

M9000-53x Series

Cast Iron Flanged Valves Linkage Kits

Description

The M9000-53x Series Cast Iron Flanged Valve Linkage Kits are designed specifically for field mounting M9116 and M9124 Series Non-spring Return (NSR) and M9220 Series Spring Return (SR) Electric Actuators to VG2000 Series Cast Iron Flanged Valves in sizes 2-1/2 in. through 6 in. Kits are available to fit older Johnson Controls® valves for easy conversion from pneumatic or older electric actuator installations.

Refer to the *M9000-53x Series Cast Iron Flanged Valve Linkage Kit for M9000 Series Electric Actuators Product Bulletin (LIT-1201538)* for important product application information.

Features

- dedicated models — facilitate quick and easy installation regardless of the valve stroke and electric actuator chosen
- single anti-rotation bracket — allows one linkage to accommodate spring return and non-spring return electric actuators
- two-bolt coupler clamp — provides quick and easy coupling of the linkage to the valve stem
- easy to convert from single to tandem actuators — accommodates changing shutoff requirements

Repair Information

If the M9000-53x Series Cast Iron Flanged Valve Linkage Kit fails to operate within its specifications, replace the unit. For a replacement kit, contact the nearest Johnson Controls® representative.



VG2x31 Valves with M9000 Series Electric Valve Actuators

Selection Chart

Valve Size, in.	Active Valve Code Number	Discontinued Valve Code Numbers That Are Compatible with Linkage Kit	Nominal Valve Stroke, in.	Valve Stem Diameter, in.	Actuator Series ¹	Number of Actuators Required	Linkage Kit Code Number
2-1/2	VG2231TM VG2431TM VG2831TM	V-5252-4, -5, -6, -7, -8, -32, -33 V-5462-6, -7, -34 V-5842-7, -8, -31 VB-3752-19 VB-3970-11 VB-4322-9	3/4	3/8	M9116 M9124 M9220	1	M9000-530 ²
							M9000-531 ³
3	VG2231UM VG2431UM VG2831UM	V-5252-9, -10, -11, -12, -13, -34, -35 V-5462-8, -9, -35 V-5842-9, -10, -32 VB-3752-22 VB-3970-14 VB-4322-11	1-1/8	1/2	M9124 M9220	2	M9000-532
							M9000-537
	VG2231UN VG2431UN VG2831UN	V-5462-10, -36 V-5842-17, -18, -33					
4	VG2231VM VG2431VM VG2831VM	V-5252-14, -36 V-5462-11, -12, -37 V-5842-9, -10, -32 VB-3752-25 VB-3970-17 VB-4322-13	1-1/8	3/8		1	M9000-531 ³
						2	M9000-532
	VG2231VN VG2431VN VG2831VN	V-5252-15, -16, -37 V-5462-13, -14, -38 V-5842-11, -12, -34	1/2			M9000-537	
5	VG2231WN VG2431WN VG2831WN	V-5252-17, -18, -38 V-5462-15, -16, -39 V-5842-13, -14, -35 VB-3752-28 VB-3970-20 VB-4322-19	1-3/8			1	M9000-533 ³
						2	M9000-534
6	VG2231YN VG2431YN VG2831YN	V-5252-19, -39 V-5462-17, -18, -40 V-5842-15, -16, -36 VB-3752-31 VB-3970-23 VB-4322-18	1-1/2			1	M9000-535 ³
						2	M9000-536

1. M9116 and M9124 Series Electric Actuators are non-spring return. M9220 Series Electric Actuators are spring return.
 2. The M9000-530 cannot be retrofitted with the M9000-610 Tandem Adapter Kit.
 3. Linkages can be retrofitted with a tandem actuator using an M9100-610 Tandem Adapter Kit.

Cast Iron Flanged Valves Linkage Kits (Continued)

Technical Specifications

M9000-53x Series Cast Iron Flanged Valve Linkage Kits		
Service¹	Hot Water, Chilled Water, 50/50 Glycol Solutions, and 15 psig (103 kPa) Saturated Steam for Heating, Ventilating, and Air Conditioning (HVAC) Systems	
Force Output	M9000-530	378 lb (1,684 N) minimum with M9116 Series Actuator 605 lb (2,691 N) minimum with M9124 Series Actuator 457 lb (2,035 N) minimum with M9220 Series Actuator
	M9000-531	238 lb (1,060 N) minimum with M9116 Series Actuator 380 lb (1,694 N) minimum with M9124 Series Actuator 288 lb (1,281 N) minimum with M9220 Series Actuator
	M9000-532	761 lb (3,385 N) minimum with Tandem M9124 Series Actuators 576 lb (2,562 N) minimum with Tandem M9220 Series Actuators
	M9000-533	315 lb (1,405 N) minimum with M9124 Series Actuator
	M9000-534	631 lb (2,806 N) minimum with Tandem M9124 Series Actuators 477 lb (2,121 N) minimum with Tandem M9220 Series Actuators
	M9000-535	280 lb (1,248 N) minimum with M9124 Series Actuator
	M9000-536	561 lb (2,495 N) minimum with Tandem M9124 Series Actuators 424 lb (1,887 N) minimum with Tandem M9220 Series Actuators
	M9000-537	761 lb (3,385 N) minimum with Tandem M9124 Series Actuators 576 lb (2,562 N) minimum with Tandem M9220 Series Actuators
Valve Stroke	M9000-530	3/4 in. (19 mm) Nominal
	M9000-531	1-1/8 in. (29 mm) Nominal
	M9000-532	1-1/8 in. (29 mm) Nominal
	M9000-533	1-3/8 in. (35 mm) Nominal
	M9000-534	1-3/8 in. (35 mm) Nominal
	M9000-535	1-1/2 in. (38 mm) Nominal
	M9000-536	1-1/2 in. (38 mm) Nominal
	M9000-537	1-1/8 in. (29 mm) Nominal
Minimum Ambient Operating Temperature (Limited by the Valve)	35°F (2°C) in Water and Steam Applications	
Maximum Ambient Operating Temperature² (Limited by the Actuator)	122°F (50°C) M91xx Series Actuators 131°F (55°C) M9220 Series Actuators	
Shipping Weight	7-1/2 lb (3.4 kg)	

1. Proper water treatment is recommended; refer to VDI 2035 Standard.

2. In steam applications, install the valve with the stem horizontal to the piping, and wrap the valve with insulation.