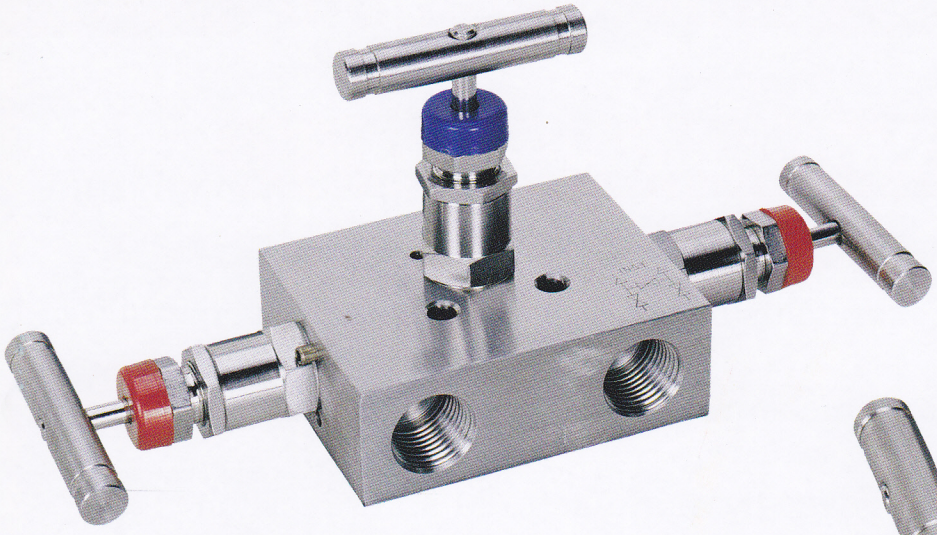
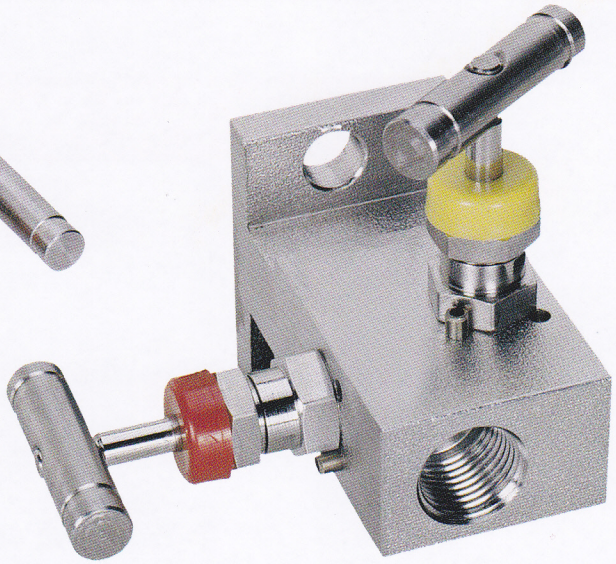
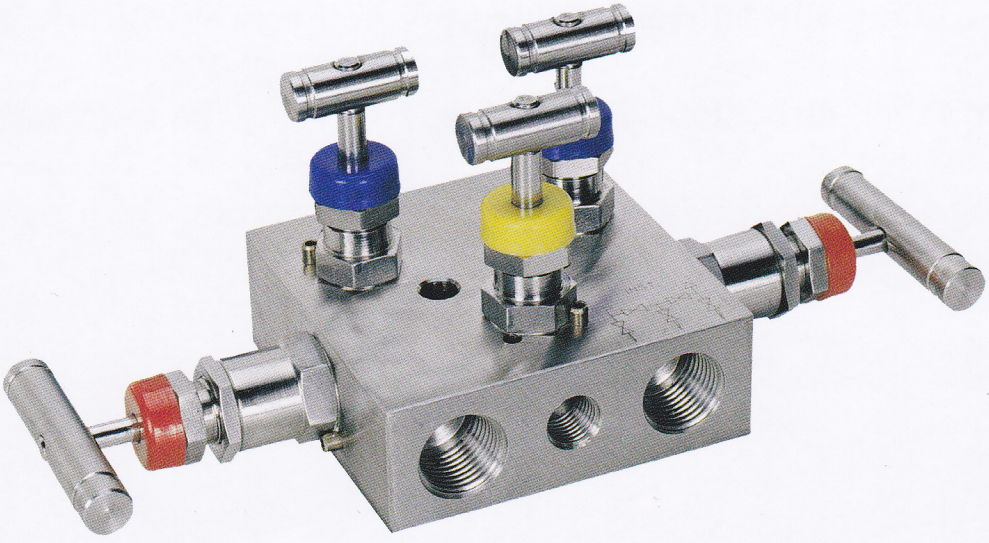




Sync-Lok

Valve Manifold



2-3-5 Valve Manifolds

Sync-Lok range of Valve Manifolds offer a safe and economical method of installation to control and measure pressure of liquids and gaseous media. They are ruggedly manufactured and precision machined to the most exacting dimensional tolerance to ensure perfect installation and application.

Sync-Lok Valve Manifolds are fuctionally installed to control, measure, isolate, equalize, calibrate, drain, vent or differentiate the pressure of liquids and gasses.

Sync-Lok Valve Manifolds series offer 2, 3 and 5 valves configuration which are available in remote mounting “R” Type (Pipe to Pipe), direct mounting “T” & “H” Type (Pipe to Pipe & Flange to Flange) with a standard 2 1/8” (54mm) centers.

