Space saving due to direct mounting
between DIN flanges / sealing surfaces

Body material

aluminum

Manual actuator

DN 50: toggle lever
DN 63 - 100: push rod

DN		Ordering numbers
mm	inch	
50	2	08234-FA06
63	2 1/2	08136-FA03
80	3	08138-FA03
100	4	08140-FA03

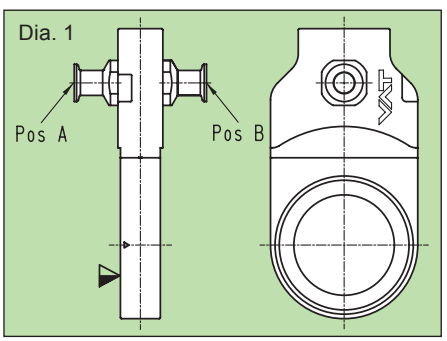
Pneumatic actuator

double acting
with position indicator
with solenoid

50	2	08234-FA44
63	2 1/2	08136-FA44
80	3	08138-FA44
100	4	08140-FA44

without position indicator, without solenoid: 08 . . . -FA**1**4
with position indicator, without solenoid: 08 . . . -FA**2**4

Options



▽ valve seat side

Actuator:

- Solenoid for impulse actuation:
  actual valve position is maintained at power failure
- Solenoid separate, for external mounting
- Solenoid for 12, 48 V DC
  24, 48, 100, 115, 200, 230 V 50 Hz
  24, 100, 115, 200, 230 V 60 Hz

Valve:

- Port with seal made of VITON (diagram 1) for DN 63 - 100
  for roughing (by-pass), venting or for gauges
  (recommended port: ISO-KF16 for DN 63, ISO-KF25 for DN 80 and 100)

Ordering information for options:
Ordering No. of valve-X (e. g. 08140-FA44-X, X = port ISO-KF25 at position A)

Seal kit

Consisting of seals for flanges, gate and lower part of body
Ordering No.: see operating manual or price list

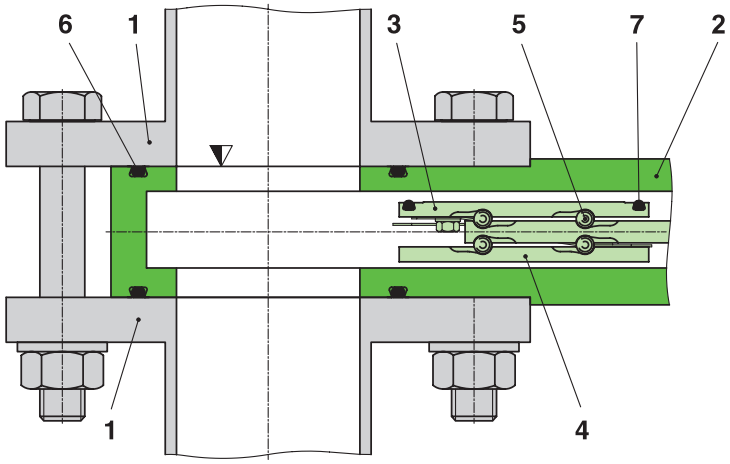
Sealing materials

Gate: VITON

Bonnet: VITON

Feedthrough

VITON / shaft feedthrough



1 vacuum tubing
2 body
3 valve gate
4 counter plate
5 ball pairs
6 flange seal
7 gate seal
▽ valve seat side

Features

Flanges with DIN centering insert

VATLOCK configuration (see glossary)

Technical data

Continued next page

Leak rate: body, valve seat	< $1 \cdot 10^{-9}$ mbar $l s^{-1}$
Pressure range	$1 \cdot 10^{-7}$ mbar to 1.6 bar (abs)
Differential pressure on the gate - DN 50 / 63 - 100	≤ 1 / ≤ 1.6 bar in either direction
Differential pressure at opening	≤ 30 mbar
Cycles until first service - DN 50 / 63 - 100	50 000 / 200 000
Temperature [1)] - Valve body DN 50 / 63 - 100 - Manual actuator - Pneumatic actuator - Position indicator - Solenoid	 ≤ 100°C / ≤ 120°C ≤ 80°C ≤ 80°C ≤ 80°C ≤ 50°C
Material - Valve body DN 50 / 63 - 100 - Mechanism	 AlMgSi1 / AlMg4.5Mn AISI 304 (1.4301), AISI 301 (1.4310) AISI 420 (1.4034)
Seal - Bonnet - Gate DN 50 / 63 - 100	 VITON VITON vulcanized / VITON
Mounting position	any
Solenoid	24 V DC, 5.4 W (others see «Options»)

