

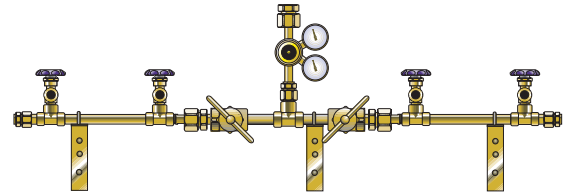
# MS, MD & SD Manual Manifolds

Western Innovator's Manual Gas Manifolds are designed to regulate high pressure gas supplies. Ideal for applications not requiring uninterrupted gas service.

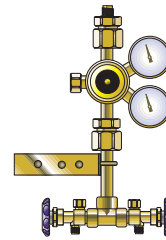
MS, MD & SD  
Western  
Innovator's  
Manual  
Gas  
Manifolds

## specifications

- Maximum inlet pressure 3000 psig.
- Includes adjustable line regulator.  
MS, MD & SD 20-160 psig  
Acetylene 0-15 psig  
LPG 0-45 psig  
MSHP, MDHP, SDHP 50-300 psig
- Manifold outlet: 1/2" NPT.
- 24" flexible stainless steel pigtails with check valves.
- 1/2" Brass, silver brazed headers.
- MS & MD Acetylene systems include: 300 scfh flashback arrestor and pigtails with individual flashback arrestors and check valves.



MD-4-4



SD-7-2



MS-9-4

## HOW TO ORDER

Specify: Control Type (V) - Service (W) - Number of

Example 1: MD-9-12VF represents MD with oxygen gas service and a vertical

Example 2: MSHP-7-6 represents MSHP with nitrogen gas service with a

CONTROL TYPE (V)	GAS SERVICE (W)	# OF CYL'S (X)
SD	(1) Acetylene (POL) CGA-510	
MS	(1A) Acetylene (Commercial) CGA-300	
MD	(2) Compressed Air CGA-346	
Standard delivery pressures for SD, MS & MD units Most gases 20-160 PSIG Acetylene (0-15 PSIG) LPG (0-45 PSIG)	(3) Argon CGA-580	
	(4) Carbon Dioxide CGA-320	
	(5) Helium CGA-580	
	(6) Hydrogen CGA-350	
	(6A) Argon/Methane Mixtures CGA-350	
MSHP	(7) Nitrogen CGA-580	
(only available for non-fuel gas services)	(7A) Industrial Air/Nitrogen OP CGA-590	
Standard delivery pressure	(8) Nitrous Oxide CGA-326	
All gases 40-300 PSIG	(9) Oxygen CGA-540	
	(10) Liquefied Fuel Gases (LPG) CGA-510	

**Note:** Different regulators may be substituted to achieve higher delivery pressures on all control types.

For more information, call Western Customer Service



## Design Lengths

TOTAL NO. OF CYLINDERS	2	3	4	5	6	7	8
MS-Standard (10" CENTERS) Overall Manifold Length	2' - 9" (.84m)	3' - 7" (1.09m)	4' - 5" (1.35m)	5' - 3" (1.60m)	6' - 1" (1.85m)	7' - 0" (2.13m)	7' - 10" (2.39m)
MS-Staggered Design (5" CENTERS) Overall Manifold Length	2' - 4" (.74m)	2' - 9" (.84m)	3' - 2" (.97m)	3' - 7" (1.09m)	4' - 0" (1.22m)	4' - 5" (1.35m)	4' - 10" (1.47m)
MS-Vertical Crossover and Crossover (10" Centers) Overall Manifold Length	1' - 11" (.58m)	N/A	2' - 9" (.84m)	N/A	3' - 7" (1.09m)	N/A	4' - 5" (1.35m)
MS Standard (13" Centers) Overall Manifold Length	3' - 0" (.91m)	4' - 1" (1.22m)	5' - 2" (1.57m)	6' - 3" (1.91m)	7' - 4" (2.24m)	8' - 5" (2.57m)	9' - 6" (2.90m)
MS-Staggered Design (6.5" Centers) Overall Manifold Length	2' - 5.5" (.75m)	3' - 0" (.91m)	3' - 6.5" (1.08m)	4' - 1" (1.25m)	4' - 7.5" (1.41m)	5' - 2" (1.57m)	5' - 8.5" (1.74m)
MS-Vertical Crossover and Crossover (13" Centers) Overall Manifold Length	1' - 11" (.58m)	N/A	3' - 0" (.91m)	N/A	4' - 1" (1.25m)	N/A	5' - 2" (1.57m)
TOTAL NO. OF CYLINDER	2	4	6	8	10	12	14
MD-Standard (10" CENTERS) Overall Manifold Length	2' - 4" (.71m)	4' - 4" (1.32m)	6' - 0" (1.83m)	7' - 8" (2.34m)	9' - 4" (2.85m)	11' - 0" (3.35m)	12' - 8" (3.86m)
MD-Staggered Design (5" CENTERS) Overall Manifold Length	2' - 4" (.71m)	3' - 6" (1.07m)	4' - 4" (1.32m)	5' - 2" (1.57m)	6' - 0" (1.83m)	6' - 10" (2.08m)	7' - 8" (2.34m)
MD-Vertical Crossover and Crossover (10" Centers) Overall Manifold Length	N/A	2' - 8" (.81M)	N/A	4' - 4" (1.32M)	N/A	6' - 0" (1.83m)	N/A
MD-Standard (13" Centers) Overall Manifold Length	2' - 4" (.71m)	4' - 9" (1.471m)	7' - 0" (2.13m)	9' - 2" (2.79m)	11' - 4" (3.45m)	13' - 6" (4.11m)	15' - 8" (4.77m)
MD-Staggered Design (6.5" Centers) Overall Manifold Length	2' - 4" (.71m)	3' - 9" (1.14m)	4' - 10" (1.47m)	5' - 11" (1.80m)	7' - 0" (2.13m)	8' - 1" (2.46m)	9' - 2" (2.79m)
MD-Vertical Crossover and Crossover (13" Centers) Overall Manifold Length	N/A	2' - 8" (.81M)	N/A	4' - 10" (1.47M)	N/A	7' - 0" (2.13m)	N/A



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

*crossover bank of 6 cylinders per side which is mounted on a floor stand.  
standard header configuration of 6 cylinders which is mounted on the wall.*

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