

FB... Actuator Series

On/Off, On/Off + Switch, Modulating



Fail Safe

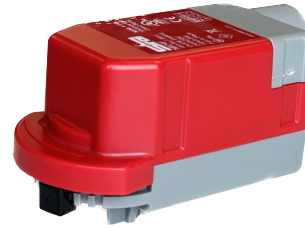
Specification		FB24	FB24-S	FB24M	FBLV
Control	Signal	On/Off	On/Off + Switch	Modulating (0)2 -10VDC	On/Off
Power	Voltage AC	24 VAC 50/60 Hz ± 20%			110 -230 VAC ± 10%
	Voltage DC	24 VDC ± 10%			
	Overload Protection	Electronic			
	Consumption	1 W	1.5 W	0.5 W	
	Transformer	1 VA (Class 2)	2 VA (Class 2)	1 VA (Class 2)	
Connection	Plenum rated cable	Plenum rated cable 22 AWG: 3 ft (1 m)		Plenum rated cable 18 AWG: 3 ft (1 m)	
	18 AWG: 3 ft (1 m)				
Operation	Runtime (Motor)	80 Seconds		75 Seconds	
	Runtime (CAP)	50 Seconds			
	Manual Override	With actuator body			
	Rotation Angle	90°, tool free field adjustable mechanical stops			
	Rotation Direction (Motor)	Jumper Switch CW/CCW,			
	Rotation Direction (CAP)	Jumper Switch CW/CCW,			
	Position Indicator	Visual Pointer			
	Noise Motor	35dBA			
	Noise Motor Cap	35dBA			
	Housing	Protection	NEMA 1 / IP40		
Rating		UL94-5V (B)			
Temp.	Ambient	-0°F to 122°F (-18°C to 50°C)			
	Storage	-22°F to 122°F (-30°C to 50°C)			
	Humidity	5 to 95% non-condensing			
Agency Listing		cULus UL 60730-1A/-2-14			
		CAN/CAS E60730-1:2			
		CE according to 2004/108/EC and 2006/95/EC for line voltage			

On/Off: **FB24**

On/Off, Auxiliary Switch: **FB24-S**

Modulating: **FB24M**

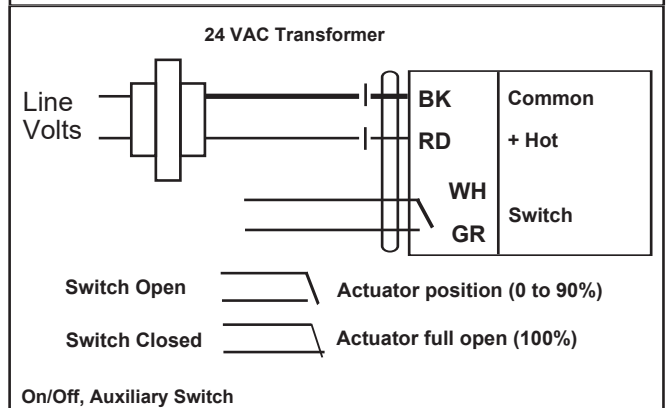
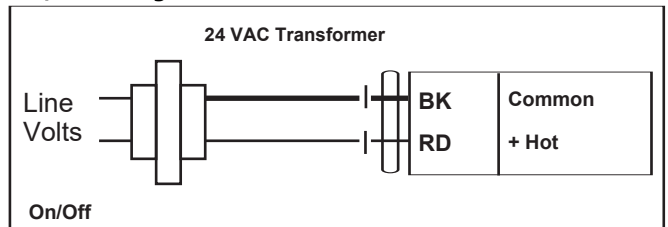
On/Off Line Voltage: **FBLV**



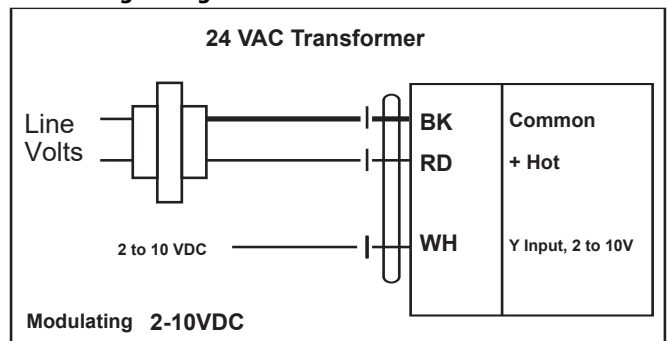
WARNING

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.

