



NEW from the leader
in Hydronic Balancing.

Bell & Gossett®

OPTIFLO™ Pressure Independent Control Valve



Automatically provides
hydronic balance for
ultimate system efficiency

- Multi Function
 - Adjustable Automatic Balance Valve
 - Full Modulating Control Valve
- Maintains the set flow rate within +/- 5% regardless of pressure fluctuations in the system as long as the ΔP across the valve falls within allowable range.
- Integrated Pressure / Temperature Ports to easily measure differential pressure and temperature
- Reduces design, installation, and commissioning time
- Reduces energy costs and ensures better comfort

Engineered for life



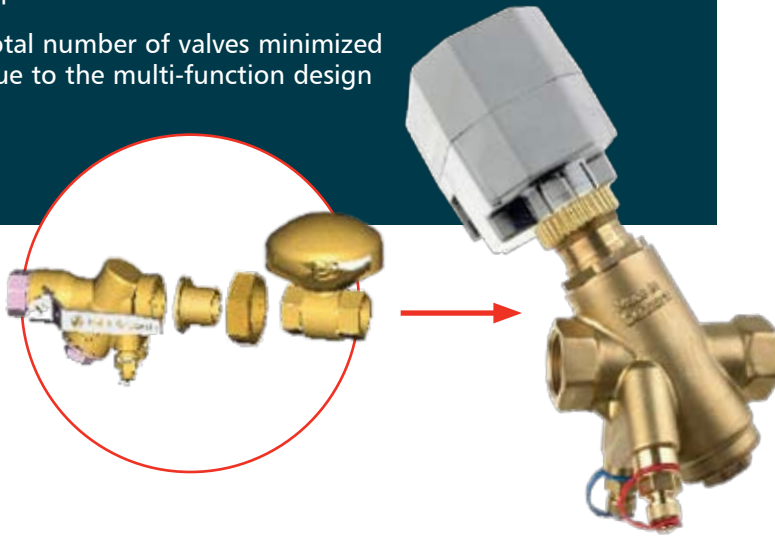


The Bell & Gossett OPTIFLO™ pressure independent temperature control and balancing valve.

The OPTIFLO™ combines an externally adjustable automatic balancing valve and a full modulating control valve. This provides modulating control with full authority regardless of any fluctuations in the differential pressure of the system, meaning less design and installation times, better energy efficiency and more comfort to the end-user.

Benefits:

- Flexibility if the system is modified after the initial installation
- Less time to define the necessary equipment for a hydraulic balanced system (only flow data is required)
- No need to calculate valve authority
- No further regulating valves required in the distribution pipe work when OPTIFLO™ is installed
- Total number of valves minimized due to the multi-function design



