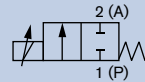


## 2/2-way Proportional Valve

2875

### G 3/8" and G 1/2", DN2.0-8.0 mm

- Excellent range
- Very good repeatability
- Compact Design



The direct-acting solenoid control valve, Type 2875, (49 mm installation width) is used as the regulating unit in control loops. Due to an elastomeric seat seal the valve closes tight, up to the DN specific nominal pressure.

The operation lever of the valve is suspended frictionless, which leads to an extraordinary adjustment characteristic. Valve control takes place through a PWM signal (see control electronics, Type 8605).

### Technical data

<b>Body material</b>	Brass, stainless steel
<b>Medium</b>	Neutral gases, liquids on request
<b>Span</b>	1 : 200
<b>Response sensitivity</b>	0.25% of full scale
<b>Rotation time</b>	< 25 ms
<b>PWM frequency</b>	900 Hz
<b>Medium temperature</b>	-10 °C to 90 °C
<b>Ambient temperature</b>	Max. 55 °C
<b>Seal material</b>	FKM
<b>Operating voltages</b>	24 V DC
<b>Power consumption</b>	16 W
<b>Max. coil current<sup>1)</sup></b>	420 mA
<b>Duty cycle</b>	100 % continuously rated
<b>Electrical connection</b>	Cable Plug Type 2508 acc. to DIN EN 175301-803 Form A (previously DIN 43650) (not included)
<b>Typical control data<sup>2)</sup> at PWM control</b>	
Hysteresis	< 5 %
Repeatability	< 0.5 % F.S. <sup>3)</sup>
<b>Protection class</b>	IP65 (with Cable Plug)

<sup>1)</sup> Maximum value, value depends on operating pressure

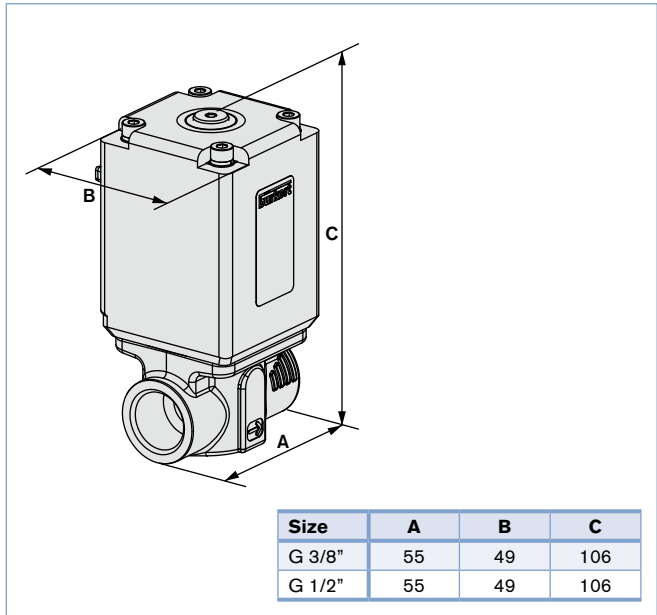
<sup>2)</sup> Characteristic data of control behaviour depends on process conditions

<sup>3)</sup> by flow measurement

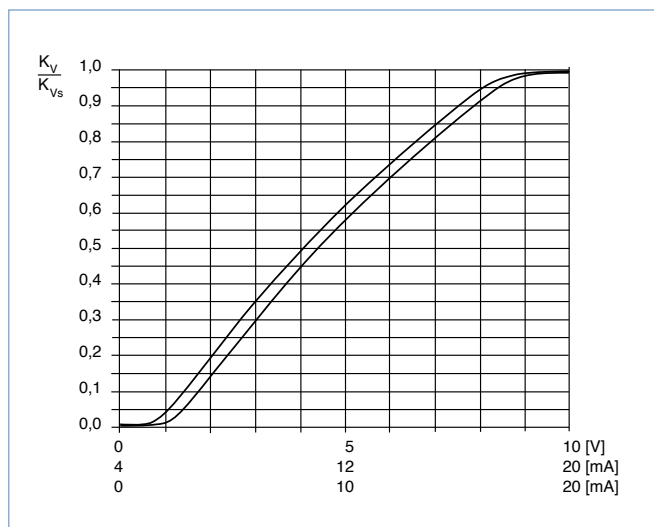
### Options/Accessories

- Seal material EPDM
- 12 V coil
- Oxygen versions
- Parts oil-, fat- and silicon free
- Flange

### Dimensions [mm] (see datasheet for further Details)



## Characteristics of a proportional valve



## Advice for valve sizing

In continuous flow applications, the choice of an appropriate valve size is much more important than with on/off valves. The optimum size should be selected such that the resulting flow in the system is not unnecessarily reduced by the valve. However, a sufficient part of the pressure drop should be taken across the valve even when it is fully opened.

**Recommended value:  $\Delta p_{\text{valve}} > 25\%$  of total pressure drop within the system**

Otherwise, the ideal, linear valve curve characteristic is changed. If the differential pressure (difference between inlet and outlet pressure) exceeds half the value of the nominal pressure, the characteristics may change.

For that reason take advantage of Bürkert competent engineering services during the planning phase!

## Ordering Chart

Port connection [inch]	Orifice [mm]	Kv value [m <sup>3</sup> /h]	Nominal pressure [bar(ü)]	Max. differential pressure [bar]	Max. coil current [mA]	Item no.	
						Brass	Stainless steel
<b>Type 2875</b>							
G 3/8	2	0.12	25	13	750	236 897	236 899
G 3/8	3	0.25	10	5	750	236 901	236 903
G 3/8	4	0.45	8	4	750	236 905	236 910
G 1/2	6	0.8	4	2	750	236 915	236 919
G 1/2	8	1-Jan	2	1	750	236 922	236 924

## Accessories

Description	Item no.
Control electronics Type 8605, DIN-Rail version	178 363
Control electronics Type 8605, cable plug with PG-connection	178 354
Control electronics Type 8605, cable plug with M12-connection	178 355
Cable 5 m for Type 8605, M12-connection	918 038
Cable plug Type 2508	008 376
Cable plug Type 2508 with 3 m cable	783 573