

BI

Western Innovator BI Series Analog Manifolds are 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

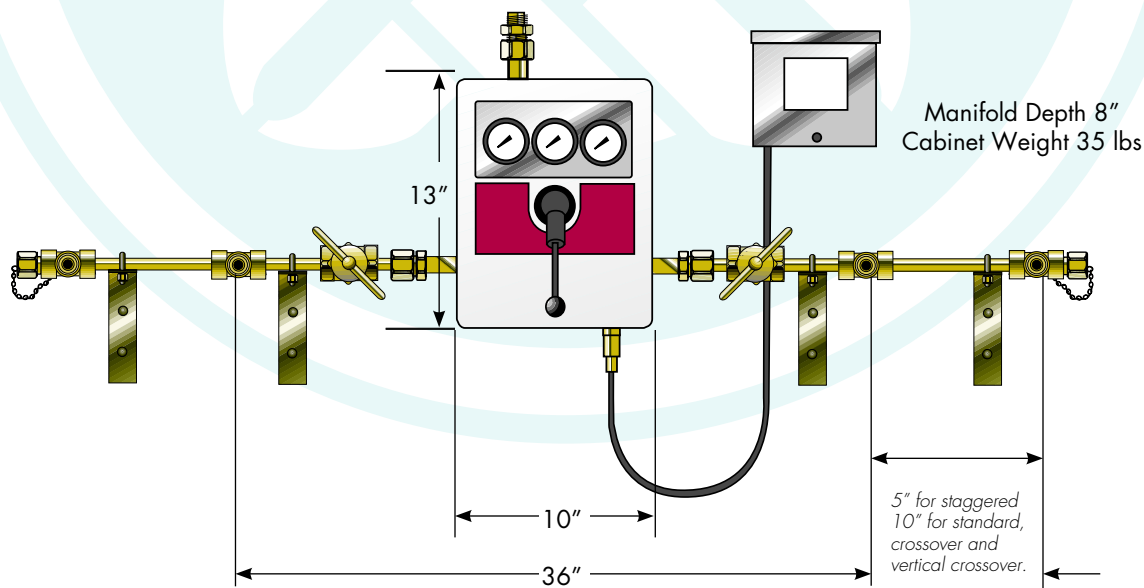
- Automatic Analog System
- CSA Approved Power Supply Included
- Maximum inlet pressure:
 - BI 3000 psig
 - BI (CO₂ & N₂O) 2000 psig
 - BI (Acetylene, LPG) 400 psig
 - BIHL (CO₂ & N₂O) 2000 psig
 - BIHP 3000 psig
 - BIHP (CO₂ & N₂O) 2000 psig
- Maximum flow rate:
 - BI 1200 scfh
 - BI (Acetylene) 300 scfh
 - BI (LPG) 400 scfh
 - BI (CO₂ & N₂O) 35 scfh
 - BIHL (CO₂ & N₂O) 500 scfh
 - BIHP 1200 scfh
- Internal adjustable line regulator:
 - BI & BIHL 30–125 psig
 - Acetylene 0–15 psig
 - LPG 0–30 psig
 - BIHP 50–200 psig
- Manifold outlet: 1/2" NPT male
- Relief valve outlet: 3/4" NPT male
- 24" flexible stainless steel braided pigtailed with check valves
- 1/2" Brass, silver brazed headers
- Individual header valves at each cylinder location (units with 4 cylinders or larger—all gases except Oxygen). Oxygen units shipped with check valve outlets in place of header valves to provide added safety from heat of recompression
- Acetylene systems include:
 - 300 scfh flashback arrestor and piping. Pigtailed with individual flashback arrestors and check valves
- Fuel gas units do not include visual alarm, power supply, or any electrical components. Fuel gas alarm kits are available as an option.
- Connects to remote alarms systems (Up to 3 amps 30 VDC or 2 amps 250 VAC)



HOW TO ORDER

Specify: Control Type (V)–Service (W)–Number of Cylinders (X)		
Example 1: BI-9-12V represents BI with oxygen gas service and a vertical cylinder		
Example 2: BIHP-7-6 represents BIHP with nitrogen gas service with a standard cylinder		
CONTROL TYPE (V)	GAS SERVICE (W)	# OF CYL'S (X)
BI (30 to 125 psig Acetylene (0–15 psig) LPG (0–30 psig) BIHL (30 to 125 psig) (500 scfh heater included in HL model for CO ₂ and N ₂ O) BIHP (50 to 200 psig) (Higher delivery pressure—to 235 psig available upon request)	(1) Acetylene (POL)	CGA-510
	(1A) Acetylene (Commercial)	CGA-300
	(2) Air	CGA-346
	(3) Argon	CGA-580
	(4) Carbon Dioxide	CGA-320
	(5) Helium	CGA-580
	(6) Hydrogen	CGA-350
	(6A) Argon/Methane Mixtures	CGA-350
	(7) Nitrogen	CGA-580
	(7A) Industrial Air/Nitrogen OP	CGA-590
(8) Nitrous Oxide	CGA-326	
(9) Oxygen	CGA-540	
(10) Liquefied Fuel Gases (LPG)	CGA-510	

BI series



Example: BI-9-4 = Oxygen (9=CGA-540) Manifold for 4 Cylinders

Design Lengths

TOTAL NO. OF CYLINDERS	2	4	6	8	10	12	16
Standard (10" CENTERS) Overall Manifold Length	2'-0" (0.61m)	5'-5" (1.65m)	7'-1" (2.16m)	8'-9" (2.67m)	10'-5" (3.18m)	11'-9" (3.58m)	15'-3" (4.65m)
Staggered Design (5" CENTERS) Overall Manifold Length	2'-0" (0.61m)	4'-7" (1.40m)	5'-5" (1.65m)	6'-3" (1.91m)	7'-1" (2.16m)	7'-11" (2.4m)	9'-7" (2.92m)
Vertical Crossover (10" CENTERS) Overall Manifold Length	N/A	3'-9" (1.14m)	N/A	5'-5" (1.65m)	N/A	7'-1" (2.16m)	8'-9" (2.67m)
Crossover (10" CENTERS) Overall Manifold Length	N/A	3'-9" (1.14m)	N/A	5'-5" (1.65m)	N/A	7'-1" (2.16m)	8'-9" (2.67m)
Acetylene Manifold (13" CENTERS) Overall Manifold Length	2'-0" (0.61m)	5'-9" (1.75m)	8'-0" (2.44m)	10'-2" (3.10m)	12'-4" (3.76m)	14'-5" (4.40m)	16'-7" (5.06m)

Cylinders (X)-Header Configuration (Y)-Mounting (Z)

Standard crossover bank of 6 cylinders per side which is mounted on the wall.
Standard header configuration of 3 cylinders per side which is mounted on the wall.

HEADER CONFIGURATION (Y)	MOUNTING (Z)
BLANK -Standard 10" on Center 13" on Center for Acetylene & LPG S -Staggered 5" on Center 6.5" on Center for Acetylene & LPG V -Vertical crossover Standard 10" on Center 13" on Center for Acetylene & LPG C -Crossover (Floor Mount Only) Standard 10" on Center 13" on Center for Acetylene & LPG U-Shaped -Drawing Required L-Shaped -Drawing Required	BLANK = Wall mount F = Floor mounted