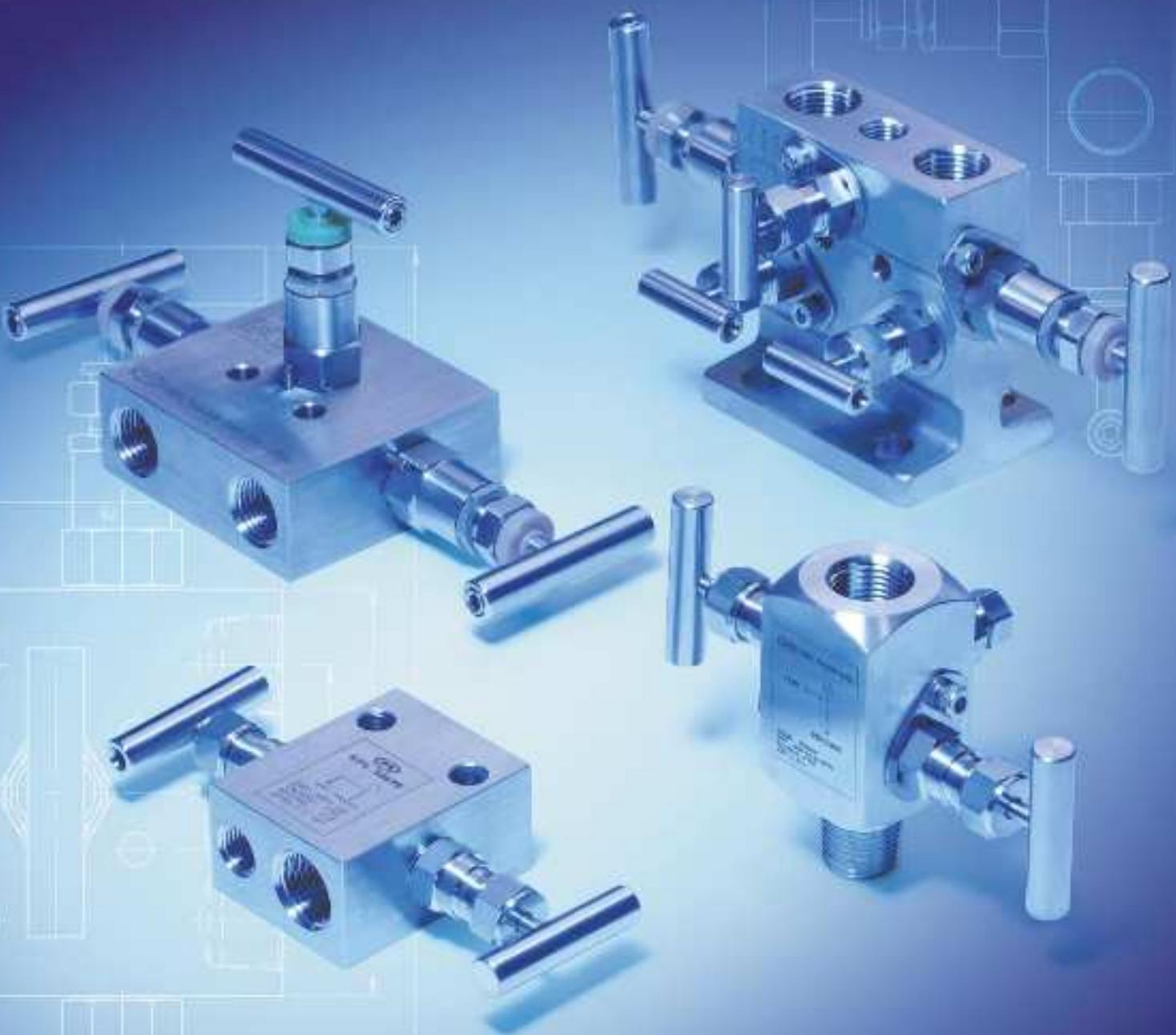


K-LOK®

INSTRUMENT MANIFOLDS



INDIA
TOKYO
CHINA
SINGAPORE
KOREA
AUSTRALIA
THAILAND
PHILIPPINES
INDONESIA
MEXICO
CANADA
U.S.A.



KPL VALVE IND. CO., LTD.

Certificate of Authority to use the Official API Monogram

License Number: 6D-0894

ORIGINAL

The American Petroleum Institute hereby grants to

KPL VALVE IND. CO. LTD.
19-19, Samjung-Dong
Ojung-Ku
Bucheon-City
South Korea

the right to use the Official API Monogram™ on restructured products, under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1[®] and API Spec 6D
and in accordance with the provisions of the License Agreement.

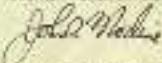
In all cases where the Official API Monogram is applied, the API Monogram should be used in conjunction with the certificate number: 6D-0894.

The American Petroleum Institute reserves the right to revoke this authority to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following product: Oil valves

DMG Exclusions: No Exclusions Identified as Applicable

American Petroleum Institute



Director of Certification Program

Effective Date: AUGUST 21, 2006

Expiration Date: AUGUST 21, 2009

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Instrument Quality Management

Certificate of Registration

REGISTERED TO: **KPL Valve Ind. Co., Ltd.**

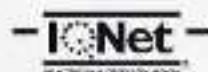
19-19, Samjung-Dong, Ojung-Ku, Bucheon-City, Kyunggi-Do, Korea

CLRT-001012
KCI Number: KCI-NI-012
Date of Original Registration:
Date of Current Registration:
Registration by User:

800-00
KCI-NI-012
Aug. 25, 2004
Jan. 25, 2006
Aug. 25, 2007

which has demonstrated that its Quality Management System is in conformance with
ISO 9001:2000

The following scope of registration applies:
Design, development, production and servicing of valves and fittings.




W.J. Park
President



KPL INSTRUMENT MANIFOLDS

KPL Valves many years experience in the manufacture of valves for the oil and gas industries has culminated in the creation of a range of manifold block specifically designed to be compact and simple to install.

The KPL manifold mounting system allows the manifold to be installed on site complete.

With impulse lines prior to the introduction of the transducer or transmitter.

This prevents unnecessary risk of damage to the instrument at the construction stage and allows removal of the instrument for calibration and maintenance without disturbing the ancillary pipework.



INTRODUCTION

KPL Manifold valves development and manufactures KPL valve industries are able to introduce most comprehensive range of manifold valves. In this design, selection can be made from a comprehensive range of bodies with variety of connections and valve positions optimising installations.

