PRO-SOURCE® Composite Fibrewound Tanks

NSF/ANSI 61
Drinking Water

Built Tough...for Quality
Every Pro-Source® Composite tank utilizes a durable, FDA approved air cell which is resistant to chlorine and will not promote taste or odor problems associated with iron bacteria that may be present in the water supply.

Built Tough...for Durability
Each tank is wrapped with more than three miles of overlapping, continuous fiberglass strands, sealed with high-grade epoxy resin, then oven-cured. Tough composite construction means longer lasting tanks that will not rust, corrode, dent or scratch.

Built Tough...for Easy Installation and Service

Not only is composite construction tougher, it's also more lightweight...as little as half the weight of steel tanks. Installation is faster, easier and can be handled by one person. Repairable with the tank installed.

ORDERING INFORMATION

Catalog Number	Tank Capacity Gal./Liter	Tank Diameter Inch / cm	Tank Height Inch / cm	Discharge Tapping Inch / cm	Water Yield Per Pump Cycle Pressure Switch Setting		
					20-40 Gal./ Liter	30-50 Gal./ Liter	40-60 Gal./ Liter
PSC-14-4	14.5 / 55	16 / 41	28.2 / 71.6	1 / 2.5	4.9 / 18.7	4.4 / 16.5	3.8 / 14.3
PSC-20-6	19.8 / 75	16 / 41	34.1 / 86.6	1 / 2.5	6.7 / 25.5	5.9 / 22.5	5.1 / 19.5
PSC-30-9	29.5 / 112	16 / 41	46.3 / 117.6	1 / 2.5	10.0 / 38.1	8.9 / 33.5	7.7 / 29.1
PSC-40-12	40.3 / 153	16 / 41	59.0 / 149.9	1 / 2.5	13.7 / 52.0	12.1 / 45.8	10.5 / 39.8
PSC-48-14	47.1 / 178	21 / 53	43.6 / 110.7	1.25 / 3.1	16.0 / 60.5	14.1 / 53.5	12.2 / 46.3
PSC-60-20	60 / 227	24 / 61	44.4 / 112.8	1.25 / 3.1	20.4 / 77.2	18.0 / 68.1	15.6 / 59.0
PSC-80-23	79.6 / 301	21 / 53	65.5 / 166.4	1.25 / 3.1	27.1 / 102.3	23.8 / 90.4	20.7 / 78.3
PSC-85-25	86.7 / 328	24 / 61	57.2 / 145.3	1.25 / 3.1	29.5 / 111.5	26.0 / 98.5	22.5 / 85.3
PSC-119-35	119.7 / 453	24 / 61	75.4 191.5	1.25 / 3.1	40.7 / 154	35.9 / 135.9	31.1 / 117.8

Maximum Operating Pressure = 125 PSI, PSC - 80-23 has a maximum operating pressure of 100 PSI.
Maximum Internal Water Temperature: 120°F (49°C). Maximum Ambient Air Temperature: 120°F (49°C)
Distance from base to center line of connection is 2-1/4" (5.7 cm)*. Allow 12" (30.5 cm) for service clearance.
*1-3/4" (4.4 cm) for 16" diameter tanks

Certified to ANSI/NSF 61, Drinking Water System Components

PRO-SOURCE® Composite Fibrewound Tanks

APPLICATIONS

Use wherever pressurized tanks are needed in water systems applications.

SPECIFICATIONS

Inner Liner: One-piece high-density polyethylene

Outer Shell: Fiberglass-wound, oven-cured, and epoxy resin sealed

Exclusive Air Cell: Heavy gauged PEU, meets Water Quality Association standards

Base: Rotatable base with quick connect

Service Connection: Stainless steel, 300 grade

FEATURES

Durable Composite Construction: A rugged one-piece molded inner liner of premium high-density polyethylene.

Miles of continuous overlapping fiberglass strands, sealed with oven-cured epoxy, make the outer shell impervious to rust, dents and ultra-violet rays (no paint to scratch and touch up).

Air Cell: Seamless, durable PEU air cell is full replaceable and constructed of heavy-gauge engineered polymer. Meets Water Quality Assocation standards.

Tank Base: Rigid molded ABS is the sturdiest composite base on the market. Corrosion- and impact-resistant.

Replaceable Air Cell: Generous and accessible air cell opening facilitates easy removal and re-installation of replacement air cell (with the professional contractor in mind). Replaceable on PSC line of Fibrewound.

Stainless Steel Service Connection: 300 grade, the professional's choice

TANK SIZING RULE:

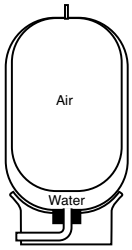
Size tank for one gallon of drawdown for each gallon per minute at pump capacity.

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 composite tank is a PSC-80-23, which has a 23.8 gallon drawdown.

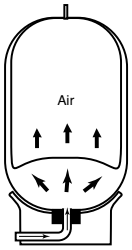
PRO-SOURCE® Composite Fibrewound Tanks

OPERATING CYCLE

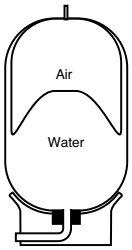
1.Pro-Source® Composite tank is nearly empty: air cell is fully expanded



2. Water is pumped into tank: air in cell is compressed



3. Pump-up cycle is complete: air is now compressed to "cut off" setting of pressure switch



4. Water is drawn from tank: pressure in air cell provides water as needed, until tank is empty and cycle repeats

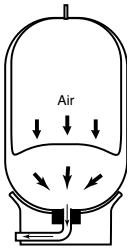


CHART A

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	PSC-20-6	PSC-30-9	PSC-20-6	PSC-40-12	PSC-20-6	PSC-40-12
7.5	PSC-30-9	PSC-48-14	PSC-30-9	PSC-60-20	PSC-30-9	PSC-60-20
12.5	PSC-40-12	PSC-80-23	PSC-48-14	PSC-85-25	PSC-60-20	PSC-119-35
15	PSC-48-14	PSC-119-35	PSC-60-20	PSC-119-35	PSC-60-20	PSC-119-35
20	PSC-60-20	PSC-119-35	PSC-80-23	PSC-80-23 (2)	PSC-80-23	PSC-80-23 (2)
30	PSC-85-25	PSC-85-25 (2)	PSC-119-35	PSC-119-35 (2)	PSC-119-35	PSC-119-35 (2)
50	PSC-80-23 (2)	PSC-119-35 (3)	PSC-85-25 (2)	PSC-119-35 (3)	PSC-119-35 (2)	PSC-119-35 (3)

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.

CHART B

DRAWDOWN VOLUME MULTIPLIER* (APPROXIMATE)

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 tank selection chart. Drawdown based on Boyle's Law.

Procedure:

1. Identify drawdown multiplier relating to specific application.

2. Insert multiplier (X) into the following formula:

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

3. Refer to "Ordering Information" Table – Max. Capacity Gals.

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