

## OVERVIEW

Kugelhahn Müller flanged ball valves feature maintenance-free and durable adjustable live-loaded PTFE stem sealing or O-Ring sealing system with certified packing.

This design has proven to ensure an extreme long service life and meets the highest quality requirements in the Chemical Industry worldwide.

A wide range of accessories and special materials enable high flexibility and ensure customer requirements.



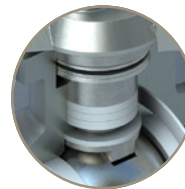
### APPLICATIONS

- > Chemical gases
- > Chemical fluids
- > Petrochemicals
- > Food & Beverage (FDA)
- > Pharmaceutical
- > Water and Wastewater treatment

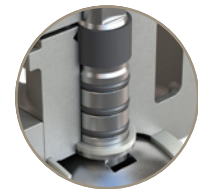
### MEDIA

- > Acids
- > Alkalis
- > Corrosive Chemicals
- > Gases
- > Hydrogen
- > Oxygen
- > Water

**PTFE PACKING**



**O-RING SEALING**



## SPECIFICATIONS

<b>Size Range</b>	DN 15 to 200
<b>Temperature Range</b>	PTFE: -60°C to 200°C
	O-Ring: -25°C to 200°C
<b>Maximum Operating Pressure</b>	40 bar
<b>Body Style</b>	Two-piece flanged
<b>Port</b>	Full Port
<b>Tightness Test</b>	EN 12266-1 Rate A

## DESIGN STANDARDS

<b>Valve Design</b>	EN 12569   EN 593   NE 167
<b>Material Standard</b>	EN 16668   AD2000 W0
<b>Food Contact</b>	EC 1935
<b>Marking</b>	EN 19   DIN EN IEC 61406*   DIN 91406*
<b>Top Flange</b>	ISO 5211
<b>Flange Drilling</b>	EN 1092-1 PN 10, 16, 25, 40
<b>Face-to-Face</b>	EN 558 Series 1   Series 27
<b>Testing Standard</b>	EN 12266-1

### NOTES

Other flange patterns are available on request.  
Customer specification and standards on request.  
\* AutoID available shortly.

## MATERIAL OPTIONS<sup>1</sup>

<b>Body</b>	Carbon Steel (EN 1.0619)
	Stainless Steel (EN 1.4408)
<b>Ball</b>	Stainless Steel (EN 1.4408)
	Stainless Steel (EN 1.4404)
<b>Stem</b>	Stainless Steel (EN 1.4462)
<b>Seat</b>	PTFE/25% GFR
	PTFE/50% VA
	Virgin PTFE (FDA)
<b>Packing</b>	PTFE
	Viton® (FKM)