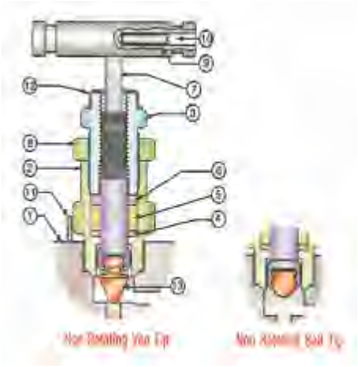
Contents

CONTENTS

MATERIAL OF CONSTRUCTION

Material of Construction

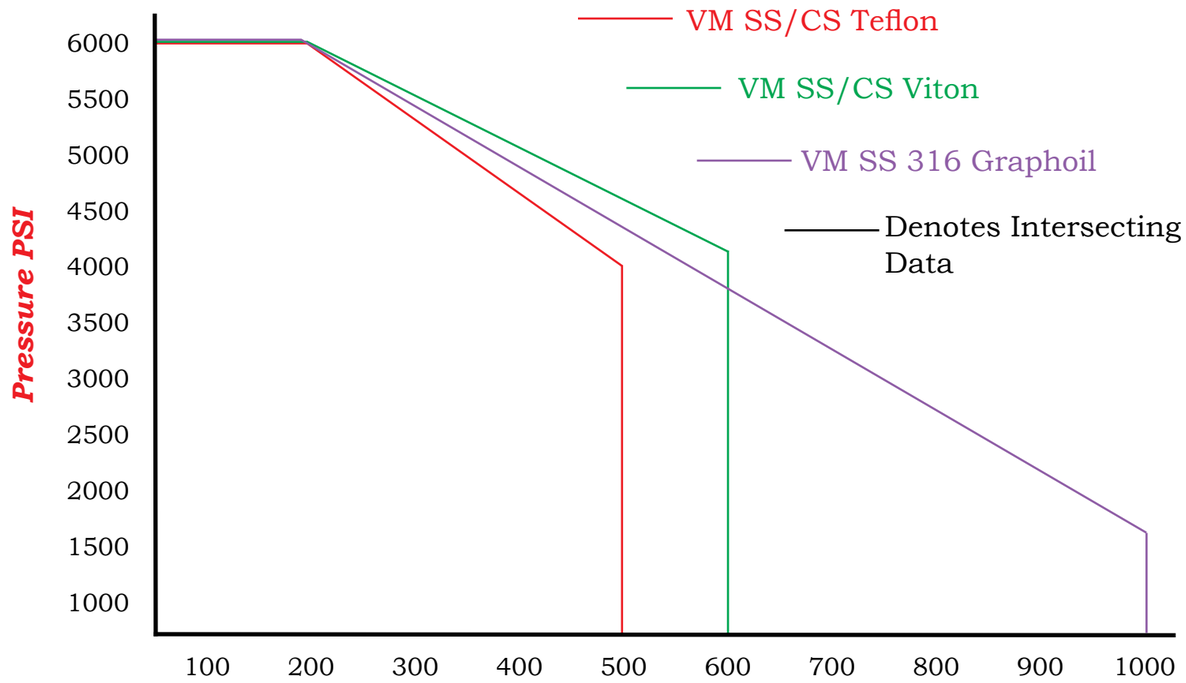
Sr No.	Part	Qty	Material
1	Body	1	A479-316 / A-105
2	Gland Body	1	A479-316 / A-105
3	Gland Retainer	1	A479-316 / A-105
4	Washer	1	A479-316 / A-105
5	Packing	1	PTFE / Graphoil
6	Packing Washer	1	A276-316 / A-105
7	Spindle	1	A276-316
8	Lock Nut	1	A479-316 / A-105
9	Grub Screw	1	Steel
10	Handle	1	A276-304 / A-105
11	Lock Pin	1	A479-316 / A-105
12	Dust Cap	1	Plastic LD
13	Vee Tip /Ball Tip	1	17-4 PH



Features/Benefits

Forged one piece body construction (no welding)	For high strength
Non Rotating Vee / Ball tip design	Which forms a bearing joint with the stem, eliminates rotation between plug & seat at closure. This prevents scoring and galling of the valve seat and ensures long life in repetitive shut off service
Safety Bonnet Lock	Prevents accidental disassembley
Stem thread rolled & hard plated	Provides additional strength & maximum service life.
Mirror Finish Stem, burnished to a 16RMS	Extends packing life and smoothens stem operation.
Adjustable packing below stem threads	Prevents stem lubrication washout and isolates threads from process contamination.
Safety Back Seating	Provides secondary stem seal in full open position, prevents stem blowout.
Stainless Steel Handle	For proper actuation
Body to Bonnet seal	Metal to Metal constant compression, isolates bonnet threads from system fluids and eliminates possible tensile.
Dust Cap	Prevents contamination and lubricant washout of bonnet assembly

Pressure vs. Temperature



Pressure Rating:

Temp.	C.S.	S.S	Orifice	Cv
Room	6000 PSI	6000 PSI		
500° F	4000 PSI	4000 PSI	4.8mm	0.52 Max
1000° F	1500 PSI	1500 PSI		

Manifold Selection:

Pressure and temperature rating are selected from ANSI B16.34 for standard class valves based on ANSI B16-Class 2500. Optional sour gas service conforms to NACE MR-01-75.

Testing:

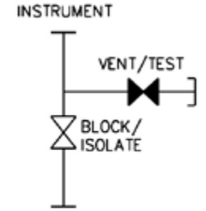
Each valve is hydrostatically tested in accordance with MSS-SP-99. This procedure includes testing of the body cavity. Hydrostatic test is performed with pure water or other liquids of similar or lower viscosity at 1.5 times and seat leakage test at 1.1 times the maximum working pressure. Each valve is also tested with Nitrogen Gas at 1000 psi for seat, seal and shell
leakage. Other tests like vibration, temperature, helium are available upon request.

