Continuous position feedback and diagnostics

Feedback systems for valves and valve actuators

ifm.com/gb/mvq

50th ifmniversary
experience in automation.

Precise, continuous, predictive: smart valve monitoring with the MVQ

Continuous:
Position feedback to the nearest degree via IO-Link or freely adjustable switching outputs.

Quick set-up:
Flexible parameter setting via teach function or IO-Link.

Informative:
Great all-round position visibility from a distance.

Monitoring:
Diagnostic functions: cycle time and count, seal monitoring.

Without additional wiring:
Address the control valve directly via IO-Link using the MVQ201.

GERMAN DESIGN AWARD 2019

"**Thanks to its backwards compatibility and easy set-up, the MVQ integrated seamlessly with our application, which features a number of mechanical control cabinets.**"
Designer (brewery)

Cycle counter as a maintenance aid

By counting the closing cycles of the valve, conclusions can be drawn with regard to seal wear. Maintenance can be planned, rather than conducted "on spec" at fixed time intervals.

Detects a change of closing times

Wear and deposits impact the closing speed of a valve. In some cases, the valve no longer closes properly.
The MVQ detects both and issues an error message in a freely definable warning range between 0.1 and 15 degrees. The same applies if the ambient temperature is outside the device-specific range.

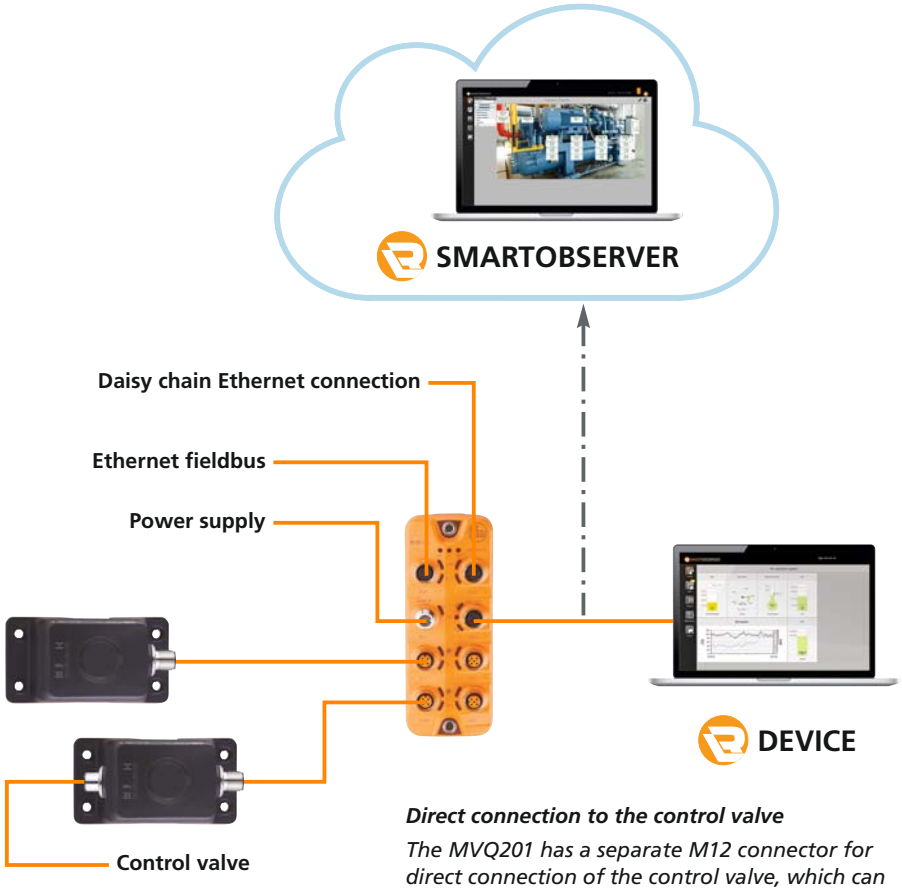
Signals a blocked valve

The MVQ recognises a blocked valve and signals it immediately via the switching output and the status LED.
It can also signal a short circuit at the outputs or a defective device – even without IO-Link.

For industrial applications

Digital communication for real time maintenance

The MVQ valve sensor can be digitally networked, controlled and read out via IO-Link. The device parameters can be set with the help of the LR Device software, allowing an exact adjustment to the application.
Via IO-Link, further information is provided such as changes in the closing and opening times of the valve due to deposits or wear. The data can then be further processed in Smart Observer or in the controller. This enables condition-based maintenance and cleaning of the system. Unplanned and costly downtimes can be prevented efficiently.



Direct connection to the control valve

The MVQ201 has a separate M12 connector for direct connection of the control valve, which can then be controlled via IO-Link or conventionally. The short cabling simplifies installation and makes the data transmission less susceptible to interference. The auto teach function automatically identifies and saves the end positions of the valve.

IO-Link

IP 65
IP 67

Shaft height [mm]	Input / output function	Control valve output	Accuracy/ resolution [°]	Order no.
Smart valve sensor · M12 connector · 360° detection range				
20	3 x DO nc/no (selectable)	–	± 1 / 0.1	**MVQ101**
20	2 x DO nc/no (selectable), 1 x DI	•	± 1 / 0.1	**MVQ201**

Shaft height [mm]	Shaft diameter [mm]	Dimensions [VDI / VDE 3845]	Order no.
Mounting accessories			
30	< 38	80 x 30	**E12569**
		130 x 30	**E12573**
20 - 40	> 38	80 x 30	**E12674**
		130 x 30	
30 - 50	> 38	80 x 30	**E12628**
		130 x 30	
IO-Link accessories			
MVQ starter kit IO-Link			**ZZ0619**

For more information, technical data, accessories, application videos or prices please go to
ifm.com/gb/mvq

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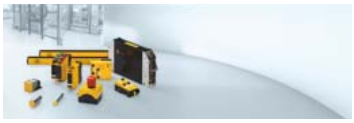
Position sensors

Sensors for motion control

Industrial imaging



Safety technology

Process sensors

Industrial communication

IO-Link

Identification systems

Condition monitoring systems

Systems for mobile machines

Connection technology

Software

Power supplies

Accessories

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