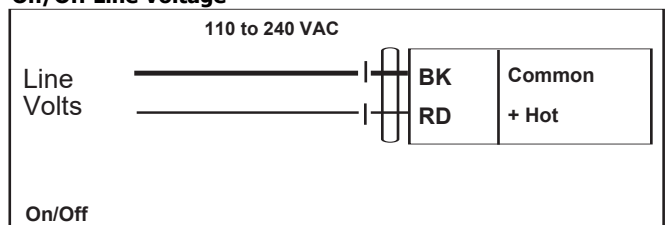
On/Off Wiring



Modulating Wiring

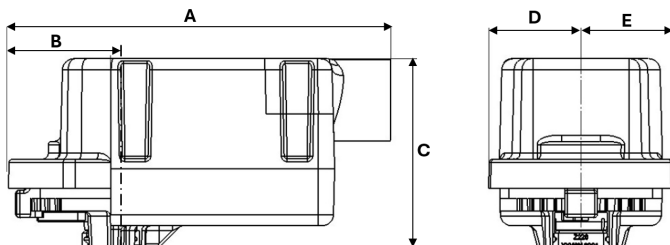


On/Off Line Voltage



Dimensions

A	B	C	D	E
inch	mm	inch	mm	inch
4.89	124	1.43	36.3	2.34
				59.4
			1.11	28.3
				1.11
				28.3



NB... Actuator Series

On/Off Floating , Modulating

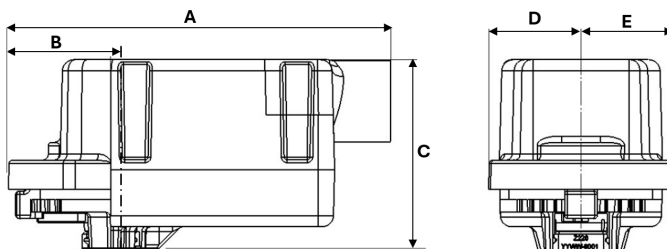


Non-Fail -Safe

Specification		NB24F	NB24M	NBLVF
Control	Signal	On/Off, Floating (3-Point)	Modulating (0)2 -10VDC	On/Off, Floating (3-Point)
Power	Voltage AC	24 VAC 50/60 Hz ± 20%		110 - 230 VAC ± 10%
	Voltage DC	24 VDC ± 10%		
	Overload Protection	Electronic		
	Consumption	0.5 W	0.5 W	
	Transformer	1 VA (Class 2)	1 VA (Class 2)	2 VA
	Connection	Plenum rated cable 22 AWG: 3 ft (1 m)		Plenum rated cable 16 AWG: 3 ft (1 m)
Operation	Run time (Motor)	75 Seconds		
	Manual Override	With actuator body		
	Rotation Angle	90°, tool free field adjustable mechanical stops		
	Rotation Direction	Jumper Switch CW/CCW		
	Position Indicator	Visual Pointer		
	Noise	35dBA		
	Housing	Protection	NEMA 1 / IP40	
	Rating	UL94-5V (B)		
Temp.	Ambient	-0°F to 122°F (-18°C to 50°C)		
	Storage	-22°F to 122°F (-30°C to 50°C)		
	Humidity	5 to 95% non-condensing		
Agency Listing		cULus UL 60730-1A/-2-14		
		CAN/CAS E60730-1:2		
		CE according to 2004/108/EC and 2006/95/EC for line voltage		

Dimensions

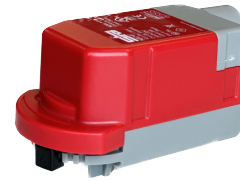
A	B	C	D	E
inch mm	inch mm	inch mm	inch mm	inch mm
4.89 124	1.43 36.3	2.34 59.4	1.11 28.3	1.11 28.3



On/Off, Floating Point: **NB24F**

Modulating: **NB24M**

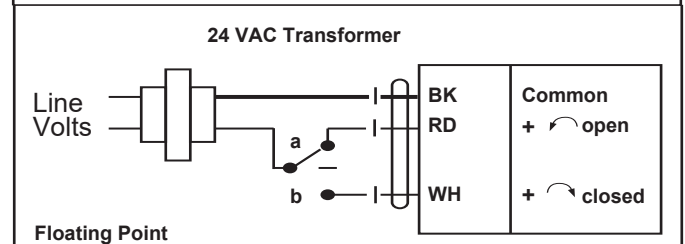
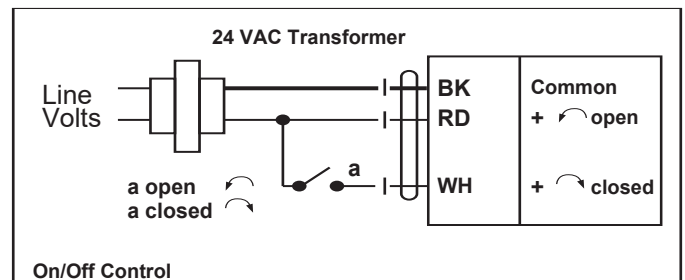
On/Off, Floating Point Line Voltage: **NBLVF**



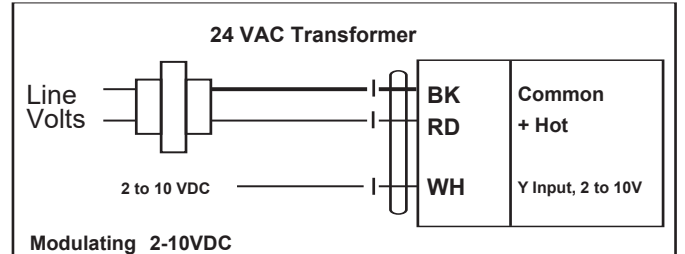
WARNING

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.

On/Off, Floating Wiring



Modulating Wiring



On/Off, Floating Line Voltage

