



# CONTROL VALVES

## 599 SERIES BALL VALVES 599 BALL VALVE SERIES

### DESCRIPTION

The **Siemens 599 Series ball valves and valve actuators** deliver comprehensive control solutions for almost any chilled water, hot water, or 50% glycol applications. Available in spring return, non-spring return, 2-position, floating, and proportional control these valves and actuators suit most applications. Two-way valves are available with chrome-plated brass ball and brass stem or stainless steel ball and stem for harsher conditions. The **599 Series** has a wide variety of Cv ranges to help you size the control of your application correctly.

### FEATURES

- 200 psi close-off pressure
- 0.4 to 160 Cv ranges depending on valve size
- 600/WOG/ANSI 250 pressure rating
- Double o-ring stem packing
- Blow-out proof stem for high pressure safety
- Thermal barrier on universal mounting bracket

NEW!

SIEMENS



599 Series  
2-way Ball Valve



599 Series  
3-way Ball Valve

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CONTROL VALVES

### SPECIFICATIONS

<b>Connections</b>	Female NPT	<b>Ball</b>	Nickel-plated brass or Stainless Steel
<b>Body Pattern</b>	3 Way, 2 Way	<b>Ball seals</b>	Reinforced PTFE seals with EPDM O-rings
<b>Leakage Class</b>	ANSI Class 1V	<b>Female end connections</b>	Brass
<b>Body Rating</b>	Forged Brass ASTM B283, C37733	<b>Stem</b>	Brass or stainless steel
<b>Maximum Closeoff Pressure</b>	200 PSI	<b>Stem seals</b>	EPDM O-rings
<b>Materials Of Construction</b>	Forged Brass or Stainless Steel	<b>Angle of rotation</b>	0 to 90 degrees
<b>Media Compatibility</b>	50% Water, Glycol Solutions up to 50%	<b>Close-off ratings per ANSI/FCI 70-2</b>	Class IV for A-AB, Class III for B-AB
<b>Media temperature</b>		<b>Maximum operating differential pressure</b>	
1/2" to 1-1/4"	35° to 250°F (2° to 121°C)	1/2" to 1-1/2"	60 psi
1-1/2" to 2"	35° to 230°F (2° to 110°C)	2"	35 psi
<b>Actuator Compatibility</b>	Siemens GDE, GLB, GMA, GQD,	<b>Dimensions</b>	See Dimensions table
<b>Static pressure</b>	360 psi (2482 kPa)	<b>Weight</b>	See Dimensions table
<b>Flow Optimizer</b>	Glass filled polymer	<b>Warranty</b>	2 Years

NEW!

# CONTROL VALVES

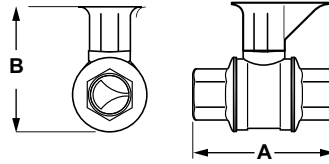
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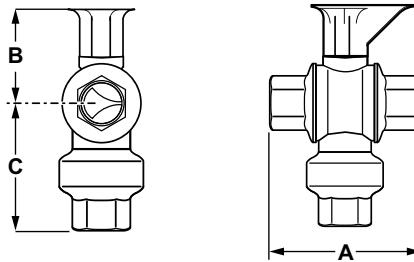
CONTROL VALVES

### DIMENSIONS



2-WAY

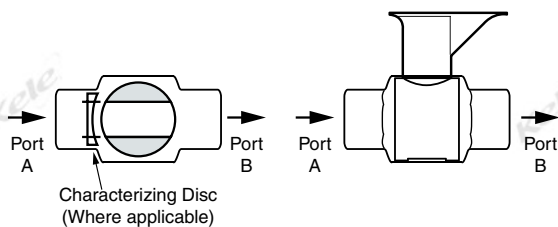
Brass or Stainless Steel Valve Body (599-)	Valve Nominal Size		Dimensions - in (mm)	
	Inches	DN (mm)	A	B
10300 - 10307	0.50	15	2-7/16 (61)	3-1/4 (83)
10308 - 10311	0.75	20	2-3/4 (70)	3-1/4 (83)
10312	1.00	25	3 (77)	3-3/4 (95)
10313-10315	1.00	25	3-1/4 (82)	4 (102)
10316	1.00	25	3-7/8 (98)	4 (102)
10317	1.25	32	3-3/8 (86)	4 (102)
10318-10321	1.25	32	3-11/16 (94)	4 (102)
10322 and 10324	1.50	40	3-5/8 (92)	4 (102)
10323, 10325, 10326	1.50	40	3-15/16 (100)	4-1/2 (114)
10327 and 10329	2.00	50	4 (102)	4-1/2 (114)
10328 and 10330	2.00	50	4-5/8 (117)	5-3/4 (146)



