

# Gauge Valves / Multi-Port Valves & Air Distribution Manifolds

## ***OV Series***

*Orifice valves 6,000 psi and 10,000 psi rated*

## ***GV Series***

*Multi-port gauge valves 6,000 psi and 10,000 psi rated*

## ***GPV Series***

*Rising plug multi-port gauge valves 6,000 psi and 10,000 psi rated*

## ***ADM-PRO™ Needle Valve Style***

*Air distribution manifolds rated up to 10,000 psi*

## ***NVDM Series***

*Integral needle valve distribution manifolds 6,000 psi and 10,000 psi rated*

## ***How to order the above***

*An explanation of the part numbering system*

# OV Series

## General Information

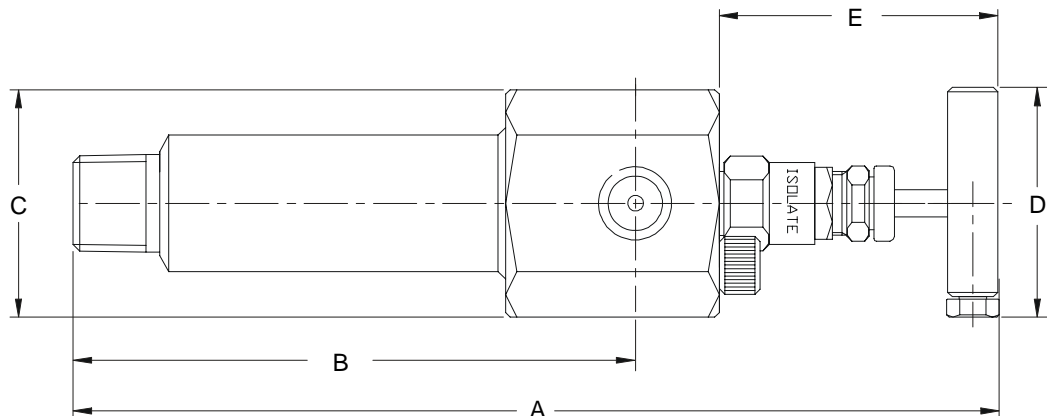
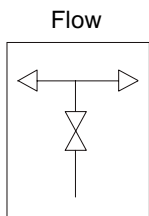
### 6,000 & 10,000 psi Rated

The OV series is an orifice or root valve used as a single pipeline sample / vent or for mounting in pairs across an orifice plate for extended interface of an instrument in a pipeline. The OV series single isolation valve utilises metal to metal seat and body to bonnet connection for superior, bubble tight sealing capabilities at both extreme pressures and temperatures. The OV series also offers non-rotating hardened tip for extended service life. The unique anti-vibration cam locking safety device at the body bonnet connection is for extra safety. Working pressures are 6,000 psi and 10,000 psi. Maximum working temperature up to 260°C and up to 570°C with GP option at reduced pressure. Can be supplied in welded or threaded connections.



## Design Features

- Temperature rating -50°C to 230°C (570°C with GP option).
- Unique bonnet locking cam.
- Ingress seal fitted as standard.
- 100 % Hydrostatic testing.
- Absolute flexibility.
- 2 piece non-rotating hardened (17-4PH) tip for first time seal.
- Repair / service kit available to extend field life further.
- Metal to metal body bonnet seal for high pressure and high temperature sealing.
- Bubble tight shut off.
- Positive no slack stem action.
- Full material traceability.
- Materials of construction can be supplied to meet the requirements of NACE MR-01-75 latest revision.



## Part Numbers

St/St Part No.	Connections Size	A (Open)	B	C	D	E	CV	KV	Weight (KGs)
OV4NS	1/2" NPT (M) inlet x 2 x 1/2" (F) outlets	203	110	50	50	61	0.75	0.65	1.1
OV6NS	3/4" NPT (M) inlet x 2 x 3/4" (F) outlets	203	110	50	50	61	0.75	0.65	1.2

For high pressure 10,000 psi version add "U" i.e. UOV4NS  
Packing materials: RTFE (standard) graphoil option -GP

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REF: AVCAT2K082

REV: 00

# GV Series



Note: shown with vent & blank plug (optional)

