

# Instrumentation Manifold Valves

## SM2V / SM3V / SM5V Series



### Ordering Information

Example : **SM2 V - F 8N - M40**

1
2
3
4
5

#### 1. Valve Series

SM2 : 2-Valve Manifolds  
SM3 : 3-Valve Manifolds  
SM5 : 5-Valve Manifolds

#### 2. Mounting Type

V : Horizontal Style (Remote Mounting)  
VF : Horizontal Single Flange Style (Direct Mounting)  
VDF : Horizontal Dual Flange Style (Direct Mounting)  
VD : Vertical Style (Direct Mounting)

#### 3. End Connection Type

S : Superlok Female Tube Fitting  
F : Female Pipe Thread

#### 4. End Connection Size

##### Tube O.D Designation

Size (inch)	1/2
Designation	8

##### Pipe Thread Designation

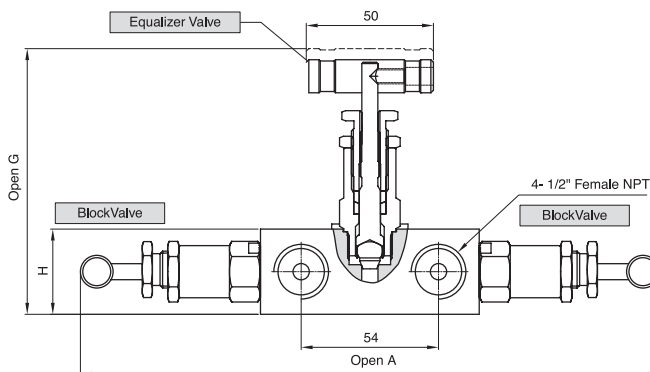
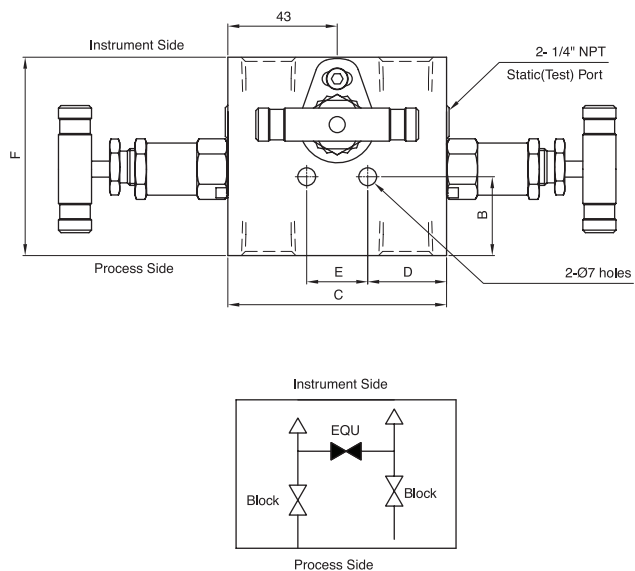
Size (inch)	1/2
Screwed NPT	8N

#### 5. Body Material

SS : 316 Stainless Steel  
M40 : Alloy 400 (Monel)

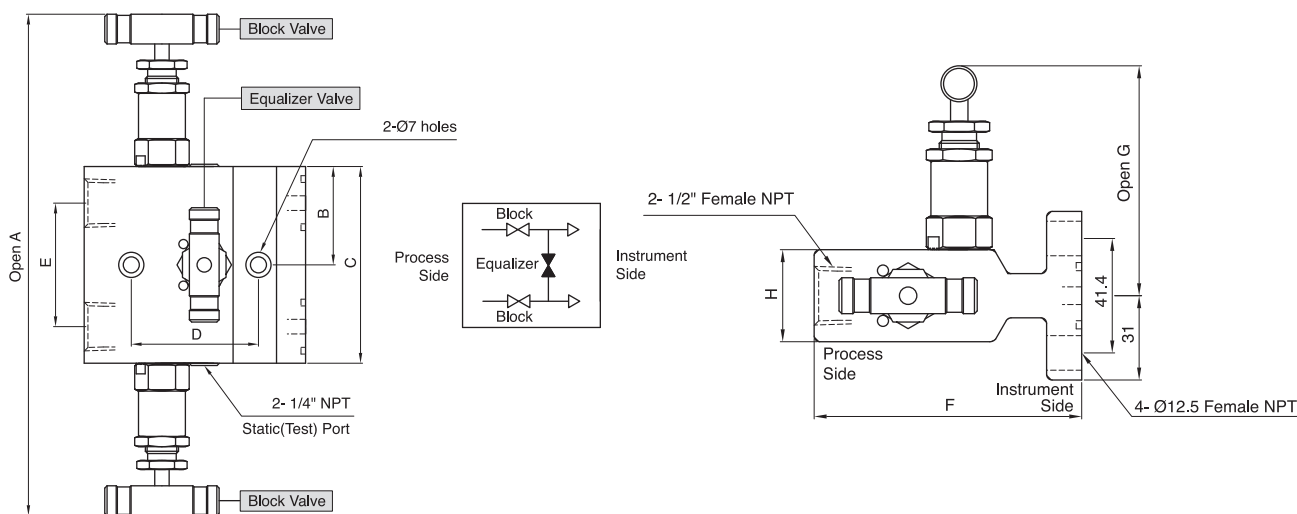
# 3-Valve Manifolds

## Horizontal Style (Remote Mounting)



Part Number	End Connections		Weight Dimensions							
	Process	Instrument	A	B	C	D	E	F	G	H
SM3V-F8N	1/2" Female NPT		228.0	31.0	86.0	31.0	24.0	78.0	106.0	33.5