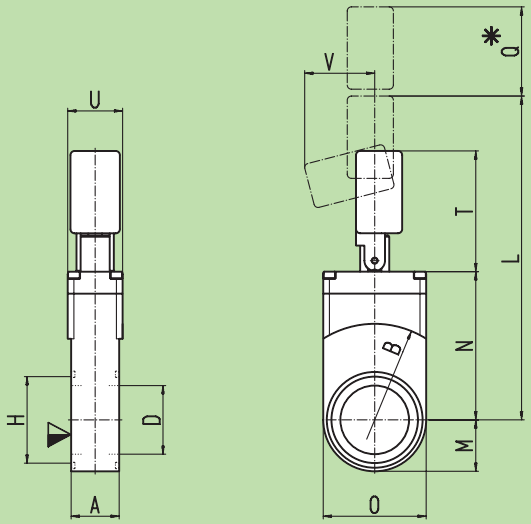
Position indicator: contact rating	DN 50	DN 63 - 100
- Voltage	≤ 50 V AC	≤ 250 V AC
- Current	≤ 0.5 A	≤ 2 A
- Power	max. 10 W	

Valve position	visual (mechanical)

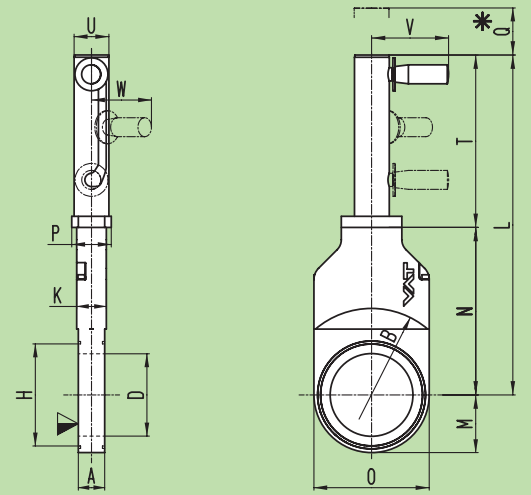
[1)] Maximum values: depending on operating conditions and sealing materials

Manual actuator

DN 50 (2")



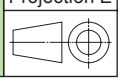
DN 63 - 100 (2½" - 4")



DN		50	63	80	100
	inch	2	2 ½	3	4
A	mm	35	32	32	32
	inch	1.38	1.26	1.26	1.26
B	mm	140	160	190	210
	inch	5.51	6.3	7.48	8.27
D	mm	50	65	80	100
	inch	1.97	2.56	3.15	3.94
H	mm	63	88	104	124
	inch	2.48	3.46	4.09	4.88
I.D. x d [1]		63.09x3.53	88.49x3.53	104.37x3.53	123.42x3.53
		2.48x0.139	3.49x0.139	4.11x0.139	4.86x0.139
K	mm	–	36	36	36
	inch	–	1.42	1.42	1.42
L	mm	240	329.5	363	413
	inch	9.45	12.97	14.29	16.26
M	mm	37.5	50	59	70
	inch	1.48	1.97	2.32	2.76
N	mm	108	155.5	173.5	203.5
	inch	4.25	6.12	6.83	8.01
O	mm	75	100	118	140
	inch	2.95	3.94	4.65	5.51
P	mm	–	48	48	48
	inch	–	1.89	1.89	1.89
Q	mm	65	25	25	25
	inch	2.56	0.98	0.98	0.98
T	mm	93	174	189.5	209.5
	inch	3.67	6.85	7.46	8.25
U	mm	40	43	43	43
	inch	1.57	1.69	1.69	1.69
V	mm	55	94	94	94
	inch	2.17	3.7	3.7	3.7
W	mm	–	75	75	75
	inch	–	2.95	2.95	2.95

