PENTAIR
WATER SOLUTIONS

# WELLMATE

## PRODUCTS THAT ARE WORTH MORE

# PENTAIR WELLMATE OFFERS DEALERS MORE ADVANTAGES, MORE SOLUTIONS FOR MORE APPLICATIONS.

Innovative Pentair WellMate solutions for water storage and pressure boosting applications offer you a world class product.

**A growing customer base**

In the residential, commercial, and agricultural markets of the world, Pentair WellMate composite tanks have long been the tank of choice for their unmatched performance over steel. As the recognized leader in composite pressure tank design, Pentair WellMate Water Systems give you more to sell. With unique features that translate into real benefits for your customers, WellMate by Pentair sets you apart from the competition.

## RESIDENTIAL
## COMMERCIAL
## AGRICULTURAL

For well systems, water storage, and pressure boosting.

### A MATERIAL DIFFERENCE

From the high-density polyethylene inner liner, to the fiberglass-wound and epoxy resin-sealed outer shell, Pentair WellMate tanks do not contain steel, so they will not rust. What they can do is make everything easier. WellMate Tanks by Pentair require little or no maintenance because they won't dent and they do not have paint to scratch and touch up. Their light weight – half that of steel tanks – makes them easier and faster to install. In fact, most can be handled by a single installer, keeping costs down. Pentair WellMate Tanks are certified to CE and NSF/ANSI std. 61 section 8 and Annex G and are 100% lead-free. In addition, they will not introduce undesirable chemicals or elements into the water.

### A PRODUCT THAT'S WORTH MORE

Innovative Pentair WellMate solutions for water storage and pressure boosting applications offer you a world class product that's worth more. From initial design through promised delivery, quality is a hallmark of WellMate by Pentair Tanks. State-of-the-art equipment, the best materials and an ISO-9001 certified manufacturing facility guarantee that our one-piece composite construction is second to none.

### ONGOING DEALER SUPPORT

As a Pentair WellMate dealer, you'll enjoy total dealer support. WellMate Tanks by Pentair are only sold through a network of select professional dealers, giving you a real opportunity to make your mark. In addition, Pentair WellMate dealers enjoy the benefits of sales training programs, seminars and technical support, as well as marketing support and dealer incentive programs. Want to know more about WellMate by Pentair and the edge it gives its dealers? Call your Pentair WellMate distributor or visit *www.wellmate.com* for more information.

LP-Series (standard model)

# LOW-PROFILE CAPTIVE AIR TANKS

## BIG ON PERFORMANCE, SMALL ON SPACE

Designed for height-restricted applications such as mobile homes, crawl spaces and closets, our compact LP-Series pressure tanks give you added flexibility in small-space residential applications.

**Plus they offer you these distinct advantages:**

- Available in CLASSIC drain assembly, polyether urethane (PEU) air cell.
- Highest Drawdown in the Industry for its Profile.
- Air Cell – easier to service in the field.
- Lightweight – easier to maneuver.

## APPLICATIONS

- Mobile Homes
- Crawl Spaces
- Closets

## HERE ARE THE FEATURES THAT SET US APART

1. Durable, polyether urethane (PEU) air cell is fully replaceable.
2. One-piece seamless inner shell is molded of high-density polyethylene.
3. Outer shell is composed of continuous fiberglass strands sealed with high-grade epoxy resin.
4. Sturdy, molded polymeric base is corrosion and impact proof.
5. Bottom inlet/outlet assembly is custom molded of high-impact PVC.

**CLASSIC**


## SPECIFICATIONS – CLASSIC

| Model | Capacity gal / liter | Maximum operating Pressure PSI / kPa / bar | Drawdown 30/50 setting** gal/liter | Diameter* Inch / cm | Overall height* Inch / cm | Height* inlet/outlet to floor inch / cm | System Connection | Assembly weight* Lb / kg |
|---|---|---|---|---|---|---|---|---|
| WM-6LP / WM-LP-075 | 19.3 / 73 | 125 / 862 / 8.6 | 5.8 / 21.9 | 24 / 61 | 20.25 / 51 | 2.25 / 5.7 | 1" male NPT | 22.75 / 10.3 |
| WM-10LP / WM-LP-130 | 34.5 / 131 | 125 / 862 / 8.6 | 10.4 / 39.2 | 24 / 61 | 28 / 71 | 2.25 / 5.7 | 1" male NPT | 29.5 / 13.4 |

***Note:*** *Maximum external operating temperature 120°F (49°C). Maximum internal operating temperature 100°F (38°C). Minimum operating temperature 40°F (4°C).*

** Diameter, height and weight may vary slightly without notice.*

*** In keeping with current industry standards, drawdown factors are based on Boyle's law. Actual drawdowns will vary depending upon system variables, including the accuracy and operation of the pressure switch and gauge and operating temperature of the system.*

WM-Series (classic model)

# CAPTIVE AIR TANKS

## EASY TO INSTALL, MAINTAIN, AND SERVICE

Our WM-Series offers features and benefits that steel tanks just can't match. From their corrosion-proof composite construction to their lighter weight, easier maintenance and less expensive installation, **WM-Series pressure tanks are the preferred choice of professionals, especially when the following advantages are added to the mix:**

- Available in CLASSIC drain assembly, polyetherurethane (PEU) air cell.
- Replaceable Air Cell – for easier field servicing.
- Easy to carry.
- Easy and Less Costly to Install – usually requiring only one person and fewer man-hours.
- Greater Drawdown than Comparably-Sized Steel Tanks – for greater efficiency.
- Won't Rust in Corrosive Environments – particularly important in agricultural and livestock applications, and coastal regions.

