2/2-Way, DN15-65, PN16, Cast iron

Design

The 2/2-way-operated globe valve is available with cast iron valve body.

The valve is operated with a single- or double-acting actuator. Standard material is polyamide, optional for ambient temperatures up to 140 °C is PPS (e.g. external sterilizing).

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 range of solenoid pilot valve systems

Advantages / Benefits

- **High operating safety:**
  - **Extended spindle guide and wiper seal with self-adjusting double packing glands**
- **Maintenance-free actuator with long-life piston ring**
- **Easy to install: Infinitely rotable actuator allows pneumatic connection in any position**
- **Short face to face length DIN 3202, F1**
- **Cost savings in operation due to minimized control air consumption**
- **Standard optical position indication**
- **Comprehensive range of modular accessories (as required)**

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

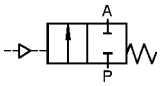
Chemical industry

bürkert Easy Fluid Control Systems

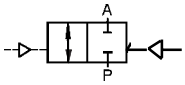
Technical Data

Control Functions

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

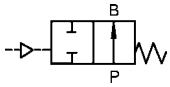


I 2/2-way flow valve,
with double-acting actuator
(on request)



Control Functions

B 2/2-way flow valve,
normally open spring return
(on request)



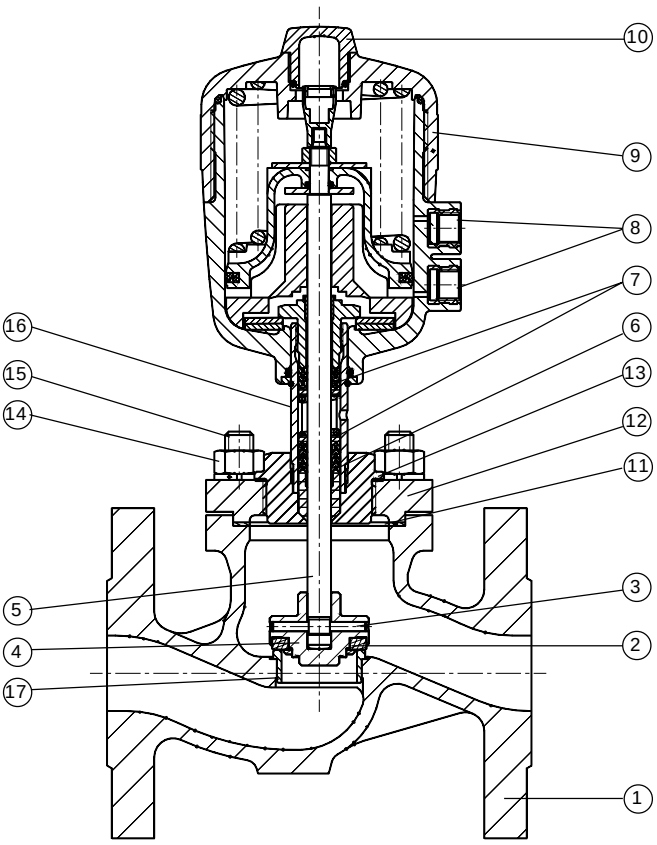
Operating data, valve

Valve body material	Cast iron,
Flange connection	DIN 2501
Orifice	DN 15-50
Nominal pressure	PN 16 according to DIN
Max. operating pressure (medium)	16 bar
Fluids	Neutral gases and liquids.
Max. viscosity	600 mm^2/s
Fluid temperature	min. -10 °C, max. +180 °C
Ambient temperature	min. -10 °C, max. +60 °C

Operating data, actuator

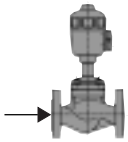
Control pressure	see ordering chart
Minimum control pressure	flow below seat: 4.5 bar flow above seat: see chart
Max. permissible control pressure	10 bar (see ordering chart)
Control medium	Neutral gases, air
Control connection	G 1/4
Installation position	as required, but preferably with actuator upright

Materials



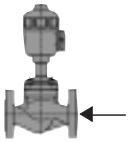
1.	Valve body:	Grey cast iron
2.	Seat-Seal:	PTFE
3.	Pin:	1.4401
4.	Swivel plate:	Brass
5.	Spindle:	1.4401
6.	Wiper:	PTFE
7.	V-seals:	PTFE
8.	Cone glands G1/4:	Brass
9.	Actuator casing:	Polyamide
10.	Position indication:	Polycarbonat
11.	Seal:	Graphite
12.	Flange:	GGG 40.3
13.	Flat-seal:	Klingerit
14.	Locknut:	A2L
15.	Screw:	A2L
16.	Tube:	Brass
17.	Screwed single seat:	A2L

Ordering Chart



Control function A, normally closed
Flow direction below seat

Nominal valve size	Orifice size [mm]	Actuator size [ømm]	Max. operating pressure (fluid) [bar]	Control pressure [bar]	Kv [m³/h]	Flow direction	Weight [kg]		**Item-No.**
DN15	15.0	63	10.0	4.2-10	4.0	below seat	3.5		424 277 Y
DN20	20.0	63	10.0	4.2-10	7.0	below seat	4.3		424 278 H
DN25	25.0	63	10.0	4.2-10	12.0	below seat	5.5		424 279 A
DN32	32.0	80	10.0	5.0-10	19.0	below seat	6.8		424 280 Y
DN40	40.0	80	7.5	5.0-10	31.0	below seat	8.7		424 281 M
DN40	40.0	100	10.0	4.4-10	31.0	below seat	10.3		424 282 N
DN50	50.0	100	7.5	4.4-10	47.0	below seat	13.5		424 283 P
DN50	50.0	125	10.0	3.2- 7	47.0	below seat	15.5		424 284 Q



