Intstrumentation

VALVES

MET-LOK
HYDRO PNEUMATIC
KISH

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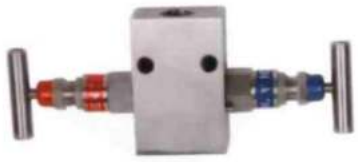
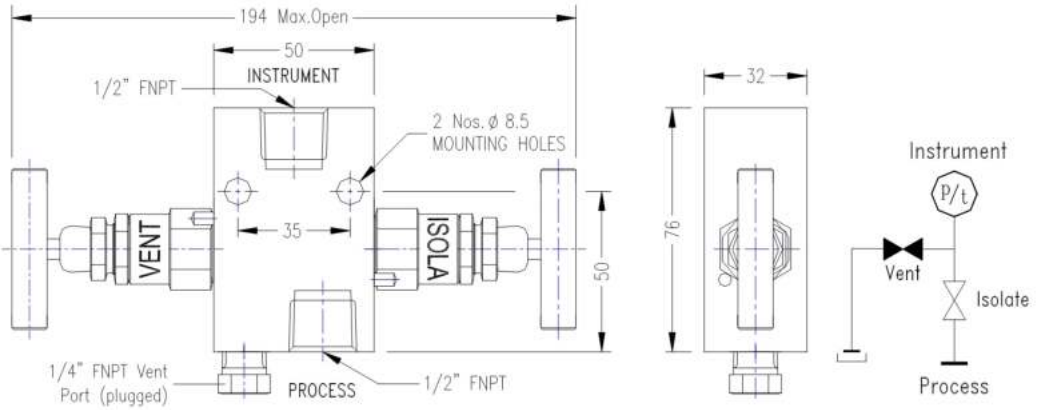
Specifications

Model	M2 - V
Type :	Two Valve Manifold, Remote Mount - Vertical port inlet , outlet and bottom vent / test connections.
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
PTFE :	6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
Graphoil :	6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Thread Size Range:	1/4" - 1/2" NPT (Standard), BSP-Taper / Parallel.
Connections :	Process x Instrument x Vent
	1/2" FNPT x 1/2"FNPT x 1/4" FNPT
Features :	Two valve manifolds combines an isolation, calibration, test and venting of instruments in a single block. By incorporating all these functions, considerable material and installation cost saving will be made. The manifold is designed for use with pressure transmitters, pressure gauges, pressure switches and similar pressure measurement equipment. Mounting holes are provided for two 5/16" bolt (not supplied).
Notes :	All valves are 100% pressure tested.
	Vent port fitted with a plug as standard.
	0.187-inch (4.8 mm) diameter orifice.
	Valve Cv - 0.52 maximum.
	Carbon Steel valves are zinc plated and dichromated.
	Stainless Steel valves have natural finish.
	Approximate. valve weight - 1.0 kg

For Ordering please refer our Ordering Information.

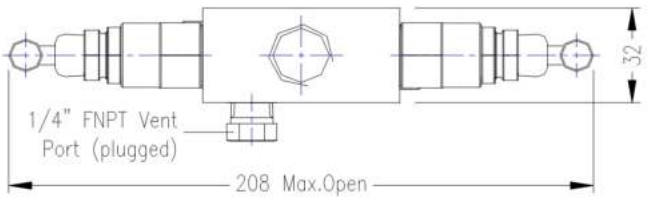


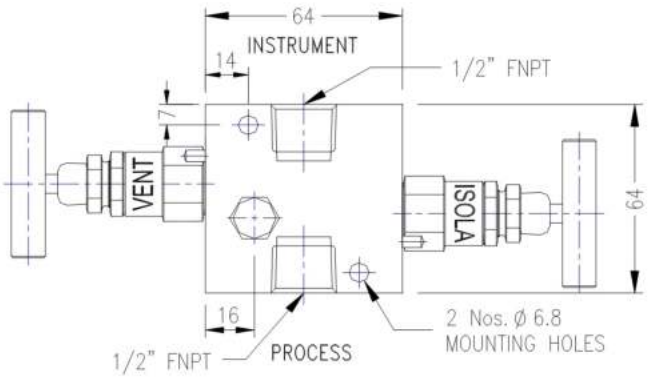


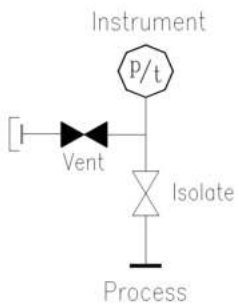
Specifications

Model	M2 - VF
Type :	Two Valve Manifold, Remote Mount - Vertical port inlet , outlet and front vent / test connections.
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
	PTFE : 6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
	Graphoil : 6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Thread Size Range :	1/4" - 1/2" NPT (Standard), BSP-Taper / Parallel.
Connections :	Process x Instrument x Vent
	1/2" FNPT x 1/2"FNPT x 1/4" FNPT
Features :	Two valve manifolds combines an isolation, calibration, test and venting of instruments in a single block. By incorporating all these functions, considerable material and installation cost saving will be made. The manifold is designed for use with pressure transmitters, pressure gauges, pressure switches and similar pressure measurement equipment. Mounting holes are provided for two 1/4" bolts (not supplied).
Notes :	All valves are 100% pressure tested.
	Vent port fitted with a plug as standard.
	0.187-inch (4.8 mm) diameter orifice.
	Valve Cv - 0.52 maximum.
	Carbon Steel valves are zinc plated and dichromated..
	Stainless Steel valves have natural finish.
	Approximate valve weight - 1.0 kg.

For Ordering please refer our Ordering Information.



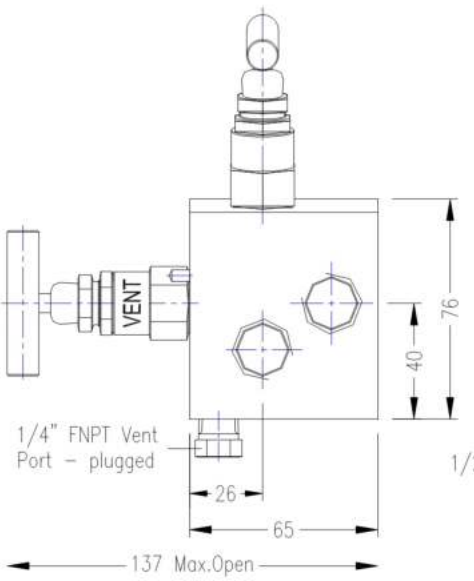


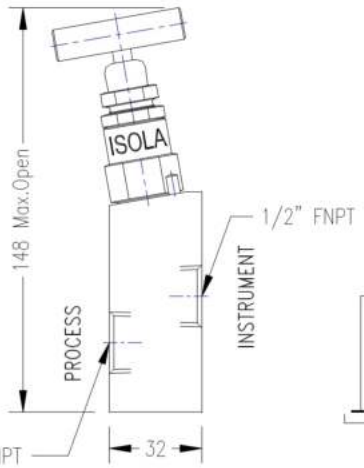


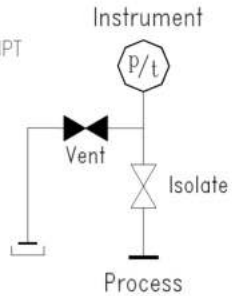
Specifications

Model	M2 - AZ
Type :	Two Valve Manifold, Angle Remote Mount - Horizontal port inlet, outlet and bottom vent / test connections.
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temp erature Rating
PTFE :	6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
Graphoil :	6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Thread Size Range :	1/4" - 1/2" NPT (Standard), BSP-Taper / Parallel
Connections :	Process x Instrument x Vent
	1/2" FNPT x 1/2"FNPT x 1/4" FNPT
Features :	Two valve manifolds combines an isolation, calibration, test and venting of instruments in a single block. By incorporating all these functions, considerable material and installation cost saving will be made. The manifold is designed for use with pressure transmitters, pressure gauges, pressure switches and similar pressure measurement equipment.
Notes :	All valves are 100% pressure tested.
	Vent port fitted with a plug as standard.
	0.187-inch (4.8 mm) diameter orifice.
	Valve Cv - 0.52 maximum.
	Carbon Steel valves are zinc plated and dichromated.
	Approximate. valve weight - 1.3 kg

For Odering ple ase refer our Ordering Informati on.

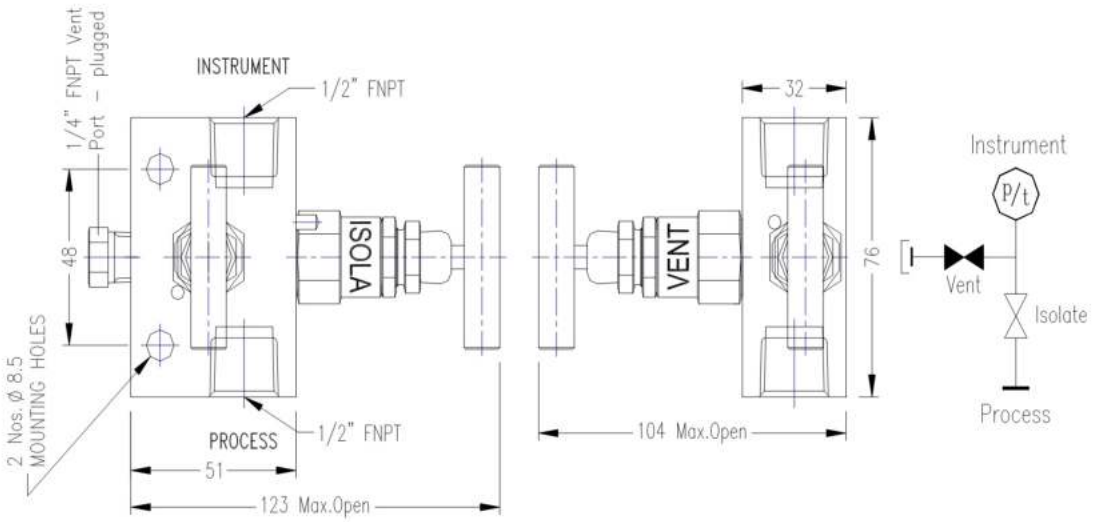






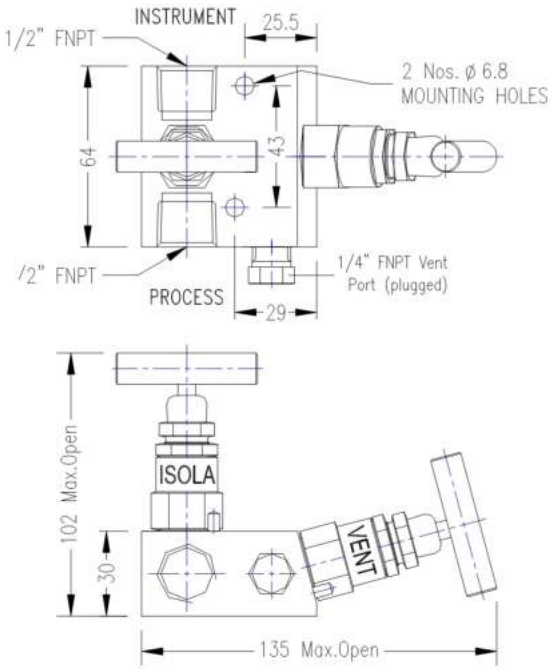
Specifications

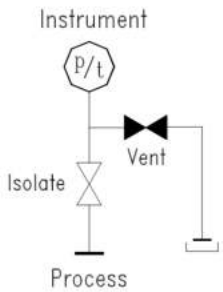
Model	M2 - L
Type :	Two Valve Manifold, Remote Mount - Horizontal or Vertical port inlet , outlet and vent / test connections.
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
PTFE :	6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
Graphoil :	6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Thread Size Range :	1/4" - 1/2" NPT (Standard), BSP-Taper / Parallel.
Connections :	Process x Instrument x Vent
	1/2" FNPT x 1/2"FNPT x 1/4" FNPT
Features :	Two valve manifolds combines an isolation, calibration, test and venting of instruments in a single block. By incorporating all these functions, considerable material and installation cost saving will be made. The manifold is designed for use with pressure transmitters, pressure gauges, pressure switches and similar pressure measurement equipment. Mounting holes are provided for two 5/16" bolts (not supplied).
Notes :	All valves are 100% pressure tested.
	Vent port fitted with a plug as standard.
	0.187-inch (4.8 mm) diameter orifice.
	Valve Cv - 0.52 maximum.
	Carbon Steel valves are zinc plated and dichromated..
	Stainless Steel valves have natural finish.
	Approximate. valve weight - 1.0 kg
For Ordering	please refer our Ordering Information.



Specifications

Model	M2 - AL
Type :	Two Valve Manifold, Angle Remote Mount - Horizontal or Vertical port inlet , outlet and vent / test connections.
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
PTFE :	6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
Graphoil :	6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Thread Size Range :	1/4" - 1/2" NPT (Standard), BSP-Taper / Parallel.
Connections :	Process x Instrument x Vent
	1/2" FNPT x 1/2"FNPT x 1/4" FNPT
Features :	Two valve manifolds combines an isolation, calibration, test and venting of instruments in a single block. By incorporating all these functions, considerable material and installation cost saving will be made. The manifold is designed for use with pressure transmitters, pressure gauges, pressure switches and similar pressure measurement equipment. Mounting holes are provided for two 1/4" bolts (not supplied).
Notes :	All valves are 100% pressure tested.
	Vent port fitted with a plug as standard.
	0.187-inch (4.8 mm) diameter orifice.
	Valve Cv - 0.52 maximum.
	Carbon Steel valves are zinc plated and dichromated.
	Approximate. valve weight - 1.0 kg
For Ordering	please refer our Ordering Information.

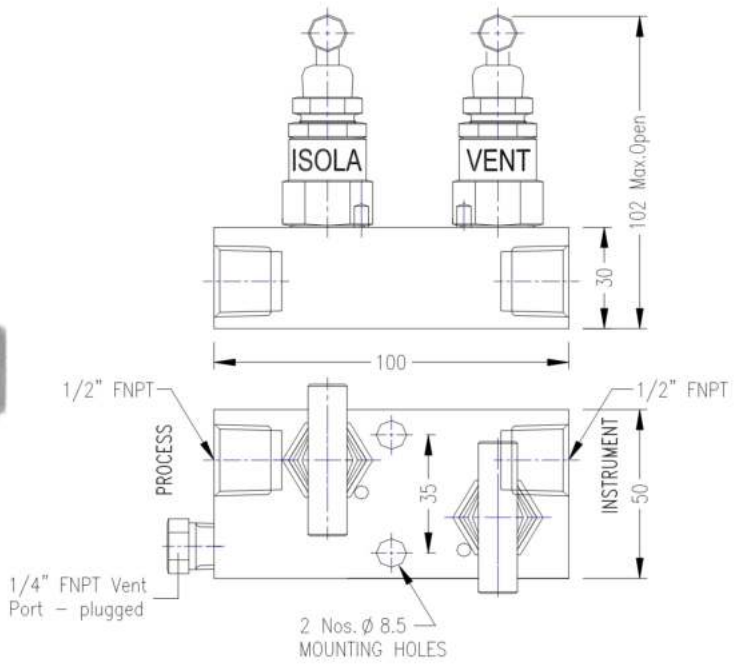


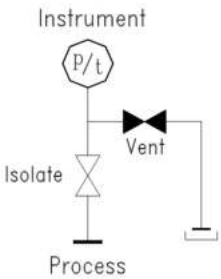


Specifications

Model	M2 - LI
Type :	Two Valve Manifold, Remote Mount - Valves on top, Horizontal or Vertical port inlet , outlet and vent / test connections.
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
PTFE :	6000 PSI @ 200 ° F - 413 bar @ 93 ° C
	4000 PSI @ 500 ° F - 276 bar @ 260 ° C
Graphoil :	6000 PSI @ 200 ° F - 413 bar @ 93 ° C
	1500 PSI @ 1000 ° F - 103 bar @ 537 ° C
Thread Size Range :	1/4" - 1/2" NPT (Standard), BSP-Taper / Parallel.
Connections :	Process x Instrument x Vent 1/2" FNPT x 1/2"FNPT x 1/4" FNPT
Features :	Two valve manifolds combines an isolation, calibration, test and venting of instruments in a single block. By incorporating all these functions, considerable material and installation cost saving will be made. The manifold is designed for use with pressure transmitters, pressure gauges, pressure switches and similar pressure measurement equipment. Mounting holes are provided for two 1/4" bolts (not supplied).
Notes :	All valves are 100% pressure tested. Vent port fitted with a plug as standard. 0.187-inch (4.8 mm) diameter orifice. Valve Cv - 0.52 maximum. Carbon Steel valves are zinc plated and dichromated. Approximate. valve weight - 1.2 kg

For Ordering please refer our Ordering Information.

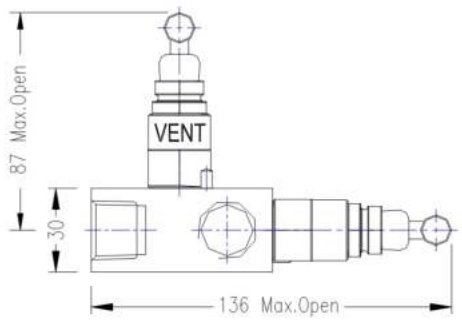


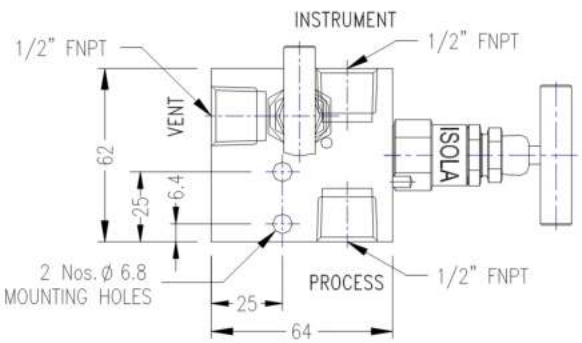


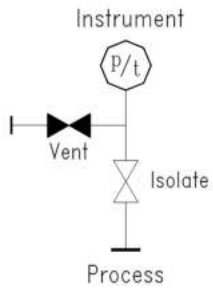
Specifications

Model	M2 - L - PTM
Type :	Two Valve Manifold, Remote Mount - Horizontal or Vertical port inlet , outlet and vent / test connections - PT Manifold.
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
PTFE :	6000 PSI @ 200 ° F - 413 bar @ 93 ° C
	4000 PSI @ 500 ° F - 276 bar @ 260 ° C
Graphoil :	6000 PSI @ 200 ° F - 413 bar @ 93 ° C
	1500 PSI @ 1000 ° F - 103 bar @ 537 ° C
Thread Size Range :	1/4" - 1/2" NPT (Standard), BSP-Taper / Parallel.
Connections :	Process x Instrument x Vent
	1/2" FNPT x 1/2"FNPT x 1/2" FNPT
	1/2" FNPT x 1/2"FNPT x 1/4" FNPT
Features :	Two valve manifolds combines an isolation, calibration, test and venting of instruments in a single block. By incorporating all these functions, considerable material and installation cost saving will be made. The manifold is designed for use with pressure transmitters, pressure gauges, pressure switches and similar pressure measurement equipment. Mounting holes are provided for two 1/4" bolts.(not supplied)
Notes :	All valves are 100% pressure tested.
	0.187-inch (4.8 mm) diameter orifice.
	Valve Cv - 0.52 maximum.
	Carbon Steel valves are zinc plated and dichromated..
	Stainless Steel valves have natural finish.
	Approximate. valve weight - 0.9 kg.

For Ordering please refer our Ordering Information.



