

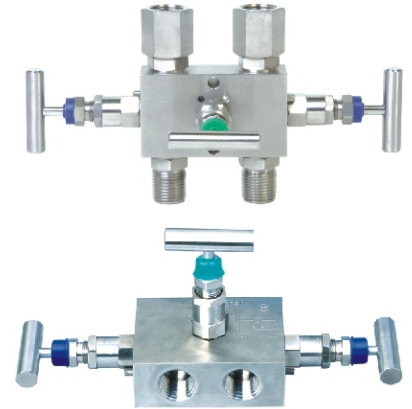
## FEATURES

- 2 isolate & 1 vent valves (plugged vent provided)

## APPLICATION

- Isolation & venting of gauges, switches & transmitters
- High pressure line shut off
- Liquid & gas services

### Direct / Remote Mounting

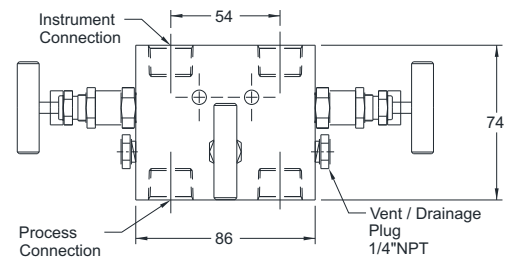


### STANDARD SPECIFICATIONS

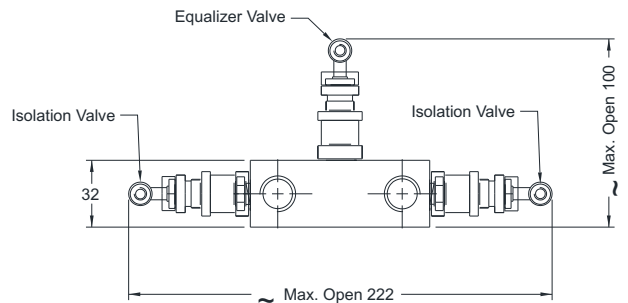
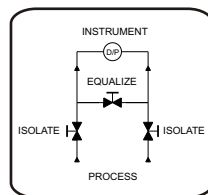
Mounting	: Direct
Pattern	: 1
Wetted parts	: AISI 316 SS
Instrument connection	: 1/2" NPT (F) x 2 Nos. / 1/2" BSP (F) x 2 Nos.
Stem packing	: PTFE
Process connection	: 1/2" NPT (F) x 2 Nos. / 1/2" BSP (F) x 2 Nos.
Stem	: Conical metal tip
Max. working pressure	: 413.7 bar (6000 psi)
Max. working temperature	: 240°C
"T" bar handle	: AISI 304 SS
Drain port	: 1/4" NPT (F) x 2 Nos, plugged

### DIMENSIONAL DRAWING

#### Remote mount - Pattern 1



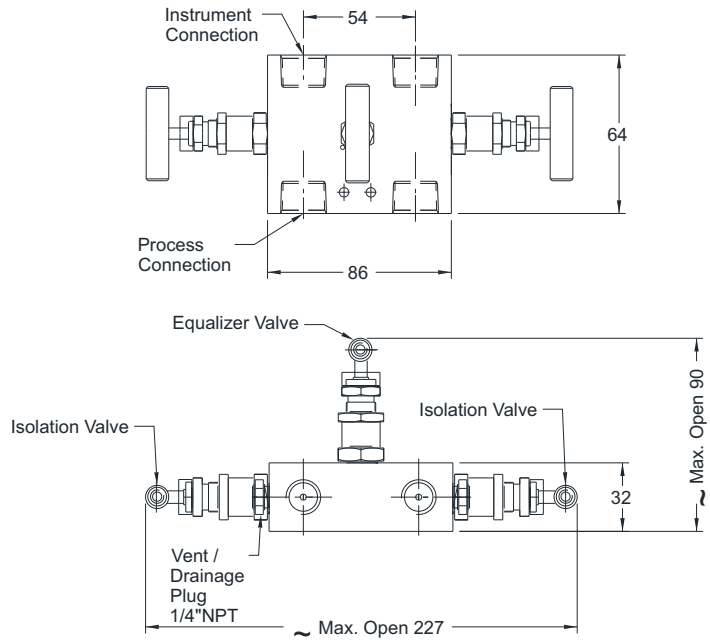
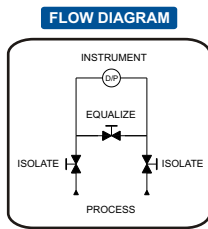
#### FLOW DIAGRAM



All dimensions are in mm.

