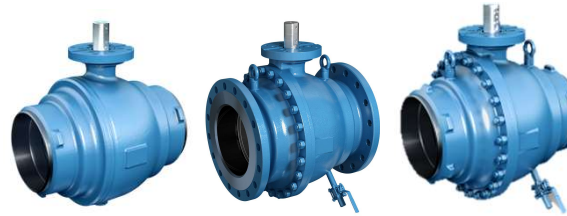




# KLINGER USP'S

# KH(SV)I ADVANTAGES



1



## (1) Sealing system:

- » Reliable Elastic Sealing System ensures high temperatures (260°C) → no spring loaded system
- » Due to sealing system construction low torque
- » Base on low Torque – high operating cycles are possible
- » Sealing system construction is insensitive to impurities → metal seats available
- » Bidirectional tight

2



## (2) Ball:

- » Ductile graphite iron ball with chrome coating (30µm)
- » Very corrosion resistant → Scratch proof
- » Chrome layer is harder than ANY stainless steel ball
- » Highest resistance against different chemical, corrosive (media) and mechanical (solids) loads
- » No turbulences due to full bore ball

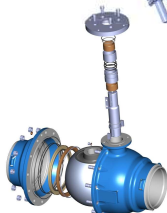
3



## (3) Body

- » Compact construction because casted material – insensitive to pipe forces
- » Pneum. and electr. Actuators possible to install
- » Installation in any position possible – bidirectional flow
- » Fully Welded version available → no different weldings on housing
- » Drain/Test Cock available for all line sizes

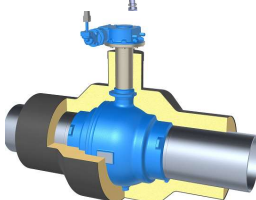
4



## (4) Quality

- » Basically maintenance free
- » Long service life (min. 20 -25 years)
- » Stem Sealing could be changed inline
- » Leakage rate A – best in class → tested acc. EN12266-1
- » DB&B feature ensures maximum safety → TÜV confirmed

5



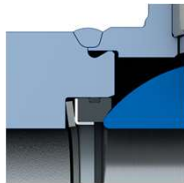
## (5) EN488

- » Fulfill the latest version acc. EN488:2015
- » Certification acc. EN488:2015 available
- » Preisolated with HDPE jacket on demand

# KHO ADVANTAGES



1



## (1) Sealing elements:

- » Design is elastic, robust, reliable and insensitive to impurities and pressure shocks → high lifetime.
- » Bi- directional flow.

2



## (2) Stem sealing:

- » Triple stem sealing ensures maximum safety.
- » Top O- ring can be changed inline.

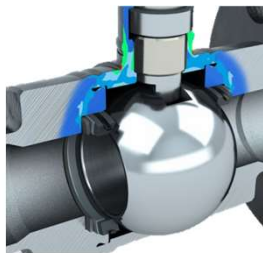
3



## (3) Ball:

- » Standard ball made of stainless steel 1.4401 / 1.4408 / AISI 304L → high resistance to chemical media and mechanical loads.
- » The ball has a cylindrical passage which ensures laminar flow without turbulences.
- » Larger ball ensures higher sealing surface of the seal ring.
- » Ensures low pressure drop and lower pumping energy.

4



## (4) Body:

- » Compact casted body → Insensitive to pipeline forces and tension optimised construction.
- » Dome connection is of the middle piece is casted – no welding seam directly on the middle piece for the dome pipe.
- » Each body welding seam is completely welded through the entire cross section → no possibility of crack corrosion.

5



## (5) Quality

- » Certified acc. EN488:2019 and EHP003.
- » Maintenance free and long service life.
- » Fully isolated solutions available.

# KHA ADVANTAGES



## (1) Sealing elements:

- » High temperature range -196°C – 400°C → achievable with different sealing element versions
- » Wide range of different sealing element types → easy adaptable for many different applications
- » Design is elastic, robust, reliable and insensitive to impurities and pressure shocks → high lifetime
- » Additional C4430 gaskets on housing pitch → improved tightness to atmosphere

## (2) Stuffingboxes:

- » Wide range of different stuffingbox types → easy adaptable for many different applications
- » Easy combinable with all types of sealing elements in one valve construction
- » New aflas / graphite stuffingbox → Fire safe and TA Luft / ISO15848 approved

## (3) Ball:

- » Standard ball made of stainless steel 1.4401 or 1.4408 → high resistance to chemical media and mechanical loads
- » By using of metal sealing elements, the ball is chrome coated → Insensitive for solids, no sticking of media particles on the surface
- » Cylindrical bore → No turbulences, laminar flow, low pressure drop
- » Different ball bearings → floating ball or trunnion mounted
- » V – port balls in 10°, 30°, 60° and slotted cutting on demand → for control applications with different flow characteristics

## (4) Body

- » Compact casted center piece → Insensitive to pipeline forces
- » Short housing screws → high mechanical stability at thermal expansion due to temperature changes
- » ISO TOP flange for every line size → Easy installation of additional equipment like gears and actuators
- » Valve could be installed in any position → easy handling
- » Modular valve construction → Max. flexibility to adopt the valve to many different applications

## (5) Quality

- » In standard version fire safe and TA Luft / ISO15848 approved
- » Inline service possible → service and cost efficient
- » Long service life → Reduction of maintenance costs
- » Spare parts are quick available
- » Double block & bleed version for all sizes → TÜV confirmed, max. safety for maintenance, drainage of the cavity in closed position

# KVN ADVANTAGES



1



## (1) Sealing system:

- » Reliable valve ring/piston construction
- » Due to construction low torque
- » Base on low Torque – high operating cycles are possible
- » Valid for cloudy & milky medias
- » Standard version valid for extreme temperature (400°C)

2



## (2) Valve rings:

- » Standard Valve Ring KX-GT made of graphite with serrated stainless steel layer
- » Valve ring KX-GT valid up to 400°C
- » Valve ring type KX1 graphite with PTFE valid for TA Luft → external tightness

3



## (3) Body

- » Compact construction because casted material – insensitive to pipe forces
- » Pneum. and electr. Actuators are possible to
- » Installation in any position possible
- » Fire safe in standard execution

4



## (4) Quality

- » Long service life
- » Maintenance very easy and inline possible
- » Leakage rate A – best in class → tested acc. EN12266-1
- » All parts of the valve available as spare part
- » Self cleaning function due to piston construction
- » Valve rings are located not directly in the flow

5



## (5) Options

- » Regulation version available
- » Heating jackets
- » Oxygen version