

VG7000



VA-7152 Actuator with VG7842 Valve

## VA-7150 Actuators

COMPACT SIZE – Fits in tight spaces  
 90 LB. FORCE – Provides high close-off  
 NON-SPRING RETURN  
 DIRECT COUPLED – No linkage required  
 MAGNETIC CLUTCH – Protects gearing  
 CONTROLS – Hot or chilled water, steam  
 FITS VG7000 VALVES – 1/2 to 1-1/4"  
 FLUID TEMPERATURE – 35 to 284°F (2 to 140°C)  
 MAXIMUM STEAM PRESSURE – 38 psig saturated  
 VALVE PRESSURE RATING – ANSI Class 250  
 VOLTAGE – 24VAC, 50/60Hz, 4.7VA MAX



VA-7202 Actuator with VG7842 Valve

## VA-7200 Actuators

COMPACT SIZE  
 180 LB. FORCE – Provides high close-off  
 NON-SPRING RETURN  
 DIRECT COUPLED – No linkage required  
 MAGNETIC CLUTCH – Protects gearing  
 CONTROLS – Hot or chilled water, steam  
 FITS VG7000 VALVES – 1 to 2"  
 FLUID TEMPERATURE – 35 to 284°F (2 to 140°C)  
 MAXIMUM STEAM PRESSURE – 38 psig saturated  
 VALVE PRESSURE RATING – ANSI Class 250  
 COMPLETE RANGE OF CONTROL INPUTS  
 OPTIONAL AUXILIARY SWITCHES  
 VOLTAGE – 24VAC, 50/60Hz, 8.7VA MAX



VA-4233-AGA-2 Actuator with VG7441 Valve

## VA-4233 Actuators

SPRING RETURN – Stem up  
 61 LB. FORCE – Provides high close-off  
 MANUAL OPENER  
 CONTROLS – Hot or chilled water, steam  
 VG7000 VALVES – 1/2 to 1-1/4"  
 VALVE TRIM – Brass (Stainless Steel Available)  
 FLUID TEMPERATURE – 35 to 250°F (2 to 121°C)  
 MAXIMUM STEAM PRESSURE – 15 psig saturated  
 VALVE PRESSURE RATING – ANSI Class 250  
 OPTIONAL AUXILIARY SWITCHES AVAILABLE  
 VOLTAGE – 20-30VAC, 50/60Hz, 12VA MAX  
 AUTO STROKE CALIBRATION – Proportional models only



M9216-HGA-2 Actuator with VG7842 Valve

## M9216 Actuators

SPRING RETURN – Stem up or stem down  
 180 LB. FORCE – Provides high close-off  
 MANUAL OPENER  
 CONTROLS – Hot or chilled water, steam  
 VG7000 VALVES – 1/2 to 2"  
 FLUID TEMPERATURE – 35 to 284°F (2 to 140°C)  
 MAXIMUM STEAM PRESSURE – 38 psig saturated  
 VALVE PRESSURE RATING – ANSI Class 250  
 OPTIONAL AUXILIARY SWITCHES AVAILABLE  
 VOLTAGE – 20-30VAC, 50/60Hz, 12VA MAX

