

PVC-PVDF valve body, DN15 - DN50



Advantages / Benefits

- ▶ Integrated, cascaded process controller with parameter definable PID-algorithm
- ▶ Automatic self-adjustment of basic parameters
- ▶ User-friendly operation - menu-guided
- ▶ Code-protection against unauthorized access
- ▶ Fluid is hermetically isolated from the actuator by diaphragm
- ▶ CE certified

Design

This continuous control system is a combination of a piston operated diaphragm valve with PVC or PVDF body, a position sensor and an electro-pneumatic control system. The position sensor measures the actual regulating distance of the valve.

The micro-processor controlled electronics continuously compares this actual value to a controller output, pre-defined by the standard signal input. In case of a control difference, the electro-pneumatic control system corrects the control position. Due to the 4...20 mA standard transmitter input the positioner can also be used as a cascaded process controller for controlled variables such as flow, temperature, pressure, level etc. The diaphragm between the actuator and body of the valve hermetically isolates the fluid from the actuator.

- Programmable flow curves:
  - linear, equal percentage
  - freely programmable via restart points
- No control air consumption in stabilized condition
- Excellent flow characteristic combined with high flow rates

Applications

Fluids

For contaminated and aggressive fluids up to 120 °C

Applications

- Water treatment
- System engineering
- Process technology
- Semi-conductor industry
- Environmental technology



# Diaphragm Valve System for continuous control with Plastic Body

**2030**  
with Positioner

## Technical Data Positioner Type 1067

### Electrical Data

Voltage supply:	24 V DC
Power consumption:	< 10 W
Signal input for positioner:	Unit signal: 4 ... 20 mA 0 ... 20 mA 0 ... 10 V
Binary input:	Configurable as normally open or closed contact.
Connection:	Clamping screw 1,5 mm Cable gland 2 x PG 9

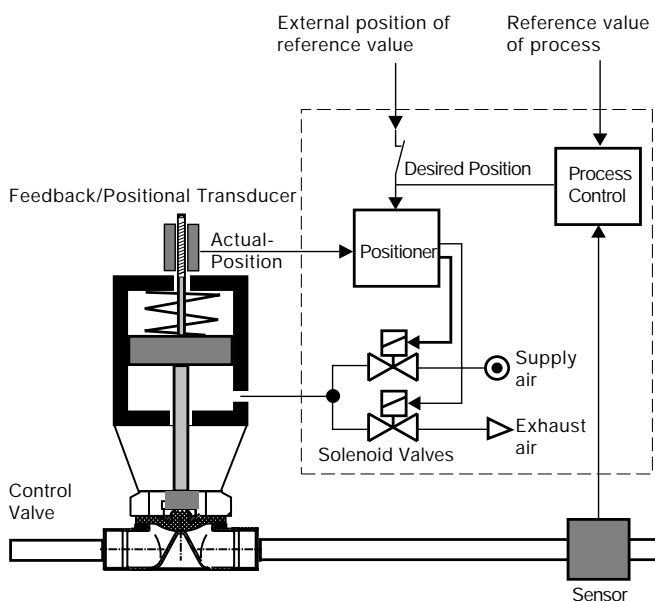
### Pneumatic Data

Instrument air:	Air, filtered compressed air, lubricated or non-lubricated
Pressure range:	0 ... 6 bar
Air performance	
Air inlet valve:	33 (66) NI/min <sup>(1)</sup>
Exhaust valve:	38 (76) NI/min <sup>(1)</sup>
	<sup>(1)</sup> In case of pressure drop from 6 to 5 bar. (Figures in brackets as option).
Internal air consumption in leveled status:	0 NI/min
Connection:	Internal screw thread G 1/8"

### Installation and Operation Data

Overall dimensions of positioner	(B x H x T): 125 mm x 80 mm x 77 mm
Body material:	Aluminium, laquered
Fluid plate material:	Aluminium, anodized
Weight of positioner:	approx. 1 kg
Rating:	IP 65
Operating temperature:	0 ... 60 °C

## Functional Diagram



## Technical Data Control Valve 2030

### Valve

Size (DN):	15, 20, 25, 32, 40, 50
Rangeability:	Control range $\geq 50:1$
Flow features:	Modified equal percentage
Flow capacity:	see table page 4
Medium temperature:	0°C...+ 60°C (PVC) 0°C...+120°C (PVDF)
Max. Operating pressure:	10 bar (at ambient temperature)

### Actuator

Actuator size (ø mm):	see table page 3
Signal (bar):	Air min. 5.5 bar, air max. 7 bar

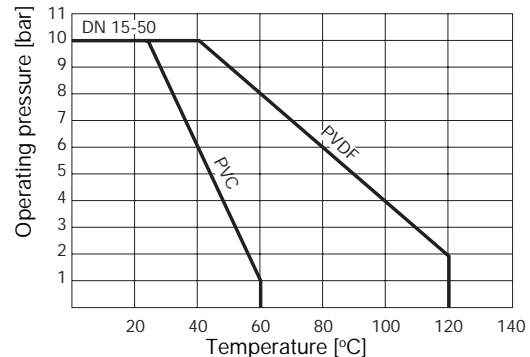
### Function:

Normally closed under spring force.

