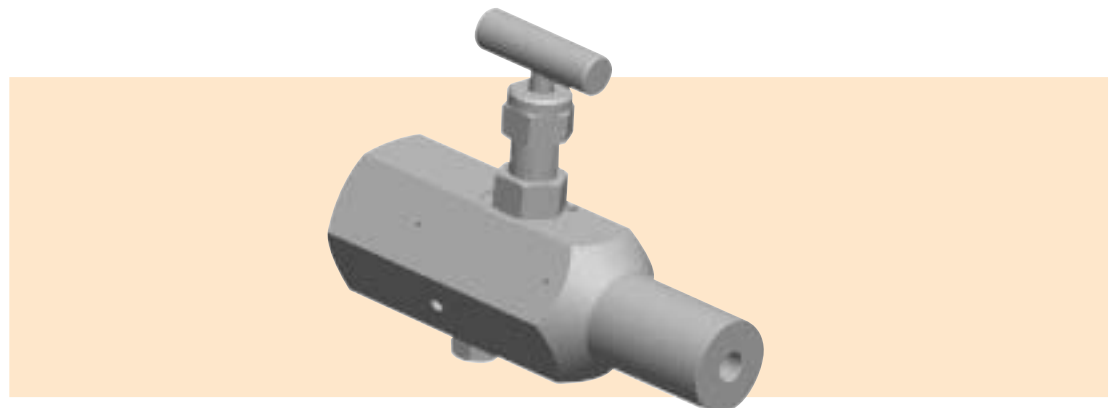


Kerotest KM9 Block & Bleed Gauge Valve



Product Brief

The KM9 Block & Bleed Valve is ideal for gauge installation. It is rugged, safe, compact and economical. The KM9 valve is offered in metal and soft seat versions, both using the same bonnet assembly for economy and convenience. A bleed plug is standard with each valve, permitting the safe venting of line pressure without breaking any in-line threaded connections.

Features/Benefits

- **Field-serviceable soft seat.** Allows replacement with valve still in the line.
- **Isolated stem threads** (O-ring bonnet). Packing below stem threads keeps solids away. Prevents process contamination.
- **Bubble-tight shutoff.**
- **Chrome-plated stainless steel stem** prevents freezing and galling.
- **Two-way seat design.** Soft seat via simple insert or metal seat when no insert is used.
- **One piece handle.** No way to lose the handle from vibration or misplacement.
- **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-backout stem design prevents blowout problems and removal while in use.
- **Less parts** mean less leak points and less fugitive emissions.

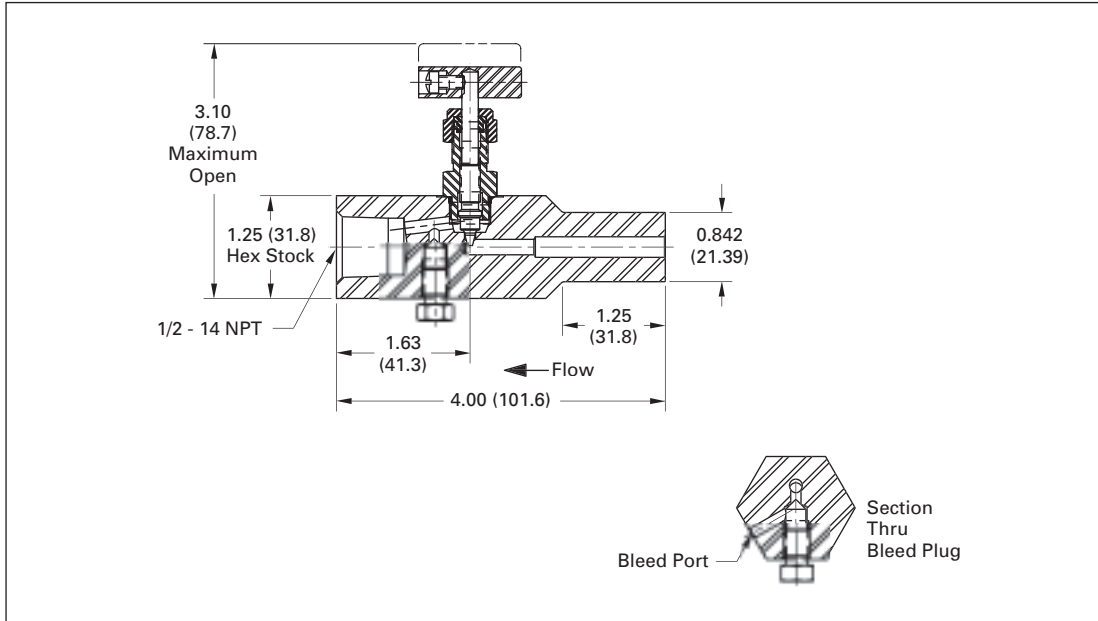


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Kerotest KM9 Block & Bleed Gauge Valve

