



# **Mining Valve**

# Control&On-off Valve Manufacture Since 1956

### "Reliable Valves for the Mining Industry"



GEKO fluid control GmbH has set the standard for valves used in mining. 55 years of experience along with state-of- the art HVOF applied coatings make Geko valves the best choice for all applications, especially in extreme conditions. This guide will help you find the best solution for your application:

**Content Menu** 

Geko manufactures and repairs valves for mining companies including:

- Barrick Gold Corporation
- Rio Tinto- Kennecott Copper Mine
- Newmont Mining
- General Electric Company
- Tyco Fire Protection Products

Our Metal-Seated Ball Valves are made to perform in all mining applications including:

- Autoclave
- Slurry Transport
- Continuous Catalytic Reforming

**<u>Complete List of Applications</u>** 

"When you work with us, you'll gain not only a world-class team but also a wealth of industry experience."



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### **Valve Selection**

\*All valves can be customized with materials and coatings to meet unique operating conditions



#### **GKBV** Series

- Custom made to wide range of applications
- Tested to API 598 Standards
- For Temperatures: 400°F +
- End Types: Socket Weld, NPT, Butt Weld, Flange
- Sizes: 1/2" 20"
- ANSI Class: 150 4500
- Materials: 410ss, 17-4 ph, 316ss, • Inconels, Ferralium 255 (autoclaves), Hastelloys, Monel, Alloy 20, Titanium, Zirconium



#### Carbide GKBV Series

- Wide range of applications
- Full Bore, High Cycle
- Tested to API 598 Standards
- End Types: Socket Weld, NPT, Butt- Weld, Flange
- Sizes: 1/2" 8"
- ANSI Class: 150 4500
- Available in CF8M (316ss) and A216-WCB



#### **GKPV** Series

- Power Plants, Steam Generation
- For Temperatures:
- End Types: Socket Weld, NPT, Butt- Weld, Flange
- Sizes: 1/2" 4"
- ANSI Class: 900, 1500, 3200, 4500
- Materials: F22, A105, F91 (Other materials available)



#### **Trunnion GKBV Series**

- Wide range of high cycle applications
- Torque-Reducing Design
- End Types: Socket Weld, NPT, Butt Weld, Flange
- Sizes: 2" 12"
- ANSI Class: 300, 600, 900
- Materials: (All GKBV Series materials)



#### **GKPV2** Series (2 -piece)

- Power Plants, Steam Generation
- Available in a wide variety of sizes and materials
- End Types: Socket Weld, NPT, Butt- Weld , Flange
- Sizes: 1/2" 4"
- ANSI Class: Up to 4500#
- Standard Materials: F22, A105, • F91 (Other materials available)



#### **GKBV3** Series

- For temperatures exceeding 500° F
- Carbide sealing areas
- End Types: Socket Weld, NPT, Butt Weld, Flange
- Sizes: 1/2" 4"
- Available in CF8M (316ss) and A216-WCB

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The temperature of our product is based on our valve's materials. If you have any question about temperature, please consult to GEKO.



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### Valve Details

Series	Bore Size <sup>1</sup>	End Size	ASME Class	Body Type	Body Mat'l. <sup>2</sup>	Trim Mat'l. <sup>3</sup>
GKBV	.56" - 18.81"	1/2" - 20"	150#, 300#, 600#, 900#, 1500#, 2500#, 3200#, 4500#	2-PC Forged	A105, 316ss, Inconels, Ferralium 255, Hastelloys, Monel, Alloy 20, Titanium, Zirconium	17-4 ph, 316ss, Inconels, Ferralium 255, Hastelloys, Monel, Alloy 20, Titanium, Zirconium
Carbide <sub>GKBV</sub>	.56" - 8"	1/2" - 8"	150#, 300#, 600#	2-PC Casted	CF8M, WCB	17-4 ph, 316ss, Inconels, Ferralium 255, Hastelloys, Monel, Alloy 20, Titanium, Zirconium
GKBV3	.56" - 4"	1/2" - 4"	150#, 300#	3-PC Casted	CF8M, WCB	316ss
Trunnion GKBV	1.5" - 12"	2" - 12"	300#, 600#, 900#	2-PC Forged	A105, 316ss, Inconels, Ferralium 255, Hastelloys, Monel, Alloy 20, Titanium, Zirconium	<ul><li>17-4 ph, 316ss, Inconels, Ferralium 255,</li><li>Hastelloys, Monel, Alloy 20, Titanium, Zirconium</li></ul>
GKPV	.56" - 4"	1/2" - 4"	900# , 1500#, 2500#, 3200#, 4500#	1-PC Forged	316ss, F22, A105, F91	<ul><li>17-4 ph, 316ss, Inconels, Ferralium 255,</li><li>Hastelloys, Monel, Alloy</li><li>20, Titanium, Zirconium</li></ul>
GKPV2	.56" - 4"	1/2" - 4"	900# , 1500#, 2500#, 3200#, 4500#	2-PC Forged	316ss, F22, A105, F91	17-4 ph, 316ss, Inconels, Ferralium 255, Hastelloys, Monel, Alloy 20, Titanium, Zirconium

