



CONTROL VALVES

MVN BALL VALVE ACTUATORS

MVN SERIES

DESCRIPTION

The **Honeywell MVN Series 3Nm (27 lb-in) Control Valve Actuator** is used with the VBN2 two-way and the VBN3 three-way control ball valves to control hot and chilled water with glycol solutions up to 50% in heating, ventilating, and air conditioning (HVAC) systems to provide two-position or modulating functions.

FEATURES

- **Non-spring Return**
- **Floating and modulating**
- **Space saving, click-on installation – no tool required**
- **Extendable position indicator for easy commissioning**
- **Available with or without cable**
- **Compatible with control ball valves from 1/2 to 1-1/4 inches.**
- **Actuator can be mounted on the valve in any of four positions.**

Honeywell



MVN643L

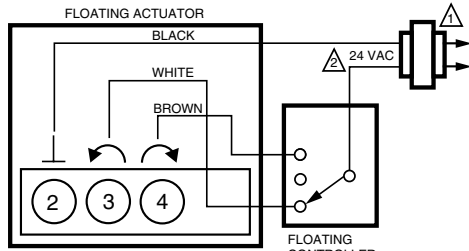


SPECIFICATIONS

Actuator Type	Valve	Humidity Ratings:	5% to 95% RH noncondensing
Rotational Stroke	90° ±3°	Design Life (at Rated Voltage)	60,000 cycles; 1 cycle = 0°...90°...0°
Fail Safe Mode	Non-spring return, Fail in place	Cable Specification	18 AWG, Plenum Rated, 300 V, 10 A, 3 ft. length from end of access cover
Torque	27 lb-in. (3 Nm).	Operating Temperature	-4° to 131°F (-20° to 55°C)
External Auxiliary Switches Available	No	Operating Humidity	5 to 95% RH, noncondensing
Supply Voltage	24 VAC +20%, -15%, 24 VDC	Enclosure Rating	NEMA 3R, IP40, Plenum rated plastic housing
Power Consumption	5 VA- Modulating; 1.5 VA - Floating; 6 VA - Fast Acting SPDT	Dimensions:	
Environmental Rating	NEMA2	Standard base units	2-13/16"W x 3-7/8"H x 4-9/16"D (7.1 x 9.8 x 11.6 cm)
Frequency	50 Hz; 60 Hz	Low Profile base units	2-13/16"W x 3-1/2"H x 4-9/16"D (7.1 x 8.2 x 11.6 cm)
Mounting	Click-on installation – no tool required	Weight	1.4 lb (0.64 Kg)
Noise Rating at 1m (Maximum)	35 dB(A) max at 1 m [50 dB(A) for MVN643]	Warranty	1 year
Timing	90 sec. for MVN613 and MVN713; 30 sec. for MVN643		
Electrical Connections	Field wiring 18 to 20 AWG to screw terminals, located under the removable access cover		



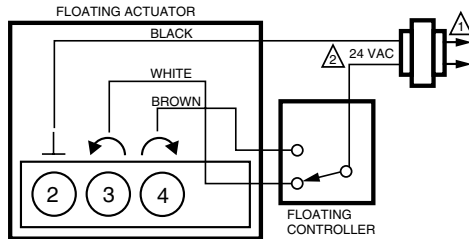
WIRING



⚠ POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.

⚡ USE CLASS II 24V TRANSFORMER FOR MVN643.

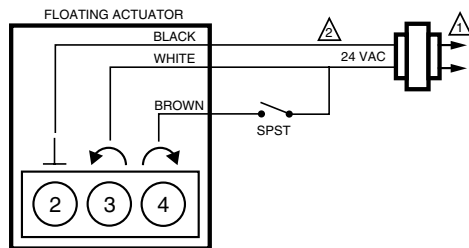
MVN613 or MVN643 with Floating Control



⚠ POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.

⚡ USE CLASS II 24V TRANSFORMER FOR MVN643.

MVN613 or MVN643 with 2-Position Control

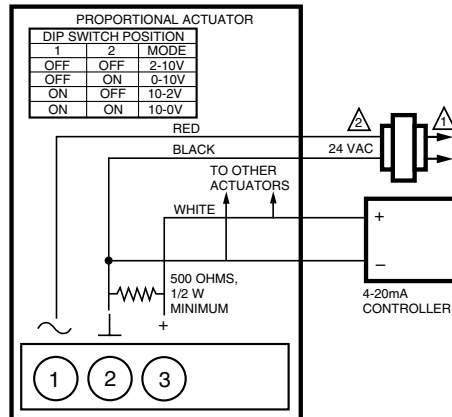


⚠ POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.

⚡ USE CLASS II 24V TRANSFORMER.

MVN643 with Two Position SPST Control

PROPORTIONAL/MODULATING: 4-20mA CONTROLLER OUTPUT WITH 500Ω SERIES RESISTOR

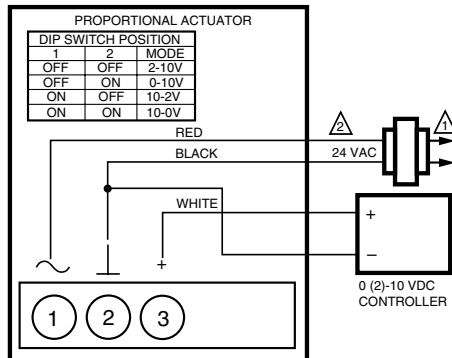


⚠ POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.

⚡ USE CLASS II 24V TRANSFORMER.

MVN713 with 4-20mA Control

PROPORTIONAL/MODULATING: 0(2)...10 VDC OR 10...0(2) VDC CONTROLLER OUTPUT



⚠ POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.

⚡ 24 VDC SUPPLY ACCEPTABLE.

MVN713 with 0 (2)-10 VDC Control

ORDERING INFORMATION

MODEL

MVN613A0000
MVN613L0000
MVN643A0000
MVN643L0000
MVN713A0000
MVN713L0000

DESCRIPTION

Floating control actuator for standard base ball valve
Floating control actuator for low profile ball valve
Fast acting SPDT control actuator for standard base ball valve
Fast acting SPDT control actuator for low profile ball valve
Modulating control actuator for standard base ball valve
Modulating control actuator for low profile ball valve