Specifications

KM9VIS – 44C Dimensions with Teflon® Bonnet ①, Inches (mm)



① Bonnets interchangeable between all body configurations.
4.00-inch (101.6 mm) for -44°C, -46°C.
KM9(-)4 body length 2.88-inch (73.2 mm).

Note: For Hastelloy® and SG3, call factory for dimensions and weights.

Kerotest KM9 Block & Bleed Gauge Valve

Standard Materials

Metal Seat

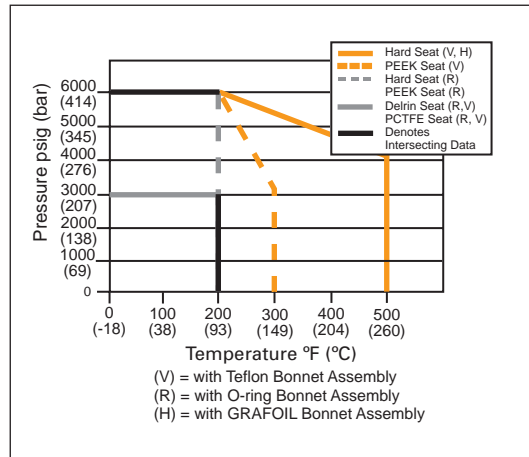
Valve ①	Body	Bonnet	Stem	Packing	Bleed Plug	Seat
CS ②	A108 CS	A108 CS	A581-303 SS	Teflon or BUNA-N O-ring	A108 CS	Integral
SS	A479-316 SS	A479-316 SS	A276-316 SS	Teflon, BUNA-N O-ring or GRAFOIL®	A276-316 SS	Integral
SG ③	A479-316 SS	A479-316 SS	Monel 400	Teflon	A279-316 SS	Integral
Monel®	Monel R405	Monel R405	Monel R405	Teflon	Monel R405	Integral
SG3 ④	Hastelloy C-276	Hastelloy C-276	Hastelloy C-276	Teflon	Hastelloy C-276	Integral

Soft Seat

Valve ①	Body	Bonnet	Stem	Packing	Flow Washer	Bleed Plug	Seat ⑤
CS ②	A108 CS	A108 CS	A581-303 SS	Teflon or BUNA-N O-ring	316 SS	A108 CS	Delrin®
SS	A479-316 SS	A479-316 SS	A276-316 SS	Teflon or Viton® O-ring	316 SS	A276-316 SS	PCTFE ⑥
SG ③	A479-316 SS	A479-316 SS	Monel 400	Teflon	316 SS	A276-316 SS	PCTFE ⑥
SG3 ④	Hastelloy C-276	Hastelloy C-276	Hastelloy C-276	Teflon	Hastelloy C-276	Hastelloy C-276	PCTFE ⑥

- ① Approximate valve weight: 1.2 lb (.54 kg).
Orifice size 0.136-inch (3.5 mm) diameter.
Metal Seat: Cv = .25, full open.
Soft Seat: Cv = .24, full open.
- ② CS is zinc cobalt-plated to prevent corrosion (except male plain end is black oxide coated).
- ③ SG (Sour Gas) meets the requirements of NACE MR0175-2002.
- ④ SG3 (Sour Gas) meets the requirements of NACE MR0175-2003.
- ⑤ PEEK available.
- ⑥ PCTFE (Polychlorotrifluoroethylene) is the equivalent of Kel-F®.