			On-Off / Floating	On-Off / Floating with Feedback	0 to 10 VDC Proportional
Valve	Size	Cv	VA-7150-1001	VA-7153-1001	VA-7152-1001
<b>2-way Hot or Chilled Water, Brass Trim</b>					
VG7241CT	1/2"	0.73	345	VG7241CT+7150G	VG7241CT+7152G
VG7241ET	1/2"	1.8	345	VG7241ET+7150G	VG7241ET+7152G
VG7241GT	1/2"	4.6	216	VG7241GT+7150G	VG7241GT+7152G
VG7241LT	3/4"	7.3	138	VG7241LT+7150G	VG7241LT+7152G
VG7241NT	1"	11.6	86	VG7241NT+7150G	VG7241NT+7152G
VG7241PT	1-1/4"	18.5	52	VG7241PT+7150G	VG7241PT+7152G
<b>3-way Mixing, Brass Trim</b>					
VG7842CT	1/2"	0.73	345 / 345	VG7842CT+7150G	VG7842CT+7152G
VG7842ET	1/2"	1.8	345 / 345	VG7842ET+7150G	VG7842ET+7152G
VG7842GT	1/2"	4.6	216 / 257	VG7842GT+7150G	VG7842GT+7152G
VG7842LT	3/4"	7.3	138 / 153	VG7842LT+7150G	VG7842LT+7152G
VG7842NT	1"	11.6	86 / 100	VG7842NT+7150G	VG7842NT+7152G
VG7842PT	1-1/4"	18.5	52 / 57	VG7842PT+7150G	VG7842PT+7152G
VG7842RT	1-1/2"	28.9	34 / 36	VG7842RT+7150G	VG7842RT+7152G
VG7842ST	2"	46.2	21 / 22	VG7842ST+7150G	VG7842ST+7152G
<b>2-way, Stainless Steel Trim (100 psig max steam pressure 35 to 338°F fluid temp)</b>					
VG7243CT	1/2"	0.73	239	VG7243CT+7150G	VG7243CT+7152G
VG7243ET	1/2"	1.8	239	VG7243ET+7150G	VG7243ET+7152G
VG7243GT	1/2"	4.6	135	VG7243GT+7150G	VG7243GT+7152G
VG7243LT	3/4"	7.3	86	VG7243LT+7150G	VG7243LT+7152G
VG7243NT	1"	11.6	54	VG7243NT+7150G	VG7243NT+7152G
VG7243PT	1-1/4"	18.5	33	VG7243PT+7150G	VG7243PT+7152G

			On-Off / Floating	On-Off / Floating with Feedback	0 to 10 VDC Proportional
Valve	Size	Cv	VA-7200-1001	VA-7203-1001	VA-7202-1001
<b>2-way Hot or Chilled Water, Brass Trim</b>					
VG7241NT	1"	11.6	179	VG7241NT+7200G	VG7241NT+7202G
VG7241PT	1-1/4"	18.5	109	VG7241PT+7200G	VG7241PT+7202G
VG7241RT	1-1/2"	28.9	70	VG7241RT+7200G	VG7241RT+7202G
VG7241ST	2"	46.2	45	VG7241ST+7200G	VG7241ST+7202G
<b>3-way Mixing, Brass Trim</b>					
VG7842NT	1"	11.6	179 / 209	VG7842NT+7200G	VG7842NT+7202G
VG7842PT	1-1/4"	18.5	109 / 120	VG7842PT+7200G	VG7842PT+7202G
VG7842RT	1-1/2"	28.9	70 / 74	VG7842RT+7200G	VG7842RT+7202G
VG7842ST	2"	46.2	45 / 46	VG7842ST+7200G	VG7842ST+7202G
<b>2-way, Stainless Steel Trim (100 psig max steam pressure 35 to 338°F fluid temp)</b>					
VG7243CT	1/2"	0.73	308	VG7243CT+7200G	VG7243CT+7202G
VG7243ET	1/2"	1.8	308	VG7243ET+7200G	VG7243ET+7202G
VG7243GT	1/2"	4.6	278	VG7243GT+7200G	VG7243GT+7202G
VG7243LT	3/4"	7.3	177	VG7243LT+7200G	VG7243LT+7202G
VG7243NT	1"	11.6	112	VG7243NT+7200G	VG7243NT+7202G
VG7243PT	1-1/4"	18.5	68	VG7243PT+7200G	VG7243PT+7202G
VG7243RT	1-1/2"	28.9	44	VG7243RT+7200G	VG7243RT+7202G
VG7243ST	2"	46.2	28	VG7243ST+7200G	VG7243ST+7202G

