

VG7000 Series Brass Trim Globe Valves with V-3000 Pneumatic Actuators Catalog Page

LIT-1900082

2020-07-17

Description

VG7000 Series Brass Trim Globe Valves with V-3000 Pneumatic Actuators control hot or chilled water or 38 psig saturated steam.

Refer to the *VG7000 Series Bronze Control Valves Product Bulletin (LIT-977140)* for important product application information.

Features

- Rugged actuator die-cast enclosure, fits VG7000 Series valves 1/2 through 2 in.
- Effective diaphragm area: 8 sq. in.
- Controls: hot or chilled water, 38 psig saturated steam
- Valve trim: brass
- Maximum supply air pressure: 25 psig (172 kPa)
- Fluid temperature: 35°F to 284°F (2°C to 140°C), 38 psig saturated steam
- Valve body static pressure rating: ANSI Class 250
- Factory or field assembly
- For optional V-9502-90 Positioner, add a P to the end of the code number (not available with enclosed spring actuator)

Repair information

If the VG7000 Series Globe Valve fails to operate within its specifications, replace the valve body, actuator, or entire assembly. For replacement parts, contact the nearest Johnson Controls® representative.



Selection charts

Table 1: VG7000 Series Valve Assemblies with V-3000-8012 Exposed Pneumatic Actuators

Actuator code number			V-3000-8012					
Mounting Kit	1/2 in. and 3/4 in.		VG7000-1001		VG7000-1002		VG7000-1003	
	1 in. and 1-1/4 in.		VG7000-1004		VG7000-1005		VG7000-1006	
	1-1/2 in. and 2 in.		VG7000-1007		VG7000-1008		VG7000-1009	
Spring range			3 psig to 6 psig		4 psig to 8 psig		9 psig to 13 psig	
Valve code number	Size, in.	Cv	Closeoff psig	Code number	Closeoff psig	Code number	Closeoff psig	Code number
Two-way normally open — NPT end connections (To specify a factory-mounted pneumatic postioner, add a P to the end of the code number.)								
VG7241CT	1/2	0.73	365	VG7241CT+3008B	339	VG7241CT+3008D	191	VG7241CT+3008E
VG7241ET	1/2	1.8	365	VG7241ET+3008B	339	VG7241ET+3008D	191	VG7241ET+3008E
VG7241GT	1/2	4.6	225	VG7241GT+3008B	192	VG7241GT+3008D	108	VG7241GT+3008E
VG7241LT	3/4	7.3	144	VG7241LT+3008B	122	VG7241LT+3008D	69	VG7241LT+3008E
VG7241NT	1	11.6	90	VG7241NT+3008B	76	VG7241NT+3008D	42	VG7241NT+3008E
VG7241PT	1-1/4	18.5	55	VG7241PT+3008B	47	VG7241PT+3008D	26	VG7241PT+3008E
VG7241RT	1-1/2	28.9	35	VG7241RT+3008B	30	VG7241RT+3008D	16	VG7241RT+3008E
VG7241ST	2	46.2	22	VG7241ST+3008B	19	VG7241ST+3008D	11	VG7241ST+3008E
