



UL Classified to ANSI/NSF 61, Drinking Water System Components



# Signature 00°

#### Fibrewound Pressure Tanks

Built Tough... for Quality
Every Signature 2000® 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 over-lapping,
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											
	Max.			Service		Connection		Drawdown in Gallons/Liters			
Catalog Number	Capacity gal/liter	Diameter inch/cm	Height inch/cm	Clearance inch/cm	Precharge PSI/kPa	Size Female	Connection Material	20-40	30-50	40-60	Weight lbs/kg
SR20-6S	<b>20</b> /76	<b>16</b> /41	<b>36</b> /92	<b>48</b> /122	<b>40</b> /276	1" NPT	Stn. Stl.	<b>6.9</b> /26.2	<b>5.9</b> /22.4	<b>5.2</b> /19.7	<b>25</b> /11
SR35-10S	<b>35</b> /133	<b>20</b> /51	<b>39.5</b> /101	<b>51</b> /130	<b>40</b> /276	1" NPT	Stn. Stl.	<b>12.1</b> /46.0	<b>10.3</b> /39.1	<b>9.0</b> /34.2	<b>40</b> /18
SR40-12S	<b>40</b> /151	<b>16</b> /41	<b>60.5</b> /154	<b>80</b> /201	<b>40</b> /276	1" NPT	Stn. Stl.	<b>13.8</b> /52.2	<b>11.8</b> /44.7	<b>10.3</b> /39.0	<b>36</b> /16.3
SR48-14S	<b>48</b> /182	<b>20</b> /51	<b>50.25</b> /128	<b>69</b> /175	<b>40</b> /276	1" NPT	Stn. Stl.	<b>16.5</b> /62.5	<b>14.2</b> /53.8	<b>12.4</b> /46.9	<b>41</b> /18.6
SR60-18	<b>60</b> /228	<b>24</b> /61	<b>45.75</b> /117	<b>58</b> /148	<b>40</b> /276	1-1/4" NPT	Stn. Stl.	<b>20.7</b> /78.6	<b>17.7</b> /67.2	<b>15.5</b> /58.9	<b>60</b> /27
SR85-25	<b>85</b> /323	<b>24</b> /61	<b>59.5</b> /152	<b>78</b> /199	<b>40</b> /276	1-1/4" NPT	Stn. Stl.	<b>29.3</b> /111.3	<b>25.1</b> /95.3	<b>21.9</b> /83.2	<b>75</b> /34
SR119-35	<b>119</b> /452	<b>28</b> /72	<b>62.25</b> /159	<b>81</b> /206	<b>40</b> /276	1-1/4" NPT	Stn. Stl.	<b>41.1</b> /156.1	<b>35.1</b> /133.3	<b>30.7</b> /116.6	<b>105</b> /48

Maximum Operating Pressure = 100 PSI Maximum Liquid Temperature: 120°F (49°C)

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



#### **APPLICATIONS**

■ Use wherever pressurized tanks are needed in water systems applications.

#### SPECIFICATIONS

**Inner Liner** – One-piece highdensity polyethylene

Outer Shell - Fiberglass-wound and epoxy resin sealed

Air Cell - Heavy mil ethyl-vinylacetate (EVA)

**Upper and Lower Flanges -**Reinforced polypropylene

**Base** – One piece high density polyethylene

**Service Connection – Stainless** steel on all models

Air Valve - Brass body, Schrader core assembly

**Weather Cap** - High density polyethylene

#### **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).
- Proprietary wrap pattern makes the tank stronger than steel. Tanks can be installed with a wider range of pressure settings. so you can select the system pressure you want.

**Air Cell** – The air cell is fabricated from durable and extensively tested ethyl-vinyl-acetate (EVA).

- EVA is resistant to chlorine.
- EVA will not support iron bacteria growth that may be present in the water supply.
- EVA and Polyethylene meet FDA requirements for potable water supplies.

■ Signature 2000® Fibrewound Pressure Tank assembly is classified to ANSI/NSF Standard 61 for water system components.

Tank Base - Rigid molded polvethylene is the sturdiest composite base on the market. Corrosion- and impact-resistant. Base rotates 360° for ease-of-service hook-up.

Replaceable Air Cell - With the tank installed! Air cell access is via a top mount design. Generous and accessible air cell opening facilitates easy removable and re-installation of replacement air cell (with the professional contractor in mind).

Five Year Warranty - Managed and provided by WICOR Industries, the only US manufacturer to design and manufacture fibrewound and steel tanks!

Signature 2000® is a registered trademark of WICOR Industries. In order to provide the best products possible, specifications are subject to change.

#### 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 Signature 2000® tank is a SR85-25, which has a 25.1 gallon drawdown.



#### **OPERATING CYCLE** 1. Tank nearly empty -2. Water begins to 3. Pump-up cycle 4. Water being drawn 5. Tank now empty -Air expands, filling enter tank - Air is completed - Air is from tank -New cycle ready to begin now compressed to Compressed air in air compressed in air cell inside cell forces as tank tank fills with water out setting of water pressure of tank switch Air t Water

	System Pressure Switch Setting – PSI									
Pump	20	-40		0-50	40-60					
GPM	Run Times									
	1 Minute	2 Minute	1 Minute	2 Minute	1 Minute	2 Minute				
5	SR20	SR35	SR20	SR35	SR20	SR40				
7.5	SR20	SR48	SR35	SR48	SR35	SR60				
10	SR40	SR60	SR35	SR60	SR40	SR85				
12.5	SR48	SR60	SR40	SR85	SR48	SR85				
15	SR60	SR85	SR48	SR119	SR60	SR119				
20	SR60	SR119	SR60	SR119	SR85	SR85 (2)				
30	SR85	SR85 (2)	SR119	SR60 + SR119	SR119	SR119 (2)				
50	SR85 (2)	SR119 (2)	SR85 (2)	SR119 (3)	SR119 (2)	SR119 (4)				

**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.

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			

<sup>\*</sup>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:

  Pump GPM x Min Run Time
  Multiplier (X)

  Minimum Tank
  Capacity Required
- **3.** Refer to "Ordering Information" Table Max. Capacity Gals.

