

KUGELHAHN MÜLLER GMBH  
**PRODUCT OVERVIEW**

---



# PASSIONATE

## KUGELHAHN MÜLLER HIGH QUALITY SINCE 1979

Since the company's inception in 1979 we stand for highest quality standards, proximity to our customers, and reliable delivery. Our core competence is the development, production and sale of high-quality ball valves and special valves for the chemical industry. Based on decades of experience and continuous optimization of our processes, we always guarantee product quality at the highest level.

The long story of our company's success began with a trade business for ball valves and – on a small scale – the manufacture of selected special ball valves.

To offer their customers a smooth and highly flexible order execution with first-class product quality and reliable delivery, Kugelhahn Müller in the 1990s invested in modern and powerful machinery with a

large vertical scope of manufacture and started their first own series production.

We meet the constantly growing requirements of the markets by continuously investing in state-of-the-art technologies and process optimization measures, and by regularly upgrading our employees' level of qualification.

These measures are fundamental prerequisites for the positive further development of our company and our product portfolio. In 2014, we became a member of the Bray International Inc. family – another milestone on our way to become an ever better provider of ball valves. Whatever we do, and wherever we go: Customer satisfaction is always our top priority.

# QUALITY-CONSCIOUS

### OUR MOST VALUABLE ASSET IS THE TRUST OF OUR CUSTOMERS QUALITY IS OUR FORMULA FOR SUCCESS

True to this motto, the high standard of our quality assurance system ensures that every valve is tested for proper operation and leak-tightness – resulting in an error rate of the final inspection of almost zero percent.

If the valve meets the strict requirements, it is marked with a stamp on the edge of the flange. An essential component of our success is the continuous process optimization and the regular certification of our quality management system by TÜV Rheinland. This ensures that we achieve our own goals and meet the demands of our customers.

# CUSTOMER-FOCUSED



### ABOUT US WHAT WE STAND FOR

- > Customer proximity
- > Quality
- > Delivery reliability
- > Manufacturing and repair of ball valves
- > Large stock
- > Flexibility

### PRECISION IN EVERY DETAIL ENGINEERING

High quality standards, decades of know-how, and the constant optimization of our products ensure top-notch quality.

It all starts with the sophisticated design and planning process in our own engineering department. Precision in absolutely every detail and the matching of the products to the respective requirements guarantee optimized solutions for our customers' demanding applications.

### DELIVERY RELIABILITY LARGE STOCK

To meet our high standards, we maintain a large stock of standard valves, which enables us to offer short delivery times. This makes us a reliable partner.



### FLAWLESS RESULTS PRODUCTION PROCESSES

In our own assembly hall, the processes are continuously optimized to achieve maximum production speed and quality.

Clearly structured workflows and well-trained personnel mesh with a strict quality assurance system. State-of-the-art equipment and machines ensure consistently flawless results.



### TECHNICAL SPECIFICATION

Size Range <sup>1</sup>	DN15 - DN200
Body Type	Two-piece
Port	Full port
Temperature Range <sup>2</sup>	-60°C to +260°C
Operating Pressure	max. 40 bar
Flange Connection <sup>3</sup>	EN 1092 Form B1, PN10 - 40
Top Flange	ISO 5211
Face-to-Face <sup>4</sup>	EN 558 Series 1, 27
Design	EN 12516/AD2000
Pressure Test	EN 12266-1
Certification	TA-Luft VDI 2440 PED 2014/68/EU

<sup>1</sup> DN20 and DN32 available as type TX/TA.  
<sup>2</sup> Maximum temperature ranges only valid for special version.  
<sup>3</sup> Other drilling patterns on request.  
<sup>4</sup> ≤ DN100 (Series 1 and 27), > DN100 (Series 27).

The series TXST/TAST features a self-sealing, maintenance-free PTFE sealing system with a custom-made preloaded Belleville spring design. This design has proven to ensure an extremely long service life. This flanged ball valve meets the highest quality requirements of the German Chemical Industry and is supplied with a hand lever (up to DN100) made of solid material with two travel stops to prevent inadmissible torsional forces. Alternatively, an investment-cast cranked hand lever is available.