Two-way normally closed — NPT end connections (To specify a factory-mounted pneumatic postioner, add a P to the end of the code number.)								
VG7441CT	1/2	0.73	100	VG7441CT+3008B	142	VG7441CT+3008D	348	VG7441CT+3008E
VG7441ET	1/2	1.8	100	VG7441ET+3008B	142	VG7441ET+3008D	348	VG7441ET+3008E
VG7441GT	1/2	4.6	49	VG7441GT+3008B	68	VG7441GT+3008D	168	VG7441GT+3008E
VG7441LT	3/4	7.3	29	VG7441LT+3008B	41	VG7441LT+3008D	100	VG7441LT+3008E
VG7441NT	1	11.6	17	VG7441NT+3008B	25	VG7441NT+3008D	65	VG7441NT+3008E
VG7441PT	1-1/4	18.5	10	VG7441PT+3008B	14	VG7441PT+3008D	37	VG7441PT+3008E
VG7441RT	1-1/2	28.9	6	VG7441RT+3008B	9	VG7441RT+3008D	23	VG7441RT+3008E
VG7441ST	2	46.2	4	VG7441ST+3008B	6	VG7441ST+3008D	14	VG7441ST+3008E
Three-way mixing — NPT end connections (To specify a factory-mounted pneumatic postioner, add a P to the end of the code number.)								
VG7842CT	1/2	0.73	365 / 100	VG7842CT+3008B	339 / 142	VG7842CT+3008D	191 / 348	VG7842CT+3008E
VG7842ET	1/2	1.8	365 / 100	VG7842ET+3008B	339 / 142	VG7842ET+3008D	191 / 348	VG7842ET+3008E
VG7842GT	1/2	4.6	225 / 49	VG7842GT+3008B	192 / 68	VG7842GT+3008D	108 / 168	VG7842GT+3008E
VG7842LT	3/4	7.3	144 / 29	VG7842LT+3008B	122 / 41	VG7842LT+3008D	69 / 100	VG7842LT+3008E
VG7842NT	1	11.6	90 / 17	VG7842NT+3008B	76 / 25	VG7842NT+3008D	42 / 65	VG7842NT+3008E
VG7842PT	1-1/4	18.5	55 / 10	VG7842PT+3008B	47 / 14	VG7842PT+3008D	26 / 37	VG7842PT+3008E
VG7842RT	1-1/2	28.9	35 / 6	VG7842RT+3008B	30 / 9	VG7842RT+3008D	16 / 23	VG7842RT+3008E
VG7842ST	2	46.2	22 / 4	VG7842ST+3008B	19 / 6	VG7842ST+3008D	11 / 14	VG7842ST+3008E
Two-way normally open — union sweat end connections (To specify a factory-mounted pneumatic postioner, add a P to the end of the code number.)								
VG7281CT	1/2	0.73	365	VG7281CT+3008B	339	VG7281CT+3008D	191	VG7281CT+3008E
VG7281ET	1/2	1.8	365	VG7281ET+3008B	339	VG7281ET+3008D	191	VG7281ET+3008E
VG7281GT	1/2	4.6	225	VG7281GT+3008B	192	VG7281GT+3008D	108	VG7281GT+3008E
VG7281LT	3/4	7.3	144	VG7281LT+3008B	122	VG7281LT+3008D	69	VG7281LT+3008E
VG7281NT	1	11.6	90	VG7281NT+3008B	76	VG7281NT+3008D	42	VG7281NT+3008E
VG7281PT	1-1/4	18.5	55	VG7281PT+3008B	47	VG7281PT+3008D	26	VG7281PT+3008E
VG7281RT	1-1/2	28.9	35	VG7281RT+3008B	30	VG7281RT+3008D	16	VG7281RT+3008E
VG7281ST	2	46.2	22	VG7281ST+3008B	19	VG7281ST+3008D	11	VG7281ST+3008E
Two-way normally closed — union sweat end connections (To specify a factory-mounted pneumatic postioner, add a P to the end of the code number.)								
VG7481CT	1/2	0.73	100	VG7481CT+3008B	142	VG7481CT+3008D	348	VG7481CT+3008E

