

Valves & Valve Manifolds



VALVES AND VALVE MANIFOLDS

stablished in 1967, **GENERAL INSTRUMENTS CONSORTIUM** is an ISO 9001 certified company, involved in the manufacture of Valves, Valve Manifolds, Compression Tube Fittings & Special accessories for use in instrumentation, hydraulics, pneumatic, which cater to Oil and gum industries, Petrochemicals, Power generation, Agro genic and Vacuum applications.

Design and Materials

Engineered to the specific designs for low, medium and high pressure usage, The Valves & Manifold manufactured by General are available in a wide range of materiels. These materials are custom selected for the body, trim and seals to suit the pressure, temperatures and fluids in the process systems.

The materials used for manufacturing are based on ASTM / DIN / BS and other relevant standards depending upon the requirements of our clients. Most of the products manufactured are in stainless steel (ASTM 182 F 316, ASTM A 479 & ASTM A 276), Carbon Steel (ASTM A 105). Both the materials confirm to NACE MR01-75 for specified corrosive applications & requirements.

Special Valves are available in materials such as Monel, Hastealloy C, Titanium depending upon the specifications of the application for all the valves specified in the Catalogue, the full range of materials for both body and trim are available.

The gland seal material for the Valves & Manifolds are directly related to application service and the temperature. As a standard PTFE is used. For high Temperature above 180°C graphite asbetos and graphoil are used. For temperature above 270°C combination of graphite & graphoil are used.

GENERAL products are manufactured using latest art of technology. The products are machined for tolerance and compliance with International standards.

GENERAL is committed to ensure the highest quality of their products. Consequently all products undergo quality check at

every stage. This is achieved by the full fledged Quality Assurance Dept. equipped with all standard gauges and test jigs. We have a Quality assurance programme which is in line with the international standards.

Certificate - All valves & Manifolds are supplied with certificate of conformance for material, performance & type tests specified by our customers.

GENERAL offers a series of Manifolds Compact Piping and Control in lines involving pressure and differential pressure instruments. Manifold eliminates several parts used in the conventional method of piping with individual valves and adaptors resulting in costs saving. Their compact design reduces space requirements for operation and installation. Internal porting arrangements within the Manifold eliminates leakage points.

GENERAL Manifolds are available in 2, 3 and 5 Valve construction.

Two Valve Manifolds are used in pressure instruments such as pressure gauges, pressure transmitters, pressure switches, differential pressure gauges etc.

Three Valve and Five Valve Manifolds are used in differential pressure instruments such as differential pressure transmitters, differential pressure switches, differential pressure gauges etc. as well as level/flow transmitters.

Three Valve Manifolds are the most commonly used manifolds. They may be provided with test ports on the process sides and drain ports on the instrument side for drawing of the process and instrument lines respectively.

Five Valve Manifolds are normally used with differential pressure instruments where drain valves are required on the instrument sides. They are also used for flushing of the system and prevention of loss of expensive process fluid in the impulses.



GENERAL Manifolds are available in four different types of designs.

SEPARATELY MOUNTED MANIFOLDS (PIPE TO PIPE) meant for installation from the instrument and are usually connected by means of pipes or tubes, pipes and pipe fittings/tubes and tube fittings.

DIRECT MOUNTING 'T' TYPE MANIFOLDS(PIPE TO FLANGE) for the direct mounting on the instrument and screwed process connections.

DIRECT MOUNTING "H" TYPE (FLANGE TO FLANGE) Manifold for stacked assembly between the instrument and flanged process connection.

CO-PLANAR MANIFOLDS mounted directly on the instrument eliminating the adapter plate.

At the heart of the **GENERAL** Manifold is the design of the pressure sealing system for each of the valve which has the following advantages :

- The stem threads are rolled to reduce friction
- Stem threads are coated with silver teflon mixture to allow for smooth operation.
- The stem plug has swivelling design and is uniquely hardened to provide for wear resistance and long life.
- The pipe sealing system to prevent blowout of the stem and reduce gland leakage.

GENERAL Manifolds are available in variety of materials depending on the usage. The most common materials of construction are

- Carbon Steel ASTM A 105
- Stainless Steel ASTM 479/A182 F 304, F316, F304L, F316L and F321
- Cupro Nickel : Monel
- Inconel
- Hastealloy 'C'
- Titanium

GENERAL Manifolds are available in three specific designs.

- The standard design is with a case hardened swivelling stem plug suitable for most applications in low, medium and high pressure range.
- Where gas at high pressure is encounterable, eroddable swivelling plug with soft seat is preferred. The standard seat materials are reinforced PTFE, Delrin and PEEK.
- The thread design is for a case hardened ball plug in 316 Stainless Steel. Alternatively, Hastelloy, Monel, Inconel and Titanium manifolds have TungstenCarbide ball plug.
- All these designs are available in a standard thread above the seal so that stem threads are not subjected to process fluid.

The gland sealing arrangements used in **GENERAL** Manifolds vary with the temperature requirement. The most common material is PTFE for temperatures upto 180°C. For temperatures in the range 180°C to 270°C graphitized asbestos is a common gland seal material. Beyond 270°C and up to 540°C, graphoil is the standard use.

Note: Drawings, Dimensions and other information are subject to change without notice, as a part of our continued research and development.

Manifolds in Stainless Steel and Monel are also available with conformity to NACE MR 0175 for corrosion resistance.