## APPLICATIONS

- Residential
- Light Commercial
- Pressure Boosting

## HERE ARE THE FEATURES THAT SET US APART

1. Durable, polyether urethane (PEU) air cell is fully replaceable.
2. One-piece seamless inner shell is molded of high-density polyethylene.
3. Outer shell is composed of continuous fiberglass strands sealed with high-grade epoxy resin.
4. Sturdy, molded polymeric base is corrosion- and impact-proof.
5. Bottom inlet/outlet one-piece drain is custom molded of high-impact PVC.

**CLASSIC**


CPVC Drain Assembly (threaded)

## SPECIFICATIONS – CLASSIC

| Model | Capacity gal / liter | Maximum operating Pressure PSI / kPa / bar | Drawdown 30/50 setting** gal/liter | Diameter* Inch / cm | Overall height* Inch / cm | Height* inlet/outlet to floor inch / cm | System Connection | Assembly weight* Lb / kg |
|---|---|---|---|---|---|---|---|---|
| WM-4 / WM0060 | 14.5 / 55 | 125 / 862 / 8.6 | 4.4 / 16.5 | 16 / 41 | 26 / 66 | 1.75 / 4.4 | 1" male NPT | 14.5 / 6.6 |
| WM-6 / WM0075 | 19.8 / 75 | 125 / 862 / 8.6 | 5.9 / 22.5 | 16 / 41 | 32 / 81 | 1.75 / 4.4 | 1" male NPT | 17.75 / 8.1 |
| WM-9 / WM0120 | 29.5 / 112 | 125 / 862 / 8.6 | 8.9 / 33.5 | 16 / 41 | 44 / 112 | 1.75/ 4.4 | 1" male NPT | 24.75 / 11.2 |
| WM-12 / WM0150 | 40.3 / 153 | 125 / 862 / 8.6 | 12.1 / 45.8 | 16 / 41 | 57 / 145 | 13/4/4.4 | 1" male NPT | 30 / 13.6 |
| WM-14WB / WM0180 | 47.1 / 178 | 125 / 862 / 8.6 | 14.1 / 53.5 | 21 / 53 | 41.25 / 105 | 2.25 / 5.7 | 1 ¼" male NPT | 43 / 19.5 |
| WM-20WB / WM0235 | 60.0 / 227 | 125 / 862 / 8.6 | 18.0 / 68.1 | 24 / 61 | 41.5 / 105 | 2.25 / 5.7 | 1 ¼" male NPT | 50 / 22.7 |
| WM-23 / WM0300 | 79.6 / 301 | 125 / 862 / 8.6 | 23.8 / 90.4 | 21 / 53 | 62 / 157 | 2.25 / 5.7 | 1 ¼" male NPT | 65.7 / 29.8 |
| WM-25WB / WM0330 | 86.7 / 328 | 125 / 862 / 8.6 | 26.0 / 98.5 | 24 / 61 | 55.25 / 140 | 2.25 / 5.7 | 1 ¼" male NPT | 72.75 / 33.0 |
| WM-35WB / WM0450 | 119.7 / 453 | 125 / 862 / 8.6 | 35.9 / 135.9 | 24 / 61 | 74.25 / 189 | 2.25 / 5.7 | 1 ¼" male NPT | 95 / 43.1 |

***Note:*** *Maximum external operating temperature 120°F (49°C). Maximum internal operating temperature 100°F (38°C). Minimum operating temperature 40°F (4°C).*
** Diameter, height and weight may vary slightly without notice.*
*** In keeping with current industry standards, drawdown factors are based on Boyle's law. Actual drawdowns will vary depending upon system variables, including the accuracy and operation of the pressure switch and gauge and operating temperature of the system.*

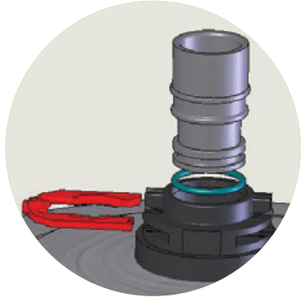
UT -Series

# UNIVERSAL RETENTION TANKS

## DO YOU HAVE CONTACT WITH CHEMICALS, CHLORINE, HYDROGEN SULFIDE? GO WITH THE PROS AND CHOOSE UT

There's no better tank choice for water treatment than our UT-Quick Connect Series. Composite construction makes the entire line impervious to the chemicals found in aggressive water. **Plus the following advantages give our UT-Quick Connect Series the kind of application versatility dealers want:**

- Inlet/Outlet PVC Pipe Connections – allow straight through T connection on bottom of tank for ease of piping.
- Blowdown Valve – for easy removal of sludge from bottom of tank.
- Hydropneumatic Convertible – optional air volume control assembly and micronizer allow for quick and easy tank conversion. Dealers no longer need to stock more than one kind of air-over-water pressure tank.



