



sealmatic®

Sealmatic Delivers Type B750VK Double Mechanical Seal For Hydrocarbon (LPG) In Oil & Gas Application

LPG or Liquefied Petroleum Gas, is highly flammable and flashing hydrocarbon consisting primarily of propane and butane gases. It is obtained during the refining of crude oil and natural gas processing. LPG is stored and transported in a liquid state under moderate pressure. Upon release of pressure, it evaporates back into a gaseous state, making it convenient for various applications such as residential heating, cooking and hot water systems; as a fuel in cars and in industrial, agricultural and manufacturing contexts. LPG's adaptability, high energy content, and relatively low environmental impact have contributed to its widespread adoption across various sectors. However, proper handling, storage, and transportation practices are essential due to its highly flammable nature and requires expertise knowledge to develop and design appropriate mechanical seals for such adverse applications. LPG application is surrounded with adverse environmental conditions, high rotational speed, and pressure levels as well as place demanding requirements on sealing technology employed.

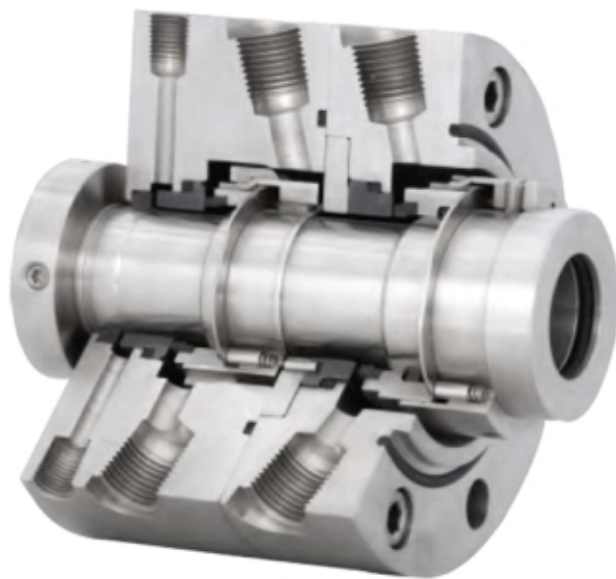
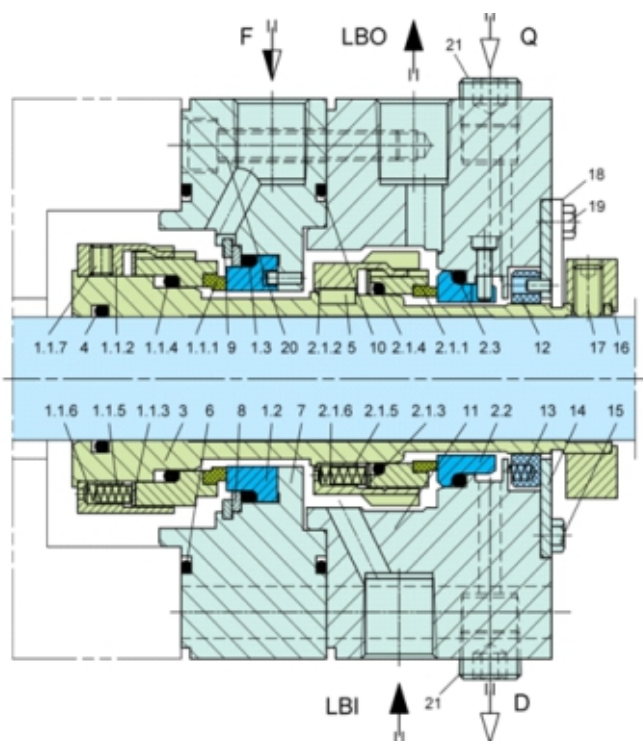
Sealmatic has proven itself with its heavy-duty mechanical seals with innovative and tailor-made seal components with high-strength seal faces, guaranteeing longer service life even in highly stressed pumps. Sealing system for LPG application needs to be reliable to ensure continuous operation of equipment in the oil and gas industry. Regular maintenance, including monitoring seal performance, lubrication, and replacement, when necessary, is essential to prevent seal failure and maintain system integrity.

Operating Parameter Of Type B750VK Double Mechanical Seal											sealmatic®	
Sr No	Seal Type	RPM	Media	API Plan	Temp (°C)	Equipment Type	Stuffing Box Pressure (kg/cm ²)	Suction Pressure (kg/cm ²)	Discharge Pressure (kg/cm ²)	Seal Configuration	Viscosity (cP)	Specific Gravity
1	91-B750VK/90-PTa9 R1	2980	Hydrocarbon (LPG)	11, 53B	43°C	OH2 Centrifugal Pump	10.5 kg/cm ²	13 kg/cm ²	17 kg/cm ²	3CW – FB	0.1 cP	0.528

We are pleased to announce that Sealmatic has successfully executed an order and has delivered the said mechanical seal in order to meet the demanding operating conditions as mentioned above, thus; bringing areas of design, operation, and maintenance with a view to achieve the highest safety standards in a cost-effective manner.

Sealmatic Type B750VK Double Mechanical Seal

Type B750VK is an API 682 double cartridge balanced mechanical seal with the configuration of 3CW – FB, it provides the benefit of independent direction of rotation, and it can also handle extensive applications in various temperatures and pressures. The seal has the pumping device which is available for increased efficiency in circulation of media. It also provides reliability due to rugged metal torque transmission at the rotating seal face.



Performance Capabilities

- Shaft diameter: d = 20 ... 110 mm (0.79" ... 4.33")
- Pressure: p1 = ... 42 bar (609 PSI)
- Temperature: t = -40 °C ... +176 °C (+220 °C) (-40 °F ... +349 °F (+428 °F))*
- Sliding velocity: vg = 23 m/s (76 ft/s)
- Axial movement:
- d ≤40 mm ±1.0 mm
- d >40 mm ±1.5 mm

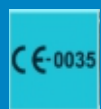
Typical Industrial Applications

- API 610/ISO 13709 pumps
- Oil and gas industry
- Refining technology
- Petrochemical industry
- Chemical industry
- Highly volatile hydrocarbons
- LPG plants
- Power plant technology
- Process pumps

Typical Industrial Applications

- Seal rings: Blister resistant carbon, Silicon carbide SSiC (Q1), RBSiC (Q2)
- Mating rings: Silicon carbide SSiC (Q1), RBSiC (Q2)
- Secondary seals: EPDM (E), NBR (P), FKM (V), FFKM (K)
- Springs: Hastelloy® C-276 (M5)
- Metal parts: CrNiMo steel 316 (G), Duplex (G1), Hastelloy C-276 (M5)

API Spec Q1 . ISO 19443:2018 . ATEX – 2014/34/EU . ISO 9001:2018 . ISO 14001:2018 . ISO 45001:2018 . BS – OHSAS 18001:2007. PED - CE



June 13th 2023

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