## Horizontal Single Flange Style (Direct Mounting)

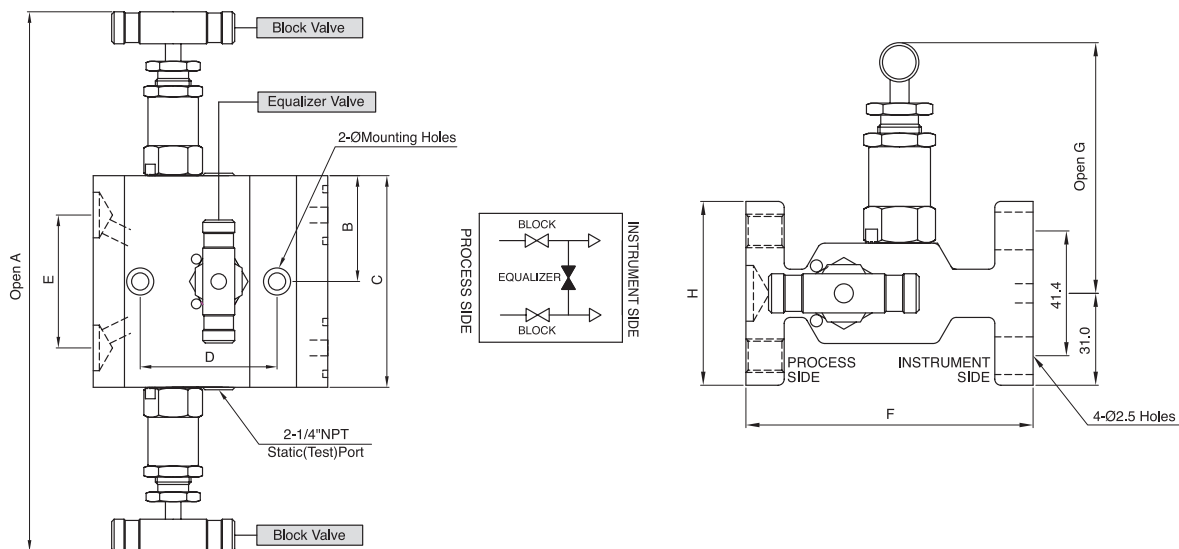


Part Number	End Connections		Weight Dimensions							
	Process	Instrument	A	B	C	D	E	F	G	H
SM3VF-F8N	1/2" Female NPT	Flange	228.0	43.0	86.0	55.6	54.0	97.0	87.7	31.8

• All dimensions in millimeters unless specified as "inch". Dimension are for reference only and are subject to change.  
 • To order a manifold with optional Grafoil packing, add-G to the manifold ordering number.

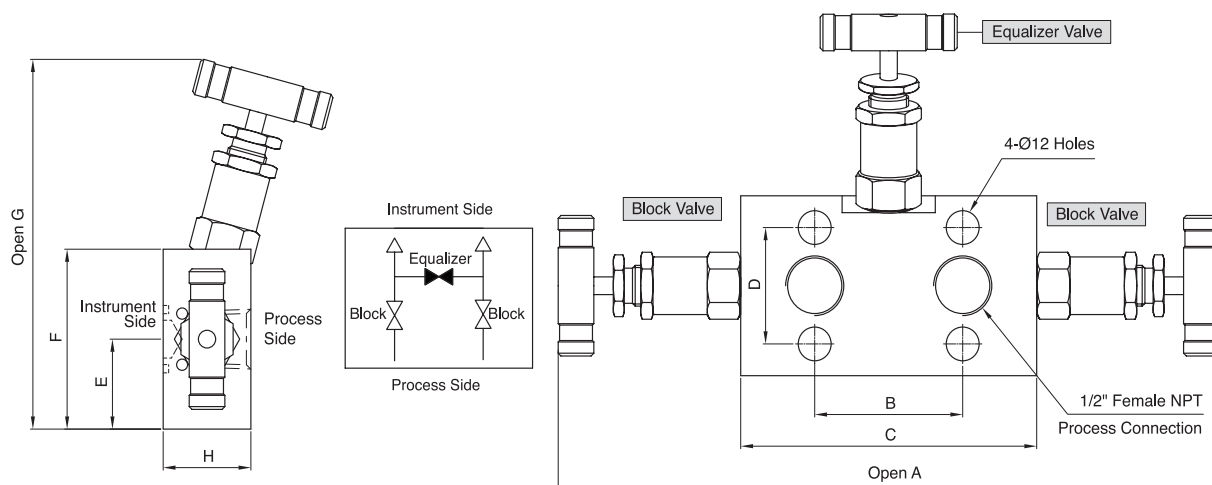
# 3-Valve Manifolds

## Horizontal Dual Flange Style (Direct Mounting)



Part Number	End Connections		Weight Dimensions							
	Process	Instrument	A	B	C	D	E	F	G	H
SM3VDF	Flange	Flange	228.0	43.0	86.0	55.6	54.0	96.4	87.7	62.0

