

2/2-Way, DN15-50, PN16, Stainless Steel



### Advantages / Benefits

- ▶ **High operating safety:**
  - Extended spindle guide and wiper seal with self-adjusting double packing glands
- ▶ **Waterhammer-free**
- ▶ **Maintenance-free actuator with long-life piston ring**
- ▶ **Easy to install:**
  - Infinitely rotatable actuator allows pneumatic connection in any position
- ▶ **Cost savings in operation due to minimized control air consumption**
- ▶ **Low Lifecycle costs**
- ▶ **50% more economical than ball valves**
- ▶ **Comprehensive range of modular accessories (as required)**

### Design

The externally piloted angle-seat valve is either operated with a single- or double-acting piston actuator.

The actuator is available in two materials, depending on ambient temperatures. Standard material is PA, optional for ambient temperatures up to 140°C is PPS (e.g. external sterilizing). Flow from under seat eliminates the danger of waterhammer.

High flow rates are attained with the stainless steel 2-way body.

The reliable self-adjusting twin packing gland provides high sealing integrity.

- ON/OFF control function
- visual position indicator -> standard
- simple conversion of control functions (e.g. N/C to N/O or double-acting)
- safe and fast actuator servicing, due to no preloaded spring tension and few parts

#### Optional accessories:

- manual override
- various electrical position feedbacks
- adjustable stroke limiters
- wide choice of solenoid pilot valves

### Applications

#### Fluids

Gases and liquids up to 16 bar

Steam up to 10 bar / 180°C (SIP)

Aggressive fluids (CIP-fluids)

#### Industries

Systems engineering

Sterilizers

Food and beverage processing

Dairy product processing

Pharmaceutical and cosmetic industry

Process technology

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Easy Fluid Control Systems

# Angle-Seat Valve

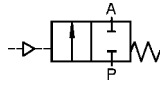
flanged connection with different body lengths