			Spring Return - Stem Up		
			Floating	On-Off	0 to 10 VDC Proportional
Valve	Size	Cv	VA-4233-AGA-2	VA-4233-BGA-2	VA-4233-GGA-2
<b>2-way Spring Return Open, Brass Trim</b>					
VG7241CT	1/2"	0.73	345	VG7241CT+423AGA	VG7241CT+423GGA
VG7241ET	1/2"	1.8	345	VG7241ET+423AGA	VG7241ET+423GGA
VG7241GT	1/2"	4.6	208	VG7241GT+423AGA	VG7241GT+423GGA
VG7241LT	3/4"	7.3	132	VG7241LT+423AGA	VG7241LT+423GGA
VG7241NT	1"	11.6	63	VG7241NT+423AGA	VG7241NT+423GGA
VG7241PT	1-1/4"	18.5	38	VG7241PT+423AGA	VG7241PT+423GGA
<b>2-way Spring Return Closed, Brass Trim</b>					
VG7441CT	1/2"	0.73	345	VG7441CT+423AGA	VG7441CT+423GGA
VG7441ET	1/2"	1.8	345	VG7441ET+423AGA	VG7441ET+423GGA
VG7441GT	1/2"	4.6	173	VG7441GT+423AGA	VG7441GT+423GGA
VG7441LT	3/4"	7.3	103	VG7441LT+423AGA	VG7441LT+423GGA
VG7441NT	1"	11.6	68	VG7441NT+423AGA	VG7441NT+423GGA
VG7441PT	1-1/4"	18.5	38	VG7441PT+423AGA	VG7441PT+423GGA
<b>3-way Mixing, Brass Trim</b>					
VG7842CT	1/2"	0.73	345 / 345	VG7842CT+423AGA	VG7842CT+423GGA
VG7842ET	1/2"	1.8	345 / 345	VG7842ET+423AGA	VG7842ET+423GGA
VG7842GT	1/2"	4.6	208 / 173	VG7842GT+423AGA	VG7842GT+423GGA
VG7842LT	3/4"	7.3	132 / 103	VG7842LT+423AGA	VG7842LT+423GGA
VG7842NT	1"	11.6	63 / 68	VG7842NT+423AGA	VG7842NT+423GGA
VG7842PT	1-1/4"	18.5	38 / 38	VG7842PT+423AGA	VG7842PT+423GGA

			Spring Return Open - Stem Up		Spring Return Closed - Stem Down	
			On-Off / Floating	0 to 10 Vdc Proportional	On-Off / Floating	0 to 10 Vdc Proportional
Valve	Size	Cv	M9216-AGA-2	M9216-HGA-2	M9216-AGA-2	M9216-HGA-2
<b>2-way Hot or Chilled Water, Brass Trim</b>						
VG7241CT	1/2"	0.73	345	VG7241CT+926AGA	VG7241CT+926HGA	VG7241CT+946AGA
VG7241ET	1/2"	1.8	345	VG7241ET+926AGA	VG7241ET+926HGA	VG7241ET+946AGA
VG7241GT	1/2"	4.6	345	VG7241GT+926AGA	VG7241GT+926HGA	VG7241GT+946AGA
VG7241LT	3/4"	7.3	289	VG7241LT+926AGA	VG7241LT+926HGA	VG7241LT+946AGA
VG7241NT	1"	11.6	182	VG7241NT+926AGA	VG7241NT+926HGA	VG7241NT+946AGA
VG7241PT	1-1/4"	18.5	111	VG7241PT+926AGA	VG7241PT+926HGA	VG7241PT+946AGA
VG7241RT	1-1/2"	28.9	71	VG7241RT+926AGA	VG7241RT+926HGA	VG7241RT+946AGA
VG7241ST	2"	46.2	46	VG7241ST+926AGA	VG7241ST+926HGA	VG7241ST+946AGA
<b>3-way Mixing, Brass Trim</b>						
VG7842CT	1/2"	0.73	345 / 345	VG7842CT+926AGA	VG7842CT+926HGA	VG7842CT+946AGA
VG7842ET	1/2"	1.8	345 / 345	VG7842ET+926AGA	VG7842ET+926HGA	VG7842ET+946AGA
VG7842GT	1/2"	4.6	345 / 345	VG7842GT+926AGA	VG7842GT+926HGA	VG7842GT+946AGA
VG7842LT	3/4"	7.3	289 / 321	VG7842LT+926AGA	VG7842LT+926HGA	VG7842LT+946AGA
VG7842NT	1"	11.6	182 / 213	VG7842NT+926AGA	VG7842NT+926HGA	VG7842NT+946AGA
VG7842PT	1-1/4"	18.5	111 / 122	VG7842PT+926AGA	VG7842PT+926HGA	VG7842PT+946AGA
VG7842RT	1-1/2"	28.9	71 / 76	VG7842RT+926AGA	VG7842RT+926HGA	VG7842RT+946AGA
VG7842ST	2"	46.2	46 / 47	VG7241ST+926AGA	VG7842ST+926HGA	VG7842ST+946AGA
<b>2-way, Stainless Steel Trim (100 psig max steam pressure 35 to 338°F fluid temp)</b>						
VG7243CT	1/2"	0.73	308	VG7243CT+926AGA	VG7243CT+926HGA	VG7243CT+946AGA
VG7243ET	1/2"	1.8	308	VG7243ET+926AGA	VG7243ET+926HGA	VG7243ET+946AGA
VG7243GT	1/2"	4.6	283	VG7243GT+926AGA	VG7243GT+926HGA	VG7243GT+946AGA
VG7243LT	3/4"	7.3	180	VG7243LT+926AGA	VG7243LT+926HGA	VG7243LT+946AGA
VG7243NT	1"	11.6	114	VG7243NT+926AGA	VG7243NT+926HGA	VG7243NT+946AGA
VG7243PT	1-1/4"	18.5	70	VG7243PT+926AGA	VG7243PT+926HGA	VG7243PT+946AGA
VG7243RT	1-1/2"	28.9	45	VG7243RT+926AGA	VG7243RT+926HGA	VG7243RT+946AGA
VG7243ST	2"	46.2	28	VG7243ST+926AGA	VG7243ST+926HGA	VG7243ST+946AGA

