Plant Valves

VG1000 Flanged

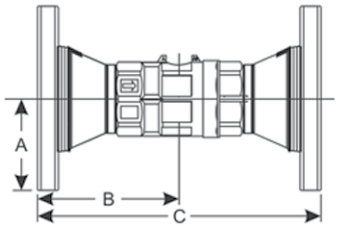
DN65...100, PN16

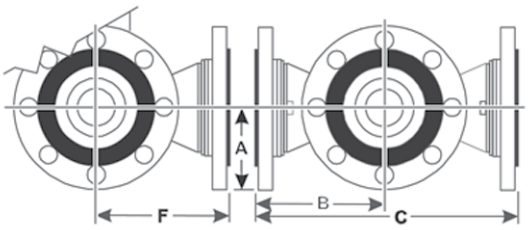
The VG1000 series control ball valves are used for the water control of air treatment systems in ventilation and air conditioning units as well as heating system.

They are operated by remote mounted Spring Return and Non Spring Return actuators.

Features

- 2-way & 3-way mixing
- Body Rating PN 16
- Hot water, chilled water, 50/50 glycol solutions and 172 kPa Saturated Steam for HVAC Systems
- Valve Fluid Temperature Limits -18 to 140 °C
- Maximum Closeoff Pressure
  2-way: 689 kPa / 3-way: 345 kPa
- Maximum Recommended Operating Pressure Drop
  207 kPa for quiet service
- Flow Characteristics
  2-way: Equal Percentage (according EN60534-2-4)
  3-way: Equal Percentage (according EN60534-2-4) Flow Characteristics of Inline Port (Coil) and Linear Percentage Flow Characteristics of Angle Port (Bypass)
- Rangeability Greater than 500:1
- Leakage
  2 and 3-way: 0.01% of Maximum Flow, Control port, ANSI/FCI 70-2, Class 4
  3-way: 1% of Maximum Flow, Bypass Port





Dimensions in mm

Valve Size	A	B	C	F	Holes for Flange	Holes Diameters	Bolt
DN65	92.5	145	290	149	4	19	M16x60
DN80	100	155	310	159	8	19	M16x65
DN100	110	175	350	179	8	19	M16x70

Plant Valves
VG1000 Flanged

Assemblies of Valves with Proportional Actuators

Spring Return Function	---		•	
Supply Voltage	24 VAC/DC			
Torque	24 Nm		20 Nm	
Running Time	125 s		150 s	
Spring Return Time Power Off	---		26 s	
Control Signal				
VDC:	0 - 10 / 2 - 10			
mA:	0 - 20 / 4 - 20			
Switches	---	2 x SPDT	---	2 x SPDT
Feedback				
VDC:	0 - 10 / 2 - 10			
Actuator Code	**M9124-GGA-1N**	**M9124-GGC-1N**	**M9220-HGA-1**	**M9220-HGC-1**
Linkage Code	**M9000-518**		**M9000-519**	
Ordering Code Suffix for Assemblies	**+ 524GGA**	**+ 524GGC**	**+ 530HGA** (Spring Opens) **+ 550HGA** (Spring Closes)	**+ 530HGC** (Spring Opens) **+ 550HGC** (Spring Closes)

Ordering Codes

Valve Code	Body Size	K_{VS} (Control Port)	K_{VS} (Bypass Port)	Valid combinations of valves, linkages and actuators			
2-way Models							
VG12E5GT	DN65	63	---	•	•	•	•
VG12E5GU		100	---	•	•	•	•
VG12E5HU	DN80	100	---	•	•	•	•
VG12E5HW		180	---	•	•	•	•
VG12E5JV	DN100	150	---	•	•	•	•
3-way Models							
VG18E5GT	DN65	63	40	•	•	•	•
VG18E5GU		100	63	•	•	•	•
VG18E5HU	DN80	100	63	•	•	•	•
VG18E5HW		180	75	•	•	•	•
VG18E5JV	DN100	150	75	•	•	•	•

Plant Valves
VG1000 Flanged

Assemblies of Valves with Foating and ON/OFF Actuators

Spring Return Function	---				•					
Supply Voltage	24 VAC / DC		230 VAC		24 VAC / DC			230 VAC		
Torque	24 Nm				20 Nm					
Running Time	125 s				150 s				24 - 57 s	
Spring Return Time Power Off	---				20 s				11...50 s	
Control Signal	Floating and ON/OFF						ON/OFF			
Switches	---	2 x SPDT	---	2 x SPDT	---	2 x SPDT	---	2 x SPDT	---	2 x SPDT
Feedback	---									
Actuator Code	M9124-AGA-1N	M9124-AGC-1N	M9124-ADA-1N	M9124-ADC-1N	M9220-AGA-1	M9220-AGC-1	M9220-BGA-1	M9220-BGC-1	M9220-BDA-1	M9220-BDC-1
Linkage Code	M9000-518				M9000-519					
Ordering Code suffix for assemblies	+524AGA	+524AGC	+524ADA	+524ADC	+530AGA (Spring Opens) +550AGA (Spring Closes)	+530AGC (Spring Opens) +550AGC (Spring Closes)	+530BGA (Spring Opens) +550BGA (Spring Closes)	+530BGC (Spring Opens) +550BGC (Spring Closes)	+530BDA (Spring Opens) +550BDA (Spring Closes)	+530BDC (Spring Opens) +550BDC (Spring Closes)

Ordering Codes

Valve Code	Body Size	K_{VS} (Control Port)	K_{VS} (Bypass Port)	Valid combinations of valves, linkages and actuators									
2-way Models													
VG12E5GT	DN65	63	---	•	•	•	•	•	•	•	•	•	•
VG12E5GU		100	---	•	•	•	•	•	•	•	•	•	•
VG12E5HU	DN80	100	---	•	•	•	•	•	•	•	•	•	•
VG12E5HW		180	---	•	•	•	•	•	•	•	•	•	•
VG12E5JV	DN100	150	---	•	•	•	•	•	•	•	•	•	•
3-way Models													
VG18E5GT	DN65	63	40	•	•	•	•	•	•	•	•	•	•
VG18E5GU		100	63	•	•	•	•	•	•	•	•	•	•
VG18E5HU	DN80	100	63	•	•	•	•	•	•	•	•	•	•
VG18E5HW		180	75	•	•	•	•	•	•	•	•	•	•
VG18E5JV	DN100	150	75	•	•	•	•	•	•	•	•	•	•