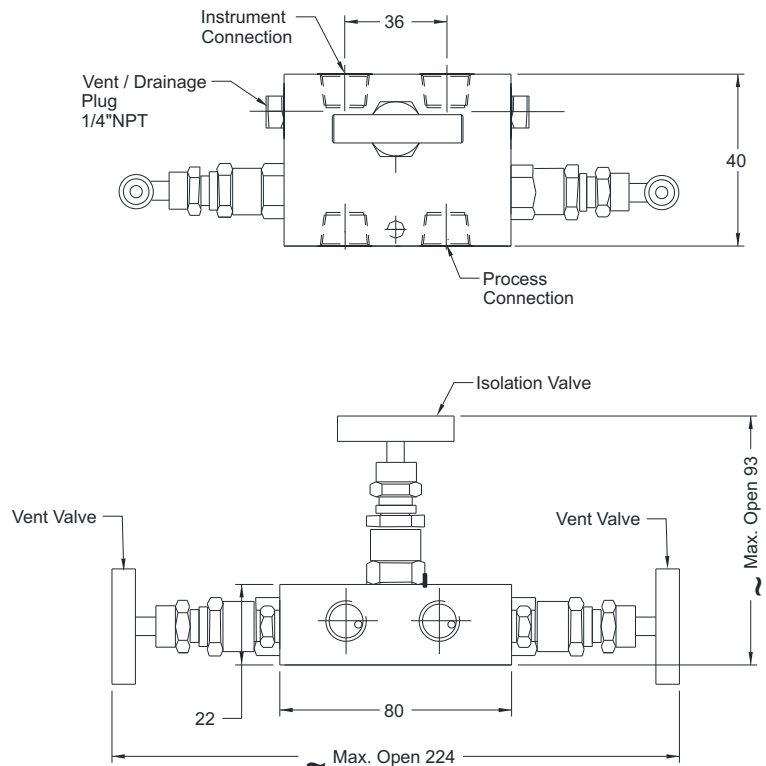
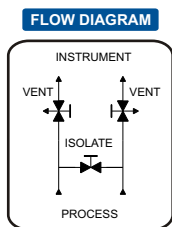
## DIMENSIONAL DRAWING

### Remote mount - Pattern 2



Note : The model comes without drain plugs.

### Remote mount - Pattern 3

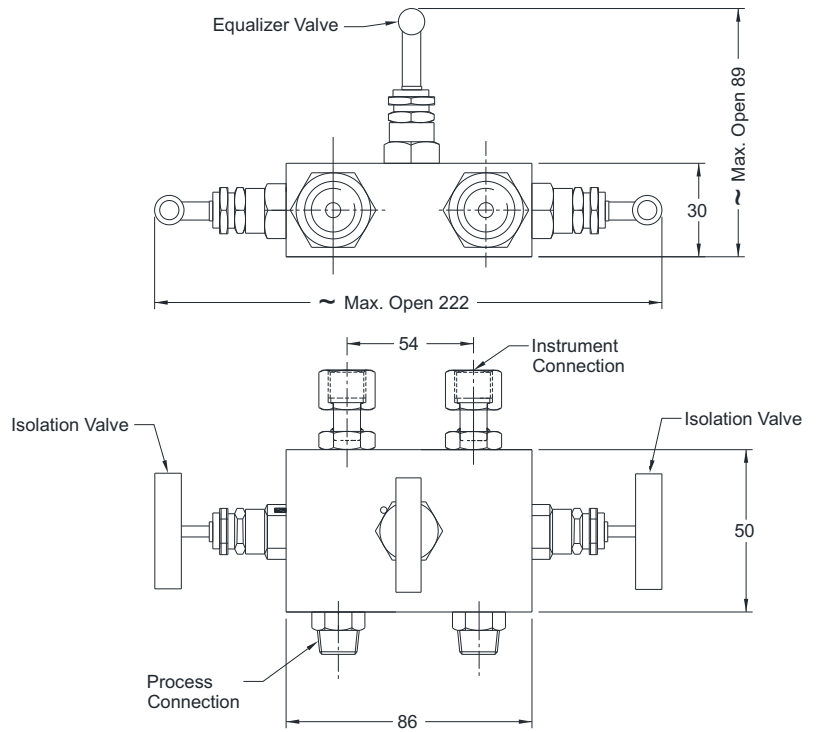
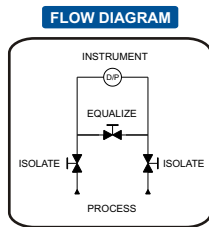


Note : Available as 1/4" NPT (F x F) connection only.

