

2/2-Way, G $\frac{3}{8}$ - G $\frac{3}{4}$, 0-16 bar, Waterhammer-free



Advantages / Benefits

- ▶ **High operating safety:**
 - Maintenance-free packing glands with intermediate relief and wiper
 - PTFE motion plug
- ▶ **Ultra-Compact:**
 - small dimensions
 - low weight
- ▶ **Waterhammer-free**
- ▶ **Easy to install:**
 - 360° positioning of actuator control ports
- ▶ **Optical position indication standard**
- ▶ **Cost-savings in operation due to minimized control air consumption**
- ▶ **Low Lifecycle costs**

Design

The pneumatically-operated 2/2 way angle-seat valve is operated by an ultra-compact piston actuator.

Despite the small dimensions of the actuator, high pressures can be switched without problem.

The angle-seat construction of the body makes possible extremely high flow rates, particularly in comparison to conventional globe valves.

The proven, self-adjusting and maintenance-free Burkert packing glands ensure high sealing integrity.

- In idle position, valve normally open or closed by spring action.

- Two-way valve with double-acting actuator without spring return.

- Gunmetal or stainless steel body

- High specific flow rate

- Body available as option with external thread

- Optimally-matched programme of pilot valves

Applications

Media

Neutral gases and liquids up to 16 bar

With stainless steel also suitable for aggressive fluids

Steam up to 10 bar/180°C

Branches

Systems engineering

Food processing

Chemical process technology

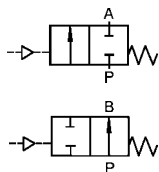
Sterilizers and autoclaves

bürkert
Easy Fluid Control Systems

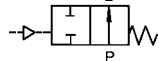
Technical data

Control functions

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

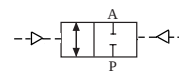


B 2/2-way valve, normally open spring return



Control function

I 2/2-way valve with double-acting actuator without spring return.



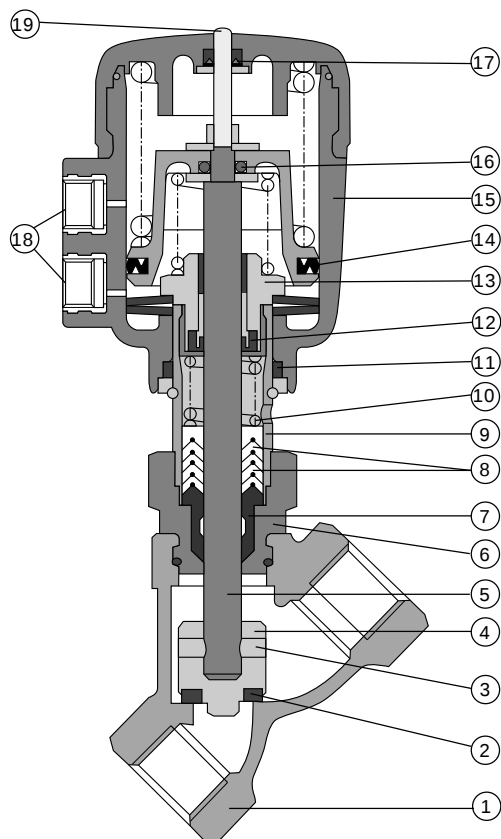
Operating data, valve

Valve body material	Gunmetal, stainless steel
Port Connection	G ^{3/8} ", G ^{1/2} ", G ^{3/4} " (NPT, Rc on request)
Orifice	DN 13-20
Max. operating pressure (medium)	0 - 16 bar 0 - 10 bar (for steam)
Sealing material	(See materials)
Fluids	Water, alcohols, oils, fuels, hydraulic liquids, salt solutions, alkalis, steam
Temperature of medium	-10°C to + 180°C
Ambient temperature	-10°C to + 60°C
Max. viscosity	600 mm ² /s

Operating data, actuator

Minimum control pressure	See pressure diagram (dependent on control function)
Max. permissible control pressure	10 bar
Control medium	Neutral gases, air
Control connection	G 1/8
Installation position	as required, but preferably with actuator upright

