

DN13-65, G 1/2 bis 2 1/2"



### Advantages / Benefits

- ▶ Spring return closed or open, double-acting
- ▶ Materials: gunmetal, stainless steel
- ▶ High flow rate
- ▶ With self-adjusting packing glands, intermediate relief and wiper
- ▶ Optical position indication
- ▶ Pilot connection can be rotated through 360°
- ▶ Low control air consumption due to minimized volume in the actuator
- ▶ Electrical position indication, stroke limitation and manual override available as accessories

### Design

The externally piloted angle-seat valve is operated with a single- or double-acting piston actuator. The actuator is available in two different materials, depending on the ambient temperature. High flow rates are attained with the gunmetal or stainless steel 2-way body. The reliable self-adjusting packing gland provides high sealing integrity. These maintenance-free and robust valves can be retro-fitted with a comprehensive range of accessories for position indication, stroke limitation or manual override.

### Applications

Neutral gases and liquids up to 16 bar  
Steam up to 10 bar / 180°C  
Aggressive fluids with stainless steel body  
Systems engineering  
Food processing  
Chemical industry  
Sterilizers

**bürkert**  
*Easy* Fluid Control Systems

# 2/2-Way Angle-Seat Valve

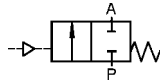
for High-Quality Applications and Steam

# Type 2000

## Technical Data

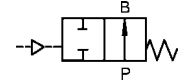
### Control Functions

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

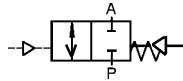


### Steuerfunktionen

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



**I** 1/2-way valve, with double-acting actuator (on request)



### Specifications

Connections ISO 228	Orifice DN [mm]	Kv-Value Water 2/2-Way [m <sup>3</sup> /h]	Max. Operating Pressure <sup>3)</sup> Differential Pressure <sup>1)</sup>		Operating Pressure with Steam (180°C) [bar]	Weight [kg]	Actuator Size ø
			CFA [bar]	CFB <sup>2)</sup> [bar]			
G 1/2	13,0	4,2	16		10	0,83	50
				16	10		50
G 3/4	20,0	8	16		10	0,96	50
				16	10		50
G 1	25,0	19	16		10	1,83	63
				16	10		63
G 1 1/4	32,0	27,5	16		10	3,1	63
				13	10		63
G 1 1/2	40,0	42	16		10	3,5	63
				9	10		63
			16		10	5,0	80
				16	10		80
G 2	50,0	55	14		10	7,0	63
				6	10		63
			16		10	6,5	80
				9	10		80
G 2 1/2	65,0	90	15		10	11,0	80
				6	10		80

<sup>1)</sup> Higher differential pressures by other combinations of actuators on request.

<sup>2)</sup> Flow below seat only.

All pressures quoted are gauge pressures with respect to the prevailing atmospheric pressure. <sup>3)</sup> Required control pressure 4.5 bar

## Operating Data

Threaded connection	ISO 228	Body material	
Weld ends	ISO 4200	gunmetal	RG
Nominal pressure gunmetal	PN 16	stainless steel	1.4408 (threaded connection) 1.4581 (weld ends)
Nominal pressure stainless steel	PN 16	Seal material	PTFE
Min. control pressure	see diagram	Packing gland	self-adjusting PTFE-stem seals, intermediate relief and strainer
Max. control pressure	10 bar	Fluids	water, alcohols, oils, fuels, hydraulic liquids, salt solutions, lyes, organic solvents, steam
Control fluid	neutral gases, air		
Max. viscosity	600 mm <sup>2</sup> /s		
Ambient temperature			
PA-actuator	min. -10 °C max. +60 °C		
PPS-actuator	min. +5 °C max. +130 °C		
Fluid temperature	min. -10 °C max. +180 °C		

