

2/2-Way, 1/2"-2", 0-230 PSI, Stainless Steel



## Advantages / Benefits

- ▶ **High operating safety:**
  - Extended stem 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**
- ▶ **Extensive range of modular accessories**

## Design

The externally piloted Y-pattern valve is operated by an integrally mounted, single- or double-acting piston actuator.

The actuator housing is available in two different materials, depending on ambient temperature. Standard material is PA, and PPS is offered for ambient temperatures up to 284°F (i.e. external sterilizing). Tight shut-off is provided by a PTFE seal and high flow rates are obtained through the 2-way stainless steel body. Normal flow direction is under the seat, which eliminates the danger of waterhammer to the piping system.

The self-adjusting twin packing gland provides high stem-sealing integrity for the process and the actuator.

- ON/OFF control function
- Visual position indicator standard
- Simple conversion of control functions (i.e. 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 230 PSI  
 Steam up to 140 PSI / 356°F (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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# Y-Pattern Valve

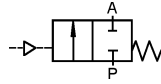
Compatible with ANSI Class 150 Flanges

# Type 2000

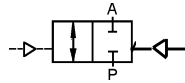
## Technical Data

### Control Functions

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

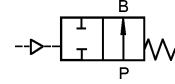


**I** - 2/2-way flow valve,  
with double-acting actuator



### Control Functions

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



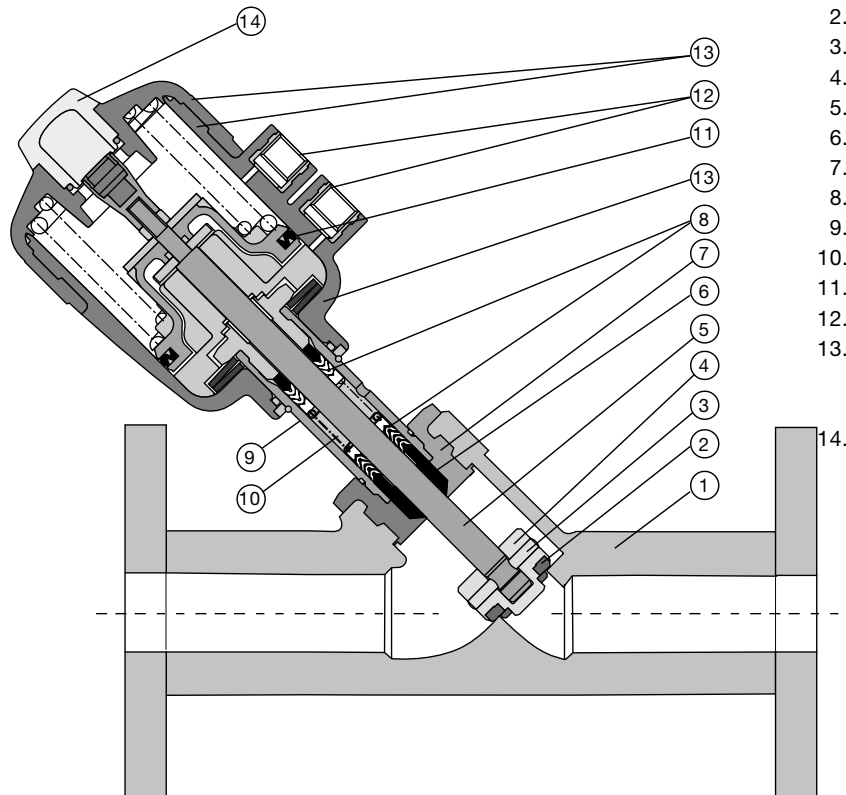
### Operating Data, Valve

Valve body material	316L Stainless Steel
Flange connection	ANSI Class 150
Orifice	1/2" - 2"
Max. operating pressure (medium)	0 - 230 PSI, gas and liquid 0 - 140 PSI, steam
Fluids	Water, alcohols, acids, lyes, organic solvents, steam, CIP fluids, beverages, pharmaceutical products and cosmetics
Max. viscosity	600 cSt
Fluid temperature	14°F to 356°F
Ambient temperature	14°F to 140°F

### Operating Data, Actuator

Minimum control pressure	See Ordering Chart
Max. permissible control pressure	140 PSI
Control medium	Neutral gases, air
Control connection	G 1/4
Installation position	as required; preferably with actuator upright

