

#### **Product Brief**

The KMC2, KMC3 and KMT3 Manifolds are designed as integral manifolds, intended for use with a specific transmitter brand. These particular manifolds complement the KMC5G manifold series. All are designed for Rosemount® Transmitter Models 3051, 2024 and 3095. They offer 2- and 3-valve options with the Rosemount Transmitter. They are lightweight and small, making an integrated package when mounted directly to and installed with the transmitter. The KMC5G manifold is also designed to be compatible with Rosemount Coplanar™ pressure transmitters including Models 3051C and 3051P.

## Features/Benefits

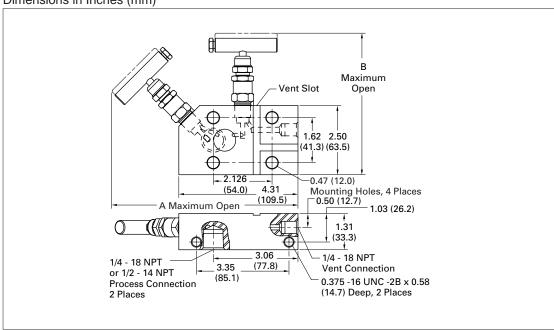
- Ball end stem. Hardened, non-rotating ball ensures exact leak-tight closure every time.
- Field-serviceable soft seat. Allows replacement with valve still in the line.
- Isolated stem threads. Packing below stem threads keeps solids away. Prevents process contamination.
- Bubble-tight shutoff.
- Chrome-plated stainless steel stem prevents freezing and galling.
- Metal-to-metal seal between bonnet and body. Maintains thread integrity, prevents bonnet breakage and ensures reliable seal.

- Locking pin ensures safety. Bonnet lock pin keeps bonnet and body together.
- Adjustable bonnet packing. Increases valve life and maintains integrity of stem threads.
- Rolled stem and bonnet threads for increased strength and life.
- No more stem blowouts. No-blackout stem design prevents blowout problems and removal while in use.
- Less parts mean less leak points and less fugitive emissions.



## **Specifications – KMC2 2-Valve Manifold for Static Pressure**

#### Dimensions in Inches (mm)

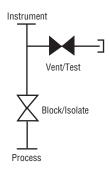


#### Dimensions in Inches (mm)

Valve ①	Α	В
Teflon® Packed	6.85 (174.0)	5.10 (129.5)
GRAFOIL®/Low Emissions Graphite Packed	7.49 (190.2)	5.75 (146.1)

 $^{\scriptsize \textcircled{1}}$  Approximate valve weight: 4.1 lb (1.9 kg) 0.156-inch (4.0 mm) diameter orifice. Cv = .36, full open.

Body face is slotted to ensure atmospheric vent when a differential transmitter is used.



## Specifications - KMC2 2-Valve Manifold for Static Pressure

## **Standard Materials**

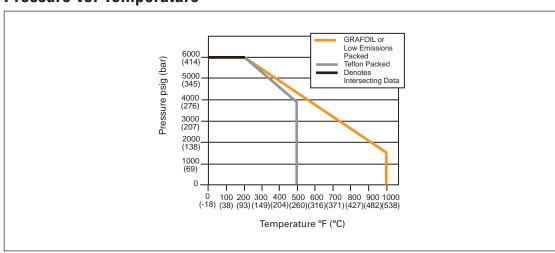
Valve	<b>Body and Bonnet</b>	Stem and Ball
SS	A479-316 316	A276-316 316
SG ①	A479-316 316	Monel® 400 Monel K500
SG ①	Hastelloy® C-276	Hastelloy C-276 Stellite

## **Pressure and Temperature Ratings**

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Valve	Packing	Ratings
SS	Teflon	6000 psig at 200°F (414 bar at 93°C) 4000 psig at 500°F (276 bar at 260°C)
SS	GRAFOIL/ Low Emissions Graphite	6000 psig at 200°F (414 bar at 93°C) 1500 psig at 1000°F (103 bar at 538°C)
SG ①	Teflon	6000 psig at 200°F (414 bar at 93°C) 4000 psig at 500°F (276 bar at 260°C)
SG ①	GRAFOIL/ Low Emissions Graphite	6000 psig at 200°F (414 bar at 93°C) 1500 psig at 1000°F (103 bar at 538°C)
SG3 ②	Teflon	6000 psig at 200°F (414 bar at 93°C) 4000 psig at 500°F (276 bar at 260°C)
SG3 ②	GRAFOIL/ Low Emissions Graphite	6000 psig at 200°F (414 bar at 93°C) 1500 psig at 1000°F (103 bar at 538°C)

 $<sup>^{\</sup>scriptsize \textcircled{\tiny 1}}$  SG (Sour Gas) meets the requirements of NACE MR0175-2002.

