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Bürkert Fluid Control Systems
Christian-Bürkert-Straße 13-17
74653 Ingelfingen
Germany

Tel.: +49 (0) 7940/10-0
Fax: +49 (0) 7940/10-91 204

info@burkert.com
www.burkert.com

Solenoid Valve Type 2610

for low temperatures and aggressive media

bürkert
FLUID CONTROL SYSTEMS

- **Fluidic and thermal separation due to fully welded metal bellows system**
- **Maximum process reliability**
- **Energy saving due to “Kick & Drop” electronics**

For low temperatures and aggressive media

Extremely cool. Our direct-acting, media separated 2/2-way solenoid valve allows media temperatures of –200 °C. But that is not all. High temperatures of +180 °C are also no problem. The background of this broad temperature range: the coil and body are separated from each other by a metal bellows system, which prevents condensation between the fluid element and the coil, as well as excessive heating or freezing of the coil. It is even possible to save energy. The “Kick & Drop” electronics support the opening of the valve and reduce the current to holding power directly after opening. The use of high-resistance body and seal materials such as stainless steel and PTFE enable use in critical chemical applications.

The following versions are available:

- Body material: Stainless steel and brass, valve seat of stainless steel (1.4581)
- Metal bellows: Stainless steel 1.4511
- Seal material: PTFE
- Functioning principle: Normally closed
- Media temperature: –200 to +180 °C
- Operating voltage: 24 UC, 110 UC, 230 UC
- Diameter: 6, 8 and 12 mm
- Pressure range: 0 to 10 bar
- Process connection: G1/4, G1/2, NPT1/4, NPT1/2

Metal bellows system

Available versions:

Functioning principle	Diameter [mm]	Process connection	Kv value [m³/h]	Pressure range [bar]	Voltage / frequency		
					24 UC	110 UC	230 UC
NC	6.0	G 1/4	0.8	0 … 10	x	x	x
NC	6.0	NPT 1/4	0.8	0 … 10	x	A	A
NC	8.0	G 1/2	0.9	0 … 10	x	x	x
NC	8.0	NPT 1/2	0.9	0 … 10	x	A	A
NC	12.0	G 1/2	1.8	0 … 3.5	x	x	x
NC	12.0	NPT 1/2	1.8	0 … 3.5	x	A	A

All valves with PTFE seal and VA body

x=available A=on request

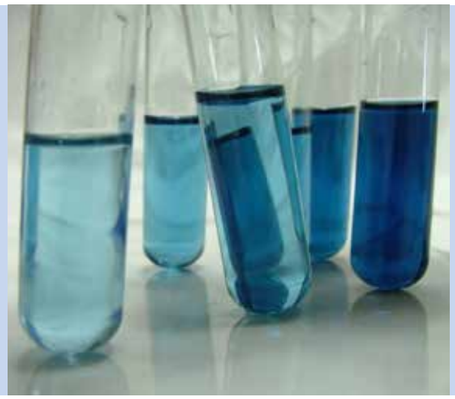
Special features and benefits

Secure switching due to thermal decoupling

The special feature of the Type 2610 valve is the metal bellows system, which provides both fluidic and thermal separation of the magnetic drive from the medium. This thermal isolation is beneficial especially when used at low temperatures down to –200 °C. It ensures reliable switching by preventing the plunger from freezing in the coil. Condensation between the coil and the fluidic body is avoided by the thermal separation. Type 2610 is therefore ideal for use in cryogenic applications.

Maximum process reliability

The Type 2610 valve also shows its strengths in chemical applications. Thanks to the use of highly resistant materials such as the stainless steel (1.4541) metal bellows and PTFE as the seal material, the valve switches reliably when used with mild acidic and alkaline solutions. The fully welded construction of the metal bellows system guarantees maximum process reliability due to a leakage rating of 10^{-6} mbarl/s (He).



Energy saving due to “Kick & Drop” electronics

The Type 2610 solenoid valve is equipped with power-reducing “Kick & Drop” electronics as a standard feature. The high starting power of 72 W required for opening of the valve is generated by overexcitation of the coil. Immediately (400 ms) after the valve has switched, the power consumption is electronically reduced to the substantially lower holding power of 4 W.