



### Markets Served:

Clinics  
Educational Facilities  
Energy / Power  
Food / Beverage Production  
Food Service / Restaurants  
Grocery  
Healthcare / Hospitals / Bio-Pharmaceutical  
Hospitality / Lodging  
Manufacturing  
Municipal Drinking Water  
Oil / Gas

## The Culligan Hi-Flo® xN Series WATER SOFTENER SYSTEM

Durable, Efficient & Expandable Water Treatment  
for Commercial & Industrial Applications

The Hi-Flo xN Series softener reduces hard water contaminants\* reducing scale build-up that can affect equipment performance. The corrosion resistant innovative valve design offers improved reliability and ease of service. The Culligan® Smart Controller allows you to efficiently set up and manage your water treatment equipment. Customers can set up a single or multiple tank system that adjusts to flow demand. Customers can also monitor their water treatment system performance, consumable usage, and maintenance needs, at a single site or across multiple ones 24 hours a day.

The Hi-Flo xN softener is part of the Culligan® Commercial and Industrial Solutions that combine durable and efficient equipment, systems experience, and technical experts who understand your unique requirements. From planning your system to installing your water treatment equipment, Culligan® Commercial and Industrial Solutions offer options that help deliver the quality of water to meet your needs. Contact Culligan® today to learn more about the Hi-Flo xN softener system.

### CULLIGAN® COMMERCIAL & INDUSTRIAL ADVANTAGES:

- Simple System Integration
- Global Product Platform
- Flexible Configurations
- Quick Delivery / Easy Installation
- Exclusive Culligan Advanced Electronics
  - Historical Operating Data
  - Alarm Recognitions
  - US Standard and Metric Readings
  - Remote Monitoring Options
  - Telemetry Options

\*Contaminants may not necessarily be in your water.



**PRE-TREATMENT SOLUTIONS.**

# SYSTEM SPECIFICATIONS

## Warranty

Culligan's Hi-Flo xN water softeners are backed by a limited 1-year warranty against defects in material, workmanship and corrosion. In addition, softener tanks are warranted for a period of 5 years.<sup>†</sup>

<sup>†</sup> See printed warranty for details. Culligan® will provide a copy of the warranty upon request. Some localities have corrosive water. A softener cannot correct this condition, so its printed warranty disclaims liability for corrosion of plumbing lines, fixtures, or water-using equipment. If you suspect corrosion, your independently operated Culligan® dealer has equipment to help control the problem.

## System Specifications

Specification	US	Metric
Inlet Pressure (dynamic)	30–100 psig	210–690 kPa
Power Voltage Frequency	120 Volts <sup>1</sup> 50/60Hz	
Feed Water Temperature	40–120° F	4–49° C
Vacuum	None <sup>2</sup>	None <sup>2</sup>
Turbidity Chlorine Iron	5 NTU, max. <sup>3</sup> 1 mg/L, max. <sup>3</sup> 5 mg/L, max. <sup>3</sup>	

<sup>1</sup> 120 Volt/24 Volt CUL/UL listed Transformer Included.

<sup>2</sup> FRP tank warranty is void if subject to vacuum

<sup>3</sup> See media specification for details.



Tested and Certified by WQA to NSF/ANSI 61 and 372

## Examples of Softener Applications

- Food and Beverage—Improved taste
- Educational Facilities—Boiler and cooling tower make-up water for scale reduction and improved energy costs
- Restaurants—For dishwashing, cleaning material savings, scale reduction
- RO Softener / DI Pretreatment
- Car washes—Quality results, detergent and water heating savings, scale reduction
- Apartment buildings, assisted living facilities and hotels—Quality water for laundry, dishwashers, boilers
- Grocery / Retail—Quality water for aesthetics and help extend equipment life

## Standard Features

- Single, Multiple Tank Configurations – Hardness removal capacities up to 900,000 grains per tank Continuous flow rates up to 148 gpm per tank
- Culligan's Smart Controller – More control over your equipment with programming and monitoring capabilities typically found in more expensive PLC controls A variety of add-on options for advanced instrumentation and communication let you easily customize the system to help meet your needs
- Telemetric Capability
- Regeneration initiation by choice or combination of time clock, meter or Aqua-Sensor inputs
- Culligan® Exclusive Hi-Flo xN Valve - All plastic "corrosion resistant" valve designed for reliability, ease of service with fewer parts compared to that of traditional valve nest.
- DC Motor Driven Piston - The motor driven piston does not require pilot valve when compared to a traditional valve nest. Self cleaning piston movement is ideal for challenging water conditions.