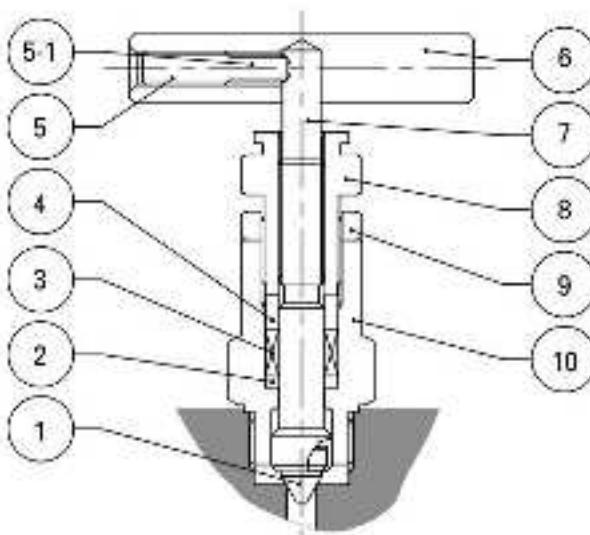
TECHNICAL SPECIFICATIONS

- Pressures to 6000 psi / 413 Bar at 100°F (38°C)
- Temperature rating : PTFE-450°F (232°C), Grafoil-700°F (371°C)
- End connection : NPT, PT, Socket weld.
- Optional Sour gas service valves available confirming to NACE Standard MR-01-75.
- All valves are 100% factory testes prior to shipment.
- Material of construction : 316ss standard. Other special materials are available.
(304ss, Monel, Hastelloy C276, Titanium.)

APPLICATION

- Refineries, liquid petroleum gas processing plant, petro-chemical plant Systems difficult to shur off due to solid contents dust, rust, dirt ect.

BONNET ASSEMBLY



No	Description	M'TL
1	Stem Tip	316 SS
2	Packing Ring	316 SS
3	Packing	PTFE
4	Gland	316 SS
5	Sel Screw	A193-B8
5-1	Handle Pin	304 SS
6	Handle	304 SS
7	Stem	316 SS
8	Packing Bolt	316 SS
9	Lock Nut	304 SS
10	Bonnet	316 SS

- Screwed bonnet design.
- Bonnet back seated blow out proof.
- Stem tip-none rotating tip shut off type. (Vee tip is standard. Ball tip is optional)
- Maximum sealing integrity with minimum operation torque.
- Greatly improved packing life.

HOW TO ORDER

KM2		-	15N	-	S	-	V	-	T		
Model No.											
KM2	2 Valve Block										
KM2V	2 Valve Vertical										
KM2H	2 Valve Horizontal										
KM2SF	2 Valve Single Flange										
KM2BF	2 Valve Single Block Flange										
KMS	3 Valve Block										
KMSA	3 Valve Block Type A										
KMSV	3 Valve Vertical										
KMSSF	3 Valve Single Flange										
KMSBF	3 Valve Single Block Flange										
KMSBFA	3 Valve Single Block Flange Type A										
KMSVBF	5 Valve Vertical Single Block Flange										
KMS	5 Valve Block										
KMSA	5 Valve Block Type A										
KMSV	5 Valve Vertical										
KMSSF	5 Valve Single Flange										
KMSBF	5 Valve Single Block Flange										
KMSBFA	5 Valve Single Block Flange Type A										
KMSBFB	5 Valve Single Block Flange Type B										
End Connection Inlet / Outlet											
BN: 1/4" NPT											
ISN: 1/2" NPT											
F: Both Flange											
Material Designator											
S : 316											
SL : 316L											
D : Duplex											
H : Hastelloy											
T : Titanium											
M : Monel											
Packing Designator											
T : PTFE											
G : Grafol											



2-VALVE MANIFOLDS

Purpose

2-valve manifolds combine facilities for isolation, calibration, test and venting of instrument. By incorporating all these functions in one block, considerable material and installation cost savings will be made.

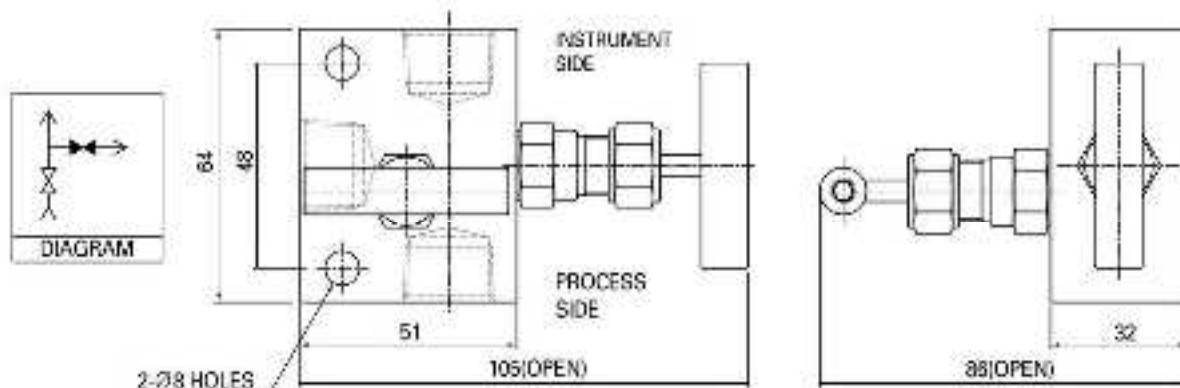
The manifold is designed for use with pressure gauges, pressure transmitters, pressure switches and similar pressure measurement equipment.

The manifold is available in a number of configurations to suit every type of installation, port connections are standard in NPT and BSP Taper.

A variety of manifold mounting / support methods are possible.

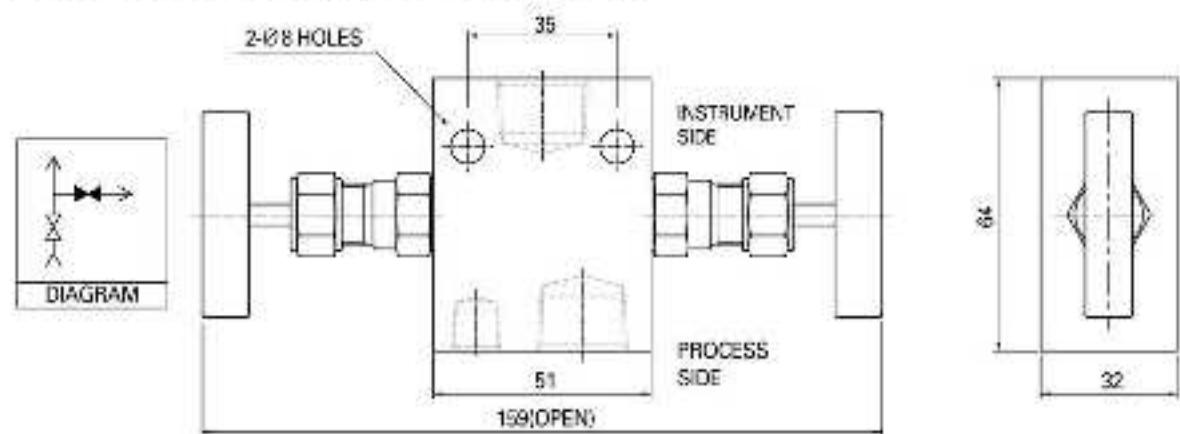
REMOTE MOUNTING.

2-Valve Manifold - Block Type.