All dimensions are in mm.

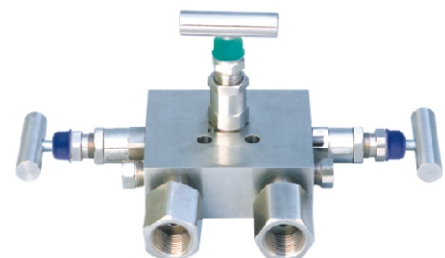
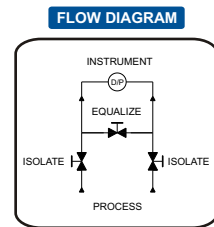
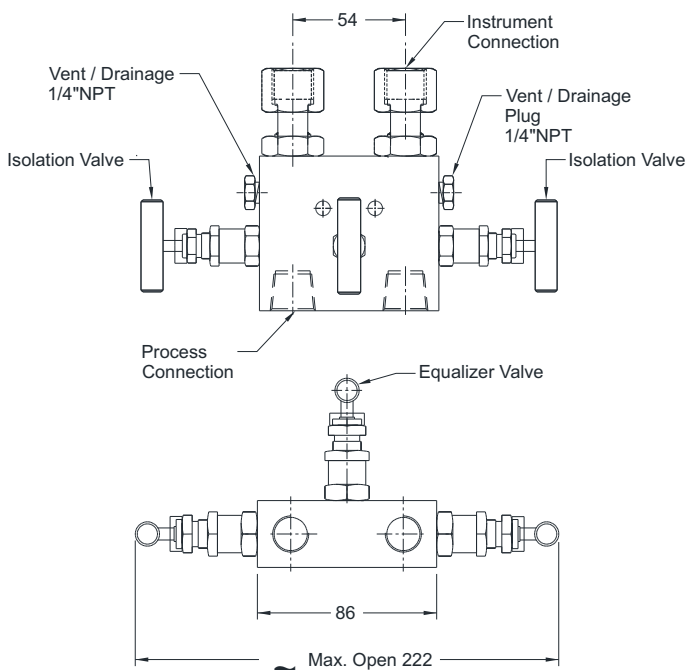
DIMENSIONAL DRAWING

Remote mount - Pattern 4



Note : The model comes without drain ports and with male process connections.

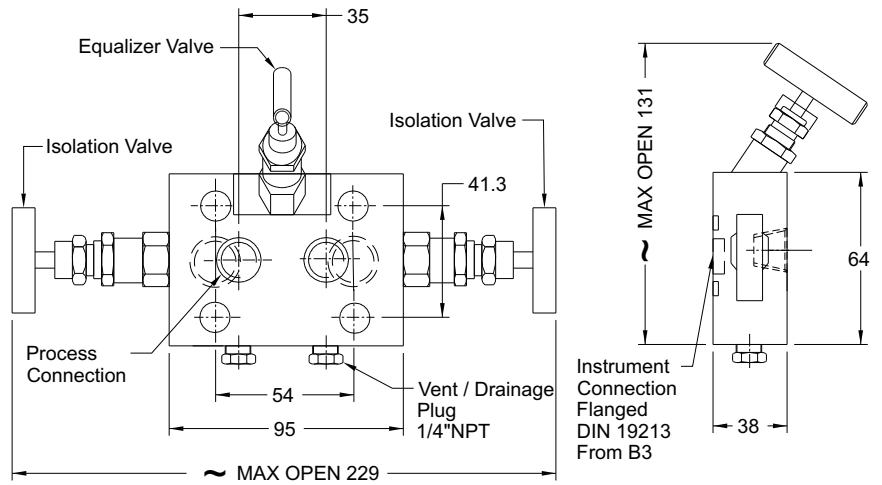
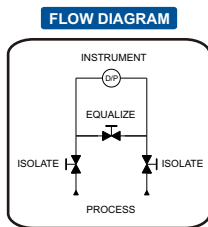
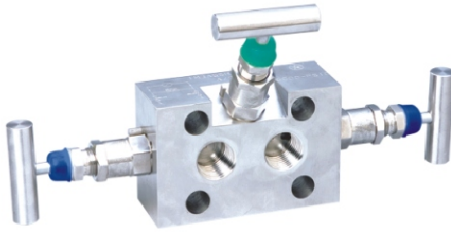
Remote mount - Pattern 5



All dimensions are in mm.

