BOTTERSEAL®

中外合资品牌



博特尔密封科技（张家港）有限公司

BOTTER SEAL TECHNOLOGY(ZHANG JIA GANG)CO.,LTD.

博特尔密封科技（张家港）有限公司
BotterSeal Technology (Zhangjiagang) Co., LTD.
地址：江苏省苏州市张家港市德积街道护漕港南路28-3号
电话：0512-56755868 / 18914932519




# INTRODUCTION

博特尔密封科技（张家港）有限公司隶属于“BORGMANN”集团，成立于 2021 年 11 月 4 日，法定代表人周利人，注册资金 220 万美元，是一家以设计制造各类机械密封为主的高新技术企业，位于苏州张家港市。

集团母公司 Borgmann mechanical seal Group Co., Ltd 位于英国北安普敦郡皇家橡树工业园区，是一家具有国际知名度的生产销售机械密封的科技型公司。集团 2021 年斥资 1.2 亿美元打造中国机械密封项目，一期投资 220 万美元于博特尔密封科技（张家港）有限公司，打造机械密封生产基地，建筑面积 9800 平方米，预计用工 2000 人。

公司主要产品为泵用、釜用、搅拌及风机用机械密封，同时大力开发高速高压高温“三高”类机械密封。在集团公司的大力支持下，公司引进国外技术，加大自主研发投入，将进口配件国产化，降低生产成本，增加产品竞争力。时至今日，我司产品已广泛应用于火力发电、石油化工、造纸、食品、制药和船舶等行业领域，有效地解决了业内“质量差、价格高、交期长”的行业痛点，同时系统地降低了设备制造厂商 30% 以上的制造成本。

为满足客户多品种、小批量、高质量的定制化需求，公司建立起敏捷和效率相结合的生产体制包括核心产品的精密加工、定制化追加工、研磨装配等工序。为达成快速交付，公司除大力投资先进生产设备和检测设备外，还对生产体系进行了信息化改造，确保从订单到交付的全环节信息都在信息系统中及时呈现。

质量方面，公司秉承“锐意进取，精益求精”的工匠精神，以质量求生存，以诚信求发展，2022 年通过了 IS09001 国际质量管理体系认证，公司严格按照质量管理体系和特种设备制造许可条例规定，以认真负责的态度迎接每位新老顾客，打造机械密封品牌标杆。

BotterSeal Technology (Zhangjiagang) Co., Ltd. is a Sino-British joint venture company integrating production, sales and research and development of mechanical seals, which was established on November 4, 2021, with Zhou Liren as its legal representative and 2.2 million US dollars as registered capital.

Borgmann mechanical seal Group Co., Ltd, the parent company of the group, is located in Royal Oak Industrial Park, Northamptonshire, UK. It is an internationally renowned technology company which produces and sells mechanical seals. In 2021, the group will invest $120 million to build China's mechanical seal project. The first phase will invest $2.2 million in BotterSeal Technology (Zhangjiagang) Co., LTD., to build a mechanical seal production base with a construction area of 9,800 square meters and an estimated workforce of 2,000.

The company's main products are mechanical seals for pump, kettle, stirring and fan, and vigorously develop high-speed high pressure high temperature "three high" type of mechanical seals. Under the strong support of the group company, the company introduces foreign technology, increases independent research and development investment, localization of imported parts, reduces production costs, and increases product competitiveness. Up to now, our products have been widely used in thermal power generation, petrochemical, paper, food, pharmaceutical and shipbuilding industries, effectively solve the industry "poor quality, high price, long delivery" industry pain points, while systematically reduce the equipment manufacturers more than 30% of the manufacturing cost.

In order to meet customers' customized needs of various varieties, small batches and high quality, the company has established a production system that combines agility and efficiency, including precision machining, customized finishing and grinding assembly of core products. In order to achieve rapid delivery, the company has not only invested heavily in advanced production equipment and testing equipment, but also carried out information transformation on the production system to ensure that the whole link information from order to delivery is presented in a timely manner in the information system.

In terms of quality, adhering to the craftsman spirit of "forge ahead and strive for excellence", the company has passed the IS09001 international quality management system certification in 2022. In strict accordance with the quality management system and special equipment manufacturing license regulations, the company welcomes every new and old customers with a serious and responsible attitude. Strive to build "Botter" as a domestic brand benchmark.




CERTIFICATE OF INCORPORATION
OF A
PRIVATE LIMITED COMPANY

Company Number 12906787

The Registrar of Companies for England and wales,hereby certifies that

EAGLEBURGMAN MECHANICAL SEAL GROUP CO., LTD

is this day incorporated under the Companies Act 2006 as a private company, that the company is limited by shares, and the situation of its registered office is in England and Wales.

Given at Companies House,Cardiff,on **25th September 2020.**

The above information was communicated by electronic means and authenticated by the Registrar of Companies under section 1115 of the Companies Act 2006

Companies House

THE OFFICIAL SEAL OF THE REGISTRAR OF COMPANIES





（2021）英领认字第 0001813 号
兹证明前面文书上英国外交、联邦事务和发展部的印章和该部官员J Allsop-Ward的签字均属实。
该文书内容由出文机构负责。
中华人民共和国
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一等秘书兼领事
2021年04月15日
A7593462


营业执照
登记机关
2021 年 11 月 04 日


SHARE CERTIFICATE
Certificate No ONE(1)
No. of Shares 55,000
EAGLEBURGMAN MECHANICAL SEAL GROUP CO., LTD
INCORPORATED UNDER THE COMPANIES ACT
THIS is to Certify that YLLIU
of 8 PROSPECT WAY, ROYAL OAK INDUSTRIAL ESTATE, DAVENTRY, NORTHAMPTONSHIRE, UK NN11 8PZ
is the Registered Holder of 55,000 fully paid Share(s) of £1.00 each in
the above-named Company subject to the Memorandum and Articles of Association thereof.
GIVEN under the Common Seal of the said Company, dated the 25th September 2020
Director
Director



## 公司荣誉
## Company Honor










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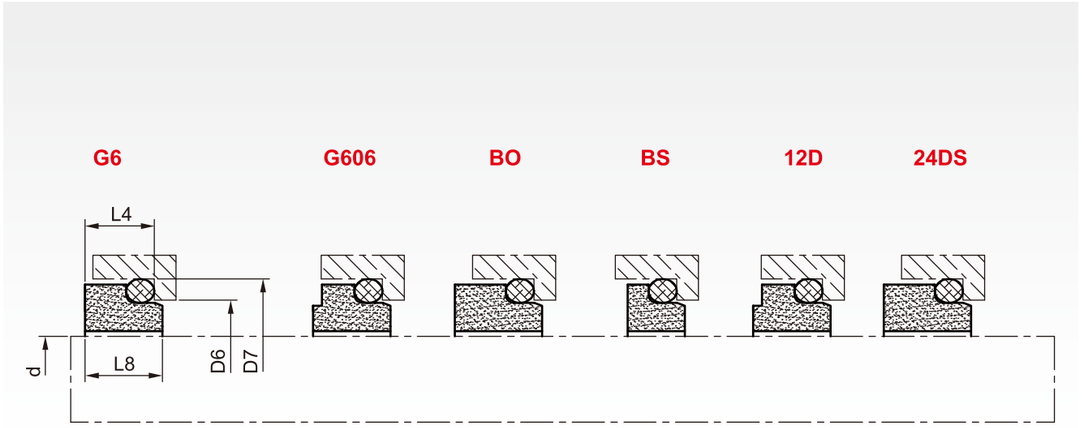

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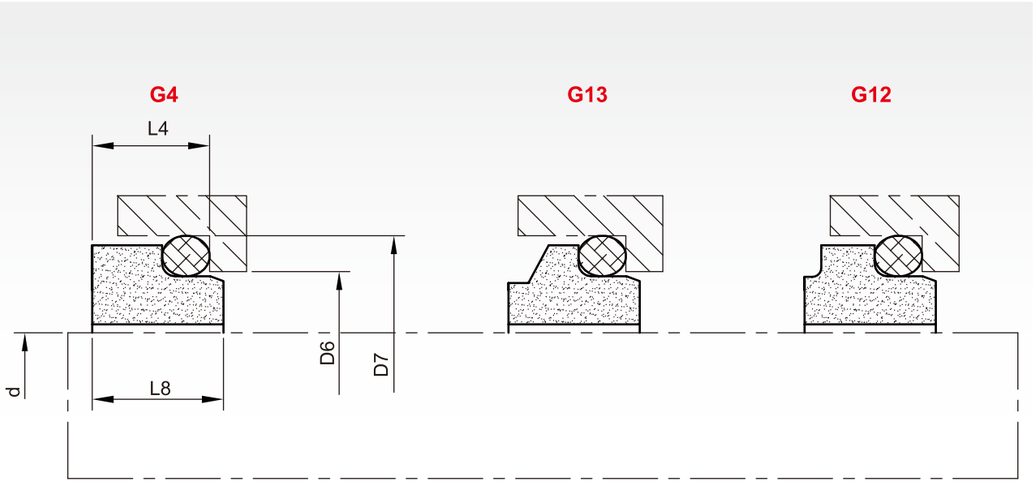


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| Size/ Metric | | | | GBG6/G606 | | GBBO | | GBBS | | GB12D | | GB24DS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | d | D6 | D7 | L4 | L8 | L4 | L8 | L4 | L8 | L4 | L8 | L4 | L8 |
| 10 | 10 | 17 | 21 | 6.6 | 7.5 | — | — | — | — | 7.0 | 8.5 | 8.6 | 10.0 |
| 12 | 12 | 19 | 23 | 6.6 | 7.5 | — | — | 6.0 | 6.8 | 7.0 | 8.5 | 8.6 | 10.0 |
| 14 | 14 | 21 | 25 | 6.6 | 7.5 | 12.0 | 12.8 | 6.0 | 6.8 | 7.0 | 8.5 | 8.6 | 10.0 |
| 16 | 16 | 23 | 27 | 6.6 | 7.5 | 12.0 | 12.8 | 6.0 | 6.8 | 7.0 | 8.5 | 8.6 | 10.0 |
| 18 | 18 | 27 | 33 | 7.5 | 8.5 | 13.5 | 14.5 | 6.0 | 7.0 | 10.0 | 12.0 | 10.0 | 11.5 |
| 20 | 20 | 29 | 35 | 7.5 | 8.5 | 13.5 | 14.5 | 6.0 | 7.0 | 10.0 | 12.0 | 10.0 | 11.5 |
| 22 | 22 | 31 | 37 | 7.5 | 8.5 | 13.5 | 14.5 | 6.0 | 7.0 | 10.0 | 12.0 | 10.0 | 11.5 |
| 24 | 24 | 33 | 39 | 7.5 | 8.5 | 13.3 | 14.3 | 6.0 | 7.0 | 10.0 | 12.0 | 10.0 | 11.5 |
| 25 | 25 | 34 | 40 | 7.5 | 8.5 | 13.0 | 14.0 | 6.0 | 7.0 | 10.0 | 12.0 | 10.0 | 11.5 |
| 28 | 28 | 37 | 43 | 7.5 | 8.5 | 12.5 | 13.5 | 6.0 | 7.0 | 10.0 | 12.0 | 10.0 | 11.5 |
| 30 | 30 | 39 | 45 | 7.5 | 8.5 | 12.0 | 13.0 | 7.0 | 8.0 | 10.0 | 11.5 | 10.0 | 11.5 |
| 32 | 32 | 42 | 48 | 7.5 | 8.5 | 12.0 | 13.0 | 7.0 | 8.0 | 10.0 | 11.5 | 10.0 | 11.5 |
| 33 | 33 | 42 | 48 | 7.5 | 8.5 | 12.0 | 13.0 | 7.0 | 8.0 | 10.0 | 11.5 | 10.0 | 11.5 |
| 35 | 35 | 44 | 50 | 7.5 | 8.5 | 12.0 | 13.0 | 8.0 | 9.0 | 10.0 | 11.5 | 10.0 | 11.5 |
| 38 | 38 | 49 | 56 | 9.0 | 10.0 | 13.0 | 14.0 | 8.0 | 9.0 | 13.0 | 15.0 | 11.0 | 12.5 |
| 40 | 40 | 51 | 58 | 9.0 | 10.0 | 13.0 | 14.0 | 8.0 | 9.0 | 13.0 | 15.0 | 11.0 | 12.5 |
| 43 | 43 | 54 | 61 | 9.0 | 10.0 | 13.0 | 14.0 | 8.0 | 9.0 | 13.0 | 14.5 | 11.0 | 12.5 |
| 45 | 45 | 56 | 63 | 9.0 | 10.0 | 13.0 | 14.0 | 8.0 | 9.0 | 13.0 | 14.5 | 11.0 | 12.5 |
| 48 | 48 | 59 | 66 | 9.0 | 10.0 | 13.0 | 14.0 | 10.0 | 11.0 | 13.0 | 15.0 | 11.0 | 12.5 |
| 50 | 50 | 62 | 70 | 9.5 | 10.5 | 13.5 | 14.5 | 10.0 | 11.0 | 14.0 | 16.0 | 13.0 | 14.5 |
| 53 | 53 | 65 | 73 | 11.0 | 12.0 | 13.5 | 14.5 | 10.0 | 11.0 | 14.0 | 16.0 | 13.0 | 14.5 |
| 55 | 55 | 67 | 75 | 11.0 | 12.0 | 13.5 | 14.5 | 10.0 | 11.0 | 14.0 | 16.0 | 13.0 | 14.5 |
| 58 | 58 | 70 | 78 | 11.0 | 12.0 | 13.5 | 14.2 | 10.0 | 10.7 | 14.0 | 16.0 | 13.0 | 14.5 |
| 60 | 60 | 72 | 80 | 11.0 | 12.0 | 13.5 | 14.2 | 12.0 | 12.7 | 14.0 | 16.0 | 13.0 | 14.5 |
| 63 | 63 | 75 | 83 | 11.0 | 12.0 | 13.5 | 14.2 | 12.0 | 12.7 | 14.0 | 16.0 | 13.0 | 14.5 |
| 65 | 65 | 77 | 85 | 11.0 | 12.0 | 13.5 | 14.2 | 12.0 | 12.7 | 14.0 | 16.0 | 13.0 | 14.5 |
| 68 | 68 | 81 | 90 | 11.3 | 12.5 | 13.5 | 14.2 | 12.0 | 12.7 | 14.0 | 18.0 | 15.3 | 16.5 |
| 70 | 70 | 83 | 92 | 11.3 | 12.5 | 14.5 | 15.2 | 12.0 | 12.7 | 16.0 | 18.0 | 15.3 | 16.5 |
| 75 | 75 | 88 | 97 | 11.3 | 12.5 | 14.5 | 15.2 | 12.0 | 12.7 | 16.0 | 18.0 | 15.3 | 16.5 |
| 80 | 80 | 95 | 105 | 12.0 | 13.0 | 15.0 | 15.7 | 12.5 | 13.2 | 18.0 | 20.0 | 15.7 | 17.5 |
| 85 | 85 | 100 | 110 | 14.0 | 15.0 | 15.0 | 15.7 | 12.5 | 13.2 | 18.0 | 20.0 | 15.7 | 17.5 |
| 90 | 90 | 105 | 115 | 14.0 | 15.0 | 15.0 | 15.7 | 12.5 | 13.2 | 18.0 | 20.0 | 15.7 | 17.5 |
| 95 | 95 | 110 | 120 | 14.0 | 15.0 | 15.0 | 15.7 | 12.5 | 13.2 | 18.0 | 20.0 | 15.7 | 17.5 |
| 100 | 100 | 115 | 125 | 14.0 | 15.0 | 15.0 | 15.7 | 12.5 | 13.2 | 18.0 | 20.0 | 15.7 | 17.5 |

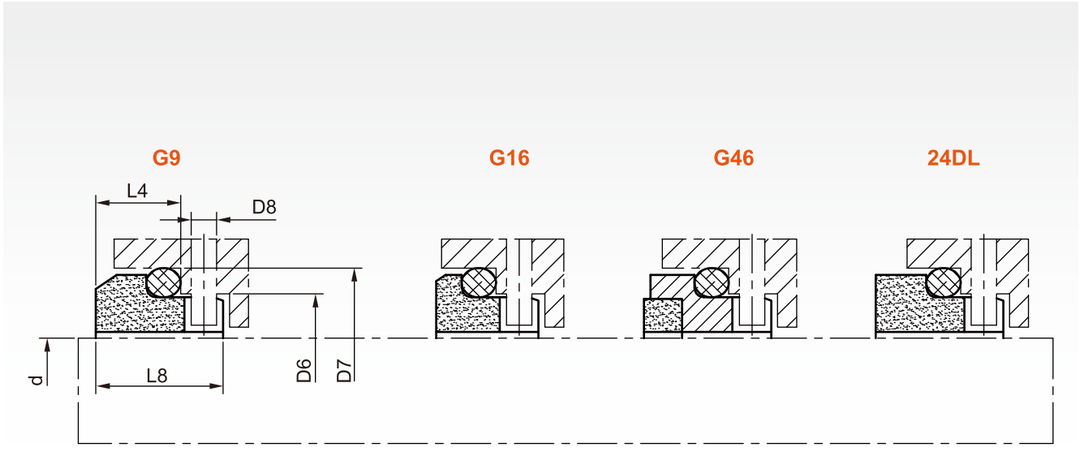
# GBG4/G13/12




| Size/ Metric | | | | GBG4 | | GBG13 | |
|---|---|---|---|---|---|---|---|
| | d | D6 | D7 | L4 | L8 | L4 | L8 |
| 10 | 10 | 15.5 | 19.2 | 6.6 | 7.5 | 7.1 | 9.0 |
| 12 | 12 | 17.5 | 21.6 | 5.6 | 6.5 | 7.6 | 10.0 |
| 14 | 14 | 20.5 | 24.6 | 5.6 | 6.5 | 7.6 | 10.0 |
| 15 | 15 | 20.5 | 24.6 | 6.6 | 7.5 | 8.6 | 11.0 |
| 16 | 16 | 22.0 | 28.0 | 7.5 | 8.5 | 9.0 | 11.5 |
| 18 | 18 | 24.0 | 30.0 | 8.0 | 9.0 | 10.0 | 12.5 |
| 20 | 20 | 29.5 | 35.0 | 7.5 | 8.5 | 9.5 | 12.5 |
| 22 | 22 | 29.5 | 35.0 | 7.5 | 8.5 | 9.5 | 12.5 |
| 24 | 24 | 32.0 | 38.0 | 7.5 | 8.5 | 9.5 | 12.5 |
| 25 | 25 | 32.0 | 38.0 | 7.5 | 8.5 | 9.5 | 12.5 |
| 26 | 26 | 34.0 | 40.0 | 8.0 | 9.0 | 10.0 | 13.0 |
| 28 | 28 | 36.0 | 42.0 | 9.0 | 10.0 | 11.0 | 14.0 |
| 30 | 30 | 39.2 | 45.0 | 10.5 | 11.5 | 11.0 | 14.0 |
| 32 | 32 | 42.2 | 48.0 | 10.5 | 11.5 | 11.0 | 14.0 |
| 33 | 33 | 44.2 | 50.0 | 10.5 | 12.0 | 11.5 | 14.5 |
| 35 | 35 | 46.2 | 52.0 | 11.0 | 12.0 | 11.5 | 14.5 |
| 38 | 38 | 49.2 | 55.0 | 10.3 | 11.3 | 11.5 | 14.5 |
| 40 | 40 | 52.2 | 58.0 | 10.8 | 11.8 | 11.5 | 14.5 |
| 42 | 42 | 53.3 | 62.0 | 12.0 | 13.2 | 14.3 | 17.0 |
| 43 | 43 | 53.3 | 62.0 | 12.0 | 13.2 | 14.3 | 17.0 |
| 45 | 45 | 55.3 | 64.0 | 11.6 | 12.8 | 14.3 | 17.0 |
| 48 | 48 | 59.7 | 68.4 | 11.6 | 12.8 | 14.3 | 17.0 |
| 50 | 50 | 60.8 | 69.3 | 11.6 | 12.8 | 14.3 | 17.0 |
| 53 | 53 | 63.8 | 72.3 | 12.3 | 13.5 | 14.3 | 17.0 |
| 55 | 55 | 66.5 | 75.4 | 13.3 | 14.5 | 15.3 | 18.0 |
| 58 | 58 | 69.5 | 78.4 | 13.3 | 14.5 | 15.3 | 18.0 |
| 60 | 60 | 71.5 | 80.4 | 13.3 | 14.5 | 15.3 | 18.0 |
| 63 | 63 | 74.5 | 83.4 | 13.3 | 14.2 | 15.3 | 18.0 |
| 65 | 65 | 76.5 | 85.4 | 13.0 | 14.2 | 15.3 | 18.0 |
| 68 | 68 | 82.7 | 91.5 | 13.7 | 14.9 | 16.0 | 19.0 |
| 70 | 70 | 83.0 | 92.0 | 13.0 | 14.2 | 15.3 | 18.0 |
| 75 | 75 | 90.2 | 99.0 | 14.8 | 15.2 | 15.3 | 18.0 |
| 80 | 80 | 95.2 | 104.0 | 14.8 | 16.2 | 16.3 | 19.0 |
| 85 | 85 | 100.2 | 109.0 | 14.8 | 16.0 | 16.3 | 19.0 |
| 90 | 90 | 105.2 | 114.0 | 14.8 | 16.0 | 16.3 | 19.0 |
| 95 | 95 | 111.6 | 120.3 | 15.8 | 17.0 | 17.3 | 20.0 |
| 100 | 100 | 114.5 | 123.3 | 15.8 | 17.0 | 17.3 | 20.0 |

| Size/ Metric | GB12 | | | | |
|---|---|---|---|---|---|
| | d | D6 | D7 | L4 | L8 |
| 10 | 10 | 14.0 | 18.1 | 5.5 | 7.0 |
| 11 | 11 | 16.5 | 20.6 | 5.5 | 7.0 |
| 12 | 12 | 16.5 | 20.6 | 5.5 | 7.0 |
| 13 | 13 | 19.0 | 23.1 | 6.0 | 7.5 |
| 14 | 14 | 19.0 | 23.1 | 6.0 | 7.5 |
| 15 | 15 | 21.0 | 26.9 | 7.0 | 9.0 |
| 16 | 16 | 21.0 | 26.9 | 7.0 | 9.0 |
| 17 | 17 | 21.0 | 26.9 | 7.0 | 9.0 |
| 18 | 18 | 25.0 | 30.9 | 8.0 | 9.5 |
| 19 | 19 | 25.0 | 30.9 | 8.0 | 9.5 |
| 20 | 20 | 25.0 | 30.9 | 8.0 | 9.5 |
| 21 | 21 | 30.0 | 35.4 | 8.0 | 9.5 |
| 22 | 22 | 30.0 | 35.4 | 8.0 | 9.5 |
| 23 | 23 | 30.0 | 35.4 | 8.0 | 9.5 |
| 24 | 24 | 30.0 | 35.4 | 8.0 | 9.5 |
| 25 | 25 | 33.0 | 38.2 | 8.5 | 9.5 |
| 26 | 26 | 33.0 | 38.2 | 8.5 | 9.5 |
| 28 | 28 | 38.0 | 43.3 | 9.0 | 11.0 |
| 29 | 29 | 38.0 | 43.3 | 9.0 | 11.0 |
| 30 | 30 | 38.0 | 43.3 | 9.0 | 11.0 |
| 32 | 32 | 38.0 | 43.3 | 9.0 | 11.0 |
| 33 | 33 | 45.0 | 53.5 | 11.5 | 13.0 |
| 34 | 34 | 45.0 | 53.5 | 11.5 | 13.0 |
| 35 | 35 | 45.0 | 53.5 | 11.5 | 13.0 |
| 36 | 36 | 45.0 | 53.5 | 11.5 | 13.0 |
| 38 | 38 | 52.0 | 60.5 | 11.5 | 13.0 |
| 40 | 40 | 52.0 | 60.5 | 11.5 | 13.0 |
| 42 | 42 | 52.0 | 60.5 | 11.5 | 13.0 |
| 43 | 43 | 52.0 | 60.5 | 11.5 | 13.0 |
| 44 | 44 | 57.0 | 65.5 | 11.5 | 13.0 |
| 45 | 45 | 57.0 | 65.5 | 11.5 | 13.0 |
| 48 | 48 | 57.0 | 65.5 | 11.5 | 13.0 |
| 50 | 50 | 64.0 | 72.5 | 11.5 | 13.5 |
| 55 | 55 | 64.0 | 72.5 | 11.5 | 13.5 |
| 60 | 60 | 72.0 | 79.3 | 11.5 | 13.5 |
| 65 | 65 | 77.0 | 84.5 | 11.5 | 13.5 |
| 70 | 70 | 82.0 | 89.5 | 11.5 | 13.5 |
| 75 | 75 | 87.0 | 94.5 | 11.5 | 13.5 |
| 80 | 80 | 92.0 | 99.5 | 11.5 | 13.5 |
| 85 | 85 | 98.0 | 105.5 | 13.5 | 15.5 |
| 90 | 90 | 105.0 | 111.5 | 13.5 | 15.5 |
| 96 | 96 | 110.0 | 116.5 | 13.5 | 15.5 |
| 100 | 100 | 114.0 | 119.5 | 13.5 | 15.5 |

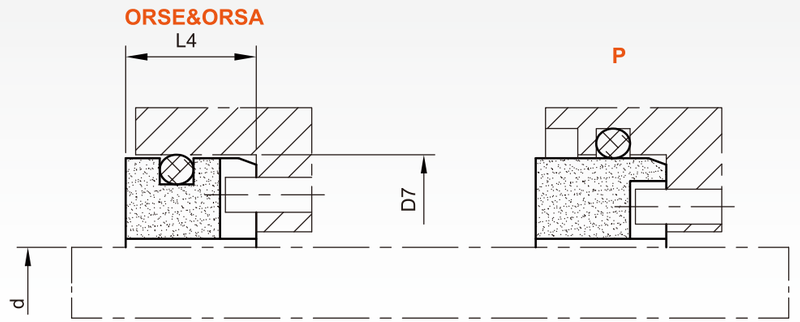
# GBG9/G16/G46/24DL




| Size/ Metric | | | | | GBG9 | | GBG16 | | GBG46 | | GB24DL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | d | D6 | D7 | D8 | L4 | L8 | L4 | L8 | L4 | L8 | L4 | L8 |
| 10 | 10 | 17 | 21 | 3 | 10.0 | 17.5 | — | — | — | — | 8.6 | 15.0 |
| 12 | 12 | 19 | 23 | 3 | 10.0 | 17.5 | — | — | — | — | 8.6 | 15.0 |
| 14 | 14 | 21 | 25 | 3 | 10.0 | 17.5 | — | — | — | — | 8.6 | 15.0 |
| 16 | 16 | 23 | 27 | 3 | 10.0 | 17.5 | — | — | — | — | 8.6 | 15.0 |
| 18 | 18 | 27 | 33 | 3 | 11.5 | 19.5 | 7.0 | 15.0 | 9.0 | 17.0 | 10.0 | 17.0 |
| 20 | 20 | 29 | 35 | 3 | 11.5 | 19.5 | 7.0 | 15.0 | 9.0 | 17.0 | 10.0 | 17.0 |
| 22 | 22 | 31 | 37 | 3 | 11.5 | 19.5 | 7.0 | 15.0 | 9.0 | 17.0 | 10.0 | 17.0 |
| 24 | 24 | 33 | 39 | 3 | 11.5 | 19.5 | 7.0 | 15.0 | 9.0 | 17.0 | 10.0 | 17.0 |
| 25 | 25 | 34 | 40 | 3 | 11.5 | 19.5 | 7.0 | 15.0 | 9.0 | 17.0 | 10.0 | 17.0 |
| 28 | 28 | 37 | 43 | 3 | 11.5 | 19.5 | 7.0 | 15.0 | 9.5 | 17.5 | 10.0 | 17.0 |
| 30 | 30 | 39 | 45 | 3 | 11.5 | 19.5 | 7.0 | 15.0 | 9.5 | 17.5 | 10.0 | 17.0 |
| 32 | 32 | 42 | 48 | 3 | 11.5 | 19.5 | 7.0 | 15.0 | 9.5 | 17.5 | 10.0 | 17.0 |
| 33 | 33 | 42 | 48 | 3 | 11.5 | 19.5 | 7.0 | 15.0 | 9.5 | 17.5 | 10.0 | 17.0 |
| 35 | 35 | 44 | 50 | 3 | 11.5 | 19.5 | 7.0 | 15.0 | 9.5 | 17.5 | 10.0 | 17.0 |
| 38 | 38 | 49 | 56 | 4 | 14.0 | 22.0 | 7.0 | 16.0 | 10.5 | 18.5 | 11.0 | 18.0 |
| 40 | 40 | 51 | 58 | 4 | 14.0 | 22.0 | 8.0 | 16.0 | 10.5 | 18.5 | 11.0 | 18.0 |
| 43 | 43 | 54 | 61 | 4 | 14.0 | 22.0 | 8.0 | 16.0 | 10.5 | 18.5 | 11.0 | 18.0 |
| 45 | 45 | 56 | 63 | 4 | 14.0 | 22.0 | 8.0 | 16.0 | 10.5 | 18.5 | 11.0 | 18.0 |
| 48 | 48 | 60 | 66 | 4 | 14.0 | 22.0 | 8.0 | 16.0 | 10.5 | 18.5 | 11.0 | 18.0 |
| 50 | 50 | 62 | 70 | 4 | 15.0 | 23.0 | 9.5 | 17.0 | 12.0 | 19.5 | 13.0 | 20.0 |
| 53 | 53 | 65 | 73 | 4 | 15.0 | 23.0 | 9.5 | 17.0 | 12.0 | 19.5 | 13.0 | 20.0 |
| 55 | 55 | 67 | 75 | 4 | 15.0 | 23.0 | 9.5 | 17.0 | 12.0 | 19.5 | 13.0 | 20.0 |
| 58 | 58 | 70 | 78 | 4 | 15.0 | 23.0 | 10.5 | 18.0 | 13.0 | 20.5 | 13.0 | 20.0 |
| 60 | 60 | 72 | 80 | 4 | 15.0 | 23.0 | 10.5 | 18.0 | 13.0 | 20.5 | 13.0 | 20.0 |
| 63 | 63 | 75 | 83 | 4 | 15.0 | 23.0 | 10.5 | 18.0 | 13.0 | 20.5 | 13.0 | 20.0 |
| 65 | 65 | 77 | 85 | 4 | 15.0 | 23.0 | 10.5 | 18.0 | 13.0 | 20.5 | 13.0 | 20.0 |
| 68 | 68 | 81 | 90 | 4 | 18.0 | 26.0 | 11.0 | 18.5 | 13.5 | 21.0 | 15.3 | 22.0 |
| 70 | 70 | 83 | 92 | 4 | 18.0 | 26.0 | 11.5 | 19.0 | 14.0 | 21.5 | 15.3 | 22.0 |
| 75 | 75 | 88 | 97 | 4 | 18.0 | 26.0 | 11.5 | 19.0 | 14.0 | 21.5 | 15.3 | 22.0 |
| 80 | 80 | 95 | 105 | 4 | 18.2 | 26.2 | 11.5 | 19.0 | 14.0 | 21.5 | 15.7 | 23.0 |
| 85 | 85 | 100 | 110 | 4 | 18.2 | 26.2 | 11.5 | 19.0 | 14.0 | 21.5 | 15.7 | 23.0 |
| 90 | 90 | 105 | 115 | 4 | 18.2 | 26.2 | 13.0 | 20.5 | 15.5 | 23.0 | 15.7 | 23.0 |
| 95 | 95 | 110 | 120 | 4 | 17.2 | 25.2 | 13.0 | 20.5 | 15.5 | 23.0 | 15.7 | 23.0 |
| 100 | 100 | 115 | 125 | 4 | 17.2 | 25.2 | 13.0 | 20.5 | 15.5 | 23.0 | 15.7 | 23.0 |



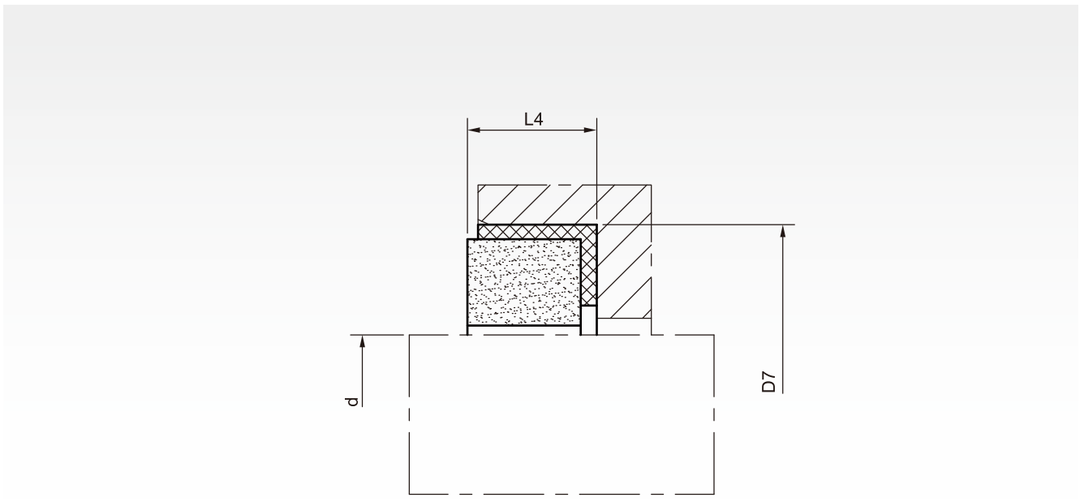
# GBORSE&ORSA/P




| Size | GBORSE | | | GBORSA | |
|---|---|---|---|---|---|
| | d | D7 | L4 | D7 | L4 |
| 10.00 | 10.00 | 24.60 | 8.74 | 20.62 | 7.93 |
| 12.00 | 12.00 | 27.79 | 8.74 | | |
| 16.00 | 16.00 | 30.95 | 10.32 | 31.75 | 10.28 |
| 18.00 | 18.00 | 34.15 | 10.32 | | |
| 19.00 | 19.00 | 34.15 | 10.32 | 34.93 | 10.28 |
| 20.00 | 20.00 | 35.70 | 10.32 | | |
| 22.00 | 22.00 | 37.3 | 10.32 | 37.30 | 10.32 |
| 25.00 | 25.00 | 40.5 | 10.32 | 41.28 | 11.10 |
| 28.00 | 28.00 | 47.6 | 11.99 | | |
| 30.00 | 30.00 | 50.8 | 11.99 | | |
| 32.00 | 32.00 | 50.8 | 11.99 | 47.63 | 11.10 |
| 33.00 | 33.00 | 53.98 | 11.99 | | |
| 35.00 | 35.00 | 53.98 | 11.99 | 50.80 | 11.10 |
| 38.00 | 38.00 | 57.15 | 11.99 | 53.98 | 11.10 |
| 40.00 | 40.00 | 60.33 | 11.99 | | |
| 43.00 | 43.00 | 63.5 | 11.99 | | |
| 45.00 | 45.00 | 63.5 | 11.99 | 63.50 | 12.70 |
| 48.00 | 48.00 | 66.68 | 11.99 | 66.68 | 12.70 |
| 50.00 | 50.00 | 69.85 | 13.50 | | |
| 53.00 | 53.00 | 73.03 | 13.50 | | |
| 55.00 | 55.00 | 76.2 | 13.50 | | |
| 60.00 | 60.00 | 79.38 | 13.50 | 82.55 | 14.28 |
| 65.00 | 65.00 | 92.08 | 15.88 | | |
| 70.00 | 70.00 | 95.25 | 15.88 | 88.90 | 15.88 |
| 75.00 | 75.00 | 101.6 | 15.88 | | |
| 80.00 | 80.00 | 111.13 | 19.88 | 101.6 | 19.88 |
| 85.00 | 85.00 | 117.48 | 19.88 | 107.95 | 19.88 |
| 90.00 | 90.00 | 120.65 | 19.88 | 111.13 | 19.88 |
| 95.00 | 95.00 | 127.00 | 19.88 | 117.48 | 19.88 |
| 100.00 | 100.00 | 133.35 | 19.88 | 123.83 | 19.88 |

| Size/Inch | GBP | | | |
|---|---|---|---|---|
| | d | D7 | L4 | L2 |
| 0.500 | 12.70 | 25.60 | 7.90 | 2.50 |
| 0.625 | 15.80 | 31.95 | 10.30 | 2.50 |
| 0.750 | 19.00 | 35.12 | 10.30 | 2.50 |
| 0.875 | 22.20 | 38.30 | 10.30 | 2.50 |
| 1.000 | 25.40 | 41.48 | 11.15 | 2.50 |
| 1.125 | 28.50 | 44.65 | 11.15 | 2.50 |
| 1.250 | 31.70 | 47.83 | 11.15 | 2.50 |
| 1.375 | 34.90 | 51.00 | 11.15 | 2.50 |
| 1.500 | 38.10 | 54.18 | 11.15 | 2.50 |
| 1.625 | 41.20 | 60.53 | 12.75 | 3.00 |
| 1.750 | 44.40 | 63.70 | 12.75 | 3.00 |
| 1.875 | 47.60 | 66.88 | 12.75 | 3.00 |
| 2.000 | 50.80 | 70.05 | 12.75 | 3.00 |
| 2.125 | 53.90 | 76.40 | 14.33 | 3.50 |
| 2.250 | 57.10 | 79.58 | 14.33 | 3.50 |
| 2.375 | 60.30 | 82.75 | 14.33 | 3.50 |
| 2.500 | 63.50 | 85.93 | 14.33 | 3.50 |
| 2.625 | 66.60 | 85.93 | 15.93 | 3.50 |
| 2.750 | 69.80 | 89.10 | 15.93 | 3.50 |
| 2.875 | 73.00 | 95.45 | 15.93 | 3.50 |
| 3.000 | 76.20 | 98.63 | 15.93 | 3.50 |
| 3.125 | 79.30 | 101.80 | 19.84 | 3.50 |
| 3.250 | 82.50 | 104.98 | 19.84 | 3.50 |
| 3.375 | 85.70 | 108.15 | 19.84 | 3.50 |
| 3.500 | 88.90 | 111.33 | 19.84 | 3.50 |
| 3.625 | 92.00 | 114.50 | 19.84 | 3.50 |
| 3.750 | 95.20 | 117.68 | 19.84 | 3.50 |
| 3.875 | 98.40 | 120.85 | 19.84 | 3.50 |
| 4.000 | 101.60 | 124.03 | 19.84 | 3.50 |

# GBG60/24/210/20/11

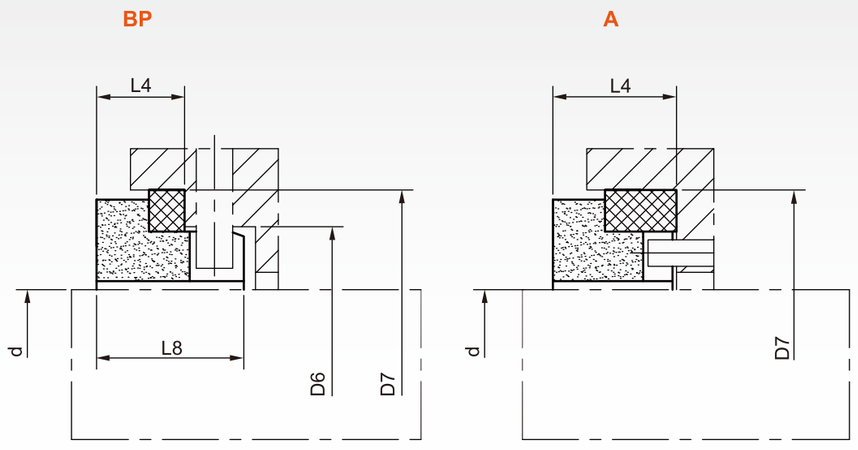



| Size/ Metric | d | D7 | GBG60 | GB24 | GB210 |
|---|---|---|---|---|---|
| | | | L4 | L4 | L4 |
| 10 | 10 | 21 | 6.6 | 8.6 | 5 |
| 12 | 12 | 23 | 6.6 | 8.6 | 6 |
| 14 | 14 | 25 | 6.6 | 8.6 | 6 |
| 16 | 16 | 27 | 6.6 | 8.6 | 6 |
| 18 | 18 | 33 | 7.5 | 10.0 | 6 |
| 20 | 20 | 35 | 7.5 | 10.0 | 6 |
| 22 | 22 | 37 | 7.5 | 10.0 | 6 |
| 24 | 24 | 39 | 7.5 | 10.0 | 6 |
| 25 | 25 | 40 | 7.5 | 10.0 | 6 |
| 28 | 28 | 43 | 7.5 | 10.0 | 6 |
| 30 | 30 | 45 | 7.5 | 10.0 | 7 |
| 32 | 32 | 48 | 7.5 | 10.0 | 7 |
| 33 | 33 | 48 | 7.5 | 10.0 | 7 |
| 35 | 35 | 50 | 7.5 | 10.0 | 8 |
| 38 | 38 | 56 | 9.0 | 11.0 | 8 |
| 40 | 40 | 58 | 9.0 | 11.0 | 8 |
| 43 | 43 | 61 | 9.0 | 11.0 | 8 |
| 45 | 45 | 63 | 9.0 | 11.0 | 8 |
| 48 | 48 | 66 | 9.0 | 11.0 | 10 |
| 50 | 50 | 70 | 9.5 | 13.0 | 10 |
| 53 | 53 | 73 | 11.0 | 13.0 | 10 |
| 55 | 55 | 75 | 11.0 | 13.0 | 10 |
| 58 | 58 | 78 | 11.0 | 13.0 | 10 |
| 60 | 60 | 80 | 11.0 | 13.0 | 12 |
| 63 | 63 | 83 | 11.0 | 13.0 | 12 |
| 65 | 65 | 85 | 11.0 | 13.0 | 12 |
| 68 | 68 | 90 | 11.3 | 15.3 | 12 |
| 70 | 70 | 92 | 11.3 | 15.3 | 12 |
| 75 | 75 | 97 | 11.3 | 15.3 | 12 |
| 80 | 80 | 105 | 12.0 | 15.7 | 12.5 |
| 85 | 85 | 110 | 14.0 | 15.7 | 12.5 |
| 90 | 90 | 115 | 14.0 | 15.7 | 12.5 |
| 95 | 95 | 120 | 14.0 | 15.7 | 12.5 |
| 100 | 100 | 125 | 14.0 | 15.7 | 12.5 |

| Size/ Inch | Size/ Metric | GB20 | | GB11 | |
|---|---|---|---|---|---|
| | | D7 | L4 | D7 | L4 |
| 0.375 | 9.5 | 24.60 | 8.7 | 22.23 | 7.95 |
| 0.500 | 12.7 | 27.80 | 8.7 | 25.40 | 7.95 |
| 0.625 | 15.8 | 30.95 | 10.3 | 31.75 | 10.31 |
| 0.750 | 19.0 | 34.15 | 10.3 | 34.93 | 10.31 |
| 0.813 | 20.6 | 35.70 | 10.3 | — | — |
| 0.875 | 22.2 | 37.30 | 10.3 | 38.10 | 10.31 |
| 1.000 | 25.4 | 40.50 | 10.3 | 41.28 | 11.10 |
| 1.125 | 28.5 | 47.65 | 11.9 | 44.45 | 11.10 |
| 1.250 | 31.7 | 50.80 | 11.9 | 47.63 | 11.10 |
| 1.375 | 34.9 | 54.00 | 11.9 | 50.80 | 11.10 |
| 1.500 | 38.1 | 57.15 | 11.9 | 53.98 | 11.10 |
| 1.625 | 41.2 | 60.35 | 11.9 | 60.33 | 12.70 |
| 1.750 | 44.4 | 63.50 | 11.9 | 63.50 | 12.70 |
| 1.875 | 47.6 | 66.70 | 11.9 | 66.68 | 12.70 |
| 2.000 | 50.8 | 69.85 | 13.5 | 69.85 | 12.70 |
| 2.125 | 53.9 | 73.05 | 13.5 | 76.20 | 14.27 |
| 2.250 | 57.1 | 76.20 | 13.5 | 79.38 | 14.27 |
| 2.375 | 60.3 | 79.40 | 13.5 | 82.55 | 14.27 |
| 2.500 | 63.5 | 82.55 | 13.5 | 85.73 | 14.27 |
| 2.625 | 66.6 | 92.05 | 15.9 | 85.73 | 15.88 |
| 2.750 | 69.8 | 95.25 | 15.9 | 88.90 | 15.88 |
| 2.875 | 73.0 | 98.45 | 15.9 | 95.25 | 15.88 |
| 3.000 | 76.2 | 101.65 | 15.9 | 98.43 | 15.88 |
| 3.125 | 79.3 | 111.15 | 20.0 | 101.60 | 19.84 |
| 3.250 | 82.5 | 114.30 | 20.0 | 104.78 | 19.84 |
| 3.375 | 85.7 | 117.50 | 20.0 | 107.95 | 19.84 |
| 3.500 | 88.9 | 120.65 | 20.0 | 111.13 | 19.84 |
| 3.625 | 92.0 | 123.85 | 20.0 | 114.20 | 19.84 |
| 3.750 | 95.2 | 127.00 | 20.0 | 117.48 | 19.84 |
| 3.875 | 98.4 | 130.20 | 20.0 | 120.65 | 19.84 |
| 4.000 | 101.6 | 133.35 | 20.0 | 123.83 | 19.84 |



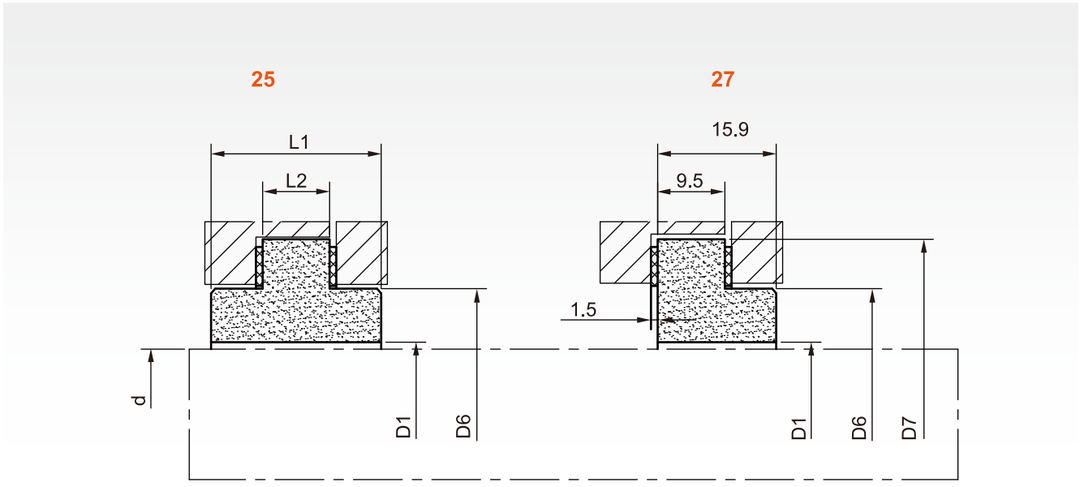
# GBBP/ A




| Size/ Metric | GBBP | | | | |
|---|---|---|---|---|---|
| | d | D6 | D7 | L4 | L8 |
| 14 | 14 | 21 | 25 | 12.0 | 18.5 |
| 16 | 16 | 23 | 27 | 12.0 | 18.5 |
| 18 | 18 | 27 | 33 | 13.5 | 20.5 |
| 20 | 20 | 29 | 35 | 13.5 | 20.5 |
| 22 | 22 | 31 | 37 | 13.5 | 20.5 |
| 24 | 24 | 33 | 39 | 13.3 | 20.3 |
| 25 | 25 | 34 | 40 | 13.0 | 20.0 |
| 28 | 28 | 37 | 43 | 12.5 | 19.5 |
| 30 | 30 | 39 | 45 | 12.0 | 19.0 |
| 32 | 32 | 42 | 48 | 12.0 | 19.0 |
| 33 | 33 | 42 | 48 | 12.0 | 19.0 |
| 35 | 35 | 44 | 50 | 12.0 | 19.0 |
| 38 | 38 | 49 | 56 | 13.0 | 20.0 |
| 40 | 40 | 51 | 58 | 13.0 | 20.0 |
| 43 | 43 | 54 | 61 | 13.0 | 20.0 |
| 45 | 45 | 56 | 63 | 13.0 | 20.0 |
| 48 | 48 | 59 | 66 | 13.0 | 20.0 |
| 50 | 50 | 62 | 70 | 13.5 | 20.5 |
| 53 | 53 | 65 | 73 | 13.5 | 20.5 |
| 55 | 55 | 67 | 75 | 13.5 | 20.5 |
| 58 | 58 | 70 | 78 | 13.5 | 20.5 |
| 60 | 60 | 72 | 80 | 13.5 | 20.5 |
| 63 | 63 | 75 | 83 | 13.5 | 20.5 |
| 65 | 65 | 77 | 85 | 13.5 | 20.5 |
| 68 | 68 | 81 | 90 | 13.5 | 20.5 |
| 70 | 70 | 83 | 92 | 14.5 | 21.5 |
| 75 | 75 | 88 | 97 | 14.5 | 21.5 |
| 80 | 80 | 95 | 105 | 15.0 | 22.0 |
| 85 | 85 | 100 | 110 | 15.0 | 22.0 |
| 90 | 90 | 105 | 115 | 15.0 | 22.0 |
| 95 | 95 | 110 | 120 | 15.0 | 22.0 |
| 100 | 100 | 115 | 125 | 15.0 | 22.0 |