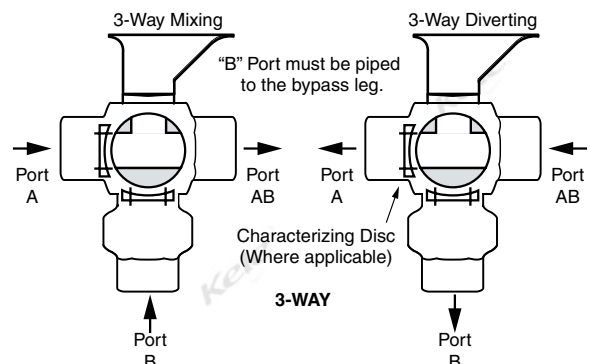
3-WAY

Brass or Stainless Steel Valve Body (599-)	Valve Nominal Size		Dimensions - in (mm)		
	Inches	DN (mm)	A	B	C
10350 - 10357	0.50	15	2-9/16 (65)	3-1/4 (83)	1-3/8 (35)
10358	0.75	20	2-3/4 (70)	3-1/4 (83)	1-3/8 (35)
10359 - 10360	0.75	20	3-1/8 (79)	3-1/4 (83)	1-11/16 (43)
10361	1.00	25	3-1/4 (82)	3-3/4 (95)	1-11/16 (43)
10362 - 10363	1.00	25	3-13/16 (100)	4 (102)	2 (51)
10364 - 10365	1.25	32	3-5/8 (92)	4 (102)	2 (51)
10366	1.25	32	3-15/16 (100)	4 (102)	2-15/16 (59)
10367 - 10368	1.50	40	3-15/16 (100)	4 (102)	2-15/16 (59)
10369	1.50	40	4-5/8 (117)	4-1/2 (114)	2-13/16 (71)
10370	2.00	50	4-5/8 (117)	4-1/2 (114)	2-7/8 (73)
10371 - 10372	2.00	50	4-5/8 (117)	5-3/4 (146)	2-7/8 (73)

