

Technical Data Sheet



WQ-SF

Complete Water Quality Solutions

Engineered Solutions

Lync WQ-SF is a complete, fully engineered domestic water quality system. Expertly designed by one manufacturer, the Lync WQ-SF offers a compact, pre-assembled, and configurable sodium regenerated water softener for the reduction of water hardness.

The system utilizes the ion exchange process to effectively remove hardness from the water by exchanging hardness ions such as calcium and magnesium with a non-hardness ion such as sodium. The water softener control valve utilizes the water hardness level input and the amount of water passed through the softener to automatically initiate the regeneration process and restore its water softening capacity.

WQ-SF includes mineral tanks to hold the ion exchange resin, brine tank(s) to store the brine solution, and metered control valves for automatic operation of the system. The size of the system is configurable based on the required flow rate and hardness level of the feed water. Depending on model, WQ-SF systems are configured in Twin Alternating (TA) and Progressive Flow (PF) modes. Lync Progressive Flow systems consist of two separate skids to provide the flexibility of maneuvering these systems through narrow spaces of buildings and mechanical rooms.

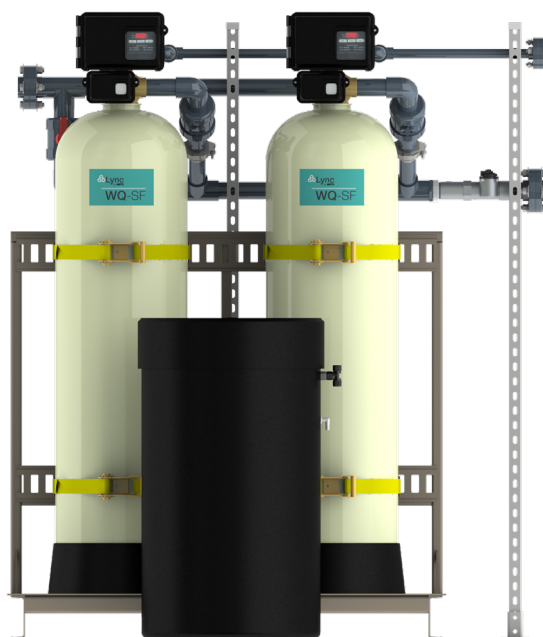
Features

Fully Engineered and Factory-Assembled

- 2" Fleck 2900 control valves with NXT2 controller
- Mineral tanks fastened onto a steel skid for safe and easy transportation and installation
- WQ-SF systems are factory pre-assembled to keep installation time and labor to minimum.
- Systems available in either Twin Alternating or Progressive Flow configurations
- Lower construction costs for new installations
- Reduced downtime during retrofits

Superior Safety, Reliability, and Longevity

- Effectively reduces dissolved hardness, scale formation inside the plumbing system, and spot formation outside the plumbing system
- Saving on energy and water heating costs by maintaining the surface of heat exchangers free of hardness scale



- Softened water reduces soaps and cleaning product consumption by up to 50%
- Prolongs the life of water using appliances
- Tanks will come online during high flow demand periods to add flow rate capacity (Progressive models only)
- Tanks will go offline during low flow demand periods to ensure optimal efficiency and water quality (Progressive models only)