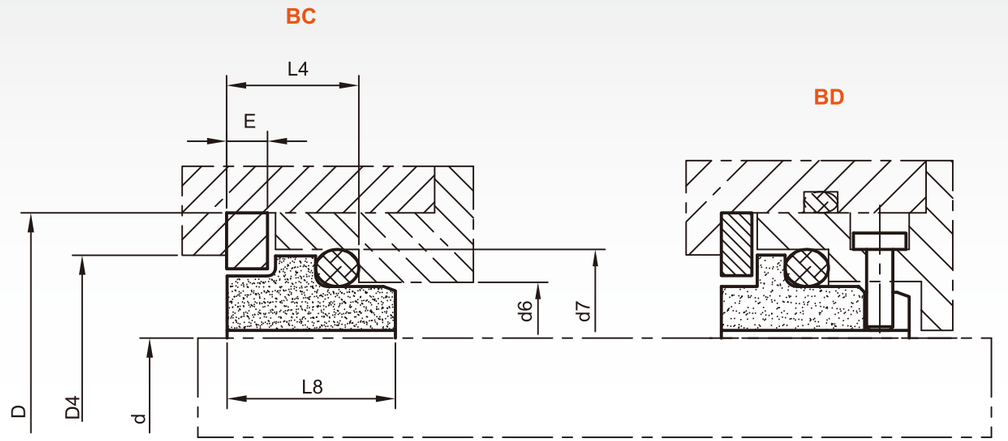
| Size/ Inch | GBA | | |
|---|---|---|---|
| | d | D7 | L4 |
| 0.250 | 6.3 | 19.05 | 7.9 |
| 0.375 | 9.5 | 22.23 | 7.9 |
| 0.500 | 12.7 | 25.40 | 7.9 |
| 0.625 | 15.6 | 31.75 | 10.3 |
| 0.750 | 19.0 | 34.93 | 10.3 |
| 0.875 | 22.2 | 38.10 | 10.3 |
| 1.000 | 25.4 | 41.28 | 11.1 |
| 1.125 | 29.6 | 44.45 | 11.1 |
| 1.250 | 31.7 | 47.63 | 11.1 |
| 1.375 | 34.9 | 50.80 | 11.1 |
| 1.500 | 38.1 | 53.98 | 11.1 |
| 1.625 | 41.2 | 60.33 | 12.7 |
| 1.750 | 44.4 | 63.50 | 12.7 |
| 1.875 | 47.6 | 66.68 | 12.7 |
| 2.000 | 50.8 | 69.85 | 12.7 |
| 2.125 | 53.4 | 76.20 | 14.3 |
| 2.250 | 57.1 | 79.38 | 14.3 |
| 2.375 | 60.3 | 82.55 | 14.3 |
| 2.500 | 63.6 | 85.73 | 14.3 |
| 2.625 | 66.6 | 85.73 | 15.9 |
| 2.750 | 69.8 | 88.90 | 15.9 |
| 2.875 | 73.0 | 95.25 | 15.9 |
| 3.000 | 76.2 | 98.43 | 15.9 |
| 3.125 | 79.2 | 101.60 | 19.8 |
| 3.250 | 82.6 | 104.78 | 19.8 |
| 3.375 | 85.7 | 107.95 | 19.8 |
| 3.500 | 88.9 | 111.13 | 19.8 |
| 3.625 | 92.0 | 114.30 | 19.8 |
| 3.750 | 95.2 | 117.48 | 19.8 |
| 3.875 | 98.4 | 120.65 | 19.8 |
| 4.000 | 101.6 | 123.83 | 19.8 |
| 4.125 | 104.7 | 130.18 | 19.8 |
| 4.250 | 107.9 | 133.35 | 19.8 |
| 4.375 | 111.1 | 136.53 | 19.8 |
| 4.500 | 114.3 | 139.70 | 19.8 |
| 4.625 | 117.4 | 142.88 | 19.8 |
| 4.750 | 120.6 | 146.05 | 19.8 |
| 4.875 | 123.8 | 149.23 | 19.8 |
| 5.000 | 127.0 | 152.40 | 19.8 |

# GB25/27




| Size/ Inch | Inch d | Metric Size d | GB25 | | | | | GB27 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | D1 | D6 | L1 | L2 | Gasket Thick | D1 | D6 | D7 |
| 0.500 | 0.500 | | 13.7 | 29.05 | 17.4 | 7.9 | 0.8 | - | - | - |
| 0.625 | 0.625 | | 16.8 | 33.04 | 17.4 | 7.9 | 0.8 | - | - | - |
| 0.750 | 0.750 | | 20.0 | 36.21 | 17.4 | 7.9 | 0.8 | 21.60 | 34.80 | 44.45 |
| | | 20 | 21.0 | 36.90 | 17.4 | 7.9 | 0.8 | - | - | - |
| 0.875 | 0.875 | | 23.2 | 39.90 | 17.4 | 7.9 | 0.8 | 24.75 | 37.95 | 47.65 |
| | | 25 | 26.0 | 41.90 | 17.4 | 7.9 | 0.8 | - | - | - |
| 1.000 | 1.000 | | 26.4 | 42.56 | 17.4 | 7.9 | 0.8 | 27.95 | 41.15 | 50.85 |
| 1.125 | 1.125 | | 29.6 | 45.74 | 26.9 | 11.1 | 1.6 | 31.10 | 44.30 | 53.95 |
| 1.187 | 1.187 | | - | - | - | - | - | 32.70 | 45.90 | 55.55 |
| | | 30 | 31.0 | 48.69 | 26.9 | 11.1 | 1.6 | - | - | - |
| 1.250 | 1.250 | | 32.7 | 50.50 | 26.9 | 11.1 | 1.6 | 34.30 | 47.50 | 57.15 |
| 1.375 | 1.375 | | 36.0 | 53.68 | 26.9 | 11.1 | 1.6 | 37.45 | 50.65 | 60.30 |
| 1.500 | 1.500 | | 39.1 | 56.85 | 26.9 | 11.1 | 1.6 | 40.65 | 57.00 | 66.65 |
| 1.625 | 1.625 | | 42.2 | 63.20 | 26.9 | 11.1 | 1.6 | 43.80 | 60.15 | 69.85 |
| 1.750 | 1.750 | | 45.4 | 66.38 | 26.9 | 11.1 | 1.6 | 47.00 | 63.35 | 79.20 |
| 1.875 | 1.875 | | 49.0 | 69.55 | 26.9 | 11.1 | 1.6 | 50.15 | 66.50 | 79.35 |
| | | 50 | 51.0 | 71.90 | 26.9 | 11.1 | 1.6 | - | - | - |
| 2.000 | 2.000 | | 51.8 | 72.73 | 26.9 | 11.1 | 1.6 | 53.35 | 69.70 | 82.55 |
| 2.125 | 2.125 | | 54.9 | 79.08 | 33.3 | 14.3 | 1.6 | 56.50 | 72.85 | 88.90 |
| 2.250 | 2.250 | | 58.1 | 82.25 | 33.3 | 14.3 | 1.6 | 59.70 | 76.05 | 92.05 |
| 2.375 | 2.375 | | 61.3 | 85.43 | 33.3 | 14.3 | 1.6 | 62.85 | 79.20 | 95.25 |
| 2.500 | 2.500 | | 64.5 | 88.60 | 33.3 | 14.3 | 1.6 | 66.00 | 82.40 | 101.50 |
| 2.625 | 2.625 | | 67.6 | 91.78 | 33.3 | 14.3 | 1.6 | 69.20 | 85.60 | 104.75 |
| 2.750 | 2.750 | | 71.0 | 94.90 | 33.3 | 14.3 | 1.6 | - | - | - |
| 2.875 | 2.875 | | 74.0 | 98.13 | 33.3 | 14.3 | 1.6 | - | - | - |
| 3.000 | 3.000 | | 77.2 | 99.71 | 33.3 | 14.3 | 1.6 | 78.00 | 93.50 | 121.00 |
| 3.125 | 3.125 | | 80.4 | 102.89 | 33.3 | 14.3 | 1.6 | | | |
| 3.500 | 3.500 | | 89.9 | 114.00 | 34.3 | 14.3 | 1.6 | | | |
| 3.750 | 3.750 | | 96.3 | 120.35 | 34.3 | 14.3 | 1.6 | | | |
| 4.000 | 4.000 | | 102.6 | 126.70 | 34.3 | 14.3 | 1.6 | | | |
| 4.125 | 4.125 | 105 | 106.0 | 139.90 | 36.0 | 16.0 | 1.6 | | | |
| 4.500 | 4.500 | | 115.3 | 139.40 | 34.3 | 14.3 | 1.6 | | | |
| 5.000 | 5.000 | | 140.7 | 177.50 | 36.0 | 16.0 | 1.6 | | | |

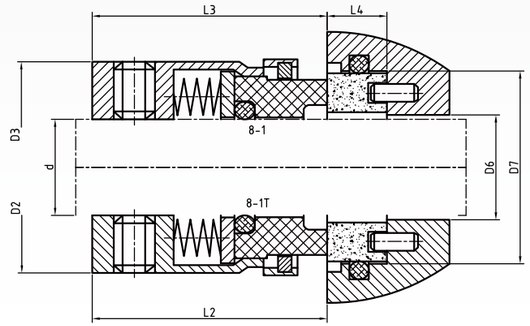
# GBBC/BD




| Size/ Metric | d | D | | D4 | | d6 | d7 | L4 | E | GBBC | GBBD |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Unbal Seal | Bal Seal | Unbal Seal | Bal Seal | | | | | L8 | L8 |
| 14 | 14 | 30 | 38 | 26 | 34 | 21 | 25 | 12.0 | 4 | 12.8 | 18.5 |
| 16 | 16 | 32 | 40 | 28 | 36 | 23 | 27 | 12.0 | 4 | 12.8 | 18.5 |
| 18 | 18 | 38 | 42 | 34 | 38 | 27 | 33 | 13.5 | 4 | 14.5 | 20.5 |
| 20 | 20 | 40 | 43 | 36 | 40 | 29 | 35 | 13.5 | 4 | 14.5 | 20.5 |
| 22 | 22 | 42 | 46 | 38 | 42 | 31 | 37 | 13.5 | 4 | 14.5 | 20.5 |
| 24 | 24 | 43 | 48 | 40 | 44 | 33 | 39 | 13.5 | 4 | 14.5 | 20.5 |
| 25 | 25 | 46 | 50 | 41 | 46 | 34 | 40 | 13.0 | 4 | 14 | 20.0 |
| 28 | 28 | 48 | 53 | 44 | 49 | 37 | 43 | 12.5 | 4 | 13.5 | 19.5 |
| 30 | 30 | 50 | 60 | 46 | 51 | 39 | 45 | 12.0 | 4 | 13 | 19.0 |
| 32 | 32 | 53 | 62 | 48 | 58 | 42 | 48 | 12.0 | 4 | 13 | 19.0 |
| 33 | 33 | 53 | 62 | 49 | 58 | 42 | 48 | 12.0 | 4 | 13 | 19.0 |
| 35 | 35 | 60 | 65 | 51 | 60 | 44 | 50 | 12.0 | 4 | 13 | 19.0 |
| 38 | 38 | 62 | 67 | 58 | 63 | 49 | 56 | 13.0 | 6 | 14 | 20.0 |
| 40 | 40 | 65 | 70 | 60 | 65 | 51 | 58 | 13.0 | 6 | 14 | 20.0 |
| 43 | 43 | 67 | 72 | 63 | 68 | 54 | 61 | 13.0 | 6 | 14 | 20.0 |
| 45 | 45 | 70 | 75 | 65 | 70 | 56 | 63 | 13.0 | 6 | 14 | 20.0 |
| 48 | 48 | 72 | 77 | 68 | 73 | 59 | 66 | 13.0 | 6 | 14 | 20.0 |
| 50 | 50 | 75 | 86 | 70 | 75 | 62 | 70 | 13.5 | 6 | 14.5 | 20.5 |
| 53 | 53 | 77 | 88 | 73 | 83 | 65 | 73 | 13.5 | 6 | 14.5 | 20.5 |
| 55 | 55 | 86 | 91 | 75 | 85 | 67 | 75 | 13.5 | 6 | 14.5 | 20.5 |
| 58 | 58 | 88 | 93 | 83 | 88 | 70 | 78 | 13.5 | 6 | 14.2 | 20.5 |
| 60 | 60 | 91 | 96 | 85 | 90 | 72 | 80 | 13.5 | 6 | 14.2 | 20.5 |
| 63 | 63 | 93 | 98 | 88 | 93 | 75 | 83 | 13.5 | 6 | 14.2 | 20.5 |
| 65 | 65 | 96 | 103 | 90 | 95 | 77 | 85 | 13.5 | 6 | 14.2 | 20.5 |
| 68 | 68 | 98 | — | 93 | — | 81 | 90 | 13.5 | 6 | 14.2 | 20.5 |
| 70 | 70 | 103 | 108 | 95 | 104 | 83 | 92 | 14.5 | 6 | 15.2 | 21.5 |
| 75 | 75 | 108 | 120 | 104 | 109 | 88 | 97 | 14.5 | 6 | 15.2 | 21.5 |
| 80 | 80 | 120 | 125 | 109 | 114 | 95 | 105 | 15.0 | 6 | 15.7 | 22.0 |
| 85 | 85 | 125 | 130 | 114 | 119 | 100 | 110 | 15.0 | 6 | 15.7 | 22.0 |
| 90 | 90 | 130 | 135 | 119 | 124 | 105 | 115 | 15.0 | 6 | 15.7 | 22.0 |
| 95 | 95 | 135 | 140 | 124 | 129 | 110 | 120 | 15.0 | 6 | 15.7 | 22.0 |
| 100 | 100 | 140 | 145 | 129 | 134 | 115 | 125 | 15.0 | 6 | 15.7 | 22.0 |

# GB8-1/8-1T






**技术参数：**
密封腔温度：-40℃+260℃
线速度：≤25m/s
密封腔压力：≤16bar
轴径尺寸：0.5"-4"

**Operating Limits:**
Temperature:-40℃+260℃
Speed:≤25m/s
Pressure:≤16bar
Standard Size:0.5"-4"

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

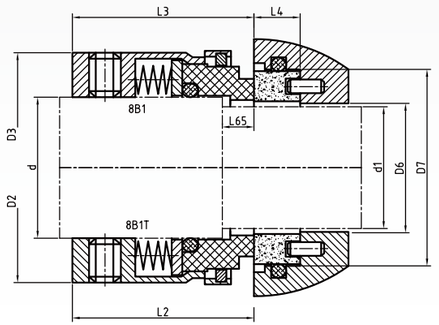
**Material:**
Seal ring:Car,Sic,Ssic,TC
Secondary seal:NBR,Viton,EPDM,Kalrez.
Spring and metal parts:304,316,HAST.C

| Size | d | D2 | D3 | D6 | D7 | L2 | L3 | L4 |
|---|---|---|---|---|---|---|---|---|
| 0.500 | 12.70 | 23.80 | 26.7 | 14.50 | 25.60 | 23.80 | 21 | 7.90 |
| 0.625 | 15.87 | 26.97 | 30.7 | 17.50 | 31.95 | 23.80 | 19 | 10.30 |
| 0.750 | 19.05 | 30.15 | 34.0 | 21.00 | 35.12 | 23.80 | 22 | 10.30 |
| 0.875 | 22.22 | 32.32 | 37.2 | 24.00 | 38.30 | 23.80 | 24 | 11.15 |
| 1.000 | 25.40 | 36.50 | 40.3 | 27.50 | 41.48 | 25.40 | 25 | 11.15 |
| 1.125 | 28.57 | 39.67 | 43.5 | 30.50 | 44.65 | 25.40 | 27 | 11.15 |
| 1.250 | 31.75 | 42.85 | 48.3 | 33.50 | 47.83 | 25.40 | 27 | 11.15 |
| 1.375 | 34.92 | 49.20 | 51.5 | 37.00 | 51.00 | 34.93 | 29 | 11.15 |
| 1.500 | 38.10 | 49.50 | 54.6 | 40.00 | 54.18 | 28.58 | 29 | 11.15 |
| 1.625 | 41.27 | 57.15 | 61.0 | 43.50 | 60.53 | 29.36 | 35 | 12.75 |
| 1.750 | 44.45 | 58.72 | 64.2 | 46.50 | 63.70 | 34.93 | 35 | 12.75 |
| 1.875 | 47.62 | 63.50 | 67.3 | 49.50 | 66.88 | 34.93 | 35 | 12.75 |
| 2.000 | 50.80 | 66.68 | 70.5 | 53.00 | 70.05 | 34.93 | 35 | 12.75 |
| 2.125 | 53.97 | 71.42 | 76.9 | 56.00 | 76.40 | 42.85 | 43 | 14.33 |
| 2.250 | 57.15 | 72.21 | 80.0 | 59.00 | 79.58 | 34.93 | 43 | 14.33 |
| 2.375 | 60.32 | 76.20 | 83.2 | 62.50 | 82.75 | 42.85 | 43 | 14.33 |
| 2.500 | 63.50 | 79.38 | 86.4 | 65.50 | 85.93 | 34.93 | 43 | 14.33 |
| 2.625 | 66.67 | 82.55 | 89.6 | 68.50 | 85.93 | 42.85 | 43 | 15.93 |
| 2.750 | 69.85 | 85.73 | 92.7 | 72.00 | 89.10 | 42.85 | 43 | 15.93 |
| 2.875 | 73.02 | 88.90 | 95.9 | 75.00 | 95.45 | 42.85 | 43 | 15.93 |
| 3.000 | 76.20 | 92.08 | 97.5 | 78.50 | 98.63 | 42.85 | 43 | 15.93 |
| 3.125 | 79.37 | 95.25 | 100.7 | 81.50 | 101.80 | 42.85 | 43 | 19.84 |
| 3.250 | 82.55 | 98.43 | 105.4 | 84.50 | 104.98 | 42.85 | 43 | 19.84 |
| 3.375 | 85.72 | 101.60 | 108.6 | 88.00 | 108.15 | 42.85 | 43 | 19.84 |
| 3.500 | 88.90 | 104.78 | 111.8 | 91.00 | 111.33 | 42.85 | 43 | 19.84 |
| 3.625 | 92.07 | 107.95 | 115.0 | 94.00 | 114.50 | 42.85 | 43 | 19.84 |
| 3.750 | 95.25 | 111.13 | 118.1 | 97.50 | 117.68 | 42.85 | 43 | 19.84 |
| 3.875 | 98.42 | 114.30 | 121.3 | 100.50 | 120.85 | 42.85 | 43 | 19.84 |
| 4.000 | 101.60 | 117.48 | 124.5 | 103.50 | 124.03 | 42.85 | 43 | 19.84 |



# GB8B1/8B1T






**技术参数：**
密封腔温度：-40℃+260℃
线速度：≤25m/s
密封腔压力：≤24bar
轴径尺寸：0.5"-4"

**Operating Limits:**
Temperature:-40℃+260℃
Speed:≤25m/s
Pressure:≤24bar
Standard Size:0.5"-4"

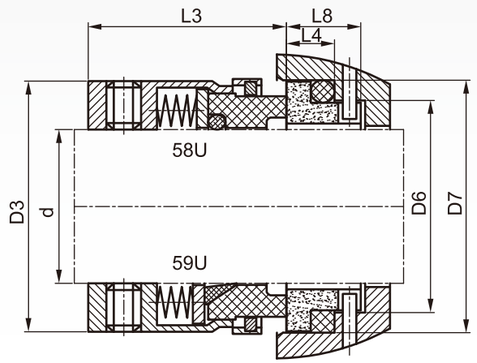
**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

**Material:**
Seal ring:Car,Sic,Ssic,TC
Secondary seal:NBR,Viton,EPDM,Kalrez.
Spring and metal parts:304,316,HAST.C

| Size | d | d1 | D2 | D3 | D6 | D7 | L3 | L4 | L65 |
|---|---|---|---|---|---|---|---|---|---|
| 1.000 | 25.4 | 22.2 | 36.50 | 40.3 | 24.00 | 38.30 | 33 | 10.30 | 8 |
| 1.125 | 28.5 | 25.4 | 39.67 | 43.4 | 27.50 | 41.48 | 35 | 11.15 | 7.9 |
| 1.250 | 31.7 | 28.5 | 42.85 | 48.3 | 30.50 | 44.65 | 35 | 11.15 | 7.9 |
| 1.375 | 34.9 | 28.5 | 49.20 | 51.3 | 33.50 | 47.83 | 37 | 11.15 | 8.7 |
| 1.500 | 38.1 | 31.7 | 49.20 | 54.5 | 37.00 | 51.00 | 37 | 11.15 | 8.7 |
| 1.625 | 41.2 | 34.9 | 57.15 | 60.8 | 40.00 | 54.18 | 45 | 11.15 | 8.7 |
| 1.750 | 44.4 | 38.1 | 28.72 | 64.0 | 43.50 | 60.53 | 45 | 11.15 | 9.5 |
| 1.875 | 47.6 | 41.2 | 63.50 | 67.2 | 46.50 | 63.70 | 45 | 12.75 | 9.5 |
| 2.000 | 50.8 | 44.4 | 66.68 | 70.4 | 49.50 | 66.88 | 45 | 12.75 | 9.5 |
| 2.125 | 53.9 | 47.6 | 71.42 | 76.7 | 53.00 | 70.05 | 52 | 12.75 | 11.1 |
| 2.250 | 57.1 | 50.8 | 72.21 | 79.9 | 56.00 | 76.40 | 52 | 12.75 | 11.1 |
| 2.375 | 60.3 | 53.9 | 76.20 | 83.1 | 59.00 | 79.58 | 52 | 14.33 | 11.1 |
| 2.500 | 63.5 | 57.1 | 79.38 | 86.2 | 62.50 | 82.75 | 52 | 14.33 | 11.1 |
| 2.625 | 66.6 | 60.3 | 82.55 | 89.4 | 65.50 | 85.93 | 52 | 14.33 | 11.1 |
| 2.750 | 69.8 | 63.5 | 85.73 | 92.6 | 68.50 | 85.93 | 52 | 14.33 | 11.1 |
| 2.875 | 73.0 | 66.6 | 88.90 | 95.8 | 72.00 | 89.10 | 52 | 15.93 | 11.1 |
| 3.000 | 76.2 | 69.8 | 92.08 | 97.3 | 75.00 | 95.45 | 52 | 15.93 | 11.1 |
| 3.125 | 79.3 | 73.0 | 95.25 | 100.5 | 78.50 | 98.63 | 52 | 15.93 | 11.1 |
| 3.250 | 82.5 | 76.2 | 98.43 | 105.3 | 81.50 | 101.80 | 52 | 15.93 | 14.3 |
| 3.375 | 85.7 | 79.3 | 101.60 | 108.5 | 84.50 | 104.98 | 52 | 19.84 | 14.3 |
| 3.500 | 88.9 | 82.5 | 104.78 | 111.6 | 88.00 | 108.15 | 52 | 19.84 | 14.3 |
| 3.625 | 92.0 | 85.7 | 107.95 | 114.8 | 91.00 | 111.33 | 52 | 19.84 | 14.3 |
| 3.750 | 95.2 | 88.9 | 111.13 | 118.0 | 94.00 | 114.50 | 52 | 19.84 | 14.3 |
| 3.875 | 98.4 | 92.0 | 114.30 | 121.2 | 97.50 | 117.68 | 52 | 19.84 | 14.3 |
| 4.000 | 101.6 | 95.2 | 117.48 | 124.3 | 100.50 | 120.85 | 52 | 19.84 | 14.3 |

# GB58U/59U






**技术参数：**
密封腔温度：-20℃+250℃
线速度：≤15m/s
密封腔压力：≤12bar
轴径尺寸：14-100mm

**Operating Limits:**
Temperature:-20℃+250℃
Speed:≤15m/s
Pressure:≤12bar
Standard Size:14-100mm

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶，聚四氟乙烯
弹簧及金属件：304，316，哈氏合金

**Material:**
Seal ring:Car,Sic,Ssic,TC
Secondary seal:NBR,Viton,EPDM,Kalrez,PTFE.
Spring and metal parts:304,316,HAST.C

| Size | d | D3 | D6 | D7 | L3 | L4 | L8 |
|---|---|---|---|---|---|---|---|
| 14 | 14 | 24 | 21 | 25 | 23.0 | 12.0 | 18.5 |
| 16 | 16 | 26 | 23 | 27 | 23.0 | 12.0 | 18.5 |
| 18 | 18 | 32 | 27 | 33 | 24.0 | 13.5 | 20.5 |
| 20 | 20 | 34 | 29 | 35 | 24.0 | 13.5 | 20.5 |
| 22 | 22 | 36 | 31 | 37 | 24.0 | 13.5 | 20.5 |
| 24 | 24 | 38 | 33 | 39 | 26.7 | 13.3 | 20.3 |
| 25 | 25 | 39 | 34 | 40 | 27.0 | 13.0 | 20.0 |
| 28 | 28 | 42 | 37 | 43 | 30.0 | 12.5 | 19.5 |
| 30 | 30 | 44 | 39 | 45 | 30.5 | 12.0 | 19.0 |
| 32 | 32 | 46 | 42 | 48 | 30.5 | 12.0 | 19.0 |
| 33 | 33 | 47 | 42 | 48 | 30.5 | 12.0 | 19.0 |
| 35 | 35 | 49 | 44 | 50 | 30.5 | 12.0 | 19.0 |
| 38 | 38 | 54 | 49 | 56 | 32.0 | 13.0 | 20.0 |
| 40 | 40 | 56 | 51 | 58 | 32.0 | 13.0 | 20.0 |
| 43 | 43 | 59 | 54 | 61 | 32.0 | 13.0 | 20.0 |
| 45 | 45 | 61 | 56 | 63 | 32.0 | 13.0 | 20.0 |
| 48 | 48 | 64 | 59 | 66 | 32.0 | 13.0 | 20.0 |
| 50 | 50 | 66 | 62 | 70 | 34.0 | 13.5 | 20.5 |
| 53 | 53 | 69 | 65 | 73 | 34.0 | 13.5 | 20.5 |
| 55 | 55 | 71 | 67 | 75 | 34.0 | 13.5 | 20.5 |
| 58 | 58 | 78 | 70 | 78 | 39.0 | 13.5 | 20.5 |
| 60 | 60 | 80 | 72 | 80 | 39.0 | 13.5 | 20.5 |
| 63 | 63 | 83 | 75 | 83 | 39.0 | 13.5 | 20.5 |
| 65 | 65 | 85 | 77 | 85 | 39.0 | 13.5 | 20.5 |
| 68 | 68 | 88 | 81 | 90 | 39.0 | 13.5 | 20.5 |
| 70 | 70 | 90 | 83 | 92 | 45.0 | 14.5 | 21.5 |
| 75 | 75 | 95 | 88 | 97 | 45.0 | 14.5 | 21.5 |
| 80 | 80 | 104 | 95 | 105 | 45.0 | 15.0 | 22.0 |
| 85 | 85 | 109 | 100 | 110 | 45.0 | 15.0 | 22.0 |
| 90 | 90 | 114 | 105 | 115 | 50.0 | 15.0 | 22.0 |
| 95 | 95 | 119 | 110 | 120 | 50.0 | 15.0 | 22.0 |
| 100 | 100 | 124 | 115 | 125 | 50.0 | 15.0 | 22.0 |



# GB58B/59B

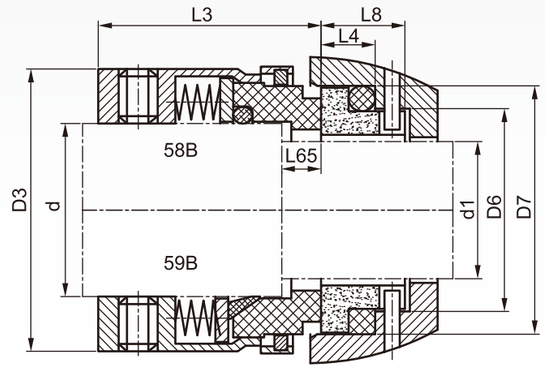
**技术参数：**
密封腔温度：-20℃+250℃
线速度：≤15m/s
密封腔压力：≤25bar
轴径尺寸：14-100mm

**Operating Limits:**
Temperature:-20℃+250℃
Speed:≤15m/s
Pressure:≤25bar
Standard Size:14-100mm

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶，聚四氟乙烯
弹簧及金属件：304，316，哈氏合金

**Material:**
Seal ring:Car,Sic,Ssic,TC
Secondary seal:NBR,Viton,EPDM,Kalrez,PTFE.
Spring and metal parts:304,316,HAST.C

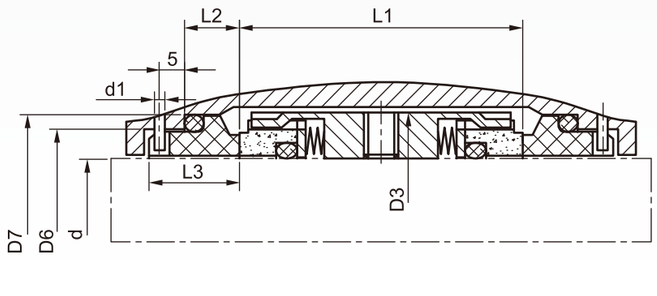





| Size | d | d1 | D3 | D6 | D7 | L3 | L4 | L8 | L65 |
|---|---|---|---|---|---|---|---|---|---|
| 14 | 14 | 18 | 32 | 21 | 25 | 30.5 | 12.0 | 18.5 | 6.0 |
| 16 | 16 | 20 | 34 | 23 | 27 | 30.5 | 12.0 | 18.5 | 6.0 |
| 18 | 18 | 22 | 36 | 23 | 33 | 31.5 | 13.5 | 20.5 | 6.5 |
| 20 | 20 | 24 | 38 | 29 | 35 | 31.5 | 13.5 | 20.5 | 6.5 |
| 22 | 22 | 26 | 40 | 31 | 37 | 31.5 | 13.5 | 20.5 | 6.5 |
| 24 | 24 | 28 | 42 | 33 | 39 | 34.2 | 13.3 | 20.3 | 6.7 |
| 25 | 25 | 30 | 44 | 34 | 40 | 34.5 | 13.0 | 20.0 | 7.0 |
| 28 | 28 | 33 | 47 | 37 | 43 | 37.5 | 12.5 | 19.5 | 7.5 |
| 30 | 30 | 35 | 49 | 39 | 45 | 38.0 | 12.0 | 19.0 | 8.0 |
| 32 | 32 | 38 | 54 | 42 | 48 | 38.0 | 12.0 | 19.0 | 8.0 |
| 33 | 33 | 38 | 54 | 42 | 48 | 38.0 | 12.0 | 19.0 | 8.0 |
| 35 | 35 | 40 | 56 | 44 | 50 | 38.0 | 12.0 | 19.0 | 8.0 |
| 38 | 38 | 43 | 59 | 49 | 56 | 39.5 | 13.0 | 20.0 | 10.0 |
| 40 | 40 | 45 | 61 | 51 | 58 | 39.5 | 13.0 | 20.0 | 10.0 |
| 43 | 43 | 48 | 64 | 54 | 61 | 39.5 | 13.0 | 20.0 | 10.0 |
| 45 | 45 | 50 | 66 | 56 | 63 | 39.5 | 13.0 | 20.0 | 10.0 |
| 48 | 48 | 53 | 69 | 59 | 66 | 39.5 | 13.0 | 20.0 | 10.0 |
| 50 | 50 | 55 | 71 | 62 | 70 | 44.0 | 13.5 | 20.5 | 11.5 |
| 53 | 53 | 58 | 78 | 65 | 73 | 44.0 | 13.5 | 20.5 | 11.5 |
| 55 | 55 | 60 | 80 | 67 | 75 | 44.0 | 13.5 | 20.5 | 11.5 |
| 58 | 58 | 63 | 83 | 70 | 78 | 49.0 | 13.5 | 20.5 | 11.5 |
| 60 | 60 | 65 | 85 | 72 | 80 | 49.0 | 13.5 | 20.5 | 11.5 |
| 63 | 63 | 68 | 88 | 75 | 83 | 49.0 | 13.5 | 20.5 | 11.5 |
| 65 | 65 | 70 | 90 | 77 | 85 | 49.0 | 13.5 | 20.5 | 11.5 |
| 70 | 70 | 75 | 95 | 83 | 92 | 55.0 | 14.5 | 21.5 | 13.5 |
| 75 | 75 | 80 | 104 | 88 | 97 | 55.0 | 14.5 | 21.5 | 13.5 |
| 80 | 80 | 85 | 109 | 95 | 105 | 55.0 | 15.0 | 22.0 | 13.0 |
| 85 | 85 | 90 | 114 | 100 | 110 | 60.0 | 15.0 | 22.0 | 13.0 |
| 90 | 90 | 95 | 119 | 105 | 115 | 60.0 | 15.0 | 22.0 | 13.0 |
| 95 | 95 | 100 | 124 | 110 | 120 | 60.0 | 15.0 | 22.0 | 13.0 |
| 100 | 100 | 105 | 129 | 115 | 125 | 60.0 | 15.0 | 22.0 | 13.0 |

# GBM74-D






**技术参数：**
密封腔温度：–20℃+220℃
线速度：≤20m/s
密封腔压力：≤16bar
轴径尺寸：18–100mm

**Operating Limits:**
Temperature:-20℃+220℃
Speed:≤20m/s
Pressure:≤16bar
Standard Size:18-100mm

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

**Material:**
Seal ring:Car,Sic,Ssic,TC
Secondary seal:NBR,Viton,EPDM,Kalrez.
Spring and metal parts:304,316,HAST.C

| Size | d | D6 | D7 | D3 | d1 | L1 | L2 | L3 |
|---|---|---|---|---|---|---|---|---|
| 18 | 18 | 27 | 33 | 33 | 3 | 38.0 | 11.5 | 19.5 |
| 20 | 20 | 29 | 35 | 35 | 3 | 38.0 | 11.5 | 19.5 |
| 22 | 22 | 31 | 37 | 37 | 3 | 38.0 | 11.5 | 19.5 |
| 24 | 24 | 33 | 39 | 39 | 3 | 38.0 | 11.5 | 19.5 |
| 25 | 25 | 34 | 40 | 40 | 3 | 38.0 | 11.5 | 19.5 |
| 28 | 28 | 37 | 43 | 43 | 3 | 39.0 | 11.5 | 19.5 |
| 30 | 30 | 39 | 45 | 45 | 3 | 39.0 | 11.5 | 19.5 |
| 32 | 32 | 42 | 48 | 47 | 3 | 39.0 | 11.5 | 19.5 |
| 33 | 33 | 42 | 48 | 48 | 3 | 39.0 | 11.5 | 19.5 |
| 35 | 35 | 44 | 50 | 50 | 3 | 39.0 | 11.5 | 19.5 |
| 38 | 38 | 49 | 56 | 55 | 4 | 41.0 | 14.0 | 22.0 |
| 40 | 40 | 51 | 58 | 57 | 4 | 42.0 | 14.0 | 22.0 |
| 43 | 43 | 54 | 61 | 60 | 4 | 42.0 | 14.0 | 22.0 |
| 45 | 45 | 56 | 63 | 62 | 4 | 42.0 | 14.0 | 22.0 |
| 48 | 48 | 59 | 66 | 65 | 4 | 42.0 | 14.0 | 22.0 |
| 50 | 50 | 62 | 70 | 67 | 4 | 43.0 | 15.0 | 23.0 |
| 53 | 53 | 65 | 73 | 70 | 4 | 43.0 | 15.0 | 23.0 |
| 55 | 55 | 67 | 75 | 72 | 4 | 43.0 | 15.0 | 23.0 |
| 58 | 58 | 70 | 78 | 79 | 4 | 56.0 | 15.0 | 23.0 |
| 60 | 60 | 72 | 80 | 81 | 4 | 56.0 | 15.0 | 23.0 |
| 63 | 63 | 75 | 83 | 84 | 4 | 55.0 | 15.0 | 23.0 |
| 65 | 65 | 77 | 85 | 86 | 4 | 55.0 | 15.0 | 23.0 |
| 68 | 68 | 81 | 90 | 89 | 4 | 55.0 | 18.0 | 26.0 |
| 70 | 70 | 83 | 92 | 91 | 4 | 56.0 | 18.0 | 26.0 |
| 75 | 75 | 88 | 97 | 99 | 4 | 56.0 | 18.0 | 26.0 |
| 80 | 80 | 95 | 105 | 104 | 4 | 56.0 | 18.2 | 26.2 |
| 85 | 85 | 100 | 110 | 109 | 4 | 56.0 | 18.2 | 26.2 |
| 90 | 90 | 105 | 115 | 114 | 4 | 56.0 | 18.2 | 26.2 |
| 95 | 95 | 110 | 120 | 119 | 4 | 56.0 | 17.2 | 25.2 |
| 100 | 100 | 115 | 125 | 124 | 4 | 56.0 | 17.2 | 25.2 |



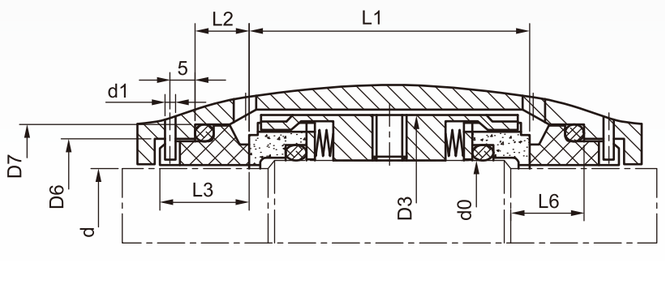
# GBH74-D

**技术参数：**
密封腔温度：–20℃+220℃
线速度：≤20m/s
密封腔压力：≤25bar
轴径尺寸：14–100mm

**Operating Limits:**
Temperature:-20℃+220℃
Speed:≤20m/s
Pressure:≤25bar
Standard Size:14-100mm



**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

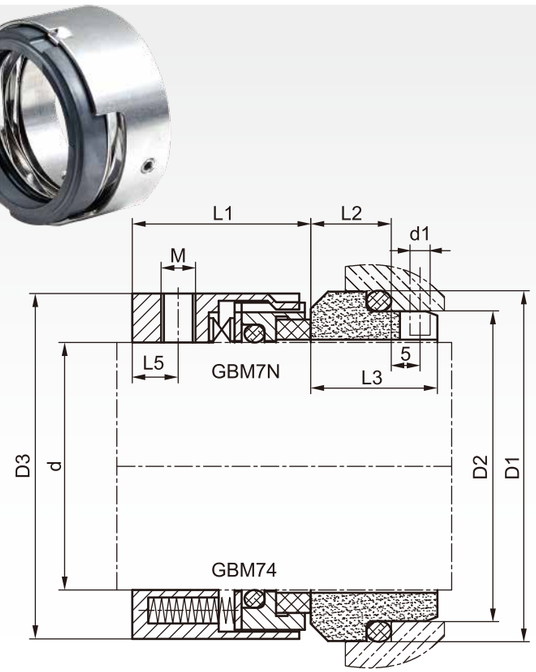



**Material:**
Seal ring:Car,Sic,Ssic,TC
Secondary seal:NBR,Viton,EPDM,Kalrez.
Spring and metal parts:304,316,HAST.C

| Size | d | d0 | D3 | D6 | D7 | d1 | L6 | L1 | L2 | L3 |
|---|---|---|---|---|---|---|---|---|---|---|
| 14 | 14 | 18 | 33 | 21 | 25 | 3 | 18 | 53.0 | 10.0 | 17.5 |
| 16 | 16 | 20 | 35 | 23 | 27 | 3 | 18 | 53.0 | 10.0 | 17.5 |
| 18 | 18 | 22 | 37 | 27 | 33 | 3 | 20 | 53.0 | 11.5 | 19.5 |
| 20 | 20 | 24 | 39 | 29 | 35 | 3 | 20 | 53.0 | 11.5 | 19.5 |
| 22 | 22 | 26 | 41 | 31 | 37 | 3 | 20 | 53.0 | 11.5 | 19.5 |
| 24 | 24 | 28 | 43 | 33 | 39 | 3 | 20 | 54.0 | 11.5 | 19.5 |
| 25 | 25 | 30 | 45 | 34 | 40 | 3 | 20 | 54.0 | 11.5 | 19.5 |
| 28 | 28 | 33 | 48 | 37 | 43 | 3 | 20 | 54.0 | 11.5 | 19.5 |
| 30 | 30 | 35 | 50 | 39 | 45 | 3 | 20 | 54.0 | 11.5 | 19.5 |
| 32 | 32 | 38 | 55 | 42 | 48 | 3 | 20 | 56.0 | 11.5 | 19.5 |
| 33 | 33 | 38 | 55 | 42 | 48 | 3 | 20 | 56.0 | 11.5 | 19.5 |
| 35 | 35 | 40 | 57 | 44 | 50 | 3 | 20 | 57.0 | 11.5 | 19.5 |
| 38 | 38 | 43 | 60 | 49 | 56 | 4 | 23 | 57.0 | 14.0 | 22.0 |
| 40 | 40 | 45 | 62 | 51 | 58 | 4 | 23 | 57.0 | 14.0 | 22.0 |
| 43 | 43 | 48 | 65 | 54 | 61 | 4 | 23 | 57.0 | 14.0 | 22.0 |
| 45 | 45 | 50 | 67 | 56 | 63 | 4 | 23 | 56.0 | 14.0 | 22.0 |
| 48 | 48 | 53 | 70 | 59 | 66 | 4 | 23 | 56.0 | 14.0 | 22.0 |
| 50 | 50 | 55 | 72 | 62 | 70 | 4 | 25 | 63.0 | 15.0 | 23.0 |
| 53 | 53 | 58 | 79 | 65 | 73 | 4 | 25 | 67.0 | 15.0 | 23.0 |
| 55 | 55 | 60 | 81 | 67 | 75 | 4 | 25 | 67.0 | 15.0 | 23.0 |
| 58 | 58 | 63 | 84 | 70 | 78 | 4 | 25 | 74.0 | 15.0 | 23.0 |
| 60 | 60 | 65 | 86 | 72 | 80 | 4 | 25 | 74.0 | 15.0 | 23.0 |
| 63 | 63 | 68 | 89 | 75 | 83 | 4 | 25 | 79.0 | 15.0 | 23.0 |
| 65 | 65 | 70 | 91 | 77 | 85 | 4 | 25 | 68.0 | 15.0 | 23.0 |
| 70 | 70 | 75 | 99 | 83 | 92 | 4 | 28 | 76.4 | 18.0 | 26.0 |
| 75 | 75 | 80 | 104 | 88 | 97 | 4 | 28 | 76.4 | 18.0 | 26.0 |
| 80 | 80 | 85 | 109 | 95 | 105 | 4 | 28 | 76.0 | 18.2 | 26.2 |
| 85 | 85 | 90 | 114 | 100 | 110 | 4 | 28 | 76.0 | 18.2 | 26.2 |
| 90 | 90 | 95 | 119 | 105 | 115 | 4 | 28 | 76.0 | 18.2 | 26.2 |
| 95 | 95 | 100 | 124 | 110 | 120 | 4 | 28 | 76.0 | 17.2 | 25.2 |
| 100 | 100 | 105 | 129 | 115 | 125 | 4 | 28 | 76.0 | 17.2 | 25.2 |

# GBM7N/M74






**技术参数：**
密封腔温度：-20℃+220℃
线速度：≤20m/s
密封腔压力：≤16bar
轴径尺寸：14-100mm

**Operating Limits:**
Temperature:-20℃+220℃
Speed:≤20m/s
Pressure:≤16bar
Standard Size:14-100mm

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

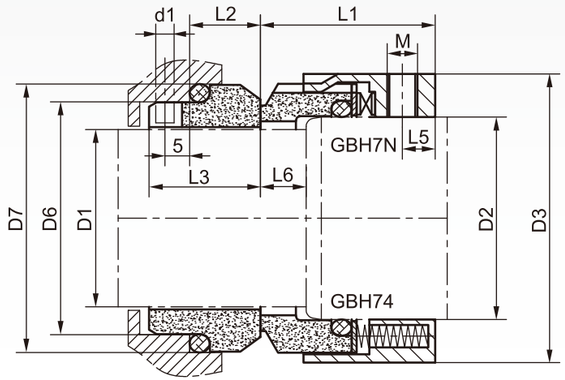
**Material:**
Seal ring:Car,Sic,Ssic,TC
Secondary seal:NBR,Viton,EPDM,Kalrez.
Spring and metal parts:304,316,HAST.C

| Size | d | D3 | D2 | D1 | d1 | L1 | L2 | L3 | L5 | M |
|---|---|---|---|---|---|---|---|---|---|---|
| 14 | 14 | 25 | 21 | 25 | 3 | 25.0 | 10.0 | 17.5 | 6 | M5 |
| 16 | 16 | 27 | 23 | 27 | 3 | 25.0 | 10.0 | 17.5 | 6 | M5 |
| 18 | 18 | 33 | 27 | 33 | 3 | 26.0 | 11.5 | 19.5 | 7 | M5 |
| 20 | 20 | 35 | 29 | 35 | 3 | 26.0 | 11.5 | 19.5 | 7 | M5 |
| 22 | 22 | 37 | 31 | 37 | 3 | 26.0 | 11.5 | 19.5 | 7 | M5 |
| 24 | 24 | 39 | 33 | 39 | 3 | 28.5 | 11.5 | 19.5 | 8 | M5 |
| 25 | 25 | 40 | 34 | 40 | 3 | 28.5 | 11.5 | 19.5 | 8 | M5 |
| 28 | 28 | 43 | 37 | 43 | 3 | 31.0 | 11.5 | 19.5 | 8 | M6 |
| 30 | 30 | 45 | 39 | 45 | 3 | 31.0 | 11.5 | 19.5 | 8 | M6 |
| 32 | 32 | 47 | 42 | 48 | 3 | 31.0 | 11.5 | 19.5 | 8 | M6 |
| 33 | 33 | 48 | 42 | 48 | 3 | 31.0 | 11.5 | 19.5 | 8 | M6 |
| 35 | 35 | 50 | 44 | 50 | 3 | 31.0 | 11.5 | 19.5 | 8 | M6 |
| 38 | 38 | 55 | 49 | 56 | 4 | 31.0 | 14.0 | 22.0 | 8 | M6 |
| 40 | 40 | 57 | 51 | 58 | 4 | 31.0 | 14.0 | 22.0 | 8 | M6 |
| 43 | 43 | 60 | 54 | 61 | 4 | 31.0 | 14.0 | 22.0 | 8 | M6 |
| 45 | 45 | 62 | 56 | 63 | 4 | 31.0 | 14.0 | 22.0 | 8 | M6 |
| 48 | 48 | 65 | 59 | 66 | 4 | 31.0 | 14.0 | 22.0 | 8 | M6 |
| 50 | 50 | 67 | 62 | 70 | 4 | 32.5 | 15.0 | 23.0 | 8 | M6 |
| 53 | 53 | 70 | 65 | 73 | 4 | 32.5 | 15.0 | 23.0 | 8 | M6 |
| 55 | 55 | 72 | 67 | 75 | 4 | 32.5 | 15.0 | 23.0 | 8 | M6 |
| 58 | 58 | 79 | 70 | 78 | 4 | 37.5 | 15.0 | 23.0 | 9 | M8 |
| 60 | 60 | 81 | 72 | 80 | 4 | 37.5 | 15.0 | 23.0 | 9 | M8 |
| 63 | 63 | 84 | 75 | 83 | 4 | 37.5 | 15.0 | 23.0 | 9 | M8 |
| 65 | 65 | 86 | 77 | 85 | 4 | 37.5 | 15.0 | 23.0 | 9 | M8 |
| 68 | 68 | 89 | 81 | 90 | 4 | 34.5 | 18.0 | 26.0 | 9 | M8 |
| 70 | 70 | 91 | 83 | 92 | 4 | 42.0 | 18.0 | 26.0 | 9 | M8 |
| 75 | 75 | 99 | 88 | 97 | 4 | 42.0 | 18.0 | 26.0 | 10 | M8 |
| 80 | 80 | 104 | 95 | 105 | 4 | 41.8 | 18.2 | 26.2 | 10 | M8 |
| 85 | 85 | 109 | 100 | 110 | 4 | 41.8 | 18.2 | 26.2 | 10 | M8 |
| 90 | 90 | 114 | 105 | 115 | 4 | 46.8 | 18.2 | 26.2 | 10 | M8 |
| 95 | 95 | 119 | 110 | 120 | 4 | 47.8 | 17.2 | 25.2 | 10 | M8 |
| 100 | 100 | 124 | 115 | 125 | 4 | 47.8 | 17.2 | 25.2 | 10 | M8 |



# GBH7N/H74






**技术参数：**
密封腔温度：-20℃+220℃
线速度：≤20m/s
密封腔压力：≤25bar
轴径尺寸：14-100mm

**Operating Limits:**
Temperature:-20℃+220℃
Speed:≤20m/s
Pressure:≤25bar
Standard Size:14-100mm

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

**Material:**
Seal ring:Car,Sic,Ssic,TC
Secondary seal:NBR,Viton,EPDM,Kalrez.
Spring and metal parts:304,316,HAST.C

| Size | D1 | D2 | D3 | D6 | D7 | d1 | L1 | L2 | L3 | L5 | L6 | M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14 | 14 | 18 | 33 | 21 | 25 | 3 | 32.5 | 10.0 | 17.5 | 6.0 | 8.0 | M5 |
| 16 | 16 | 20 | 35 | 23 | 27 | 3 | 32.5 | 10.0 | 17.5 | 6.0 | 8.0 | M5 |
| 18 | 18 | 22 | 37 | 27 | 33 | 3 | 33.5 | 11.5 | 19.5 | 7.0 | 8.5 | M5 |
| 20 | 20 | 24 | 39 | 29 | 35 | 3 | 33.5 | 11.5 | 19.5 | 5.5 | 8.5 | M5 |
| 22 | 22 | 26 | 41 | 31 | 37 | 3 | 33.5 | 11.5 | 19.5 | 8.0 | 8.5 | M5 |
| 24 | 24 | 28 | 43 | 33 | 39 | 3 | 36.0 | 11.5 | 19.5 | 5.5 | 8.5 | M6 |
| 25 | 25 | 30 | 45 | 34 | 40 | 3 | 36.0 | 11.5 | 19.5 | 5.5 | 8.5 | M6 |
| 28 | 28 | 33 | 48 | 37 | 43 | 3 | 38.5 | 11.5 | 19.5 | 8.0 | 8.5 | M6 |
| 30 | 30 | 35 | 50 | 39 | 45 | 3 | 38.5 | 11.5 | 19.5 | 8.0 | 8.5 | M6 |
| 32 | 32 | 38 | 55 | 42 | 48 | 3 | 38.5 | 11.5 | 19.5 | 8.0 | 8.5 | M5 |
| 33 | 33 | 38 | 55 | 42 | 48 | 3 | 38.5 | 11.5 | 19.5 | 8.0 | 8.5 | M6 |
| 35 | 35 | 40 | 57 | 44 | 50 | 3 | 38.5 | 11.5 | 19.5 | 8.0 | 8.5 | M6 |
| 38 | 38 | 43 | 60 | 49 | 56 | 4 | 38.5 | 14.0 | 22.0 | 8.0 | 9.0 | M6 |
| 40 | 40 | 45 | 62 | 51 | 58 | 4 | 38.5 | 14.0 | 22.0 | 8.0 | 9.0 | M6 |
| 43 | 43 | 48 | 65 | 54 | 61 | 4 | 38.5 | 14.0 | 22.0 | 8.0 | 9.0 | M6 |
| 45 | 45 | 50 | 67 | 56 | 63 | 4 | 38.5 | 14.0 | 22.0 | 8.0 | 9.0 | M6 |
| 48 | 48 | 53 | 70 | 59 | 66 | 4 | 38.5 | 14.0 | 22.0 | 8.0 | 9.0 | M6 |
| 50 | 50 | 55 | 72 | 62 | 70 | 4 | 42.5 | 15.0 | 23.0 | 8.0 | 10.0 | M6 |
| 53 | 53 | 58 | 79 | 65 | 73 | 4 | 42.5 | 15.0 | 23.0 | 9.0 | 10.0 | M8 |
| 55 | 55 | 60 | 81 | 67 | 75 | 4 | 42.5 | 15.0 | 23.0 | 9.0 | 10.0 | M8 |
| 58 | 58 | 63 | 84 | 70 | 78 | 4 | 47.5 | 15.0 | 23.0 | 9.0 | 10.0 | M8 |
| 60 | 60 | 65 | 86 | 72 | 80 | 4 | 47.5 | 15.0 | 23.0 | 9.0 | 10.0 | M8 |
| 63 | 63 | 68 | 89 | 75 | 83 | 4 | 47.5 | 15.0 | 23.0 | 9.0 | 10.0 | M8 |
| 65 | 65 | 70 | 91 | 77 | 85 | 4 | 47.5 | 15.0 | 23.0 | 9.0 | 10.0 | M8 |
| 70 | 70 | 75 | 99 | 83 | 92 | 4 | 52.0 | 18.0 | 26.0 | 10.0 | 10.0 | M8 |
| 75 | 75 | 80 | 104 | 88 | 97 | 4 | 52.0 | 18.0 | 26.0 | 10.0 | 10.0 | M8 |
| 80 | 80 | 85 | 109 | 95 | 105 | 4 | 51.8 | 18.2 | 26.2 | 10.0 | 9.8 | M8 |
| 85 | 85 | 90 | 114 | 100 | 110 | 4 | 56.8 | 18.2 | 26.2 | 10.0 | 9.8 | M8 |
| 90 | 90 | 95 | 119 | 105 | 115 | 4 | 56.8 | 18.2 | 26.2 | 10.0 | 9.8 | M8 |
| 95 | 95 | 100 | 124 | 110 | 120 | 4 | 57.8 | 17.2 | 26.2 | 10.0 | 10.8 | M8 |
| 100 | 100 | 105 | 129 | 115 | 125 | 4 | 57.8 | 17.2 | 26.2 | 10.0 | 10.8 | M8 |