Model NO.	Inlet	Outlet	Drain / Test
KM2	1/2" NPT female	1/2" NPT female	1/4", 1/2" NPT female

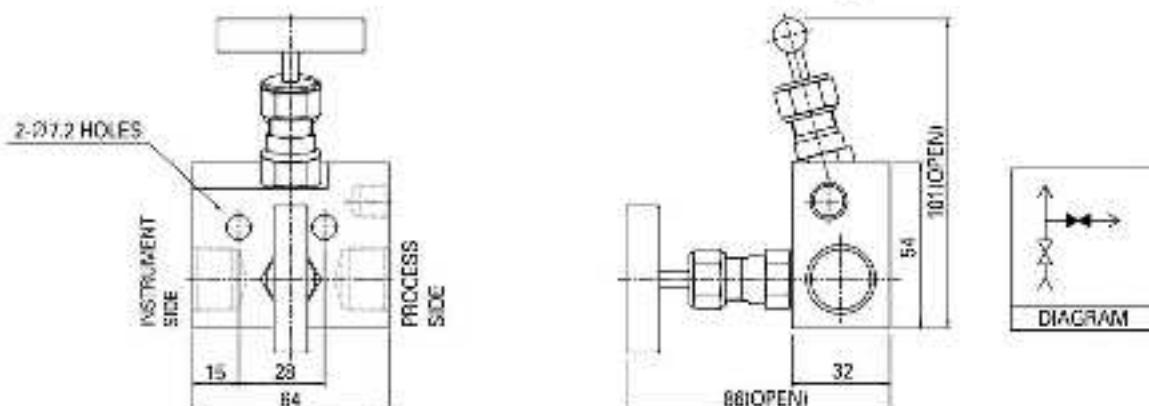
2-Valve Manifold - With Vertical Port Inlet, Outlet and Drain / Test Connection



Model NO.	Inlet	Outlet	Drain / Test
KM2V	1/2" NPT female	1/2" NPT female	1/4" NPT female

INSTRUMENT MANIFOLD

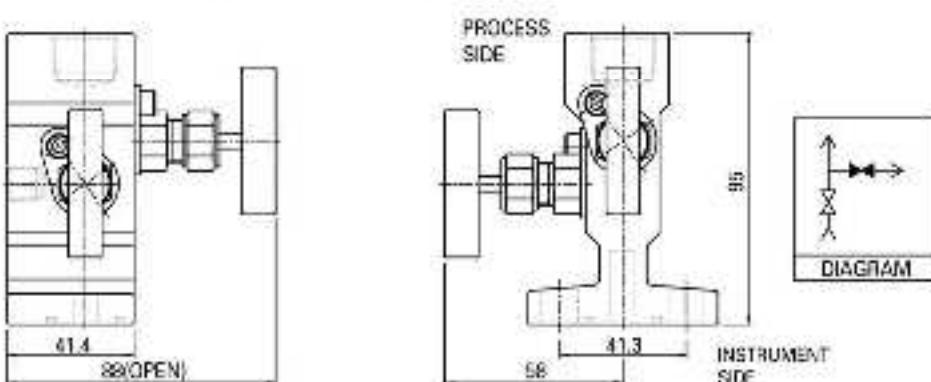
2-Valve Manifold - Horizontal or Vertical Port Entry.



Model NO.	Inlet	Outlet	Drain / Test
KM2H	1/2" NPT female	1/2" NPT female	1/4" NPT female

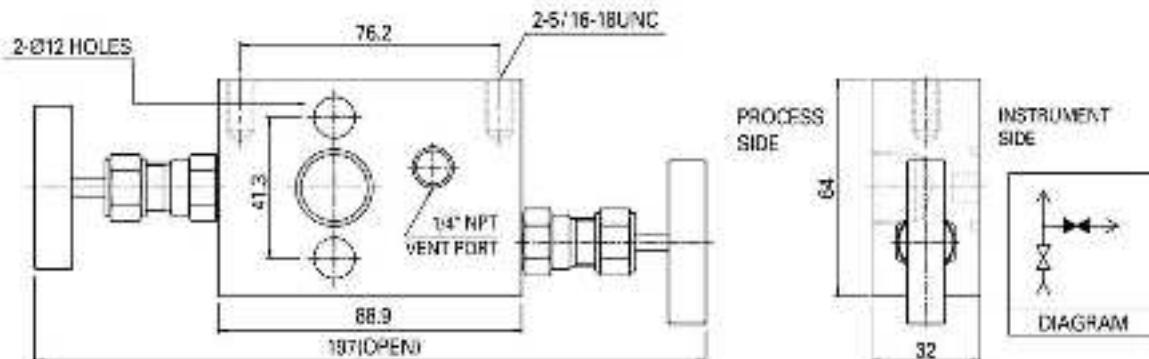
DIRECT(DRAIN / TEST) MOUNTING.

2-Valve Manifold - Single Flange Type.



Model NO.	Inlet	Outlet	Drain / Test
KM2SF	1/2" NPT female	Flange	1/4" NPT female

2-Valve Manifold - Single Block Flange Type.



Model NO.	Inlet	Outlet	Drain / Test
KM2BF	1/2" NPT female	Flange	1/4" NPT female



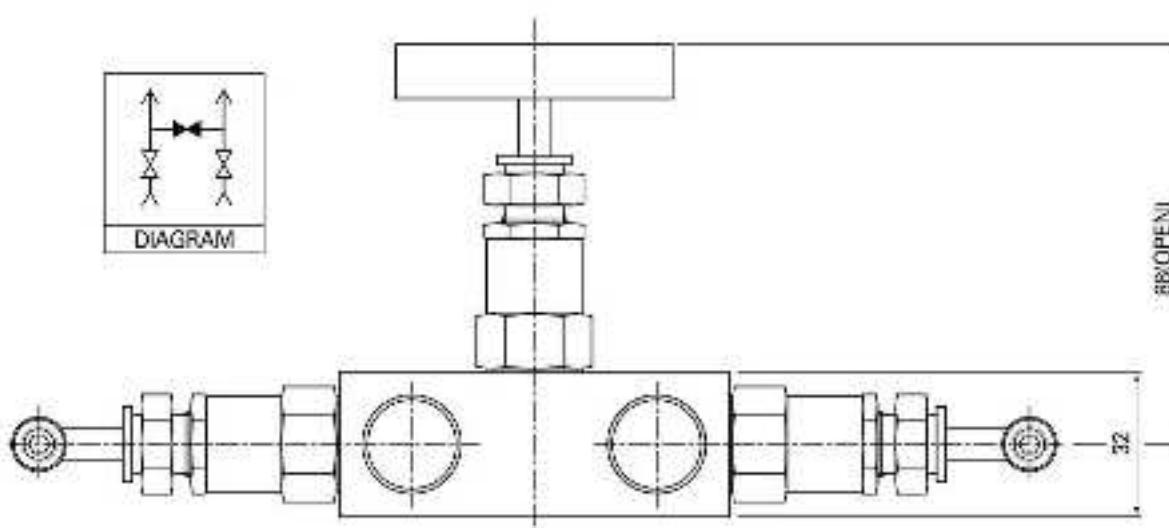
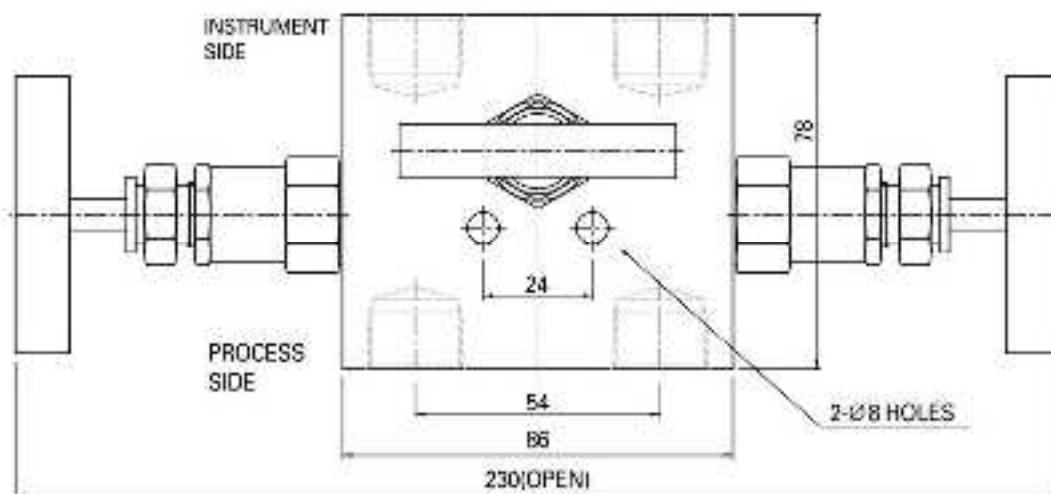
3-VALVE MANIFOLDS

