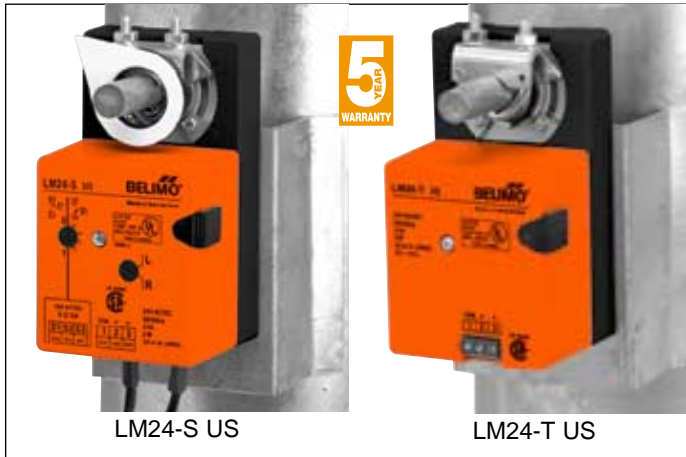


LM24 (-T) US

On-off control, non-spring return, direct coupled, 24 V



Torque min. 35 in-lb, for control of damper surfaces up to 8 sq ft.

LM24 US
LM24-S US
LM24-10P US
LM24-5P0-T US
LM24-T US



Application

For on-off control of dampers in HVAC systems. Actuator sizing should be done in accordance with the damper manufacturer's specifications. The actuator mounts directly to the damper operating shaft with a universal V-bolt clamp assembly.

Operation

The actuator is not provided with and does not require any limit switches, but is electronically protected against overload. The angle of rotation is mechanically limited to 95°. When reaching the damper or actuator end position, the actuator automatically stops. The gears can be manually disengaged with a button on the actuator cover. The position of the actuator is indicated by a visual pointer. The anti-rotation strap supplied with the actuator will prevent lateral movement.

Accessories

LM-P T-type anti-rotation bracket
ZG-LMSA Shaft adaptor for short shafts
Tool-02 8 mm wrench

Technical Data	LM24... on-off/floating point
Power supply	24 VAC ± 20% 50/60 Hz 24 VDC ± 10%
Power consumption	2 W
Transformer sizing	3 VA (Class 2 power source)
Electrical connection	3 ft, 18 GA, UL CL2P plenum cable
Control	On-off
Overload protection	Electronic throughout 0 to 95° rotation
Angle of rotation	max 95°, adjust. with mechanical stops
Torque	min 35 in-lb [4 Nm]
Direction of rotation	reversible w/switch L/R (not on "-T" models)
Position indication	clip-on indicator (not on "-T" models)
Running time	80 to 110 sec. for 0 to 35 in-lb
Manual override	external push button
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 type	NEMA type 2 (-T models NEMA 1)
Housing material rating	UL94-5V
Noise level	less than 35 dB (A)
Servicing	maintenance free
Agency listings	UL 873 listed, CSA C22.2 No.24 certified, CE
Quality standard	ISO 9001
Weight	1.2 lbs [0.55 kg]

LM24-S US

Control	On-off
Auxiliary switch	Adj. 0° to 95°, SPDT 6 A (2.5A) @ 24 VAC

LM24-10P US

Control	On-off/Floating point
Feedback	10 kΩ, 1W potentiometer

LM24-5P0-T.1 US (bulk pack only)

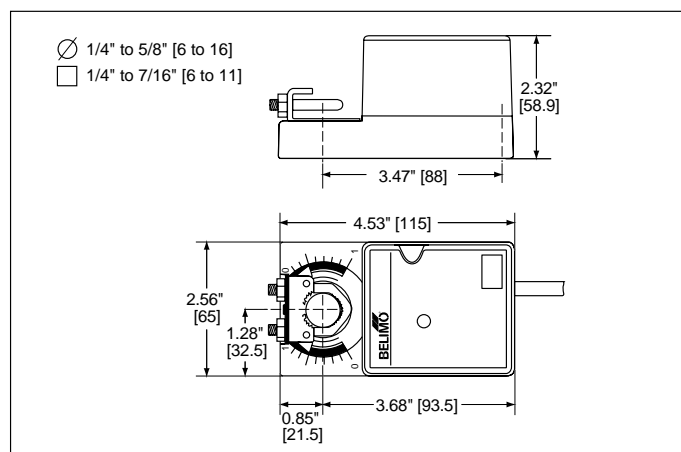
Control	On-off/Floating point
Feedback	5 kΩ, 1W potentiometer

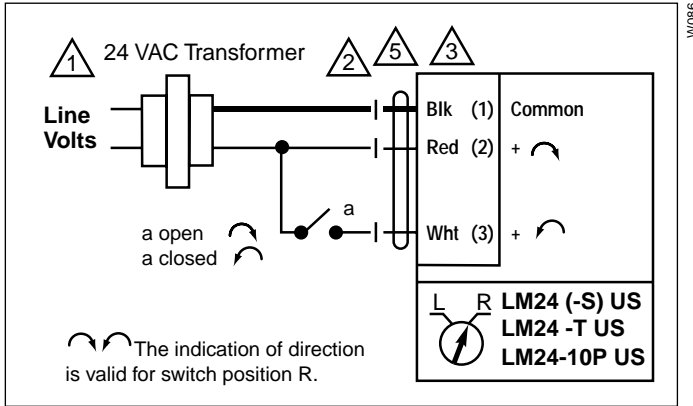
Housing	NEMA type 1
Direction of rotation	Reverse wires terminals 2 and 3

LM24-T.1 US (bulk pack only)