## Optional Features & Accessories

- Corrosion resistant brine system construction for long life
- Skid Mounted – fully pre-piped and wired systems for single point field utility connection of inlet, outlet, drain and power supply
- Patented Progressive Flow –Culligan's Smart Controller can monitor flow demands bringing additional softening tanks on-line or offline as flows increase or decrease
- Brine Reclaim – reduces operating costs
- Patented Aqua-Sensor® Control – initiates regeneration only when needed based upon water hardness, automatically adjusts to changes in raw water hardness and water consumption
- Light industry—For process and make-up water, boiler and cooling system pretreatment, general housekeeping
- Office buildings—For heating plant pretreatment, tenant convenience, general housekeeping
- Plastic Valve Sleeves - The valve sleeves provide a smooth sealing surface and guides the piston travel. The sleeves are designed to minimize wear on the O-ring and for ease of service
- Internal blocking Valves Functionality - Eliminates the need for external blocking valves for multi-tank systems
- Available with FRP or ASME Code Steel Tanks
- Flow Measuring Devices – are available for direct connection to the Culligan® Smart Controller for volume based regeneration initiation
- Remote Display
- RS232, RS485, Modbus PLC Output

## Hi-Flo xN Water Softener System

Model	Media Qty.	Pipe Size	Service Flow Rates		Tank Size***		
			Continuous*	Peak**	Softener FRP <sup>a</sup>	Softener Steel <sup>b</sup>	Brine****
			ft <sup>3</sup> liters	in mm	gpm @ psi drop lpm @ kPa drop	gpm @ psi drop lpm @ kPa drop	in mm
Hi-Flo xN 150-2	5	2	74	108	21 x 72	20 x 54	24 x 50
	142	50.8	280	409	533 x 1829	508 x 1372	607 x 1270
Hi-Flo xN 210-2	7	2	84	119	24 x 78	24 x 54	24 x 50
	198	50.8	318	450	607 x 1981	607 x 1372	607 x 1270
Hi-Flo xN 300-2	10	2	93	129	30 x 76	30 x 60	30 x 50
	283	50.8	352	488	762 x 1930	762 x 1524	762 x 1270
Hi-Flo xN 450-2	15	2	88	122	30 x 76	30 x 60	30 x 50
	425	50.8	333	462	762 x 1930	762 x 1524	762 x 1270
Hi-Flo xN 600-2	20	2	104	144	36 x 76	36 x 60	39 x 48
	566	50.8	394	545	914 x 1930	914 x 1524	991 x 1219
Hi-Flo xN 750-2	25	2	108	148	42 x 83	42 x 60	42 x 48
	708	50.8	409	560	1067 x 2108	1067 x 1524	1067 x 1219
Hi-Flo xN 900-2	30	2	107	146	42 x 83	42 x 60	42 x 48
	850	50.8	405	553	1067 x 2108	1067 x 1524	1067 x 1219

\*Flow rate is @ 15 psi pressure drop

\*\*Flow rate is @ 25 psi pressure drop

\*\*\*Dimensions are diameter by height

\*\*\*\*Brine Systems are optional

<sup>a</sup> FRP Tank height is measured flange to flange

<sup>b</sup> Steel Tank height is shell height



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For over 80 years, Culligan® has made better water. Our global network, comprised of 800+ dealers and international licensees in over 90 countries, is dedicated to addressing your water-related problems. As a worldwide leader in water treatment, our sales representatives and service technicians are familiar with the local water conditions in your area. Being global and local position us to deliver customized solutions to commercial and industrial water issues that affect your business and your bottom line.

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