TAC Erie[™] Zone Valves Three-Way Mixing or Diverting Spring Return



1/2 to 1-1/4 in. Sweat Ends

Three-Way Mixing or Diverting Spring Return Normally Closed (B Port) General Close-Off

Two-Position

Flow Type 1 to 4 Cv equal % 8 Cv linear

Body Forged brass

Material Seat Brass
Stem Nickel plated brass

Paddle Highly saturated nitrile (VS), Buna N (VT)

VT Series: 32 to 200 °F @ 104 °F ambient

Fluid Temperature (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)

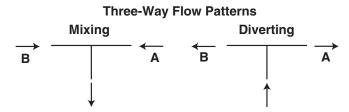
Seat Leakage ANSI IV

Size in.	Cv (K _{vs})	Close Off Pressure psi (kPa)	VT Series 32 to 200 °F	VS Series - High Temp 32 to 250 °F	Voltage Vac
1/2	1 (0.8)	60 (413)	VT3211G13A020	VS3211G14A020	24
			VT3211G13B020	VS3211G14B020	120
	2.5 (2.2)	40 (275)	VT3212G13A020	VS3212G14A020	24
1/2			VT3212G13B020	VS3212G14B020	120
	3.5 (3)	25 (172)	VT3213G13A020	VS3213G14A020	24
			VT3213G13B020	VS3213G14B020	120
	2.5 (2.2)	40 (275)	VT3312G13A020	VS3312G14A020	24
			VT3312G13B020	VS3312G14B020	120
	3.5 (3)	25 (172)	VT3313G13A020	VS3313G14A020	24
3/4			VT3313G13B020	VS3313G14B020	120
3/4	5 (4.3)	20 (138)	VT3315G13A020	VS3315G14A020	24
			VT3315G13B020	VS3315G14B020	120
	7.5 (6.5)	17 (117)	VT3317G13A020	VS3317G14A020	24
			VT3317G13B020	VS3317G14B020	120
	5 (4.3)	20 (138)	VT3415G13A020	VS3415G14A020	24
			VT3415G13B020	VS3415G14B020	120
1	8 (6.9)	17 (117)	VT3417G13A020	VS3417G14A020	24
			VT3417G13B020	VS3417G14B020	120
1 1/4	8 (6.9)	17 (117)	VT3517G13A020	VS3517G14B020	24
1-1/4			VT3517G13B020	VS3517G14B020	120

Actuator Code Table.

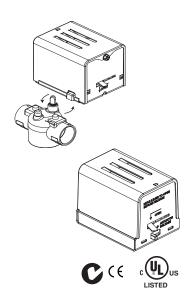
Actuator Model (Reference pages 146	Description	Wiring	Diagrams	Dimension Information	
thru 148)	Description	Page	Figure	Page	Figure
AG13A020, AG14A020	2-Position	152	1	206	102
AG13B020, AG14B020	2-Position	152	1	206	102

TAC Erie[™] Zone Valves Three-Way Mixing or Diverting Spring Return



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.

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. **Dimensions:**

(62 x 67 x 93 mm)

Override: Manual (normally closed models only).

Motor Type: Hysteresis synchronous.

Refer to F-26496. **General Instructions:**

Agency Listing: UL-873. Underwriters Laboratories (File #E9429 Category

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.

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		Normally Closed Normally	32 to 200°F (Fluid) @ 104°F				
AG13B020	120			(Ambient) (0 to 93°C @40°C)				
AG14A020	24			Closed	Closed	32 to 250°F (Fluid)@ 169°F		
AG14B020	120			(Ambient) (0 to 121°C @ 76°C)	No	18 in. (45.7 cm) Leads		
AG23A020	24	7.5		32 to 200°F (Fluid)@ 104°F (Ambient) (0 to 93°C @40°C)				
AG24A020	24		Open (can only be used on	32 to 250°F (Fluid)@ 169°F (Ambient) (0 to 121°C @ 76°C				
AG23B020	120		2-way valve)	32 to 200°F (Fluid)@ 104°F (Ambient) (0 to 93°C @40°C)				
AG24B020	120			32 to 250°F (Fluid)@ 169°F (Ambient) (0 to 121°C @ 76°C				

High Close O	ff, 2-Position, Po	wer (Open or Cl	ose): 13 to 1	8 Seconds; Spring Return (Open or	Close): 4 to 5 S	econds
AH13A020	24		7.5 Normally Open (can only be used on 2-way valve)	32 to 200°F (Fluid) @ 104°F	No	18 in. (45.7 cm) Leads
AH13B020	120			(Ambient) (0 to 93°C @40°C)		
AH14A020	24			32 to 250°F (Fluid) @ 169°F		
AH14B020	120			(Ambient) (0 to 121°C @ 76°C)		
AH23A020	24	7.5		32 to 200°F (Fluid) @ 104°F (Ambient) (0 to 93°C @40°C)		
AH23B020	120					
AH24A020	24			32 to 250°F (Fluid) @ 169°F (Ambient) (0 to 121°C @ 76°C)		
AH24B020	120					

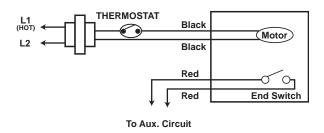


Figure 1 AG/AH TAC Erie PopTop with Wire Leads.

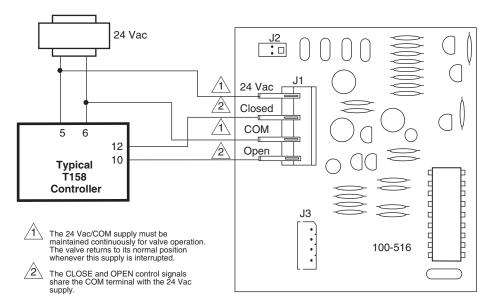


Figure 2 ATx3A00T TAC Erie PopTop 3-Wire Floating Actuator with Time-Out.

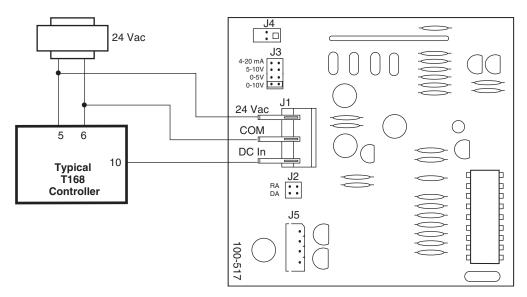
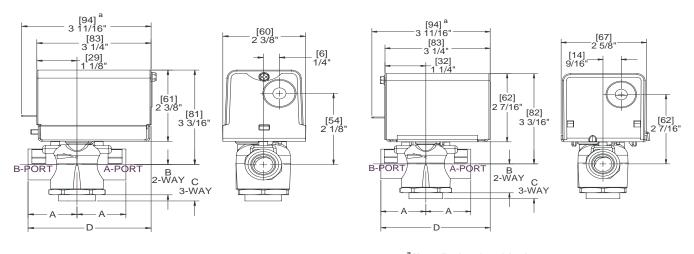


Figure 3 APx3A000 TAC Erie PopTop Three-Wire Proportional Actuator.

		Valve Dimensions in inches (millimeters)							
Valve Body Size inches	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.

^a Normally closed model only.

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

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