

FLECK 2510 RESIDENTIAL

3/4-INCH CONTROL VALVE



NSF/ANSI Std. 44 for material safety and structural integrity, NSF/ANSI Std. 372 for low lead compliance and CSA B483.1



UL listed to UL 979*

FEATURES • BENEFITS

- ◆ Fiber-reinforced polymer valve body for superior strength and durability, non-corrosive, and UV-resistant
- ◆ Continuous service flow rate of 19 GPM with a backwash of 17 GPM
- ◆ Backwash capability accommodates softener tanks up to 16 inches and filters up to 16 inches in diameter
- ◆ Fully adjustable three- or five-cycle control for efficient and reliable water treatment system operation
- ◆ Time-tested, hydraulically-balanced piston for service and regeneration

AiQ POWERHEAD

The Pentair Fleck AiQ Powerhead sets a new industry benchmark with its modern design and innovative features.

FEATURES		BENEFITS
Wrap-around status light bar	→	Quick visibility in various applications
USB-C port with modular 4-step teardown	→	Easy programming, data management, and quick access to all parts for maintenance
Twist-off controller, hinge/screw cover removal, and handle on backplate	→	Simplified servicing, maintenance, and handling
Wireless connection for up to 16 valves	→	Placement flexibility with less wires to manage

AiQ HUB

The AiQ Hub provides additional features to create multi-tank, coordinated systems.

FEATURES		BENEFITS
Wired and wireless connectivity	→	Seamless, scalable communication between AiQ valves
BACnet and Modbus protocol support	→	Full building management system (BMS) compatibility for enterprise integration
Hub pushes programming to other valves	→	Program once, deploy to all
Remote regen, system lockout and additional relays available	→	Enables additional functionality to meet the needs of most applications

Visit pentair.com/aiq to learn more

VALVE SPECIFICATIONS

Valve Material	Fiber-reinforced polymer
Inlet/Outlet	3/4", 1", or 1 1/4" NPT, BSP, Sweat
Cycles	3 or 5

FLOW RATES (50 PSI INLET) – VALVE ALONE

Continuous 15 psi (1.0 bar) drop	19 GPM (4.3 m ³ /h)
Peak 25 psi (1.7 bar) drop	24 GPM (5.5 m ³ /h)
CV flow at 1 psi drop	4.8
Max. Backwash 25 psi (1.7 bar) drop	17 GPM (3.9 m ³ /h)

REGENERATION

Downflow/Upflow	Downflow only
Adjustable Cycles	Yes
Timers Available AiQ	0–240 min/cycle

METER INFORMATION

Meter Accuracy 3/4" Paddle/Turbine	0.25–15 GPM ± 5% (0.06–3 m ³ /h)
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)
AiQ Filter capacity:	100–100,000 gal (0.1–400 m ³)
Softener capacity:	100–1,000,000 gal (0.3–4,000 m ³)

AIO – Meter not included

DIMENSIONS

Distributor Pilot	1.05" O.D. (26.7 mm)
1-1/2" EM Extended:	1/2" NPTF Quick-Connect
Brine Valve 1600	3/8"
Injector System	1650
Mounting Base	2.5" – 8 NPSM
Height from Top of Tank	6.45" (191 mm)
Riser Tube Diameter	3/4" (19 mm)
Riser Height	1/4" Below top of tank

TYPICAL APPLICATIONS

Water Softener	6–16" Diameter
Filters (including AIO)	8–16" Diameter based on 10 GPM/ft ²

ADDITIONAL INFORMATION

Electrical Rating	24V DC
Estimated Shipping Weight Time Clock	7 lbs
Metered Valve	10 lbs
Pressure Hydrostatic	300 psi (20 bar)
Working	20–125 psi (1.4–8.5 bar)
Working (AIO only)	20–80 psi (1.4–5.5 bar)
Temperature Cold Water Valve	34–110°F (1–43°C)



Pentair Residential Filtration, LLC

13845 Bishops Dr. | Suite 200 | Brookfield, WI 53005 | United States

P: 262.238.4400 | Customer Service: 800.279.9404 | tech-support@pentair.com | pentair.com

All indicated Pentair trademarks and logos are property of Pentair. Third party registered and unregistered trademarks and logos are the property of their respective owners.

©2026 Pentair. All Rights Reserved.

40729 SE26