# GBHJ92N

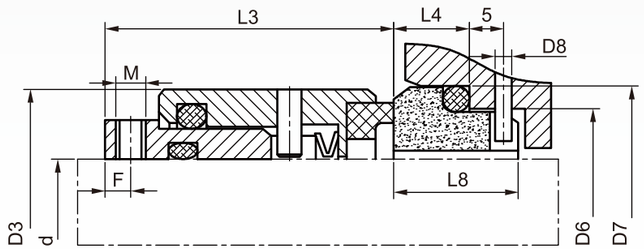
**技术参数:**
密封腔温度：-20℃+220℃
线速度：≤20m/s
密封腔压力：≤25bar
轴径尺寸：18-100mm

**Operating Limits:**
Temperature:-20℃+220℃
Speed:≤20m/s
Pressure:≤25bar
Standard Size:18-100mm

**材料组合:**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

**Material:**
Seal ring:Car,Sic,Ssic,TC
Secondary seal:NBR,Viton,EPDM,Kalrez.
Spring and metal parts:304,316,HAST.C



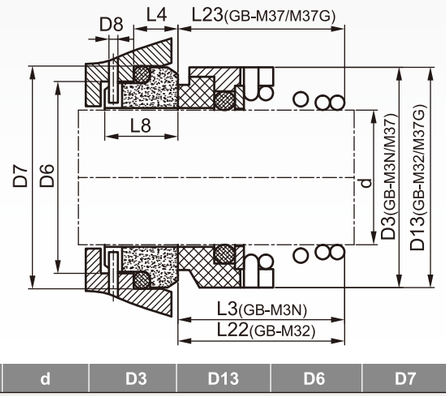



| Size | d | D3 | D6 | D7 | D8 | L3 | L4 | L8 | F | M |
|---|---|---|---|---|---|---|---|---|---|---|
| 18 | 18 | 32 | 27 | 33 | 3 | 30.5 | 7 | 15.0 | 3.0 | M4 |
| 20 | 20 | 34 | 29 | 35 | 3 | 30.5 | 7 | 15.0 | 3.0 | M4 |
| 22 | 22 | 36 | 31 | 37 | 3 | 30.5 | 7 | 15.0 | 3.0 | M4 |
| 24 | 24 | 38 | 33 | 39 | 3 | 33 | 7 | 15.0 | 3.5 | M5 |
| 25 | 25 | 39 | 34 | 40 | 3 | 33 | 7 | 15.0 | 3.5 | M5 |
| 28 | 28 | 42 | 37 | 43 | 3 | 35.5 | 7 | 15.0 | 3.5 | M5 |
| 30 | 30 | 44 | 39 | 45 | 3 | 35.5 | 7 | 15.0 | 3.5 | M5 |
| 32 | 32 | 47 | 42 | 48 | 3 | 35.5 | 7 | 15.0 | 3.5 | M5 |
| 33 | 33 | 47 | 42 | 48 | 3 | 35.5 | 7 | 15.0 | 3.5 | M5 |
| 35 | 35 | 49 | 44 | 50 | 3 | 35.5 | 7 | 15.0 | 3.5 | M5 |
| 38 | 38 | 54 | 49 | 56 | 4 | 37 | 8 | 16.0 | 4.0 | M5 |
| 40 | 40 | 56 | 51 | 58 | 4 | 37 | 8 | 16.0 | 4.0 | M5 |
| 43 | 43 | 59 | 54 | 61 | 4 | 37 | 8 | 16.0 | 4.0 | M5 |
| 45 | 45 | 61 | 56 | 63 | 4 | 37 | 8 | 16.0 | 4.0 | M5 |
| 48 | 48 | 64 | 59 | 66 | 4 | 37 | 8 | 16.0 | 4.0 | M5 |
| 50 | 50 | 66 | 62 | 70 | 4 | 38 | 9.5 | 17.0 | 4.5 | M6 |
| 53 | 53 | 69 | 65 | 73 | 4 | 38 | 9.5 | 17.0 | 4.5 | M6 |
| 55 | 55 | 71 | 67 | 75 | 4 | 38 | 9.5 | 17.0 | 4.5 | M6 |
| 58 | 58 | 78 | 70 | 78 | 4 | 42 | 10.5 | 18.0 | 4.5 | M6 |
| 60 | 60 | 80 | 72 | 80 | 4 | 42 | 10.5 | 18.0 | 4.5 | M6 |
| 63 | 63 | 83 | 75 | 83 | 4 | 42 | 10.5 | 18.0 | 4.5 | M6 |
| 65 | 65 | 85 | 77 | 85 | 4 | 42 | 10.5 | 18.0 | 4.5 | M6 |
| 68 | 68 | 88 | 81 | 90 | 4 | 41.5 | 11 | 18.5 | 4.5 | M6 |
| 70 | 70 | 90 | 83 | 92 | 4 | 48.5 | 11.5 | 19.0 | 5.0 | M6 |
| 75 | 75 | 99 | 88 | 97 | 4 | 48.5 | 11.5 | 19.0 | 5.5 | M8 |
| 80 | 80 | 104 | 95 | 105 | 4 | 48.5 | 11.5 | 19.0 | 5.5 | M8 |
| 85 | 85 | 109 | 100 | 110 | 4 | 48.5 | 11.5 | 19.0 | 5.5 | M8 |
| 90 | 90 | 114 | 105 | 115 | 4 | 52 | 13 | 20.5 | 5.5 | M8 |
| 95 | 95 | 119 | 110 | 120 | 4 | 52 | 13 | 20.5 | 5.5 | M8 |
| 100 | 100 | 124 | 115 | 125 | 4 | 52 | 13 | 20.5 | 5.5 | M8 |



# GBM3N/M32/M37/M37G






**技术参数:**
密封腔温度：-20℃+180℃
线速度：≤15m/s
密封腔压力：≤10bar
轴径尺寸：10-80mm

**Operating Limits:**
Temperature:-20℃+180℃
Speed:≤15m/s
Pressure:≤10bar
Standard Size:10-80mm

**材料组合:**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶
弹簧及金属件：304，316

**Material:**
Seal ring:Car,Sic,Ssic,TC
Secondary seal:NBR,Viton,EPDM
Spring and metal parts:304,316

| Size | d | D3 | D13 | D6 | D7 | D8 | L3 | L4 | L8 | L22 | L23 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 10 | 19 | 20.0 | 17 | 21 | 3 | 15.5 | 10.0 | 17.5 | 16.9 | |
| 12 | 12 | 21 | 22.0 | 19 | 23 | 3 | 16.0 | 10.0 | 17.5 | 17.4 | |
| 14 | 14 | 23 | 24.0 | 21 | 25 | 3 | 16.5 | 10.0 | 17.5 | 17.4 | 16.5 |
| 16 | 16 | 26 | 26.0 | 23 | 27 | 3 | 18.0 | 10.0 | 17.5 | 19.5 | 16.5 |
| 18 | 18 | 29 | 31.0 | 27 | 33 | 3 | 19.5 | 11.5 | 19.5 | 20.5 | 18.0 |
| 20 | 20 | 31 | 34.0 | 29 | 35 | 3 | 22.0 | 11.5 | 19.5 | 22.0 | 19.0 |
| 22 | 22 | 33 | 36.0 | 31 | 37 | 3 | 21.5 | 11.5 | 19.5 | 23.5 | 20.5 |
| 24 | 24 | 35 | 38.0 | 33 | 39 | 3 | 23.5 | 11.5 | 19.5 | 25.0 | 22.0 |
| 25 | 25 | 36 | 39.0 | 34 | 40 | 3 | 26.5 | 11.5 | 19.5 | 26.5 | 23.5 |
| 28 | 28 | 40 | 42.0 | 37 | 43 | 3 | 26.5 | 11.5 | 19.5 | 26.5 | 24.5 |
| 30 | 30 | 43 | 44.0 | 39 | 45 | 3 | 26.5 | 11.5 | 19.5 | 25.0 | 24.5 |
| 32 | 32 | 46 | 46.0 | 42 | 48 | 3 | 28.5 | 11.5 | 19.5 | 28.5 | 28.0 |
| 33 | 33 | 47 | 47.0 | 42 | 48 | 3 | 28.5 | 11.5 | 19.5 | | |
| 35 | 35 | 49 | 49.0 | 44 | 50 | 3 | 28.5 | 11.5 | 19.5 | 28.5 | 28.0 |
| 38 | 38 | 53 | 54.0 | 49 | 56 | 4 | 33.5 | 14.0 | 22.0 | 32.2 | 31.0 |
| 40 | 40 | 56 | 56.0 | 51 | 58 | 4 | 36.0 | 14.0 | 22.0 | 34.7 | 34.0 |
| 43 | 43 | 59 | 59.0 | 54 | 61 | 4 | 38.5 | 14.0 | 22.0 | | |
| 45 | 45 | 61 | 61.0 | 56 | 63 | 4 | 39.5 | 14.0 | 22.0 | 39.2 | 36.5 |
| 48 | 48 | 64 | 64.0 | 59 | 66 | 4 | 46.0 | 14.0 | 22.0 | 44.7 | 42.0 |
| 50 | 50 | 66 | 66.0 | 62 | 70 | 4 | 45.0 | 15.0 | 23.0 | 45.7 | 43.0 |
| 53 | 53 | 69 | 69.0 | 65 | 73 | 4 | 47.0 | 15.0 | 23.0 | | |
| 55 | 55 | 71 | 71.0 | 67 | 75 | 4 | 49.0 | 15.0 | 23.0 | 49.0 | 47.0 |
| 58 | 58 | 76 | 78.0 | 70 | 78 | 4 | 55.0 | 15.0 | 23.0 | 52.0 | 50.0 |
| 60 | 60 | 78 | 79.0 | 72 | 80 | 4 | 55.0 | 15.0 | 23.0 | 53.0 | 51.0 |
| 63 | 63 | 83 | 83.0 | 75 | 83 | 4 | 55.0 | 15.0 | 23.0 | | |
| 65 | 65 | 84 | 85.0 | 77 | 85 | 4 | 55.0 | 15.0 | 23.0 | 54.3 | 52.0 |
| 68 | 68 | 88 | 88.0 | 81 | 90 | 4 | 55.0 | 18.0 | 26.0 | 55.3 | 52.7 |
| 70 | 70 | 90 | 90.0 | 83 | 92 | 4 | 57.0 | 18.0 | 26.0 | 56.3 | 54.0 |
| 75 | 75 | 98 | 98.0 | 88 | 97 | 4 | 62.0 | 18.0 | 26.0 | 56.3 | 54.0 |
| 80 | 80 | 100 | 103.0 | 95 | 105 | 4 | 61.8 | 18.2 | 26.2 | 59.3 | 58.0 |

# GB502

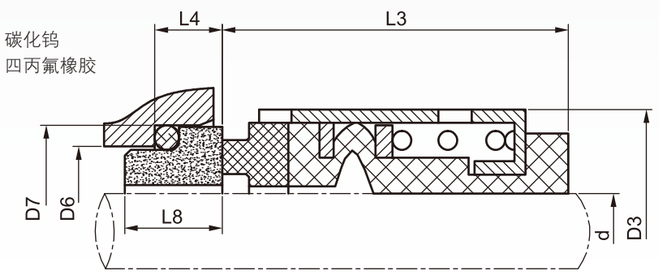
**技术参数：**
密封腔温度：–20℃+120℃
线速度：≤15m/s
密封腔压力：≤25bar
轴径尺寸：14–100mm

**Operating Limits:**
Temperature:-20℃+120℃
Speed:≤15m/s
Pressure:≤25bar
Standard size:14-100mm



**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，四丙氟橡胶
弹簧及金属件：304，316

**Material:**
Seal ring: Car,Sic,Ssic,TC
Secondary seal: NBR,EPDM,Viton,Aflas
Spring and metal parts:304,316




| Size | d | D3 | D6 | D7 | L3 | L4 | L8 |
|---|---|---|---|---|---|---|---|
| 14 | 14 | 24 | 21 | 25 | 23.0 | 12.0 | 12.8 |
| 16 | 16 | 26 | 23 | 27 | 23.0 | 12.0 | 12.8 |
| 18 | 18 | 32 | 27 | 33 | 24.0 | 13.5 | 14.5 |
| 20 | 20 | 34 | 29 | 35 | 24.0 | 13.5 | 14.5 |
| 22 | 22 | 36 | 31 | 37 | 24.0 | 13.5 | 14.5 |
| 24 | 24 | 38 | 33 | 39 | 26.7 | 13.3 | 14.3 |
| 25 | 25 | 39 | 34 | 40 | 27.0 | 13.0 | 14.0 |
| 28 | 28 | 42 | 37 | 43 | 30.0 | 12.5 | 13.5 |
| 30 | 30 | 44 | 39 | 45 | 30.5 | 12.0 | 13.0 |
| 32 | 32 | 46 | 42 | 48 | 30.5 | 12.0 | 13.0 |
| 33 | 33 | 47 | 42 | 48 | 30.5 | 12.0 | 13.0 |
| 35 | 35 | 49 | 44 | 50 | 30.5 | 12.0 | 13.0 |
| 38 | 38 | 54 | 49 | 56 | 32.0 | 13.0 | 14.0 |
| 40 | 40 | 56 | 51 | 58 | 32.0 | 13.0 | 14.0 |
| 43 | 43 | 59 | 54 | 61 | 32.0 | 13.0 | 14.0 |
| 45 | 45 | 61 | 56 | 63 | 32.0 | 13.0 | 14.0 |
| 48 | 48 | 64 | 59 | 66 | 32.0 | 13.0 | 14.0 |
| 50 | 50 | 66 | 62 | 70 | 34.0 | 13.5 | 14.5 |
| 53 | 53 | 69 | 65 | 73 | 34.0 | 13.5 | 14.5 |
| 55 | 55 | 71 | 67 | 75 | 34.0 | 13.5 | 14.5 |
| 58 | 58 | 78 | 70 | 78 | 39.0 | 13.5 | 14.2 |
| 60 | 60 | 80 | 72 | 80 | 39.0 | 13.5 | 14.2 |
| 63 | 63 | 83 | 75 | 83 | 39.0 | 13.5 | 14.2 |
| 65 | 65 | 85 | 77 | 85 | 39.0 | 13.5 | 14.2 |
| 68 | 68 | 88 | 81 | 90 | 39.0 | 13.5 | 14.2 |
| 70 | 70 | 89 | 83 | 92 | 45.5 | 14.5 | 15.2 |
| 75 | 75 | 96 | 88 | 97 | 45.5 | 14.5 | 15.2 |
| 80 | 80 | 104 | 95 | 105 | 45.0 | 15.0 | 15.7 |
| 85 | 85 | 108 | 100 | 110 | 45.0 | 15.0 | 15.7 |
| 90 | 90 | 114 | 105 | 115 | 50.0 | 15.0 | 15.7 |
| 95 | 95 | 118 | 110 | 120 | 50.0 | 15.0 | 15.7 |
| 100 | 100 | 124 | 115 | 125 | 50.0 | 15.0 | 15.7 |



# GB2100

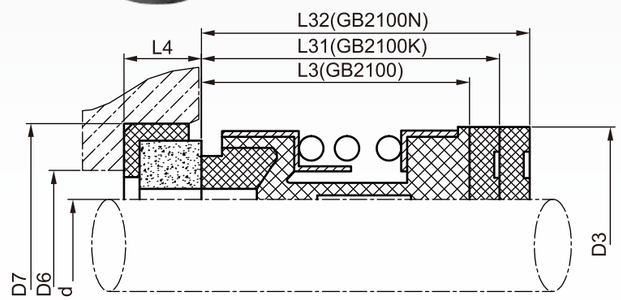


**技术参数：**
密封腔温度：–40℃+150℃
线速度：≤15m/s
密封腔压力：≤16bar
轴径尺寸：10–100mm

**Operating Limits:**
Temperature:-40℃+150℃
Speed:≤15m/s
Pressure:≤16bar
Standard size:10-100mm

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，四丙氟橡胶
弹簧及金属件：304，316

**Material:**
Seal ring: Car,Sic,Ssic,TC
Secondary seal: NBR,EPDM,Viton,Aflas
Spring and metal parts:304,316




| Size | d | D3 | D6 | D7 | L3 | L31 | L32 | L4 |
|---|---|---|---|---|---|---|---|---|
| 10 | 10 | 20 | 15 | 21 | 15 | 27.5 | 35.0 | 5.0 |
| 12 | 12 | 22 | 17 | 23 | 15 | 26.5 | 34.0 | 6.0 |
| 14 | 14 | 24 | 19 | 25 | 15 | 29.0 | 34.0 | 6.0 |
| 15 | 15 | 25 | 20 | 26 | 15 | 29.0 | 34.0 | 6.0 |
| 16 | 16 | 26 | 23 | 27 | 15 | 29.0 | 34.0 | 6.0 |
| 18 | 18 | 32 | 25 | 33 | 20 | 31.5 | 39.0 | 6.0 |
| 20 | 20 | 34 | 27 | 35 | 20 | 31.5 | 39.0 | 6.0 |
| 22 | 22 | 36 | 29 | 37 | 20 | 31.5 | 39.0 | 6.0 |
| 24 | 24 | 38 | 31 | 39 | 20 | 34.0 | 44.0 | 6.0 |
| 25 | 25 | 39 | 32 | 40 | 20 | 34.0 | 44.0 | 6.0 |
| 28 | 28 | 42 | 35 | 43 | 26 | 36.5 | 44.0 | 6.0 |
| 30 | 30 | 44 | 37 | 45 | 26 | 35.5 | 43.0 | 7.0 |
| 32 | 32 | 46 | 40 | 48 | 26 | 35.5 | 48.0 | 7.0 |
| 33 | 33 | 47 | 40 | 48 | 26 | 35.5 | 48.0 | 7.0 |
| 35 | 35 | 49 | 42 | 50 | 26 | 34.5 | 47.0 | 8.0 |
| 38 | 38 | 54 | 47 | 56 | 30 | 37.0 | 47.0 | 8.0 |
| 40 | 40 | 56 | 49 | 58 | 30 | 37.0 | 47.0 | 8.0 |
| 43 | 43 | 59 | 52 | 61 | 30 | 37.0 | 52.0 | 8.0 |
| 45 | 45 | 61 | 54 | 63 | 30 | 37.0 | 52.0 | 8.0 |
| 48 | 48 | 64 | 57 | 66 | 30 | 35.0 | 50.0 | 10.0 |
| 50 | 50 | 66 | 60 | 70 | 30 | 37.5 | 50.0 | 10.0 |
| 53 | 53 | 69 | 63 | 73 | 30 | 37.5 | 60.0 | 10.0 |
| 55 | 55 | 71 | 65 | 75 | 30 | 37.5 | 60.0 | 10.0 |
| 58 | 58 | 78 | 68 | 78 | 33 | 42.5 | 60.0 | 10.0 |
| 60 | 60 | 80 | 70 | 80 | 33 | 40.5 | 58.0 | 12.0 |
| 63 | 63 | 83 | 73 | 83 | 33 | 40.5 | 58.0 | 12.0 |
| 65 | 65 | 85 | 75 | 85 | 33 | 40.5 | 68.0 | 12.0 |
| 68 | 68 | 88 | 79 | 90 | 33 | 40.5 | 68.0 | 12.0 |
| 70 | 70 | 90 | 81 | 92 | 33 | 48.0 | 68.0 | 12.0 |
| 75 | 75 | 99 | 86 | 97 | 40 | 48.0 | 68.0 | 12.0 |
| 80 | 80 | 104 | 92 | 105 | 40 | 47.5 | 77.5 | 12.5 |
| 85 | 85 | 109 | 97 | 110 | 40 | 47.5 | 77.5 | 12.5 |
| 90 | 90 | 114 | 102 | 115 | 40 | 52.5 | 77.5 | 12.5 |
| 95 | 95 | 119 | 117 | 120 | 40 | 52.5 | 77.5 | 12.5 |
| 100 | 100 | 124 | 122 | 125 | 40 | 52.5 | 77.5 | 12.5 |

# GBBIA

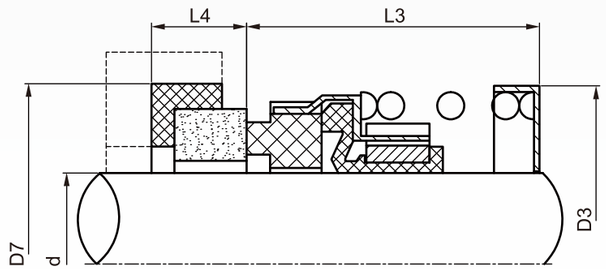
**技术参数：**
密封腔温度：–20℃+120℃
线速度：≤15m/s
密封腔压力：≤10bar
轴径尺寸：14–90mm

**Operating Limits:**
Temperature:-20℃+120℃
Speed: ≤15m/s
Pressure: ≤10bar
Standard size:14-90mm

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，
四丙氟橡胶
弹簧及金属件：304，316

**Material:**
Seal ring: Car,Sic,Ssic,TC
Secondary seal: NBR,EPDM,Viton,Aflas
Spring and metal parts:304,316






| Size | d | D3 | D7 | L3 | L4 |
|---|---|---|---|---|---|
| 14 | 14 | 27.5 | 30 | 19.0 | 5.0 |
| 16 | 16 | 28.5 | 32 | 21.0 | 5.0 |
| 18 | 18 | 31.2 | 35 | 22.5 | 7.5 |
| 20 | 20 | 31.7 | 35 | 21.0 | 8.0 |
| 25 | 25 | 40.2 | 40 | 25.5 | 8.0 |
| 28 | 28 | 44.1 | 43 | 25.5 | 8.0 |
| 30 | 30 | 45.1 | 45 | 25.5 | 9.0 |
| 32 | 32 | 49.0 | 48 | 33.5 | 9.0 |
| 33 | 33 | 49.0 | 48 | 33.5 | 9.0 |
| 35 | 35 | 50.2 | 50 | 33.5 | 9.0 |
| 38 | 38 | 55.3 | 56 | 33.5 | 9.0 |
| 40 | 40 | 57.0 | 58 | 33.5 | 9.0 |
| 43 | 43 | 60.7 | 61 | 36.5 | 9.5 |
| 45 | 45 | 62.5 | 63 | 38.0 | 9.5 |
| 48 | 48 | 66.5 | 66 | 38.0 | 9.5 |
| 50 | 50 | 68.6 | 70 | 38.0 | 9.5 |
| 53 | 53 | 70.8 | 73 | 41.0 | 9.5 |
| 55 | 55 | 72.4 | 75 | 41.0 | 9.5 |
| 58 | 58 | 80.0 | 78 | 42.0 | 9.5 |
| 60 | 60 | 83.0 | 80 | 42.0 | 9.5 |
| 65 | 65 | 87.2 | 85 | 42.0 | 10.0 |
| 70 | 70 | 91.6 | 92 | 45.0 | 11.0 |
| 75 | 75 | 99.4 | 97 | 47.0 | 12.0 |
| 80 | 80 | 104.6 | 104 | 55.0 | 12.0 |
| 85 | 85 | 111.0 | 109 | 64.0 | 12.0 |
| 90 | 90 | 113.0 | 114 | 66.0 | 12.0 |



# GBEA560

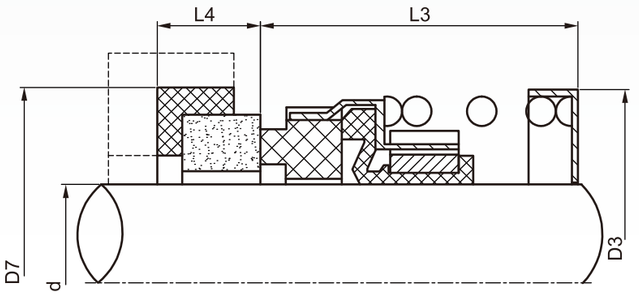
**技术参数：**
密封腔温度：–20℃+100℃
线速度：≤5m/s
密封腔压力：≤7bar
轴径尺寸：8–50mm（0.375"–2.000"）

**Operating Limits:**
Temperature:-20℃+100℃
Speed:≤5m/s
Pressure:≤7bar
Standard size:8-50mm or 0.375"-2"

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，
碳化钨，陶瓷
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，
四丙氟橡胶
弹簧及金属件：304，316

**Material:**
Seal ring: Car,Sic,Ssic,Ceramic,TC
Secondary seal: NBR,EPDM,Viton,Aflas
Spring and metal parts:304,316



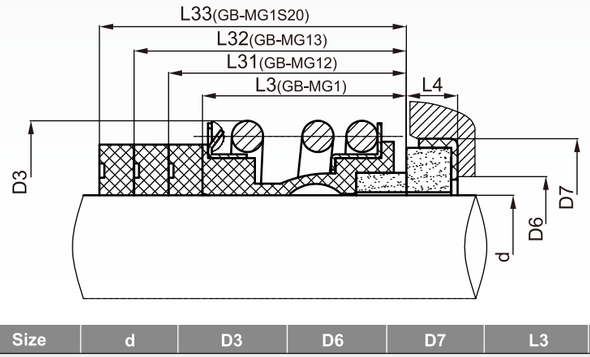



| d(mm) | D3 | D7 | L3 | L4 |
|---|---|---|---|---|
| 8 | 18.2 | 21 | 11 | 7 |
| 9 | 18.2 | 24 | 16 | 7 |
| 10 | 20.6 | 24 | 16 | 7 |
| 11 | 20.6 | 24 | 16 | 7 |
| 12 | 21.8 | 26 | 17 | 7 |
| 13 | 21.8 | 26 | 17 | 7 |
| 14 | 26.4 | 28 | 18 | 7 |
| 15 | 26.4 | 28 | 18 | 7 |
| 16 | 26.4 | 32 | 19 | 8 |
| 17 | 28.5 | 32 | 19 | 8 |
| 18 | 29.5 | 35 | 19 | 8 |
| 19 | 29.5 | 35 | 19 | 8 |
| 20 | 31.6 | 38 | 20 | 8 |
| 22 | 33.6 | 40 | 20 | 8 |
| 25 | 39.6 | 44 | 20 | 9 |
| 28 | 45 | 46 | 21 | 9 |
| 30 | 46.6 | 50 | 22 | 9 |
| 32 | 46.6 | 54 | 24 | 9 |
| 35 | 50.8 | 58 | 26 | 10 |
| 38 | 54.3 | 60 | 27 | 10 |
| 40 | 57.3 | 64 | 28 | 10 |
| 45 | 61.3 | 66 | 30 | 10 |
| 50 | 67.8 | 72 | 32 | 10 |

| Size/inch | d | D3 | D7 | L3 | L4 |
|---|---|---|---|---|---|
| 0.375 | 9.525 | 23.5 | 22.225 | 22.2 | 6.4 |
| 0.500 | 12.700 | 26.0 | 25.400 | 22.2 | 6.4 |
| 0.625 | 15.875 | 30.0 | 31.750 | 23.8 | 8.7 |
| 0.750 | 19.050 | 32.5 | 34.925 | 23.8 | 8.7 |
| 0.875 | 22.225 | 37.5 | 38.100 | 25.4 | 8.7 |
| 1.000 | 25.400 | 44.0 | 41.275 | 27.0 | 9.5 |
| 1.125 | 28.575 | 48.0 | 44.450 | 28.6 | 9.5 |
| 1.250 | 31.750 | 50.0 | 47.625 | 28.6 | 9.5 |
| 1.375 | 34.925 | 54.5 | 50.800 | 30.2 | 9.5 |
| 1.500 | 38.100 | 58.5 | 53.975 | 30.2 | 9.5 |
| 1.625 | 41.275 | 64.0 | 60.325 | 36.5 | 11.1 |
| 1.750 | 44.450 | 67.0 | 63.500 | 36.5 | 11.1 |
| 1.875 | 47.625 | 71.0 | 66.675 | 39.7 | 11.1 |
| 2.000 | 50.800 | 73.5 | 69.850 | 39.7 | 11.1 |

# GBMG1/MG12/MG13






**技术参数：**
密封腔温度：–20℃+120℃
线速度：≤10m/s
密封腔压力：≤12bar
轴径尺寸：10–100mm

**Operating Limits:**
Temperature:-20℃+120℃
Speed:≤10m/s
Pressure:≤12bar
Standard size:10-100mm

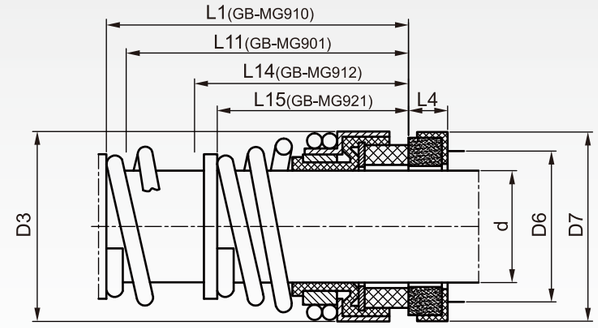
**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，四丙氟橡胶
弹簧及金属件：304，316

**Material:**
Seal ring: Car,Sic,Ssic,TC
Secondary seal: NBR,EPDM,Viton,Aflas
Spring and metal parts:304,316

| Size | d | D3 | D6 | D7 | L3 | L31 | L32 | L33 | L4 |
|---|---|---|---|---|---|---|---|---|---|
| 10 | 10 | 22.5 | 17 | 21 | 14.5 | 25.9 | 33.4 | 25.0 | 6.6 |
| 12 | 12 | 25.0 | 19 | 23 | 15.0 | 25.9 | 33.4 | 25.0 | 6.6 |
| 14 | 14 | 28.5 | 21 | 25 | 17.0 | 28.4 | 33.4 | 25.0 | 6.6 |
| 15 | 15 | 28.5 | - | - | 17.0 | 28.4 | 33.4 | 25.0 | - |
| 16 | 16 | 28.5 | 23 | 27 | 17.0 | 28.4 | 33.4 | 25.0 | 6.6 |
| 18 | 18 | 32.0 | 27 | 33 | 19.5 | 30.0 | 37.5 | 25.0 | 7.5 |
| 19 | 19 | 37.0 | - | - | 21.5 | 30.0 | 37.5 | 25.0 | - |
| 20 | 20 | 37.0 | 29 | 35 | 21.5 | 30.0 | 37.5 | 25.0 | 7.5 |
| 22 | 22 | 37.0 | 31 | 37 | 21.5 | 30.0 | 37.5 | 25.0 | 7.5 |
| 24 | 24 | 42.5 | 33 | 39 | 22.5 | 32.5 | 42.5 | 25.0 | 7.5 |
| 25 | 25 | 42.5 | 34 | 40 | 23.0 | 32.5 | 42.5 | 25.0 | 7.5 |
| 28 | 28 | 49.0 | 37 | 43 | 26.5 | 35.0 | 42.5 | 33.0 | 7.5 |
| 30 | 30 | 49.0 | 39 | 45 | 26.5 | 35.0 | 42.5 | 33.0 | 7.5 |
| 32 | 32 | 53.5 | 42 | 48 | 27.5 | 35.0 | 47.5 | 33.0 | 7.5 |
| 33 | 33 | 53.5 | 42 | 48 | 27.5 | 35.0 | 47.5 | 33.0 | 7.5 |
| 35 | 35 | 57.0 | 44 | 50 | 28.5 | 35.0 | 47.5 | 33.0 | 7.5 |
| 38 | 38 | 59.0 | 49 | 56 | 30.0 | 36.0 | 46.0 | 33.0 | 9.0 |
| 40 | 40 | 62.0 | 51 | 58 | 30.0 | 36.0 | 46.0 | 33.0 | 9.0 |
| 42 | 42 | 65.5 | - | - | 30.0 | 36.0 | 51.0 | 41.0 | - |
| 43 | 43 | 65.5 | 54 | 61 | 30.0 | 36.0 | 51.0 | 41.0 | 9.0 |
| 45 | 45 | 68.0 | 56 | 63 | 30.0 | 36.0 | 51.0 | 41.0 | 9.0 |
| 48 | 48 | 70.5 | 59 | 66 | 30.5 | 36.0 | 51.0 | 41.0 | 9.0 |
| 50 | 50 | 74.0 | 62 | 70 | 30.5 | 38.0 | 50.5 | 41.0 | 9.5 |
| 53 | 53 | 78.5 | 65 | 73 | 33.0 | 36.5 | 59.0 | 41.0 | 11.0 |
| 55 | 55 | 81.0 | 67 | 75 | 35.0 | 36.5 | 59.0 | 41.0 | 11.0 |
| 58 | 58 | 85.5 | 70 | 78 | 37.0 | 41.5 | 59.0 | 41.0 | 11.0 |
| 60 | 60 | 88.5 | 72 | 80 | 38.0 | 41.5 | 59.0 | 41.0 | 11.0 |
| 65 | 65 | 93.5 | 77 | 85 | 40.0 | 41.5 | 69.0 | 49.0 | 11.0 |
| 68 | 68 | 96.5 | 81 | 90 | 40.0 | 41.2 | 68.7 | 49.0 | 11.3 |
| 70 | 70 | 99.5 | 83 | 92 | 40.0 | 48.7 | 68.7 | 49.0 | 11.3 |
| 75 | 75 | 107.0 | 88 | 97 | 40.0 | 48.7 | 68.7 | 52.0 | 11.3 |
| 80 | 80 | 112.0 | 95 | 105 | 40.0 | 48.0 | 78.0 | 56.0 | 12.0 |
| 85 | 85 | 120.0 | 100 | 110 | 41.0 | 46.0 | 76.0 | 56.0 | 14.0 |
| 90 | 90 | 127.0 | 105 | 115 | 45.0 | 51.0 | 76.0 | 59.0 | 14.0 |
| 95 | 95 | 132.0 | 110 | 120 | 46.0 | 51.0 | 76.0 | 59.0 | 14.0 |
| 100 | 100 | 137.0 | 115 | 125 | 47.0 | 51.0 | 76.0 | 62.0 | 14.0 |



# GBMG9






**技术参数：**
密封腔温度：–20℃+140℃
线速度：≤10m/s
密封腔压力：≤12bar
轴径尺寸：10–100mm

**Operating Limits:**
Temperature:-20℃+140℃
Speed ≤10 m/s
Pressure :≤12 bar
Shaft diameter: 10 -100 mm

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，四丙氟橡胶
弹簧及金属件：304，316

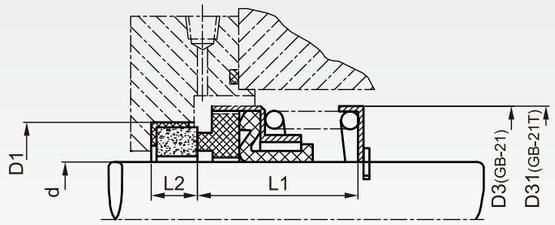
**Material:**
Seal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton, EPDM,Aflas
Spring and metal parts:304,316

| Size/Inch | d | D3 | D6 | D7 | L4 | L1 | L11 | L14 | L15 |
|---|---|---|---|---|---|---|---|---|---|
| 0.375 | 9.5 | 18.8 | 15.88 | 22.23 | 7.95 | 44.0 | 30.15 | 25.0 | 20.63 |
| 0.500 | 12.7 | 22.3 | 19.05 | 25.40 | 7.95 | 44.0 | 30.15 | 25.0 | 20.63 |
| 0.625 | 15.8 | 26.5 | 23.80 | 31.75 | 10.31 | 44.0 | 33.33 | 25.0 | 22.23 |
| 0.750 | 19.0 | 29.5 | 26.97 | 34.93 | 10.31 | 44.0 | 33.33 | 25.0 | 22.23 |
| 0.875 | 22.2 | 33.0 | 30.15 | 38.10 | 10.31 | 44.0 | 34.93 | 25.0 | 23.80 |
| 1.000 | 25.4 | 38.0 | 33.32 | 41.28 | 11.10 | 44.0 | 39.70 | 25.0 | 25.40 |
| 1.125 | 28.5 | 41.5 | 36.50 | 44.45 | 11.10 | 60.0 | 41.27 | 33.0 | 27.00 |
| 1.250 | 31.7 | 45.0 | 39.70 | 47.63 | 11.10 | 60.0 | 41.27 | 33.0 | 27.00 |
| 1.375 | 34.9 | 48.0 | 42.85 | 50.80 | 11.10 | 60.0 | 42.85 | 33.0 | 28.57 |
| 1.500 | 38.1 | 52.5 | 46.05 | 53.98 | 11.10 | 60.0 | 42.85 | 33.0 | 28.57 |
| 1.625 | 41.2 | 57.0 | 50.80 | 60.33 | 12.70 | 60.0 | 50.80 | 33.0 | 34.93 |
| 1.750 | 44.4 | 60.5 | 53.97 | 63.50 | 12.70 | 71.0 | 50.80 | 41.0 | 34.93 |
| 1.875 | 47.6 | 64.0 | 57.15 | 66.68 | 12.70 | 71.0 | 53.98 | 41.0 | 38.10 |
| 2.000 | 50.8 | 66.0 | 60.33 | 69.85 | 12.70 | 72.5 | 53.98 | 42.5 | 38.10 |
| 2.125 | 53.9 | 71.0 | 60.33 | 76.20 | 14.27 | 71.0 | 60.33 | 41.0 | 42.85 |
| 2.250 | 57.1 | 76.5 | 61.90 | 79.38 | 14.27 | 71.0 | 60.33 | 41.0 | 42.85 |
| 2.375 | 60.3 | 78.5 | 65.10 | 82.55 | 14.27 | 71.0 | 63.50 | 41.0 | 46..06 |
| 2.500 | 63.5 | 82.0 | 68.25 | 85.73 | 14.27 | 71.0 | 63.50 | 41.0 | 46.06 |
| 2.625 | 66.6 | 84.0 | 71.42 | 85.73 | 15.88 | 70.0 | 69.85 | 49.0 | 49.19 |
| 2.750 | 69.8 | 89.0 | 74.60 | 88.90 | 15.88 | 70.0 | 69.85 | 49.0 | 49.19 |
| 2.875 | 73.0 | 92.5 | 77.77 | 95.25 | 15.88 | 73.0 | 73.02 | 52.0 | 52.37 |
| 3.000 | 76.2 | 95.5 | 80.95 | 98.43 | 15.88 | 73.0 | 73.02 | 52.0 | 52.37 |
| 3.125 | 79.3 | 101.6 | 84.12 | 101.60 | 19.84 | 79.0 | 79.37 | 56.0 | 55.55 |
| 3.250 | 82.5 | | 87.30 | 104.78 | 19.84 | 79.0 | 79.37 | 56.0 | 55.55 |
| 3.375 | 85.7 | | 90.47 | 107.95 | 19.84 | 79.0 | 79.37 | 56.0 | 55.55 |
| 3.500 | 88.9 | 111.5 | 93.65 | 111.13 | 19.84 | 79.0 | 79.37 | 56.0 | 55.55 |
| 3.625 | 92.0 | | 96.82 | 114.30 | 19.84 | 83.0 | 82.55 | 59.0 | 58.72 |
| 3.750 | 95.2 | 118.0 | 100.00 | 117.48 | 19.84 | 83.0 | 82.55 | 59.0 | 58.72 |
| 3.875 | 98.4 | | 103.17 | 120.65 | 19.84 | 83.0 | 85.72 | 62.0 | 61.90 |
| 4.000 | 101.6 | 125.0 | 106.35 | 123.83 | 19.84 | 83.0 | 85.72 | 62.0 | 61.90 |

| Size/Metric | d | D3 | D6 | D7 | L4 | L1 | L11 | L14 | L15 |
|---|---|---|---|---|---|---|---|---|---|
| 10 | 10 | 19.6 | 17.0 | 21.0 | 6.6 | 44 | 33.4 | 25.9 | 25.0 |
| 12 | 12 | 21.6 | 19.0 | 23.0 | 6.6 | 44 | 33.4 | 25.9 | 25.0 |
| 14 | 14 | 24.0 | 21.0 | 25.0 | 6.6 | 44 | 33.4 | 28.4 | 25.0 |
| 15 | 15 | 25.0 | | | | 44 | | | 25.0 |
| 16 | 16 | 26.5 | 23.0 | 27.0 | 6.6 | 44 | 33.4 | 28.4 | 25.0 |
| 18 | 18 | 29.0 | 27.0 | 33.0 | 7.5 | 44 | 37.5 | 30.0 | 25.0 |
| 20 | 20 | 31.5 | 29.0 | 35.0 | 7.5 | 44 | 37.5 | 30.0 | 25.0 |
| 22 | 22 | 33.0 | 31.0 | 37.0 | 7.5 | 44 | 37.5 | 30.0 | 25.0 |
| 24 | 24 | 37.0 | 33.0 | 39.0 | 7.5 | 44 | 42.5 | 32.5 | 25.0 |
| 25 | 25 | 38.0 | 34.0 | 40.0 | 7.5 | 44 | 42.5 | 32.5 | 25.0 |
| 28 | 28 | 41.0 | 37.0 | 43.0 | 7.5 | 60 | 42.5 | 35.0 | 33.0 |
| 30 | 30 | 43.0 | 39.0 | 45.0 | 7.5 | 60 | 42.5 | 35.0 | 33.0 |
| 32 | 32 | 45.0 | 42.0 | 48.0 | 7.5 | 60 | 47.5 | 35.0 | 33.0 |
| 33 | 33 | 46.0 | 42.0 | 42.0 | 7.5 | 60 | 47.5 | 35.0 | 33.0 |
| 35 | 35 | 48.0 | 44.0 | 50.0 | 7.5 | 60 | 47.5 | 35.0 | 33.0 |
| 38 | 38 | 52.5 | 49.0 | 56.0 | 9.0 | 60 | 46.0 | 36.0 | 33.0 |
| 40 | 40 | 55.5 | 51.0 | 58.0 | 9.0 | 60 | 46.0 | 36.0 | 33.0 |
| 43 | 43 | 58.5 | 54.0 | 61.0 | 9.0 | 71 | 51.0 | 36.0 | 41.0 |
| 45 | 45 | 60.5 | 56.0 | 63.0 | 9.0 | 71 | 51.0 | 36.0 | 41.0 |
| 48 | 48 | 64.0 | 59.0 | 66.0 | 9.0 | 71 | 51.0 | 36.0 | 41.0 |
| 50 | 50 | 66.0 | 62.0 | 70.0 | 9.5 | 73 | 50.5 | 38.0 | 42.5 |
| 53 | 53 | 69.0 | 65.0 | 73.0 | 11.0 | 71 | 59.0 | 36.5 | 41.0 |
| 55 | 55 | 71.0 | 67.0 | 75.0 | 11.0 | 71 | 59.0 | 36.5 | 41.0 |
| 58 | 58 | 76.0 | 70.0 | 78.0 | 11.0 | 71 | 59.0 | 41.5 | 41.0 |
| 60 | 60 | 78.0 | 72.0 | 80.0 | 11.0 | 71 | 59.0 | 41.5 | 41.0 |
| 63 | 63 | 82.0 | 75.0 | 83.0 | 11.0 | | 59.0 | 41.5 | |
| 65 | 65 | 84.0 | 77.0 | 85.0 | 11.0 | 70 | 69.0 | 41.5 | 49.0 |
| 68 | 68 | 87.0 | 81.0 | 90.0 | 11.3 | 70 | 68.7 | 41.2 | 49.0 |
| 70 | 70 | 89.0 | 83.0 | 92.0 | 11.3 | 70 | 68.7 | 48.7 | 49.0 |
| 75 | 75 | 95.0 | 88.0 | 97.0 | 11.3 | 73 | 68.7 | 48.7 | 52.0 |
| 80 | 80 | 102.5 | 95.0 | 105.0 | 12.0 | 79 | 78.0 | 48.0 | 56.0 |
| 85 | 85 | | 100.0 | 110.0 | 14.0 | 79 | 76.0 | 46.0 | 56.0 |
| 90 | 90 | 111.5 | 105.0 | 115.0 | 14.0 | 83 | 76.0 | 51.0 | 59.0 |
| 95 | 95 | | 110.0 | 120.0 | 14.0 | 83 | 76.0 | 51.0 | 59.0 |
| 100 | 100 | 122.5 | 115.0 | 125.0 | 14.0 | 86 | 76.0 | 51.0 | 62.0 |

# GB21/21T






**技术参数：**
密封腔温度：–20℃+120℃
线速度：≤15m/s
密封腔压力：≤10bar
轴径尺寸：0.5–3.000"

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，四丙氟橡胶
弹簧及金属件：304，316

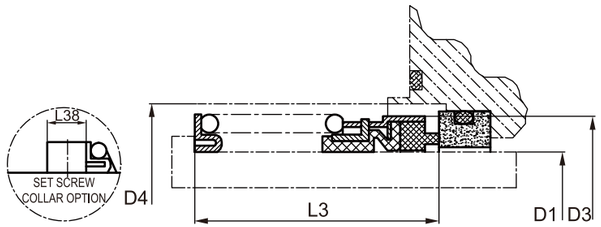
**Operating Limits:**
Temperature:-20℃+120℃
Speed:≤15m/s
Pressure:≤10bar
Standard Size:0.5-3.000"

**Material:**
Seal ring:Car,Sic,Ssic,TC
Secondary seal:NBR,Viton, EPDM,Aflas
Spring and metal parts:304,316

| Size | d | D3 | D31 | D1 | L1 | L2 |
|---|---|---|---|---|---|---|
| 0.500 | 12.7 | 24.0 | 22.80 | 25.40 | 20.62 | 7.95 |
| 0.625 | 15.8 | 26.7 | 26.70 | 31.75 | 22.23 | 10.31 |
| 0.750 | 19.1 | 31.2 | 30.40 | 34.93 | 22.23 | 10.31 |
| 0.875 | 22.2 | 33.5 | 33.40 | 38.10 | 23.80 | 10.31 |
| 1.000 | 25.4 | 43.2 | 39.30 | 41.28 | 25.40 | 11.10 |
| 1.125 | 28.6 | 46.5 | 42.00 | 44.45 | 26.97 | 11.10 |
| 1.250 | 31.7 | 49.5 | 45.80 | 47.63 | 26.97 | 11.10 |
| 1.375 | 34.9 | 52.7 | 49.30 | 50.80 | 28.58 | 11.10 |
| 1.500 | 38.1 | 56.0 | 52.80 | 53.98 | 28.58 | 11.10 |
| 1.625 | 41.2 | 62.2 | 55.50 | 60.33 | 34.93 | 12.70 |
| 1.750 | 44.4 | 66.0 | 61.00 | 63.50 | 34.93 | 12.70 |
| 1.875 | 47.6 | 66.0 | 64.00 | 66.68 | 38.10 | 12.70 |
| 2.000 | 50.8 | 73.0 | 66.00 | 69.85 | 38.10 | 12.70 |
| 2.125 | 53.9 | 73.5 | 71.50 | 76.20 | 42.85 | 14.27 |
| 2.250 | 57.1 | 79.6 | 79.60 | 79.38 | 42.85 | 14.27 |
| 2.375 | 60.3 | 82.0 | 79.60 | 82.55 | 46.05 | 14.27 |
| 2.500 | 63.5 | 85.0 | 81.50 | 85.73 | 46.05 | 14.27 |
| 2.625 | 66.6 | 88.5 | 84.60 | 85.73 | 49.20 | 15.88 |
| 2.750 | 69.8 | 92.7 | 90.00 | 88.90 | 49.20 | 15.88 |
| 3.000 | 76.2 | 102.0 | 96.80 | 98.40 | 52.37 | 15.88 |