Purpose

3-valve manifolds are used in conjunction with differential pressure transmitters, they combine instrument isolation and equalising in one block resulting in lower installation costs. The manifold designs have facilities for direct mounting to differential pressure transmitters or remote mounting from transmitters.

REMOTE MOUNTING.

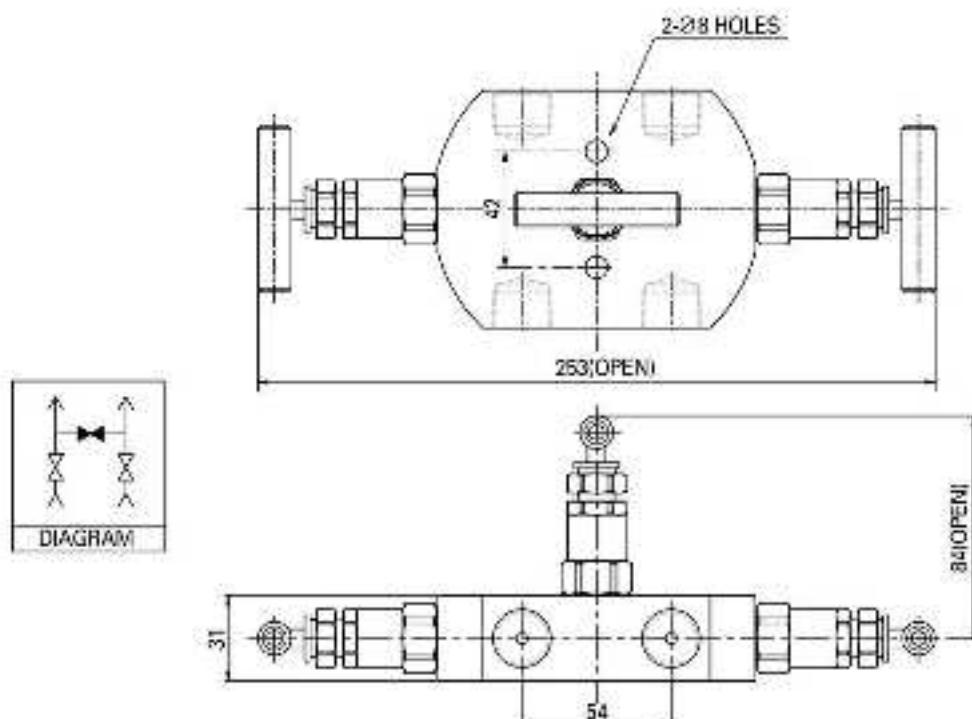
3-Valve Manifold - Block.



Model No.	Inlet	Outlet
KM3	1/2" NPT female	1/2" NPT female

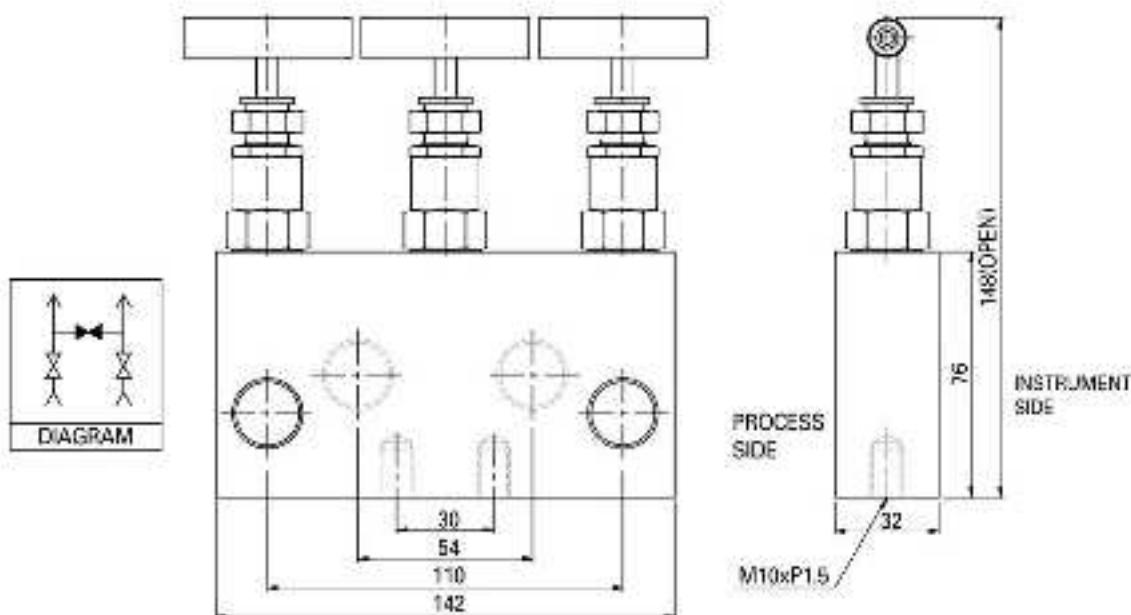
INSTRUMENT MANIFOLD

3-Valve Manifold - Block. Type - A



Model NO.	Inlet	Outlet
KM3A	1/2" NPT female	1/2" NPT female

3-Valve Manifold - For Line or Remote Installation.

