

Direct-acting 2-way proportional solenoid control valve

2871

- Precise flow control
- High and low differential pressure designs
- Vacuum rated
- Direct-acting valve for demanding control functions (wide control range, high cycling and dry gases)



Type 2871 direct-acting proportional solenoid control valves are used as the regulating unit in control loops. Precise control is provided by utilizing Burkert's proportional control technology, a Type 8605 PWM Digital Controller.

Not all proportional valves are created equal. Valve size selection is critical since Burkert's flow-efficient designs provide high flow capacities (Cv) in compact designs. A Burkert valve can reach its full flow rate with a small opening (stroke) and will be oversized. As a result, the valve will not provide the desired control and may cause the system to hunt or cycle. For Burkert Solenoid Control Valves, typically the required valve size or orifice size is smaller than the corresponding line size.

Type 2871 solenoid control valves provide a linear flow characteristic. To provide good valve control, a major portion of the pressure drop should be taken across the valve even when it is fully open. The recommended pressure drop across the valve is >25% of the total system pressure drop, but <50%. It is recommended Burkert Technical Sales review your application.

Technical Data

Setting range	1:200: DN 0.8 – 2.0mm, 1:500: DN 0.05 – 0.6mm
Materials	Brass, Stainless Steel
Pressure range	-14.0 – 174 PSI
Operating voltage	24V DC (12V on request)
Medium temperature	14 °F to 194 °F (-10 °C to +90 °C) (with FKM) -22 °F to 194 °F (-30 °C to +90 °C) (with EPDM)
Viscosity (max.)	21 cP

Options

- Manifold mount
- O2 cleaning
- UL recognized
- FDA conformity
- USP Class VI

Note:

- All valves with FKM seals, other materials available on request
- DN 0.05 and DN 0.1 valves supplied with PCTFE seats with FKM seals
- TYPE 2507 Cable Plug, Form B (Not Included)
- TYPE 8605 PWM Controller Versions - Cable plug for direct mounting or DIN rail mounting (Controller Not Included)
- TYPE 2871 Valve requires a DIN Rail Version of the TYPE 8605 Controller (Form B Size Controllers are not available)

Ordering Chart

Orifice [mm]	Port connection [inch]	Cv	Nominal pressure [PSI]	Maximum differential pressure [PSI]	Item no.	
					Brass Body	S.S. Body
0.05	NPT 1/8	0.00007	-14.0...145	145	254968	254971
0.1	NPT 1/8	0.0003	-14.0...145	145	254972	254973
0.2	NPT 1/8	0.0012	-14.0...145	145	254974	254975
0.3	NPT 1/8	0.0023	-14.0...145	145	254977	254978
0.4	NPT 1/8	0.005	-14.0...116	116	254979	254980
0.6	NPT 1/8	0.012	-14.0...87	87	254981	254982
0.6	NPT 1/8	0.012	-14.0...174	174	-	360155
0.8	NPT 1/8	0.021	-14.0...174	174	255598	255600
1.0	NPT 1/8	0.031	-14.0...145	145	255604	255606
1.2	NPT 1/8	0.044	-14.0...116	116	255611	255614
1.6	NPT 1/8	0.064	-14.0...87	87	255620	255623
2.0	NPT 1/8	0.104	-14.0...43	43	255632	255636

Dimensions [mm] (see datasheet for details)

