

Electronic Globe Valves

NV(D)24-MFT US Non-spring return, direct coupled globe valve actuator, proportional control



NV24-MFT US NVD24-MFT US

Application

For floating point and proportional control of globe valves. Actuator will mate to an integrated adaptor bracket. Adaptor bracket shown fits valves manufactured by Siebe Environmental Controls under designations VB7000 and VB9000.

Functional safety

The actuator is secured against short circuiting and incorrect polarity. The stroke is adapted automatically and is overload-protected.

Manual operation

When a 3/16" or 5 mm hex is inserted and turned clockwise, the actuator plunger pushes out. The actuator plunger retains the position until the nominal voltage is applied.

Display of function

The stroke is shown mechanically on the adaptor bracket, and the maximum stroke is set automatically. Under the housing cover on -MFT models is a two-colored LED status display.

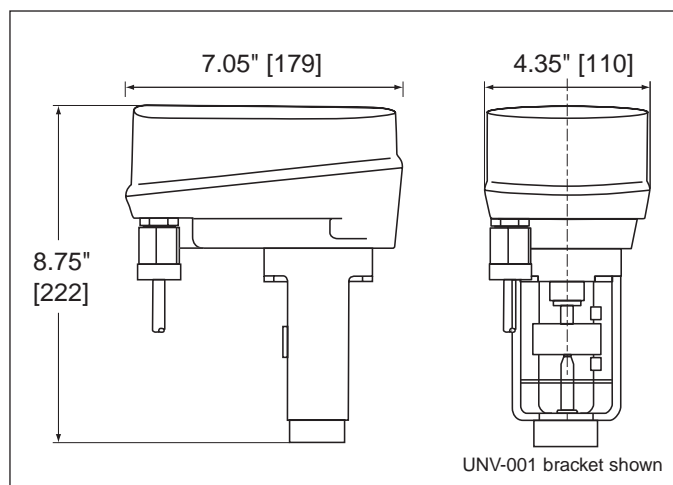
Multi-Function Technology® (MFT)

An integrated microprocessor allows for a variety of parameters to be easily configured at the factory or in the field.

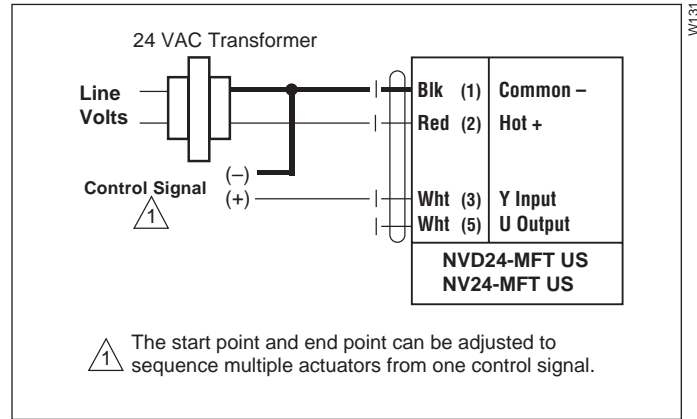
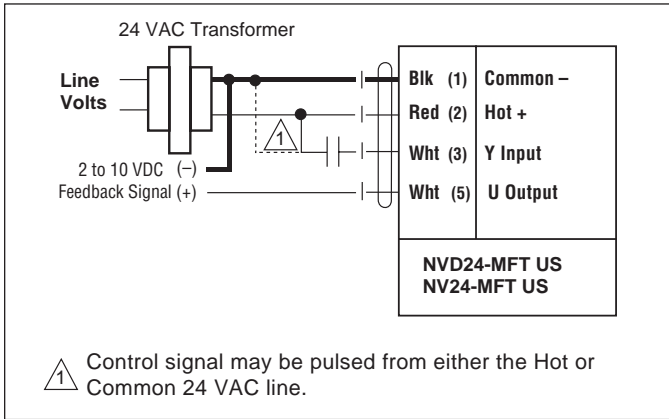
Technical Data	NV... Series
Power Supply:	24 VAC +/- 20% 50/60 Hz 24 VDC +/- 10%
Power consumption	5 W, NV...-MFT US
Transformer sizing	7 VA, NV...-MFT US (Class 2 power supply)
Electrical connection	3 ft, 18 GA appliance cable, 1/2" conduit fitting
Overload protection	electronic throughout stroke
Control signal Y*	2 to 10 VDC, NV...MFT US, V-10001 Default Pulse width modulation, NV...MFT US V-20... (selectable when ordered)
Operating range*	2 to 10 VDC, 4 to 20 mA w/500Ω, 1/4" W resistor
Input impedance	100KΩ for 2 to 10 VDC, 500Ω for 4 to 20 mA, 750Ω for PWM 1500Ω for On-Off, Floating point, NV...3 US
Feedback*	2 to 10 VDC, 0.5 mA max., NV...MFT US
Maximum stroke	3/4" [20 mm]
Force	90 lbf [400 N], NVD... US 180 lbf [800 N], NV... US
Position indication	stroke indicator on bracket
Manual override	3/16" hex, 5 mm hex, phillips screwdriver
Running time motor*	150 sec. Independent of load, Independent of stroke
Humidity	5 to 95% RH, non-condensing
Ambient temperature	-22°F to + 122° F [-30°C to 50°C]
Media temperature	20°F to + 250° F [-7°C to 120°C]
Storage temperature	-40°F to +176° F [-40°C to 80°C]
Housing	NEMA 2/ IP54 with cable entry down
Housing material	UL 94-5V (flammability rating)
Agency listing	CE, UL 873, CSA C22.2 NO.24 certified
Quality standard	ISO 9001
Noise level	max. 35 dB(A)
Servicing	maintenance free
Weight	4 lb [1.8 kg]

