

PRO-SOURCE® Steel Pressurized Tanks

APPLICATIONS

Use wherever pressurized tanks are needed in water systems applications.

SPECIFICATIONS

Shell: Heavy-gauge steel

Base: High-impact composite, ABS

Finish: Electrostatically applied, baked-on polyester paint

Water Cell: One-piece seamless PVC, made from FDA listed material

Flange: Reinforced polypropylene

Service Connection: Reinforced polypropylene integral to flange

Air Valve: Rubber stem/brass body Schrader valve assembly

UV Valve Cover: High-density polyethylene



ORDERING INFORMATION

| Catalog Number | Maximum Capacity Gal/Liter | Diameter* Inch/cm | Height Inch/cm | Length Inch/cm | Precharge PSI/kPa | Connection Size Female | Drawdown in Gallons/Liter | | | Weight lbs/kg |
|--------------------------------|----------------------------|-------------------|----------------|----------------|-------------------|------------------------|---------------------------|------------|------------|---------------|
| | | | | | | | 20-40 | 30-50 | 40-60 | |
| VERTICAL MODELS | | | | | | | | | | |
| PS6-S02 | 6.0/22.7 | 12/30.5 | 16.1/40.9 | - | 40/276 | 3/4" NPT | 2.2/8.3 | 1.8/6.8 | 1.6/6.0 | 18/8.2 |
| PS19S-T02 | 19/72 | 20/40.6 | 21/53.3 | - | 40/276 | 1" NPT | 6.9/26.1 | 5.8/21.9 | 5.0/18.9 | 45/20.4 |
| PS19T-T02 | 19/72 | 16/40.6 | 27.5/70 | - | 40/276 | 1" NPT | 6.9/26.1 | 5.8/21.9 | 5.0/18.9 | 40/18.1 |
| PS32-T03 | 32/122 | 20/51 | 43/109 | - | 40/276 | 1" NPT | 11.6/43.9 | 9.8/37.1 | 8.5/32.2 | 56/25.4 |
| PS35-T05 | 35/133 | 16/40.6 | 33/84 | - | 40/276 | 1" NPT | 12.7/48.1 | 10.7/40.5 | 9.3/35.2 | 66/29.9 |
| PS50-T50 | 50/189 | 20/51 | 32.5/83 | - | 40/276 | 1-1/4" NPT | 18.3/69.3 | 15.5/58.7 | 13.4/50.7 | 84/38.1 |
| PS62-T51 | 62/235 | 24/61 | 39.5/100 | - | 40/276 | 1-1/4" NPT | 21.4/81.0 | 18.3/69.3 | 16.0/60.6 | 112/50.8 |
| PS85-T52 | 85/322 | 24/61 | 51/130 | - | 40/276 | 1-1/4" NPT | 30/113.6 | 26/98.4 | 22/83.3 | 124/56.2 |
| PS119-TR50 | 119/450 | 24/61 | 68/173 | - | 40/276 | 1-1/4" NPT | 41.3/156.3 | 35.4/134.0 | 31.0/117.3 | 140/63.5 |
| IN-LINE VERTICAL MODELS | | | | | | | | | | |
| PS2-S01 | 2.0/7.6 | 8.4/21.3 | 12.6/32.0 | - | 20/137.8 | 3/4" NPTM | 0.7/2.65 | 0.6/2.2 | NA | 12.6/5.7 |
| PS5-S02 | 5.0/18.9 | 10.6/26.9 | 16.2/41.1 | - | 30/206.8 | 3/4" NPTM | 2.2/8.3 | 1.8/6.8 | 1.8/6.8 | 16.2/7.3 |
| HORIZONTAL MODELS | | | | | | | | | | |
| PS6H-S05 | 6.0/22.7 | 12/30.5 | 13.8/35.0 | 16/40.6 | 40/276 | 3/4" NPT | 2.2/8.3 | 1.8/6.8 | 1.6/6.0 | 22/10 |
| PS19H-S00 | 19/72 | 16/40.6 | 17.5/44.5 | 28/71.1 | 40/276 | 1" NPT | 6.9/26.1 | 5.8/21.9 | 5.0/18.9 | 40/18 |

*Subject to change without notice.

Maximum Operating Pressure = 100 PSI

Maximum Liquid Temperature: 120°F (49°C) Maximum External (Ambient) Temperature: 125°F (52°C)

PRO-SOURCE® Steel Pressurized Tanks

FEATURES

Heavy-Gauge Metal Construction:

Sturdy “welded wrapper and head design.”
Built to last.