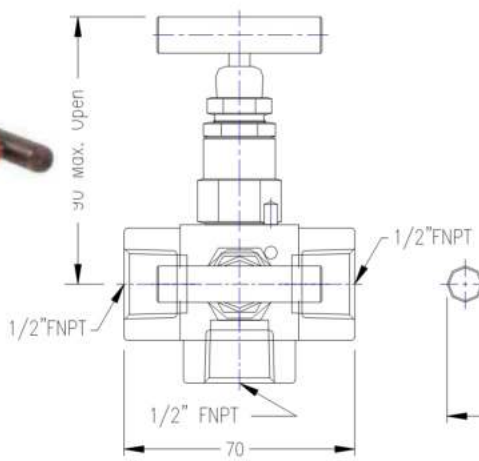


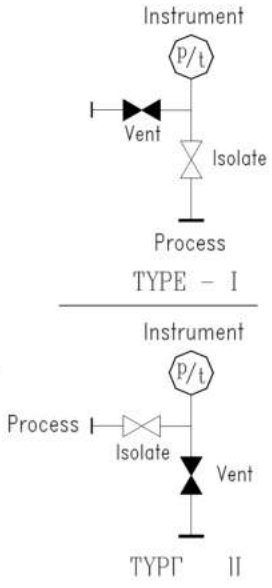


Specifications

Model	M2 - 3L
Type :	Two Valve (3 Way) Manifold, Remote Mount - Horizontal or Vertical port inlet , outlet and vent / test connections.
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
PTFE :	6000 PSI @ 200 ° F - 413 bar @ 93 ° C
	4000 PSI @ 500 ° F - 276 bar @ 260 ° C
Graphoil :	6000 PSI @ 200 ° F - 413 bar @ 93 ° C
	1500 PSI @ 1000 ° F - 103 bar @ 537 ° C
Thread Size Range :	1/4" - 1/2" NPT (Standard), BSP-Taper / Parallel.
Connections :	Process x Instrument x Vent
	1/2" FNPT x 1/2"FNPT x 1/2" FNPT
	1/2" FNPT x 1/2"FNPT x 1/4" FNPT
	1/2" NB SW x 1/2"NB SW x 1/2" FNPT
	1/2" NB SW x 1/2"NB SW x 1/4" FNPT
Type :	I (Straight) - Process inline with gauge and drain/vent at right angle.
	II (Angle) - Gauge inline with drain/vent and process at right angle.
Features :	Two valve manifolds combines an isolation, calibration, test and venting of instruments in a single block. By incorporating all these functions, considerable material and installation cost saving will be made. The manifold is designed for use with pressure transmitters, pressure gauges, pressure switches and similar pressure measurement equipment.
Optional :	Three piece gauge union for direct mounting and positioning of gauge can be supplied to order seperately.
Notes :	All valves are 100% pressure tested.
	0.187-inch (4.8 mm) diameter orifice.
	Valve Cv - 0.52 maximum.
	Carbon Steel valves are zinc plated and dichromated..
	Stainless Steel valves have natural finish.
	Approximate. valve weight - 1.2 kg

For Ordering please refer our Ordering Information.

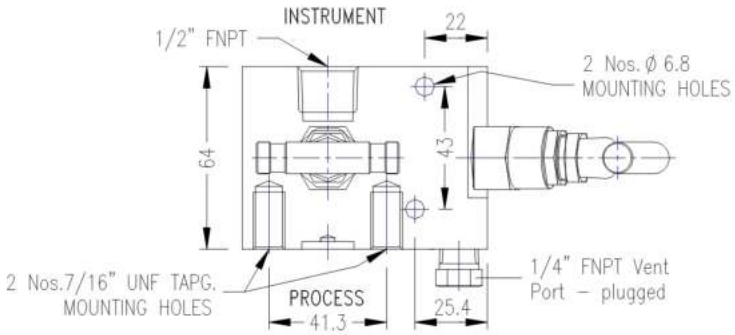


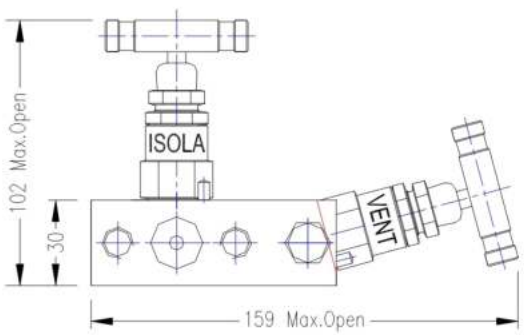


Specifications

Model	M2 - XW
Type :	Two Valve Manifold, Direct Mount - Flange inlet, threaded port outlet and bottom vent / test connections.
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
	PTFE : 6000 PSI @ 200 ° F - 413 bar @ 93 ° C
	4000 PSI @ 500 ° F - 276 bar @ 260 ° C
	Graphoil : 6000 PSI @ 200 ° F - 413 bar @ 93 ° C
	1500 PSI @ 1000 ° F - 103 bar @ 537 ° C
Thread Size Range :	1/4" - 1/2" NPT (Standard), BSP-Taper / Parallel.
Connections :	Process x Instrument x Vent
	Flange x 1/2"FNPT x 1/4" FNPT
Features :	Two valve manifolds combines an isolation, calibration, test and venting of instruments in a single block. By incorporating all these functions, considerable material and installation cost saving will be made. The manifold is designed for use with pressure transmitters, pressure gauges, pressure switches and similar pressure measurement equipment. Mounting holes are provided for two 1/4" bolts (not supplied).
Notes :	All valves are 100% pressure tested.
	Vent port fitted with a plug as standard.
	0.187-inch (4.8 mm) diameter orifice.
	Valve Cv - 0.52 maximum.
	Carbon Steel valves are zinc plated and dichromated..
	Stainless Steel valves have natural finish.
	Approximate. valve weight - 1.5 kg

For Ordering please refer our Ordering Information.

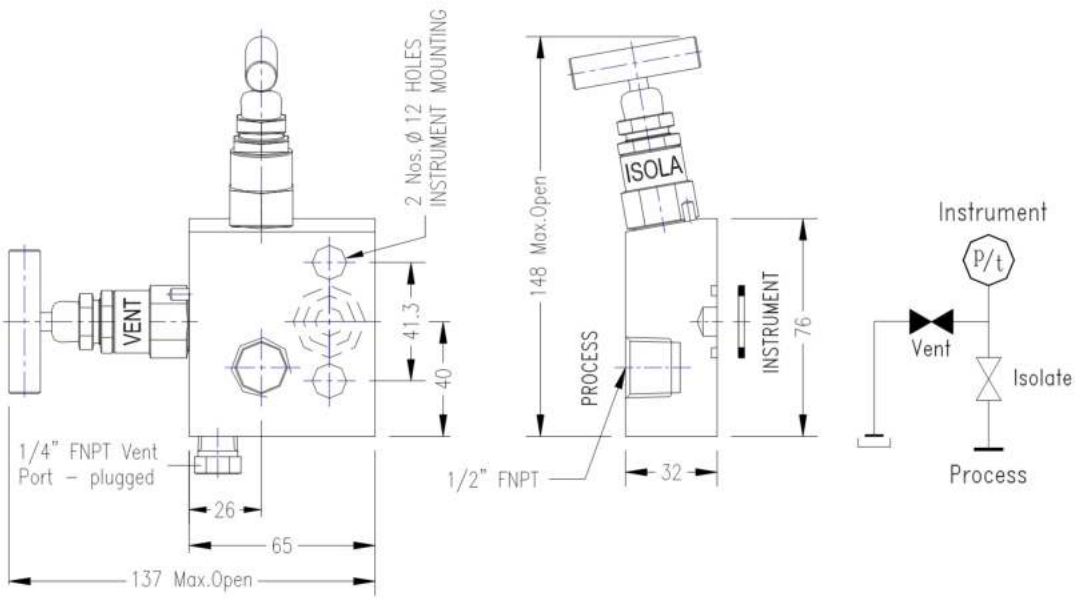




Specifications

Model	M2 - XT
Type :	Two Valve Manifold, Direct Mount - Horizontal port inlet, Instrument flange outlet and bottom vent / test connections.
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
	PTFE : 6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
	Graphoil : 6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Thread Size Range :	1/4" - 1/2" NPT (Standard), BSP-Taper / Parallel.
Connections :	Process x Instrument x Vent
	1/2" FNPT x Flange x 1/4" FNPT
Acessories :	One PTFE seal rings & Two 7/16" UNF HT. Steel mounting bolts.
Features :	Two valve manifolds combines an isolation, calibration, test and venting of instruments in a single block. By incorporating all these functions, considerable material and installation cost saving will be made. The manifold is designed for use with pressure transmitters, pressure gauges, pressure switches and similar pressure measurement equipment.
Notes :	All valves are 100% pressure tested.
	Vent port fitted with a plug as standard.
	0.187-inch (4.8 mm) diameter orifice.
	Valve Cv - 0.52 maximum.
	Carbon Steel valves are zinc plated and dichromated..
	Stainless Steel valves have natural finish.
	Approximate. valve weight - 1.3 kg

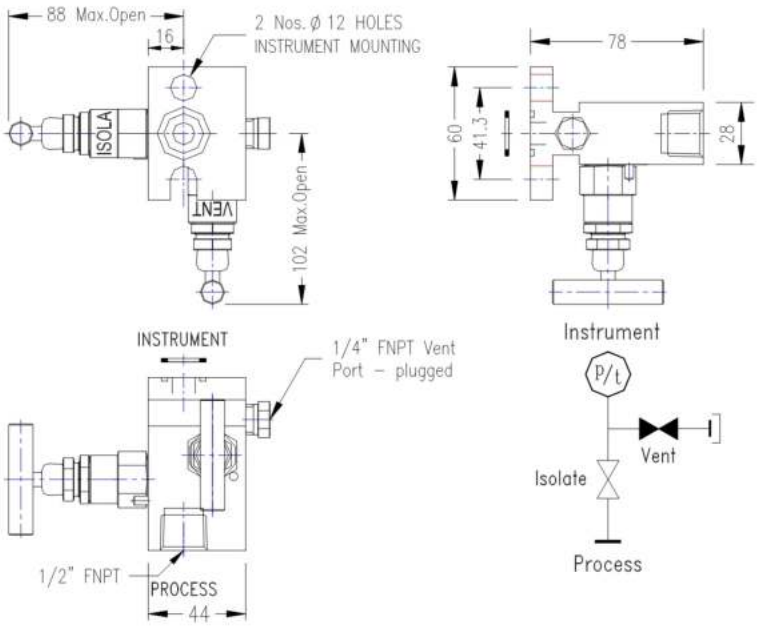
For Ordering please refer our Ordering Information.



Specifications

Model	M2 - T
Type :	Two Valve Manifold, Direct Mount - T block, threaded inlet, instrument flange outlet and side vent / test connections.
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
PTFE :	6000 PSI @ 200 ° F - 413 bar @ 93 ° C
	4000 PSI @ 500 ° F - 276 bar @ 260 ° C
Graphoil :	6000 PSI @ 200 ° F - 413 bar @ 93 ° C
	1500 PSI @ 1000 ° F - 103 bar @ 537 ° C
Thread Size Range :	1/4" - 1/2" NPT (Standard), BSP-Taper / Parallel.
Connections :	Process x Instrument x Vent
	1/2" FNPT x Flanged x 1/4" FNPT
Acessories :	One PTFE seal rings & Two 7/16" UNF HT. Steel mounting bolts.
Features :	Two valve manifolds combines an isolation, calibration, test and venting of instruments in a single block. By incorporating all these functions, considerable material and installation cost saving will be made. The manifold is designed for use with pressure transmitters, pressure gauges, pressure switches and similar pressure measurement equipment.
Notes :	All valves are 100% pressure tested.
	Vent port fitted with a plug as standard.
	0.187-inch (4.8 mm) diameter orifice.
	Valve Cv - 0.52 maximum.
	Carbon Steel valves are zinc plated and dichromated..
	Stainless Steel valves have natural finish.
	Approximate. valve weight - 1.5 kg

For Ordering please refer our Ordering Information.



ORDERING INFORMATION - 2 Valve Manifolds

ORDERING CODES

M2 - L - PTM _ P _ V _ SS _

MODEL

M2 - V, M2 - VF, M2 - AZ, M2 - L, M2 - AL, M2 - LI,
M2 - L - PTM, M2 - L - PTM 4, M2 - 3L - I, M2 - 3L - II,
M2 - 3L - 4 - I, M2 - 3L - 4 - II, M2 - 3L - SW - I,
M2 - 3L - SW - II, M2 - 3L - SW - 4 - I, M2 - 3L - SW - 4 - II,
M2 - XW, M2 - XT, M2 - T

VALVE SEAT

STEM PACKING

MATERIAL

OPTIONS

ORDERING EXAMPLE - M2 - L - PTM - P - V - SS

Model	Type	Connection s - Process x Instrument x Vent
M2 - V	Two Valve Manifold, Remote Mount - Vertical port inlet, outlet and bottom vent / test connections..	1/2"FNPT x 1/2"FNPT x 1/4"FNPT
M2 - VF	Two Valve Manifold, Remote Mount - Vertical port inlet, outlet and front vent / test connections.	1/2"FNPT x 1/2"FNPT x 1/4"FNPT
M2 - AZ	Two Valve Manifold, Angle - Remote Mount - Horizontal port inlet, outlet and bottom vent / test connections.	1/2"FNPT x 1/2"FNPT x 1/4"FNPT
M2 - L	Two Valve Manifold, Remote Mount - Horizontal or Vertical port inlet, outlet and vent / test connections.	1/2"FNPT x 1/2"FNPT x 1/4"FNPT
M2 - AL	Two Valve Manifold, Angle - Remote Mount - Horizontal or Vertical port inlet, outlet and vent / test connections.	1/2"FNPT x 1/2"FNPT x 1/4"FNPT
M2 - LI	Two Valve Manifold, Remote Mount - Valves on top, Horizontal or Vertical port inlet, outlet and vent / test connections.	1/2"FNPT x 1/2"FNPT x 1/4"FNPT
M2 - L - PTM M2 - L - PTM - 4	Two Valve Manifold, Remote Mount - Horizontal or Vertical port inlet, outlet and vent / test connections - PT Manifold	1/2"FNPT x 1/2"FNPT x 1/2"FNPT 1/2"FNPT x 1/2"FNPT x 1/4"FNPT
M2 - 3 L - I * / II * M2 - 3 L - 4 - I * / II *	Two Valve (3 Way) Manifold, Remote Mount - Horizontal or Vertical port inlet, outlet and vent / test connections - Type - I & Type - II	1/2"FNPT x 1/2"FNPT x 1/2"FNPT 1/2"FNPT x 1/2"FNPT x 1/4"FNPT
M2 - 3 L - SW - I * / II * M2 - 3 L - SW - 4 - I * / II *		1/2"NB SW x 1/2"NB SW x 1/2"FNPT 1/2"NB SW x 1/2"NB SW x 1/4"FNPT
M2 - XW	Two Valve Manifold, Direct Mount - Flange inlet, threaded port outlet and bottom vent / test connections.	FL x 1/2"FNPT x 1/4"FNPT
M2 - XT	Two Valve Manifold, Direct Mount - Horizontal port inlet, instrument flange outlet and bottom vent / test connections.	1/2"FNPT x FL x 1/4"FNPT
M2 - T	Two Valve Manifold, Direct Mount - T block, threaded inlet, instrument flange outlet and side vent / test connections.	1/2"FNPT x FL x 1/4"FNPT

I * : Type I (Straight) - Process inline with gauge and drain / vent at rig ht angle.

II ** : Type II (Angle) - Gauge inline with drain / vent and process at right angle.

Valve Type

M2 - Two Valve Manifolds

Body Style

V - Vertical
Z - Horizontal
L - Vertical / Horizontal
A - Valve Angle
F - Front Vent / Drain
I - Valve on top
X - Flat Body
W - Flange x Threaded
T - Threaded x Flange

Code	Valve Hard Seat
P	Plug Seat - Standard
B	Ball Seat - Optional

Code	Stem Packing
V	Teflon (PTFE) - Standard
G	Graphoil

Code	Material
CS	A 105 CS
S	SS 304
SS	SS 316
H	Hastelloy
ML	Monel

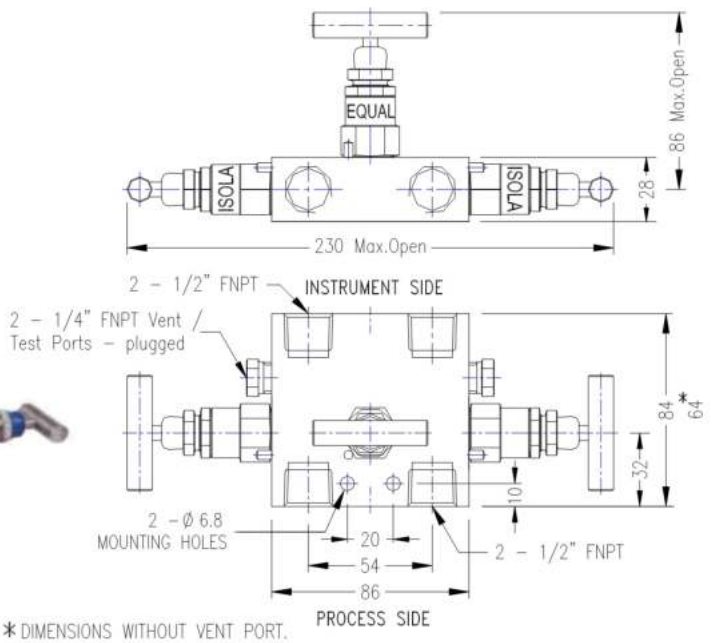
Code	Options
SG	Sour Gas meets the requirement of NACE MR-01-75
	lastest revisions. (SS valves only)
OC	Clean for Oxygen Service
SP	Special requirements - please specify.

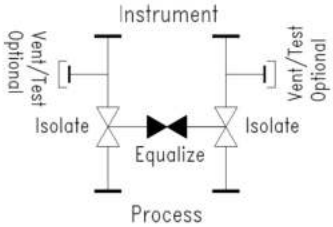
Note : Standard Connections
Threaded - NPT to ANSI/ASME B1-20 .1
Other Connections
Threaded - BSP Taper to BSP Taper to BS 21
- BSP Parallel to BS 2779
Socket Weld - (SW) - To ASME B16.11
Please consult the sales office for availability.

Specifications

Model	M3 - S
Type :	Three Valve Manifold, Remote Mount - Threaded port inlet, outlet and vent / test connections
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
	PTFE : 6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
	Graphoil : 6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Thread Size Range :	1/4" - 1/2" NPT (Standard), BSP-Taper / Parallel.
Connections :	Process x Instrument x Vent
	1/2" FNPT x 1/2"FNPT x 1/4" FNPT
	1/2" FNPT x 1/2"FNPT
	Process and Instrument ports are both on 54 mm (2.125") centres.
Features :	Three valve manifolds are used in conjunction with differential pressure transmitters. They combine instrument isolation and equalizing in one block resulting in lower installation costs. The manifold designs have facilities for remote mounting to instrument in any selected position to process line and transmitters. Mounting holes are provided.
Notes :	All valves are 100% pressure tested.
	Vent port fitted with a plug as standard.
	0.187-inch (4.8 mm) diameter orifice.
	Valve Cv - 0.52 maximum.
	Carbon Steel valves are zinc plated and dichromated.
	Stainless Steel valves have natural finish.
	Approximate. valve weight - 1.9 kg with vent
	- 1.6 kg without vent

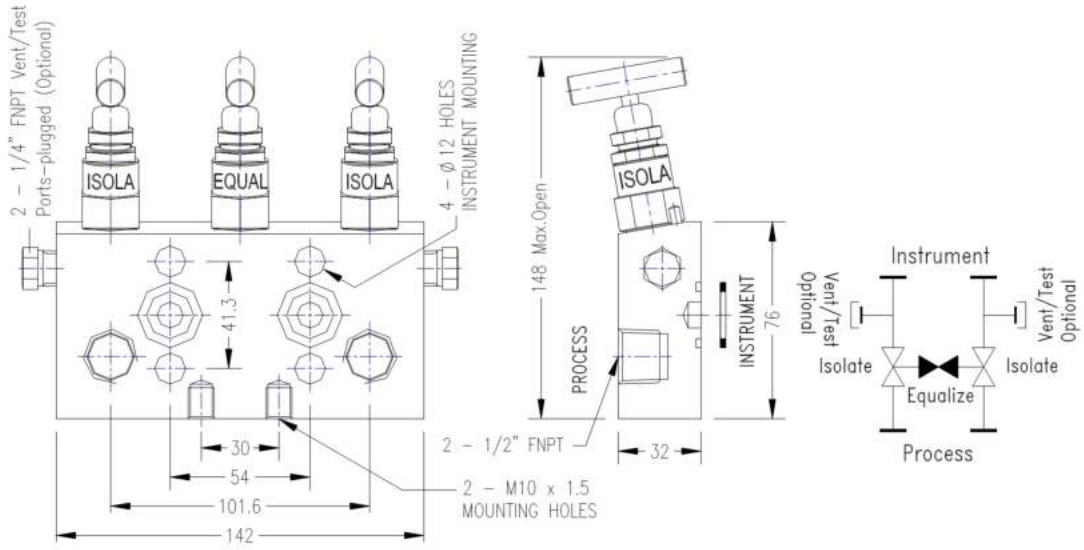
For Ordering please refer our Ordering Information.