## APPLICATIONS

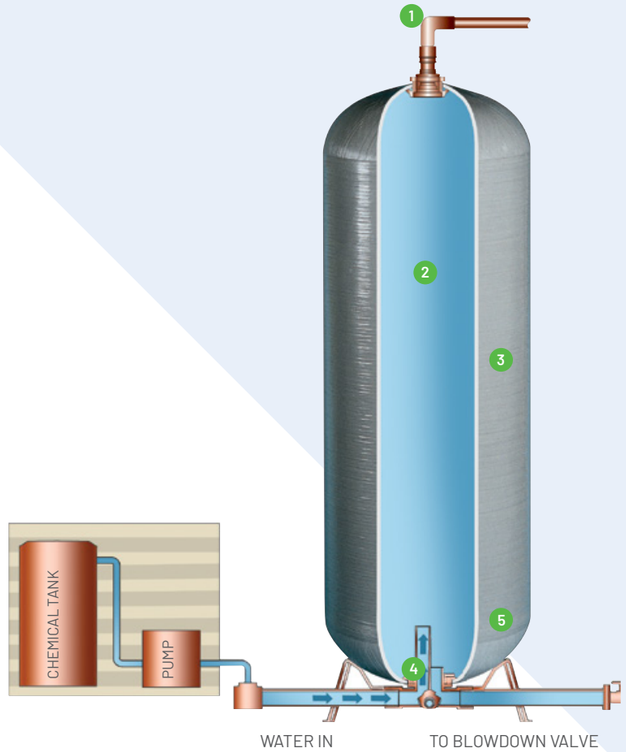
- **Contact Tank for Water Treatment**
- **Hydropneumatic** *(with purchased accessories)*



## HERE ARE THE FEATURES THAT SET US APART

1. Vacuum breaker required.
2. One piece, seamless inner shell molded of premium, high-density polyethylene which provides impact and corrosion resistance.
3. Miles of fiberglass filament covered with epoxy resin produce superior strength in a light-weight design.
4. Additional drain port.
5. Curved bottom dome design maximizes contact time and facilitates sludge removal.

   1¼" socket inlet/outlet PVC pipe connections offer maximum application flexibility.




## SPECIFICATIONS – CLASSIC

| Quick Connect Model | Capacity gal / liter | Maximum Operating Pressure PSI / kPa / bar | Diameter* inch / cm | Overall Height* inch / cm | Height* inlet/outlet to floor inch / cm | System Connection | | Assembly Weight* lb / kg |
|---|---|---|---|---|---|---|---|---|
| | | | | | | TOP | BOTTOM | |
| UT-30 / WM-UT-110 / CE | 30 / 114 | 75 / 500 / 5.0 | 16 / 41 | 44.5 / 113 | 1.5 / 3.8 | 1 ¼" Socket Q.C. | 1 ¼" Socket | 25 / 11.3 |
| UT-40 / WM-UT-150 / CE | 40 / 151 | 75 / 500 / 5.0 | 16 / 41 | 57.25 / 145 | 1.5 / 3.8 | 1 ¼" Socket Q.C. | 1 ¼" Socket | 28 / 12.7 |
| UT-40SQ / WM-UT-150-SQ / CE | 40 / 151 | 75 / 500 / 5.0 | 21 / 53 | 36 / 91 | 2 / 5.1 | 1 ¼" Socket Q.C. | 1 ¼" Socket | 33 / 15.0 |
| UT-80 / WM-UT-300 / CE | 80 / 303 | 75 / 500 / 5.0 | 21 / 53 | 62.75 / 159 | 2 / 5.1 | 1 ¼" Socket Q.C. | 1 ¼" Socket | 43 / 19.5 |
| UT-120 / WM-UT-450 / CE | 120 / 454 | 75 / 500 / 5.0 | 24 / 61 | 72.25 / 186 | 2 / 5.1 | 1 ¼" Socket Q.C. | 1 ¼" Socket | 63 / 28.6 |

***Note:*** *Maximum external operating temperature 120°F (49°C). Maximum internal operating temperature 100°F (38°C). Minimum operating temperature 40°F (4°C). Minimum operating temperature 40°F (4°C).*
**Diameter, height and weight may vary slightly without notice.*