Note:

<sup>1</sup> Bore size range limited to corresponding end size

<sup>2</sup> Special body materials available

<sup>3</sup> Special trim materials and HVOF applied coatings available

#### **Available End Connections**

Socket Weld (SW) Butt Weld (BW) Raised-Face Flange (RFF) Ring Type Joint (RTJ) Threaded (NPT)









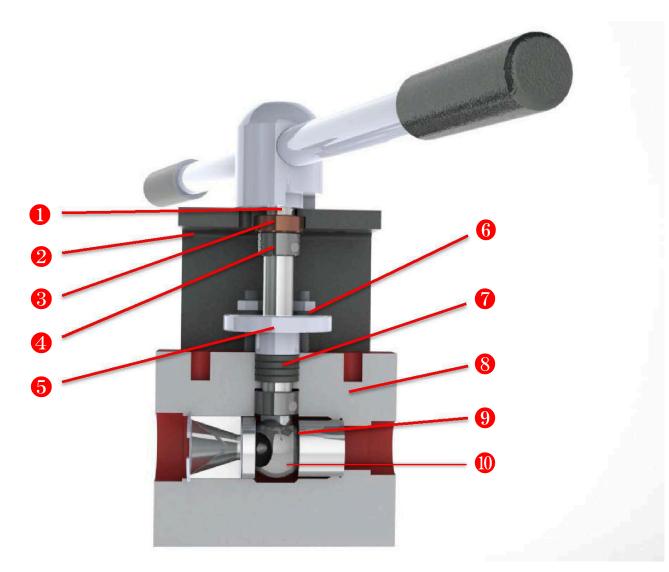


**Available Actuation** 

All Geko valves can easily be equipped with actuators to meet user specifications. <u>Contact us for information</u> regarding different actuator options. Common actuation types include: Lever, Hand-wheel, Bevel Gear, Pneumatic, Hydraulic, and Electric. <u>Return to Menu</u>