Needle Valves Integral Bonnet Screwed Ends



Angle Needle Valves Screwed Bonnet Design



Needle Valves Integral Bonnet Double Ferrule Ends



Multi - Port Gauge Valves



Needle Valves Screwed Bonnet Design Female Ends



Needle Valves Screwed Bonnet Design Male x Female Ends

Single Block & Bleed

Gauge Valves



Needle Valves Screwed Bonnet Design Double Ferrule Tube Ends



Double Block & Bleed Gauge Valves



Adjustable Pressure

Gauge Snubber



Two Valve (three-way) Manifold for Pressure Instruments



Two Valve Manifold



Two Valve Manifold



Two Valve T Type Manifold for Pressure Instruments



Three Valve Manifold (separately Mounted)



Three Valve Manifold, Direct Mounting

Five Valve Manifold,

Remote Mounted Type



Three Valve Manifold, Direct Mounting -T Type With Vent Plugs



Five Valve Manifold, Direct Mounting



Three Valve Manifold, Direct Mounting -H Type



Five - Valve Manifold, Direct Mounting -T Type



Coplanar Mounting Three Valve Manifold With Drain Plugs



Five - Valve Manifold, Direct Mounting -H Type



Five Valve Manifold, Remote Mounted Type



Coplanar Mounting Five Valve Manifold







DESCRIPTION

Designed for use in applications for throttling purpose and straight shut off of liquids, gas or vapour service. These needle valves are available with a variety of end connections and stem packing.

Test Pressure	: @ 25°C Room Temperature Hydrostatic : Body - 620 bar Seat - 415 bar Pneumatic : Seat - 40 bar
Gland Packin	g : PTFE : Standard Graphoil : Temperatures above 1800 c
Material	: A 105, A 479 304, A 479 316, A182 GR F 316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural

CONNECTIONS

TUBE OD	Α	A1	В	С	D A/F	PART No.
1/4″/6mm	67.8	36.0	25	90	14	G4 NV-T/NV-T-6
5/16"/8mm	67.8	34.5	25	90	16	G5 NV-T/NV-T-8
3/8" / 10mm	70	35	25	90	17	G6 NV-T/NV-T-10
1/2" / 12mm	86.5	40.5	28	92	22	G8 NV-T/NV-T-12
3/4" / 20 mm	92	42	28	92	28.5	G12 NV-T/NV-T-20

Note: Bigger tube connections up to 1-1/2"/ 38 mm OD size available on request.

Needle Valves Integral Bonnet Double Ferrule Ends







DESCRIPTION

A compact needle valve especially designed for direct use with tubes through built-in double ferrule compression fittings. Ideal for stainless steel, copper monel tubes.

Test Pressure	: @ 25°C Room Temperature Hydrostatic : Body - 415 bar Seat - 280 bar Pneumatic : Seat - 40 bar
Gland Packing	: PTFE : Standard Graphoil : Temperatures above 180°C
Material	: A 479 304, A 479 316, A182 GR F 316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural

CONNECTIONS

SIZE	А	В	W	S 1	L	PART No.
1/8" O. D.	59	27	19	11	68	G2 NV - T - IB
1/4″ O. D.	59	27	19	14	68	G4 NV - T - IB-P
3/8″ O. D.	67	32	24	17	72	G6 NV - T - IB-P
1/2″ O. D.	72	27	28	22	75	G8 NV - T - IB-P
3/4" O. D.	123	73	32	28.5	120	G12 NV - T - IB-P
1″ O. D.	128	64	38	38.1	120	G16 NV - T - IB-P

Needle Valves Screwed Bonnet Design Female Ends







Designed for use in purpose applications for throttling and straight shut off of liquids, gas or vapour service. These needle valves are available with a variety of end connections and stem packing.

Test Pressure :	@ 25°C Room Temperature Hydrostatic: Body - 620 bar Seat - 415 bar Pneumatic: Seat - 40 bar
Gland Packing :	PTFE : Standard Graphoil : Temperatures Above 180°C
Material :	A 105, A 479 304, A 479 316, A182 GR F 316, Monel, Hastelloy
Finish :	CS zinc plated. SS Natural
CONNECTIONS	

CONNECTION	5
------------	---

A

SIZE		Α	В	С	PART No.	SIZE	Α	B	С	PART No.
1/4″	FNPT	56	25	89	G4 FNVN	1/4″BSP	56	25	90	G4 FNVR
3/8″	FNPT	56	25	89	G6 FNVN	3/8"BSP	56	25	90	G6 FNVR
1/2″	FNPT	65	28	90	G8 FNVN	1/2″BSP	65	28	92	G8 FNVR
3/4″	FNPT	65	32	110	G12 FNVN	3/4"BSP	65	32	92	G12 FNVR
]″	FNPT	80	42	113	G16 FNVN	1"BSP	80	42	100	G16 FNVR



Needle Valves Screwed Bonnet Design Male x Female Ends



MODEL NO:102NU 6000P91/99316 88.NO.05120001



DESCRIPTION

Designed for use in applications for throttling purpose and straight shut off of liquids, gas or vapour service. These needle valves are available with a variety of end connections and stem packing.