Polyester Paint Finish: Electrostatically powder-painted, then oven-baked for a smooth high-gloss, appliance-quality finish. Resists corrosion.

Elongated, Seamless Water Cell:

- Controlled 2-dimensional cell expansion.
- Rugged, seamless “water cell” prevents the most common cause of tank failure – “waterlogging.”
- Water never touches the steel tank material.
- Translucent bag material facilitates manufacturing quality control inspection.

Composite Sealing Flange:

- Corrosion-resistant.
- Integral O-ring groove better traps the water cell’s sealing ring.
- Reinforcing ribs strengthen and maintain a flat smooth sealing surface.

Integral Standpipe: Keeps the water cell standing erect, promoting complete flushing of the water entering/exiting the tank.

Nitrogen-Rich Precharge: Decreases air permeation three to four times over straight air precharge.

40 PSI Precharge: Ready for use with 40/60 pressure range systems. Enables installer to reduce pressure depending on pressure switch setting.

Sturdy Base: Tested-tough composite construction.

Tank Sizing Rule

Size tank for one gallon of drawdown for each gallon per minute at pump capacity.

Example: For a 1 HP, 20 GPM unit pumping 20 gallons per minute on a 30-50 pressure switch setting, the properly sized Pro-Source® tank is a PS85-T52 which has a 26 gallon drawdown.

| CHART A | | | | | | |
|----------------------|--------------------------------------|----------|----------|--------------|--------------|------------------|
| Tank Selection Chart | | | | | | |
| Pump GPM | SYSTEM PRESSURE SWITCH SETTING – PSI | | | | | |
| | 20-40 | | 30-50 | | 40-60 | |
| | Runtimes | | | | | |
| | 1 Minute | 2 Minute | 1 Minute | 2 Minute | 1 Minute | 2 Minute |
| 5 | PS19T | PS32 | PS19T | PS35 | PS19T | PS50 |
| 7.5 | PS32 | PS50 | PS32 | PS50 | PS32 | PS62 |
| 10 | PS32 | PS62 | PS35 | PS85 | PS50 | PS85 |
| 12.5 | PS35 | PS85 | PS50 | PS85 | PS50 | PS119 |
| 15 | PS50 | PS85 | PS50 | PS119 | PS62 | PS119 |
| 20 | PS62 | PS119 | PS85 | PS85 [2] | PS85 | PS85 [2] |
| 30 | PS85 | PS85 [2] | PS119 | PS119 + PS85 | PS119 | PS119 [2] |
| 30 | - | - | PS119 | PS119 + PS85 | PS119 | PS119 [2] |
| 50 | PS62 + PS85 | PS85 [3] | PS85 [2] | PS119 [3] | PS85 + PS119 | PS119 [3] + PS50 |

Note: Drawdown will be affected by operating temperature of the system, accuracy of the pressure switch and gauge, the actual precharge pressure, and rate of fill. Pumps installed with a Pro-Source® tank require a 100 PSI relief valve. Relief valve must be capable of relieving entire flow of pump at relief pressure.

| CHART B | | | | | | | | |
|---------------------------------------|---------------------------|------|------|------|------|------|------|------|
| Drawdown Volume Multiplier* (Approx.) | | | | | | | | |
| Pump Off Pressure PSI | PUMP START PRESSURE – PSI | | | | | | | |
| | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |
| 20 | 0.26 | | | | | | | |
| 30 | 0.41 | 0.22 | | | | | | |
| 40 | | 0.37 | 0.18 | | | | | |
| 50 | | 0.46 | 0.31 | 0.15 | | | | |
| 60 | | | 0.40 | 0.27 | 0.13 | | | |
| 70 | | | 0.47 | 0.35 | 0.24 | 0.12 | | |
| 80 | | | | 0.42 | 0.32 | 0.21 | 0.11 | |
| 90 | | | | 0.48 | 0.38 | 0.29 | 0.19 | 0.10 |
| 100 | | | | | 0.44 | 0.35 | 0.26 | 0.17 |

*Utilize this chart if proper selection cannot be made using Chart A. Drawdown based on Boyle’s Law.

