

## Pretreatment - Water Softeners

### TAFS Series, 1" Water Softening Systems

The Biolab TAFS Series 1" Water Softening Systems are designed to remove calcium and magnesium ions from incoming water and replace them with soft sodium ions.

Our complete system series features the Performa™ Softener Valve with standard controller for simple operation and efficient regeneration.

### Operating Parameters

- Pressure: 20-100 psi (138 - 690 KPA)
- Temperature: 33-120° F (2-38° C)
- Electrical: 115/60Hz, single phase
- Inlet/Outlet: 1.0 inch
- Drain: 0.75 inch

### Materials of Construction

- Media Tank: FRP - HDPE lined
- Control Valve: Glass filled Noryl®
- Media: Virgin cation resin
- Distributor Piping: PVC
- Brine Tank: Polyethylene

### Standard Features

- Fully automatic regeneration
- 30,000 to 150,000 grains hardness removal
- Single unit flow rates up to 25 USgpm
- Parallel flow rates up to 50 USgpm
- Durable, high quality exchange cation resin
- Non-corroding fiberglass tank
- Valve constructed of plastic materials
- Standard reliable electronic timer
- Tank for brine making & salt storage



### Options Available

- Single, duplex twin alternating or parallel configs
- Free standing or skid-mounted systems
- Factory, fully pre-plumbed & pre-wired systems
- Custom installations and valve nests to meet facility requirements

### Typical Applications

- Reverse osmosis system pretreatment
- Boiler feedwater
- Reagent grade lab water systems
- USP purified water systems
- Hemodialysis & Life Sciences water systems

## TAFS Series 1" Water Softeners @ 25°C

Model Number	Capacity Maximum (Kgr)	Flow Design (USgpm)	Resin Volume (Ft.3)	Backwash Flow (USgpm)	Pressure Drop @ Peek (psig)	Salt Per Regen (Lbs.)	Brine Capacity (Lbs.)	Media Tank W x H (In.)	Brine Tank W x H (In.)	Shipping Weight (Lbs.)	Space Required W x D x H
TAFS-30P	30	1 - 5	1	2.5	5	10	450	10x47	18x40	150	28x18x57
TAFS-45P	45	1.5 - 7.5	1.5	4	7.5	15	450	12x42	18x40	195	30x18x52
TAFS-60P	60	2 - 10	2	4	10	20	450	12x52	18x40	245	30x18x62
TAFS-90P	90	3 - 15	3	5	15	30	700	14x65	24x40	350	38x24x75
TAFS-120P	120	4 - 20	4	7	20	40	700	16x65	24x40	485	40x24x75
TAFS-150P	150	5 - 25	5	9	25	50	700	18x65	24x40	565	42x24x75

Note: All weights and dimensions are approximate.

### Installation Considerations

- For proper serviceability, it is recommended that there be 18" of space around the entire system. A minimum of 12" is required. The tanks should be installed on a firm, level surface.
- The inlet piping should be sized large enough to provide the required water flow for both service flow and backwashing of the tanks with minimum amount of pressure loss.
- A drain with suitable capability for the backwash flow rate of the tanks is required.
- Isolation valves, pressure gauges, sample ports, a vacuum breaker and a relief valve should be installed on each assembly.

### For More Information

Contact one of our application specialists at USA (800) 346-0365 or Canada (800) 268-5035, or visit [www.mcpur.com](http://www.mcpur.com)

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