# GB1






**技术参数：**
密封腔温度：–20℃+120℃
线速度：≤15m/s
密封腔压力：≤14bar
轴径尺寸：1"–4.0"

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，四丙氟橡胶
弹簧及金属件：304，316

**Operating Limits:**
Temperature:-20℃+120℃
Speed:≤15m/s
Pressure:≤14bar
Standard size:1"-4.0 "

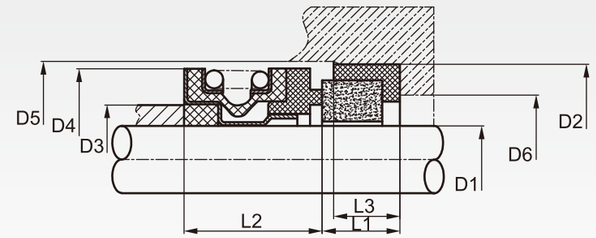
**Material:**
Seal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton, EPDM,Aflas
Spring and metal parts:304,316

| Size | D1 | D3 | D4 | L3 | L38 |
|---|---|---|---|---|---|
| 1.000 | 1.000 | 1.500 | 1.750 | 1.562 | 0.375 |
| 1.125 | 1.125 | 1.625 | 1.875 | 1.625 | 0.375 |
| 1.250 | 1.250 | 1.812 | 2.000 | 1.625 | 0.375 |
| 1.375 | 1.375 | 1.875 | 2.125 | 1.687 | 0.375 |
| 1.500 | 1.500 | 2.000 | 2.250 | 1.687 | 0.375 |
| 1.625 | 1.625 | 2.250 | 2.500 | 2.000 | 0.375 |
| 1.750 | 1.750 | 2.375 | 2.625 | 2.000 | 0.375 |
| 1.875 | 1.875 | 2.500 | 2.750 | 2.125 | 0.375 |
| 2.000 | 2.000 | 2.625 | 2.937 | 2.125 | 0.375 |
| 2.125 | 2.125 | 2.812 | 3.125 | 2.375 | 0.500 |
| 2.250 | 2.250 | 2.937 | 3.250 | 2.375 | 0.500 |
| 2.375 | 2.375 | 3.062 | 3.375 | 2.500 | 0.500 |
| 2.500 | 2.500 | 3.187 | 3.500 | 2.500 | 0.500 |
| 2.625 | 2.625 | 3.375 | 3.750 | 2.750 | 0.500 |
| 2.750 | 2.750 | 3.500 | 3.875 | 2.750 | 0.500 |
| 2.875 | 2.875 | 3.625 | 4.000 | 2.875 | 0.500 |
| 3.000 | 3.000 | 3.750 | 4.187 | 2.875 | 0.500 |
| 3.125 | 3.125 | 4.000 | 4.437 | 3.125 | 0.500 |
| 3.250 | 3.250 | 4.125 | 4.562 | 3.125 | 0.500 |
| 3.375 | 3.375 | 4.250 | 4.687 | 3.125 | 0.500 |
| 3.500 | 3.500 | 4.375 | 4.812 | 3.125 | 0.500 |
| 3.625 | 3.625 | 4.500 | 4.937 | 3.250 | 0.562 |
| 3.750 | 3.750 | 4.625 | 5.062 | 3.250 | 0.562 |
| 3.875 | 3.875 | 4.750 | 5.187 | 3.375 | 0.562 |
| 4.000 | 4.000 | 4.875 | 5.312 | 3.375 | 0.562 |





# GB6






**技术参数：**
密封腔温度：–45℃+205℃
线速度：≤5m/s
密封腔压力：≤5bar
轴径尺寸：0.375"–1.0"

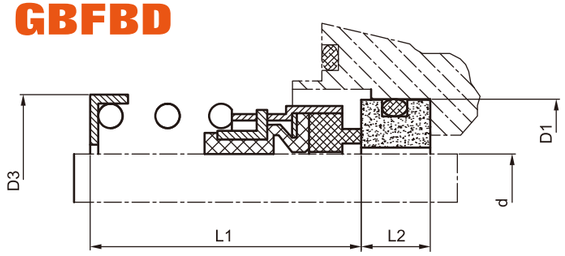
**Operating Limits:**
Temperature:-45℃+205℃
Speed:≤5m/s
Pressure:≤5bar
Standard Size:0.375"--1.0"

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，四丙氟橡胶
弹簧及金属件：304，316

**Material:**
Seal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton, EPDM,Aflas
Spring and metal parts:304,316

| Size | D1 | D2 | D3 | D4 | D5 | D6 | L1 | L2 | L3 |
|---|---|---|---|---|---|---|---|---|---|
| 0.375 | 0.375 | 1.000 | 0.812 | 1.062 | 1.312 | 0.750 | 0.312 | 0.656 | 0.250 |
| 0.437 | 0.437 | 1.000 | 0.812 | 1.062 | 1.312 | 0.750 | 0.312 | 0.656 | 0.250 |
| 0.500 | 0.500 | 1.000 | 0.812 | 1.062 | 1.312 | 0.750 | 0.312 | 0.656 | 0.250 |
| 0.562 | 0.562 | 1.250 | 0.937 | 1.218 | 1.500 | 0.937 | 0.406 | 0.718 | 0.343 |
| 0.625 | 0.625 | 1.250 | 0.937 | 1.218 | 1.500 | 0.937 | 0.406 | 0.718 | 0.343 |
| 0.687 | 0.687 | 1.375 | 1.062 | 1.343 | 1.625 | 1.062 | 0.406 | 0.718 | 0.343 |
| 0.750 | 0.750 | 1.375 | 1.062 | 1.343 | 1.625 | 1.062 | 0.406 | 0.718 | 0.343 |
| 0.875 | 0.875 | 1.625 | 1.312 | 1.687 | 2.000 | 1.312 | 0.437 | 0.812 | 0.375 |
| 1.000 | 1.000 | 1.625 | 1.312 | 1.687 | 2.000 | 1.312 | 0.437 | 0.812 | 0.375 |

# GBFBD






**技术参数：**
密封腔温度：–20℃+120℃
线速度：≤15m/s
密封腔压力：≤14bar
轴径尺寸：16–120mm

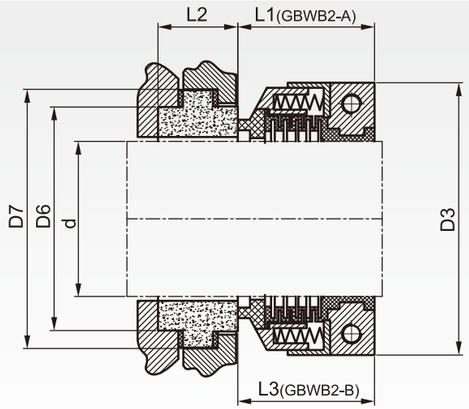
**Operating Limits:**
Temperature:-20℃+120℃
Speed:≤15m/s
Pressure:≤14bar
Standard Size:16-120mm

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，四丙氟橡胶
弹簧及金属件：304，316

**Material:**
Seal ring:Car,Sic,Ssic,TC
Secondary seal:NBR,Viton, EPDM,Aflas
Spring and metal parts:304,316

| Size | d | D3 | D1 | L1 | L2 |
|---|---|---|---|---|---|
| 16 | 16 | 34.0 | 30 | 25 | 8 |
| 18 | 18 | 36.8 | 32 | 25 | 8 |
| 20 | 20 | 38.8 | 34 | 25 | 8 |
| 22 | 22 | 41.5 | 36 | 25 | 8 |
| 25 | 25 | 44.8 | 39 | 26 | 8 |
| 28 | 28 | 48.5 | 43 | 26 | 8 |
| 30 | 30 | 52.0 | 48 | 26 | 8 |
| 35 | 35 | 57.0 | 53 | 30 | 10 |
| 40 | 40 | 67.0 | 58 | 34 | 10 |
| 45 | 45 | 73.0 | 63 | 36 | 10 |
| 50 | 50 | 79.0 | 68 | 41 | 10 |
| 55 | 55 | 84.0 | 73 | 41 | 12 |
| 60 | 60 | 90.0 | 79 | 41 | 12 |
| 65 | 65 | 98.5 | 86 | 49 | 12 |
| 70 | 70 | 103.5 | 91 | 52 | 12 |
| 75 | 75 | 110.5 | 96 | 52 | 12 |
| 80 | 80 | 120.0 | 105 | 56 | 14 |
| 85 | 85 | 125.0 | 110 | 56 | 14 |
| 90 | 90 | 132.0 | 115 | 56 | 14 |
| 95 | 95 | 137.0 | 120 | 56 | 14 |
| 100 | 100 | 144.0 | 125 | 62 | 14 |
| 110 | 110 | 157.0 | 135 | 62 | 16 |
| 120 | 120 | 169.5 | 145 | 72 | 16 |

# GBWB2






**技术参数：**
密封腔温度：–20℃+120℃
线速度：≤10m/s
密封腔压力：≤5bar
轴径尺寸：25–65mm
(1"–2.375")

**材料组合：**
密封面：石墨，反应碳化硅，
无压碳化硅，聚四氟乙烯
辅助密封：聚四氟乙烯
弹簧及金属件：304，316

**Operating Limits:**
Temperature:-20℃+120℃
Speed: ≤10m/s
Pressure: ≤5bar
Standard size: 25-65mm or
1"-2.375"

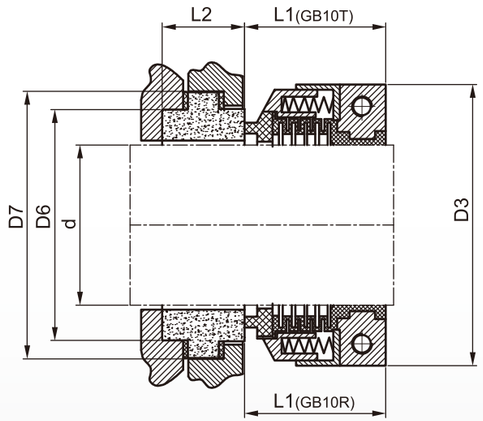
**Material:**
Seal ring: Car,Sic,Ssic,PTFE
Secondary seal: PTFE
Spring and metal parts:304,316

| d/inches | D3 | D6 | D7 | L1 | L3 | L2 |
|---|---|---|---|---|---|---|
| 1.000 | 60 | 42.86 | 54 | 42 | 45 | 17.5 |
| 1.125 | 67 | 46.03 | 60 | 42 | 45 | 27.0 |
| 1.250 | 69 | 50.80 | 65 | 42 | 45 | 27.0 |
| 1.375 | 72 | 53.98 | 68 | 42 | 45 | 27.0 |
| 1.500 | 76 | 57.15 | 71 | 42 | 45 | 27.0 |
| 1.625 | 80 | 63.50 | 78 | 42 | 45 | 27.0 |
| 1.750 | 84 | 66.68 | 81 | 44 | 46 | 27.0 |
| 1.875 | 86 | 69.85 | 84 | 44 | 46 | 27.0 |
| 2.000 | 90 | 73.03 | 87 | 46 | 46 | 27.0 |
| 2.125 | 95 | 79.38 | 97 | 46 | 46 | 33.5 |
| 2.250 | 98 | 82.55 | 100 | 46 | 46 | 33.5 |
| 2.375 | 100 | 85.73 | 103 | 46 | 46 | 33.5 |

| d/mm | D3 | D6 | D7 | L1 | L3 | L2 |
|---|---|---|---|---|---|---|
| 25 | 60 | 47.0 | 60 | 42 | 45 | 27 |
| 30 | 67 | 53.0 | 67 | 42 | 45 | 27 |
| 32 | 69 | 50.7 | 64 | 42 | 45 | 27 |
| 35 | 72 | 57.0 | 70 | 42 | 45 | 27 |
| 40 | 78 | 62.0 | 76 | 42 | 45 | 26 |
| 45 | 84 | 67.0 | 82 | 44 | 46 | 27 |
| 50 | 88 | 72.0 | 86 | 46 | 46 | 27 |
| 55 | 95 | 77.0 | 90 | 46 | 46 | 27 |
| 60 | 100 | 82.0 | 95 | 46 | 46 | 27 |
| 65 | 105 | 87.0 | 100 | 46 | 46 | 27 |

# GB10R/10T






**技术参数：**
密封腔温度：–20℃+120℃
线速度：≤10m/s
密封腔压力：≤5bar
轴径尺寸：25–65mm
(1"–2.375")

**材料组合：**
密封面：石墨，反应碳化硅，
无压碳化硅，聚四氟乙烯
辅助密封：聚四氟乙烯
弹簧及金属件：304，316

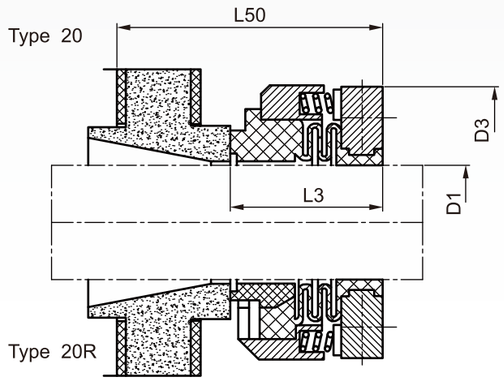
**Operating Limits:**
Temperature:-20℃+120℃
Speed:≤10m/s
Pressure:≤5bar
Standard size:25-65mm or
1"-2.375"

**Material:**
Seal ring: Car,Sic,Ssic,PTFE
Secondary seal: PTFE
Spring and metal parts:304,316

| Size(inch) | d | D3 | D6 | D7 | L1 | L2 |
|---|---|---|---|---|---|---|
| 1.000 | 1.000 | 60 | 42.86 | 54 | 33.2 | 17.6 |
| 1.125 | 1.125 | 67 | 50.80 | 65 | 36.2 | 27.0 |
| 1.250 | 1.250 | 69 | 53.98 | 68 | 37.2 | 27.0 |
| 1.375 | 1.375 | 72 | 57.15 | 71 | 38.2 | 27.0 |
| 1.500 | 1.500 | 76 | 63.50 | 78 | 38.2 | 27.0 |
| 1.625 | 1.625 | 80 | 66.68 | 81 | 40.2 | 27.0 |
| 1.750 | 1.750 | 84 | 69.85 | 84 | 40.2 | 27.0 |
| 1.875 | 1.875 | 86 | 73.03 | 87 | 43.2 | 27.0 |
| 2.000 | 2.000 | 90 | 79.38 | 97 | 43.2 | 33.3 |

# GB20/20R






**技术参数：**
密封腔温度：–20℃+120℃
密封腔压力：≤10bar
线速度：20 :≤ mps 20R:≤13 mps
轴径尺寸：0.625–4.000"

**Operating Limits:**
Temperature:-20℃+120℃
Pressures: ≤10 bar
Speeds:20: ≤ mps 20R:≤13 mps
Standard size:0.625"- 4.000"

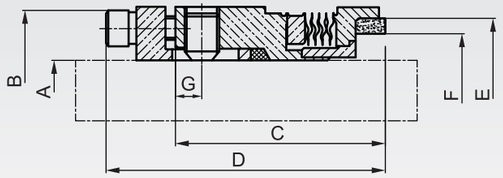
**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，
聚四氟乙烯
辅助密封：聚四氟乙烯
弹簧及金属件：304,316

**Material:**
Seal ring:Car,PTFE,SiC,Ssic
Secondary Seal:PTFE
Metal parts: 304,316

| Size | D1 | D3 | L3 | L50 |
|---|---|---|---|---|
| 0.625 | 0.625 | 1.312 | 2.062 | 2.875 |
| 0.750 | 0.750 | 1.437 | 2.062 | 2.875 |
| 0.875 | 0.875 | 1.562 | 1.000 | 2.812 |
| 1.000 | 1.000 | 2.250 | 1.000 | 1.718 |
| 1.125 | 1.125 | 2.375 | 1.062 | 1.781 |
| 1.250 | 1.250 | 2.625 | 1.062 | 1.781 |
| 1.375 | 1.375 | 2.750 | 1.125 | 1.875 |
| 1.500 | 1.500 | 2.875 | 1.125 | 1.875 |
| 1.625 | 1.625 | 3.000 | 1.375 | 2.125 |
| 1.750 | 1.750 | 3.125 | 1.375 | 2.125 |
| 1.875 | 1.875 | 3.375 | 1.375 | 2.125 |
| 2.000 | 2.000 | 3.500 | 1.375 | 2.250 |
| 2.125 | 2.125 | 3.625 | 1.687 | 2.562 |
| 2.250 | 2.250 | 3.750 | 1.687 | 2.562 |
| 2.375 | 2.375 | 3.875 | 1.687 | 2.562 |
| 2.500 | 2.500 | 4.000 | 1.687 | 2.562 |
| 2.625 | 2.625 | 4.125 | 1.687 | 2.562 |
| 2.750 | 2.750 | 4.250 | 1.687 | 2.562 |
| 2.875 | 2.875 | 4.375 | 1.687 | 2.562 |
| 3.000 | 3.000 | 4.500 | 1.687 | 2.562 |
| 3.125 | 3.125 | 4.875 | 1.687 | 2.562 |
| 3.250 | 3.250 | 5.000 | 1.687 | 2.562 |
| 3.375 | 3.375 | 5.125 | 1.687 | 2.562 |
| 3.500 | 3.500 | 5.250 | 1.687 | 2.562 |
| 3.625 | 3.625 | 5.375 | 1.687 | 2.562 |
| 3.750 | 3.750 | 5.500 | 1.687 | 2.562 |
| 3.875 | 3.875 | 5.625 | 1.687 | 2.562 |
| 4.000 | 4.000 | 5.750 | 1.687 | 2.562 |

# GB606






**技术参数：**
密封腔温度：–20℃+425℃
线速度：≤25m/s
密封腔压力：≤25bar
轴径尺寸：0.75"–3.75"

**材料组合：**
密封面：石墨，反应碳化硅，
无压碳化硅，碳化钨
辅助密封：柔性石墨
弹簧及金属件：304,316,AM350,
HAST.C,In718,Ti

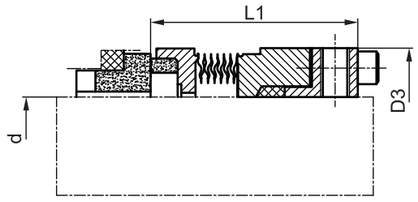
**Operating Limits:**
Temperature:-20℃+425℃
Speed:≤25m/s
Pressure:≤2.5MPa
Standard Size:0.75"- 3.75"

**Material:**
Seal Ring:Car、Sic、Ssic、TC
Secondary seal:Carbon graphite
Spring and metal parts:304,316
AM350,HAST.C,Inconel 718,
Titanium

| Size A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|
| 0.750 | 1.625 | 1.687 | 2.312 | 1.438 | 1.238 | 0.188 |
| 0.875 | 1.750 | 1.719 | 2.343 | 1.565 | 1.365 | 0.188 |
| 1.000 | 1.875 | 1.719 | 2.343 | 1.719 | 1.519 | 0.188 |
| 1.125 | 2.000 | 1.750 | 2.375 | 1.845 | 1.645 | 0.188 |
| 1.250 | 2.125 | 1.750 | 2.375 | 1.970 | 1.720 | 0.188 |
| 1.375 | 2.250 | 1.844 | 2.468 | 2.095 | 1.845 | 0.250 |
| 1.500 | 2.375 | 1.875 | 2.500 | 2.220 | 1.970 | 0.250 |
| 1.625 | 2.500 | 1.875 | 2.500 | 2.345 | 2.095 | 0.250 |
| 1.750 | 2.625 | 1.906 | 2.531 | 2.471 | 2.221 | 0.250 |
| 1.875 | 2.750 | 1.906 | 2.531 | 2.595 | 2.345 | 0.250 |
| 2.000 | 2.875 | 1.937 | 2.562 | 2.721 | 2.471 | 0.250 |
| 2.125 | 3.000 | 1.937 | 2.562 | 2.846 | 2.596 | 0.250 |
| 2.250 | 3.250 | 2.000 | 2.750 | 3.096 | 2.796 | 0.250 |
| 2.375 | 3.375 | 2.031 | 2.781 | 3.221 | 2.921 | 0.250 |
| 2.500 | 3.500 | 2.031 | 2.781 | 3.347 | 3.047 | 0.250 |
| 2.625 | 3.687 | 2.125 | 2.875 | 3.502 | 3.202 | 0.250 |
| 2.750 | 3.812 | 2.250 | 3.000 | 3.627 | 3.327 | 0.281 |
| 2.875 | 4.000 | 2.250 | 3.000 | 3.772 | 3.442 | 0.281 |
| 3.000 | 4.125 | 2.250 | 3.000 | 3.897 | 3.567 | 0.281 |
| 3.125 | 4.250 | 2.250 | 3.000 | 4.022 | 3.692 | 0.281 |
| 3.250 | 4.375 | 2.250 | 3.000 | 4.147 | 3.817 | 0.281 |
| 3.375 | 4.500 | 2.250 | 3.000 | 4.272 | 3.942 | 0.281 |
| 3.500 | 4.625 | 2.250 | 3.000 | 4.397 | 4.067 | 0.281 |
| 3.625 | 4.750 | 2.250 | 3.000 | 4.522 | 4.192 | 0.281 |
| 3.750 | 4.875 | 2.250 | 3.000 | 4.647 | 4.317 | 0.281 |

# GB609






**技术参数：**
密封腔温度：–20℃+425℃
线速度：≤25m/s
密封腔压力：≤25bar
轴径尺寸：1"–4"

**材料组合：**
密封面：石墨，反应碳化硅，
无压碳化硅，碳化钨
辅助密封：柔性石墨
弹簧及金属件：304,316,AM350,
HAST.C,In718,Ti

**Operating Limits:**
Temperature:-20℃+425℃
Speed: ≤25m/s
Pressure: ≤25bar
Standard size: 1"-4"

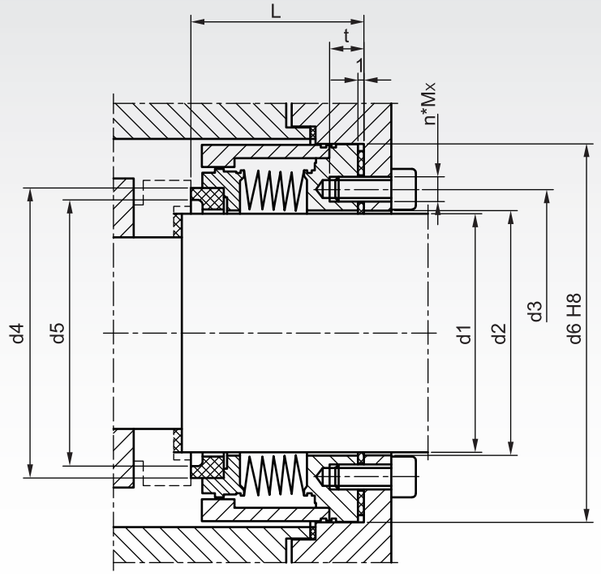
**Material:**
Seal ring: Car,Sic,Ssic,TC
Secondary seal: Carbon graphite
Spring and Metal parts:304,316,
AM350,HAST.C,Inconel 718,
Titanium

| Size | d | D3 | L1 |
|---|---|---|---|
| 1.000 | 25.40 | 41.28 | 38.95 |
| 1.125 | 28.58 | 44.45 | 39.87 |
| 1.250 | 31.75 | 47.63 | 40.66 |
| 1.375 | 34.93 | 50.80 | 40.66 |
| 1.500 | 38.10 | 53.98 | 40.66 |
| 1.625 | 41.28 | 57.15 | 40.66 |
| 1.750 | 44.45 | 60.33 | 41.48 |
| 1.875 | 47.63 | 63.50 | 41.48 |
| 2.000 | 50.80 | 66.68 | 42.26 |
| 2.125 | 53.98 | 69.85 | 42.26 |
| 2.250 | 57.15 | 73.03 | 43.86 |
| 2.375 | 60.33 | 76.20 | 43.86 |
| 2.500 | 63.50 | 82.55 | 44.65 |
| 2.625 | 66.68 | 85.73 | 45.44 |
| 2.750 | 69.85 | 88.90 | 45.44 |
| 2.875 | 73.03 | 93.65 | 47.83 |
| 3.000 | 76.20 | 96.82 | 47.83 |
| 3.125 | 79.38 | 101.60 | 47.83 |
| 3.250 | 82.55 | 104.78 | 47.83 |
| 3.375 | 85.73 | 107.95 | 47.83 |
| 3.500 | 88.90 | 111.13 | 47.83 |
| 3.625 | 92.08 | 114.30 | 47.83 |
| 3.750 | 95.25 | 117.48 | 47.83 |
| 3.875 | 98.43 | 120.65 | 47.83 |
| 4.000 | 101.60 | 123.83 | 47.83 |



# GBMFL65






**技术参数：**
密封腔温度：–20℃+400℃
线速度：≤50m/s
密封腔压力：≤25bar
轴径尺寸：16–100mm

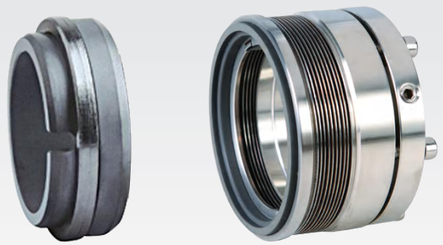
**Operating Limits:**
Temperature:-20℃+400℃
Speed:≤50m/s
Externally pressurized:≤25bar
Shaft diameter:16-100mm

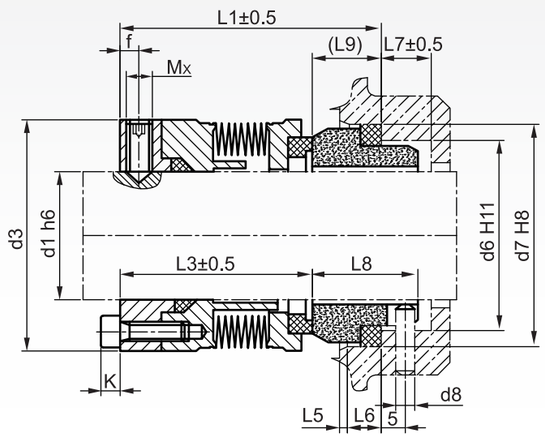
**材料组合：**
密封面：石墨，反应碳化硅，
无压碳化硅，碳化钨
辅助密封：柔性石墨，聚四氟乙烯
弹簧及金属件：304,316,AM350,
HAST.C,In718,Ti

**Material:**
Seal Ring:Car、Sic、Ssic、TC
Secondary seal: Carbon graphite,
PTFE
Spring and metal parts:304,316,
AM350,HAST.C,Inconel 718,
Titanium

| d | d1 | d2 | d3 | d4 | d5 | d6 | L | n*Mx | t |
|---|---|---|---|---|---|---|---|---|---|
| 19 | 16–19 | 20.5 | 29 | 30.3 | 25.3 | 45.0 | 33.5 | 4xM4 | 6 |
| 24 | 20–24 | 25.5 | 35 | 38.8 | 33.8 | 49.0 | 33.5 | 4xM4 | 6 |
| 30 | 25–30 | 31.5 | 40 | 43.6 | 38.6 | 55.0 | 34.5 | 6xM4 | 6 |
| 35 | 31–35 | 36.0 | 45 | 45.8 | 40.8 | 59.0 | 33.0 | 6xM4 | 6 |
| 40 | 36–40 | 41.0 | 50 | 51.5 | 46.5 | 65.0 | 30.5 | 6xM4 | 6 |
| 45 | 41–45 | 46.0 | 55 | 55.2 | 50.2 | 69.0 | 35.5 | 6xM4 | 6 |
| 51 | 46–51 | 52.0 | 63 | 64.7 | 59.7 | 76.5 | 40.5 | 6xM5 | 7 |
| 60 | 52–60 | 61.0 | 70 | 70.6 | 65.6 | 84.0 | 32.0 | 6xM5 | 7 |
| 70 | 61–70 | 71.0 | 80 | 82.8 | 76.8 | 95.0 | 38.0 | 6xM5 | 7 |
| 82 | 71–82 | 83.5 | 95 | 98.0 | 92.0 | 112.0 | 41.0 | 6xM6 | 7 |
| 88 | 83–88 | 89.5 | 100 | 107.7 | 101.7 | 120.0 | 47.0 | 6xM6 | 7 |
| 100 | 89–100 | 101.0 | 112 | 112.7 | 106.7 | 130.0 | 47.0 | 6xM6 | 7 |

# GBMFLWT






**技术参数：**
密封腔温度：-40℃+400℃
线速度：≤20m/s
密封腔压力：≤25bar
轴径尺寸：16-100mm

**Operating Limits:**
Temperature:-40℃+400℃
Sliding velocity:≤20m/s
Pressure:≤25bar
Shaft diameter:16-100mm

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：柔性石墨
弹簧及金属件：304，316，哈氏合金，AM350，In718，Ti

**Material:**
Seal ring: Car, Sic, Ssic, TC
Secondary seal: Carbon graphite
Spring and Metal parts: 304,316,AM350, HAST.C,Inconel 718,Titanium

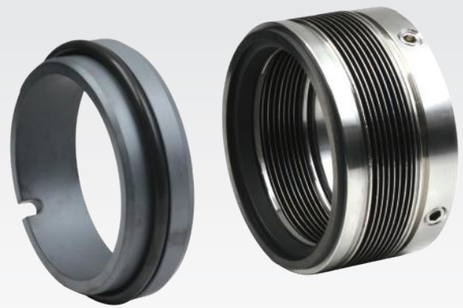
| Size | d1 | d3 | d6 | d7 | d8 | L1 | L3 | L5 | L6 | L7 | L8 | L9 | f | k | mx |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | 16 | 38 | 29.0 | 35.0 | 3 | 58.0 | 46.5 | 2.0 | 5 | 9 | 19.5 | 11.5 | 5 | 5 | M5 |
| 18 | 18 | 40 | 31.0 | 37.0 | 3 | 58.0 | 46.5 | 2.0 | 5 | 9 | 19.5 | 11.5 | 5 | 5 | M5 |
| 20 | 20 | 42 | 34.0 | 40.0 | 3 | 58.0 | 46.5 | 2.0 | 5 | 9 | 19.5 | 11.5 | 5 | 5 | M5 |
| 22 | 22 | 44 | 37.0 | 43.0 | 3 | 58.0 | 46.5 | 2.0 | 5 | 9 | 19.5 | 11.5 | 5 | 5 | M5 |
| 24 | 24 | 46 | 37.0 | 43.0 | 3 | 58.0 | 46.5 | 2.0 | 5 | 9 | 19.5 | 11.5 | 5 | 5 | M5 |
| 25 | 25 | 47 | 39.0 | 45.0 | 3 | 58.0 | 46.5 | 2.0 | 5 | 9 | 19.5 | 11.5 | 5 | 5 | M5 |
| 28 | 28 | 50 | 42.0 | 48.0 | 3 | 58.0 | 46.5 | 2.0 | 5 | 9 | 19.5 | 11.5 | 5 | 5 | M6 |
| 30 | 30 | 52 | 44.0 | 50.0 | 3 | 58.0 | 46.5 | 2.0 | 5 | 9 | 19.5 | 11.5 | 5 | 5 | M6 |
| 32 | 32 | 54 | 49.0 | 56.0 | 4 | 60.5 | 46.5 | 2.0 | 6 | 9 | 22.0 | 14.0 | 5 | 5 | M6 |
| 33 | 33 | 55 | 49.0 | 56.0 | 4 | 60.5 | 46.5 | 2.0 | 6 | 9 | 22.0 | 14.0 | 5 | 5 | M6 |
| 35 | 35 | 57 | 51.0 | 58.0 | 4 | 60.5 | 46.5 | 2.0 | 6 | 9 | 22.0 | 14.0 | 5 | 5 | M6 |
| 38 | 38 | 60 | 54.0 | 61.0 | 4 | 60.5 | 46.5 | 2.0 | 6 | 9 | 22.0 | 14.0 | 5 | 5 | M6 |
| 40 | 40 | 66 | 56.0 | 63.0 | 4 | 61.5 | 47.5 | 2.0 | 6 | 9 | 22.0 | 14.0 | 5 | 6 | M6 |
| 43 | 43 | 69 | 59.0 | 66.0 | 4 | 61.5 | 47.5 | 2.0 | 6 | 9 | 22.0 | 14.0 | 5 | 6 | M6 |
| 45 | 45 | 71 | 62.0 | 70.0 | 4 | 62.5 | 47.5 | 2.5 | 6 | 9 | 23.0 | 15.0 | 5 | 6 | M6 |
| 48 | 48 | 74 | 65.0 | 73.0 | 4 | 62.5 | 47.5 | 2.5 | 6 | 9 | 23.0 | 15.0 | 5 | 6 | M6 |
| 50 | 50 | 76 | 67.0 | 75.0 | 4 | 62.5 | 47.5 | 2.5 | 6 | 9 | 23.0 | 15.0 | 5 | 6 | M6 |
| 53 | 53 | 79 | 70.0 | 78.0 | 4 | 62.5 | 47.5 | 2.5 | 6 | 9 | 23.0 | 15.0 | 5 | 6 | M6 |
| 55 | 55 | 81 | 72.0 | 80.0 | 4 | 62.5 | 47.5 | 2.5 | 6 | 9 | 23.0 | 15.0 | 5 | 6 | M6 |
| 58 | 58 | 85 | 75.0 | 83.0 | 4 | 68.0 | 53.0 | 2.5 | 6 | 9 | 23.0 | 15.0 | 5 | 6 | M6 |
| 60 | 60 | 87 | 77.0 | 85.0 | 4 | 68.0 | 53.0 | 2.5 | 6 | 9 | 23.0 | 15.0 | 6 | 6 | M8 |
| 63 | 63 | 90 | 81.0 | 90.0 | 4 | 71.0 | 53.0 | 2.5 | 7 | 9 | 26.0 | 18.0 | 6 | 6 | M8 |
| 65 | 65 | 92 | 83.0 | 92.0 | 4 | 71.0 | 53.0 | 2.5 | 7 | 9 | 26.0 | 18.0 | 6 | 6 | M8 |
| 68 | 68 | 95 | 88.0 | 97.0 | 4 | 71.0 | 53.0 | 2.5 | 7 | 9 | 26.0 | 18.0 | 6 | 6 | M8 |
| 70 | 70 | 97 | 88.0 | 97.0 | 4 | 71.0 | 53.0 | 2.5 | 7 | 9 | 26.0 | 18.0 | 6 | 6 | M8 |
| 75 | 75 | 102 | 95.0 | 105.0 | 4 | 71.0 | 52.8 | 3.0 | 7 | 9 | 26.2 | 18.2 | 6 | 6 | M8 |
| 80 | 80 | 107 | 100.0 | 110.0 | 4 | 71.0 | 52.8 | 3.0 | 7 | 9 | 26.2 | 18.2 | 6 | 6 | M8 |
| 85 | 85 | 112 | 105.0 | 115.0 | 4 | 71.0 | 52.8 | 3.0 | 7 | 9 | 26.2 | 18.2 | 6 | 6 | M8 |
| 90 | 90 | 117 | 110.0 | 120.0 | 4 | 71.0 | 53.8 | 3.0 | 7 | 9 | 25.2 | 17.2 | 6 | 6 | M8 |
| 95 | 95 | 122 | 115.0 | 125.0 | 4 | 71.0 | 53.8 | 3.0 | 7 | 9 | 25.2 | 17.2 | 6 | 6 | M8 |
| 100 | 100 | 127 | 122.2 | 134.3 | 5 | 74.0 | 54.0 | 3.0 | 9 | 11 | 30.0 | 20.0 | 6 | 6 | M8 |



# GBMFL85N

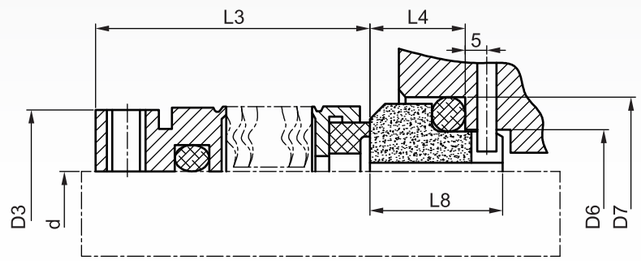
**技术参数：**
密封腔温度：-40℃+220℃
线速度：≤20m/s
密封腔压力：≤25bar
轴径尺寸：16-100mm

**Operating Limits:**
Temperature:-40℃+220℃
Speed:≤20m/s
Externally pressurized:≤25bar
Shaft diameter:16-100mm



**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，AM350，HAST.C，In718,Ti

**Material:**
Seal Ring:Car、Sic、Ssic、TC
Secondary seal: NBR,Viton,EPDM,Kalrez.
Spring and metal parts:304,316,AM350, HAST.C,Inconel 718,Titanium




| Size | d | D3 | D6 | D7 | L3 | L8 | L4 |
|---|---|---|---|---|---|---|---|
| 16 | 16 | 30.0 | 23 | 27.0 | 32.5 | 17.5 | 10.0 |
| 18 | 18 | 32.0 | 27 | 33.0 | 30.5 | 14.0 | 11.5 |
| 20 | 20 | 33.5 | 29 | 35.0 | 30.5 | 14.0 | 11.5 |
| 22 | 22 | 36.5 | 31 | 37.0 | 30.5 | 14.0 | 11.5 |
| 24 | 24 | 39.0 | 33 | 39.0 | 28.5 | 19.5 | 11.5 |
| 25 | 25 | 39.6 | 34 | 40.0 | 28.5 | 19.5 | 11.5 |
| 28 | 28 | 42.8 | 37 | 43.0 | 31.0 | 19.5 | 11.5 |
| 30 | 30 | 45.0 | 39 | 45.0 | 31.0 | 19.5 | 11.5 |
| 32 | 32 | 46.0 | 42 | 48.0 | 31.0 | 19.5 | 11.5 |
| 33 | 33 | 48.0 | 42 | 48.0 | 31.0 | 19.5 | 11.5 |
| 35 | 35 | 49.2 | 44 | 50.0 | 31.0 | 19.5 | 11.5 |
| 38 | 38 | 52.3 | 49 | 56.0 | 31.0 | 22.0 | 14.0 |
| 40 | 40 | 55.5 | 51 | 58.0 | 31.0 | 22.0 | 14.0 |
| 43 | 43 | 57.5 | 54 | 61.0 | 31.0 | 22.0 | 14.0 |
| 45 | 45 | 58.7 | 56 | 63.0 | 31.0 | 22.0 | 14.0 |
| 48 | 48 | 61.9 | 59 | 66.0 | 31.0 | 22.0 | 14.0 |
| 50 | 50 | 65.0 | 62 | 70.0 | 32.5 | 23.0 | 15.0 |
| 53 | 53 | 68.2 | 65 | 73.0 | 32.5 | 23.0 | 15.0 |
| 55 | 55 | 70.0 | 67 | 75.0 | 32.5 | 23.0 | 15.0 |
| 58 | 58 | 71.7 | 70 | 78.0 | 37.5 | 23.0 | 15.0 |
| 60 | 60 | 74.6 | 72 | 80.0 | 37.5 | 23.0 | 15.0 |
| 63 | 63 | 79.0 | 75 | 83.0 | 37.5 | 23.0 | 15.0 |
| 65 | 65 | 84.1 | 77 | 85.0 | 37.5 | 23.0 | 15.0 |
| 68 | 68 | 87.3 | 81 | 90.0 | 34.5 | 26.0 | 18.0 |
| 70 | 70 | 87.3 | 83 | 92.0 | 42.0 | 26.0 | 18.0 |
| 75 | 75 | 95.0 | 88 | 97.0 | 42.0 | 26.0 | 18.0 |
| 80 | 80 | 98.4 | 95 | 105.0 | 41.8 | 26.2 | 18.2 |
| 85 | 85 | 104.7 | 100 | 110.0 | 41.8 | 26.2 | 18.2 |
| 90 | 90 | 111.0 | 105 | 115.0 | 46.8 | 26.2 | 18.2 |
| 95 | 95 | 114.0 | 110 | 120.0 | 47.8 | 25.2 | 17.2 |
| 100 | 100 | 117.4 | 115 | 125.0 | 47.8 | 25.2 | 17.2 |

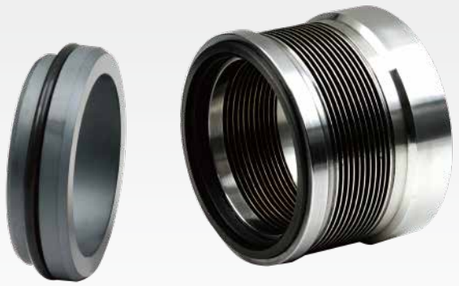
# GBYE400

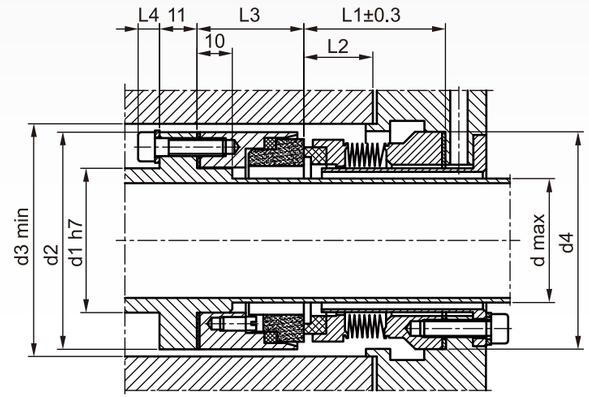
**技术参数：**
密封腔温度：–240℃+425℃
线速度：≤50m/s
密封腔压力：≤35bar
轴径尺寸：14–90mm

**Operating Limits:**
Temperature:-240℃+425℃
Speed: :≤50 m/s
Pressure: ≤35 bar
Standard Size:14-90mm

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：柔性石墨，聚四氟乙烯
弹簧及金属件：304，316，AM350，HAST.C，In718,Ti

**Material:**
Seal Ring:Car、Sic、Ssic、TC
Secondary seal: Carbon graphite,PTFE
Spring and metal parts:304,316,AM350, HAST.C,Inconel 718,Titanium



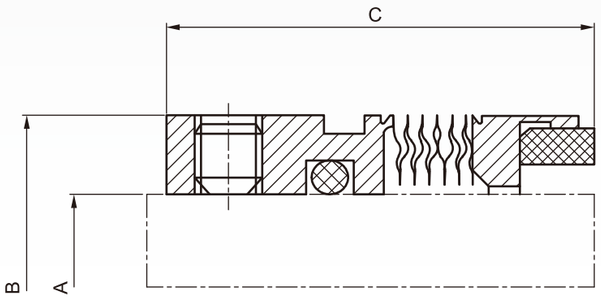



| Size code | d | d1 | d2 | d3 | d4 | L1 | L2 | L3 | L4 |
|---|---|---|---|---|---|---|---|---|---|
| X14 | 18 | 21 | 42 | 47 | 44 | 36 | 15 | 31 | 6.3 |
| X16 | 21 | 26 | 47 | 50 | 47 | 38 | 17 | 31 | 6.3 |
| X18 | 24 | 29 | 50 | 53 | 50 | 38 | 17 | 31 | 6.3 |
| X20 | 27.5 | 32 | 53 | 56 | 53 | 38 | 17 | 31 | 6.3 |
| X22 | 31 | 36 | 57 | 60 | 57 | 38 | 17 | 31 | 6.3 |
| X24 | 33 | 39 | 60 | 64 | 60 | 41 | 20 | 31 | 6.3 |
| X26 | 36 | 42 | 63 | 67 | 63 | 41 | 20 | 31 | 6.3 |
| X28 | 39 | 45 | 66 | 70 | 66 | 41 | 20 | 31 | 6.3 |
| X30 | 42 | 48 | 69 | 73 | 69 | 41 | 20 | 31 | 6.3 |
| X32 | 45 | 51 | 72 | 76 | 72 | 41 | 20 | 31 | 6.3 |
| X34 | 4.5 | 54 | 75 | 80 | 76 | 43 | 22 | 31 | 6.3 |
| X36 | 50 | 58 | 79 | 83 | 79 | 43 | 22 | 31 | 6.3 |
| X38 | 53 | 61 | 82 | 86 | 82 | 43 | 22 | 31 | 6.3 |
| X40 | 55 | 64 | 85 | 89 | 85 | 51 | 30 | 31 | 6.3 |
| X42 | 58.5 | 67 | 89 | 92 | 88 | 51 | 30 | 31 | 6.3 |
| X44 | 62.5 | 71 | 92 | 96 | 92 | 51 | 30 | 31 | 6.3 |
| X46 | 64 | 74 | 96 | 99 | 95 | 55 | 34 | 31 | 6.3 |
| X48 | 67 | 77 | 99 | 102 | 98 | 55 | 34 | 31 | 6.3 |
| X50 | 70 | 81 | 102 | 105 | 101 | 55 | 34 | 31 | 6.3 |
| X52 | 73 | 84 | 105 | 108 | 104 | 55 | 34 | 31 | 6.3 |
| X54 | 75.5 | 87 | 109 | 111 | 107 | 55 | 34 | 31 | 6.3 |
| X56 | 78.5 | 90 | 113 | 116 | 111 | 58 | 37 | 31 | 6.3 |
| X58 | 82 | 93 | 116 | 120 | 114 | 58 | 37 | 31 | 6.3 |
| X60 | 85 | 96 | 119 | 122 | 117 | 58 | 37 | 31 | 6.3 |
| X62 | 88 | 99 | 122 | 125 | 120 | 58 | 37 | 31 | 6.3 |
| X64 | 91 | 103 | 125 | 128 | 123 | 58 | 37 | 31 | 6.3 |
| X70 | 100 | 111 | 138 | 142 | 134 | 60 | 39 | 31 | 6.3 |
| X78 | 110 | 116 | 147 | 152 | 145 | 60 | 39 | 41 | 7.5 |
| X90 | 129 | 137 | 168 | 173 | 166 | 63 | 42 | 41 | 7.5 |



# GB680






**技术参数：**
密封腔温度：–40℃+220℃
线速度：≤20m/s
密封腔压力：≤25bar
轴径尺寸：18–115mm (0.75–5.25")

**Operating Limits:**
Temperature:-40℃+220℃
Speed: ≤20mps
Pressure: ≤ 25bar
Standard size: 18-115mm or 0.75"-5.25"

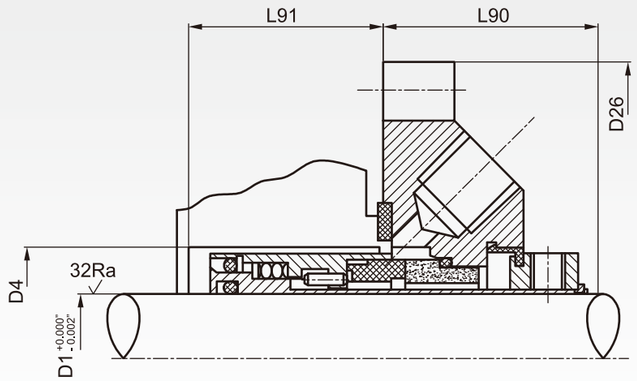
**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金，AM350，HAST.C,In718,Ti

**Material:**
Seal ring: Car,Sic,Ssic,TC
Secondary seal: NBR,EPDM,Viton,Kalrez
Spring and Metal parts:304,316,AM350, HAST.C,Inconel 718,Titanlum

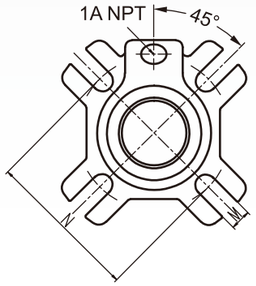
| Size | A | B | C |
|---|---|---|---|
| 18 | 18 | 32.0 | 27.5 |
| 20 | 20 | 33.3 | 27.5 |
| 22 | 22 | 36.0 | 27.5 |
| 24 | 24 | 38.1 | 30.0 |
| 25 | 25 | 39.0 | 30.0 |
| 28 | 28 | 42.0 | 32.5 |
| 30 | 30 | 44.0 | 32.5 |
| 32 | 32 | 46.0 | 32.5 |
| 33 | 33 | 47.0 | 32.5 |
| 35 | 35 | 49.2 | 32.5 |
| 38 | 38 | 52.4 | 34.0 |
| 40 | 40 | 55.6 | 34.0 |
| 43 | 43 | 58.7 | 34.0 |
| 45 | 45 | 58.7 | 34.0 |
| 48 | 48 | 61.9 | 34.0 |
| 50 | 50 | 65.1 | 34.5 |
| 53 | 53 | 68.3 | 34.5 |
| 55 | 55 | 71.0 | 34.5 |
| 60 | 60 | 74.6 | 39.5 |
| 65 | 65 | 84.1 | 39.5 |
| 70 | 70 | 87.3 | 45.0 |
| 75 | 75 | 95.3 | 45.0 |
| 80 | 80 | 98.4 | 44.5 |
| 85 | 85 | 104.8 | 44.5 |
| 90 | 90 | 108.0 | 49.5 |
| 95 | 95 | 114.3 | 49.5 |
| 100 | 100 | 120.7 | 49.5 |
| 105 | 105 | 131.7 | 48.3 |
| 110 | 110 | 138.1 | 48.3 |
| 115 | 115 | 144.5 | 48.3 |

| Size | A | B | C |
|---|---|---|---|
| 0.750 | 0.750 | 1.312 | 1.250 |
| 0.875 | 0.875 | 1.437 | 1.250 |
| 0.937 | 0.937 | 1.500 | 1.250 |
| 1.000 | 1.000 | 1.562 | 1.250 |
| 1.125 | 1.125 | 1.687 | 1.250 |
| 1.250 | 1.250 | 1.812 | 1.312 |
| 1.375 | 1.375 | 1.937 | 1.437 |
| 1.500 | 1.500 | 2.062 | 1.437 |
| 1.625 | 1.625 | 2.187 | 1.437 |
| 1.750 | 1.750 | 2.312 | 1.437 |
| 1.875 | 1.875 | 2.437 | 1.500 |
| 2.000 | 2.000 | 2.562 | 1.500 |
| 2.125 | 2.125 | 2.687 | 1.500 |
| 2.250 | 2.250 | 2.812 | 1.562 |
| 2.375 | 2.375 | 2.937 | 1.562 |
| 2.500 | 2.500 | 3.187 | 1.562 |
| 2.625 | 2.625 | 3.312 | 1.625 |
| 2.750 | 2.750 | 3.437 | 1.625 |
| 2.875 | 2.875 | 3.625 | 1.687 |
| 3.000 | 3.000 | 3.750 | 1.687 |
| 3.125 | 3.125 | 3.875 | 1.750 |
| 3.250 | 3.250 | 4.000 | 1.750 |
| 3.375 | 3.375 | 4.125 | 1.750 |
| 3.500 | 3.500 | 4.250 | 1.875 |
| 3.625 | 3.625 | 4.375 | 1.875 |
| 3.750 | 3.750 | 4.500 | 1.875 |
| 3.875 | 3.875 | 4.625 | 1.875 |
| 4.000 | 4.000 | 4.750 | 1.875 |
| 4.250 | 4.250 | 5.187 | 1.903 |
| 4.500 | 4.500 | 5.438 | 1.903 |
| 4.750 | 4.750 | 5.688 | 1.903 |
| 5.000 | 5.000 | 5.938 | 1.903 |
| 5.250 | 5.250 | 6.213 | 1.903 |