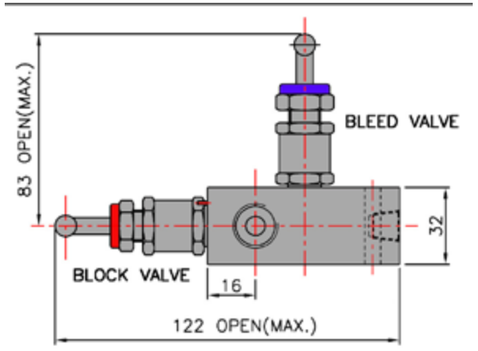
PRESSURE VS. TEMPERATURE

2VM-SS-8-R

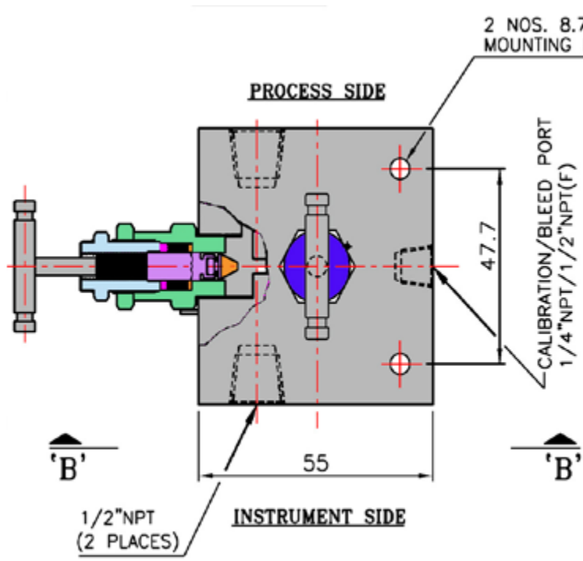
2 Valve Manifold - Pipe to Pipe

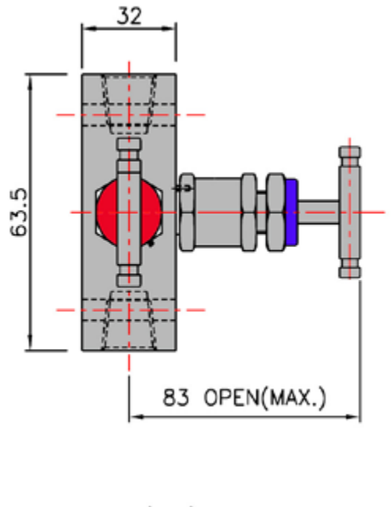
Sync-Lok 2 Valve Manifold Pipe to Pipe design for remote mounting, connecting system impulse lines and transmitters, having simple two valve configuration, which allows for easy block, bleed and calibration of a static pressure transmitter or gauge.





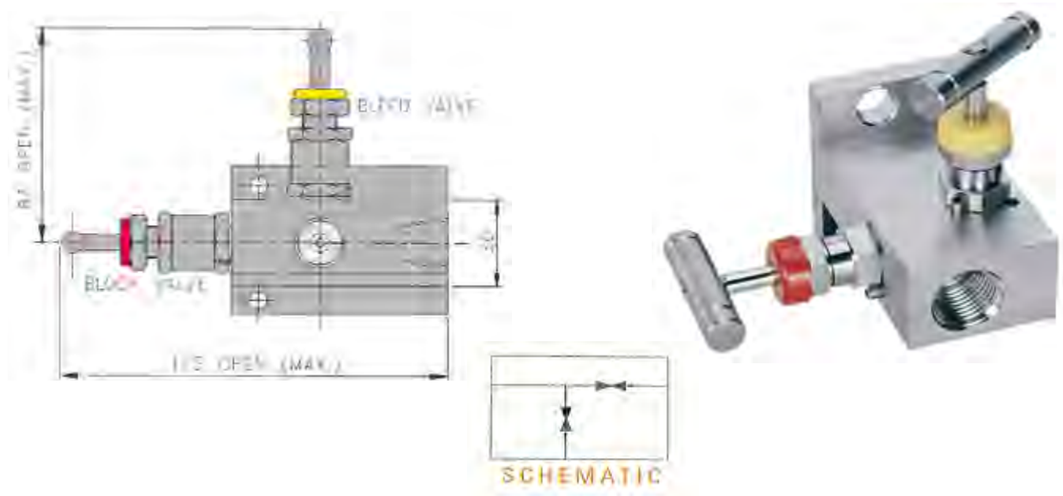
SCHEMATIC

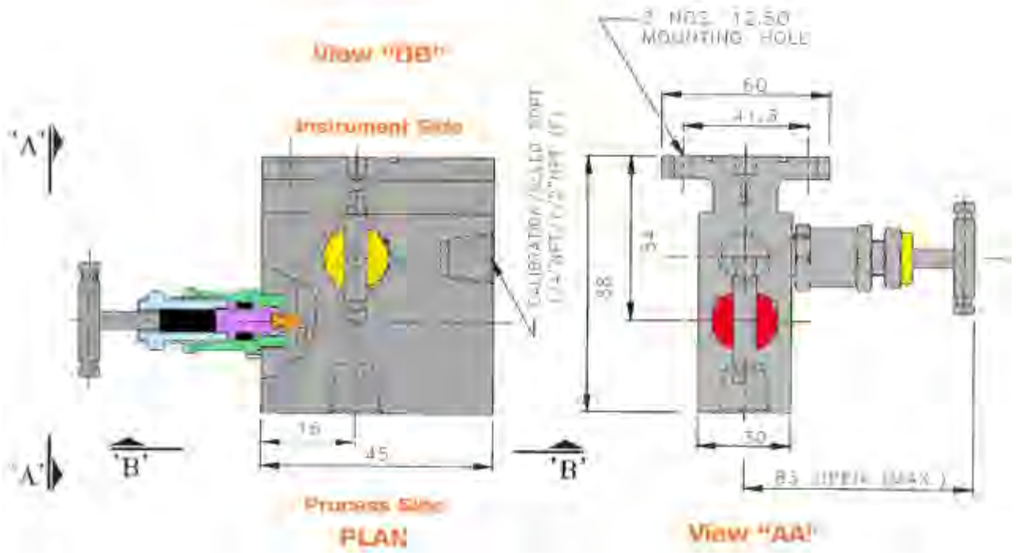




2 Valve Manifold - Pipe to Flange

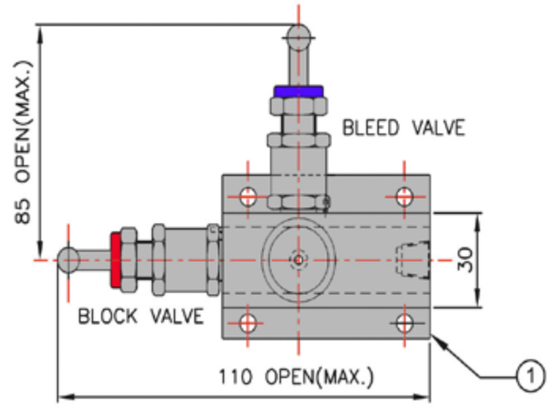
Sync-Lok 2 Valve Manifold Pipe to Flange design for direct mounting, connecting system impulse lines and transmitters, having simple two valve configuration, which allows for easy block, bleed and calibration of a static pressure transmitter or gauge.