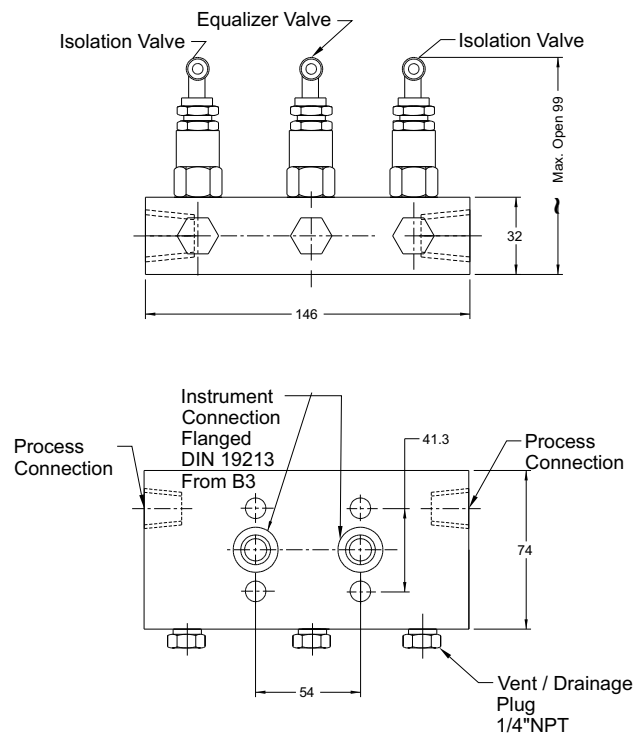
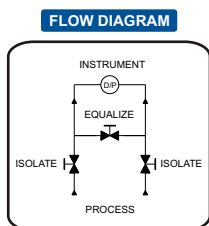
DIMENSIONAL DRAWING

Direct mount - Pattern 1



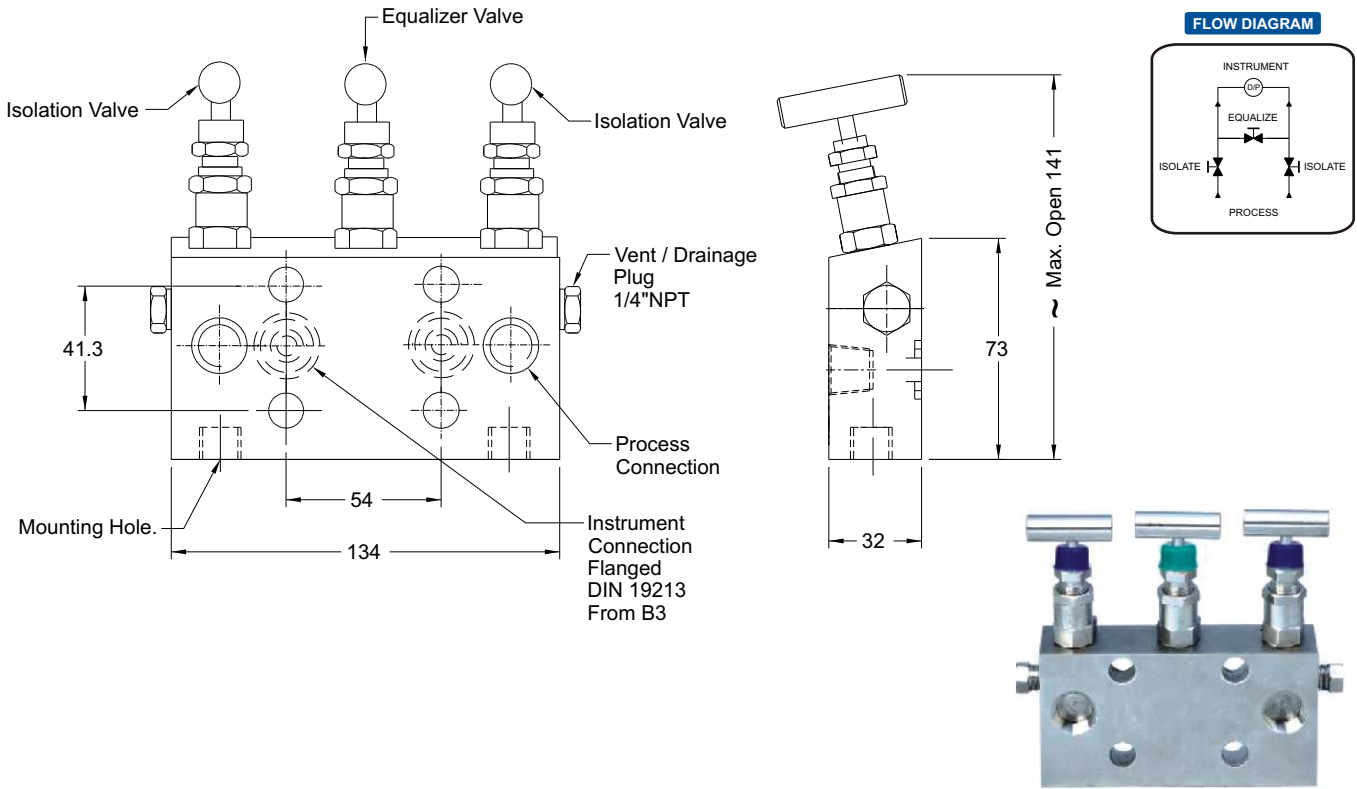
Note : The model comes without drain plugs.

