

FLECK 2850 COMMERCIAL

1 1/2 INCH BRASS CONTROL VALVE



Tested and Certified by the WQA to NSF/ANSI/CAN 61 for Material Safety only and NSF/ANSI 372 for Lead Free compliance and CSA B483.1



UL listed to UL 979

*For Fleck NXT2 and SXT models only

FEATURES • BENEFITS

- ◆ Lead-free brass valve body for superior strength and durability
- ◆ Designed for single or multiple tank systems
- ◆ Time-tested, hydraulically-balanced piston for service and regeneration
- ◆ Versatile top or side mount

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	Lead-free brass*
Inlet/Outlet	1½" NPTF/BSPF
Cycles	3 or 5

FLOW RATES (50 PSI INLET) – VALVE ALONE

Continuous	46 GPM
15 psi drop	(10.4 m³/h)
Peak	60 GPM
25 psi drop	(13.6 m³/h)
Cv	12
flow at 1 psi drop	
Max. Backwash	47 GPM (10.7 m³/h)
25 psi drop	

REGENERATION

Downflow/Upflow	Downflow only
Adjustable Cycles	Yes
Time Available	
NXT2:	0 - 240 min/cycle
SXT:	0 - 199 min/cycle
Electromechanical:	0 - 164 min/regeneration

METER INFORMATION

Meter Accuracy	
1" Paddle:	0.7-40 GPM ± 5% (0.16-9 m³/h)
1-1/2" Paddle:	1.5-75 GPM ± 5% (0.34-17 m³/h)
1-1/2" Turbine:	2-40 GPM +5/-8% (0.45-9 m³/h)
Meter Capacity Range	
1" Standard:	310-5,270 gal (1.2-20 m³)
1" Extended:	1,550-26,350 gal (6-100 m³)
1-1/2" Standard:	625-10,625 gal (2.5-40 m³)
1-1/2" Extended:	3,125-53,125 gal (12-200 m³)
NXT2:	1-9,999,999 gal (0-37,854 m³)
SXT:	1-999,900 gal (0-3,785 m³)

DIMENSIONS

Distributor Pilot	1.9" O.D. (50 mm)
Drain Line	1" NPTM
Brine Valve	
1600 or 1650:	3/8"
1700 or 1710:	1/2"
Injector System	1600 or 1700
Mounting Base	4" - 8 UN
Height from Top of Tank	6 ½" (165 mm)
Riser Tube Diameter	1 ½" (38 mm)
Riser Height	1/4" Below top of tank

TYPICAL APPLICATIONS

Water Softener	14-36" diameter
Filters	14-30" diameter based on 10 GPM/ft²

ADDITIONAL INFORMATION

Electrical Rating	24/110/220V 50/60 Hz
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)
Temperature	
Cold Water Valve:	34-110°F (1-43°C)
Hot Water Valve:	34-180°F (1-82°C)
Filter, Time Clock, 1600 Brine System	
Hot Water Valve:	34-150°F (1 - 66°C)
Meter, 1700 Brine System	



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