight (Ibs) (kg)	
Min 5 RPM Max 100 RPM						
12/1.5	.06-1.3 .02759	.013 .006	.11	.75 20	5 2.27	
12/3	.13-2.6 .059-1.18	.026 .012	.21	.75 20	6 2.72	
12/6	.27-5.4 .122-2.45	.054 .024	.43	.75 20	7 3.18	
12/12	.75-15 .340-6.80	.109 .049	.85	.75 20	7 3.18	
28/6	1.36-27.2 .617-12.3	.272 .123	2.06	1 25	16 7.26	
28/12	2.66-53.2 1.21-24.1	.532 .241	4.03	1 25	18 8.16	
28/20	4.82-96.4 2.19-43.7	.964 .437	7.30	1 25	20 9.07	
28/28	6.80-136 3.08-61.7	1.36 .617	10.3	2 50	22 9.98	
38/38	22.1-442 10-200	4.42 2.0	33.8	2.5 65	40 18	
45/45	38.5-769 17.5-349	7.7 3.5	58.2	3.5 90	62 28	
60/60	76-1,520 34.5-689	15.2 6.9	115	4.5 114	125 57	
70/70	116-2,320 52.6-1,052	23.2 10.5	176	4.5 114	180 82	
76/76	186.5-3,730 84.6-1,692	37.3 16.9	283	6 150	195 88	
90/90	293-5,180 133-2,350	51.8 23.5	392	6-8 150-200	245 111	
Min 5 RPM Max 50 RPM						
110/110	480.5-4,805 218-2,180	96.1 43.6	727	8 200	410 186	
150/75	730-7,300 331-3,311	146 66.2	1,108		1,053 478	
150/100	975-9,750 442-4,423	195 88.5	1,477		1,114 505	
150/125	1,220-12,200 553-5,534	244 111	1,846		1,184 537	
150/150	1,465-14,650 665-6,645	293 133	2,215		1,250 567	
180/135	1,595-15,950 723-7,235	319 145	2,418		1,500 680	
180/180	2,130-21,300 966-9,662	426 193	3,224		1,700 771	
224/168	3,085-30,850 1,399-13,993	617 280	4,670		2,450 1,111	
224/224	4,110-41,100 1,864-18,643	822 373	6,227		2,720 1,234	

For larger sizes and special applications contact our PSI sales office

Pressure, Temperature and Output Profile With a PSI Gear Pump



Why Use Our Pumps?

- Higher output due to the reduction in the extruder head pressure
- Elimination of surging and related defects in the extruded product, resulting in higher yield of finished product per pound
- Reduction in melt temperature reduces the cooling load on downstream equipment and increases output rate

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