

Product Brief

The KM6A 5-Valve Manifold is designed specifically for natural gas applications, especially for use with recording orifice meters. These manifolds are generally mounted in the tubing from the orifice flange. Because of its light weight, it is normally supported by the meter tubing without additional support. The KM6T and KM6TA options, however, allow for flange by tube installation or flange-by-flange installation of these manifolds if desired.

Features/Benefits

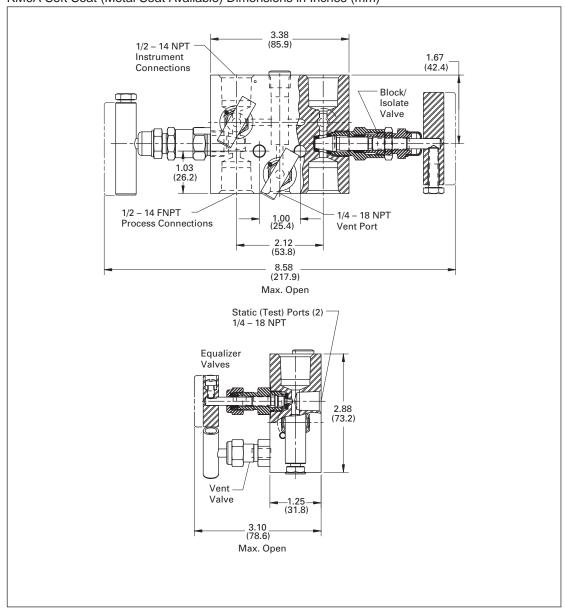
- Lightweight construction. Installs in meter tubing without additional support.
- Field-serviceable soft seat. Allows replacement with valve still in the line.
- 1/4-inch FNPT ports standard. Connect static pressure to the upstream or downstream ports.
- Isolated stem threads. Adjustable packing below stem threads keeps process fluid away. Ensures leakproof, long service life.
- Bubble-tight shutoff.

- Space-saving design.
- One valve does the work of five. Saves money and labor.
- Bonnet cap protection. Increases valve life and maintains integrity of stem threads.
- Rolled stem and bonnet threads for increased strength and life.
- No more stem blowouts. No-backout stem design prevents blowout problems and removal while in use.
- Less parts mean less leak points and less fugitive emissions.



Specifications

KM6A Soft Seat (Metal Seat Available) Dimensions in Inches (mm)



Notes:

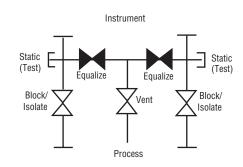
Approximate valve weight: 4.0 lb (1.8 kg)

Metal Seat: 0.156-inch (4.0 mm) diameter orifice.

Cv = .36, full open.

Soft Seat: 0.187-inch (4.8 mm) diameter orifice.

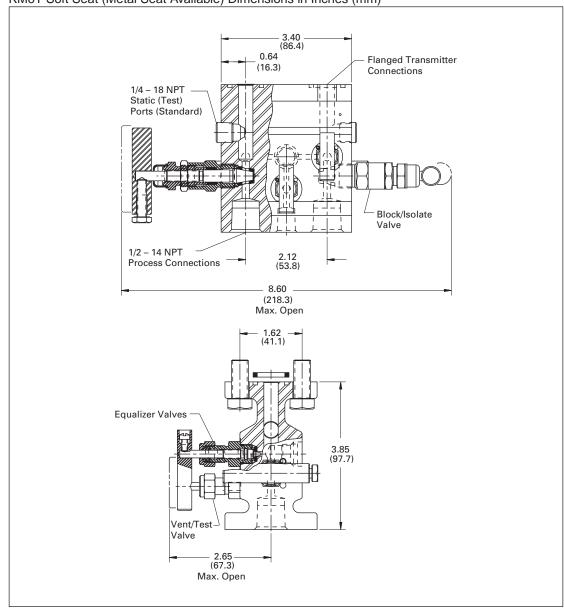
Cv = .83, full open.





Specifications

KM6T Soft Seat (Metal Seat Available) Dimensions in Inches (mm)



Notes

Approximate valve weight: 6.0 lb (2.7 kg)

Metal Seat: 0.156-inch (4.0 mm) diameter orifice.

Cv = .36, full open.

Soft Seat: 0.187-inch (4.8 mm) diameter orifice.