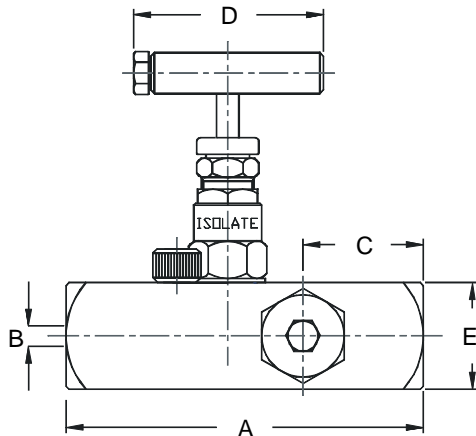
## General Information

### Multiport Gauge Valves 6,000 psi & 10,000 psi

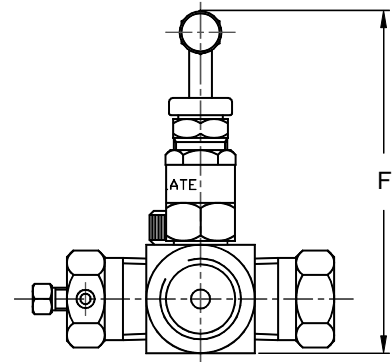
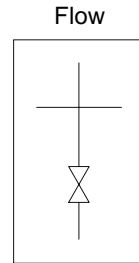
The GV series multiport gauge valve provides an economical method of mounting pressure gauges, manometers, pressure transducers or transmitters and includes vent and blanked port facilities or additional drains in a circuit or system. Both 1/2" and 3/4" have 1/2" side ports. Especially suited as a method of using a manometer and a sample manometer or a transmitter and manometer simultaneously. Compact 1/4" all around version available. Other options such as hand wheels and locking devices are available.

## Design Features

- 2-piece non-rotating hardened (17-4PH) tip for first time seal and long service life.
- Positive no slack stem action.
- Bubble tight, metal to metal seat for positive shut off.
- Unique bonnet locking cam.
- Metal to metal body bonnet seal for high pressure and high temperature sealing.
- Pressure responsive multi-ring / piston packing for compression and pressure dynamic sealing.
- 50mm and 100mm extended versions are available.
- Temperature rating -50°C to 230°C.
- Ingress seal fitted as standard to prevent crevice corrosion.
- Repair /service kits available to extend service life further.
- Full material traceability of major components.
- 100% Hydrostatic testing.
- Vent and blanking plugs available. Option VP-BP.
- Weld ends available (butt or socket type).
- Materials of construction can be supplied to meet the requirements of NACE MR-01-75.



Add -VP-BP for vent & blank plug.  
Shown with F x F connections and optional vent & blanking plugs.



Note: can be supplied with soft tip for bubble tight first time sealing on gas applications

## Part Numbers

St/St Part No.	Connections Size	A	B	C	D	E SQ.	F	CV	KV	Weight (kgs)
GV2NS	1/4" NPT MALE INLET 3 X 1/4" NPT FEMALE OUTLETS	84	5	24	50	25	86	0.3	0.26	0.4
GV4NS	1/2" NPT MALE INLET 3 X 1/2" NPT FEMALE OUTLETS	95	5	32	50	28	90	0.75	0.65	0.8
GV4NS-16MN	3/4" NPT MALE INLET 3 X 1/2" NPT FEMALE OUTLETS	95	5	35	50	32	93	0.75	0.65	0.8
GV6NS	3/4" NPT MALE X 3/4" NPT FEMALE AND 1/2" NPT SIDE PORTS	100	5	35	50	38	99	0.75	0.65	0.85

For 50mm extended male end add EXT50 i.e. GV4NS-EXT50  
For BSPT version change 'N' to 'T' i.e. GV4TS  
Packing materials: RTFE (standard) graphoil option -GP  
For 10,000 psi version add 'U' i.e. UGV4NS

Dims are in mm (Appx)

See technical section for important additional valve data.

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REF: AVCAT2K083

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# GVP Series

## General Information

### 6,000 & 10,000 psi

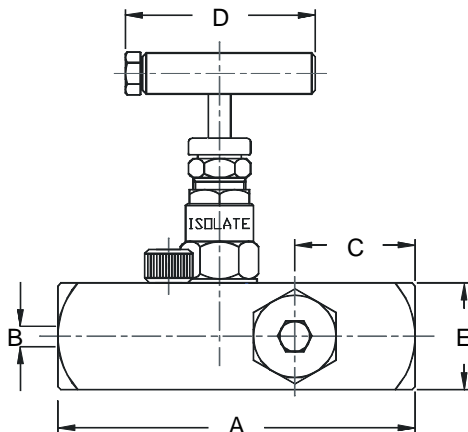
The "GVP" series multiport gauge valve provides an economical method of mounting pressure gauges, manometers, pressure transducers, or transmitters and including vent port facilities or additional drains in a circuit or system. Side ports are 1/2" NPT female as standard. Especially suited as a method of using a manometer and a sample manometer or a transmitter and manometer simultaneously. The "GVP" series rising plug multiport gauge valve offers bubble tight shut off high flow with accurate control, fully roddable clear bore, soft replaceable seat. Excellent for use with viscous materials at high pressure.