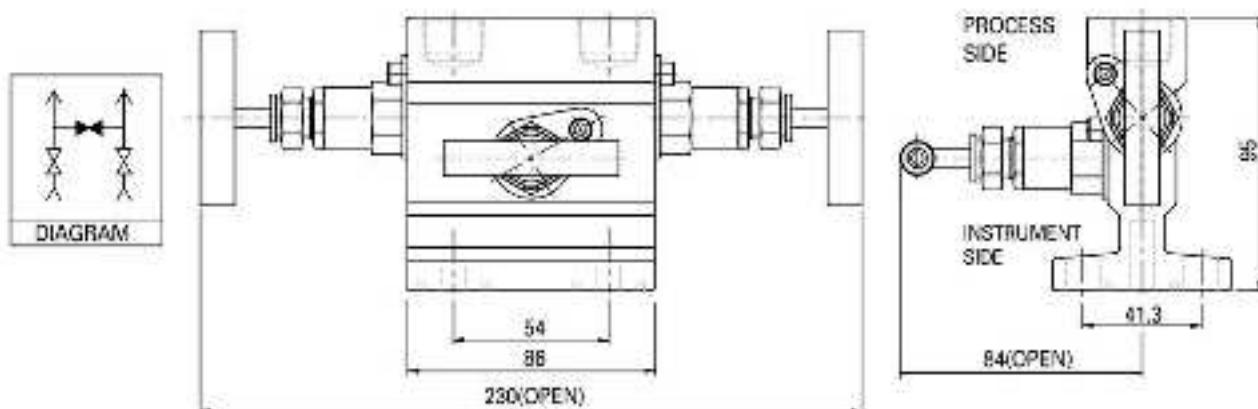


Model NO.	Inlet	Outlet
KM3V	1/2" NPT female	1/2" NPT female

INSTRUMENT MANIFOLD

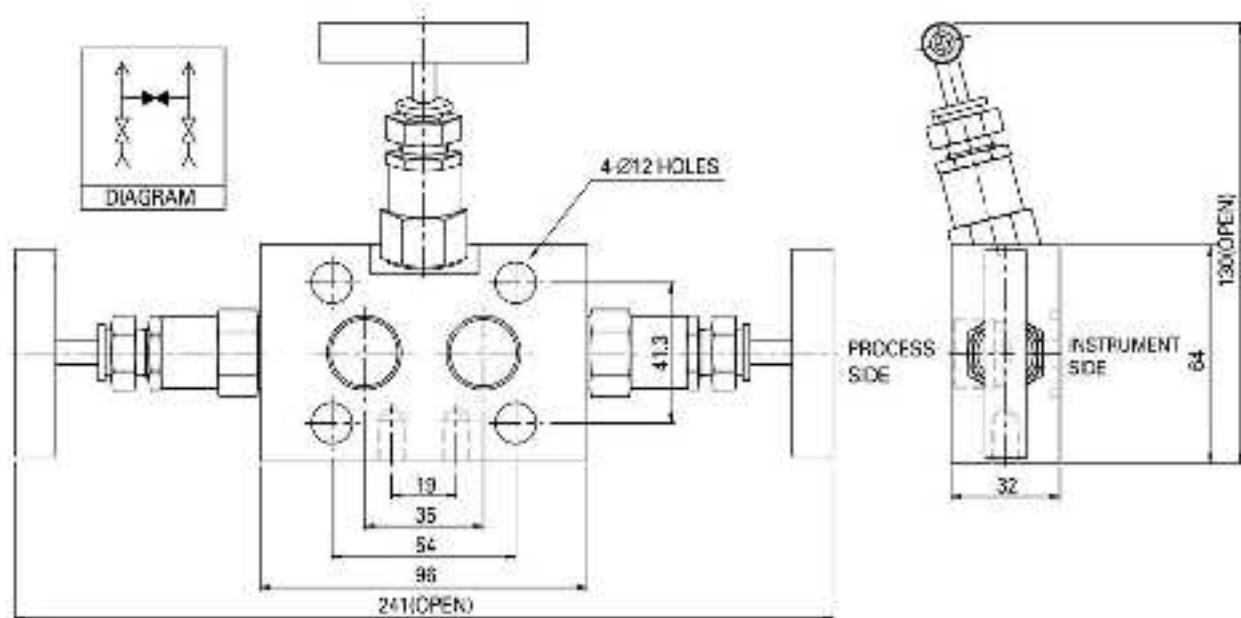
DIRECT(OR FLANGE) MOUNTING.

3-Valve Manifold - Single Flange.



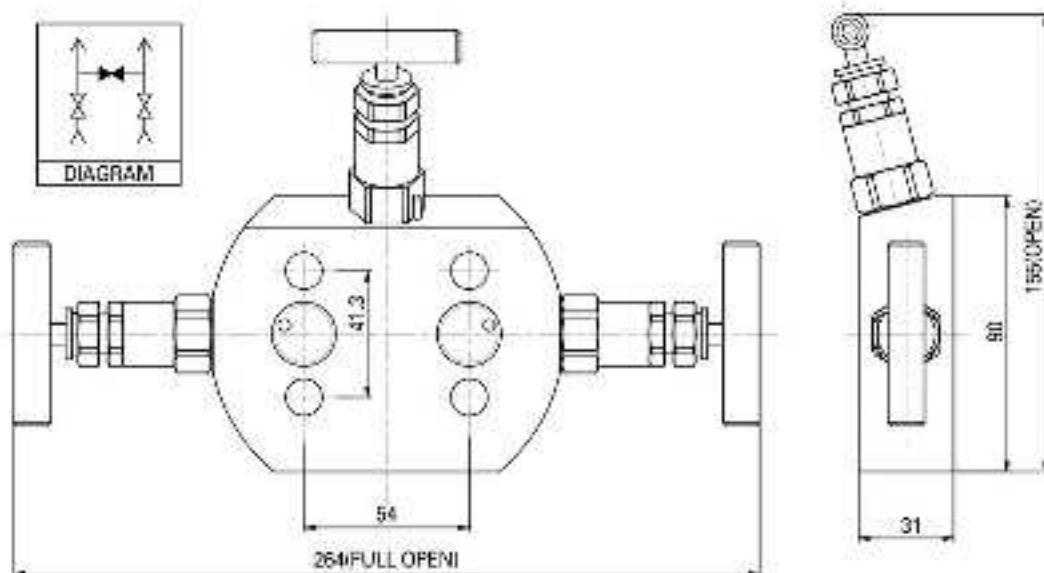
Model NO:	Inlet	Outlet
KM3SF	1/2" NPT female	Flange

3-Valve Manifold - Single Block Flange.