PROCEDURE: 1. Identify drawdown multiplier relating to specific application.
2. Insert multiplier (X) into the following formula:

$$\frac{\text{Pump GPM} \times \text{Min Runtime}}{\text{Multiplier (X)}} = \text{Minimum Tank Capacity Required}$$

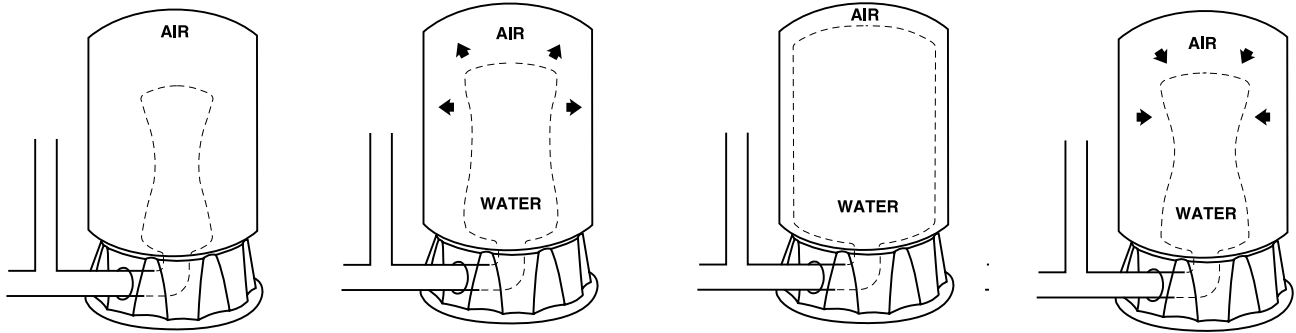
EXAMPLE: An example of a 20 GPM pump with a minimum runtime of 1 minute, installed on a 50-70 PSIG system pressure range:

$$\frac{20 \text{ GPM} \times 1 \text{ minute}}{.24 [\text{factor}] \text{ from Chart B}} = 83.3 \text{ minimum U.S. gal. tank capacity required}$$

Referring to “Ordering Information” chart, the model PS85-T52 has the closest U.S. gallon capacity that is greater or equal to the minimum volume requirement of 83.3 U.S. gallons.

PRO-SOURCE® Steel Pressurized Tanks

OPERATING CYCLE



- 1. Separator is completely empty:** A new cycle is ready to begin. Simple, positive action produces maximum drawdown on every cycle.
- 2. Water begins to enter the tank:** Air is compressed around the water separator as it fills with water.
- 3. Pump-up cycle completed:** Air is now compressed to the cut-off setting of pressure switch.
- 4. Water is being drawn from the tank:** Compressed air in the tank forces water out of the separator.

ACCESSORIES



PKG 198
Universal Jet Pump
to Tank Bracket



**PKG 111,
PKG 112 or
PKG 207**
Jet Pump-to-Tank
Mounting Pkg.

ORDERING INFORMATION

| |
|--|
| PKG 198 - Jet Pump Mounting Bracket |
| PKG 111 - Pump-to-Tank Fitting Package for composite jet pumps |
| PKG 112 - Pump-to-Tank Fitting Package for cast iron series jet pumps with composite fittings |
| PKG 207 - Pump-to-Tank Fitting Package for cast iron series jet pumps with galvanized fittings |

MULTIPLE TANK INSTALLATIONS

Pro-Source® tanks can be connected together to increase the supply of usable water (drawdown). Two tanks of the same size will double the supply and three tanks will triple the supply. See Figures No. 1 and 2 for the typical installations of this kind.

