## SUBMITTAL

Manufacturer: Itron

(formerly Actaris / Schlumberger)
Model: B838

## Options Designations:

N: denotes No Internal Relief

| As Specified |  |  |
| :--- | :--- | :---: |
| Capacity Required |  |  |
| Inlet /Outlet Pres. |  |  |
| Overpres. Limits |  |  |


| As Submitted |  |
| :--- | :--- |
| Capacity |  |
| Droop |  |
| Build-up |  |

R: denotes Internal Relief valve for over-pressure protection
MR: denotes closed throat monitor construction w/R

## Specifications:

|  | Spring Color |
| :--- | :--- |
| Orange | Adj. Range |
| - | $2.5-5$ " w.c. |
| Brown | $3.5-7$ "" w.c. |
| Green/white | $4-9$ " w.c. |
| Black | $5-15$ " w.c. |
| Blue | $0.5-1$ PSIG |
| Silver | $0.8-2.5$ PSIG |
| Yellow | $1.5-4.7$ PSIG |
| Red | $1.5-6.0$ PSIG |


| Orifice | MAOP <br> "w.c. <br> delivery | MAOP <br> PSIG <br> delivery |
| :---: | :---: | :---: |
| $3 / 8^{\prime \prime}$ | 25 | 125 |
| $1 / 2^{\prime \prime}$ | 25 | 75 |
| $5 / 8^{\prime \prime}$ | 25 | 75 |
| $3 / 4^{\prime \prime}$ | 25 | 60 |
| 1 " | 10 | 45 |
| $1-1 / 4^{\prime \prime}$ | 5 | 40 |


| Connection Size |
| :---: |
| 2" x 2" NPT |
| 2" $\times 2$ " Flanged |
| 2" $\times$ " Flanges |
| 2" $\times 4$ " Flanged |

## Assembly: <br> Dimensions:

| Valve Body | High Tensile Strength Cast Iron |
| :--- | :--- |
| Orifice: | Brass |
| Valve Seat: | Buna-N |
| Valve Stem: | Nylon |
| Lever: | Zinc \& dichromate plated steel |
| Upper Diaphr Plate | Zinc \& dichromate plated steel |
| Lower Diaph. Plate | Die cast aluminum |
| Diaphragm: | Buna $N$ reinforcing fiber. |
| Diaphragm case: | Die cast aluminum |
| Vent Screen: | Stainless Steel |



|  | A | B | C | D | E | F | G | H |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $1-1 / 2^{\prime \prime}, 2^{\prime \prime}$, or $3^{\prime \prime}$ | $25^{\prime \prime}$ | $13^{\prime \prime}$ | $37-3 / 4^{\prime \prime}$ | $12-3 / 4^{\prime \prime}$ | $18-7 / 8^{\prime \prime}$ | $12-7 / 8^{\prime \prime}$ | $6-1 / 2^{\prime \prime}$ |

General Note on installation: The regulator comes with a 1 " to $2-1 / 2^{\prime \prime}$ vent with a stainless steel vent screen. On outside installations, regulator should be oriented with the vent pointing down to keep water or ice from entering vent. If regulator is installed with vent pointing up or to the side, vent screen should be removed and a 1 to $2-1 / 2^{\prime \prime \prime}$ elbow (or elbows) should be installed to position the vent correctly. If installed inside, vent must be piped to a safe outside location in accordance with NFPA 54 recommendations and/or local codes.

## Typical Capacity.

Note: Capacity will change as a function of the orifice size, inlet pressure \& outlet pressure setting. The capacity tables below are for a typical configuration: a $2^{\prime \prime}$ Regulator, with $3 / 4^{\prime \prime}$ orifice and $0^{\circ}$ loading ring setting. Smaller orifices may have less capacity, but will handle higher inlet pressures (see MAOP above). Outlet pipe size* and length may also reduce flow. Consult complete product bulletin for capacities and relief curves of other contigurations.

|  | Capacity as a Function of Inlet Pressure \& Set Point in SCFH |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Set Point | 1 PSIG | 2 PSIG | 3 PSIG | 5 PSIG | 10 PSIG |
| 7" w.c. | 3000 | 3750 | 5150 | 7800 | 11250 |
| 1 PSIG |  | 4000 | 6200 | 7900 | 12600 |
| 5 PSIG |  |  |  |  | 5500 |



Capacities expressed for 0.6 s.g. nat. gas,