* Variable

Dimensions in inches (numbers in brackets are metric)



D030
E20222 5 4 3 2 1 05/02-10M-FG-Subject to change. © Belimo Aircontrols (USA), Inc.



Pulse width modulation control wiring

Range Available: 20 ms to 50 sec.

Typical:

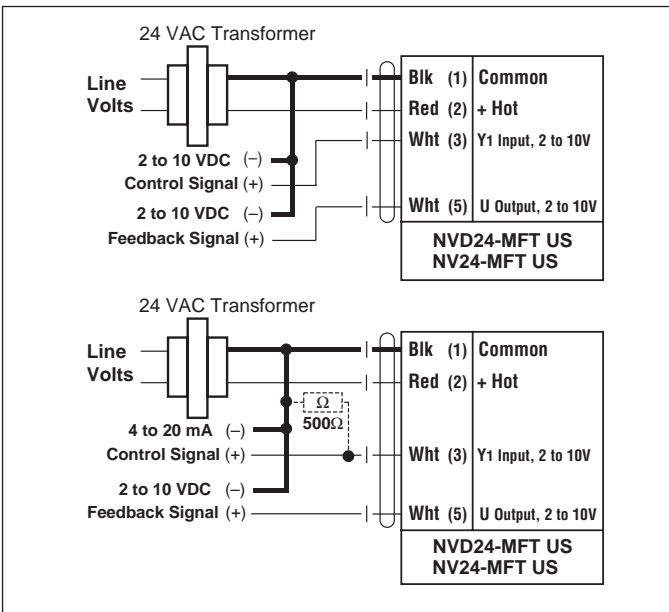
0.59 to 2.93	V-20001
0.02 to 5.00	V-20002
0.10 to 25.5	V-20003
Custom configurations available	

Start point and stop adjustable wiring

Range Available: Start 0.5 to 30 VDC
Stop 2.5 to 32 VDC

Typical:

2 - 10 VDC	V-10001
0 - 10 VDC	V-10002
4 - 7 VDC	V-10004
6 - 9 VDC	V-10005
Custom configurations available	



MFT typical 2 to 10 VDC or 4 to 20 mA wiring