

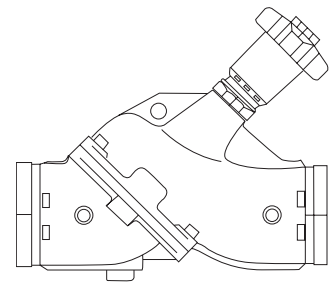
CIRCUIT BALANCING VALVES | GROOVED, STRAIGHT AND ANGLED | SIZES 2½" - 6" | SUBMITTAL

File no: 36.52
 Date: NOVEMBER 20, 2015
 Supersedes: 36.52
 Date: JUNE 30, 2000

Job: _____ Representative: _____
 _____ Ordered by: _____ Date: _____
 Engineer: _____ Submitted by: _____ Date: _____
 Contractor: _____ Approved by: _____ Date: _____

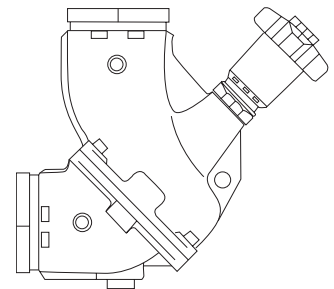
STRAIGHT DESIGN CBV-GS

VALVE SIZE	QUANTITY REQUIRED	IDENTIFICATION	GROOVED	FITTINGS REQUIRED			
				125 LB FLANGE		250 LB FLANGE	
				ONE	TWO	ONE	TWO
CBV - GS							
CBV - GS							
CBV - GS							
CBV - GS							
CBV - GS							
CBV - GS							



ANGLE DESIGN CBV-GA

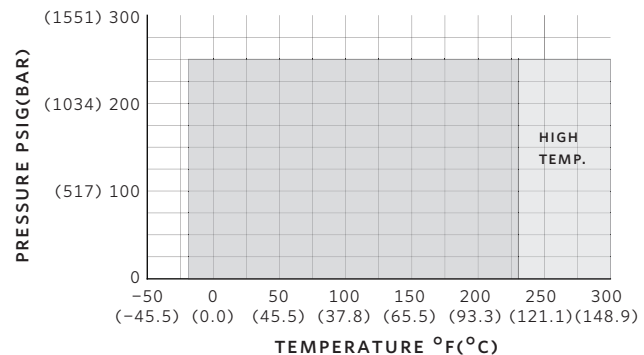
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MATERIALS OF CONSTRUCTION

- Body:** Ductile iron ASTM A536 GR 65-45-12
- Disc:** Bronze ASTM B584 C-84400
- Seat:** High strength engineered resin
- Stem:** Brass - ASTM B-16
- Memory lock:** Brass - ASTM B-16
- O rings:** BUNA N. & EPDM (EPDM only on high temp.)
- Meter ports:** NPT brass body with EPDM check
- Drain tappings:** ¼" quantity 2 with Brass Plug
- Flange adapters:** Ductile iron - ASTM A 536
- Flange gaskets:** EPDM
- Insulation:** Fiberglass

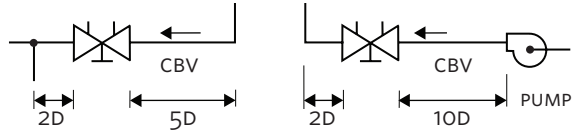
OPERATING PARAMETERS - PRESSURE/TEMPERATURE



NOTE: For temperatures from 230°F to 300°F (110°C to 150°C) use EPDM.

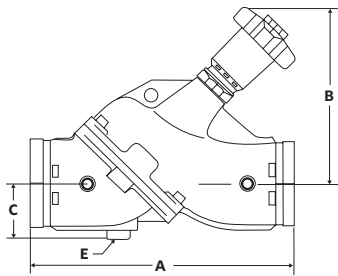
INSTALLATION

Generally locate the valve five pipe diameters downstream from a fitting; with two diameters downstream from the balancing valve free from fittings. If a balancing valve is located downstream from a circulation pump, allow a distance of ten (10) diameters between the pipe and balancing valves (as illustrated below).

