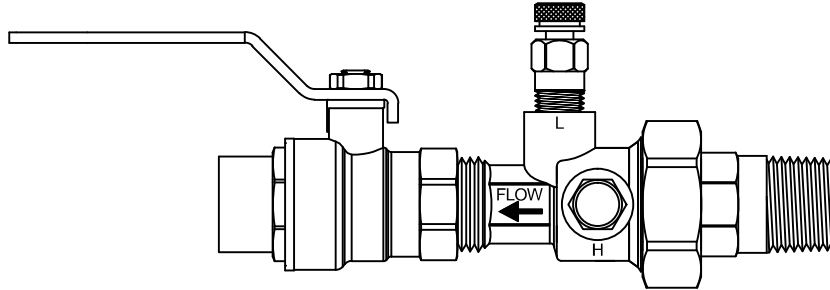




CBV Series Specifications Combination Ball Valve/Venturi



PRODUCT DESCRIPTION: The CBV flow balancing brass venturi provides highly accurate flow measurement capabilities rated at 600 WOG / CWP @ 250°F. The efficient low loss venturi design provides effective flow balancing with minimal system pressure loss. The CBV includes a standard port ball valve with memory stop, a venturi with an integral union on the inlet side, and a fixed FNPT or SWT on the run-out side. The CBV comes standard with two pressure/temperature ports for instrument readings. The union side incorporates an o-ring for maximum sealing protection. The union connection options include MNPT, FNPT, SWT, and a variety of reductions.

NOTE: If the same size male, female, sweat, or an reducing male tail piece is used, no extra pipe diameter is required.

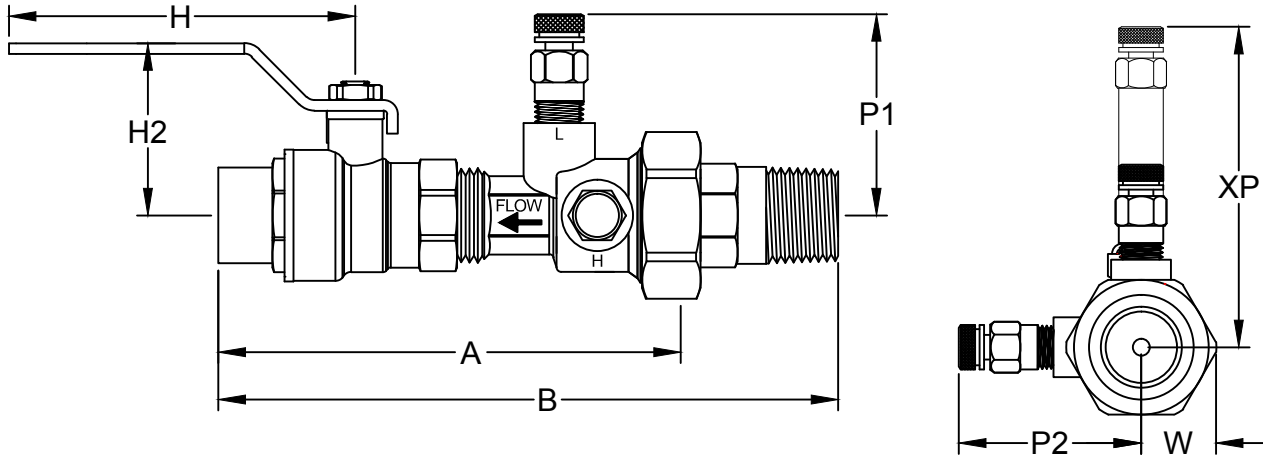
RECOMMENDED FLOW RANGES (GPM)					STANDARD MATERIAL SPECIFICATIONS	
Model	Size	Minimum	@ 100"	@ 200"		
CBV050L	½	0.3	1.1	1.5	Venturi	Cast Brass ASTM B763-08A
CBV050H	½	0.9	3.0	4.2	Ball Valve	Forged Brass ASTM B283-06
CBV075UL	¾	0.3	1.1	1.5	O-ring	EPDM
CBV075L	¾	0.9	3.0	4.2	Tail Piece	Brass ASTM B124-09, B228-06, or B763-08A
CBV075H	¾	1.8	6.0	8.5	PT Seal	EPDM Dual Durometer Core
CBV100	1	2.8	9.5	14.0	Handle	Chrome Plated Steel
CBV125	1¼	5.4	17.0	24.0	Stem	Brass ASTM B124-09 - Explosion Proof
CBV150	1½	9.0	26.0	36.0	Ball	Chrome Plated Brass - Standard Port
CBV200	2	16.0	46.0	66.0	Ball Seat	Teflon
					Specification information is provided to assist and is given without obligation or warranty. The Company reserves the right to make changes in design, materials, and/or specifications without notice or liability.	

