




TWIN-TANK WATER SOFTENER SYSTEM

FLECK 9100 VALVE


TWIN TANKS PROVIDE CONTINUOUS SOFT WATER

With a twin-tank system featuring the Fleck® 9100 valve, families benefit from soft water 24 hours a day, 7 days a week. That's because the second tank of soft water acts as a backup, ready to immediately provide soft water once 100% of the first tank is used. While the second tank is in service, the first tank regenerates giving you all the advantages of continuous soft water.

A photograph of the Fleck 9100 valve system. It consists of a black rectangular control valve mounted on top of two large, cylindrical, tan-colored water tanks. The tanks are connected by a black pipe. The background is a light gray with a white diagonal stripe.

With an efficient mechanical timer, you'll only be paying **pennies** in electricity per year!

Manufactured from high-tech Noryl® material, the 9100 valve has been engineered to withstand the equivalent of **27 years** of uninterrupted daily use.

A close-up photograph of water splashing, showing droplets and ripples in a vibrant blue color.

Unlike preset systems, the 9100 twin-tank system regenerates with soft water only when needed. The end result? **15%** savings in both salt and water.

HOW A WATER SOFTENER WORKS

Water Softening Process

Hard water enters the water softener system. As it passes through the resin inside the tank, the hard water minerals are attracted to the resin and the water is softened to service the home.

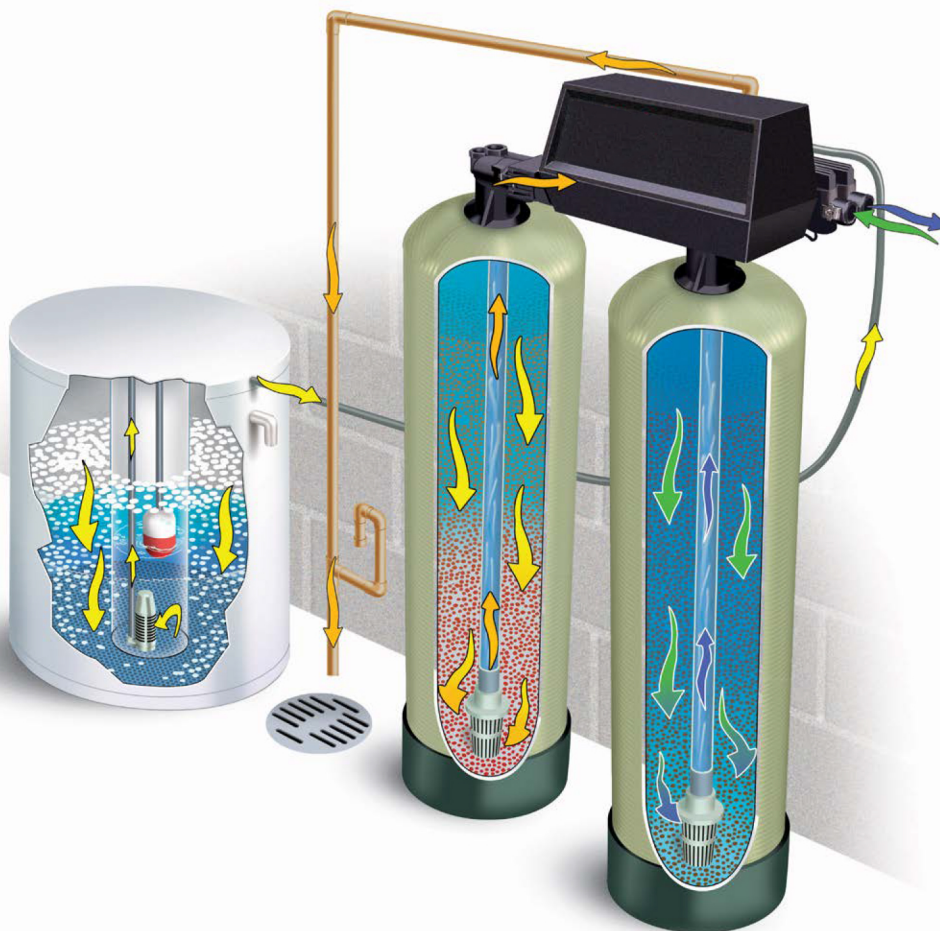
Regeneration Process

When the resin becomes saturated with hard water minerals, the water softener system goes automatically into regeneration. This is the process that frees the resin of hard water minerals, making it ready to soften the water again.

Brine water is drawn into the tank and rinses the hard water minerals off the resin and down the drain. Once the resin is free of hard water minerals, fresh water rinses the remaining brine water out of the system leaving the system ready for service.

Twin-Tank Advantage

A twin-tank system assures that there is always soft water available. The water softener always switches to flow to the fresh second tank while the first tank is regenerating. Thus, the system always delivers soft water without interruption.



