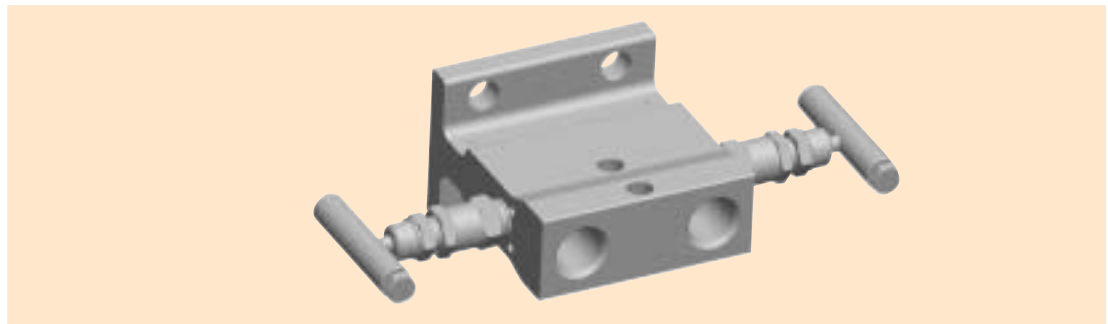


# Kerotest KM4TL 2-Valve Liquid Level Manifold



## Product Brief

The KM4TL is a two-valve manifold designed for use with Differential Pressure style pressure transmitters. The manifold is primarily intended for liquid level service. The manifold consists of two block valves. It does not contain an equalizer valve. It is offered in a single connection style of flange by NPT.

## Features/Benefits

- **Bubble-tight shutoff.** Every valve is 100% tested.
- **Space-saving design.** One compact valve replaces two. Less connections means less leak paths means **less fugitive emissions.**
- **Cost-saving design.** Less parts means lower cost in the order of 20-30% compared to conventional two-valve installation.
- **Stem threads isolated** from the process fluid, eliminating process fluid contamination.
- **Direct pipestand mounting.** Requires KMC mounting kit. Permits complete piping installation without the transmitter to minimize potential instrument damage during construction.
- **Easy instrument removal** as a result of direct bolting of the instrument to the manifold.
- **Service, repair and calibration** are enhanced because the signal and purge lines are undisturbed during instrument installation and removal.
- **Multiple packing options** available including Teflon® and GRAFOIL®.
- **Ball-tipped stem design** prevents seat galling during valve closure.