### APPLICATIONS

Bi-directional shut-off of a variety of liquid and gaseous media in many applications under the most demanding operating conditions, e.g. in the following industries:

- > Chemical
- > Pharmaceutical
- > Petrochemical
- > Water technology
- > Food processing

### PRODUCT FEATURES

- > Resilient-seated ball valve with floating ball in optimized design
- > Antistatic design as standard
- > Blowout-proof stem
- > Chambered body gasket
- > Free of non-ferrous metals
- > Modular hand lever design for manual stem extension
- > Maintenance-free and durable
- > Packing design offers the possibility of manual adjustment of the sealing
- > Use of acid-resistant materials

### MATERIALS

Part	KM-TXST	KM-TAST
Body	Stainless Steel (1.4408)	Carbon Steel (1.0619)
Ball	Stainless steel (1.4408, 1.4404)	
Seat	PTFE/25% GFR, PTFE/50% VA, PEEK, virgin PTFE (FDA) <sup>5</sup>	
Stem	Stainless steel (1.4404, 1.4571)	
Stem Packing	PTFE	
Gland retainer	Stainless steel (1.4404, 1.4571)	
Body Sealing	PTFE	
Bolts	A4-70	
Hand lever	1.4104	

<sup>5</sup> Optional only for KM-TXST



### TECHNICAL SPECIFICATION

Size Range <sup>1</sup>	DN15 - DN200
Body Type	Two-piece
Port	Full port
Temperature Range <sup>2</sup>	-25°C to +220°C
Operating Pressure	max. 40 bar
Flange Connection <sup>3</sup>	EN 1092 Form B1, PN10 - 40
Top Flange	ISO 5211
Face-to-Face <sup>4</sup>	EN 558 Series 1, 27
Design	EN 12516/AD2000
Pressure Test	EN 12266-1
Certification	TA-Luft VDI 2440 PED 2014/68/EU

<sup>1</sup> DN20 and DN32 available as type OX/OA.  
<sup>2</sup> Maximum temperature ranges only valid for special version.  
<sup>3</sup> Other drilling patterns on request.  
<sup>4</sup> ≤ DN100 (Series 1 and 27), > DN100 (Series 27).

The series OXST/OAST features a self-sealing, maintenance-free sealing system with a custom-made O-ring arrangement and simultaneous use of at least three O-rings (four O-rings from DN150). This design has proven to ensure an extremely long service life. This flanged ball valve meets the highest quality requirements of the German Chemical Industry and is supplied with a hand lever (up to DN100) made of solid material with two travel stops to prevent inadmissible torsional forces. Alternatively, an investment-cast cranked hand lever is available.

### APPLICATIONS

Bi-directional shut-off of a variety of liquid and gaseous media in many applications under the most demanding operating conditions, e.g. in the following industries:

- > Chemical
- > Pharmaceutical
- > Petrochemical
- > Water technology
- > Food processing

### PRODUCT FEATURES

- > Resilient-seated ball valve with floating ball in optimized design
- > Antistatic design as standard
- > Blowout-proof stem
- > Chambered body gasket
- > Free of non-ferrous metals
- > Modular hand lever design for manual stem extension
- > Maintenance-free and durable
- > Use of acid-resistant materials

### MATERIALS

Part	KM-OXST	KM-OAST
Body	Stainless Steel (1.4408)	Carbon Steel (1.0619)
Ball	Stainless steel (1.4408, 1.4404)	
Seat	PTFE/25% GFR, PTFE/50% VA, PEEK, virgin PTFE (FDA) <sup>5</sup>	
Stem	Stainless steel (1.4404, 1.4571)	
O-Ring	Viton®	
Guide Bushing	PTFE-P	
Body Sealing	PTFE	
Bolts	A4-70	
Hand lever	1.4104	

<sup>5</sup> Optional only for KM-OXST



### TECHNICAL SPECIFICATION

Size Range	DN15 - DN100
Body Type	Two-piece
Port	Full port
Temperature Range <sup>1</sup>	-60°C to +260°C
Operating Pressure	max. 40 bar
Flange Connection <sup>2</sup>	EN 1092 Form B1, PN16/40
Top Flange	ISO 5211
Face-to-Face	EN 558 Series 1, 27
Design	EN 12516/AD2000
Pressure Test	EN 12266-1
Certification	TA-Luft VDI 2440 PED 2014/68/EU Fire Safe <sup>3</sup> ISO 10497, API 607

<sup>1</sup> Maximum temperature ranges only valid for special version.  
<sup>2</sup> Other drilling patterns on request.  
<sup>3</sup> Optional: Ball with relief bore on pressure side (requires unidirectional installation).

### APPLICATIONS

Bi-directional shut-off of a variety of liquid and gaseous media in many applications under the most demanding operating conditions, e.g. in the following industries:

- > Chemical
- > Pharmaceutical
- > Petrochemical
- > Water technology
- > Food processing

The series TX/TA features a self-sealing, maintenance-free PTFE sealing system with a custom-made preloaded Belleville spring design. This design has proven to ensure an extremely long service life. This flanged ball valve meets the highest quality requirements of the German Chemical Industry and is supplied with a hand lever made of solid material with two travel stops to prevent inadmissible torsional forces.

