

HV CYLINDER VALVE, SERIES 25.0 / 25.1 / 25.2

For pumping and venting of HV systems when maximum conductance is important.



For harsh process environments

Protected gate seal

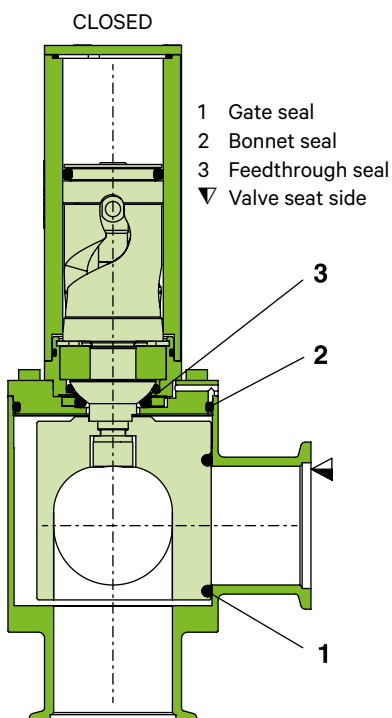
Resistant against differential pressure

Mechanically locked in open and closed position

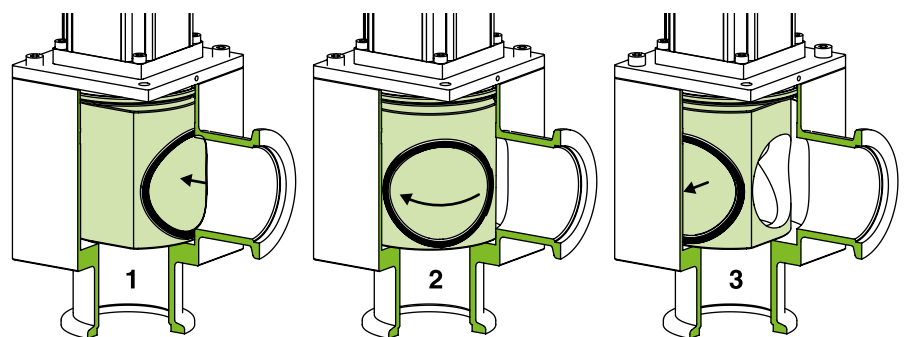
MAIN FEATURES

Sizes	DN 16 – 40 mm (5/8" – 1½")
Actuator	pneumatic: double acting
Body material	aluminum
Standard flanges	ISO-KF, ISO-KF «claw»

FUNCTIONAL PRINCIPLE



The cylinder-shaped gate performs a TILT-TURN-TILT movement. This prevents the gate seal from sliding on the valve seat.



3 steps from CLOSED to OPEN:

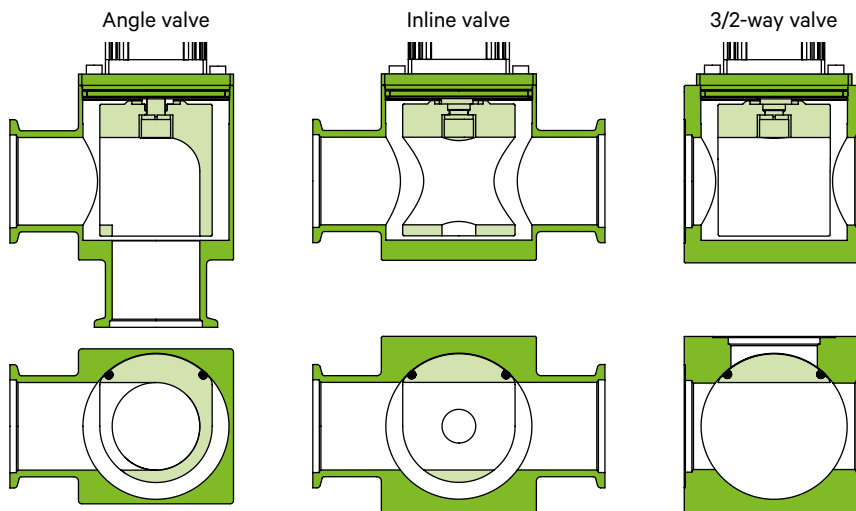
- 1 TILT movement of gate. Gate seal lifts off from valve seat.
- 2 90° TURN of gate towards the open position.
- 3 TILT movement of gate towards the valve body. Gate seal is protected.

