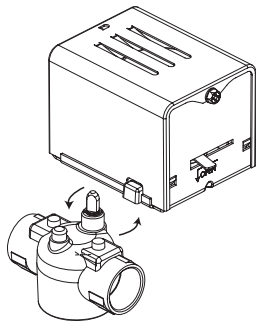


TAC Erie™ Zone Valves

Three-Way Mixing or Diverting Spring Return



1/2 to 1 in. Female NPT Ends
Three-Way Mixing or Diverting Spring Return
Normally Closed (B Port)
High Close-Off
Two-Position

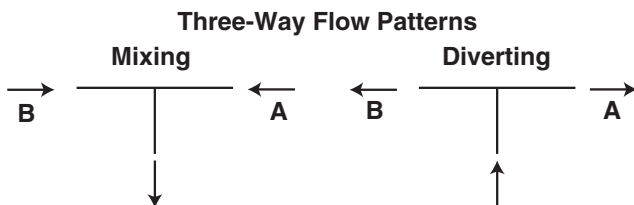
Flow Type	On, off, normally open or closed
Material	Body Forged brass Seat Brass Stem Nickel plated brass Paddle Highly saturated nitrile (VS), Buna N (VT)
Fluid Temperature	VT Series: 32 to 200 °F @ 104 °F ambient (0 to 93 °C @ 40 °C) VS Series: 32 to 250 °F @ 169 °F ambient (0 to 121 °C @ 76 °C)
Maximum Static Pressure	300 psi (20.6 bar)
Seat Leakage	ANSI IV

Size in.	Cv (K _{vs})	Close Off psig (kPa)	VT Series 32 to 200 °F		VS Series 32 to 250 °F	
			24 Vac	120 Vac	24 Vac	120 Vac
1/2	1.5 (1.3)	75 (517)	VT3221H13A020	VT3221H13B020	VS3221H14A020	VS3221H14B020
	3 (2.6)	50 (344)	VT3222H13A020	VT3222H13B020	VS3222H14A020	VS3222H14B020
	4 (3.4)	30 (208)	VT3223H13A020	VT3223H13B020	VS3223H14A020	VS3223H14B020
3/4	3 (2.6)	50 (344)	VT3322H13A020	VT3322H13B020	VS3322H14A020	VS3322H14B020
	4 (3.4)	30 (203)	VT3323H13A020	VT3323H13B020	VS3323H14A020	VS3323H14B020
	5 (4.3)	25 (172)	VT3325H13A020	VT3325H13B020	VS3325H14A020	VS3325H14B020
	7.5 (6.5)	20 (137)	VT3327H13A020	VT3327H13B020	VS3327H14A020	VS3327H14B020
1	8 (6.9)	20 (137)	VT3427H13A020	VT3427H13B020	VS3427H14A020	VS3427H14B020

Zone Valves

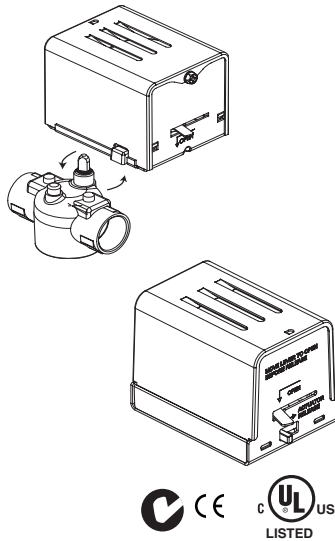
Actuator Code Table.

Actuator Model (Reference pages 146 thru 148)	Description	Wiring Diagrams		Dimension Information	
		Page	Figure	Page	Figure
AH13A020, AH14A020	2-Position	152	1	206	103
AH13B020, AH14B020	2-Position	152	1	206	103



For normally open, reverse pipe A and B ports. B port is normally closed.

TAC Erie™ AG, AH Series Spring Return Actuator Two-Position



Connections: 18 in. leads.

Housing: NEMA 1.

Dimensions: G Series: 2-3/8 H x 2-3/8 W x 3-11/16 D in. (60 x 60 x 96 mm)
H Series: 2-7/16 H x 2-5/8 W x 3-11/16 D in. (62 x 67 x 93 mm)

Override: Manual (normally closed models only).

Motor Type: Hysteresis synchronous.

General Instructions: Refer to F-26496.

Agency Listing: UL-873. Underwriters Laboratories (File #E9429 Category Temperature Indicating and Regulating Equipment). European Community: EMC Directive (89/336/EEC). Low Voltage Directive (72/23/EEC). CUL: UL listed for use in Canada by Underwriters Laboratory. Canadian Standards C22.2 No. 24. Australia: This product meets requirements to bear the C-Tick Mark according to the terms specified by the Communications Authority under the Radio Communications Act of 1992.