Pressure vs. Temperature



Pressure and Temperature Ratings

Teflon or GRAFOIL Bonnet

Hard Seat	6000 psig at 200°F (414 bar at 93°C)
	4000 psig at 500°F (276 bar at 260°C)
Delrin and PCTFE	3000 psig at 200°F (207 bar at 93°C)
PEEK Seat	6000 psig at 200°F (414 bar at 93°C)
	3000 psig at 300°F (207 bar at 149°C)

O-ring Bonnet

Hard Seat	6000 psig at 200°F (414 bar at 93°C)
Delrin and PCTFE	3000 psig at 200°F (207 bar at 93°C)
PEEK Seat	6000 psig at 200°F (414 bar at 93°C)

Kerotest KM9 Block & Bleed Gauge Valve

Ordering Information

KM9 **V** **I** **S** - **44C** - **SG**
1. 2. 3. 4. 5.

1. Packing

V – Teflon Bonnet (Standard for 316 SS)
R – O-ring Bonnet
H – GRAFOIL (500°F [260°C] Maximum)

2. Seat

I – Integral
D – Delrin (Standard)
E – PEEK
K – PCTFE

3. Body Material

C – CS
S – SS
M – Monel
J – Hastelloy
I – Inconel

4. Connections (Inlet/Outlet)

44 – 1/2-Inch MNPT x 1/2-Inch FNPT
46 – 3/4-Inch MNPT x 1/2-Inch FNPT
4M – 1/2-Inch MNPT x 1/2-Inch MNPT
4 – 1/2-Inch FNPT x 1/2-Inch FNPT
C – Male Plain End (CS is Black Oxide Coated)
44A – 9/16-Inch M Autoclave x 9/16-Inch F Autoclave

5. Options

AL – Low Temperature Lubricant; Not Available for CS Valves
CLC – Chlorine Cleaning
HD – Hydrostatic Testing (100%) (MSS-SP-61)
MS – Monel Stem
OC – Oxygen Cleaning
PHB – Phenolic Black Handle
PHG – Phenolic Green Handle
PHR – Phenolic Red Handle
PM – Panel Mount (Teflon Packed Only)
SG – Sour Gas Meets the Requirements of NACE MR0175-2002 (SS Only)
SG3 – Sour Gas Meets the Requirements of NACE MR0175-2003
SP – Special Requirements – Please Specify

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Kerotest Manufacturing Corp.

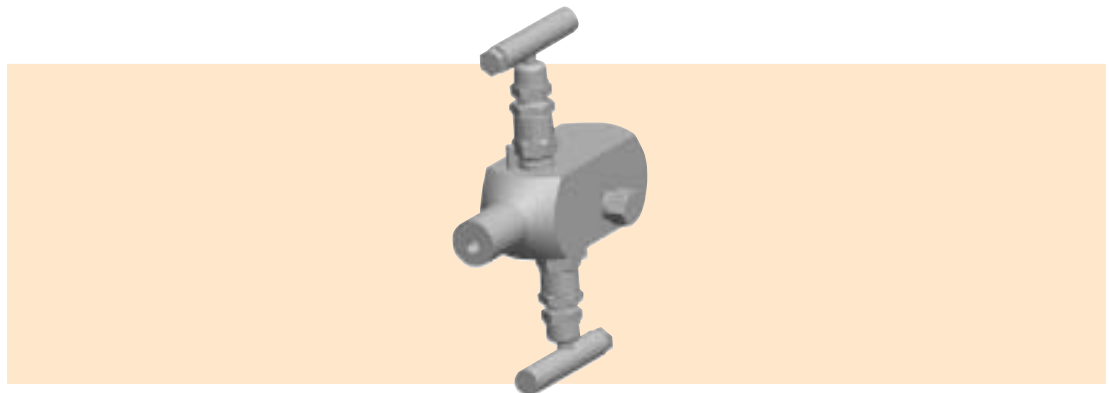
5500 Second Avenue, Pittsburgh, PA 15207

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

email: sales@kerotest.com

www.kerotest.com

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 free-swiveling 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.