Most popular models are shown. For a complete listing refer to Product/Technical Bulletin LIT-977140.



## Sizing Water Valves

**Two-Position Applications:** The valve is normally sized to the pipe size with largest Cv available.

**Modulating Applications:** The valve should be sized to produce the required GPM flow at a pressure drop of 1 to 2 times the pressure drop across the coil at design flow.

**Example:** Coil requirements 28 GPM @ 5 psig pressure drop. The valve should be selected to provide 28 GPM with a pressure drop between 5 and 10 psig (1 to 2 times the pressure drop across the coil at required flow).

**Solution:** From the table below a 1", 11.6 Cv valve will provide 25.9 GPM @ 5 psig pressure drop and 36.7 GPM @ 10 psig pressure drop. This valve should be selected as the pressure drop across the valve at required flow is between 1 and 2 times the pressure drop across the coil at required flow.

### Flow Rate in GPM (Gallons Per Minute)

Pipe Size NPT	1/2"	1/2"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
Cv	.73	1.8	4.6	7.3	11.6	18.5	28.9	46.2
<b>Pressure Drop</b>								
<b>1</b>	.7	1.8	4.6	7.3	11.6	18.5	28.9	46.2
<b>2</b>	1.0	2.5	6.5	10.3	16.4	26.2	40.9	65.3
<b>3</b>	1.3	3.1	8.0	12.6	20.1	32.0	50.1	80.0
<b>4</b>	1.5	3.6	9.2	14.6	23.2	37.0	57.8	92.4
<b>5</b>	1.6	4.0	10.3	16.3	25.9	41.4	64.6	103.3
<b>6</b>	1.8	4.4	11.3	17.9	28.4	45.3	70.8	113.2
<b>7</b>	1.9	4.8	12.2	19.3	30.7	48.9	76.5	122.2
<b>8</b>	2.1	5.1	13.0	20.6	32.8	52.3	81.7	130.7
<b>9</b>	2.2	5.4	13.8	21.9	34.8	55.5	86.7	138.6
<b>10</b>	2.3	5.7	14.5	23.1	36.7	58.5	91.4	146.1
<b>11</b>	2.4	6.0	15.3	24.2	38.5	61.4	95.9	153.2
<b>12</b>	2.5	6.2	15.9	25.3	40.2	64.1	100.1	160.0
<b>13</b>	2.6	6.5	16.6	26.3	41.8	66.7	104.2	166.6
<b>14</b>	2.7	6.7	17.2	27.3	43.4	69.2	108.1	172.9
<b>15</b>	2.8	7.0	17.8	28.3	44.9	71.7	111.9	178.9
<b>16</b>	2.9	7.2	18.4	29.2	46.4	74.0	115.6	184.8
<b>17</b>	3.0	7.4	19.0	30.1	47.8	76.3	119.2	190.5
<b>18</b>	3.1	7.6	19.5	31.0	49.2	78.5	122.6	196.0
<b>19</b>	3.2	7.8	20.1	31.8	50.6	80.6	126.0	201.4
<b>20</b>	3.3	8.0	20.6	32.6	51.9	82.7	129.2	206.6
<b>21</b>	3.3	8.2	21.1	33.5	53.2	84.8	132.4	211.7
<b>22</b>	3.4	8.4	21.6	34.2	54.4	86.8	135.6	216.7
<b>23</b>	3.5	8.6	22.1	35.0	55.6	88.7	138.6	221.6
<b>24</b>	3.6	8.8	22.5	35.8	56.8	90.6	141.6	226.3
<b>25</b>	3.7	9.0	23.0	36.5	58.0	92.5	144.5	231.0
<b>26</b>	3.7	9.2	23.5	37.2	59.1	94.3	147.4	235.6
<b>27</b>	3.8	9.4	23.9	37.9	60.3	96.1	150.2	240.1
<b>28</b>	3.9	9.5	24.3	38.6	61.4	97.9	152.9	244.5
<b>28</b>	3.9	9.7	24.8	39.3	62.5	99.6	155.6	248.8
<b>30</b>	4.0	9.9	25.2	40.0	63.5	101.3	158.3	253.0

## Sizing Steam Valves

**Two-Position Applications:**

The valve is normally sized to be the same as the pipe using the largest Cv available for a given pipe size.

**Modulating Applications:**

Select the valve to meet the BtuH requirements of the coil. The table assumes an atmospheric return.

