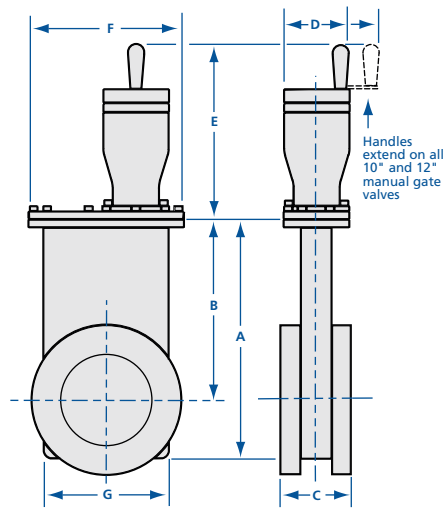


Isolation Valves - Manual Viton Seal Gate Valves



SPECIFICATIONS

General

Nominal IDs: 1.5 to 12 inch
Helium leak rate: $\leq 2 \times 10^{-9}$ std. cc./sec.

Materials

Body: 304 SS vacuum furnace brazed body
Bellows: Welded AM-350
O-ring: Viton (standard), Chemraz, Kalrez, Silicone

Finish: Electropolished inside and out

Maximum pressure differential

At opening
4 inch ID or smaller:
760 Torr on gate side,
20 torr on carriage side
Greater than 4 inch ID: 20 Torr either direction
Closed: 760 Torr in either direction

Vacuum range

Viton seal bonnet: $\geq 10^{-9}$ Torr

Temperature range

Viton Seal Bonnet: $\leq 150^\circ\text{C}$

Manually actuated Acme threads for fewer turns

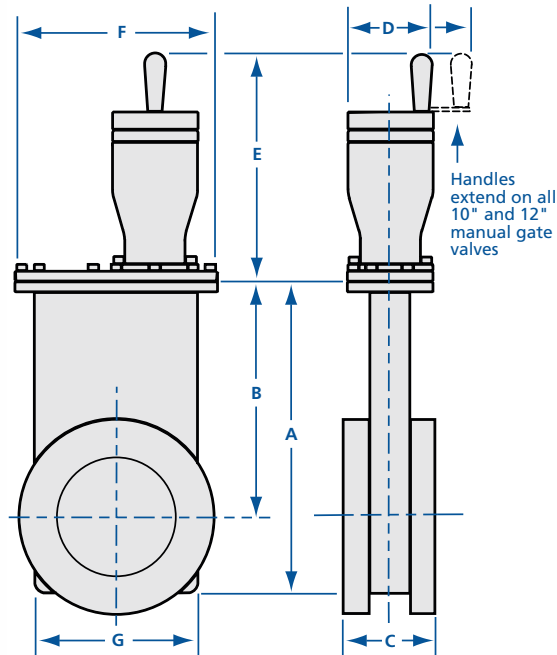
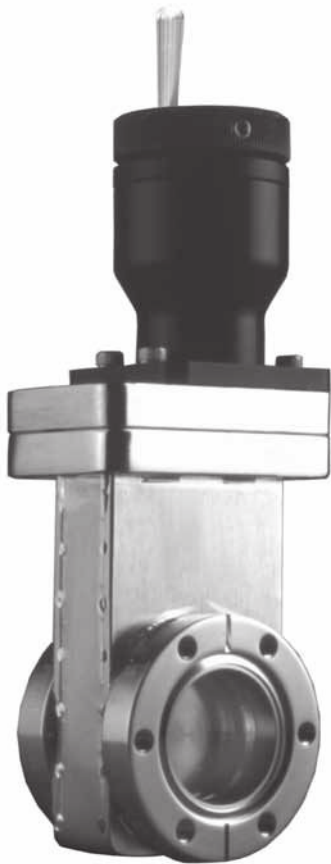
Options: O-rings, heater jackets

