



#### 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® Premier Series DEIONIZER SYSTEM

### High Quality Water for Specialized Applications

Culligan Premier Deionizers are part of a multiple process treatment system that produces high quality water required for specialized applications. Premier deionizers use ion exchange to reduce unwanted contaminants.\* Choose from a flexible configuration of weak base or strong base resin tanks. You also have the option to automatically or manually control the regeneration process.

Culligan Premier Deionizers use fewer valves than competitors which helps improve reliability. A pumped regenerant system helps provide consistent regenerant usage.

Premier Series deionizers are part of the Culligan Matrix 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 Matrix Solutions offer options that help deliver the quality of water to meet your needs. Consult with a Culligan representative to create your solution.

#### CULLIGAN MATRIX SOLUTIONS ADVANTAGES:

- Simple System Integration
- Global Product Platform
- Flexible Configurations
- Exclusive Culligan Advanced Electronics
  - Historical Operating Data
  - Alarm Recognition
  - Remote monitoring options
  - Telemetry Options
  - Single or Duplex Options
  - Automatic or Manual Regeneration Initiation

\*Contaminants may not necessarily be in your water.



# SYSTEM SPECIFICATIONS

## Examples of DI Applications

- Manufacturing—Improved productivity for process, makeup and rinse
- Food and Beverage—Improved taste and clarity, consistent quality for fountain solution
- Ice Production—Improved clarity and reduced mineral build-up
- Glass/Mirrors—Rinsing to improve quality and product yield
- Boilers/Humidification—Reduced scaling, improved energy efficiency
- Plating—Spot-free rinse
- Printing—Low sodium

## System Specifications

Specification	US	Metric
Inlet Water Pressure (dynamic)	50-60 psig	345-414 kPa
Air Pressure	85 psi Min. 8-10 scfm	586.5 kPa 13.6-17 sm <sup>3</sup> /hr
Power Voltage, Frequency, Phase	120 VAC 60 HZ 1 Ph	
Feed Water Temperature	45-100°F	7-38°C

## Standard Features

- Two Bed Strong Base and Two Bed Weak Base Systems are available.
- All Plastic Construction — Filament wound epoxy coated fiberglass tanks to retain good appearance in harsh environments. Schedule 80 PVC plumbing and glass-filled thermoplastic valves resist corrosion.
- 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.
- Quality Rinse Prior to Regeneration — The purge valve (rinse valve) opens for a fast flush when the product water TDS (Total Dissolved Solids) exceeds a desired set-point. If the desired quality is achieved, the unit will return to service. If the desired quality is not achieved the unit will be regenerated.
- Auxiliary Outputs — Allow you to control the discharge to the neutralization system.

## Optional Features and Accessories

- Recirculation System
- Flow Measuring Devices — are available for direct connection to the Culligan Smart Controller for volume based regeneration initiation
- Duplex Alternating Systems
- Vacuum Breakers
- Caustic Drum Heater
- System Telemetry
- RS232, RS485, Modbus PLC Output

## Premier Series Automatic Deionizer

Single Tank	Capacity <sup>1,2</sup> Strong Base	Capacity <sup>1,2</sup> Weak Base	Service Flow Rates		Pipe Size	Tank Size	Resin Qty Strong Base		Resin Qty Weak Base	
			Min. Flow @ ΔP	Max. Flow @ ΔP			Cation	Anion	Cation	Anion
Models	gr	gr	gpm @ psi	gpm @ psi	in.	in	ft <sup>3</sup>	ft <sup>3</sup>	ft <sup>3</sup>	ft <sup>3</sup>
	g	g	lpm @ kPa	lpm @ kPa	in.	mm	L	L	L	L
QS/QW-21	100,000	126,000	4.4 @ 3	20 @ 23	1.5	21 x 62	5	6	6	5
	6,480	8,165	17.1 @ 20.7	78 @ 159	1.5	533 x 1,575	141.6	169.9	169.9	141.6
QS/QW-24	180,000	189,000	6.3 @ 4	30 @ 15	2	24 x 72	9	9	9	8
	11,664	12,247	24.4 @ 27.6	116 @ 103	2	610 x 1,829	254.9	254.9	254.9	226.6
QS/QW-30	280,000	315,000	9.8 @ 4	50 @ 22	2	30 x 72	14	15	15	13
	18,144	20,412	38 @ 27.6	194 @ 152	2	762 x 1,829	396.5	424.8	424.8	368.2
QS/QW-36	420,000	462,000	14.2 @ 4	70 @ 22	2	36 x 72	21	22	22	19
	27,216	29,938	55 @ 27.6	271 @ 152	2	914 x 1,829	594.7	623	623	538.1
QS/QW-42	520,000	609,000	19.2 @ 2	100 @ 17	3	42 x 72	26	29	29	24
	33,696	39,463	74.4 @ 13.8	388 @ 117	3	1,067 x 1,829	736.3	821.3	821.3	679.7
QS/QW-48	720,000	819,000	25.1 @ 2	125 @ 21	3	48 x 72	36	39	39	34
	46,656	53,071	97.3 @ 13.8	484 @ 145	3	1,219 x 1,829	1019.5	1104.5	1104.5	962.9

<sup>1</sup> Capacities based on treating water containing 10 grains per gallon (171 mg/l) total dissolved solids (expressed as calcium carbonate), consisting of 25% sodium, 50% alkalinity, 77° F (25° C), and free of color, oil, turbidity and organics. These are nominal capacities and will vary with influent water characteristics, water temperature and other factors.

<sup>2</sup> Capacities based on regenerating cation resin at 6 lb per ft<sup>3</sup> (96 kg/m<sup>3</sup>) as 100% HCl and strong base anion resin with 6 lb per ft<sup>3</sup> (96 kg/m<sup>3</sup>) as 100% NaOH.

<sup>3</sup> Flow rates less than minimum require an optional recirculation pump system to maintain water quality.

NOTE: Operational, maintenance and replacement requirements are essential for this product to perform as advertised. Specifications shown are for single models. Also available in multiple tank configurations.



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For over 75 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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