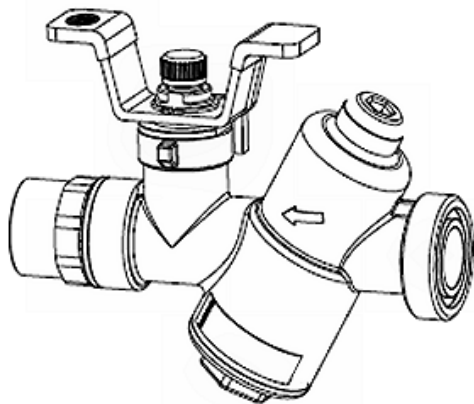


JOB:	REPRESENTATIVE:	
UNIT TAG:	ORDER NO.	DATE:
ENGINEER:	SUBMITTED BY:	DATE:
CONTRACTOR:	APPROVED BY:	DATE:



Circuit Sentry

Model ACL

Combination Commissioning/Isolation Valve & Field Adjustable Automatic Flow Limiting Valve for Low Flow Applications

DESCRIPTION

The Bell & Gossett Model ACL Circuit Sentry™ Low Flow valve is a combination commissioning, isolation, and adjustable automatic flow limiting valve for low flow applications for use in HVAC systems. Valves are furnished with removable flow limiting diaphragm cartridge. Cartridge can be adjusted to provide flows from 0.25 GPM to 3.8 GPM without the need for different flow orifices. Valves come standard with one pressure/temperature port as well as hanging ID tag for commissioning purposes. Part numbered valves come standard with SWTF union tailpiece and additional loose pressure/temperature port and configured valves come with choice of SWTF, NPTF, and NPTM union tailpiece.

CONSTRUCTION

Body: Brass C37700
Ball: Chrome plated Brass C38500
O-rings: EPDM
Handle: Chrome Plated Steel w/ Black Vinyl
Cartridge
Spring: DZR Brass C35330
Diaphragm: HBNR
Orifice: PPO 20%
Screw: Stainless Steel

MAXIMUM WORKING PRESSURE

400 PSI (2758 KPa)

TEMPERATURE RANGE

250°F (121°C)

FLOW RANGE

0.25 GPM (0.015 L/s) to 3.8 GPM (0.24 L/s)

CONTROL RANGE

Min: See chart on page 3

Max: 60 psid

ACCURACY

+/-5% up to 50 psid

+/-10% between 50 psid and 60 psid

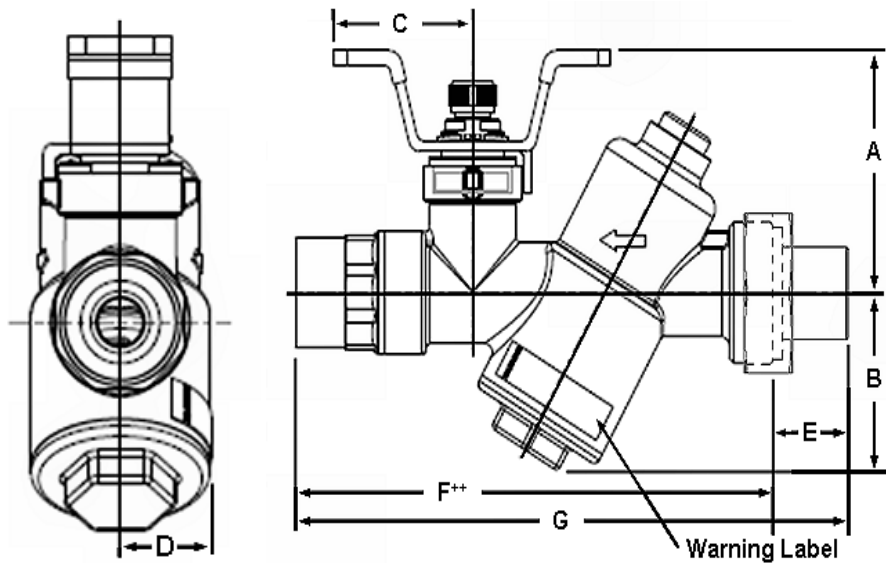
SCHEDULE

PART NUMBERED VALVES

Part Number	TAGGING INFORMATION	QUANTITY
117437		
117438		
117439		

SCHEDULE

VALVE FIXED END	TAGGING INFORMATION	QUANTITY
1/2" SWTF		
3/4" SWTM		
3/4" SWTF		
3/4" NPTF		



DIMENSIONS AND WEIGHTS
PART NUMBERED VALVES

++Indicates dimensions w/o tailpiece

Valve Fixed End	Valve Union End	DIMENSIONS* IN INCHES (mm)							Approx.Wt. lbs.(kg)
		A	B	C	D	E	F**	G	
1/2" SWTF	1/2" SWTF	2.2 (55)	1.6 (41)	1.4 (36)	0.7 (18)	0.6 (15)	5.1 (129)	5.7 (145)	1.4 (0.65)
3/4" SWTM	1/2" SWTF	2.2 (55)	1.6 (41)	1.4 (36)	0.7 (18)	0.6 (15)	5.1 (129)	5.7 (145)	1.4 (0.65)
3/4" SWTF	3/4" SWTF	2.2 (55)	1.6 (41)	1.4 (36)	0.7 (18)	0.8 (20)	4.8 (122)	5.6 (142)	1.4 (0.65)
3/4" NTPF	3/4" SWTF	2.2 (55)	1.6 (41)	1.4 (36)	0.7 (18)	0.8 (20)	4.9 (125)	5.7 (145)	1.4 (0.65)

CONFIGURED VALVES

Valve Fixed End	Connection Fixed End	DIMENSIONS* IN INCHES (mm)							Approx.Wt. lbs.(kg)
		A	B	C	D	E(Max)	F**	G	
1/2"	Sweat Female	2.2 (55)	1.6 (41)	1.4 (36)	0.7 (18)	1.6 (40)	5.1 (129)	6.6 (169)	1.55 (0.70)
3/4"	Sweat Male	2.2 (55)	1.6 (41)	1.4 (36)	0.7 (18)	1.6 (40)	5.1 (129)	6.6 (169)	1.55 (0.70)
3/4"	Sweat Female	2.2 (55)	1.6 (41)	1.4 (36)	0.7 (18)	1.6 (40)	4.8 (122)	6.4 (162)	1.55 (0.70)
3/4"	NPT Female	2.2 (55)	1.6 (41)	1.4 (36)	0.7 (18)	1.6 (40)	4.9 (125)	6.5 (164)	1.55 (0.70)

*All dimensions +/- 0.125" (3.2 mm) tolerance. Dimensions are subjected to change. Not to be used for construction purposes unless certified
Note: This product is not intended for use in potable water applications.

Xylem Inc.
8200 N. Austin Avenue
Morton Grove, IL 60053
Phone: (847)966-3700
Fax: (847)965-8379
www.bellgossett.com
Bell & Gossett is a trademark of Xylem Inc. or one of its subsidiaries.
© 2015 Xylem Inc.



Differential Pressure vs. Flow

Minimum differential pressure required to maintain flow through adjustable flow cartridge.