Pipe Size NPT	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"	1"	1"	1-1/4"	1-1/4"	1-1/2"	1-1/2"	2"	2"
Cv	0.73	0.73	1.8	1.8	4.6	4.6	7.3	7.3	11.6	11.6	18.5	18.5	28.9	28.9	46.2	46.2
Saturated Steam	Minimum Coil BtuH	Maximum Coil BtuH	Minimum Coil BtuH	Maximum Coil BtuH	Minimum Coil BtuH	Maximum Coil BtuH	Minimum Coil BtuH	Maximum Coil BtuH	Minimum Coil BtuH	Maximum Coil BtuH	Minimum Coil BtuH	Maximum Coil BtuH	Minimum Coil BtuH	Maximum Coil BtuH	Minimum Coil BtuH	Maximum Coil BtuH
Steam Supply Pressure																
<b>1</b>	6,500	8,300	16,100	20,400	41,100	52,000	65,300	82,600	103,800	131,200	165,500	209,300	258,500	327,000	413,200	522,700
<b>2</b>	9,500	12,000	23,400	29,700	59,900	75,800	95,100	120,300	151,100	191,100	240,900	304,700	376,400	476,100	601,700	761,000
<b>3</b>	11,900	15,100	29,500	37,300	75,300	95,200	119,500	151,200	189,900	240,200	302,800	383,100	473,100	598,400	756,300	956,600
<b>4</b>	14,200	17,900	34,900	44,200	89,300	113,000	141,700	179,300	225,200	284,800	359,100	454,300	561,000	709,600	896,900	1,134,400
<b>5</b>	16,200	20,500	40,000	50,600	102,200	129,300	162,200	205,200	257,800	326,100	411,100	520,000	642,200	812,400	1,026,700	1,298,700
<b>6</b>	18,200	23,000	44,900	56,800	114,700	145,100	182,100	230,300	289,300	365,900	461,400	583,600	720,800	911,700	1,152,200	1,457,500
<b>7</b>	20,100	25,400	49,500	62,700	126,600	160,100	200,900	254,100	319,200	403,800	509,100	644,000	795,300	1,006,000	1,271,400	1,608,200
<b>8</b>	21,900	27,800	54,100	68,400	138,300	174,900	219,400	277,600	348,700	441,100	556,100	703,400	868,700	1,098,800	1,388,700	1,756,600
<b>9</b>	23,700	30,000	58,500	74,000	149,600	189,200	237,400	300,300	377,200	477,200	601,600	761,000	939,900	1,188,900	1,502,500	1,900,500
<b>10</b>	25,500	32,300	62,900	79,600	160,800	203,400	255,200	322,900	405,600	513,000	646,800	818,200	1,010,500	1,278,200	1,615,400	2,043,300
<b>11</b>	27,300	34,500	67,200	85,000	171,800	217,300	272,700	344,900	433,300	548,100	691,000	874,100	1,079,500	1,365,400	1,725,600	2,182,800
<b>12</b>	29,000	36,700	71,500	90,400	182,600	231,000	289,800	366,600	460,500	582,500	734,400	929,000	1,147,300	1,451,300	1,834,100	2,320,000
<b>15</b>	34,100	43,100	84,100	106,300	214,800	271,700	340,900	431,200	541,700	685,200	863,900	1,092,800	1,349,600	1,707,100	2,157,400	2,729,000
<b>20</b>	42,400	53,000	104,600	130,800	267,400	334,200	424,400	530,300	674,400	842,700	1,075,500	1,344,000	1,680,200	2,099,500	2,685,900	3,356,300