Test Pressure :	@ 25°C Room Temperature Hydrostatic : Body - 620 bar Seat - 415 bar Pneumatic : Seat - 40 bar
Gland Packing :	PTFE : Standard Graphoil : Temperatures above 1800 C
Material :	A 105, A 479 304, A 479 316, A182 GR F 316, Monel, Hastelloy
Finish :	CS zinc plated. SS Natural

CONNECTIONS

(INLET x OUTLET)	Α	В	С	PART No.
1/4"MNPT x 1/4"FNPT	60	25	90	G4 M/FNVN
1/4"MBSPx1/4"FBSP	60	25	90	G4 M/FNVR
1/2"MNPT x 1/4"FNPT	63	28	92	G8-4 M/FNVN
1/2"MNPT x 1/2"FNPT	65	28	92	G8 M/FNVN
1/2"MBSPx1/2"FBSP	65	28	92	G8 M/FNVR
3/4"MNPT x 1/2"FNPT	75	35	110	G12-8 M/FNVN
3/4"MBSPx1/2"FBSP	75	35	110	G12-8 M/FNVR
3/4"MNPT x 3/4"FNPT	70	32	95	G12 M/FNVN
3/4"MBSPx3/4"FBSP	70	32	95	G12 M/FNVR
1"MNPT x 1"FNPT	80	42	100	G16M/FNVN
1"MBSP x 1"FBSP	80	42	100	G16M/FNVR



Needle Valves Integral Bonnet Screwed Ends





DESCRIPTION

A compact needle type valve for isolation of lines, sampling, throttling & similar applications. The valve has screwed ends to be used with pipes & tubes.



Test Pressure	: @25°C Room Temperature Hydrostatic : Body - 415 bar Seat - 280 bar Pneumatic : Seat - 40 bar
Gland Packing	: PTFE : Standard Graphoil : Temperatures above 180°C
Material	: A 105, A 479 304, A 479 316, A182 GR F 316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural

CONNECTIONS

SIZE	Α	В	W	L	PART No.
1/8" FNPT	45	11	19	65	G2 FNVN-IB
1/4" FNPT	45	14	19	65	G4 FNVN-IB-P
3/8"FNPT	50	17	24	53	G6 FNVN-IB-P
1/2"FNPT	65	19	28	88	G8 FNVN-IB-P
3/4"FNPT	65	19	36	88	G12 FNVN-IB-P
1" FNPT	84	25	46	102	G16 FNVN-IB-P

Angle Needle Valves Screwed Bonnet Design



Model No. ANVN



DESCRIPTION

Designed for use in applications for throttling purpose and straight shut off of liquids, gas or vapour service. These needle valves are available with a variety of end connections and stem packing.

lest Pressure :	@ 25°C Room lemperature Hydrostatic : Body - 620 bar Seat - 415 bar
 Claud Packing	Pneumatic : Seat - 40 bar
	Graphoil : Temperatures Above 180°C
Material :	A 105, A 479 304, A 479 316, A182 GR F 316, Monel, Hastelloy
Finish :	CS zinc plated. SS Natural

CONNECTIONS

(INLET x OUTLET)	Α	В	С	D	PART No.
1/4"MNPT x 1/4"MNPT	44	39	29	116	G4 AMNVN
1/4"FNPT x 1/4"FNPT	44	39	29	115	G4 AFNVN
1/4"MNPT x 1/4"FNPT	44	39	29	115	G4 AM/FNVN
3/8"MNPT x 3/8"MNPT	44	39	29	116	G6 AMNVN
3/8"FNPT x 3/8"FNPT	44	39	29	115	G6 AFNVN
3/8"MNPT x 3/8"FNPT	44	39	29	115	G6 M/FNVN
1/2"MNPT x 1/2"MNPT	50	47	35	126	G8 AMNVN
1/2"FNPT x 1/2"FNPT	50	47	35	128	G8 AFNVN
1/2" MNPT x 1/2" FNPT	50	47	35	128	G8 AM/FNVN

Note: Also available with BSP and BSP taper thread connections bigger pipe connections on request.



Multi - Port Gauge Valves





DECOURTIC

DESCRIPTION

Multiport gauge valve is designed for giving the user flexibility in positioning of gauges or pressure switches. These valve can be supplied with vent valve and blanking plug separately.

Test Pressure	: @ 25°C Room temperature Hydrostatic : Body - 620 bar Seat - 415 bar Pneumatic : Seat - 40 bar
Gland Packing	: PTFE : Standard Graphoil : Temperatures above 180°C
Material	: A 105, A 479 304, A 479 316, A182 GR F 316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural
Ontional Items	· Plug at Outlet End · Drain / Vent Valve

CONNECTION

(INLET x OUTLET)	PART No.
1/2"MNPT x 1/2"FNPT	G8 MPV M/FN
1/2"FNPT x 1/2"FNPT	G8 MPV FN
3/4"MNPT x 1/2"FNPT	G12-8 MPV M/FN

Note: Also available with BSP and BSP taper threads.

Adjustable Pressure Gauge Snubber



Model No. PSAN

DESCRIPTION

The adjustable pressure gauge dampener draw a unique taper PIN / ORIFICE design for high range of dampening. The dampening can be adjusted to suit the fluid and the pulsation.

