

Ultra-High Vacuum Valve VUGP Series

Ultra-High Vacuum Valve VUGP-CS/F Series

Compressed Air Driven Valves with UFC Flanges (CS Models) or UVF Flanges (F Models)

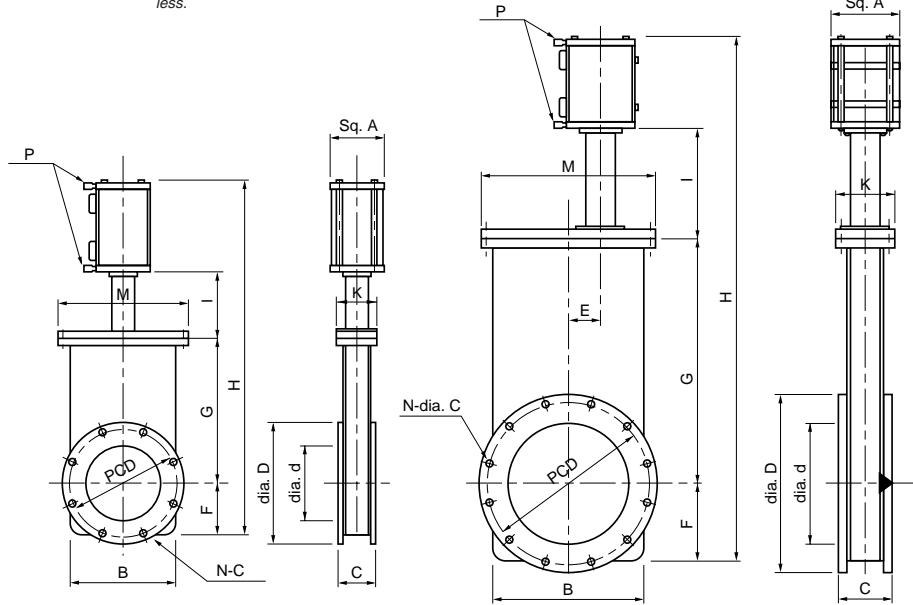


Specifications

Item	Model	VUGP-CS	VUGP-F
Connection flange		UFC070-040FH-UFC306-250FH	UVF40-UVF250
Main unit material		Valve body, disc: Stainless steel	
Gasket material		Bonnet seal: Silver wire, Disk seal: Fluoride rubber	Bonnet seal, disk seal: Fluoride rubber
Allowable baking temperature ^{*1}	°C	OPEN: 200 / CLOSE: 150	Max. 150
Applicable pressure range	Pa	10 ⁵ -10 ⁻⁸	
Leak volume	Pa · m ³ /s	< 1.3 x 10 ⁻¹¹ ^{*2}	
Allowable surrounding temperature	°C	5-40	
Operation method		Compressed air	
Open/close signal output		Attachment possible (optional) ^{*3}	
Compressed air operating pressure	MPa G	0.45-0.55	

Note: 1. 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
2. Perform valve opening and closing operations with a maximum pressure differential of 100 Pa or less.

^{*1} Cylinder heating is not possible.
^{*2} O-ring permeability is not included in the leak volume.
^{*3} Auto switch model: D-A54 (for both DC24 V and AC100/200 V, with indicator lamp)



▼ Shows the disk seat direction

VUGP-40~100

VUGP-150~250

VUGP-CS series

unit: mm

Item	Common port diameter (A)	Flange specification	Conductance L/s ^{*1}	Flange diameter dia. D	Surface interval L	Total height H	Diameter dia. d	Bolt center PCD	Hole quantity/diameter N-dia. C	Cylinder Sq. A	B	E	F	G	I	K	M	Compressed connection port P	Weight kg
VUGP-40CS	40	UFC070	80	69.3	52	324.5	38	58.7	6-M6 depth 6	60	76	—	38.5	93	73	62	120	Rc (PT) 1/8	5
VUGP-65CS	65	UFC114	370	113.5	60	468	65	92.15	8-M8 depth 10	74	110	—	57	157.5	99.5	80	162	Rc (PT) 1/8	10.5
VUGP-100CS	100	UFC152	1200	151.6	70	606	100	130.3	16-M8 depth 10	86	152	—	76	209.5	127.5	82	200	Rc (PT) 1/8	15
VUGP-150CS	150	UFC203	3000	202.4	85	688	150	181.05	20-M8 depth 10	108	200	45	100	350	146	92	242	Rc (PT) 1/8	25
VUGP-200CS	200	UFC253	6000	253.2	100	963	195	231.9	24-M8 depth 10	132	252	45	126	435	236	108	314	Rc (PT) 1/8	45
VUGP-250CS	250	UFC306	10000	306	105	1020	240	284.0	32-M8 depth 10	142	292	60	150	480	213	112	340	Rc (PT) 1/8	55

^{*1}: Conductance: Calculated value using molecular flow, 20 °C, and air

VUGP-F series

unit: mm

Item	Common port diameter (A)	Flange specification	Conductance L/s ^{*1}	Flange diameter dia. D	Surface interval L	Total height H	Diameter dia. d	Bolt center PCD	Hole quantity/diameter N-dia. C	Cylinder Sq. A	B	E	F	G	I	K	M	Compressed connection port P	Weight kg
VUGP-40F	40	UVF-40	80	105	52	326	38	85	4-M8 depth 8	60	76	—	38.5	93	73	60	100	Rc (PT) 1/8	5
VUGP-65F	65	UVF-65	370	145	60	467	65	120	4-M10 depth 7	74	110	—	57	157.5	99	74	140	Rc (PT) 1/8	10.5
VUGP-100F	100	UVF-100	1200	185	70	606	100	160	8-M10 depth 11	86	152	—	76	209.5	127.5	78	186	Rc (PT) 1/8	15
VUGP-150F	150	UVF-150	3000	235	85	727	150	210	8-M10 depth 10	108	200	45	100	350	149	96	236	Rc (PT) 1/8	25
VUGP-200F	200	UVF-200	6000	300	100	963	195	270	8-M12 depth 12	132	252	45	126	435	236	104	290	Rc (PT) 1/8	45
VUGP-250F	250	UVF-250	10000	350	105	1023	240	320	12-M12 depth 14	142	292	60	150	480	215	110	330	Rc (PT) 1/8	55

^{*1}: Conductance: Calculated value using molecular flow, 20 °C, and air