EST. 1856
McDonald
DuraMAC™
Water Pressure Booster System
The World's Most Versatile
Residential Booster System

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The **DuraMAC**™ **Water Pressure Booster System** was built with one simple goal in mind - to be **the World's Most Versatile Residential Booster System.**

Versatile

It is the first booster pump of its kind to be designed for virtually all residential boosting applications. In **Pressure Mode**, the pump starts with a 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 at peak demand, such as multiple showers, bathtubs, or irrigation systems running.

Simple

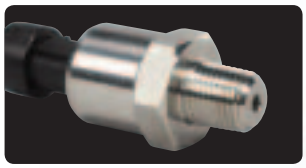
A single-speed, totally enclosed fan-cooled motor drives the **DuraMAC**™ booster pump with single phase power. It is controlled with one dial, and tells you it is working properly by illuminating a single status light. The settings and readouts are simple and easy to understand.

Sophisticated

Electronic circuitry and a pressure transducer constantly monitor your water system, making sure that you have good, reliable pressure when you want it.

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 residential 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.



Transducer

Continuously monitors system pressure

EST. 1856 McDonald®

DuraMAC™

Water Pressure Booster Syste

State-of-the-Art Control in an Ea

How It Works

The **DuraMAC™ Water Pressure Booster System** can be set to three separate modes, which can accommodate virtually any household application.

Pressure Mode

START METHOD: Pressure drop

STOP METHOD: Low flow

TYPICAL INSTALLATION: Standard household installation

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 leaks may be present

RESULT: Pump operates only when usage of water exceeds approximately one gallon per minute

Conservation Mode

START METHOD: Pressure drop

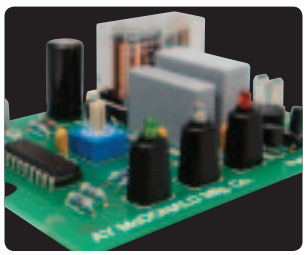
STOP METHOD: Low Flow

TYPICAL INSTALLATION: Application where pressure is adequate for most uses and boosting is only necessary for high demand

RESULT: Pump operates only when system pressure is below city supplied pressure and continuously runs while there is demand for water

Pressure Tank

Eliminates short cycling and helps accommodate thermal expansion



Circuit Board

Sophisticated programming ensures proper operation in all conditions

Union Swivel

Allows for 360° adjustment of discharge

Motor

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

Pump

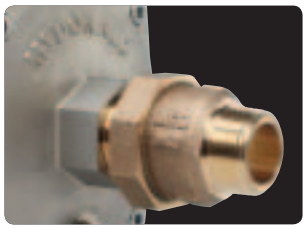
All stainless steel construction for tough water conditions

Pressure Gauge

Displays total system pressure

Digital Control

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



Inlet w/Check Valve

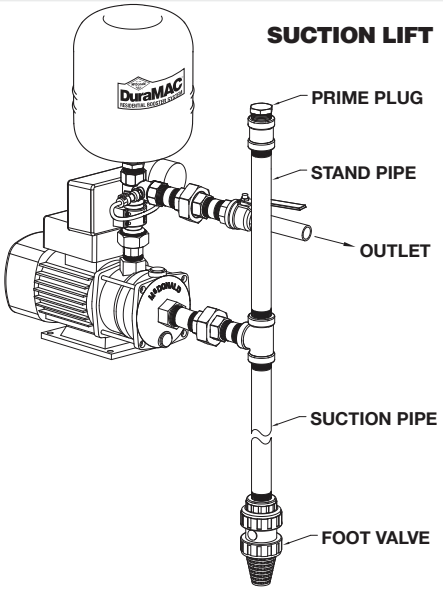
No Lead Brass NPT thread with large wrench flats for easy & secure pipe connections

