

ABB Inc.

DATE: 21 APRIL-2004
Calibration By: Ron Teal

SERIAL NUMBER: Balancing Valve: 3/4"-Low REF.: FLO-PAC
SIZE: 3/4 in. - NPT (Brass)
 Test Valve Connection: Flanged 150# (Adapters)
 CAL FACTOR: 8.05 US GAL PER MINUTE & 10 FT/SEC.
 MASTER METER: ABB-MAG
 METER SIZE: 3/4 in. Serial# **3/4"-LOW** Pipe Size: 3/4" Sch.40 ID: 0.824 in.
 TEST FREQUENCY: 1000 Hz **TEST VELOCITY: 80% @Max.= 8 FT/SEC.**
 TEST FLOW RATE: 0 TO 6.35 US GAL PER MINUTE
 CONVERTER: ABB DP Cell: Series 600T-C **REFERENCE METER: MAG-8.05 USGPM**
 Range: 160"H2O (4-20 mA)

BETA RATIO: 0.40
THROAT SIZE: 0.330 in.

TEST RESULTS

| RUN # | MASTER METER | | | | 1/2-open | TEST VALVE | | Cd (COEF) | RE # | % ACC. |
|-------|---------------|---------|--------|-------|----------|------------|----------|-----------|-------|--------|
| | Vel. (Ft/Sec) | P(PSIG) | TEMP-F | USGPM | | DP-"H2O | K-METER | | | |
| 1 | 3.82 | 20 | 74 | 6.35 | 155.75 | 0.1319 | 19.60 mA | 0.8137 | 32260 | 2.17 |
| 2 | 2.40 | 20 | 74 | 4.00 | 65 | 0.1286 | 10.51 mA | 0.7935 | 20322 | -0.37 |
| 3 | 1.12 | 20 | 74 | 1.87 | 14.68 | 0.1265 | 5.470 mA | 0.7805 | 9500 | -2.00 |
| 4 | 2.35 | 20 | 74 | 3.91 | 61.4 | 0.1293 | 10.13 mA | 0.7980 | 19864 | 0.20 |

AVERAGE COEFFICIENTS:
Cd: 0.7964 K-METER: 0.1291

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

Cv=2.70

Pressure Loss: 12% Of DP
(Permanent)

