



Position sensors



No detours: Valve sensor directly connected to control valve



Feedback systems for valves
and valve actuators



Less networking complexity
due to direct control of the
control valve

Self-diagnostics regarding
wear, blockages or deposits,
for maintenance tailored to
your needs

- LED flash mode for quick
visual sensor localisation
- End position setting with
just one click for even quicker
set-up



IO-Link



Stainless
steel



VDI
VDE
3845



Laptop
parameter setting

Direct connection reduces wiring

The MVQ201 continuously monitors the position of the valve to the nearest degree. Via the "Auto teach" function, the end positions are automatically approached and taught. The control valve can be easily connected via the separate M12 connection and be controlled via IO-Link. This reduces wiring and installation complexity – reducing possible sources of error.

User-friendly status query, maintenance information in good time

The defined valve positions are signalled via two switching outputs as well as via the clearly visible status LED. The sensor also detects altered closing durations, which suggest wear, deposits or blockages due to foreign bodies, and signals them via IO-Link. This allows for demand-oriented maintenance planning or immediate troubleshooting, which help avoid longer and costly plant downtimes. To simplify localisation, the selected device flashes green in flash mode.



Mounting dimensions [VDI/VDE 3845]	Shaft height [mm]	Shaft diameter [mm]	Input function / output function	Accuracy / resolution [°]	Order no.
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


Smart valve sensor · M12 connector · control valve output

80 x 30	20	< 38	2 x NC / NO (selectable), 2 x NO for valve control	± 1 / 0.1	MVQ201
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Accessories

Type	Description	Order no.
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Installation

	Mounting adapter, 80 x 30 mm (VDI/VDE 3845) Shaft height: 30 mm, Ø < 38 mm	E12569
	Mounting adapter, 130 x 30 mm (VDI/VDE 3845) Shaft height: 30 mm, Ø < 38 mm	E12573
	Mounting bridge 80 x 30 / 130 x 30 mm (VDI/VDE 3845) Shaft height: 20...40 mm, Ø > 38 mm	E12674
	Mounting bridge 80 x 30 / 130 x 30 mm (VDI/VDE 3845) Shaft height: 30...50 mm, Ø > 38 mm	E12628

IO-Link

	IO-Link master with PROFINET interface	AL1100
	LR DEVICE (supplied on USB flash drive) Software for online and offline parameter setting of IO-Link sensors and actuators	QA0011

Further technical data

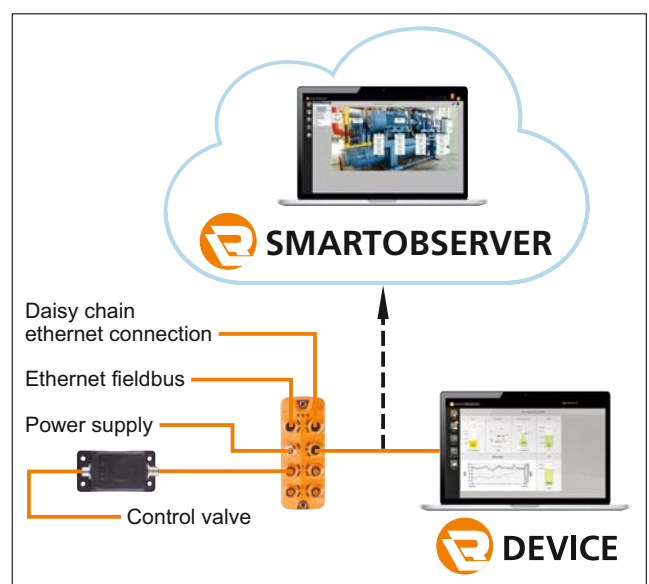
Operating voltage	[V DC]	10...30
Current rating	[mA]	2 x 100, 2 x 200 (valve control)
Detection range	[°]	360
Reverse polarity protection		•
Short-circuit protection		•
Protection rating		IP 65 / IP 67
Ambient temperature	[°C]	-25...70
Tolerance	[°]	± 0.1...15
Repeatability	[°]	0.1
Type of transmission		COM2 (38.4 kBaud)
IO-Link revision		1.1
Min. process cycle time	[ms]	4
Required master port class		A
SIO mode		•
Profiles		Smart sensor: Device identification; Device diagnosis; Device teach channel; Binary data channel; Process data variable; Measurement data channel
Housing materials		PA; stainless steel plug
Dimensions	[mm]	95 x 50 x 57

Directly connected to the control valve

The MVQ201 has a separate M12 connection for direct connection to the control valve, which can then be easily controlled via IO-Link. The short cable path simplifies installation and reduces data transmission's susceptibility to failure.

Moreover, additional information, e.g. altered closing and opening durations of the valve, due to deposits or wear, is provided via IO-Link and can then be further processed either in the SMART OBSERVER or in the controller.

This allows for condition-based maintenance and cleaning of the plant as well as for prevention of unplanned and costly downtime.



We reserve the right to make technical alterations without prior notice. · 11.2019