## ACCESSORIES

(For Hydropneumatic Conversion)

| | |
|---|---|
| (Consult factory for correct size) | Air Volume Control Assembly |
| Part #CH3929-5 | Micronizer |
| Part #CH19426 | Vacuum Breaker 1/4" NPT |


Air Volume Control Assembly


Micronizer


Vacuum Breaker

***Note:*** *Flexible connectors must be installed between hard piping and tank openings. These pressure vessels are rated for an internal negative pressure of 5" HG (17 Pa) vacuum below atmospheric. If negative pressure could ever exceed 5" Hg (17 Pa), an adequate vacuum breaker must also be properly installed. Failure to install flex connection properly, or improper installation of a vacuum breaker when required, may void the warranty.*

HP -Series

# HYDRO-PNEUMATIC AIR/ WATER TANKS


## THE TOUGHEST TANKS FOR YOUR MOST DIFFICULT INSTALLS

Iron and sulfur removal? Methane and other undesirable well gases? You need our HP-Quick Connect Series of hydropneumatic tanks. These high performance tanks can be used for aggressive water, or as an open system where air is introduced to oxidize and aerate.
**All this, plus these other key advantages:**

- Large Drawdown Ratio – for increased efficiency.
- Adapter and UT Drain Assembly – (sold separately) – allows you to add 1" riser pipe to increase aeration of water. See page 12.
- Self-Adjusting Air Volume Control – for system flexibility and ease of installation.

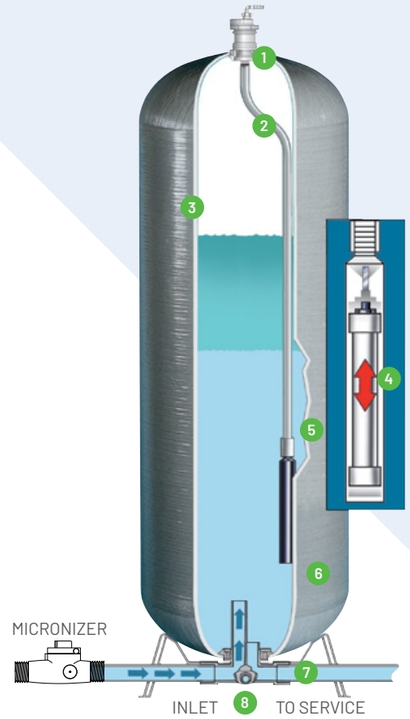
## APPLICATIONS

- Sulfer and Iron Water Treatment
- Hypochloride Environments
- Release of Methane or Other Well Gases



## HERE ARE THE FEATURES THAT SET US APART

1. ¼" vent line. 360° rotating threadless connection.
2. Top-mounted air volume control provides 50% or more drawdown than similar sized conventional tanks.
3. Miles of fiberglass filament covered with epoxy resin produce superior strength in a light-weight design.
4. Self-adjusting air volume control – a Pentair WellMate exclusive.
5. One piece, seamless inner shell molded of premium, high-density polyethylene which provides impact and corrosion resistance.
6. Convex bottom design with top-mounted air volume control maximizes drawdown.
7. 1¼" socket inlet/outlet PVC pipe connections offer maximum application flexibility.
8. Blowdown port with ½" NPT connection.




## SPECIFICATIONS

| Quick connect Model | Capacity gal / liter | Maximum operating Pressure PSI / kPa / bar | Drawdown 30/50 setting** gal/liter | Diameter* Inch / cm | Overall height* Inch / cm | Height* inlet/outlet to floor inch / cm | System connection | | Assembly weight* Lb / kg |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | TOP | BOTTOM | |
| HP-7/WM-HP-110 | 30 / 114 | 75 / 500 / 5.0 | 6.6 / 25.0 | 16 / 41 | 43.75 / 111 | 1.5 / 3.8 | 1¼" vent line | 1¼" Socket | 26 / 11.8 |
| HP-9/WM-HP-150 | 40 / 151 | 75 / 500 / 5.0 | 9.0 / 34.1 | 16 / 41 | 56.5 / 144 | 1.5 / 3.8 | 1¼" vent line | 1¼" Socket | 29 / 13.2 |
| HP-8SQ/WM-HP-150SQ | 40 / 151 | 75 / 500 / 5.0 | 8.0 / 30.3 | 21 / 53 | 35.25 / 90 | 2 / 5.1 | 1¼" vent line | 1¼" Socket | 34 / 15.4 |
| HP-18/WM-HP-300 | 80 / 303 | 75 / 500 / 5.0 | 17.8 / 67.4 | 21 / 53 | 62 / 157 | 2 / 5.1 | 1¼" vent line | 1¼" Socket | 44 / 20.0 |
| HP-26/WM-HP-450 | 120 / 454 | 75 / 500 / 5.0 | 25.5 / 96.5 | 24 / 61 | 72.5 / 184 | 2 / 5.1 | 1¼" vent line | 1¼" Socket | 64 / 29.0 |