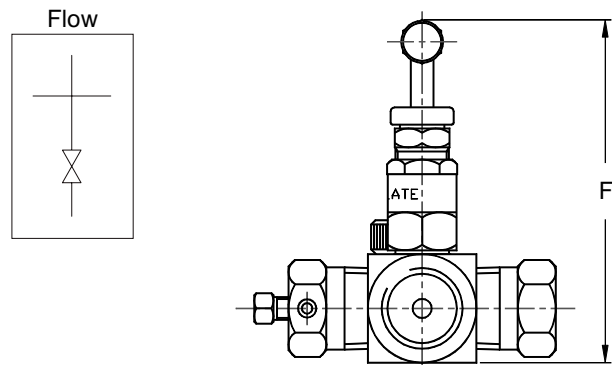
Note: shown with vent & blank plug (optional)

## Design Features

- Soft seat for bubble tight shut-off.
- Unique bonnet locking cam.
- Metal to metal body bonnet seal for high pressure and temperature use.
- Replaceable seat.
- Ingress seal fitted as standard.
- High flow rate with fine control.
- Handles viscous fluids easily with a large 7mm clear roddable bore.
- Temperature rating -60°C to 110°C
- Repair / service kit available to extend field life further.
- Vent and blanking plugs available. Option VP-BP.
- Full material traceability.
- 100% Hydrostatic testing.
- Materials of construction can be supplied to meet the requirements of NACE MR-01-75.
- 50mm and 100mm extended versions are available i.e. GVP4NS – Ext50 = 50mm Extended. GVP4NS – Ext100 = 100mm Extended.



Add -VP-BP for vent & blank plug, shown with F x F connections & optional vent plug



## Part Numbers

St/St Part No.	Connections Size	A	B	C	D	E	F	CV	KV	Weight (kgs)
GVP4NS	1/2" NPT MALE INLET 3 X 1/2" NPT FEMALE OUTLETS	114	5	38	50	32	93	0.75	0.65	0.8
GVP4NS-F	1/2" NPT FEMALE INLET 3 X 1/2" NPT FEMALE OUTLETS	114	5	38	50	32	93	0.75	0.65	0.8

For 50mm extended male end add EXT50 i.e. GVP4NS-EXT50  
For BSPT change 'N' to 'T' GVP4TS  
Packing materials: RTFE (standard) graphoil option -GP  
For 10,000psi version add 'U' i.e.UGVP4NS

Dims are in mm (Appx)

See technical section for important additional valve data.

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REF: AVCAT2K084

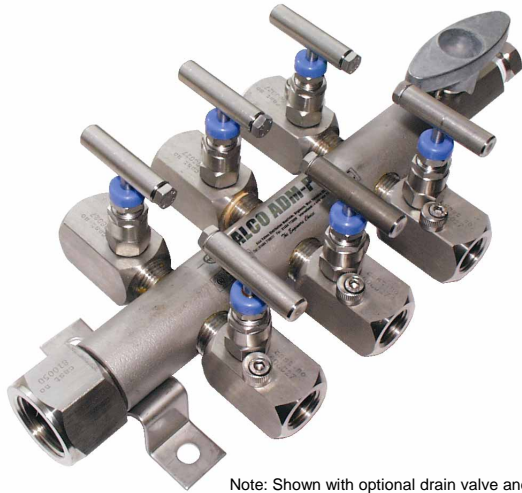
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# ADM-PRO™