### FLOW PATTERN



2-WAY



3-WAY



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CONTROL VALVES

ORDERING INFORMATION								
VALVE SPECIFICATION				NON-SPRING RETURN		SPRING RETURN (N.O.)**		
Configuration/Port	Valve #	Cv***	Size	Two-pos/Floating	Proportional	Two-pos	Floating	Proportional
Two-Way	10300	0.4	1/2"	GDE131.1P (171A-)	GDE161.1P (171C-)	GQD121.1P (171H-)	GQD131.1P (171J-)	GQD151.1P (171K-)
Two-Way	10301	0.63	1/2"	GDE131.1P (171A-)	GDE161.1P (171C-)	GQD121.1P (171H-)	GQD131.1P (171J-)	GQD151.1P (171K-)
Two-Way	10303	1.6	1/2"	GDE131.1P (171A-)	GDE161.1P (171C-)	GQD121.1P (171H-)	GQD131.1P (171J-)	GQD151.1P (171K-)
Two-Way	10304	2.5	1/2"	GDE131.1P (171A-)	GDE161.1P (171C-)	GQD121.1P (171H-)	GQD131.1P (171J-)	GQD151.1P (171K-)
Two-Way	10305	4.0	1/2"	GDE131.1P (171A-)	GDE161.1P (171C-)	GQD121.1P (171H-)	GQD131.1P (171J-)	GQD151.1P (171K-)
Two-Way	10306	6.3	1/2"	GDE131.1P (171A-)	GDE161.1P (171C-)	GQD121.1P (171H-)	GQD131.1P (171J-)	GQD151.1P (171K-)
Two-Way	10307*	10.0	1/2"	GDE131.1P (171A-)	GDE161.1P (171C-)	GQD121.1P (171H-)	GQD131.1P (171J-)	GQD151.1P (171K-)
Two-Way	10308	6.3	3/4"	GDE131.1P (171A-)	GDE161.1P (171C-)	GQD121.1P (171H-)	GQD131.1P (171J-)	GQD151.1P (171K-)
Two-Way	10309	10.0	3/4"	GDE131.1P (171A-)	GDE161.1P (171C-)	GQD121.1P (171H-)	GQD131.1P (171J-)	GQD151.1P (171K-)
Two-Way	10310	16.0	3/4"	GDE131.1P (171A-)	GDE161.1P (171C-)	GQD121.1P (171H-)	GQD131.1P (171J-)	GQD151.1P (171K-)
Two-Way	10311*	25.0	3/4"	GDE131.1P (171A-)	GDE161.1P (171C-)	GQD121.1P (171H-)	GQD131.1P (171J-)	GQD151.1P (171K-)
Two-Way	10312	10.0	1"	GLB131.1P (171B-)	GLB161.1P (171D-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Two-Way	10314	25.0	1"	GLB131.1P (171B-)	GLB161.1P (171D-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Two-Way	10316*	63.0	1"	GLB131.1P (171B-)	GLB161.1P (171D-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Two-Way	10317	16.0	1-1/4"	GLB131.1P (171B-)	GLB161.1P (171D-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Two-Way	10319	40.0	1-1/4"	GLB131.1P (171B-)	GLB161.1P (171D-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Two-Way	10321*	100.0	1-1/4"	GLB131.1P (171B-)	GLB161.1P (171D-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Two-Way	10322	25.0	1-1/2"	GLB131.1P (171B-)	GLB161.1P (171D-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Two-Way	10324	63.0	1-1/2"	GLB131.1P (171B-)	GLB161.1P (171D-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Two-Way	10326*	160.0	1-1/2"	GLB131.1P (171B-)	GLB161.1P (171D-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Two-Way	10327	40.0	2"	GLB131.1P (171B-)	GLB161.1P (171D-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Two-Way	10329	63.0	2"	GLB131.1P (171B-)	GLB161.1P (171D-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Two-Way	10330*	160.0	2"	GLB131.1P (171B-)	GLB161.1P (171D-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10350	0.4	1/2"	GDE131.1P (171A-)	GDE161.1P (171C-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10351	0.63	1/2"	GDE131.1P (171A-)	GDE161.1P (171C-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10353	1.6	1/2"	GDE131.1P (171A-)	GDE161.1P (171C-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10354	2.5	1/2"	GDE131.1P (171A-)	GDE161.1P (171C-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10355	4.0	1/2"	GDE131.1P (171A-)	GDE161.1P (171C-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10356	6.3	1/2"	GDE131.1P (171A-)	GDE161.1P (171C-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10357*	10.0	1/2"	GDE131.1P (171A-)	GDE161.1P (171C-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10358	6.3	3/4"	GDE131.1P (171A-)	GDE161.1P (171C-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10359	10.0	3/4"	GDE131.1P (171A-)	GDE161.1P (171C-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10360*	16.0	3/4"	GDE131.1P (171A-)	GDE161.1P (171C-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10361	10.0	1"	GDE131.1P (171A-)	GDE161.1P (171C-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10362	16.0	1"	GDE131.1P (171A-)	GDE161.1P (171C-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10363*	25.0	1"	GDE131.1P (171A-)	GDE161.1P (171C-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10364	16.0	1-1/4"	GDE131.1P (171A-)	GDE161.1P (171C-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10365	25.0	1-1/4"	GDE131.1P (171A-)	GDE161.1P (171C-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10366*	40.0	1-1/4"	GDE131.1P (171A-)	GDE161.1P (171C-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10367	25.0	1-1/2"	GLB131.1P (171B-)	GLB161.1P (171D-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10368	40.0	1-1/2"	GLB131.1P (171B-)	GLB161.1P (171D-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10369*	63.0	1-1/2"	GLB131.1P (171B-)	GLB161.1P (171D-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10370	40.0	2"	GLB131.1P (171B-)	GLB161.1P (171D-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10371	63.0	2"	GLB131.1P (171B-)	GLB161.1P (171D-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)
Three-Way	10372*	100.0	2"	GLB131.1P (171B-)	GLB161.1P (171D-)	GMA121.1P (171E-)	GMA131.1P (171F-)	GMA161.1P (171G-)

\* No characterized disc. Denotes full-port valve.

\*\* For N.C. (Normally Closed) Valves use 172x- in place of 171x- (2-way valves only)

\*\*\* To order valve body only, use prefix 599- and Valve #

All valves are factory assembled. No field assembly required.

**Note:** Standard ball valve construction is chrome plated brass ball and stem. Add "S" to the end of part number for stainless steel.

### EXAMPLE

MODEL	DESCRIPTION
17XX	Compatible Actuator (Select from Above)
103XX	Ball valve (Select from Above)

NEW!