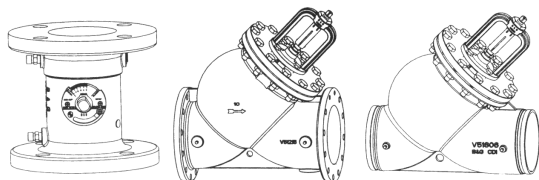


<b>JOB:</b>    <b>UNIT TAG:</b> <b>ENGINEER:</b> <b>CONTRACTOR:</b>	<b>REPRESENTATIVE:</b>    <b>ORDER NO.</b> <b>SUBMITTED BY:</b> <b>APPROVED BY:</b>	<b>DATE:</b> <b>DATE:</b> <b>DATE:</b>
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## Circuit Setter<sup>®</sup>

### Calibrated Balance Valves with Flanged and Grooved 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)

#### 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

- Grooved: Ductile Iron

Disc: Bronze with EPDM insert

Stern: Stainless Steel

Packing: Teflon-Graphite (Asbestos-Free)

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

Seal Ring: EPDM

Bushing: Zinc Plated Steel

#### 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 (select one: cast iron [flanged models only] or ductile iron [grooved models only]) \_\_\_\_\_ construction with (select one: 125 psi ANSI flanged or standard cut groove) \_\_\_\_\_ 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 ITT Bell & Gossett Model No. CB- \_\_\_\_\_ (note sizes)

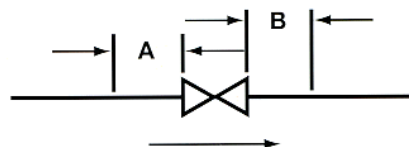
#### IMPORTANT

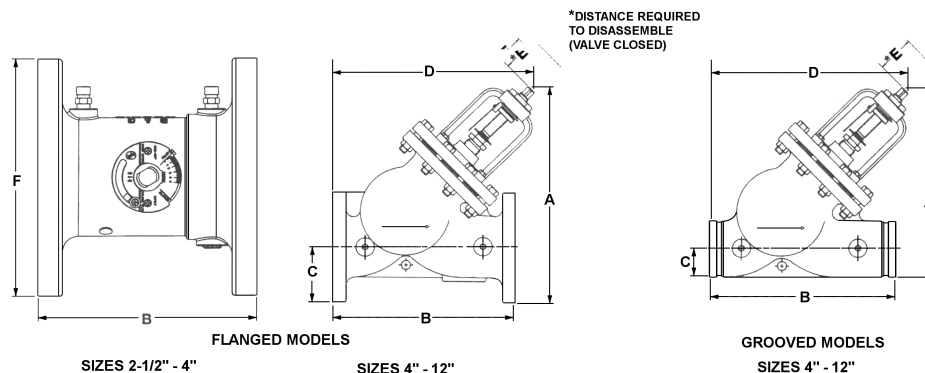
When monitoring system flow care must be exercised to avoid direct skin or eye contact with liquids that may escape. Liquids with temperatures in excess of 120°F (49°C) may cause burns.

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	UPSTREAM "A" (In Pipe Diameters)	DOWNSTREAM "B" (In Pipe Diameters)
2-1/2"-4"	3	1
4"-12"	5	2





## 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	FLGD.	-	-	6-9/16 (166.7)	-	-	-	-	7 (177.8)	-	23 (10.4)
CB-3F	3	FLGD.	-	-	6-13/16 (173.0)	-	-	-	-	7-1/2 (190.5)	-	29 (13.2)
CB-4	4	FLGD.	-	-	8 (203.2)	-	-	-	-	9 (228.6)	-	41 (18.5)
CB-4F	4	FLGD.	18-7/8 (479.4)	17-13/16 (452.4)	14-1/2 (368.3)	4-1/2 (114.3)	17-1/8 (435.0)	16 (406.4)	7-5/8 (193.7)	-	9 (228.6)	100 (45.4)
CB-4G	4	GRVD.	16-5/8 (422.3)	15-9/16 (395.3)	15-1/8 (384.2)	2-1/4 (57.2)	17-1/8 (435.0)	16 (406.4)	7-5/8 (193.7)	-	9 (228.6)	76 (34.5)
CB-5F	5	FLGD.	20-7/16 (519.1)	19-3/16 (487.4)	16 (406.4)	5 (127.0)	18-3/8 (466.7)	17-1/8 (435.0)	8-3/8 (212.7)	-	10 (254.0)	120 (54.4)
CB-5G	5	GRVD.	18-7/32 (462.8)	16-31/32 (431.0)	17-1/8 (435.0)	2-25/32 (70.6)	18-7/8 (479.4)	17-5/8 (447.7)	8-3/8 (212.7)	-	10 (254.0)	92 (41.7)
CB-6F	6	FLGD.	22-5/8 (574.7)	21-7/32 (539.0)	18 (457.2)	5-1/2 (139.7)	20-3/8 (517.5)	19 (482.6)	9-3/4 (247.6)	-	11 (279.4)	197 (89.4)
CB-6G	6	GRVD.	20-7/16 (519.1)	19-1/32 (483.4)	19 (482.6)	3-5/16 (84.1)	20-7/8 (530.2)	19-1/2 (495.3)	9-3/4 (247.6)	-	11 (279.4)	171 (77.6)
CB-8F	8	FLGD.	26-13/32 (670.7)	24-13/16 (630.2)	21-1/2 (546.1)	6-3/4 (171.5)	23-5/8 (600.1)	22-1/8 (562.0)	12-3/4 (323.9)	-	14-1/4 (362.0)	327 (148.3)
CB-8G	8	GRVD.	23-31/32 (608.8)	22-3/8 (568.3)	22-1/2 (571.5)	4-5/16 (109.5)	23-5/8 (600.1)	22 (558.8)	12-3/4 (323.9)	-	14-1/4 (362.0)	281 (127.5)
CB-10F	10	FLGD.	31-3/4 (806.5)	29-1/2 (749.3)	25-1/2 (647.7)	8 (203.2)	28-1/2 (723.9)	22-1/4 (666.8)	14-1/2 (368.3)	-	17 (431.8)	455 (206.4)
CB-10G	10	GRVD.	29-1/8 (739.8)	26-7/8 (682.6)	26-1/2 (673.1)	5-3/8 (136.5)	28-1/2 (723.9)	26-3/4 (679.5)	14-1/2 (368.3)	-	17 (431.8)	302 (137.0)
CB-12F	12	FLGD.	35-7/8 (911.2)	33-1/2 (850.9)	30 (762)	9-1/2 (241.3)	31-3/8 (796.6)	29 (736.6)	17-1/4 (438.2)	-	20 (508)	695 (315.2)
CB-12G	12	GRVD.	32-3/4 (831.9)	30-3/8 (771.5)	31 (787.4)	6-3/8 (161.9)	31-7/8 (809.6)	29-1/2 (749.3)	17-1/4 (438.2)	-	20 (508)	470 (213.2)

## SCHEDULE

MODEL NO.	PART NO.	TAGGING INFORMATION	QUANTITY
CB-2-1/2F	117116		
CB-3F	117117		
CB-4	117035		
CB-4F	117112		
CB-4G	117118		
CB-5F	117113		
CB-5G	117119		
CB-6F	117114		
CB-6G	117120		
CB-8F	117115		
CB-8G	117121		
CB-10F	117420		
CB-10G	117422		
CB-12F	117421		
CB-12G	117423		



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