## General Information

### Rated up to 10,000 psi

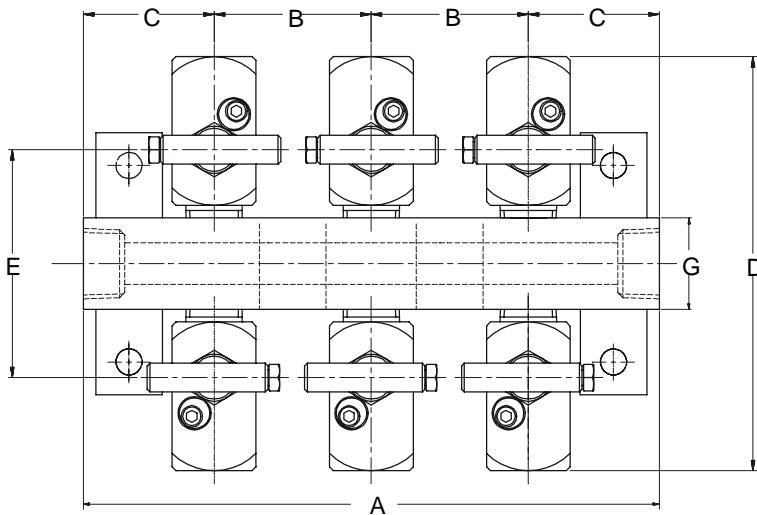
The economical ADM-PRO™ range of compact, air distribution manifolds come in our standard configuration (shown below) or to client specifications. ADM-PRO™ can be supplied with up to 40 take-off valves. Inlet and drain connections are threaded as standard however, can be made to your specification, this includes flanges i.e. 150 lbs. RF. or even socket / butt weld. Mounting legs are supplied as standard to make installation easier. Take off sizes can vary from 1/4" to 1" in size. Working pressures range from 750 psi version up to 10,000 psi. Other options such as hand wheels and locking devices can be supplied.



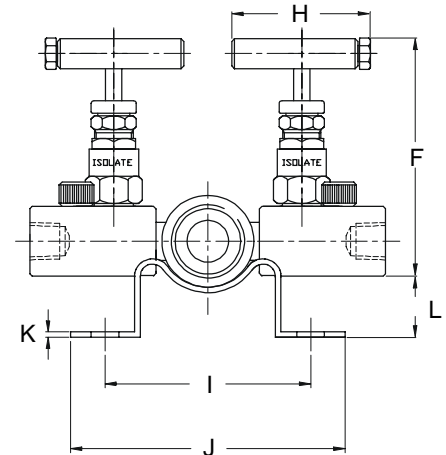
Note: Shown with optional drain valve and plug

## Design Features

- 2-piece non-rotating hardened (17-4PH) tip for first time seal and long service life.
- Bubble tight metal to metal seat for positive shut off.
- Positive no slack stem action.
- Unique bonnet locking cam.
- Metal to metal body bonnet seal for high pressure and high temperature use.
- Mounting legs as standard.
- Temperature rating -50°C to 230°C (570°C with GP option).
- Ingress seal fitted as standard.
- Repair / service kit available to extend field life further.
- Full material traceability.
- 100% Hydrostatic testing.
- Material of construction can be supplied to meet the requirements of NACE MR-01-75



Note: Inlet and drain is supplied threaded as standard. Please specify separately if valves are required.



Note: Various mounting brackets can be supplied - please specify at the time of ordering.

## Part Numbers

St/St Part No.	Connections Size	A	B	C	D	E	F	G	H	I	J	K	L	Weight (kgs)
ADM6-N4NS	3/4" Inlet / Outlet 6 x 1/2" NPT take offs	220	60	50	158	87	94	35	50	75	100	2	18	3.5

Packing materials: RTFE (standard) graphoil option -GP  
Locking device available:  
-LKT = All take off valves lockable  
-LKI = Inlet valve lockable  
-LKD = Drain valve lockable  
-LKA = All valves lockable

Dims are in mm (Appx)  
Sizes and dimensions will vary according to format valves used and specification.

See technical section for important additional valve data.

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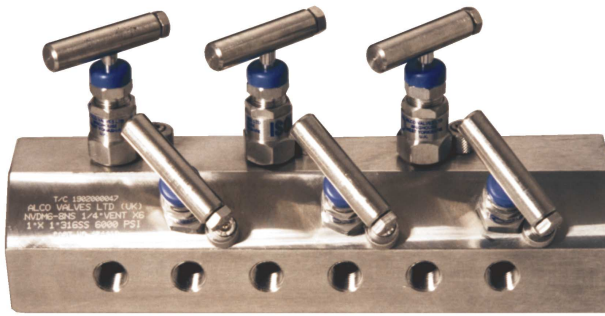
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REF: AVCAT2K085

