

# FLECK INDUSTRIAL VALVE 2850

Featuring Advanced-iQ  
controller & powerhead



# 2850 AiQ

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## It's easier than ever to meet your needs

2850 is a ROHS and Reach brass valve with environmental protective cover for water resistance, corrosion resistance, and UV stability. Designed for single or multiple tank systems ideally suitable for small commercial and industrial applications, softening and filtration applications.

The **Pentair Fleck AiQ Powerhead** sets a new industry benchmark with its modern design and innovative features – leaving traditional valves behind. Experience effortless installation and setup with our intuitive controller interface, ensuring simple and efficient programming whether on-board, or via USB port. Maintenance has never been easier, thanks to the modular design that reduces powerhead teardown steps saving you time and effort.



## FEATURES AND BENEFITS

- ▶ **Lightweight and compact**  
Easier to handle, ship, and store
- ▶ **Modular powerhead design**  
Simple 4-step process to install and teardown
- ▶ **Backplate hook**  
Convenient place to rest the cover during service or installation
- ▶ **Easy grip handle**  
Straightforward handling of the powerhead during installation or maintenance
- ▶ **Benchtop programming**  
Program before installation using just the controller
- ▶ **Efficient data transfer and custom programming**  
The USB-C port facilitates programming, data transfer, usage history retrieval, software updates, diagnostics, and troubleshooting
- ▶ **Intuitive multilanguage menu**  
Full-Color Display with Quick Start Menu and Intuitive Menu Structure with Multilanguage
- ▶ **Flash programming**  
Efficiently program multiple valves with pre-defined configurations or water-specific profiles using simple Excel files
- ▶ **Field-updateable controller**  
Keep systems current without replacing hardware
- ▶ **Modern and functional design with enhanced visibility**  
Clear status indicator with a multi-angle wrap-around light bar
- ▶ **Customizable support information via USB-C**  
Add a custom logo and contact info to the display

## OPERATING SPECIFICATIONS

| Valve specifications |                 |
|----------------------|-----------------|
| Valve material       | Brass           |
| Hydrostatic pressure | 20 bar          |
| Working pressure     | 1.8 - 8.5 bar   |
| Working temperature  | 1 - 43 °C       |
| Electrical rating    | 24 V - 50/60 Hz |
| Protection index     | IP 23           |

| Flow rates (3.5 BAR INLET) - Valve Alone |                        |
|--|------------------------|
| Continuous ( $\Delta p = 1$ bar)         | 11.6 m <sup>3</sup> /h |
| Peak ( $\Delta p = 1.8$ bar)             | 15 m <sup>3</sup> /h   |
| CV*                                      | 13.2 gpm               |
| Maximum backwash ( $\Delta p = 1.8$ bar) | 11.1 m <sup>3</sup> /h |

\* Cv: Flow rate of valve alone in gpm at 0.07 bar pressure drop.

| Down Flow Regeneration |                   |
|------------------------|-------------------|
|                        | <b>Electronic</b> |
| Cycles                 | Adjustable        |
| Time available         | 99 min each cycle |

| Connections - Dimension             |   |
|-------------------------------------|---|
| Inlet / outlet                      | 1½" BSP   |
| Distributor tube                    | 50 mm (DN 40)   |
| Riser tube cut: Target / Max / Min  | 0.25" below top of tank / Flush with top tank / 0.75" below |
| Drain line                          | 1" NPT  |
| Brine line (1650)                   | ¾"  |
| Brine line (1710)                   | ½"  |
| Mounting base - Top                 | 4" - 8 UN   |
| Height (from the top of tank)       | 165 mm  |
| Tank size application (recommended) |   |
| Water softener                      | 10 - 30" (250 - 760 mm)                                     |
| Filters                             | 10 - 24" (250 - 610 mm)                                     |

| Regeneration Cycles   |  |
|-----------------------|--|
| <b>Down flow</b>      |  |
| 1. Backwash           |  |
| 2. Brine & slow rinse |  |
| 3. Rapid rinse        |  |
| 4. Brine tank refill  |  |
| 5. Service            |  |

| Additional information       |                    |
|------------------------------|--------------------|
| No water during regeneration | NBP                |
| Mounting                     | Side Mount adapter |
| Filter                       | Yes                |



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