Test Pressure	: @ 25oC Room Temperature Hydrostatic : Body - 415 bar Seat - 280 bar Pneumatic : Seat - 40 bar
Gland Seal	: BUNA 'N', VITON
Material	: A 105, A 276 304, A 276 316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural

CONNECTION

(INLET x OUTLET)	PART No.
1/4"MNPT x 1/4"FNPT	G4 PSA - N
3/8"MNPT x 3/8"FNPT	G6 PSA - N
1/2"MNPT x 1/2"FNPT	G8 PSA - N
3/4"MNPT x 3/4"FNPT	G12 PSA - N
1/4"MBSPx1/4"FBSP	G4 PSA - R
3/8"MBSPx3/8"FBSP	G6 PSA - R
1/2"MBSPx1/2"FBSP	G8 PSA - R
3/4"MBSPx3/4"FBSP	G12 PSA - R

DRAIN VALVE

A compact miniature drain valve to be used with multiport valves and transmitters for draining or venting of instruments.

Size	Α	L	PART NO.
1/4"NPT	37.3	14.3	G4DVN
3/8"NPT	37.3	14.3	G6DVN
1/2"NPT	42.1	19.1	G8DVN
3/4"NPT	42.1	19.1	G12DVN



BSP ENDS

SR NO







OPTIONAL ITEM





Single Block & Bleed Gauge Valves

DESCRIPTION

Needle Valve with down stream vent for usage with Static Pressure Gauge and instrument installation for isolation and venting.

Test Pressure	: 25°C Room Temperature Hydrostatic : Body - 620 bars Seat - 415 bars Pneumatic : Seat - 40 bars
Gland Packing	: PTFE : Standard Graphoil : Temperatures above 180
Material	: A 105, A 479 304, A 479 316, A182 GR F 316, Monel, Hastelloy
Finish	: CS Zinc plated. SS Natural

CONNECTIONS

(INLET x OUTLET)	PART No.
1/2" MNPT x 1/2" MNPT	G8 GIV.M.N.D
1/2"MNPT x 1/2"FNPT	G8 GIV.M/F.N.D
1/2"FNPT x 1/2"FNPT	G8 GIV.F.N.D
3/4"MNPT x 1/2"FNPT	G12-8 GIV.M/F.N.D

Note: Also available with BSP and BSP Taper Pipe Threads bigger pipe connections on request.





www.generalinstruments.net

Double Block & Bleed Gauge Valves

272 Model No. 2 GIV



10.7















DESCRIPTION

Designed for use with Gauges, switches or Pressure Transmitter. These Gauge Valve incorporates Two-Valve with single outlet that combines isolation, calibration and venting.

Test Pressure :	@ 25°C Room Temperature Hydrostatic : Body - 620 bar Seat - 415 bar Pneumatic : Seat - 40 bar
Gland Packing	PTFE : Standard Graphoil : Temperatures above 180°C
Material :	A 105, A 479 304, A 479 316, A182 GR F 316, Monel, Hastelloy
Finish	CS zinc plated SS Natural

CONNECTIONS

(INLET x OUTLET)	PART No.
1/2"MNPT x 1/2"MNPT	G8-2 GIV. M.N.D
1/2"MNPT x 1/2"FNPT	G8-2 GIV.M/F.N.D
1/2"FNPT x 1/2"MNPT	G8-2 GIV.F/M.N.D
1/2"FNPT x 1/2"FNPT	G8-2 GIV.F.N.D
3/4"MNPT x 1/2"FNPT	G12-8-2 GIV.M/F.N.D

Note: Also available with BSP and BSP Taper Pipe Threads bigger pipe connections on request.

Two Valve (three-way) Manifold for Pressure Instruments





DESCRIPTION

Two valve manifold is designed in a single block with female screwed inlet and outlet ports combining isolation valve and calibration / vent valve. Generally used on static pressure transmitters, switches and gauges.

PROCESS PORT	GAUGE PORT	DRAIN PORT	Α	L1	L2
1/2" NPT(F)	1/2" NPT(F)	1/4" NPT(F)	70	98	110
1/2" NPT(F)	1/2" NPT(F)	1/2" NPT(F)	70	98	110
3/4" NPT(F)	3/4" NPT(F)	3/4" NPT(F)	70	98	110
1/2" BSP(F)	1/2" BSP(F)	1/2" BSP(F)	70	98	110
1/2" NBSW	1/2" NPT(F)	1/2" NPT(F)	70	98	110
3/4"NBSW	1/2" NPT(F)	1/2" NPT(F)	70	98	110

ANGLE TYPE II

GAUGE INLINE	WITH DRAIN/VEN	T AND PROCESS	A T RIG	HT A	NGLE
1/2" BSP(F)	1/2" NPT(F)	1/2" NPT(F)	70	98	110
3/4" NPT(F)	3/4" NPT(F)	3/4" NPT(F)	70	98	110
1/2" NBSW	1/2"NPT(F)	1/2" NPT(F)	70	98	110
3/4" NBSW	1/2" NPT(F)	1/2" NPT(F)	70	98	110

Test Pressure	: @ 25°C Room Temperature Hydrostatic : Body - 620 bar Seat - 415 bar Pneumatic : Seat - 40 bar
Gland Packing	: PTFE : Standard : GRAPHOIL: Temperatures above 180°C'
Material	: A 105, A 182 GR F 304, A 182 GR F 316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural
Option	: Drain plug. Three piece union for gauge positioning



OPTIONAL ITEM





Two Valve Manifold



Vent valve on top and isolation valve on side



DESCRIPTION

Two valve manifold is designed in a single block with female screwed inlet and outlet port combining isolation valve and calibration / vent valve. Generally used on static pressure transmitters, switches or gauges.

