MINI VACUUM GATE VALVE, SERIES 01.2

General purpose valve for isolation in vacuum applications.

Manual

Pneumatic

Low cost

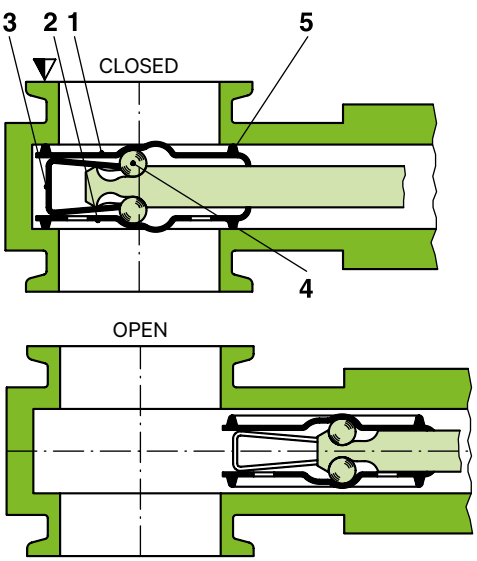
Compact and simple design

Mechanically locked in closed position

MAIN FEATURES

Sizes	DN 16 – 50 mm (⅝" – 2")
Actuators	manual with toggle lever pneumatic: double acting
Body material	aluminum
Feedthrough	shaft feedthrough
Standard flanges	ISO-KF
Sealing technology	VATLOCK (see glossary)

FUNCTIONAL PRINCIPLE



1 Gate
2 Counter-plate
3 Spring stop
4 Ball pairs
5 Gate seal
▼ Valve seat side

TECHNICAL DATA

Leak rate	Valve body, valve seat	$< 1 \cdot 10^{-9}$ mbar ls^{-1}
Pressure range		$1 \cdot 10^{-7}$ mbar to 1 bar (abs)
Differential pressure on the gate		≤ 1 bar
Differential pressure at opening		≤ 30 mbar
Cycles until first service [1]		50 000
Temperature [1]	Valve body Manual and pneumatic actuator Solenoid valve Position indicator	≤ 100 °C ≤ 80 °C ≤ 50 °C ≤ 80 °C
Heating and cooling rate		≤ 30 °C h^{-1}
Material	Valve body Gate	EN AW-6082 (3.2315) AISI 301 (1.4310)
Seal	Bonnet, gate	FKM (Viton®)
Feedthrough		shaft feedthrough
Mounting position		any
Solenoid valve		24 V DC, 5.4 W (others on request)
Position indicator: contact rating	Voltage Current Power	≤ 50 V AC/DC ≤ 0.1 A max. 10 W
Valve position indication		visual (mechanical)

			Valve with manual actuator		Valve with pneumatic actuator						
DN (nominal I.D.)		Conductance (molecular flow) (depending on A-dimension and flange type)	Weight		Compressed air min. – max. overpressure		Volume of pneumatic actuator		Closing or opening time	Weight	
mm	inch	ls^{-1}	kg	lbs	bar	psi	l	ft^3	s	kg	lbs
16	⅝	10	0.40	0.90	4.5 – 7	65 – 102	0.01	0.0004	0.80	0.80	1.80
25	1	34	0.40	0.90	4.5 – 7	65 – 102	0.03	0.001	1.10	0.80	1.80
40	1½	140	0.70	1.50	4.5 – 7	65 – 102	0.07	0.002	1.20	1.20	2.70
50	2	260	0.70	1.50	4.5 – 7	65 – 102	0.07	0.002	1.30	1.20	2.70

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

OPTIONS, CUSTOMIZED SOLUTIONS

ACTUATOR

- Solenoid valve for impulse actuation:
  last valve position is maintained at power failure
- Solenoid valve separate, for external mounting
- Other solenoid valve voltage (standard 24 V DC)
- Manual emergency operation on solenoid valve lockable

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

ORDERING INFORMATION
FOR STANDARD VALVES

Valve with manual actuator
toggle lever

DN		Ordering numbers
mm	inch	ISO-KF
16	⅝	01224-KA06
25	1	01228-KA06
40	1½	01232-KA06
50	2	01234-KA06

Valve with pneumatic actuator
double acting
without solenoid valve
without position indicator

DN		Ordering numbers
mm	inch	ISO-KF
16	⅝	01224-KA14
25	1	01228-KA14
40	1½	01232-KA14
50	2	01234-KA14

without solenoid valve, with position indicator: 012 . . -KA**24**
with solenoid valve, with position indicator: 012 . . -KA**44** (specify control voltage)