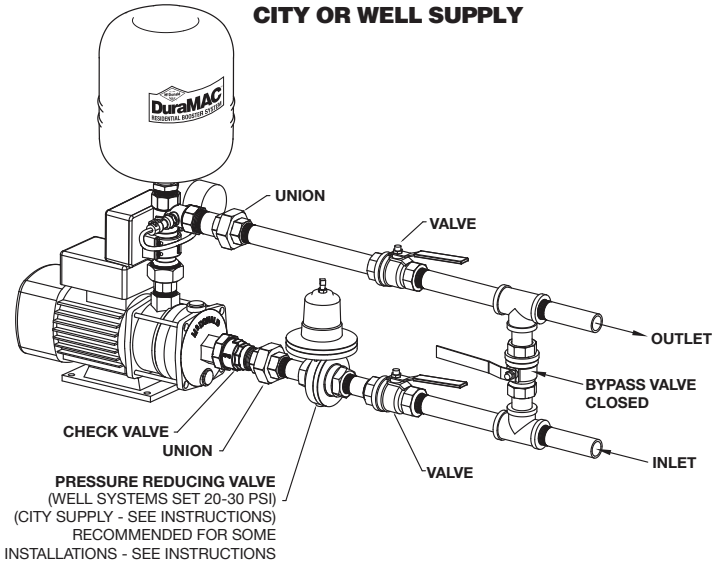
3 YEAR LIMITED WARRANTY

sy-to-Operate Booster Package

See Pumps & Accessories Price List for Limited Warranty details.

Typical Installations





Specifications / Dimensions

Sizing Information

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

Example:
Household system pressure before boost = 30 PSI

30	+		=		*Not Recommended to Exceed 80 PSI
Household Pressure		Total Pump Pressure		Total Pressure After Boost	

Models Available:	**Boost**
17035R020PC1	+35
17052R020PC1	+52
17070R020PC2	+70

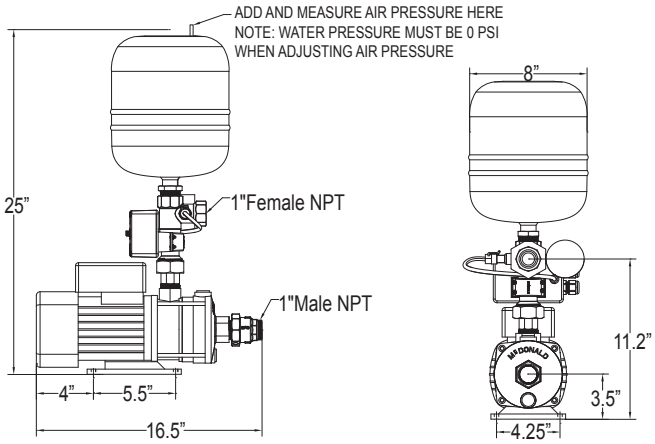
30	+	35	=	65
Household Pressure		Total Pump Pressure		Total Pressure After Boost

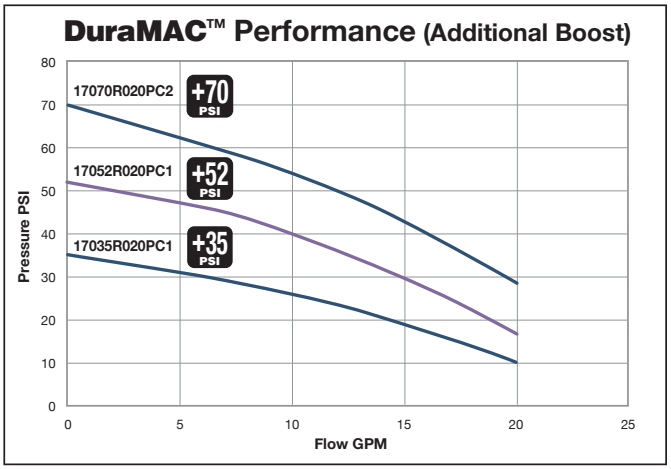
Based on this example, the recommended model for this application is the 17035R020PC1.

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

Materials of Construction

Impellers	304 Stainless Steel
Pump Casing Inlet	301 Stainless Steel
Pump Casing Outlet	301 Stainless Steel
Pump Seal (stationary)	Silicon Carbide
Pump Seal (rotating)	Carbon (synthetic)
Diffuser	304 Stainless Steel
Suction Check Valve	No-Lead Brass
Pump Control Body	No-Lead Brass





DuraMAC™ Model	Pump Boost	Voltage	Power	*Maximum incoming pressure
17035R020PC1	35 psi	120 - 60 Hz	1/2 HP	45 psi
17052R020PC1	52 psi	120 - 60 Hz	3/4 HP	28 psi
17070R020PC2	70 psi	230 - 60 Hz	1 HP	10 psi (For use with holding tank)