ISOLATION VALVE

Connections	: Process : 1/2″NPT (F) Instrument : 1/2″NPT (F) Drain/Vent : 1/4″ NPT (F), 1/2″NPT (F)
Test Pressure	: @ 25°C Room Temperature Hydrostatic : Body - 620 bar Seat - 415 bar Pneumatic : Seat - 40 bar
Gland Packing	g : PTFE : Standard : GRAPHOIL: Temperatures above 180°C
Material	: A 105, A 182 / A 479 GR F 304, A 182 / A 479 GR F316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural
Option	: Drain Plug. Three piece union for gauge positioning
Accessory	: Mounting Bolts - IS : 1364 - 1960 - 2 Nos

Two Valve Manifold



Isolation & vent valve opposed and drain on process side





DESCRIPTION

Two valve manifold is designed in a single block with female screwed inlet and outlet port combining isolation valve and vent / calibration valve . Generally used on static pressure transmitters, switches or gauges.

Connections	: Process : 1/2"NPT (F) Instrument : 1/2"NPT (F) Drain/Vent : 1/4" NPT (F)
Test Pressure	: @ 25°C Room Temperature Hydrostatic : Body - 620 bar Seat - 415 bar Pneumatic : Seat - 40 bar
Gland Packing	: PTFE : Standard : GRAPHOIL: Temperatures above 180°C
Material	: A 105, A 182 / A 479 GR F 304, A 182 / A 479 GR F316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural
Option	: Drain Plug. Three piece union for gauge positioning
Accessory	: Mounting Bolts - IS : 1364 - 1960

Two Valve "T" Type Manifold for Pressure Instruments



Model No.G2VMPF1





PROCESS





DESCRIPTION

Two valve manifold is designed in a single block with female screwed inlet and outlet port combining isolation valve and vent / calibration valve . Generally used on static pressure transmitters, switches or gauges.

Connections	: Process : 1/2″NPT (F) Instrument : Flanged Drain/Vent : 1/4″NPT (F)
Test Pressure	: @ 25°C Room Temperature Hydrostatic : Body - 620 bar Seat - 415 bar Pneumatic : Seat - 40 bar
Gland Packing	g : PTFE : Standard : GRAPHOIL: Temperatures above 180°C
Material	: A 105, A 182 GR F 304, A 182 GR F 316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural
Option	: Drain Plug
Accessory	: Mounting Bolts - IS : 1364 - 1960 - 2 Nos Interface seal - PTFE / VITON - 1 Nos

ISOLATION VALVE Three Valve Manifold (separately Mounted)



Manifolds

Valve on three sides with screwed connections





DESCRIPTION

Designed for applications to facilitate remote mounting of differential pressure instruments. Dimensions shown above are for the standard 54 mm or 2 1/8 inch instrument connection. Centre distance found in majority of instruments. The manifold is also available for instruments with other centre distances for instrument connections (as 55 mm, 56 mm and 57 mm) but dimensions shown will vary. Please consult us for these dimensions. Useful for installations in remote fields eliminating conventional method of piping.

Connections	: Process : 1⁄2″ NPT (F) Instrument : 1⁄2″ NPT (F) Drain/Vent : 1⁄4″ NPT (F)
Test Pressure	: @ 25°C Room Temperature Hydrostatic : Body - 620 bar Seat - 415 bar Pneumatic : Seat - 40 bar
Gland Packing	g : PTFE : Standard : GRAPHOIL: Temperatures above 180°C
Material	: A 105, A 182 GR F 304, A 182 GR F 316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural
Option	: Drain Port on instrument side with drain plug (Dimension 64 becomes 82) Test Port on process side with plug.
Accessory	: Mounting Bolts - IS : 1364 - 1960 - 2 Nos

EQUALIZER VAL



Model No.G3VMPF2

Three Valve Manifold, Direct Mounting

All valves on top, screwed process connections

DESCRIPTION

Designed for direct mounting on to standard differential pressure transmitters. This manifold block incorporates three valves, two main process isolation valves and one equalising valve.

This design is suitable where the straight valve may foul with the instrument and to provide ease of operation.

Dimensions shown above are for the standard 54 mm or 2 1/8 inch instrument connection Centre distance found in majority of instruments. The manifold is also available for instruments with other centre distances for instrument connections (as 55 mm, 56 mm and 57 mm) but dimensions shown will vary. Please consult factory for these dimensions.

Connections	: Process : ½" NPT (F) Instrument : Flanged Drain/Vent : ¼" NPT (F)
Test Pressure	: @ 25°C Room Temperature Hydrostatic : Body - 620 bar Seat - 415 bar Pneumatic : Seat - 40 bar
Gland Packing	g : PTFE : Standard : GRAPHOIL: Temperatures above 180°C
Material	: A 105, A 182 / A 479 GR F 304, A 182 / A 479 GR F316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural
Option	: Drain Port on instrument side with drain plug. Test Port on process side with plug.
Accessory	: Mounting Bolts - IS : 1364 - 1960 - 4 Nos Interface seal - PTFE / VITON - 2 Nos





Three Valve Manifold, Direct Mounting - T Type



Model No.G3 VMPF1

Screwed process and flanged instrument connection







DESCRIPTION

Designed for direct mounting on to standard differential pressure transmitters. This manifold block incorporates three valves, two main process isolation valves and one equalising valve.