Zone Valves

General Close-Off, 2-Position, Power (Open or Close): 9 to 11 Seconds; Spring Return (Open or Close): 4 to 5 Seconds						
Model No.	Volts AC	VA	Electrical Position	Temperature Range F (C)	End Of Travel Switch	Wiring
AG13A020	24	7.5	Normally Closed	32 to 200°F (Fluid) @ 104°F (Ambient) (0 to 93°C @ 40°C)	No	18 in. (45.7 cm) Leads
AG13B020	120			32 to 250°F (Fluid) @ 169°F (Ambient) (0 to 121°C @ 76°C)		
AG14A020	24					
AG14B020	120			32 to 200°F (Fluid) @ 104°F (Ambient) (0 to 93°C @ 40°C)		
AG23A020	24		32 to 250°F (Fluid) @ 169°F (Ambient) (0 to 121°C @ 76°C)			
AG24A020	24			32 to 200°F (Fluid) @ 104°F (Ambient) (0 to 93°C @ 40°C)		
AG23B020	120		32 to 250°F (Fluid) @ 169°F (Ambient) (0 to 121°C @ 76°C)			
AG24B020	120					

High Close Off, 2-Position, Power (Open or Close): 13 to 18 Seconds; Spring Return (Open or Close): 4 to 5 Seconds						
Model No.	Volts AC	VA	Electrical Position	Temperature Range F (C)	End Of Travel Switch	Wiring
AH13A020	24	7.5	Normally Closed	32 to 200°F (Fluid) @ 104°F (Ambient) (0 to 93°C @ 40°C)	No	18 in. (45.7 cm) Leads
AH13B020	120			32 to 250°F (Fluid) @ 169°F (Ambient) (0 to 121°C @ 76°C)		
AH14A020	24					
AH14B020	120			32 to 200°F (Fluid) @ 104°F (Ambient) (0 to 93°C @ 40°C)		
AH23A020	24		32 to 250°F (Fluid) @ 169°F (Ambient) (0 to 121°C @ 76°C)			
AH23B020	120			32 to 200°F (Fluid) @ 104°F (Ambient) (0 to 93°C @ 40°C)		
AH24A020	24		32 to 250°F (Fluid) @ 169°F (Ambient) (0 to 121°C @ 76°C)			
AH24B020	120					

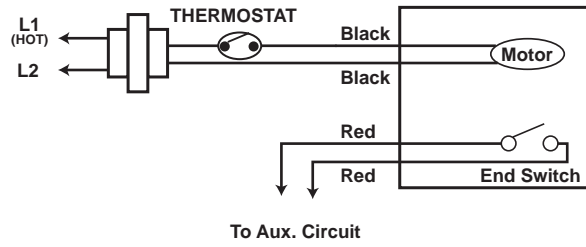


Figure 1 AG/AH TAC Erie PopTop with Wire Leads.

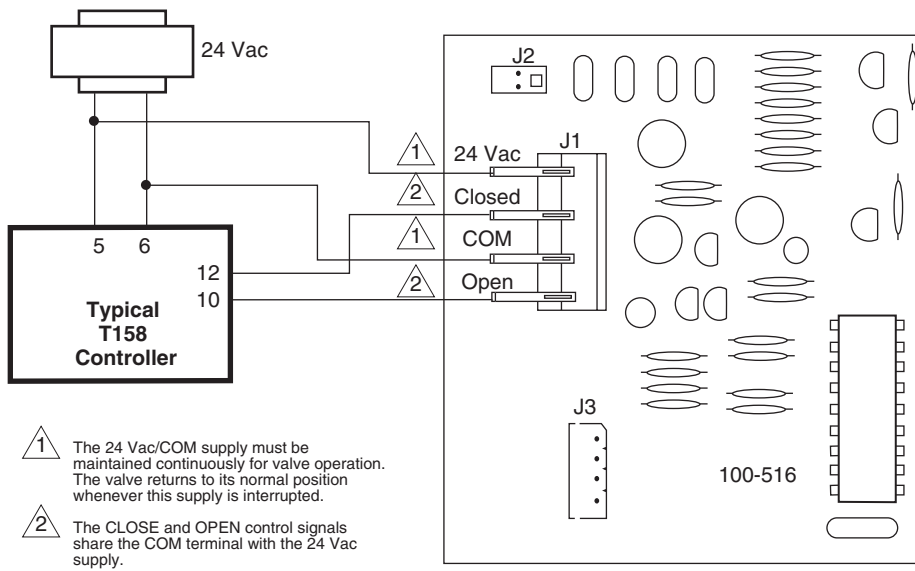


Figure 2 ATx3A00T TAC Erie PopTop 3-Wire Floating Actuator with Time-Out.