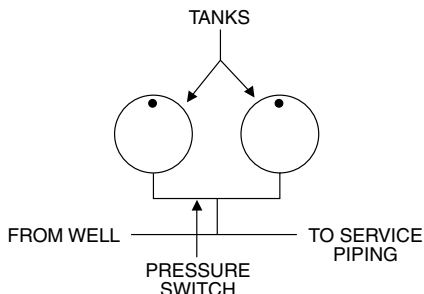


Figure 1

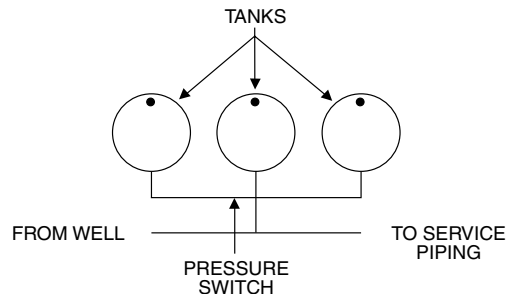
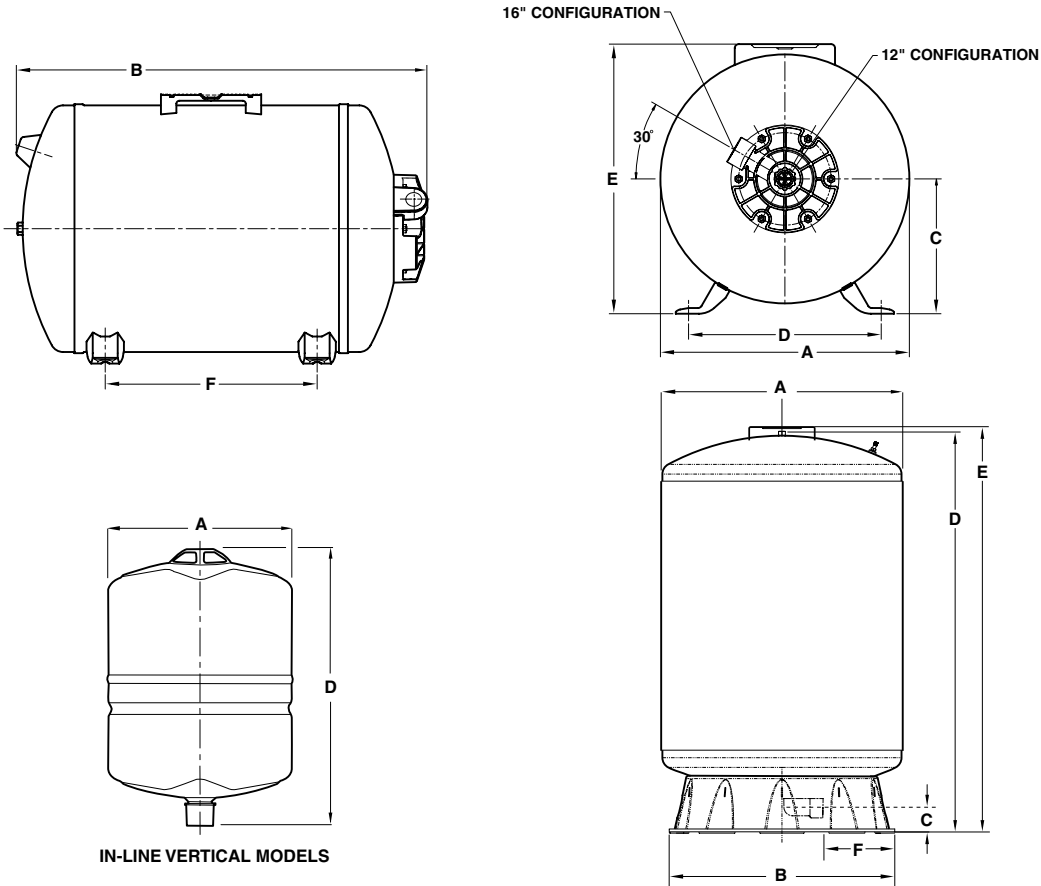


Figure 2

PRO-SOURCE® Steel Pressurized Tanks

OUTLINE DIMENSIONS



| Catalog Number | Discharge NPT | A | B | C | D | E | F |
|--------------------------------|---------------|------|------|-----|------|------|------|
| VERTICAL MODELS | | | | | | | |
| PS6-S02 | 3/4" | 12.0 | - | - | 16.1 | - | - |
| PS19T-T02 | 1" | 16.1 | 15.5 | 2.0 | 27.8 | - | 3.9 |
| PS32-T03 | 1" | 16.1 | 15.5 | 2.0 | 43.0 | - | 2.3 |
| PS19S-T02 | 1" | 20.1 | 15.5 | 2.0 | - | 21.5 | 2.3 |
| PS35-T05 | 1" | 20.1 | 15.5 | 2.0 | 33.0 | - | 2.3 |
| PS50-T50 | 1-1/4" | 24.1 | 22.7 | 2.5 | 33.2 | - | 5.5 |
| PS62-T51 | 1-1/4" | 24.1 | 22.7 | 2.5 | 40.1 | - | 5.5 |
| PS85-T52 | 1-1/4" | 24.1 | 22.7 | 2.5 | 51.5 | - | 5.5 |
| PS119-TR50 | 1-1/4" | 24.1 | 22.7 | 2.5 | 68.6 | - | 5.5 |
| IN-LINE VERTICAL MODELS | | | | | | | |
| PS2-S01 | 3/4" | 18.4 | - | - | 12.6 | - | - |
| PS5-S02 | 3/4" | 10.6 | - | - | 16.2 | - | - |
| HORIZONTAL MODELS | | | | | | | |
| PS6H | 3/4" | 12.1 | 16.9 | 6.9 | 10.0 | 13.3 | 6.1 |
| PS19H | 1" | 16.2 | 26.6 | 8.7 | 12.5 | 17.5 | 13.8 |

Dimensions (in inches) are for estimating purposes only.



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