Dimensions shown above are for the standard 54 mm or 2 1/8 inch instrument connection Centre distance found in majority of instruments. The manifold is also available for instruments with other centre distances for instrument connections (as 55 mm, 56 mm and 57 mm) but dimensions shown will vary. Please consult us for these dimensions.

Connections	: Process : 1/2" NPT (F) Instrument : Direct on instrument Drain/Vent : 1/4" NPT (F)
Test Pressure	: @ 25°C Room Temperature Hydrostatic : Body - 620 bar Seat - 415 bar Pneumatic : Seat - 40 bar
Gland Packing	g : PTFE : Standard : GRAPHOIL: Temperatures above 180°C
Material	: A 105, A 182 GR F 304, A 182 GR F 316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural
Accessories	: Two PTFE seal ring and four 7/16" UNF HI. Steel mounting bolts available on request.
Mounting Kit	: Mounting bracket with U bolts and necessary kits for fitting on 2"NB stanchion pipe stand or wall mount. (to be ordered seperately)
Option	: Drain Port on instrument side with drain plug. Test Port on process side with plug.
Accessory	: Mounting Bolts - IS : 1364 - 1960 - 4 Nos Interface seal - PTFE / VITON - 2 Nos

Three Valve Manifold, Direct Mounting - H Type



Model No.G3 VMFF1

Flanged instrument and process connection



DESCRIPTION

Designed for direct or remote mounting of differential pressure transmitters. For remote mounting two oval / kidney flanges are used for connecting process pipe to manifold block. The manifold block incorporate two main valves for process isolation and one valve for equalizing.

Dimensions shown above are for the standard 54 mm or 2 1/8 inch instrument connection Centre distance found in majority of instruments. The manifold is also available for instruments with other centre distances for instrument connections (as 55 mm, 56 mm and 57 mm) but dimensions shown will vary. Please consult us for these dimensions.

Connections	: Process : Flanged Instrument : Flanged Drain/Vent : 1/4" NPT (F)
Test Pressure	: @ 25°C Room Temperature Hydrostatic : Body - 620 bar Seat - 415 bar Pneumatic : Seat - 40 bar
Gland Packing	g : PTFE : Standard : GRAPHOIL: Temperatures above 180°C
Material	: A 105, A 182 GR F 304, A 182 GR F 316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural
Accessories	: Two PTFE seal ring and four 7/16" UNF HI. Steel mounting bolts available on request.
Mounting Kit	: Mounting bracket with U bolts and necessary kits for fitting on 2"NB stanchion pipe stand or wall mount. (to be ordered seperately)
Option	: Drain Port on instrument side with drain plug. Test Port on process side with plug.
Accessory	: Mounting Bolts - IS : 1364 - 1960 - 4 Nos Interface seal - PTFE / VITON - 2 Nos

Coplanar Mounting Three Valve Manifold With Drain Plugs

יהופהפה Model No. G3 VMC 1









DESCRIPTION

Designed as a new series of process instrument manifold for particular transmitter models. The coplanar manifold when assembled to transmitter has the advantage of compact size with ease for operation in minimum space, thereby eliminating several components in integrating the manifold to the transmitter. The coplanar manifold has two isolating valves, one equalizer valve and two vent ports duly plugged. The manifold dimensions illustrated are for standard 54 mm or 2 1/8 inch instrument centres but available for other centres. The direct mounting facility to the base of the differential pressure transmitter results in less leakage points and more accurate measurements.

Connections	: Process : ½" NPT (F) Instrument : Flanged Drain/Vent : ¼" NPT (F)
Test Pressure	: @ 25°C Room Temperature Hydrostatic : Body - 620 bar Seat - 415 bars Pneumatic : Seat - 40 bar
Gland Packing	g : PTFE : Standard : GRAPHOIL: Temperatures above 180°C
Material	: A 105, A 182 / A 479 GR F 304, A 182 / A 479 GR F316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural
Optional	: Test Port on process side with plug.
Accessory	: Mounting Bolts - IS : 1364 - 1960 - 4 Nos

Five Valve Manifold, Remote Mounted Type

General

Model No.G5 VMPP 1

Screwed connections



MAX. OPE

DESCRIPTION

Five Valve Manifold G5 VMPP-1 incorporate two process isolation valves, one equalizer valve and two drain/vent valves with separate connections in a compact manifold block. The Model G5 VMPP-1 is designed for remote mounting away from the differential pressure instrument and joined by tube or pipe impulse lines. They have threaded connections of which the most popular are detailed below but also available to suit other sizes and standards.

Dimensions shown above are for the standard 54 mm or 2 1/8 inch instrument connection. Centre distance found in majority of instruments. The manifold is also available for instruments with other centre distances for instrument connections (as 55 mm, 56 mm and 57 mm) but dimensions shown will vary. Please consult us for these dimensions.

