

# Manifolds



## BI Series



Convenient and easy to use Western Innovator BI Series is specifically designed to regulate and provide uninterrupted gas supply for industrial applications. Factory-set functional components are protected inside a tamper-resistant case. A green light indicates the service bank is functioning and the reserve bank is ready for service. A red light alerts the user that the unit has changed over and one or both banks are depleted (except on fuel gas units). A simple rotation of the control lever resets the unit.

### Specifications:

- Connects to Remote alarm systems. (Up to 3 amps 30 VDC or 2 amps 250 VDC)
- Maximum Inlet pressure:
 

|   |         |
|---|---------|
| BI  | 3000psi |
| BI (CO <sub>2</sub> & N <sub>2</sub> O)   | 2000psi |
| BI (Acetylene)                            | 400psi  |
| BIHL (CO <sub>2</sub> & N <sub>2</sub> O) | 2000psi |
| BIHP                                      | 3000psi |
| BIHP (CO <sub>2</sub> & N <sub>2</sub> O) | 2000psi |
- Maximum Flow:
 

|   |          |
|---|----------|
| BI  | 1200scfh |
| BI (Acetylene)                            | 300scfh  |
| BI (LPG)                                  | 400scfh  |
| BI (CO <sub>2</sub> & N <sub>2</sub> O)   | 35scfh   |
| BIHL (CO <sub>2</sub> & N <sub>2</sub> O) | 500scfh  |
| BIHP                                      | 1200scfh |
- Internal adjustable line regulators
 

|           |             |
|-----------|-------------|
| BI & BIHL | 30-125psig  |
| Acetylene | 0-15psig    |
| LPG       | 0-30psig    |
| BIHP      | 50-200 psig |
- Manifold outlet ½" NPT
- Relief valve outlet ¾" NPT
- 24" flexible stainless steel pigtails with check valves.
- ½" Brass, silver brazed headers.
- Acetylene systems include:  
300 scfh flashback arrestor and piping. Pigtails with individual flashback arrestors and check valves

## Ordering Information

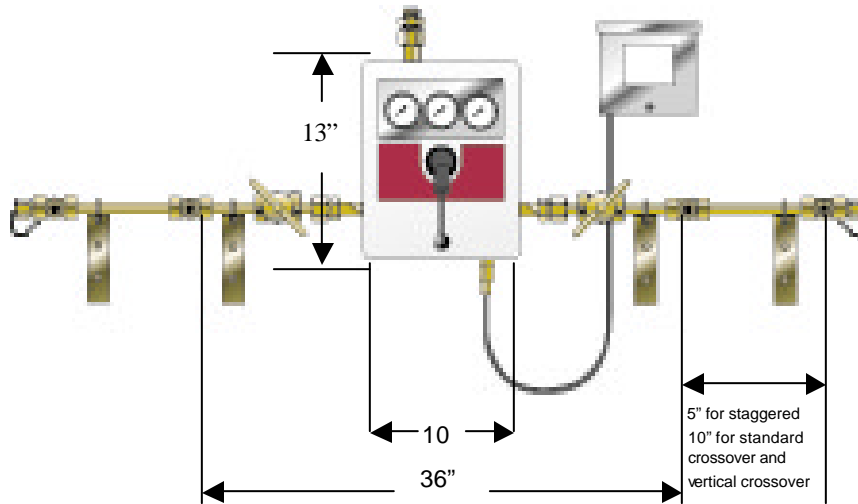
| Specify: Control Type (V) – Service (W) – Number of Cylinders (X) Header Configuration (Y) Mounting (Z)   |   |                 |   |   |
|---|---|-----------------|---|---|
| <i>Example1:</i> BI-9-12VF represents BI with oxygen gas service and a vertical crossover bank of 6 cylinders per side is mounted on a floor stand          |   |                 |   |   |
| <i>Example2:</i> BIHP-7-6 represents BIHP with in nitrogen gas service a standard header configuration of 3 cylinders per side which is mounted on the wall |   |                 |   |   |
| Control Type (V)  | Gas Service (W)   | No. of Cyls (X) | Header Configuration (Y)  | Mounting (Z)                              |
| BI (30-125 psig)<br>Acetylene (0-15psig)<br>LPG (0-30psig)  | (1) Acetylene (POL)CGA 510<br>(1A) Acetylene(commercial) CGA 300<br>(2) Breathing Air CGA 346<br>(3) Argon CGA 580                      |                 | Blank- Standard 10" on center<br>13" on center for Acetylene & LPG<br>S- Staggered 5" on center<br>6.5" on center for Acetylene & LPG             | Blank = Wall Mount<br><br>F = Floor Mount |
| BIHL (30-125psig)<br>(500SCFH heater included in HL model for CO <sub>2</sub> & N <sub>2</sub> O)   | (4) Carbon Dioxide CGA 320<br>(5) Helium CGA 580<br>(6) Hydrogen CGA 350<br>(6A) Argon/Methane Mixtures CGA 350<br>(7) Nitrogen CGA 580 |                 | V- Vertical crossover<br>Standard 10" on center<br>13" on center for Acetylene & LPG<br>C- Crossover (Floor Mount Only)<br>Standard 10" on center |   |
| BHP(50-200 psig)<br>(Higher delivery pressure-to 235psig available upon request.  | (7A) Industrial Air/Nitrogen OP CGA 590<br>(8) Nitrous Oxide CGA 326<br>(9) Oxygen CGA 540<br>(10) Liquefied Fuel Gas LPG CGA 510       |                 | 13" on center for acetylene & LPG<br>U- Shaped - Drawing Required<br>L- Shaped - Drawing Required   |   |

For ordering and technical support (858) 578-2622  
WestAir Gases & Equipment, Inc.

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### Design Lengths

| Total No. of Cylinders                                      | 2                | 4                | 6                | 8                 | 10                | 12                | 16                |
|---|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| Standard (10" centers)<br>Overall Manifold Length           | 2' 0"<br>(0.61m) | 5' 5"<br>(1.65m) | 7' 1"<br>(2.16m) | 8' 9"<br>(2.67m)  | 10' 5"<br>(3.18m) | 11' 9"<br>(3.58m) | 15' 3"<br>(4.65m) |
| Staggered Design (5" centers)<br>Overall manifold Length    | 2' 0"<br>(0.61m) | 4' 7"<br>(1.40m) | 5' 5"<br>(1.65m) | 6' 3"<br>(1.91m)  | 7' 1"<br>(2.16m)  | 7' 11"<br>(2.4m)  | 9' 7"<br>(2.92m)  |
| Vertical Crossover (10" Centers)<br>Overall Manifold Length | N/A              | 3' 9"<br>(1.14m) | N/A              | 5' 5"<br>(1.65m)  | N/A               | 7' 1"<br>(2.16m)  | 8' 9"<br>(2.67m)  |
| Crossover (10" Centers)<br>Overall manifold Length          | N/A              | 3' 9"<br>(1.14m) | N/A              | 5' 5"<br>(1.65m)  | N/A               | 7' 1"<br>(2.16m)  | 8' 9"<br>(2.67m)  |
| Acetylene Manifold (13" centers)<br>Overall Manifold Length | 2' 0"<br>(0.61m) | 5' 9"<br>(1.75m) | 8' 0"<br>(2.44m) | 10' 2"<br>(3.10m) | 12' 4"<br>(3.76m) | 14' 5"<br>(4.40m) | 16' 7"<br>(5.06m) |