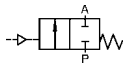
Materials



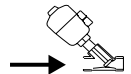
	Construction	
	Gunmetal casing	Stainl. steel casing
1. Valve body:	Gunmetal G-CuSn5ZnPb2%Ni	Stainl. steel 1.4408
2. Seals:	PTFE	PTFE
3. Pins:	1.4401	1.4401
4. Swivel plate:	CuZn36Pb1.5	1.4401
5. Spindle:	1.4201	1.4401
6. Nipple:	Brass CuZn	1.4401
7. Wiper:	PTFE	PTFE
8. V-seals:	PTFE	PTFE
9. Tube:	CuZn39 Pb3	1.4401
10. Tension spring:	1.4310	1.4310
11. O-ring:	Viton (FPM)	Viton (FPM)
12. Lip seal:	Viton (FPM)	Viton (FPM)
13. Screw:	Brass CuZn	Brass CuZn
14. Cylinder seal:	Perbunan (NBR)	Perbunan (NBR)
15. Actuator casing:	Polyamide	Polyamide
16. O-ring:	Perbunan (NBR)	Perbunan (NBR)
17. Lip seal:	Perbunan (NBR)	Perbunan (NBR)
18. Cone glands G1/8:	Brass	1.4305
19. Position indication:	St. Steel 1.4021	St. Steel 1.4401

Characteristic Values with Ordering Information (Other models on request)

Control Function A

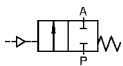


Flow above seat

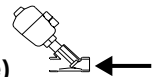


Port connection	DN [mm]	Kv value [Water]	Weight [g] (Gunmetal casing)	Weight [g] (Stainl. steel casing)	Order No.	
					Valve body material	
					Gunmetal	Stainless steel
G 3/8	13,0	3,7	639	597	131 145 N	134 674 T
G 1/2	13,0	3,8	671	625	002 373 D	130 407 Z
G 3/4	20,0	7,9	820	772	130 329 H	130 181 N

Control Function A

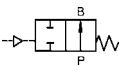


Flow under seat
(Waterhammer-free)

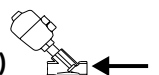


Port connection	DN [mm]	Kv value [Water]	Weight [g] (Gunmetal casing)	Weight [g] (Stainl. steel casing)	Order No.	
					Valve body material	
					Gunmetal	Stainless steel
G 3/8	13,0	3,7	639	597	131 141 J	134 675 U
G 1/2	13,0	3,8	671	625	002 198 X	002 196 M
G 3/4	20,0	7,9	820	772	002 199 Y	002 197 N

Control Function B

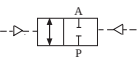


Flow under seat
(Waterhammer-free)



Port connection	DN [mm]	Kv value [Water]	Weight [g] (Gunmetal casing)	Weight [g] (Stainl. steel casing)	Order No.	
					Valve body material	
					Gunmetal	Stainless steel
G 3/8	13,0	3,7	639	597	131 143	134 676 V
G 1/2	13,0	3,8	671	625	130 326 W	130 178 A
G 3/4	20,0	7,9	820	772	130 327 X	130 179 B

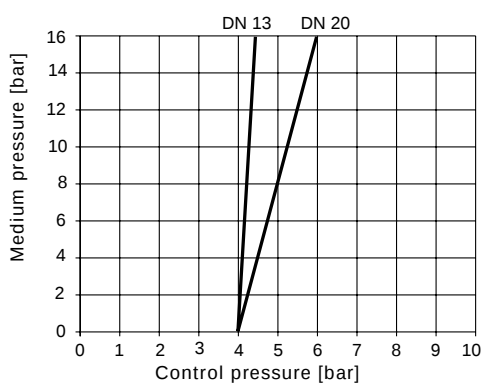
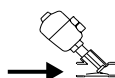
Control function I



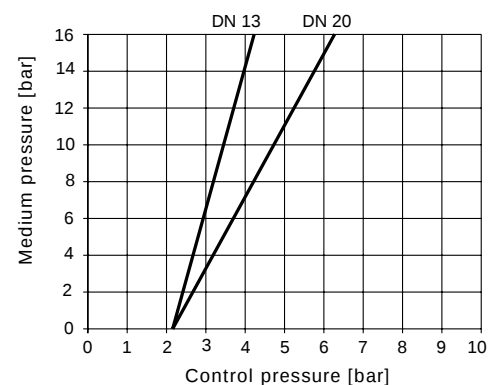
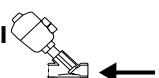
Flow under seat
(on request)