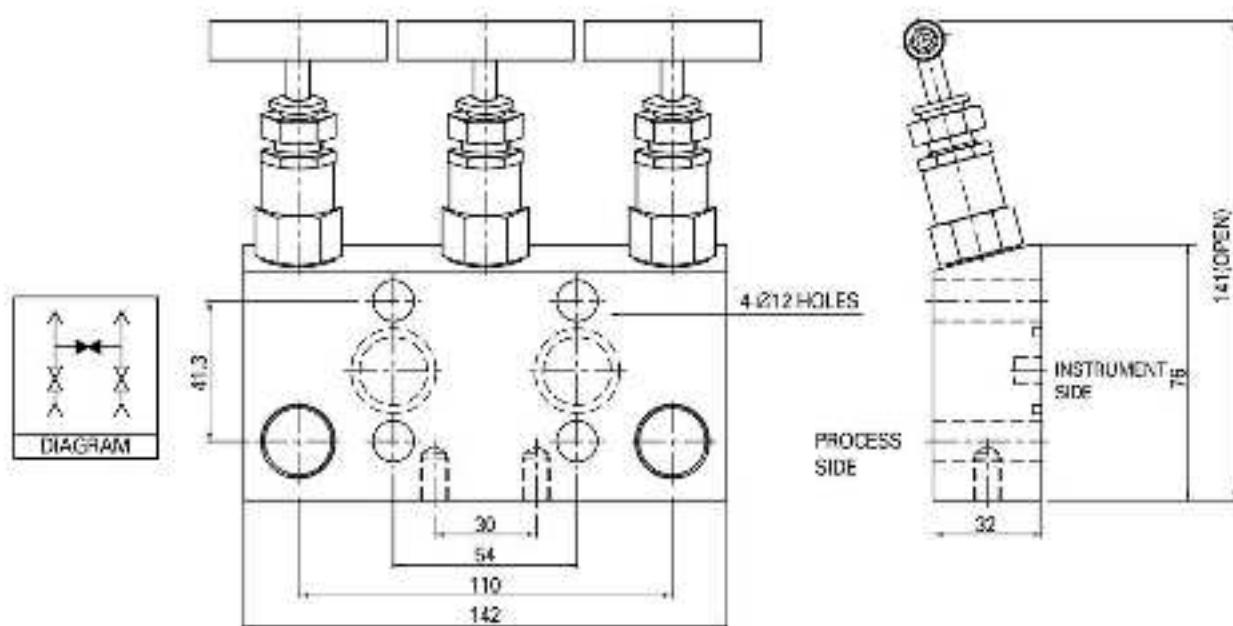
Model NO:	Inlet	Outlet
KM3BF	1/2" NPT female	Flange

3-Valve Manifold - Single Block Flange. Type - A



Model NO.	Inlet	Outlet
KM3BFA	1/2" NPT female	Flange

3-Valve Manifold - Vertical Single Block Flange.



Model NO.	Inlet	Outlet
KM3VBF	1/2" NPT female	Flange



5-VALVE MANIFOLDS

Purpose

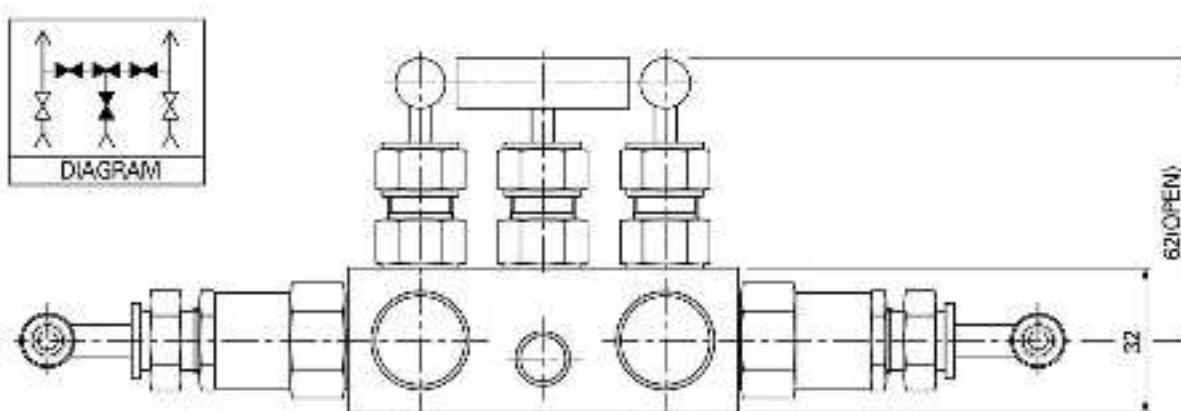
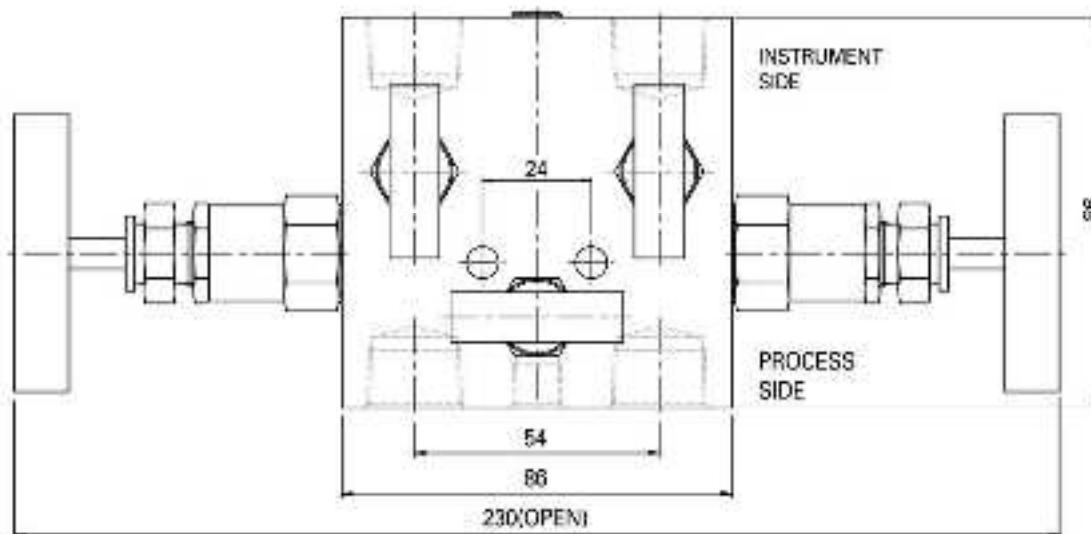
5-Valve manifolds are used in combination with differential pressure transmitters providing isolation, equalising and drain / test functions.

The manifold allows operators to isolate, zero adjust the instrument and safety drain any trapped medium. The drain ports have a dual function, they can also be used as test or calibration connections after the draining operation has been completed.

Manifold designs cover both direct mount and remote installation.

REMOTE MOUNTING.