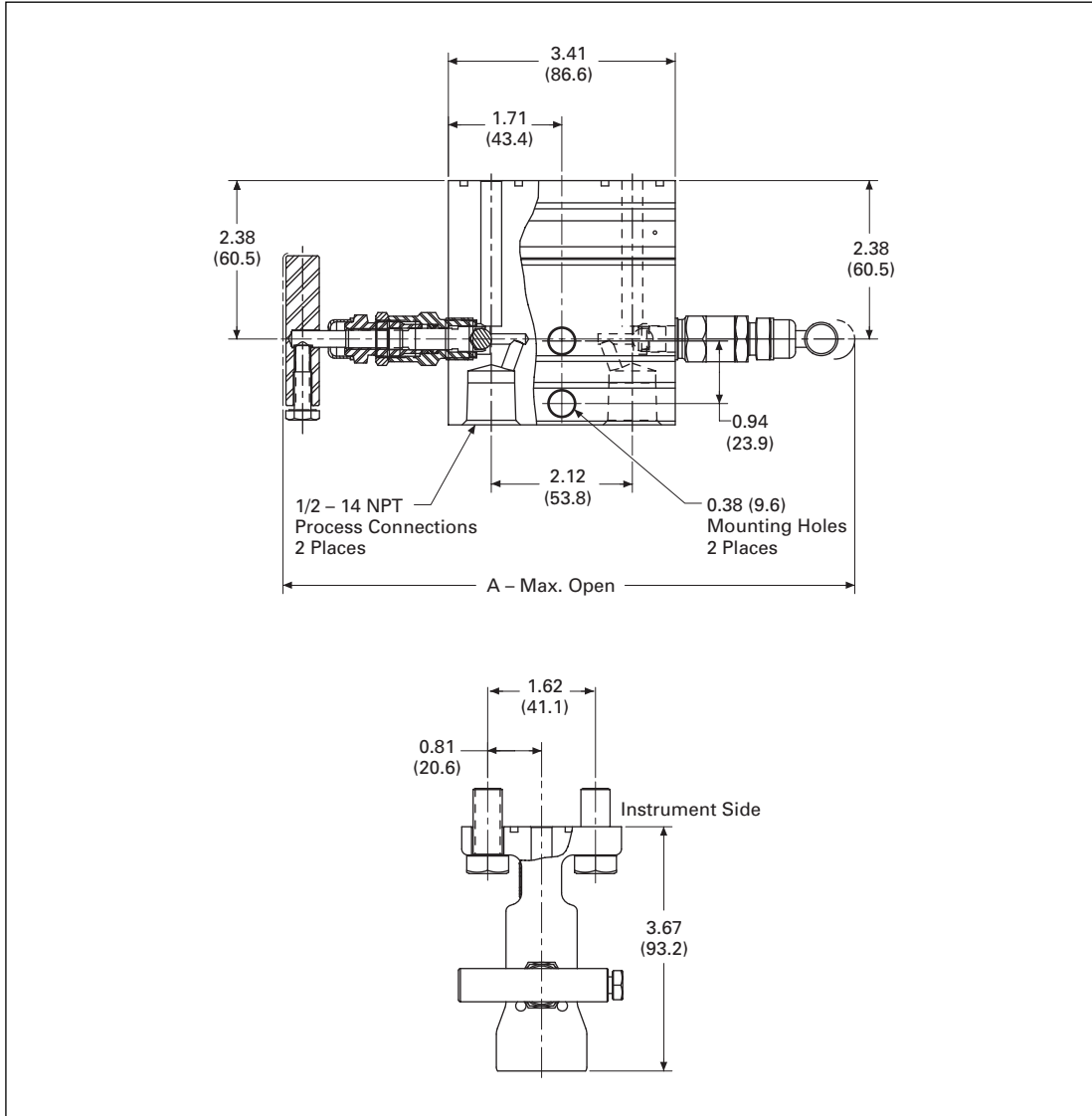


*An Employee Owned Total Quality Management Company*

# Kerotest KM4TL 2-Valve Liquid Level Manifold

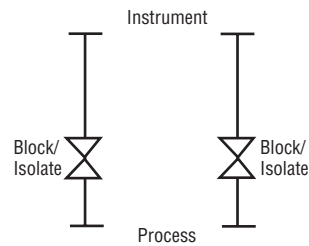
## Specifications

KM4TL – Metal Seat (Soft Seat Available) Dimensions in Inches (mm)



### Dimensions in Inches (mm)

Packing	A
Teflon	8.60 (218.4)
GRAFOIL	9.90 (251.5)



# Kerotest KM4TL 2-Valve Liquid Level Manifold

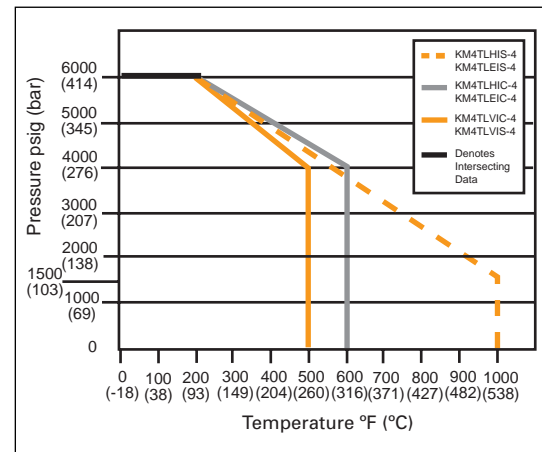
## Standard Materials

Valve ①	Packing	Body	Bonnet	Stem	Ball	Bolts ②
CS ③	Teflon	A576 10L18	A108	A581-303	17-4 PH	A193-B7
CS ③	GRAFOIL/ Low Emissions Graphite	A576 10L18	A105	A581-303	17-4 PH	A193-B7
SS	Teflon	A479-316	A479-316	A276-316	316	A193-B7
SS	GRAFOIL/ Low Emissions Graphite	A479-316	A479-316	A276-316	316	A193-B7
SG ④	Teflon	A479-316	Monel® 400	Monel K500	A193-B7	Teflon
SG ④	GRAFOIL/ Low Emissions Graphite	A479-316	A479-316	Monel 400	Monel K500	A193-B7
SG3 ⑤	Teflon	Hastelloy® C276	Hastelloy C276	Hastelloy C276	Stellite	A193-B7