Table 1: VG7000 Series Valve Assemblies with V-3000-8012 Exposed Pneumatic Actuators

Actuator code number			V-3000-8012					
Mounting Kit	1/2 in. and 3/4 in.		VG7000-1001		VG7000-1002		VG7000-1003	
	1 in. and 1-1/4 in.		VG7000-1004		VG7000-1005		VG7000-1006	
	1-1/2 in. and 2 in.		VG7000-1007		VG7000-1008		VG7000-1009	
Spring range			3 psig to 6 psig		4 psig to 8 psig		9 psig to 13 psig	
Valve code number	Size, in.	Cv	Closeoff psig	Code number	Closeoff psig	Code number	Closeoff psig	Code number
VG7481ET	1/2	1.8	100	VG7481ET+3008B	142	VG7481ET+3008D	348	VG7481ET+3008E
VG7481GT	1/2	4.6	49	VG7481GT+3008B	68	VG7481GT+3008D	168	VG7481GT+3008E
VG7481LT	3/4	7.3	29	VG7481LT+3008B	41	VG7481LT+3008D	100	VG7481LT+3008E
VG7481NT	1	11.6	17	VG7481NT+3008B	25	VG7481NT+3008D	65	VG7481NT+3008E
VG7481PT	1-1/4	18.5	10	VG7481PT+3008B	14	VG7481PT+3008D	37	VG7481PT+3008E
VG7481RT	1-1/2	28.9	6	VG7481RT+3008B	9	VG7481RT+3008D	23	VG7481RT+3008E
VG7481ST	2	46.2	4	VG7481ST+3008B	6	VG7481ST+3008D	14	VG7481ST+3008E
Three-way mixing — union sweat end connections (To specify a factory-mounted pneumatic postioner, add a P to the end of the code number.)								
VG7882CT	1/2	0.73	365 / 100	VG7882CT+3008B	339 / 142	VG7882CT+3008D	191 / 348	VG7882CT+3008E
VG7882ET	1/2	1.8	365 / 100	VG7882ET+3008B	339 / 142	VG7882ET+3008D	191 / 348	VG7882ET+3008E
VG7882GT	1/2	4.6	225 / 49	VG7882GT+3008B	192 / 68	VG7882GT+3008D	108 / 168	VG7882GT+3008E
VG7882LT	3/4	7.3	144 / 29	VG7882LT+3008B	122 / 41	VG7882LT+3008D	69 / 100	VG7882LT+3008E
VG7882NT	1	11.6	90 / 17	VG7882NT+3008B	76 / 25	VG7882NT+3008D	42 / 65	VG7882NT+3008E
VG7882PT	1-1/4	18.5	55 / 10	VG7882PT+3008B	47 / 14	VG7882PT+3008D	26 / 37	VG7882PT+3008E
VG7882RT	1-1/2	28.9	35 / 6	VG7882RT+3008B	30 / 9	VG7882RT+3008D	16 / 23	VG7882RT+3008E
VG7882ST	2	46.2	22 / 4	VG7882ST+3008B	19 / 6	VG7882ST+3008D	11 / 14	VG7882ST+3008E
Two-way normally open — 3/8 in. union sweat end connections (To specify a factory-mounted pneumatic postioner, add a P to the end of the code number.)								
VG7271CT	1/2	0.73	365	VG7271CT+3008B	339	VG7271CT+3008D	191	VG7271CT+3008E
VG7271ET	1/2	1.8	365	VG7271ET+3008B	339	VG7271ET+3008D	191	VG7271ET+3008E
VG7271GT	1/2	4.6	225	VG7271GT+3008B	192	VG7271GT+3008D	108	VG7271GT+3008E
Two-way normally closed — 3/8 in. union sweat end connections (To specify a factory-mounted pneumatic postioner, add a P to the end of the code number.)								
VG7471CT	1/2	0.73	100	VG7471CT+3008B	142	VG7471CT+3008D	348	VG7471CT+3008E
VG7471ET	1/2	1.8	100	VG7471ET+3008B	142	VG7471ET+3008D	348	VG7471ET+3008E
VG7471GT	1/2	4.6	49	VG7471GT+3008B	68	VG7471GT+3008D	168	VG7471GT+3008E
Three-way mixing — 3/8 in. union sweat end connections (To specify a factory-mounted pneumatic postioner, add a P to the end of the code number.)								
VG7872CT	1/2	0.73	365 / 100	VG7872CT+3008B	339 / 142	VG7872CT+3008D	191 / 348	VG7872CT+3008E
VG7872ET	1/2	1.8	365 / 100	VG7872ET+3008B	339 / 142	VG7872ET+3008D	191 / 348	VG7872ET+3008E
VG7872GT	1/2	4.6	225 / 49	VG7872GT+3008B	192 / 68	VG7872GT+3008D	108 / 168	VG7872GT+3008E
Two-Way normally open — 3/4 in. union sweat end connections (To specify a factory-mounted pneumatic postioner, add a P to the end of the code number.)								
VG7291CT	1/2	0.73	365	VG7291CT+3008B	339	VG7291CT+3008D	191	VG7291CT+3008E
VG7291ET	1/2	1.8	365	VG7291ET+3008B	339	VG7291ET+3008D	191	VG7291ET+3008E
VG7291GT	1/2	4.6	225	VG7291GT+3008B	192	VG7291GT+3008D	108	VG7291GT+3008E
Two-way normally closed — 3/4 in. union sweat end connections (To specify a factory-mounted pneumatic postioner, add a P to the end of the code number.)								
VG7491CT	1/2	0.73	100	VG7491CT+3008B	142	VG7491CT+3008D	348	VG7491CT+3008E
VG7491ET	1/2	1.8	100	VG7491ET+3008B	142	VG7491ET+3008D	348	VG7491ET+3008E
VG7491GT	1/2	4.6	49	VG7491GT+3008B	68	VG7491GT+3008D	168	VG7491GT+3008E
Three-way mixing — 3/4 in. union sweat end connections (To specify a factory-mounted pneumatic postioner, add a P to the end of the code number.)								
VG7892CT	1/2	0.73	365 / 100	VG7892CT+3008B	339 / 142	VG7892CT+3008D	191 / 348	VG7892CT+3008E