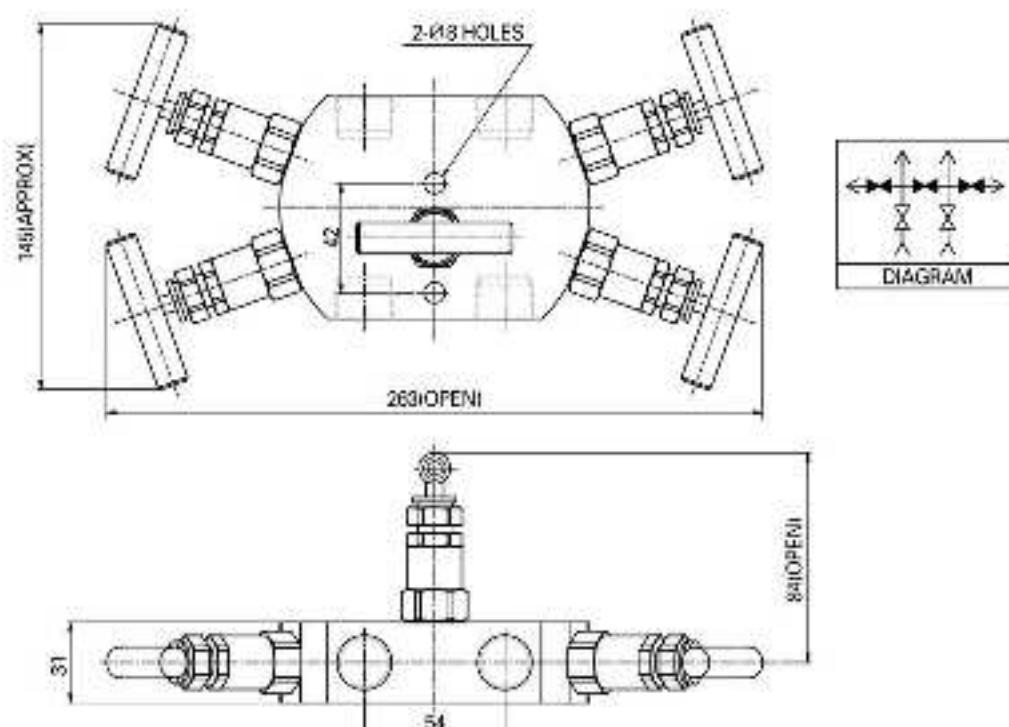
5-Valve Manifold - Block.



Model No.	Inlet	Outlet	Drain / Test
KM5	1/2" NPT female	1/2" NPT female	1/4" NPT female

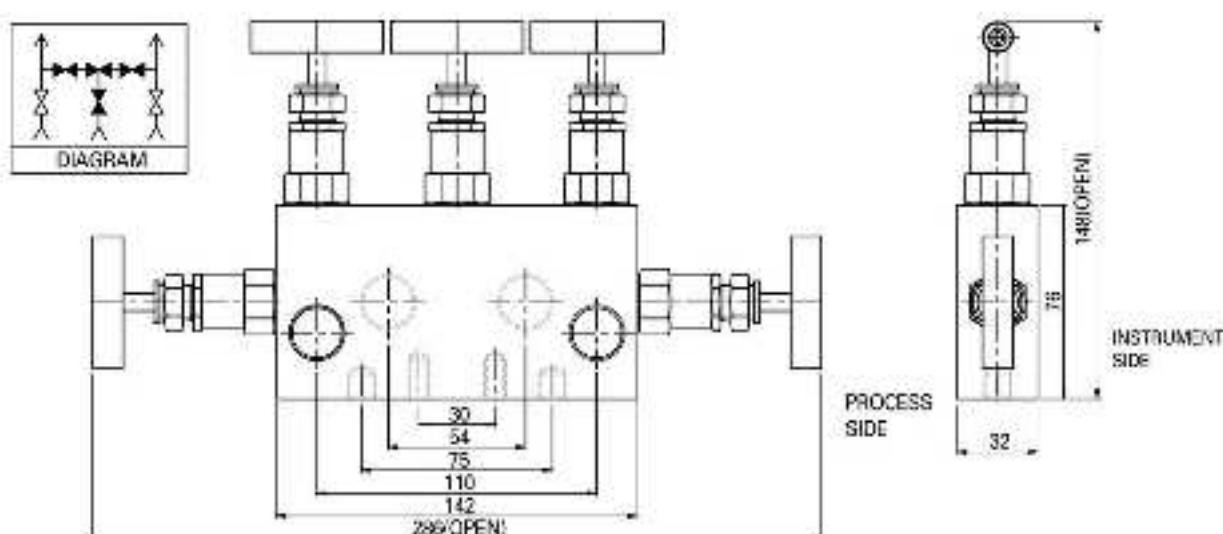
INSTRUMENT MANIFOLD

5-Valve Manifold - Block. Type -A



Model NO.	Inlet	Outlet	Drain / Test
KM5A	1/2" NPT female	1/2" NPT female	1/4" NPT female

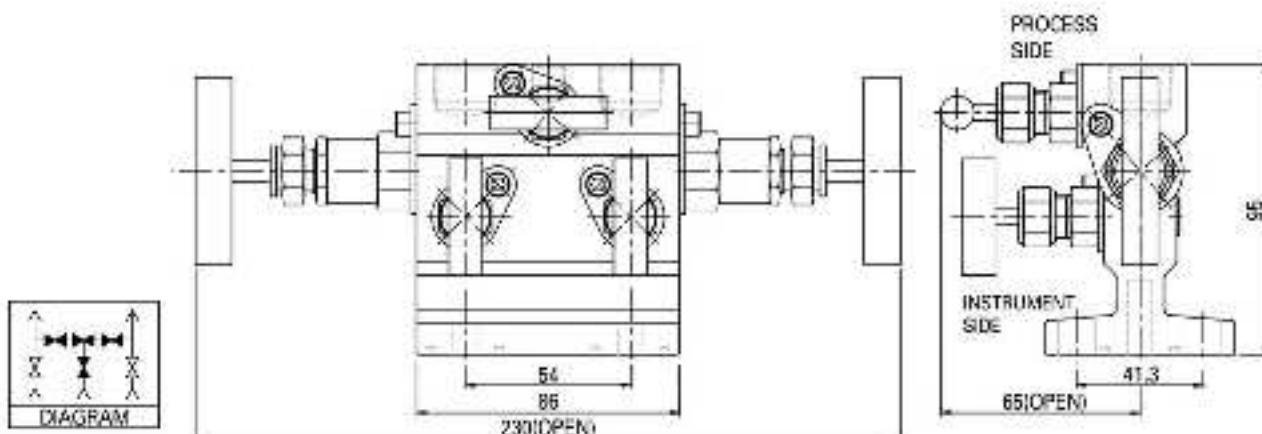
5-Valve Manifold - For Line or Remote Mounting.



Model NO.	Inlet	Outlet	Drain / Test
KM5V	1/2" NPT female	1/2" NPT female	1/4" NPT female

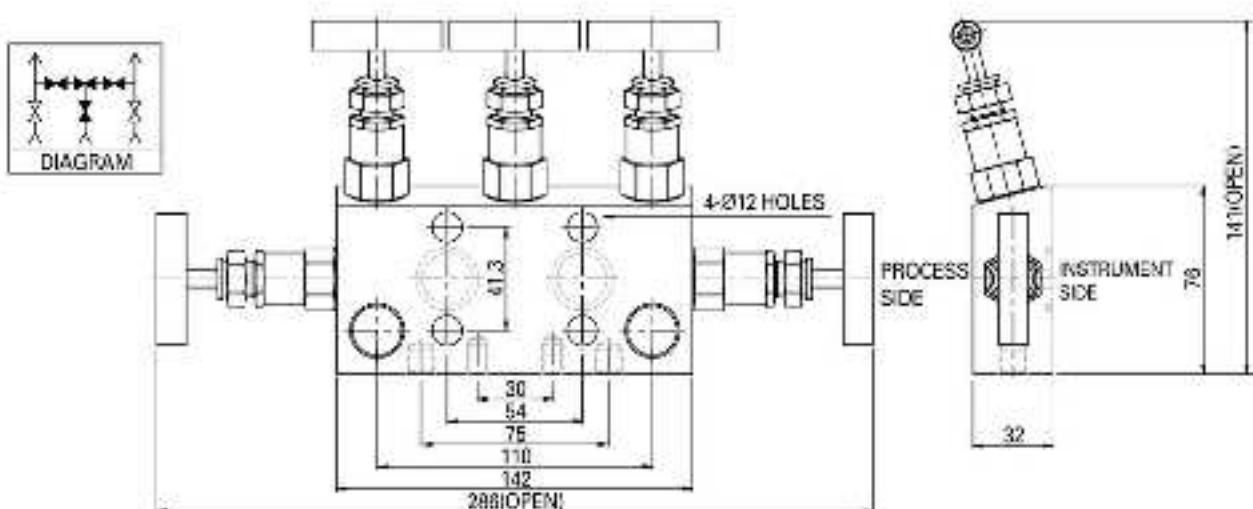
DIRECT(OR FLANGE) MOUNTING.