[1] dimensions of flange O-ring

Projection E



▼ valve seat side

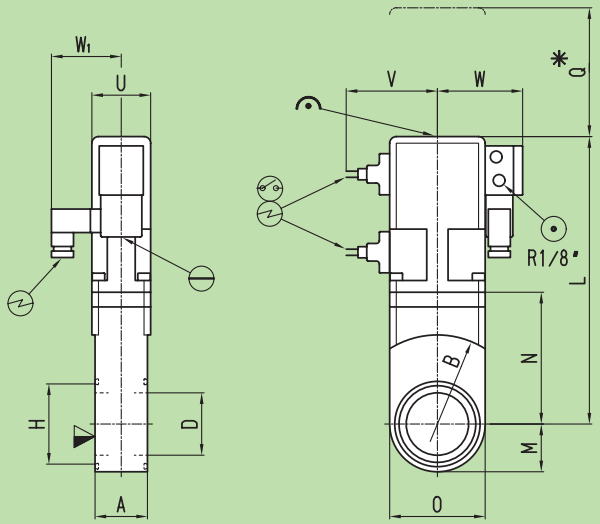
✳ required for dismantling

Technical data

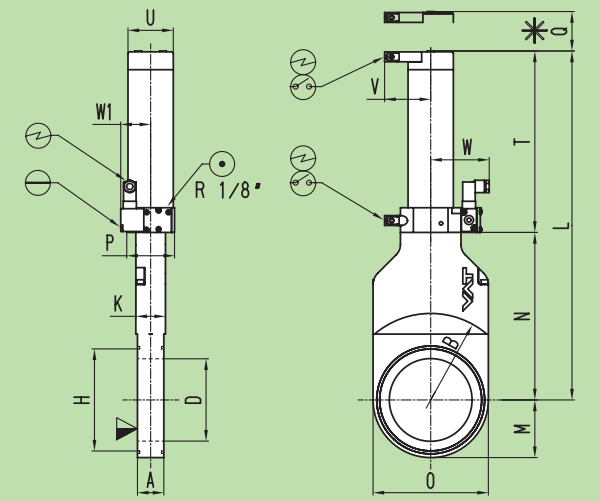
DN (nominal I. D.)		molecular flow conductance	manual weight		pneumatic compressed air pressure min. - max. overpressure		volume of air cylinder		closing or opening time	weight	
mm	inch	$l s^{-1}$	kg	lbs	bar	psi	l	ft^3	s	kg	lbs
50	2	410	0.7	1.5	4.5 - 7	65 - 100	0.07	0.002	1.2	1.2	2.7
63	2 ½	1000	1.5	3.3	4 - 7	55 - 100	0.16	0.0056	1.5	1.5	3.3
80	3	2000	2.3	5.1	4 - 7	55 - 100	0.2	0.0071	1.7	2.3	5.1
100	4	3800	3	6.6	4 - 7	55 - 100	0.22	0.0078	2	3	6.6

Pneumatic actuator

DN 50 (2")



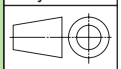
DN 63 - 100 (2½" - 4")



DN		50	63	80	100
	inch	2	2 1/2	3	4
A	mm	35	32	32	32
	inch	1.38	1.26	1.26	1.26
B	mm	140	160	190	210
	inch	5.51	6.3	7.48	8.27
D	mm	50	65	80	100
	inch	1.97	2.56	3.15	3.94
H	mm	63	88	104	124
	inch	2.48	3.46	4.09	4.88
I.D. x d [1]		63.09x3.53	88.49x3.53	104.37x3.53	123.42x3.53
		2.48x0.139	3.49x0.139	4.11x0.139	4.86x0.139
K	mm	–	36	36	36
	inch	–	1.42	1.42	1.42
L	mm	220	341.5	375	425
	inch	8.66	13.44	14.76	16.73
M	mm	37.5	50	59	70
	inch	1.48	1.97	2.32	2.76
N	mm	103	155.5	173.5	203.5
	inch	4.06	6.12	6.83	8.01
O	mm	75	100	118	140
	inch	2.95	3.94	4.65	5.51
P	mm	–	58	58	58
	inch	–	2.28	2.28	2.28
Q	mm	65	25	25	25
	inch	2.56	0.98	0.98	0.98
T	mm	–	186	201.5	221.5
	inch	–	7.32	7.93	8.72
U	mm	40	55	55	55
	inch	1.57	2.17	2.17	2.17
V	mm	65	56	56	56
	inch	2.56	2.2	2.2	2.2
W	mm	66	72	72	72
	inch	2.6	2.83	2.83	2.83
W1	mm	50	36.5	36.5	36.5
	inch	1.97	1.44	1.44	1.44

[1] dimensions of flange O-ring

Projection E



▼ valve seat side
✳ required for dismantling
⊖ emergency operation
⊙ compressed air connection
⊜ electrical connection
⊘ position indicator
⊙ mechanical position indication