# GB4610






| D1(Inch) | D4 Box Bore Min. | D4 Box Bore Max. | D26 | L90 Min. | L91 | N Min. | N Max. | M |
|---|---|---|---|---|---|---|---|---|
| 1.000 | 1.615 | 1.940 | 4.125 | 1.422 | 1.267 | 2.62 | 3.75 | 0.437 |
| 1.125 | 1.730 | 2.060 | 4.250 | 1.422 | 1.267 | 2.75 | 3.87 | 0.437 |
| 1.250 | 1.875 | 2.190 | 4.370 | 1.422 | 1.267 | 2.87 | 4.00 | 0.437 |
| 1.375 | 2.000 | 2.310 | 4.500 | 1.422 | 1.267 | 3.06 | 4.12 | 0.437 |
| 1.500 | 2.250 | 2.500 | 5.000 | 1.462 | 1.313 | 3.43 | 4.50 | 0.563 |
| 1.625 | 2.360 | 2.500 | 5.000 | 1.462 | 1.313 | 3.43 | 4.50 | 0.563 |
| 1.750 | 2.500 | 2.625 | 5.250 | 1.462 | 1.313 | 3.56 | 4.75 | 0.563 |
| 1.875 | 2.625 | 3.000 | 5.500 | 1.462 | 1.313 | 3.87 | 5.00 | 0.563 |
| 2.000 | 2.750 | 3.000 | 5.500 | 1.462 | 1.313 | 3.87 | 5.00 | 0.563 |
| 2.125 | 2.875 | 3.310 | 5.750 | 1.462 | 1.313 | 4.37 | 5.12 | 0.563 |
| 2.250 | 3.000 | 3.310 | 5.750 | 1.462 | 1.313 | 4.37 | 5.12 | 0.689 |
| 2.375 | 3.130 | 3.560 | 6.000 | 1.462 | 1.313 | 4.62 | 5.37 | 0.689 |
| 2.500 | 3.250 | 3.875 | 6.250 | 1.462 | 1.433 | 4.87 | 5.62 | 0.689 |
| 2.625 | 3.500 | 3.875 | 6.250 | 1.482 | 1.433 | 4.87 | 5.62 | 0.689 |
| 2.750 | 3.740 | 3.875 | 6.250 | 1.482 | 1.433 | 4.87 | 5.62 | 0.689 |

## 技术参数：

密封腔温度：–20℃+205℃
线速度：≤15m/s
密封腔压力：≤21bar
轴径尺寸：24–70mm (1–2.75")

## Operating Limits:

Temperature:-20℃+205℃
Speed:≤15m/s
Pressure: ≤ 21bar
Standard Size: 24-70mm or 1-2.75"

## 材料组合：

密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

## Material:

Seal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton,EPDM,Kalrez
Spring and metal parts:304,316,HAST.C

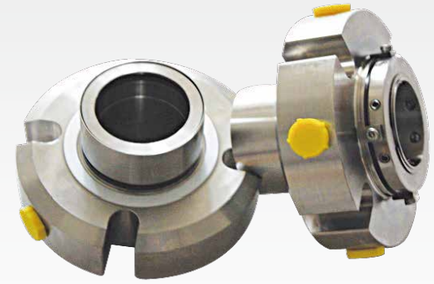
| D1(mm) | D4 Box Bore Min. | D4 Box Bore Max. | D26 | L90 Min. | L91 | N Min. | N Max. | M |
|---|---|---|---|---|---|---|---|---|
| 24 | 40.0 | 49.2 | 104.8 | 36 | 32 | 66.7 | 95.3 | 11.1 |
| 25 | 41.0 | 49.2 | 104.8 | 36 | 32 | 66.7 | 95.3 | 11.1 |
| 28 | 44.0 | 52.4 | 108.0 | 36 | 32 | 69.9 | 98.4 | 11.1 |
| 30 | 46.0 | 55.6 | 111.0 | 36 | 32 | 73.0 | 101.6 | 11.1 |
| 32 | 47.6 | 55.6 | 111.0 | 36 | 32 | 73.0 | 101.6 | 11.1 |
| 33 | 49.0 | 58.7 | 114.3 | 36 | 32 | 73.0 | 101.6 | 11.1 |
| 35 | 50.8 | 58.7 | 114.3 | 36 | 32 | 77.8 | 104.8 | 11.1 |
| 38 | 57.15 | 63.5 | 127.0 | 37 | 33 | 87.3 | 114.3 | 14.3 |
| 40 | 60.0 | 63.5 | 127.0 | 37 | 33 | 87.3 | 114.3 | 14.3 |
| 43 | 63.0 | 66.7 | 133.4 | 37 | 33 | 90.5 | 120.7 | 14.3 |
| 45 | 63.5 | 66.7 | 133.4 | 37 | 33 | 90.5 | 120.7 | 14.3 |
| 48 | 66.7 | 76.2 | 139.7 | 37 | 33 | 98.4 | 127.0 | 14.3 |
| 50 | 69.8 | 76.2 | 139.7 | 37 | 33 | 98.4 | 127.0 | 14.3 |
| 53 | 73.0 | 84.1 | 146.0 | 37 | 33 | 111.1 | 130.2 | 17.5 |
| 55 | 73.0 | 84.1 | 146.0 | 37 | 33 | 111.1 | 130.2 | 17.5 |
| 58 | 79.4 | 90.5 | 152.4 | 37 | 33 | 117.5 | 136.5 | 17.5 |
| 60 | 79.4 | 90.5 | 152.4 | 37 | 33 | 117.5 | 136.5 | 17.5 |
| 63 | 82.6 | 98.4 | 158.8 | 37 | 36 | 123.8 | 142.9 | 17.5 |
| 65 | 88.9 | 98.4 | 158.8 | 37.5 | 36 | 123.8 | 142.9 | 17.5 |
| 70 | 95.0 | 98.4 | 158.8 | 37.5 | 36 | 123.8 | 142.9 | 17.5 |



# GB4620/4620P

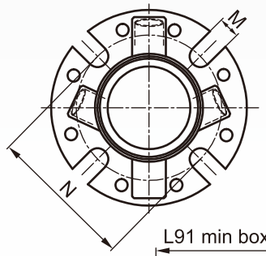
## 技术参数：

密封腔温度：–50℃+204℃
线速度：≤23m/s
密封腔压力：≤20bar
轴径尺寸：1"–2.75"



## Operating Limits:

Temperature:-50℃+204℃
Speed:≤23m/s
Pressure:≤20bar
Standard Size:1″-2.75″

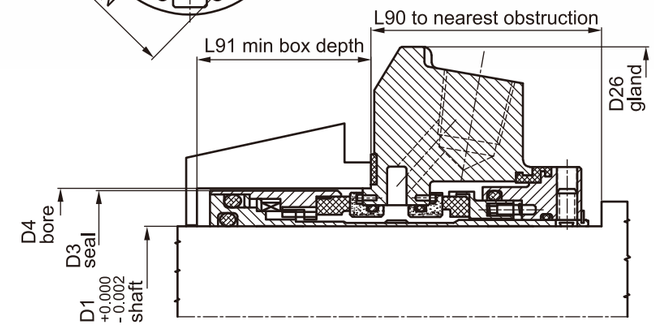



## 材料组合：

密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

## Material:

Seal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton,EPDM,Kalrez
Spring and metal parts:304，316，HAST.C




| D1(mm) | D4 Box Bore Min. | D4 Box Bore Max. | D26 | L90 | L91 Min. | N | M |
|---|---|---|---|---|---|---|---|
| 1.000 | 1.625 | 1.889 | 4.000 | 2.000 | 1.635 | 2.805 | 0.525 |
| 1.125 | 1.750 | 2.015 | 4.125 | 2.125 | 1.603 | 2.933 | 0.525 |
| 1.250 | 1.875 | 2.294 | 4.250 | 2.125 | 1.603 | 3.213 | 0.525 |
| 1.375 | 2.000 | 2.421 | 4.375 | 2.125 | 1.603 | 3.338 | 0.525 |
| 1.500 | 2.250 | 2.680 | 4.875 | 2.187 | 1.680 | 3.599 | 0.525 |
| 1.625 | 2.375 | 2.812 | 5.000 | 2.187 | 1.680 | 3.766 | 0.562 |
| 1.750 | 2.500 | 2.918 | 5.250 | 2.187 | 1.680 | 3.875 | 0.562 |
| 1.875 | 2.625 | 2.918 | 5.250 | 2.187 | 1.680 | 3.875 | 0.562 |
| 2.000 | 2.750 | 3.015 | 5.500 | 2.375 | 1.711 | 4.000 | 0.562 |
| 2.125 | 2.875 | 3.360 | 5.859 | 2.375 | 1.711 | 4.469 | 0.687 |
| 2.250 | 3.000 | 3.485 | 6.500 | 2.475 | 1.711 | 4.566 | 0.687 |
| 2.375 | 3.125 | 3.610 | 6.500 | 2.528 | 1.711 | 4.719 | 0.687 |
| 2.500 | 3.375 | 3.891 | 6.750 | 2.625 | 1.703 | 5.000 | 0.687 |
| 2.625 | 3.687 | 4.062 | 6.750 | 2.562 | 1.727 | 5.170 | 0.687 |
| 2.750 | 3.687 | 4.062 | 6.750 | 2.562 | 1.727 | 5.170 | 0.687 |



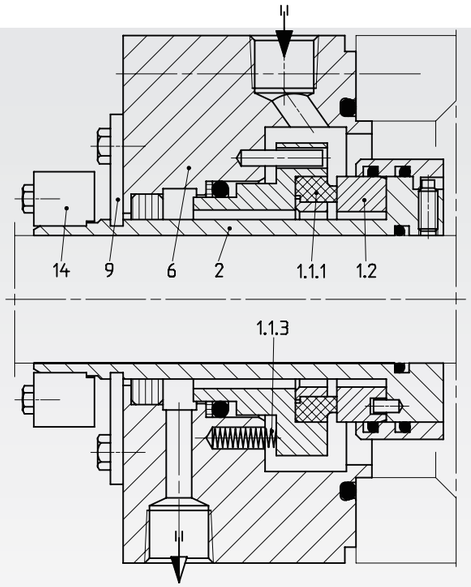
# GBSH(V)

**特 点:**

集装式设计
单密封
平衡
固定弹簧加载装置
波纹密封面
多弹簧

**Features:**

Cartridge design
Single seal
Balanced
Stationary spring loaded unit
Shrink-fitted seal face
Multiple springs




**优 点:**

- 对于高压高滑动速度优化的机械密封（静压高达500bar 动压高达150bar）
- 标准化内部组件，有效降低使用成本。
- 连接部件适用性强，安装方式灵活性高。
- 由于特殊设计，可应对小幅轴向窜动。
- 集装式设计，安装快捷方便。
- 符合API682的使用要求。
- 可提供灵活的密封面的版本，来应对极端工况下的使用。较少的组件设计。

**Advantages:**

- Deformation-optimized seal for high pressures and high sliding velocities (static up to 500 bar and dynamic up to 150 bar)
- Economical due to standardized inner components
- High flexibility due to adaptation of the connection parts to the pump seal chamber
- Insensitive to shaft deflections due to stationary design
- Pre-assembled unit for quick and easy installation
- Suitable for use in compliance with API 682, type ES
- Version with loose-fitted seal face available, for extreme applications
- Only small number of components

**技术参数:**

轴径轴径尺寸：d1*=40~250mm （1.57"~9.84"）
压力：p1=150bar（2175PSI）
温度：t=200℃（394° F）
滑动速度：vg=60 m/s（197 ft/s）
轴向移动：±3mm

**Operating Limits:**

Shaft diameter: d 1 * = 40-250 mm (1.57"- 9.84")
Pressure: p 1 = 150 bar (2,175 PSI)
Temperature: t = 200 °C (394 °F)
Sliding velocity: v g = 60 m/s (197 ft/s)
Axial movement: ±3 mm

*其他尺寸可按要求提供
Other sizes on request

**材料组合:**

密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金，AM350，HAST.C,In718,Ti

**Material:**

Seal ring: Car,Sic,Ssic,TC
Secondary seal: NBR,EPDM,Viton,Kalrez
Spring and Metal parts:304,316,AM350,
HAST.C,Inconel 718,Titanlum

**推荐应用:**

石油和天然气行业
精炼技术
化学工业
热水
酸性水
苛性钠
胺
结晶介质
原油
工艺用水
原油供给泵
注入泵
多相泵

**Recommended applications:**

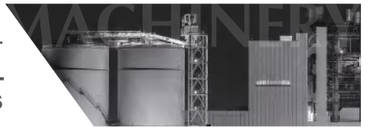
Oil and gas industry
Refining technology
Chemical industry
Hot water
Sour water
Caustic soda
Amines
Crystallizing media
Crude oil
Process water
Crude oil feed pumps
Injection pumps
Multi-phase pumps

SH(V)I与SH（V）设计相同，但具有松散插入的密封面用于极端应用。 压力：p1=200bar（2900PSI）

SH(V)I Same design as SH(V) but with loosely inserted seal face
for extreme applications.
Pressure: p1 = 200 bar (2,900 PSI)







# GBSHF/SHP

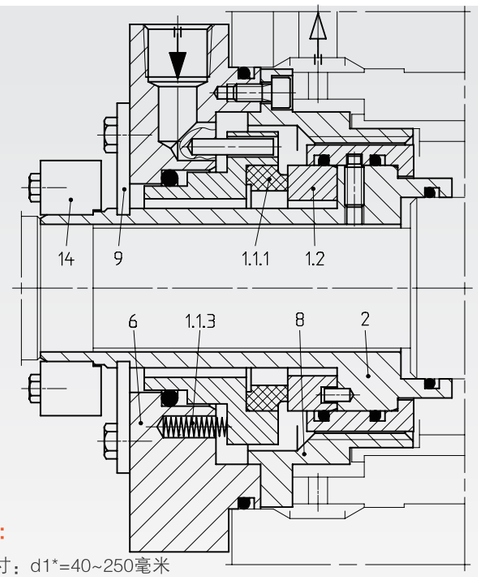
**特 点:**

集装式设计
单密封
平衡
取决于旋转方向
集成泵装置
固定弹簧加载装置
波纹密封面
多弹簧

**Features:**

Cartridge design
Single seal
Balanced
Dependent of direction of rotation
Integrated pumping device
Stationary spring loaded unit
Shrink-fitted seal face
Multiple springs






**优 点:**

- 对于高压高滑动速度优化的机械密封。
- 标准化内部组件，有效降低使用成本。
- 可替换锅炉给水泵的迷宫、填料密封等。
- 连接部件适用性强，安装方式灵活性高。
- 集成泵送环设计，优化散热。
- 由于特殊设计，可应对小幅轴向窜动。
- 集装式设计，安装快捷方便。
- 较少的组件设计。
- 较短的设计方案。

**Advantages:**

- Deformation-optimized seal for high sliding velocitiesand medium pressures
- Economical due to standardized inner components
- Universal application for OEM or retrofits of boiler feed water pumps with floating ring seals, labyrinths or packings
- High flexibility due to adaptation of the connection parts to the pump seal chamber
- Optimum heat dissipation due to integrated pumping device and optimized seat design
- Insensitive to shaft deflections due to stationary design
- Pre-assembled unit for quick and easy installation
- Only small number of components
Short built

**技术参数:**

轴径轴径尺寸：d1*=40~250毫米（1.57"~9.84"）
压力：p1=50bar（725PSI）
温度：t=300℃（572° F）
滑动速度：vg=60 m/s（197 ft/s）
轴向移动：±3mm

**Operating Limits:**

Shaft diameter: d1* = 40-250 mm (1.57"- 9.84")
Pressure: p1= 50 bar (725PSI)
Temperature: t = 300 °C (572 °F)
Sliding velocity: vg = 60 m/s (197 ft/s)
Axial movement: ±3 mm
*其他尺寸可按要求提供
Other sizes on request

**材料组合:**

密 封 面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶， 全氟橡胶
弹簧及金属件：304，316，哈氏合金，AM350，HAST.C,In718,Ti

**Material:**

Seal ring: Car,Sic,Ssic,TC
Secondary seal: NBR,EPDM,Viton,Kalrez
Spring and Metal parts:304,316,AM350,
HAST.C,Inconel 718,Titanlum

**推荐应用:**

石油和天然气行业
精炼技术
化学工业
热水
酸性水
苛性钠
胺
结晶介质
原油
工艺用水
原油供给泵
注入泵
多相泵

**Recommended applications:**

Oil and gas industry
Refining technology
Chemical industry
Hot water
Sour water
Caustic soda
Amines
Crystallizing media
Crude oil
Process water
Crude oil feed pumps
Injection pumps
Multi-phase pumps



SHF4型带整体夹套冷却的单机械密封，锅炉给水泵。

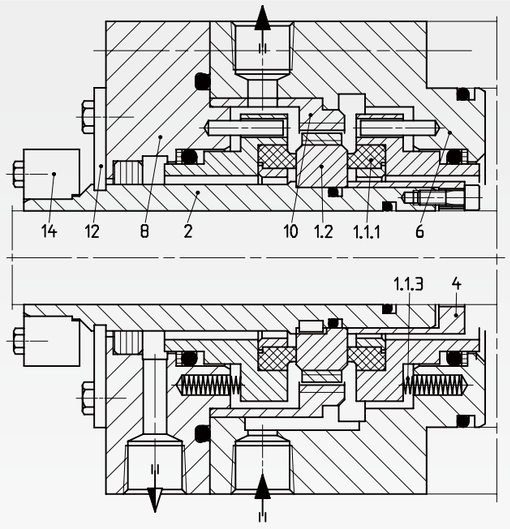
SHF4 Single mechanical seal with integrated jacket cooling, for boiler feed pumps.

# GBSHF(V)-D/SHP(V)-D

**特 点:**

集装式设计
双端面
平衡
取决于旋转方向
集成泵装置
固定弹簧加载装置
波纹密封面
稳定的静环
多弹簧






**Features**

Cartridge design
Dual seal
Balanced
Integrated pumping device
Stationary spring loaded unit
Shrink-fitted seal face
One rugged seat
Multiple springs arrangement

**优 点:**

- 对于高压高滑动速度优化的机械密封（静压高达500ba 动压高达150ba）
- 标准化内部组件，有效降低使用成本。
- 连接部件适用性强，安装方式灵活性高。
- 集成泵送环设计，优化散热。
- 由于特殊设计，可应对小幅轴向窜动。
- 集装式设计，安装快捷方便。
- 即使在隔离液压力失效的情况下，密封面也不会打开。
- 加强的动静环设计。
- 符合API682的使用要求。
- 可提供灵活的密封面的版本，来应对极端工况下的使用。
- 较少的组件设计。

**Advantages:**

- Deformation-optimized seal for high pressures and high sliding velocities (static up to 500 bar (7,250 PSI)) and dynamic up to 150 bar (2,175 PSI)
- Economical due to standardized inner components
- High flexibility due to adaptation of the connection partsto the pump seal chamber
- Optimum heat dissipation due to integrated pumping device
- Insensitive to shaft deflections due to stationary design
- Pre-assembled unit for quick and easy installation
- Dual seal does not open even in the event of barrier fluid pressure failure
- Reliable operation due to one rugged seat with bandage
- Suitable for use in compliance with API 682, type ES
- Version with loose-fitted seal face available, for extreme applications
- Only small number of components

**技术参数:**

轴径轴径尺寸：d1*=40~250毫米
（1.57"~9.84"）
压力：p3=150bar（2175PSI）
温度：t=200℃（392° F）
滑动速度：vg=60 m/s（197 ft/s）

**Operating Limits:**

Shaft diameter: d 1 * = 40-250 mm
(1.57"- 9.84")
Pressure: p 1 = 150 bar (2,175 PSI)
Temperature: t = 200 °C (392 °F)
Sliding velocity: vg= 60 m/s (197 ft/s)

**材料组合:**

密 封 面：石墨，浸锑碳，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶， 全氟橡胶
弹簧及金属件：304，316，哈氏合金，AM350，T2,HAST.C,In718,Ti

**Material:**

Seal ring: Car,Q3,Sic,Ssic,TC
Secondary seal: NBR,EPDM,Viton,Kalrez
Spring and Metal parts:304,316,AM350,T2
HAST.C,Inconel 718,Titanlum

**推荐应用:**

石油和天然气行业
精炼技术
化学工业
挥发性和非挥发性碳氢化合物
原油
工艺用水
原油供给泵
注入泵
多相泵

**Recommended applications:**

Oil and gas industry
Refining technology
Chemical industry
Volatile and non-volatile hydrocarbons
Crude oil
Process water
Crude oil feed pumps
Injection pumps
Multi-phase pumps

**SHF（V）内径/SHP（V）内径**

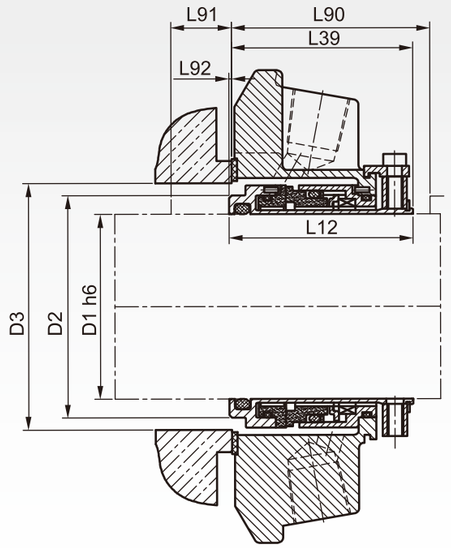
与SHF（V）-D/SHP（V）-D的设计相同，但具有松散的用于极端应用的插入式密封面。
压力：p1=200bar（2900PSI）

**SHF(V)I-D/SHP(V)I-D**

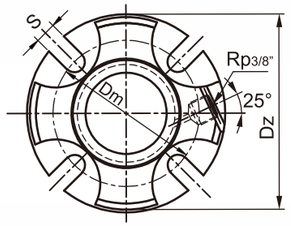
Same design as SHF(V)-D/SHP(V)-D but with loosely inserted seal face for extreme applications.
Pressure: p 1 = 200 bar (2,900 PSI)



# GB5610






| Size | D2 | D3Min | D3Max | Dz | L12 | L39 | L90 | L91 | L92 | Dm | S |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 34.9 | 36.7 | 48.0 | 101.6 | 50.5 | 49.6 | 50.8 | 4.0 | 0.9 | 71.2 | 13.3 |
| 25 | 34.9 | 36.7 | 48.0 | 101.6 | 50.5 | 49.6 | 50.8 | 4.0 | 0.9 | 71.2 | 13.3 |
| 28 | 38.1 | * | 51.2 | 104.8 | 52.4 | 52.4 | 54.0 | 3.2 | * | 74.6 | 13.3 |
| 30 | 40.0 | * | 56.5 | 108.0 | 52.4 | 52.4 | 54.0 | 3.2 | * | 79.9 | 13.3 |
| 32 | 41.3 | * | 58.3 | 108.0 | 52.4 | 52.4 | 54.0 | 3.2 | * | 81.6 | 13.3 |
| 33 | 44.5 | * | 61.5 | 111.1 | 52.4 | 52.4 | 54.0 | 3.2 | * | 84.8 | 13.3 |
| 35 | 44.5 | * | 61.5 | 111.1 | 52.4 | 52.4 | 54.0 | 3.2 | * | 84.8 | 13.3 |
| 38 | 49.2 | 51.0 | 68.1 | 123.8 | 54.8 | 54.0 | 55.5 | 4.0 | 0.8 | 91.4 | 13.3 |
| 40 | 52.4 | 54.2 | 71.4 | 127.0 | 54.8 | 54.0 | 55.5 | 4.0 | 0.8 | 96.7 | 14.3 |
| 43 | 55.1 | 56.9 | 74.1 | 133.4 | 54.8 | 54.0 | 55.5 | 4.0 | 0.8 | 98.4 | 14.3 |
| 45 | 55.1 | 56.9 | 74.1 | 133.4 | 54.8 | 54.0 | 55.5 | 4.0 | 0.8 | 98.4 | 14.3 |
| 48 | 58.7 | 60.5 | 74.1 | 133.4 | 54.8 | 54.0 | 55.5 | 4.0 | 0.8 | 98.4 | 14.3 |
| 50 | 61.9 | 63.7 | 76.6 | 139.7 | 60.3 | 58.7 | 60.3 | 4.7 | 1.6 | 101.6 | 14.3 |
| 53 | 65.1 | 66.9 | 85.3 | 148.8 | 60.3 | 58.7 | 60.3 | 4.7 | 1.6 | 113.5 | 17.4 |
| 55 | 66.7 | 75.0 | 85.3 | 148.8 | 60.3 | 58.7 | 60.3 | 4.7 | 1.6 | 113.5 | 17.4 |
| 58 | 68.2 | 70.0 | 88.5 | 165.1 | 60.3 | 58.7 | 60.3 | 4.7 | 1.6 | 116.0 | 17.4 |
| 60 | 71.4 | 73.2 | 91.7 | 165.1 | 63.1 | 62.6 | 64.2 | 3.6 | 1.6 | 119.9 | 17.4 |
| 63 | 77.8 | * | 98.8 | 171.5 | 63.1 | 65.1 | 66.7 | 3.2 | 0.5 | 127.0 | 17.4 |
| 65 | 77.8 | * | 98.8 | 171.5 | 63.1 | 65.1 | 66.7 | 3.2 | * | 127.0 | 17.4 |
| 68 | 84.1 | * | 103.2 | 171.5 | 63.5 | 63.5 | 65.1 | 3.2 | * | 131.3 | 17.4 |
| 70 | 84.1 | * | 103.2 | 171.5 | 63.5 | 63.5 | 65.1 | 3.2 | * | 131.3 | 17.4 |
| 75 | 92.1 | * | 113.5 | 196.9 | 63.5 | 65.1 | 66.7 | 3.2 | * | 145.3 | 20.6 |
| 80 | 95.3 | 97.9 | 116.8 | 188.9 | 65.1 | 63.8 | 66.9 | 4.5 | 1.3 | 148.4 | 20.6 |
| 85 | 101.6 | 104.8 | 123.2 | 206.4 | 65.1 | 65.1 | 68.3 | 3.2 | * | 154.5 | 20.6 |
| 90 | 107.1 | 110.3 | 129.5 | 212.7 | 65.1 | 65.1 | 68.3 | 3.2 | * | 158.8 | 17.4 |
| 95 | 110.3 | 113.5 | 132.1 | 222.3 | 65.1 | 65.1 | 68.3 | 3.2 | * | 172.0 | 17.4 |
| 100 | 116.7 | 119.8 | 139.7 | 228.6 | 65.1 | 65.1 | 68.3 | 3.2 | * | 171.7 | 20.6 |
| 105 | 119.8 | 123.0 | 142.9 | 228.6 | 65.1 | 65.1 | 68.3 | 3.2 | * | 174.9 | 20.6 |
| 110 | 129.4 | 132.5 | 152.4 | 241.3 | 65.1 | 65.1 | 68.3 | 3.2 | * | 184.4 | 20.6 |
| 115 | 129.4 | 132.5 | 152.4 | 241.3 | 65.1 | 65.1 | 68.3 | 3.2 | * | 184.4 | 20.6 |
| 120 | 135.7 | 138.9 | 160.4 | 263.5 | 65.1 | 65.1 | 68.3 | 3.2 | * | 192.4 | 20.6 |
| 125 | 148.4 | 151.6 | 184.4 | 304.8 | 75.0 | 77.3 | 80.5 | 3.2 | * | 254.0 | 20.6 |
| 130 | 154.8 | 157.9 | 190.8 | 311.2 | 75.0 | 77.3 | 80.5 | 3.2 | * | 260.4 | 20.6 |
| 135 | 161.1 | 164.3 | 203.2 | 322.3 | 75.0 | 77.3 | 80.5 | 3.2 | * | 265.7 | 23.8 |
| 140 | 161.1 | 164.3 | 203.2 | 322.3 | 75.0 | 77.3 | 80.5 | 3.2 | * | 265.7 | 23.8 |

**技术参数:**

密封腔温度：-30℃+205℃
线速度：≤25m/s
密封腔压力：≤21bar
轴径尺寸：24-140mm (1"-5.5")

**Operating Limits:**

Temperature:-30℃+205℃
Speed:≤25m/s
Pressure:≤21bar
Standard Size:24-140mm or 1"-5.5"

**材料组合:**

密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

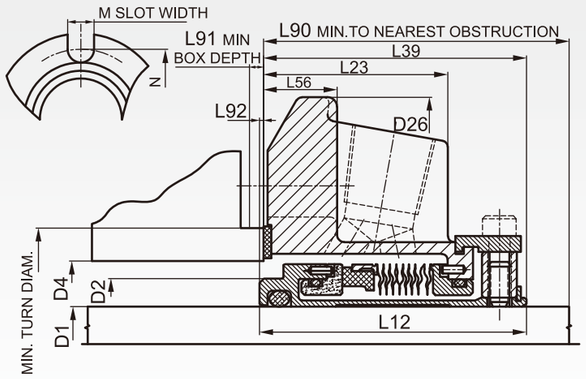
**Material:**

Seal Ring:Car,Sic,Ssic,TC
Secondary seal:NBR,Viton,EPDM,Kalrez
Spring and metal parts:304,316,HAST.C

| Size | D2 | D3Min | D3Max | Dz | L12 | L39 | L90 | L91 | L92 | Dm | S |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | 1.375 | 1.445 | 1.889 | 4.000 | 1.989 | 1.954 | 2.000 | 0.160 | 0.035 | 2.805 | 0.525 |
| 1.125 | 1.500 | * | 2.015 | 4.125 | 2.062 | 2.062 | 2.125 | 0.125 | * | 2.933 | 0.525 |
| 1.250 | 1.625 | * | 2.294 | 4.250 | 2.062 | 2.062 | 2.125 | 0.125 | * | 3.213 | 0.525 |
| 1.375 | 1.750 | * | 2.421 | 4.376 | 2.062 | 2.062 | 2.125 | 0.125 | * | 3.338 | 0.525 |
| 1.500 | 1.937 | 2.007 | 2.680 | 4.876 | 2.156 | 2.125 | 2.187 | 0.156 | 0.031 | 3.599 | 0.525 |
| 1.625 | 2.062 | 2.132 | 2.812 | 5.000 | 2.156 | 2.125 | 2.187 | 0.156 | 0.031 | 3.766 | 0.662 |
| 1.750 | 2.170 | 2.240 | 2.918 | 5.250 | 2.156 | 2.125 | 2.187 | 0.156 | 0.031 | 3.875 | 0.662 |
| 1.875 | 2.312 | 2.382 | 2.918 | 5.250 | 2.156 | 2.125 | 2.187 | 0.156 | 0.031 | 3.875 | 0.662 |
| 2.000 | 2.437 | 2.507 | 3.015 | 5.500 | 2.375 | 2.312 | 2.375 | 0.187 | 0.062 | 4.000 | 0.662 |
| 2.125 | 2.662 | 2.623 | 3.360 | 5.869 | 2.375 | 2.312 | 2.375 | 0.187 | 0.062 | 4.469 | 0.687 |
| 2.250 | 2.687 | 2.767 | 3.485 | 6.500 | 2.375 | 2.312 | 2.375 | 0.187 | 0.062 | 4.566 | 0.687 |
| 2.375 | 2.812 | 2.882 | 3.610 | 6.500 | 2.484 | 2.406 | 2.625 | 0.143 | 0.018 | 4.719 | 0.687 |
| 2.500 | 3.062 | * | 3.891 | 6.750 | 2.484 | 2.662 | 2.625 | 0.125 | * | 5.000 | 0.687 |
| 2.625 | 3.312 | * | 4.062 | 6.750 | 2.500 | 2.600 | 2.625 | 0.125 | * | 5.170 | 0.687 |
| 2.750 | 3.312 | * | 4.062 | 6.750 | 2.500 | 2.600 | 2.662 | 0.125 | * | 5.170 | 0.687 |
| 2.875 | 3.375 | * | 4.186 | 7.000 | 2.500 | 2.600 | 2.662 | 0.125 | * | 5.312 | 0.687 |
| 3.000 | 3.625 | * | 4.469 | 7.750 | 2.500 | 2.662 | 2.625 | 0.125 | * | 5.720 | 0.812 |
| 3.125 | 3.750 | 3.853 | 4.600 | 7.875 | 2.662 | 2.662 | 2.687 | 0.125 | * | 5.845 | 0.812 |
| 3.250 | 3.750 | 3.853 | 4.600 | 7.437 | 2.662 | 2.610 | 2.635 | 0.177 | 0.062 | 5.845 | 0.812 |
| 3.375 | 4.000 | 4.125 | 4.850 | 8.125 | 2.662 | 2.662 | 2.687 | 0.125 | * | 6.095 | 0.812 |
| 3.500 | 4.125 | 4.250 | 4.975 | 8.250 | 2.562 | 2.662 | 2.687 | 0.125 | * | 6.220 | 0.812 |
| 3.625 | 4.218 | 4.343 | 5.100 | 8.375 | 2.562 | 2.662 | 2.687 | 0.125 | * | 6.250 | 0.687 |
| 3.750 | 4.343 | 4.468 | 5.199 | 8.750 | 2.562 | 2.662 | 2.687 | 0.125 | * | 6.770 | 0.687 |
| 3.875 | 4.468 | 4.593 | 5.375 | 8.750 | 2.562 | 2.662 | 2.687 | 0.125 | * | 6.635 | 0.812 |
| 4.000 | 4.593 | 4.718 | 5.500 | 9.000 | 2.562 | 2.662 | 2.687 | 0.125 | * | 6.761 | 0.812 |
| 4.125 | 4.718 | 4.843 | 5.625 | 9.000 | 2.562 | 2.662 | 2.687 | 0.125 | * | 6.886 | 0.812 |
| 4.250 | 4.843 | 4.968 | 5.750 | 9.250 | 2.562 | 2.662 | 2.687 | 0.125 | * | 7.011 | 0.812 |
| 4.500 | 5.093 | 5.218 | 6.000 | 9.500 | 2.562 | 2.662 | 2.687 | 0.125 | * | 7.261 | 0.812 |
| 4.750 | 5.343 | 5.468 | 6.313 | 10.375 | 2.562 | 2.662 | 2.687 | 0.125 | * | 7.574 | 0.812 |
| 5.000 | 5.843 | 5.968 | 7.200 | 12.000 | 2.953 | 3.043 | 3.168 | 0.125 | * | 10.000 | 0.812 |
| 5.250 | 6.093 | 6.218 | 7.510 | 12.250 | 2.953 | 3.043 | 3.168 | 0.125 | * | 10.250 | 0.812 |
| 5.500 | 6.343 | 6.468 | 8.000 | 12.687 | 2.953 | 3.043 | 3.168 | 0.125 | * | 10.500 | 0.937 |

# GB5615






**技术参数：**

密封腔温度：-30℃+205℃
线速度：≤25m/s
密封腔压力：≤16bar
轴径尺寸：24-75mm或1"-3"

**Operating Limits:**

Temperature:-30℃+205℃
Speed:≤ 25m/s
Pressure: ≤16bar
Standard Size: 24~75mm or 1"~3"

**材料组合：**

密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

**Material:**

Seal Ring:Car,Sic,Ssic,TC
Secondary seal:NBR,Viton,EPDM,Kalrez
Spring and metal parts:304,316,HAST.C

**GB-Type 5615 Dimensions(Inches)**

| D1 | D2 | D4(min.) | D4(max.) | D26 | L12 | L23 | L39 | L56 | L90 | L91 | L92 | M | N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | 1.375 | 1.445 | 1.889 | 4.000 | 1.989 | 1.353 | 1.954 | 0.531 | 2.000 | 0.160 | 0.035 | 0.525 | 2.805 |
| 1.125 | 1.500 | * | 2.015 | 4.125 | 2.062 | 1.446 | 2.062 | 0.531 | 2.125 | 0.125 | * | 0.525 | 2.933 |
| 1.250 | 1.625 | * | 2.294 | 4.250 | 2.062 | 1.446 | 2.062 | 0.531 | 2.125 | 0.125 | * | 0.525 | 3.213 |
| 1.375 | 1.750 | * | 2.421 | 4.375 | 2.062 | 1.446 | 2.062 | 0.531 | 2.125 | 0.125 | * | 0.525 | 3.338 |
| 1.500 | 1.937 | 2.007 | 2.680 | 4.875 | 2.156 | 1.487 | 2.125 | 0.593 | 2.187 | 0.156 | 0.031 | 0.525 | 3.599 |
| 1.625 | 2.062 | 2.132 | 2.812 | 5.000 | 2.156 | 1.487 | 2.125 | 0.593 | 2.187 | 0.156 | 0.031 | 0.562 | 3.766 |
| 1.750 | 2.170 | 2.240 | 2.918 | 5.250 | 2.156 | 1.487 | 2.125 | 0.593 | 2.187 | 0.156 | 0.031 | 0.562 | 3.875 |
| 1.875 | 2.312 | 2.382 | 2.918 | 5.250 | 2.156 | 1.487 | 2.125 | 0.593 | 2.187 | 0.156 | 0.031 | 0.562 | 3.875 |
| 2.000 | 2.437 | 2.507 | 3.015 | 5.500 | 2.375 | 1.601 | 2.312 | 1.063 | 2.375 | 0.187 | 0.062 | 0.562 | 4.000 |
| 2.125 | 2.562 | 2.632 | 3.360 | 5.859 | 2.375 | 1.601 | 2.312 | 0.593 | 2.375 | 0.187 | 0.062 | 0.687 | 4.469 |
| 2.250 | 2.687 | 2.757 | 3.485 | 6.500 | 2.375 | 1.601 | 2.312 | 0.593 | 2.375 | 0.187 | 0.062 | 0.687 | 4.566 |
| 2.375 | 2.812 | 2.882 | 3.610 | 6.500 | 2.484 | 1.717 | 2.466 | 0.625 | 2.528 | 0.143 | 0.018 | 0.687 | 4.719 |
| 2.500 | 3.062 | * | 3.891 | 6.750 | 2.484 | 1.717 | 2.563 | 0.625 | 2.625 | 0.125 | * | 0.687 | 5.000 |
| 2.625 | 3.312 | * | 4.062 | 6.750 | 2.500 | 1.625 | 2.500 | 0.625 | 2.562 | 0.125 | * | 0.687 | 5.170 |
| 2.750 | 3.312 | * | 4.062 | 6.750 | 2.500 | 1.625 | 2.500 | 0.625 | 2.562 | 0.125 | * | 0.687 | 5.170 |
| 2.875 | 3.375 | * | 4.186 | 7.000 | 2.500 | 1.725 | 2.500 | 0.625 | 2.562 | 0.125 | * | 0.687 | 5.312 |
| 3.000 | 3.625 | * | 4.469 | 7.750 | 2.500 | 1.787 | 2.562 | 0.685 | 2.625 | 0.125 | * | 0.812 | 5.720 |

**Type 5615 Oversize Bore Dimensional Data (inches)**

| D1 | D2 | D4(min.) | D4(max.) | D26 | L12 | L23 | L39 | L56 | L90 | L91 | L92 | M | N | Turn Diam.(min.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.375 | 1.750 | 2.875 | 3.023 | 5.375 | 2.062 | 1.446 | 2.062 | 0.625 | 2.125 | 0.250 | 0.125 | 0.562 | 4.062 | 3.268 |
| 1.750 | 2.170 | 3.500 | 3.925 | 6.500 | 2.156 | 1.487 | 2.125 | 0.656 | 2.187 | 0.250 | 0.125 | 0.687 | 5.093 | 3.885 |
| 1.875 | 2.312 | 3.625 | 3.734 | 6.500 | 2.156 | 1.316 | 1.954 | 0.485 | 2.017 | 0.327 | 0.202 | 0.687 | 5.093 | ** |
| 2.125 | 2.562 | 3.875 | 4.250 | 7.156 | 2.375 | 1.570 | 2.282 | 0.749 | 2.407 | 0.219 | 0.094 | 0.687 | 5.687 | 4.264 |
| 2.500 | 3.062 | 4.750 | 4.875 | 8.000 | 2.484 | 1.697 | 2.407 | 0.656 | 2.532 | 0.204 | 0.079 | 0.687 | 6.062 | 5.139 |
| 2.625 | 3.312 | 4.625 | 4.740 | 8.000 | 2.500 | 1.617 | 2.329 | 0.578 | 2.454 | 0.296 | 0.171 | 0.687 | 6.062 | *** |
| 2.750 | 3.312 | 4.750 | 4.875 | 8.000 | 2.500 | 1.697 | 2.407 | 0.656 | 2.532 | 0.218 | 0.093 | 0.687 | 6.062 | 5.139 |

**Seal cartridge is OD registered on the turn diam. of 4.125"; ***Seal cartridge is OD registered on the turn diam. of 5.125".

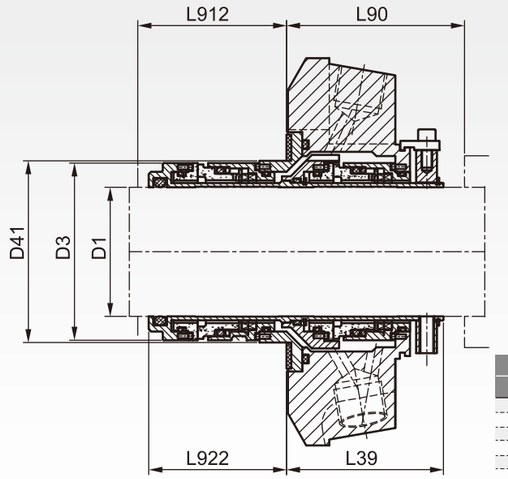
**GB-Type 5615 Dimensions(mm)**

| D1 | D2 | D4(min.) | D4(max.) | D26 | L12 | L23 | L39 | L56 | L90 | L91 | L92 | M | N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 34.9 | 36.7 | 48 | 101.6 | 50.5 | 34.4 | 49.6 | 13.5 | 50.8 | 4 | 0.9 | 13.3 | 71.2 |
| 25 | 34.9 | 36.7 | 48 | 101.6 | 50.5 | 34.4 | 49.6 | 13.5 | 50.8 | 4 | 0.9 | 13.3 | 71.2 |
| 28 | 38.1 | * | 51.2 | 104.8 | 52.4 | 36.7 | 52.4 | 13.5 | 54 | 3.2 | * | 13.3 | 74.5 |
| 30 | 40 | * | 56.5 | 108 | 52.4 | 36.7 | 52.4 | 13.5 | 54 | 3.2 | * | 13.3 | 79.9 |
| 32 | 41.3 | * | 58.3 | 108 | 52.4 | 36.7 | 52.4 | 13.5 | 54 | 3.2 | * | 13.3 | 81.6 |
| 33 | 44.5 | * | 61.5 | 111.1 | 52.4 | 36.7 | 52.4 | 13.5 | 54 | 3.2 | * | 13.3 | 84.8 |
| 35 | 44.5 | * | 61.5 | 111.1 | 52.4 | 36.7 | 52.4 | 13.5 | 54 | 3.2 | * | 13.3 | 84.8 |
| 38 | 49.2 | 51 | 68.1 | 123.8 | 54.8 | 37.8 | 54 | 15.1 | 55.5 | 4 | 0.8 | 13.3 | 91.4 |
| 40 | 52.4 | 54.2 | 71.4 | 127 | 54.8 | 37.8 | 54 | 15.1 | 55.5 | 4 | 0.8 | 14.3 | 95.7 |
| 43 | 55.1 | 56.9 | 74.1 | 133.4 | 54.8 | 37.8 | 54 | 15.1 | 55.5 | 4 | 0.8 | 14.3 | 98.4 |
| 45 | 55.1 | 56.9 | 74.1 | 133.4 | 54.8 | 37.8 | 54 | 15.1 | 55.5 | 4 | 0.8 | 14.3 | 98.4 |
| 48 | 58.7 | 60.5 | 74.1 | 133.4 | 54.8 | 37.8 | 54 | 15.1 | 55.5 | 4 | 0.8 | 14.3 | 98.4 |
| 50 | 61.9 | 63.7 | 76.6 | 139.7 | 60.3 | 40.7 | 58.7 | 27 | 60.3 | 4.7 | 1.6 | 14.3 | 101.6 |
| 53 | 65.1 | 66.9 | 85.3 | 148.8 | 60.3 | 40.7 | 58.7 | 15.1 | 60.3 | 4.7 | 1.6 | 17.4 | 113.5 |
| 55 | 66.7 | 75 | 85.3 | 148.8 | 60.3 | 40.7 | 58.7 | 15.1 | 60.3 | 4.7 | 1.6 | 17.4 | 113.5 |
| 58 | 68.2 | 70 | 88.5 | 165.1 | 60.3 | 40.7 | 58.7 | 15.1 | 60.3 | 4.7 | 1.6 | 17.4 | 116 |
| 60 | 71.4 | 73.2 | 91.7 | 165.1 | 63.1 | 43.6 | 62.6 | 15.9 | 64.2 | 3.6 | 0.5 | 17.4 | 119.9 |
| 63 | 77.8 | * | 98.8 | 171.5 | 63.1 | 43.6 | 65.1 | 15.9 | 66.7 | 3.2 | * | 17.4 | 127 |
| 65 | 77.8 | * | 98.8 | 171.5 | 63.1 | 43.6 | 65.1 | 15.9 | 66.7 | 3.2 | * | 17.4 | 127 |
| 68 | 84.1 | * | 103.2 | 171.5 | 63.5 | 41.3 | 63.5 | 15.9 | 65.1 | 3.2 | * | 17.4 | 131.3 |
| 70 | 84.1 | * | 103.2 | 171.5 | 63.5 | 41.3 | 63.5 | 15.9 | 65.1 | 3.2 | * | 17.4 | 131.3 |
| 75 | 92.1 | * | 113.5 | 196.9 | 63.5 | 45.4 | 65.1 | 17.4 | 66.7 | 3.2 | * | 20.6 | 145.3 |

*Not applicable. Completely outside mounted.



