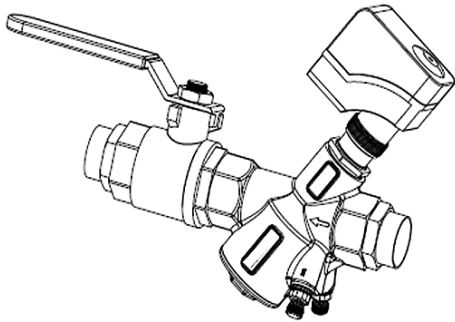


JOB: UNIT TAG: ENGINEER: CONTRACTOR:	REPRESENTATIVE: ORDER NO. SUBMITTED BY: APPROVED BY:	DATE: DATE: DATE:
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OPTIFLO™

Pressure Independent Control And Balancing Valve

Model AA

DESCRIPTION

The Bell & Gossett OPTIFLO™ Model AA is a pressure independent electrically actuated combination temperature control, balance, and commissioning valve with supplied ball isolation/shut off valve for use in HVAC systems. Valves are furnished with two pressure/temperature ports, a choice of 0-10 V_{DC} Analog or 3-Position Tri-State modulating actuator, and hanging ID tag for commissioning. Sweat Female and NPT female end connections are available on both the fixed and union ends.

CONSTRUCTION

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

Ball Valve
 Body/Stem: Brass EN CW602N
 Ball: Brass C37000
 O-Ring: EPDM
 Seat: Teflon

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

MAXIMUM WORKING PRESSURE

290 psig (2,000 kPa)

TEMPERATURE RANGE

34°F (1°C) to 230°F (110°C)

CONTROL RANGE

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

ACCURACY

+/- 5%

AMBIENT AIR TEMPERATURE

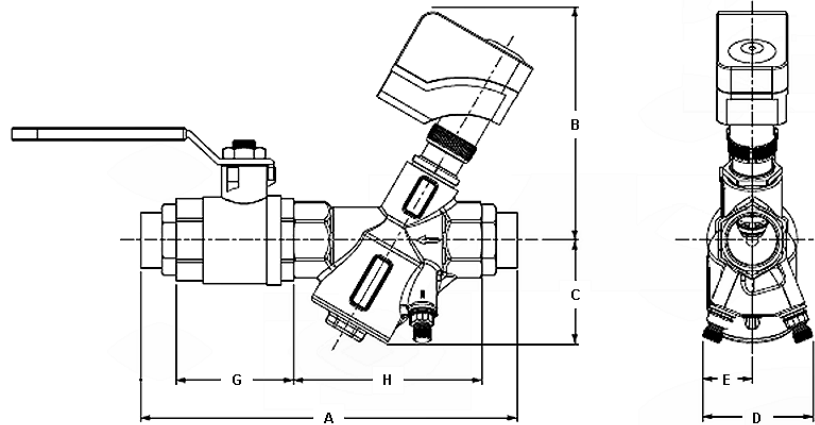
34°F (1°C) to 122°F (50°C)

AMBIENT HUMIDITY

5% to 35% r.h.

SCHEDULE

VALVE SIZE FIXED END	TAGGING INFORMATION	QUANTITY
1/2"L Sweat Female		
1/2"L NPT Female		
1/2"H Sweat Female		
1/2"H NPT Female		
3/4"L Sweat Female		
3/4"L NPT Female		
3/4"H Sweat Female		
3/4"H NPT Female		
1"L Sweat Female		
1"L NPT Female		
1"H Sweat Female		
1"H NPT Female		
1-1/4" Sweat Female		
1-1/4" NPT Female		



DIMENSIONS AND WEIGHTS

Valve Size Fixed End	Connection Fixed End	DIMENSIONS* IN INCHES (mm)							Cv ⁺	Flow Capacity** in GPM (L/hr)		Approx. Weight Lbs. (kg.)	
		A	B	C	D	E	G	H		Min.	Max.		
1/2"L	Sweat	6.5	5.8	2.3	2.6	1.1	1.7	3.6	1.86	0.3	2.2	4.1	
	Female	(164)	(148)	(59)	(65)	(29)	(42)	(92)		(68)	(500)		(1.9)
	NPT	-	5.8	2.3	2.6	1.1	1.7	3.6		0.3	2.2		4.1
	Female	(-)	(148)	(59)	(65)	(29)	(42)	(92)	1.86	(68)	(500)	(1.9)	
1/2"H	Sweat	6.5	5.8	2.3	2.6	1.1	1.7	3.6	4.65	0.9	6.6	4.1	
	Female	(164)	(148)	(59)	(65)	(29)	(42)	(92)		(200)	(1,500)		(1.9)
	NPT	-	5.8	2.3	2.6	1.1	1.7	3.6		0.9	6.6		4.1
	Female	(-)	(148)	(59)	(65)	(29)	(42)	(92)	4.65	(200)	(1,500)	(1.9)	
3/4"L	Sweat	7.8	5.8	2.3	2.6	1.1	2.1	3.6	3.02	0.4	4.0	4.4	
	Female	(197)	(148)	(59)	(65)	(29)	(53)	(92)		(91)	(909)		(2.0)
	NPT	-	5.8	2.3	2.6	1.1	2.1	3.6		0.4	4.0		4.4
	Female	(-)	(148)	(59)	(65)	(29)	(53)	(92)	3.02	(91)	(909)	(2.0)	
3/4"H	Sweat	7.8	5.8	2.3	2.6	1.1	2.1	3.6	5.00	0.9	8.8	4.4	
	Female	(197)	(148)	(59)	(65)	(29)	(53)	(92)		(200)	(2,000)		(2.0)
	NPT	-	5.8	2.3	2.6	1.1	2.1	3.6		0.9	8.8		4.4
	Female	(-)	(148)	(59)	(65)	(29)	(53)	(92)	5.00	(200)	(2,000)	(2.0)	
1"L	Sweat	8.6	5.8	2.3	2.6	1.1	2.5	3.8	4.65	0.9	6.6	5.0	
	Female	(219)	(148)	(59)	(65)	(29)	(63)	(96)		(200)	(1,500)		(2.3)
	NPT	-	5.8	2.3	2.6	1.1	2.5	3.8		0.9	6.6		5.0
	Female	(-)	(148)	(59)	(65)	(29)	(63)	(96)	4.65	(200)	(1,500)	(2.3)	
1"H	Sweat	8.6	5.8	2.3	2.6	1.1	2.5	3.8	5.00	0.9	8.8	5.0	
	Female	(219)	(148)	(59)	(65)	(29)	(63)	(96)		(200)	(2,000)		(2.3)
	NPT	-	5.8	2.3	2.6	1.1	2.5	3.8		0.9	8.8		5.0
	Female	(-)	(148)	(59)	(65)	(29)	(63)	(96)	5.00	(200)	(2,000)	(2.3)	
1 1/4"	Sweat	10.6	6.1	2.7	2.9	1.3	3.1	5.0	8.37	2.2	13.2	7.2	
	Female	(269)	(155)	(69)	(74)	(33)	(79)	(128)		(500)	(3,000)		(3.3)
	NPT	-	6.1	2.7	2.9	1.3	3.1	5.0		2.2	13.2		7.2
	Female	(-)	(155)	(69)	(74)	(33)	(79)	(128)	8.37	(500)	(3,000)	(3.3)	

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

**Flow Capacity is with supplied ball valve 100% open. Ball valve is not intended to be used to limit flow, but rather as an isolation valve only.

+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.