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*** In keeping with current industry standards, drawdown factors are based on Boyle's law. Actual drawdowns will vary depending upon system variables, including the accuracy and operation of the pressure switch and gauge and operating temperature of the system.*

## ACCESSORIES

| | |
|---|---|
| Part #CH3929-5 | Micronizer |
| Part #CH19426 | Vacuum Breaker ¼" NPT |


Micronizer


Vacuum Breaker

***Note:*** *Flexible connectors must be installed between hard piping and tank openings. These pressure vessels are rated for an internal negative pressure of 5" HG (17 Pa) vacuum below atmospheric. If negative pressure could ever exceed 5" Hg (17 Pa), an adequate vacuum breaker must also be properly installed. Failure to install flex connection properly, or improper installation of a vacuum breaker when required, may void the warranty.*

E-Series

# CAPTIVE AIR AND RETENTION TANKS

## MAXIMUM STORAGE. MINIMUM HEADACHES

Wider pressure switch settings on our E-Series tanks allow for maximum water storage during periods of peak demand. As a captive air tank, the E-Series
can handle up to 125 psi/8.6 bar operating pressure. **Plus the high-volume, high-pressure tanks offer these benefits:**

- Retention Tank Capability – without the air cell, can function as a high capacity retention tank for water storage and treatment.
- Polyether Urethane (PEU) Air Cell – offers a longer life than bladders or diaphragms.
- Wider Range of Pressure Settings – for greater application versatility.
- Pre-Installed Inlet/Outlet Assembly – with system connections to save time and money.

## APPLICATIONS

- High Volume Water Storage
- Water Storage Treatment

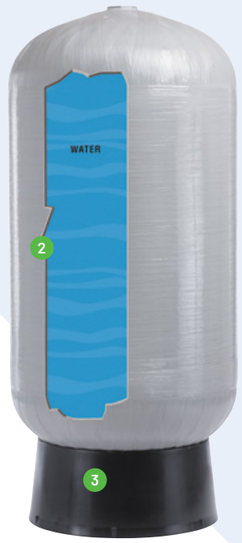


## HERE ARE THE FEATURES THAT SET US APART

1. **Air cell –** polyether urethane (PEU) – captive air tank only.
2. **Vessel –** fiberglass and epoxy filament wound onto a one-piece molded liner.
3. **Base –** glass filled sheet molding compound.

**CAPTIVE AIR TANK**


**RETENTION TANK**




*Our E-Series tanks are also available as a retention tank for water storage/treatment.*

## SPECIFICATIONS

| Model | Capacity gal / liter | Maximum operating Pressure PSI / kPa / bar | Drawdown 30/50 setting** gal/liter | Diameter* Inch / cm | Overall height* Inch / cm | Height* inlet/outlet to floor inch / cm | System connection | | Assembly weight* Lb / kg |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | TOP | BOTTOM | |
| **Captive Air Tank** | | | | | | | | | |
| WM-60 | 187 / 707 | 125 / 862 / 8.6 | 55.2 /209 | 30 / 76 | 79 / 201 | 7.5 / 19 | N/A | 2" FNPT | 234 / 106.14 |
| WM-80 | 264 / 999 | 125 / 862 / 8.6 | 78.0 / 295 | 36 / 91 | 81 / 206 | 8.0 / 20 | N/A | 2" FNPT | 292 / 132.45 |
| **Retention Tank** | | | | | | | | | |
| RT-200 | 187 / 707 | 125 / 862 / 8.6 | N/A | 30 / 76 | 79 / 201 | 7.5 / 19 | 2" NPSM | 2" MNPT | 234 / 106.14 |
| RT-270 | 264 / 999 | 125 / 862 / 8.6 | N/A | 36 / 91 | 81 / 206 | 8.0 / 20 | 2" NPSM | 2" MNPT | 292 / 132.45 |

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UT/HP

# AERATION TANKS

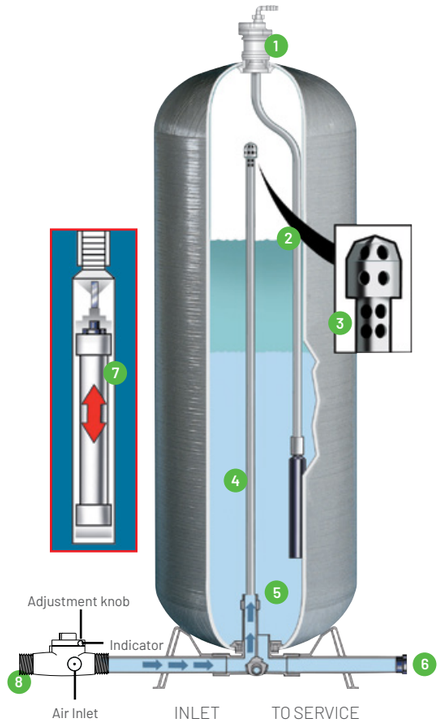
## HOW TO AIR OUT UNDESIRABLE GASES

Got a problem with undesirable well gases? These tanks have been designed to introduce air to oxidize and aerate, minimizing or even eliminating both methane gas and hydrogen sulfide gas which is detectable by its rotten egg odor. **These tough-performing tanks also offer the following:**

- Large Drawdown Ratio – for increased efficiency.
- Self Adjusting Air Volume Control System – for flexibility and ease of installation.
- Composite Construction – for increased tank life.