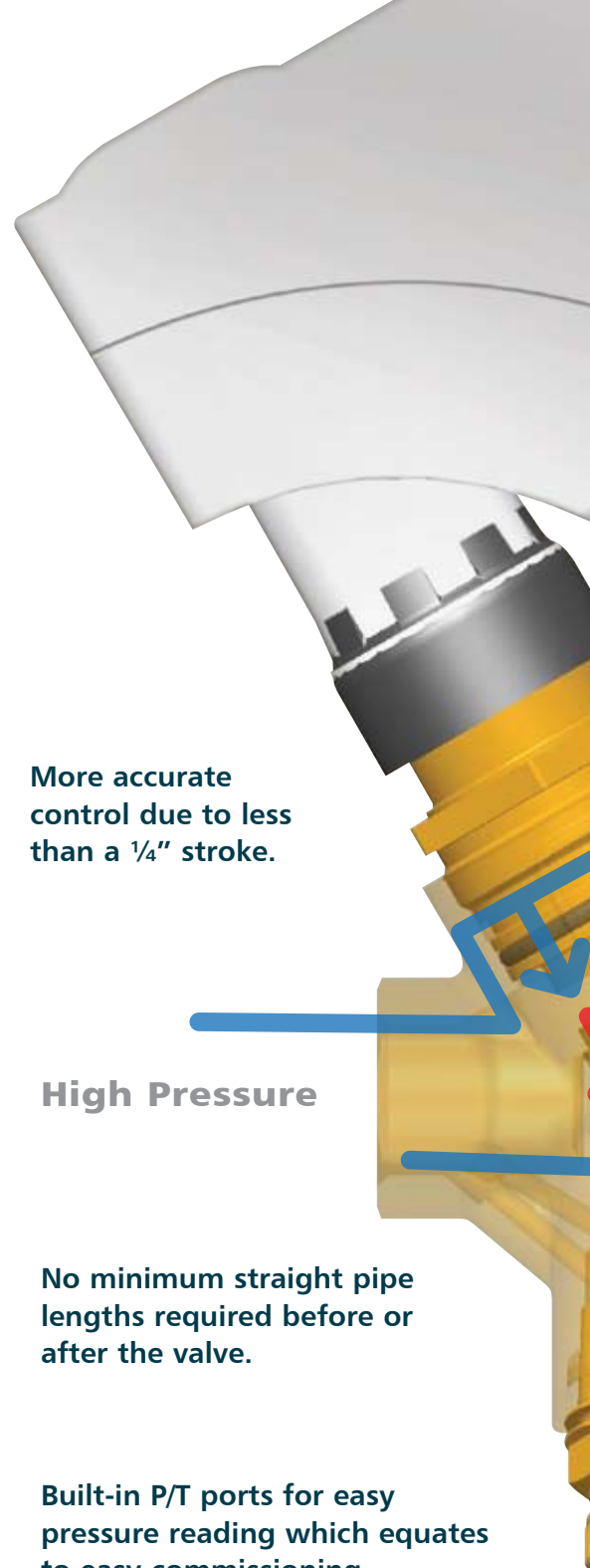
More accurate control due to less than a 1/4" stroke.

High Pressure

No minimum straight pipe lengths required before or after the valve.

Built-in P/T ports for easy pressure reading which equates to easy commissioning.

With Bell & Gossett's high quality construction, you can rest assured that your valve will operate trouble free.



The presetting function has no impact on the stroke; full stroke modulation at all times, regardless of the preset flow.

Electrical actuator 0-10 V and 3 point control, normally closed models are available for choice of control.

The constant differential pressure across the modulating control component guarantees 100% authority.

Low Pressure

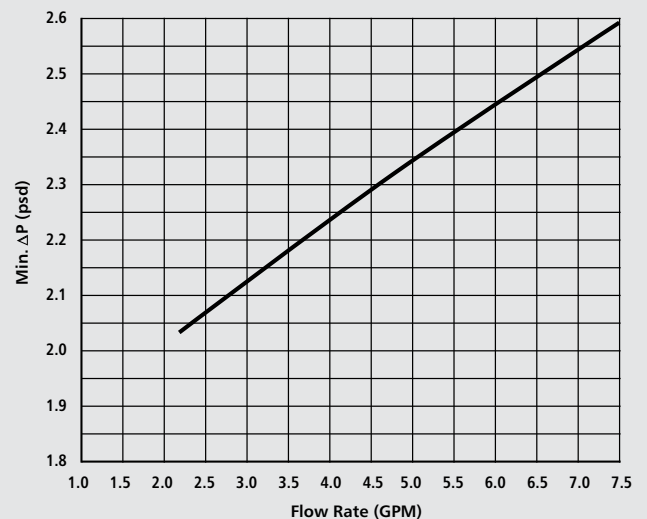
Removable differential pressure cartridge solution simplifies flushing procedure.

Automatic balancing eliminates overflows, regardless of fluctuating pressure conditions in the system.