# GB5620






**技术参数：**

密封腔温度：-30℃+205℃
线速度：≤25m/s
密封腔压力：≤21bar
轴径尺寸：24-140mm（1"-5.5"）

**Operating Limits:**

Temperature:-30℃+205℃
Speed:≤25m/s
Pressure:≤21bar
Standard Size:24-140mm or 1"-5.5"

**材料组合：**

密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

**Material:**

Seal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton,EPDM,Kalrez
Spring and metal parts:304,316,HAST.C

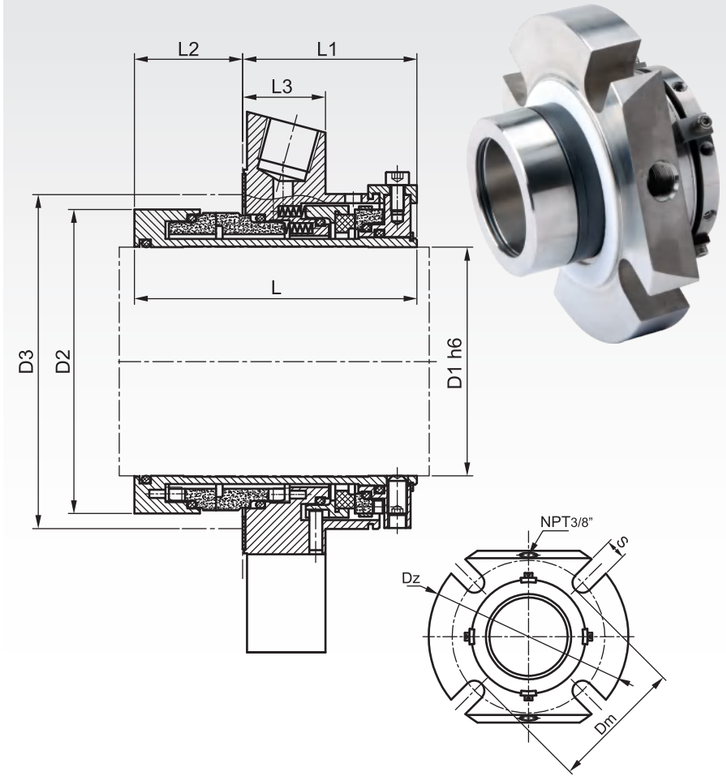
**GB-5620 Dimensions(Inch)**

| D1 | D3 | D41Min | D41Max | L39 | L90 | L922 | L912 | D26 | S | Dm |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | 1.564 | 1.625 | 1.889 | 1.954 | 2.000 | 1.751 | 1.876 | 4.000 | 0.525 | 2.806 |
| 1.125 | 1.689 | 1.750 | 2.015 | 2.062 | 2.125 | 1.789 | 1.914 | 4.125 | 0.525 | 2.933 |
| 1.250 | 1.812 | 1.875 | 2.294 | 2.062 | 2.125 | 1.789 | 1.914 | 4.250 | 0.525 | 3.213 |
| 1.375 | 1.939 | 2.000 | 2.421 | 2.062 | 2.125 | 1.789 | 1.914 | 4.375 | 0.525 | 3.338 |
| 1.500 | 2.187 | 2.250 | 2.680 | 2.125 | 2.187 | 1.870 | 1.995 | 4.875 | 0.525 | 3.599 |
| 1.625 | 2.312 | 2.375 | 2.812 | 2.125 | 2.187 | 1.870 | 1.995 | 5.000 | 0.562 | 3.766 |
| 1.750 | 2.405 | 2.480 | 2.918 | 2.125 | 2.187 | 1.870 | 1.995 | 5.250 | 0.562 | 3.872 |
| 1.875 | 2.549 | 2.625 | 2.918 | 2.125 | 2.187 | 1.870 | 1.995 | 5.250 | 0.562 | 3.875 |
| 2.000 | 2.637 | 2.750 | 3.015 | 2.312 | 2.375 | 2.042 | 2.167 | 5.500 | 0.562 | 4.000 |
| 2.125 | 2.798 | 2.875 | 3.360 | 2.312 | 2.375 | 2.042 | 2.167 | 5.859 | 0.687 | 4.469 |
| 2.250 | 2.923 | 3.000 | 3.485 | 2.312 | 2.375 | 2.042 | 2.167 | 6.500 | 0.687 | 4.566 |
| 2.375 | 3.048 | 3.125 | 3.610 | 2.466 | 2.825 | 2.079 | 2.204 | 6.500 | 0.687 | 4.719 |
| 2.500 | 3.301 | 3.375 | 3.891 | 2.562 | 2.625 | 1.982 | 2.107 | 6.750 | 0.687 | 5.000 |
| 2.625 | 3.551 | 3.625 | 4.062 | 2.500 | 2.562 | 2.094 | 2.219 | 6.750 | 0.687 | 5.170 |
| 2.750 | 3.551 | 3.625 | 4.062 | 2.500 | 2.562 | 2.094 | 2.219 | 6.750 | 0.687 | 5.170 |
| 2.875 | 3.614 | 3.750 | 4.186 | 2.500 | 2.562 | 2.094 | 2.219 | 7.000 | 0.687 | 5.312 |
| 3.000 | 3.864 | 4.000 | 4.469 | 2.562 | 2.625 | 2.032 | 2.157 | 7.750 | 0.812 | 5.720 |
| 3.125 | 4.022 | 4.125 | 4.600 | 2.562 | 2.687 | 2.125 | 2.250 | 7.875 | 0.812 | 5.845 |
| 3.250 | 4.022 | 4.134 | 4.600 | 2.510 | 2.635 | 2.177 | 2.302 | 7.437 | 0.812 | 5.845 |
| 3.375 | 4.246 | 4.375 | 4.850 | 2.562 | 2.687 | 2.125 | 2.250 | 8.125 | 0.812 | 6.095 |
| 3.500 | 4.371 | 4.500 | 4.975 | 2.562 | 2.687 | 2.125 | 2.250 | 8.250 | 0.812 | 6.220 |
| 3.625 | 4.500 | 4.625 | 5.100 | 2.562 | 2.687 | 2.125 | 2.250 | 8.375 | 0.687 | 6.250 |
| 3.750 | 4.625 | 4.724 | 5.199 | 2.562 | 2.687 | 2.125 | 2.250 | 8.750 | 0.687 | 6.770 |
| 3.875 | 4.750 | 4.875 | 5.375 | 2.562 | 2.687 | 2.125 | 2.250 | 8.750 | 0.812 | 6.636 |
| 4.000 | 4.875 | 5.000 | 5.500 | 2.562 | 2.687 | 2.125 | 2.250 | 9.000 | 0.812 | 6.761 |
| 4.125 | 5.000 | 5.125 | 5.625 | 2.562 | 2.687 | 2.125 | 2.250 | 9.000 | 0.812 | 6.886 |
| 4.250 | 5.125 | 5.250 | 5.750 | 2.562 | 2.687 | 2.125 | 2.250 | 9.250 | 0.812 | 7.011 |
| 4.500 | 5.375 | 5.500 | 6.000 | 2.562 | 2.687 | 2.125 | 2.250 | 9.500 | 0.812 | 7.261 |
| 4.750 | 5.625 | 5.750 | 6.313 | 2.562 | 2.687 | 2.125 | 2.250 | 10.375 | 0.812 | 7.574 |
| 5.000 | 6.125 | 6.760 | 7.260 | 3.043 | 3.168 | 2.473 | 2.598 | 12.000 | 0.812 | 10.000 |
| 5.250 | 6.375 | 7.010 | 7.510 | 3.043 | 3.168 | 2.473 | 2.598 | 12.250 | 0.812 | 10.250 |
| 5.500 | 6.625 | 7.500 | 8.000 | 3.043 | 3.168 | 2.473 | 2.598 | 12.667 | 0.937 | 10.500 |

**GB-5620 Dimensions(mm)**

| D1 | D3 | D41Min | D41Max | L39 | L90 | L922 | L912 | D26 | S | Dm |
|---|---|---|---|---|---|---|---|---|---|---|
| 24.0 | 39.7 | 41.3 | 48.0 | 49.6 | 50.8 | 44.5 | 47.7 | 101.6 | 13.3 | 71.2 |
| 25.0 | 39.7 | 41.3 | 48.0 | 49.6 | 50.8 | 44.5 | 47.7 | 101.6 | 13.3 | 71.2 |
| 28.0 | 42.9 | 44.5 | 51.2 | 52.4 | 54.0 | 45.4 | 48.6 | 104.8 | 13.3 | 74.5 |
| 30.0 | 44.5 | 46.1 | 56.5 | 52.4 | 54.0 | 45.4 | 48.6 | 108.0 | 13.3 | 79.9 |
| 32.0 | 46.0 | 47.6 | 58.3 | 52.4 | 54.0 | 45.4 | 48.6 | 108.0 | 13.3 | 81.6 |
| 33.0 | 49.3 | 50.8 | 61.5 | 52.4 | 54.0 | 45.4 | 48.6 | 111.1 | 13.3 | 84.8 |
| 35.0 | 49.3 | 50.8 | 61.5 | 52.4 | 54.0 | 45.4 | 48.6 | 111.1 | 13.3 | 84.8 |
| 38.0 | 55.5 | 57.2 | 68.1 | 54.0 | 55.5 | 47.5 | 50.7 | 123.8 | 13.3 | 91.4 |
| 40.0 | 58.7 | 60.3 | 71.4 | 54.0 | 55.5 | 47.5 | 50.7 | 127.0 | 14.3 | 95.7 |
| 43.0 | 61.1 | 63.0 | 74.1 | 54.0 | 55.5 | 47.5 | 50.7 | 133.4 | 14.3 | 98.4 |
| 45.0 | 61.1 | 63.0 | 74.1 | 54.0 | 55.5 | 47.5 | 50.7 | 133.4 | 14.3 | 98.4 |
| 48.0 | 64.7 | 66.7 | 74.1 | 54.0 | 55.5 | 47.5 | 50.7 | 133.4 | 14.3 | 98.4 |
| 50.0 | 67.9 | 70.0 | 76.6 | 58.7 | 60.3 | 51.9 | 55.0 | 139.7 | 14.3 | 101.6 |
| 53.0 | 71.1 | 73.0 | 85.3 | 58.7 | 60.3 | 51.9 | 55.0 | 148.8 | 17.4 | 113.5 |
| 55.0 | 72.9 | 75.0 | 85.3 | 58.7 | 60.3 | 51.9 | 55.0 | 148.8 | 17.4 | 113.5 |
| 58.0 | 74.2 | 76.2 | 88.5 | 58.7 | 60.3 | 51.9 | 55.0 | 165.1 | 17.4 | 116.0 |
| 60.0 | 77.4 | 79.4 | 91.7 | 62.6 | 64.2 | 52.8 | 56.0 | 165.1 | 17.4 | 119.9 |
| 63.0 | 83.8 | 85.7 | 98.8 | 65.1 | 66.7 | 50.3 | 53.5 | 171.5 | 17.4 | 127.0 |
| 65.0 | 83.8 | 85.7 | 98.8 | 65.1 | 66.7 | 50.3 | 53.5 | 171.5 | 17.4 | 127.0 |
| 68.0 | 90.2 | 92.1 | 103.2 | 63.5 | 65.1 | 53.2 | 56.4 | 171.5 | 17.4 | 131.3 |
| 70.0 | 90.2 | 92.1 | 103.2 | 63.5 | 65.1 | 53.2 | 56.4 | 171.5 | 17.4 | 131.3 |
| 75.0 | 98.1 | 101.6 | 113.5 | 65.1 | 66.7 | 51.6 | 54.8 | 196.9 | 20.6 | 145.3 |
| 80.0 | 102.2 | 105.0 | 116.8 | 63.8 | 66.9 | 55.3 | 58.5 | 188.9 | 20.6 | 148.5 |
| 85.0 | 107.9 | 111.1 | 123.2 | 65.1 | 68.3 | 54.0 | 57.2 | 206.4 | 17.4 | 154.8 |
| 90.0 | 114.3 | 117.5 | 129.5 | 65.1 | 68.3 | 54.0 | 57.2 | 212.7 | 17.4 | 158.6 |
| 95.0 | 117.5 | 120.0 | 132.1 | 65.1 | 68.3 | 54.0 | 57.2 | 222.3 | 20.6 | 172.0 |
| 100.0 | 123.8 | 127.0 | 139.7 | 65.1 | 68.3 | 54.0 | 57.2 | 228.3 | 20.6 | 171.7 |
| 105.0 | 127.0 | 130.2 | 142.9 | 65.1 | 68.3 | 54.0 | 57.2 | 238.6 | 20.6 | 174.9 |
| 110.0 | 136.5 | 139.7 | 152.4 | 65.1 | 68.3 | 54.0 | 57.2 | 241.3 | 20.6 | 184.4 |
| 115.0 | 136.5 | 139.7 | 152.4 | 65.1 | 68.3 | 54.0 | 57.2 | 241.3 | 20.6 | 184.4 |
| 120.0 | 142.9 | 146.1 | 160.4 | 65.1 | 68.3 | 54.0 | 57.2 | 263.5 | 20.6 | 192.4 |
| 125.0 | 155.6 | 171.7 | 184.4 | 77.3 | 80.5 | 62.8 | 66.0 | 304.8 | 20.6 | 254.0 |
| 130.0 | 161.9 | 178.1 | 190.8 | 77.3 | 80.5 | 62.8 | 66.0 | 311.2 | 20.6 | 260.4 |
| 135.0 | 168.3 | 190.5 | 203.2 | 77.3 | 80.5 | 62.8 | 66.0 | 322.3 | 23.8 | 266.7 |
| 140.0 | 168.3 | 190.5 | 203.2 | 77.3 | 80.5 | 62.8 | 66.0 | 322.3 | 23.8 | 266.7 |

# GBCartex-DN




**技术参数：**
密封腔温度：-50℃+204℃
线速度：≤23m/s
密封腔压力：≤20bar
轴径尺寸：25-100mm

**Operating Limits:**
Temperature:-50℃+204℃
Speed:≤23m/s
Pressure:≤20bar
Standard Size:25-100mm

**材料组合：**
密封面：石墨，反应碳化硅，
无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，
乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

**Material:**
Seal ring:Car,Sic,Ssic,TC
Secondary seal:NBR,Viton,EPDM,
Kalrez
Spring and metal parts:304,316,
HAST.C

| Size | D1 | D2 | D3min | D3max | L | L1 | L2 | L3 | Dm | Dz. | S |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | 25 | 43.0 | 44.0 | 51.5 | 86.5 | 53.4 | 33.1 | 25.4 | 62 | 105 | 13.2 |
| 28 | 28 | 46.0 | 47.0 | 52.0 | 86.5 | 53.4 | 33.1 | 25.4 | 62 | 105 | 13.2 |
| 30 | 30 | 48.0 | 49.0 | 56.0 | 86.5 | 53.4 | 33.1 | 25.4 | 65 | 105 | 13.2 |
| 32 | 32 | 49.8 | 51.0 | 57.0 | 86.5 | 53.4 | 33.1 | 25.4 | 67 | 108 | 13.2 |
| 33 | 33 | 49.8 | 51.0 | 57.0 | 86.5 | 53.4 | 33.1 | 25.4 | 67 | 108 | 13.2 |
| 35 | 35 | 53.0 | 54.0 | 61.5 | 86.5 | 53.4 | 33.1 | 25.4 | 70 | 113 | 13.2 |
| 38 | 38 | 56.0 | 57.0 | 66.0 | 86.5 | 53.4 | 33.1 | 25.4 | 75 | 123 | 13.2 |
| 40 | 40 | 58.0 | 59.0 | 68.0 | 86.5 | 53.4 | 33.1 | 25.4 | 75 | 123 | 14.2 |
| 42 | 42 | 60.5 | 61.5 | 69.5 | 86.5 | 53.4 | 33.1 | 25.4 | 80 | 133 | 14.2 |
| 43 | 43 | 60.5 | 61.5 | 70.5 | 86.5 | 53.4 | 33.1 | 25.4 | 80 | 133 | 14.2 |
| 45 | 45 | 62.5 | 64.0 | 73.0 | 86.5 | 53.4 | 33.1 | 25.4 | 81 | 138 | 14.2 |
| 48 | 48 | 65.6 | 67.0 | 75.0 | 86.5 | 53.4 | 33.1 | 25.4 | 84 | 138 | 14.2 |
| 50 | 50 | 68.0 | 69.0 | 78.0 | 86.5 | 53.4 | 33.1 | 25.4 | 87 | 148 | 14.2 |
| 53 | 53 | 72.0 | 73.0 | 87.0 | 86.5 | 53.4 | 33.1 | 25.4 | 97 | 148 | 18.0 |
| 55 | 55 | 73.0 | 74.0 | 88.0 | 86.5 | 53.4 | 33.1 | 25.4 | 90 | 148 | 18.0 |
| 60 | 60 | 78.0 | 79.0 | 91.0 | 86.5 | 53.4 | 33.1 | 25.4 | 102 | 157 | 18.0 |
| 65 | 65 | 84.8 | 85.7 | 98.5 | 86.5 | 53.4 | 33.1 | 25.4 | 109 | 163 | 18.0 |
| 70 | 70 | 93.0 | 95.0 | 108.0 | 86.5 | 53.4 | 33.1 | 25.4 | 118 | 178 | 18.0 |
| 75 | 75 | 100.0 | 101.6 | 118.0 | 108.0 | 63.9 | 44.1 | 28.0 | 129 | 190 | 18.0 |
| 80 | 80 | 106.4 | 108.0 | 124.0 | 108.0 | 63.9 | 44.1 | 28.0 | 135 | 195 | 18.0 |
| 85 | 85 | 109.5 | 111.1 | 128.0 | 108.0 | 63.9 | 44.1 | 28.0 | 139 | 198 | 22.0 |
| 90 | 90 | 115.9 | 117.5 | 135.0 | 108.0 | 63.9 | 44.1 | 28.0 | 145 | 205 | 22.0 |
| 95 | 95 | 119.1 | 120.7 | 138.0 | 108.0 | 63.9 | 44.1 | 28.0 | 148 | 208 | 22.0 |
| 100 | 100 | 125.4 | 127.0 | 144.0 | 108.0 | 63.9 | 44.1 | 28.0 | 154 | 218 | 22.0 |

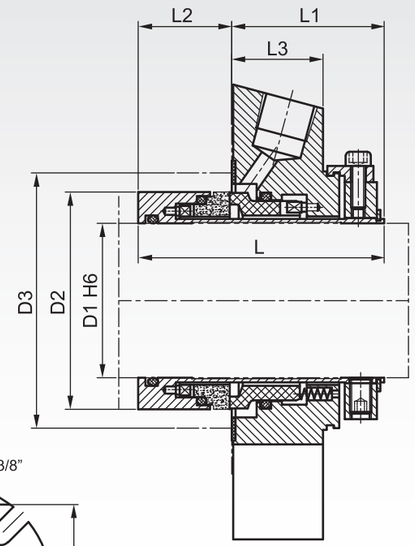


# GBCartex-SN

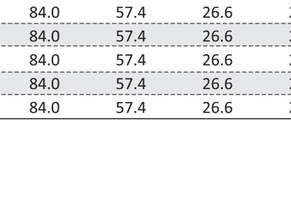
**技术参数：**
密封腔温度：-40℃+220℃
线速度：≤23m/s
密封腔压力：≤20bar
轴径尺寸：25-100mm



**Operating Limits:**
Temperature:-40℃+220℃
Speed:≤23m/s
Pressure:≤20bar
Standard Size:25-100mm




**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，
碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，
全氟橡胶
弹簧及金属件：304，316，哈氏合金




**Material:**
Seal Ring:Car,Sic,Ssic,TC
Secondary seal:NBR,Viton,EPDM,Kalrez
Spring and metal parts:304,316,HAST.C

| Size | D1 | D2 | D3min | D3max | L | L1 | L2 | L3 | Dm | Dz. | S |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | 25 | 43.0 | 44.0 | 51.5 | 67.0 | 42.4 | 24.6 | 25.4 | 62 | 105 | 13.2 |
| 28 | 28 | 46.0 | 47.0 | 52.0 | 67.0 | 42.4 | 24.6 | 25.4 | 62 | 105 | 13.2 |
| 30 | 30 | 48.0 | 49.0 | 56.0 | 67.0 | 42.4 | 24.6 | 25.4 | 65 | 105 | 13.2 |
| 32 | 32 | 49.8 | 51.0 | 57.0 | 67.0 | 42.4 | 24.6 | 25.4 | 67 | 108 | 13.2 |
| 33 | 33 | 49.8 | 51.0 | 57.0 | 67.0 | 42.4 | 24.6 | 25.4 | 67 | 108 | 13.2 |
| 35 | 35 | 53.0 | 54.0 | 61.5 | 67.0 | 42.4 | 24.6 | 25.4 | 70 | 113 | 13.2 |
| 38 | 38 | 56.0 | 57.0 | 66.0 | 67.0 | 42.4 | 24.6 | 25.4 | 75 | 123 | 13.2 |
| 40 | 40 | 58.0 | 59.0 | 68.0 | 67.0 | 42.4 | 24.6 | 25.4 | 75 | 123 | 14.2 |
| 42 | 42 | 60.5 | 61.5 | 69.5 | 67.0 | 42.4 | 24.6 | 25.4 | 80 | 133 | 14.2 |
| 43 | 43 | 60.5 | 61.5 | 70.5 | 67.0 | 42.4 | 24.6 | 25.4 | 80 | 133 | 14.2 |
| 45 | 45 | 62.5 | 64.0 | 73.0 | 67.0 | 42.4 | 24.6 | 25.4 | 81 | 138 | 14.2 |
| 48 | 48 | 65.6 | 67.0 | 75.0 | 67.0 | 42.4 | 24.6 | 25.4 | 84 | 138 | 14.2 |
| 50 | 50 | 68.0 | 69.0 | 78.0 | 67.0 | 42.4 | 24.6 | 25.4 | 87 | 148 | 14.2 |
| 53 | 53 | 72.0 | 73.0 | 87.0 | 67.0 | 42.4 | 24.6 | 25.4 | 97 | 148 | 18.0 |
| 55 | 55 | 73.0 | 74.0 | 83.0 | 67.0 | 42.4 | 24.6 | 25.4 | 90 | 148 | 18.0 |
| 60 | 60 | 78.0 | 79.0 | 91.0 | 67.0 | 42.4 | 24.6 | 25.4 | 102 | 157 | 18.0 |
| 65 | 65 | 84.8 | 85.7 | 98.5 | 67.0 | 42.4 | 24.6 | 25.4 | 109 | 163 | 18.0 |
| 70 | 70 | 93.0 | 95.0 | 108.0 | 67.0 | 42.4 | 24.6 | 25.4 | 118 | 178 | 18.0 |
| 75 | 75 | 100.0 | 101.6 | 118.0 | 84.0 | 57.4 | 26.6 | 28.0 | 129 | 190 | 18.0 |
| 80 | 80 | 106.4 | 108.0 | 124.0 | 84.0 | 57.4 | 26.6 | 28.0 | 135 | 195 | 18.0 |
| 85 | 85 | 109.5 | 111.1 | 128.0 | 84.0 | 57.4 | 26.6 | 28.0 | 139 | 198 | 22.0 |
| 90 | 90 | 115.9 | 117.5 | 135.0 | 84.0 | 57.4 | 26.6 | 28.0 | 145 | 205 | 22.0 |
| 95 | 95 | 119.1 | 120.7 | 138.0 | 84.0 | 57.4 | 26.6 | 28.0 | 148 | 208 | 22.0 |
| 100 | 100 | 125.4 | 127.0 | 144.0 | 84.0 | 57.4 | 26.6 | 28.0 | 154 | 218 | 22.0 |

# GBConvertor Ⅱ

**技术参数：**
密封腔温度：-20℃+220℃
线速度：≤15m/s
密封腔压力：≤25bar
轴径尺寸：24-100mm or (1.0"-4.0")

**Operating Limits:**
Temperature:-20℃+220℃
Speed:≤15m/s
Pressure:≤25bar
Standard Size:24-100mm or 1.0"-4.0"

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

**Material:**
Seal ring:Car,Sic,Ssic,TC
Secondary seal:NBR,Viton,EPDM,Kalrez
Spring and metal parts:304,316,HAST.C





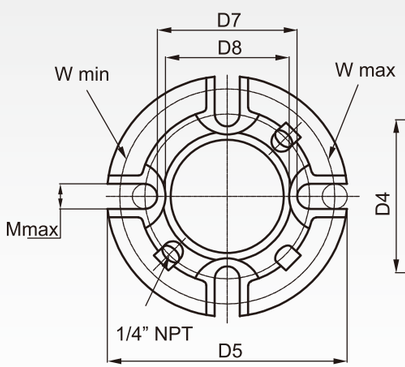

| GB-Convertor Ⅱ Dimensions(Inches) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| d | D1 | Dm | L3 | D2 | D3 Min | D3 Max | S | L1 | L2 |
| 1.000 | 4.000 | 2.187 | 0.812 | 2.208 | 1.625 | 1.875 | 0.500 | 1.125 | 1.250 |
| 1.125 | 4.125 | 2.312 | 0.812 | 2.333 | 1.750 | 2.000 | 0.500 | 1.125 | 1.250 |
| 1.250 | 4.250 | 2.437 | 0.812 | 2.458 | 1.875 | 2.215 | 0.500 | 1.125 | 1.250 |
| 1.375 | 4.250 | 2.625 | 0.812 | 2.645 | 2.000 | 2.250 | 0.500 | 1.125 | 1.250 |
| 1.500 | 4.500 | 2.812 | 0.875 | 2.833 | 2.250 | 2.500 | 0.500 | 1.125 | 1.312 |
| 1.625 | 4.750 | 2.937 | 0.875 | 2.958 | 2.375 | 2.625 | 0.500 | 1.125 | 1.312 |
| 1.750 | 5.000 | 3.062 | 0.937 | 3.083 | 2.500 | 2.750 | 0.500 | 1.187 | 1.375 |
| 1.875 | 5.250 | 3.187 | 0.937 | 3.207 | 2.625 | 2.875 | 0.500 | 1.187 | 1.375 |
| 2.000 | 5.500 | 3.312 | 1.000 | 3.333 | 2.750 | 3.000 | 0.625 | 1.187 | 1.437 |
| 2.125 | 5.750 | 3.437 | 1.000 | 3.458 | 2.875 | 3.125 | 0.625 | 1.187 | 1.437 |
| 2.250 | 6.500 | 3.750 | 1.000 | 3.895 | 3.000 | 3.375 | 0.750 | 1.187 | 1.437 |
| 2.375 | 6.500 | 3.750 | 1.000 | 3.895 | 3.125 | 3.375 | 0.750 | 1.187 | 1.437 |
| 2.500 | 7.000 | 4.375 | 1.000 | 4.770 | 3.375 | 4.000 | 0.750 | 1.125 | 1.625 |
| 2.625 | 7.000 | 4.375 | 1.000 | 4.770 | 3.500 | 4.000 | 0.750 | 1.125 | 1.625 |
| 2.750 | 7.000 | 4.375 | 1.000 | 4.770 | 3.625 | 4.000 | 0.750 | 1.125 | 1.625 |
| 2.875 | 7.500 | 4.937 | 1.250 | 5.145 | 3.750 | 4.500 | 0.750 | 1.187 | 2.000 |
| 3.000 | 7.500 | 4.937 | 1.250 | 5.145 | 3.875 | 4.500 | 0.750 | 1.187 | 2.000 |
| 3.125 | 7.500 | 4.937 | 1.250 | 5.145 | 4.000 | 4.500 | 0.750 | 1.187 | 2.000 |
| 3.250 | 8.000 | 5.312 | 1.250 | 5.520 | 4.125 | 4.875 | 0.750 | 1.187 | 2.000 |
| 3.375 | 8.000 | 5.312 | 1.250 | 5.520 | 4.250 | 4.875 | 0.750 | 1.187 | 2.000 |
| 3.500 | 8.000 | 5.312 | 1.250 | 5.520 | 4.375 | 4.875 | 0.750 | 1.187 | 2.000 |
| 3.625 | 8.500 | 5.687 | 1.250 | 5.895 | 4.500 | 5.250 | 0.750 | 1.187 | 2.000 |
| 3.750 | 8.500 | 5.687 | 1.250 | 5.895 | 4.625 | 5.250 | 0.750 | 1.187 | 2.000 |
| 3.875 | 8.500 | 5.687 | 1.250 | 5.895 | 4.750 | 5.250 | 0.750 | 1.187 | 2.000 |
| 4.000 | 9.000 | 6.062 | 1.250 | 6.145 | 4.875 | 5.500 | 0.750 | 1.187 | 2.000 |

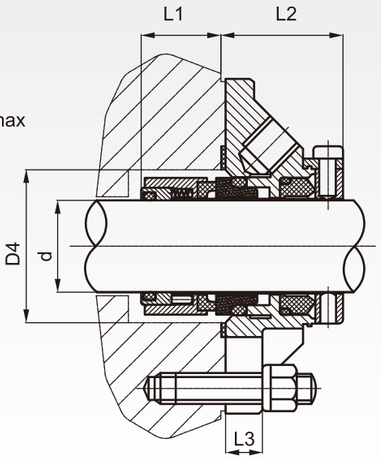
| GB-Convertor Ⅱ Dimensions(mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| d | D1 | Dm | L3 | D2 | D3 Min | D3 Max | S | L1 | L2 |
| 24 | 101.6 | 55.6 | 20.7 | 56.1 | 40.0 | 48.0 | 12.0 | 28.6 | 31.8 |
| 25 | 101.6 | 55.6 | 20.7 | 56.1 | 41.0 | 48.0 | 12.0 | 28.6 | 31.8 |
| 28 | 104.8 | 58.8 | 20.7 | 59.3 | 44.0 | 50.0 | 12.0 | 28.6 | 31.8 |
| 30 | 108.0 | 61.9 | 20.7 | 62.4 | 46.0 | 54.0 | 12.0 | 28.6 | 31.8 |
| 32 | 108.0 | 61.9 | 20.7 | 62.4 | 48.0 | 54.0 | 12.0 | 28.6 | 31.8 |
| 33 | 108.0 | 61.9 | 20.7 | 62.4 | 49.0 | 55.0 | 12.0 | 28.6 | 31.8 |
| 35 | 108.0 | 66.7 | 20.7 | 67.2 | 51.0 | 59.0 | 12.0 | 28.6 | 31.8 |
| 38 | 114.3 | 71.5 | 22.3 | 72.0 | 57.2 | 62.0 | 12.0 | 28.6 | 33.4 |
| 40 | 114.3 | 71.5 | 22.3 | 72.0 | 58.0 | 64.0 | 12.0 | 28.6 | 33.4 |
| 43 | 120.7 | 74.6 | 22.3 | 75.1 | 61.0 | 67.0 | 12.0 | 28.6 | 33.4 |
| 45 | 127.0 | 77.8 | 23.8 | 78.3 | 63.5 | 69.0 | 12.0 | 30.2 | 35.0 |
| 48 | 133.4 | 81.0 | 23.8 | 81.5 | 66.7 | 72.0 | 12.0 | 30.2 | 35.0 |
| 50 | 133.4 | 81.0 | 23.8 | 81.5 | 68.0 | 74.0 | 12.0 | 30.2 | 35.0 |
| 53 | 139.7 | 84.2 | 25.4 | 84.7 | 71.0 | 77.0 | 16.0 | 30.2 | 36.5 |
| 55 | 146.1 | 87.3 | 25.4 | 87.8 | 74.0 | 79.0 | 16.0 | 30.2 | 36.5 |
| 58 | 165.1 | 95.3 | 25.4 | 98.9 | 79.4 | 85.7 | 20.0 | 30.2 | 36.5 |
| 60 | 165.1 | 95.3 | 25.4 | 98.9 | 79.4 | 85.7 | 20.0 | 30.2 | 36.5 |
| 63 | 177.8 | 111.2 | 25.4 | 121.2 | 85.8 | 101.6 | 20.0 | 28.6 | 41.2 |
| 65 | 177.8 | 111.2 | 25.4 | 121.2 | 88.9 | 101.6 | 20.0 | 28.6 | 41.2 |
| 68 | 177.8 | 111.2 | 25.4 | 121.2 | 92.1 | 101.6 | 20.0 | 28.6 | 41.2 |
| 70 | 177.8 | 111.2 | 25.4 | 121.2 | 92.1 | 101.6 | 20.0 | 28.6 | 41.2 |
| 75 | 190.5 | 125.4 | 31.7 | 130.7 | 98.5 | 114.3 | 20.0 | 30.2 | 50.8 |
| 80 | 190.5 | 125.4 | 31.7 | 130.7 | 101.6 | 114.3 | 20.0 | 30.2 | 50.8 |
| 85 | 203.2 | 135.0 | 31.7 | 140.2 | 108.0 | 123.8 | 20.0 | 30.2 | 50.8 |
| 90 | 215.9 | 144.5 | 31.7 | 149.7 | 114.3 | 133.3 | 20.0 | 30.2 | 50.8 |
| 95 | 215.9 | 144.5 | 31.7 | 149.7 | 117.5 | 133.3 | 20.0 | 30.2 | 50.8 |
| 100 | 228.5 | 154.0 | 31.7 | 156.1 | 123.9 | 139.7 | 20.0 | 30.2 | 50.8 |



# GBCURC






**技术参数：**
密封腔温度：-20℃+220℃
线速度：≤15m/s
密封腔压力：≤25bar
轴径尺寸：24-125mm

**Operating Limits:**
Temperature:-20℃+220℃
Speed:≤15m/s
Pressure:≤25bar
Standard Size:24-125mm

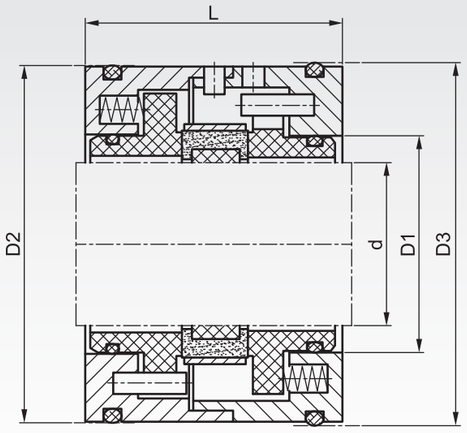
**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶
弹簧及金属件：304，316，哈氏合金

**Material:**
Seal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton,EPDM
Spring and metal parts:304,316, HAST.C

| Size | d | D5 | D7 | D8 | L3 | D4(min) | D4(max) | W(min) | W(max) | M | L1 | L2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 | 24 | 104.8 | 54.0 | 49.2 | 13.2 | 40.0 | 46.0 | 67.0 | 90.5 | 12 | 28.6 | 40.5 |
| 25 | 25 | 104.8 | 54.0 | 49.2 | 13.2 | 41.0 | 49.0 | 67.0 | 90.5 | 12 | 28.6 | 40.5 |
| 28 | 28 | 108.0 | 57.2 | 52.4 | 13.2 | 44.0 | 52.3 | 70.3 | 93.6 | 12 | 28.6 | 40.5 |
| 30 | 30 | 111.0 | 60.4 | 55.6 | 13.2 | 46.0 | 55.5 | 73.5 | 96.8 | 12 | 28.6 | 40.5 |
| 32 | 32 | 111.0 | 60.4 | 55.6 | 13.2 | 48.0 | 55.5 | 73.5 | 96.8 | 12 | 28.6 | 40.5 |
| 33 | 33 | 111.0 | 60.4 | 55.6 | 13.2 | 49.0 | 55.5 | 73.5 | 96.8 | 12 | 28.6 | 40.5 |
| 35 | 35 | 111.0 | 63.5 | 58.8 | 13.2 | 51.0 | 57.5 | 76.6 | 96.8 | 12 | 28.6 | 40.5 |
| 38 | 38 | 127.0 | 71.5 | 65.0 | 16.4 | 57.2 | 60.4 | 85.7 | 114.3 | 12 | 28.6 | 44.5 |
| 40 | 40 | 127.0 | 71.5 | 65.0 | 16.4 | 58.0 | 60.4 | 85.7 | 114.3 | 12 | 28.6 | 44.5 |
| 43 | 43 | 139.7 | 81.0 | 71.4 | 16.4 | 61.0 | 69.9 | 95.3 | 127.0 | 12 | 28.6 | 44.5 |
| 45 | 45 | 139.7 | 81.0 | 71.4 | 16.4 | 63.5 | 69.9 | 95.3 | 127.0 | 12 | 28.6 | 44.5 |
| 48 | 48 | 139.7 | 81.0 | 71.4 | 16.4 | 66.7 | 73.0 | 95.3 | 127.0 | 12 | 28.6 | 44.5 |
| 50 | 50 | 152.4 | 90.5 | 77.8 | 16.4 | 68.0 | 76.2 | 104.8 | 139.7 | 12 | 28.6 | 44.5 |
| 53 | 53 | 152.4 | 90.5 | 77.8 | 16.4 | 71.0 | 76.2 | 104.8 | 139.7 | 12 | 28.6 | 44.5 |
| 55 | 55 | 165.1 | 96.8 | 84.1 | 16.4 | 74.0 | 82.5 | 114.3 | 149.2 | 16 | 28.6 | 44.5 |
| 58 | 58 | 165.1 | 96.8 | 84.1 | 16.4 | 76.2 | 82.6 | 114.3 | 149.2 | 16 | 28.6 | 44.5 |
| 60 | 60 | 165.1 | 96.8 | 84.1 | 16.4 | 79.4 | 85.7 | 114.3 | 149.2 | 16 | 28.6 | 44.5 |
| 63 | 63 | 177.8 | 109.5 | 96.8 | 19.6 | 85.8 | 92.1 | 127.0 | 160.3 | 16 | 31.8 | 47.7 |
| 65 | 65 | 177.8 | 109.5 | 96.8 | 19.6 | 88.9 | 95.3 | 127.0 | 160.3 | 16 | 31.8 | 47.7 |
| 68 | 68 | 177.8 | 109.5 | 96.8 | 19.6 | 92.1 | 98.4 | 127.0 | 160.3 | 16 | 31.8 | 47.7 |
| 70 | 70 | 177.8 | 109.5 | 96.8 | 19.6 | 92.1 | 98.4 | 127.0 | 160.3 | 16 | 31.8 | 47.7 |
| 75 | 75 | 190.5 | 125.4 | 108.0 | 19.6 | 98.5 | 108.0 | 142.9 | 173.0 | 16 | 31.8 | 47.7 |
| 80 | 80 | 190.5 | 125.4 | 108.0 | 19.6 | 101.6 | 111.1 | 142.9 | 173.0 | 16 | 31.8 | 47.7 |
| 85 | 85 | 203.2 | 135.0 | 117.5 | 19.6 | 108.0 | 117.5 | 155.6 | 182.5 | 20 | 31.8 | 47.7 |
| 90 | 90 | 215.9 | 150.8 | 127.0 | 19.6 | 114.3 | 127.0 | 171.5 | 195.2 | 20 | 31.8 | 47.7 |
| 95 | 95 | 215.9 | 150.8 | 127.0 | 19.6 | 117.5 | 130.2 | 171.5 | 195.2 | 20 | 31.8 | 47.7 |
| 100 | 100 | 228.6 | 168.3 | 136.5 | 19.6 | 123.9 | 139.7 | 188.9 | 207.9 | 20 | 31.8 | 47.7 |
| 105 | 105 | 228.6 | 168.3 | 136.5 | 19.6 | 130.1 | 149.2 | 189.0 | 208.0 | 20 | 31.8 | 47.7 |
| 110 | 110 | 241.3 | 177.8 | 146.1 | 19.6 | 136.5 | 158.8 | 198.4 | 220.6 | 20 | 31.8 | 47.7 |
| 115 | 115 | 254.0 | 186.6 | 155.6 | 19.6 | 142.9 | 168.3 | 211.1 | 230.2 | 22 | 31.8 | 47.7 |
| 120 | 120 | 254.0 | 186.6 | 155.6 | 19.6 | 142.9 | 168.3 | 211.1 | 230.2 | 22 | 31.8 | 47.7 |
| 125 | 125 | 254.0 | 186.6 | 155.6 | 19.6 | 142.9 | 168.3 | 211.1 | 230.2 | 22 | 31.8 | 47.7 |

# GBEMU






**技术参数：**
密封腔温度：-40℃+200℃
密封腔压力：≤12bar
线速度：≤20m/s
轴径尺寸：35-75mm

**Operating Limits:**
Temperature:-40℃+200℃
Pressure： ≤12bar
Speed： ≤20m/s
Standard Size:35-75mm

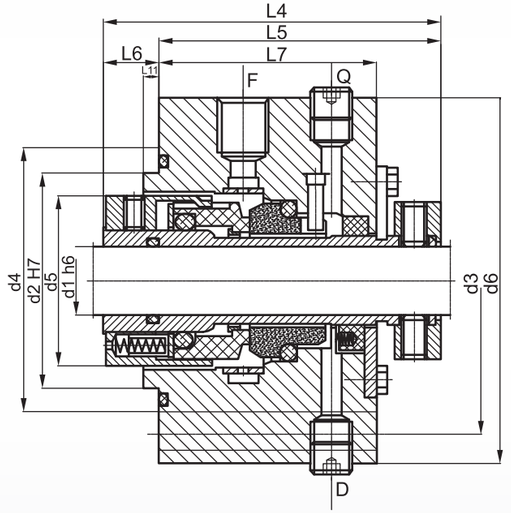
**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：四丙氟橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316

**Material:**
Rotary Ring：Car,SiC,TC,Ssic
Secondary Seal：EPDM,Viton,Aflas,Kalrez
Spring and Metal Parts：304,316

| Size | D1 | D2 | D3 | L1 |
|---|---|---|---|---|
| 35 | 47 | 72 | 72 | 47 |
| 50 | 63 | 90 | 92 | 52 |
| 75 | 95 | 128 | 130 | 75 |

# GBH75VN






**技术参数：**
密封腔温度：-40℃+220℃
线速度：≤23m/s
密封腔压力：≤40bar
轴径尺寸：20-110mm

**Operating Limits:**
Temperature:-40℃+220℃
Speed: ≤23 m/s
Pressure: ≤40 bar
Shaft diameter: 20- 110 mm

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

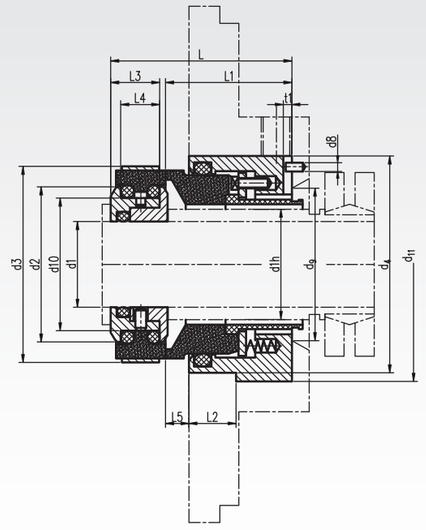
**Material:**
Seal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton,EPDM,Kalrez
Spring and metal parts:304,316,HAST.C

| Size | d1 | d2 | d3 | d4 | d5 | d6 | L4 | L5 | L6 | L7 | L11 | Overall length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 | 20 | 70 | 105 | 85 | 50 | 138 | 95 | 94 | 1 | 76 | 6 | 100 |
| 30 | 30 | 80 | 115 | 95 | 62 | 148 | 100.5 | 98 | 2.5 | 77 | 6 | 104 |
| 40 | 40 | 90 | 125 | 105 | 72 | 158 | 105.5 | 98.5 | 7 | 77.5 | 6 | 125 |
| 50 | 50 | 100 | 140 | 115 | 86 | 168 | 111.5 | 99.5 | 12 | 78.5 | 6 | 140 |
| 60 | 60 | 120 | 160 | 135 | 99 | 188 | 120.5 | 102 | 18.5 | 81 | 6 | 160 |
| 70 | 70 | 130 | 170 | 145 | 109 | 198 | 124.5 | 106 | 18 | 81 | 6 | 170 |
| 80 | 80 | 140 | 180 | 155 | 119 | 208 | 129 | 106 | 23 | 81 | 6 | 180 |
| 90 | 90 | 160 | 205 | 175 | 129 | 238 | 129 | 106 | 23 | 81 | 6 | 205 |
| 100 | 100 | 170 | 215 | 185 | 153 | 248 | 133 | 109 | 24 | 81 | 6 | 215 |
| 110 | 110 | 180 | 225 | 195 | 168 | 258 | 133 | 109 | 24 | 81 | 6 | 225 |



# GBHR






**技术参数：**
密封腔温度：-20℃+160℃
线速度：≤10m/s
密封腔压力：≤16bar
轴径尺寸：20-250mm

**Operating Limits:**
Temperature:-20℃+160℃
Speed:≤10m/s
Pressure:≤16bar
Shaft diameter:20-250 mm

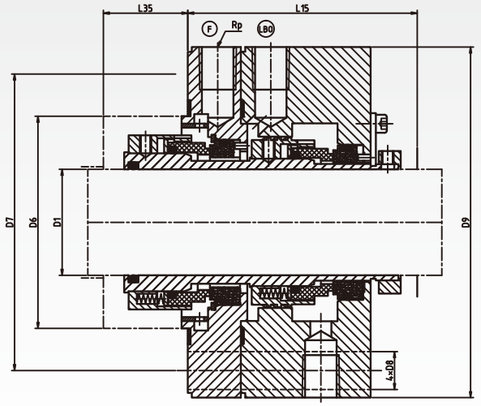
**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

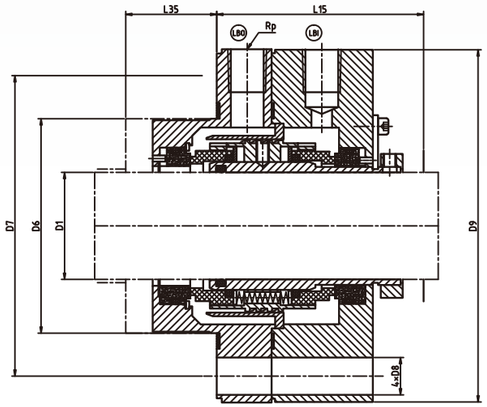
**Material:**
Seal face:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton,EPDM,Kalrez
Spring and metal parts:304,316 HAST.C

| Size | d1 | d1h | dn | d2 | d3 | d4 | d5 | d6 | d7 | d8 | d9 | d10 | d11+0.2min | L | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L9 | k2 | t | t1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 | 20 | 28 | 36 | 47.1 | 65 | 70 | 46 | 56.0 | 63.0 | 4 | 40 | 38 | 75 | 75 | 53 | 20 | 19.5 | 17 | 10.5 | 6 | 9 | 8.0 | 51.0 | 4.5 | 3 |
| 25 | 25 | 33 | 41 | 52.1 | 70 | 75 | 51 | 62.0 | 70.0 | 4 | 45 | 43 | 80 | 75 | 53 | 20 | 19.5 | 17 | 10.5 | 6 | 9 | 9.5 | 56.5 | 4.5 | 3 |
| 28 | 28 | 38 | 46 | 57.1 | 75 | 80 | 56 | 67.0 | 75.0 | 4 | 50 | 48 | 85 | 75 | 53 | 20 | 19.5 | 17 | 10.5 | 6 | 9 | 9.5 | 61.5 | 4.5 | 3 |
| 33 | 33 | 43 | 51 | 62.1 | 80 | 85 | 61 | 72.0 | 80.0 | 4 | 55 | 53 | 90 | 75 | 53 | 20 | 19.5 | 17 | 10.5 | 6 | 9 | 10.5 | 66.5 | 4.5 | 3 |
| 38 | 38 | 48 | 56 | 67.1 | 85 | 90 | 66 | 77.0 | 85.0 | 4 | 60 | 58 | 95 | 75 | 53 | 20 | 19.5 | 17 | 10.5 | 6 | 9 | 10.5 | 71.5 | 4.5 | 3 |
| 43 | 43 | 53 | 61 | 72.1 | 90 | 95 | 69 | 81.0 | 90.0 | 4 | 65 | 63 | 100 | 75 | 53 | 20 | 19.5 | 17 | 10.5 | 7 | 9 | 11.0 | 75.0 | 4.5 | 3 |
| 48 | 48 | 58 | 66 | 77.1 | 95 | 100 | 76 | 88.0 | 97.0 | 4 | 70 | 68 | 105 | 75 | 53 | 20 | 19.5 | 17 | 10.5 | 7 | 9 | 11.5 | 82.0 | 4.5 | 3 |
| 53 | 53 | 63 | 71 | 82.1 | 101 | 105 | 81 | 95.0 | 105.0 | 4 | 75 | 73 | 110 | 75 | 53 | 20 | 19.5 | 17 | 10.5 | 7 | 9 | 11.5 | 88.0 | 4.5 | 3 |
| 55 | 55 | 65 | 75 | 87.1 | 106 | 110 | 86 | 100.0 | 110.0 | 4 | 79 | 78 | 115 | 75 | 53 | 20 | 19.5 | 17 | 10.5 | 7 | 9 | 11.5 | 93.0 | 4.5 | 3 |
| 60 | 60 | 70 | 80 | 92.1 | 111 | 115 | 91 | 105.0 | 115.0 | 4 | 84 | 83 | 120 | 75 | 53 | 20 | 19.5 | 17 | 10.5 | 7 | 9 | 13.0 | 98.0 | 4.5 | 3 |
| 65 | 65 | 75 | 85 | 97.1 | 116 | 120 | 96 | 110.0 | 120.0 | 4 | 89 | 88 | 125 | 75 | 53 | 20 | 19.5 | 17 | 10.5 | 7 | 9 | 13.0 | 103.0 | 4.5 | 3 |
| 70 | 70 | 80 | 90 | 102.1 | 121 | 125 | 101 | 115.0 | 125.0 | 4 | 94 | 93 | 130 | 75 | 53 | 20 | 19.5 | 17 | 10.5 | 7 | 9 | 13.0 | 108.0 | 4.5 | 3 |
| 75 | 75 | 85 | 95 | 107.1 | 126 | 130 | 107 | 122.2 | 134.3 | 5 | 99 | 98 | 135 | 75 | 53 | 20 | 19.5 | 17 | 10.5 | 10 | 12 | 20.0 | 114.5 | 7 | 3 |
| 80 | 80 | 90 | 100 | 112.1 | 131 | 135 | 107 | 122.2 | 134.3 | 5 | 104 | 103 | 140 | 75 | 53 | 20 | 19.5 | 17 | 10.5 | 10 | 12 | 20.0 | 114.5 | 7.0 | 3 |
| 90 | 90 | 100 | 110 | 126.1 | 147 | 155 | 117 | 136.2 | 148.3 | 5 | 116 | 117 | 163 | 98 | 73 | 30 | 22.0 | 19 | 16.0 | 10 | 12 | 20.0 | 126.5 | 7.0 | 4 |
| 100 | 100 | 110 | 120 | 136.1 | 157 | 165 | 132 | 146.2 | 158.3 | 5 | 126 | 127 | 173 | 98 | 73 | 30 | 22.0 | 19 | 16.0 | 10 | 12 | 20.0 | 139.0 | 7 | 4 |
| 110 | 110 | 120 | 130 | 145.1 | 167 | 175 | 142 | 156.2 | 168.3 | 5 | 136 | 136 | 183 | 98 | 73 | 30 | 22.0 | 19 | 16.0 | 10 | 12 | 20.0 | 149.0 | 7.0 | 4 |
| 120 | 120 | 130 | 140 | 154.1 | 177 | 185 | 152 | 168.2 | 180.3 | 5 | 146 | 145 | 193 | 98 | 73 | 30 | 22.0 | 19 | 16.0 | 10 | 12 | 22.0 | 160.0 | 7.0 | 4 |
| 130 | 130 | 140 | 150 | 163.9 | 188 | 195 | 162 | 178.2 | 190.3 | 5 | 156 | 155 | 203 | 98 | 73 | 30 | 22.0 | 19 | 16.0 | 12 | 12 | 24.0 | 170.0 | 7 | 4 |
| 140 | 140 | 150 | 160 | 174.9 | 189 | 205 | 172 | 188.2 | 200.3 | 5 | 166 | 166 | 213 | 98 | 73 | 30 | 22.0 | 19 | 16.0 | 12 | 12 | 24.0 | 180.0 | 7.0 | 4 |
| 160 | 160 | 170 | 180 | 193.9 | 220 | 230 | 187 | 212.5 | 224.3 | 5 | 186 | 185 | 238 | 98 | 73 | 30 | 22.0 | 19 | 16.0 | 12 | 12 | 28.0 | 199.5 | 7.0 | 4 |
| 180 | 180 | 190 | 200 | 213.9 | 240 | 255 | - | - | - | - | 206 | 205 | 265 | 98 | 73 | 30 | 22.0 | 19 | 16.0 | - | - | - | - | - | 4 |
| 190 | 190 | 200 | 210 | 231.9 | 255 | 270 | - | - | - | - | 218 | 220 | 280 | 115 | 83 | 40 | 28.35 | 24.7 | 19.0 | - | - | - | - | - | 5 |
| 200 | 200 | 210 | 220 | 241.9 | 265 | 280 | - | - | - | - | 228 | 230 | 290 | 115 | 83 | 40 | 28.35 | 24.7 | 19.0 | - | - | - | - | - | 5 |
| 210 | 210 | 220 | 230 | 251.9 | 275 | 290 | - | - | - | - | 238 | 240 | 300 | 115 | 83 | 40 | 28.4 | 24.7 | 19.0 | - | - | - | - | - | 5 |
| 220 | 220 | 230 | 240 | 261.8 | 285 | 300 | - | - | - | - | 248 | 250 | 310 | 115 | 83 | 40 | 28.35 | 24.7 | 19.0 | - | - | - | - | - | 5 |
| 230 | 230 | 240 | 250 | 271.9 | 295 | 310 | - | - | - | - | 258 | 260 | 320 | 115 | 83 | 40 | 28.35 | 24.7 | 19.0 | - | - | - | - | - | 5 |
| 250 | 250 | 260 | 270 | 291.9 | 315 | 330 | - | - | - | - | 278 | 280 | 340 | 115 | 83 | 40 | 28.4 | 24.7 | 19.0 | - | - | - | - | - | 5 |

# GBH75VK/H75VK2






**技术参数：**
密封腔温度：–50℃~204℃；
线速度：≤23m/s
密封腔压力：≤32bar
轴径尺寸：20–110mm

**Operating Limits:**
Temperature:–50℃~204℃;
Speed:≤23m/s
Pressure:≤32bar
Standard Size:20-110mm

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅， 碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

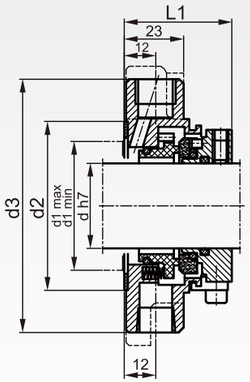
**Material:**
Seal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton,EPDM,Kalrez
Spring and metal parts:304,316,HAST.C

| D1(max) | L15 | L35 | D6 | D7 | D8 | D9 | Rp |
|---|---|---|---|---|---|---|---|
| 20 | 100 | 50 | 70 | 105 | 14 | 134 | 1/2" |
| 30 | 100 | 55 | 80 | 115 | 14 | 144 | 1/2" |
| 40 | 100 | 60 | 90 | 125 | 14 | 154 | 1/2" |
| 50 | 110 | 55 | 100 | 140 | 18 | 173 | 1/2" |
| 60 | 110 | 60 | 120 | 160 | 18 | 193 | 1/2" |
| 70 | 110 | 65 | 130 | 170 | 18 | 203 | 3/4" |
| 80 | 110 | 70 | 140 | 180 | 18 | 213 | 3/4" |
| 90 | 120 | 65 | 160 | 205 | 22 | 242 | 3/4" |
| 100 | 120 | 70 | 170 | 215 | 22 | 252 | 3/4" |
| 110 | 120 | 75 | 180 | 225 | 22 | 262 | 3/4" |