**Pentair WellMate does not guarantee sizing requirements or the successful removal of odors and gases. It is the responsibility of the contractor or water treatment specialist to assess the many variables involved and select the proper tank.*

1. ¼" vent line. 360° rotating threadless connection. Vacuum breaker required.* (Refer to "note" below)
2. Water level.
3. Cap and pipe with ¼" drilled holes to distribute flow (minimum 12-17 holes required).
4. Riser tube of 1" pipe (customer supplied).
5. Adapter P/N CH11068.
6. Vacuum breaker required for HP applications.
7. Air volume control system.
8. Micronizer.




**WARNING** To avoid health or environmental hazards from gas accumulation, plumb the top fitting to vent off gas to a safe area.

## SPECIFICATIONS

| Quick connect Model | Capacity gal / liter | 1" Riser tube length (Inches) | ½ Avc (tube only) (Inches) | Avc overall length (Inches) |
|---|---|---|---|---|
| UT-30 / HP-7 | 30 / 114 | 24.00 | 23.25 | 34.88 |
| UT-40SQ / HP-8SQ | 40 / 151 | 16.00 | 14.50 | 26.15 |
| UT-40 / HP-9 | 40 / 151 | 37.50 | 35.50 | 47.12 |
| UT-80 / HP-18 | 80 / 303 | 42.75 | 40.00 | 51.62 |
| UT-120 / HP-26 | 120 / 454 | 53.00 | 46.50 | 58.12 |

## ACCESSORIES

| | |
|---|---|
| Part # CH3929-5 | Micronizer |
| Part # CH19426 | Vacuum Breaker 1/4" NPT |
| Part # CH11068 | Adapter |

Micronizer

Vacuum Breaker

***Note:*** *Maximum external operating temperature 120°F (49°C). Maximum internal operating temperature 100°F (38°C). Minimum operating temperature 40°F (4°C). Diameter, height and weight may vary slightly without notice. In keeping with current industry standards, drawdown factors are based on Boyle's law. Actual drawdowns will vary depending upon system variables, including the accuracy and operation of the pressure switch and gauge and operating temperature of the system.*

***Note****: Flexible connectors must be installed between hard piping and tank openings. These pressure vessels are rated for an internal negative pressure of 5" HG (17 Pa) vacuum below atmospheric. If negative pressure could ever exceed 5" Hg (17 Pa), an adequate vacuum breaker must also be properly installed. Failure to install flex connection properly, or improper installation of a vacuum breaker when required, may void the warranty.*



