

Zawory kulowe do wodoru

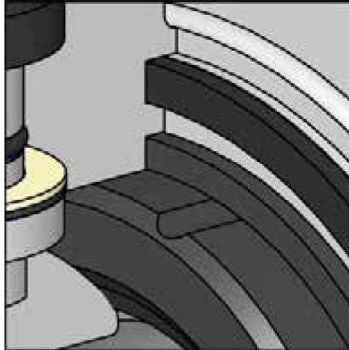
Industrial ball valves for hydrogen gas



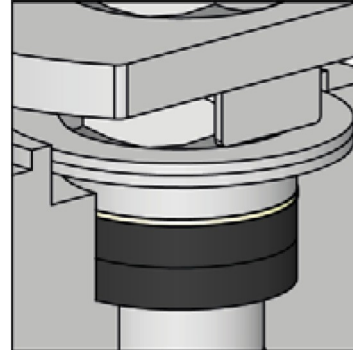
CERTIFICATION	CONSTRUCTION STANDARDS	TEST STANDARDS
Fuelling Stations Certification acc. to ISO 19880-3 (intended process)	ASME B16.34	Test applied: Hydrostatic shell and seat test Pneumatic shell and seat test
CE Certification acc. to TPED 2010/35/EU (intended process)	ISO 17292-1 ASME B16.25 & B36.10M	
CE Certification acc. to PED 2014/68/EU	ASME B16.11	Helium Test Available Upon Request
Fire Safe Design acc to API 607 Ed.6 / ISO 10497	ASME B1.20.1	EN 10204 type 3.1 certificate is available for each valve
CE Certification acc. to ATEX II 2GD 2014/34/EU	ISO 7.1	
Company Quality System Certified acc. to ISO 9001	ISO 19 880-3	



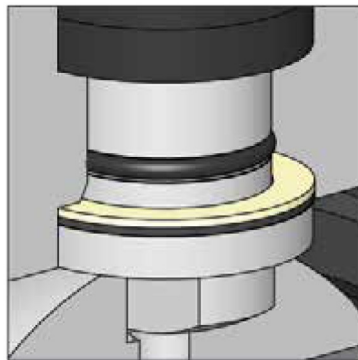
GENERAL FEATURES



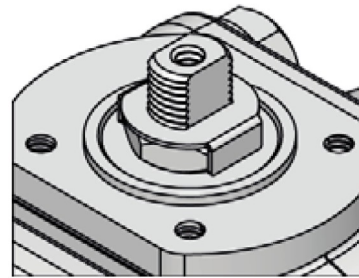
Double encapsulated body seals for extra resistance and tightness performance



Self-adjust live loaded packing system ensures longer service without maintenance and spare parts replacement

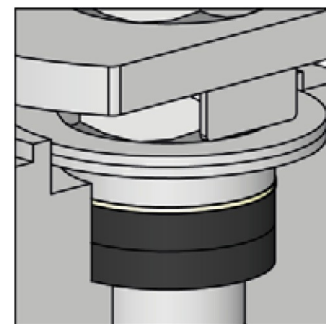
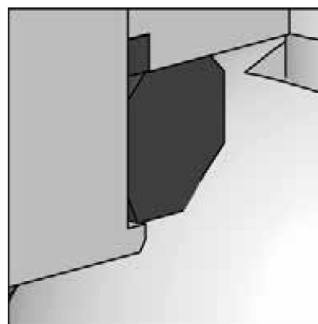
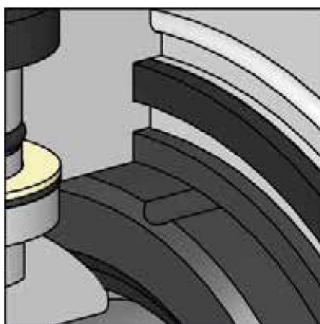


Anti-static device ensures the electrical conductivity between body, end, ball and stem according to European directive 2014/34/EU (ATEX)