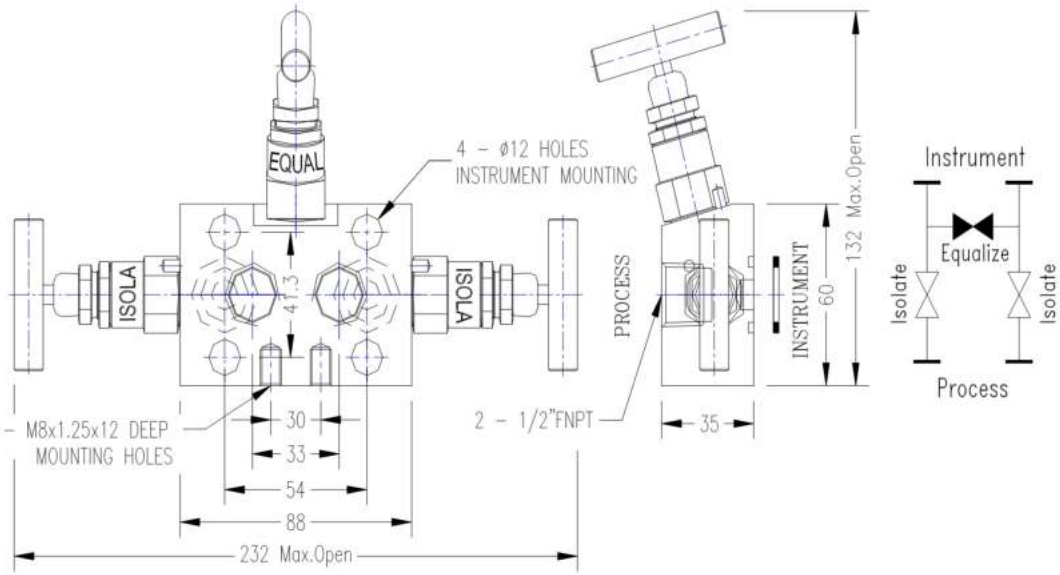
Specifications

Model	M3 - IXT
Type :	Three Valve Manifold, Direct Mount - Valves In-Line on the top is angled, threaded port inlet, instrument flange outlet and vent / test connections.
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
PTFE :	6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
Graphoil :	6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Thread Size Range :	1/4" - 1/2" NPT (Standard), BSP-Taper / Parallel.
Connections :	Process x Instrument x Vent (Optional)
	1/2" FNPT x Flange x 1/4" FNPT
	Flanged to transmitter for direct mounting to instrument on 54 mm (2.125") on centres.
Acessories :	Two PTFE seal rings & Four 7/16" UNF HT. Steel mounting bolts.
Features :	Three valve manifolds are used in conjunction with differential pressure transmitters. They combine instrument isolation and equalizing in one block resulting in lower installation costs. The manifold designs have facilites for direct mounting to differential pressure transmitters. Base mounting holes are provided for M10 x 1.5 bolts.
Notes :	All valves are 100% pressure tested.
	Vent port fitted with a plug as standard.
	0.187-inch (4.8 mm) diameter orifice.
	Valve Cv - 0.52 maximum.
	Carbon Steel valves are zinc plated and dichromated.
	Stainless Steel valves have natural finish.
	Approximate. valve weight - 2.8 kg
For Ordering	please refer our Ordering Information.



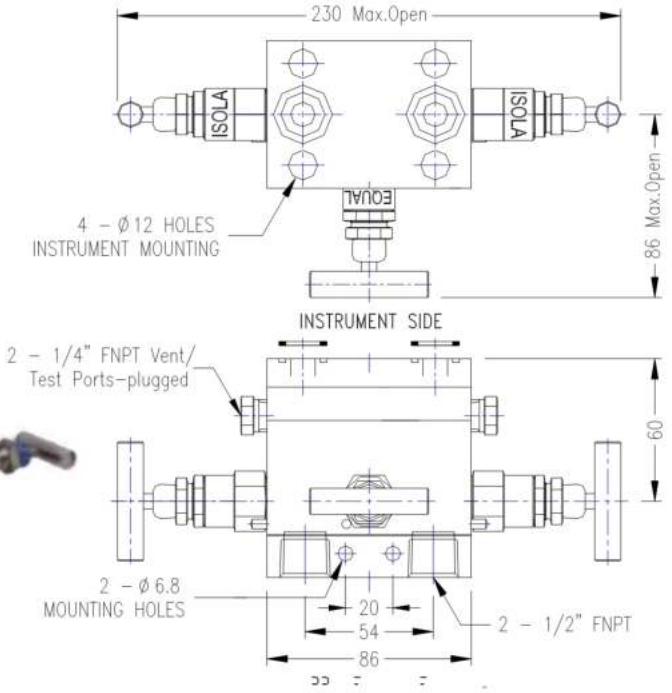
Specifications

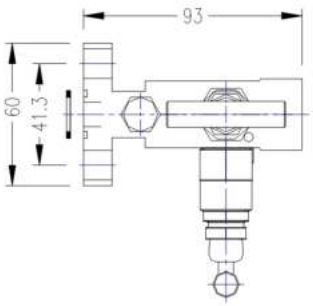
Model	M3 - XT
Type :	Three Valve Manifold, Direct Mount - Equalize valve on the top is angled, threaded port inlet and instrument flange outlet connections.
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
PTFE :	6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
Graphoil :	6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Thread Size Range :	1/4" - 1/2" NPT (Standard), BSP-Taper / Parallel.
Connections :	Process x Instrument 1/2" FNPT x Flange Flanged to transmitter for direct mounting to instrument on 54 mm (2.125") on centres.
Acessories :	Two PTFE seal rings & Four 7/16" UNF HT. Steel mounting bolts.
Features :	Three valve manifolds are used in conjunction with differential pressure transmitters. They combine instrument isolation and equalizing in one block resulting in lower installation costs. The manifold designs have facilites for direct mounting to differential pressure transmitters. Base mounting holes are provided for M8 x 1.25 bolts.
Notes :	All valves are 100% pressure tested. 0.187-inch (4.8 mm) diameter orifice. Valve Cv - 0.52 maximum. Carbon Steel valves are zinc plated and dichromated. Stainless Steel valves have natural finish. Approximate. valve weight - 1.7 kg
For Ordering	please refer our Ordering Information.

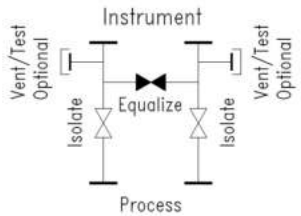


Specifications

Model	M3 - T
Type :	Three Valve Manifold, Direct Mount - T block, threaded port inlet, instrument flange outlet and vent / test connections.
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
PTFE :	6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
Graphoil :	6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Thread Size Range :	1/4" - 1/2" NPT (Standard), BSP-Taper / Parallel.
Connections :	Process x Instrument x Vent 1/2" FNPT x Flange x 1/4" FNPT Flanged to transmitter for direct mounting to instrument on 54 mm (2.125") on centres.
Acessories :	Two PTFE seal rings & Four 7/16" UNF HT. Steel mounting bolts.
Features :	Three valve manifolds are used in conjunction with differential pressure transmitters. They combine instrument isolation and equalizing in one block resulting in lower installation costs. The manifold designs have facilites for direct mounting to differential pressure transmitters. Mounting holes are provided.
Notes :	All valves are 100% pressure tested. Vent port fitted with a plug as standard. 0.187-inch (4.8 mm) diameter orifice. Valve Cv - 0.52 maximum. Carbon Steel valves are zinc plated and dichromated. Stainless Steel valves have natural finish. Approximate. valve weight - 2.0 kg
For Ordering	please refer our Ordering Information.



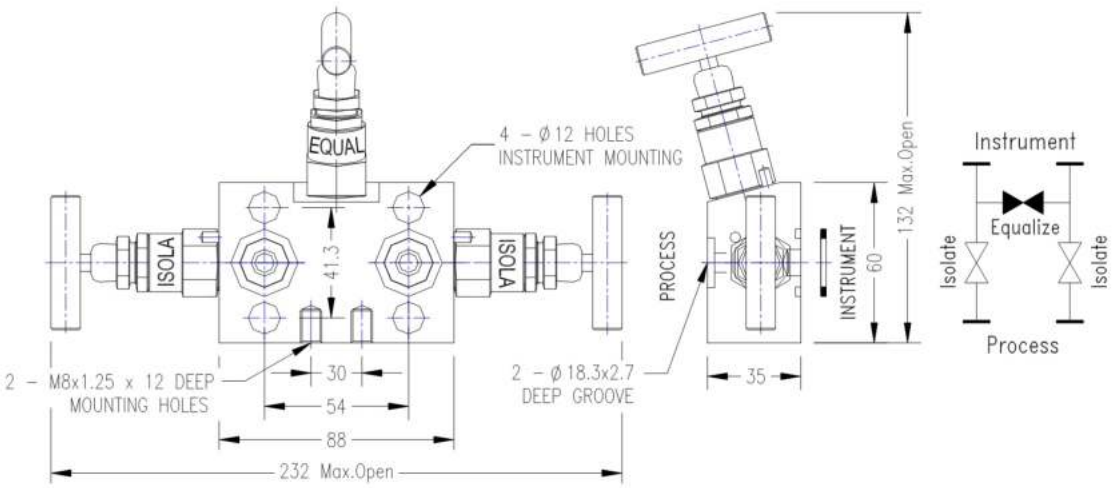




Specifications

Model	M3 - XH
Type :	Three Valve Manifold, Direct Mount - Equalize valve on the top is angled, process flange inlet and instrument flange oulet connections.
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
PTFE :	6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
Graphoil :	6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Size Range :	Standard Transmitter Flange
Connections :	Process x Instrument
	Flange x Flange
	Flanged to transmitter for direct mounting to instrument on 54 mm (2.125") on centres.
	Flanged to process to connections.
Acessories :	Two PTFE seal rings & Four 7/16" UNF HT. Steel mounting bolts.
Features :	Three valve manifolds are used in conjunction with differential pressure transmitters. They combine instrument isolation and equalizing in one block resulting in lower installation costs. The manifold designs have facilites for direct mounting to differential pressure transmitters.
	Base mounting holes are provided for M10 x 1.5 bolts.
Notes :	All valves are 100% pressure tested.
	0.187-inch (4.8 mm) diameter orifice.
	Valve Cv - 0.52 maximum.
	Carbon Steel valves are zinc plated and dichromated.
	Stainless Steel valves have natural finish.
	Approximate. valve weight - 1.7 kg

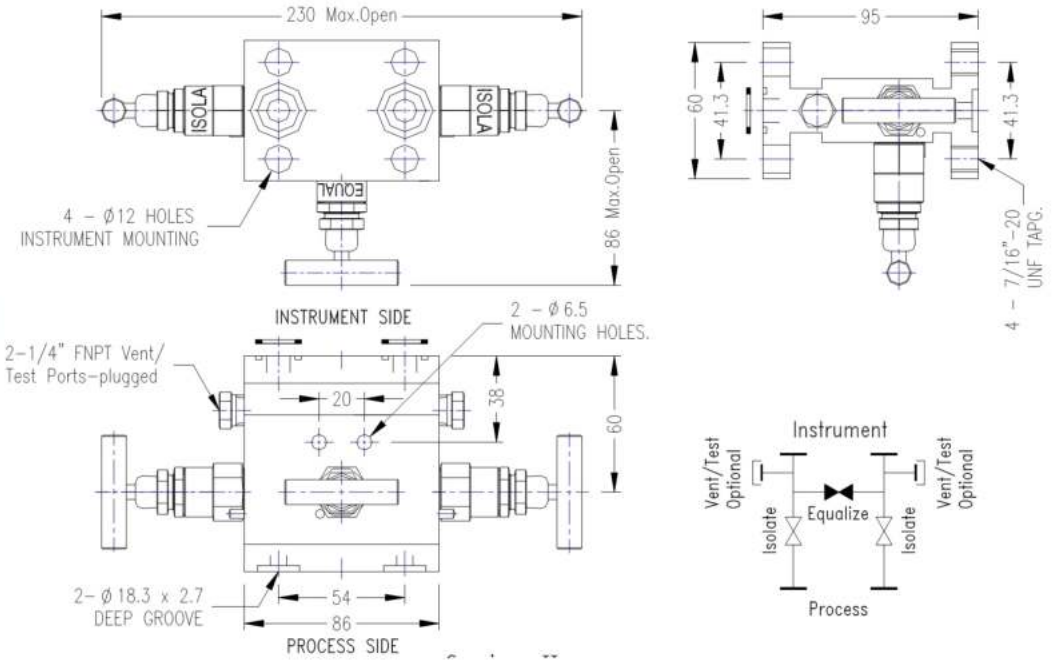
For Ordering please refer our Ordering Information.

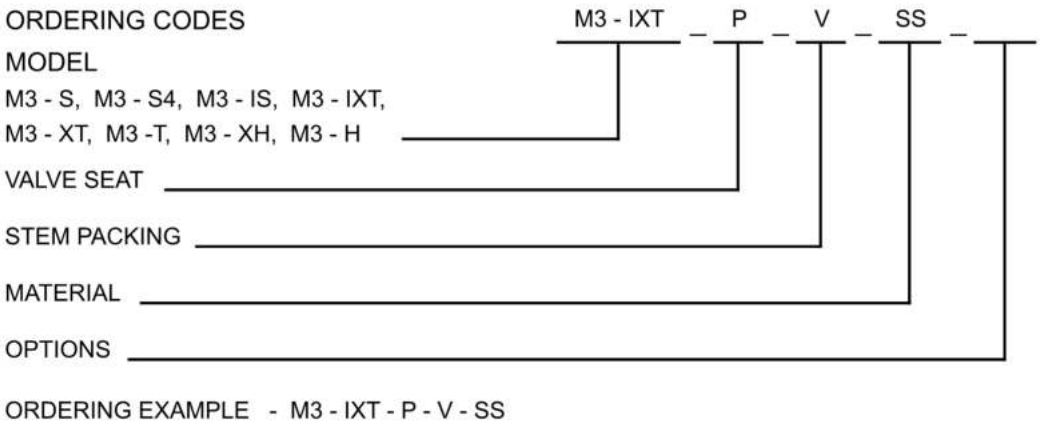


Specifications

Model	M3 - H
Type :	Three Valve Manifold, Direct Mount - H block, process flange inlet, instrument flange oulet and vent / test connections.
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
PTFE :	6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
Graphoil :	6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Size Range :	Standard Transmitter Flange
Connections :	Process x Instrument x Vent
	Flange x Flange x 1/4" FNPT
	Flanged to transmitter for direct mounting to instrument on 54 mm (2.125") on centres.
	Flanged to process to connections
Acessories :	Two PTFE seal rings & Four 7/16" UNF HT. Steel mounting bolts.
Features :	Three valve manifolds are used in conjunction with differential pressure transmitters. They combine instrument isolation and equalizing in one block resulting in lower installation costs. The manifold designs have facilites for direct mounting to differential pressure transmitters. Mounting holes are provided.
Notes :	All valves are 100% pressure tested.
	Vent port fitted with a plug as standard.
	0.187-inch (4.8 mm) diameter orifice.
	Valve Cv - 0.52 maximum.
	Carbon Steel valves are zinc plated and dichromated.
	Stainless Steel valves have natural finish.
	Approximate. valve weight - 2.1 kg

For Ordering please refer our Ordering Information.





Model	Type	Connections - Process x I nstrument x Vent
M3 - S	Three Valve Manifold, Remote Mount - Threaded port inlet, outlet and vent / test connections.	1/2"FNPT x 1/2"FNPT x 1/4"FNPT
M2 - S4	Three Valve Manifold, Remote Mount - Threaded 1/4" FNPT port inlet, outlet and vent / test connections.	1/4"FNPT x 1/4"FNPT x 1/4"FNPT
M3 - IS	Three Valve Manifold, Remote Mount - Valve In - Line on the top, threaded port inlet, outlet and vent / test connections.	1/2"FNPT x 1/2"FNPT x 1/4"FNPT
M3 - IXT	Three Valve Manifold, Direct Mount - Valve In - Line on the top is angled, threaded port inlet, instrument flange outlet and vent / test connections.	1/2"FNPT x Flange x 1/4"FNPT
M3 - XT	Three Valve Manifold, Direct Mount - Equalize valve on the top is angled, threaded port inlet and instrument flange oulet connections.	1/2"FNPT x Flange
M3 - T	Three Valve Manifold, Direct Mount - T block, threaded port inlet, instrument flange outlet and vent / test connections.	1/2"FNPT x Flange x 1/4"FNPT
M3 - XH	Three Valve Manifold, Direct Mount - Equalize valve on the top is angled, process flange inlet and instrument flange outlet connections.	Flange x Flange
M3 - H	Three Valve Manifold, Direct Mount - H bock, process flange inlet, instrument flange outlet and vent / test connections.	Flange x Flange x 1/4"FNPT

Valve Type

M3 - Three Valve Manifolds

Body Style

S - Screwed - Process, Instrument and Vent / Drain Connections
4 - Screwed - 1/4"FNPT Process, Instrument and Vent / Drain Connections
I - Valve In - Line on the Top
X - Flat Body
T - Threaded x Flange
H - Flange x Flange

Code	Valve Hard Seat
P	Plug Seat - Standard
B	Ball Seat - Optional

Code	Stem Packing
V	Teflon (PTFE) - Standard
G	Graphoil

Code	Material
CS	A 105 CS
S	SS 304
SS	SS 316
H	Hastelloy
ML	Monel

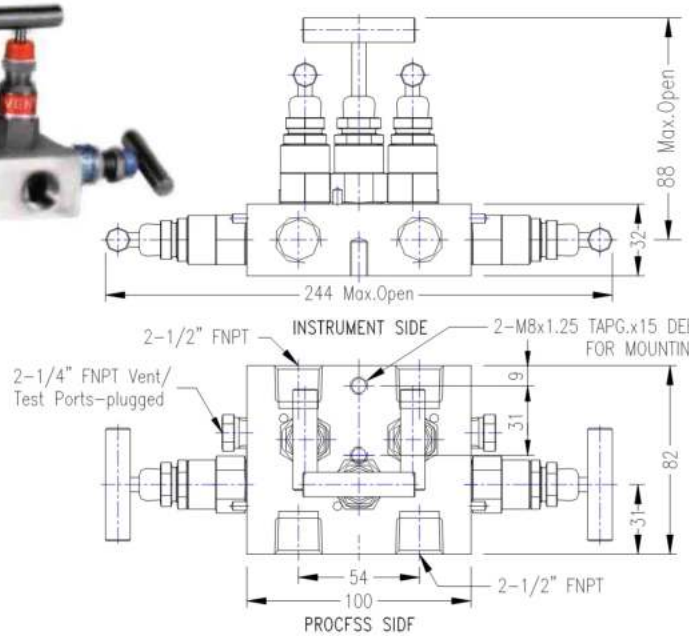
Code	Options
PX	Blind Plug
SG	Sour Gas meets the requirement of NACE MR-01-75
	lastest revisions. (SS valves only)
OC	Clean for Oxygen Service
SP	Special requirements - please specify.

