

PRODUCT RANGE.

Horizontal pumps

with hydrodynamic shaft seal

Vertical pumps

- for dry installations, short design
- for wet installations, without bearing in the liquid
- for wet installations, with slide bearing
- with feeder propeller for space-saving installation

Tank pumps

with intake from above

Horizontal- and Vertical pumps

- with semi-open impellers
- with closed impellers
- with torque flow impellers

Downstream seals

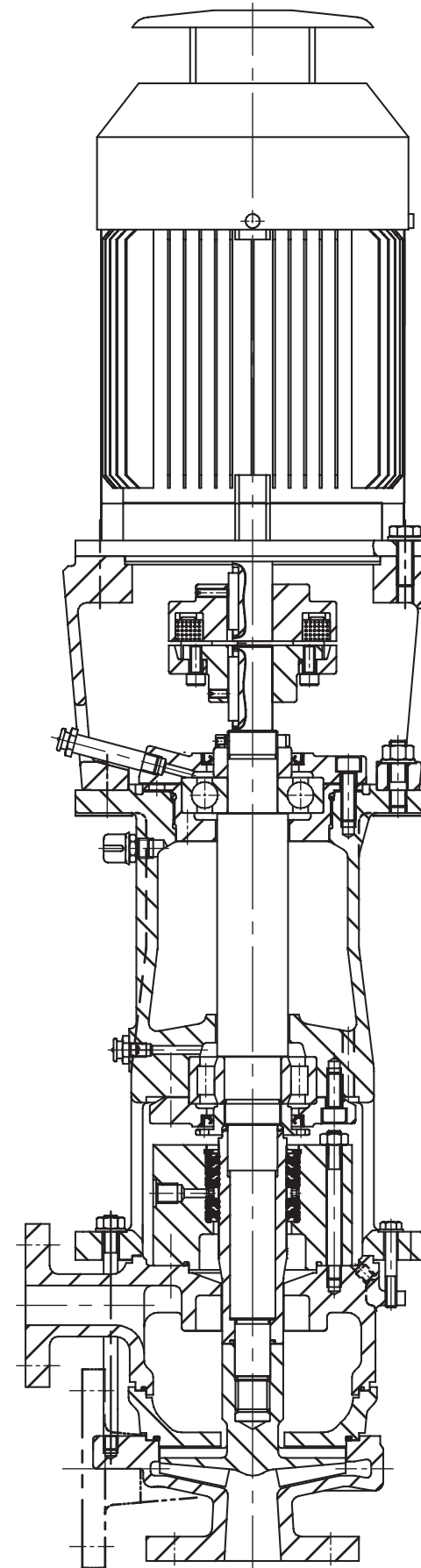
for pumps with hydrodynamic relief of the shaft gap

- packing gland
- mechanical seal
- magnetic drive
- particular solution for problem cases

Comprehensive information about each type of pumps is featured in individual product brochures.

MATERIALS.

- all castable and weldable stainless steel qualities
- castable and weldable special alloys
- grey cast iron, rubber lined
- special materials such as titanium, zirconium, etc.



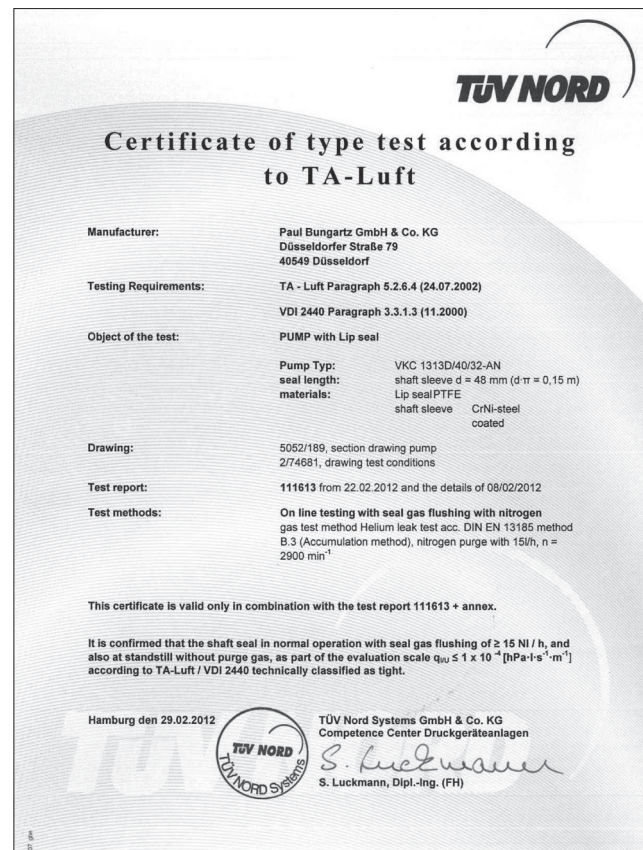
BUNGARTZ
CENTRIFUGAL PUMPS
LIP SEAL

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ALL SEALED. LIP SEAL FOR VK-AN VERTICAL PUMPS.