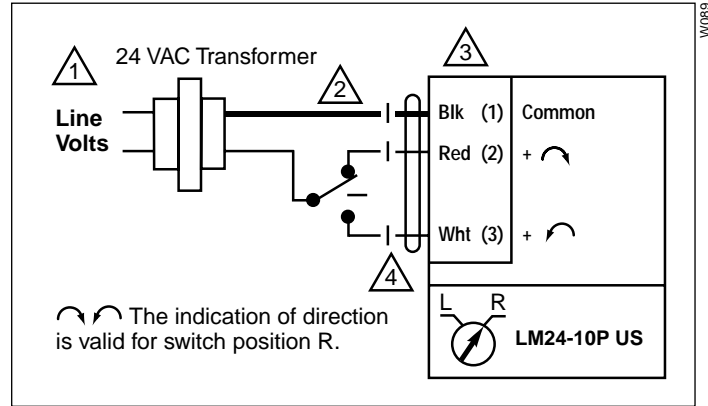
Control	On-off
Electrical connection	Screw terminal (for 26 to 14 GA wire)
Housing	NEMA type 1
Direction of rotation	Reverse wires terminals 2 and 3

Dimensions (All numbers in brackets are metric.)

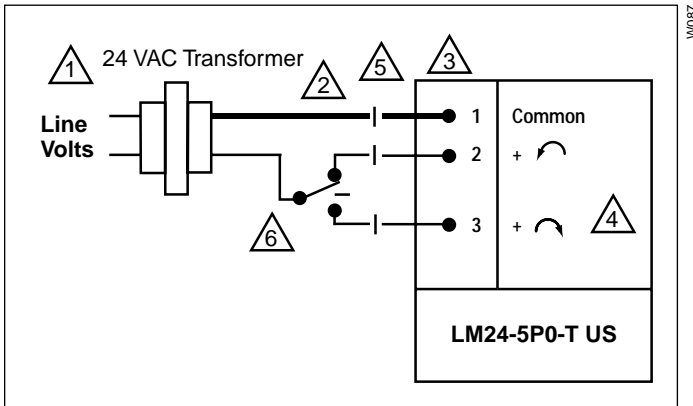




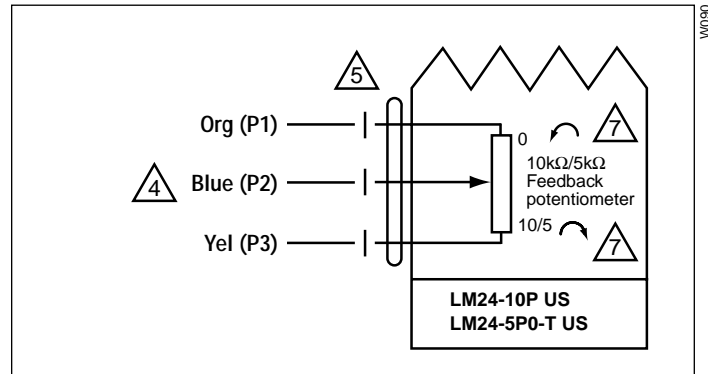
On-off control



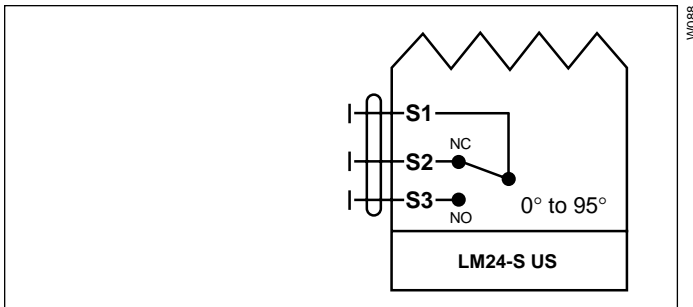
Floating point or on-off control



Floating point or on-off control



Feedback potentiometer wiring for LM24-10P US and LM24-5P0-T US



Auxiliary switch wiring for LM24-S US

Notes

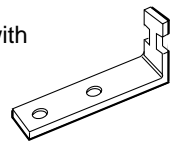
- 1 Provide overload protection and disconnect as required.
- 2 Actuators may also be powered by 24 VDC.
- 3 Actuators are provided with color coded wires. Wire numbers are provided for reference.
- 4 For position indication, the LM24-10P US is provided with a 10 kΩ feedback potentiometer and the LM24-5P0-T US is provided with a 5 kΩ feedback potentiometer.
- 5 The LM24-T US and LM24-5P0-T US are provided with a numbered screw terminal strip instead of cable.
- 6 Switch wires 2 and 3 to change rotation direction of LM24-T US and LM24-5P0-T US (does not have L/R external switch).
- 7 Value based on resistance between (P1) and (P2). ↻ indicates direction of rotation of actuator.

LM24... on-off - Typical Specification:

Control damper actuators shall be electronic direct coupled type which require no crank arm and linkage. Actuators shall be UL and CSA listed, have a 5 year warranty, and be man-ufactured under ISO 9001 International Quality Control Standards. Actuators shall have reversing switch and manual override on the cover, and be protected from overload at all angles of rotation. If required, actuator will be provided with screw terminal strip for electrical connections (LM24-T US and LM24-5P0-T US). If required, one adjustable SPDT auxiliary switch shall be provided (LM24-S US). If required, actuators shall be provided with a built-in 10 kΩ feedback potentiometer (LM24-10P US) or 5kΩ (LM24-5P0-T) for use in modulating (floating point) applications. Actuators shall be as manufactured by Belimo.

L-Type anti-rotation bracket. Included with each actuator.

Part #: 22065



Bulk packaging LM24 on-off/floating

Bulk Pack No.	Actuator Type	Quantity/Pack
LM24.1 US	LM24 US	32
LM24-T.1 US	LM24-T US	48
LM24-5P0-T.1 US	LM24-5P0-T US	48