### Materials



1. Valve body:	316 SS
2. Seal:	PTFE
3. Pin:	316 SS
4. Swivel plate:	316 SS
5. Spindle:	316 SS
6. Wiper:	PTFE
7. Nipple:	316 SS
8. V-seals:	PTFE
9. Tube:	316 SS
10. Tension spring:	301 SS
11. Cylinder seal:	NBR
12. Cone glands G1/4:	304 SS
13. Actuator casing:	PA, Polyamide PPS, Polyphenylene Sulphide (optional)
14. Position indication:	Polycarbonate

### Ordering Chart

Control function	Orifice size [inch]	Actuator Piston Dia. [inch]	Max. operating pressure [PSI]	Min. control pressure [PSI]	Cv	Flow direction	Weight [lb]	Item-No.
A	1/2"	1.97	230	53	4.9	below seat	4.7	426 009 S
	3/4"	1.97	155	53	9.3	below seat	6.4	426 010 N
	1"	2.48	155	61	22.1	below seat	9.0	426 011 B
	1-1/4"	3.15	215	70	32.0	below seat	14.3	426 012 C
	1-1/2"	3.94	180	63	48.9	below seat	19.3	426 013 D
	1-1/2"	4.93	230	44	48.9	below seat	27.0	426 014 E
	2"	3.94	140	63	64.1	below seat	26.7	426 015 F
	2"	4.93	230	44	64.1	below seat	34.4	426 016 G
B	1/2"	1.97	230	42	4.9	below seat	4.7	426 561 P
	3/4"	1.97	230	55	9.3	below seat	6.4	426 562 Q
	1"	2.48	230	54	22.1	below seat	9.0	426 563 R
	1-1/4"	3.15	230	49	32.0	below seat	14.3	426 564 J
	1-1/2"	3.15	230	64	48.9	below seat	16.0	426 565 K
	1-1/2"	3.94	230	45	48.9	below seat	19.3	426 566 L
	2"	3.94	230	70	64.1	below seat	26.7	426 567 M
	2"	4.93	230	49	64.1	below seat	34.4	426 568 W
A	1/2"	1.97	230	41	4.9	above seat	4.7	426 569 X
	3/4"	1.97	230	53	9.3	above seat	6.4	426 570 U
	1"	2.48	230	40	22.1	above seat	9.0	426 571 R
	1-1/4"	2.48	230	66	32.0	above seat	13.5	426 572 J
	1-1/2"	2.48	230	84	48.9	above seat	14.9	426 573 K
	1-1/2"	3.15	230	58	48.9	above seat	17.1	426 574 L
	2"	2.48	230	136	64.1	above seat	24.5	426 575 M
	2"	3.15	230	82	64.1	above seat	25.6	426 576 E

### Options

- Double-acting actuator
- PPS-actuator for ambient temperatures up to 284°F
- Vacuum version
- Position feedback
  - Type 1062 top mounted micro switches or inductive switches
  - Type 1071 external mounted inductive switches (requires magnetic piston)
- 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 to multiple valve systems, including several different fieldbus protocols.

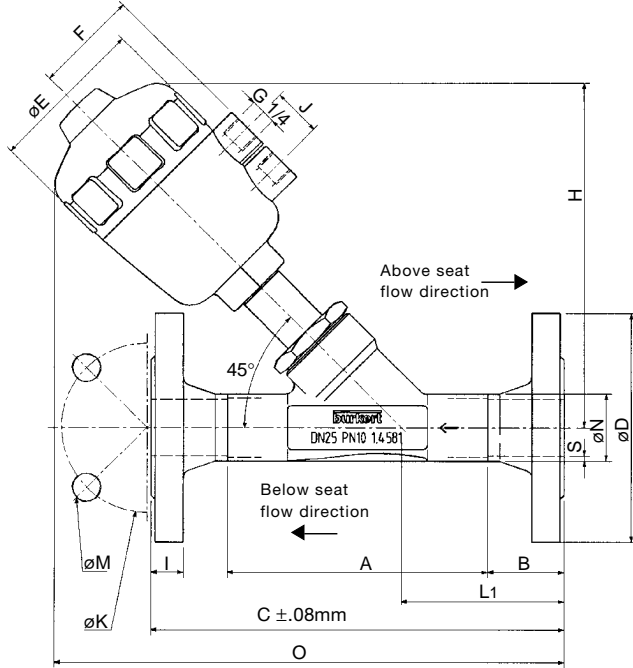
Please ask for datasheet "Pneumatic Valve Actuation System for the Process Technology and Industry".

