

# Hydrotech<sup>®</sup>

## 89 Control Valve



### Features:

- True 1" porting for high flow rates. Up to 18" softeners and 18" filters
- High-efficiency Performance. Upflow with Optimal Precision Brining or Downflow Regeneration.
- Adjustable backwash frequency saves up to 2,000 gallons of water per year
- Large 4 line Touch Pad LCD display – customizable for dealership
- Automatic reserve – adjusts based on actual usage
- Automatic System Flush refreshes system during periods of non use preventing bacteria growth
- Soft Water Recharge performs quick regeneration ensuring you never run out of soft water
- Soft Water Brine Tank Refill conserves capacity and keeps brine tank clean
- Time saving quick connect features on bypass, drain line and powercord
- Meter immediate; meter delayed; meter override; vacation and calendar clock modes
- Self charging capacitor keeps date / time of day for 48 hours while programming remains in permanent memory
- Space saving bypass with integrated turbine meter
- Comes with 1" straight NPT and 3/4" 90 degree elbows
- Seven Year Control Valve Warranty

Specifications	
Valve Body Material	Noryl (PPO)
Plumbing Connections (NPT)	Straight 1"
Tank Thread	2-1/2" NPSM
Adjustable Cycles	0 - 99 minutes
Regeneration	Up Flow /Down Flow
Meter Accuracy	+/-5%
Maximum Meter Capacity	99,999 GAL
Distributor Pilot	1.05"
Drain Line	3/4"
Brine Line	3/8"
Flow Rates (Valve Only 50 psi inlet)	
Continuous (15 psi drop)	27 GPM
Peak (25 psi drop)	35 GPM
Max. Backwash (25 psi drop)	27 GPM
Cv	7
Typical Applications	
Softeners	up to 18" Diameter
Filters	up to 18" Diameter
Electrical	
Input	110V AC 50/60Hz
Output	12V AC 50/60Hz 650mA
Certification	cUL
Operation Ratings	
Max. Working Pressure	20 - 125 psi
Max. Temperature	34F - 100F
Approvals	
NSF/ANSI 44	Certified
Additional Information	
Shipping Weight	7 pounds

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## HTO Upflow Series Whole House Water Refining System

### A Complete Water Refining System For Your Home

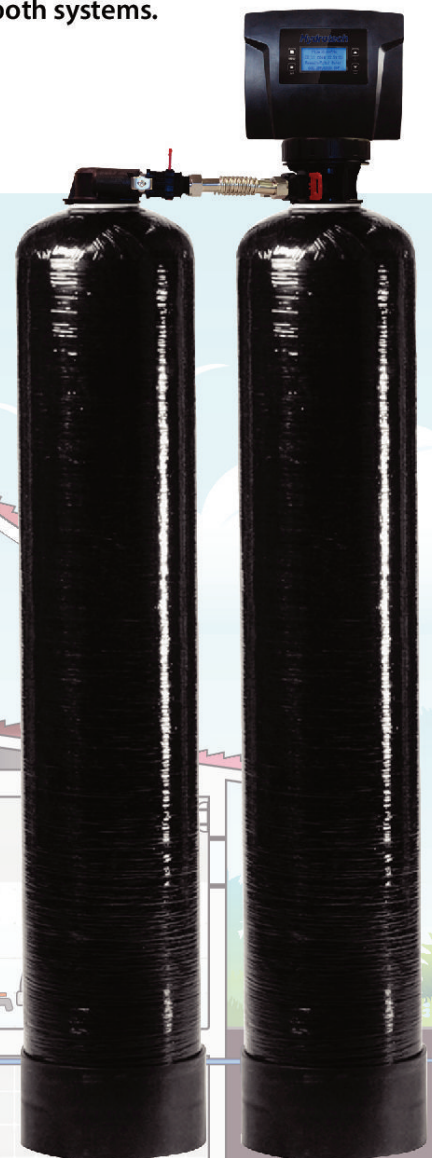
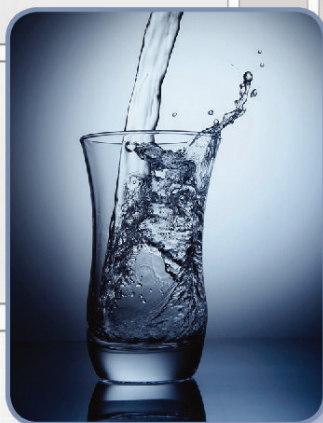
Rid your water of hardness minerals (calcium and magnesium) plus filter out bad tastes and odor caused by chlorine, chloramines or organic matter.