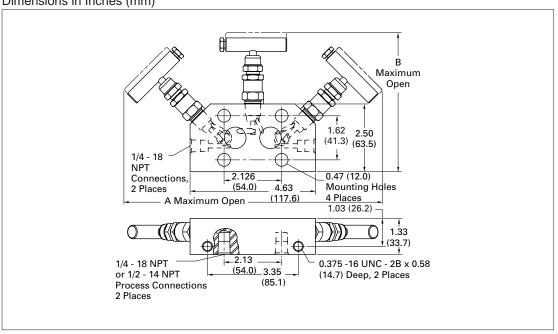
## Pressure vs. Temperature



② SG3 (Sour Gas) meets the requirements of NACE MR0175-2003.

## Specifications – KMC3 3-Valve Manifold with Optional Externally Valved Test Ports

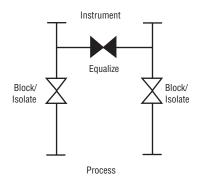
Dimensions in Inches (mm)



#### Dimensions in Inches (mm)

Valve ①	Α	В	
Teflon Packed	9.60 (243.8)	5.10 (129.5)	
GRAFOIL/Low Emissions Graphite Packed	10.98 (278.9)	5.75 (146.1)	

① Approximate valve weight: 5.0 lb (2.3 kg) for KMC3VI ( ) -2-H5 4.4 lb (2.0 kg) for KMC3VI ( ) -2 0.156-inch (4.0 mm) diameter orifice. Cv = .36, full open.



## Specifications – KMC3 3-Valve Manifold with Optional Externally Valved Test Ports

## **Standard Materials**

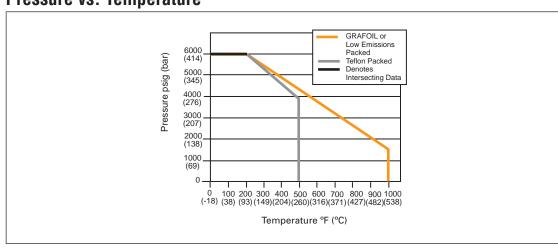
Valve ①	<b>Body and Bonnet</b>	Stem and Ball
SS	A479-316 316	A276-316 316
SG ②	A479-316 316	Monel 400 Monel K500
SG3 ③	Hastelloy C-276	Hastelloy C-276 Stellite

## **Pressure and Temperature Ratings**

Valve	Packing	Ratings
SS	Teflon	6000 psig at 200°F (414 bar at 93°C) 4000 psig at 500°F (276 bar at 260°C)
SS	GRAFOIL/ Low Emissions Graphite	6000 psig at 200°F (414 bar at 93°C) 1500 psig at 1000°F (103 bar at 538°C)
SG ②	Teflon	6000 psig at 200°F (414 bar at 93°C) 4000 psig at 500°F (276 bar at 260°C)
SG ②	GRAFOIL/ Low Emissions Graphite	6000 psig at 200°F (414 bar at 93°C) 1500 psig at 1000°F (103 bar at 538°C)
SG3 ③	Teflon	6000 psig at 200°F (414 bar at 93°C) 4000 psig at 500°F (276 bar at 260°C)
SG3 ③	GRAFOIL/ Low Emissions Graphite	6000 psig at 200°F (414 bar at 93°C) 1500 psig at 1000°F (103 bar at 538°C)

 $<sup>\</sup>ensuremath{^{\circlearrowleft}}$  Optional test port valves are available. Convertible soft-to-metal seat.

## Pressure vs. Temperature



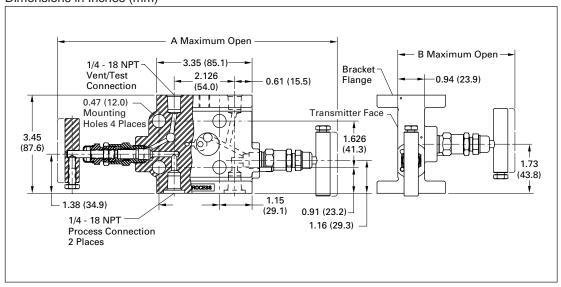


 $<sup>\</sup>ensuremath{^{\odot}}$  SG (Sour Gas) meets the requirements of NACE MR0175-2002.

<sup>3</sup> SG3 (Sour Gas) meets the requirements of NACE MR0175-2003.

