



HVA is the premier manufacturer and supplier to the world's leading vacuum technology innovators. Renowned for our world class manufacturing of high quality precision stainless steel and aluminum vacuum valves, we now introduce the HPV Series Gate Valves - engineered for tomorrow's most advanced and harshest processes.

HPV - Harsh Process Valve

Extreme Durability - For your most demanding process applications

Increased Safety - Robust dual containment design

Maintenance Free - Sealed bellows isolated from process

Reduced Downtime - Easy in-situ cleaning and o-ring replacement

Improved Pump Performance - Pump overload protection/isolation

Lower Particles - Integrated soft pump feature

71000 Series Standard Technical Specifications

Materials

Valve body and gate	304 stainless steel
Welded bellows shaft seal	AM-350
Bonnet / gate seals	FKM or FKKM/FFPM elastomer

Vacuum

Pressure Range	1 x 10 ⁻⁹ mbar
Helium leak rate	< 1 x 10 ⁻⁹ mbar l/s
Differential pressure closed	tested up to 7 bar in any direction
Differential pressure at opening	1 bar

Temperature

Body	150°C
Actuator	100°C

Mechanism

Manual	hand crank
Pneumatic air service	55 - 80 psi
Solenoid	120V AC, 24V DC 50/60 Hz
Position indicator, max	115 VAC or 28 VDC, 20mA

Mounting Position

any

Cycles

Cycles until service > 250,000 cycles
dependent on process



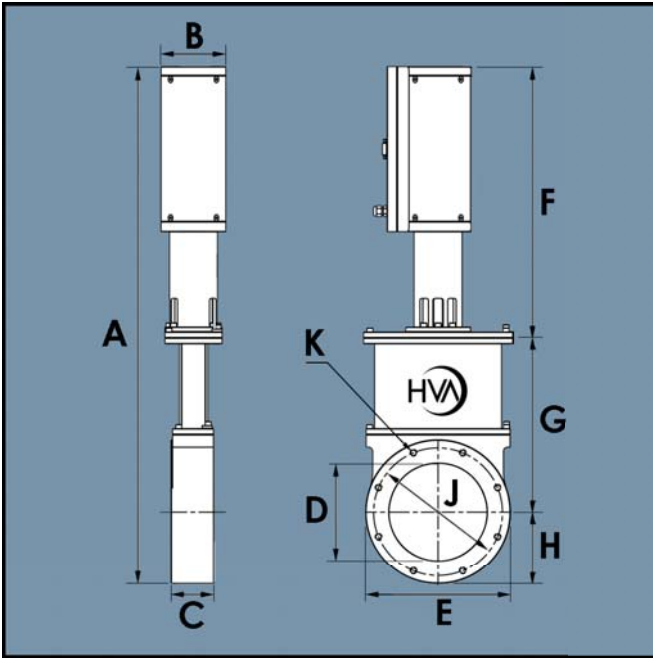


High Vacuum Valves
Leader in Quality and Value

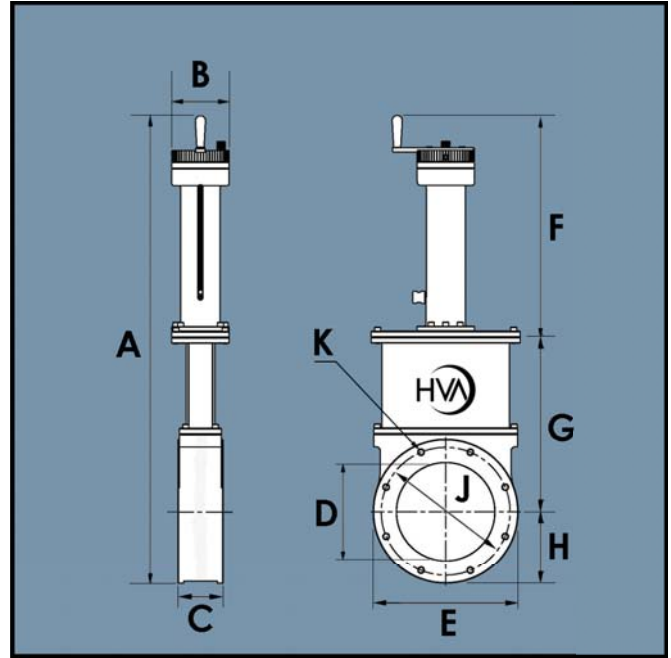
71000 Series

Harsh Process Valve

Pneumatic, KF 50 & ISO-F 63 - 160 (2.0" - 6.0")