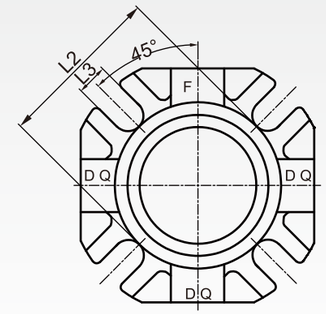


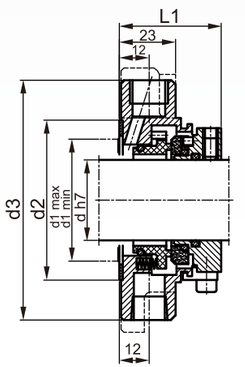
# GBMA290/MA390



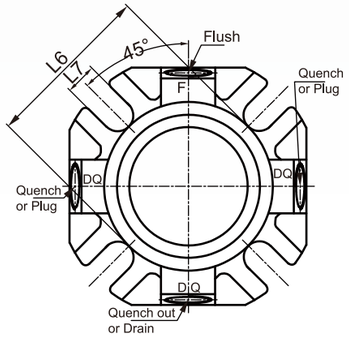



GBMA290




GBMA390




**技术参数：**
密封腔温度：–20℃+160℃
线速度：≤20m/s
密封腔压力：≤16bar
轴径尺寸：20–100mm

**Operating Limits:**
Temperature:-20℃+160℃
Speed:≤20 m/s
Pressure: ≤ 16 bar
Standard Size:20-100mm

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

**Material:**
Seal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton,EPDM,Kalrez
Spring and metal parts:304,316,HAST.C

| Size | d | d1min | d1max | d2 | d3 | L1 | L2 | L3 |
|---|---|---|---|---|---|---|---|---|
| 20 | 20 | 30 | 51 | 58 | 104 | 42 | 60 | 12 |
| 24 | 24 | 34 | 51 | 58 | 104 | 42 | 60 | 12 |
| 25 | 25 | 35 | 51 | 58 | 104 | 42 | 60 | 12 |
| 28 | 28 | 38 | 54 | 63 | 108 | 42 | 65 | 12 |
| 30 | 30 | 40 | 56 | 63 | 108 | 42 | 65 | 12 |
| 32 | 32 | 42 | 56 | 63 | 108 | 42 | 65 | 12 |
| 33 | 33 | 43 | 66 | 73 | 118 | 42 | 75 | 14 |
| 35 | 35 | 45 | 66 | 73 | 118 | 42 | 75 | 14 |
| 38 | 38 | 48 | 66 | 73 | 118 | 42 | 75 | 14 |
| 40 | 40 | 50 | 66 | 73 | 118 | 42 | 75 | 14 |
| 43 | 43 | 53 | 71 | 78 | 128 | 42 | 80 | 14 |
| 45 | 45 | 55 | 71 | 78 | 128 | 42 | 80 | 14 |
| 48 | 48 | 58 | 81 | 88 | 138 | 44 | 90 | 14 |
| 50 | 50 | 60 | 81 | 88 | 138 | 44 | 90 | 14 |
| 53 | 53 | 63 | 81 | 88 | 138 | 44 | 90 | 14 |
| 55 | 55 | 65 | 81 | 88 | 138 | 44 | 90 | 14 |
| 58 | 58 | 68 | 96 | 103 | 164 | 46 | 105 | 18 |
| 60 | 60 | 70 | 96 | 103 | 164 | 46 | 105 | 18 |
| 63 | 63 | 73 | 96 | 103 | 164 | 46 | 105 | 18 |
| 65 | 65 | 75 | 96 | 103 | 164 | 46 | 105 | 18 |
| 70 | 70 | 80 | 102 | 109 | 178 | 46 | 111 | 18 |
| 75 | 75 | 85 | 114 | 121 | 193 | 49 | 123 | 18 |
| 80 | 80 | 90 | 114 | 121 | 193 | 49 | 123 | 18 |
| 85 | 85 | 95 | 124 | 131 | 208 | 49 | 133 | 20 |
| 90 | 90 | 100 | 124 | 131 | 208 | 49 | 133 | 20 |
| 95 | 95 | 105 | 134 | 141 | 218 | 49 | 143 | 20 |
| 100 | 100 | 110 | 134 | 141 | 218 | 49 | 143 | 20 |

# GBMtex-D

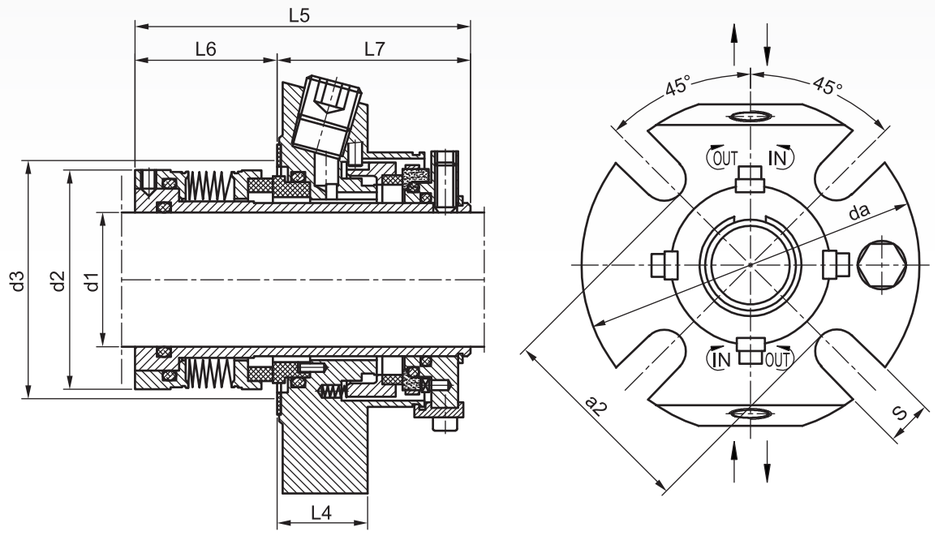


**技术参数：**
密封腔温度：-40℃+220℃
线速度：≤20m/s
密封腔压力：≤25bar
轴径尺寸：25-80mm

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

**Operating Limits:**
Temperature:-40℃+220℃
Speed: ≤20 m/s
Pressure: ≤25 bar
Shaft diameter: 25 - 80 mm

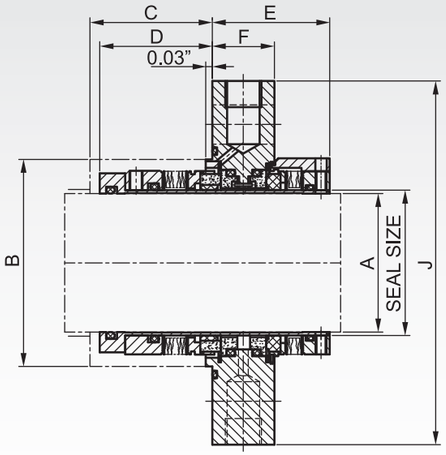
**Material:**
Seal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton,EPDM,Kalrez
Spring and metal parts:304,316,HAST.C

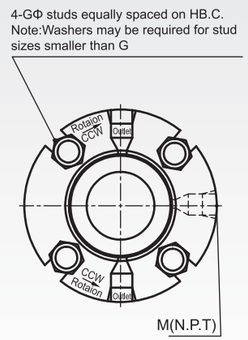



| Size | d1 | d2 | d3min | d3max | L4 | L5 | L6 | L7 | da | a2 | s |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | 25 | 45.0 | 47.0 | 51.0 | 25.4 | 87.0 | 33.6 | 53.4 | 105.0 | 62.0 | 13.2 |
| 30 | 30 | 49.4 | 52.0 | 56.0 | 25.4 | 86.5 | 33.1 | 53.4 | 105.0 | 67.0 | 13.2 |
| 32 | 32 | 52.3 | 54.5 | 57.0 | 25.4 | 86.5 | 33.1 | 53.4 | 108.0 | 70.0 | 13.2 |
| 33 | 33 | 52.3 | 54.5 | 57.0 | 25.4 | 86.5 | 33.1 | 53.4 | 108.0 | 70.0 | 13.2 |
| 35 | 35 | 54.8 | 58.0 | 61.5 | 25.4 | 86.5 | 33.1 | 53.4 | 113.0 | 72.0 | 13.2 |
| 38 | 38 | 57.5 | 60.0 | 66.0 | 25.4 | 86.5 | 33.1 | 53.4 | 123.0 | 75.0 | 14.0 |
| 40 | 40 | 58.8 | 62.0 | 68.0 | 25.4 | 86.3 | 32.9 | 53.4 | 123.0 | 77.0 | 14.2 |
| 43 | 43 | 61.9 | 64.5 | 70.5 | 25.4 | 86.5 | 33.1 | 53.4 | 133.0 | 80.0 | 14.2 |
| 45 | 45 | 65.0 | 68.5 | 73.0 | 25.4 | 86.5 | 33.1 | 53.4 | 138.0 | 82.0 | 14.2 |
| 48 | 48 | 68.4 | 71.0 | 75.0 | 25.4 | 86.8 | 33.4 | 53.4 | 138.0 | 85.0 | 14.2 |
| 50 | 50 | 70.0 | 73.0 | 78.0 | 25.4 | 87.2 | 33.8 | 53.4 | 148.0 | 87.0 | 14.2 |
| 53 | 53 | 71.9 | 75.0 | 87.0 | 25.4 | 87.4 | 34.0 | 53.4 | 148.0 | 97.0 | 18.0 |
| 55 | 55 | 74.6 | 77.0 | 83.0 | 25.4 | 87.0 | 33.6 | 53.4 | 148.0 | 92.0 | 18.0 |
| 60 | 60 | 83.9 | 87.0 | 91.0 | 25.4 | 88.2 | 34.8 | 53.4 | 157.0 | 102.0 | 18.0 |
| 65 | 65 | 87.5 | 90.0 | 98.5 | 25.4 | 88.1 | 34.7 | 53.4 | 163.0 | 109.3 | 18.0 |
| 70 | 70 | 93.0 | 98.0 | 108.0 | 25.4 | 89.6 | 36.2 | 53.4 | 178.0 | 118.3 | 18.0 |
| 75 | 75 | 96.8 | 101.6 | 118.0 | 28.0 | 107.4 | 43.5 | 63.9 | 190.0 | 129.0 | 18.0 |
| 80 | 80 | 104.7 | 108.0 | 124.0 | 28.0 | 106.8 | 42.9 | 63.9 | 195.0 | 135.0 | 18.0 |



# GBX-100/X-200






**技术参数：**
密封腔温度：-20℃+180℃
线速度：≤15m/s
密封腔压力：≤5bar
轴径尺寸：1.125"-4.125"mm

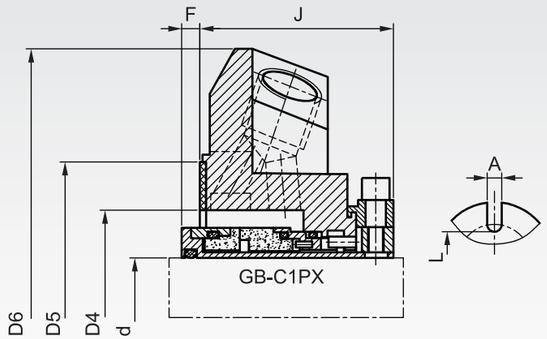
**Operating Limits:**
Temperature:-20℃+180℃
Speed:≤15m/s
Pressure:≤5bar
Standard Size:1.125"-4.125"mm

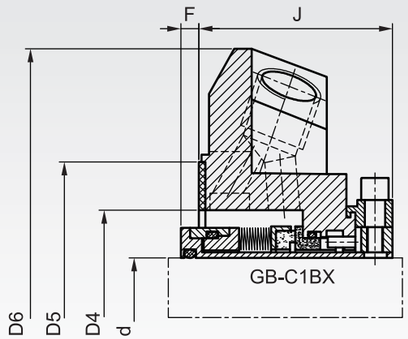
**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

**Material:**
Seal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton, EPDM,Kalrez
Spring and metal parts:304,316, HAST.C

| Size | A | Bmin | Bmax | Cmin | D | E | F | Gmax | Hmin | J | M |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.125 | 1 | 1.75 | 1.875 | 1.78 | 1.69 | 2 | 1.02 | 0.375 | 2.75 | 3.75 | 0.375 |
| 1.125 | 1.125 | 1.75 | 2 | 1.78 | 1.69 | 2 | 1.02 | 0.5 | 3 | 3.88 | 0.375 |
| 1.375 | 1.25 | 2 | 2.125 | 1.97 | 1.88 | 2 | 1.02 | 0.5 | 3.12 | 4.25 | 0.375 |
| 1.500 | 1.375 | 2 | 2.25 | 1.97 | 1.88 | 2 | 1.02 | 0.375 | 3.25 | 4.25 | 0.375 |
| 1.625 | 1.5 | 2.25 | 2.5 | 1.97 | 1.88 | 2 | 1.02 | 0.375 | 3.75 | 4.75 | 0.375 |
| 1.750 | 1.625 | 2.375 | 2.625 | 1.97 | 1.88 | 2 | 1.02 | 0.5 | 3.75 | 4.75 | 0.375 |
| 1.875 | 1.75 | 2.5 | 2.75 | 1.97 | 1.88 | 2 | 1.02 | 0.5 | 3.75 | 5 | 0.375 |
| 2.000 | 1.875 | 2.625 | 2.875 | 1.97 | 1.88 | 2 | 1.02 | 0.5 | 3.88 | 5 | 0.375 |
| 2.125 | 2 | 2.75 | 3 | 1.97 | 1.88 | 2 | 1.02 | 0.625 | 4.12 | 5.12 | 0.375 |
| 2.250 | 2.125 | 2.875 | 3.25 | 1.97 | 1.88 | 2 | 1.02 | 0.625 | 4.38 | 6 | 0.375 |
| 2.375 | 2.25 | 3 | 3.375 | 1.97 | 1.88 | 2 | 1.02 | 0.625 | 4.62 | 6.5 | 0.375 |
| 2.500 | 2.375 | 3.25 | 3.625 | 2.16 | 2.06 | 2.09 | 1.11 | 0.625 | 5 | 6.38 | 0.375 |
| 2.625 | 2.5 | 3.375 | 3.75 | 2.16 | 2.06 | 2.09 | 1.11 | 0.625 | 5 | 6.62 | 0.375 |
| 2.750 | 2.625 | 3.5 | 3.875 | 2.16 | 2.06 | 2.09 | 1.11 | 0.75 | 5.75 | 7.25 | 0.375 |
| 2.875 | 2.75 | 3.75 | - | 2.16 | 2.06 | 2.62 | 1.58 | | | | 0.75 |
| 3.000 | 2.75 | 3.875 | - | 2.16 | 2.06 | 2.62 | 1.58 | | | | 0.75 |
| 3.000 | 2.875 | 3.875 | - | 2.16 | 2.06 | 2.62 | 1.58 | | | | 0.75 |
| 3.125 | 2.875 | 4 | - | 2.16 | 2.06 | 2.62 | 1.58 | | | | 0.75 |
| 3.125 | 3 | 4 | - | 2.16 | 2.06 | 2.62 | 1.58 | | | | 0.75 |
| 3.250 | 3 | 4.125 | - | 2.16 | 2.06 | 2.62 | 1.58 | | | | 0.75 |
| 3.375 | 3.125 | 4.25 | - | 2.16 | 2.06 | 2.62 | 1.58 | | As Required | | 0.75 |
| 3.500 | 3.25 | 4.375 | - | 2.28 | 2.19 | 2.75 | 1.71 | | | | 0.75 |
| 3.625 | 3.375 | 4.5 | - | 2.28 | 2.19 | 2.75 | 1.71 | | | | 0.75 |
| 3.750 | 3.5 | 4.625 | - | 2.28 | 2.19 | 2.75 | 1.71 | | | | 0.75 |
| 3.875 | 3.625 | 4.75 | - | 2.28 | 2.19 | 2.75 | 1.71 | | | | 0.75 |
| 4.000 | 3.75 | 4.875 | - | 2.28 | 2.19 | 2.75 | 1.71 | | | | 0.75 |
| 4.125 | 3.875 | 5 | - | 2.28 | 2.19 | 2.75 | 1.71 | | | | 0.75 |

# GBC1PX/C1BX






| GB-C1PX Size/Inch | d | D4 | | D5 | D6 | F | J | L |
|---|---|---|---|---|---|---|---|---|
| | | MIN | MAX | | | | | |
| 1.000 | 1.000 | 1.625 | 1.875 | 2.115 | 3.69-3.75 | 0.212 | 1.913 | 2.750 |
| 1.125 | 1.125 | 1.750 | 2.000 | 2.240 | 3.69-3.75 | 0.212 | 1.193 | 2.875 |
| 1.250 | 1.250 | 1.890 | 2.245 | 2.495 | 4.19-4.25 | 0.212 | 1.913 | 3.125 |
| 1.375 | 1.375 | 2.000 | 2.375 | 2.615 | 3.94-4.00 | 0.212 | 1.913 | 3.250 |
| 1.437 | 1.437 | 2.250 | 2.688 | 2.775 | 4.72--4.78 | 0.222 | 1.973 | 3.750 |
| 1.500 | 1.500 | 2.250 | 2.525 | 2.775 | 4.69-4.75 | 0.202 | 1.973 | 3.750 |
| 1.625 | 1.625 | 2.375 | 2.780 | 3.030 | 4.69-4.76 | 0.202 | 1.973 | 3.750 |
| 1.750 | 1.750 | 2.500 | 2.875 | 3.150 | 4.94-5.00 | 0.202 | 1.973 | 3.875 |
| 1.875 | 1.875 | 2.625 | 2.875 | 3.150 | 4.94-5.01 | 0.202 | 1.973 | 3.875 |
| 1.937 | 1.937 | 2.690 | 2.920 | TBD | TBD | 0.207 | 1.973 | TBD |
| 2.000 | 2.000 | 2.750 | 3.030 | 3.280 | 5.00-5.12 | 0.202 | 1.973 | 4.120 |
| 2.125 | 2.125 | 2.875 | 3.125 | 3.430 | 5.94-6.00 | 0.202 | 1.973 | 4.250 |
| 2.250 | 2.250 | 3.000 | 3.280 | TBD | TBD | 0.206 | 1.973 | TBD |
| 2.375 | 2.375 | 3.125 | 3.678 | 3.975 | 6.32-6.38 | 0.202 | 1.973 | 4.875 |
| 2.437 | 2.437 | 3.375 | 3.450 | TBD | 6.32-6.38 | 0.233 | 1.942 | 4.875 |
| 2.500 | 2.500 | 3.375 | 3.687 | 3.975 | 6.32-6.38 | 0.202 | 1.973 | 4.875 |
| 2.625 | 2.625 | 3.625 | 4.312 | 4.615 | 7.19-7.25 | 0.204 | 2.726 | 5.625 |
| 2.750 | 2.750 | 3.750 | 4.312 | 4.615 | 7.19-7.25 | 0.204 | 2.726 | 5.625 |

## 技术参数：

密封腔温度：–20℃+220℃
线速度：≤16m/s
密封腔压力：≤25bar
轴径尺寸：25–70mm (1–2.75")

## Operating Limits:

Temperature:-20℃+220℃
Sliding velocity:≤16m/s
Pressure:≤25bar
Shaft diameter:25-70mm or 1-2.75"

## 材料组合：

密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

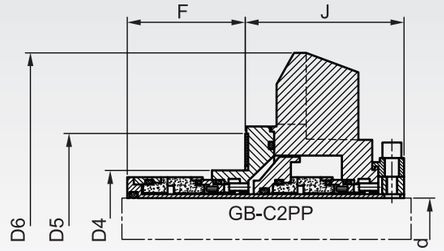
## Material:

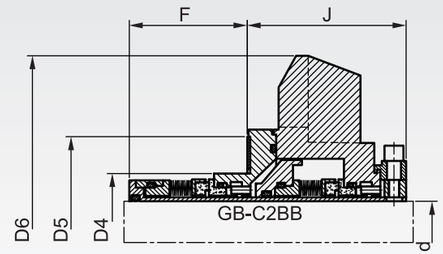
Seal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton,EPDM,Kalrez
Spring and metal parts:304,316,HAST.C

| GB-C1BX Size/Metric | d | D4 | | D5 | D6 | F | J | L |
|---|---|---|---|---|---|---|---|---|
| | | MIN | MAX | | | | | |
| 25 | 25 | 41.28 | 47.50 | 53.72 | 93.73-95.25 | 5.38 | 48.59 | 69.85 |
| 30 | 30 | 48.01 | 57.02 | 63.37 | 106.4-108.0 | 5.38 | 48.59 | 79.38 |
| 33 | 33 | 50.08 | 60.33 | 66.42 | 109.7-111.3 | 5.38 | 48.59 | 82.55 |
| 35 | 35 | 50.08 | 60.33 | 66.42 | 109.7-111.3 | 5.38 | 48.59 | 82.55 |
| 38 | 38 | 51.15 | 64.14 | 70.49 | 119.1-120.7 | 5.38 | 50.11 | 95.25 |
| 40 | 40 | 60.33 | 70.61 | 76.96 | 119.1-120.7 | 5.13 | 50.11 | 95.25 |
| 43 | 43 | 63.50 | 73.03 | 80.01 | 125.5-127.0 | 5.13 | 50.11 | 98.43 |
| 45 | 45 | 66.68 | 73.03 | 80.01 | 125.5-127.0 | 5.13 | 50.11 | 98.43 |
| 48 | 48 | 67.06 | 73.41 | 80.52 | 136.4-137.9 | 5.13 | 50.11 | 97.99 |
| 50 | 50 | 69.85 | 76.96 | 83.31 | 127.0-130.3 | 5.13 | 50.11 | 104.65 |
| 53 | 53 | 73.03 | 79.38 | 122.17 | 150.9-152.4 | 5.13 | 50.11 | 112.78 |
| 55 | 55 | 79.38 | 93.65 | 100.97 | 160.5-162.1 | 5.13 | 50.11 | 123.83 |
| 60 | 60 | 79.38 | 94.62 | 100.97 | 160.5-162.1 | 5.13 | 50.11 | 123.83 |
| 65 | 65 | 89.92 | 98.81 | 105.16 | 179.5-181.0 | 1.93 | 53.42 | 127.00 |
| 70 | 70 | 95.25 | 109.52 | 117.22 | 182.6-184.2 | 5.18 | 69.24 | 142.88 |



# GBC2PP/C2BB






| GB-C2PP Size/Inch | d | D4 | | D5 | D6 | F | J | L |
|---|---|---|---|---|---|---|---|---|
| | | MIN | MAX | | | | | |
| 1.000 | 1.000 | 1.625 | 1.875 | 2.115 | 3.69-3.75 | 1.838 | 2.062 | 2.750 |
| 1.125 | 1.125 | 1.750 | 2.000 | 2.240 | 3.69-3.75 | 1.838 | 2.062 | 2.875 |
| 1.250 | 1.250 | 1.890 | 2.245 | 2.295 | 4.19-4.25 | 1.838 | 2.062 | 3.125 |
| 1.375 | 1.375 | 2.000 | 2.375 | 2.615 | 3.94-4.00 | 1.838 | 2.062 | 3.250 |
| 1.437 | 1.437 | 2.250 | 2.688 | 2.775 | 4.72--4.78 | 1.903 | 2.122 | 3.750 |
| 1.500 | 1.500 | 2.250 | 2.525 | 2.775 | 4.69-4.75 | 1.903 | 2.122 | 3.750 |
| 1.625 | 1.625 | 2.375 | 2.780 | 3.030 | 4.69-4.76 | 1.903 | 2.122 | 3.750 |
| 1.750 | 1.750 | 2.500 | 2.875 | 3.150 | 4.94-5.00 | 1.903 | 2.122 | 3.875 |
| 1.875 | 1.875 | 2.625 | 2.875 | 3.150 | 4.94-5.01 | 1.903 | 2.122 | 3.875 |
| 1.937 | 1.937 | 2.690 | 2.920 | TBD | TBD | 1.903 | 2.122 | TBD |
| 2.000 | 2.000 | 2.750 | 3.030 | 3.280 | 5.00-5.12 | 1.903 | 2.122 | 4.120 |
| 2.125 | 2.125 | 2.875 | 3.125 | 3.430 | 5.94-6.00 | 1.903 | 2.122 | 4.250 |
| 2.250 | 2.250 | 3.000 | 3.280 | TBD | TBD | 1.903 | 2.122 | TBD |
| 2.375 | 2.375 | 3.125 | 3.678 | 3.975 | 6.32-6.38 | 1.903 | 2.122 | 4.875 |
| 2.437 | 2.437 | 3.375 | 3.450 | TBD | 6.32-6.38 | 1.934 | 2.091 | 4.875 |
| 2.500 | 2.500 | 3.375 | 3.687 | 3.975 | 6.32-6.38 | 1.903 | 2.122 | 4.875 |
| 2.625 | 2.625 | 3.625 | 4.312 | 4.615 | 7.19-7.25 | 2.429 | 2.906 | 5.625 |
| 2.750 | 2.750 | 3.750 | 4.312 | 4.615 | 7.19-7.25 | 2.429 | 2.906 | 5.625 |

## 技术参数：

密封腔温度：–20℃+220℃
线速度：≤16m/s
密封腔压力：≤25bar
轴径尺寸：25–70mm (1–2.75")

## Operating Limits:

Temperature:-20℃+220℃
Speed:≤16m/s
Pressure:≤25bar
Shaft diameter:25-70mm or 1-2.75"

## 材料组合：

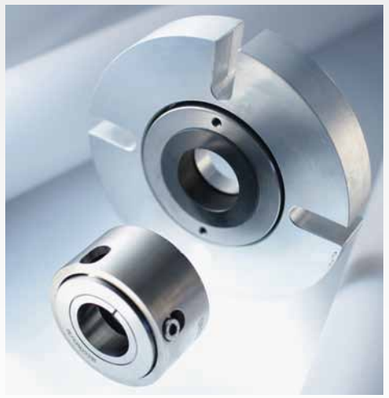
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

## Material:

SSeal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton,EPDM,Kalrez
Spring and metal parts:304,316,HAST.C

| GB-C2BB Size/Metric | d | D4 | | D5 | D6 | F | J | L |
|---|---|---|---|---|---|---|---|---|
| | | MIN | MAX | | | | | |
| 25 | 25 | 41.28 | 47.50 | 53.72 | 93.73-95.25 | 46.69 | 48.26 | 69.85 |
| 30 | 30 | 48.01 | 57.02 | 63.37 | 106.4-108.0 | 46.69 | 48.26 | 79.38 |
| 33 | 33 | 50.08 | 60.33 | 66.42 | 109.7-111.3 | 46.69 | 48.26 | 82.55 |
| 35 | 35 | 50.08 | 60.33 | 66.42 | 109.7-111.3 | 46.69 | 48.26 | 82.55 |
| 38 | 38 | 51.15 | 64.14 | 70.49 | 119.1-120.7 | 48.34 | 48.26 | 95.25 |
| 40 | 40 | 60.33 | 70.61 | 76.96 | 119.1-120.7 | 48.34 | 49.91 | 95.25 |
| 43 | 43 | 63.50 | 73.03 | 80.01 | 125.5-127.0 | 48.34 | 49.91 | 98.43 |
| 45 | 45 | 66.68 | 73.03 | 80.01 | 125.5-127.0 | 48.34 | 49.91 | 98.43 |
| 48 | 48 | 67.06 | 73.41 | 80.52 | 136.4-137.9 | 48.34 | 49.91 | 97.99 |
| 50 | 50 | 69.85 | 76.96 | 83.31 | 127.0-130.3 | 48.34 | 49.91 | 104.65 |
| 53 | 53 | 73.03 | 79.38 | 122.17 | 150.9-152.4 | 48.34 | 49.91 | 112.78 |
| 55 | 55 | 79.38 | 93.65 | 100.97 | 160.5-162.1 | 48.34 | 49.91 | 123.83 |
| 60 | 60 | 79.38 | 94.62 | 100.97 | 160.5-162.1 | 48.34 | 49.91 | 123.83 |
| 65 | 65 | 89.92 | 98.81 | 105.16 | 179.5-181.0 | 45.06 | 46.63 | 127.00 |
| 70 | 70 | 95.25 | 109.52 | 117.22 | 182.6-184.2 | 61.70 | 63.27 | 142.88 |

# GBSeccoMix



## 特 点:

对于顶部入口驱动器，可以根据要求选择侧驱动器
干气运行
单、双密封
平衡型
外置
多个弹簧旋转
与旋转方向无关

## Features

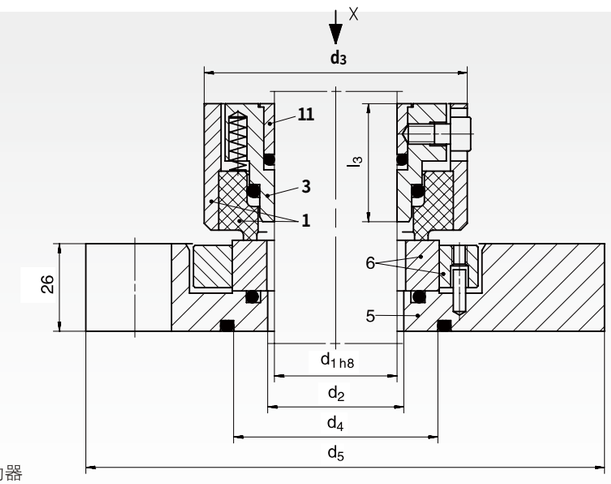
For top entry drives, on request side drive possible
Dry-running
Single and double seals
Balanced
Outboard
Multiple springs rotating
Independent of direction of rotation

## 优 点:

可作为散件或者集装式。
适用于负压设备。
由于设备环境，摩擦面很好的贴合。
与轴用螺栓锁定连接。
钢(SeccoMix481)和玻璃内衬(SeccoMix461)反应釜的连接可按DIN28138标准或按要求提供。
也可用于侧入式反应釜，需提前咨询。
应要求提供ATEX防爆认证。

## Advantages:

Available as components or as cartridge units
Suitable for pressure reversals
Due to the hydraulic conditions, product pressure as well overlaying barrier pressure closes the seal
Friction-locked connection to the shaft
Connections for steel (SeccoMix® 481) and glass-lined (SeccoMix® 461) reactors are available to DIN 28138 standards or as required

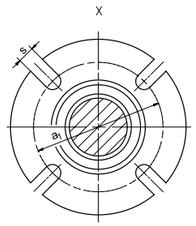



## 技术参数:

轴径:d1 = 25~160 mm(0.98"~6.30”)
压力:p1 =真空…6 bar (87 PSI)
温度:t1 = –20 °C – +150(250 *) °C
滑动速度:vg = 0 –2 m/s(0–6ft/s)
轴向移动: ± 1.5 mm
径向移动: ± 1.5 mm
*带冷却法兰

## Operating Limits:

Shaft diameter: d1 = 25-160 mm (0.98"-6.30")
Pressure: p1 = vacuum ... 6 bar (87 PSI)
Temperature: t1 = –20 °C ... +150 (250*) °C
Sliding velocity: vg = 0 ... 2 m/s (0 ... 6 ft/s)
Axial movement: ±1.5 mm
Radial movement: ±1.5 mm
* With cooling flange




## 材料组合:

密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅 助 密 封：根据应用情况根据应用情况
弹簧及金属件：根据应用情况根据应用情况

## Material:

Seal face: Carbon graphite, FDA conform
Seat: Silicon carbide
Secondary seals and metal parts according to application
and customer's specifications.

## 推荐应用:

化学工业
制药工业
餐饮业
单密封无毒介质
双重密封有毒介质
搅拌器
反应堆

## Recommended applications

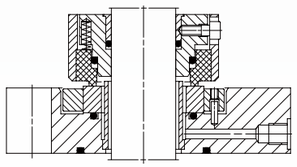
Chemical industry
Pharmaceutical industry
Food and beverage industry
Non-toxic media with single seal
Toxic media with double seal
Agitators
Reactors

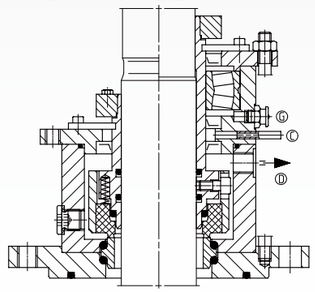


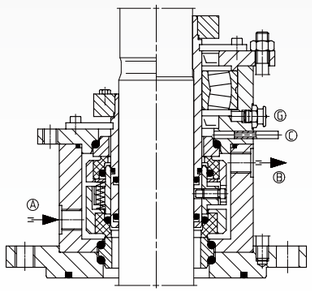
SeccoMix–11提供收集槽装置，用于收集密封面上磨损下来的颗粒。
因此，反应釜中的介质不会受到污染。
可以通过冲洗孔来排出磨损颗粒。
请注意：
直径(d2到d5)增加到下一个可能的设计尺寸。

SeccoMix481型单端面密封。
SeccoMix481L型
单端面带轴承机械密封。
SeccoMix451
所有类型的SecooMix481
可用于无阶梯轴（所有直径）的反应釜。
密封型号：SeccoMix451
可提供定制设计来满足不同设备的使用要求。
SeccoMix461/（491）
适用于搪瓷反应釜。

SeccoMix481–D系列
双端面机械密封。
SeccoMix481L–D系列
双端面带轴承机械密封。
该系列产品特殊设计，即使压力变化或负压状态同样可使用该系列产品。由于双端面设计可以加入隔离液缓冲机械密封所面临的极端工况，缓冲液压力应高于釜内压力0.5–1.0bar（7.25–15psi）






| Size | d1 | d2 | d3 | d4 | d5 | L2 | L3 | a1(min) | a1(max) | S |
|---|---|---|---|---|---|---|---|---|---|---|
| 25 | 25 | 34 | 68 | - | 148 | 41.5 | 40.5 | 100 | 132 | 11 |
| 28 | 28 | 34 | 68 | 55 | 148 | 41.5 | 40.5 | 100 | 132 | 11 |
| 30 | 30 | 34 | 68 | 55 | 148 | 41.5 | 40.5 | 100 | 132 | 11 |
| 32 | 32 | 39 | 73 | 60 | 153 | 41.5 | 40.5 | 105 | 137 | 11 |
| 35 | 35 | 39 | 73 | 60 | 153 | 41.5 | 40.5 | 105 | 137 | 11 |
| 38 | 38 | 44 | 78 | 65 | 158 | 41.5 | 40.5 | 110 | 142 | 11 |
| 40 | 40 | 44 | 78 | 65 | 158 | 41.5 | 40.5 | 110 | 142 | 11 |
| 45 | 45 | 49 | 83 | 68 | 163 | 41.5 | 40.5 | 115 | 152 | 11 |
| - | - | 49 | 83 | 68 | 163 | 41.5 | 40.5 | 115 | 152 | 11 |
| 48 | 48 | 54 | 88 | 73 | 178 | 41.5 | 40.5 | 125 | 160 | 14 |
| 50 | 50 | 54 | 88 | 73 | 178 | 41.5 | 40.5 | 125 | 160 | 14 |
| 55 | 55 | 59 | 93 | 78 | 183 | 41.5 | 40.5 | 130 | 165 | 14 |
| - | - | 59 | 93 | 78 | 183 | 41.5 | 40.5 | 130 | 165 | 14 |
| 60 | 60 | 64 | 98 | 85 | 188 | 41.5 | 40.5 | 135 | 170 | 14 |
| 65 | 65 | 69 | 103 | 90 | 193 | 44.5 | 40.5 | 140 | 175 | 14 |
| - | - | 69 | 103 | 90 | 193 | 44.5 | 40.5 | 140 | 175 | 14 |
| 70 | 70 | 74 | 108 | 95 | 198 | 44.5 | 43.5 | 145 | 180 | 14 |
| - | - | 74 | 108 | 95 | 198 | 44.5 | 43.5 | 145 | 180 | 14 |
| 75 | 75 | 79 | 113 | 100 | 203 | 44.5 | 43.5 | 150 | 185 | 14 |
| 80 | 80 | 84 | 118 | 105 | 208 | 44.5 | 43.5 | 155 | 190 | 14 |
| 85 | 85 | 89 | 123 | 110 | 213 | 44.5 | 43.5 | 160 | 195 | 14 |
| 90 | 90 | 94 | 128 | 115 | 218 | 44.5 | 43.5 | 165 | 200 | 14 |
| 95 | 95 | 99 | 133 | 120 | 223 | 44.5 | 43.5 | 170 | 205 | 14 |
| 100 | 100 | 104 | 138 | 125 | 228 | 44.5 | 43.5 | 175 | 210 | 14 |
| 105 | 105 | 109 | 143 | 130 | 233 | 44.5 | 43.5 | 180 | 215 | 14 |
| 110 | 110 | 114 | 148 | 135 | 238 | 44.5 | 43.5 | 185 | 220 | 14 |
| 115 | 115 | 119 | 153 | 140 | 267 | 44.5 | 43.5 | 196 | 243 | 18 |
| 125 | 125 | 129 | 163 | 150 | 277 | 44.5 | 43.5 | 206 | 253 | 18 |
| 140 | 140 | 144 | 178 | 165 | 297 | 44.5 | 43.5 | 221 | 273 | 18 |
| - | - | 144 | 178 | 165 | 297 | 44.5 | 43.5 | 221 | 273 | 18 |
| - | - | 144 | 178 | 165 | 297 | 44.5 | 43.5 | 221 | 273 | 18 |
| 150 | 150 | 154 | 188 | 175 | 307 | 44.5 | 43.5 | 231 | 283 | 18 |
| 160 | 160 | 164 | 198 | 185 | 317 | 44.5 | 43.5 | 241 | 293 | 18 |
| - | - | 164 | 198 | 185 | 317 | 44.5 | 43.5 | 241 | 293 | 18 |

# GBMR-D



## 特 点:

用于顶部、横向和底部驱动器
产品侧座椅旋转
不平衡
双重密封
独立于旋转方向
集装单元

## Features

For top, lateral and bottom drives
Product side seat rotating
Unbalanced
Double seal
Independent of direction of rotation
Cartridge unit

## 优 点:

表面光滑,无卫生死角。
CIP–/SIP ( 清洗方便,消毒方便 )。
摩擦面符合 FDA 认证标准。
卫生级的机械密封解决方案。

## Advantages:

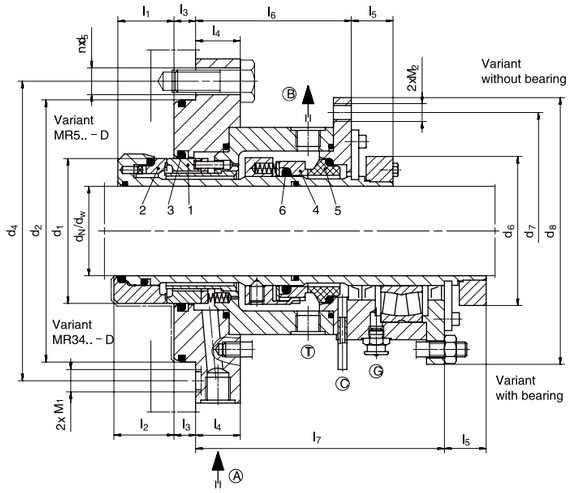
Smooth surface with no empty spaces
CIP–/SIP
(Cleaning in Place, Sterilization in Place)
Sliding materials FDA conform
Variant for sterile applications available

## 材料组合:

密封面阀座：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金，AM350，HAST.C,In718,Ti

## Material:

Seal ring: Car,Sic,Ssic,TC
Secondary seal: NBR,EPDM,Viton,Kalrez
Spring and Metal parts:304,316,AM350,
HAST.C,Inconel 718,Titanlum




## 技术参数:

轴径：dN/dw=30~200 （ 500 ） mm
轴向偏移轴/壳体：dN/dw 30~60mm 最大 ± 1.5mm
dN/dw>60mm ： 最大 ± 2.0mm
径向偏置轴/壳体：最大 ± 0.3 mm
压力：p1 ( 介质 ) = 真空~14 （ 23 ） bar
p3 （ 缓冲液 ) = 最大16 （ 25 ） bar
Δp3>p1=最小2bar ， 最大10bar
温度：t1 ( 介质 ) = – 20℃~+200 （ 300 ）℃
滑动速度：vg=20 m/s ( 66 ft/s )

## Operating Limits:

Shaft diameter: dN/dw = 30 -200 (500) mm
Axial offset shaft/housing:
dN/dw 30 - 60 mm : max. ±1.5 mm
dN/dw >60 mm : max. ±2.0 mm
Radial offset shaft/housing: max. ±0.3 mm
Pressure: p1 (media) = vacuum-14 (23) bar
p3 (buffer fluid) = max. 16 (25) bar
Δ p3 > p1 = min. 2 bar , max. 10 bar
Temperature:
t1 (media) = –20 °C- +200 (300) °C
Sliding velocity: vg = 20 m/s

## 推荐应用:

化学工业
制药工业
餐饮业
反应堆
搅拌机
捏合机
磨坊
干燥器
压力过滤器

## Recommended applications:

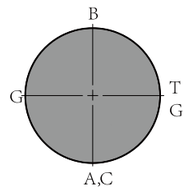
Chemical industry
Pharmaceutical industry
Food and beverage industry
Reactors
Mixers
Kneaders
Mills
Dryers
Pressure filters

## 电源连接

A液体中的屏障
B隔离液流出
C排水
G润滑脂
T温度测量

## Supply connections

A Barrier fluid IN
B Barrier fluid OUT
C Drainage
G Grease
T Temperature measuring






# GBHSHLU-D

## 特 点:

用于底部驱动器入口
多弹簧旋转
平衡
双重密封
独立于旋转方向
液体润滑
墨盒单元
根据要求提供集成轴承

## Features

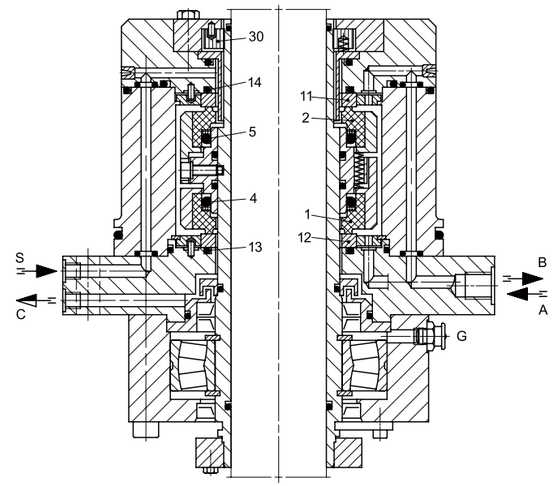
For bottom drive entries
Multiple springs rotating
Balanced
Double seal
Independent of direction of rotation
Liquid-lubricated
Cartridge unit
On request with integrated bearing

## 优 点:

直接接触介质的高压机械密封。
专利水封装置。
介质侧浮动节流套。
高可靠性和长寿命设计。
经过长期合作单位测试的产品。
安装尺寸可根据客户需求稍作更改。
由于介质压力和隔离液压力平衡性,摩擦面不会打开。

## Advantages

High pressure seal for process orientated solutions
Patented hydrodynamic grooves
Floating throttle ring on the product side
High reliability and long service life
Ready-to-fit and factory-tested units
Connection dimensions to customer's requirements
Due to the hydraulic conditions, product pressure as well overlaying barrier pressure closes the seal




## 技术参数:

轴直径：dw=400mm
压力：p1=真空~60 bar
温度：t= – 40 °C~+200 °C
滑动速度：vg=0~5m/s

## Operating range

Shaft diameter: dw = 400 mm
Pressure: p1 = vacuum -60 bar
Temperature: t = –40 °C-+200 °C
Sliding velocity: vg = 0 - 5 m/s

## 材料组合:

密封面阀座：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金，AM350，HAST.C,In718,Ti
根据应用和客户要求

## Material:

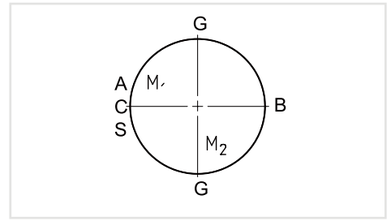
Seal ring: Car,Sic,Ssic,TC
Secondary seal: NBR,EPDM,Viton,Kalrez
Spring and Metal parts:304,316,AM350,
HAST.C,Inconel 718,Titanlum
According to application and customer's specification

## 推荐应用:

化学工业
适用于所有介质
搅拌器

## Recommended applications:

Chemical industry
Suitable for all media
Agitators




## 电源连接

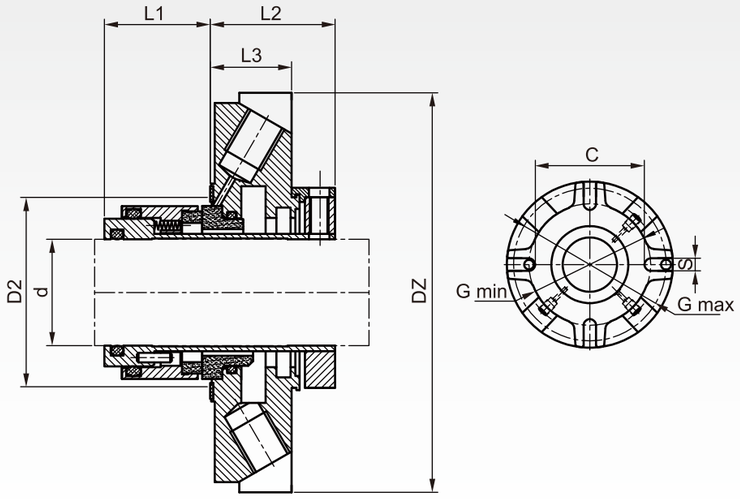
A液体中的屏障
B隔离液流出
C排水
G润滑脂
S冲洗

## Supply connections

A Barrier fluid IN
B Barrier fluid OUT
C Drainage
G Grease
S Flush

# GBCDSS






**技术参数：**
密封腔温度;-20℃+200℃
线速度：≤16m/s
密封腔压力：≤16bar
轴径尺寸：1-3.5"

**Operating Limits:**
Temperature:-20℃+200℃
Speed: ≤16 m/s
Pressure: ≤ 16 bar
Shaft diameter: 1-3.5"

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

**Material:**
Seal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton, EPDM,Kalrez
Spring and metal parts:304,316, HAST.C

| Size | d | D2 | Dz | L1 | L2 | L3 | C | G | | S |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | MIN | MAX | |
| 1.000 | 1.000 | 1.625 | 4.125 | 1.209 | 1.467 | 0.927 | 2.375 | 2.937 | 3.625 | 1/2 |
| 1.125 | 1.125 | 1.750 | 4.250 | 1.209 | 1.467 | 0.927 | 2.375 | 2.937 | 3.750 | 1/2 |
| 1.250 | 1.250 | 1.875 | 4.375 | 1.209 | 1.467 | 0.927 | 2.500 | 3.062 | 3.875 | 1/2 |
| 1.375 | 1.375 | 2.000 | 4.375 | 1.209 | 1.467 | 0.927 | 2.625 | 3.186 | 3.875 | 1/2 |
| 1.500 | 1.500 | 2.250 | 5.000 | 1.090 | 1.400 | 0.852 | 2.832 | 3.375 | 4.500 | 1/2 |
| 1.625 | 1.625 | 2.375 | 5.000 | 1.090 | 1.400 | 0.852 | 2.932 | 3.375 | 4.500 | 1/2 |
| 1.750 | 1.750 | 2.500 | 5.250 | 1.090 | 1.400 | 0.852 | 3.022 | 3.562 | 4.750 | 1/2 |
| 1.875 | 1.875 | 2.625 | 5.250 | 1.090 | 1.400 | 0.852 | 3.022 | 3.562 | 4.750 | 1/2 |
| 2.000 | 2.000 | 2.750 | 5.500 | 1.150 | 1.413 | 0.852 | 3.386 | 3.937 | 5.000 | 1/2 |
| 2.125 | 2.125 | 2.875 | 5.750 | 1.150 | 1.413 | 0.852 | 3.687 | 4.375 | 5.125 | 5/8 |
| 2.250 | 2.250 | 3.000 | 5.750 | 1.150 | 1.413 | 0.852 | 3.687 | 4.375 | 5.125 | 5/8 |
| 2.375 | 2.375 | 3.125 | 6.000 | 1.150 | 1.413 | 0.852 | 3.937 | 4.625 | 5.375 | 5/8 |
| 2.500 | 2.500 | 3.375 | 7.000 | 1.250 | 1.500 | 0.926 | 4.312 | 5.000 | 6.375 | 5/8 |
| 2.625 | 2.625 | 3.500 | 7.000 | 1.250 | 1.500 | 0.926 | 4.312 | 5.000 | 6.375 | 5/8 |
| 2.750 | 2.750 | 3.625 | 7.000 | 1.250 | 1.500 | 0.926 | 4.312 | 5.000 | 6.375 | 5/8 |
| 2.875 | 2.875 | 3.750 | 7.500 | 1.250 | 1.500 | 0.926 | 4.937 | 5.625 | 6.812 | 5/8 |
| 3.000 | 3.000 | 3.875 | 7.500 | 1.250 | 1.500 | 0.926 | 4.937 | 5.625 | 6.812 | 5/8 |
| 3.125 | 3.125 | 4.000 | 7.500 | 1.250 | 1.500 | 0.926 | 4.937 | 5.625 | 6.812 | 5/8 |
| 3.250 | 3.250 | 4.125 | 8.000 | 1.250 | 1.500 | 0.926 | 5.312 | 6.125 | 7.312 | 5/8 |
| 3.375 | 3.375 | 4.250 | 8.000 | 1.250 | 1.500 | 0.926 | 5.312 | 6.125 | 7.312 | 5/8 |
| 3.500 | 3.500 | 4.375 | 8.000 | 1.250 | 1.500 | 0.926 | 5.312 | 6.125 | 7.312 | 5/8 |



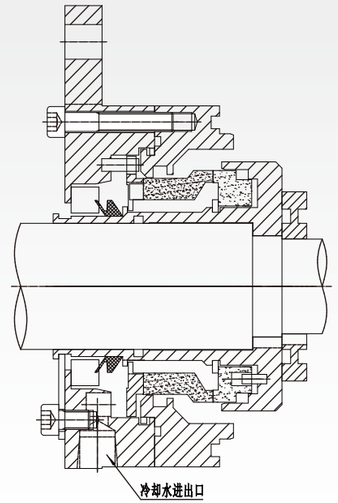
# GBTUJ88



**适用范围**
介质：石膏浆料，水泥浆料，纸浆，污水等。
浓度：≦20%
温度：<120℃
压力：<1.2Mpa
线速度：<10m/s

**材料**
密封面：石墨，碳化硅，碳化钨等。
密封圈：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶，等。
弹簧及金属件： 304，316，合氏合金，等。

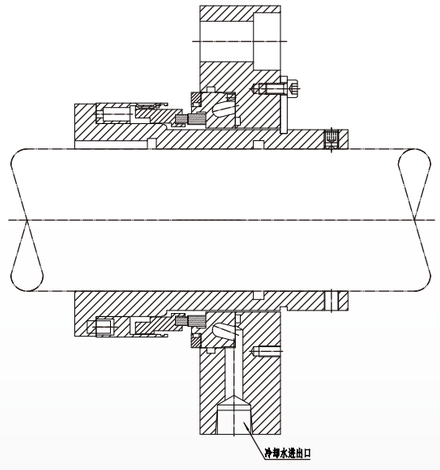
**结构特点**
1：与旋转方向无关
2：采用外部冷却，冲洗水不进入泵内，不对工艺介质产生影响。
3：适应轴套为夹紧固定在轴上的一种单端面集装式机械密封，避免安装时发生干涉。




