

CONTROL VALVES

TWO-POSITION POPTOP™ ZONE VALVES VT SERIES



Schneider
Electric



DESCRIPTION

The VT Series Two-Position PopTop™ zone valves offer a wide range of models to handle chilled water, hot water, and 15 psig (103 kPa) steam applications. PopTop™ valves feature removable actuators to aid in both installation and service. They are available in 2-way and 3-way body patterns and with normally open or normally closed actuators.

FEATURES

- Two- or three-way mixing/diverting body patterns
- Removable and replaceable actuator
- NPT, sweat, or inverted flare connections
- 2-position spring return control



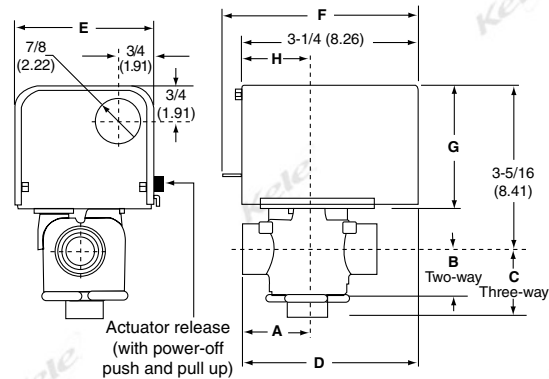
3

CONTROL VALVES

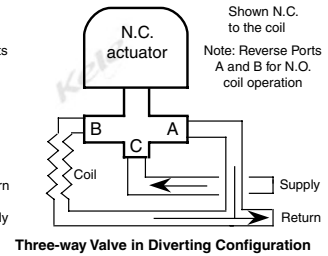
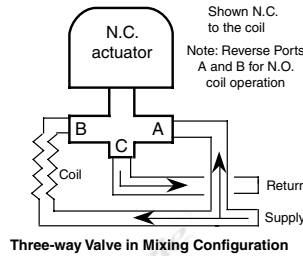
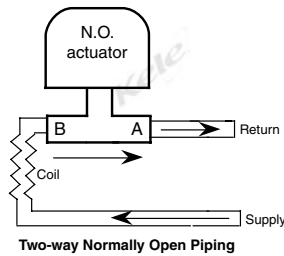
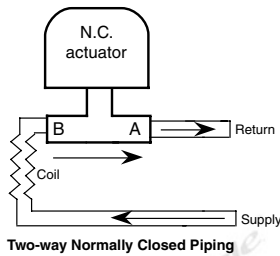
DIMENSIONS

in
(cm)

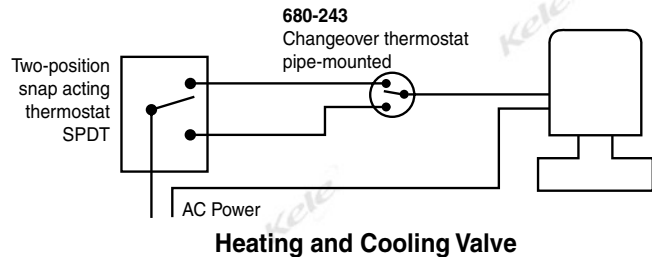
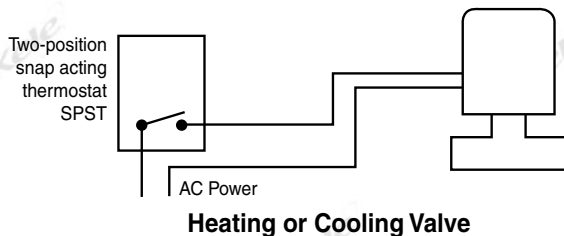
VALVE BODY SIZE	DIMENSIONS			
	A	B	C	D
1/2" Sweat	1-5/16 (3.33)	7/8 (2.22)	1-5/16 (3.33)	3-5/16 (8.41)
3/4" Sweat	1-3/8 (3.49)	7/8 (2.22)	1-11/16 (4.29)	3-3/8 (8.57)
1" Sweat	1-11/16 (4.29)	7/8 (2.22)	1-11/16 (4.29)	3-5/8 (9.21)
1/2" NPT	1-3/8 (3.49)	7/8 (2.22)	1-5/16 (3.33)	3-3/8 (8.57)
3/4" NPT	1-11/16 (4.29)	7/8 (2.22)	1-7/16 (3.65)	3-5/8 (9.21)
1" NPT	1-7/8 (4.76)	1 (2.54)	1-3/4 (4.45)	3-7/8 (9.84)
Inverted flare union	1-3/8 (3.49)	7/8 (2.22)	1-5/16 (3.33)	4-1/8 (10.48)
ACTUATOR	E	F	G	H
AG	2-3/8 (6.03)	3-11/16 (9.36)	2-3/8 (6.03)	1-1/4 (3.18)
AH	2-5/8 (6.67)	3-7/8 (9.84)	2-3/8 (6.03)	1-1/4 (3.18)