### **GKPV Series** Design Features

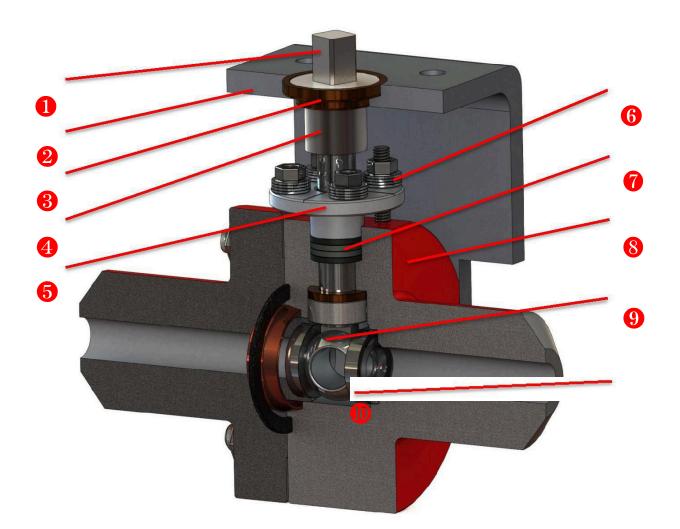


- **1** Stem for convenient adaptation of manual, geared, pneumatic, hydraulic, and other motor actuators.
- **2** Mounting Bracket customized to various actuator specifications for easy installation.
- **3** Guide Bearing for smooth, quarter-turn opening and closing.
- **4** Thrust Collars for blowout-proof operation.
- **6** Adjustable Packing Follower to ensure continued seal throughout value life.
- **6** Live-loaded Springs apply continuous pressure on Packing Follower.
- **7 Durable Packing** for leak-proof performance. (Available in Graphoil and Inconel)
- **8** One-Piece Forged Body (GKPV Series only) most readily available and cost effective forged value on the market.
- 9 Mate-Lapped Ball & Seats for precise sealing during isolation.
- **WOF Applied Coatings** for wear resistance in extreme corrosive and abrasive conditions.

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### **GKPV2 Series** Design Features



- **1** Stem Adapter for convenient installation of manual, geared, pneumatic, hydraulic, and other motor actuators.
- **2** Mounting Bracket customized to unique actuator sizes for easy mounting.
- **3** Guide Bearing for smooth, quarter-turn opening and closing.
- **4** Thrust Collars for blowout-proof operation.
- **6** Adjustable Packing Follower to ensure stem alignment and continued seal throughout valve life.
- **6** Live-loaded Springs apply continuous pressure on Packing Follower so packing remains tight after thousands of cycles.
- **7** Durable Packing for leak-proof performance. (Available in Graphoil and Inconel Material)
- 8 2-Piece Forged Body For custom end connections and easy maintenance.
- **9** Mate-Lapped Ball & Seats for perfect seal.
- **WOF Applied Coatings** for wear resistance in extreme corrosive and abrasive conditions.

## **GKBV Series** Design Features



- **1** Stem for convenient installation of manual, geared, pneumatic, hydraulic, and other motor actuators.
- **2** Mounting Bracket customized to unique actuator sizes for easy mounting.
- **B** Guide Bearing for smooth, quarter-turn opening and closing.
- 4 Adjustable Packing Follower to ensure stem alignment and continued seal throughout valve life.
- **5** Thrust Collar for Blowout-proof operation.
- **6** Live-loaded Springs apply continuous pressure on Packing Follower so packing remains tight after thousands of cycles.
- **7** Durable Packing for leak-proof performance. (Available in Graphoil and Inconel Material)
- 8 2-Piece Forged Body For custom end connections and easy maintenance.
- 9 Mate-Lapped Ball & Seats for perfect seal.
- **WOF Applied Coatings** for wear resistance in extreme corrosive and abrasive conditions.

### **Applications**

#### Geko valves GmbH specializes in solutions for the following mining applications:

#### -Autoclave-

**Oxygen** Injection Autoclave Vent Autoclave Vent Isolation Autoclave Discharge Autoclave Feed Sparge Valves **Pump Isolation** 

High Pressure Heater Drain Valve High Pressure Heater Isolation Valve Slurry Feed Pump Isolation Valve Acid Valves Acid Drain Valves Steam Supply Control Valve Steam Valves Vent Valves Rapid Decompression Valve **Discharge Valves** 

Slurry Feed Pump Isolation Valve Steam Supply Control Valve Steam / Quench Valves Oxygen Valves Vent Valves Rapid Decompression Valve Discharge Valves Quench Valves Steam Valves

More Applications





### -Slurry Transport-

#### **Pump Station:**

Charge Valve Pump Isolation Valve Drain Valve Charge Pump Isolation

#### **Pressure Letdown Choke Station:**

Choke Station Emergency Shutdown Valve Instrument Isolation Instrument Bleed Valve Drain Valve Emergency Dump Valve Choke Loop Cut Valve Choke Loop Seal Valve Choke Loop Isolation Valve By-pass Isolation Main Slurry Line Isolation

#### **Pressure Letdown Choke Station:**

Choke Station Emergency Shutdown Valve Instrument Isolation Instrument Bleed Valve Pigging Isolation Drain Valve Emergency Dump Valve Discharge Valves Pig Launch Charge Valve Vent Valves





ISO 9001











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