Table 1: VG7000 Series Valve Assemblies with V-3000-8012 Exposed Pneumatic Actuators

Actuator code number			V-3000-8012					
Mounting Kit	1/2 in. and 3/4 in.	VG7000-1001	VG7000-1002			VG7000-1003		
	1 in. and 1-1/4 in.	VG7000-1004	VG7000-1005			VG7000-1006		
	1-1/2 in. and 2 in.	VG7000-1007	VG7000-1008			VG7000-1009		
Spring range			3 psig to 6 psig		4 psig to 8 psig		9 psig to 13 psig	
Valve code number	Size, in.	Cv	Closeoff psig	Code number	Closeoff psig	Code number	Closeoff psig	Code number
VG7892ET	1/2	1.8	365 / 100	VG7892ET+3008B	339 / 142	VG7892ET+3008D	191 / 348	VG7892ET+3008E
VG7892GT	1/2	4.6	225 / 49	VG7892GT+3008B	192 / 68	VG7892GT+3008D	108 / 168	VG7892GT+3008E
Two-way normally open — union globe end connections (no positioner option available)								
VG7251CT	1/2	0.73	365	VG7251CT+3008B	339	VG7251CT+3008D	191	VG7251CT+3008E
VG7251ET	1/2	1.8	365	VG7251ET+3008B	339	VG7251ET+3008D	191	VG7251ET+3008E
VG7251GT	1/2	4.6	225	VG7251GT+3008B	192	VG7251GT+3008D	108	VG7251GT+3008E
VG7251LT	3/4	7.3	144	VG7251LT+3008B	122	VG7251LT+3008D	69	VG7251LT+3008E
VG7251NT	1	11.6	90	VG7251NT+3008B	76	VG7251NT+3008D	42	VG7251NT+3008E
VG7251PT	1-1/4	18.5	55	VG7251PT+3008B	47	VG7251PT+3008D	26	VG7251PT+3008E
VG7251RT	1-1/2	28.9	35	VG7251RT+3008B	30	VG7251RT+3008D	16	VG7251RT+3008E
Two-way normally closed — union globe end connections (no positioner option available)								
VG7451CT	1/2	0.73	100	VG7451CT+3008B	142	VG7451CT+3008D	348	VG7451CT+3008E
VG7451ET	1/2	1.8	100	VG7451ET+3008B	142	VG7451ET+3008D	348	VG7451ET+3008E
VG7451GT	1/2	4.6	49	VG7451GT+3008B	68	VG7451GT+3008D	168	VG7451GT+3008E
Two-way normally open — union angle end connections (no positioner option available)								
VG7551CT	1/2	0.73	365	VG7551CT+3008B	339	VG7551CT+3008D	191	VG7551CT+3008E
VG7551ET	1/2	1.8	365	VG7551ET+3008B	339	VG7551ET+3008D	191	VG7551ET+3008E
VG7551GT	1/2	4.6	225	VG7551GT+3008B	192	VG7551GT+3008D	108	VG7551GT+3008E
VG7551LT	3/4	7.3	144	VG7551LT+3008B	122	VG7551LT+3008D	69	VG7551LT+3008E
VG7551NT	1	11.6	90	VG7551NT+3008B	76	VG7551NT+3008D	42	VG7551NT+3008E
VG7551PT	1-1/4	18.5	55	VG7551PT+3008B	47	VG7551PT+3008D	26	VG7551PT+3008E
VG7551RT	1-1/2	28.9	35	VG7551RT+3008B	30	VG7551RT+3008D	16	VG7551RT+3008E

Table 2: VG7000 Series Valve Assemblies with V-3000-8003 Enclosed Pneumatic Actuators

