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 DATE: New

ARMflo Circuit Balancing Valves

CBV050VBCR-LF to CBV200VBCR – DN15 to 50 – Corrosion Resistant

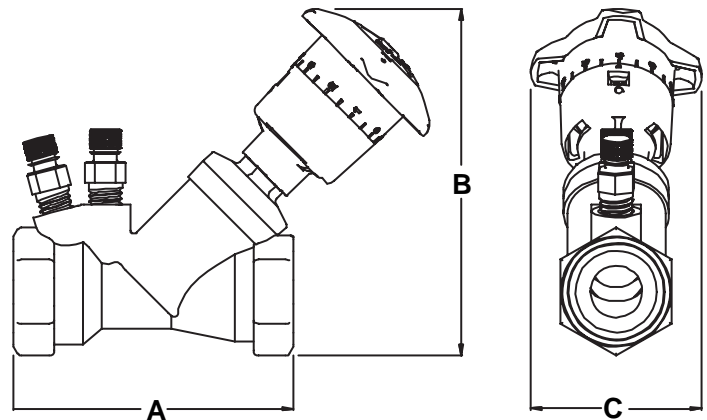
SUBMITTAL

JOB: _____	REPRESENTATIVE: _____
ENGINEER: _____	ORDER NO: _____ DATE: _____
CONTRACTOR: _____	SUBMITTED BY: _____ DATE: _____
	APPROVED BY: _____ DATE: _____

MODEL NUMBER	QTY REQ'D	IDENTIFICATION	MODEL NUMBER	QTY REQ'D	IDENTIFICATION

TECHNICAL DATA	
Connection	BSPP – (ISO-228)
Maximum Working Pressure	PN20 / 20 Bar (300 psi)
Operating Temperature Range	-20°C to 150°C (-4°F to 300°F)

MATERIALS OF CONSTRUCTION	
Body, Bonnet	Brass Alloy (forged) – CW602N Corrosion resistant (CR) to ISO-6509
Stem and Disk	Brass Alloy (machined) – CW602N Corrosion resistant (CR) to ISO-6509
Elastomers	EPDM
Handwheel	Reinforced Nylon, ABS



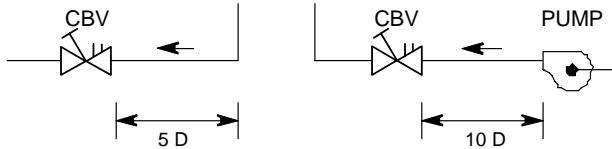
DIMENSIONS and WEIGHTS					
Model	Pipe Size	A	B	C	Shipping Weight
CBV050VB-LF	DN15 (1/2")	76 (2.99)	117 (4.60)	70 (2.76)	0.49 (1.07)
CBV075VB-LF	DN20 (3/4")	83 (3.26)	125 (4.90)	70 (2.76)	0.55 (1.21)
CBV050VB	DN15 (1/2")	76 (2.99)	117 (4.60)	70 (2.76)	0.49 (1.07)
CBV075VB	DN20 (3/4")	83 (3.26)	125 (4.90)	70 (2.76)	0.55 (1.21)
CBV100VB	DN25 (1")	97 (3.80)	135 (5.29)	70 (2.76)	0.84 (1.86)
CBV125VB	DN32 (1 1/4")	110 (4.32)	143 (5.60)	70 (2.76)	1.06 (2.34)
CBV150VB	DN40 (1 1/2")	129 (5.07)	150 (5.90)	70 (2.76)	1.59 (3.49)
CBV200VB	DN50 (2")	153 (6.00)	170 (6.68)	70 (2.76)	2.46 (5.97)

Note: Notes: All dimensions are in mm (inches) and weights in kg (lbs.)

INSTALLATION

ARMflo circuit balancing valves are highly resistant to turbulence induced by nearby piping components and can often provide excellent results when mounted directly to other fittings. However, for optimum flow measurement accuracy and when practical, locate the valve:

- 5 pipe diameters downstream of a fitting.
- 2 pipe diameters upstream of a fitting.
- 10 pipe diameters upstream or downstream of a pump.