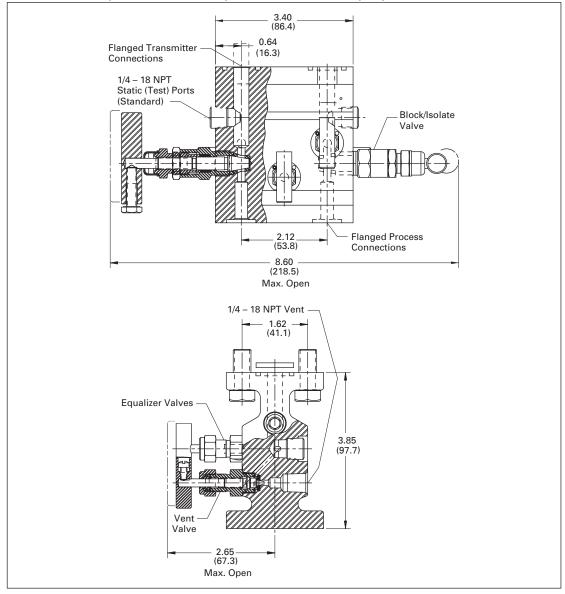
Cv = .83, full open.

KM6T Installation Kit consists of 4 bolts, 7/16-inch -20×1 -inch A193-B7, 4 washers, and 2 Teflon gaskets.



Specifications

KM6TA Soft Seat (Metal Seat Available) Dimensions in Inches (mm)



Notes

Approximate valve weight: 6.0 lb (2.7 kg) Metal Seat: 0.156-inch (4.0 mm) diameter orifice.

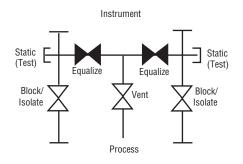
Cv = .36, full open.

Soft Seat: 0.187-inch (4.8 mm) diameter orifice.

Cv = .83, full open.

KM6TA Installation Kit consists of 4 bolts, 7/16-inch -20×1 -inch A193-B7, 4 washers, and 2 Tefllon® gaskets.

The KM6TA high pressure extrusion has flanged (integral) instrument and process connections.





Standard Materials

Valve	Seat	Body	Bonnet	Stem	Ball	Flow Washer
CS ①	Soft	A105 @	A108	A581-303	N/A	316
CS ①	Integral	A105 @	A108	A581-303	17-4PH	N/A
SS	Soft	A479-316	A479-316	A276-316	N/A	316
SS	Integral	A479-316	A479-316	A276-316	316	N/A
SG ②	Soft	A479-316	A479-316	Monel® 400	N/A	316
SG ②	Integral	A479-316	A479-316	Monel 400	Monel K500	N/A
SG3 ③	Hastelloy® C-276	Hastelloy C-276	Hastelloy C-276	Hastelloy C-276	Stellite	Hastelloy

Pressure and Temperature Ratings

Valve	Packing	Seat Material	Standard Bolting	SS Bolting
CS ① , SS, SG ②, SG3 ③, Monel	Teflon O-ring	Delrin® PCTFE ®	3000 psig at 200°F (207 bar at 93°C)	3000 psig at 200°F (207 bar at 93°C)
CS ①, SS, SG ②, SG3 ③	Teflon O-ring	PEEK	6000 psig at 200°F (414 bar at 93°C) 3000 psig at 300°F (207 bar at 149°C)	4500 psig at 100°F (310 bar at 38°C) 3000 psig at 300°F (207 bar at 149°C)
Monel	Teflon O-ring	PEEK	5300 psig at 200°F ⑦ (365 bar at 93°C) 3000 psig at 300°F (207 bar at 149°C)	4500 psig at 100°F (310 bar at 38°C) 3000 psig at 300°F (207 bar at 149°C)
CS ① , SS, SG ②, SG3 ③, Monel	Teflon	Teflon ®	1000 psig at 150°F (69 bar at 66°C) 200 psig at 500°F (14 bar at 260°C)	1000 psig at 150°F (69 bar at 66°C) 200 psig at 500°F (14 bar at 260°C)
CS ①, SS, SG ②, SG3 ③	Teflon GRAFOIL® Low Emissions Graphite	Body Material	4000 psig at 500°F (276 bar at 260°C)	3000 psig at 500°F (207 bar at 260°C)
Monel	Teflon GRAFOIL Low Emissions Graphite	Body Material	5300 psig at 200°F ⑦ (365 bar at 93°C) 4000 psig at 500°F (276 bar at 260°C)	4500 psig at 100°F (310 bar at 38°C) 3000 psig at 500°F (207 bar at 260°C)

 $[\]ensuremath{^{\circlearrowleft}}$ CS parts are zinc cobalt-plated to prevent corrosion.



