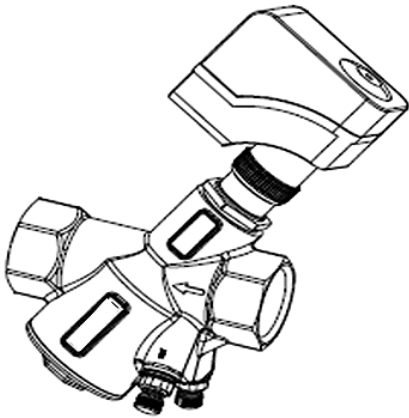


JOB:	REPRESENTATIVE:
UNIT TAG:	ORDER NO.:
ENGINEER:	SUBMITTED BY:
CONTRACTOR:	APPROVED BY:
	DATE:
	DATE:
	DATE:



OPTIFLO™

Pressure Independent Control And Balancing Valve

DESCRIPTION

The Bell & Gossett OPTIFLO™ is a pressure independent electrically actuated combination temperature control, balance, and commissioning valve for use in HVAC systems. It features an internal automatic balancing cartridge that works in conjunction with the external modulating control actuator to ensure proper flow through the system. This results in less required installation and commissioning time and allows for greater system flexibility and more accurate control. Valves come with a choice of 0-10 V_{DC} Analog or 3-Position Tri-State actuator and are equipped with two capped 1/4" readout valves and feature Threaded NPT end connections.

CONSTRUCTION

Valve
 Body: Brass EN CW613N
 Spring: Stainless Steel
 Diaphragm: HNBR
 O-Rings: EPDM

Actuator
 Rating: NEMA 1
 Noise Level: <35 db (A)

MAXIMUM WORKING PRESSURE

400 psig (2,758 kPa)

TEMPERATURE RANGE

32°F (0°C) to 250°F (121°C)

CONTROL RANGE

5 psi (34 kPa) to 60 psi (414 kPa)

ACCURACY

+/- 5%

AMBIENT AIR TEMPERATURE

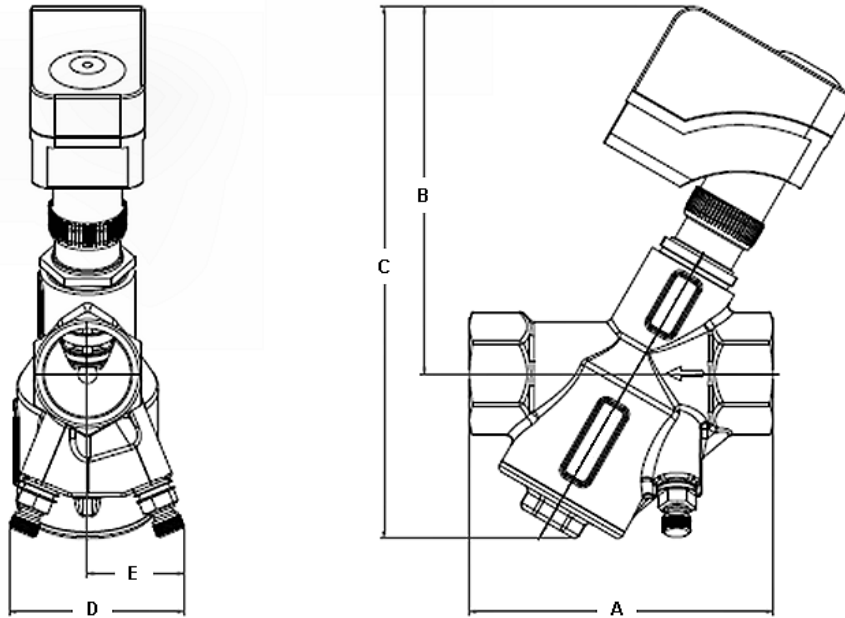
34°F (1°C) to 122°F (50°C)

AMBIENT HUMIDITY

5% to 85% r.h.

SCHEDULE

MODEL NUMBER	PART NUMBER	TAGGING INFORMATION	QUANTITY
PVA-1/2H	117443		
PVA-1/2L	117444		
PVT-1/2H	117445		
PVT-1/2L	117446		
PVA-3/4H	117447		
PVA-3/4L	117448		
PVT-3/4H	117449		
PVT-3/4L	117450		
PVA-1H	117451		
PVA-1L	117452		
PVT-1H	117453		
PVT-1L	117454		
PVA-1-1/4	117455		
PVT-1-1/4	117456		



DIMENSIONS AND WEIGHTS

Model Number	Size	Connection Type	DIMENSIONS* IN INCHES (mm)					Cv ⁺	Flow Capacity in GPM (L/hr)		Approx. Weight Lbs. (kg)
			A	B	C	D	E		Min.	Max.	
PVA-1/2L PVT-1/2L	1/2"L	NPT Female	3.6 (92)	5.8 (148)	8.1 (207)	2.6 (65)	1.4 (36)	1.86	0.3 (68)	2.2 (500)	3.7 (1.7)
PVA-1/2H PVT-1/2H	1/2"H	NPT Female	3.6 (92)	5.8 (148)	8.1 (207)	2.6 (65)	1.4 (36)	4.65	0.9 (200)	6.6 (1,500)	3.7 (1.7)
PVA-3/4L PVT-3/4L	3/4"L	NPT Female	3.6 (92)	5.8 (148)	8.1 (207)	2.6 (65)	1.4 (36)	3.02	0.4 (91)	4.0 (909)	3.7 (1.7)
PVA-3/4H PVT-3/4H	3/4"H	NPT Female	3.6 (92)	5.8 (148)	8.1 (207)	2.6 (65)	1.4 (36)	5.00	0.9 (200)	8.8 (2,000)	3.7 (1.7)
PVA-1L PVT-1L	1"L	NPT Female	3.8 (96)	5.8 (148)	8.1 (207)	2.6 (65)	1.4 (36)	4.65	0.9 (200)	6.6 (1,500)	3.9 (1.8)
PVA-1H PVT-1H	1"H	NPT Female	3.8 (96)	5.8 (148)	8.1 (207)	2.6 (65)	1.4 (36)	5.00	0.9 (200)	8.8 (2,000)	5.2 (2.4)
PVA-1-1/4 PVT-1-1/4	1 1/4"	NPT Female	5.0 (128)	6.1 (155)	8.8 (224)	2.9 (74)	1.6 (41)	8.37	2.2 (500)	13.2 (3,000)	5.2 (2.4)

*All dimensions +/- 0.125 (3.2 mm) tolerance. Dimensions are subject to change. Not to be used for construction purposes unless certified.

+Cv Values are calculated using minimum ΔP and maximum flow capacity.

ACTUATOR SPECIFICATIONS

Actuator	Part Number	Operating Voltage (Tolerance)	Rated Frequency	Max. Power Consumption	Control Signal	Run Time ¹ (sec)	Fuse for Incoming Cable	Parallel Operation ² (# of Actuators)
SSD81	V59061	AC 24V (+/- 20%)	50/60 Hz	0.8 VA	3 Position Tri-State	150	2 A, quickblow	max. 24
SSD61	V59062	AC 24V (+/- 20%)	50/60 Hz	2.5 VA	Analog DC 0-10 V	75	2 A, quickblow	max. 10

¹ Run time for 5.5 mm stroke at 50 Hz

² Provided the controllers' output is sufficient.