## Installation

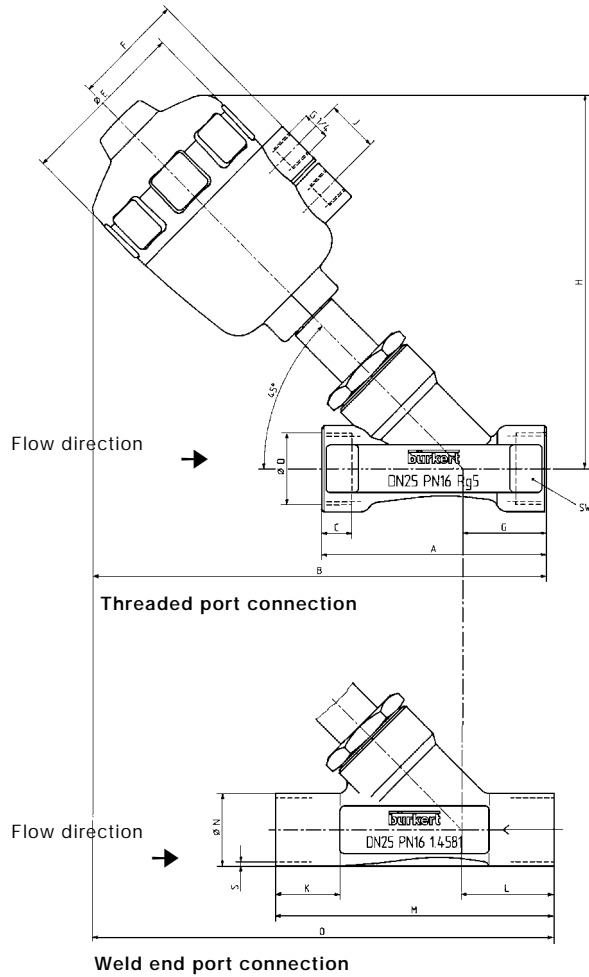
Installation as required

# 2/2-Way Angle-Seat Valve

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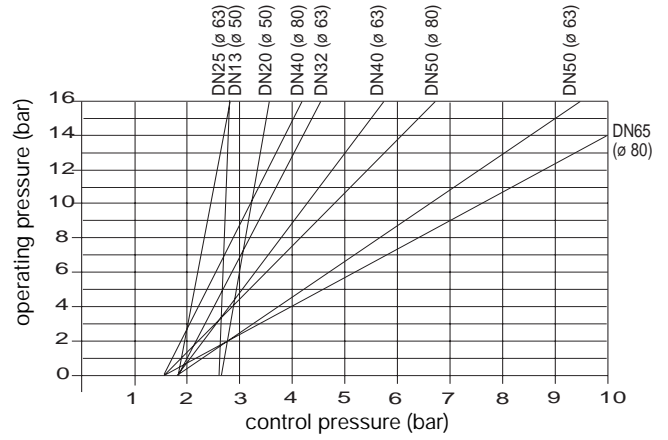
### Dimensions in mm



### Pressure chart

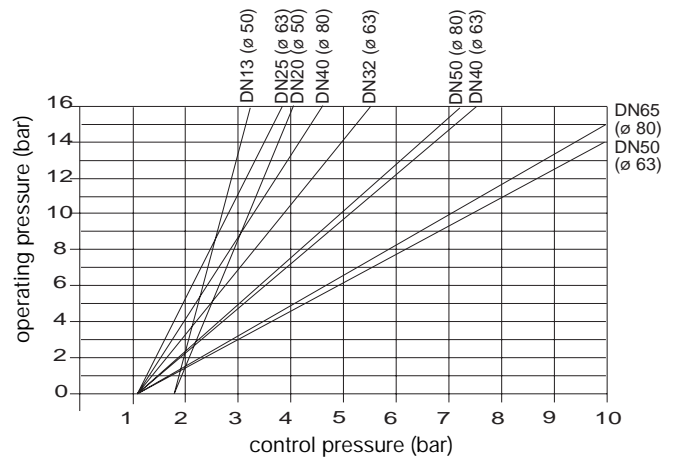
#### Control Function A

Actuator 50 - 80 mm



#### Control Function B

Actuator 50 - 80 mm



### Technical Data

Actuator	ø50mm			ø63mm			ø80mm		
	DN 13	DN 20	DN 25	DN 32	DN 40	DN 50	DN 40	DN 50	DN 65
DN	DN 13	DN 20	DN 25	DN 32	DN 40	DN 50	DN 40	DN 50	DN 65
øD	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	1 1/2"	2"	2 1/2"
A	85	95	105	120	130	150	130	150	185
B	173	178	212	226	230	250	250	270	296
C	12	12	14	16	18	20	18	20	22
E	64	80	80	80	80	80	101	101	101
F	44	44	52	52	52	52	60	60	60
G	33	36	39	41	41	45	41	45	57
H	137	145	173	186	189	205	213	225	239
J	24	24	24	24	24	24	24	24	24
K	20	25	30	30	30	30	30	30	-
L	34	39	43	45	49	50	49	50	-
M	100	115	130	145	160	175	160	175	-
N	21,3	26,9	35,7	42,4	48,3	60,3	48,3	60,3	-
O	174	181	217	230	238	255	258	275	-
S	1,6	1,6	2	2	2	2,6	2	2,6	-

# 2/2-Way Angle-Seat Valve

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## Ordering Chart (other Versions on request.)