Connections	: Process : 1/2" NPT (F) Instrument : 1/2" NPT (F) Drain/Vent : 1/4" NPT (F)
Test Pressure	: @ 25°C Room Temperature Hydrostatic : Body - 620 bars Seat - 415 bars Pneumatic : Seat - 40 bars
Gland Packing	g : PTFE : Standard : GRAPHOIL: Temperatures above 180°C
Material	: A 105, A 182 / A 479 GR F 304, A 182 / A 479 GR F316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural
Option	: Test Port on precess side with plug.
Accessory	: Mounting Bolts - IS : 1364 - 1960 - 2 Nos

Five Valve Manifold, Remote Mounted Type



Screwed process and Instrument connection -Drain in front









DESCRIPTION

Five Valve Manifold G5 VMPP- 2 incorporate two process isolation valves, two equalizer valve and one drain/vent valve with a common drain connection in a compact manifold block. The Model G5 VMPP 2 is designed for remote mounting away from the differential pressure instrument and joined by tube or pipe impulse lines. They have threaded connections of which the most popular are detailed below but also available to suit other sizes and Standards.

Dimensions shown above are for the standard 54 mm or 2 1/8 inch instrument connection Centre distance found in majority of instruments. The manifold is also available for instruments with other centre distances for instrument connections (as 55 mm, 56 mm and 57 mm) but dimensions shown will vary. Please consult us for these dimensions.

Connections	: Process : ½" NPT (F) Instrument : ½" NPT (F) Drain/Vent : ¼" NPT (F)
Test Pressure	: @ 25°C Room Temperature Hydrostatic : Body - 620 bar Seat - 415 bar Pneumatic : Seat - 40 bar
Gland Packing	g : PTFE : Standard : GRAPHOIL: Temperatures above 180°C
Material	: A 105, A 182 / A 479 GR F 304, A 182 / A 479 GR F316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural
Option	: Test Port on precess side with plug.
Accessory	: Mounting Bolts - IS : 1364 - 1960 - 2 Nos

Five Valve Manifold, Direct Mounting



Model No.G5 VMPF 2

Vent valves on side and rest on top, screwed process connection





DESCRIPTION

Five Valve Manifold Model G5 VMPF 2 is designed for direct mounting on differential pressure instruments. The manifold incorporates two process isolation valves, one equ alizer valve and two drain/vent valves with separate connections. The process connection is through threaded connections for tube or pipe assembly. The valves are suitably angled to prevent fouling with the instrument. Dimensions shown are for the standard 54 mm or 2 1/8 inch instrument connection centres but also available for other centres on request.

Connections	: Process : ½" NPT (F) Instrument : Flanged Drain/Vent : ¼" NPT (F)
Test Pressure	: @ 25°C Room Temperature Hydrostatic : Body - 620 bar Seat - 415 bar Pneumatic : Seat - 40 bar
Gland Packing	g : PTFE : Standard : GRAPHOIL: Temperatures above 180°C
Material	: A 105, A 182 / A 479 GR F 304, A 182 / A 479 GR F316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural
Option	: Test Port on precess side with plug.
Accessory	: Mounting Bolts - IS : 1364 - 1960 - 4 Nos Interface seal - PTFE / VITON - 2 Nos

Five - Valve Manifold, Direct Mounting - T Type



Screwed process and flanged instrument connection





DESCRIPTION

Five Valve Manifold Model "T" type Model G5 VMPF 1 is designed for direct mounting on differential pressure instruments. The manifold incorporates two process isolation valves, one equalizer valve and two drain/vent valves in a compact block. The process connection is threaded for connections by tube or pipe fittings. Dimensions shown are for the standard 54 mm or 2 1/8 inch centres for instrument and process connections but are available for other centres on request. Thread details shown are for standard popular sizes and available to suit other thread standards.

Connections	: Process : ½" NPT (F) Instrument : Flanged Drain/Vent : ¼" NPT (F)
Test Pressure	: @ 25°C Room Temperature Hydrostatic : Body - 620 bar Seat - 415 bar Pneumatic : Seat - 40 bar
Gland Packing	g : PTFE : Standard : GRAPHOIL: Temperatures above 180°C
Material	: A 105, A 182 GR F 304, A 182 GR F 316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural
Mounting Kit	: Mounting bracket with U bolts and necessary kits for fitting on 2"NB stanchion pipe stand or wall mount. (to be ordered separately)
Option	: Test Port on precess side with plug .
Accessory	: Mounting Bolts - IS : 1364 - 1960 - 4 Nos Interface seal - PTFE / VITON - 2 Nos

Five - Valve Manifold, Direct Mounting - H Type



Model No.G5 VMFF 1

Flanged instrument and process connection-drain port on one side optional test port at bottom





DESCRIPTION

Five - Valve Manifold Model G5 VMFF 1 is designed for direct or remote mounting of differential pressure transmitters. For remote mounting two oval / kidney flanges are used for connecting process pipe to manifold block. These manifold block incorporate five valves, two main valve for process isolation valve for vent two valves for equalizing.

Dimensions shown above are for the standard 54 mm or 2 1/8 inch instrument connection Centre distance found in majority of instruments. The manifold is also available for instruments with other centre distances for instrument connections (as 55 mm, 56 mm and 57 mm) but dimensions shown will vary. Please consult us for these dimensions.