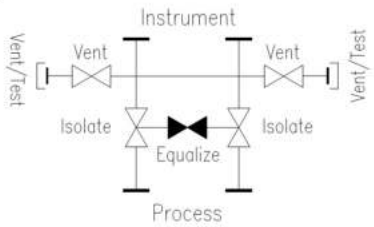
Note : Standard Connections
Threaded - NPT to ANSI/ASME B1-20 .1
Other Connections
Threaded - BSP Taper to BSP Taper to BS 21
- BSP Parallel to BS 2779
Socket Weld - (SW) - To ASME B16.11
Please consult the sales office for availability.

Specifications

Model	M5 - S1
Type :	Five Valve Manifold, Remote Mount - Threaded port inlet, outlet and vent / test connections
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
PTFE :	6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
Graphoil :	6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Thread Size Range :	1/4" - 1/2" NPT (Standard), BSP-Taper / Parallel.
Connections :	Process x Instrument x Vent
	1/2" FNPT x 1/2"FNPT x 1/4" FNPT
	Process and Instrument ports are both on 54 mm (2.125") centres.
Features :	Five valve manifolds are used in combination with differential pressure transmitters provided isolation, equalizing and drain / test functions. The manifold allows operators to isolate, zero adjust the instrument and safely drain any trapped medium. The drain ports can also be used as test or calibration connections after draining operation has be completed. Base mounting holes are provided for 2 nos. M8 x 1.25 bolts
Notes :	All valves are 100% pressure tested.
	Vent port fitted with a plug as standard.
	0.187-inch (4.8 mm) diameter orifice.
	Valve Cv - 0.52 maximum.
	Carbon Steel valves are zinc plated and dichromated.
	Stainless Steel valves have natural finish.
	Approximate. valve weight - 2.5 kg

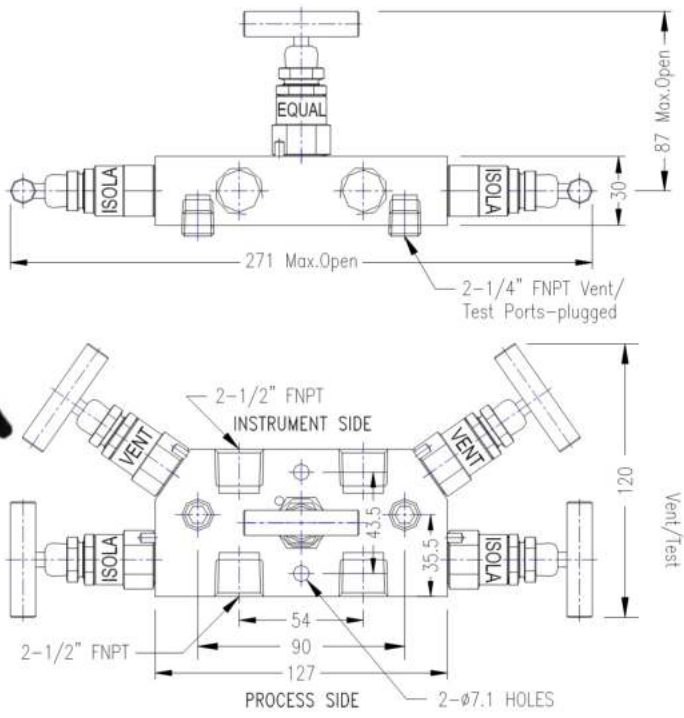
For Ordering please refer our Ordering Information.

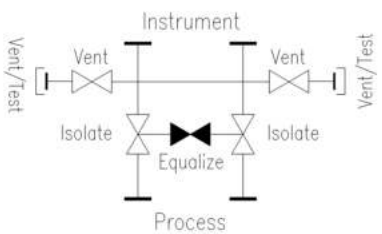




Specifications

Model	M5 - S2
Type :	Five Valve Manifold, Remote Mount - Threaded port inlet, outlet and vent / test connections
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
	PTFE : 6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
	Graphoil : 6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Thread Size Range :	1/4" - 1/2" NPT (Standard), BSP-Taper / Parallel.
Connections :	Process x Instrument x Vent
	1/2" FNPT x 1/2"FNPT x 1/4" FNPT
	Process and Instrument ports are both on 54 mm (2.125") centres.
Features :	Five valve manifolds are used in combination with differential pressure transmitters provided isolation, equalizing and drain / test functions. The manifold allows operators to isolate, zero adjust the instrument and safely drain any trapped medium. The drain ports can also be used as test or calibration connections after draining operation has be completed. Mounting holes are provided.
Notes :	All valves are 100% pressure tested.
	Vent port fitted with a plug as standard.
	0.187-inch (4.8 mm) diameter orifice.
	Valve Cv - 0.52 maximum.
	Carbon Steel valves are zinc plated and dichromated.
	Stainless Steel valves have natural finish.
	Approximate. valve weight - 2.3 kg
For Ordering	please refer our Ordering Information.

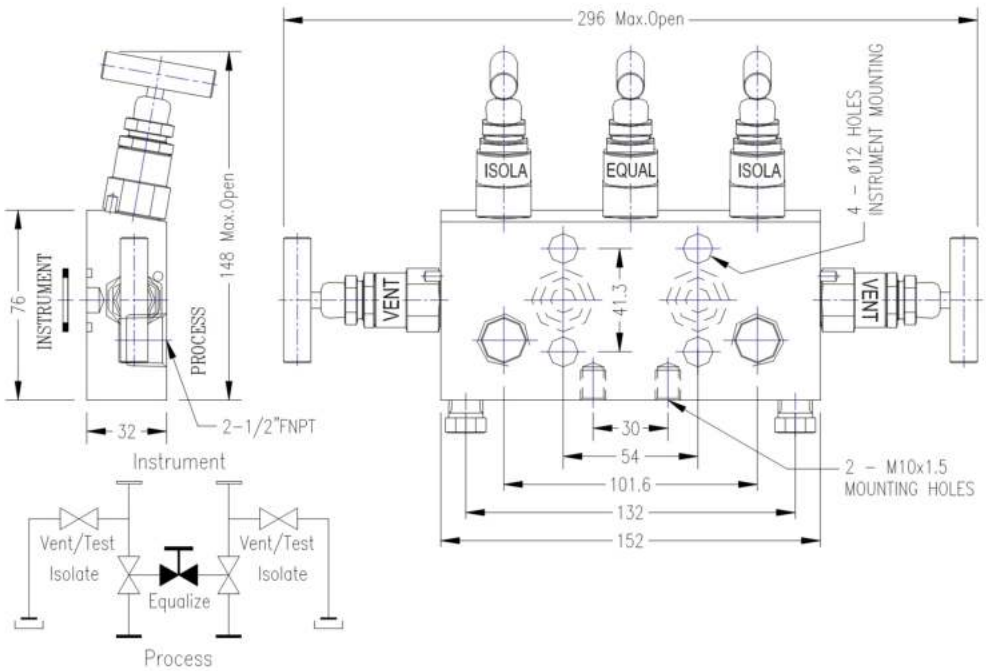




Specifications

Model	M5 - IXT
Type :	Five Valve Manifold, Direct Mount - Isolation, equalize valves In - Line on the top is angled and vent valves are on the sides, threaded port inlet, instrument flange outlet and vent / test connections.
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
PTFE :	6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
Graphoil :	6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Thread Size Range :	1/4" - 1/2" NPT (Standard), BSP-Taper / Parallel.
Connections :	Process x Instrument x Vent 1/2" FNPT x Flange x 1/4" FNPT Flanged to transmitter for direct mounting to instrument on 54 mm (2.125") on centres.
Acessories :	Two PTFE seal rings & Four 7/16" UNF HT. Steel mounting bolts.
Features :	Five valve manifolds are used in combination with differential pressure transmitters provided isolation, equalizing and drain / test functions. The manifold allows operators to isolate, zero adjust the instrument and safely drain any trapped medium. The drain ports can also be used as test or calibration connections after draining operation has be completed. The manifold designs have facilites for direct mounting to differential pressure transmitters. Base mounting holes are provided for M10 x 1.5 bolts.
Notes :	All valves are 100% pressure tested. Vent port fitted with a plug as standard. 0.187-inch (4.8 mm) diameter orifice. Valve Cv - 0.52 maximum. Carbon Steel valves are zinc plated and dichromated. Approximate. valve weight - 3.0 kg

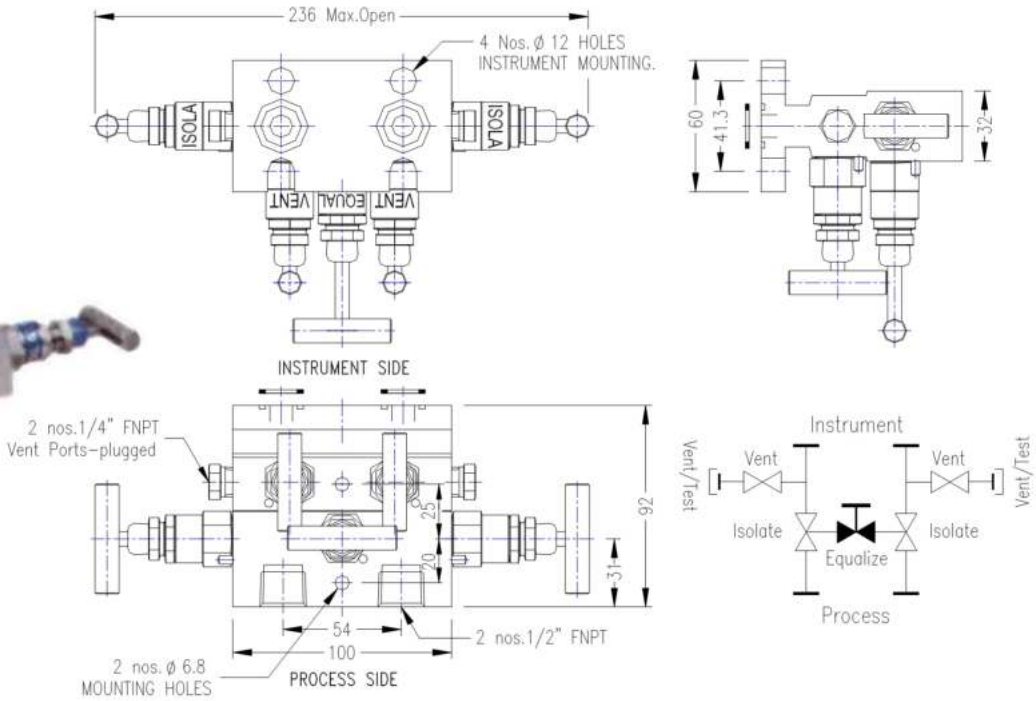
For Ordering please refer our Order ing Information.



Specifications

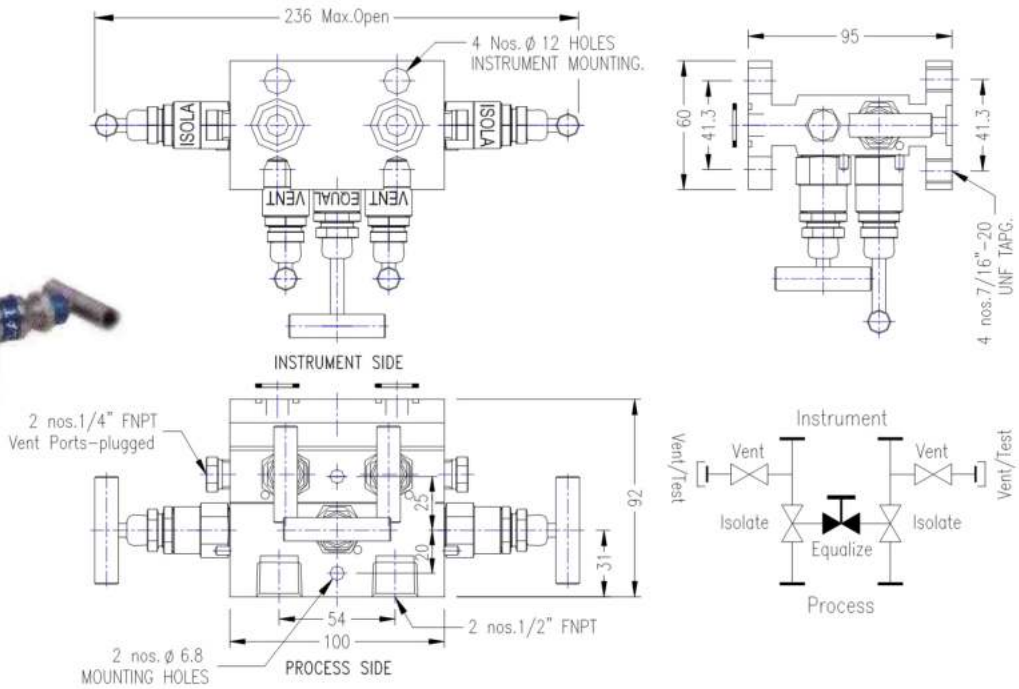
Model	M5 - T
Type :	Five Valve Manifold, Direct Mount - T block, threaded port inlet, instrument flange outlet and vent / test connections.
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
PTFE :	6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
Graphoil :	6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Thread Size Range :	1/4" - 1/2" NPT (Standard), BSP-Taper / Parallel.
Connections :	Process x Instrument x Vent 1/2" FNPT x Flange x 1/4" FNPT Flanged to transmitter for direct mounting to instrument on 54 mm (2.125") on centres.
Acessories :	Two PTFE seal rings & Four 7/16" UNF HT. Steel mounting bolts.
Features :	Five valve manifolds are used in combination with differential pressure transmitters provided isolation, equalizing and drain / test functions. The manifold allows operators to isolate, zero adjust the instrument and safely drain any trapped medium. The drain ports can also be used as test or calibration connections after draining operation has be completed. The manifold designs have facilites for direct mounting to differential pressure transmitters. Mounting holes are provided.
Notes :	All valves are 100% pressure tested. Vent port fitted with a plug as standard. 0.187-inch (4.8 mm) diameter orifice. Valve Cv - 0.52 maximum. Carbon Steel valves are zinc plated and dichromated. Approximate. valve weight - 2.8 kg

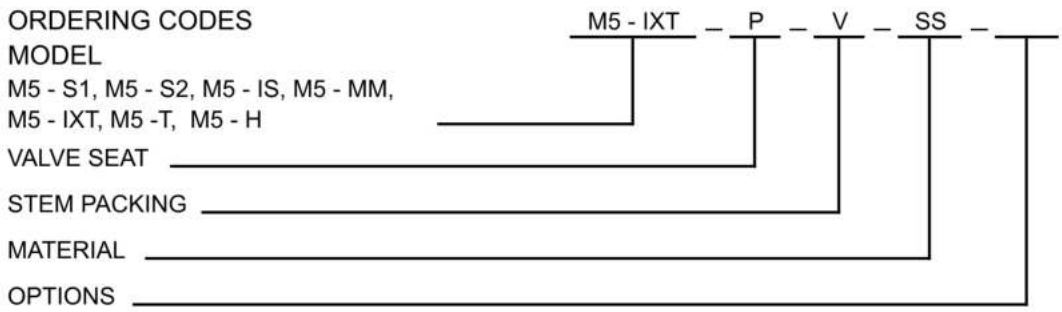
For Ordering please refer our Ordering Information.



Specifications

Model	M5 - H
Type :	Five Valve Manifold, Direct Mount - H block, process flange inlet, instrument flange outlet and vent / test connections.
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil.
	Pressure vs Temperature Rating
PTFE :	6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
Graphoil :	6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Size Range :	Standard Transmitter Flange
Connections :	Process x Instrument x Vent
	Flange x Flange x 1/4" FNPT
	Flanged to transmitter for direct mounting to instrument on 54 mm (2.125") on centres.
Acessories :	Two PTFE seal rings & Four 7/16" UNF HT. Steel mounting bolts.
Features :	Five valve manifolds are used in combination with differential pressure transmitters provided isolation, equalizing and drain / test functions. The manifold allows operators to isolate, zero adjust the instrument and safely drain any trapped medium. The drain ports can also be used as test or calibration connections after draining operation has be completed. The manifold designs have facilites for direct mounting to differential pressure transmitters. Mounting holes are provided.
Notes :	All valves are 100% pressure tested.
	Vent port fitted with a plug as standard.
	0.187-inch (4.8 mm) diameter orifice.
	Valve Cv - 0.52 maximum.
	Carbon Steel valves are zinc plated and dichromated.
	Approximate. valve weight - 3.2 kg
For Ordering	please refer our Ordering Information.





ORDERING EXAMPLE - M5 - IXT - P - V - SS

Model	Type	Connections - Process x I nstrument x Vent
M5 - S1	Five Valve Manifold, Remote Mount - Threaded port inlet, outlet and vent / test connections	1/2"FNPT x 1/2"FNPT x1/4"FNPT
M5 - S2	Five Valve Manifold, Remote Mount - Threaded port inlet, outlet and vent / test connections	1/2"FNPT x 1/2"FNPT x1/4"FNPT
M5 - IS	Five Valve Manifold, Remote Mount - Isolation, equalize valves In - Line on the top and vent valves are on the sides, threaded port inlet, outlet and vent / test connections.	1/2"FNPT x 1/2"FNPT x1/4"FNPT
M5 - MM	Five Valve Miniature Manifold, Remote Mount - Threaded 1/4" FNPT port inlet, outlet and vent / test connections	1/4"FNPT x 1/4"FNPT x1/4"FNPT
M5 - IXT	Five Valve Manifold, Direct Mount - Isolation, equalize valves In - Line on the top is angled and vent valves are on the sides, threaded port inlet instrument flange outlet and vent / test connections.	1/2"FNPT x 1/2"FNPT x1/4"FNPT
M5 - T	Five Valve Manifold, Direct Mount - T block, threaded port inlet, instrument flange outlet and vent / test connections.	1/2"FNPT x Flange x 1/4"FNPT
M5 - H	Five Valve Manifold, Direct Mount - H block, process flange inlet, instrument flange outlet and vent / test connections.	Flange x Flange x 1/4"FNPT

Valve Type

M5 - Five Valve Manifolds

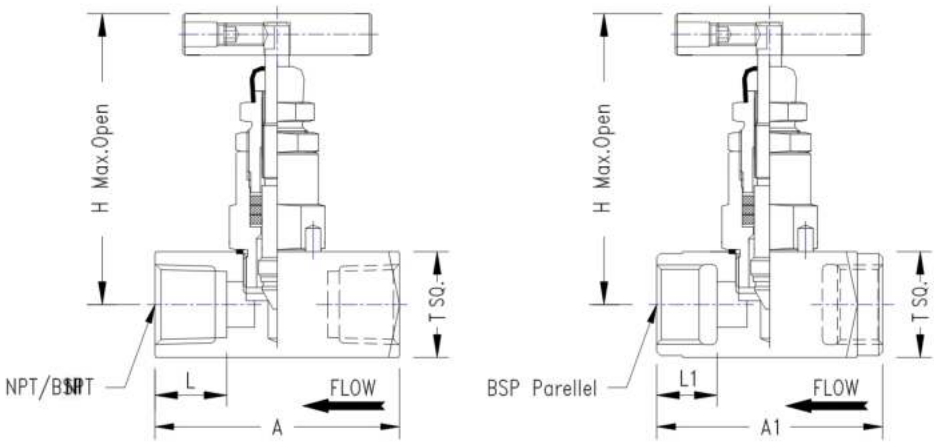
Body Style

S - Screwed - Process, Instrument and Vent / Drain Connections
1 - Type - 1
2 - Type - 2
I - Valve In - Line on the Top
MM - Miniature Manifold
X - Flat Body
T - Threaded x Flange
H - Flange x Flange

Specifications

Model	NV
Type :	Hand Valve (Screwed Bonnet Needle Valve) - Female End Connections ~ Hard Seat
Material - Body:	A105 CS, A 479 SS 304, A 479 SS 316, Hastealloy, Monel.
Plug / Ball:	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing:	PTFE (standard), Graphoil
	Pressure vs Temperature Rating
PTFE :	6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
Graphoil :	6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Thread Size Range:	1/8" - 1" NPT or BSP-Taper / Parallel.
Features & Benefits:	The Hand Valve Series has packing below threads , are designed for safe, repetitive bubble - tight closure, simple maintenance, and a long, trouble - free life. A free - swiveling plug / ball end stem is incorporated for bubble-tight closure.
Notes :	All valves are 100% pressure tested.
	Carbon Steel valves are zinc plated and dichromated.
	Stainless Steel valves have natural finish.

