

# FLECK 2850 AIQ SPECS

## COMMERCIAL 1 1/2" CONTROL VALVE

### 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        |



## VALVE SPECIFICATIONS

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

## FLOW RATES (50 PSI INLET) – VALVE ALONE

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

## 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%<br>(0.16–9 m³/h)  |
| 1-1/2" Paddle:       | 1.5–75 GPM ± 5%<br>(0.34–17 m³/h) |
| 1-1/2" Turbine:      | 2–40 GPM +5/-8%<br>(0.45–9 m³/h)  |
| Meter Capacity Range |                                   |
| 1" Standard:         | 310–5,270 gal<br>(1.2–20 m³)      |
| 1" Extended:         | 1,550–26,350 gal<br>(6–100 m³)    |
| 1-1/2" Standard:     | 625–10,625 gal<br>(2.5–40 m³)     |
| 1-1/2" Extended:     | 3,125–53,125 gal<br>(12–200 m³)   |
| NXT2:                | 1–9,999,999 gal<br>(0–37,854 m³)  |
| SXT:                 | 1–999,900 gal<br>(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<br>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<br>based on 10 GPM/ft² |

## ADDITIONAL INFORMATION

|                                          |                             |
|------------------------------------------|-----------------------------|
| Electrical Rating                        | 24/110/220V<br>50/60 Hz     |
| Estimated Shipping Weight                |                             |
| Time Clock:                              | 7 lbs                       |
| Metered Valve:                           | 10 lbs                      |
| Pressure                                 |                             |
| Hydrostatic:                             | 300 psi<br>(20 bar)         |
| Working:                                 | 20–125 psi<br>(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,<br>1600 Brine System |                             |
| Hot Water Valve:                         | 34–150°F (1 – 66°C)         |
| Meter, 1700 Brine System                 |                             |

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