MAXIMUM CONDUCTANCE

The conductance is comparable to a 90° elbow (angle valve) or a straight tube (inline valve). The gas flow is not inhibited by the gate.

PROTECTED GATE SEAL

The gate seal is pressed against the valve body in closed and open position. The contact with process gas is minimized.



TECHNICAL DATA

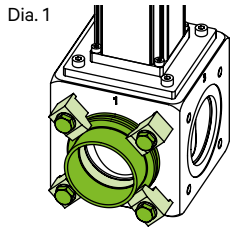
Leak rate	Valve body, valve seat	$< 1 \cdot 10^{-9}$ mbar ls ⁻¹
Pressure range		$1 \cdot 10^{-8}$ mbar to 3 bar (abs)
Differential pressure on the gate	In opening direction	≤ 1.2 bar
	In closing direction	≤ 3.0 bar
Differential pressure at opening		≤ 1.2 bar
Cycles until first service		100 000
Temperature ¹⁾	Valve body	≤ 120 °C
	Actuator	≤ 120 °C
	Position indicator	≤ 80 °C
Material	Valve body	EN AW-6060 (3.3206), EN AW-6082 (3.2315)
	Gate, bonnet flange	EN AW-6082 (3.2315)
	Shaft	AISI 316L (1.4435) with Ni-PTFE coating
	Gate fastening screw, washer	A4-80 with Ni-PTFE coating
Seal	Bonnet, gate, feedthrough	FKM (Viton®)
Feedthrough		rotary feedthrough
Mounting position		any
Position indicator: contact rating	Voltage	10 – 30 V DC
	Current	5 – 100 mA
Valve position indication		LED ²⁾

DN (nominal I.D.)		Conductance (molecular flow)				Compressed air min. – max. overpressure		Volume of pneumatic actuator		Closing or opening time	Weight	
		25.0	25.1	25.2								
mm	inch	ls ⁻¹	ls ⁻¹	A → B ls ⁻¹	A → C ls ⁻¹	bar	psi	l	ft ³	s	kg	lbs
16	5/8	5	6	8	7	4 – 8	58 – 116	0.032	0.0011	0.6	1.40	3
25	1	16	19	31	24	4 – 8	58 – 116	0.032	0.0011	0.6	1.40	3
40	1½	46	55	90	67	4 – 8	58 – 116	0.032	0.0011	0.6	1.70	3.70

¹⁾ Maximum values: depending on operating conditions and sealing materials.

²⁾ Valves with position indicator.

OPTIONS, CUSTOMIZED SOLUTIONS



ACTUATOR

- One-touch fitting for pneumatic tube

VALVE

- Other sealing materials, e. g. FFKM
- Valve DN 40 with flange ISO-KF DN 50 «claw» (Dia. 1)
- Stainless steel version
- Heating cartridge for DN 40

SPARE PARTS

We can offer a wide variety of spare parts. Please contact us for details and an offer.

Thank you for specifying the fabrication number of the valve indicated on the identification tag when asking for spare parts.

ACCESSORIES

- Flange connections for installation of the valve: see series 31
- Solenoid valve for external mounting

ORDERING INFORMATION

25.0
Angle valve with pneumatic actuator
double acting

DN		Ordering numbers	
mm	inch	ISO-KF	
		without position indicator	with position indicator
16	5/8	25024-KA14	25024-KA24
25	1	25028-KA14	25028-KA24
40	1½	25032-KA14	25032-KA24

25.1
Inline valve with pneumatic actuator
double acting

DN		Ordering numbers	
mm	inch	ISO-KF	
		without position indicator	with position indicator
16	5/8	25124-KA14	25124-KA24
25	1	25128-KA14	25128-KA24
40	1½	25132-KA14	25132-KA24