PRODUCT SPECIFICATIONS:

- Devices shall have a 15° regain chamber for optimal pressure regain and minimal permanent pressure drop
- Venturi tube shall be independent of the throttling valve
- Venturi tube shall include proper pipe diameters for optimal accuracy
- Valve shall be designed with memory stop to limit flow once balanced
- The Model CBV shall have an accuracy rating of:
 - ±1% between 10" W.C. and 70" W.C.
 - ±3% between 5" W.C. and 150" W.C.
 - ±5% less than 5" W.C. and over 150" W.C.

PRO Hydronic Specialties

CBV Series Dimensions Combination Ball Valve/Venturi



Model	Size	A		H	H2	P1	P2	W	Option XP	Cv **
		FPT	SWT							
CBV050L	½"	4.5	4.9	3.5	1.3	2.1	2.1	0.8	3.3	1.1
CBV050H	½"	4.5	4.9	3.5	1.3	2.1	2.1	0.8	3.3	3.8
CBV075UL*	¾"	5.1	5.3	3.7	1.5	2.1	2.1	1.0	3.3	1.1
CBV075L	¾"	4.7	5.0	3.7	1.5	2.1	2.1	1.0	3.3	2.3
CBV075H	¾"	4.7	5.0	3.7	1.5	2.1	2.1	1.0	3.3	8.0
CBV100	1"	5.1	5.4	4.5	1.8	2.3	2.3	1.1	3.4	13.4
CBV125	1¼"	5.6	6.0	5.5	2.1	2.4	2.4	1.4	3.6	25
CBV150	1½"	7.0	7.3	5.5	2.5	2.8	-	1.7	3.9	31
CBV200	2"	7.6	8.1	5.9	2.6	3.0	-	2.0	4.1	87

Size	Tail Piece	B	Weight	Size	Tail Piece	B	Weight
½" SWT	- M	6.4	1.2	½" FPT	- M	6.0	1.2
	½" - F	5.5	1.1		½" - F	5.1	1.1
	- S	5.5	1.1		- S	5.1	1.1
¾" SWT	- M	6.7	1.6	¾" FPT	- M	6.4	1.6
	½" - F	5.8	1.6		½" - F	5.5	1.6
	- S	5.7	1.5		- S	5.4	1.4
	- M	7.0	1.6		- M	6.2	1.5
	¾" - F	7.0	1.5		¾" - F	5.8	1.5
	- S	5.8	1.4		- S	5.4	1.4
1" SWT	½" - M	7.4	2.3	1" FPT	½" - M	7.1	2.3
	¾" - M	6.3	2.0		¾" - M	6.0	2.3
	- S	6.4	2.1		- S	6.1	2.1
	- M	7.2	2.3		- M	7.1	2.3
1¼" SWT	1" - F	7.4	2.1	1¼" FPT	1" - F	7.1	2.1
	- S	7.4	2.1		- S	6.0	2.1
	½" - M	8.0	3.5		½" - M	7.6	3.5
	¾" - M	7.0	3.7		¾" - M	6.6	3.7
	1" - M	7.1	3.7		1" - M	6.6	3.6
	- M	7.7	3.7		- M	7.4	3.8
1½" SWT	1¼" - F	8.0	3.6	1½" FPT	1¼" - F	7.6	3.6
	- S	8.0	3.3		- S	7.6	3.3
	¾" - M	9.8	6.0		¾" - M	9.4	6.0
	1" - M	8.8	4.9		1" - M	8.2	5.8
	1¼" - M	8.5	5.9		1¼" - M	8.1	5.8
	- M	9.2	5.8		- M	8.8	5.9
2" SWT	1½" - F	9.8	5.5	2" FPT	1½" - F	9.4	5.5
	- S	9.8	4.3		- S	9.4	5.3
	1" - M	11.1	9.2		1" - M	10.1	9.0
	1¼" - M	9.2	9.1		1¼" - M	8.7	9.0
	1½" - M	9.5	9.0		1½" - M	9.0	8.8
	- M	10.1	9.0		- M	9.6	8.8
2" SWT	2" - F	11.1	8.3	2" FPT	2" - F	10.6	8.1
	- S	11.1	7.9		- S	10.6	7.8

