

## Circuit Setter Sizing –Rev.8/14

*The following chart is recommended for sizing ITT Bell and Gossett Circuit Setters.* 

Minimum Flow GPM	Maximum Flow GPM	Circuit Setter Model	Circuit Setter Model	CV
.3	.75	CB- <sup>1</sup> /2" RF	<sup>1</sup> /2"	.7
.75	1	CB-3/4" RF	3/4"	.75
.5	2.5	CB-1/2"	<sup>1</sup> / <sub>2</sub> "	1.7
.9	4.7	CB- <sup>3</sup> / <sub>4</sub> "	3/4"	3.2
2.3	9.7	CB-1"	1"	6.6
7.6	23.0	CB-1 <sup>1</sup> / <sub>4</sub> "	<b>1</b> <sup>1</sup> /4"	15.9
15	35.0	CB-1 <sup>1</sup> / <sub>2</sub> "	1 <sup>1</sup> /2"	24.3
16	77	CB-2"	2"	53.5
31	115	CB-2 <sup>1</sup> / <sub>2</sub> "	2 <sup>1</sup> / <sub>2</sub> "	84
58	205	CB-3F"	3"	142
40	360	CB-4F or 4G	4 "	332
165	550	CB-5F or 5G	5"	433
237	800	CB-6F or 6G	6"	658
320	1300	CB-8F or 8G	8"	869
700	2500	CB-10F	10"	1650
1000	3200	CB-12F	12"	2200

The design limits are as follows:

- 1. The valve is selected to provide a 1-foot readout at the minimum flow rate; the valve may be throttled to obtain the 1-foot reading.
- 2. The valve minimum flow is selected to provide 20 PSIG (46 feet) of pressure drop when throttled to the maximum factory recommendation this should be adequate for most valves but will not be correct for the first take off on a high head direct return system. (Exception is 0.3 GPM to 0.4 GPM which has 25 ft. PD)
- 3. The maximum flow rate is selected to provide 5 feet pressure drop maximum when fully open and to keep below 8 FPS velocity in pipe size shown.
- 4. The CV for reference on open valves is shown.
- 5. Chart is based on NPT or sweat selection through 2" and flanged or grooved  $2^{1}/_{2}$ " and over.

\*This document was created by R.L. Deppmann Company