For Ordering please refer our Ordering Information.

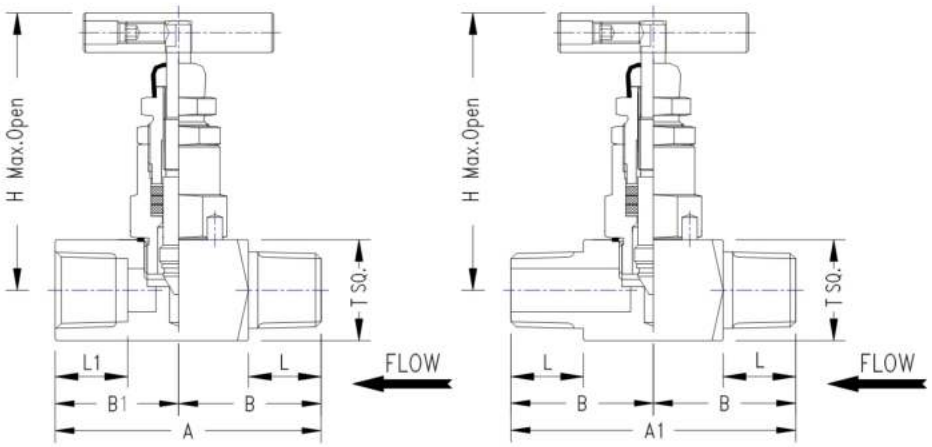


CONNECTION SIZE INLET x OUTLET Female x Female	ORIFICE mm – inch	Cv	L	A	L1	A1	T SQ.	H	WEIGHT Kg. (Approx.)
1/8" x 1/8"	3.5 – 0.138	0.25	10.4	50	10.0	48	25	85	0.300
1/4" x 1/4"	4.8 – 0.187	0.52	15.0	60	12.0	52	25	85	0.320
3/8" x 3/8"	4.8 – 0.187	0.52	15.0	60	14.0	56	25	85	0.310
1/2" x 1/2"	6.4 – 0.250	0.86	19.8	70	16.0	60	28	87	0.380
3/4" x 3/4"	8.0 – 0.312	1.2	20.6	74	18.0	70	35	118	0.600
1" x 1"	8.0 – 0.312	1.2	25.4	84	20.0	76	41	121	0.950

Specifications

Model	NV
Type :	Hand Valve (Screwed Bonnet Needle Valve) - Male x Female / Male x Male End Connections ~ Hard Seat
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil
	Pressure vs Temperature Rating
	PTFE : 6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
	Graphoil : 6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Thread Size Range :	1/8" - 1" NPT or BSP-Taper / Parallel.
Features & Benefits :	The Hand Valve Series has packing below threads , are designed for safe, repetitive bubble - tight closure, simple maintenance, and a long, trouble - free life. A free - swiveling plug / ball end stem is incorporated for bubble-tight closure.
Notes :	All valves are 100% pressure tested.
	Carbon Steel valves are zinc plated and dichromated.
	Stainless Steel valves have natural finish.

For Ordering please refer our Ordering Information.

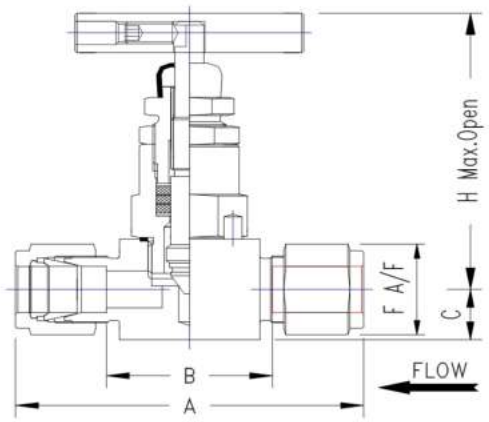


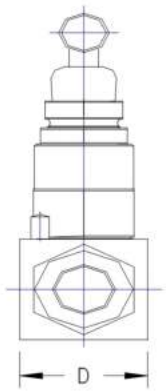
CONNECTION SIZE INLET x OUTLET Male x Female / Male x Male	ORIFICE mm – inch	Cv	L	L1	A	A1	B	B1	T SQ.	H	WEIGHT Kg. (Approx.) M x F/M x M
1/8" x 1/8"	3.5 – 0.138	0.25	9.7	10.4	55	60	30	25	25	85	0.330 / 0.360
1/4" x 1/4"	4.8 – 0.187	0.52	14.3	15.0	65	70	35	30	25	85	0.350 / 0.380
3/8" x 3/8"	4.8 – 0.187	0.52	14.3	15.0	65	70	35	30	25	85	0.340 / 0.370
1/2" x 1/2"	6.4 – 0.250	0.86	19.1	19.8	75	80	40	35	28	87	0.430 / 0.500
3/4" x 3/4"	8.0 – 0.312	1.2	19.1	20.6	80	86	43	37	35	118	0.660 / 0.760
1" x 1"	8.0 – 0.312	1.2	23.9	25.4	90	96	48	42	41	121	1.110 / 1.250

Specifications

Model	NV
Type :	Hand Valve (Screwed Bonnet Needle Valve)- Tube End Connections ~ Hard Seat
Material - Body:	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil
	Pressure vs Temperature Rating
	PTFE : 6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
	Graphoil : 6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Size Range :	1/8" - 1/2" Tube OD / 3mm - 12mm Tube OD
Features & Benefits :	The Hand Valve Series haspacking below threads , are designed for safe, repetitive bubble - tight closure, simple maintenance, and a long, trouble - free life. A free - swiveling plug / ball end stem is incorporated for bubble-tight closure.
Notes :	All valves are 100% pressure tested. Carbon Steel valves are zinc plated and dichromated.. Stainless Steel valves have natural finish.

For Ordering please refer our Ordering Information.





CONNECTION SIZE INLET x OUTLET TUBE OD x TUBE OD	ORIFICE mm – inch	Cv	A	B	C	D	F A/F	H	WEIGHT Kg. (Approx.)
1/8" x 1/8" 3mm x 3mm	2.0 – 0.080	0.09	55	29	12.5	25	11	85	0.280
1/4" x 1/4" 6mm x 6mm	3.2 – 0.125	0.21	60	29	12.5	25	14	85	0.300
8mm x 8mm	4.8 – 0.187	0.52	65	31	12.5	25	16	85	0.320
3/8" x 3/8" 10mm x 10mm	4.8 – 0.187	0.52	70	36	12.5	25	17 19	85	0.340
1/2" x 1/2" 12mm x 12mm	6.4 – 0.250	0.73	80	34	14	28	22	87	0.450

ORDERING CODES

NV _ 8 F _ N _ P _ V _ SS _

HAND VALVE - NV
Female Ends, Male Ends, Male x Female Ends, Female x Male Ends & Tube Ends.

SIZE

CONNECTIONS - Inlet x Oulet

THREAD

VALVE SEAT

STEM PACKING

MATERIAL

OPTIONS

ORDERING EXAMPLE - NV - 8 F - N - P - V - SS
- NV - 8 T - P - V - SS

Code	Size (INCH)			
2	1/8 "		8	1/2 "
4	1/4 "		12	3/4 "
6	3/8 "		16	1 "

Code	Connection - Outlet x Inlet		
F	Female x Female	F/M	Female x Male
M	Male x Male	T	Tube
M/F	Male x Female		

For Metric Tube Size denote m with Tube Size - eg.12m for 12 mm Tube OD

Code	Thread Type
N	NPT - Standard
Rx	BSP Taper
Rp	BSP Parrallel

Note : Standard Connections
Threaded - NPT to ANSI/ASME B1-20 .1
Other Connections
Threaded - BSP Taper to BS 21
- BSP Parallel to BS 2779
Please consult the sales office for availability.

Code	Valve Hard Seat
P	Plug Seat - Standard
B	Ball Seat - Optional

Code	Stem Packing
V	Teflon (PTFE) - Standard
G	Graphoil

Code	Material
CS	A 105 CS
S	SS 304
SS	SS 316
H	Hastelloy
ML	Monel

Code	Options
SG	Sour Gas meets the requirement of NACE MR-01-75 lastest revisions. (SS valves only)
OC	Clean for Oxygen Service
SP	Special requirements - please specify.

Specifications

Model : ANV

Type : Angle Hand Valve (Screwed Bonnet Angle Needle Valve) - Screwed End Connections ~ Hard Seat

Material - Body : A105 CS, A 479 SS 304, A 479 SS 316, Hastealloy, Monel.

Plug / Ball : SS 316

Stem : SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.

Stem Packing : PTFE (standard), Graphoil

Pressure vs Temperature Rating

PTFE : 6000 PSI @ 200 °F - 413 bar @ 93 °C
4000 PSI @ 500 °F - 276 bar @ 260 °C

Graphoil : 6000 PSI @ 200 °F - 413 bar @ 93 °C
1500 PSI @ 1000 °F - 103 bar @ 537 °C

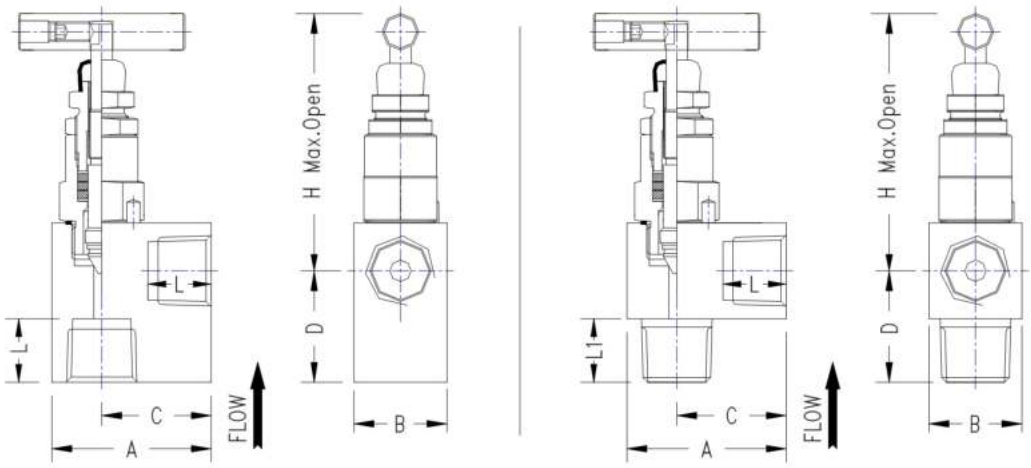
Thread Size Range : 1/4" - 1" NPT or BSP-Taper / Parallel.

Connections : Inlet x Outlet
Female x Female, Male x Female threaded Ends.

Features & Benefits : The Hand Valve Series has packing below threads , are designed for safe, repetitive bubble - tight closure, simple maintenance, and a long, trouble - free life. A free - swiveling plug / ball end stem is incorporated for bubble-tight closure.
The 90 deg. Angle needle valve offer high pressure bubble-tight sealing in a compact body allowing pipe work origination to change by 90 degree at the valve.

Notes : All valves are 100% pressure tested.
Carbon Steel valves are zinc plated and dichromated..
Stainless Steel valves have natural finish.

For Ordering please refer our Ordering Information.

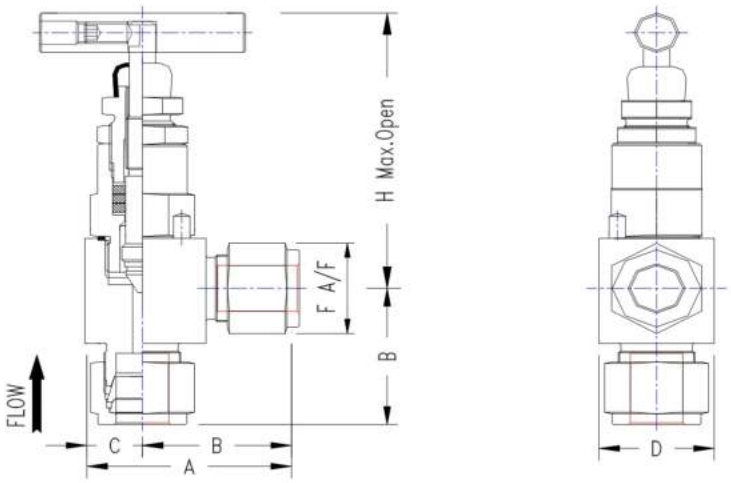


CONNECTION SIZE INLET x OUTLET Female x Female / Male x Female	ORIFICE mm – inch	Cv	L	L1	A	B	C	D	H	WEIGHT Kg. (Approx.) F x F/M x F
1/4" x 1/4"	4.8 – 0.187	0.52	15.0	14.3	42	25	29	27	85	0.370 / 0.270
3/8" x 3/8"	4.8 – 0.187	0.52	15.0	14.3	42	25	29	27	85	0.400 / 0.310
1/2" x 1/2"	6.4 – 0.250	0.86	19.8	19.1	48	28	34	34	87	0.520 / 0.370
3/4" x 3/4"	8.0 – 0.312	1.2	20.6	19.1	55	35	37	37	118	0.740 / 0.530
1" x 1"	8.0 – 0.312	1.2	25.4	23.9	63	41	42	44	121	1.120 / 0.780

Specifications

Model	ANV
Type :	Angle Hand Valve (Screwed Bonnet Angle Needle Valve) - Tube End Connections ~ Hard Seat
Material - Body:	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball:	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing:	PTFE (standard), Graphoil
	Pressure vs Temperature Rating
	PTFE : 6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
	Graphoil : 6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Size Range:	1/8 " - 1/2 " Tube OD / 3 mm - 12 mm Tube OD
Features & Benefits:	The Hand Valve Series haspacking below threads , are designed for safe, repetitive bubble - tight closure, simple maintenance, and a long, trouble - free life. A free - swiveling plug / ball end stem is incorporated for bubble-tight closure.
	The 90 deg. Angle needle valve offer high pressure bubble-tight sealing in a compact body allowing pipe work origination to change by 90 degree at the valve.
Notes :	All valves are 100% pressure tested.
	Carbon Steel valves are zinc plated and dichromated..
	Stainless Steel valves have natural finish.

For Ordering please refer our Ordering Information.



CONNECTION SIZE INLET x OUTLET TUBE OD x TUBE OD	ORIFICE mm – inch	Cv	A	B	C	D	F A/F	H	WEIGHT Kg. (Approx.)
1/8" x 1/8" 3mm x 3mm	2.0 – 0.080	0.09	36	23	13	25	11	85	0.250
1/4" x 1/4" 6mm x 6mm	3.2 – 0.125	0.21	43	30	13	25	14	85	0.300
8mm x 8mm	4.8 – 0.187	0.52	46	33	13	25	16	85	0.330
3/8" x 3/8" 10mm x 10mm	4.8 – 0.187	0.52	48	35	13	25	17 19	85	0.350
1/2" x 1/2" 12mm x 12mm	6.4 – 0.250	0.73	54	40	14	28	22	87	0.450

ORDERING CODES

ANV _ 8 F _ N _ P _ V _ CS _

Angle Needle Valve - ANV
Female Ends, Male Ends, Male x Female Ends, Female x Male Ends & Tube Ends.

SIZE

CONNECTIONS - Inlet x Oulet

THREAD

VALVE SEAT

STEM PACKING

MATERIAL

OPTIONS

ORDERING EXAMPLE - ANV - 8 F - N - P - V - CS
- ANV - 12mT - P - V - CS

Code	Size (INCH)			
2	1/8 "		8	1/2 "
4	1/4 "		12	3/4 "
6	3/8 "		16	1 "

Code	Connection - Outlet x Inlet		
F	Female x Female	F/M	Female x Male
M	Male x Male	T	Tube
M/F	Male x Female		

For Metric Tube Size denotem with Tube Size - eg.12m for 12 mm Tube OD

Code	Thread Type
N	NPT - Standard
Rx	BSP Taper
Rp	BSP Parrallel

Note : Standard Connections
Threaded - NPT to ANSI/ASME B1-20 .1
Other Connections
Threaded - BSP Taper to BS 21
- BSP Parallel to BS 2779
Please consult the sales office for availability.

Code	Valve Hard Seat
P	Plug Seat - Standard
B	Ball Seat - Optional

Code	Stem Packing
V	Teflon (PTFE) - Standard
G	Graphoil

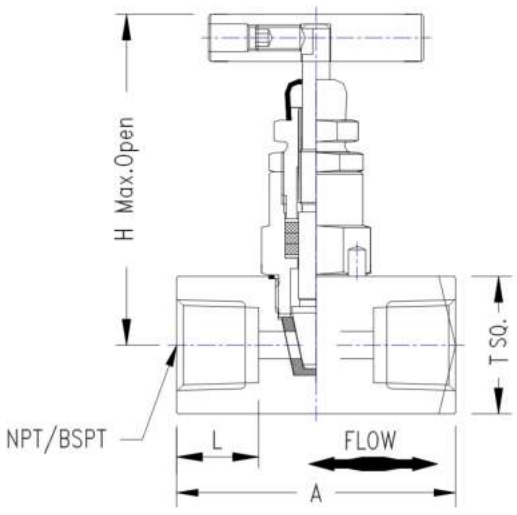
Code	Material
CS	A 105 CS
S	SS 304
SS	SS 316
H	Hastelloy
ML	Monel

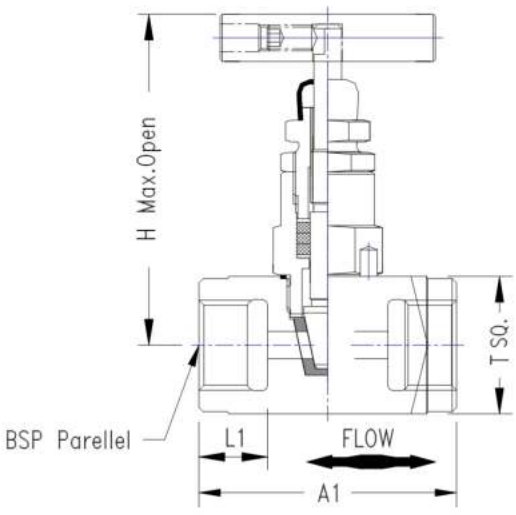
Code	Options
SG	Sour Gas meets the requirement of NACE MR-01-75 lastest revisions. (SS valves only)
OC	Clean for Oxygen Service
SP	Special requirements - please specify.

Specifications

Model	SNV
Type :	Hand Valve ~ Soft Seat - Female End Connections
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Stem :	SS 316 cold rolled surface, one-piece rotating stem and plug.
Stem Packing :	PTFE
Seat :	Delrin (Standard) / PTFE
	Pressure vs Temperature Rating
	Delrin : 6000 PSI @ 200 ° F - 413 bar @ 93 ° C
	PTFE : 1000 PSI @ 150 ° F - 69 bar @ 78 ° C
Thread Size Range :	1/4" - 1/2" NPT or BSP-Taper / Parallel.
Orifice Size / Cv :	0.187-inch (4.8 mm) diameter / Cv - 0.83
	0.250-inch (6.4 mm) diameter / Cv - 1.40
Features & Benefits :	The Soft Seated Hand valve Series are designed for maximum system reliability. The design criteria includes repetitive bubble - tight closure, safety, and a long, trouble - free life with easy maintenance. Gene-tech utilizes a replaceable soft seat that gives premium tightness at closure, even in dirty service.The valve's straight throught rising plug design provides good regulation and high capacity bi-directional flow, and is also roddable for easy cleaning.
Notes :	All valves are 100% pressure tested.
	Carbon Steel valves are zinc plated and dichromated.
	Stainless Steel valves have natural finish.