# RESIDENTIAL TANK REPLACEMENT GUIDE

| Pentair WellMate | WM-01 | WM-02 | WM-4/ WM0060 QC | WM-6LP/ WM-LP-075 QC | WM-6/ WM0075 QC | WM-9/ WM0120 QC | WM-10LP/ WM-LP-130 QC | WM-11/ WM0130 QC | WM-12 WM0150 QC | WM-14WB WM0180 QC | WM-20WB WM0235 QC | WM-23 WM0300 QC | WM-25WB WM0330 QC | WM-35WB WM0450 QC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gallons** | 2 | 5 | 14 | 19 | 20 | 30 | 34 | 35 | 40 | 47 | 60 | 80 | 87 | 119 |
| Champion Amtrol | CH1001 | CH1002 | CH3001 | n/a | CH4202 | CH8205 | n/a | n/a | CH8205 | CH10050 | CH12051 | n/a | CH17255 | CH22050 |
| ProLine Amtrol | CA1001 | CA3002 | CA3001 | n/a | CA4202 | CA8205 | n/a | n/a | CA10050 | CA10050 | CA12051 | n/a | CA17002 | CA22050 |
| Well-Flow Amtrol | WF-6 | WF-15 | WF-45 | n/a | WF60 | WF100 | n/a | n/a | n/a | WF140 | WF200 | n/a | WF260 | WF360 |
| WellXTrol Amtrol | WX-101 | WX-102 | WX-201 | n/a | WX-202 | WX-205 | n/a | n/a | WX-250 | WX-250 | WX-251 | n/a | WX-255 | WX-350 |
| Clayton Mark | CM1001 | CM1002 | CM-200 | n/a | CM-202 | CM-203 | n/a | n/a | n/a | CM-250 | CM-251 | n/a | CM-302 | CM-350 |
| Elbl | D8 | D18 | DV50 | n/a | DV80 | n/a | n/a | n/a | n/a | DV200 | n/a | n/a | n/a | DV450 |
| Challenger Flexcon | JR6 | JR15 | PC44 | n/a | PC66 | PC111 | n/a | n/a | PC122 | PC144 | PC211 | n/a | PC266 | PC366 |
| Well-Rite Flexcon | JR6 | JR15 | WR45 | n/a | WR60 | WR80 | n/a | n/a | WR120 | WR140 | WR200 | n/a | WR260 | WR360 |
| Flex-Lite | n/a | n/a | FL-5 | n/a | FL-7 | n/a | n/a | n/a | FL-12 | FL-17 | FL-22 | FL-28 | FL-30 | FL-40 |
| Aqua Air Goulds | V8P | V15P | V45 | n/a | V60 | V100 | n/a | n/a | n/a | V140 | V200 | n/a | V250 | V350 |
| Myers | MIL2 | MIL5 | MPD14 | n/a | MPD20 | n/a | n/a | n/a | n/a | n/a | n/a | n/a | MPD86 | MPD119 |
| ConAire Sta-Rite | CA-9 | n/a | n/a | n/a | CA-42 | n/a | n/a | n/a | n/a | CA-120 | n/a | n/a | CA-220 | n/a |
| Pro Source Fiberwound | n/a | n/a | PSC-4-4 | n/a | PSC-20-6 | PSC-20-9 | n/a | PSC-35-10 | PSC-40-12 | PSC-48-14 | PSC-60-20 | PSC-80-23 | PSC-85-25 | PSC-119-35 |
| Vertical Steel Sta-Rite SR | n/a | n/a | PS30-T01 | n/a | PSP42T-T02 | PSP75T-T03 | n/a | n/a | n/a | PSP120-T50 | PSP200-T51 | n/a | PSP220-T52 | PSP320-TR50 |
| Vertical Steel ProSource | PS2-S01 | PS5-S02 | PS6-S02 | n/a | PS19S-T02 | PS32-T03 | n/a | n/a | PS35-T05 | PS50-T50 | PS62-T51 | n/a | PS85-T52 | PS119-TR50 |
| Vertical Steel ProSource PLUS | n/a | n/a | n/a | n/a | PSP19T-02 PSP19S-T02 | PSP32-T03 | n/a | n/a | PSP35-T05 | PSP50-T50 | PSP62-T51 | n/a | PSP85-T52 | PSP119-TR50 |
| Perma Tank State | PIL-2 | PIL-5 | PAD-14 | n/a | PAD-20 | n/a | n/a | n/a | n/a | PAD-52 | n/a | n/a | PAD-86 | PAD-119 |

# TWO OF THE MOST COMMON HYDROPNEUMATIC ANWENDUNGEN

**Tank Sizing Information**

There are three factors to consider when selecting the proper size Pentair WellMate for your water system:

- The pump delivery rate in gallons/liters per minute (GPM/LPM).
- The recommended minimum running time of the pump.
- The minimum (cut-in) and maximum (cut-out) system pressure parameters.

Once these factors are known, the following calculations will determine, in most cases, the correct model to meet your specifications.*

**Calculating Drawdown**

| | | |
|---|---|---|
| 1) Pump delivery rate | | GPM/LPM |
| 2) Desired minimum pump running time in minutes (1 minute, 45 seconds = 1.75 minutes). | | Minutes |
| 3) Multiply line #1 by line #2. This is the minimum drawdown or available water volume required.* | | Gallons/Liters |

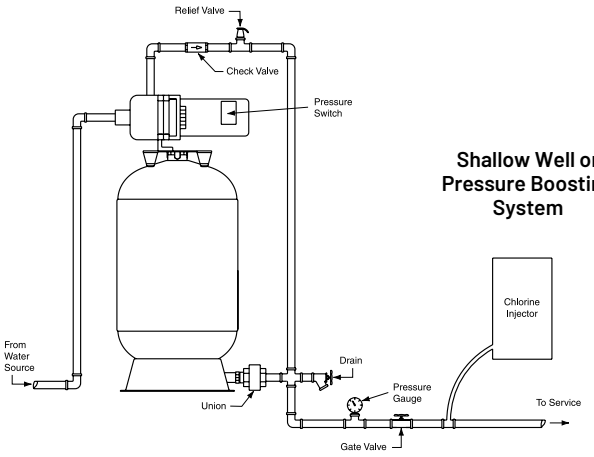
**Calculating Tank Size**

| | | |
|---|---|---|
| 4) Minimum system pressure (cut-in) | ——— | PSIG/kPa/bar |
| 5) Maximum system pressure (cut-out) | ——— | PSIG/kPa/bar |
| 6) Using table #2, find the drawdown factor applicable to lines #4 and #5. | ——— | Factor |
| 7) Divide line #3 by line #6 to determine the minimum total WellMate volume required. | ——— | Gallons/Liters |
| 8) Refer to the design data and select the WellMate model with the lowest total capacity that is greater than or equal to line #7. | ——— | Model |