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## General Information

### High Pressure Distribution Manifolds 6,000 psi & 10,000 psi Rated



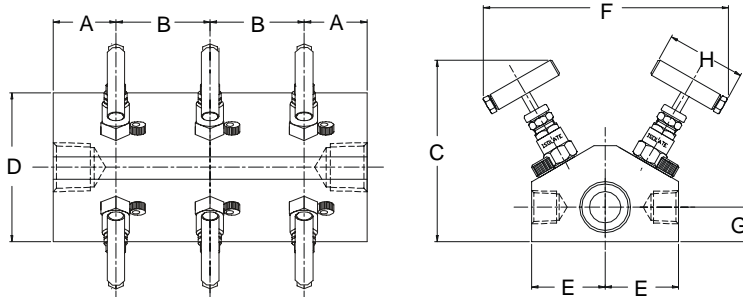
Note: version shown is type B - 6-way with 1/4" take offs

The Alco NVDM compact, integral needle valve type, high integrity distribution manifolds come in our standard configuration (shown below) or to client specifications. NVDM can be supplied with up to 20 take-off valves. Inlet and drain connections can be made to specification, this includes flanges i.e. 150 lbs. RF socket / butt weld, threaded or even compression type tube connectors. M10 base mounting holes are supplied as standard to make installation easier. Take off connections are 1/4" or 1/2" in size. Working pressures range from vacuum up to 6,000 psi & 10,000 psi. Valve orientations come in 3 formats type A, B or C for ease of use and maximise space envelope utilisation and operator access.

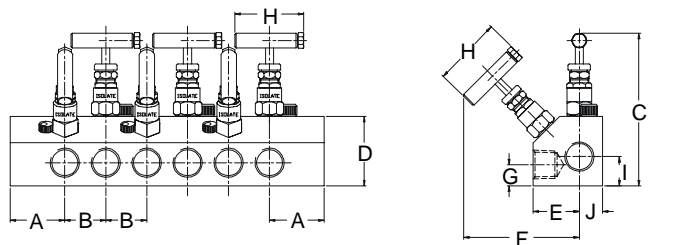
## Design Features

- Isolation valves have 2-piece non-rotating hardened (17-4PH) tips as standard.
- Bubble tight shut off.
- Positive no slack stem action.
- Unique bonnet locking cam on each valve.
- Metal to metal body bonnet seal for high pressure and high temperature use.
- Ingress seals fitted as standard.
- Many formats to suit your application.
- Maximum temperature 230°C (570°C with GP option).
- Base mounting holes to allow fixing to enclosure or mounting boss.
- Repair / service kit available to extend field life further.
- Full material traceability.
- 100% Hydrostatic testing.
- High Pressure (up to 10,000 psi).
- Material of construction can be supplied to meet the requirements of NACE MR-01-75.

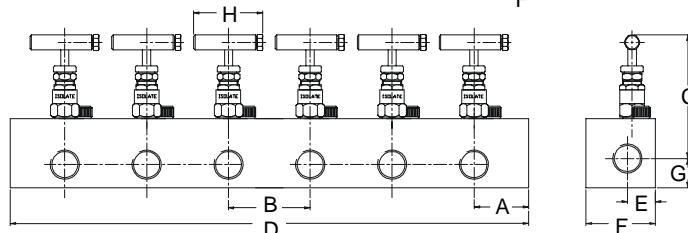
Type A  
(Double)



Type B  
(Angled)



Type C  
(Single)



Type A (Part No. NVDMA6-4NS)		Appx Weight
A	40	
B	60	
C	116	
D	95	
E	47	
F	156	
G	22	
H	50	
Type B (Part No. NVDMB6-4NS)		Appx Weight
A	40	
B	30	
C	112	
D	51	
E	34	
F	85	
G	15	
H	50	
I	21	
J	17	
Type C (Part No. NVDMC6-4NS)		Appx Weight
A	40	
B	60	
C	91	
D	380	
E	30	
F	51	
G	21	
H	50	

Dims are in mm (Appx)

Packing materials: RTFE (standard) graphoil (max 560°C) option -GP

See technical section for important additional valve data.