25.2
3/2-way valve with pneumatic actuator
double acting

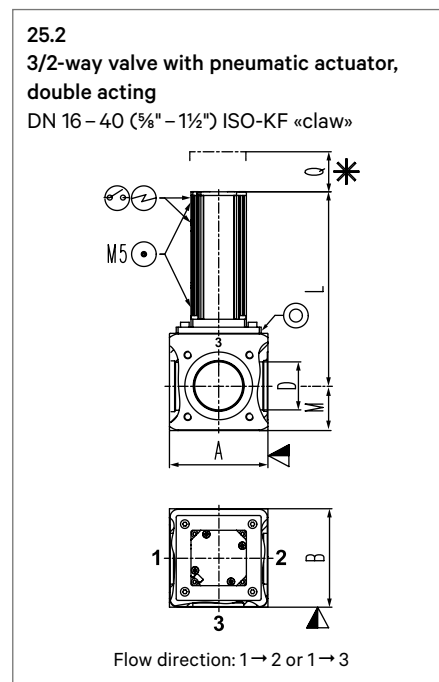
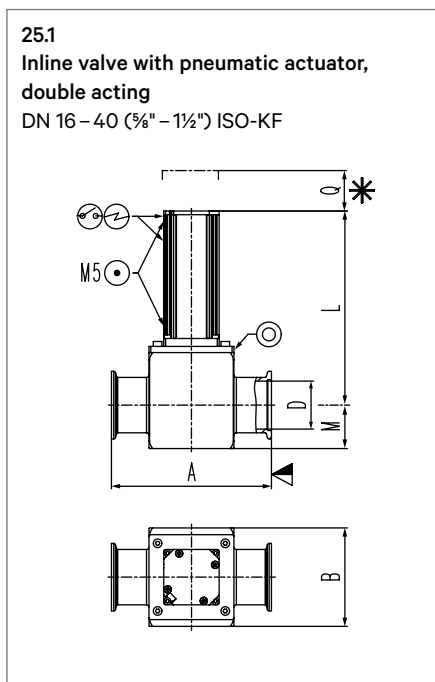
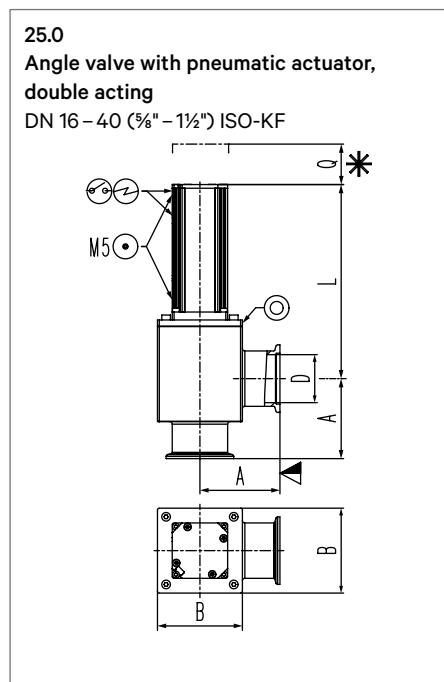
DN		Ordering numbers	
mm	inch	ISO-KF «claw»	
		without position indicator	with position indicator
16	5/8	25224-EA14	25224-EA24
25	1	25228-EA14	25228-EA24
40	1½	25232-EA14	25232-EA24

ORDERING INFORMATION FOR VALVES WITH OPTIONS

Basic ordering number plus «-X»: -X to be specified

Example: 25032-KA14-X, X = one-touch fitting for 4 mm pneumatic tube

DIMENSIONS



- ▼ Valve seat side
- * Required for dismantling
- ⊙ Compressed air connection
- ⊕ Electrical connection
- ⊗ Position indicator
- ⊙ Leak detection hole

DN	mm inch	16 5/8	25 1	40 1½
A	mm inch	40 1.57	50 1.97	65 2.56
B	mm inch	54 2.13	54 2.13	69 2.72
D	mm inch	16 0.63	25 0.98	39 1.54
L	mm inch	150.80 5.94	150.80 5.94	157.80 6.21
Q	mm inch	55 2.17	55 2.17	68 2.68

DN	mm inch	16 5/8	25 1	40 1½
A	mm inch	80 3.15	100 3.94	130 5.12
B	mm inch	60 2.36	60 2.36	80 3.15
D	mm inch	16 0.63	25 0.98	39 1.54
L	mm inch	150.80 5.94	150.80 5.94	157.80 6.21
M	mm inch	23.30 0.92	23.30 0.92	35.30 1.39
Q	mm inch	55 2.17	55 2.17	68 2.68

DN	mm inch	16 5/8	25 1	40 1½
A	mm inch	60 2.36	60 2.36	80 3.15
B	mm inch	60 2.36	60 2.36	80 3.15
D	mm inch	16 0.63	25 0.98	39 1.54
L	mm inch	150.80 5.94	150.80 5.94	157.80 6.21
M	mm inch	29.30 1.15	29.30 1.15	36.30 1.43
Q	mm inch	55 2.17	55 2.17	68 2.68