




## Sealmatic Conducts In-House Dynamic Testing Of Fully Split Mechanical Seal Type BGH Of Size 500mm (First Time In India)

In a groundbreaking achievement, Sealmatic recently conducted in-house dynamic testing of the fully split mechanical seal type BGH, of an unprecedented size of 500mm. This remarkable feat sets a new standard within the industry.



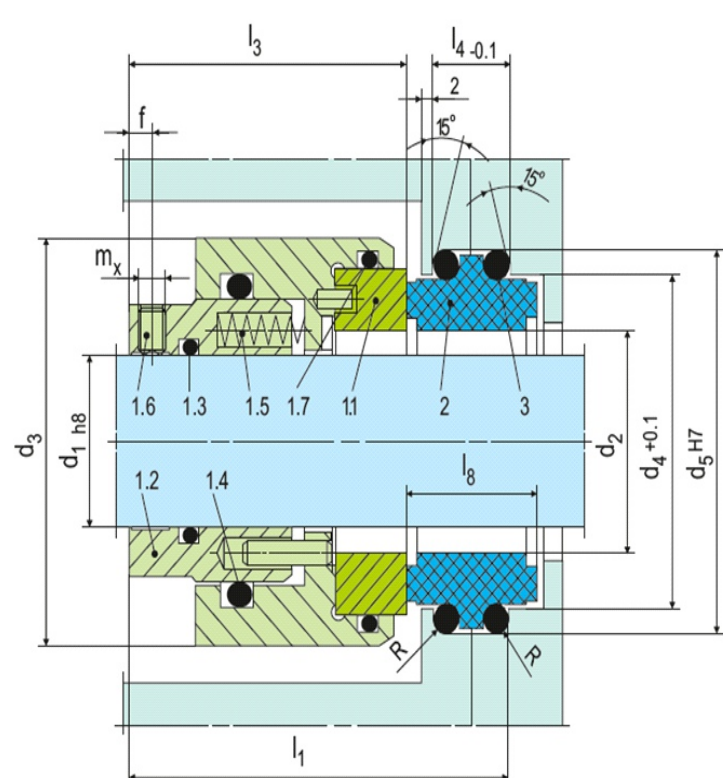
Operating Parameters Of Type BGH Mechanical Seal Size 500mm									
Sr. No.	Seal Type	Media	Equipment	RPM	API Plan	Flush Flow Rate	Temperature (°C)	Stuffing Box Pressure (kg/cm <sup>2</sup> )	Discharge Pressure (kg/cm <sup>2</sup> )
01	91-BGH311S1/500-G912	Water	Concrete Volute Type Cooling Water Pump	596	32	30 – 40 LPM	36°C	6.3 Kg/cm <sup>2</sup>	25.4 kg/cm <sup>2</sup>

As per the above-mentioned operating parameters. The 500mm fully split mechanical seal type BGH represents the pinnacle of Sealmatic's capabilities, showcasing its expertise in crafting mechanical seals of unparalleled size and complexity. Mr Zakir Chaudhary – Asst. Vice President, Engineering, says; that this mammoth mechanical seal is meticulously designed and integrated specifically for concrete volute pumps, these pumps are renowned for handling large flow of liquid, the suitability of these pumps are found in heavy duty applications and this mechanical seal exhibits a unique prowess to such applications, thus solidifying the mechanical seal's importance in critical scenarios where precision and reliability are paramount.

The designing, manufacturing and testing for these mechanical seals was executed with the utmost care, with special attention given to the seal faces of the mechanical seals to meet exacting specifications. The in-house testing of the 500mm mechanical seal set the new standards, subjecting it to a pressure of 6.3kg/cm<sup>2</sup> at a temperature of 36°C.

Notably, the mechanical seal claims a substantial weight of 620kg, adding a layer of complexity to the testing procedures. This stringent testing process showcases Sealmatic's dedication to delivering robust and reliable solutions.

The successful testing of size fully split 500mm type BGH seal opens new possibilities for Sealmatic in the realm of mechanical seal technology. It also creates proven track record and important references for such applications in the process industries. Thus, setting a new standard for precision and reliability.



Mechanical seal type BGH designed for water applications in concrete volute water cooling pumps play a crucial role in maintaining the pump efficiency and preventing water leakages. The rotating face, attached to the pump shaft, engages with the stationary face within the pump housing. Additional components like secondary sealing elements such as o-rings and springs contribute to the overall effectiveness of the seal. The suitability of this mechanical seal for such applications depends on many different parameters, e.g. pressure to be sealed, temperature at the seal, sliding velocity, power consumption, water quality (pH-value, O<sub>2</sub>-dose, conductivity, operating mode), water additives such as corrosion inhibitors etc.

### Technical Features Of Type BGH Mechanical Seal

- Economical to assemble as the complete dismantling of the equipment is not necessary to install the seal
- Reduces down time due to ease in installation
- Rugged seal construction
- Versatile split seat can be used on both the sides
- Springs are product protected to avoid contamination

### Performance Capabilities

- Sizes: d1 = Upto 800 mm
- Pressure: p1 = 25 bar (363 PSI)
- Temperature: t1 = 150 °C (302 °F)
- Speed = 20 m/s (66 ft/s)
- Permissible axial movement: ± 2.0 mm

### Materials Of Construction

- Seal face: Silicon carbide (Q1)
- Seat: Silicon carbide (Q1, Q2), Carbon graphite antimony impregnated (A), Carbon graphite resin impregnated (B)
- Secondary seals: FKM (V), EPDM (E), NBR (P)
- Metal parts: CrNiMo steel (G)

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