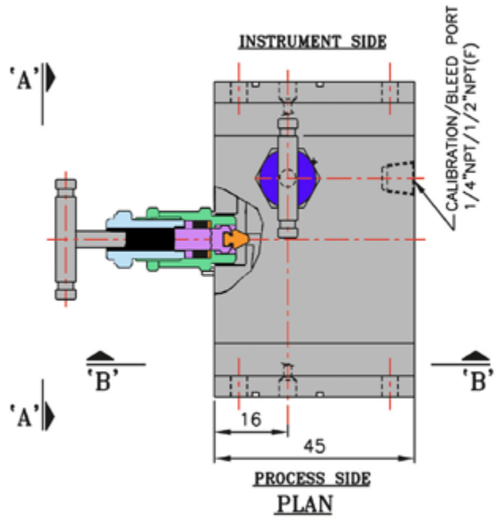


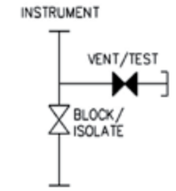


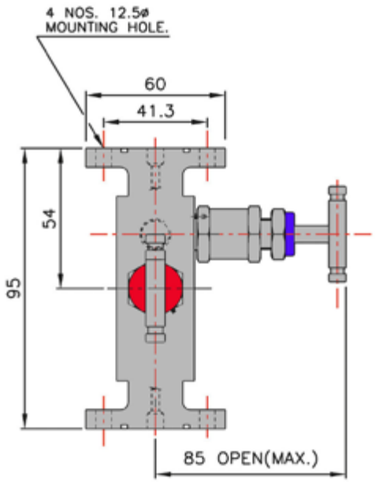
2 Valve Manifold - Flange to Flange

Sync-Lok 2 Valve Manifold Flange to Flange design for direct mounting, connecting system impulse lines and transmitters, having simple two valve configuration, which allows for easy block, bleed and calibration of a static pressure transmitter or gauge.





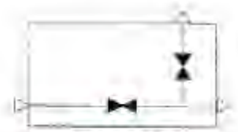


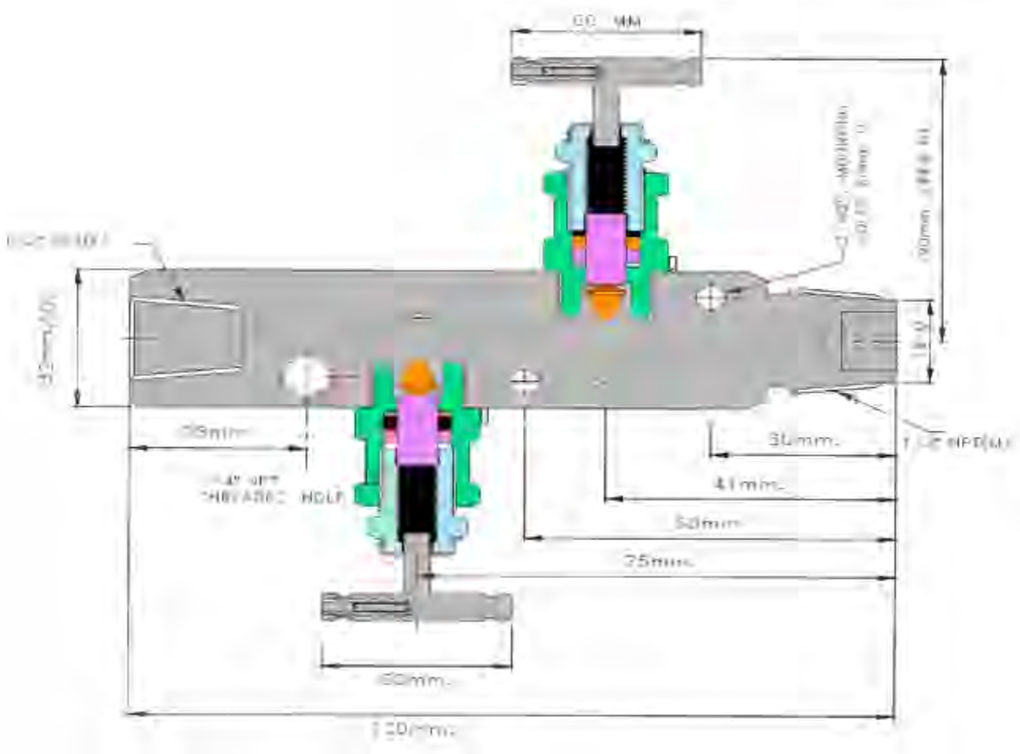


2VM-SS-8-T
2VM-SS-8-H

2 Valve Manifold - Remote Mount

Sync-Lok 2 Valve Manifold Remote Mount design for seperate mounting, connecting system impulse lines and transmitters, having simple two valve configuration, which allows for easy block, bleed and calibration of a static pressure transmitter or gauge.

