



# Fluoropolymer Gear Pump (FGP)

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



## Features Include

- 100% Inconel construction
- Compact / low profile design
- Leak-free operation to 3,000 psi (2,000  $\Delta$ P)
- All parts manufactured to ISO-9002 standards
- Process temperatures to 850° F (450° C)
- Heavy duty construction
- Precision ground gears
- Interchangeable parts with most gear pumps

The PSI Fluoropolymer Gear Pump (FGP) is ideal for processes using TFE, FEP, other fluoropolymers and highly corrosive products. With all components constructed of Inconel, the FGP resists corrosion to withstand the demanding conditions of processing fluoropolymers. The FGP provides precise displacement while lowering shear stress, lowering process energy consumption, lowering melt temperature, and increasing output rates. PSI manufactures complete pump systems with controls and all interfacing equipment, which can be mounted on a custom designed support stand or supplied as individual components.

## 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
- Lower shear stress

## Applications

- Sheet
- Coating
- Pipe and profile
- Compounding
- Wire and cable
- Lab lines
- Pelletizing (strand and underwater)
- High pressures
- Tubing
- Medical applications
- PVC and other highly corrosive materials
- Degradable materials

# Technical Data

Model	Pump Output (lbs/hr)   (kg/hr)	Capacity at SG = 1 (pph/rpm)   (kph/rpm)	CC/REV	Ext Size (in)   (mm)	Weight (lbs)   (kg)
<b>Min 5 RPM Max 100 RPM</b>					
12/1.5	.06-1.3   .027-.59	.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

For larger sizes and special applications contact our PSI sales office

## Why Use Our Pumps?

Elimination of surging and related defects in the extruded product, resulting in higher yield of finished product per pound

Higher output due to the reduction in the extruder head pressure

Reduction in melt temperature reduces the cooling load on downstream equipment and increases output rate

## Pressure, Temperature and Output Profile With a PSI Gear Pump