# Type 2000

## Technical Data

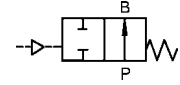
### Control Functions

**A** 2/2-way flow valve,  
normally closed spring return

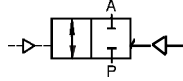


### Control Functions

**B** 2/2-way flow valve,  
normally open spring return



**I** 2/2-way flow valve,  
with double-acting actuator  
(on request)



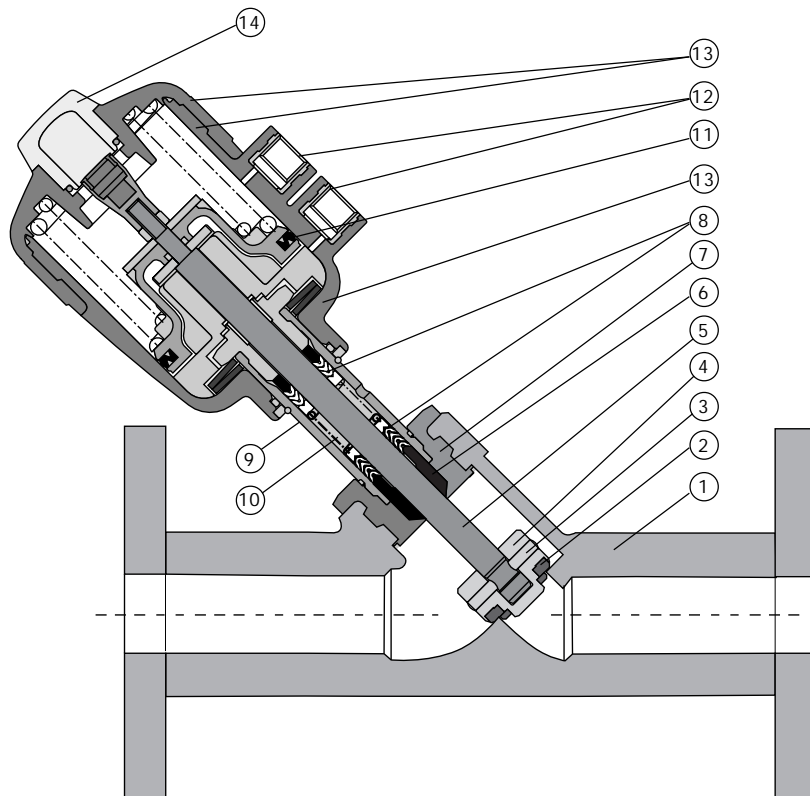
## Operating data, valve

Valve body material	Stainless steel 1.4581
Flange connection	DIN 2501, DIN 2633 and DIN 2576
Orifice	DN 15-50
Nominal pressure	PN 16
Max. operating pressure (medium)	0 - 16 bar 0 - 10 bar (for steam)
Fluids	Water, alcohols, acids, lyes, organic solvents, steam, CIP fluids, beverages, pharmaceutical products and cosmetics
Max. viscosity	600 mm <sup>2</sup> /s
Fluid temperature	min. -10 °C, max. +180 °C
Ambient temperature	min. -10 °C, max. +60 °C

## Operating data, actuator

Minimum control pressure	see pressure diagram (depend on control function)
Max. permissible control pressure	10 bar
Control medium	Neutral gases, air
Control connection	G 1/4
Installation position	as required, but preferably with actuator upright

## Materials



1. Valve body:	1.4581
2. Seal:	PTFE
3. Pin:	1.4401
4. Swivel plate:	1.4401
5. Spindle:	1.4401
6. Wiper:	PTFE
7. Nipple:	1.4401
8. V-seals:	PTFE
9. Tube:	1.4401
10. Tension spring:	1.4310
11. Cylinder seal:	Perbunan (NBR)
12. Cone glands G1/4:	1.4305
13. Actuator casing:	Polyamide
14. Position indication:	Polycarbonat

## Ordering Chart

Control function	Orifice size [mm]	Actuator size [ømm]	Max. operating pressure [bar]	Min. control pressure [bar]	Kv [m³/h]	Flow direction	Weight [kg]	Item-No.	
								Normal body length	DIN 3202, F1 body length
A	15.0	50	16.0	3.9	4.2	below seat	2.15	426 422 C	415 925 H
	20.0	50	11.0	3.9	8.0	below seat	2.90	426 423 D	415 926 A
	25.0	63	11.0	4.2	19.0	below seat	4.10	426 424 E	415 927 B
	32.0	80	15.0	5.0	27.5	below seat	6.50	426 425 F	415 928 L
	40.0	80	10.0	5.0	42.0	below seat	7.25	426 426 G	415 929 M
	40.0	100	12.5	4.4	42.0	below seat	8.75	426 427 H	415 930 J
	50.0	100	7.5	4.4	55.0	below seat	12.10	426 428 J	415 931 F
	50.0	125	10.0	3.2	55.0	below seat	15.60	426 429 K	415 932 G
B	15.0	50	16.0	see chart	4.2	below seat	2.15	415 875 P	415 933 H
	20.0	50	16.0		8.0	below seat	2.90	415 876 Q	415 934 A
	25.0	63	16.0		19.0	below seat	4.10	415 877 R	415 935 B
	32.0	80	16.0		27.5	below seat	6.50	415 878 S	415 936 C
	40.0	80	16.0		42.0	below seat	7.25	415 879 T	415 937 D
	40.0	100	16.0		42.0	below seat	8.75	415 880 R	415 938 N
	50.0	100	16.0		55.0	below seat	12.10	415 881 E	415 939 P
	50.0	125	16.0		55.0	below seat	15.60	415 882 F	415 940 U
A	15.0	50	16.0	see chart	4.2	above seat	2.15	415 883 G	415 941 R
	20.0	50	16.0		8.0	above seat	2.90	415 884 H	415 942 J
	25.0	63	16.0		19.0	above seat	4.10	415 885 A	415 943 K
	32.0	63	16.0		27.5	above seat	6.10	415 886 B	415 944 L
	40.0	63	16.0		42.0	above seat	6.75	415 887 C	415 945 M
	40.0	80	16.0		42.0	above seat	7.75	415 888 M	415 946 N
	50.0	63	16.0		55.0	above seat	11.10	415 889 N	415 947 P
	50.0	80	16.0		55.0	above seat	11.60	415 890 K	415 948 Y

