# burkert ELUID CONTROL SYSTEMS



## Servo-assisted 2/2 way diaphragm valve

- · Servo-assisted diaphragm with diameter of up to DN40
- · Spring coupled diaphragm opens without differential pressure
- · Damped design for quiet closing
- Compact construction with high flow rate
- · Energy-saving double coil technology with kick and drop design





Product variants described in the data sheet may differ from the product presentation and description.

#### Can be combined with



Type 2518 Acable Plug
DIN EN 175301 - 803 - Form A



Type 2513

Cable plug acc. to
DIN EN 175301 - 803
Form A



Type 1087
Timer

### Type description

The 6213 EV valve is a servo-assisted solenoid valve of the S.EV series. The spring coupling of the diaphragm supports the opening process of the valve. In its standard version, the valve is suitable for use in liquids. A minimum differential pressure is required for complete opening. A special version (HP00) which opens the valve without differential pressure is available for gas and vacuum applications. Various diaphragm material combinations are available depending on the application. The standard brass housing satisfies all European drinking water requirements. Dezincification-resistant brass is available for other markets. The housing offering is rounded off with a stainless steel version. To reduce power consumption in operation, coils with "Kick and Drop" (KD) electronics (double coil technology) are available. In combination with a plug in accordance with DIN EN 175301-803 Form A, the valves satisfy protection class IP65 – in combination with a stainless steel housing NEMA 4X.



## 1. General technical data

| Product properties                        |   |
|---|---|
| Materials                                 |   |
| Body                                      | Brass acc. to DIN EN 50930-6  |
|   | Stainless steel 1.4408 Gunmetal (external thread) DN10DN20  |
| Coil                                      | ,   |
| Coil                                      | Polyamide, epoxy (insulation class H)   |
| Seal                                      | NBR, FKM, EPDM Brass body: Brass, stainless steel and PPS   |
| Inner part of valve                       | Stainless steel body: Stainless steel and PPS   |
|   | Gunmetal body: Stainless steel and PPS (external thread) DN10DN20   |
| Orifice                                   | Standard: DN10DN40<br>HP00: DN13DN20  |
| Electrical data                           | TH GG. BITTOMBILEO  |
| Voltage tolerance                         | ±10%  |
| Voltages                                  | Standard: 024/DC, 024/50, 230/50, 110/50, 120/60  |
|   | HP00: 24 V (5060 Hz), 230 V (5060 Hz)   |
| Performance data                          |   |
| Duty cycle                                | 100 % continuous rating; KD coil; max. rating 6 circuit switches/minute                                     |
| Response times <sup>1,)</sup> AC / DC     |   |
| DN10DN13                                  | Opening: 10100 ms   |
|   | Closing: 100200 ms  |
| DN20                                      | Opening: 200300 ms<br>Closing: 400700 ms  |
| DN25DN40                                  | Opening: 300400 ms  |
|   | Closing: 8001400 ms   |
| Power consumption                         | Depending on orifice and coil size  For detailed information, see "5. Performance specifications" on page 9 |
| Medium data                               |   |
| Medium                                    |   |
| NBR                                       | Neutral fluids, water, hydraulic oil, oil without additives   |
| FKM                                       | Per-solutions, hot oils with additives  |
| EPDM                                      | Oil and fat-free fluids and gases   |
| Medium temperature                        |   |
| NBR                                       | -10 °C+80 °C  |
| FKM                                       | 0 °C +90 °C with polyamide coil<br>0 °C +120 °C with epoxy coil   |
| EPDM                                      | -30 °C+90 °C with polyamide coil<br>-30 °C+100 °C with epoxy coil   |
| Viscosity                                 | Max. 21 mm²/s   |
| Approvals and certificates                |   |
| Protection class                          | IP65 with cable plug and cable connection IP65 with terminal box  |
| Due de et composis                        | (further versions on request)   |
| Product connections Electrical connection | Tag connector acc. to DIN EN 175 301 - 803 Form A   |
| Lieutiuai connection                      | (see "6.4. Ordering chart accessories" on page 14)  |
| Environment and installation              |   |
| Installation                              | As required, preferably with actuator upright   |
| Ambient temperature                       | Max.+55 °C  |

<sup>1.)</sup> Measurement with water at valve outlet 6 bar and +20 °C. Opening: Pressure build-up 0 to 90 %, Closing: Pressure drop 100 to 10