For Ordering please refer our Ordering Information.





CONNECTION SIZE INLET x OUTLET Female x Female	L	A	L1	A1	T SQ.	H	WEIGHT Kg. (Approx.)
1/4" x 1/4"	15.0	60	12.0	54	32	86	0.500
3/8" x 3/8"	15.0	60	14.0	58	32	86	0.500
1/2" x 1/2"	19.8	70	16.0	62	32	86	0.600

ORDERING INFORMATION - Needle Valves - Screwed End Connections ~ Soft Seat

ORDERING CODES

SNV _ 8 F _ N _ 2 _ D _ SS _ ____

Soft Seated Hand Valve - SNV
Female Ends, Male Ends, Male x Female Ends & Tube Ends.

SIZE

CONNECTIONS - Inlet x Oulet

THREAD

ORIFICE SIZE

VALVE SOFT SEAT - Material

MATERIAL

OPTIONS

ORDERING EXAMPLE - SNV - 8 F - N - 2 - D - SS
- SNV - 12 T - 2 - D - SS

Code	Size (INCH)
4	1/4 "
6	3/8 "
8	1/2 "

Code	Connection - Outlet x Inlet
F	Female x Female
M	Male x Male
M/F	Male x Female
T	Tube

Code	Thread Type
N	NPT - Standard
Rx	BSP Taper
Rp	BSP Parrallel

Code	Orifice Size
1	4.8 diameter
2	6.4 diameter

Code	Valve Soft Seat - Material
D	Delrin - Standard
P	PTFE - Optional

Code	Stem Packing
	Teflon (PTFE) - Standard

Code	Material
CS	A 105 CS
S	SS 304
SS	SS 316
H	Hastelloy
ML	Monel

Code	Options
SG	Sour Gas meets the requirement of NACE MR-01-75 lastest revisions. (SS valves only)
OC	Clean for Oxygen Service
SP	Special requirements - please specify.

For Metric Tube Size denote m with Tube Size - eg. 12m for 12 mm Tube OD

Note : Standard Connections
Threaded - NPT to ANSI/ASME B1-20 .1
Other Connections
Threaded - BSP Taper to BS 21
- BSP Parallel to BS 2779

Please consult the sales office for availability.

Specifications

Model : MV

Type : Mini - Valve (Screwed Bonnet) - Female End Connections

Material - Body : A105 CS, A 479 SS 304, A 479 SS 316 , Brass, Hastelloy, Monel.

Stem : SS 316 cold rolled surface, one-piece rotating, with ' V ' tipped plug for accurated flow control.

Stem Packing : PTFE (standard), Graphoil

Pressure vs Temperature Rating

CS and SS Valves

PTFE :	6000 PSI @	200	° F - 413 bar @	93	° C
	4000 PSI @	500	° F - 276 bar @	260	° C
Graphoil :	6000 PSI @	200	° F - 413 bar @	93	° C
	1500 PSI @	1000	° F - 103 bar @	537	° C

Brass Valves

PTFE :	3000 PSI @	200	° F - 207 bar @	93	° C
Graphoil :	3000 PSI @	200	° F - 207 bar @	93	° C

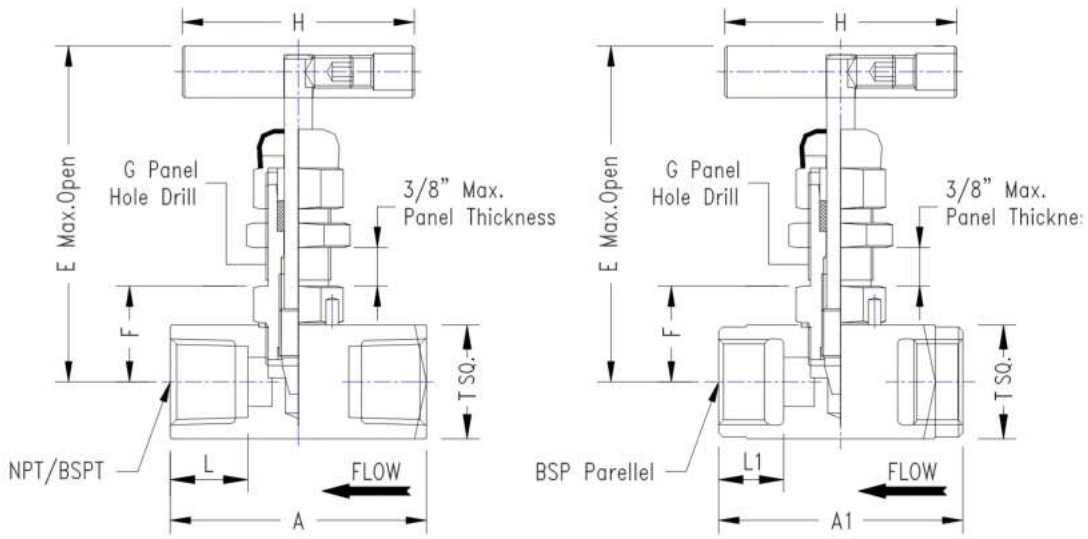
Thread Size Range : 1/8" - 1/2" NPT or BSP-Taper / Parallel.

Features & Benefits : The Mini valves has packing above threads , facilitate safe, compact, and economical installations.They are excellent for both throttling and straight isolation.

Optional : Panel mounting available.

Notes : All valves are 100% pressure tested.
Carbon Steel valves are zinc plated and dichromated..
Stainless Steel valves have natural finish.
Brass valves have natural finish or are nickel plated.

For Ordering please refer our Ordering Information.



CONNECTION SIZE INLET x OUTLET Female x Female	ORIFICE mm – inch	Cv	L	A	L1	A1	TSQ.	E	F	G	H	WEIGHT Kg. (Approx.)
1/8" x 1/8"	3.2 – 0.125	0.21	10.4	46	10.0	44	22	88	21	16.5	46	0.270
1/4" x 1/4"	4.8 – 0.187	0.42	15.0	56	12.0	50	25	90	22.5	16.5	57	0.350
3/8" x 3/8"	4.8 – 0.187	0.42	15.0	56	14.0	54	25	90	22.5	16.5	57	0.320
1/2" x 1/2"	6.4 – 0.250	0.73	19.8	66	16.0	60	28	92	24	16.5	57	0.410

ORDERING CODES

MV _ 8 F _ N _ V _ SS _

Straight Mini - Valve - MV
Female Ends, Male Ends, Male x Female End,
Female x Male End & Tube Ends.

SIZE

CONNECTIONS - Inlet x Oulet

THREAD

STEM PACKING

MATERIAL

OPTIONS

ORDERING EXAMPLE - MV - 8 MF - N - V - SS
- MV - 12 T - V - SS

Code	Size (INCH)			
2	1/8 "		6	3/8 "
4	1/4 "		8	1/2 "

Code	Connection - Outlet x Inlet			
F	Female x Female		F/M	Female x Male
M	Male x Male		T	Tube
M/F	Male x Female			

For Metric Tube Size denote m with Tube Size - eg.12m for 12 mm Tube OD

Code	Thread Type
N	NPT - Standard
Rx	BSP Taper
Rp	BSP Parrallel

Note : Standard Connections
Threaded - NPT to ANSI/ASME B1-20 .1
Other Connections
Threaded - BSP Taper to BS 21
- BSP Parallel to BS 2779
Please consult the sales office for availability.

Code	Stem Packing
V	Teflon (PTFE) -Standard
G	Graphoil

Code	Material
CS	A 105 CS
S	SS 304
SS	SS 316
B	Brass
H	Hastelloy
ML	Monel

Code	Options
SG	Sour Gas meets the requirement of NACE MR-01-75 lastest revisions. (SS valves only)
PM	Panel Mounting
OC	Clean for Oxygen Service
SP	Special requirements - please specify.

Specifications

Model : IBV

Type : Integral Bonnet Valves - Screwed End Connections.

Material - Body : A105 CS, A 479 SS 304, A 479 SS 316 , Brass, Hastelloy, Monel.

Stem : SS 316 cold rolled surface, one-piece rotating, which is ' V ' tipped for accurate flow control.

Stem Packing : PTFE (standard), Graphoil

Pressure vs Temperature Rating

CS and SS Valves

PTFE :	6000 PSI @	200	° F - 413 bar @	93	° C
	4000 PSI @	500	° F - 276 bar @	260	° C
Graphoil :	6000 PSI @	200	° F - 413 bar @	93	° C
	1500 PSI @	1000	° F - 103 bar @	537	° C

Brass Valves

PTFE :	3000 PSI @	200	° F - 207 bar @	93	° C
Graphoil :	3000 PSI @	200	° F - 207 bar @	93	° C

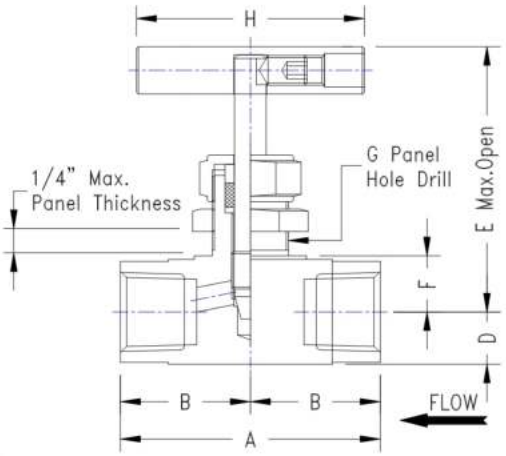
Thread Size Range : 1/8" - 1/2" NPT or BSP-Taper / Parallel.

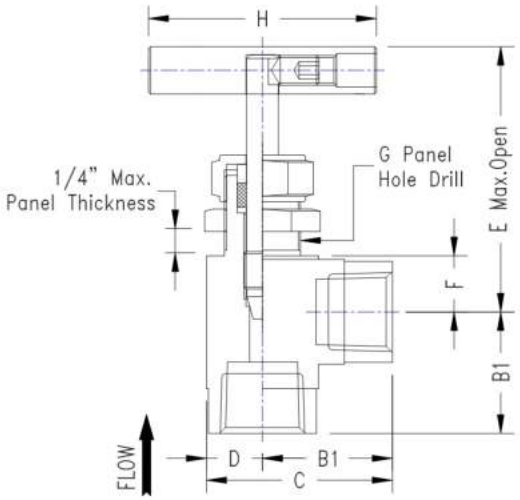
Features & Benefits : The Integral Bonnet valves facilitate safe, compact, and economical installations.They are excellent for both throttling and straight isolation.

Optional : Panel mounting available.

Notes : All valves are 100% pressure tested.
Carbon Steel valves are zinc plated and dichromated..
Stainless Steel valves have natural finish.
Brass valves have natural finish or are nickel plated.

For Ordering please refer our Ordering Information.





CONNECTION SIZE INLET x OUTLET Female x Female / Male x Male / Male x Female	ORIFICE mm – inch	Cv	A	B	B1	C	D	E	F	G	H	WEIGHT Kg. (Approx.) Straight/Angle
1/8" x 1/8"	3.2 – 0.125	0.21	46	23	22.5	32	9.5	58	11	16.5	46	0.260 / 0.290
1/4" x 1/4"	4.8 – 0.187	0.42	50	25	24.5	34	9.5	60	11	16.5	46	0.320 / 0.350
3/8" x 3/8"	6.4 – 0.250	0.73	54	27	27	38	11	70	13	19.8	57	0.340 / 0.380
1/2" x 1/2"	6.4 – 0.250	0.73	64	32	32	46	14	72	16	19.8	57	0.400 / 0.450

Specifications

Model : IBV

Type : Integral Bonnet Valves - Tube End Connections.

Material - Body : A105 CS, A 479 SS 304, A 479 SS 316 , Brass Hastelloy, Monel.

Stem : SS 316 cold rolled surface, one-piece rotating, which is ' V ' tipped for accurate flow control.

Stem Packing : PTFE (standard), Graphoil

Pressure vs Temperature Rating

CS and SS Valves

PTFE : 6000 PSI @ 200 ° F - 413 bar @ 93 ° C

4000 PSI @ 500 ° F - 276 bar @ 260 ° C

Graphoil : 6000 PSI @ 200 ° F - 413 bar @ 93 ° C

1500 PSI @ 1000 ° F - 103 bar @ 537 ° C

Brass Valves

PTFE : 3000 PSI @ 200 ° F - 207 bar @ 93 ° C

Graphoil : 3000 PSI @ 200 ° F - 207 bar @ 93 ° C

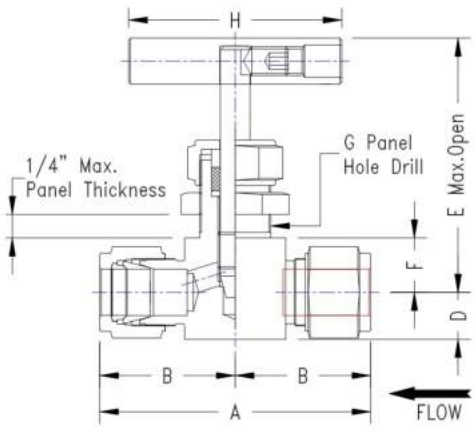
Size Range : 1/8" - 1/2" Tube OD / 3mm - 12mm Tube OD.

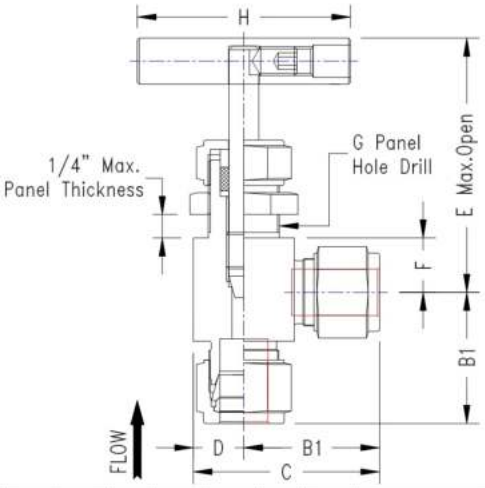
Features & Benefits : The Integral Bonnet valves facilitate safe, compact, and economical installations.They are excellent for both throttling and straight isolation.

Optional : Panel mounting available.

Notes : All valves are 100% pressure tested.
Carbon Steel valves are zinc plated and dichromated..
Stainless Steel valves have natural finish.
Brass valves have natural finish or are nickel plated.

For Ordering please refer our Ordering Information.





CONNECTION SIZE INLET x OUTLET TUBE OD x TUBE OD	ORIFICE mm – inch	Cv	A	B	B1	C	D	E	F	G	H	WEIGHT Kg. (Approx.) Straight/Angle
1/8" x 1/8" 3mm x 3mm	2.0 – 0.080	0.09	49	24.5	24.5	34	9.5	58	11.0	16.5	46	0.250 / 0.260
1/4" x 1/4" 6mm x 6mm	3.2 – 0.125	0.21	57	28.5	28.5	38	9.5	60	11.0	16.5	46	0.260 / 0.320
8mm x 8mm	4.8 – 0.187	0.42	60	30.0	30.0	41	11.0	70	13.0	19.8	57	0.300 / 0.330
3/8" x 3/8" 10mm x 10mm	6.4 – 0.250	0.73	66	33.0	33.0	44	11.0	70	13.0	19.8	57	0.320 / 0.360
1/2" x 1/2" 12mm x 12mm	6.4 – 0.250	0.73	72	36.0	36.0	50	14.0	72	16.0	19.8	57	0.360 / 0.450

ORDERING CODES

Straight Integral Bonnet Valve - IBV
Angle Integral Bonnet Valve - AIBV
Female Ends, Male Ends, Male x Female End,
Female x Male End & Tube Ends.

IBV _ 8 F _ N _ V _ SS _

SIZE

CONNECTIONS - Inlet x Oulet

THREAD

STEM PACKING

MATERIAL

OPTIONS

ORDERING EXAMPLE - IBV - 8 MF - N - V - SS
- IBV - 12T - V - SS

Code	Size (INCH)			
2	1/8 "		6	3/8 "
4	1/4 "		8	1/2 "

Code	Connection - Outlet x Inlet		
F	Female x Female	F/M	Female x Male
M	Male x Male	T	Tube OD
M/F	Male x Female		

For Metric Tube Size denote m with Tube Size - eg.12m for 12 mm Tube OD

Code	Thread Type
N	NPT - Standard
Rx	BSP Taper
Rp	BSP Parrallel

Note : Standard Connections
Threaded - NPT to ANSI/ASME B1-20 .1
Other Connections
Threaded - BSP Taper to BS 21
- BSP Parallel to BS 2779
Please consult the sales office for availability.

Code	Stem Packing
V	Teflon (PTFE) -Standard
G	Graphoil

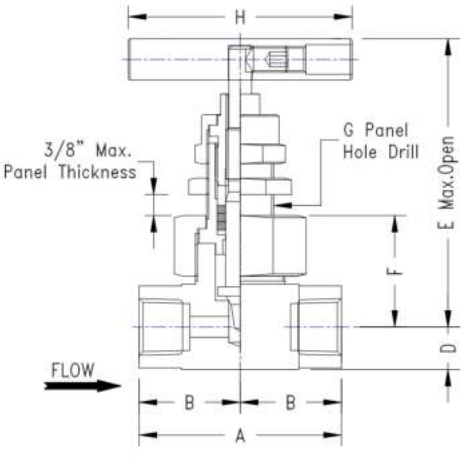
Code	Material
CS	A 105 CS
S	SS 304
SS	SS 316
B	Brasss
H	Hastelloy
ML	Monel

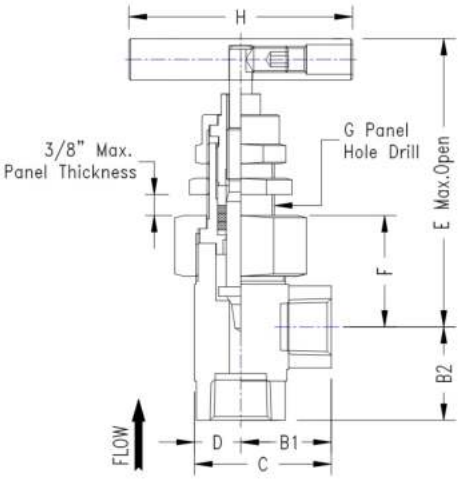
Code	Options
SG	Sour Gas meets the requirement of NACE MR-01-75 lastest revisions. (SS valves only)
PM	Panel Mounting
OC	Clean for Oxygen Service
SP	Special requirements - please specify.

Specifications

Model	UBV
Type :	Union Bonnet Valve - Screwed End Connections.
Material - Body	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Stem :	SS 316 cold rolled surface, regulating vee tipped plug for better flow control.
Stem Packing:	PTFE (standard), Graphoil
	Pressure vs Temperature Rating
	PTFE: 6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
	Graphoil : 6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Thread Size Range	1/8" - 1" NPT or BSP-Taper / Parallel.
Features & Benefits	The Union Bonnet Valves are designed for safe, repetitive bubble-tight closure and simple maintenance.This valve provides long life and bubble - tight shutoff in severe operating conditions.
Optional:	Panel mounting available.
Notes :	All valves are 100% pressure tested.
	Carbon Steel valves are zinc plated and dichromated..
	Stainless Steel valves have natural finish.

For Ordering please refer our Ordering Information.



