

## VALVES

### PLANT VALVES

## VG1000 FLANGED

DN65...150, 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.

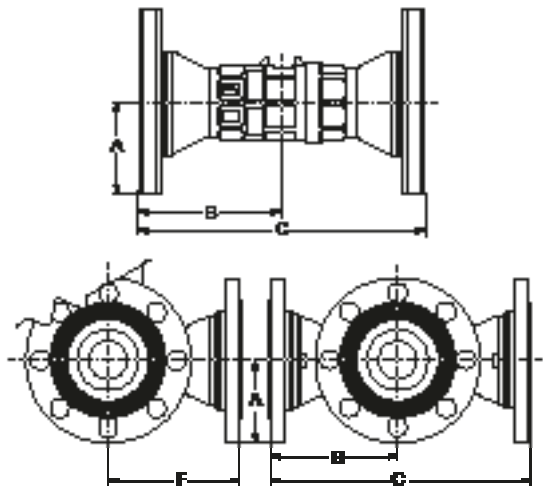


## FEATURES

- 2-way and 3-way mixing
- Body rating PN16
- Hot water, chilled water, 50/50 glycol solutions and 172 kPa saturated steam for HVAC Systems
- Valve fluid temperature limits -20 to 140°C
- Maximum close-off pressure 2-way: 690 kPa / 3-way: 345 kPa
- Maximum recommended operating pressure drop 200 kPa for quiet service
- Flow characteristics
  - 2-way: Equal percentage
  - 3-way: Equal percentage in Inline port (Coil) and linear characteristics in angle port (By-pass)
- Rangeability greater than 500:1
- Leakage 2-way and 3-way: 0.01% of maximum flow, control port
- 3-way: 1% of maximum flow, by-pass ports



#### DIMENSIONS (in mm)



CODES	VALVE SIZE	A	B	C	F	HOLES FOR FLANGE	HOLES DIAMETERS	BOLT
VG1xE5Gx	DN65	92.5	145	290	149	4	19	M16x60
VG1xE5Hx	DN80	100	155	310	159	8	19	M16x65
VG1xE5Jx	DN100	110	175	350	179	8	19	M16x70
VG1xE5NY	DN125	125	200	400	255	8	19	M16x75
VG1xE5PZ	DN150	142.5	240	480	290	8	23	M20x80



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## ORDERING INFORMATION

### 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 Codes	<b>M9124-GGA-1N</b>	<b>M9124-GGC-1N</b>	<b>M9220-HGA-1</b>	<b>M9220-HGC-1</b>
Linkage Codes	<b>M9000-518</b>		<b>M9000-519</b>	
Ordering Code Suffix for Assemblies	<b>+ 524GGA</b>	<b>+ 524GGC</b>	<b>+ 530HGA</b> (Spring opens)	<b>+ 530HGC</b> (Spring opens)
			<b>+ 550HGA</b> (Spring closes)	<b>+ 550HGC</b> (Spring closes)

VALVE CODES	BODY SIZE	K <sub>VS</sub> (Control port)	K <sub>VS</sub> (By-pass port)	VALID COMBINATIONS OF VALVES, LINKAGES AND ACTUATORS			
2-way models							
VG12E5GT	DN65	63	---	■	■	■	■
VG12E5GU		100	---	■	■	■	■
VG12E5HU	DN80	100	---	■	■	■	■
VG12E5HW		180	---	■	■	■	■
VG12E5JV	DN100	150	---	■	■	■	■
VG12E5NY	DN125	250	---	■	■	■	■
VG12E5PZ	DN150	350	---	■	■	■	■
3-way models							
VG18E5GT	DN65	63	40	■	■	■	■
VG18E5GU		100	63	■	■	■	■
VG18E5HU	DN80	100	63	■	■	■	■
VG18E5HW		180	75	■	■	■	■
VG18E5JV	DN100	150	75	■	■	■	■
VG18E5NY	DN125	250	160	■	■	■	■
VG18E5PZ	DN150	350	160	■	■	■	■



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### VG1000 FLANGED - PLANT VALVES

## ORDERING INFORMATION

### ASSEMBLIES OF VALVES WITH FLOATING 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 Codes	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 Codes	M9000-518				M9000-519					
Ordering Code Suffix for Assemblies	+524AGA	+524AGC	+524ADA	+524ADC	+530AGA	+530AGC	+530BGA	+530BGC	+530BDA	+530BDC
					(Spring Opens)	(Spring Opens)	(Spring Opens)	(Spring Opens)	(Spring Opens)	(Spring Opens)
					+550AGA	+550AGC	+550BGA	+550BGC	+550BDA	+550BDC
					(Spring Closes)	(Spring Closes)	(Spring Closes)	(Spring Closes)	(Spring Closes)	(Spring Closes)

VALVE CODES	BODY SIZE	K <sub>vs</sub> (Control port)	K <sub>vs</sub> (By-pass port)	VALID COMBINATIONS OF VALVES, LINKAGES AND ACTUATORS									
				2-way models									
VG12E5GT	DN65	63	---	■	■	■	■	■	■	■	■	■	■
VG12E5GU		100	---	■	■	■	■	■	■	■	■	■	■
VG12E5HU	DN80	100	---	■	■	■	■	■	■	■	■	■	■
VG12E5HW		180	---	■	■	■	■	■	■	■	■	■	■
VG12E5JV	DN100	150	---	■	■	■	■	■	■	■	■	■	■
VG12E5NY	DN125	250	---	■	■	■	■	■	■	■	■	■	■
VG12E5PZ	DN150	350	---	■	■	■	■	■	■	■	■	■	■
3-way models													
VG18E5GT	DN65	63	40	■	■	■	■	■	■	■	■	■	■
VG18E5GU		100	63	---	■	■	■	■	■	■	■	■	■
VG18E5HU	DN80	100	63	■	■	■	■	■	■	■	■	■	■
VG18E5HW		180	75	---	■	■	■	■	■	■	■	■	■
VG18E5JV	DN100	150	75	---	■	■	■	■	■	■	■	■	■
VG18E5NY	DN125	250	160	---	■	■	■	■	■	■	■	■	■
VG18E5PZ	DN150	350	160	---	■	■	■	■	■	■	■	■	■