NOTES:

Valves can be "line sized" for applications with 0.7 to 1.3 m/s flow velocity for nominal pipe size.

For valve sizing based on design flow, check the Range Chart and Flow Rate Ranges.

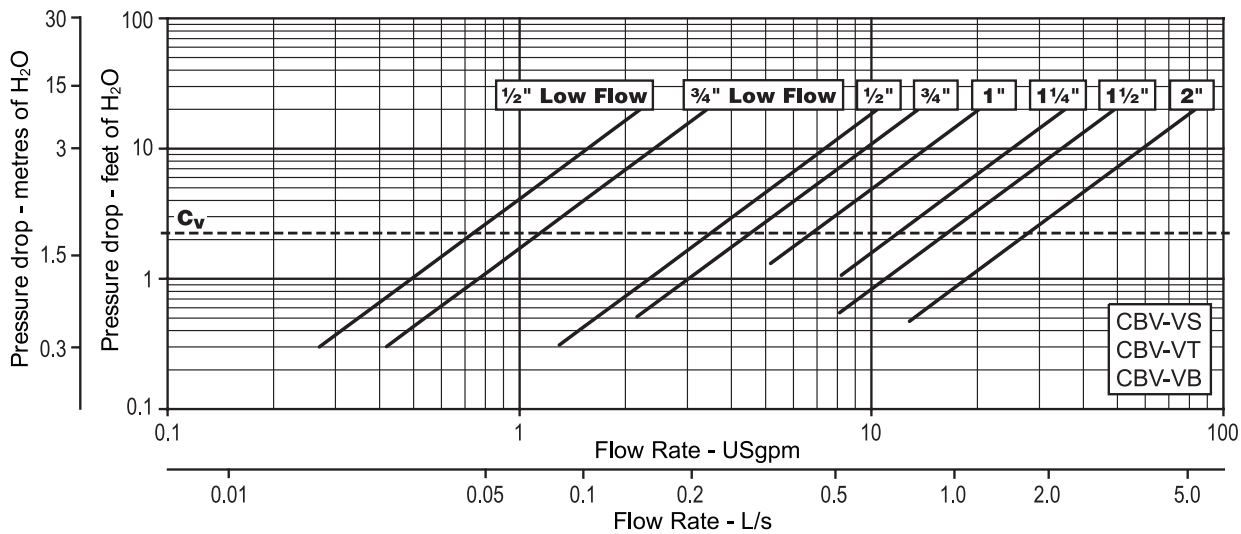
For valve performance at turn-down, refer to published ARMflo CBV Performance Curves.

All valves are furnished with PT Ports for differential pressure measurement across the venturi.

Refer to Installation and Operation Instructions for venturi differential pressure to flow correlation. **Do not attempt to use Range Chart or Performance Curves for flow measurement.**

RANGE CHART

Composite Curves - Fully Open Valves



These curves show the pressure drop across the ARMflo balancing valves and are for use in valve sizing. For "pressure drop / flow" curves required for system balancing, please refer to the Venturi C_v Performance Curves chart in the ARMflo Venturi CBV Installation and Operating Instructions manual.

FLOW RATE RANGES

Valve Model	Size		Minimum Flow Rate		Maximum Flowrate	
	Imperial	Metric	US GPM	L/s	US GPM	L/s
CBV050VBCR-LF	1/2" LF	DN15 LF	0.26	0.02	2.2	0.14
CBV075VBCR-LF	3/4" LF	DN20 LF	0.40	0.03	3.4	0.21
CBV050VBCR	1/2"	DN15	1.4	0.09	10.4	0.66
CBV075VBCR	3/4"	DN20	2.1	0.13	13.5	0.85
CBV100VBCR	1"	DN25	5.2	0.33	20.2	1.28
CBV125VBCR	1-1/4"	DN32	8.2	0.51	35.5	2.24
CBV150VBCR	1-1/2"	DN40	8.1	0.51	48.9	3.09
CBV200VBCR	2"	DN50	14.0	0.88	83.3	5.25

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