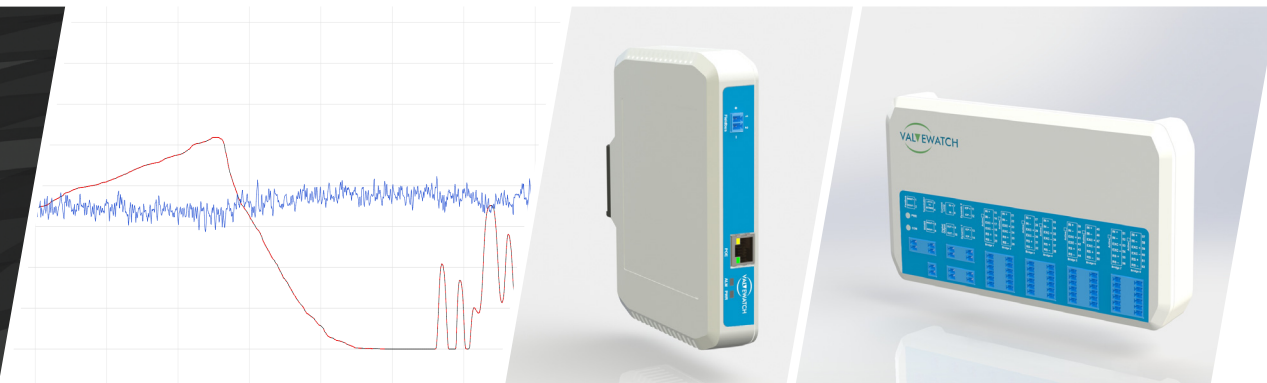


When a valve is critical, test results must be meaningful

With **VALVEWATCH**<sup>®</sup>, the condition of critical valves is always known

ValveWatch<sup>®</sup> is an automated, online valve monitoring system brought to you exclusively by IKM Flux AS.



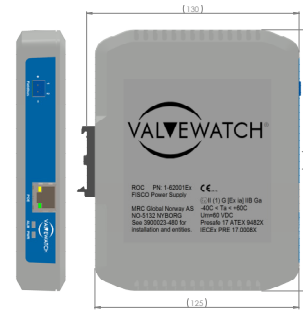
## Benefits & Key Features include

- Continuous 24/7 surveillance of valves in high data resolution
- Fully automated data acquisition and analysis processes
- Proactive analysis, making full cycle and partial stroke testing meaningful
- Degradation detection provides focus for maintenance, leading to less downtime
- Higher level of safety by lowering probability of failure on demand (PFD)
- Extend the mandatory testing period of emergency shutdown valves (ESD)
- IECEx & Atex certified Intrinsic Safety "Ex i"
- NE107 standard compliant
- Communicate with external systems and IOT through OPC UA
- Industry leading product designed for stability and scalability
- User interface provides overview of system and insight into Valve health
- Expert analysts and training available

**Problems Detectable by ValveWatch**

Valve	Actuator
Leaking Valve Seats	Internal Corrosion
Bent Stem	Broken Return Spring
Debris or Damage After Pigging	Cylinder Damage
Loose or Over-Tightened Packing	Undersized Actuator
Excessive Breakout Torque	Restricted Solenoid Exhaust
Valve Galling	Actuator Pressure Leak
Ejected Cavity Sealant	Insufficient Air Supply
Solenoid Valve Degradation	Limit Switch Deviation

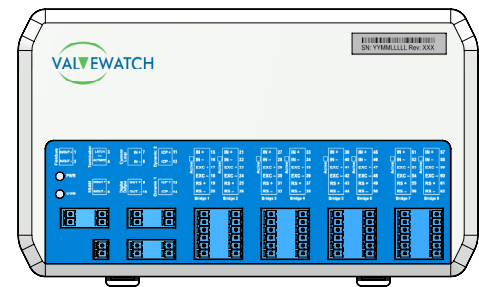
**Cabinet Installed Communication & Intrinsic Safety Protection Module (ROC)**



The ROC provides intrinsic safety protection for field circuits and manages communication between the field devices and ValveWatch services.

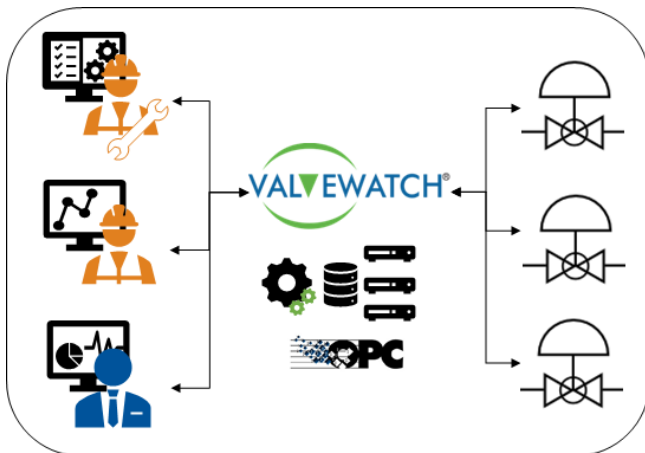
	Valve Problems	Actuator Problems	Leaks: Valve Closed	Seat Integrity: Valve Open
Ball Valves	•	•	•	•
Gate Valves	•	•	•	•
Plug Valves	•	•	•	
Globe Valves	•	•	•	
Butterfly Valves	•	•	•	
X-MAS TREE	•	•	•	
Pipeline Valves	•	•	•	•
PSV	•		•	
Manual Valve	•			

**Field Installed Data Acquisition Front-End Electronics Module (FEE)**



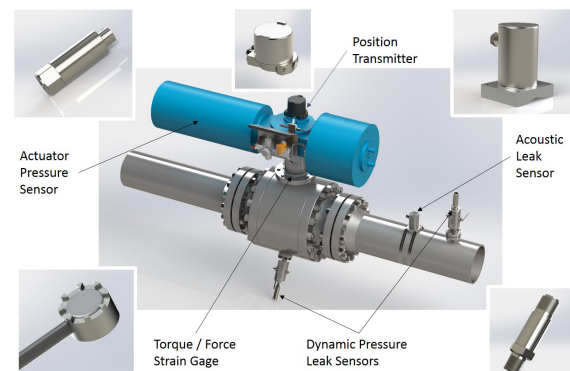
The FEE provides signal conditioning and data acquisition functions at the valve.

**ValveWatch System Overview**



The ValveWatch system consists of hardware, services, an Oracle database, OPC UA client and service, and an end-user client.

**Compatible Sensors**



ValveWatch supports multiple types of sensors. Sensors can be connected directly to the FEE, or ValveWatch services can gather sensor data through OPC UA.