Pressure diagrams

Control function A,
Flow over seat¹⁾



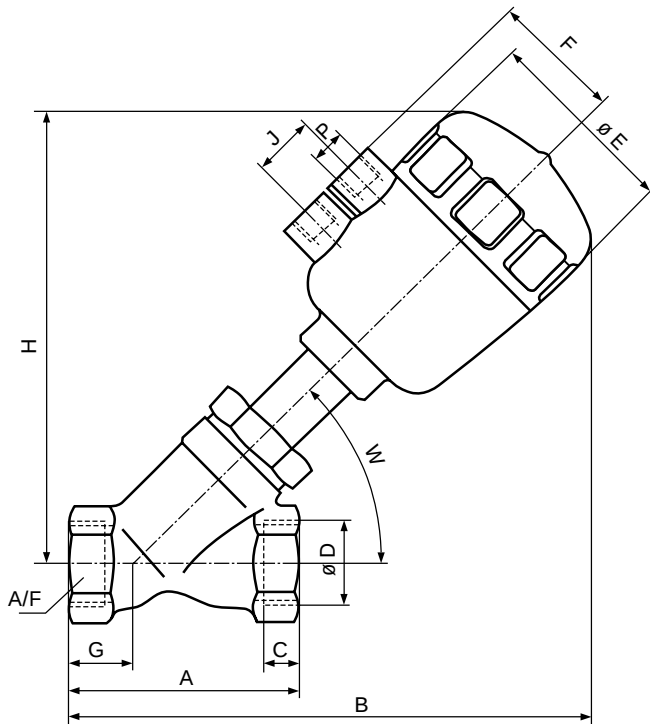
Control function B and I
Flow under seat



¹⁾Flow under seat:

Minimum control pressure 4 bar

Dimensions in mm



Port connection G-thread

Port connection øD	Body material	DN [mm]	W	A	B	C	øE	F	G	H	J	P	A/F
G 3/8	Gunmetal	13	45	65	136	12	53	33	19	117	16,5	G 1/8	27
G 3/8	Stainless steel	13	42	65	141	12	53	33	19	113	16,5	G 1/8	27
G 1/2	Gunmetal	13	45	85	147	14	53	33	33	114	16,5	G 1/8	27
G 1/2	Stainless steel	13	45	85	147	14	53	33	33	114	16,5	G 1/8	27
G 3/4	Gunmetal	20	45	95	155	12	53	33	36	119	16,5	G 1/8	32
G 3/4	Stainless steel	20	45	95	155	12	53	33	36	119	16,5	G 1/8	32

Port connection NPT-thread (on request)

Port connection øD	Body material	DN [mm]	W	A	B	C	øE	F	G	H	J	P	A/F
NPT 3/8	Gunmetal	13	45	65	136	10,3	53	33	19	117	16,5	G 1/8	27
NPT 3/8	Stainless steel	13	42	65	141	10,3	53	33	19	113	16,5	G 1/8	27
NPT 1/2	Gunmetal	13	45	85	147	14	53	33	33	114	16,5	G 1/8	27
NPT 1/2	Stainless steel	13	45	85	147	14	53	33	33	114	16,5	G 1/8	27
NPT 3/4	Gunmetal	20	45	95	155	14	53	33	36	119	16,5	G 1/8	32
NPT 3/4	Stainless steel	20	45	95	155	14	53	33	36	119	16,5	G 1/8	32

Port connection Rc-thread (on request)

Port connection øD	Body material	DN [mm]	W	A	B	C	øE	F	G	H	J	P	A/F
Rc 3/8	Gunmetal	13	45	65	136	10	53	33	19	117	16,5	G 1/8	27
Rc 3/8	Stainless steel	13	-	-	-	-	-	-	-	-	-	-	-
Rc 1/2	Gunmetal	13	45	85	147	13	53	33	33	114	16,5	G 1/8	27
Rc 1/2	Stainless steel	13	45	85	147	13	53	33	33	114	16,5	G 1/8	27
Rc 3/4	Gunmetal	20	45	95	155	14,5	53	33	36	119	16,5	G 1/8	32
Rc 3/4	Stainless steel	20	45	95	155	14,5	53	33	36	119	16,5	G 1/8	32