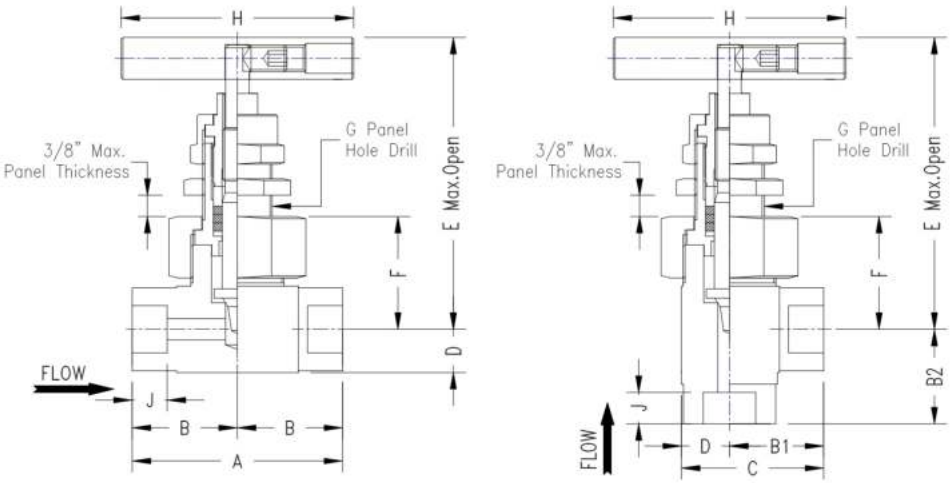


CONNECTION SIZE INLET x OUTLET Female x Female / Male x Male / Male x Female	ORIFICE mm – inch	Cv	A	B	B1	B2	C	D	E	F	G	H	WEIGHT Kg. (Approx.) Straight/Angle
1/8" x 1/8"	4.0 – 0.156	0.35	50	25	23	25	32.5	9.5	78	28	15.1	46	0.300 / 0.280
1/4" x 1/4"	6.4 – 0.250	0.86	57	28.5	25	28.5	38	13	98	34	19.8	64	0.450 / 0.350
3/8" x 3/8"	6.4 – 0.250	0.86	57	28.5	25	28.5	38	13	98	34	19.8	64	0.430 / 0.320
1/2" x 1/2"	9.5 – 0.375	1.8	76	38	34	38	50	16	124	46	26.2	90	0.800 / 0.650
3/4" x 3/4"	9.5 – 0.375	1.8	82	41	—	—	—	19	124	50	26.2	90	1.000 / —
1" x 1"	9.5 – 0.375	1.8	90	45	—	—	—	25	130	54	26.2	90	1.600 / —

Specifications

Model		UBV
Type :		Union Bonnet Valve - Socket Weld End Connections.
Material -	Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
	Stem :	SS 316 cold rolled surface, regulating vee tipped plug for better flow control.
	Stem Packing :	PTFE (standard), Graphoil
		Pressure vs Temperature Rating
		PTFE : 6000 PSI @ 200° F - 413 bar @ 93° C
		4000 PSI @ 500° F - 276 bar @ 260° C
		Graphoil : 6000 PSI @ 200° F - 413 bar @ 93° C
		1500 PSI @ 1000° F - 103 bar @ 537° C
Size Range :		1/4" OD - 1/2" OD Tube Socket Weld
		1/4" NB - 1" NB Pipe Socket Weld
Features & Benefits :		The Union Bonnet Valves are designed for safe, repetitive bubble-tight closure and simple maintenance.This valve provides long life and bubble - tight shutoff in severe operating conditions.
Optional :		Panel mounting available.
Notes :		All valves are 100% pressure tested.
		Carbon Steel valves are zinc plated and dichromated..
		Stainless Steel valves have natural finish.

For Ordering please refer o ur Ordering Information.



CONNECTION SIZE INLET x OUTLET TSW x TSW	ORIFICE mm – inch	Cv	A	B	B1	B2	C	D	E	F	G	H	J	WEIGHT Kg. (Approx.) Straight/Angle
1/4" x 1/4"	4.0 – 0.156	0.35	46	23	22	30	31.5	9.5	78	28	15.1	46	7.2	0.450 / 0.350
3/8" x 3/8"	6.4 – 0.250	0.86	57	28.5	25	28.5	38	13	98	34	19.8	64	7.9	0.480 / 0.380
1/2" x 1/2"	6.4 – 0.250	0.86	57	28.5	25	28.5	38	13	98	34	19.8	64	9.5	0.520 / 0.420
PSW x PSW														
1/4" x 1/4"	6.4 – 0.250	0.86	57	28.5	25	28.5	38	13	98	34	19.8	64	9.5	0.500 / 0.400
3/8" x 3/8"	6.4 – 0.250	0.86	60	30	26	30	38	14	98	35	19.8	64	9.5	0.580 / 0.480
1/2" x 1/2"	9.5 – 0.375	1.8	76	38	34	38	52	18	124	48	26.2	90	13	0.900 / 0.720
3/4" x 3/4"	9.5 – 0.375	1.8	82	41	—	—	—	20	124	50	26.2	90	13	1.100 / —
1" x 1"	9.5 – 0.375	1.8	90	45	—	—	—	25	130	54	26.2	90	13	1.800 / —

ORDERING CODES

Straight Union Bonnet Valve - UBV
Angle Union Bonnet Valve - AUBV
Female Ends, Male Ends, Male x Female End,
Female x Male End, Tube Ends, Tube Socket
Weld Ends & Pipe Socket Weld Ends.

UBV _ 8 PSW _ _ V _ CS _

SIZE

CONNECTIONS - Inlet x Oulet

THREAD

STEM PACKING

MATERIAL

OPTIONS

ORDERING EXAMPLE - UBV - 8 F - N - V - CS
- UBV - 6mmT - V - CS
- UBV - 8 PSW - V - CS

Code	Size (INCH)		
2	1/8 "	8	1/2 "
4	1/4 "	12	3/4 "
6	3/8 "	16	1 "

Code	Connection - Outlet x Inlet		
F	Female x Female	T	Tube OD
M	Male x Male	TSW	Tube Socket Weld
M/F	Male x Female	PSW	Pipe Socket Weld
F/M	Female x Male		

For Metric Tube Size denote m with Tube Size - eg.12m for 12 mm Tube OD

Code	Thread Type
N	NPT - Standard
Rx	BSP Taper
Rp	BSP Parrallel

Note : Standard Connections
Threaded - NPT to ANSI/ASME B1-20 .1
Other Connections
Threaded - BSP Taper to BS 21
- BSP Parallel to BS 2779
Please consult the sales office for availability.

Code	Stem Packing
V	Teflon (PTFE) - Standard
G	Graphoil

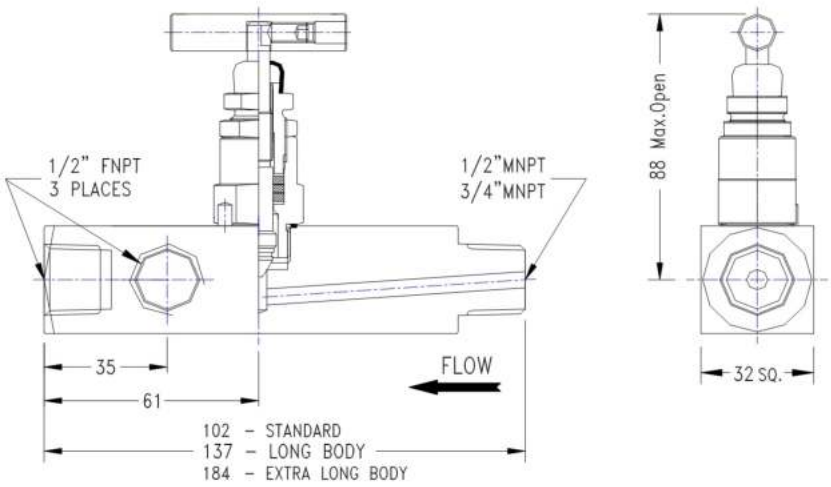
Code	Material
CS	A 105 CS
S	SS 304
SS	SS 316
H	Hastelloy
ML	Monel

Code	Options
PM	Panel Mounting
SG	Sour Gas meets the requirement of NACE MR-01-75 lastest revisions. (SS valves only)
OC	Clean for Oxygen Service
SP	Special requirements - please specify.

Specifications

Model	MPV
Type :	Multi - Port Gauge Valve ~ Hard Seat
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil
	Pressure vs Temperature Rating
	PTFE : 6000 PSI @ 200 ° F - 413 bar @ 93 ° C
	4000 PSI @ 500 ° F - 276 bar @ 260 ° C
	Graphoil : 6000 PSI @ 200 ° F - 413 bar @ 93 ° C
	1500 PSI @ 1000 ° F - 103 bar @ 537 ° C
Connections :	Inlet x Outlet
	1/2" MNPT x (3) 1/2" FNPT
	3/4" MNPT x (3) 1/2" FNPT
	1/2"NB Butt Weld x (3) 1/2" FNPT
	3/4"NB Butt Weld x (3) 1/2" FNPT
Features :	Muti-port gauge valves allowing the versatile positioning of gauges or pressure switches without requiring additional penetration of the main piping. The standard configuration has a male or female inlet and three 1/2" FNPT outlet ports. All valves with male inlet connections are available threaded or prepared for welding and either standard or extended inlets.
Optional :	Vent and blanking plug can be supplied to order seperately.
Notes :	All valves are 100% pressure tested.
	0.187-inch (4.8 mm) diameter orifice.
	Valve Cv - 0.52 maximum.
	Carbon Steel valves are zinc plated and dichromated..
	Stainless Steel valves have natural finish.
	Approximate valve weight - Standard - 0.800 kg.
	- Long - 1.100 kg.
	- Extra Long - 1.400 kg.

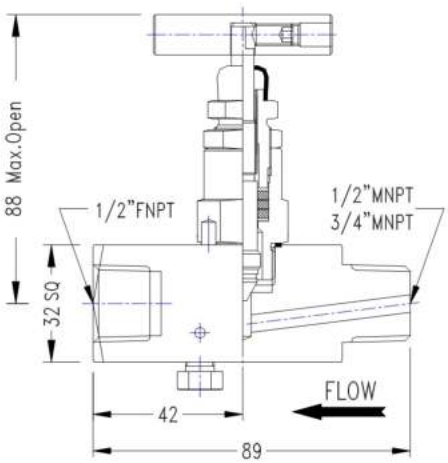
For Ordering please refer our ordering Information.

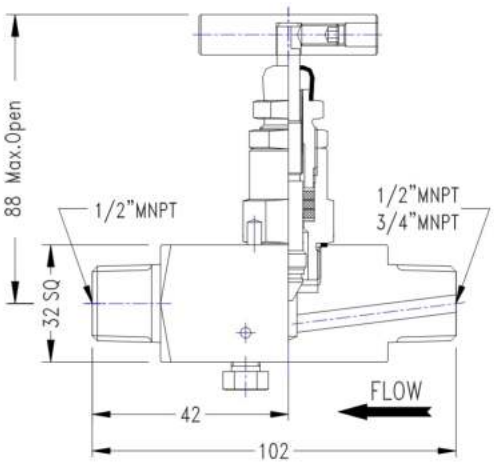


Specifications

Model	BBV
Type :	Block and Bleed Gauge Valve ~ Hard Seat
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316,Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil
	Pressure vs Temperature Rating
	PTFE : 6000 PSI @ 200° F - 413 bar @ 93° C
	4000 PSI @ 500° F - 276 bar @ 260° C
	Graphoil : 6000 PSI @ 200° F - 413 bar @ 93° C
	1500 PSI @ 1000° F - 103 bar @ 537° C
Connections :	Inlet x Outlet
	1/2" MNPT x 1/2" FNPT
	3/4" MNPT x 1/2" FNPT
	1/2" MNPT x 1/2" MNPT
	3/4" MNPT x 1/2" MNPT
	1/2" FNPT x 1/2" FNPT
Features :	Block and bleed gauge valve is specifically designed to facilitate safe, compact and economical gauge installation. These valve enables pressure to be safely vented without breaking threaded connections.
Notes :	All valves are 100% pressure tested.
	0.187-inch (4.8 mm) diameter orifice.
	Valve Cv - 0.52 maximum.
	Carbon Steel valves are zinc plated and dichromated..
	Stainless Steel valves have natural finish.
	Approximate. valve weight - 0.600 kg

For Ordering please refer our ordering Information.

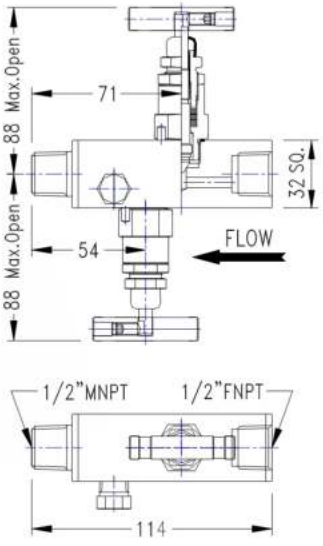


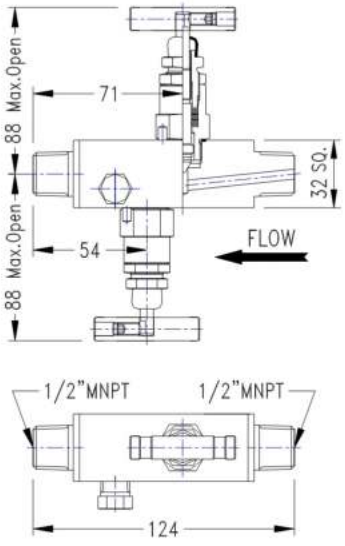


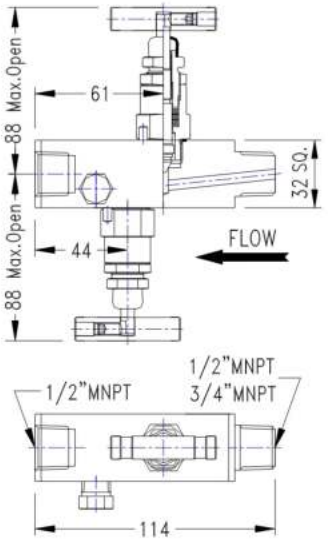
Specifications

Model	DBBV
Type :	Double Block and Bleed Gauge Valves ~ Hard Seat
Material - Body :	A105 CS, A 479 SS 304, A 479 SS 316, Hastelloy, Monel.
Plug / Ball :	SS 316
Stem :	SS 316 cold rolled surface, back seat & rotating with free swivel plug / ball type seat.
Stem Packing :	PTFE (standard), Graphoil
	Pressure vs Temperature Rating
	PTFE : 6000 PSI @ 200 ° F - 413 bar @ 93 ° C
	4000 PSI @ 500 ° F - 276 bar @ 260 ° C
	Graphoil : 6000 PSI @ 200 ° F - 413 bar @ 93 ° C
	1500 PSI @ 1000 ° F - 103 bar @ 537 ° C
Connections :	Inlet x Outlet
	1/2" FNPT x 1/2" MNPT
	1/2" MNPT x 1/2" MNPT
	1/2" MNPT x 1/2" FNPT
	3/4" MNPT x 1/2" FNPT
Features :	Two Valve Block and Bleed Gauge Valves are single oulet gauge valves that combine isolating, calibrating and venting facilities in a single compact unit. These valves enable gauges, pressure transmitters or switches to be reliably installed and serviced, by reducing potential leak points. The vent port is threaded 1/4"FNPT on all valves and fitted with a plug. This facilitates installation of exhaust piping / tubing on hazardous services, which in turn contributes to operator safety.
Notes :	All valves are 100% pressure tested.
	0.187-inch (4.8 mm) diameter orifice.
	Valve Cv - 0.52 maximum.
	Carbon Steel valves are zinc plated and dichromated..
	Stainless Steel valves have natural finish.
	Approximate. valve weight - 1.250 Kg

For Ordering please refer our Ordering Information.







ORDERING CODES

Multi - Port Guage V alve - MPV
Block & Bleed V alve - BBV
Double Block & Bleed V alve - DBBV

MPV _ 12-8 M/F _ N _ P _ V _ SS _

SIZE

CONNECTIONS - Inlet x Oulet

THREAD

VALVE SEAT

STEM PACKING

MATERIAL

OPTIONS

ORDERING EXAMPLE - MPV - 12 - 8M/F - N - P - V - SS

Code	Size (INCH)
8	1/2"
12	3/4"

Code	Connection - Inlet x Outlet			
M/F	Male x Female		F	Female x Female
M	Male x Male		F/M	Female x Male
M/F - L	Male x Female - Long body (Only for MPV)			
M/F - EL	Male x Female - Extra Long body (Only for MPV)			
BW/F	Butt Weld End x Female (Only for MPV)			
BW/F - L	Butt Weld End x Female - LONG BODY(Only for MPV)			
BW/F - EL	Butt Weld End x Female - EXTRA LONG BODY(Only for MPV)			

Code	Thread Type
N	NPT
Rx	BSPT
Rp	BSP Parrallel

Note : Standard Connections
Threaded - NPT to ANSI/ASME B1-20 .1
Other Connections
Threaded - BSP Taper to BS 21
- BSP Parallel to BS 2779
Please consult the sales office for availability.

Code	Valve Hard Seat
P	Plug Seat - Standard
B	Ball Seat - Optional

Code	Stem Packing
V	Teflon (PTFE) - Standard
G	Graphoil

Code	Material
CS	A 105 CS
S	SS 304
SS	SS 316
H	Hastelloy
ML	Monel

Code	Options
SG	Sour Gas meets the requirement of NACE MR-01-75 lastest revisions. (SS valves only)
OC	Clean for Oxygen Service
SP	Special requirements - please specify.

Specifications

Type : 1st Isolate : O.S.& Y. / 2nd Isolate : Needle / Vent : Needle

Features & Benefits :

- ANSI B16.5 flanged inlet conections
- 1 / 2" to 2" sizes
- 150 lb rated to 2500 lb rated.
- Raised face and ring type joint flange style.
- 1 / 2" NPT(Female) standard outlet.
- 1 / 4" NPT(Female) standard vent.
- One piece forged construction flange
- Standard material of construction
- SS ASTM A 182 F

NOTE :

- ALSO AVAILABLE IN OTHER COMBINATION.
- SINGLE BLOCK & BLEED
  1st ISOLATE:O.S.&Y. / VENT: NEEDLE
- DOUBLE BLOCK
  1st ISOLATE : O.S.&Y. / 2nt: NEEDLE
- SINGLE BLOCK
  1st ISOLATE : O.S.&Y.

