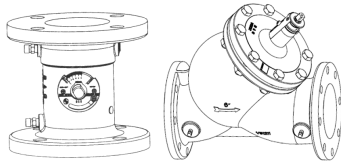


JOB:	REPRESENTATIVE:	
UNIT TAG:	ORDER NO.	DATE:
ENGINEER:	SUBMITTED BY:	DATE:
CONTRACTOR:	APPROVED BY:	DATE:



Circuit Setter®

Calibrated Balance Valves with Flanged Connections

DESCRIPTION

The Bell & Gossett Circuit Setter calibrated balance valve is a precision machined triple purpose balancing instrument. It is precisely calibrated for use as a presettable balance valve, variable orifice flow meter and positive shut-off service valve.

Valves are furnished with a calibrated nameplate and memory stop indicator which permits the value to be preset to a fixed open position and then closed for service without disturbing valve setting.

Valves are equipped with capped readout valves fitted with internal check valves. Sizes 2-1/2"-4" (brass ball) include a 1/4" NPT tapped and plugged drain port as standard.

MAXIMUM OPERATING TEMPERATURE

250°F (121°C)

MAXIMUM WORKING PRESSURE

175 PSIG (1207 kPa)

TYPICAL SPECIFICATION

Furnish and install as shown on plans and with manufacturer's recommendations Model CB calibrated balance valves.

PRE-SET BALANCE FEATURE

Valves to be designed to allow installing contractor to pre-set balance points for proportional system balance prior to system start-up in accordance with pre-set balance schedule.

VALVE DESIGN AND CONSTRUCTION

Valves shall be of heavy-duty cast iron {flanged} construction with 125 psi ANSI flange _____ connections suitable up to 175 psi working pressure. Valves 2-1/2" - 4" pipe shall have a brass ball with glass and carbon filled TFE seat rings. valves 4" - 12" shall be fitted with a bronze seat, replaceable bronze disc with EPDM seal insert, and stainless steel stem.

DESIGN PRESSURE/TEMPERATURE

175 psig at 250°F

All balance valves to be Xylem Bell & Gossett Model No. CB- _____ (note sizes)

CONSTRUCTION
Sizes 2-1/2"-4"

Body: Cast Iron

Ball: Brass

Seat Rings: Glass and carbon filled TFE

Readout Valves: Brass with EPT check valve

Stem "O" Ring: EPDM

Sizes 4"-12"

Body & Bonnet - Flanged: Cast Iron

Disc: 4" - 8" Brass with EPDM insert

10" - 12" Stainless Steel with EPDM Insert

Stern: Stainless Steel

Packing: Teflon-Graphite (Asbestos-Free)

Gasket: Synthetic Fiber - Nitrile Binder (Asbestos-Free)

Seal Ring: EPDM

Bushing: Nickel Plated Steel

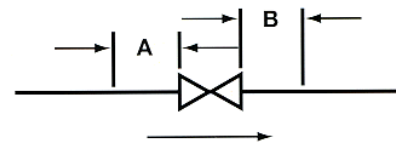
IMPORTANT

When monitoring system flow care must be exercised to avoid direct skin or eye contact with liquids that may escape. Liquids with temperatures in excess of 120°F (49°C) may cause burns.

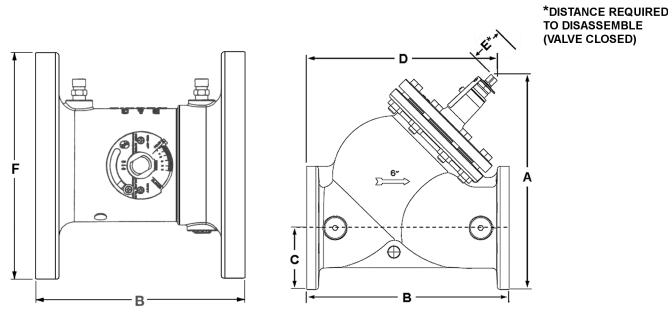
Bell & Gossett Circuit Setter Balance Valves are not recommended for use with meter connections pointing downward.

To retain calibrated accuracy, a minimum length of unrestricted straight pipe adjacent to the valve should be maintained as follows:

SIZE INCHES (mm)	UPSTREAM "A" (In Pipe Diameters)	DOWNSTREAM "B" (In Pipe Diameters)
2-1/2"-4" (63.5-101.6)	3	1
4"-12" (63.5-304.8)	5	2



Best use results maximize straight pipe length entering and leaving valve. Obstructions or changes in planar flow profiles entering valve may affect accuracy if too close to valve.



FLANGED MODELS
 SIZES 2-1/2" - 4" SIZES 4" - 12"

DIMENSIONS AND WEIGHTS*

DIMENSIONS IN INCHES (MM)

MODEL NO.	PIPE SIZE	CONNS.	A		B	C	D		E	F	MAX. WIDTH OF VALVE	WEIGHT IN LBS. (Kg)
			OPEN	CLOSED			OPEN	CLOSED				
CB-2-1/2F	2-1/2 (63.5)	FLGD.	-	-	6-9/16 (166.7)	-	-	-	-	7 (177.8)	-	23 (10.4)
CB-3F	3 (76.2)	FLGD.	-	-	6-13/16 (173.0)	-	-	-	-	7-1/2 (190.5)	-	29 (13.2)
CB-4	4 (101.6)	FLGD.	-	-	8 (203.2)	-	-	-	-	9 (228.6)	-	41 (18.5)
CB-4F	4 (101.6)	FLGD.	16-7/8 (428.6)	15-7/8 (403.2)	14-1/2 (368.3)	4-1/2 (114.3)	15-11/16 (398.5)	13-15/16 (354.0)	6-1/4 (158.8)	-	9 (228.6)	94 (43)
CB-5F	5 (127)	FLGD.	18-1/2 (470.0)	17-1/4 (438.2)	16 (406.4)	5 (127.0)	16-27/32 (427.8)	15-1/16 (382.6)	6-7/8 (174.6)	-	10 (254.0)	114 (52)
CB-6F	6 (152.4)	FLGD.	20-3/4 (527.1)	19-1/4 (489.0)	18 (457.2)	5-1/2 (139.7)	19-1/8 (485.8)	17 (431.8)	8-1/4 (209.6)	-	11 (279.4)	186 (85)
CB-8F	8 (203.2)	FLGD.	24-3/4 (628.7)	23-1/4 (590.6)	21-1/2 (546.1)	6-3/4 (171.5)	22-3/8 (568.3)	20-5/16 (516.0)	10-3/8 (263.5)	-	14-1/4 (362.0)	316 (144)
CB-10F	10 (254)	FLGD.	28-7/8 (733.4)	26-1/2 (673.1)	25-1/2 (647.7)	8 (203.2)	26 (660.4)	23-3/16 (589.0)	12-1/4 (311.2)	-	17 (431.8)	458 (208)
CB-12F	12 (304.8)	FLGD.	33-1/2 (851.0)	31-1/8 (790.6)	30 (762.0)	9-1/2 (241.3)	29-11/16 (754.1)	26-9/16 (674.7)	14-1/2 (368.3)	-	20 (508)	662 (301)

All Dimensions +/- 0.125" (3.2 mm) tolerance. Dimensions are subjected to change. Not to be used in construction purposes unless certified.

SCHEDULE

MODEL NO.	PART NO.	TAGGING INFORMATION	QUANTITY
CB-2-1/2F	117116		
CB-3F	117117		
CB-4	117035		
CB-4F	117470		
CB-5F	117471		
CB-6F	117472		
CB-8F	117473		
CB-10F	117639		
CB-12F	117640		

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