

## Gate Valves - Stainless Steel

Neyco offers gate valves designed for high vacuum applications. These valves provide valving for cryopumps, turbo pumps, ion pumps and other applications requiring clean, low outgassing valves. Metal-sealed CF flanges provide compatibility with UHV systems when pressure ranges approximate  $10^{-10}$  mbar and higher bakeout temperatures of 200°C are needed. These valves can also be configured for higher temperatures by using hi-temp elastomer O-rings, grease and parts.

These gate valves are available in 4 types:

- Manual with Viton bonnet (HV series)
- Manual with Copper bonnet (UHV series)
- Pneumatic with Viton bonnet (HV series)
- Pneumatic with Copper bonnet (UHV series)

### SPECIFICATIONS

Valve body and gate	SS 304
Welded bellows shaft seal	AM 350
Bonnet / gate seals	Viton / Viton (HV) Copper / Viton (UHV)
Helium leak rate	$< 2 \cdot 10^{-9}$ mbar.l.s <sup>-1</sup>
Pressure range	1.10 <sup>-9</sup> mbar (HV) 1.10 <sup>-10</sup> mbar (UHV)
Differential pressure closed	1 bar in either direction
Max Δ pressure before opening	≤ 30 mbar
Service life (full orifice open)	500.000 cycles
Bakeout temperature	150°C (HV) 200°C (UHV), valve open 150°C (UHV), valve closed
Mounting position	Any
Cycles until service	100.000 cycles (dependent on process)

Mechanism	
Pneumatic air service	80 psig
Voltages solenoid	24 / 120 / 200 / 240 V AC, 50/60 Hz 12 / 24 V DC
Position Indicator, max	115 V AC 28 V DC

## OPTIONS

- Kalrez seals for both bonnet and gate seals
- Microswitches for position indicators
- Motor operators
- Spring loaded: Air-to-open, Spring-to-close on sizes up to DN 80
- High temperature components including O-rings, microswitches and actuators

## AVAILABLE FLANGES

	KF / ISO K	ISO F	CF-F
Manual HV series	DN 16 to DN 200	DN 63 to DN 320	DN 16 to DN 300
Manual UHV series	-	-	DN 16 to DN 300
Pneumatic HV series	DN 16 to DN 200	DN 63 to DN 500	DN 16 to DN 300
Pneumatic UHV series	-	-	DN 16 to DN 300



Manual CF gate valve



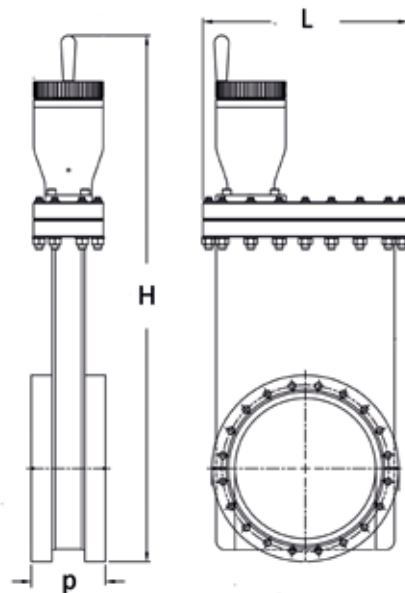
Pneumatic CF gate valve

## MAXIMAL DIMENSIONS

DN	KF/ISO K - HV & UHV SERIES				ISO F - MANUAL			ISO F - PNEUMATIC		
	L	P	H - MANUAL	H - PNEUMATIC	L	P	H	L	P	H
16	47.6	75.2	108.4	126.0	-	-	-	-	-	-
40	84.1	50.7	211.6	254.2	-	-	-	-	-	-
50	96.8	50.7	234.3	277.2	-	-	-	-	-	-
63	130.0	87.8	278.7	321.4	130.0	51.4	278.7	130.0	51.4	321.4
80	139.3	97.4	307.6	350.5	145.0	50.0	310.6	145.0	50.0	353.4
100	171.5	107.8	492.3	469.0	177.8	61.1	489.1	177.8	61.1	465.8
160	228.6	107.8	584.5	561.2	225.0	59.8	582.7	225.0	59.8	559.4
200	279.4	107.8	693.4	670.1	285.8	67.4	696.6	285.8	67.4	673.2
250	-	-	-	-	335.0	80.1	936.4	341.4	80.1	873.0
320	-	-	-	-	424.9	80.1	1076.2	425.0	80.1	1012.8
400	-	-	-	-	-	-	-	527.1	97.8	1253.8
500	-	-	-	-	-	-	-	644.5	121.2	1577.8

DN	CF - HV & UHV SERIES			
	L	P	H - MANUAL	H - PNEUMATIC
16	47.6	39.6	108.6	126.1
40	84.1	51.5	212.7	255.3
50	96.8	57.9	239.5	281.9
63	113.5	61.2	270.5	313.1
80	133	64.2	296.9	339.7
100	177.8	75.3	482.3	459.1
160	222.3	80.4	571.3	548.1
200	285.8	85	686.5	663.3
250	330.2	92.8	934.0	867.4
300	381	99.0	1054.1	987.5

All dimensions are in mm. Dimensions subject to change.



## ORDERING P/N GUIDE

### NEGVSS - V - KF - DN - M

