

## Models

TFX24 US      TFX120 US  
 TFX24-S US    TFX120-S US    w/built-in Aux. Switch

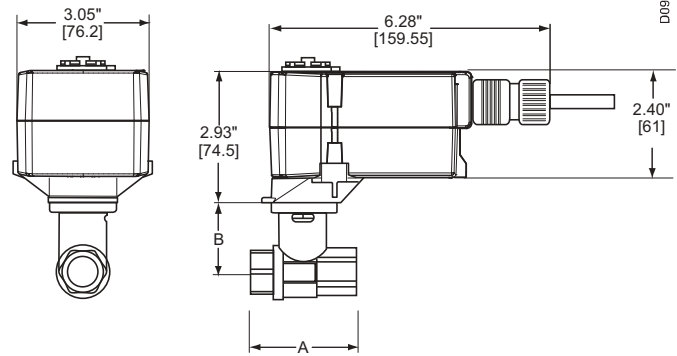
Technical Data	
Control	On/Off
Power supply	24VAC ± 20%, 50/60Hz
TFX24(-S) US	24VDC ± 10%
TFX120(-S) US	(nominal) 100 to 240 VAC, 50/60 Hz (tolerance) 85 to 265 VAC, 50/60 Hz
Power consumption	running 2.5 W holding 1.3 W
Transformer sizing	TFX24(-S) US 4 VA (class 2 power source) TFX120(-S) US 5 VA (class 2 power source)
Electrical connection	1/2" conduit connector 18 GA appliance cable
(-S models have 2 cables)	TFX... US 3 ft [1m] TFX... /300 US 10 ft [3m] TFX... /500 US 16 ft [5m]
Overload protection	electronic throughout 0° to 95° rotation
Angle of rotation	95°
Torque	min. 18 in-lb [2 Nm]
Direction of rotation	reversible with protected  mounting
Position indication	visual indicator, 0° to 95°
Running time	motor <75 sec (0 to 18 in-lb) spring <75 sec @ -22°F to 122°F [-20°C to 50°C]
Humidity	5 to 95% RH non-condensing
Ambient temperature	-22°F to 122°F [-30°C to 50°C]
Storage temperature	-40°F to 176°F [-40°C to 80°C]
Housing	NEMA type 2/IP42
Housing material	UL94 - 5VA
Agency listings†	cULus acc. to UL 60730-1A/-2-14, CAN/CSA E60730-1, CSA C22.2 No. 24-93, CE acc. to 89/336/EEC (and 2006/95/EC for line voltage and/or -S versions)
Noise level (max)	running <40 db (A) spring return <40 dB (A)
Quality standard	ISO 9001

## TFX...-S

Auxiliary switch 1 x SPDT, 3A (0.5A) @ 250 VAC, UL Listed adjustable 0° to 95°

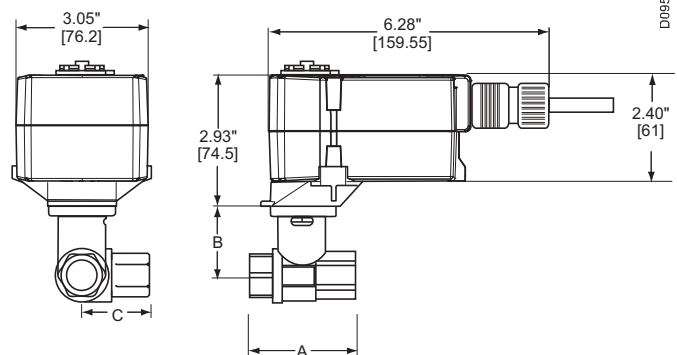
† Rated impulse voltage 800V (4kV for 120V model), Control pollution degree 3, Type of action 1.AA (1.AA.B for -S models)

## Dimensions with 2-Way Valve



Valve Body	Valve Nominal Size		Dimensions (Inches [mm])	
	Inches	DN [mm]	A	B
B207(B)-B211(B)	1/2"	15	2.41" [61.1]	1.39" [35.2]
B212(B)-B215(B)	1/2"	15	2.38" [60.4]	1.72" [43.7]
B217(B)-B220(B)	3/4"	20	2.73" [69.3]	1.81" [45.9]

## Dimensions with 3-Way Valve



Valve Body	Valve Nominal Size		Dimensions (Inches [mm])		
	Inches	DN [mm]	A	B	C
B307(B)-B311(B)	1/2"	15	2.41" [61.1]	1.39" [35.2]	1.20" [30.6]
B312(B)-B315(B)	1/2"	15	2.38" [60.4]	1.72" [43.7]	1.26" [32.1]
B317(B)-B320(B)	3/4"	20	2.73" [69.3]	1.81" [45.9]	1.45" [36.8]

K20903 - 04/08 - Subject to change. © Belimo Aircontrols (USA), Inc.

### Wiring Diagrams

#### **INSTALLATION NOTES**



#### **CAUTION** *Equipment damage!*

Actuators may be connected in parallel.  
Power consumption and input impedance must be observed.



Actuators may also be powered by 24 VDC.



#### **APPLICATION NOTES**



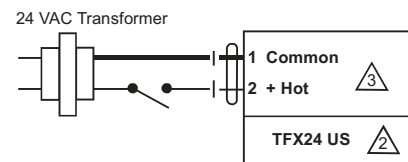
Meets cULus or UL and CSA requirements without the need of an electrical ground connection.



#### **WARNING** *Live Electrical Components!*

During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

Note:  
Transformer  
provided  
by Others



On/Off Wiring

W237