

2/2-Way; DN15-50; PN10; Stainless Steel



Advantages / Benefits

The superior alternative e.g. to complex actuated ball valves:

- ▶ Compact size
- ▶ Min. 2-4 times increased cycle life
- ▶ Superior packing gland reduces risk of leaks to atmosphere (proven record)
- ▶ More cost-effective due to lower installation and running costs
- ▶ More versatility by a comprehensive range of options and accessories
- ▶ Hygienically clean and smooth surfaces
- ▶ Externally sterilizable with optional PPS-actuator

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 of up to 130°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 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.

- Visual position indication
- low control air consumption
- 360° positioning of actuator control ports
- Simple conversion of control functions
- Safe and fast actuator servicing due to no preloaded spring tension and few parts
- Externally sterilizable with optional PPS-actuator
- Manual override (optional)
- Electr. position feedback (optional)
- Adjustable stroke limiter (optional)

Applications

Gases and liquids up to 10 bar

Steam up to 10 bar / 180°C (SIP)

Aggressive fluids (CIP-fluids)

Systems engineering

Sterilizers

Food and beverage processing

Dairy product processing

Pharmaceutical and cosmetics industry

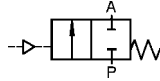
bürkert
Easy Fluid Control Systems

Tri-Clamp[®] Angle-Seat Valve, waterhammer-free

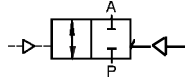
Technical Data

Control Functions

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

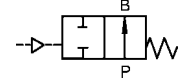


I 2/2-way flow valve,
with double-acting actuator
(on request)



Control Functions

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



Specifications

Connections ISO 2852	Orifice DN [mm]	Kv-Value Water [m ³ /h]	Max. Operating Pressure Differential Pressure ¹⁾		Required Control Pressure CFA [bar]	Weight [kg]	Actuator σ
			CFA [bar]	CFB [bar]			
15	13,0	4,2	10		3.9	0,83	50
				10			50
20	20,0	8	8		3.9	0,96	50
				10			50
25	25,0	19	10		4,2	1,83	63
				10			63
32	32,0	27,5	10		4.5	3,1	80
				10		2,7	63
40	40,0	42	8		4,5	3,5	80
				9		3,0	63
			10		4,5	4,0	100
				10		5,0	80
50	50,0	55	8		4,5	7,0	100
				6		6,0	63
			10		4,5	10,2	125
				10		6,5	80

¹⁾ Higher differential pressures by other combinations of actuators on request.

All pressures quoted are gauge pressures with respect to the prevailing atmospheric pressure.

Technical Data

Tri-Clamp [®] connection	ISO 2852	Body material	1.4581
Nominal pressure	PN 10	Seal material	PTFE
Min. required control pressure		Packing gland	self-adjusting PTFE-stem seals with intermediate relief and wiper
with control function A	see chart	Fluids	water, alcohols, salt solutions, lyes, organic solvents, steam, CIP-fluids, beverages, pharmaceutical products and cosmetics
with control function B	see diagram		
Control pressure	max. 10 bar		
Control fluid	neutral gases, air		
Max. viscosity	600 mm ² /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