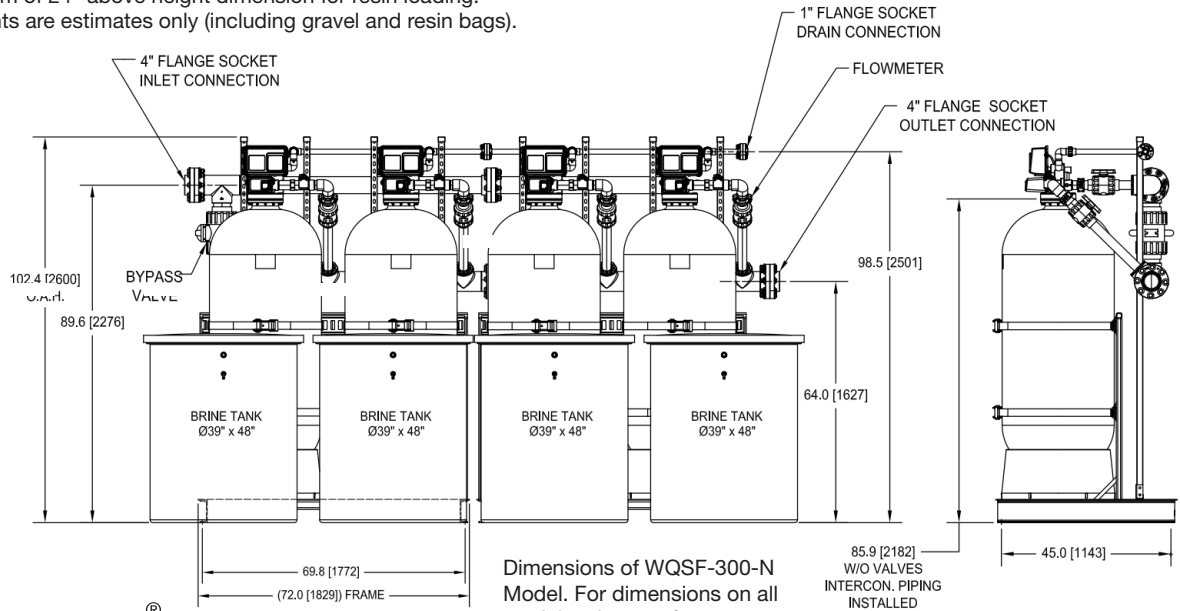
Feed Water Guidelines

pH	6 to 10
Hardness (maximum)	Depends on customer's acceptable hardness leakage level.
Water Pressure	25psi to 125psi (172 kPa to 861 kPa)
Temperature	34 - 113°F (1 - 45°C)
Free Chlorine (maximum)	1mg/L
Iron (maximum)	1mg/L
Manganese (maximum)	1mg/L
Oil and H ₂ S	None Allowed
Turbidity	Less than 5.0 NTU
Total Dissolved Solids	Must be below 750mg/l for the softener to produce less than 1 grain per gallon soft water
Ambient Temperature	34°F/1°C - 122°F/52°C
Maximum Altitude	6,500 ft above sea level

Technical Data

Unit QVSF	QVSF-025-N	QVSF-050-N	QVSF-075-N	QVSF-100-N	QVSF-200-N	QVSF-300-N
Performance and Specs						
Twin Alternating/Progressive Flow	TA	TA	PF	PF	PF	PF
Resin Tank Quantity - Size	2 - 18" x 65"	2 - 21" x 62"	4 - 18" x 65"	4 - 21" x 62"	4 - 24" x 72"	4 - 30" x 72"
Resin (cu ft./tank)	5	7	5	7	10	15
Max Hardness Removal Capacity (grains/tank) ¹	150,000	210,000	150,000	210,000	300,000	450,000
Max Salt Usage (lb/tank) ¹	75	105	75	105	150	225
Min Hardness Removal Capacity (grains/tank) ²	100,000	140,000	100,000	140,000	200,000	300,000
Min Salt Usage (lb/tank) ²	30	42	30	42	60	90
Inlet/Outlet - Drain Pipe Size	2" - 1"	2" - 1"	2" - 1"	2" - 1"	4" - 1"	4" - 1"
Brine Tank Quantity - Size (in)	1 - 24D x 50H	1 - 30D x 50H	4 - 24D x 50H	4 - 30D x 50H	4 - 30D x 50H	4 - 39D x 48H
Flow Rate @ 15 psi Pressure Drop (GPM) ³	57	60	216	228	296	320
Flow Rate @ 25 psi Pressure Drop (GPM) ⁴	65	77	247	292	388	400
Backwash (GPM)	10	13	10	13	15	25
Floor Space w/o Brine Tank(s) and Weights						
Width (in)	75	75	135	136	149	155
Depth (in)	38	39	38	39	45	49
Height (in) ⁵	86	86	86	86	97	103
Shipping Weight (lbs) ⁶	2000	2200	4100	4500	5200	6200
Control Valve Electrical Data						
Input Voltage Phase, Frequency	100-240 VAC, Single Phase, 50/60 Hz (per control valve)					
Output Voltage, Amps	24 VDC, 2.7 A (per control valve)					

- 1.2. Maximum capacity is based on 30,000 grains per cubic foot of resin when regenerated with 15 lbs of salt and minimum capacity is based on 20,000 grains per cubic foot of resin when regenerated with 6 lbs of salt.
- 3.4. Flow rates listed above are based on pressure drop only. Selecting a system based on pressure drop alone does not guarantee that the system will provide adequately softened water. System selection should be based on resin quantity, capacity required, feed water analysis, and application requirements. Ask your Lync rep for more information.
5. Allow a minimum of 24" above height dimension for resin loading.
6. Shipping weights are estimates only (including gravel and resin bags).



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Fort Worth, TX • (817) 335-9531

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