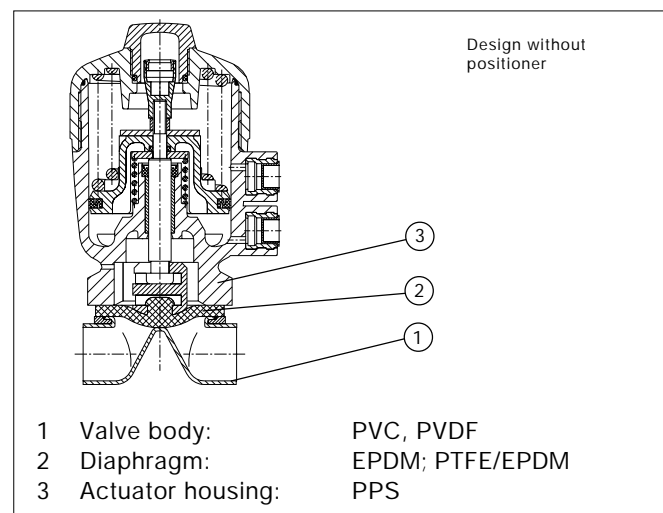
### Tightness

According to ANSI B 16-104 Class IV (St.St. seat and St.St. seal)

## Operating pressure depending on fluid temperature



## Material



## Ordering Chart

Orifice DN [mm]	Actuator- size [mm]	Max. operating pressure [bar]	Seal (Diaphragm)	Weight [kg]	Item-No. for different materials/connections			
					DN [mm]	PVC, True union Item-No.	PVC, Solvent spigot Item-No.	PVDF, Fusion spigot Item-No.
15	63	10.0	EPDM	2.0	15	425 809 Y	425 851 R	---
	63	6.0	PTFE/EPDM		15	425 810 L	425 852 J	425 824 E
20	80	10.0	EPDM	2.8	20	425 813 B	425 854 L	---
	80	6.0	PTFE/EPDM		20	425 814 C	425 855 M	425 825 F
25	80	10.0	EPDM	2.9	25	425 815 D	425 856 N	---
	80	6.0	PTFE/EPDM		25	425 816 E	425 857 P	425 866 Q
32	100	8.0	EPDM	4.4	32	425 817 F	425 858 Y	---
	100	6.0	PTFE/EPDM		32	425 818 Q	425 859 Z	425 867 R
40	125	10.0	EPDM	6.4	40	425 820 N	425 861 K	---
	125	6.0	PTFE/EPDM		40	425 821 B	425 862 L	425 868 S
50	125	8.0	EPDM	7.6	50	425 822 C	425 863 M	---
	125	6.0	PTFE/EPDM		50	425 823 D	425 864 N	425 869 T

**Easy** Pressure Control  
Flow Control  
Temperature Control

### Easy to commission

Automatic self-adjustment of basic parameters by finger tip control



### Easy to install

Compact design

- Delivered pre-mounted, tested and ready to install
- Requires less space than conventional control valves