V-AN PUMPS are used all over the world. The self-regulating centrifugal pumps master even the most difficult conveying tasks. What is new is the innovative sealing principle: Lip seals replace the conventional double mechanical seal. Dry running is possible for several hours.

For pumps used to convey critical media, usually double-acting mechanical seals are employed. These conventional seals have some disadvantages. The required sealing systems are complex. Dry running in the case of a failure of the sealing medium immediately causes damage and thus leads to standstill.

That is not the case for centrifugal pumps of the **V-AN** series: The vertical pumps of types **VKC** and **VKC-AN** are real problem-solving pumps. They have been tried and tested for a long time, for instance in plants with gas-containing mixtures or media at boiling point. Their advantages – self-regulating, safe dry run and reliable. Thanks to the innovative sealing principle – a gas-sealed shaft seal with lip seals – they now are even more reliable. The sealing lips are arranged back-to-back, just like in the case of mechanical seals. The exact quantity and arrangement depends on the individual case. Sealing gas is fed between the seals. The sealing gas pressure is

determined by the closing force of the pre-stressed sealing lips; usually 1.5 bar are sufficient.

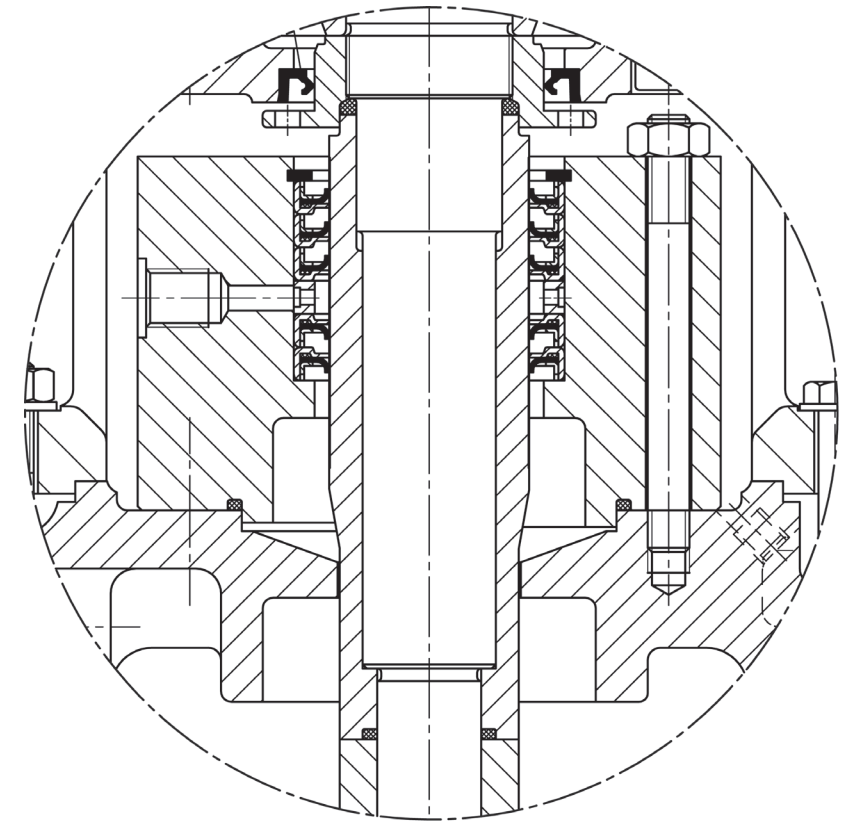
The sealing gas volume flow and pressure values are within the normal ranges of the gas mechanical seals. If the supply of sealing gas fails, the lips close reliably. Situations that lead to immediate damage with mechanical seals are no longer dangerous with lip seals: dry running is possible for several hours. Of course, this sealing system can also be used for horizontal pumps by Bungartz.

Visit us on the internet to watch an animation that demonstrates the principle:

www.bungartz.de/sealing

ADVANTAGES.

- technically sealed according to TA-Luft
- safe to run dry
- reliable
- safe to operate
- low maintenance
- cost-saving



TESTED.

It was proven by means of a helium leak test carried out by TÜV Nord. The leakage values limited according to TA-Luft (Germany's Technical Instructions on Air Quality Control) are clearly within the permitted range. This applies to standstill as well as to operation. The TÜV confirms: When operated correctly, the shaft seal is to be considered as technically leak-proof.

WELL-PROVEN.

The innovative sealing principle is already being used successfully. The lip seal has been proving its quality for years for the use of dry-running magnetic pumps of types MPCH and MPCV. In the case of these vertical and horizontal pumps, the cost-saving seal is installed upstream of the bearing unit. Sealing gas flows beneath the lip seals and significantly reduces the contact force applied on the seals. Conclusion: After more than six months of continuous operation, no signs of wear can be detected.