Direct mount - Pattern 2

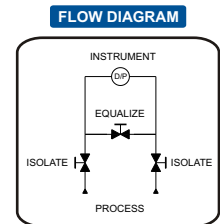


DIMENSIONAL DRAWING

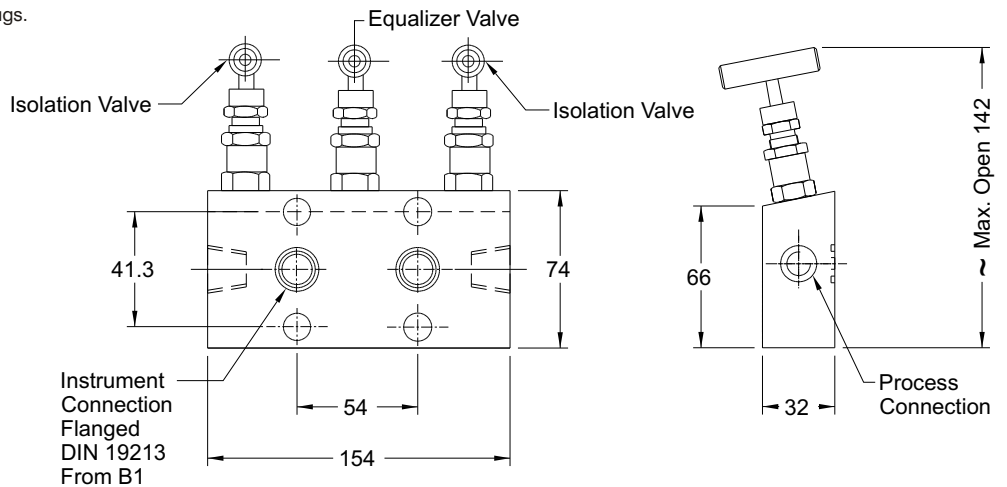
Direct mount - Pattern 3



Direct mount - Pattern 4



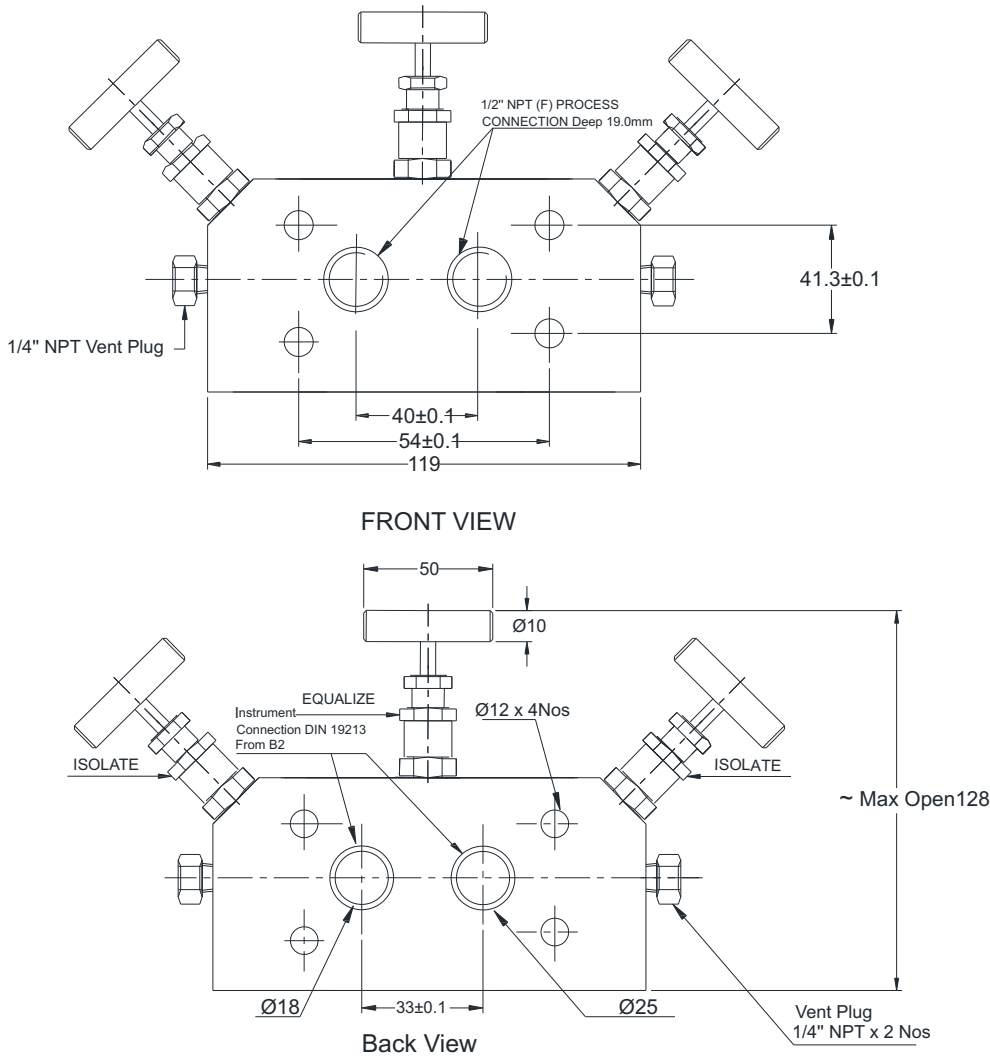
Note : The model comes without drain plugs.