Actuator code number			V-3000-8003					
Mounting kit	1/2 in. and 3/4 in.	VG7000-1001	VG7000-1002			VG7000-1003		
	1 in. and 1-1/4 in.	VG7000-1004	VG7000-1005			VG7000-1006		
	1-1/2 in. and 2 in.	VG7000-1007	VG7000-1008			VG7000-1009		
Spring range			3 psig to 6 psig		4 psig to 8 psig		9 psig to 13 psig	
Valve code number	Size, in.	Cv	Closeoff psig	Code number	Closeoff psig	Code number	Closeoff psig	Code number
Two-way normally open — NPT end connections								
VG7241CT	1/2	0.73	365	VG7241CT+3003B	339	VG7241CT+3003D	191	VG7241CT+3003E
VG7241ET	1/2	1.8	365	VG7241ET+3003B	339	VG7241ET+3003D	191	VG7241ET+3003E
VG7241GT	1/2	4.6	225	VG7241GT+3003B	192	VG7241GT+3003D	108	VG7241GT+3003E
VG7241LT	3/4	7.3	144	VG7241LT+3003B	122	VG7241LT+3003D	69	VG7241LT+3003E
VG7241NT	1	11.6	90	VG7241NT+3003B	76	VG7241NT+3003D	42	VG7241NT+3003E
VG7241PT	1-1/4	18.5	55	VG7241PT+3003B	47	VG7241PT+3003D	26	VG7241PT+3003E
VG7241RT	1-1/2	28.9	35	VG7241RT+3003B	30	VG7241RT+3003D	16	VG7241RT+3003E
VG7241ST	2	46.2	22	VG7241ST+3003B	19	VG7241ST+3003D	11	VG7241ST+3003E
Two-way normally closed — NPT end connections								
VG7441CT	1/2	0.73	100	VG7441CT+3003B	142	VG7441CT+3003D	348	VG7441CT+3003E
VG7441ET	1/2	1.8	100	VG7441ET+3003B	142	VG7441ET+3003D	348	VG7441ET+3003E
VG7441GT	1/2	4.6	49	VG7441GT+3003B	68	VG7441GT+3003D	168	VG7441GT+3003E

Table 2: VG7000 Series Valve Assemblies with V-3000-8003 Enclosed Pneumatic Actuators

