Versatile
It is the first booster pump of its kind to be designed for virtually all boosting applications. In Pressure Mode, the pump starts with pressure drop and stops on low flow. In Flow Mode, the pump starts and stops by sensing flow. In Conservation Mode, the pump only operates during a peak demand, such as when multiple showers, bathtubs, or irrigation systems running.

Simple
A single-speed, totally enclosed fan-cooled motor drives the DuraMAC booster pump with single phase power. It is controlled with one dial and tells you it is working properly by illuminating a single status light. The settings and readouts are simple and straightforward.

Sophisticated
A pressure transducer constantly monitors system pressure and alerts the pump control to start the pump as water in the system is used. The pump then stops on, boosting the system pressure until the need for water is no longer present, indicated by low flow.

Reliable
Electronic components are completely separated from piping and water ways for added safety and ease of field repair. The DuraMAC is built from scratch with one purpose in mind - boosting water pressure. Each component of the system is specifically designed to work together, as one harmonious unit. The result is a complete package backed by an industry leading three year warranty.

How It Works
The DuraMAC Water Pressure Boosting System can be set to three separate modes, which can accommodate virtually any application.

PRESSURE MODE
START METHOD: Pressure drop
STOP METHOD: Low flow
TYPICAL INSTALLATION: Appropriate for the majority of light commercial or residential applications
RESULT: Pump operates continuously while there is a need for water

FLOW MODE
START METHOD: Water flow
STOP METHOD: Low flow
TYPICAL INSTALLATION: Application where pressure fluctuates or occasional system leaks are present
RESULT: Pump operates when usage of water exceeds approximately one gallon per minute

CONSERVATION MODE
START METHOD: Pressure drop
STOP METHOD: Low flow
TYPICAL INSTALLATION: Application where pressure is adequate for most uses, and boosting is only necessary for high demand
RESULT: Pump only operates when system pressure is below city supplied pressure and operates continuously while there is demand for water

See Pumps and Accessories Price List for Limited Warranty Details.

DuraMAC Water Pressure Booster System

The DuraMAC Booster System was built with one simple goal in mind - to be the World’s Most Versatile Booster System.
The World's Most Versatile Booster System

**Pressure Tank**
Eliminates short cycling and accommodates thermal expansion.

**Pressure Gauge**
Displays total system pressure.

**Circuit Board**
Sophisticated programming assures proper operation in all conditions.

**Digital Control**
Single knob for simple pressure adjustment. Status light indicates standby, run and fault modes.

**Transducer**
Constantly monitors system pressure.

**Inlet w/Check Valve:**
- Residential: No-Lead Brass NPT thread with large wrench flats for easy & secure pipe connections.
- Light Commercial: No-Lead Brass NPT thread with large wrench flats for easy & secure pipe connections.

**Union Swivel**
Allows for 360° adjustment of discharge.

**Motor**
Totally enclosed fan-cooled motor for quiet operation and low power consumption.

**Pump**
All stainless steel construction for tough water conditions.

**Typical Installations**

**Light Commercial/Irrigation & Residential Boosters**

**Specifications/Dimensions**

**Sizing Information**

**Materials of Construction**
- Impellers: 304 Stainless Steel
- Pump Housing: 304 Stainless Steel
- Check Valve Seat Body: 304 Stainless Steel
- Diffuser: No-Lead Brass
- Pump Controller: No-Lead Brass
- Cables: UL Listed

**Typical Installations**

**DoubleMAC Booster Systems** are designed to shut off when no flow is detected. Pump total pressure boost should be added to current system pressure to determine total system pressure when boosted.

**Example:**

Incoming system pressure before boost = 30 PSI

\[
\begin{align*}
\text{Incoming Pressure} & = 30 \text{ PSI} \\
\text{Pump Pressure Boost} & = 40 \text{ PSI} \\
\text{Total Pressure After Boost} & = 70 \text{ PSI}
\end{align*}
\]

Based on this example, the recommended model for this application is the 17040C035PC2.

For systems with fluctuating pressure, a pressure reducing valve is recommended to ensure system pressure stays below 80 PSI.

**DuraMAC™** Booster Systems are designed to shut off when no flow is detected. Pump total pressure boost should be added to current system pressure to determine total system pressure when boosted. Note: It is not recommended to exceed 80 PSI total boosted pressure.

**Example:**

Incoming system pressure before boost = 30 PSI

\[
\begin{align*}
\text{Incoming Pressure} & = 30 \text{ PSI} \\
\text{Pump Pressure Boost} & = 40 \text{ PSI} \\
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\]

Based on this example, the recommended model for this application is the 17040C035PC2.

For systems with fluctuating pressure, a pressure reducing valve is recommended to ensure system pressure stays below 80 PSI.

**Sizing Information**

<table>
<thead>
<tr>
<th>DuraMAC™ Model</th>
<th>Pump Boost</th>
<th>Length</th>
<th>Size</th>
<th>Voltage</th>
<th>Power</th>
<th>Pressure Reducing Valve</th>
</tr>
</thead>
<tbody>
<tr>
<td>17035R020PC1</td>
<td>35 psi</td>
<td>15.29&quot;</td>
<td>1&quot;</td>
<td>120 - 60 Hz</td>
<td>1/2 HP</td>
<td>45 psi</td>
</tr>
<tr>
<td>17052R020PC1</td>
<td>52 psi</td>
<td>15.97&quot;</td>
<td>1&quot;</td>
<td>120 - 60 Hz</td>
<td>3/4 HP</td>
<td>28 psi</td>
</tr>
<tr>
<td>17070R020PC2</td>
<td>70 psi</td>
<td>16.68&quot;</td>
<td>1&quot;</td>
<td>230 - 60 Hz</td>
<td>1 HP</td>
<td>10 psi</td>
</tr>
<tr>
<td>17040C035PC2</td>
<td>40 psi</td>
<td>15.43&quot;</td>
<td>1.25&quot;</td>
<td>230 - 60 Hz</td>
<td>1 HP</td>
<td>40 psi</td>
</tr>
<tr>
<td>17062C035PC2</td>
<td>62 psi</td>
<td>16.49&quot;</td>
<td>1.25&quot;</td>
<td>230 - 60 Hz</td>
<td>1 HP</td>
<td>18 psi</td>
</tr>
<tr>
<td>17078C035PC2</td>
<td>78 psi</td>
<td>17.55&quot;</td>
<td>1.25&quot;</td>
<td>230 - 60 Hz</td>
<td>1½ HP</td>
<td>2 psi</td>
</tr>
</tbody>
</table>

**DoubleMAC™** pump lengths vary based on model. Many plumbing codes do not recommend system pressure exceeding 80 PSI.

Refer to local plumbing codes for maximum boosted pressure.