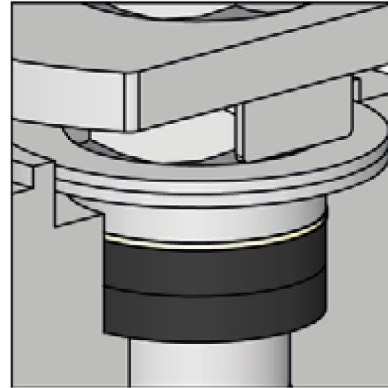
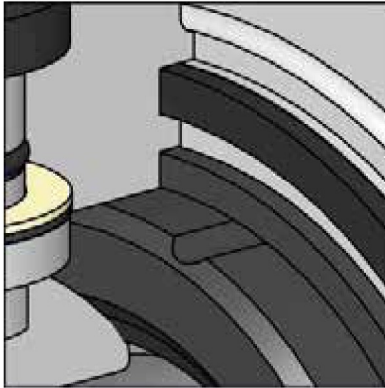
Top flange fitted with ISO 5211 providing universal connection for automation

FIRE SAFE DESIGN



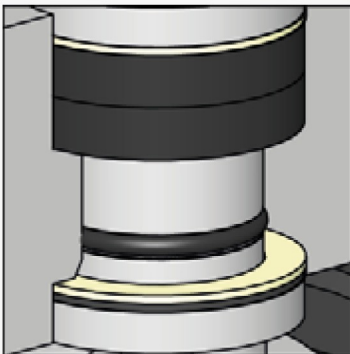
Firesafe design according to ISO 10497 and API 607 for critical services. Primary layer of TFE prevents graphite contamination into the media assuring the cleanliness of the processes. A metal backseat system allows the sealing in the event of a fire ensuring the tightness of the process.

FUGITIVE EMISSIONS



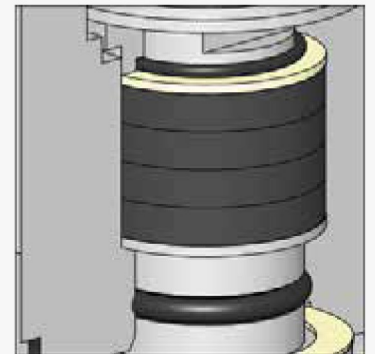
Fugitive emissions design according to ISO 15848 and TA LUFT / VDI 2440 reducing the potentially emission to the environment, the hydrogen losses and the risk of ignition.

ANTI EXPLOSIVE DECOMPRESSION

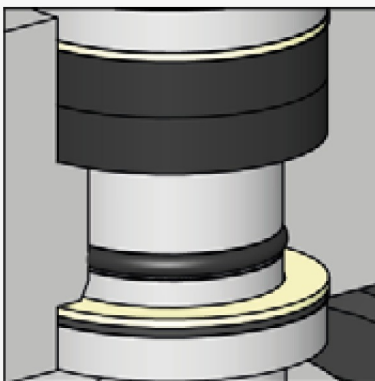


Explosive Decompression (ED) or Rapid Gas Decompression (RGD) is a failure mechanism associated with high pressure gas media. High pressure gas can reach easily the o'ring chambers. When the pressure is released, as when the valve is closed, the remaining gas located in the chamber expands causing fissures and o'ring failure.

The best solution to avoid this failure mechanism is the application of Anti Explosive Decompression (AED) o'rings. These o'rings applied in hydrogen valves are tested and certified in accordance with the requirements of norsok M-710 ensuring high safety levels.



CONTAMINATION FREE SYSTEM



High purity hydrogen is an important requirement in some processes to guarantee high levels of quality and process performance and efficiency while keeping the valve with the firesafe safe design. To perform this the valves are designed with double insulation system where the first line is made from inert polymeric materials isolating the hydrogen media from any contact with graphite parts. This design is capable to avoid any contamination ensuring the high purity levels of the processes.