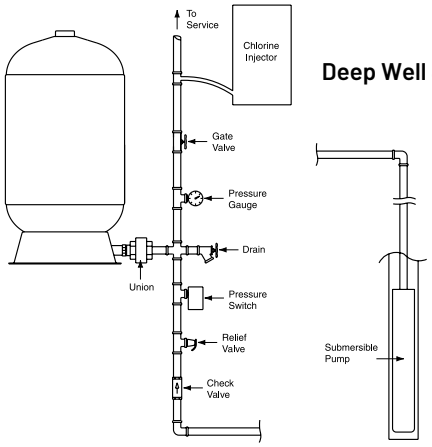
**EXAMPLE:** An application using an 8 GPM pump with a minimum run time of 1 minute and a 30-50 PSIG system pressure range;

$$\frac{8\ \text{GPM} \times 1\ \text{minute}}{.30\ (\text{factor})} = 26.7\ \text{gallon minimum tank capacity}$$

*If a volume of water needed is greater than the amount calculated on line #3, enter that amount on line #3 in place of the calculated volume.




**Shallow Well or Pressure Boosting System**




**Deep Well System**

## TABLE #2 – DRAWDOWN FACTORS

| Maximum System Pressure (Cut-Out) PSIg/(kPa)/bar | Minimum system pressure (cut-in) – PSIg/(kPa)/bar | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20 (138) 1.38 | 25 (173) 1.72 | 30 (207) 2.06 | 35 (242) 2.41 | 40 (276) 2.76 | 45 (311) 3.10 | 50 (345) 3.45 | 55 (380) 3.80 | 60 (414) 4.16 | 65 (449) 4.48 | 70 (483) 4.83 | 75 (518) 5.17 | 80 (552) 5.51 | 85 (587) 5.86 | 90 (621) 6.20 | 95 (656) 6.55 | 100 (690) 6.89 | 105 (725) 7.24 | 110 (759) 7.58 |
| **30**/(207)/2.06 | .21 | | | | | | | | | | | | | | | | | | |
| **35**/(242)/2.41 | .28 | .19 | | | | | | | | | | | | | | | | | |
| **40**/(276)/2.76 | .34 | .26 | .17 | | | | | | | | | | | | | | | | |
| **45**/(311)/3.10 | .39 | .32 | .24 | .16 | | | | | | | | | | | | | | | |
| **50**/(345)/3.45 | .44 | .37 | .30 | .22 | .15 | | | | | | | | | | | | | | |
| **55**/(380)/3.80 | .47 | .41 | .34 | .28 | .21 | .14 | | | | | | | | | | | | | |
| **60**/(414)/4.16 | .50 | .44 | .38 | .32 | .26 | .19 | .13 | | | | | | | | | | | | |
| **65**/(449)/4.48 | .53 | .48 | .42 | .36 | .30 | .24 | .18 | .12 | | | | | | | | | | | |
| **70**/(483)/4.83 | .56 | .50 | .45 | .40 | .34 | .29 | .23 | .17 | .11 | | | | | | | | | | |
| **75**/(518)/5.17 | | .53 | .48 | .43 | .38 | .32 | .27 | .22 | .16 | .11 | | | | | | | | | |
| **80**/(552)/5.51 | | | .50 | .46 | .41 | .36 | .31 | .26 | .21 | .15 | .10 | | | | | | | | |
| **85**/(587)/5.86 | | | | .48 | .43 | .39 | .34 | .29 | .24 | .20 | .15 | .10 | | | | | | | |
| **90**/(621)/6.20 | | | | | .46 | .42 | .37 | .32 | .28 | .23 | .19 | .14 | .09 | | | | | | |
| **95**/(656)/6.55 | | | | | | .44 | .40 | .35 | .31 | .27 | .22 | .18 | .13 | .09 | | | | | |
| **100**/(690)/6.89 | | | | | | | .42 | .38 | .34 | .30 | .26 | .21 | .17 | .13 | .09 | | | | |
| **105**/(725)/7.24 | | | | | | | | .41 | .37 | .33 | .29 | .25 | .20 | .16 | .13 | .08 | | | |
| **110**/(759)/7.58 | | | | | | | | | .39 | .35 | .31 | .27 | .24 | .20 | .16 | .12 | .08 | | |
| **115**/(794)/7.92 | | | | | | | | | | .38 | .34 | .30 | .26 | .23 | .19 | .15 | .11 | .08 | .07 |
| **120**/(828)/8.27 | | | | | | | | | | | .36 | .33 | .29 | .25 | .22 | .18 | .15 | .11 | .11 |
| **125**/(863)/8.62 | | | | | | | | | | | | .35 | .32 | .28 | .25 | .21 | .18 | .14 | |

*In keeping with current industry standards, drawdown factors are based on Boyle's law. Actual drawdowns will vary depending upon system variables, including the accuracy and operation of the pressure switch and gauge, actual precharge pressure, and operating temperature of the system.*

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