Manually Operated Viton Seal Gate Valves

MODEL NUMBER	NOM. ID	FLANGE TYPE	CONDUCTANCE (molecular/l/sec.)	A	B	C	D	E	F	G
GV-1502-NW	1½	NW-40	98	4.69	3.40	1.99	2.00	3.61	3.31	2.45
GV-1502-CF	1½	2.75 CF	130	4.69	3.40	2.03	2.00	3.61	3.31	2.45
GV-2002-NW	2	NW-50	220	5.60	4.12	1.99	2.00	3.61	3.81	2.96
GV-2002-CF	2	3.38 CF	300	5.60	4.12	2.28	2.00	3.61	3.81	2.96
GV-2502-CF	2½	4.50 CF	520	6.50	4.81	2.40	2.00	3.61	4.37	3.52
GV-2502-ASA	2½	ASA-6*	610	6.50	4.81	2.03	2.00	3.61	4.37	3.52
GV-2502-ISO	2½	ISO-63	610	6.50	4.81	2.03	2.00	3.61	4.37	3.52
GV-2502-ISO-OF	2½	ISO-63-OF	320	6.50	4.81	3.46	2.00	3.61	4.37	3.52
GV-3002-CF	3	4.62 CF	840	7.70	5.77	2.53	2.00	3.61	4.94	4.28
GV-3002-ASA	3	ASA-7.5*	1,070	7.70	5.77	2.03	2.00	3.61	4.94	4.28
GV-3002-ISO	3	ISO-80	1,070	7.70	5.77	1.97	2.00	3.61	4.94	4.28
GV-3002-ISO-OF	3	ISO-80-OF	550	7.70	5.77	3.84	2.00	3.61	4.94	4.28
GV-4002-CF	4	6.00 CF	1,700	10.76	8.13	2.97	3.11	7.90	7.00	5.65
GV-4002-ASA	4	ASA-9*	2,100	10.76	8.13	2.41	3.11	7.90	7.00	5.65
GV-4002-ISO	4	ISO-100	2,100	10.76	8.13	2.41	3.11	7.90	7.00	5.65
GV-4002-ISO-OF	4	ISO-100-OF	1,400	10.76	8.13	4.25	3.11	7.90	7.00	5.65
GV-6002-CF	6	8.00 CF	5,400	14.07	10.64	3.17	3.11	7.90	8.75	7.55
GV-6002-ASA	6	ASA-11*	7,100	14.07	10.64	2.41	3.11	7.90	8.75	7.55
GV-6002-ISO	6	ISO-160	7,100	14.07	10.64	2.36	3.11	7.90	8.75	7.55
GV-6002-ISO-OF	6	ISO-160-OF	4,000	14.07	10.64	4.25	3.11	7.90	8.75	7.55
GV-8002-CF	8	10.00 CF	12,200	18.42	13.93	3.35	3.11	7.90	11.25	10.02
GV-8002-ASA	8	ASA-11*	14,500	18.42	13.93	2.76	3.11	7.90	11.25	10.02
GV-8002-ISO	8	ISO-200	15,200	18.42	13.93	2.66	3.11	7.90	11.25	10.02
GV-8002-ISO-OF	8	ISO-200-OF	9,500	18.42	13.93	4.25	3.11	7.90	11.25	10.02
GV-10002-CF	10	12.00 CF	24,900	24.04	18.30	3.65	8.98	12.00	13.44	11.99
GV-10002-ASA	10	ASA-16*	24,800	24.04	18.30	3.15	8.98	12.00	13.44	11.99
GV-10002-ISO	10	ISO-250	26,900	24.04	18.30	3.15	8.98	12.00	13.44	11.99
GV-10002-ISO-OF	10	ISO-250-OF	15,400	24.04	18.30	5.51	8.98	12.00	13.44	11.99
GV-12002-CF	12	14.00 CF	34,600	28.89	22.03	3.89	8.98	12.00	15.90	14.28
GV-12002-ASA	12	ASA-16*	42,800	28.89	22.03	3.15	8.98	12.00	15.90	14.28
GV-12002-ISO	12	ISO-320	42,800	28.89	22.03	3.15	8.98	12.00	15.90	14.28
GV-12002-ISO-OF	12	ISO-320-OF	24,500	28.89	22.03	4.67	8.98	12.00	15.90	14.28

*Note: All ASA flanged valves are provided without O-ring grooves. Grooves can be provided on request.

Isolation Valves - Manual Copper Seal Gate Valves



SPECIFICATIONS

General

Nominal IDs: 1.5 to 12 inch
Helium leak rate: $\leq 2 \times 10^{-9}$ std. cc./sec.

Materials

Body: 304 SS vacuum furnace brazed body
Bellows: Welded AM-350
O-ring: Viton (standard), Chemraz, Kalrez, Silicone

Finish: Electropolished inside and out

Maximum pressure differential

At opening
4 inch ID or smaller:
760 Torr on gate side,
20 torr on carriage side
Greater than 4 inch ID:
20 Torr either direction
Closed: 760 Torr in either direction

Vacuum range

Copper seal bonnet: $\geq 10^{-10}$ Torr

Temperature range

Viton Seal Bonnet: $\leq 150^\circ\text{C}$
Copper Seal Bonnet: $\leq 200^\circ\text{C}$ with
CF flanges and gate in open position

Manually actuated

Acme threads for fewer turns

Options: O-rings, heater jackets

Manually Operated Copper Seal Bonnet Gate Valves

MODEL NUMBER	NOM. ID	FLANGE TYPE	CONDUCTANCE (molecular-I/sec.)	A	B	C	D	E	F	G
GVM-1502-CF	1½	2.75 CF	130	4.69	3.40	2.03	2.00	3.57	3.31	2.45
GVM-2002-CF	2	3.38 CF	300	5.60	4.12	2.28	2.00	3.61	3.81	2.96
GVM-2502-CF	2½	4.50 CF	520	6.50	4.81	2.40	2.00	3.61	4.37	3.52
GVM-3002-CF	3	4.62 CF	840	7.70	5.77	2.53	2.00	3.61	5.24	4.28
GVM-4002-CF	4	6.00 CF	1,700	10.76	8.13	2.97	3.11	7.90	7.00	5.65
GVM-6002-CF	6	8.00 CF	5,400	14.07	10.64	3.17	3.11	7.90	8.75	7.55
GVM-8002-CF	8	10.00 CF	12,200	18.42	13.93	3.35	3.11	7.90	11.25	10.02
GVM-10002-CF	10	12.00 CF	24,900	24.04	18.30	3.65	8.98	12.12	13.44	11.99
GVM-12002-CF	12	14.00 CF	34,600	28.89	22.03	3.89	8.98	12.12	15.90	14.28

REV 6/16