### PRODUCT FEATURES

- > Resilient-seated ball valve with floating ball
- > Antistatic design as standard
- > Blowout-proof stem
- > Chambered body gasket
- > Free of non-ferrous metals
- > Modular hand lever design for manual stem extension
- > Maintenance-free and durable
- > Packing design offers the possibility of manual adjustment of the sealing
- > Use of acid-resistant materials

### MATERIALS

Part	KM-TX	KM-TA
Body	Stainless Steel (1.4408)	Carbon Steel (1.0619)
Ball	Stainless steel (1.4408, 1.4404)	
Seat	PTFE/25% GFR, PTFE/50% VA, PEEK, virgin PTFE (FDA) <sup>4</sup>	
Stem	Stainless steel (1.4404, 1.4571)	
Stem Packing	PTFE + graphite <sup>3</sup>	
Gland retainer	Stainless steel (1.4404, 1.4571)	
Body Sealing	PTFE + graphite <sup>3</sup>	
Bolts	A4-70	
Hand lever	1.4104 <sup>4</sup> Optional only for KM-TX	



### TECHNICAL SPECIFICATION

Size Range	DN15 - DN100
Body Type	Two-piece
Port	Full port
Temperature Range <sup>1</sup>	-25°C to +220°C
Operating Pressure	max. 40 bar
Flange Connection <sup>2</sup>	EN 1092 Form B1, PN16/40
Top Flange	ISO 5211
Face-to-Face	EN 558 Series 1, 27
Design	EN 12516/AD2000
Pressure Test	EN 12266-1
Certification	TA-Luft VDI 2440 PED 2014/68/EU

<sup>1</sup> Maximum temperature ranges only valid for special version.  
<sup>2</sup> Other drilling patterns on request.

### APPLICATIONS

Bi-directional shut-off of a variety of liquid and gaseous media in many applications under the most demanding operating conditions, e.g. in the following industries:

- > Chemical
- > Pharmaceutical
- > Petrochemical
- > Water technology
- > Food processing

The series OX/OA features a self-sealing, maintenance-free sealing system with a custom-made O-ring arrangement and simultaneous use of three O-rings. This design has proven to ensure an extremely long service life. This flanged ball valve meets the highest quality requirements of the German Chemical Industry and is supplied with a hand lever made of solid material with two travel stops to prevent inadmissible torsional forces.

### PRODUCT FEATURES

- > Resilient-seated ball valve with floating ball
- > Antistatic design as standard
- > Blowout-proof stem
- > Chambered body gasket
- > Free of non-ferrous metals
- > Modular hand lever design for manual stem extension
- > Maintenance-free and durable
- > Use of acid-resistant materials

### MATERIALS

Part	KM-OX	KM-OA
Body	Stainless Steel (1.4408)	Carbon Steel (1.0619)
Ball	Stainless steel (1.4408, 1.4404)	
Seat	PTFE/25% GFR, PTFE/50% VA, PEEK, virgin PTFE (FDA) <sup>3</sup>	
Stem	Stainless steel (1.4404, 1.4571)	
O-Ring	Viton®	
Guide Bushing	PTFE-P	
Body Sealing	PTFE	
Bolts	A4-70	
Hand lever	1.4104 <sup>3</sup> Optional only for KM-OX	



### TECHNICAL SPECIFICATION

Size Range	NPS 1/2" - 6" (DN15 - DN150)
Body Type	Two-piece
Port	Full port
Temperature Range <sup>1</sup>	-60°C to +260°C
Operating Pressure	max. 40 bar
Flange Connection	ASME B16.5 RF, Class 150, 300
Top Flange	ISO 5211
Face-to-Face <sup>2</sup>	EN 558 Series 3, 4
Design	ASME B16.34
Pressure Test	API 598
Certification	TA-Luft VDI 2440 Fire Safe <sup>3</sup> ISO 10497, API 607

<sup>1</sup> Maximum temperature ranges only valid for special version.  
<sup>2</sup> 6" (DN150) Class 150 (Series 12).  
<sup>3</sup> Optional: Ball with relief bore on pressure side (requires unidirectional installation).