Note: All dimensions, weights, and materials are subject to minor variations. Consult with factory for confirmation of dimensions, weights, and material specifications.

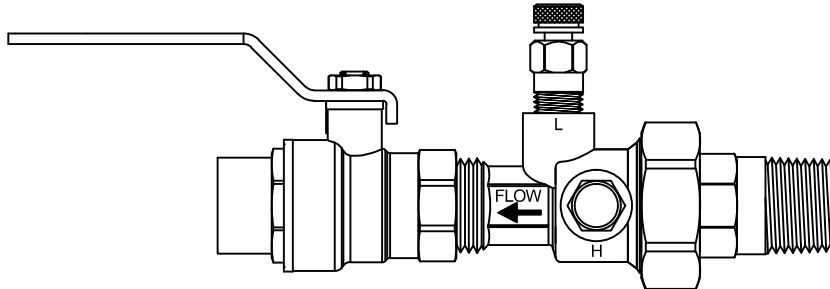
* CBV075UL Tailpiece size is ½"

** Cv = Estimated with Union connection same as inlet, no reductions.

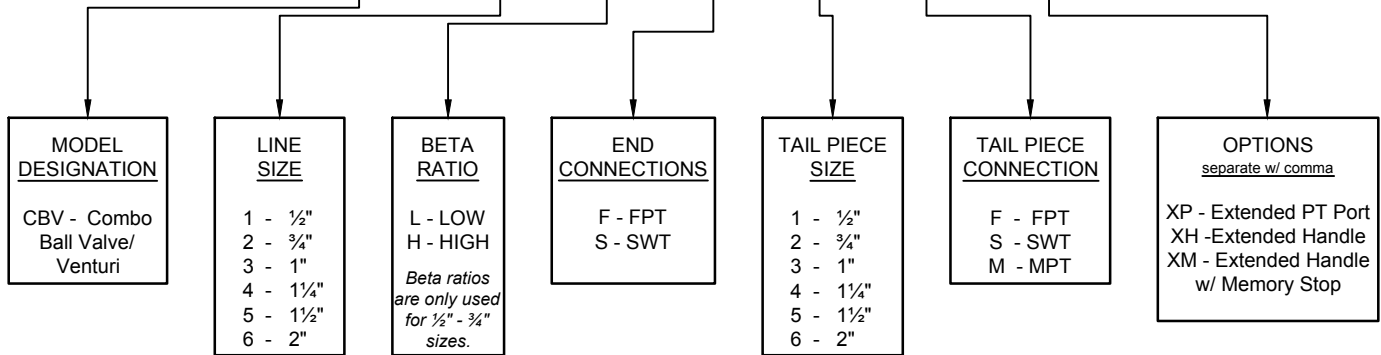
Note: Sweat size listed is nominal and will differ from the actual, measurable size.

PRO Hydronic Specialties

CBV Series Submittal Combination Ball Valve/Venturi



CBV - X - X - X - X - X - XX,



JOB NAME:		CUSTOMER:	
ENGINEER:		REF/PO#:	DATE:
CONTRACTOR:		SUBMITTED BY:	DATE:
PART # (See table above)	TAGGING/JOB INFORMATION	GPM	QUANTITY