

**ABB Inc.**

DATE: 21 APRIL-2004  
Calibration By: Ron Teal

SERIAL NUMBER: Balancing Valve: 2" REF.: FLO-PAC  
**SIZE: 2 in. - NPT Brass**  
 Test Valve Connection: Flanged 150# (Adapters)  
 CAL FACTOR: 120.80 US GAL PER MINUTE & 5 FT/SEC. @ 100%  
 MASTER METER: ABB-MAG  
 METER SIZE: 2 in. Serial# **2 in.** Pipe Size: 2" Sch.40 ID: 2.067 in.  
 TEST FREQUENCY: 1000 Hz **TEST VELOCITY: 80% @Max.= 24 FT/SEC.**  
 TEST FLOW RATE: 0 TO 60 US GAL PER MINUTE  
 CONVERTER: ABB DP Cell: Series 600T-C **REFERENCE METER: MAG-120.8 USGPM**  
 Range: 160"H2O (4-20 mA)

**BETA RATIO: 0.45**  
**THROAT SIZE: 0.930 in.**

**TEST RESULTS**

RUN #	MASTER METER				DP-"H2O	K-METER	TEST VALVE		RE #	% ACC.
	Vel. (Ft/Sec)	P(PSIG)	TEMP-F	USGPM			TRANS OUT.	Cd (COEFF.)		
1	5.73	20	74	60	159	0.1966	19.70 mA	0.9506	91727	-1.41
2	4.77	20	74	50	111	0.1960	15.0 mA	0.9481	76439	-1.67
3	2.93	20	74	30.7	40	0.2005	8.0 mA	0.9697	46934	0.57
4	1.43	20	74	15	9.12	0.2052	4.91 mA	0.9922	22932	2.91
5	2.87	20	74	30.1	39.2	0.1986	7.83 mA	0.9604	46016	-0.39

**AVERAGE COEFFICIENTS:**

Cd: 0.9642	K-METER: 0.1994
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Cv of combined valve (Venturi+Valve)  
Valve Coefficient at 1 PSI (27.73"H2O)

**CV=30**

Pressure Loss: 12% Of DP  
(Permanent)