Easy Valve Selection

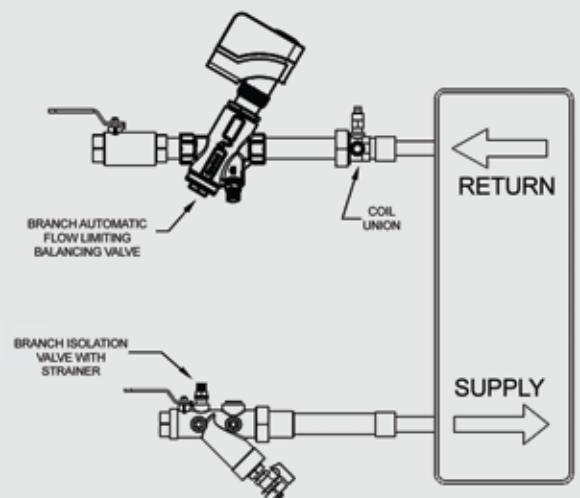
Bell & Gossett's OPTIFLO™ makes valve selection easy. Simply determine the flow rate of the coil, or load of the system, select the pipe size, and make the selection. Our charts make calculating minimum differential pressure a breeze. Whether you're at the minimum differential pressure required, or at maximum, you will be within +/- 5% of the flow that the valve is set for. In addition, there's no need to select a separate automatic temperature control valve – it's included as an all-in-one solution.

Minimum Differential Pressure Chart



AA2Y coil kit

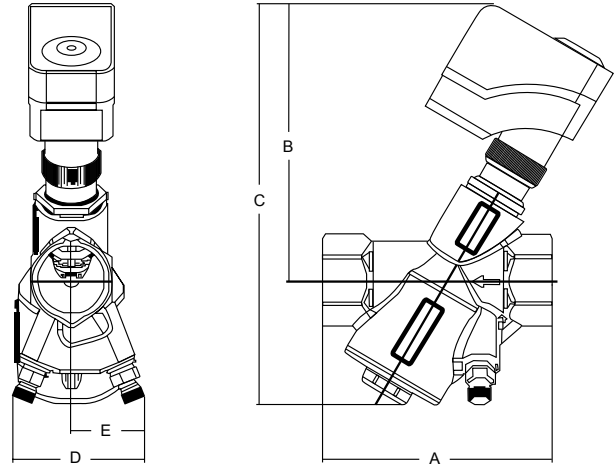
Complete coil kit solutions are available. Please contact your local B&G Representative for further information.





Built with your system in mind.

Bell & Gossett has been the leader in hydronic balancing for over 60 years and we have products and system solutions that make the engineer's job easier, save building owners money, and reduce contractor's time to install and commission the system.



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	1/2" L	NPT	3.6	5.8	8.1	2.6	1.4	1.86	0.3	2.2	3.7
PVT-1/2L		Female	(92)	(148)	(207)	(65)	(36)		(70)	(500)	
PVA-1/2H	1/2" H	NPT	3.6	5.8	8.1	2.6	1.4	4.65	0.9	6.6	3.7
PVT-1/2H		Female	(92)	(148)	(207)	(65)	(36)		(200)	(1,500)	
PVA-3/4L	3/4" L	NPT	3.6	5.8	8.1	2.6	1.4	3.02	0.4	4.0	3.7
PVT-3/4L		Female	(92)	(148)	(207)	(65)	(36)		(100)	(909)	
PVA-3/4H	3/4" H	NPT	3.6	5.8	8.1	2.6	1.4	5.00	0.9	8.8	3.7
PVT-3/4H		Female	(92)	(148)	(207)	(65)	(36)		(200)	(2,000)	
PVA-1L	1" L	NPT	3.8	5.8	8.1	2.6	1.4	4.65	0.9	6.6	3.9
PVT-1L		Female	(96)	(148)	(207)	(65)	(36)		(200)	(1,500)	
PVA-1H	1" H	NPT	3.8	5.8	8.1	2.6	1.4	5.00	0.9	8.8	3.9
PVT-1H		Female	(96)	(148)	(207)	(65)	(36)		(200)	(2,000)	
PVA-1-1/4	1 1/4"	NPT	5.0	6.1	8.8	2.9	1.6	8.37	2.2	13.2	5.2
PVT-1-1/4		Female	(128)	(155)	(224)	(74)	(41)		(500)	(3,000)	

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

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

Maximum operating pressure: 400 PSI

Minimum temperature: 32°F (0°C) to 250°F (121°C)

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	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

¹Run Time for 5.5 mm stroke at 50 Hz

²Provided the controllers' output is sufficient

Bell & Gossett can accept no responsibility for performance issues if a non-B&G actuator is used with the OPTIFLO valve.

For Minimum differential requirements please refer to the flow charts for the valve you have selected.

Maximum differential pressure is 60 PSID.



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