PIPING



WIRING





CONTROL VALVES

TWO-POSITION POPTOP™ ZONE VALVES VT SERIES

3

CONTROL VALVES

SPECIFICATIONS

Size	1/2", 3/4", 1"	Supply Voltage	24 VAC ±10%; 120 VAC ±10%, 50/60 Hz; 208-277V models also available
Cv Range	1.0 to 8.0	Supply VA	7 VA
Connections	FNPT, Sweat, or inverted flare (3/4" only)	Supply Watts	6.5 W
Flow Characteristic	Quick Opening	Control Signal	Two-position, two-wire
Leakage Rating	ANSI Class IV (0.01% of rated capacity)	Wiring	18" (45.2 cm) leads
Maximum Closeoff Pressure	Cv 1.0-1.5: 60 psid (414 kPa) AG actuator, 75 psid (517 kPa) AH actuator Cv 2.5-3.0: 40 psid (276 kPa) AG actuator, 50 psid (345 kPa) AH actuator Cv 3.5-4.0: 25 psid (172 kPa) AG actuator, 30 psid (207 kPa) AH actuator Cv 5.0: 20 psid (137 kPa) AG actuator, 25 psid (172 kPa) AH actuator Cv 7.5-8.0: 17 psid (117 kPa) AG actuator, 20 psid (137 kPa) AH actuator	Action	Two-way valves: N.O./N.C. determined by choice of actuator; three-way valves: N.C. actuator only
Maximum Pressure Rating	300 psig (2067 kPa)	Actuator Compatibility	AG (general purpose) or AH (high performance) type actuators only
Materials Of Construction	Brass valve body and seat, nickel-plated stem, BUNA N paddle; stainless steel base plate and aluminum cover on actuator	Actuator Mounting	Poptop®
Media Compatibility	Hot or chilled water; 50% or less ethylene glycol; 15 psig steam	Auxiliary Contacts	N.O. contacts, 24-240 VAC, 101mA min to 5A max; 9-30 VDC @ 100 mA max
Media Temperature Range	32° to 200°F (0° to 93°C) with AG actuator; up to 250°F (121°C) with AH actuator	Auxiliary Switch	Models with auxiliary switch available
		Drive Time	25 seconds maximum @ 60 Hz
		Manual Override	N.C. actuators only
		Operating Temperature	AG actuator: maximum ambient 104°F (40°C); AH actuator: maximum ambient 169°F (77°C)
		Spring Return Time	9 seconds maximum
		Weight	Valve bodies: <1.4 lb (.64 kg) Actuators: 1.0 lb (.45 kg)
		Approvals	UL and ULc Listed; CE
		Warranty	2 years

ORDERING INFORMATION

VALVE			
MODEL	DESCRIPTION		
V	Two-position PopTop electric valve		
TEMPERATURE			
T	Water		
S	Steam (must use high temperature actuator)		
CONFIGURATION			
2	Two-way		
3	Three-way		
CV SIZE			
2	1/2"		
3	3/4"		
4	1"		
CONNECTION			
1	Sweat - 1/2", 3/4", 1"		
2	NPT - 1/2", 3/4", 1"		
4	Inverted flare - 3/4" only		
CV CAPACITY			
	2-way	3-way	Size
1	1.0	1.5	1/2"
2	2.5	3.0	1/2", 3/4"
3	3.5	4.0	1/2", 3/4"
5	5.0	5.0	3/4", 1"
7	7.5	7.5	3/4"
7	8.0	8.0	1"

Note: Valve and actuator shipped separately.

*Inverted flare fittings not included with valve. They are field-supplied.

ACTUATOR	
MODEL	DESCRIPTION
A	VT Series actuator
CLOSEOFF	
G	General operation
H	High performance
VALVE OPERATION	
1	Normally closed*
2	Normally open**
TEMPERATURE	
3	Normal
4	Steam
VOLTAGE	
A	24 VAC, 50/60 Hz
B	120 VAC, 50/60 Hz
D	208 VAC, 60 Hz
T	277 VAC, 60 Hz
U	230/220 VAC, 50 Hz
LEADS	
02	18" Leads
OPTIONS	
0	None
A	End switch

* Three-way valves use N.C. actuator only; reverse ports for N.O.
** No manual override.

SSTAG
680-243-6

RELATED PRODUCTS
Stainless steel tag on bead chain, 1" x 2" dogtag, custom engraved per order
Changeover thermostat with conduit fitting

30-158-A
30-158-B
30-158-D
30-158-T
30-158-Y
436-252

ACCESSORIES
AG/AH Series actuator replacement motor, 24 VAC
AG/AH Series actuator replacement motor, 110/120 VAC
AG/AH Series actuator replacement motor, 208 VAC
AG/AH Series actuator replacement motor, 277 VAC
AG/AH Series actuator replacement motor, 230/240 VAC
3/4" flare-to-sweat fitting