

HP-NCCS™

High Pressure Non-contacting Containment Seal



High Performance Mechanical Seals

For use on difficult applications including oil pipeline pumping.



ENVIRONMENTAL TECHNOLOGY

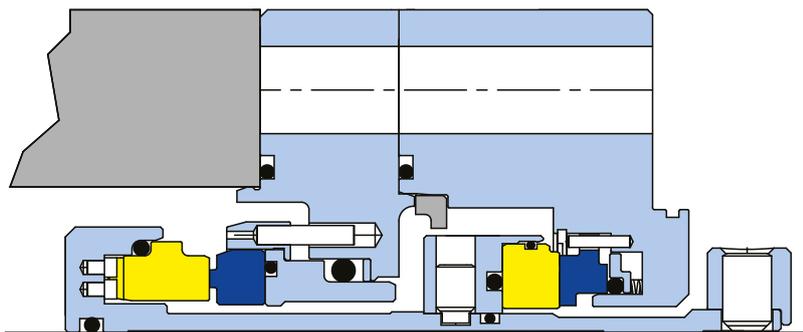


HP-NCCS™

High Pressure Non-contacting Containment Seal

These robust seals are designed for use on difficult applications including oil pipeline pumping.

The HP-NCCS™ combines proven AESSEAL® primary and secondary sealing technologies to delivery a robust hybrid sealing solution. Finite Element Analysis and hydrodynamic algorithms are used to optimize the monolithic seal face design in order to maintain a stable fluid film. The seals are engineered for maximum service life and have been laboratory tested to extremes beyond their standard capability.



TYPICAL DUTIES

- Pressures up to 50barg (725psig)
- Peripheral speeds up to 35m/s (7000ft/min)*
- Temperatures -40°C to +260°C (-40°F to 500°F) **

*PV dependant, consult AESSEAL Technical Department

**At the seal the temperature would be optimized by appropriate API plan

General Specification

Size range

65mm – 165mm (2.500” – 6.500”)
.....

Face options

Primary Seal // Containment Seal

Hard / Soft // Hard / Soft
Silicon Carbide / Antimony Carbon //
Silicon Carbide / Antimony Carbon
Hard / Hard // Hard / Soft
Silicon Carbide / Graphite Loaded Silicon
Carbide // Silicon Carbide / Antimony Carbon
.....

Elastomer options

FKM, EPR, NBR, FFKM, TFE/P
.....

Metallurgy options

316L SS (standard) DIN 1.4462 (Duplex),
Alloy 255 (Super Duplex), Alloy 276 etc.
.....

KEY FEATURES / BENEFITS

- Outboard non-contacting containment seal
- Multi spring design for even face loading
- High pressures – Robust seal faces minimize the effects of pressure distortion
- Monolithic seal faces – maintains flatness under temperature fluctuations
- Seal face design optimized using FEA and hydrodynamic algorithms
- Seal face loading factory set and statically tested prior to despatch
- Sculptured lug drive – for improved torque transmission
- Compact & robust design – allows seal to be fitted on close bearing centre pumps

Use double mechanical seals with hazardous products. Always take safety precautions:

- Guard your equipment
- Wear protective clothing



SAFETY NOTICE

Containment Seals (2CW-CS or 2NC-CS)

Monitoring the containment seal's (CS) integrity is important. Review the guidance to understand risks, apply best practices & ensure safe, reliable operation.



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