

High Vacuum Valve VLH Series

High Vacuum Valve VLH-U, US Series (Manual Valve with Vacuum Flange)



Specifications

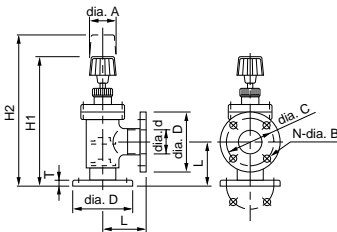
Item	Model	VLH-U, US
Common diameter		20 A (3/4B)-250 A (10B)
Main unit material		U: Soft steel / US: Stainless steel *1
Gasket material		U: Nitrile rubber US: Fluoride rubber
Allowable baking temperature	°C	U: < 60 US: < 120
Applicable pressure range	Pa	10 ⁵ -10 ⁻⁵
Leak volume	Pa·m ³ /s	U: < 1.5 x 10 ⁻⁷ / US: < 7.0 x 10 ⁻⁹ *2
Allowable surrounding temperature	°C	5-40
Operation method		Manual

Note: SI units are used in this catalog.
The following conversion can be used for non-SI units.
Ultimate pressure: 1Pa = 7.5 x 10⁻³ Torr

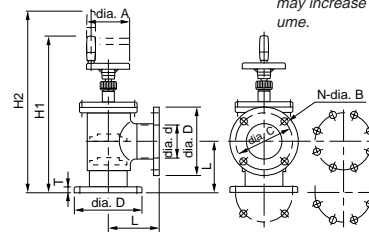
*1 Standard VLH-US material: SUS304
SUS304L, 316 and 316L are optional with a delivery period of 2 months.

*2 a. Seal performance value when valve is shut. O-ring permeability is not included in the leak volume.

b. When the valve is operated air caught in the shaft is turned in and may increase the apparent leak volume.



VLH-U3/4 (S) -2 (S)



VLH-U3 (S) -U10 (S)

(unit: mm)

Item	Common port diameter (A)	Flange diameter	Conductance L/s ^{*1}	Flange diameter dia. D	Surface interval L	When completely closed H1	When completely open H2	Diameter dia. d	Flange thickness T	Bolt center dia. C	Hole quantity/diameter N-dia. B	Handle dia. A	Weight kg
VLH-U3/4 (S)	20	VF 20	7.9	80	60	167	184	22.2	8	60	4-10	40	1.5
VLH-U1 (S)	25	VF 25	22.3	90	65	192	224	35	8	70	4-10	40	1.8
VLH-U11/2 (S)	40	VF 40	21.7	105	80	225	264	35	10	85	4-10	55	2.9
VLH-U2 (S)	50	VF 50	77.0	120	90	252	292	59.5	10	100	4-10	55	4.2
VLH-U3 (S)	80	VF 80	158.9	160	120	368	424	84	12	135	4-12	100	8.8
VLH-U4 (S)	100	VF 100	224.0	185	130	405	475	97	12	160	8-12	125	12.2
VLH-U6 (S)	150	VF 150	1000	235	160	539	646	143.6	12	210	8-12	160	26
VLH-U8 (S)	200	VF200	1900	300	200	639	779	205.4	16	270	8-15	160	50
VLH-U10 (S)	250	VF250	3700	350	220	706	865	255.4	16	320	12-15	200	68

*1: conductance: calculated valve using molecular flow, 20 °C, and air

High Vacuum Valve VLH-US-KF Series (Compressed Air Driven Valve with Vacuum Flange)



Specifications

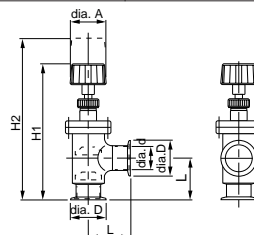
Item	Model	VLH-US-KF
Connection flange		NW25, 40, 50
Main unit material		stainless steel *1
Gasket material		Fluoride rubber
Allowable baking temperature	°C	< 120
Applicable pressure range	Pa	10 ⁵ -10 ⁻⁵
Leak volume	Pa·m ³ /s	< 7.0 x 10 ⁻⁹ *2
Allowable surrounding temperature	°C	5-40
Operation method		Manual

Note: SI units are used in this catalog.
The following conversion can be used for non-SI units.
Ultimate pressure: 1Pa = 7.5 x 10⁻³ Torr

*1 Standard material: SUS304
SUS304L, 316 and 316L are optional with a delivery period of 2 months.

*2 a. Seal performance value when valve is shut. O-ring permeability is not included in the leak volume.

b. When the valve is operated air caught in the shaft is turned in and may increase the apparent leak volume.



(unit: mm)

Item	Common port diameter (A)	Flange specification	Conductance L/s ^{*1}	Flange diameter dia. D	Surface interval L	When completely closed H1	When completely open H2	Diameter dia. d	Handle dia. A	Weight kg
VLH-US-25KF	25	NW25 (KF25)	9.2	40	50	157	174	22.2	40	1.0
VLH-US-40KF	40	NW40 (KF40)	26.0	55	65	210	249	35	55	1.3
VLH-US-50KF	50	NW50 (KF50)	72.6	75	70	232	272	50	55	3.2

*1: conductance: calculated valve using molecular flow, 20 °C, and air