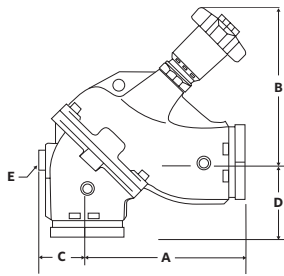
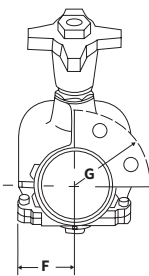


DIMENSIONS

MODEL	CBV - GS STRAIGHT inches (mm)					CBV - GA ANGLE inches (mm)				
	2½	3	4	5	6	2½	3	4	5	6
CONNECTION SIZE	2½	3	4	5	6	2½	3	4	5	6
A	12.00 (305)	12.00 (305)	14.00 (356)	17.50 (445)	20.69 (525)	7.11 (187)	8.19 (208)	9.62 (244)	12.00 (305)	14.12 (359)
B OPEN	9.62 (244)	10.50 (267)	10.56 (268)	12.75 (324)	13.06 (332)	9.62 (244)	10.50 (267)	10.56 (268)	12.75 (324)	13.62 (332)
C	2.75 (70)	2.44 (62)	3.00 (76)	3.62 (92)	4.44 (113)	2.75 (70)	2.44 (62)	3.00 (76)	3.62 (92)	4.44 (113)
D	—	—	—	—	—	4.62 (117)	3.88 (98)	4.37 (111)	5.50 (140)	6.62 (168)
E	1.00 (25)	1.00 (25)	1.25 (32)	1.25 (32)	2.00 (51)	1.00 (25)	1.00 (25)	1.25 (32)	1.25 (32)	2.00 (51)
F	2.56 (65)	3.00 (76)	3.44 (87)	4.94 (125)	5.86 (149)	2.56 (65)	3.00 (76)	3.44 (87)	4.94 (125)	5.87 (149)
G (FLANGE O. D. 125#)	7.00 (178)	7.50 (191)	9.25 (235)	10.00 (254)	11.00 (279)	7.00 (178)	7.50 (191)	9.25 (235)	10.00 (254)	11.00 (279)
G (FLANGE O. D. 250#)	7.50 (191)	8.25 (210)	10.00 (254)	11.00 (279)	12.50 (318)	7.50 (191)	8.25 (210)	10.00 (254)	11.00 (279)	12.50 (318)
WEIGHT LBS (KG)	19 (9)	24 (11)	42 (19)	81 (37)	120 (54)	19 (9)	24 (11)	42 (19)	81 (37)	120 (54)



STRAIGHT DESIGN CBV - GS



ANGLE DESIGN CBV - GA

OPTIONAL FEATURES

If checked, CBV valve pre-formed insulation to be provided to meet code requirements of flame spread rating of 25 or less and a smoke development rating of 50 or less according to ASTM E-84. EPDM elastomers for temperatures above 230°F.

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CONNECTION SIZE	ARMGRIP™ FLANGE ADAPTER							
	PIPE O.D.	125 PSI			PIPE O.D.	250 PSI		
		BOLT NO.	BOLT SIZE	BOLT CIRCLE DIAMETER		BOLT NO.	BOLT SIZE	BOLT CIRCLE DIAMETER
2½	2.875 (73)	4	5/8 × 3	5.50 (140)	2.875 (73)	8	3/4 × 3/4	5.88 (149)
3	3.500 (89)	4	5/8 × 3	6.00 (152)	3.500 (89)	8	3/4 × 3/2	6.62 (1680)
4	4.500 (114)	8	5/8 × 3	7.50 (191)	4.500 (114)	8	3/4 × 3/4	7.88 (200)
5	5.563 (140)	8	3/4 × 3/2	8.50 (216)	5.563 (140)	8	3/4 × 4	9.25 (235)
6	6.625 (168)	8	3/4 × 3/2	9.50 (241)	6.625 (168)	12	3/4 × 4/4	10.62 (270)