

OXFORD FLOW LIQUID REGULATOR

MODEL: IPS/IPXS INTELLIGENT VALVE

Fully autonomous control valve



PRODUCT OVERVIEW

The Oxford Flow IPS/IPXS Series Intelligent Valve is a key component of a smart network, proving innovative, next generation technology to enable customers to move from reactive operation and management, to one of informed, proactive, predictive and prescriptive automated operation & management.

Our intelligent solution includes an actuated pilot, high quality pressure transducers and the latest proven sensor technology for water quality monitoring, flow measurement and position sensing.

This technology enables operators to apply the appropriate type of control from simple time profiles to autonomous intelligently optimised control in pressure and flow rate.

APPLICATIONS

For use with potable water, waste water and process fluids.
Not for use as a safety device.

| | |
|---------------------------|------------------------------|
| Max. Inlet Pressure | 12 bar |
| Outlet pressure range | 1 to 11.8 bar |
| Minimum Head Loss | Down to 0.1 bar ¹ |
| Working Fluid Temperature | -10 °C to 55 °C |
| Ambient Temperature | -20 °C to 60 °C |
| Ingress Protection | IP68 |
| Power Consumption | 13 W max. (4.9 W typ.) |
| Voltage Input | 12-32 VDC |
| Communication Protocol | Modbus TCP |

¹ Minimum head-loss values vary with valve series and valve size

BENEFITS & FEATURES

- Fully autonomous, intelligent pressure and flow rate control options
- Real-time data provision, visualisation and remote-control capability
- Capable of acquisition and transmission of water quality data from 3rd party sensors
- Capable of acquisition and transmission of data from 3rd party flow meters supporting the following connection types:
 - Modbus TCP
 - Pulse
 - Analogue (4-20mA)
- Designed for deployment at strategic nodes within water distribution networks
- Lightweight integrated solution

PERFORMANCE, SIZING & KEY DIMENSIONS

The IPS and IPXS Series Intelligent Valves use the same valve bodies as the IP and IPX Series.

Use the IP and IPX technical data for available valve sizes, Kv, Kg, Cv and Cg values.

The IPS and IPXS Series Intelligent Valves use the PA1 pilot. This is comparable to the manual pressure reducing and pressure sustaining pilots.

Use the IP and IPX technical data for key dimensions.

INSTALLATION



CONSTRUCTION MATERIALS

| Assembly/Part | Wetted Materials |
|----------------|----------------------------------|
| Actuated Pilot | Acetal resin (WRAS), 316SS, EPDM |
| IP Series | Acetal resin (WRAS), 316SS, EPDM |
| IPX Series | Acetal resin (WRAS), 316SS, EPDM |
| Transducer | 304SS, FKM |

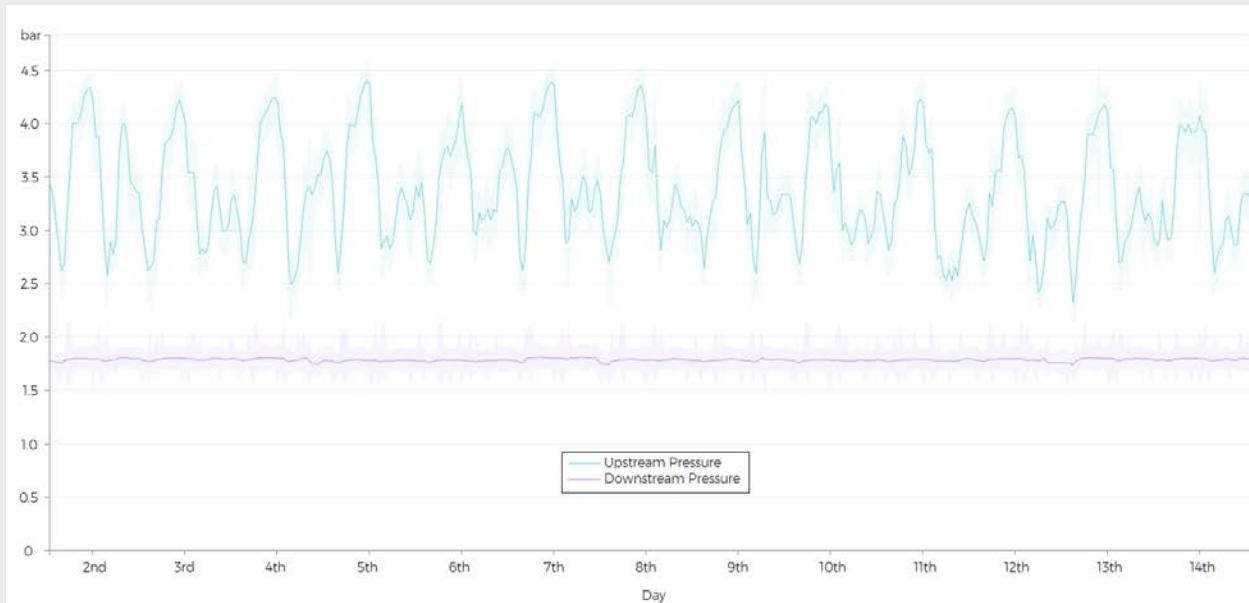
CONTROL UNIT INTERFACE



ACCESSORIES

- Manual pilot commissioning tool
- Modbus TCP to RTU protocol converter
- Water quality conversion kit
- Flow meter protocol converters
 - Modbus RTU
 - Pulse (up to 1000 Hz)
 - 4 to 20mA

EXAMPLE CONTROL DATA



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