# Y-Pattern Valve

Compatible with ANSI Class 150 Flanges

# Type 2000

## Dimensions [inch]



Face to face dimension to DIN 3202, F1

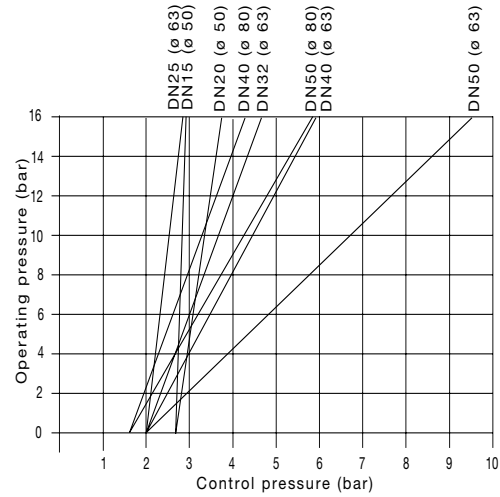


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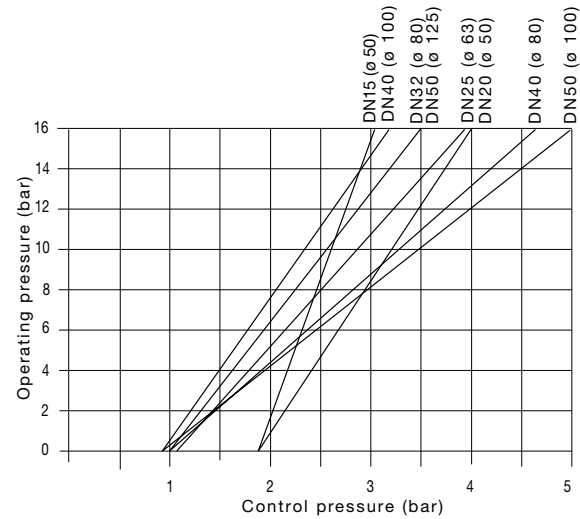
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## Pressure Charts

### Control Function A, flow above seat



### Control Function B, flow below seat



Valve Size	1/2"	3/4"	1"	1-1/4"	1-1/4"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	2"	2"	2"	2"
Acuator, Diameter	1.97	1.97	2.48	2.48	3.15	2.48	3.15	3.94	4.93	2.48	3.15	3.94	4.93
A	3.94	4.53	5.12	5.71	5.71	6.30	6.30	6.30	6.30	6.90	6.90	6.90	6.90
B	1.89	2.05	2.21	2.25	2.25	2.44	2.44	2.44	2.44	2.48	2.48	2.48	2.48
C	7.68	8.59	9.50	10.17	10.17	11.15	11.15	11.15	11.15	11.82	11.82	11.82	11.82
øD	3.51	3.90	4.26	4.61	4.61	5.00	5.00	5.00	5.00	5.99	5.99	5.99	5.99
øE	2.52	2.52	3.15	3.15	3.98	3.15	3.98	5.00	6.03	3.15	3.98	5.00	6.03
F	1.73	1.73	2.05	2.05	2.36	2.05	2.36	2.88	3.39	2.05	2.36	2.88	3.39
H	5.40	5.71	6.82	7.33	8.27	7.45	8.39	10.24	11.35	8.08	8.87	12.45	11.86
I	.44	.50	.56	.63	.63	.69	.69	.69	.69	.75	.75	.75	.75
J	.94	.94	.94	.94	.94	.94	.94	1.20	1.20	.94	.94	1.2	1.2
K	2.38	2.75	3.13	3.50	3.50	3.88	3.88	3.88	3.88	4.75	4.75	4.75	4.75
L	3.23	3.59	3.90	4.02	4.02	4.37	4.37	4.37	4.37	4.45	4.45	4.45	4.45
M	.62	.62	.62	.62	.62	.62	.62	.62	.62	.75	.75	.75	.75
øN	.84	1.06	1.33	1.67	1.67	1.90	1.90	1.90	1.90	2.38	2.38	2.38	2.38
O	8.87	9.26	10.84	11.43	12.61	12.02	12.81	14.78	15.96	12.81	13.59	15.56	16.55
S	.06	.06	.08	.08	.08	.08	.08	.08	.08	.10	.10	.10	.10

Please contact us for special applications.

We reserve the right to make technical changes without notice.  
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