<b>25</b>	50,400	60,300	124,300	148,600	317,700	379,800	504,100	602,700	801,100	957,700	1,277,600	1,527,300	1,995,800	2,385,900	3,190,500	3,814,200
<b>30</b>	58,400	67,600	143,900	166,700	367,800	425,900	583,700	675,900	927,500	1,074,000	1,479,100	1,712,800	2,310,600	2,675,700	3,693,800	4,277,500
<b>35</b>	66,200	74,800	163,200	184,500	417,000	471,500	661,800	748,200	1,051,700	1,188,900	1,677,200	1,896,100	2,620,100	2,962,000	4,188,600	4,735,100
<b>40</b>	69,800	77,400	172,100	190,900	439,800	487,900	698,000	774,400	1,109,100	1,230,500	1,768,900	1,962,400	2,763,300	3,065,600	4,417,500	4,900,700
<b>45</b>	81,900	89,500	201,900	220,600	516,000	563,900	818,900	894,800	1,301,300	1,421,900	2,075,400	2,267,700	3,242,000	3,542,600	5,182,800	5,663,200
<b>50</b>	89,700	96,800	221,100	238,600	565,000	609,700	896,600	967,600	1,424,800	1,537,600	2,272,200	2,452,100	3,549,600	3,830,600	5,674,500	6,123,700
<b>55</b>	97,400	104,000	240,100	256,500	613,700	655,400	973,900	1,040,100	1,547,600	1,652,800	2,468,100	2,635,900	3,855,600	4,117,700	6,163,600	6,582,500
<b>60</b>	105,100	111,200	259,100	274,300	662,200	701,000	1,050,900	1,112,400	1,669,900	1,767,700	2,663,200	2,819,100	4,160,400	4,403,900	6,650,900	7,040,200
<b>65</b>	112,800	118,500	278,100	292,200	710,700	746,600	1,127,900	1,184,800	1,792,300	1,882,800	2,858,300	3,002,700	4,465,200	4,690,700	7,138,100	7,498,600
<b>70</b>	120,500	125,700	297,100	310,000	759,300	792,300	1,204,900	1,257,400	1,914,700	1,998,100	3,053,600	3,186,600	4,770,200	4,977,900	7,625,700	7,957,800
<b>75</b>	128,100	132,900	315,900	327,700	807,200	837,500	1,281,000	1,329,000	2,035,500	2,111,900	3,246,300	3,368,000	5,071,300	5,261,400	8,107,000	8,411,000
<b>80</b>	135,800	140,200	334,800	345,600	855,700	883,200	1,357,900	1,401,600	2,157,800	2,227,200	3,441,300	3,552,000	5,375,900	5,548,800	8,594,000	8,870,400
<b>85</b>	143,400	147,300	353,500	363,200	903,300	928,100	1,433,600	1,472,900	2,278,000	2,340,500	3,633,000	3,732,700	5,675,400	5,831,200	9,072,800	9,321,800
<b>90</b>	151,000	154,500	372,400	381,000	951,700	973,800	1,510,200	1,545,300	2,339,800	2,455,600	3,827,300	3,916,200	5,978,900	6,117,800	9,558,000	9,780,000
<b>95</b>	158,600	161,600	390,900	398,500	999,100	1,018,500	1,585,500	1,616,300	2,519,400	2,568,400	4,018,100	4,096,200	6,276,900	6,398,900	10,034,300	10,229,400
<b>100</b>	166,200	168,900	409,800	416,400	1,047,400	1,064,200	1,662,200	1,688,800	2,641,300	2,683,600	4,212,300	4,279,800	6,580,400	6,685,800	10,519,500	10,688,000