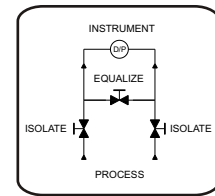
All dimensions are in mm.

## DIMENSIONAL DRAWING

### Direct mount - Pattern 5

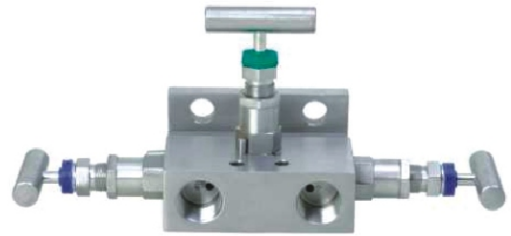
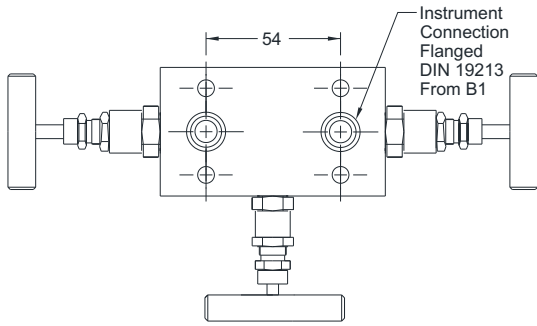
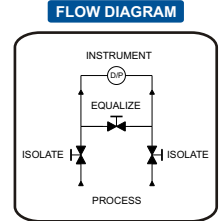
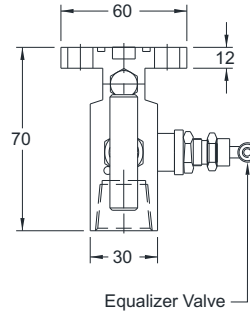
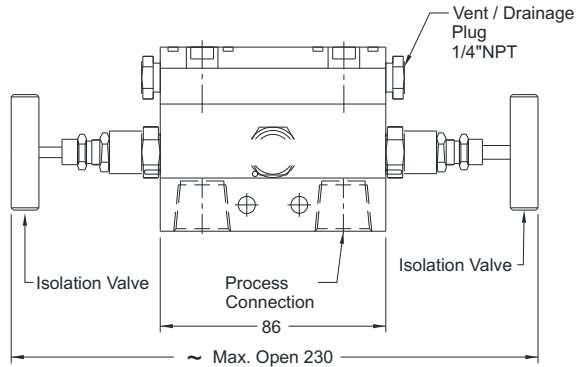