### Standard-Program

#### Type 2000 with gunmetal body, PA-actuator, pilot port with brass inserts

Control Function	Orifice DN [mm]	Port Connection (ISO 228)	Actuator Size [mm]	Flow Direction	Operating Pressure <sup>1) 2)</sup> [bar]	Order-No.
A	13	G 1/2	ø 50	above seat	16	001 252 B
	20	G 3/4	ø 50	above seat	16	001 253 C
	25	G 1	ø 63	above seat	16	001 248 P
	32	G 1 1/4	ø 63	above seat	16	001 249 Q
	40	G 1 1/2	ø 63	above seat	16	001 250 M
	40	G 1 1/2	ø 80	above seat	16	001 608 R
	50	G 2	ø 63	above seat	14	001 251 A
	50	G 2	ø 80	above seat	16	001 457 Z
	65	G 2 1/2	ø 80	above seat	15	001 398 E
	B	13	G 1/2	ø 50	below seat	16
20		G 3/4	ø 50	below seat	16	001 145 Y
25		G 1	ø 63	below seat	16	001 146 Z
32		G 1 1/4	ø 63	below seat	13	001 369 Q
40		G 1 1/2	ø 63	below seat	9	001 370 M
40		G 1 1/2	ø 80	below seat	16	001 594 K
50		G 2	ø 63	below seat	6	001 371 A
50		G 2	ø 80	below seat	9	001 595 L
65		G 2 1/2	ø 80	below seat	6	001 372 B

#### Type 2000 with stainless steel body, PA-actuator, pilot port with stainless steel inserts

Control Function	Orifice DN [mm]	Port Connection (ISO 228)	Actuator Size [mm]	Flow Direction	Operating Pressure <sup>1) 2)</sup> [bar]	Order-No. Threaded port ISO 228	Order-No. Weld connection ISO 4200
A	13	G 1/2	ø 50	above seat	16	001 421 M	001 449 M
	20	G 3/4	ø 50	above seat	16	001 422 N	001 448 G
	25	G 1	ø 63	above seat	16	001 137 Q	001 447 X
	32	G 1 1/4	ø 63	above seat	16	001 399 F	001 414 N
	40	G 1 1/2	ø 63	above seat	16	001 400 D	001 415 P
	40	G 1 1/2	ø 80	above seat	16	001 609 J	-
	50	G 2	ø 63	above seat	14	001 401 S	001 416 Q
	50	G 2	ø 80	above seat	16	001 458 A	-
	65	G 2 1/2	ø 80	above seat	15	001 402 T	-
	B	13	G 1/2	ø 50	below seat	16	001 150 H
20		G 3/4	ø 50	below seat	16	001 151 W	001 489 S
25		G 1	ø 63	below seat	16	001 152 X	001 490 X
32		G 1 1/4	ø 63	below seat	13	001 374 D	001 491 L
40		G 1 1/2	ø 63	below seat	9	001 375 E	001 492 M
40		G 1 1/2	ø 80	below seat	16	001 602 B	-
50		G 2	ø 63	below seat	6	001 376 F	001 493 N
50		G 2	ø 80	below seat	9	001 603 C	-
65		G 2 1/2	ø 80	below seat	6	001 377 G	-

<sup>1)</sup> 10 bar with steam

<sup>2)</sup> requ. control pressure

#### On request:

- Double-acting actuator
- PPS-actuator for ambient temperatures up to 130°C
- Vacuum-version
- Control function B for pressures up to 16 bar with ø 80 piston

#### Options:

- Position indication Type 1062 or position indication with external inductive switches
- Manual override
- Namur adapter for pilot valve
- Independently adjustable stroke limitation - for high and low flow

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

We reserve the right to make technical changes without notice  
711-GB/ 2-0027