Kerotest KM25 & KM251 Block & Bleed Gauge Valves



Product Brief

The KM25 and KM251 are 2-valve, single outlet valves used primarily for gauge isolation. They can also be used for calibrating and venting operations, all in a very compact unit. They are highly reliable valves that permit the safe installation and servicing of gauges, switches, etc., without concern for external leakage.

Features/Benefits

- Field-serviceable soft seat. Allows replacement with valve still in the line.
- Compact, panel mount design. Saves space and installation costs.
- Isolated stem threads. Adjustable packing below stem threads keeps solids away. Prevents process contamination.
- Bubble-tight shutoff.
- Chrome-plated stem prevents freezing and galling.
- Perfect closure every time with freeswiveling ball end stem.

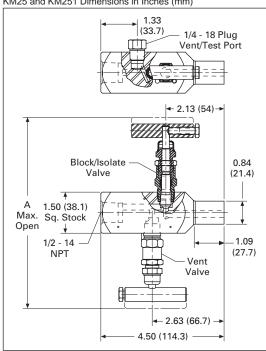
- Vent ports are threaded for safe, easy piping connections.
- Rolled stem and bonnet threads for increased strength and life. Highly polished stem.
- No more stem blowouts. No-backout stem design prevents blowout problems and removal while in use.
- Less parts mean less leak points and less fugitive emissions.



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Specifications

KM25 and KM251 Dimensions in Inches (mm)



Valve Bonnet Identification

Dust Cap Coding	The valve bonnet dust caps are color-coded to identify the gland packing/stem.	
White	Standard bonnet assembly Teflon packing.	
Blue	Blue High pressure bonnet assembly Teflon packing.	
Green	Sour Gas service Teflon packing.	

Note: CS, SS and Monel[®] valves are suitable for most process applications, however for severe service, KM25/KM251 valves are also available in exotic materials. For other material requirements, contact Kerotest.

Standard Connections

Process and Instrument	Threaded 1/2-inch NPT to ANSI/ASME B1-20-1.
Vent	Threaded 1/4-inch NPT to ANSI/ASME B1-20-1.

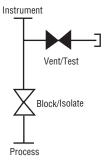
Dimensions in Inches (mm)

Packing	A
Teflon®	7.87 (200.0)
GRAFOIL®	8.98 (228.1)

Note: Approximate valve weight: 2.2 lb (1.0 kg).

0.187-inch (4.8 mm) diameter orifice. Cv = .52, full open.

The KM25 and KM251 are supplied as standard with two 0.26-inch (6.7 mm) diameter mounting holes.



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Standard Materials

Valve ①	Body	Bonnet	Stem	Ball Seat
CS ②	A108	A108	303 SS	17-4PH
SS	316 SS	316 SS	316 SS	316 SS
Monel	Monel 400	Monel 400	Monel 400	Monel K500
SG ③	316 SS	316 SS	Monel 400	Monel K500
SG3 @	Hastelloy C276	Hastelloy C276	Hastelloy C276	Stellite

① Approximate valve weight: 3.3 lb (1.5 kg).

0.187-inch (4.8 mm) diameter orifice.

Cv = .52, full open.

- ② For CS valves with GRAFOIL packing, body and bonnet material is A105. For CS valves, non-wetted parts are all CS.
- (9) For SS, SG (Sour Gas meets the requirements of NACE MR0175-2002) and Monel valves, non-wetted parts are all austenitic SS.
- 4 SG3 (Sour Gas) meets the requirements of NACE MR0175-2003.

Note: Threaded connection: vent supplied with blanking plug as standard.

Pressure and Temperature Ratings

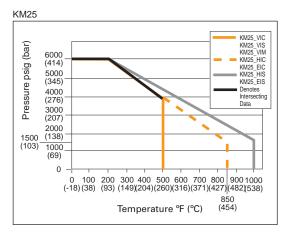
KM25

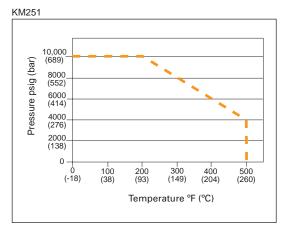
Valve	Teflon Bonnet (Standard)		
CS, SS and Monel	6000 psig at 200°F (414 bar at 93°C)	4000 psig at 500°F (276 bar at 260°C)	
Valve	High Temperature Applications		
CS	6000 psig at 200°F (414 bar at 93°C)	1500 psig at 850°F (103 bar at 454°C)	
SS	6000 psig at 200°F (414 bar at 93°C)	1500 psig at 1000°F (103 bar at 538°C)	

KM251

Valve	High Pressure Applications	
SS	10,000 psig at 200°F (689 bar at 93°C) 4000 psig at 500°F (276 bar at 260°C)	

Pressure vs. Temperature







Kerotest KM25 & KM251 Block & Bleed Gauge Valves

Ordering Information

KM25

 $\frac{V}{1}$ $\frac{I}{2}$

<u>S</u> 3.

- <u>4</u> 4.

<u>SG</u>

Valve Type

KM25 – Threaded x Threaded (Front Vent)

1. Packing

V - Teflon

H – GRAFOIL

E - Low Emissions Graphite

2. Seat

I - Integral

3. Body Material

C - CS M-Monel S - SS J-Hastelloy

4. Process Connections

Inlet x Outlet

2 -1/4-Inch FNPT x 1/4-Inch FNPT 4^① -1/2-Inch FNPT x 1/2-Inch FNPT 4M -1/2-Inch MNPT x 1/2-Inch MNPT

44 -1/2-Inch MNPT x 1/2-Inch FNPT
44F-1/2-Inch FNPT x 1/2-Inch MNPT
46 -3/4-Inch MNPT x 1/2-Inch FNPT

C –Male Plain End in Lieu of MNPT

5. Options

BL - Bonnet Lock Device

KMB51 – KMC Mount Pipestand
OC – Cleaned for Oxygen
Service

SG – Sour Gas Meets the Requirements of NACE MR0175-2002 (SS Valves Only)

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

ST - Stellite Ball Ended Stem

Special Requirements –
 Please Specify

KM251

<u>V</u>

<u>|</u> 2.

<u>S</u>

 $-\frac{4}{4}$

- <u>SG</u>

Valve Type

KM251 – Threaded x Threaded (Front Vent)

1. Packing

V - Teflon

2. Seat

I - Integral

3. Body Material

C - CS M-Monel S - SS J-Hastelloy

4. Process Connections

Inlet x Outlet

2 -1/4-Inch FNPT x 1/4-Inch FNPT 4⁽¹⁾ -1/2-Inch FNPT x 1/2-Inch FNPT 4M -1/2-Inch MNPT x 1/2-Inch MNPT 44 -1/2-Inch MNPT x 1/2-Inch FNPT 44F-1/2-Inch FNPT x 1/2-Inch MNPT

46 –3/4-Inch MNPT x 1/2-Inch FNPTC –Male Plain End in Lieu of MNPT

5. Options

BL -Bonnet Lock Device

KMB51 – KMC Mount Pipestand
OC – Cleaned for Oxygen

Service Service

- Sour Gas Meets the Requirements of NACE MR0175-2002 (SS Valves

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

ST -Stellite Ball Ended Stem

Special Requirements –Please Specify

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

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 $[\]bigcirc$ Body length = 4.5-inch (114 mm)