

Main applications

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

For harsh process environments (high resistance to corrosion and fluor)



Series 25.0
Angle valve

Series 25.1
Inline valve

Series 25.2
3/2-way valve

Ordering information

Series 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

Series 25.1
Inline valve with pneumatic actuator
double acting

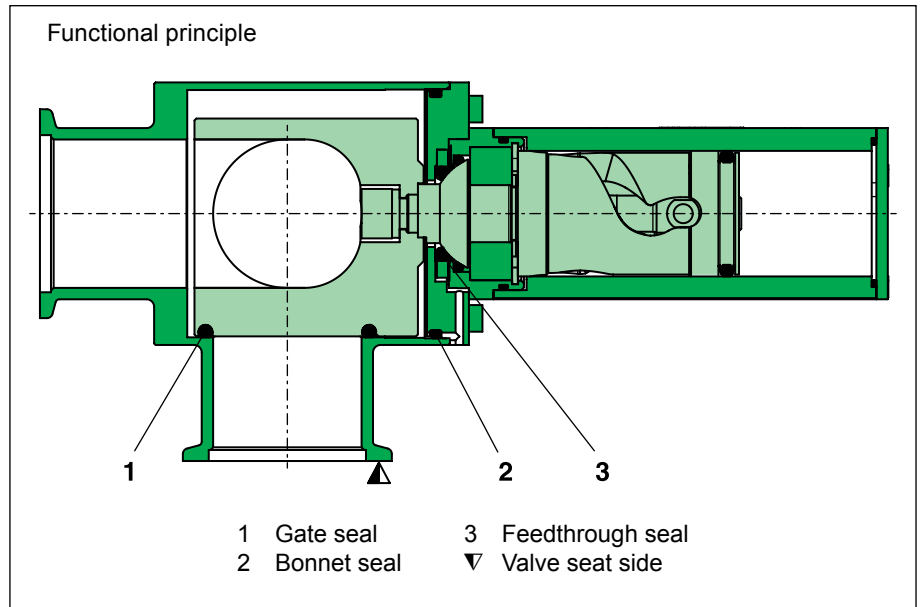
DN		Ordering numbers	
mm	inch	ISO-KF	
		without position indicator	with position indicator
16	5/8	25124-KA14	25124-KA24
25	1	25128-KA14	25128-KA24
40	1½	25132-KA14	25132-KA24

Series 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

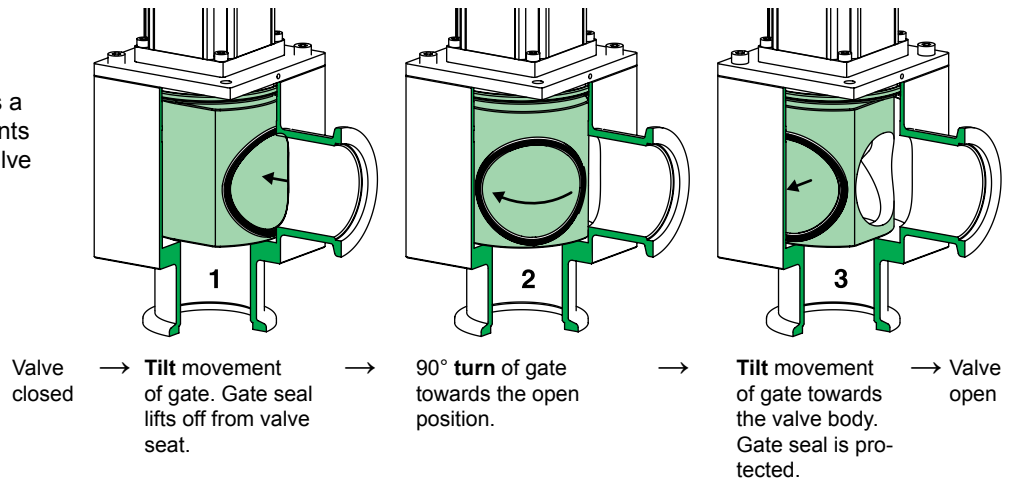
Features

- Body material: aluminum
- Parts in contact with vacuum: aluminum
- Angle, inline and 3/2-way versions
- Rotary feedthrough
- Maximum conductance
- Protected gate seal
- Resistant against differential pressure
- Mechanically locked in open and closed position
- Low particle count



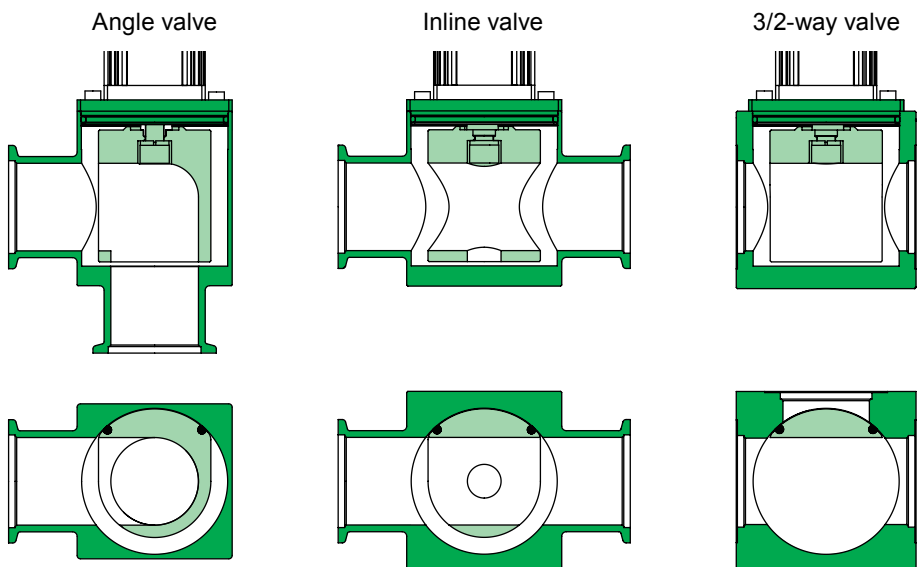
Function

The cylinder-shaped gate performs a **tilt-turn-tilt** movement. This prevents the gate seal from sliding on the valve seat.