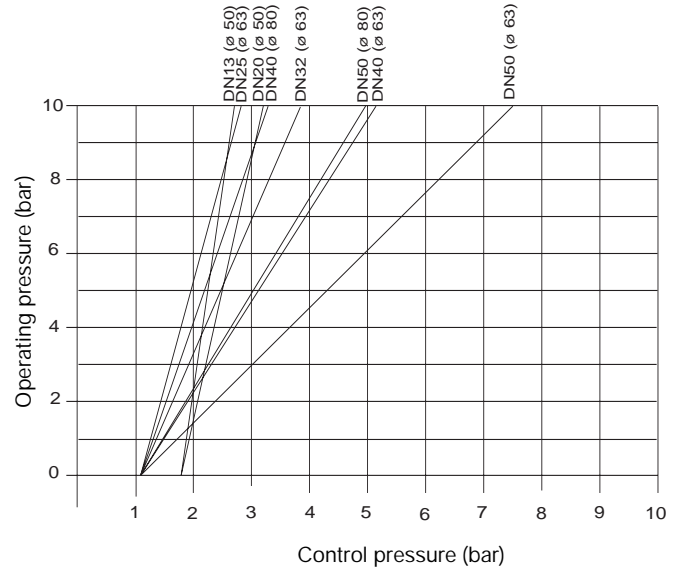
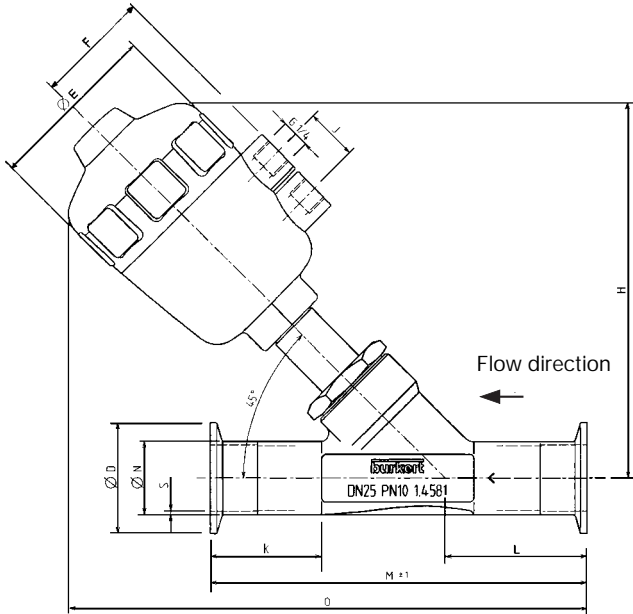
Type 2000 Waterhammer-free

Dimensions in mm

Pressure Chart

Length M to DIN 3202, F1

Control Function B



Specifications

Function	Control Functions A + B		Control Function A					Control Function B					
	ø50mm		ø63mm	ø80mm		ø100 mm		ø125mm	ø63mm			ø80mm	
DN	DN13	DN20	DN25	DN32	DN40	DN40	DN50	DN50	DN32	DN40	DN50	DN40	DN50
D	34	50.5	50.5	50.5	64	64	77.5	77.5	50.5	64	77.5	64	77.5
E	64	64	80	101	101	127	127	153	80	80	80	101	101
F	44	44	52	60	60	73	73	86	52	52	52	60	60
H	137	145	173	210	213	260	316	301	186	189	205	213	225
J	24	24	24	24	24	30	30	30	24	24	24	24	24
K	35	42.5	45	47.5	50	50	57.5	57.5	47.5	50	57.5	50	57.5
L	49	56.5	58	62.5	69	69	77.5	77.5	62.5	69	77.5	69	77.5
M	130	150	160	180	200	200	230	230	180	200	230	200	230
N	21.5	27	33.5	42.5	48.5	48.5	60.5	60.5	42.5	48.5	60.5	48.5	60.5
O	189	199	232	277	278	329	355	379	248	258	283	278	303
S	1.6	1.6	2	2	2	2	2.6	2.6	2	2	2.6	2	2.6

Ordering Chart

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

Control Function	Orifice DN [mm]	Actuator Size [mm]	Flow Direction	Operating Pressure ¹⁾ [bar]	Order-No..
A	13	ø 50	under seat	10	415 070 X
	20	ø 50	under seat	8	415 071 L
	25	ø 63	under seat	10	415 072 M
	32	ø 80	under seat	10	415 073 N
	40	ø 80	under seat	8	415 074 P
	40	ø 100	under seat	10	415 120 N
	50	ø 100	under seat	8	415 075 Q
	50	ø 125	under seat	10	415 121 B
	B	13	ø 50	under seat	10
20		ø 50	under seat	10	415 077 J
25		ø 63	under seat	10	415 078 T
32		ø 63	under seat	10	415 079 U
40		ø 63	under seat	9	415 080 J
40		ø 80	under seat	10	415 088 N
50		ø 63	under seat	6	415 081 F
50		ø 80	under seat	10	415 089 P

¹⁾Required control pressure 4.5 bar

On request:

- Double-acting actuator
- PPS-actuator for ambient temperatures up to 130°C
- Vacuum version

Options:

- Position feedback with Type 1062 or with external inductive switches
- Manual override
- NAMUR adapter for pilot valve
- Stroke adjustment (high/low flow)

Tri-Clamp®: Registered Trademark by Tri-Clover Inc.

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

We reserve the right to make technical changes without notice.
710-GB/ 2-0040