Actuator code number			V-3000-8003					
Mounting kit	1/2 in. and 3/4 in.		VG7000-1001		VG7000-1002		VG7000-1003	
	1 in. and 1-1/4 in.		VG7000-1004		VG7000-1005		VG7000-1006	
	1-1/2 in. and 2 in.		VG7000-1007		VG7000-1008		VG7000-1009	
Spring range			3 psig to 6 psig		4 psig to 8 psig		9 psig to 13 psig	
Valve code number	Size, in.	Cv	Closeoff psig	Code number	Closeoff psig	Code number	Closeoff psig	Code number
VG7441LT	3/4	7.3	29	VG7441LT+3003B	41	VG7441LT+3003D	100	VG7441LT+3003E
VG7441NT	1	11.6	17	VG7441NT+3003B	25	VG7441NT+3003D	65	VG7441NT+3003E
VG7441PT	1-1/4	18.5	10	VG7441PT+3003B	14	VG7441PT+3003D	37	VG7441PT+3003E
VG7441RT	1-1/2	28.9	6	VG7441RT+3003B	9	VG7441RT+3003D	23	VG7441RT+3003E
VG7441ST	2	46.2	4	VG7441ST+3003B	6	VG7441ST+3003D	14	VG7441ST+3003E
Three-way mixing — NPT end connections								
VG7842CT	1/2	0.73	365 / 100	VG7842CT+3003B	339 / 142	VG7842CT+3003D	191 / 348	VG7842CT+3003E
VG7842ET	1/2	1.8	365 / 100	VG7842ET+3003B	339 / 142	VG7842ET+3003D	191 / 348	VG7842ET+3003E
VG7842GT	1/2	4.6	225 / 49	VG7842GT+3003B	192 / 68	VG7842GT+3003D	108 / 168	VG7842GT+3003E
VG7842LT	3/4	7.3	144 / 29	VG7842LT+3003B	122 / 41	VG7842LT+3003D	69 / 100	VG7842LT+3003E
VG7842NT	1	11.6	90 / 17	VG7842NT+3003B	76 / 25	VG7842NT+3003D	42 / 65	VG7842NT+3003E
VG7842PT	1-1/4	18.5	55 / 10	VG7842PT+3003B	47 / 14	VG7842PT+3003D	26 / 37	VG7842PT+3003E
VG7842RT	1-1/2	28.9	35 / 6	VG7842RT+3003B	30 / 9	VG7842RT+3003D	16 / 23	VG7842RT+3003E
VG7842ST	2	46.2	22 / 4	VG7842ST+3003B	19 / 6	VG7842ST+3003D	11 / 14	VG7842ST+3003E
Two-way normally open — union sweat end connections								
VG7281CT	1/2	0.73	365	VG7281CT+3003B	339	VG7281CT+3003D	191	VG7281CT+3003E
VG7281ET	1/2	1.8	365	VG7281ET+3003B	339	VG7281ET+3003D	191	VG7281ET+3003E
VG7281GT	1/2	4.6	225	VG7281GT+3003B	192	VG7281GT+3003D	108	VG7281GT+3003E
VG7281LT	3/4	7.3	144	VG7281LT+3003B	122	VG7281LT+3003D	69	VG7281LT+3003E
VG7281NT	1	11.6	90	VG7281NT+3003B	76	VG7281NT+3003D	42	VG7281NT+3003E
VG7281PT	1-1/4	18.5	55	VG7281PT+3003B	47	VG7281PT+3003D	26	VG7281PT+3003E
VG7281RT	1-1/2	28.9	35	VG7281RT+3003B	30	VG7281RT+3003D	16	VG7281RT+3003E
VG7281ST	2	46.2	22	VG7281ST+3003B	19	VG7281ST+3003D	11	VG7281ST+3003E
Two-way normally closed — union sweat end connections								
VG7481CT	1/2	0.73	100	VG7481CT+3003B	142	VG7481CT+3003D	348	VG7481CT+3003E
VG7481ET	1/2	1.8	100	VG7481ET+3003B	142	VG7481ET+3003D	348	VG7481ET+3003E
VG7481GT	1/2	4.6	49	VG7481GT+3003B	68	VG7481GT+3003D	168	VG7481GT+3003E
VG7481LT	3/4	7.3	29	VG7481LT+3003B	41	VG7481LT+3003D	100	VG7481LT+3003E
VG7481NT	1	11.6	17	VG7481NT+3003B	25	VG7481NT+3003D	65	VG7481NT+3003E
VG7481PT	1-1/4	18.5	10	VG7481PT+3003B	14	VG7481PT+3003D	37	VG7481PT+3003E
VG7481RT	1-1/2	28.9	6	VG7481RT+3003B	9	VG7481RT+3003D	23	VG7481RT+3003E
VG7481ST	2	46.2	4	VG7481ST+3003B	6	VG7481ST+3003D	14	VG7481ST+3003E
Three-way mixing — union sweat end connections								
VG7882CT	1/2	0.73	365 / 100	VG7882CT+3003B	339 / 142	VG7882CT+3003D	191 / 348	VG7882CT+3003E
VG7882ET	1/2	1.8	365 / 100	VG7882ET+3003B	339 / 142	VG7882ET+3003D	191 / 348	VG7882ET+3003E
VG7882GT	1/2	4.6	225 / 49	VG7882GT+3003B	192 / 68	VG7882GT+3003D	108 / 168	VG7882GT+3003E
VG7882LT	3/4	7.3	144 / 29	VG7882LT+3003B	122 / 41	VG7882LT+3003D	69 / 100	VG7882LT+3003E
VG7882NT	1	11.6	90 / 17	VG7882NT+3003B	76 / 25	VG7882NT+3003D	42 / 65	VG7882NT+3003E
VG7882PT	1-1/4	18.5	55 / 10	VG7882PT+3003B	47 / 14	VG7882PT+3003D	26 / 37	VG7882PT+3003E
VG7882RT	1-1/2	28.9	35 / 6	VG7882RT+3003B	30 / 9	VG7882RT+3003D	16 / 23	VG7882RT+3003E
VG7882ST	2	46.2	22 / 4	VG7882ST+3003B	19 / 6	VG7882ST+3003D	11 / 14	VG7882ST+3003E
Two-way normally open — 3/8 in. union sweat end connections								
VG7271CT	1/2	0.73	365	VG7271CT+3003B	339	VG7271CT+3003D	191	VG7271CT+3003E
VG7271ET	1/2	1.8	365	VG7271ET+3003B	339	VG7271ET+3003D	191	VG7271ET+3003E

Table 2: VG7000 Series Valve Assemblies with V-3000-8003 Enclosed Pneumatic Actuators

