

# Direct Coupled Valve Actuators

## ML6421; ML7421

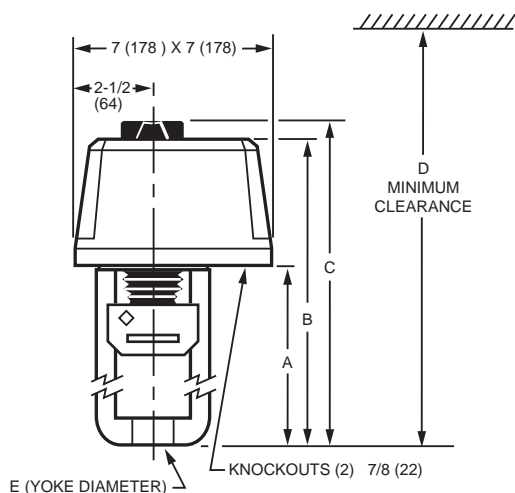
### Non-Spring Return Direct Coupled Globe Valve Actuators



Direct Coupled Globe Valve Actuators provide floating or modulating control of chilled water, hot water, or steam, and mount directly on VGF series, V5011, and V5013 valves. These Non-Spring Return High Force Actuators will operate 1-1/2 to 6 inch valves.

- Easy and quick installation on valves with 1 3/8" bonnet and 3/4" stroke, or with 1 7/8" bonnet and 1 1/2" stroke
- High force for VGF Pressure-balanced valves
- No separate linkage required
- Conduit connector standard
- No adjustments required on linkage
- Accurate valve positioning
- Low power consumption
- High close-off ratings
- Force limiting end switches
- Manual operator
- Synchronous motor
- Maintenance free

#### Dimensions in inches (millimeters)



	ML6421A, ML7421A	ML6421B, ML7421B
A	5-5/8 (142)	8 (204)
B	9-3/8 (239)	11-7/8 (301)
C	10-3/8 (264)	12-3/4 (326)
D	14-1/4 (360)	16-7/8 (430)
E	1-3/8 (35)	1-7/8 (48)

M16827

**Actuator Type:** Valve

**Fail Safe Mode:** Stays in place

**(Rated) Stem Force:** 405 bf (1800 N)

**Cable Entry:** Two knockout holes for 1/2 in. conduit standard on actuator case

**Electrical Protection:** Class I Insulation (24 Vac)

**Electrical Connections:** Screw terminals

**Ingress Protection Rating:** IP54

**Frequency:** 50 Hz; 60 Hz

**Number of Internal Auxiliary Switch:** 0

**Manual operation:** Knob

**Mounting:** Directly on V5011/V5013 Globe Valves and VGF Flanged Globe Valves

**Supply Voltage:** 24 Vac +10%, -15%

**Materials:** ABS Plastic

**Operating Humidity Range (% RH):** 5 to 95% RH

**Medium Temperature:** 300 F Maximum (150 C Maximum)

**Ambient Temperature Range:** 14 F to 122 F (-10 C to +50 C)

**Storage Temperature Range:** -40 F to +158 F (-40 C to +70 C)

**Weight:** 5.1 lb (2.3 kg)

**Includes:** 1/2 in. conduit hub; 1/2 in. flex ble conduit adapter

**Approvals**

**Canadian Standards Association:** Certified

**CE:** Recognized

**Underwriters Laboratories, Inc:** UL94-5V

**Accessories:**

**43191679-101-**Auxiliary Potentiometer for ML6421A

**43191679-102-220** ohm Auxiliary Potentiometer for ML6421B

**43191680-102-**Dual Auxiliary Switch for CREVAL actuators

**43196000-001-**High Temperature Kit for actuators with 3/4 inch (20 mm) stroke, stem button attachment

**43196000-038-**High Temperature Kit for actuators with 1-1/2 inch (38 mm) stroke, stem button attachment

**312495-**Large stem button provides anti-spin for globe valves up to 3 in. (1/4-28UNF stem) with ML6420, ML7420, ML6421A, ML7421A, ML6425, and ML7425 actuators. Not required with ML6984/7984 actuators or Q5022A linkage; not compatible with Q5020 linkage.

Product Number	Control Signal	Feedback	Stroke		Timing (seconds)	Power Consumption
			(inch)	(mm)	Nominal Driving @ 60 Hz	(Driving)
ML6421A1017	SPDT; Floating; Two position	—	3/4 in.	20 mm	95 sec	11 VA
ML6421B1040	SPDT; Floating; Two position	—	1 1/2 in.	38 mm	175 sec	11 VA
ML7421A1032	2 to 10 Vdc; 0 to 10 Vdc	2-10 Vdc	3/4 in.	20 mm	95 sec	12 VA
ML7421B1023	2 to 10 Vdc; 0 to 10 Vdc	2-10 Vdc	1 1/2 in.	38 mm	175 sec	12 VA