FLOW DIAGRAM

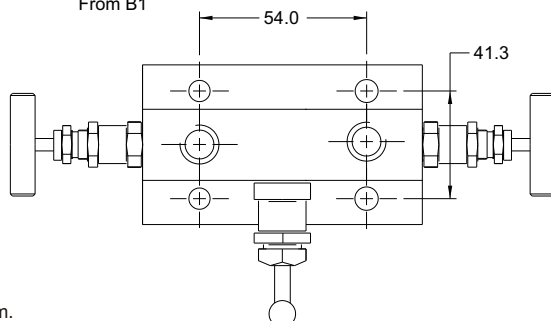
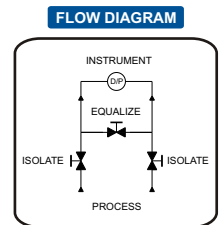
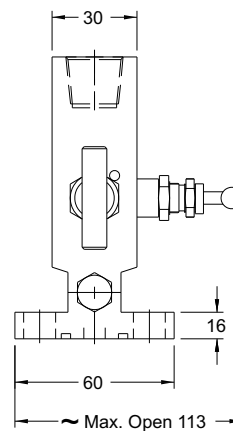
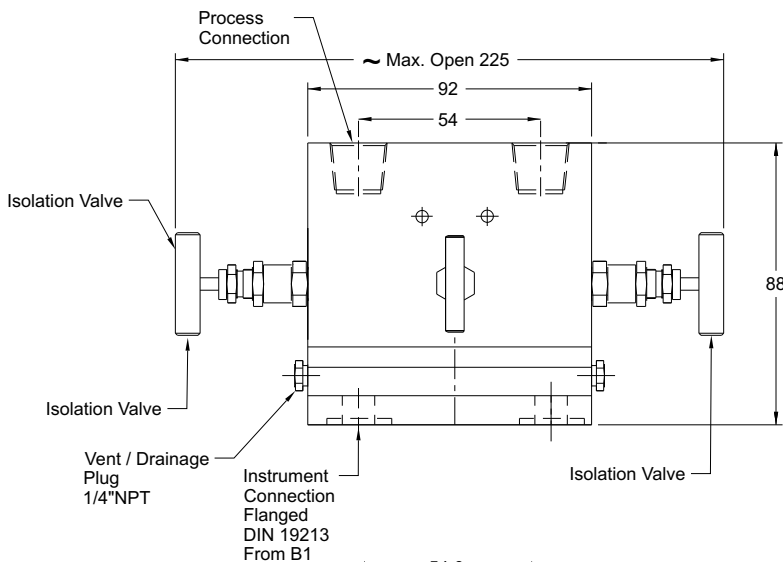


## DIMENSIONAL DRAWING

### Direct mount - Pattern 6



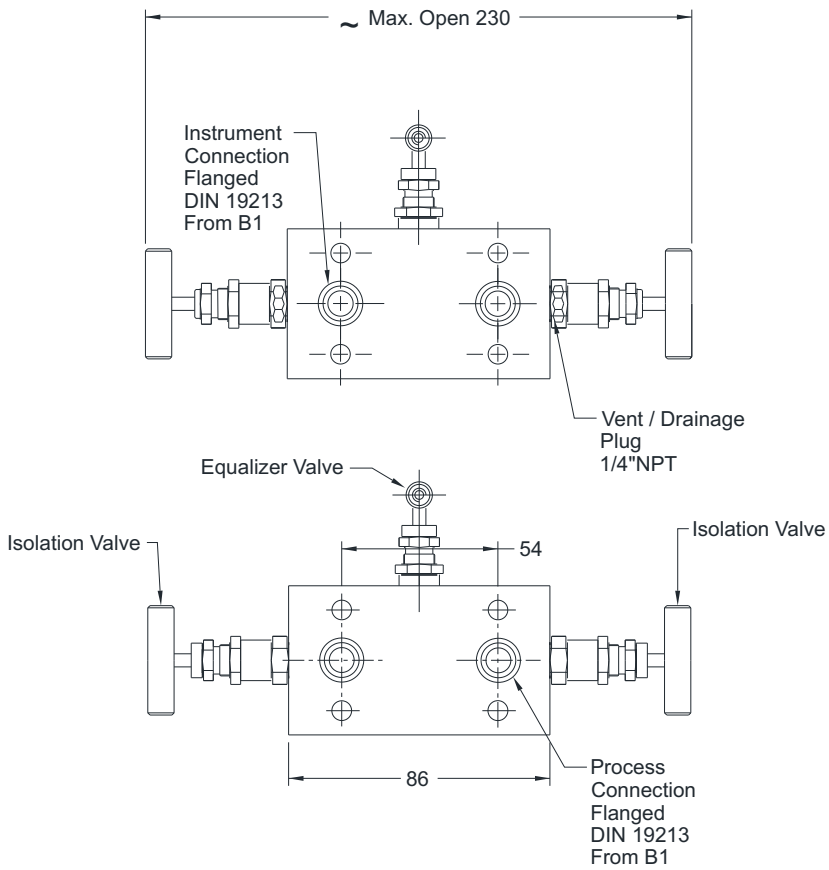
### Direct mount - Pattern 7



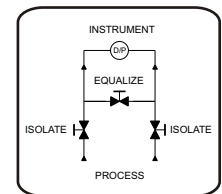
All dimensions are in mm.