Manual, KF 50 & ISO-F 63 - 160 (2.0" - 6.0")



Pneumatic valve and flange dimensions

DN	mm	inch	50	63	80	100	160
	mm	inch	443.7	443.7	481.8	579.4	804.9
A	mm	inch	17.47	17.47	18.97	22.81	31.69
B	mm	inch	81.8	81.8	81.8	100.8	100.8
	mm	inch	3.22	3.22	3.22	3.97	3.97
C	mm	inch	60.0	60.0	70.0	70.0	70.0
	mm	inch	2.36	2.36	2.76	2.76	2.76
D	mm	inch	50.0	63.0	80.0	100.0	160.0
	mm	inch	2.00	2.50	3.00	4.00	6.00
E	mm	inch	110.5	130.0	145.0	165.0	225.0
	mm	inch	4.35	5.12	5.71	6.50	8.86
F	mm	inch	242.1	242.1	253.0	301.5	421.6
	mm	inch	9.53	9.53	9.96	11.87	16.60
G	mm	inch	138.4	138.4	156.2	195.6	270.8
	mm	inch	5.45	5.45	6.15	7.70	10.66
H	mm	inch	63.2	65.0	72.6	82.6	112.5
	mm	inch	2.49	2.56	2.86	3.25	4.43
J	mm	inch	-	110.0	125.0	145.0	200.0
	mm	inch	-	4.33	4.92	5.71	7.87
K	thd	holes	-	M8 x 1.25 8	M8 x 1.25 8	M8 x 1.25 8	M10 x 1.50 8

[Dimensions Subject to Change]

Manual valve and flange dimensions

DN	mm	inch	50	63	80	100	160
	mm	inch	448.3	450.1	482.7	571.3	727.0
A	mm	inch	17.65	17.72	19.01	22.49	28.62
B	mm	inch	69.9	69.9	69.9	88.9	88.9
	mm	inch	2.75	2.75	2.75	3.50	3.50
C	mm	inch	60.0	60.0	70.0	70.0	70.0
	mm	inch	2.36	2.36	2.76	2.76	2.76
D	mm	inch	50.0	63.0	80.0	100.0	160.0
	mm	inch	2.00	2.50	3.00	4.00	6.00
E	mm	inch	110.5	130.0	145.0	165.0	225.0
	mm	inch	4.35	5.12	5.71	6.50	8.86
F	mm	inch	246.6	246.7	254.0	293.2	343.8
	mm	inch	9.71	9.71	10.00	11.54	13.54
G	mm	inch	138.4	138.4	156.2	195.6	270.8
	mm	inch	5.45	5.45	6.15	7.70	10.66
H	mm	inch	63.2	65.0	72.6	82.6	112.5
	mm	inch	2.49	2.56	2.86	3.25	4.43
J	mm	inch	-	110.0	125.0	145.0	200.0
	mm	inch	-	4.33	4.92	5.71	7.87
K	thd	holes	-	M8 x 1.25 8	M8 x 1.25 8	M8 x 1.25 8	M10 x 1.50 8

[Dimensions Subject to Change]

Ordering Guides

Pneumatic (includes reed switch position indicators)

DN	mm	inch	Model No ISO-K	Model No KF/ISO-F	Model No JIS	Model No CF-F*
50	2.0		-	71210-0203R	71210-0205R	71210-0200R
63	2.5		71210-0256R	71210-0253R	71210-0255R	71210-0250R
80	3.0		71210-0306R	71210-0303R	71210-0305R	71210-0300R
100	4.0		71210-0406R	71210-0403R	71210-0405R	71210-0400R
160	6.0		71210-0606R	71210-0603R	71210-0605R	71210-0600R

For 24V DC solenoid: 71211-
For 120V AC solenoid: 71212-

*For Metric change last '0' to '4'

Manual (includes visual position indicator)

DN	mm	inch	Model No ISO-K	Model No KF/ISO-F	Model No JIS	Model No CF-F*
50	2.0		-	71110-0203V	71110-0205V	71110-0200V
63	2.5		71110-0256V	71110-0253V	71110-0255V	71110-0250V
80	3.0		71110-0306V	71110-0303V	71110-0305V	71110-0300V
100	4.0		71110-0406V	71110-0403V	71110-0405V	71110-0400V
160	6.0		71110-0606V	71110-0603V	71110-0605V	71110-0600V

*For Metric change last '0' to '4'