

Smartly positioned

High-precision positioner for industrial valves

- Precisely approach and hold any valve position
- Extensive diagnostic functions enable condition monitoring via IO-Link
- Individually adjustable RGB LEDs for clear visual feedback and localisation
- Flexible, modular system: sensor, solenoid valve, throttle plate and connection cables in a set



IP67

IO-Link

ifm – close to you!

Precise positioning of quarter-turn actuators

The positioner developed by ifm moves shut-off valves and ball valves featuring a pneumatic quarter-turn actuator precisely to the required position, holding them there reliably. To achieve this, the positioner's intelligent algorithm controls a standard solenoid valve, allowing precise control of the of liquid and gas flows and ensuring a consistently high process quality.

The modular system is available as a set consisting of MVQ, solenoid valve, throttle plate and Y-cable, thus simplifying selection, procurement and replacement. Three variants are available for double-acting actuators or spring-return actuators.

Quick to install and easily started

MVQ, solenoid valve and throttle plate are compatible with the standard interface of the pneumatic multi-turn actuator (VDI / VDE 3845). M12 connectors reduce the wiring complexity for control, feedback and solenoid valve functions. While a standard four-wire cable is sufficient for analogue setpoint control with binary feedback, a five-wire cable is required for analogue setpoint and actual value transmission. This minimises wiring errors while simplifying installation and servicing. Automatic initialisation can be performed either by contactless actuation of the inductive button or with a few clicks in a compatible IO-Link parameter setting software.

Permanently robust and digitally scalable

The fully potted housing, with no moving operating elements or exposed electronics, enhances robustness and reliability. The RGB LED provides clear on-site indications of operating states and messages. Control is either analogue 4…20 mA / 0…10 V or via IO-Link that offers additional process information. This allows on/off valves to be cost-effectively transformed into digitally enabled control valves.

MVQ301 sensor and control unit with IO-Link			Order no.
MVQ301 sensor and control unit **MVQ301**, EVC508 Y connection cable, throttle plate, silencer (pre-mounted)	+	3/3-way solenoid valve (NAMUR) for spring-return actuators	**ZZ0687**
	+	5/3-way solenoid valve (NAMUR) for double-acting actuators	**ZZ0686**
	+	5/3-way solenoid valve (NAMUR) with fail-safe position for double-acting actuators	**ZZ0688**

MVQ302 sensor and control unit with IO-Link and analogue output			Order no.
MVQ302 sensor and control unit **MVQ302**, EVC508 Y connection cable, throttle plate, silencer (pre-mounted)	+	3/3-way solenoid valve (NAMUR) for spring-return actuators	**ZZ0694**
	+	5/3-way solenoid valve (NAMUR) for double-acting actuators	**ZZ0695**
	+	5/3-way solenoid valve (NAMUR) with fail-safe position for double-acting actuators	**ZZ0696**

Common technical data of the sets		
Operating range of the actuator	[°]	50…300
Control accuracy	[%]	± 0.5
Operating pressure of the solenoid valve	[bar]	3…8
Environmental conditions	[°C]	-25…70 (sensor) -10…50 (solenoid valves)
Communication interface		IO-Link, 4...20 mA / 0...10 V
Required master port class		B (MVQ301) A (MVQ302)
Protection rating		IP65, IP67

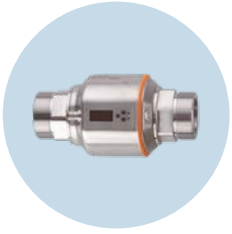
BEST FRIENDS



moneo|configure free
Software for parameter setting of the IO-Link infrastructure



IO-Link master
Field-compatible masters with PROFINET interface



Flow meters
Flow, total quantity and temperature measurement

For further technical details, please visit: ifm.com/fs/MVQ301

We reserve the right to make technical alterations without prior notice. · 11.2026
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