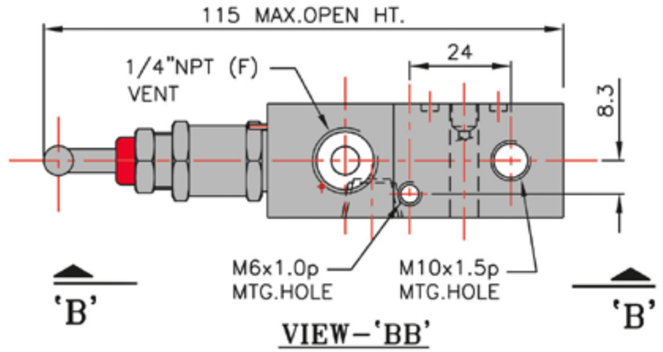


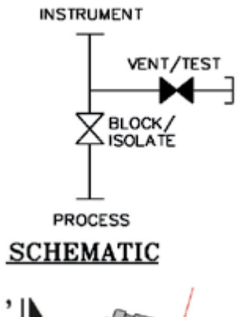


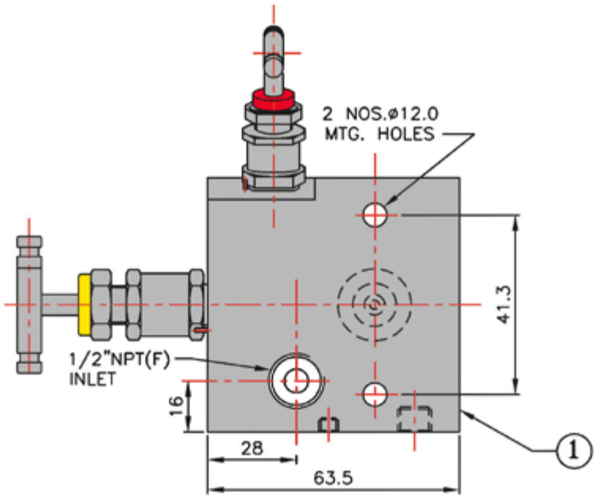
2VM-SS-8-RM
2VM-SS-8-DM

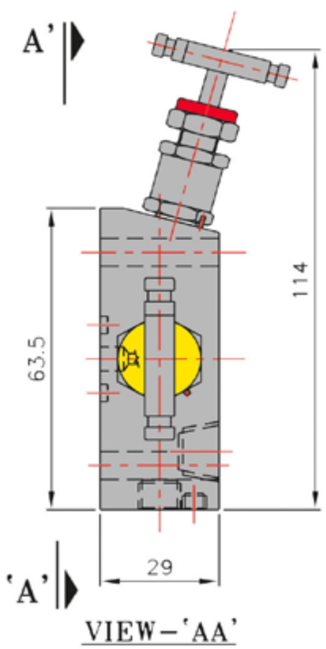
2 Valve Manifold - Direct Mount

Sync-Lok 2 Valve Manifold Pipe to Flange design for direct mounting, connecting system impulse lines and transmitters, having simple two valve configuration, which allows for easy block, bleed and calibration of a static pressure transmitter or gauge.



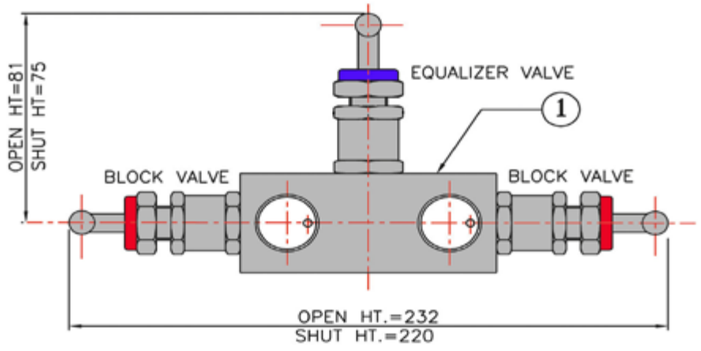






3 Valve Manifold - Pipe to Pipe

Sync-Lok 3 Valve Manifold Pipe to Pipe design for remote mounting, connecting system impulse lines and transmitters, This valve consist of 1/2" NPT Female connections on 2 1/8" (54mm) centers and one equalizer valve and two block valve.



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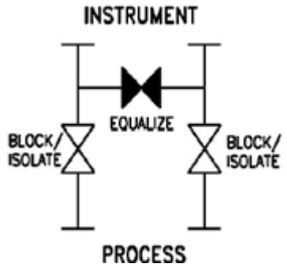

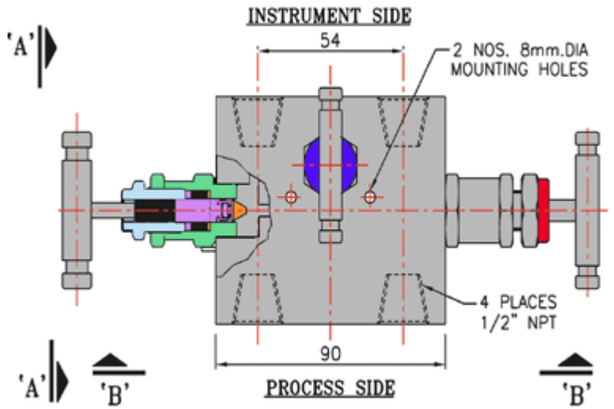

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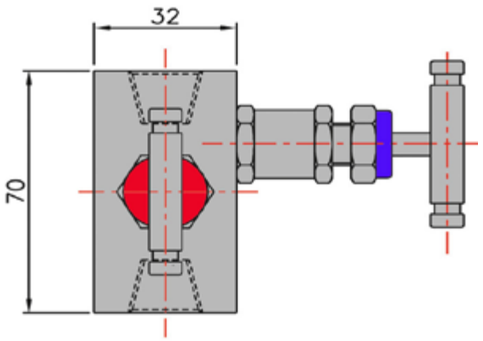
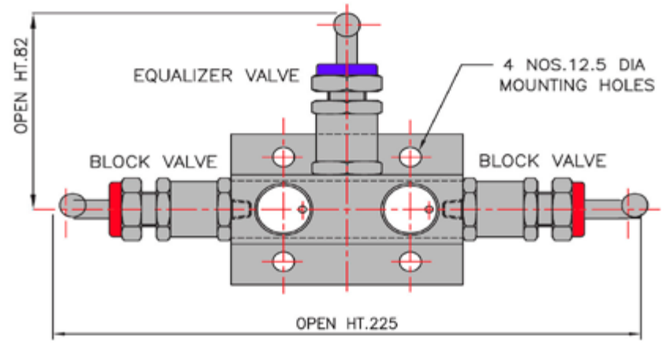


VIEW–'AA'

3VM-SS-8-R
3VM-SS-8-T

3 Valve Manifold - Pipe to Flange

Sync-Lok 3 Valve Manifold Pipe to Flange design for direct mounting, connecting system impulse lines and transmitters, This valve consist of 1/2" NPT Female connections on 2 1/8" (54mm) centers and one equalizer valve and two block valves. 1/4" NPT purge connections (2) optional.