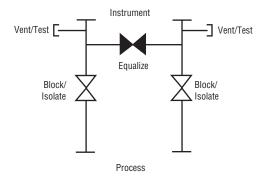
## **Specifications – KMT3 3-Valve Manifold with Test Ports**

#### Dimensions in Inches (mm)



#### Dimensions in Inches (mm)

Valve ①	Α	В
Teflon Packed	9.72 (246.9)	4.04 (102.6)
GRAFOIL/Low Emissions Graphite Packed	11.02 (279.9)	4.69 (119.1)



## **Standard Materials** 2

Valve	Body and Bonnet	Stem and Ball
SS	A351-CF8M SS 316	A276-316 316
SG ③	A351-CF8M SS 316	Monel 400 Monel K500
SG3 @	Hastelloy C-276	Hastelloy C-276 Stellite

- ① Approximate valve weight: 4.9 lb (2.22 kg)
  - 0.156-inch (4.0 mm) diameter orifice. Cv = .36, full open.
- ② Monel and Hastelloy are also available.
- 3 SG (Sour Gas) meets the requirements of NACE MR0175-2002.
- ④ SG3 (Sour Gas) meets the requirements of NACE MR0175-2003.

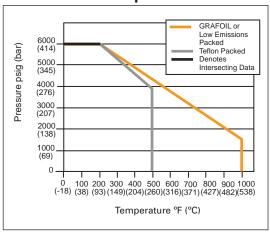


## Specifications – KMT3 3-Valve Manifold with Test Ports

## **Pressure and Temperature Ratings**

Valve	Packing	Ratings
SS	Teflon	6000 psig at 200°F (414 bar at 93°C) 4000 psig at 500°F (276 bar at 260°C)
SS	GRAFOIL/ Low Emissions Graphite	6000 psig at 200°F (414 bar at 93°C) 1500 psig at 1000°F (103 bar at 538°C)
SG ①	Teflon	6000 psig at 200°F (414 bar at 93°C) 4000 psig at 500°F (276 bar at 260°C)
SG ①	GRAFOIL/ Low Emissions Graphite	6000 psig at 200°F (414 bar at 93°C) 1500 psig at 1000°F (103 bar at 538°C)
SG3 ②	Teflon	6000 psig at 200°F (414 bar at 93°C) 4000 psig at 500°F (276 bar at 260°C)
SG3 ②	GRAFOIL/ Low Emissions Graphite	6000 psig at 200°F (414 bar at 93°C) 1500 psig at 1000°F (103 bar at 538°C)

## Pressure vs. Temperature



## Ordering Information – KMC and KMT (Rosemount Coplanar Only)

**KMC** <u>3</u> 1.

#### 1. Style

KMC - Coplanar KMT - Double Flange

## 5. Body Material

**S** - 316 SS J - Hastelloy

## 2. Type

2 – Two Valve (Static Pressure)

## 6. End Connection

2 - 1/4-Inch FNPT 4 - 1/2-Inch FNPT

3. Packing

3 – Three Valve (ΔP)

#### 7. Options

- Low Temperature Lubricant (Low Temperature Service -70°F) Not Available for CS Valves

Pipestand Mounting

 Bonnet Lock Device CB - Ceramic Ball Ended Stem

AM - KMC Mount Kit for 2-Inch

#### - Cleaned for Chlorine Service

- Cleaned for Oxygen Service

**HD** - Hydrostatic Testing

SG - Sour Gas Meets the Requirements of NACE MR0175-2002

SG3 - Sour Gas Meets the Requirements of NACE MR0175-2003

ST - Stellite Ball Ended Stem SB - Steam Block (KMC Only)

KH5 - KH5VS-22 Vent Valve (2) (KMC3 Only)

K1H5-KH5VS-22 Vent Valve (1) (KMC2, KMC3 Only)

- Special Requirements -Please Specify

### 4. Seat

V -Teflon

H -GRAFOIL

I - Integral (Body Material)

E -Low Emissions Graphite

① SG (Sour Gas) meets the requirements of NACE MR0175-2002.

<sup>&</sup>lt;sup>2</sup> SG3 (Sour Gas) meets the requirements of NACE MR0175-2003.

## Ordering Information – KMC and KMT ASME B31.1

**KMC** 1.

3HP

1. Style

KMC - Coplanar KMT - Double Flange 3. Material

**S** - 316 SS

5. Options

AM - KMC Mount Kit for 2-Inch Pipestand Mounting SP - Special Requirements -

Please Specify

2. Type

2HP - Two Valve (Static Pressure) **3HP** – Three Valve ( $\Delta P$ )

**5PHP** – Five Valve (Power) (ΔP)

4. End Connection

2 - 1/4-Inch FNPT (Use if Futbol Mounting to Inlet)

4 - 1/2-Inch FNPT

Note: All manifolds come standard with GRAFOIL packing, integral seats, bonnet locks, and are subjected to hydrostatic testing.

Manifold ratings:

6000 psig @ 100°F (414 bar @ 38°C) 2915 psig @ 1000°F (201 bar @ 538°C)

Bolts and gaskets are not included. Contact factory if bolts or gaskets are required.

KMC and KMT ASME B31.1 and B31.3 specifications meet MSS-SP-105.

All product names referenced herein are trademarks of their respective companies.

## **Kerotest Manufacturing Corp.**

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