## Vertical Style (Direct Mounting)



Part Number	End Connections		Weight Dimensions							
	Process	Instrument	A	B	C	D	E	F	G	H
SM3VD-F8N	1/2" Female NPT	Flange	250.0	54.0	108.0	41.4	32.0	64.0	136.0	32.0

• All dimensions in millimeters unless specified as "inch". Dimension are for reference only and are subject to change.  
 • To order a manifold with optional Grafoil packing, add-G to the manifold ordering number.

# Manifolds Accessories

## Flange Bolts & Seals

### Flange Bolts

Flange Bolt	Part Number	Hex Size mm (in.)	Length mm (in.)	Threads	Bolt Material Designator
Standard Hex Head Bolt	SM-FB	15.87 (5/8)	25.0 (1.0)	7/16 - 20	Stainless Steel : -S Carbon Steel : -C
Long Stud with Hex Nut	SM-LFB		58.0 (2.28)		
Short Hex Head Bolt	SM-SFB		22.2 (0.875)		

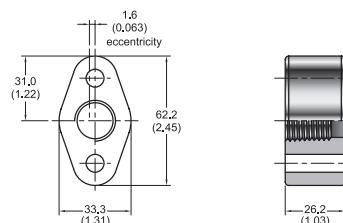


### Flange Seals

Seal Material	Ordering No.	Temperature Rating
Viton	SM - FS - V	-20°F ~ 450°F (-28°C ~ 232°C)
PTFE	SM - FS	-65°F ~ 250°F (-53°C ~ 121°C)
Grafoil	SM - FS - GR	-65°F ~ 1000°F (-53°C ~ 537°C)

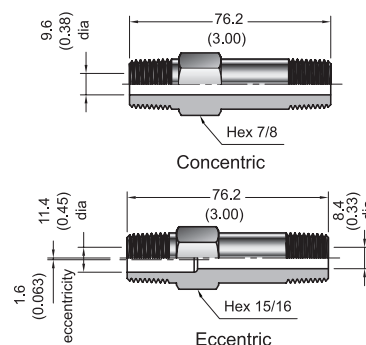
## Concentric & Eccentric Oval Flange

- Eccentric Flanges and Pipe Nipple allow connections of flange - to - flange manifolds to process flange taps or process root valves.
- Standard connection is female NPT 1/2".
- Concentric & eccentric oval flange ordering number : Concentric oval flange female NPT 1/2" : SM - COF - F8N  
Eccentric oval flange female NPT 1/2" : SM - EOF - F8N
- Dimensions, in millimeters (inches), are for reference only and are subject to change.



## Concentric & Eccentric Pipe Nipple

Type	Part Number	Material	Pressure Rating @70°F (20°C) psig (bar)	Temperature Rating F (°C)	Pressure Rating @Max. temperature
Concentric	SM - CPN - S	SS316 / A276	10000 (689)	-65 to 1200 (-53 to 648)	2850 psig @ 1200°F (196 bar @ 648°C)
	SM - CPN - C	Carbon Steel / A108	8000 (551)	-20 to 350 (-28 to 176)	6970 psig @ 350°F (480 bar @ 176°C)
Eccentric	SM - EPN - S	SS316 / A276	7500 (516)	-65 to 1200 (-53 to 648)	2140 psig @ 1200°F (147 bar @ 648°C)
	SM - EPN - C	Carbon Steel / A108	6000 (413)	-20 to 350 (-28 to 176)	5230 psig @ 350°F (360 bar @ 176°C)



\* Dimensions, in millimeters (inches), are for reference only and are subject to change.

## Calibration Fittings



Calibration fittings connect directly to the bleed port of differential pressure transmitter.

Material	Part Number	SUPERLOK O.D.	Stright Male Thread
Stainless Steel / A276	SCAL4 - 1U	1/4"	1/4 - 28UNF
	SCAL4 - 2U		5/16 - 24UNF

## Vent plugs, Bleed & PurgeValves

- Bleed & Purge valves used to vent to atmosphere and to assist in calibration.
- Are offered in 1/4, 3/8, and 1/2 in. male NPT sizes.
- For more information, see the SUPERLOK BLEED & PURGE VALVE catalog. (BMT CBPV)
- Dimensions, in millimeters (inches), are for reference only and are subject to change.

