



# VG2000 Electric Flange Valve Assembly



## M9000 SERIES NON-SPRING RETURN

### Valve

- Provides control of chilled water, hot water, or steam
- May be used with 50% glycol solutions
- ASME 125 flange – per ASME B16.1
- Class 3 leakage – 0.1% of maximum flow
- 175 psig static pressure rating – water temperatures 35 to 150°F; decreasing to 125 psig at 281°F
- Fluid temperature rating: 35 to 281°F (2 to 138°C)
- Steam pressure rating 35 psig

- Packing – EPT ring packs, field replaceable
- Cast iron body
- Bronze trim – field replaceable
- Stainless steel stem

### Actuator

- Factory or field mounted
- 24 VAC 50/60 Hz or 24 VDC, 7.5 VA
- Ambient temperature rating -4 to 122°F (-20 to 50°C)

### M9000 SERIES NON-SPRING RETURN VALVE ASSEMBLY

VALVE	SIZE IN.	Cv	CLOSEOFF PSIG	FLOATING WITHOUT SWITCHES	FLOATING WITH 2 SWITCHES	0 TO 10 VDC PROPORTIONAL WITHOUT SWITCHES	0 TO 10 VDC PROPORTIONAL WITH 2 SWITCHES
				M9116-AGA-2 OR M9124-AGA-2	M9116-AGC-2 OR M9124-AGC-2	M9116-GGA-2 OR M9124-GGA-2	M9116-GGC-2 OR M9124-GGC-2
TWO-WAY PUSH-DOWN-TO-CLOSE							
VG2231TM	2-1/2	51	62	VG2231TM+916AGA	VG2231TM+916AGC	VG2231TM+916GGA	VG2231TM+916GGC
VG2231TM	2-1/2	51	101	VG2231TM+924AGA	VG2231TM+924AGC	VG2231TM+924GGA	VG2231TM+924GGC
VG2231UM	3	83	27	VG2231UM+916AGA	VG2231UM+916AGC	VG2231UM+916GGA	VG2231UM+916GGC
VG2231UM	3	83	43	VG2231UM+924AGA	VG2231UM+924AGC	VG2231UM+924GGA	VG2231UM+924GGC
VG2231UM	3	83	88	VG2231UM2924AGA*	VG2231UM2924AGC*	VG2231UM2924GGA*	VG2231UM2924GGC*
VG2231VM	4	150	24	VG2231VM+924AGA	VG2231VM+924AGC	VG2231VM+924GGA	VG2231VM+924GGC
VG2231VM	4	150	49	VG2231VM2924AGA*	VG2231VM2924AGC*	VG2231VM2924GGA*	VG2231VM2924GGC*
VG2231WN	5	240	26	VG2231WN2924AGA*	VG2231WN2924AGC*	VG2231WN2924GGA*	VG2231WN2924GGC*
VG2231YN	6	350	16	VG2231YN2924AGA*	VG2231YN2924AGC*	VG2231YN2924GGA*	VG2231YN2924GGC*
THREE-WAY MIXING							
VG2831TM	2-1/2	54	37	VG2831TM+916AGA	VG2831TM+916AGC	VG2831TM+916GGA	VG2831TM+916GGC
VG2831TM	2-1/2	54	60	VG2831TM+924AGA	VG2831TM+924AGC	VG2831TM+924GGA	VG2831TM+924GGC
VG2831UM	3	80	16	VG2831UM+916AGA	VG2831UM+916AGC	VG2831UM+916GGA	VG2831UM+916GGC
VG2831UM	3	80	26	VG2831UM+924AGA	VG2831UM+924AGC	VG2831UM+924GGA	VG2831UM+924GGC
VG2831UM	3	80	53	VG2831UM2924AGA*	VG2831UM2924AGC*	VG2831UM2924GGA*	VG2831UM2924GGC*
VG2831VM	4	157	9	VG2831VM+916AGA	VG2831VM+916AGC	VG2831VM+916GGA	VG2831VM+916GGC
VG2831VM	4	157	14	VG2831VM+924AGA	VG2831VM+924AGC	VG2831VM+924GGA	VG2831VM+924GGC
VG2831VM	4	157	30	VG2831VM2924AGA*	VG2831VM2924AGC*	VG2831VM2924GGA*	VG2831VM2924GGC*
VG2831WN	5	238	7	VG2831WN+924AGA	VG2831WN+924AGC	VG2831WN+924GGA	VG2831WN+924GGC
VG2831WN	5	238	15	VG2831WN2924AGA*	VG2831WN2924AGC*	VG2831WN2924GGA*	VG2831WN2924GGC*
VG2831YN	6	347	4	VG2831YN+924AGA	VG2831YN+924AGC	VG2831YN+924GGA	VG2831YN+924GGC
VG2831YN	6	347	9	VG2831YN2924AGA*	VG2831YN2924AGC*	VG2831YN2924GGA*	VG2831YN2924GGC*