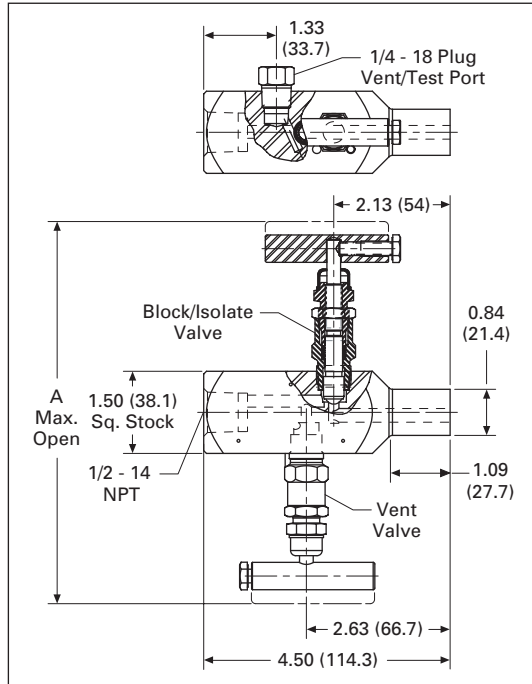


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Kerotest KM25 & KM251 Block & Bleed Gauge Valves

Specifications

KM25 and KM251 Dimensions in Inches (mm)



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.

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 High pressure bonnet assembly Teflon packing.

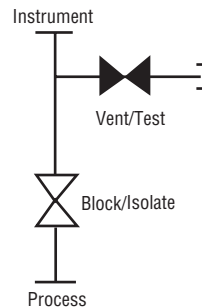
Green Sour Gas service Teflon packing.

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.



Kerotest KM25 & KM251 Block & Bleed Gauge Valves

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 ④	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.

③ 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)

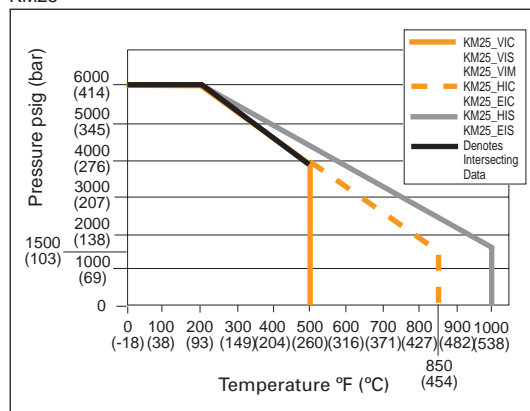
Valve	High Temperature Applications
CS	6000 psig at 200°F (414 bar at 93°C) 1500 psig at 850°F (103 bar at 454°C)
SS	6000 psig at 200°F (414 bar at 93°C) 1500 psig at 1000°F (103 bar at 538°C)

KM251

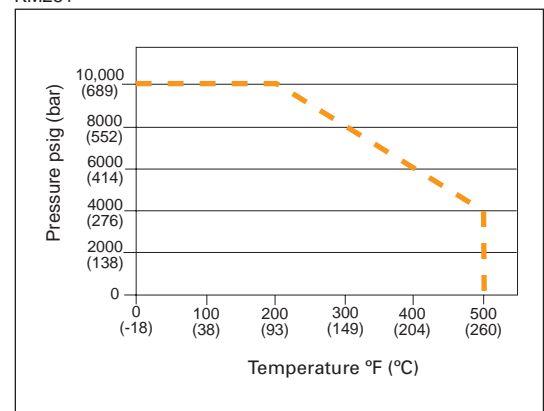
Valve	High Pressure Applications
SS	10,000 psig at 200°F (689 bar at 93°C) 4000 psig at 500°F (276 bar at 260°C)

Pressure vs. Temperature

KM25



KM251



Kerotest KM25 & KM251 Block & Bleed Gauge Valves

Ordering Information

KM25			<u>V</u> 1.	<u>I</u> 2.	<u>S</u> 3.	-	<u>4</u> 4.	-	<u>SG</u> 5.
Valve Type			3. Body Material			5. Options			
KM25 – Threaded x Threaded (Front Vent)			C – CS M–Monel S – SS J–Hastelloy			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 SP – Special Requirements – Please Specify			
1. Packing			4. Process Connections						
V – Teflon H – GRAFOIL E – Low Emissions Graphite			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						
2. Seat									
I – Integral									

KM251			<u>V</u> 1.	<u>I</u> 2.	<u>S</u> 3.	-	<u>4</u> 4.	-	<u>SG</u> 5.
Valve Type			3. Body Material			5. Options			
KM251 – Threaded x Threaded (Front Vent)			C – CS M–Monel S – SS J–Hastelloy			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 SP – Special Requirements – Please Specify			
1. Packing			4. Process Connections						
V – Teflon			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						
2. Seat									
I – Integral									

① Body length = 4.5-inch (114 mm)

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