### Easy to operate

User-friendly operation

- LCD and key pad
- Menue guided access
- Programmable characteristic curves

Burkert  
Link

### Easy to operate

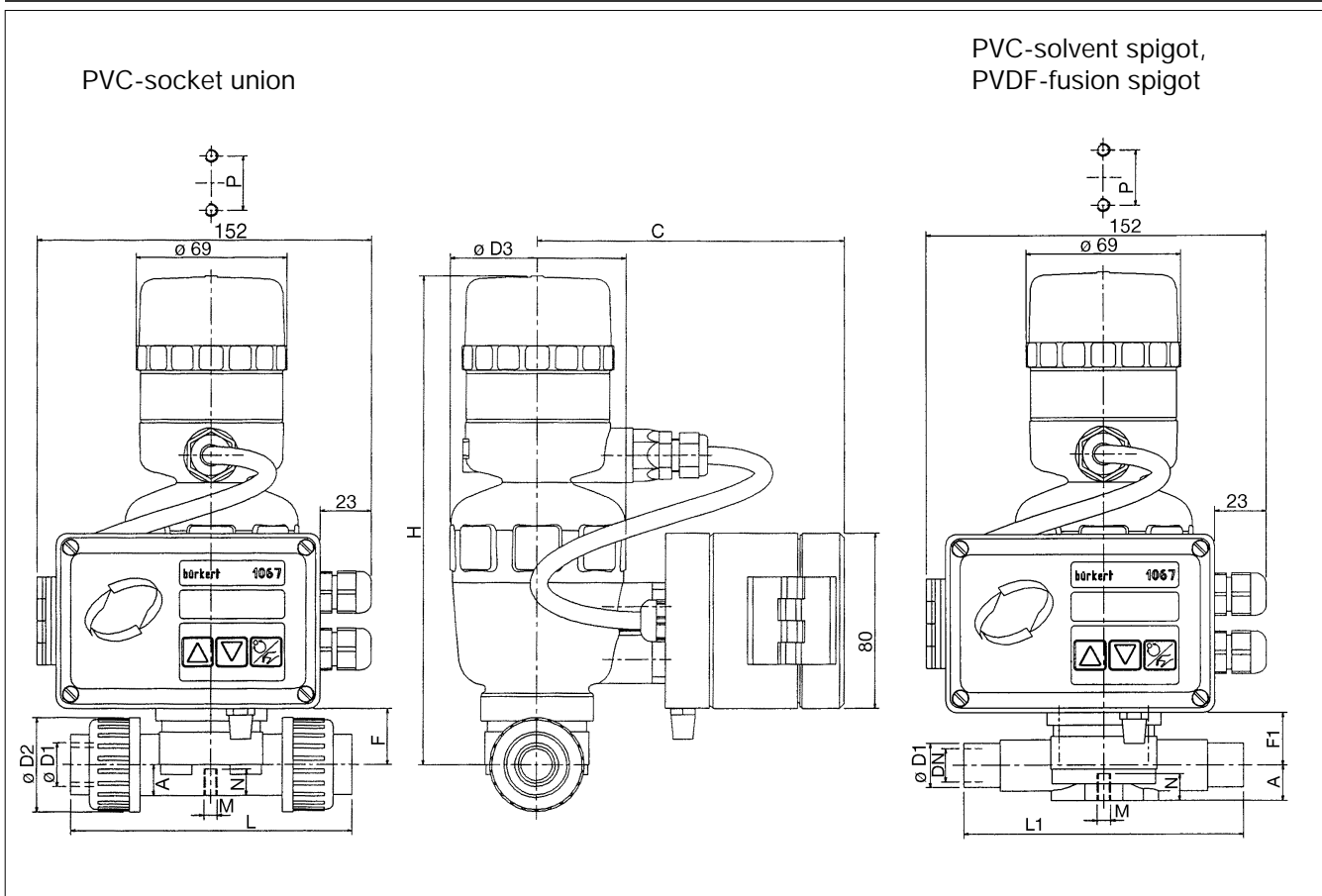


Burkert control valve with Burkert digital flow transmitter for continuous process control.

## Specifications - Flow Capacity

Plug travel [%]	Kv-value [water m³/h]					
	DN15	DN20	DN25	DN32	DN40	DN50
0	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.30	0.00
20	0.05	0.17	0.15	0.17	3.80	8.60
30	0.53	3.10	1.10	1.30	8.00	19.40
40	1.20	4.50	3.70	5.40	15.40	29.30
50	1.71	5.70	5.90	9.10	20.20	34.50
60	2.20	6.30	7.60	12.30	23.60	36.90
70	2.60	6.70	9.40	14.80	25.80	39.60
80	2.90	7.10	10.80	16.80	26.40	42.60
90	3.20	7.20	11.30	18.30	26.80	43.80
100	3.30	7.30	11.80	18.70	27.20	45.30

## Dimensions [mm]



## Variable dimensions [mm]

DN	Actuator size	A	C	$\phi D1$	$\phi D2$	$\phi D3$	F	F1	H	L	L1	M	N	P
15	63	14	139	20	43	80	25.0	23.0	223	128	124	M6	12	25
20	80	18	147	25	53	101	42.0	41.0	257	152	144	M6	12	25
25	80	21	147	32	60	101	45.0	44.0	260	166	154	M6	12	25
32	100	26	160	40	74	127	62.0	60.0	302	192	174	M8	15	45
40	125	33	173	50	83	153	77.0	76.0	358	222	194	M8	15	45
50	125	39	173	63	103	153	84.0	83.0	365	266	224	M8	15	45