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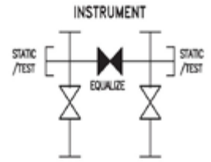
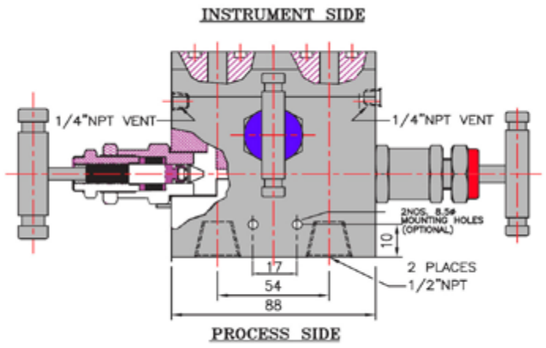
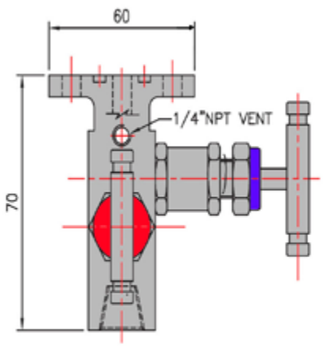




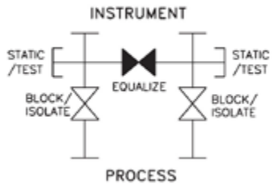
PLAN

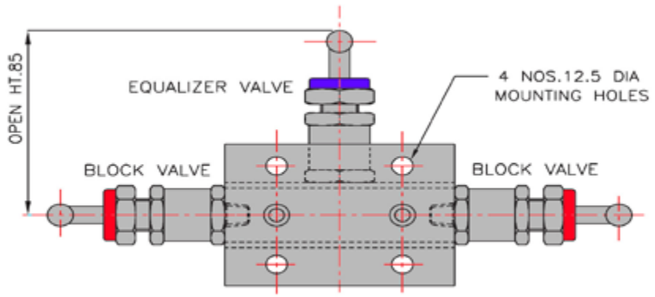


VIEW–'AA'

3 Valve Manifold - Flange to Flange

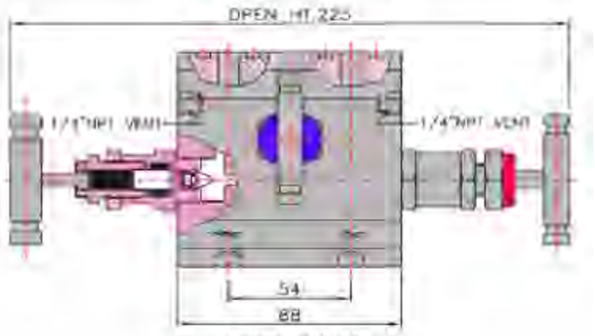
Sync-Lok 3 Valve Manifold Flange to Flange design for connecting system impulse lines and transmitters, This valve consist of Flange to Flange connections on 2 1/8" (54mm) centers and one equalizer valve and two block valves.





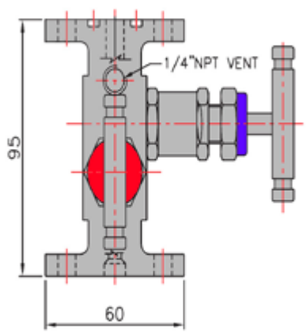
VIEW–'BB'

INSTRUMENT SIDE



PROCESS SIDE

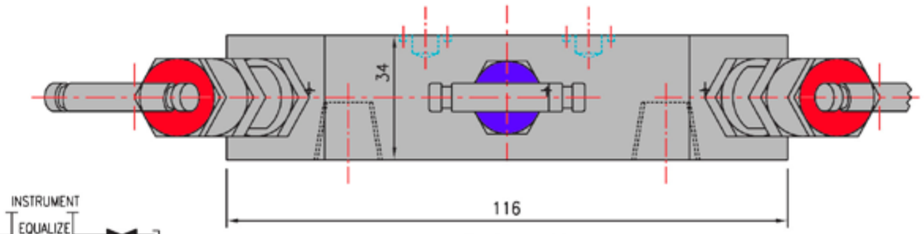
PLAN



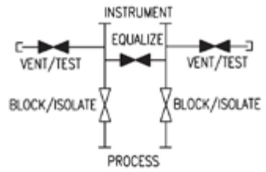
VIEW–'AA'

3 Valve Manifold - Direct Mount

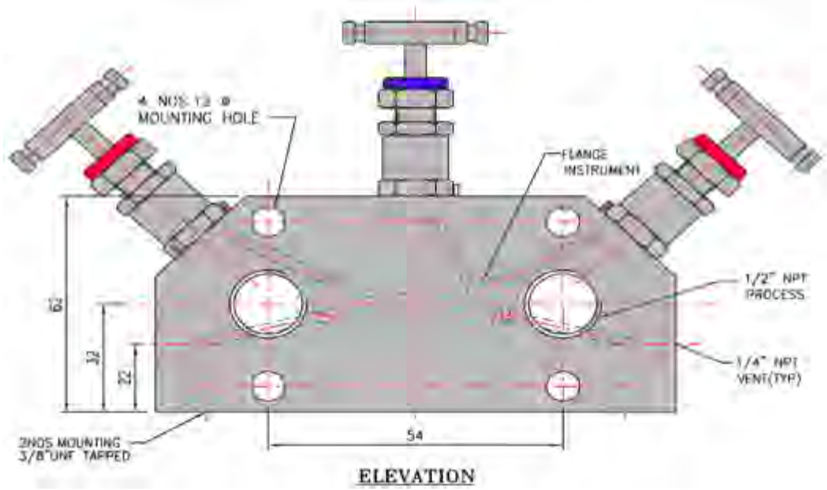
Sync-Lok 3 Valve Manifold Pipe to Flange, base mount connection design for connecting system impulse lines and transmitters, This valve consist of 1/2" NPT Female connections on 2 1/8" (54mm) centers and one equalizer valve and two block valves.