Maximum conductance

The conductance is comparable to a 90° elbow (series 25.0) or a straight tube (series 25.1). 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 and does not contact the process gas.

Technical data

Leak rate: valve body, valve seat	< 1 · 10 ⁻⁹ mbar ls ⁻¹
Pressure range	1 · 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	100000
Temperature ¹⁾	
– Valve body	≤ 120 °C
– Actuator	≤ 120 °C
– Position indicator	≤ 80 °C
Material	
– Valve body	EN AW-6060 (3.3206), -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 VDC
– Current	5–100 mA
Valve position indication	LED ²⁾

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

²⁾ Valves with position indicator

DN (nominal I. D.)		Standard flanges	Conductance (molecular flow)				Compressed air min. – max. overpressure		Volume of pneumatic actuator		Closing or opening time	Weight	
mm	inch		ls ⁻¹				bar	psi	l	ft ³		kg	lbs
			Series 25.0	Series 25.1	Series 25.2 1→2 1→3								
16	5/8	ISO-KF	5	6	8	7	4–8	58–116	0.032	.0011	0.6	1.4	3.0
25	1	ISO-KF	16	19	31	24	4–8	58–116	0.032	.0011	0.6	1.4	3.0
40	1 1/2	ISO-KF «claw» ³⁾	46	55	90	67	4–8	58–116	0.032	.0011	0.6	1.7	3.7

³⁾ Flange ISO-KF «claw». See Dia. 1 on next page.

Spare parts

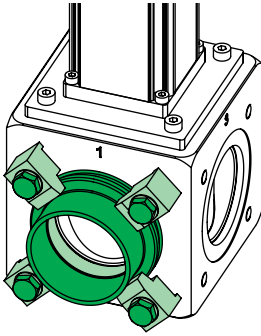
- **Seals**
on request (specify fabrication number of valve)

Accessories

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

Options

Dia. 1



Flange ISO-KF «claw»

Actuator

- One-touch fitting for pneumatic tube

Valve

- Other sealing materials, e. g. FFKM
- Valve DN 40 with flange ISO-KF DN 50 «claw»
- Stainless steel version with flange ISO-KF «claw»
- Surface treatment, e. g. aluminum, nickel-plated
- Heating cartridge for DN 40
- Water-cooled body

Ordering information for options:

Ordering No. of valve-X

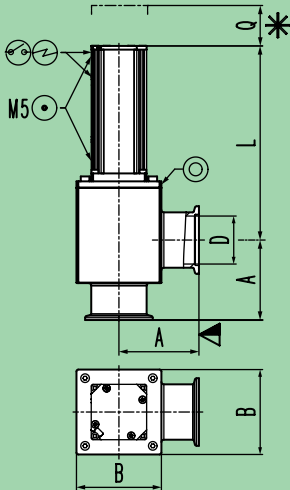
(e. g. 25032-KA14-X, X = one-touch fitting for 4 mm pneumatic tube)

Dimensions

Series 25.0

Angle valve with pneumatic actuator

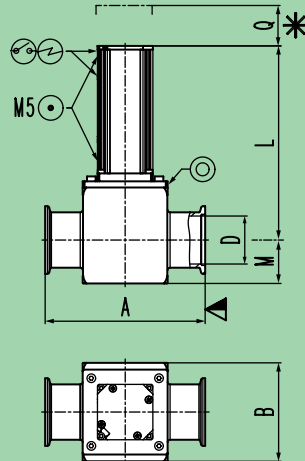
DN 16–40 (5/8"–1½") ISO-KF



Series 25.1

Inline valve with pneumatic actuator

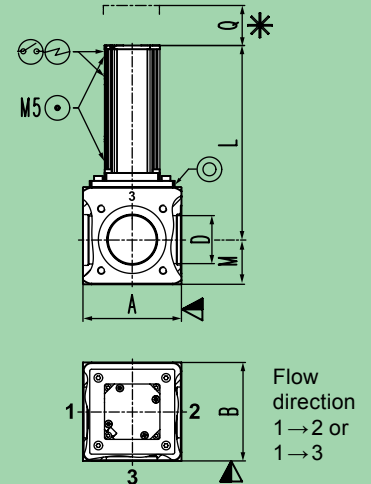
DN 16–40 (5/8"–1½") ISO-KF



Series 25.2

3/2-way valve with pneumatic actuator

DN 16–40 (5/8"–1½") ISO-KF «claw»



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
M	mm inch	–	–	–
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

▽ Valve seat side

⊙ Compressed air connection

⊙ Position indicator

* Required for dismantling

⊙ Electrical connection

⊙ Leak detection hole