

ABB Inc.

DATE: 21 APRIL-2004
Calibration By: Ron Teal

SERIAL NUMBER: Balancing Valve: 1/2"-Low REF.: FLO-PAC
SIZE: 1/2 in. - NPT (Brass)
 Test Valve Connection: Flanged 150# (Adapters)
 CAL FACTOR: 2.42 US GAL PER MINUTE & 30 FT/SEC.
 MASTER METER: ABB-MAG
 METER SIZE: 1/2 in. Serial# **1/2"-Low** Pipe Size: 1/2" Sch.40 ID: 0.622 in.
 TEST FREQUENCY: 1000 Hz **TEST VELOCITY: 80% @Max.= 24 FT/SEC.**
 TEST FLOW RATE: 0 TO 1.70 US GAL PER MINUTE
 CONVERTER: ABB DP Cell: Series 600T-C **REFERENCE METER: MAG-2.42 USGPM**
 Range: 160"H2O (4-20 mA)

BETA RATIO: 0.25
THROAT SIZE: 0.156 in.

TEST RESULTS

RUN #	Vel. (Ft/Sec)	MASTER METER			USGPM	DP-"H2O	K-METER	TEST VALVE		RE #	% ACC.
		P(PSIG)	TEMP-F	TRANS OUT.				Cd (COEF)			
1	1.79	20	74	1.7	158	0.0613	19.87	0.9786	8637	-0.20	
2	1.01	20	74	0.96	50.3	0.0613	9.01	0.9794	4877	-0.12	
3	0.41	20	74	0.39	Laminar	0.0573	5	0.9155	1981	0.00	
4	0.99	20	74	0.94	1/2-open	0.0616	8.78	0.9837	4776	0.32	

Note: Laminar Flow Point #3 Not Included in Accuracy

AVERAGE COEFFICIENTS:
Cd: 0.9806 K-METER: 0.0614

Cv of combined valve (Venturi+Valve)
Valve Coefficient at 1 PSI (27.73"H2O)

Cv=0.75

Pressure Loss: 12% Of DP
(Permanent)