## Pressure and Temperature Ratings

Valve	Packing	Ratings ②
CS ③	Teflon	6000 psig @ 200°F (414 bar @ 93°C) 4000 psig @ 500°F (276 bar @ 260°C)
CS ③	GRAFOIL/ Low Emissions Graphite	6000 psig @ 200°F (414 bar @ 93°C) 4000 psig @ 600°F (276 bar @ 316°C)
SS	Teflon	6000 psig @ 200°F (414 bar @ 93°C) 4000 psig @ 500°F (276 bar @ 260°C)
SS	GRAFOIL/ Low Emissions Graphite	6000 psig @ 200°F (414 bar @ 93°C) 1500 psig @ 1000°F (103 bar @ 538°C)
SG ④	Teflon	6000 psig @ 200°F (414 bar @ 93°C) 4000 psig @ 500°F (276 bar @ 260°C)
SG3 ⑤	Low Emissions Graphite	6000 psig @ 200°F (414 bar @ 93°C) 1500 psig @ 1000°F (103 bar @ 538°C)

## Pressure vs. Temperature



- ① Approximate valve weight: 5.0 lb (2.3 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.
- ② 316 SS bolts lower pressure ratings to a maximum of 4500 psig (310 bar). Contact factory for full rating with 316 SS bolts.
- ③ CS is zinc cobalt-plated to prevent corrosion.
- ④ SG (Sour Gas) meets the requirements of NACE MR0175-2002.
- ⑤ SG3 (Sour Gas) meets the requirements of NACE MR0175-2003.

# Kerotest KM4TL 2-Valve Liquid Level Manifold

## Ordering Information

<b>KM4TL</b>	<b>V</b>	<b>I</b>	<b>S</b>	<b>-</b>	<b>4</b>	<b>-</b>	<b>HD</b>
	<b>1.</b>	<b>2.</b>	<b>3.</b>		<b>4.</b>		<b>5.</b>

<b>1. Packing</b>	<b>4. Process Connection</b>	<b>MS</b> – Monel Stem <b>PHB</b> – Phenolic Black Handle <b>PT</b> – Top Purge Ports (1/4-Inch FNPT) <b>SSA</b> ① – SS Flange Bolt (Grade 18-8) <b>SSC</b> ① – 316 Flange Bolt (B8M) <b>SG</b> – Sour Gas Meets the Requirements of NACE MR0175-2002 (SS Valves Only) <b>SG3</b> – Sour Gas Meets the Requirements of NACE MR0175-2003 <b>ST</b> – Stellite Ball Stem Tip <b>SP</b> – Special Options – Please Specify
<b>V</b> – Teflon <b>H</b> – GRAFOIL	<b>4</b> – 1/2-Inch FNPT	
<b>2. Seat</b>	<b>5. Options</b>	
<b>I</b> – Integral (Body Material)	<b>AL</b> – Low Temperature Lubricant (Low Temperature Service) Not Available for CS Valves <b>AM</b> – KMC Mount Kit for 2-Inch Pipestand Mounting Manifold <b>BL</b> – Bonnet Lock Device <b>CL</b> – Cleaned for Chlorine Service <b>OC</b> – Cleaned for Oxygen Service <b>HD</b> – Hydrostatic Testing (100%) (MSS-SP-61)	
<b>3. Body Material</b>		
<b>C</b> – CS, A576-10L18 <b>S</b> – SS, A479-316 <b>W</b> – 316L SS <b>J</b> – Hastelloy		

① 316 SS bolts lower pressure ratings to a maximum of 4500 psig (310 bar). Contact factory for full rating with 316 SS bolts.

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

## Kerotest Manufacturing Corp.

5500 Second Avenue, Pittsburgh, PA 15207

(412) 521-7688 FAX: (412) 521-7853

email: sales@kerotest.com

www.kerotest.com