## DIMENSIONAL DRAWING

### Direct mount - Pattern 8



### FLOW DIAGRAM



### APPLICABLE ACCESSORIES

- A502 Mounting Bracket, three/five valve manifold
- A506 Mounting bolts
- A507 Ring for flanged seal
- A508 Sealing gasket



## ORDERING CODES

### 1. MOUNTING

<b>D</b>	Direct
<b>R</b>	Remote

**R**

### 2. TYPE

<b>1</b>	Pattern 1	<b>2</b>	Pattern 2
<b>3</b>	Pattern 3	<b>4</b>	Pattern 4
<b>5</b>	Pattern 5	<b>6</b>	Pattern 6
<b>7</b>	Pattern 7	<b>8</b>	Pattern 8

**2**

### 3. WETTED PARTS

<b>MB</b>	Carbon Steel / ASTM A105
<b>MC</b>	AISI 304 SS
<b>MF</b>	AISI 316 SS
<b>MG</b>	AISI 316L SS
<b>MM</b>	Monel 400
<b>MN</b>	Monel K-500
<b>MO</b>	Hastelloy C-276

**MF**

### 4. INSTRUMENT CONNECTION

<b>11N</b>	1/8" NPT (M)
<b>12N</b>	1/4" NPT (M)
<b>13N</b>	3/8" NPT (M)
<b>14N</b>	1/2" NPT (M)
<b>11B</b>	1/8" BSP (M)
<b>12B</b>	1/4" BSP (M)
<b>13B</b>	3/8" BSP (M)
<b>14B</b>	1/2" BSP (M)
<b>01N</b>	1/8" NPT (F)
<b>02N</b>	1/4" NPT (F)
<b>03N</b>	3/8" NPT (F)
<b>04N</b>	1/2" NPT (F)
<b>01B</b>	1/8" BSP (F)
<b>02B</b>	1/4" BSP (F)
<b>03B</b>	3/8" BSP (F)
<b>04B</b>	1/2" BSP (F)
<b>FL5</b>	Flange (DIN 19213 Form B1)
<b>CL5</b>	Coplanar (DIN 19213 Form B2)
<b>FL6</b>	Flange (DIN 19213 Form B3)

**04N**

### 5. STEM PACKING

<b>P</b>	PTFE
<b>G</b>	Grafoil

**P**

### 6. PROCESS CONNECTION

<b>11N</b>	1/8" NPT (M)
<b>12N</b>	1/4" NPT (M)
<b>13N</b>	3/8" NPT (M)
<b>14N</b>	1/2" NPT (M)
<b>11B</b>	1/8" BSP (M)
<b>12B</b>	1/4" BSP (M)
<b>13B</b>	3/8" BSP (M)
<b>14B</b>	1/2" BSP (M)
<b>01N</b>	1/8" NPT (F)
<b>02N</b>	1/4" NPT (F)
<b>03N</b>	3/8" NPT (F)
<b>04N</b>	1/2" NPT (F)
<b>01B</b>	1/8" BSP (F)
<b>02B</b>	1/4" BSP (F)
<b>03B</b>	3/8" BSP (F)
<b>04B</b>	1/2" BSP (F)
<b>1SW</b>	1/8" Socket-Weld
<b>2SW</b>	1/4" Socket-Weld
<b>4SW</b>	1/2" Socket-Weld
<b>5SW</b>	3/4" Socket-Weld

**04N**

### 7. OTHER OPTIONS

<b>XY</b>	Circular Handle
<b>TN</b>	Tested to NACE standards
<b>TO</b>	Certification for Oxygen service
<b>TM</b>	Material test certificate 2.2
<b>TH</b>	Hydro test certificate
<b>TC</b>	Material test certificate 3.1
<b>XL</b>	Marking by laser

**XL**

**Ordering Example : M103-R-2-MF-04N-P-04N-XL**

#### NOTES:

1. Other connections are available, please contact factory for details.
2. Valve stem dust covers shall be identified with color codes according to their function as Blue = ISOLATE, Green = EQUALIZE & Red = DRAIN / VENT.
3. For option "F5 = Flange (DIN 19213 Form B1)", the CC distance shall be 54 mm.