

## Main applications

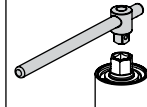
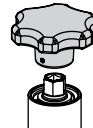
For vacuum processes with extreme UHV requirements



## Ordering information

Valve with manual actuator  
hexagon head

DN		Valve CF-R	Ordering numbers			
mm	inch		handwheel <sup>1)</sup>	T-bar tool <sup>1)</sup>	service kit 1 <sup>2)</sup>	service kit 2 <sup>2)</sup>
16	5/8	54124-GE02	240039	312699	529581	529582
40	1 1/2	54132-GE02	531966	530026	530022	530023
63	2 1/2	54136-GE02	—	312731	530024	530025



## Technical data

Leak rate: valve body, valve seat	<math> < 1 \cdot 10^{-10}</math> mbar ls <sup>-1</sup>
Pressure range	XHV to 2 bar (abs)
Differential pressure on the gate	≤ 2 bar
Differential pressure at opening	≤ 1 bar <sup>3)</sup>
Lifetime	≥ 1000 cycles
Bake-out temperature <sup>4)</sup>	≤ 300 °C open and closed
Heating and cooling rate	≤ 60 °C h <sup>-1</sup>
Material: valve body, mechanism, bellows	AISI 316L (1.4404, 1.4435)
Seal: bonnet, plate	metal
Feedthrough	bellows
Mounting position	any
Valve position indication	visual (mechanical)
Conductance (molecular flow)	DN16: 5 ls <sup>-1</sup> / DN40: 50 ls <sup>-1</sup> / DN63: 105 ls <sup>-1</sup>
Closing force	closes at a mechanical stop
Weight: DN 16 / 40 / 63 kg (lbs)	0.4 (0.9) / 1.9 (4.2) / 5.9 (13.0)

<sup>1)</sup> Handwheel or T-bar tool to put on hexagon head for convenient operation

<sup>2)</sup> Service kits to exchange the FLEX VATRING without remachining the sealing surface on the valve seat. The FLEX VATRING may be replaced up to two times. The service kit 1 is for the first, the service kit 2 for the second exchange.

<sup>3)</sup> > 1 bar with reduced number of cycles

<sup>4)</sup> Maximum values: depending on operating conditions and sealing materials

## Features

Body material: stainless steel

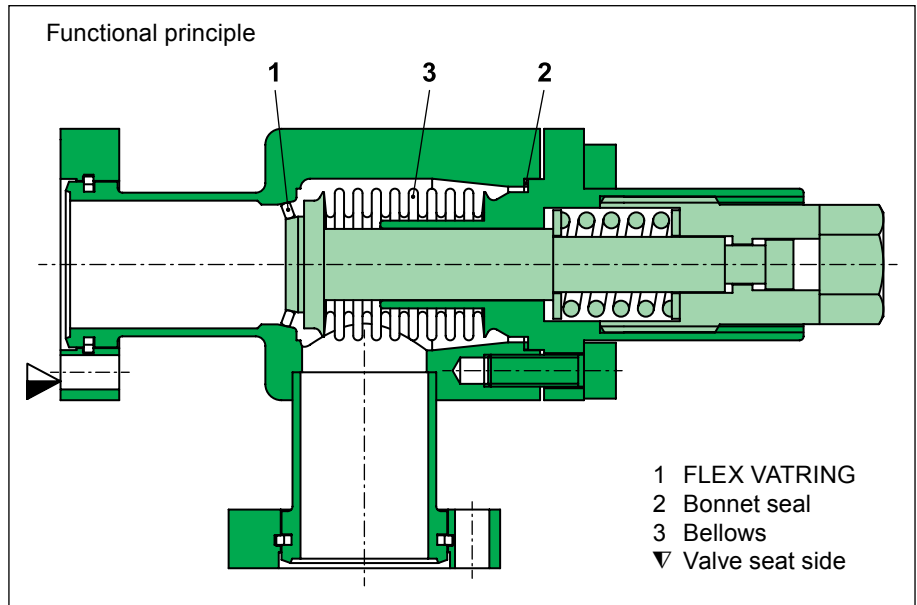
FLEX VATRING configuration:  
see glossary

Sealing surfaces are only elastically deformed

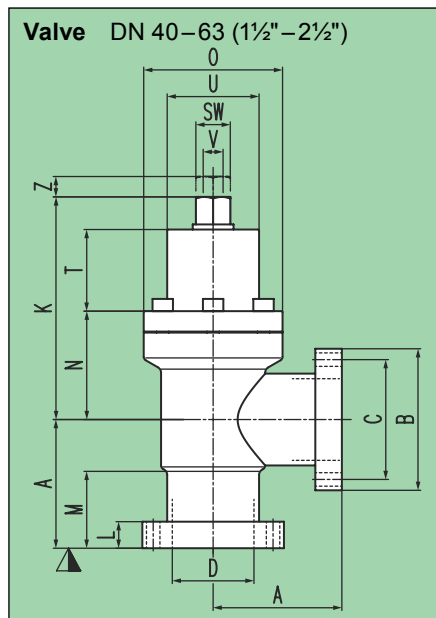
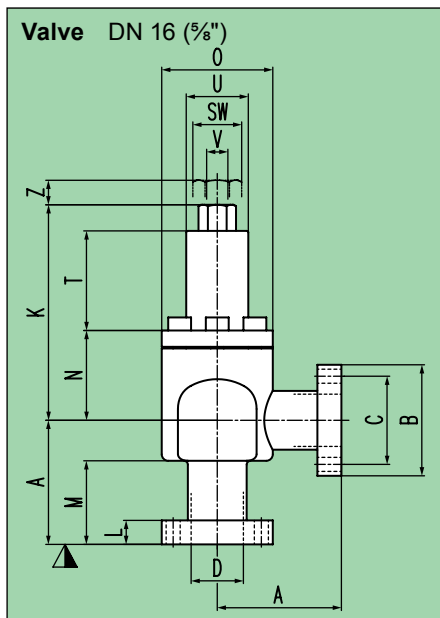
Convenient operation with a standard hexagon wrench – no torque wrench required

High conductance

FLEX VATRING exchangeable twice



## Dimensions



DN	mm	16	40	63
	inch	5/8	1 1/2	2 1/2
A	mm	38	63	105
	inch	1.50	2.48	4.13
B	mm	34	69.35	113.35
	inch	1.34	2.73	4.46
C	mm	27	58.70	92.10
	inch	1.06	2.31	3.63
D	mm	16	40	64
	inch	0.63	1.57	2.52
E x F	mm	6 x 4.30	6 x 6.60	8 x 8.40
	inch	6 x 0.17	6 x 0.26	8 x 0.33
H1	mm	21.40	48.30	82.50
	inch	0.84	1.90	3.25
H2	mm	18.50	42	77.40
	inch	0.73	1.65	3.05
K	mm	66	109.10	141.50
	inch	2.60	4.30	5.57
L	mm	7.35	13	18.90
	inch	0.29	0.51	0.74
M	mm	25.60	37.60	56.60
	inch	1.01	1.48	2.23
N	mm	27.50	53.10	74
	inch	1.08	2.09	2.91
O	mm	34	68	94
	inch	1.34	2.68	3.70
SW	mm	10	17	22
	inch	0.39	0.67	0.87
T	mm	30.50	40	51.50
	inch	1.20	1.57	2.03
U	mm	19	45	54
	inch	0.75	1.77	2.13
V	mm	6.35	9.53	12.70
	inch	0.25	0.38	0.50
Z	mm	8.50	20	20
	inch	0.33	0.79	0.79