### NOTES

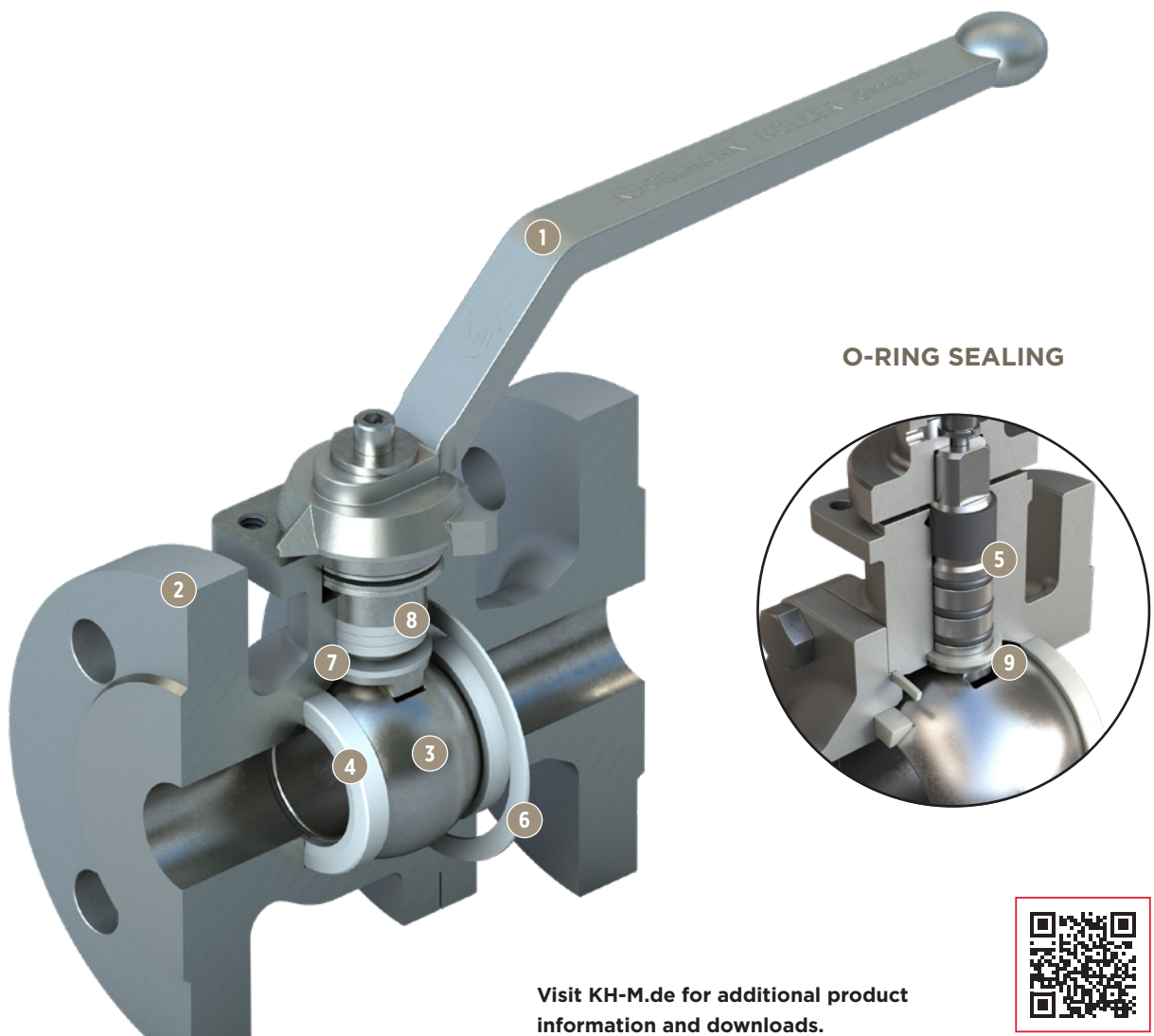
<sup>1</sup> Other materials are available on request.

## CERTIFICATIONS AND APPROVALS

<b>Declaration of Conformity</b>	CE   UKCA
<b>Pressure Equipment Directive</b>	2014/68/EU   PE(S)R
<b>Machinery Directive</b>	2006/42/EC
<b>Atmospheric Explosion</b>	ATEX 2014/34/EU
<b>Fugitive Emissions</b>	ISO 15848-1   TA Luft VDI 2440
<b>AutoID / ID Link</b>	DIN 91406   IEC 61406
<b>Safety Integrity Level</b>	IEC 61508 Parts 1-2 and 4-7:2010
<b>Fire-Safe (optional)</b>	ISO 10494   API 607

## FEATURES & BENEFITS

- 1 **HAND LEVER:** Stainless steel lockable hand lever with a position indicator.
- 2 **BODY:** Robust two-piece body design suitable for heavy-duty applications in multiple industries. A wide range of flange connections are available.
- 3 **BALL:** Floating full bore design made of polished stainless steel.
- 4 **SEAT:** Seat design ensures bidirectional zero-leakage sealing under all pressure and temperature conditions.
- 5 **STEM:** Heavy-duty, blowout-proof stem with “Double D” connection according to ISO 5211 for mounting of various hand levers, adapters, actuators and stem extensions.
- 6 **BODY SEAL:** Chambered body seal design to ensure outstanding sealing integrity.
- 7 **STEM PACKING:** Custom designed high integrity stem packing arrangement that combines a self-adjusting primary and secondary seal in order to ensure consistent torque and highest possible tightness according to ISO 15848-1.
- 8 **PTFE PACKING:** The PTFE sealing system features a preloaded Belleville spring design with the benefit of optional re-adjustment.
- 9 **O-RING PACKING:** The O-Ring sealing system features an O-Ring arrangement of at least three O-Rings.



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