### APPLICATIONS

Bi-directional shut-off of a variety of liquid and gaseous media in many applications under the most demanding operating conditions, e.g. in the following industries:

- > Chemical
- > Pharmaceutical
- > Petrochemical
- > Water technology
- > Food processing

The series TX-AS/TA-AS is designed in accordance with ASME B16.34 and features a self-sealing, maintenance-free PTFE sealing system with a custom-made preloaded Belleville spring design. This design has proven to ensure an extremely long service life. This flanged ball valve meets the highest quality requirements of the German Chemical Industry and is supplied with an investment-cast cranked hand lever (up to 4" / DN100).

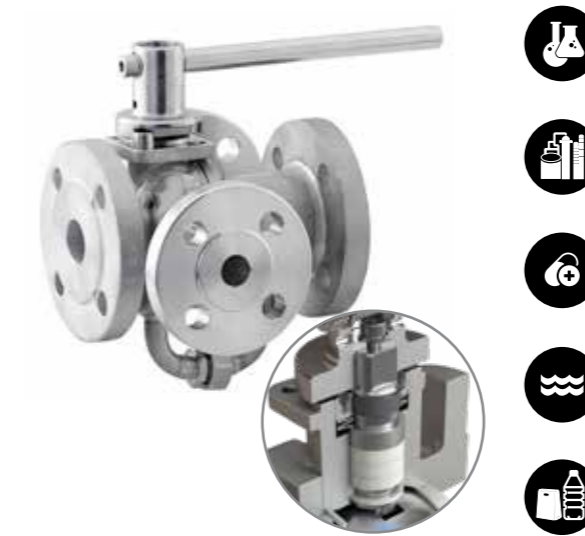
### PRODUCT FEATURES

- > Resilient-seated ball valve with floating ball in acc. with ASME B16.34
- > Antistatic design as standard
- > Blowout-proof stem
- > Chambered body gasket
- > Free of non-ferrous metals
- > Maintenance-free and durable
- > Packing design offers the possibility of manual adjustment of the sealing
- > Use of acid-resistant materials

### MATERIALS

Part	KM-TX-AS	KM-TA-AS
Body	ASTM A351 Gr. CF8M	ASTM A216 Gr. WCB
Ball	Stainless steel (1.4408, 1.4404)	
Seat	PTFE/25% GFR, PTFE/50% VA, PEEK, virgin PTFE (FDA) <sup>4</sup>	
Stem	Stainless steel (1.4404, 1.4571)	
Stem Packing	PTFE + graphite <sup>3</sup>	
Gland retainer	Stainless steel (1.4404, 1.4571)	
Body Sealing	PTFE, graphite <sup>3</sup> , further options on request	
Bolts	A4-70	

<sup>4</sup> Optional only for KM-TX-AS



### TECHNICAL SPECIFICATION

Size Range	DN15 - DN100
Heat Jacket Connections	DN15-25: DN15 DN40-100: DN25
Body Type	Two-piece
Port	Full port
Temperature Range <sup>1</sup>	-60°C to +260°C
Operating Pressure	max. 40 bar
Flange Connection <sup>2</sup>	EN 1092 Form B1, PN16/40
Top Flange	ISO 5211
Face-to-Face	EN 558 Series 1, 27
Design	EN 12516/AD2000
Pressure Test	EN 12266-1
Certification	TA-Luft VDI 2440 PED 2014/68/EU

<sup>1</sup> Maximum temperature ranges only valid for special version.  
<sup>2</sup> Other drilling patterns on request.

### APPLICATIONS

Bi-directional shut-off of a variety of liquid and gaseous media in many applications under the most demanding operating conditions, e.g. in the following industries:

- > Chemical
- > Pharmaceutical
- > Petrochemical
- > Water technology
- > Food processing

The series TX-H/TA-H is based on the TX/TA version and has a heat jacket. The self-sealing, maintenance-free PTFE sealing system with custom-made preloaded Belleville spring design has proven to ensure an extremely long service life. This flanged ball valve meets the highest quality requirements of the German Chemical Industry and is supplied with a hand lever made of solid material with two travel stops to prevent inadmissible torsional forces.