Control function A, normally closed
Flow direction above seat

Nominal valve size	Orifice size [mm]	Actuator size [ømm]	Max. operating pressure (fluid) [bar]	Control pressure [bar]	Kv [m³/h]	Flow direction	Weight [kg]		**Item-No.** Stainless steel
DN15	15.0	63	16.0	See chart next page	4.0	above seat	3.5		424 285 R
DN20	20.0	63	16.0		7.0	above seat	4.3		424 286 J
DN25	25.0	63	16.0		12.0	above seat	5.5		424 287 K
DN32	32.0	63	16.0		19.0	above seat	6.5		424 288 U
DN40	40.0	63	16.0		31.0	above seat	7.7		424 289 V
DN50	50.0	63	16.0		47.0	above seat	10.7		424 290 S

Options (on request)

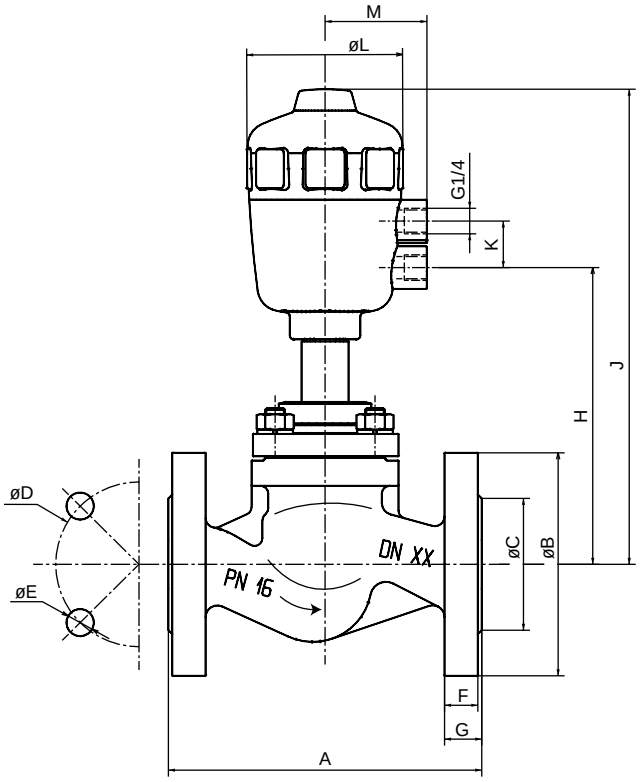
- Normally open or double-acting actuator
- PPS-actuator for ambient temperatures up to 140 °C
- Vacuum version
- Position feedback with Type 1062 or with external inductive switches
- Manual override
- NAMUR adapter for pilot valve
- Stroke adjustment (high/low flow)
- Positioner 1067

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"

Example: Type 2010 with Burkert Banjo-pilot valve

Dimensions [mm]

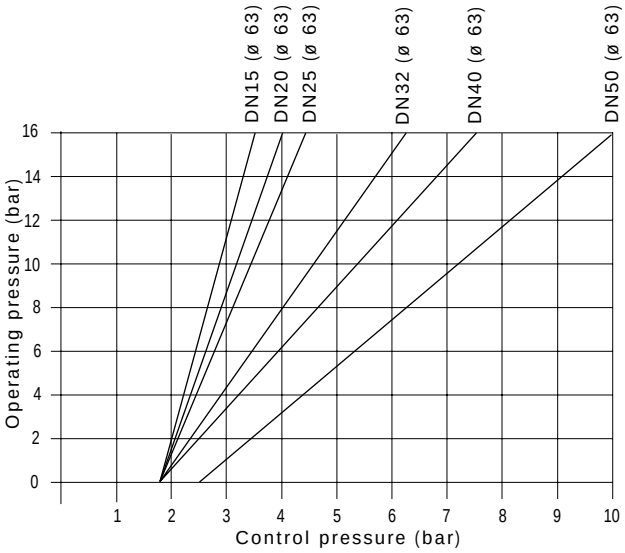


Flow direction:

flow direction below seat →
flow direction above seat ←

Pressure chart

Control Function A, flow above seat



Variable dimensions [mm]

DN	15	20	25	32	32	40	40	40	50	50	50
Actuator [ømm]	63	63	63	63	80	63	80	100	63	100	125
A	130.0	150.0	160.0	180.0	180.0	200.0	200.0	200.0	230.0	230.0	230.0
B	95.0	105.0	115.0	140.0	140.0	150.0	150.0	150.0	165.0	165.0	165.0
C	45.0	55.0	68.0	78.0	78.0	87.0	87.0	87.0	102.0	102.0	102.0
D	65.0	75.0	85.0	100.0	100.0	110.0	110.0	110.0	125.0	125.0	125.0
E	14.0	14.0	14.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
F	14.0	16.0	16.0	18.0	18.0	17.0	17.0	17.0	19.0	19.0	19.0
G	16.0	18.0	18.0	20.0	20.0	20.0	20.0	20.0	22.0	22.0	22.0
H	140.0	146.0	149.0	160.0	165.0	165.0	170.0	194.0	196.0	206.0	213.0
J	232.0	238.0	241.0	252.0	275.0	257.0	280.0	347.0	288.0	359.0	391.0
K	24.0	24.0	24.0	24.0	24.0	24.0	24.0	30.0	24.0	30.0	30.0
L	80.0	64.0	64.0	80.0	101.0	80.0	101.0	127.0	80.0	127.0	153.0
M	44.0	44.0	44.0	52.0	60.0	52.0	60.0	73.0	52.0	73.0	86.0