RELY ON EXCELLENCE

SHI300

Mechanical Seals | Mechanical seals for pumps | Engineered seals

Features

- Robust seal design - suitable for demanding light hydrocarbon applications
- Compact cartridge seal - can be fitted in older pumps with small seal chambers
- Unpressurized inboard seal with a high pressure-non contacting containment seal on the outboard – fully-rated to pipeline pressure
- Stationary spring loaded unit
- Balanced primary seal faces - in materials with high thermal conductivity and strength
- Multi-point injection - uniform heat distribution
- DiamondFace® technology optional

Advantages

Operational Excellence

- High Performance seal for single and multi fluid type pipeline services with variable pressures and speeds
- Low amount of heat generation, hence minimal temperature rise in the seal faces
- Suitable for flashing and non-flashing light hydrocarbons, even with low vapor pressure margins
- Seal faces have soft torque transmission
- Seal faces are shrouded in steel collars so that they cannot break apart in pieces in an emergency case
- Resistant to alignment issues between the pump case and shaft because of stationary springs
- Containment seal is rated for full dynamic pressure of primary seal, i.e. high degree of safety and environmental protection
- Seal face materials are resistant to solids in the pumped fluid

Technical Excellence

- Simple installation due to pre-assembled cartridge
- Seal faces are designed with FEA & CFD and qualified & tested in the lab
- Can be fitted in older pumps with small seal chambers or stuffing boxes
- High degree of standardization ensures fast deliveries and smart part inventories

Sustainability Excellence

- Zero emission seal design for sustainable environmental protection in combination with plan 75 or plan 76
- Minimized friction and energy consumption

Operating range

Materials

Seal face:
Silicon impregnated carbon (Q3), DiamondFace
Stationary seat: Silicon carbide (Q2), DiamondFace
Secondary seals: FKM (V), FFKM (K)
Springs: Hastelloy® C-4 (M)
Metal parts: CrNiMo steel (G), Duplex (G1), Super Duplex (G4), Titan (T2), Hastelloy® C-4 (M)

Standards and approvals

- Compliant to TA Luft (German Clean Air Act)

Recommended applications

- Pipeline systems
- Tank farms / storage tanks
- Petrochemical industry
- Refining technology
- Oil & gas production

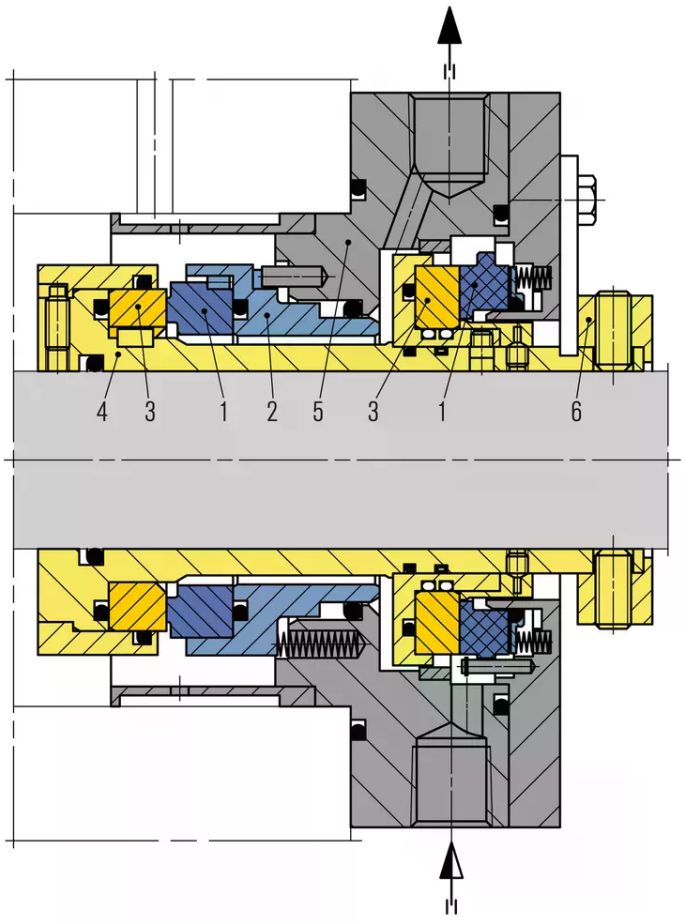
Recommended piping plans

API Plan 11
API Plan 12
API Plan 13
API Plan 32
API Plan 72
API Plan 75
API Plan 76

eagleburgmann.com
info@eagleburgmann.com

Shaft diameter:
d1* = 50 ... 138 mm (1.97" ... 5.43")
Pressure: p1 = 100 bar (1,450 PSI),
Static = up to 150 bar (2,175 PSI),
Dynamic = 5 ... 100 bar (72,5 ... 1,450 PSI)
Temperature: t = -20 ... +150 °C (-4 ... 302 °F)
Sliding velocity: vg = 50 m/s (164 ft/s)
Axial movement: ±1,5 mm

* Additional sizes upon request



SHI300

Item	Description
1	Seal face
2	Face housing
3	Seat
4	Shaft sleeve
5	Housing
6	Set ring

Installation, details, options

Fluid Groups				
Multiple Products	Ethane	Light Flashing Hydrocarbons	Flashing Hydrocarbons	Non-Flashing Hydrocarbons
Ethane, EP Mix, Flashing Hydrocarbons, Non-Flashing Hydrocarbons	Ethane	Ethane, Propane Mix	Propane, Butane, Propylene, Demethanized mixed NGL (y-grade)	Gasoline, Jet Fuel, Diesel Fuel, Kerosene, etc.

Typical fluids in pipeline applications

eagleburgmann.com
info@eagleburgmann.com