## Options (on request)

- Double-acting actuator
- PPS-actuator for ambient temperatures up to 140 °C
- Vacuum version
- Position feedback with Type 1062 or with external inductive switches
- Manual override
- NAMUR adapter for pilot valve
- Stroke adjustment (high/low flow)
- Positioner 1067

## Pneumatic pilot valve systems

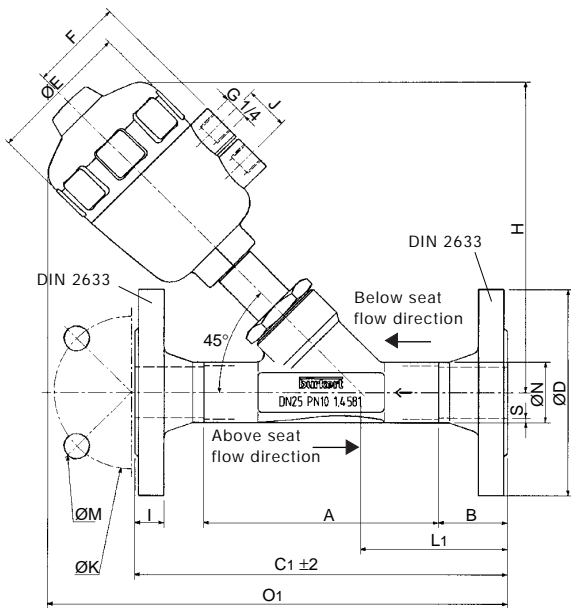
Burkert offers a comprehensive range of pneumatic valve systems from single pilot valves up to multiple valve systems with different bus connections. Please ask for data sheet "Pneumatic Valve Actuation System for the Process Technology and Industry"

# Angle-Seat Valve

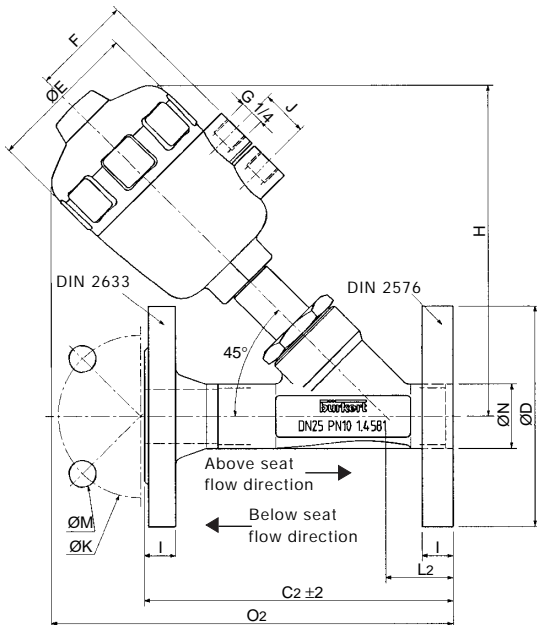
flanged connection with different body lengths