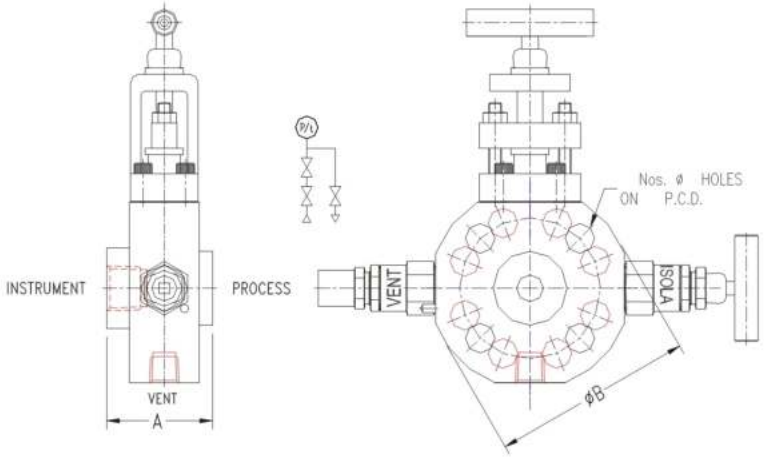
SIZE inch	RATING lb	A	øB
1/2"	150	45	88.9
1/2"	300	45	95.2
1/2"	600	50	95.2
1/2"	900/1500	50	120.7
1/2"	2500	55	133.4

SIZE inch	RATING lb	A	øB
3/4"	150	45	98.4
3/4"	300	45	117.5
3/4"	600	55	117.5
3/4"	900/1500	55	130.2
3/4"	2500	55	139.7

SIZE inch	RATING lb	A	øB
1"	150	50	108
1"	300	50	123.8
1"	600	55	123.8
1"	900/1500	55	149.2
1"	2500	55	158.8

SIZE inch	RATING lb	A	øB
1.1/2"	150	50	127
1.1/2"	300	50	155.6
1.1/2"	600	55	155.6
1.1/2"	900/1500	60	177.8
1.1/2"	2500	60	203.2

SIZE inch	RATING lb	A	øB
2"	150	50	152.4
2"	300	50	165.1
2"	600	55	165.1
2"	900/1500	60	215.9
2"	2500	60	235



Specifications

Model

Type : Slimline

Description : Double Block & Bleed - Flanged x threaded
1st Isolate : Ball/2nd Isolate:Ball/Vent : Needle

Standard Feature :
½" to 2" NB flanges (15 to 50 DN)
ANSI B16.5 flanges connections.
150 lb rated to 2500 lb rated.
Raised face and ring type joint flange style.
½" NPT(Female) stanard outlet.
½"NPT(Female) Standard vent.
Standard material of construction.
SS ASTM A 181 F316/F316L, CS ASTM A LF2/A 105
Duplex ASTM A 182 F 51.
Optional material:
Super Duplex, Monel, Hastelloy, 6 mo, Incoloy

NOTE:
ALSO AVAILABLE IN OTHER COMBINATION
DOUBLE BLOCK & BLEED
1st ISOLATE:BALL / 2nd ISOLATE:NEEDLE / VENT:NEEDLE
SINGLE BLOCK & BLEED
1st ISOLATE:BALL / VEVT:NEEDLE
DOUBLE BLOCK
1st ISOLATE:BALL / 2nd ISOLATE:NEEDLE

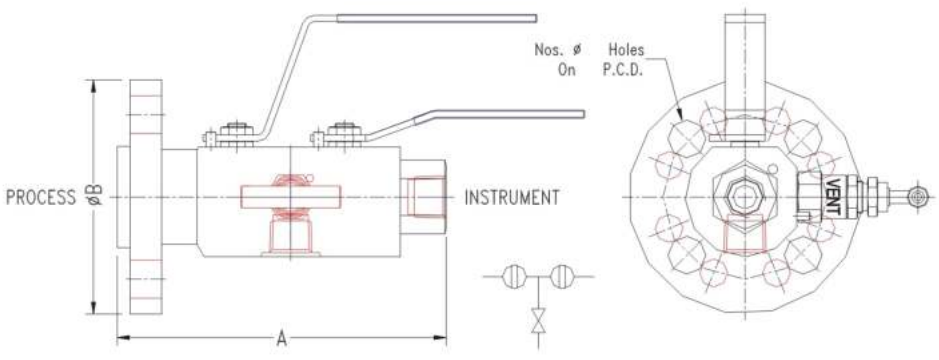
SIZE inch	RATING lb	A	øB
1/2"	150	165	88.9
1/2"	300	165	95.2
1/2"	600	165	95.2
1/2"	900/1500	175	120.7
1/2"	2500	175	133.4

SIZE inch	RATING lb	A	øB
3/4"	150	165	98.4
3/4"	300	165	117.5
3/4"	600	165	117.5
3/4"	900/1500	180	130.2
3/4"	2500	190	139.7

SIZE inch	RATING lb	A	øB
1"	150	165	108
1"	300	165	123.8
1"	600	165	123.8
1"	900/1500	180	149.2
1"	2500	190	158.8

SIZE inch	RATING lb	A	øB
1.1/2"	150	165	127
1.1/2"	300	165	155.6
1.1/2"	600	175	155.6
1.1/2"	900/1500	185	177.8
1.1/2"	2500	200	203.2

SIZE inch	RATING lb	A	øB
2"	150	165	152.4
2"	300	165	165.1
2"	600	180	165.1
2"	900/1500	190	215.9
2"	2500	210	235



Specifications

Model : CP

Type : Condensing Pot

Features & Benefits : Condensing pots are largely used in steam metering lines to cool and condense steam and to maintain a constant liquid head above instruments. They are also recommended for liquid service when flowing temperature is above 150° C.
All chambers are equipped with top venting entrapped air and can be furnished with a plug.

Size : 2"NB SCH 40 - (2 - 40) / 2"NB SCH 80 - (2 - 80) / 2"NB SCH 160 - (2 - 160)
3"NB SCH 40 - (3 - 40) / 3"NB SCH 80 - (3 - 80) / 3"NB SCH 160 - (3 - 160)
4"NB SCH 40 - (4 - 40) / 4"NB SCH 80 - (4 - 80) / 4"NB SCH 160 - (4 - 160)

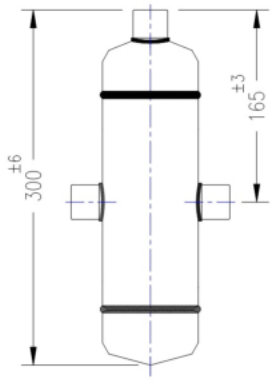
Ends Connections : Threaded - NPT Female (FN) / NPT Male (MN) - To ANSI / ASME B1-20 .1
Socket Weld - (SW) - To ASME B16.11
Buttt Weld - (BW) - To ASME B16.9

Material : Carbon Steel - A 106 Gr.B - Shell & A 105 - Caps (CS) ,
Alloy Steel - A 335 Gr.P11 - Shell & A 182 F11 - Caps (AS_P11) ,
- A 335 Gr.P22 - Shell & A 182 F22 - Caps (AS_P22) ,
Stainless Steel - A 312 Gr.TP 304 - Shell & A 182 F304 - Caps (S) ,
- A 312 Gr.TP 316 - Shell & A 182 F316 - Caps (SS) ,

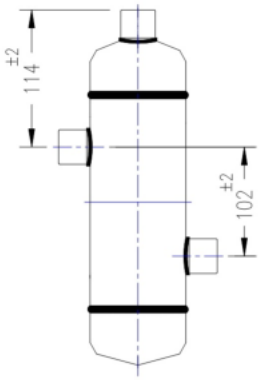
Test Pressure :

Material	Wall Thk. - SCH 40		Wall Thk. - SCH 80		Wall Thk. - SCH 160	
	Kg/cm ^{2}	PSI	Kg/cm ^{2}	PSI	Kg/cm ^{2}	PSI
Carbon Steel	80	1150	125	1800	210	3000
Alloy Steel	80	1150	125	1800	210	3000
Stainlees Steel	95	1350	155	2200	240	3400

Mounting Accessories : Blind Plug - PX, Hex. Nipple - HN, Bleed Plug - BP, Mini Bleed Valve - MBV, Mounting ' U ' clamp - MU.



TYPE - A



TYPE - B

ORDERING CODES — CP B – 3 - 40 – FN – SS –

Condensing Pot - CP
Type - A / B
Size - 2 - 40, 2 - 80, 2 - 160 / 3 - 40, 3 - 80, 3 - 160 / 4 - 40, 4 - 80, 4 - 160
Connections - FN, MN, SW, BW
Material - CS, AS_P12, AS_P22, S, SS
Mounting Accessories - DP, HN, BP, MBV, MU

ORDERING EXAMPLE - CPB - 3 - 80 - FN - SS

Air Headers

Air header and distribution manifods provide customers with many configurations isolation manifolds Virgin Engineers fabricates manifolds specially to suit the customers for requirements.

Standard Technical Specification :-

Inlet	:	DIN & ANSI 1/2" / 1" NB Flanged / Threaded Connections.
Main Pipe	:	1", 1-1/2", 2" NB SCH 40 / 80.
Outlet ports	:	6way / 8way / 12 way / 16way (Staggering or straight, Single sided or Double sided)
Port Size	:	1/4" / 1/2" NB SCH 40 / 80 Nipple Toe. Fitted on outlet ports 1/4" / 1/2" SS or Brass or A 105 Needle Valves/SS
Valves	:	Valves
Drain Plug	:	1/2" SCH 40 / 80 Nipple TOE Fitted with SS Ball Valve & Drain
Pressure	:	150 psi
M.O.C	:	Pipes will be form Seamless ASTM A 312 TP 304 / 316 & ASTM A 106 Gr B.
Mounting	:	Wall or Rack Mounting or 'U' clamps.

Apart from above standard technical specification, Virgin Engineers can Provide any size, design & end connections as per your requirement for :

Note :- Virgin Engineers can provide special surfaces like hot dipped galvanizing, Epoxy and silver coating for A 106 Gr. B Air headers and pickling for stainless steel as per your requirement.
The air headers are 100% tested Dimensional, Hydro test, Pneumatic test, guarantee and compliance artificate will be furnished

Specifications

Model: CSY

Type: Coil Syphon

Features & Benefits: Coiled pipe syphon are used for steam pressure measurement and are generally connected between pressure gauges and process taps to prevent live steam coming in direct contact with instruments. These syphons allow a good deal of heat dissipation protecting pressure gauges from high temperature which could impair their good operation and their life.

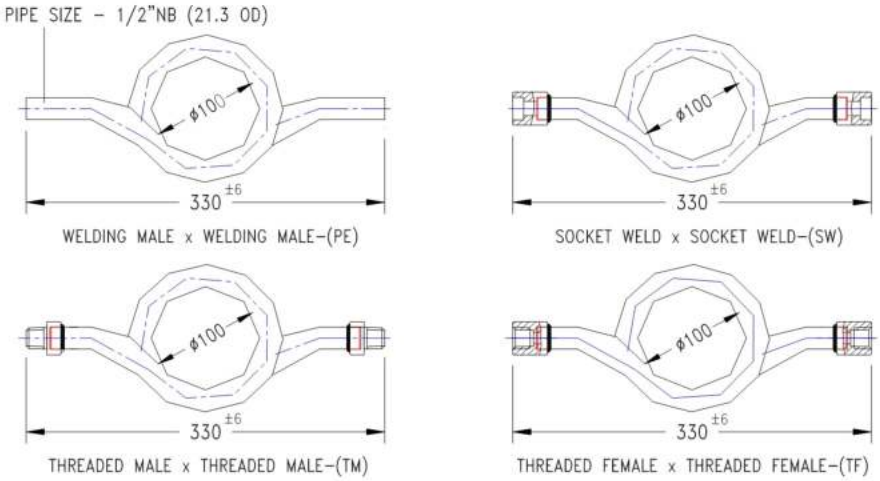
Pipe Size: 1/2"NB SCH40 / SCH 80 / SCH 160

Ends Connections: Welding Male x Welding Male -(PE), Socket Weld x Socket Weld -(SW), Threaded Male x Threaded Male -(TM), Threaded Female x Threaded Female -(TF), - Standard Connections.
Other Connections - Welding Male x Socket Weld -(PSE), Welding Male x Threaded Male -(PTM), Welding Male x Threaded Female -(PTF), Socket Weld x Threaded Male -(STM), Socket Weld x Threaded Female -(STF), Threaded Male x Threaded Female -(TMF)
Threaded - NPT to ANSI / ASME B1-20 .1 / BSP Taper to BS 21 / BSP Parallel to BS 2779.
Socket Weld - ASME B16.11 - 1996

Material: Carbon Steel - A 106 Gr.B(CS) , Alloy Steel - A 335 Gr.P12(AS_P12), / - A 335 Gr.P22 (AS_P22) , Stainless Steel - A 312 Gr.304 (S), / - A 312 Gr.316 -(SS)

Test Pressure:

Material	Wall Thk. - SCH 40		Wall Thk. - SCH 80		Wall Thk. - SCH 160	
	Kg/cm^2	PSI	Kg/cm^2	PSI	Kg/cm^2	PSI
Carbon Steel	115	1600	140	2000	210	3000
Alloy Steel	115	1600	140	2000	210	3000
Stainlees Steel	170	2400	210	2000	225	3600



ORDERING CODES — CSY _ 8 _ 80 _ TMF _ AS_P22

Coil Syphon - CSY

Pipe Size - 1/2"NB (21.3 OD) - 8

Schedule - SCH 40 - 40 / SCH 80 - 80 / SCH 160 - 160

Connections - PE, SW, TM, TF, PSE, PTM, PTF, STM, STF, TMF

Material - CS, AS_P12, AS_P22, S, SS

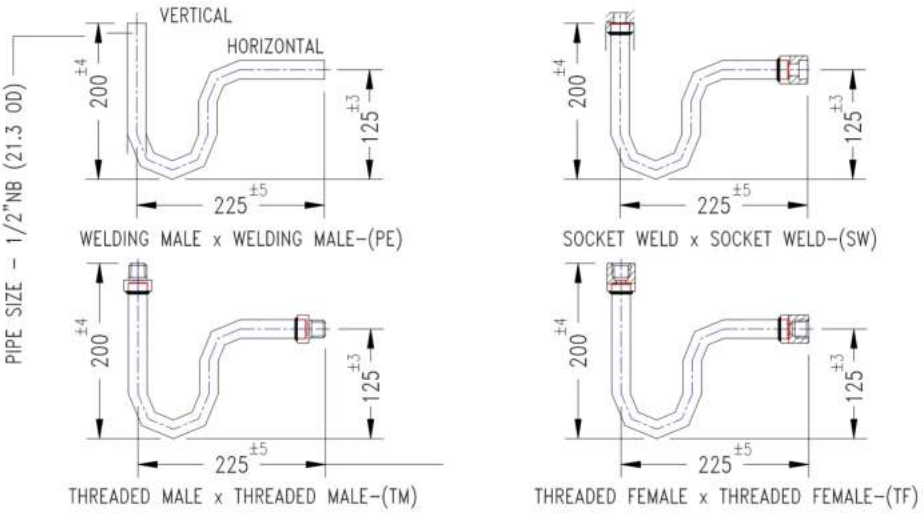
ORDERING EXAMPLE - CSY - 8 - 80 - TMF - AS_P22

Specifications

Model	BSY
Type :	Bend Syphon
Features & Benefits :	Bend pipe syphon are used for steam pressure measurement and are generally connected between pressure gauges and process taps to prevent live steam coming in direct contact with instruments. These syphons allow a good deal of heat dissipation protecting pressure gauges from high temperature which could impair their good operation and their life. Live steam cannot enter instrument directly since the ' U ' bend of syphon remains always filled with condensed steam. Heat dissipation is also facilitated by the large extension of bare pipe of these syphons.
Pipe Size :	1/2"NB SCH 40 / SCH 80 / SCH 160
Ends Connections :	Welding Male x Welding Male - (PE), Socket Weld x Socket Weld - (SW), Threaded Male x Threaded Male -(TM), Threaded Female x Threaded Female - (TF), - Standard Connections. Other Connections - Welding Male x Socket Weld - (PSE), Welding Male x Threaded Male - (PTM), Welding Male x Threaded Female - (PTF), Socket Weld x Threaded Male - (STM), Socket Weld x Threaded Female - (STF), Threaded Male x Threaded Female - (TMF) Threaded - NPT to ANSI / ASME B1-20 .1 / BSP Taper to BS 21 / BSP Parallel to BS 2779. Socket Weld - ASME B16.11 - 1996
Material :	Carbon Steel - A 106 Gr.B (CS) , Alloy Steel - A 335 Gr.P12 (AS_P12), / - A 335 Gr.P22 (AS_P22) , Stainless Steel - A 312 Gr.304 (S), / - A 312 Gr.316 - (SS)

Test Pressure :

Material	Wall Thk. - SCH 40		Wall Thk. - SCH 80		Wall Thk. - SCH 160	
	Kg/cm ^{2}	PSI	Kg/cm ^{2}	PSI	Kg/cm ^{2}	PSI
Carbon Steel	115	1600	140	2000	210	3000
Alloy Steel	115	1600	140	2000	210	3000
Stainlees Steel	170	2400	210	2000	225	3600



ORDERING CODES

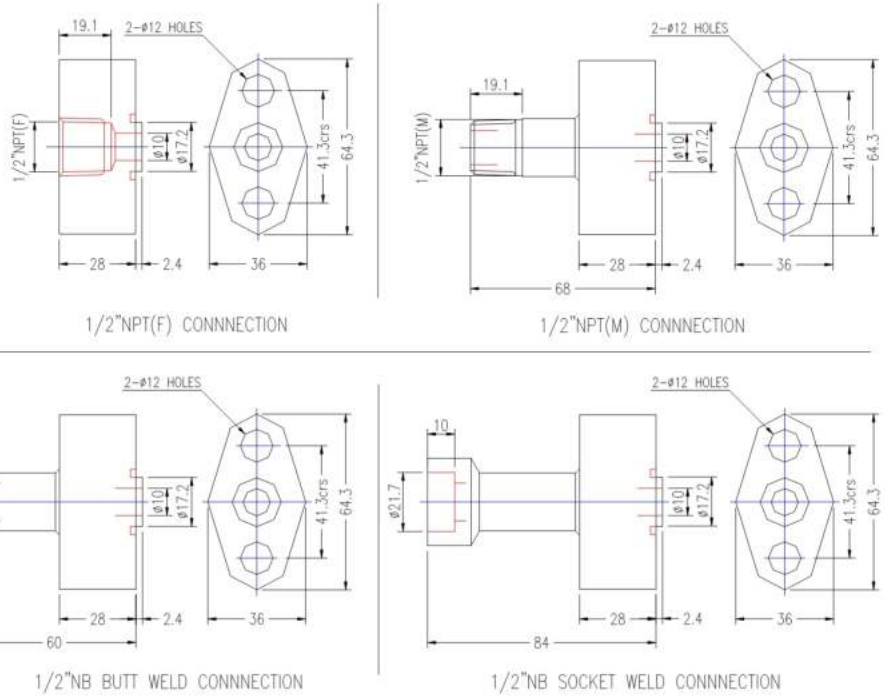
BSY _ 8 _ 80 _ TMF _ SS

Bend Syphon - BSY
Pipe Size - 1/2"NB (21.3 OD) - 8
Schedule - SCH 40 - 40 / SCH 80 - 80 / SCH 160 - 160
Connections - PE, SW, TM, TF, PSE, PTM, PTF, STM, STF, TMF
Material - CS, AS_P12, AS_P22, S, SS

ORDERING EXAMPLE - BSY - 8 - 80 - TMF - SS

Specifications

Model	EOF
Type :	Eccentric Oval Flange
Ends Connections :	Threaded - 1/2"NPT - Female (8 FN) / 1/2"NPT- Male (8 MN) - To ANSI / ASME B1-20 .1 Buttt Weld - 1/2" NB BW SCH 40 / SCH 80 / SCH 160 - (BW - 40 / BW - 80 / BW - 160) To ASME 16.9 Socket Weld - 1/2 NB SW Class 3000 / Class 6000 /Class 9000 - (SW - 3M / SW - 6M / SW - 9M) To ASME B16.11
Material :	Carbon Steel - A 105 (CS) , Alloy Steel - A 182 F12 (AS_F12) , A 182 F 22 (AS_F22) Stainless Steel - A 182 Gr.F 304 (S) , A 182 Gr. F316 (SS) , A 182 Gr.F 321 (SS 321)
Features & Benefits :	These oval flanges can be mounted on the process side of our flange to flange manifolds.
Mounting Kit :	2 Nos.Oval Flanges, 2 Nos. PTFE Seal Rings - 25.4 x 17.4 x 3 & 4 Nos. HT CS Bolts - 7/16"UNF x 1.1/2" LG. - Zinc Plated & Passivated.



ORDERING CODES

EOF _ 8 FN _ SS _ MK

Eccentric Oval Flange - EOF

End Connections - 8 FN, 8 MN / BW - 40, BW - 80, BW - 160 / SW - 3M, SW - 6M, SW - 9M

Material - CS, AS_F12, AS_F22, S, SS , SS 321

Mounting Kit (Optional) - MK

ORDERING EXAMPLE - EOF - 8 FN - SS - MK

- EOF - BW - 80 - SS

MET-LOK

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