V-FBV24 Actuator Series

On/Off, Floating (3-Point), Modulating Spring-Return (Fail-Safe)



Specification		On/Off†	(F) Floating [†]	(M) Modulating [†]	
Control	Signal	On/Off	Floating (3-Point)	2-10 VDC, 4-20mA	
	Input Impedance		1000 Ω	100 kΩ	
	Voltage AC	24 VAC 50/60 Hz ± 20%			
	Voltage DC	24 VDC ±10%		24 VDC ±10%	
	Overload Protection	Electronic overload protection			
	Consumption Running	2.5 W			
Power	Consumption Holding	1.3 W	1 W		
	Transformer	5 VA (Class 2)	4 VA (Class 2)		
	Connection	Terminals, Plenum rated cable 18 GA: 3 Ft.(1 m), 10 Ft. (3 m)			
	Runtime (Motor)	95 seconds			
	Runtime (Spring)	<75 sec @ <25 sec @ -4°F to 122°F -22°F to 122°F [-20°C to 50°C] [-20°C to 50°C] <60 sec @-22°F [-30°C]			
	Manual Override	Push-button			
	Rotation Angle	95°, adjustable using Screwed tabs			
Operation	Rotation Direction (Motor)	Direction Switch			
	Rotation Direction (Spring)	Reversible with CW/CCW mounting			
	Position Indicator	Visual			
	Noise Motor	<40 dBA	<35 dBA		
	Noise Spring	<40 dBA	BA <62 dBA		
Housing	Protection	NEMA 2 / IP42			
Tiousing	Rating	UL94-5VA			
	Ambient	-22°F to 122°F (-30°C to 50°C)			
Temp.	Storage	-40°F to 176°F (-40°C to 80°C)			
	Humidity	5 to 95% non-condensing			
Agency Listing	• cULus UL 60730-1A/-2-14, • CAN/CSA E60730-1:02, • CE according to 2004/108/EC and 2006/95/EC for line voltage				

 $^{^\}dagger$ Rated impulse voltage 800V, Control pollution degree 3, Type of action 1.AA

Dimensions

Α		В		С	
inch	mm	inch	mm	inch	mm
3.05	76.2	6.28	159.5	3.19	81

Actuators may also be powered by 24 VDC.

On/Off: V-FBV24 Floating: V-FBV24F Modulating: V-FBV24M





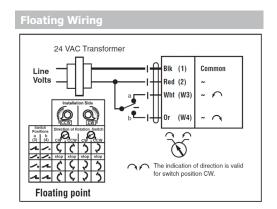




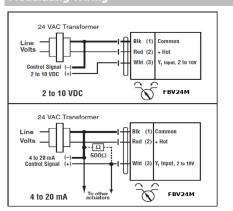
WARNING



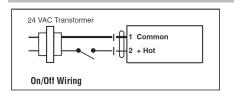
Connect the Actuator Common to the Controller Hot connection. Actuator must be installed by licensed or electrically trained technician. Failure to follow electrical safety precaution when working with live electrical connection could result in injury or death.



Modulating Wiring



On/Off Wiring



V-FDV24 Actuator Series

On/Off, Floating (3-Point), Modulating Spring-Return (Fail-Safe)



Specification		On/Off [†]	(F) Floating [†]	(M) Modulating [†]	
Control	Signal	On/Off	Floating (3-Point)	2-10 VDC, 4-20mA	
	Input Impedance		1000 Ω	100 kΩ	
	Voltage AC	24 VAC 50/60 I	Hz ± 20%		
Power	Voltage DC	24 VDC ±10% 24 VDC ±109			
	Overload Protection	Electronic overload protection			
	Consumption Running	2.5 W			
	Consumption Holding	1.3 W	1 W		
	Transformer	5 VA (Class 2)	4 VA (Class 2)		
	Connection	• Terminals, • Plenum rated cable 18 GA: 3 Ft.(1 m), 10 Ft. (3 m)			
	Runtime (Motor)	40 to 75 seconds			
	Runtime (Spring)	<75 sec @ -22°F to 122°F [-20°C to 50°C]	2°F to 122°F [-20°C to 50°C]		
	Manual Override	Push-button			
	Rotation Angle	95°, adjustable using Screwed tabs			
Operation	Rotation Direction (Motor)	Direction Switch			
	Rotation Direction (Spring)	Reversible with CW/CCW mounting			
	Position Indicator	Visual			
	Noise Motor	<40 dBA	<30 dBA		
	Noise Spring	<40 dBA	<62 dBA		
Housing	Protection	NEMA 2 / IP42			
Tiousing	Rating	UL94-5VA			
	Ambient	-22°F to 122°F (-30°C to 50°C)			
Temp.	Storage	-40°F to 176°F (-40°C to 80°C)			
	Humidity	5 to 95% non-	condensing		
Agency Listing	• cULus UL 60730-1A/-2-14, • CAN/CSA E60730-1:02,				