**Notes:**

- 1.) Must use stainless steel trim for steam pressures greater than 38 psig (262 kPa).
- 2.) Minimum coil BtuH calculated assuming a pressure drop across the valve of 50% of supply pressure.
- 3.) Maximum coil BtuH calculated assuming a pressure drop across the valve of 80% of supply pressure or 45% of absolute pressure, whichever is lower.

## Replacement Parts

**Valve Reconditioning Kits** include a bonnet, bonnet nut, packing, stem, plug, and disk. Reconditioning kits for stainless steel trim valves also include a replacement seat, since the seat can only be replaced on stainless steel trim models.

**Packing Kits** include enough materials to repack one valve.

**Lower Body Kits** for two-way valves include a bottom cap only; lower body kits for three-way valves include a lower body with seat.

Valve Size	Cv	Trim	Packing Kit	Reconditioning Kits			
				Standard Threaded stem (All assemblies except V-3801, VA-8x2x, V-500, and MP84 actuated models)			
				Equal Percentage Flow Characteristic			Linear Flow Characteristic
				Two-Way Normally Open (PDTCC)	Two-Way Normally Closed (PDTCO)	Two-Way Normally Open (PDTCC) Union Angle	Three-Way Mixing
<b>1/2"</b>	<b>0.73</b>	<b>Brass</b>	<b>VG7000-6001</b>	VG72K1CT	VG74K1CT	VG75K1CT	VG78K2CT
<b>1/2"</b>	<b>1.8</b>	<b>Brass</b>	<b>VG7000-6001</b>	VG72K1ET	VG74K1ET	VG75K1ET	VG78K2ET
<b>1/2"</b>	<b>4.6</b>	<b>Brass</b>	<b>VG7000-6001</b>	VG72K1GT	VG74K1GT	VG75K1GT	VG78K2GT
<b>3/4"</b>	<b>7.3</b>	<b>Brass</b>	<b>VG7000-6001</b>	VG72K1LT	VG74K1LT	VG75K1LT	VG78K2LT
<b>1"</b>	<b>11.6</b>	<b>Brass</b>	<b>VG7000-6002</b>	VG72K1NT	VG74K1NT	VG75K1NT	VG78K2NT
<b>1-1/4"</b>	<b>18.5</b>	<b>Brass</b>	<b>VG7000-6002</b>	VG72K1PT	VG74K1PT	VG75K1PT	VG78K2PT
<b>1-1/2"</b>	<b>28.9</b>	<b>Brass</b>	<b>VG7000-6002</b>	VG72K1RT	VG74K1RT	VG75K1RT	VG78K2RT
<b>2"</b>	<b>46.2</b>	<b>Brass</b>	<b>VG7000-6002</b>	VG72K1ST	VG74K1ST	VG75K1ST	VG78K2ST
<b>1/2"</b>	<b>0.73</b>						