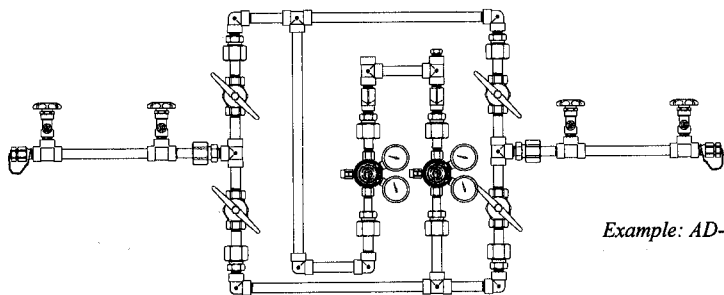


The Accu-trol model AD automatic duplex manifold is designed for applications requiring a constant and uninterrupted supply of compressed gas. This control will allow changeover from one bank to another automatically, provided a sufficient differential is maintained between the two primary regulators. After changeover, a simple manipulation of four master valves reverses the "service" and "reserve" banks. A line regulator is required to eliminate the changeover pressure differential and maintain a constant line pressure. An alarm can be added to signal changeover from "service" to "reserve" banks by adding items WME-4-9 pressure switch, WMS-1-97 orificed adapter, WMS-9-25C power supply box and BIA-3 remote audio visual alarm. (See Page 23)

### Specifications

- Model RM (or RDM for oxygen) pressure compensated regulator, adjustable delivery pressure 20-160 PSIG  
**Optional equipment is available upon request for higher delivery pressures up to 3000 psig.**
- 24" flexible stainless steel braided Teflon™ lined pigtails with check valves (EPDM seat all gases, Argon/Methane mixtures use Viton). Check valve is at header end of pigtail **except** Oxygen. *Note:* Helium & Hydrogen manifolds are shipped with synthetic fiber braided pigtails. Vertical crossover and staggered styles include half 24" and half 36" pigtails.
- 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 manifolds shipped complete with a dry flashback arrestor, separate flash arrestor with check valve on each pigtail and connecting piping. Hydraulic flashback arrestors are available as an option for an additional charge.
- Optional safety kits (flash arrestor and relief valve) available for Liquefied Fuel Gas manifolds.
- Accessory heater kits available for Carbon Dioxide and Nitrous Oxide manifolds, see page 20.
- Maximum inlet pressure: 3000 PSIG (20680 kPa)
- Manifold outlet: 1/2" NPT female.
- Optional remote audio/visual alarm panels and fuel gas alarm kits - see page 23 & 19.
- High quality, heavy duty brass master valves.
- Complete wall mounting hardware and operating instructions.
- Special header configurations available upon request, U-Shaped, L-Shaped Staggered, Crossover and Vertical Crossover. Dimensional sketch of installation necessary for U and L-shaped designs.
- Built to accommodate future expansion by adding header extensions.
- **Made in the USA**

### Design and Flow Capacity



Example: AD-7-4 Nitrogen (7=CGA 580) manifold for 4 cylinders

Manifold flow rate is the same as the flow rate of the regulators. See page 26 for RM & RDM flow capacities. See Primeline Regulator catalog for optional regulator flow capacities.