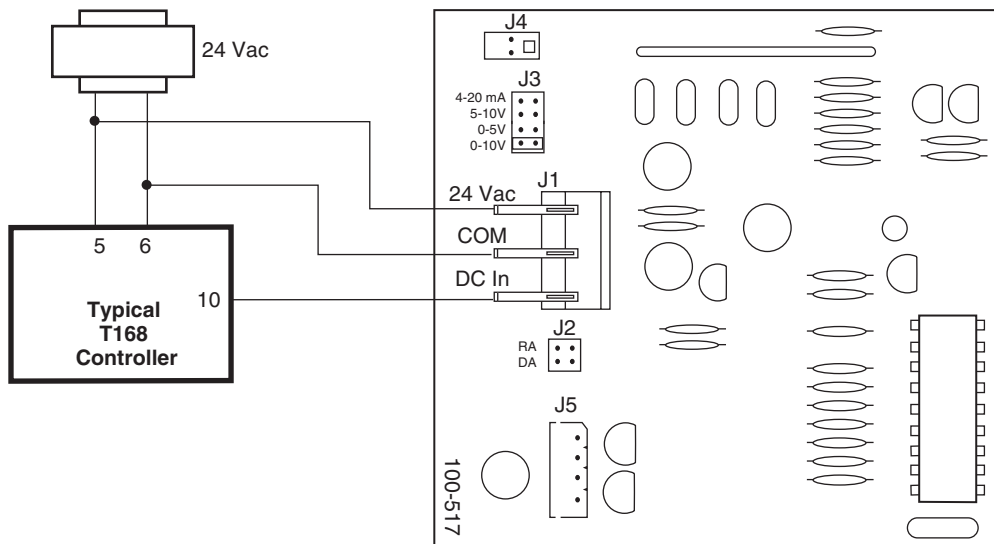
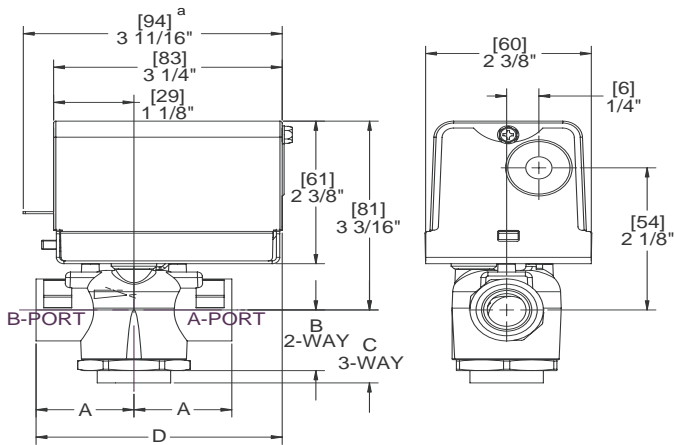


Figure 3 APx3A000 TAC Erie PopTop Three-Wire Proportional Actuator.

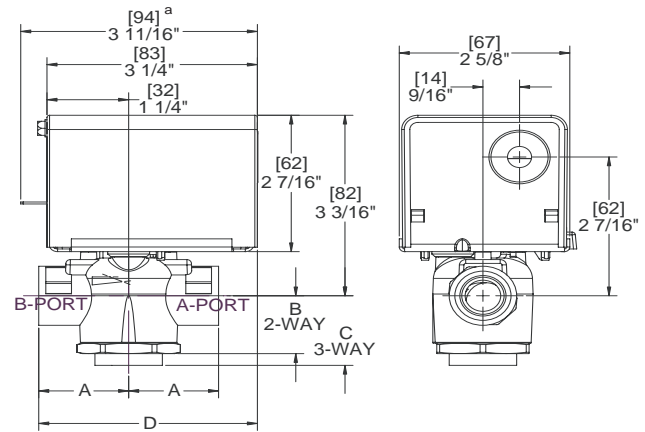
Dimensions — 1/2" to 1" Zone Valve Assemblies

Valve Body Size inches	Valve Dimensions in inches (millimeters)				
	A	B 2-Way	C 3-Way	D (General Close-Off) (Refer to Figure 102)	D (High Close-off) (Refer to Figure 103)
1/2" Sweat	1-5/16 (33)	15/16 (23)	1-5/16 (33)	3-5/16 (84)	3-5/8 (92)
3/4" Sweat	1-3/8 (35)	15/16 (23)	1-11/16 (43)	3-3/8 (86)	3-3/4 (95)
1" Sweat	1-11/16 (43)	15/16 (23)	1-11/16 (43)	3-5/8 (92)	4 (102)
1-1/4" Sweat	1-7/8 (47)	1 (25)	1-13/16 (46)	3-11/16 (94)	4-1/8 (105)
1/2" NPT	1-3/8 (35)	15/16 (23)	1-5/16 (33)	3-3/8 (86)	3-3/4 (95)
3/4" NPT	1-11/16 (43)	15/16 (23)	1-7/16 (37)	3-5/8 (92)	4 (102)
1" NPT	1-7/8 (47)	1 (25)	1-11/16 (43)	3-11/16 (94)	4-1/8 (105)



^a Normally closed model only.

Figure 102 VT/VS AG Series General Close-Off.



^a Normally closed model only.

Figure 103 VT/VS AH Series High Close-Off.