

SUBMITTAL

A-547H

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



# Circuit Setter®

# Calibrated Balance Valves with 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.

#### **MAXIMUM OPERATING TEMPERATURE**

250°F (121°C)

#### MAXIMUM WORKING PRESSURE

300 PSIG (2068 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 ductile iron {grooved} construction with connections suitable up to 300 psi working pressure. Valves 4" - 12" shall be fitted with a bronze seat, replaceable bronze disc with EPDM seal insert, and stainless steel stem.

## **DESIGN PRESSURE/TEMPERATURE**

300 psig at 250°F

All balance valves to be ITT Bell & Gossett Model No. CB-\_\_\_\_(note sizes)

#### Sizes 4"-12"

Body & Bonnet - Grooved: Ductile Iron

Disc: Brass 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

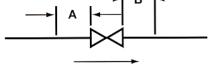
#### **IMPORTANT**

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.

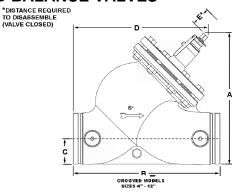
Bell & Gossett Circuit Setter Balance Valves are not recommended for use with meter connections pointing downward.

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)					
4"-12" (101.6- 304.8)	5	2					
	→ A   → B	<b>—</b>					



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.



# **DIMENSIONS AND WEIGHTS**\*

# DIMENSIONS IN INCHES (MM)

							,	,				
MODEL	PIPE			Α				D		П	MAX. WIDTH	WEIGHT IN
NO.	SIZE	CONNS.	OPEN	CLOSED	В	С	OPEN	CLOSED	E	F	OF VALVE	LBS. (Kg)
CB-4G	4	GRVD.	14-5/8	13-5/8	15-1/8	2-1/4	15-11/16	13-15/16	6-1/4	П	9	70
CB-4G	(101.6)	GRVD.	(371.5)	(346.1)	(384.2)	(57.2)	(424.0)	(354.0)	(158.8)		(228.6)	(32)
CB-5G	5	GRVD.	16-9/32	15-1/32	17-1/8	2-25/32	17-11/32	15-9/16	6-7/8	1-1	10	86
CB-3G	(127)	GRVD.	(413.5)	(407.2)	(435.0)	(70.6)	(440.5)	(395.3)	(174.6)		(254.0)	(39)
CB-6G	6	GRVD.	18-9/16	17-1/16	19	3-5/16	19-1/2	17-13/32	8-1/4	П	11	160
CB-6G	(152.4)	GRVD.	(471.5)	(433.4)	(482.6)	(84.1)	(495.3)	(442.1)	(209.6)		(279.4)	(73)
CB-8G	8	GRVD.	22-5/16	20-13/16	22-1/2	4-5/16	22-3/8	20-5/16	10-3/8	П	14-1/4	270
CB-8G	(203.2)	GRVD.	(566.7)	(528.6)	(571.5)	(109.5)	(568.3)	(516.0)	(263.5)	Ш	(362.0)	(123)
CB-10G	10	GRVD.	26-1/4	23-7/8	26-1/2	5-3/8	26-1/32	23-3/16	12-1/4	П	17	384
CB-10G	(254)	GRVD.	(666.8)	(606.4)	(673.1)	(136.5)	(661.2)	(589.0)	(311.2)	171	(431.8)	(174)
CB-12G	12	OD) (D	30-3/8	28	31	6-3/8	30-7/16	26-15/16	14-1/2	П	20	546
CB-12G	(304.8)	GRVD.	(771.5)	(711.2)	(787.4)	(161.9)	(773.1)	(684.2)	(368.3)	1-1	(508.0)	(248)

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

### **SCHEDULE**

MODEL NO.	PART NO.	TAGGING INFORMATION	QUANTITY
CB-4G	117476		
CB-5G	117477		
CB-6G	117478		
CB-8G	117479		
CB-10G	117480		
CB-12G	117481		