5-Valve Manifold - Single Flange.



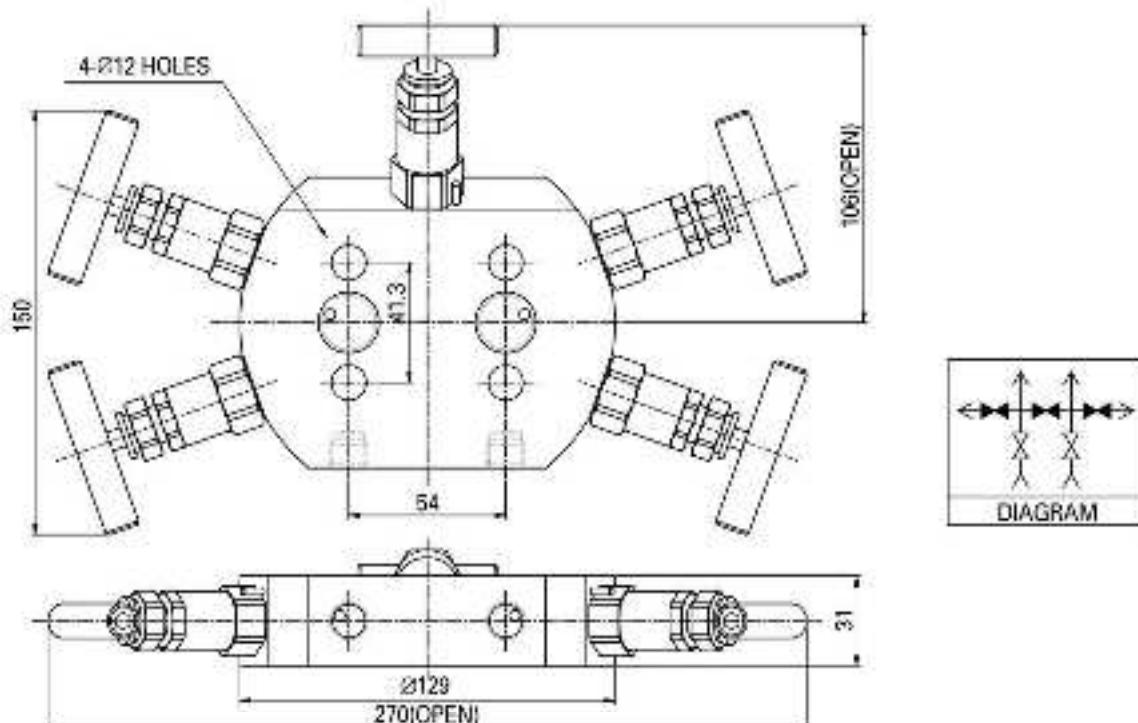
Model NO.	Inlet	Outlet	Drain / Test
KM5SF	1/2" NPT female	Flange	1/4" NPT female

5-Valve Manifold - Single Block Flange.

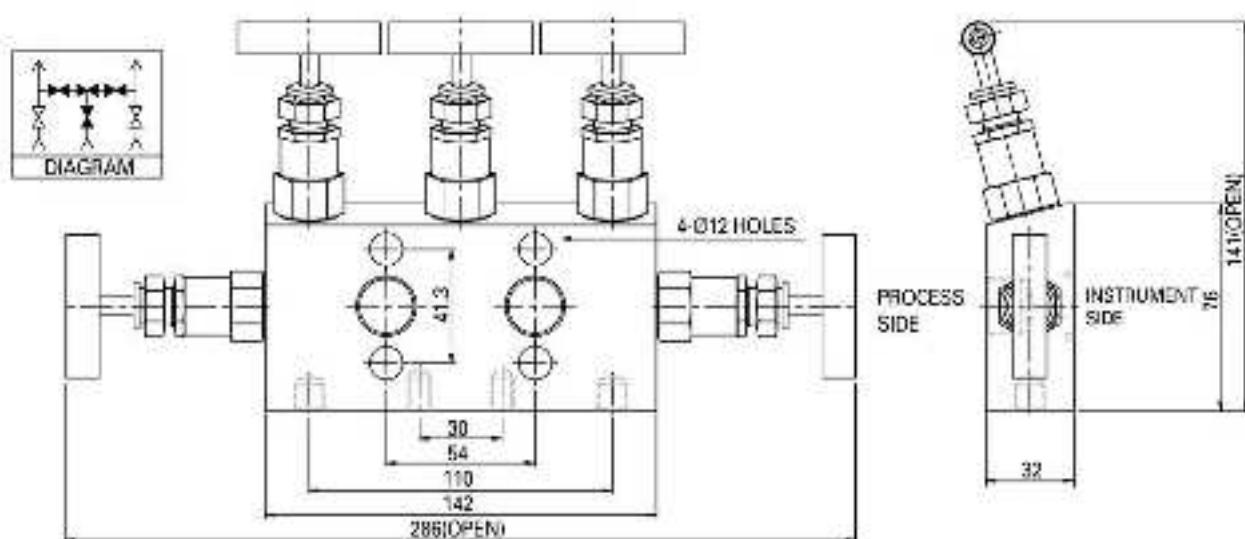


Model NO.	Inlet	Outlet	Drain / Test
KM5BF	1/2" NPT female	Flange	1/4" NPT female

5-Valve Manifold - Single Block Flange. Type - A



5-Valve Manifold - Single Block Flange. Type - B



Model No.	Inlet	Outlet	Drain / Test
KM5FB	1/2" NPT female	Flange	1/4" NPT female



MANIFOLD SUPPORT

Manifold support brackets and blocks are recommended when an instrument is to be directly mounted to the manifold.

Most manifolds are suitable for base / bracket mounting and can be supplied with the necessary mounting supports. By mounting the manifold the user will ensure that when / if the instrument is to be removed the manifold remains fully supported.

Another advantage of the "mount the manifold" philosophy is that the installation piping can proceed without the need to assemble the instrument.

Manifold base support / bracket kits can be supplied in either shot blasted and zinc sprayed steel or stainless steel upon request.

Each kit includes appropriate bracket, U bolt nuts and bracket nuts / pins.

Bracket are suitable for 2" NB standpipe or uni-strut mounting.