The unique two tank system keeps the two media beds separate, allowing for more carbon contact which greatly improves the removal of chlorine, chloramines and organics. Because the carbon typically needs to be replaced before the softening resin, the two tank system allows for easy cost effective replacement. You get the same benefit as a separate water softener and whole-house carbon filter for a much lower price as the single control valve operates both systems.

Now you can enjoy truly refined water throughout your home!

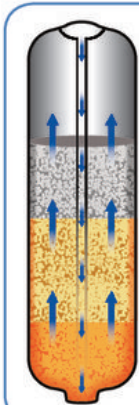
- Great tasting water
- Odor-free. No chlorine!
- Soft skin & silky hair
- Spot free dishes
- Brighter laundry
- Easier cleaning
- Protect plumbing & water using appliances from scale build-up

*Soft, Clean  
Truly Refined  
Water*





89 valve



**Upflow Regeneration** drives the hardness minerals up through the already depleted resin and out to drain - saving both salt and the unused portion of the resin for future use.

## Features:

- Two tank carbon system keeps media beds separate, allowing for more carbon contact for improved chlorine, chloramines and organic removal
- Carbon can be replaced without replacing the resin bed
- Same benefit as separate systems but with cost of only one control valve
- Salt-efficient upflow regeneration
- Exclusive NSF Certified electronic control valve with seven year warranty featuring proven piston, seal & spacer technology
- Fully adjustable cycles allow customization to the most efficient settings based on specific water quality requirements
- Backlit LCD display screen with no confusing codes or symbols. The 89 Control features a large 4 line / 80 character touch pad screen. The 785 control features a 2 line / 32 character display with rotating information display (i.e. date last regenerated, volume remaining).
- NSF Certified fibreglass pressure tank with lifetime warranty
- High density polyethylene salt tank with lifetime warranty
- Brine safety valve for added overflow protection
- Plastic salt grid prevents salt bridging
- Unique precision turbine meter is incorporated in system bypass valve – saving space over 4" of floor space
- Time saving quick connect fittings on brine line, drain line (with O-ring seal) and power cord for fast and easy installations

Specifications	HTO-100	HTO-150	HTO-200	HTO-250	HTO-300
Salt Used - Per Regeneration	6.0 lbs	9.0 lbs	12.0 lbs	15.0 lbs	18.0 lbs
Water Used - Regeneration	86.4 gal	148 gal	162.4 gal	216.0 gal	224.8 gal
Hardness Removal - Grains	25,000	37,500	50,000	67,500	75,000
Tank #1 Carbon Quantity (ft3)	1.0 ft	1.50 ft	2.0 ft	2.5 ft	3.0 ft
Tank #2 Resin Quantity (ft3)	1.0 ft	1.50 ft	2.0 ft	2.5 ft	3.0 ft
Tank Size	9x48	10x54	12x52	13x54	14x65
Tank Jacket / Media Loaded	Yes	Yes	No	No	No
Brine Tank (Inches)	BTR 18.1 x 34.5 BTS 15.0 <sup>2</sup> x34.7	BTR 18.1 x 34.5 BTS 15.0 <sup>2</sup> x34.7	20.3 x 37.4	20.3 x 37.4	23.0 x 40.5
Salt Storage Capacity	BTS 240 lbs BTR 270 lbs	BTS 240 lbs BTR 270 lbs	350 lbs	350 lbs	420 lbs
Flow Rate @ 15 psi Pressure Drop	7.2 gpm	7.4 gpm	9.0 gpm	9.2 gpm	9.2 gpm
Flow Rate @ 25 psi Pressure Drop	10.0 gpm	10.1 gpm	11.9 gpm	12.1 gpm	12.1 gpm
Back Wash Flow Rate	2.4 gpm	3.5 gpm	4.0 gpm	4.5 gpm	5.0 gpm
Shipping Weight	154 lbs	171 lbs	214 lbs	225 lbs	232 lbs
Regeneration Type	Up Flow				
Plumbing Connections	89 valve units 1" straight only. 785 valve units 3/4" 90 degree elbows and 1" straight connectors				
Resin Type	Aquafine 8% cation exchange resin				
Carbon Type	Catalytic Carbon				
Electrical Requirements	Input 120V 60 Hz - Output 12V 650mA				
Water Temperature	Min 39 - Max. 100° F				
Water Pressure	Min. 20 - Max. 125 psi				



Also available with 785 valve

Brine Tank Included