PLAN



SCHEMATIC

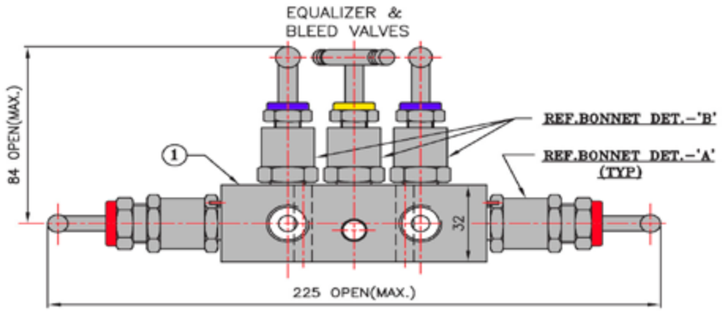


ELEVATION

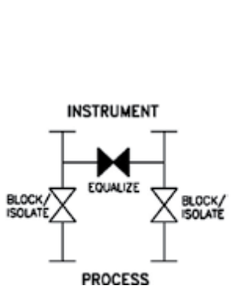
3VM-SS-8-H
3VM-SS-8-DM

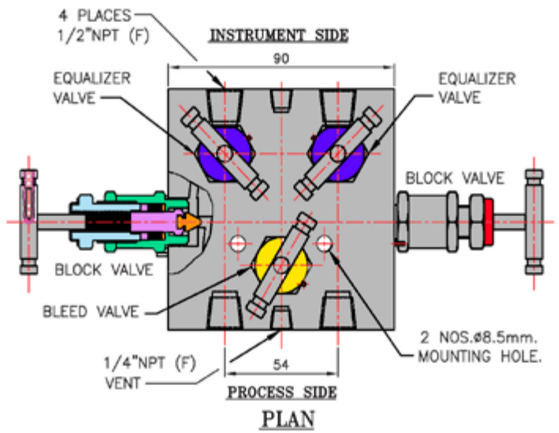
5 Valve Manifold - Pipe to Pipe

Sync-Lok 5 Valve Manifold Pipe to Pipe design for connecting system impulse lines and transmitters. This valve consists of 1/2” NPT Female connectors on 2 1/8” centers (54mm) to suit the inlet connection. This valve provides two instrument isolation valves, two equalizer valves and one bleed valve (for testing).



VIEW–'BB'





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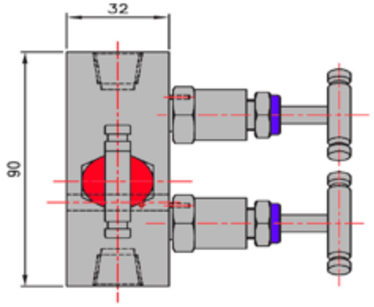
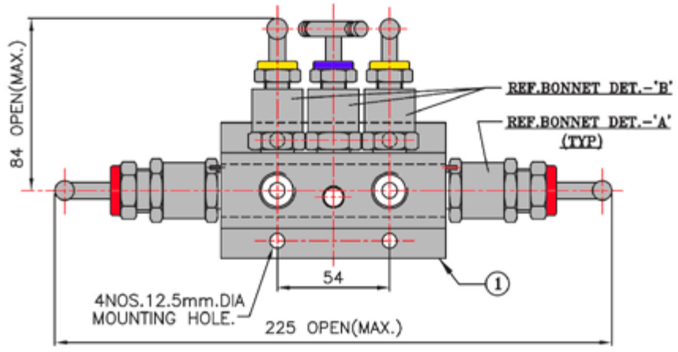


VIEW–'AA'

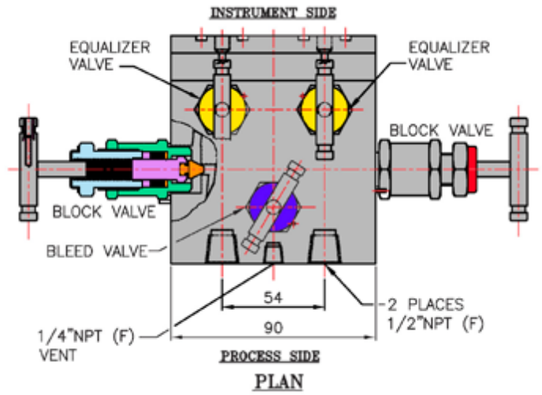
5 Valve Manifold - Pipe to Flange

Sync-Lok 5 Valve Manifold Pipe to Flange design for connecting system impulse lines and transmitters. This valve consists of Pipe to Flange connections with Teflon/Viton O-Ring packing on 2 1/8” centers (54mm) to suit the inlet connection. This valve provides two instrument isolation valves, two equalizer valves and one bleed valve (for testing).

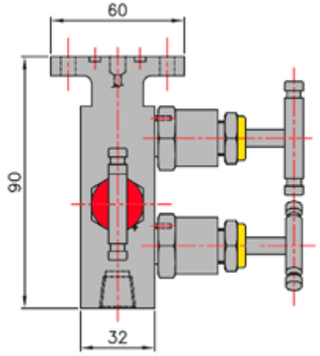


VIEW–'BB'

SCHEMATIC



PLAN

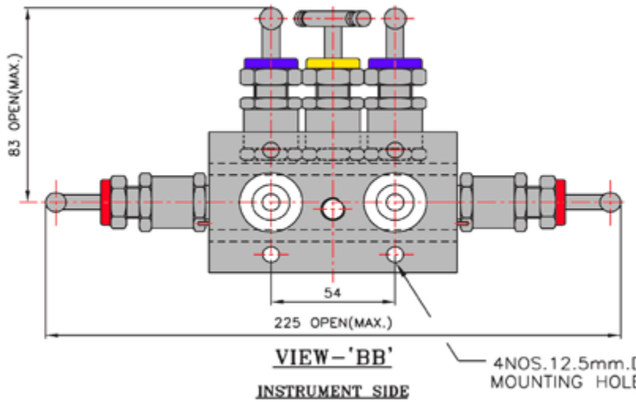


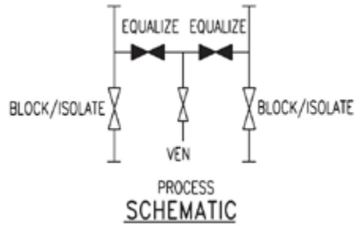
VIEW–'AA'