② SG (Sour Gas) meets the requirements of NACE MR0175-2002.

 $[\]ensuremath{^{\circlearrowleft}}$ SG3 (Sour Gas) meets the requirements of NACE MR0175-2003.

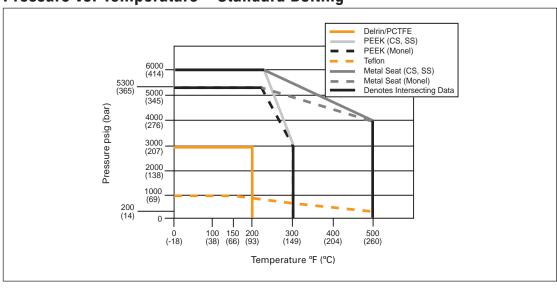
⁴ KM6A body material is A108.

[©] PCTFE (Polychlorotrifluoroethylene) is the equivalent of Kel-F®.

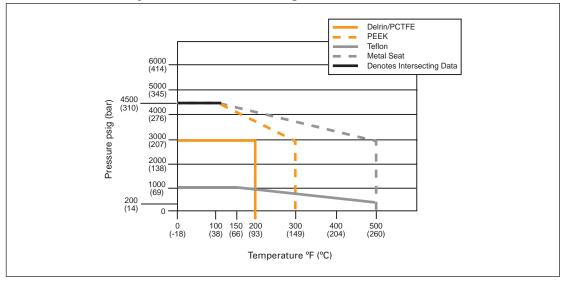
Block valves only

TM6A Monel ratings are: 6000 psig at 200°F (414 bar at 93°C), 4000 psig at 500°F (276 bar at 260°C).

Pressure vs. Temperature – Standard Bolting



Pressure vs. Temperature – SS Bolting



Ordering Information

KM6A

1.

<u>V</u>

<u>D</u> 3.

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SG 6.

1. Valve Type

3/16-Inch (4.8 mm) Orifice

KM6A – Pipe x Pipe

KM6T – Pipe x Flange

KM6TA - Flange x Flange

2. Packing

V - Teflon

R - O-ring

H - GRAFOIL

E - Low Emissions Graphite

3. Seat

Soft

V - Teflon (Block Valves Only)

D - Delrin

E - PEEK

K - PCTFE

Hard

I - Integral (Body Material)

4. Body Material

C - CS, A105 ^①

S - SS, A479-316

M - Monel

5. Process Connections

4 ^② – 1/2-Inch FNPT

AT ³ - Integral Single Ferrule Tube Fittings (4AT 1/2-Inch, 316 SS

Ferrule and Nut)

ATD ³-Integral Double Ferrule
Tube Fittings

(4ATD 1/2-Inch, 316 SS Ferrule and Nut)

6. Options

AM – KMC Mount Kit (For 2-Inch Pipestand Mounting of Manifold)

BC - Accessory Bracket for Mounting Conduit with KMC Mount

BP - Accessory Bracket for Mounting Purge Meters with KMC Mount

CL – Cleaned for Chlorine Service

HD - Hydrostatic Testing - Includes Test Report (MSS-SP-61) **OC** – Cleaned for Oxygen Service

R3V – Add When Mounting to Rosemount® Model #3051C, 2024, -3095. Specify on All Components. Use SS Columns for Rating (KM6T, KM6TA

SG - Sour Gas Meets the Requirements of NACE MR0175-2002 (B7 Mounting Bolts Standard, SS Mounting Bolts Optional) (SS Valves Only) (Not Available for O-ring Packed Valves)

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

TB - Static/Test Ports (Bottom of Manifold) 1/4-Inch - 18 NPT, 2 Places, KM6T, KM6TA Only

EL – Installed Street Elbows in Static Test Ports (KM6T, KM6TA Only) Elbows Provided with 1/4-Inch NPT Plugs

EL1 – Elbow Facing Bottom of Manifold

EL2 – Elbow Facing Outlet of Manifold

EL3 – Elbow Facing Top of Manifold

SP – Special Requirements – Please Specify

Note: For Close Couple Futbols (NPT and Tube-Ended) and Adapter Kits, consult Kerotest.

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



① KM6A is A108.

② Available to KM6A and KM6T only.

³ Available to KM6T only.