ORDERING INFORMATION
FOR VALVES WITH OPTIONS

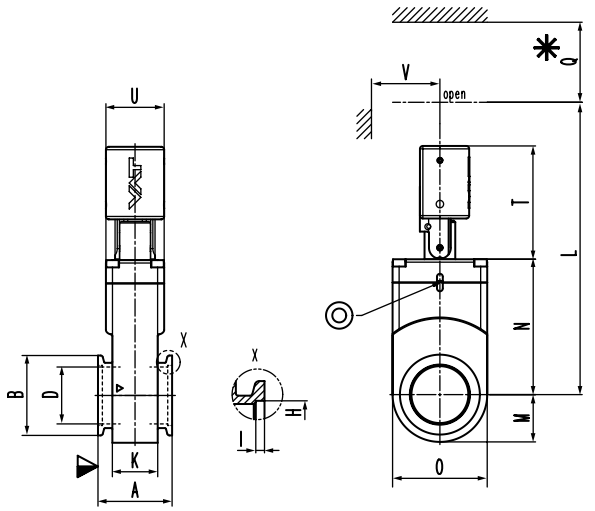
Basic ordering number plus «-X»: -X to be specified

Example: 01232-KA44-X, X = solenoid valve for impulse actuation

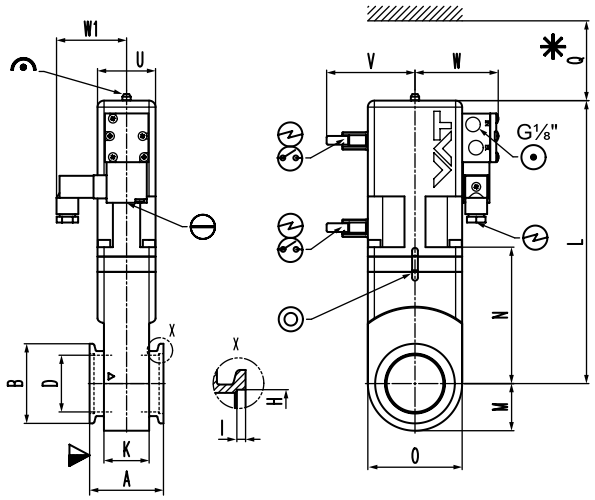
A

DIMENSIONS

Valve with manual actuator

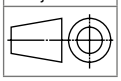


Valve with pneumatic actuator



▼ Valve seat side
✳ Required for dismantling
⊙ Compressed air connection
⊖ Electrical connection
◠ Mechanical position indication
⊘ Position indicator
⊖ Emergency operation

Projection E



DN		16	25	40	50
	mm				
	inch	⅝	1	1½	2
A	mm	40	50	51	55
	inch	1.57	1.97	2.01	2.17
B	mm	30	40	55	75
	inch	1.18	1.57	2.17	2.95
D	mm	15	24	39	49
	inch	0.59	0.94	1.54	1.93
H	mm	17.20	26.20	41.20	52.20
	inch	0.68	1.03	1.62	2.06
I	mm	3	3	3	3
	inch	0.12	0.12	0.12	0.12
K	mm	25	32	31	33
	inch	0.98	1.26	1.22	1.30
L	mm	97.30	139	200.80	235.80
	inch	3.83	5.47	7.91	9.28
M	mm	15	22	32.50	37.50
	inch	0.59	0.87	1.28	1.48
N	mm	39	58.50	93	108
	inch	1.55	2.30	3.66	4.25
O	mm	30	44	65	75
	inch	1.18	1.73	2.56	2.95
Q	mm	25	35	55	65
	inch	0.98	1.38	2.17	2.56
T	mm	33.30	47.50	77.80	87.80
	inch	1.31	1.87	3.06	3.46
U	mm	25	32	40	40
	inch	0.98	1.26	1.57	1.57
V	mm	20	30	47	52
	inch	0.79	1.18	1.85	2.05

DN		16	25	40	50
	mm				
	inch	⅝	1	1½	2
A	mm	40	50	51	55
	inch	1.57	1.97	2.01	2.17
B	mm	30	40	55	75
	inch	1.18	1.57	2.17	2.95
D	mm	15	24	39	49
	inch	0.59	0.94	1.54	1.93
H	mm	17.20	26.20	41.20	52.20
	inch	0.68	1.03	1.62	2.06
I	mm	3	3	3	3
	inch	0.12	0.12	0.12	0.12
K	mm	25	32	31	33
	inch	0.98	1.26	1.22	1.30
L	mm	105	135.90	195.10	220.1
	inch	4.13	5.35	7.68	8.66
M	mm	15	22	32.50	37.50
	inch	0.59	0.87	1.28	1.48
N	mm	45.30	62.30	94	109
	inch	1.78	2.45	3.70	4.29
O	mm	30	44	65	75
	inch	1.18	1.73	2.56	2.95
Q	mm	25	35	55	65
	inch	0.98	1.38	2.17	2.56
U	mm	25	32	40	40
	inch	0.98	1.26	1.57	1.57
V	mm	52.80	57.40	60.90	64.70
	inch	2.08	2.26	2.40	2.55
W	mm	49.80	56.80	57.40	62.40
	inch	1.96	2.34	2.26	2.46
W1		48.40	48.40	48.30	48.30
		1.91	1.91	1.90	1.90