 $^{^\}dagger$ Rated impulse voltage 800V, Control pollution degree 3, Type of action 1.AA

Dimensions

Α		В		С	
inch	mm	inch	mm	inch	mm
3.86	98	7.64	194	3.46	88

On/Off: V-FDV24 Floating: V-FDV24F Modulating: V-FDV24M



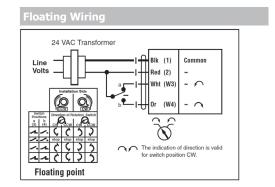




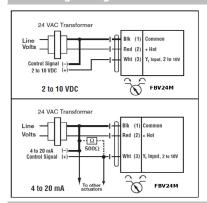
WARNING



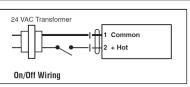
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Modulating Wiring



On/Off Wiring



Actuators may also be powered by 24 VDC.

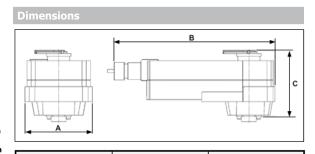
V-FFV24 Actuator Series

On/Off, Modulating Spring-Return (Fail-Safe)



Specifica	ation	On/Off [†]	(M) Modulating [†]		
	Signal	On/Off	2-10 VDC, 4-20mA		
Control	Input Impedance		100 kΩ (2-10VDC) 500 kΩ (4-20mA)		
	Feedback Signal		2-10 VDC		
	Voltage AC	24 VAC 50/60 Hz ± 20	%		
Power	Voltage DC	24 VDC +20%/-10%			
	Overload Protection	Electronic overload protection			
	Consumption Running	5 W	5.5 W		
	Consumption Holding	2.5 W	3 W		
	Transformer	7.5 VA (Class 2)	8.5 VA (Class 2)		
	Connection	Terminals, Plenum rated cable 18 GA: 3 Ft.(1 m), 10 Ft. (3 m)			
	Runtime (Motor)	<75 seconds	95 seconds		
	Runtime (Spring)	<75 sec @ -22°F to 122°F [-20°C to 50°C]	<20 sec @ -4°F to 122°F [-20°C to 50°C] <60 sec @ -22°F [-30°C]		
	Manual Override	Hex Crank (5mm)			
	Rotation Angle	95°, adjustable using Screwed tabs			
Operation	Rotation Direction (Motor)	Wire Polarity	Direction Switch		
	Rotation Direction (Spring)	Reversible with CW/CCW mounting			
	Position Indicator	Visual			
	Noise Motor	<50 dBA	<40 dBA		
	Noise Spring	<62 dBA			
Housing	Protection	NEMA 2 / IP54			
	Rating	UL94-5VA			
	Housing Material	zinc coated metal and plastic casing			
	Ambient	-22°F to 122°F (-30°C to 50°C)			
Temp.	Storage	-40°F to 176°F (-40°C to 80°C)			
	Humidity	5 to 95% non-condensing			
Agency Listing	• cULus UL 60730- • CAN/CSA E60730-				

[†] Rated impulse voltage 800V, Control pollution degree 3, Type of action 1.AA



Α		В		С	
inch	mm	inch	mm	inch	mm
3.86	98	9.77	248.2	4.02	102

On/Off: V-FFV24 Modulating: V-FFV24M





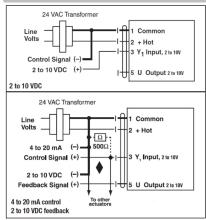


WARNING



Connect the Actuator Common to the Controller Hot connection. Actuator must be installed by licensed or electrically trained technician. Failure to follow electrical safety precaution when working with live electrical connection could result in injury or death.

Modulating Wiring



On/Off Wiring