Actuator code number			V-3000-8003					
Mounting kit	1/2 in. and 3/4 in.		VG7000-1001		VG7000-1002		VG7000-1003	
	1 in. and 1-1/4 in.		VG7000-1004		VG7000-1005		VG7000-1006	
	1-1/2 in. and 2 in.		VG7000-1007		VG7000-1008		VG7000-1009	
Spring range			3 psig to 6 psig		4 psig to 8 psig		9 psig to 13 psig	
Valve code number	Size, in.	Cv	Closeoff psig	Code number	Closeoff psig	Code number	Closeoff psig	Code number
VG7271GT	1/2	4.6	225	VG7271GT+3003B	192	VG7271GT+3003D	108	VG7271GT+3003E
Two-way normally closed — 3/8 in. union sweat end connections								
VG7471CT	1/2	0.73	100	VG7471CT+3003B	142	VG7471CT+3003D	348	VG7471CT+3003E
VG7471ET	1/2	1.8	100	VG7471ET+3003B	142	VG7471ET+3003D	348	VG7471ET+3003E
VG7471GT	1/2	4.6	49	VG7471GT+3003B	68	VG7471GT+3003D	168	VG7471GT+3003E
Three-way mixing — 3/8 in. union sweat end connections								
VG7872CT	1/2	0.73	365 / 100	VG7872CT+3003B	339 / 142	VG7872CT+3003D	191 / 348	VG7872CT+3003E
VG7872ET	1/2	1.8	365 / 100	VG7872ET+3003B	339 / 142	VG7872ET+3003D	191 / 348	VG7872ET+3003E
VG7872GT	1/2	4.6	225 / 49	VG7872GT+3003B	192 / 68	VG7872GT+3003D	108 / 168	VG7872GT+3003E
Two-way normally open — 3/4 in. union sweat end connections								
VG7291CT	1/2	0.73	365	VG7291CT+3003B	339	VG7291CT+3003D	191	VG7291CT+3003E
VG7291ET	1/2	1.8	365	VG7291ET+3003B	339	VG7291ET+3003D	191	VG7291ET+3003E
VG7291GT	1/2	4.6	225	VG7291GT+3003B	192	VG7291GT+3003D	108	VG7291GT+3003E
Two-way normally closed — 3/4 in. union sweat end connections								
VG7491CT	1/2	0.73	100	VG7491CT+3003B	142	VG7491CT+3003D	348	VG7491CT+3003E
VG7491ET	1/2	1.8	100	VG7491ET+3003B	142	VG7491ET+3003D	348	VG7491ET+3003E
VG7491GT	1/2	4.6	49	VG7491GT+3003B	68	VG7491GT+3003D	168	VG7491GT+3003E
Three-way mixing — 3/4 in. union sweat end connections								
VG7892CT	1/2	0.73	365 / 100	VG7892CT+3003B	339 / 142	VG7892CT+3003D	191 / 348	VG7892CT+3003E
VG7892ET	1/2	1.8	365 / 100	VG7892ET+3003B	339 / 142	VG7892ET+3003D	191 / 348	VG7892ET+3003E
VG7892GT	1/2	4.6	225 / 49	VG7892GT+3003B	192 / 68	VG7892GT+3003D	108 / 168	VG7892GT+3003E
Two-way normally open — union globe end connections								
VG7251CT	1/2	0.73	365	VG7251CT+3003B	339	VG7251CT+3003D	191	VG7251CT+3003E
VG7251ET	1/2	1.8	365	VG7251ET+3003B	339	VG7251ET+3003D	191	VG7251ET+3003E
VG7251GT	1/2	4.6	225	VG7251GT+3003B	192	VG7251GT+3003D	108	VG7251GT+3003E
VG7251LT	3/4	7.3	144	VG7251LT+3003B	122	VG7251LT+3003D	69	VG7251LT+3003E
VG7251NT	1	11.6	90	VG7251NT+3003B	76	VG7251NT+3003D	42	VG7251NT+3003E
VG7251PT	1-1/4	18.5	55	VG7251PT+3003B	47	VG7251PT+3003D	26	VG7251PT+3003E
VG7251RT	1-1/2	28.9	35	VG7251RT+3003B	30	VG7251RT+3003D	16	VG7251RT+3003E
Two-way normally closed — union globe end connections								
VG7451CT	1/2	0.73	100	VG7451CT+3003B	142	VG7451CT+3003D	348	VG7451CT+3003E
VG7451ET	1/2	1.8	100	VG7451ET+3003B	142	VG7451ET+3003D	348	VG7451ET+3003E
VG7451GT	1/2	4.6	49	VG7451GT+3003B	68	VG7451GT+3003D	168	VG7451GT+3003E
Two-way normally open — union angle end connections								
VG7551CT	1/2	0.73	365	VG7551CT+3003B	339	VG7551CT+3003D	191	VG7551CT+3003E
VG7551ET	1/2	1.8	365	VG7551ET+3003B	339	VG7551ET+3003D	191	VG7551ET+3003E
VG7551GT	1/2	4.6	225	VG7551GT+3003B	192	VG7551GT+3003D	108	VG7551GT+3003E
VG7551LT	3/4	7.3	144	VG7551LT+3003B	122	VG7551LT+3003D	69	VG7551LT+3003E
VG7551NT	1	11.6	90	VG7551NT+3003B	76	VG7551NT+3003D	42	VG7551NT+3003E
VG7551PT	1-1/4	18.5	55	VG7551PT+3003B	47	VG7551PT+3003D	26	VG7551PT+3003E
VG7551RT	1-1/2	28.9	35	VG7551RT+3003B	30	VG7551RT+3003D	16	VG7551RT+3003E