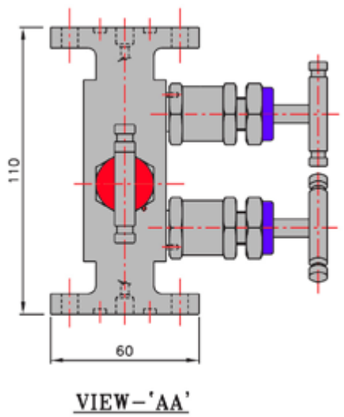
5VM-SS-8-R
5VM-SS-8-T

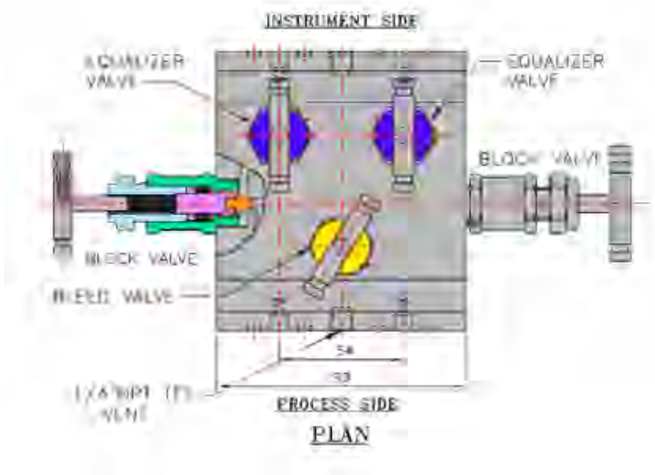
5 Valve Manifold - Flange to Flange

Sync-Lok 5 Valve Manifold Flange to Flange design for connecting system impulse lines and transmitters. This valve consists of two Flange connections with Teflon/Viton O-Ring packing on 2 1/8" centers (54mm) to suit the inlet connection. This valve provides two instrument isolation valves, two equalizer valves and one bleed valve (for testing).





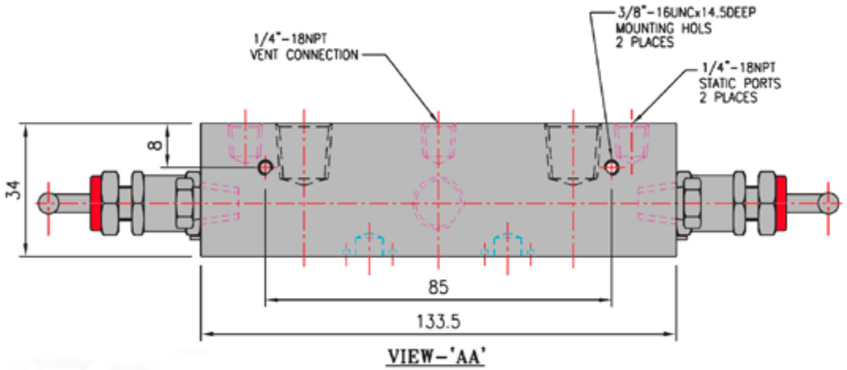


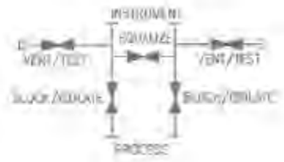


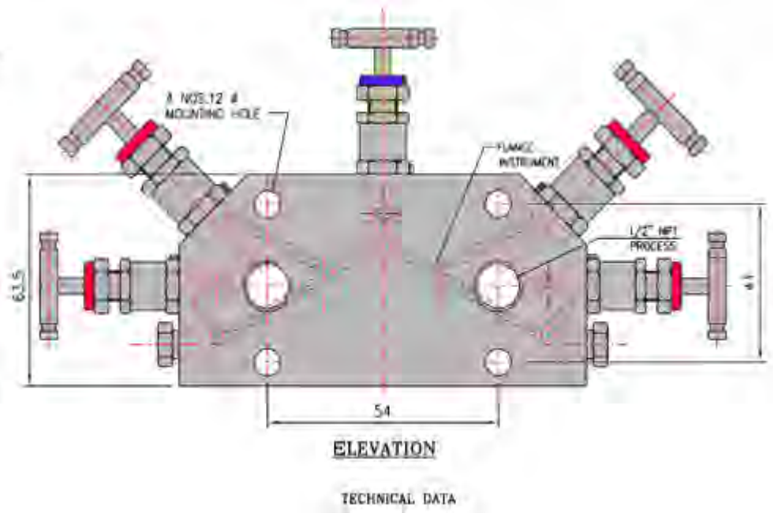
5VM-SS-8-H
5VM-SS-8-DM

5 Valve Manifold - Direct Mount

Sync-Lok 5 Valve Manifold Integral mounting connection design for connecting system impulse lines and transmitters. This valve consists of 1/2" NPT Female connections on 2 1/8" centers (54mm) to suit the inlet connection. This valve consists of two equalizer valves, two block valves and one vent valve.







TECHNICAL DATA

Model Coding & Ordering Information

2 -	VM -	SS-	8-	R

No of Valves

2 Valves
3 Valves
5 Valves

Valve Manifold

Material

SS - 316 SS
CS - Carbon Steel
M - Monel

Process Connection

8 - 1/2” NPT
4 - 1/4” NPT

Mounting

R - Pipe to Pipe
T - Pipe to Flange
H - Flange to Flange

Optional

SG - Sour Gas Service Conforms to NACE MR 01-75
G - Graphoil Packing for High Temperature