\* Valve assemblies have two actuators mounted in tandem. On tandem actuator assemblies with auxiliary switches, only one actuator is provided with auxiliary switches. For additional information, refer to Product Bulletin LIT-977133.



# Linkage Kits - Field Mounting and Replacement Parts

**VG2000 Linkage Kit**

**Code Number**

- 2-1/2 inch valve, 3/4 inch stroke, single actuator M9000-530
- 3 and 4 inch valves, 1-1/8 inch stroke, single actuator M9000-531
- 3 and 4 inch valves, 1-1/8 inch stroke, tandem actuators (3/8 inch Stem) M9000-532
- 5 inch valve, 1-3/8 inch stroke, single actuator M9000-533
- 5 inch valve, 1-3/8 inch stroke, tandem actuators M9000-534
- 6 inch valve, 1-1/2 inch stroke, single actuator M9000-535
- 6 inch valve, 1-1/2 inch stroke, tandem actuators M9000-536
- 3 and 4 inch valves, 1-1/8 inch stroke, tandem actuators (1/2 inch Stem)  
(The M9000-537 is used when converting MP86 and 8R pneumatic actuated valves) M9000-537
- Manual Handle for Non-Spring Return Actuators M9000-155
- Weather Shield for Single M9116 or M9124 Actuator (For tandem applications two weather shields are required) M9000-310
- Weather Shield for Single M9220 Actuator (For tandem applications two weather shields are required) M9000-320

**Notes:** 1) VG2431 and VG2831 valves require 2 gaskets per valve.

2) Reconditioning Kits include all parts needed to completely rebuild a valve with exception of the valve body.

LINKAGE KITS FOR FIELD MOUNTING AND REPLACEMENT PARTS

REPLACEMENT PARTS

CODE NUMBER	SIZE	STEM DIAMETER	STEM PACKING KITS	PACKING NUT KITS	RECONDITIONING KITS
<b>TWO-WAY PUSH-DOWN-TO-CLOSE</b>					
VG2231TM	2-1/2	3/8	V-9999-613	V-4510-6019	V-5252-6001
VG2231UM	3	3/8	V-9999-613	V-4510-6019	V-5252-6003
VG2231VM	4	3/8	V-9999-613	V-4510-6019	V-5252-6005
VG2231WN	5	1/2	V-5252-668	V-5252-609	V-5252-6007
VG2231YN	6	1/2	V-5252-668	V-5252-609	V-5252-6008
<b>TWO-WAY PUSH-DOWN-TO-OPEN</b>					
VG2431TM	2-1/2	3/8	V-9999-613	V-4510-6019	V-5462-6001
VG2431UM	3	3/8	V-9999-613	V-4510-6019	V-5462-6002
VG2431VM	4	3/8	V-9999-613	V-4510-6019	V-5462-6004
VG2431WN	5	1/2	V-5252-668	V-5252-609	V-5462-6006
VG2431YN	6	1/2	V-5252-668	V-5252-609	V-5462-6007
<b>THREE-WAY MIXING</b>					
VG2831TM	2-1/2	3/8	V-9999-613	V-4510-6019	V-5842-6001
VG2831UM	3	3/8	V-9999-613	V-4510-6019	V-5842-6002
VG2831VM	4	3/8	V-9999-613	V-4510-6019	V-5842-6004
VG2831WN	5	1/2	V-5252-668	V-5252-609	V-5842-6006
VG2831YN	6	1/2	V-5252-668	V-5252-609	V-5842-6007