

Non-spring return, direct coupled globe valve actuator, proportional control



**NV24-MFT US  
NVD24-MFT US  
NVG24-MFT US**

**Application**

For on/off, 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.

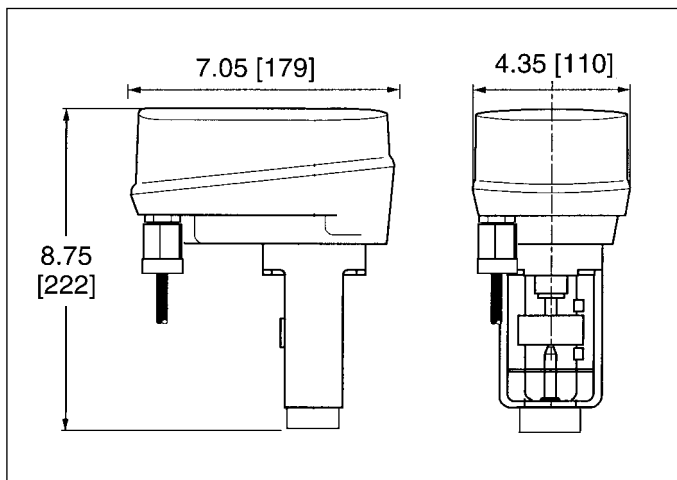
**Multi-Function Technology® (MFT)**

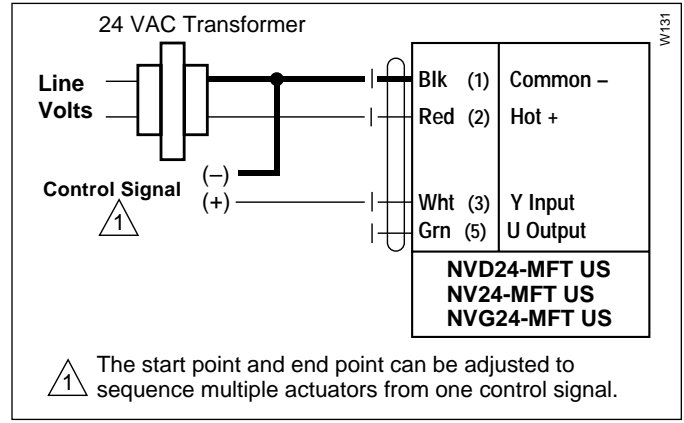
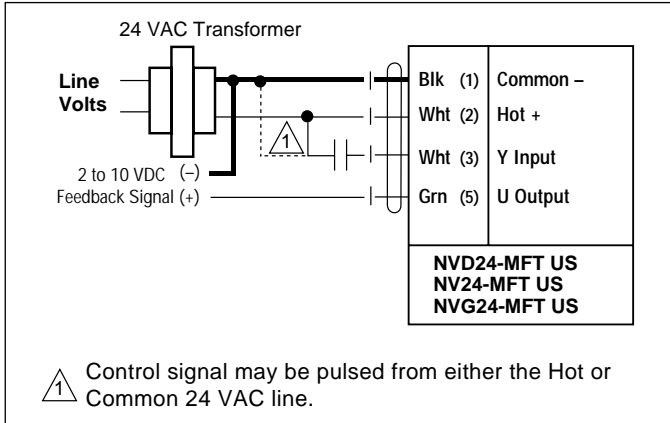
An integrated microprocessor allows for a variety of parameters to be easily configured at the factory or in the field.

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
Operating range Y*	2 to 10 VDC, NV...MFT US, 4 to 20 mA w/500Ω, 1/4" W resistor V-10001 Default Pulse width modulation, NV...MFT US V-20... (selectable when ordered)
Input impedance	100kΩ for 2 to 10 VDC (0.1 mA) 500Ω for 4 to 20 mA 1500Ω for PWM, Floating point and On-Off control
Feedback*	2 to 10 VDC, .5 mA max., NV...MFT US
Maximum stroke	3/4" [20 mm]
Force	90 lbf [400 N], NVD... US 225 lbf [1000 N], NV... US 360 LBF [1600 N], NVG...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	32°F to +122° F [0°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 during 2002

**Dimensions in inches (numbers in brackets are metric)**





**Pulse width modulation control wiring**

Range Available: 20 ms to 50 sec.

Typical:

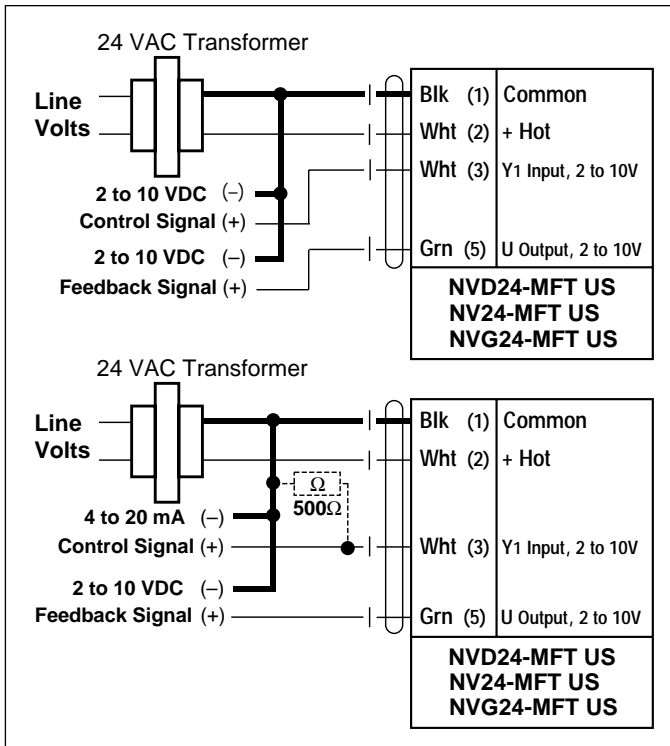
0.59 to 2.93	V-20001
0.02 to 5.00	V-20002
0.10 to 25.5	V-20003
Custom configurations available	

**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**