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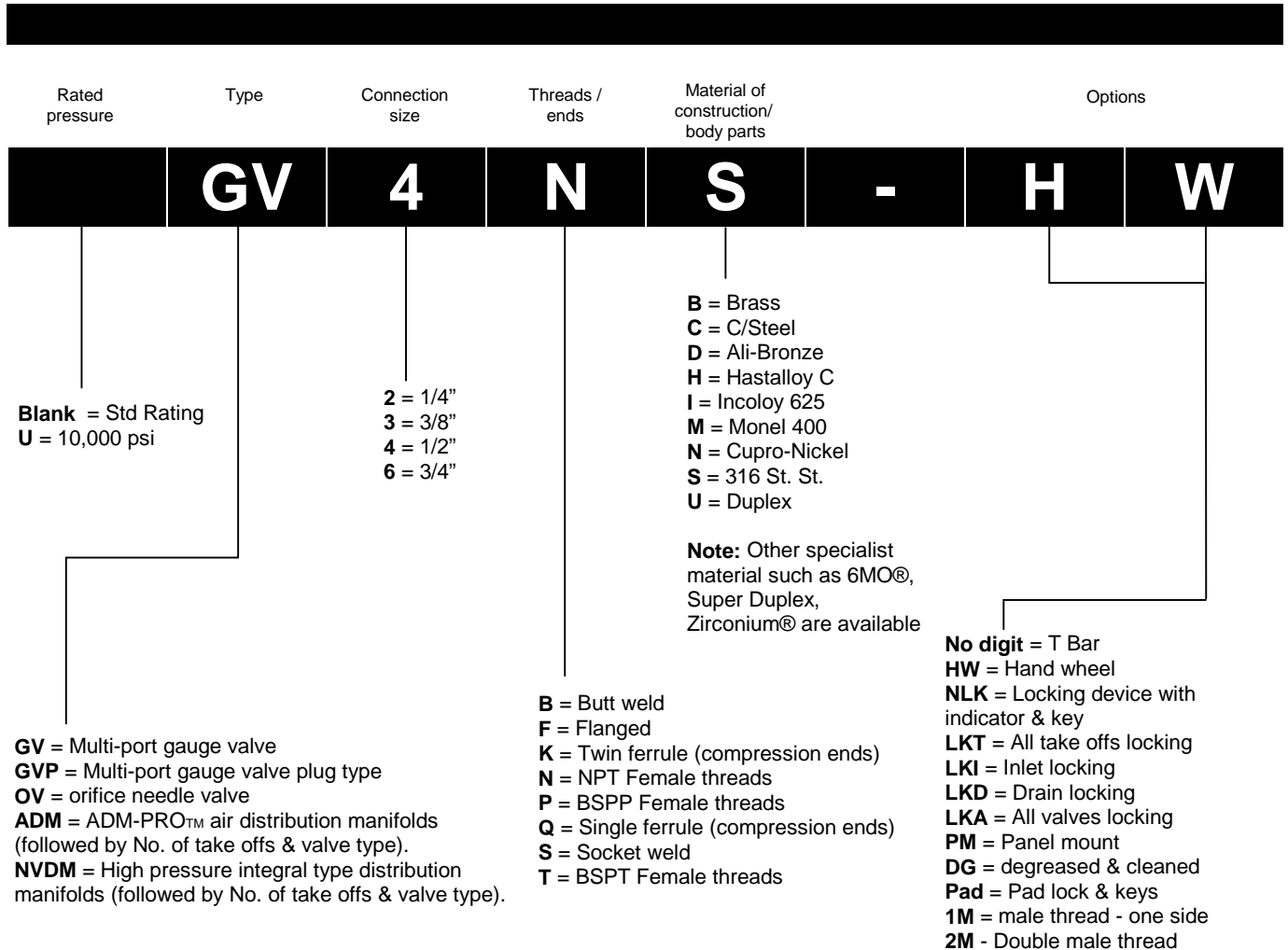
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# How to order gauge valves & Air Distribution Manifolds

Our part number system is made up of alphanumeric / generic code system as explained below.  
An example is :-

**Multi port gauge valves, 1/2" Male inlet x 1/2" NPT Female outlet with 2 x 1/2" NPT Female side ports. Constructed in 316 St/St. RTFE packing rated 6,000 psi complete with hand wheel.**

The part number shown below is made up using the system :-



**NOTE 1:** The pressure ratings quoted within our literature are maximum hydrostatic pressure ratings for the valves. Certain options available are the products / designs of other manufacturers, Alco Valves cannot accept any responsibility for these products unsuitability or failure in service.

**NOTE 2:** It is always advisable to refer to specific product literature or contact our technical sales department when ordering valves as some of these options are available only on certain styles of valves. Any special end connections such as compression ends or butt / socket weld may limit the rated working pressure of the valve or component supplied in accordance with the relevant specification of design or use of that method of connection. The valve or component will still carry the maximum working pressure markings in accordance with the valve or component design not the connection method as they vary.

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