FLECK 9100 VALVE

LIGHT COMMERCIAL/RESIDENTIAL TWIN TANK VALVE

PRECISION CONTROL AND IMMEDIATE REGENERATION



FEATURES/BENEFITS

Fleck* Fiber-reinforced polymer valve body for superior strength and durability, non-corrosive, and UV-resistant

Continuous service flow rate of 20.1 GPM with a backwash of 8.5 GPM

Backwash capability accommodates softener tanks up to 16"

Fully adjustable 5-cycle control for efficient and reliable water treatment system

Time-tested, hydraulically-balanced piston for service and regeneration

Rugged-built electromechanical timer designed with heavy duty 3/8" wide plastic gears

Salt and water savings by using 100% capacity of the tank in service before switching to the second tank

Regenerates immediately when needed for continuous soft water

Regenerates with soft water keeping system clean for optimum operating efficiency and minimum maintenance

OPTIONS

Brine cam auxiliary switch

Electromechanical timer auxiliary switch

Plumbing connections in 3/4" to 1-1/4" NPT, BSP, and sweat

Fiber-reinforced polymer or stainless steel bypass valve

SXT-Large LCD display and user-selectable time clock or metered function; usable for filtration and softener systems

XT- Offers a two-line, 16 character LCD backlit display for easy entering of master and user programming as well as view of diagnostics

Electromechanical Timer- Simple to adjust and easy to service with quick access to all internal components



TESTED and CERTIFIED by the WQA to NSF/ANSI Standard 44 for Water Softener Performance.



TESTED and CERTIFIED by the WQA to NSF/ANSI Standard 372 for Lead Free Compliance.



UL recognized to 979



Restriction of Hazardous Substance Compliant

FLOW RATES (50 PSI INLET) – VALVE ALONE

Continuous		
15 psi drop		
3/4" Meter:	18 GPM	(4.1 m ³ /h)
1" Meter:	20 GPM	(4.5 m ³ /h)
Peak		
25 psi drop		
3/4" Meter:	23 GPM	(5.5 m ³ /h)
1" Meter:	26 GPM	(5.9 m ³ /h)
Cv		
flow at 1 psi drop		
3/4" Meter:	4.6	
1" Meter:	5.1	
Max. Backwash		
25 psi drop		
3/4" Meter:	8 GPM	(2 m ³ /h)
1" Meter:	8 GPM	(2 m ³ /h)

REGENERATION

Downflow/Upflow	Downflow only
Adjustable Cycles	Yes
Time Available	
Electromechanical:	0 - 164 min/regeneration
SXT:	0 - 199 min/cycle
XT:	0 - 240 min/cycle

METER INFORMATION

Meter Accuracy	
3/4" Paddle:	0.25 - 15 GPM ± 5% (0.06 - 3 m ³ /h)
1" Paddle:	0.7 - 40 GPM ± 5% (0.16 - 9 m ³ /h)

METER INFORMATION (CONTINUED)

Meter Capacity Range	
3/4" Standard:	125 - 2,125 gal (0.5 - 8 m ³)
3/4" Extended:	625 - 10,625 gal (2.5 - 40 m ³)
1" Standard:	310 - 5,270 gal (1.2 - 20 m ³)
1" Extended:	1,550 - 26,350 gal (6 - 100 m ³)
SXT:	1 - 999,900 gal (0 - 3,785 m ³)
XT:	1,000 - 9,900,000 gal (3.8 - 37,476 m ³)

DIMENSIONS

Distributor Pilot	1.05" O.D. (32 mm)
Drain Line	1/2" NPTF
Brine Valve	
1600:	3/8"
Injector System	1600
Mounting Base	2.5" - 8 NPSM
Height from	
Top of Tank	7.3" (185 mm)
Riser Tube Diameter	3/4" (19 mm)
Riser Height	1/4" Below top of tank

TYPICAL APPLICATIONS

Water Softener	6 - 16" diameter
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ADDITIONAL INFORMATION

Electrical Rating	24/110/220V 50/60 Hz
Max VA	8.9
Estimated Shipping Weight	
Mechanical Valve:	14-1/2 lbs
SXT and XT Valve:	12 lbs
Pressure	
Hydrostatic:	300 psi (20 bar)
Working:	20 - 125 psi (1.4 - 8.5 bar)
Temperature	
Cold Water Valve:	34 - 110°F (1 - 43°C)



WATER QUALITY SYSTEMS

5730 NORTH GLEN PARK ROAD, MILWAUKEE, WI 53209

P: 262.238.4400 | F: 262.238.4404

WATERPURIFICATION.PENTAIR.COM

CUSTOMER CARE: 800.279.9404 | tech-support@pentair.com

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