### PRODUCT FEATURES

- > Resilient-seated ball valve with floating ball
- > Antistatic design as standard
- > Blowout-proof stem
- > Chambered body gasket
- > Free of non-ferrous metals
- > Modular hand lever design for manual stem extension
- > Maintenance-free and durable
- > Packing design offers the possibility of manual adjustment of the sealing
- > Use of acid-resistant materials

### MATERIALS

Part	KM-TX-H	KM-TA-H
Body	Stainless Steel (1.4408)	Carbon Steel (1.0619)
Ball	Stainless steel (1.4408, 1.4404)	
Seat	PTFE/25% GFR, PTFE/50% VA, PEEK, virgin PTFE (FDA) <sup>5</sup>	
Stem	Stainless steel (1.4404, 1.4571)	
Stem Packing	PTFE	
Gland retainer	Stainless steel (1.4404, 1.4571)	
Body Sealing	PTFE	
Bolts	A4-70	
Hand lever	1.4104	

<sup>5</sup> Optional only for KM-TX-H



### TECHNICAL SPECIFICATION

Size Range	DN15 - DN100
Body Type	Two-piece
Port	Full port
Temperature Range <sup>1</sup>	-30°C to +280°C
Operating Pressure	max. 40 bar
Flange Connection <sup>2</sup>	EN 1092 Form B1, PN16/40
Top Flange	ISO 5211
Face-to-Face	EN 558 Series 1, 27
Design	EN 12516/AD2000
Pressure Test	EN 12266-1
Certification	TA-Luft VDI 2440 PED 2014/68/EU Fire Safe <sup>3</sup> ISO 10497, API 607

<sup>1</sup> Maximum temperature ranges only valid for special version.

<sup>2</sup> Other flange connections on request.

<sup>3</sup> Optional: Ball with relief bore on pressure side (requires unidirectional installation).

### APPLICATIONS

Bi-directional shut-off of a variety of liquid and gaseous media in many applications under the most demanding operating conditions, e.g. in the following industries:

- > Chemical
- > Pharmaceutical
- > Petrochemical
- > Water technology
- > Food processing

The series XH-T/AH-T is based on the TX/TA ball valve; with its pure graphite packing, it is specially designed for high temperature applications. The self-sealing, maintenance-free PTFE sealing system with custom-made preloaded Belleville spring design has proven to ensure an extremely long service life. This flanged ball valve meets the highest quality requirements of the German Chemical Industry and is supplied with a hand lever made of solid material with two travel stops to prevent inadmissible torsional forces.

### PRODUCT FEATURES

- > Ball valve with floating ball
- > Antistatic design as standard
- > Blowout-proof stem
- > Chambered body gasket
- > Free of non-ferrous metals
- > Modular hand lever design for manual stem extension
- > Maintenance-free and durable
- > Packing design offers the possibility of manual adjustment of the sealing
- > Use of acid-resistant materials

### MATERIALS

Part	KM-XH-T	KM-AH-T
Body	Stainless Steel (1.4571)	Carbon Steel (1.0619)
Ball	Stainless steel (1.4408, 1.4404)	
Seat	1.4571/Carbon-Antimony	
Stem	Stainless Steel (1.4404)	
Stem Packing	Graphite	
Gland retainer	Stainless steel (1.4404, 1.4571)	
Body Sealing	Graphite	
Bolts	A4-70	
Hand lever	1.4104	

### STEM EXTENSION TYPE: SVA



The closed stem extension (H=100mm) made of stainless steel allows the installation of brackets and couplers for automation. Hand lever installation is also possible.

### STEM EXTENSION TYPE: SVM



The modular stem extension allows several extensions to be mounted on top of each other and offers simple installation on ball valves that are already installed. The travel stop does not have to be removed.

### AUTOMATION BRACKETS AND COUPLERS



The bracket with ISO 5211 drilling pattern features face milling on both ends. The coupler has a position indicator.

### ACTUATION HANDWHEEL



Stainless steel handwheels can also be manufactured to customer specifications.

### SAFETY LOCKABLE HANDLE



A lockable handle used to lock the valve in closed and/or open position is optionally available. Opening or closing is only possible after removal of the padlock\*.

\*Padlock not included.

### SAFETY LOCKING UNIT



The locking unit with padlock\* or locking pin prevents unintended operation of the ball valve. The ball valve can only be opened or closed after removal of the padlock or actuation of the locking pin.



**KUGELHAHN MÜLLER**

YOUR SPECIALIST FOR BALL VALVES



**KUGELHAHN MÜLLER GMBH** • A Subsidiary of Bray International, Inc.

Kölner Str. 686 • D-47807 Krefeld • T. +49 (0) 21 51. 30 80 41 | F. +49 (0) 21 51. 30 80 39 • [info@kh-m.de](mailto:info@kh-m.de)

All statements, technical information and recommendations in this brochure are intended for general use only.

Please contact us for the specific requirements and material selection for your intended application.

The right to change or modify product design or product without prior notice is reserved.

Patents issued and applied for worldwide.

© 2018 Kugelhahn Müller GmbH. All rights reserved.

B-KM-8000\_Profile\_EU-EN\_2018-10-22

**KUGELHAHN-MUELLER.DE**