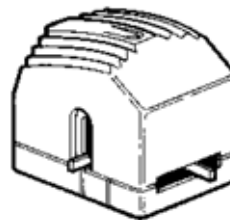


Erie™ Spring Return Floating & Proportional Actuators

The AP series proportional and AT series floating PopTop™ actuators incorporate equal percentage flow characteristics. The floating and proportional actuators are designed to be used on the 1/2 to 1-1/4 in. VM series valves for precise temperature control of fluid flow in heating or cooling applications. See valve section for details.

Features:

- Floating model is compatible with any 24 Vac three-wire signal.
- Proportional model compatible with any 0 to 10 Vdc or 4 to 20 mA controller.
- Spring return logic is only for emergency power loss.
- Microprocessor controlled (proportional only).
- Magnetic clutch to maximize the life of the motor and gear train.
- Manual operating lever/position indicator facilitates field setup.
- Easy to use lever terminal blocks.
- Returns actuator to normal position when power is lost for more than 2 seconds.
- Actuator can be installed after valve body.
- Refer to F-27384, Invensys Valve Catalog for compatible 1/2 to 1-1/4 in.c VM Series two or three way zone valves.



Zone Valve

Model Chart

Model No.	Electrical Position	Input Impedance	Control Signal	Wiring
AT13A00T	N.C.	Open/close 3.9 kΩ	24 Vac, three wire floating	Refer to Figure 1
AT23A00T	N.O. ^a			
AP13A000	N.C.	Voltage 200 kΩ; Current 300 Ω	0 to 10 Vdc, or 4 to 20 mA or 0 to 5 Vdc, 5 to 10 Vdc	Refer to Figure 2
AP23A000	N.O. ^a			

^a Cannot be used on 3-way valve. Use N.C. and pipe with open port to coil.

Specifications

Inputs

Control signal	Refer to Model Chart.
Power	Impedance: Refer to Model Chart.
	10 VA required for power-up, max running 68 mA (1.6 VA).

Outputs

Motor Type	Synchronous.
Mechanical	Control action: AP series: Direct acting, field selectable reverse acting.
	Nominal valve stroke: 2 minutes 30 seconds @ 60 Hz; 3 minutes @ 50 Hz.

Environment

Ambient temperature limits	Operating: 32 to 125°F (0 to 52°C).
Humidity	5 to 95% RH, non-condensing.

Specifications (Continued)

Agency Listings	CE compliant.
European Community	EMC Directive (89/336/EEC). Low Voltage Directive (72/23/EEC).
General Instructions	Refer to F-27384, Invensys Valve Catalog for compatible 1/2 to 1-1/4 in. VM Series two or three-way zone valves.

Typical Applications

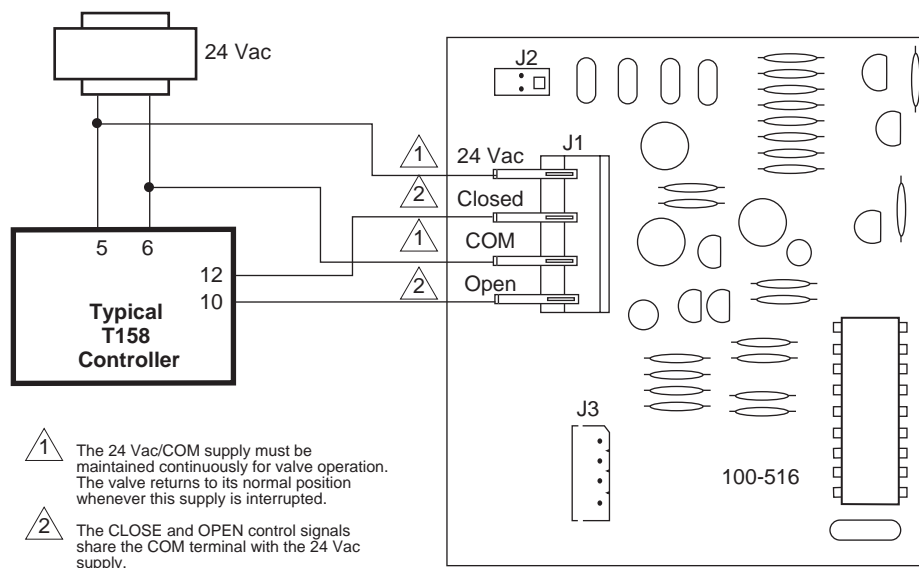


Figure 1 Typical Wiring of Three-Wire Floating Spring Return Valves with Time-Out.

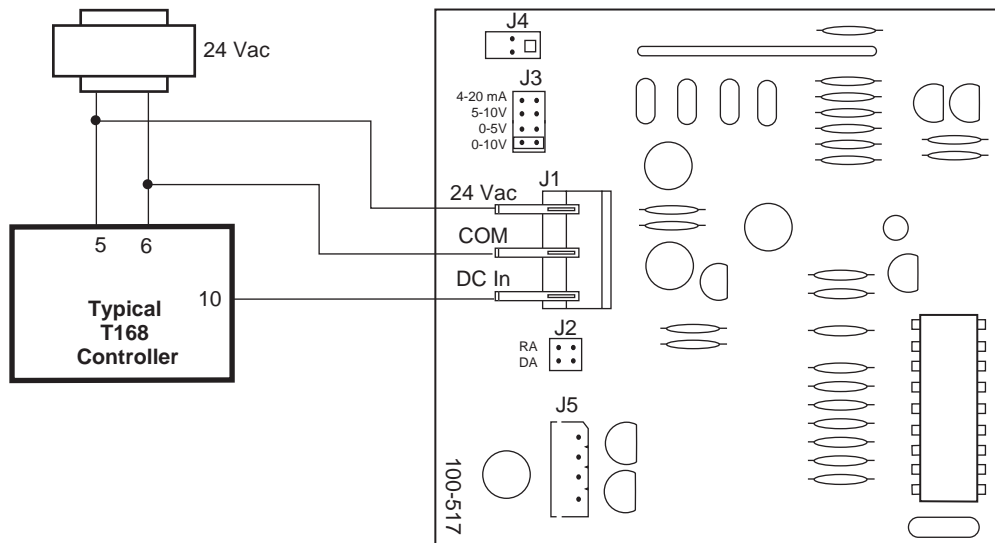


Figure 2 Typical Wiring of Three-Wire Proportional Spring Return Valves.