Extrusion Gear Pump (EGP)

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 ∆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
- Lower shear stress

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
**Technical Data**

<table>
<thead>
<tr>
<th>Model</th>
<th>Pump Output</th>
<th>Capacity at SG = 1</th>
<th>CC/REV</th>
<th>Ext Size</th>
<th>Weight</th>
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<tbody>
<tr>
<td>EGP</td>
<td>(lbs/hr)</td>
<td>(kg/hr)</td>
<td>(pph/rpm)</td>
<td>(kph/rpm)</td>
<td>(in)</td>
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**Min 5 RPM Max 100 RPM**

**Min 5 RPM Max 50 RPM**

For larger sizes and special applications, contact our PSI sales office.

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

**Discharge Pressure**
5,000 psi
(345 BAR)

**Inlet Pressure**
1,000-1,200 psi
(69-83 BAR)

**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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