Connections	: Process : Flanged Instrument : Flanged Drain/Vent : ¼″ NPT (F)
Test Pressure	: @ 25°C Room Temperature Hydrostatic : Body - 620 bar Seat - 415 bar Pneumatic : Seat - 40 bar
Gland Packing	: PTFE : Standard : GRAPHOIL: Temperatures above 180°C
Material	: A 105, A 182 GR F 304, A 182 GR F 316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural
Mounting Kit	: Mounting bracket with U bolts and necessary kits for fitting on 2"NB stanchion pipe stand or wall mount. (to be ordered separately)
Option	: Test Port on precess side with plug.
Accessory	: Mounting Bolts - IS : 1364 - 1960 - 4 Nos Interface seal - PTFE / VITON - 2 Nos

Coplanar Mounting Five Valve Manifold









DESCRIPTION

Five Valve Manifold Model G5 VMC 1 is designed as a new series of process instrument manifold for particular transmitter models. The coplanar manifold when assembled to transmitter has the advantage of compact size with ease for operation in minimum space, thereby eliminating several components in integrating the manifold to the transmitter. The coplanar manifold has two isolating valves, one equalizer valve and two vent valves and two bottom test ports duly plugged. The manifold dimensions illustrated are for standard 54 mm or 2 1/8 inch instrument centres but available for other centres. The direct mounting facility to the base of the differential pressure transmitter results in lesser leakage points and more accurate measurements.

Connections	: Process : 1/2" NPT (F) Instrument : Flanged Drain/Vent : 1/4" NPT (F)
Test Pressure	: @ 25°C Room Temperature Hydrostatic : Body - 620 bar Seat - 415 bar Pneumatic : Seat - 40 bar
Gland Packing	g : PTFE : Standard : GRAPHOIL: Temperatures above 180°C
Material	: A 105, A 182 / A 479 GR F 304, A 182 / A 479 GR F316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural
Optional	: Test Port on precess side with plug.
Accessory	: Mounting Bolts - IS : 1364 - 1960 - 4 Nos

Coplanar Mounting Five Valve Manifold









DESCRIPTION

UNENT SIDE ±0.1

Five Valve Manifold Model G5 VMC 2 is designed as a new series of process instrument manifold for particular transmitter models. The coplanar manifold when assembled to transmitter has the advantage of compact size with ease for operation in minimum space, thereby eliminating several components in integrating the manifold to the transmitter. The coplanar manifold has two isolating valves, one equalizer valve and two vent valves and two bottom test ports duly plugged. The manifold dimensions illustrated are for standard 54 mm or 2 1/8 inch instrument centres but available for other centres. The direct mounting facility to the base of the differential pressure transmitter results in lesser leakage points and more accurate measurements.

Connections	: Process : 1/2" NPT (F) Instrument : Flanged Drain/Vent : 1/4" NPT (F)
Test Pressure	: @ 25°C Room Temperature Hydrostatic : Body - 620 bar Seat - 415 bar Pneumatic : Seat - 40 bar
Gland Packing	g : PTFE : Standard : GRAPHOIL: Temperatures above 180°C
Material	: A 105, A 182 / A 479 GR F 304, A 182 / A 479 GR F316, Monel, Hastelloy
Finish	: CS zinc plated. SS Natural
Optional	: Test Port on precess side with plug.
Accessory	: Mounting Bolts - IS : 1364 - 1960 - 4 Nos



This is to certify that the Management Systems of

Gauges Bourdon (India) Pvt. Ltd. (Manufacturing Unit of General Instruments Consortium)

> Gauges Bourdon (India) Pvt. Ltd.4,5,6, Jawahar Co-operative Industrial Estate,Kamothe,Panvel 410 209.

have been assessed by International Certifications and found to comply with the requirements of

ISO 9001:2000

Quality Management Standard

Atoms

Managing Director



Issue Date: Expriy Date: 2869 19 September 2005 31 August 2008

Scope of Registration: Manufacturing & supply of Pressure Gauges, Diaphragm seals, Capsule Gauges, Pressure Switches, Manifold Valves, Snubbers, Syphons & Accessories. Differential Pressure Gauges, Absolute Pressure Gauges and also Gauge Calibration Services.



I15269.05

Certificate Number

Issued by Corporate Office International Certifications Ltd. Auckland New Zealand



Accreditation by the Joint Accreditation System of Australia and New Zealand ACC No. S1400594NA

AX /



General INSTRUMENTS CONSORTIUM

Head Office: 194/195, Gopi Tank Road, Mahim, Mumbai - 400016.
Tel: 022-24454387, 24449177 Fax: 24449123, 24463507
E-mail: sales@generalinstruments.net, Website: www.generalinstruments.net

Branches:

BANGALORE: B Wing,1005, 10th Floor, Mittal Tower, M G Road - 560001 Telefax: 080-51510945 E-mail: gicbangalore@generalinstruments.net CHENNAI: 7, Block AD, II Avenue, Annanagar - 600040 Ph: 044-26211763 Fax: 26203910 E-mail: gicchennai@generalinstruments.net GOA: D-2/5, Mapusa Industrial Estate, Mapusa - 403507 Ph: 0832-2262610 Fax: 2262814 E-mail: sales@generalinstruments.net KOLKATA: Unit No. 4, 18, Rabindra Sarani, Poddar Court - 70001 Ph: 0091-9339144886(M) E-mail: gickolkata@generalinstruments.net NEWDELHI: 511, Eros Apartments, 56, Nehru Place - 110019 Ph: 011-51607463, 26433201 Fax: 51607464 E-mail: gicbaroda@generalinstruments.net VADODARA: 715, Yashkamal Building, Tilak Road - 390005 Ph: 0265-2225192 Telefax: 2362475 E-mail: gicbaroda@generalinstruments.net