# Type 2000

## Dimensions in mm



Face to face dimension to DIN 3202, F1

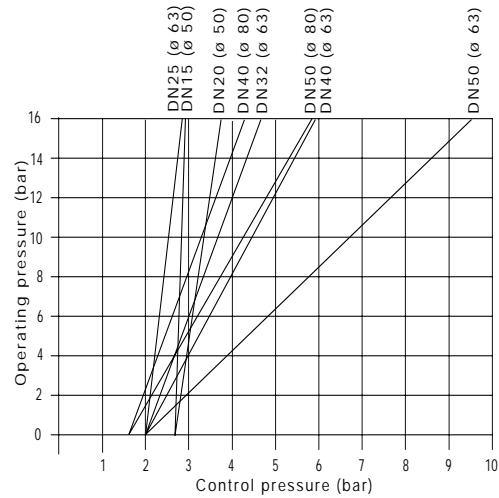


## Variable dimensions [mm]

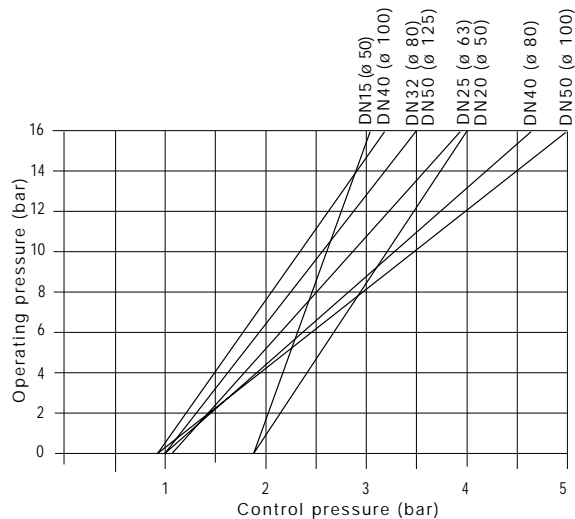
DN	15	20	25	32	32	40	40	40	50	50	50	50
Actuator [ømm]	50	50	63	63	80	63	80	100	63	80	100	125
A	100.0	115.0	130.0	145.0	145.0	160.0	160.0	160.0	175.0	175.0	175.0	175.0
B	35.0	38.0	38.0	40.0	40.0	42.0	42.0	42.0	45.0	45.0	45.0	45.0
C1	170.0	191.0	206.0	225.0	225.0	244.0	244.0	244.0	265.0	265.0	265.0	265.0
C2	130.0	150.0	160.0	180.0	180.0	200.0	200.0	200.0	230.0	230.0	230.0	230.0
D	95.0	105.0	115.0	140.0	140.0	150.0	150.0	150.0	150.0	165.0	165.0	165.0
E	64.0	64.0	80.0	80.0	101.0	80.0	101.0	127.0	80.0	101.0	127.0	153.0
F	44.0	44.0	52.0	52.0	60.0	52.0	60.0	73.0	52.0	60.0	73.0	86.0
H	137.0	145.0	173.0	186.0	210.0	189.0	213.0	260.0	205.0	225.0	316.0	301.0
I	14.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	18.0	18.0	18.0
J	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	30.0	24.0	30.0	30.0
K	65.0	75.0	85.0	100.0	100.0	110.0	110.0	110.0	125.0	125.0	125.0	125.0
L1	69.0	77.0	81.0	85.0	85.0	91.0	91.0	91.0	95.0	95.0	95.0	95.0
L2	29.0	36.0	35.0	40.0	40.0	44.0	44.0	44.0	44.0	60.0	60.0	60.0
M	14.0	14.0	14.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
N	21.3	26.9	33.7	42.4	42.4	48.3	48.3	48.3	60.3	60.3	60.3	60.3
O1	189.0	219.5	255.0	270.5	299.5	280.0	300.0	351.0	300.5	320.5	372.5	396.5
O2	166.0	181.0	208.0	226.0	250.0	233.0	257.0	304.0	233.0	285.0	376.0	361.0
S	2.0	2.3	2.6	2.6	2.6	2.6	2.6	2.6	2.9	2.9	2.9	2.9

## Pressure charts

### Control Function A, flow above seat



### Control Function B, flow below seat



In case of special application requirements, please consult for advice.

We reserve the right to make technical changes without notice.  
710-GB/ 1-0011