Technical specifications

Table 3: Technical specifications

VG7000 Series Brass Trim Globe Valves with V-3000 Pneumatic Actuators		
Service ¹		Hot water, chilled water, 50/50 glycol solutions, and steam for HVAC systems
Fluid temperature limits	Water	35°F to 248°F (2°C to 120°C) for V-3000-800335°F to 284°F (2°C to 140°C) for V-3000-8011
	Steam	38 psig (262 kPa) Saturated steam
Maximum allowable pressure/temperature	Water	400 psig (2,756 kPa) up to 150°F (66°C) decreasing to 365 psig (2,515 kPa) at 248°F (120°C)
	Steam	38 psig (262 kPa) saturated steam at 284°F (140°C)
Valve body pressure/temperature rating		Meets requirements of ANSI B16.15, Class 250
Maximum recommended operating pressure drop	Water	35 psig (241 kPa) for 1/2 in. through 1-1/4 in. valves 30 psig (207 kPa) for 1-1/2 in. and 2 in. valves
	Steam	15 psig (103 kPa)
Flow characteristics	Two-way valves	Equal percentage
	Three-way valves	Linear flow characteristics
Rangeability ²		> 25:1 According to EN60534-2-4 for the 1/2 in. size, Cv 0.73, valve bodies >100:1 according to EN60534-2-4 for all other valves
Leakage		0.01% of maximum flow per ANSI/FCI 70-2, Class 4
Actuator ambient operating temperature limits		-20°F to 150°F (-29°C to 66°C)
Maximum actuator supply pressure		25 psig (172 kPa) maximum
Materials	Body	Cast bronze
	Bonnet	Brass
	Stem	Stainless Steel
	Plug	Brass
	Seat	Brass against molded elastomeric disk
	Packing	Self-adjusting Ethylene Propylene Rubber (EPR) ring pack U-cups
Compliance	Canada	CRN: 0C22556.5

1 Refer to the VDI 2035 Guideline for recommended proper water treatment.

2 Rangeability is defined as the ratio of maximum controllable flow to minimum controllable flow.

WARNING

This product is made of copper alloy, which contains lead. The product is therefore not to be used on drinking water.

WARNING

This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects, or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

WARNING

WARNING: BRASS MAY CONTAIN LEAD

To fulfill our obligations towards Article 33, in accordance to the European REACH Regulation No 1907/2006 EC, we hereby inform you that this article contains the following Substances of Very High Concern mentioned on the Candidate list: Lead

Product warranty

This product is covered by a limited warranty, details of which can be found at www.johnsoncontrols.com/buildingswarranty.

Single point of contact

APAC	Europe	NA/SA
JOHNSON CONTROLS C/O CONTROLS PRODUCT MANAGEMENT NO. 32 CHANGJIJANG RD NEW DISTRICT WUXI JIANGSU PROVINCE 214028 CHINA	JOHNSON CONTROLS WESTENDHOF 3 45143 ESSEN GERMANY	JOHNSON CONTROLS 507 E MICHIGAN ST MILWAUKEE WI 53202 USA