**How To Order:** Specify: Control Type(V) - Service (W) - Number of Cylinders(X) Header Configuration(Y) Mounting (Z)

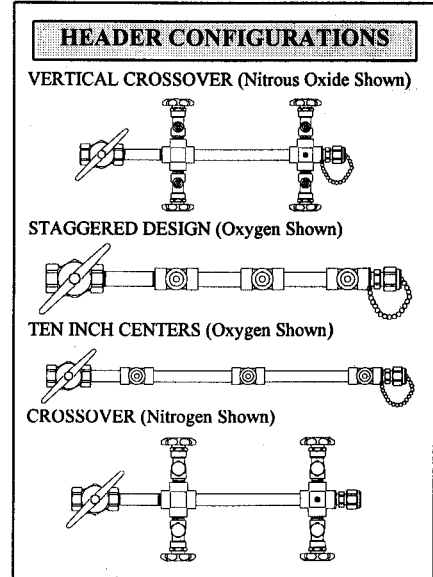
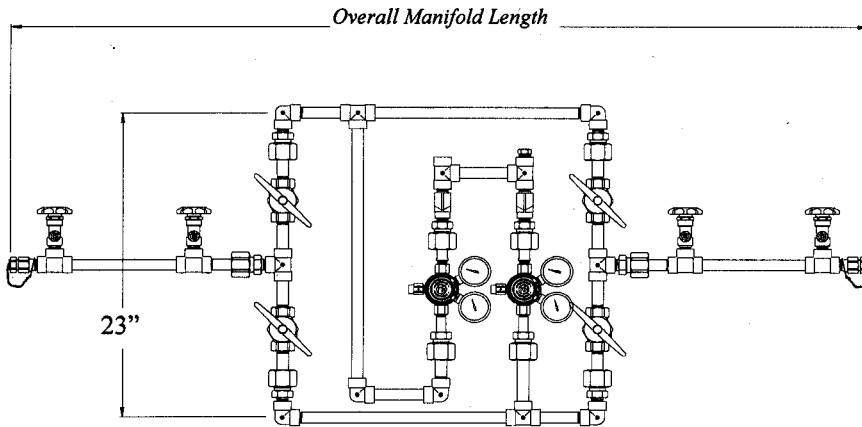
CONTROL TYPE (V)	GAS SERVICE (W)	NUMBER OF CYLINDERS(X)	HEADER CONFIGURATION (Y)	MOUNTING(Z)
AD (Automatic Duplex)	(1) Acetylene (POL)	CGA-510	BLANK STANDARD 10" on center	Blank = Wall (Standard)
	(1A) Acetylene (Commercial)	CGA-300	13" on center for Acetylene & LPG	
	(2) Compressed Air	CGA-346	S-STAGGERED 5" on center	F= Floor Mount
	(3) Argon	CGA-580	-6.5" on center for Acetylene & LPG	
	(4) Carbon Dioxide	CGA-320	V-VERTICAL CROSSOVER	-Standard 10" on center
	(5) Helium	CGA-580	-13" on center for Acetylene	
	(6) Hydrogen	CGA-350	& LPG	C-CROSSOVER (Floor Mount Only)
	(6A) Argon/Methane Mixtures	CGA-350	-Standard 10" on center	
	(7) Nitrogen	CGA-580	-13" on center for Acetylene & LPG	U-SHAPED-SKETCH REQUIRED L-SHAPED-SKETCH REQUIRED NP-NOT PAINTED
	(7A) Industrial Air/Nitrogen OP	CGA-590		
(8) Nitrous Oxide	CGA-326			
(9) Oxygen	CGA-540			
(10) Liquefied Fuel Gases (LPG)	CGA-510			

*Note: Different regulators may be substituted to achieve higher delivery pressures. See Prime Line Regulator Catalog.*

# AD - SERIES AUTOMATIC MANIFOLDS FOR INDUSTRIAL APPLICATIONS

# WESTERN ENTERPRISES®

## Dimensional Drawing



TOTAL # OF CYLINDERS	4	6	8	10	12
Standard (10" CENTERS) Overall Manifold Length	5'-8" (1.73M)	7'-4" (2.24M)	9'-0" (2.74M)	10'-8" (3.25M)	12'-0" (3.66M)
Staggered Design (5" CENTERS) Overall Manifold Length	4'-10" (1.47M)	5'-8" (1.73M)	6'-6" (1.98M)	7'-4" (2.24M)	7'-10" (2.39M)
Vertical Crossover (10" CENTERS) Overall Manifold Length	4'-0" (1.22M)	N/A	5'-8" (1.73M)	N/A	7'-4" (2.24M)

## Piping Schematic