**使用说明**
1：安装时，应在轴套内孔以及O形密封圈上涂润滑油，以便于安装。
2：冲洗水可用普通自来水，压力应控制在0.05-0.15MPA以下，一般情况下能实现流动即可。

# GB8B1D






**适用范围**
介质：油，水，酸，碱，有机溶剂及其它腐蚀性介质。
温度：<260℃
压力：<6Mpa
线速度：<15m/s
轴向窜动量：±0.5mm

**材料**
密封面：石墨，碳化硅，碳化钨等。
密封圈：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶，等。
弹簧及金属件： 304，316，合氏合金，等。

**结构特点**
1：键槽与螺丝传动，能适应更大的扭矩。
2：静环特殊设计，用于单独冷却密封面，或在必要时加热密封面。

**使用说明**
1：安装时，应在轴套内孔以及O形密封圈上涂润滑油，以便于安装。
2：冲洗水可用普通自来水，压力应控制0.3-0.5MPA以内。

# GB204B

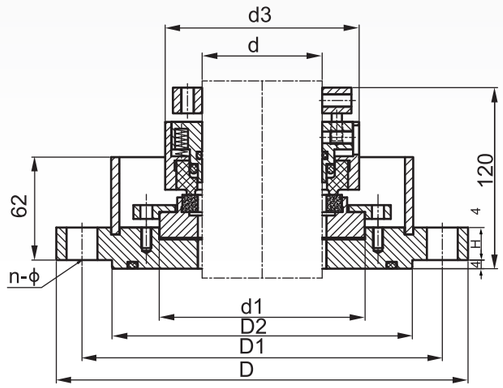
**技术参数：**
密封腔温度：–40℃+180℃
线速度：≤2m/s
密封腔压力：≤8bar
轴径尺寸：30–110mm

**Operating Limits:**
Temperature:-40℃+180℃
Speed:≤2m/s
Pressure:≤8bar
Standard Size:30-110mm



**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：氟橡胶，乙丙橡胶
弹簧及金属件：301，316，哈氏合金

**Material:**
Seal Ring:Car、Sic、Ssic、TC
Secondary seal:Viton,EPDM
Spring and metal parts:301,316,HAST.C

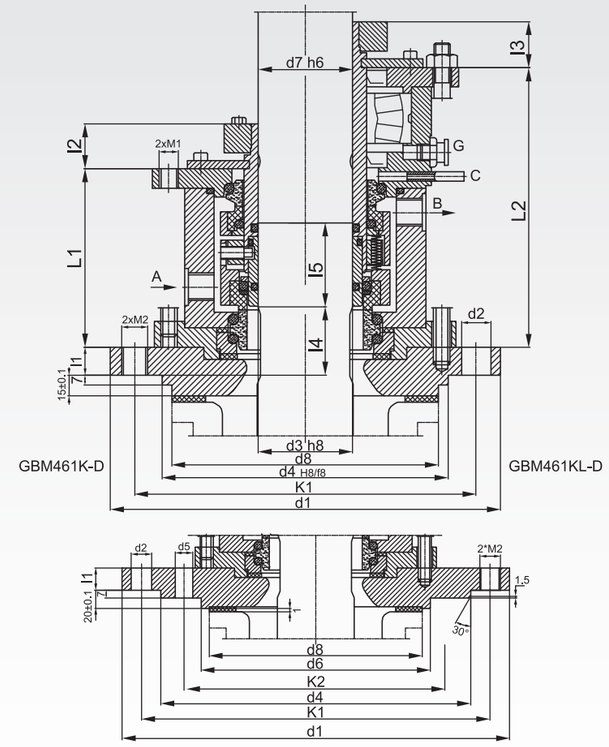


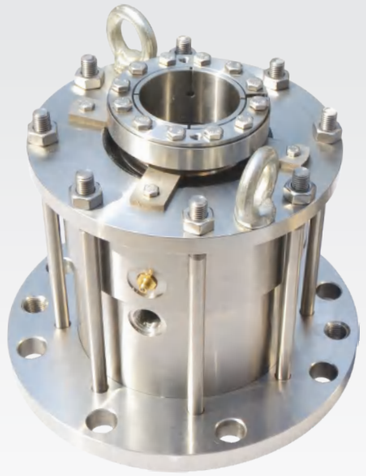

| Size | d1 | D | D1 | D2 | d3 | H | n-Φ |
|---|---|---|---|---|---|---|---|
| 30.00 | 50.0 | 185.00 | 150.0 | 116.00 | 67.00 | 16.00 | 4-Φ18 |
| 40.00 | 64.0 | 205.00 | 170.0 | 135.00 | 77.00 | 16.00 | 4-Φ18 |
| 50.00 | 74.0 | 235.00 | 200.0 | 164.00 | 87.00 | 16.00 | 8-Φ18 |
| 60.00 | 85.0 | 235.00 | 200.0 | 164.00 | 98.00 | 16.00 | 8-Φ18 |
| 65.00 | 91.0 | 235.00 | 200.0 | 164.00 | 103.00 | 16.00 | 8-Φ18 |
| 70.00 | 110.0 | 260.00 | 225.0 | 188.00 | 118.00 | 16.00 | 12-Φ18 |
| 80.00 | 119.0 | 290.00 | 225.0 | 220.00 | 128.00 | 16.00 | 12-Φ18 |
| 95.00 | 132.0 | 315.00 | 280.0 | 245.00 | 138.00 | 16.00 | 12-Φ18 |
| 100.00 | 140.0 | 315.00 | 280.0 | 245.00 | 148.00 | 16.00 | 12-Φ18 |
| 110.00 | 158.0 | 315.00 | 280.0 | 245.00 | 158.00 | 22.00 | 12-Φ18 |
| 120.00 | 168.0 | 315.00 | 280.0 | 245.00 | 168.00 | 22.00 | 12-Φ18 |
| 130.00 | 180.0 | 315.00 | 280.0 | 245.00 | 178.00 | 22.00 | 12-Φ18 |
| 150.00 | 190.0 | 360.00 | 320.0 | 285.00 | 188.00 | 25.00 | 12-Φ18 |
| 160.00 | 200.0 | 360.00 | 320.0 | 285.00 | 198.00 | 25.00 | 12-Φ18 |
| 180.00 | 220.0 | 360.00 | 320.0 | 285.00 | 218.00 | 25.00 | 12-Φ18 |





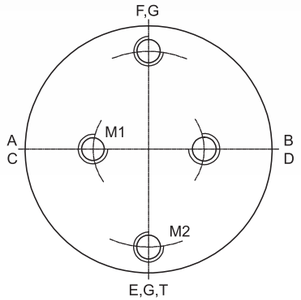
# GBM461K-D/M461KL-D



**技术参数：**
密封腔温度：–40℃+200℃
线速度：≤5m/s
密封腔压力：≤16bar
轴径尺寸：40–160mm

**Operating Limits:**
Temperature:-40℃+200℃
Sliding velocity: ≤ 5 m/s
Pressure: ≤16 bar
Shaft diameter: 40-160mm




**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

**Material:**
Seal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton,EPDM,Kalrez
Spring and metal parts:304,316,HAST.C

| d3* | d7* | Nominal size | Flangesize** | d1 | nxd² | d4 | nxd5 | d6 | d7 | [k1 | [k2 | L1 | L2 | l1 | l2 | l3 | l4 | l5 | M1 | M2 | A,B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40 | 38 | 40 | E125 | 175 | 4×18 | 110 | - | - | 102 | 145 | - | 142 | 184 | 25 | 35 | 28 | 50 | 50 | M12 | M16 | G3/8 |
| 50 | 48 | 50 | E200 | 240 | 8×18 | 176 | - | - | 138 | 210 | - | 147 | 195 | 25 | 40 | 28 | 50 | 50 | M12 | M16 | G3/8 |
| 60 | 58 | 60 | E250 | 275 | 8×22 | 204 | - | - | 188 | 240 | - | 158 | 203 | 25 | 42 | 28 | 50 | 60 | M12 | M20 | G3/8 |
| 80 | 78 | 80 | E300 | 305 | 8×22 | 234 | - | - | 212 | 270 | - | 170 | 240 | 30 | 45 | 34 | 60 | 60 | M16 | M20 | G1/2 |
| 100 | 98 | 100 | E400 | 395 | 12×22 | 313 | - | - | 268 | 350 | - | 177 | 240 | 30 | 52 | 34 | 60 | 60 | M16 | M20 | G1/2 |
| 100 | 98 | 100 | E500 | 395 | 12×22 | 313 | - | - | 268 | 350 | - | 177 | 240 | 30 | 52 | 34 | 60 | 60 | M16 | M20 | G1/2 |
| 125 | 120 | 125 | E700 | 505 | 4×22 | 422 | 12×22 | 320 | 306 | 460 | 350 | 208 | 266 | 30 | 75 | 40 | 60 | 80 | M20 | M20 | G1/2 |
| 140 | 135 | 140 | E700 | 505 | 4×22 | 422 | 12×22 | 320 | 306 | 460 | 350 | 223 | 282 | 30 | 79 | 40 | 60 | 80 | M20 | M20 | G1/2 |
| 160 | 150 | 160 | E700 | 505 | 4×22 | 422 | 12×22 | 320 | 306 | 460 | 350 | 228 | 282 | 30 | 77 | 40 | 60 | 85 | M20 | M20 | G1/2 |
| 160 | 150 | 160 | E900 | 505 | 4×22 | 422 | 12×22 | 320 | 306 | 460 | 350 | 228 | 282 | 30 | 77 | 40 | 60 | 85 | M20 | M20 | G1/2 |
| 160 | 150 | 161 | E901 | 565 | 4×26 | 474 | 12×22 | 370 | 356 | 515 | 400 | 228 | 282 | 30 | 77 | 40 | 60 | 85 | M20 | M20 | G1/2 |

# GBM481K/M481KL-D

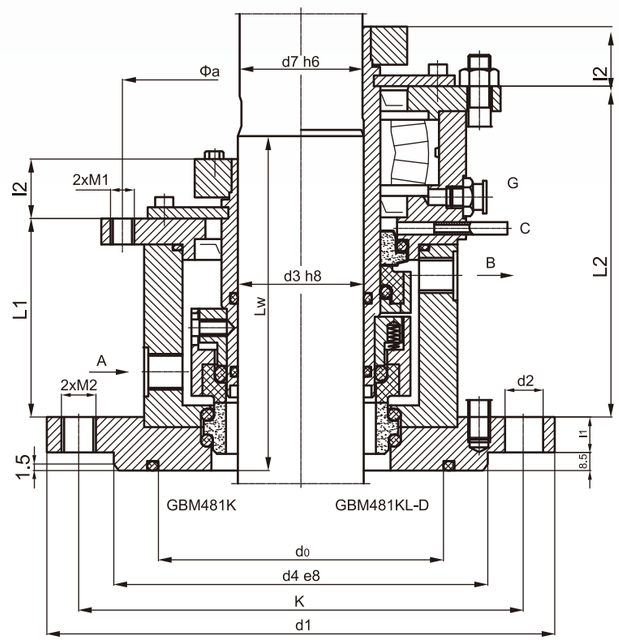
**技术参数：**
密封腔温度：–40℃+200℃
密封腔压力：≤16bar
轴径尺寸：40–220mm

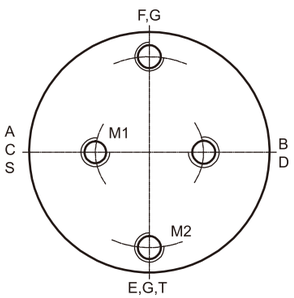
**Operating Limits:**
Temperature:-40℃+200℃
Pressure: ≤16 bar
Standard Size:40-220mm

**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

**Material:**
Seal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton,EPDM,Kalrez
Spring and metal parts:304,316,HAST.C






| d3* | d7[1)] | d1 | nxd[2] | d4 | d0 | k | L1 | L2 | Lw | l1 | l2 | A | M1 | M2 | A,B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40 | 38 | 175 | 4×18 | 110 | 90 | 142 | 87 | 136 | 143 | 15 | 28 | 122 | M12 | M16 | G3/8 |
| 50 | 48 | 240 | 8×18 | 176 | 135 | 210 | 89 | 149 | 148 | 17 | 28 | 157 | M12 | M16 | G3/8 |
| 60 | 58 | 240 | 8×18 | 176 | 135 | 210 | 93.5 | 156 | 158 | 17 | 28 | 168 | M12 | M16 | G3/8 |
| 80 | 78 | 275 | 8×22 | 204 | 155 | 240 | 104.5 | 189 | 168 | 20 | 34 | 203 | M16 | M20 | G1/2 |
| 100 | 98 | 305 | 8×22 | 234 | 190 | 270 | 109 | 190 | 178 | 20 | 34 | 228 | M16 | M20 | G1/2 |
| 125 | 120 | 330 | 8×22 | 260 | 215 | 295 | 110 | 205 | 203 | 20 | 40 | 268 | M20 | M20 | G1/2 |
| 140 | 135 | 395 | 12×22 | 313 | 250 | 350 | 124 | 222 | 208 | 20 | 40 | 285 | M20 | M20 | G1/2 |
| 160 | 150 | 395 | 12×22 | 313 | 265 | 350 | 127.5 | 219.5 | 213 | 25 | 40 | 297 | M20 | M20 | G1/2 |
| 180 | 170 | 445 | 12×22 | 364 | 310 | 400 | 132.5 | 230 | 233 | 25 | 45 | 332 | M20 | M20 | G1/2 |
| 200 | 190 | 445 | 12×22 | 364 | 310 | 400 | 137.5 | 237.5 | 243 | 25 | 45 | 352 | M20 | M20 | G1/2 |
| 220 | 210 | 505 | 16×22 | 422 | 340 | 460 | 149.5 | 249.5 | 263 | 25 | 50 | 381 | M20 | M20 | G1/2 |



# GBCK725/726



**技术参数：**
密封腔温度：–40℃+200℃
密封腔压力：≤16bar
轴径尺寸：40–160mm

**Operating Limits:**
Temperature:-40℃+200℃
Pressure: ≤16 bar
Standard Size: 40-160mm

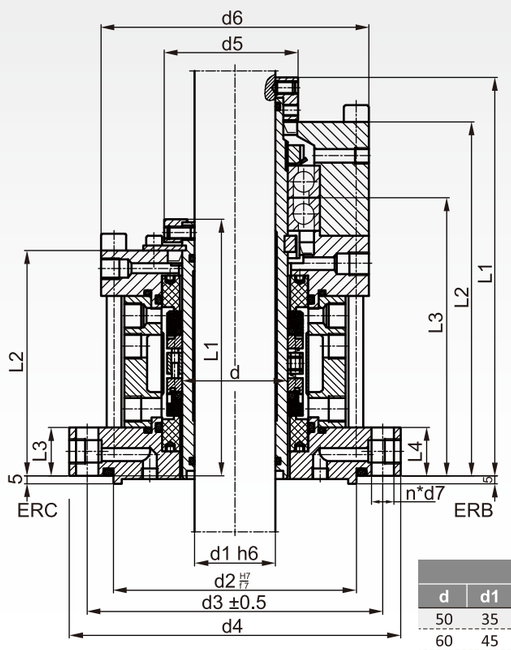
**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

**Material:**
Seal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton,EPDM,Kalrez
Spring and metal parts:304,316,HAST.C




| GB-CK725/CK726 Dimentions | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Seal Size | Flange ConnectiVity | | | Fastening | | | Cartridge Dimensions | | | | | | | | Connections & Mounting | | | |
| d3 | d0 | d1 | d4 | k | n*d2 | bolt | d7 | h(a) | h | h3 | h4 | H11 | H13 | H15 | A&B | a | T | T1 |
| 40 | 91 | 175 | 110 | 145 | 4*18 | M16 | 38 | 131.5 | 169.5 | 33 | 91 | 13 | 135 | 80 | G3/8 | 126 | M12 | M16 |
| 50 | 107 | 240 | 176 | 210 | 8*18 | M16 | 48 | 132.5 | 175.5 | 35 | 93 | 16 | 140 | 80 | G3/8 | 136 | M12 | M16 |
| 60 | 116 | 240 | 176 | 210 | 8*18 | M16 | 58 | 144.5 | 185 | 36 | 94 | 18 | 150 | 84.5 | G3/8 | 145 | M12 | M16 |
| 80 | 147 | 275 | 204 | 240 | 8*22 | M20 | 78 | 153 | 200 | 44 | 98 | 19 | 160 | 83 | G1/2 | 178 | M16 | M20 |
| 100 | 173 | 305 | 234 | 270 | 8*22 | M20 | 98 | 164 | 210 | 41 | 108 | 21 | 170 | 94 | G1/2 | 208 | M16 | M20 |
| 125 | 198 | 330 | 260 | 295 | 8*22 | M20 | 120 | 175 | 235 | 40 | 113 | 20 | 195 | 100 | G1/2 | 235 | M20 | M20 |
| 140 | 218 | 395 | 313 | 350 | 12*22 | M20 | 135 | 257 | 284 | 53 | 171 | 30 | 200 | 155 | G1/2 | 270 | M20 | M20 |
| 160 | 237 | 395 | 313 | 350 | 12*22 | M20 | 150 | 275 | 281.5 | 55 | 180 | 30 | 205 | 155 | G1/2 | 279 | M20 | M20 |

# GBERB/ERC






| GB-ERB Dimensions(mm) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d | d1 | d2 | d3 | d4 | d5 | d6 | d7 | L1 | L2 | L3 | L4 | n |
| 50 | 35 | 135 | 170 | 195 | 61 | 134 | 14 | 268 | 237 | 185 | 30 | 8 |
| 60 | 45 | 145 | 180 | 205 | 75 | 144 | 14 | 283 | 252 | 197 | 30 | 8 |
| 70 | 55 | 155 | 190 | 215 | 85 | 154 | 14 | 293 | 262 | 205 | 30 | 8 |
| 80 | 65 | 165 | 200 | 225 | 95 | 164 | 14 | 303 | 272 | 207 | 30 | 8 |
| 90 | 75 | 175 | 210 | 235 | 105 | 174 | 14 | 323 | 287 | 219 | 30 | 8 |
| 100 | 85 | 185 | 220 | 245 | 115 | 184 | 14 | 323 | 287 | 219 | 30 | 8 |
| 110 | 95 | 205 | 240 | 265 | 125 | 218 | 14 | 33 | 291 | 216 | 30 | 8 |
| 120 | 105 | 215 | 261 | 289 | 135 | 235 | 19 | 371 | 309 | 233 | 35 | 12 |
| 130 | 110 | 225 | 271 | 299 | 145 | 245 | 19 | 364 | 322 | 238 | 35 | 12 |
| 140 | 120 | 235 | 281 | 309 | 159 | 255 | 19 | 369 | 322 | 238 | 35 | 12 |
| 150 | 130 | 280 | 335 | 375 | 169 | 295 | 23 | 424 | 377 | 288 | 45 | 12 |
| 160 | 140 | 290 | 345 | 385 | 179 | 305 | 23 | 433 | 386 | 291 | 45 | 12 |
| 170 | 150 | 300 | 355 | 395 | 189 | 315 | 23 | 452 | 400 | 295 | 45 | 12 |
| 180 | 160 | 310 | 365 | 405 | 199 | 328 | 23 | 458 | 406 | 299 | 45 | 12 |
| 190 | 170 | 320 | 375 | 415 | 209 | 338 | 23 | 473 | 416 | 309 | 45 | 12 |
| 200 | 180 | 330 | 390 | 430 | 219 | 358 | 23 | 483 | 426 | 312 | 45 | 12 |

## 技术参数：

密封腔温度：-30℃+200℃
密封腔压力：≤16bar
轴径尺寸：50-200mm

## Operating Limits:

Temperature:-30℃+200℃
Pressure:≤16bar
Diameter:50-200mm

## 材料组合：

密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

## Material:

Seal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton,EPDM,Kalrez
Spring and metal parts:304,316,HAST.C

| GB-ERC Dimensions(mm) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| d | d1 | d2 | d3 | d4 | d5 | d6 | d7 | L1 | L2 | L3 | n |
| 50 | 35 | 135 | 170 | 195 | 66 | 134 | 14 | 162 | 144 | 30 | 8 |
| 60 | 45 | 145 | 180 | 205 | 76 | 144 | 14 | 175 | 157 | 30 | 8 |
| 70 | 55 | 155 | 190 | 215 | 86 | 154 | 14 | 186 | 168 | 30 | 8 |
| 80 | 65 | 165 | 200 | 225 | 96 | 164 | 14 | 186 | 168 | 30 | 8 |
| 90 | 75 | 175 | 210 | 235 | 110 | 174 | 14 | 198 | 178 | 30 | 8 |
| 100 | 85 | 185 | 220 | 245 | 120 | 184 | 14 | 198 | 178 | 30 | 8 |
| 110 | 95 | 205 | 240 | 265 | 130 | 218 | 14 | 200 | 173 | 30 | 8 |
| 120 | 105 | 215 | 261 | 289 | 140 | 235 | 19 | 217 | 190 | 35 | 12 |
| 130 | 110 | 225 | 271 | 299 | 154 | 245 | 19 | 222 | 190 | 35 | 12 |
| 140 | 120 | 235 | 281 | 309 | 164 | 255 | 19 | 222 | 190 | 35 | 12 |
| 150 | 130 | 280 | 335 | 375 | 174 | 295 | 23 | 261 | 229 | 45 | 12 |
| 160 | 140 | 290 | 345 | 385 | 184 | 305 | 23 | 263 | 231 | 45 | 12 |
| 170 | 150 | 300 | 355 | 395 | 194 | 315 | 23 | 263 | 231 | 45 | 12 |
| 180 | 160 | 310 | 365 | 405 | 204 | 328 | 23 | 263 | 231 | 45 | 12 |
| 190 | 170 | 320 | 375 | 415 | 214 | 338 | 23 | 273 | 241 | 45 | 12 |
| 200 | 180 | 330 | 390 | 430 | 224 | 358 | 23 | 277 | 245 | 45 | 12 |



# GB708/718



## 适用范围

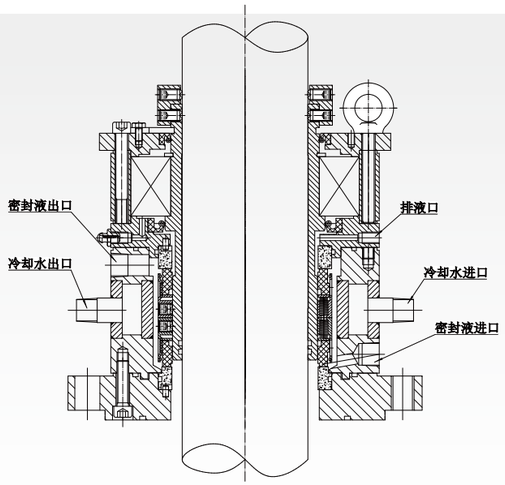
介质：弱酸，弱碱及易燃，易爆，有毒气体等，
温度：<180℃（最高380℃)
压力：<1.6Mpa
线速度：<10m/s

## 结构特点

1：外夹套双重冷却，为密封提供冷却或加热效果，从而延长密封的使用寿命。
2：内置泵送环对密封强制冷却。
3：双紧定固定，保证密封的可靠性。
4：内置轴承来稳定轴和密封环。

## 材　料

密封面：石墨，碳化硅，碳化钨等。
密封圈：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶，等。
弹簧及金属件：304，316，合氏合金，等。




## 使用说明

1：安装时，应在轴套内孔以及O形密封圈上涂润滑油，以便于安装。
2：当使用压力大于0.45Mpa以上时须配压力平衡装置。

# GB7306



## 适用范围

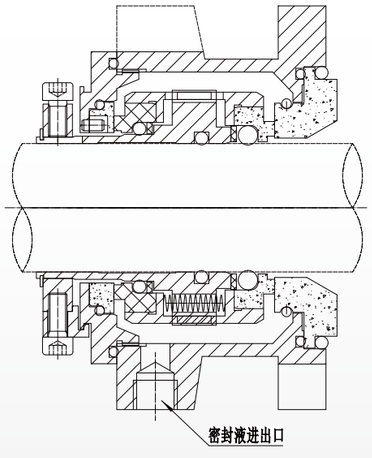
介质：硫酸，硝酸等各种强腐蚀介质。
浓度：≦85%
温度：<120℃
压力：<1.0Mpa
线速度：<20m/s

## 材料

密封面：石墨，碳化硅，碳化钨等。
密封圈：包覆圈，全氟橡胶，等。
弹簧及金属件：304，316，合氏合金，等。

## 结构特点

1：与旋转方向无关
2：采用外部冷却，冲洗水不进入泵内，不对工艺介质产生影响。
3：金属件不与介质接触，等适用更高腐蚀。
4：替换WB2四氟波纹管机封，防止结晶。

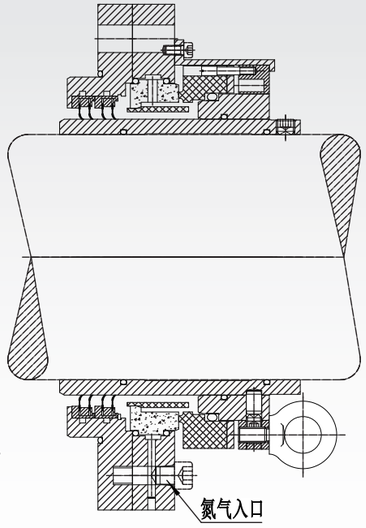



## 使用说明

1：安装时，应在轴套内孔以及O形密封圈上涂润滑油，以便于安装。
2：冲洗水可用普通自来水，压力应控制在0.05-0.15MPA以下，一般情况下能实现流动即可。

# GBHG






## 适用范围
介质：酸，碱，高分子悬浮液等
温度：<150℃
压力：<0.4Mpa
线速度：<5m/s
轴向窜动量：± 1mm

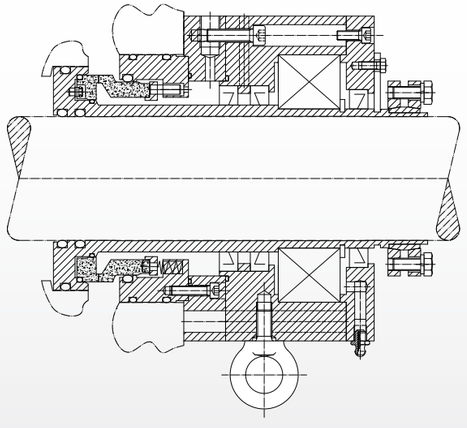
## 材料
密封面：特种石墨，碳化硅，
碳化钨，聚四氟乙稀等。
密封圈：丁腈橡胶，氟橡胶，
乙丙橡胶，全氟橡胶，等。
弹簧及金属件：304，316，合氏合金，等。

## 结构特点
1：干磨洁净型设计,内置碎屑收集装置。
2：特殊配方的摩擦副能保证在无需润滑情况下，正常使用。

## 使用说明
1：安装时，应在轴套内孔以及O形密封圈上涂润滑油，以便于安装。
2：密封通入缓冲气体（氮气）压力（0.05–0.1Mpa），为密封提供保护，也可通入隔离　气体（氮气），实现工艺流体的零泄漏。

# GB2VSF37



## 适用范围
介质：石膏浆料等
温度：<150℃
压力：<1.0Mpa
线速度：<10m/s

## 材料
密封面：碳化硅，碳化钨等。
密封圈：乙丙橡胶，硅橡胶，包覆圈，全氟橡胶，等。
弹簧及金属件：304，316，合氏合金等。

## 结构特点
1：与旋转方向无关
2：外接冷却水可用普通自来水，一般压力控制在（0.05Mpa)以下。





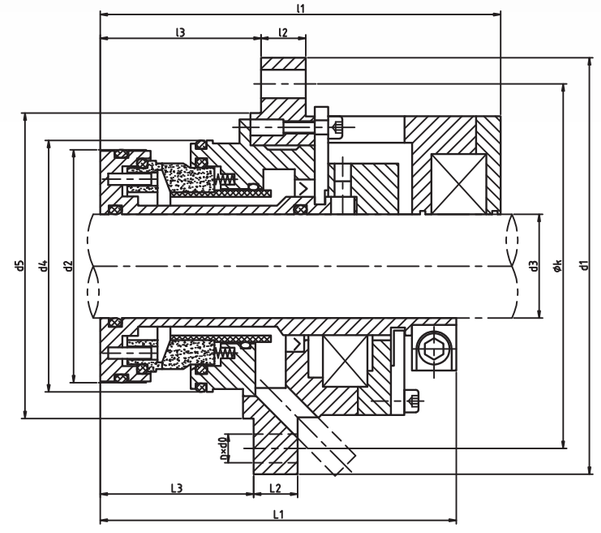



# GBESD



## 技术参数：
密封腔温度：–40℃+220℃
线速度：≤20m/s
密封腔压力：≤25bar
轴径尺寸：60–100mm

## Operating Limits:
Temperature:-40℃+220℃
Speed:≤20m/s
Externally pressurized:≤25bar
Shaft diameter:60-100mm



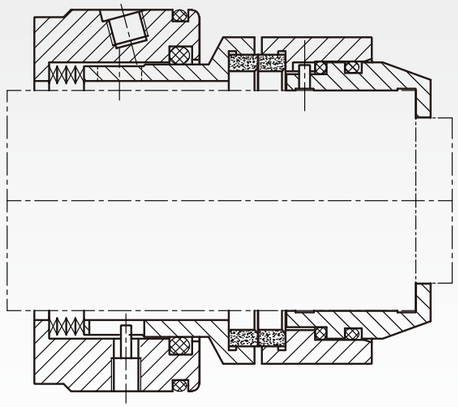

## 材料组合：
密封面：反应碳化硅，无压碳化硅，
碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，
全氟橡胶
弹簧及金属件：304，316，HAST.C，In718,Ti

## Material:
Seal Ring:Sic、Ssic、TC
Secondary seal: NBR,Viton,EPDM,Kalrez.
Spring and metal parts:304,316,HAST.C,
Inconel 718,Titanium

| d3 | φk | d1 | d2 | d4 | d5 | L1 | L2 | L3 | 11 | l2 | l3 | n*d0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 60 | 210 | 240 | 135 | 145 | 176 | 203 | 25.5 | 87 | 229 | 25 | 92 | 8*18 |
| 80 | 240 | 275 | 153 | 160 | 204 | 214 | 26 | 83 | 236 | 26 | 86 | 8*23 |
| 100 | 270 | 305 | 174 | 182 | 234 | 232 | 24 | 87 | 258 | 24 | 92 | 8*23 |

# GBJCS1A





**技术参数：**
密封腔温度：–20℃+120℃
线速度：≤20m/s
密封腔压力：≤16bar

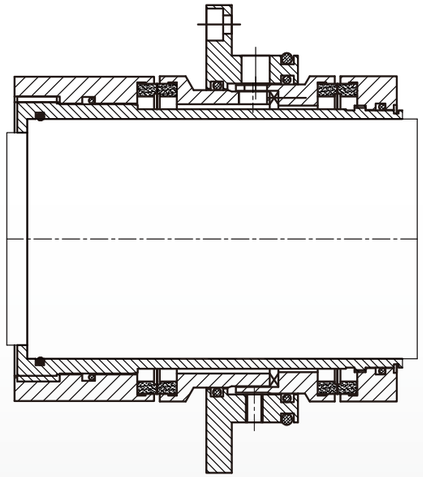
**Operating Limits:**
Temperature:-20℃+120℃
Speed:≤20m/s
Pressure:≤16bar

**材料组合：**
密封面：反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

**Material:**
Seal Ring:Sic、Ssic、TC
Secondary seal:NBR,Viton, EPDM,Kalrez
Spring and metal parts:304,316, Hast.c

# GBJCS2





**技术参数：**
密封腔温度：–20℃+180℃
线速度：≤20m/s
密封腔压力：≤15bar

**Operating Limits:**
Temperature:-20℃+180℃
Speed:≤20m/s
Pressure:≤15bar

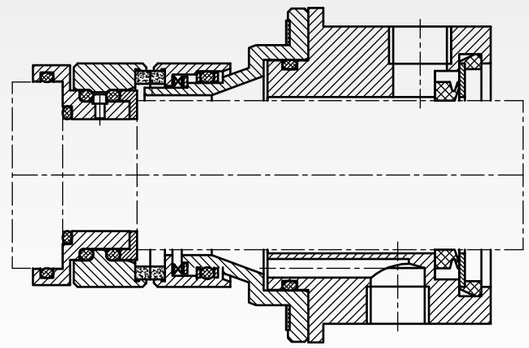
**材料组合：**
密封面：反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

**Material:**
Seal Ring:Sic、Ssic、TC
Secondary seal:NBR,Viton, EPDM,Kalrez
Spring and metal parts:304,316, Hast.c



# GBLP-Q





**技术参数：**
密封腔温度：–20℃+140℃
线速度：≤20m/s
密封腔压力：≤25bar

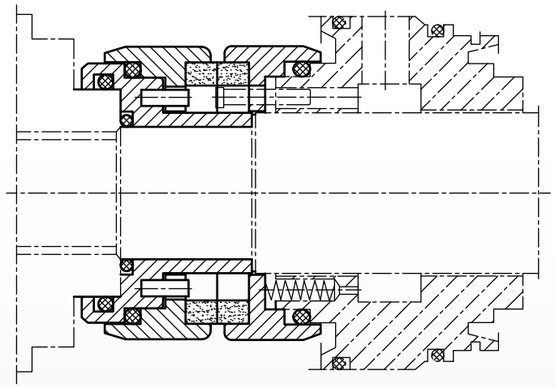
**Operating Limits:**
Temperature:-20℃+140℃
Speed:≤20m/s
Pressure: ≤25 bar

**材料组合：**
密封面：反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

**Material:**
Seal Ring:Sic、Ssic、TC
Secondary seal:NBR,Viton, EPDM,Kalrez
Spring and metal parts:304,316, Hast.c

# GBLP-S





**技术参数：**
密封腔温度：–20℃+140℃
线速度：≤20m/s
密封腔压力：≤25bar

**Operating Limits:**
Temperature:-20℃+140℃
Speed:≤20m/s
Pressure: ≤25bar

**材料组合：**
密封面：反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，哈氏合金

**Material:**
Seal Ring:Sic、Ssic、TC
Secondary seal:NBR,Viton, EPDM,Kalrez
Spring and metal parts:304,316, Hast.c

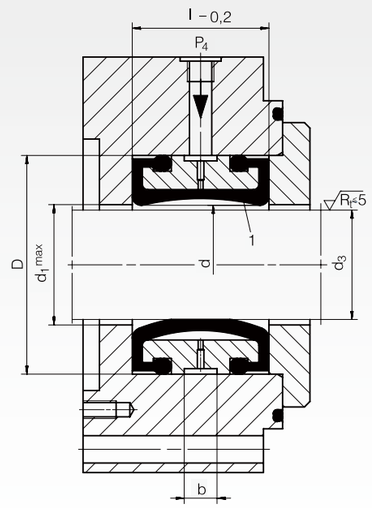
# GBSTD1

## 优 点

如果使用STD，可以在容器或反应釜带压状态更换机械密封（前提必须停机使轴保持静止状态）。可安装在每个位置。安装尺寸符合DIN 28138第1部分的要求。必须考虑材料特性。

## Advantages

If a STD is employed, it is possible to change seals with the vessel loaded and under pressure (shaft must be stationary!). Can be installed in each position. Installation dimensions according to DIN 28138 Part 1 are possible. Material properties have to be taken into account.




## 技术参数：

轴径：d w=40~200mm
压力：p 1=16bar
温度：t=100°C
弹性体密封件（项目1号），
带气动或液压驱动（关闭压力p 4>p 1）。

## Operating Limits:

Shaft diameter: d w = 40 ... 200 mm
Pressure: p 1 = 16 bar
Temperature: t = 100 °C
Elastomer sealing element (Item no. 1) with pneumatic or hydraulic actuation (closing pressure p 4 > p 1 ).

## 推荐应用

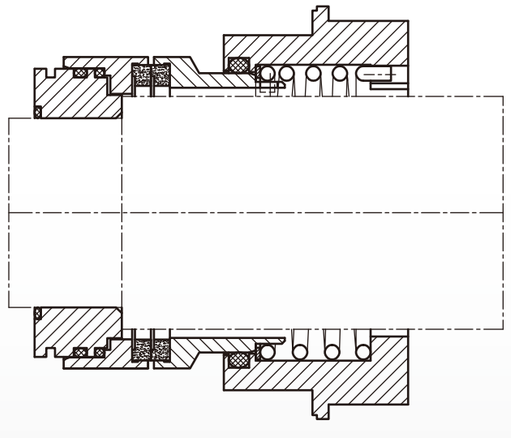
化学工业
制药工业
搅拌器

## Recommended applications

Chemical industry
Pharmaceutical industry
Agitator

# GBE1





## 技术参数：

密封腔温度：–20℃+120℃
线速度：≤20m/s
密封腔压力：≤15bar

## Operating Limits:

Temperature:-20℃+120℃
Speed:≤20m/s
Pressure:≤15bar

## 材料组合：

密封面：石墨，反应碳化硅，
无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，
乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，
哈氏合金

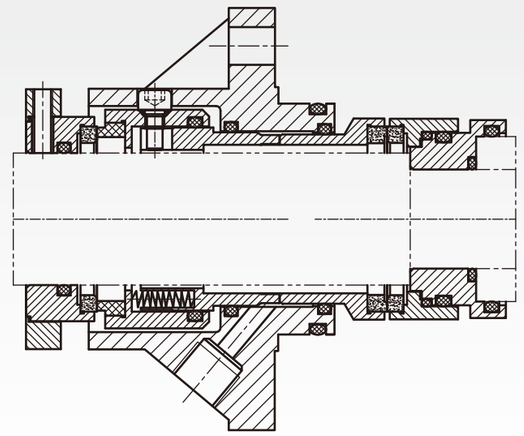
## Material:

Seal ring:Car,Sic,Ssic,TC
Secondary seal:NBR,Viton,
EPDM,Kalrez
Spring and metal parts:304,316
Hast.c



# GBE2





## 技术参数：

密封腔温度：–20℃+180℃
线速度：≤30m/s
密封腔压力：≤15bar

## Operating Limits:

Temperature:-20℃+180℃
Speed:≤30m/s
Pressure: ≤15 bar

## 材料组合：

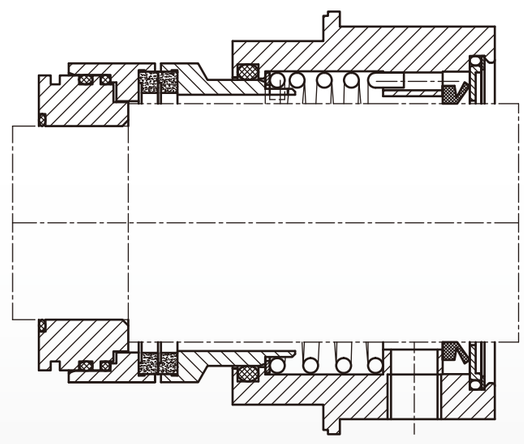
密封面：石墨，反应碳化硅，
无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，
乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，
哈氏合金

## Material:

Seal ring:Car,Sic,Ssic,TC
Secondary seal:NBR,Viton,
EPDM,Kalrez
Spring and metal parts:304,316
Hast.c

# GBEW





## 技术参数：

密封腔温度：–20℃+150℃
线速度：≤20m/s
密封腔压力：≤15bar

## Operating Limits:

Temperature:-20℃+150℃
Speed:≤20m/s
Pressure: ≤15bar

## 材料组合：

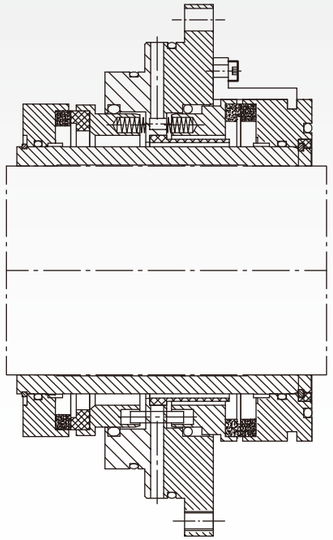
密封面：石墨，反应碳化硅，
无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，
乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，
哈氏合金

## Material:

Seal ring:Car,Sic,Ssic,TC
Secondary seal:NBR,Viton,
EPDM,Kalrez
Spring and metal parts:304,316
Hast.c

# GBSAF





**技术参数：**
密封腔温度：-20℃+120℃
线速度：≤10m/s
密封腔压力：≤10bar

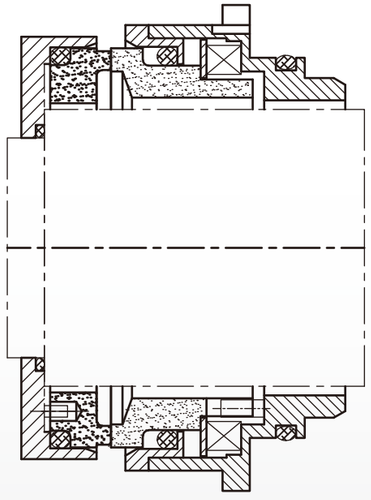
**Operating Limits:**
Temperature:-20℃+120℃
Speed:≤10m/s
Pressure: ≤10bar

**材料组合：**
密封面：石墨，反应碳化硅，
无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，
乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，
哈氏合金

**Material:**
Seal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton,
EPDM,Kalrez
Spring and metal parts:304,316,
HAST.C

# GB587





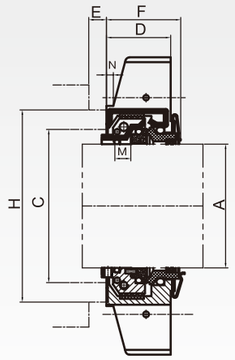
**技术参数：**
密封腔温度：-20℃+180℃
线速度：≤15m/s
密封腔压力：≤10bar

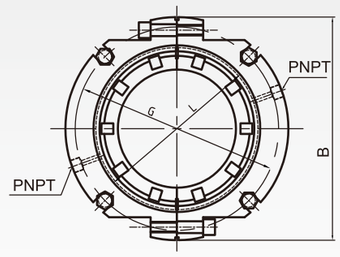
**Operating Limits:**
Temperature:-20℃+180℃
Speed: ≤15m/s
Pressure: ≤10bar

**材料组合：**
密封面：反应碳化硅，无压碳化硅，
碳化钨
辅助密封：丁腈橡胶，氟橡胶，
乙丙橡胶，全氟橡胶
弹簧及金属件：304，316

**Material:**
Seal Ring:Sic、Ssic、TC
Secondary seal:NBR,Viton,
EPDM,Kalrez
Spring and metal parts:304,316

# GB442






**技术参数：**
密封腔温度：0℃~120℃
线速度：≤20m/s
密封腔压力：≤10bar
轴径尺寸：32-195mm

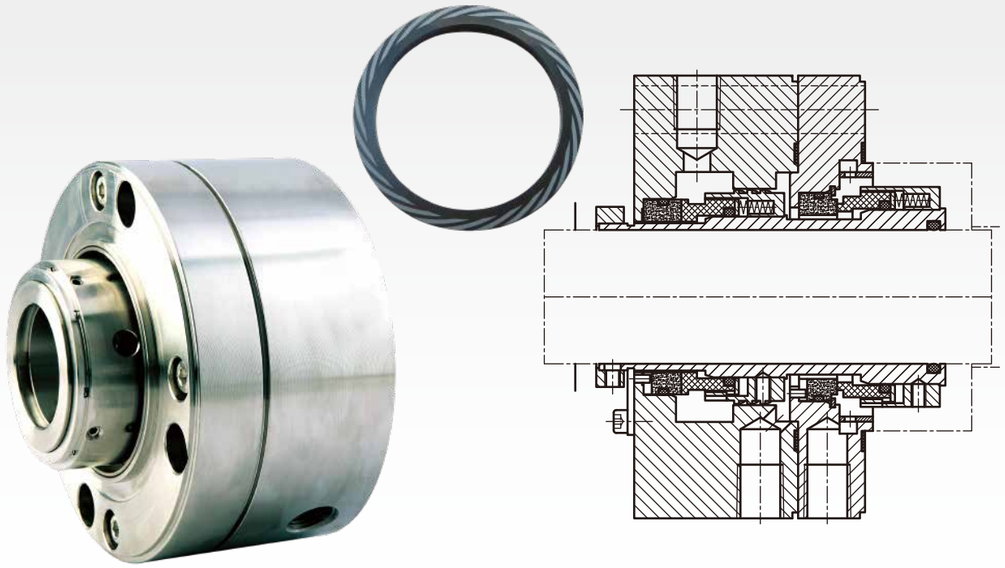
**Operating Limits:**
Temperature:0℃~120℃
Speed:≤20m/s
Pressure:≤10bar
Standard Size:32-195mm

**材料组合：**
密封面：石墨，反应碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶，
弹簧及金属件：304，316

**Material:**
Seal Ring:Car、Sic、TC
Secondary seal:NBR,Viton,EPDM,
Spring and metal parts:304,316

| A | B | C | | D | E | F | | | | | | | | H | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MAX | MIN | MAX | | MIN | | 8cm | 10cm | 12cm | 14cm | 16cm | 18cm | 20cm | 22cm | MIN | MAX |
| 32 | 124.7 | 47.2 | 53.3 | 37.6 | 4.3 | 45.2 | 78.9 | 80.9 | 82.9 | 84.9 | 86.9 | | | | 59.9 | 70.9 |
| 33 | 124.7 | 47.2 | 53.3 | 37.6 | 4.3 | 45.2 | 78.9 | 80.9 | 82.9 | 84.9 | 86.9 | | | | 59.9 | 70.9 |
| 35 | 126.7 | 49.3 | 60.5 | 37.6 | 4.3 | 45.2 | 80.6 | 82.6 | 84.6 | 86.6 | 88.6 | | | | 66.8 | 72.6 |
| 38 | 130.3 | 52.3 | 63.5 | 37.6 | 4.3 | 45.2 | 83.9 | 85.9 | 87.9 | 89.9 | 91.9 | | | | 69.9 | 75.9 |
| 40 | 133.6 | 55.6 | 66.8 | 37.6 | 4.3 | 45.2 | 87 | 89 | 91 | 93 | 95 | | | | 73.2 | 79 |
| 43 | 136.7 | 58.7 | 70 | 37.6 | 4.3 | 45.2 | 90.3 | 92.3 | 94.3 | 96.3 | 98.3 | | | | 76.2 | 82.3 |
| 45 | 136.7 | 58.7 | 70 | 37.6 | 4.3 | 45.2 | 90.3 | 92.3 | 94.3 | 96.3 | 98.3 | | | | 76.2 | 82.3 |
| 48 | 139.7 | 62 | 73.2 | 37.6 | 4.3 | 45.2 | 93.3 | 95.3 | 97.3 | 99.3 | 101.3 | | | | 79.5 | 85.3 |
| 50 | 143 | 65 | 76.2 | 37.6 | 4.3 | 45.2 | 96.6 | 98.6 | 100.6 | 102.6 | 104.6 | | | | 82.6 | 88.6 |
| 55 | 146.3 | 68.3 | 79.2 | 37.6 | 4.3 | 45.2 | 99.9 | 101.9 | 103.9 | 105.9 | 107.9 | | | | 85.9 | 91.9 |
| 60 | 152.7 | 74.7 | 85.6 | 37.6 | 4.3 | 45.2 | 106.8 | 108.8 | 110.8 | 112.8 | 114.8 | | | | 92.2 | 98.8 |
| 65 | 197.1 | 85.1 | 108 | 46.7 | 6.6 | 56.9 | | | 138.5 | 140.5 | 142.5 | 144.5 | 146.5 | | 120.7 | 126.5 |
| 70 | 197.1 | 85.1 | 108 | 46.7 | 6.6 | 56.9 | | | 138.5 | 140.5 | 142.5 | 144.5 | 146.5 | | 120.7 | 126.5 |
| 75 | 203.5 | 91.4 | 114.3 | 46.7 | 6.6 | 56.9 | | | 144.8 | 146.8 | 148.8 | 150.8 | 152.8 | | 127 | 132.8 |
| 80 | 209.8 | 97.8 | 120.7 | 46.7 | 6.6 | 56.9 | | | 151.2 | 153.2 | 155.2 | 157.2 | 159.2 | | 133.4 | 139.2 |
| 85 | 216.2 | 104.1 | 127 | 46.7 | 6.6 | 56.9 | | | 157.5 | 159.5 | 161.5 | 163.5 | 165.5 | | 139.7 | 145.5 |
| 90 | 216.2 | 104.1 | 127 | 46.7 | 6.6 | 56.9 | | | 157.5 | 159.5 | 161.5 | 163.5 | 165.5 | | 139.7 | 145.5 |
| 95 | 222.8 | 110.5 | 133.4 | 46.7 | 6.6 | 56.9 | | | 163.9 | 165.9 | 167.9 | 169.5 | 171.5 | | 146.1 | 151.9 |
| 100 | 229.1 | 116.8 | 139.7 | 46.7 | 6.6 | 56.9 | | | 170.5 | 172.5 | 174.5 | 176.5 | 178.5 | | 152.4 | 158.5 |
| 110 | 241.8 | 129.5 | 152.4 | 46.7 | 6.6 | 56.9 | | | 183.2 | 185.2 | 187.2 | 189.2 | 191.2 | | 165.1 | 171.2 |
| 115 | 241.8 | 129.5 | 152.4 | 46.7 | 6.6 | 56.9 | | | 183.2 | 185.2 | 187.2 | 189.2 | 191.2 | | 165.1 | 171.2 |
| 120 | 248.2 | 135.9 | 158.8 | 46.7 | 6.6 | 56.9 | | | 189.5 | 191.5 | 193.5 | 195.5 | 197.5 | | 171.5 | 177.5 |
| 125 | 286.4 | 150.1 | 177.8 | 73.9 | 7.4 | 87.6 | | | | | | 214.6 | 216.6 | 218.6 | 190.5 | 196.6 |
| 130 | 292.8 | 155.1 | 184.2 | 73.9 | 7.4 | 87.6 | | | | | | 220.9 | 222.9 | 224.9 | 196.9 | 202.9 |
| 135 | 299.2 | 160.1 | 190.5 | 73.9 | 7.4 | 87.6 | | | | | | 227.3 | 229.3 | 231.3 | 203.2 | 209.3 |
| 140 | 299.2 | 165.2 | 190.5 | 73.9 | 7.4 | 87.6 | | | | | | 227.3 | 229.3 | 231.3 | 203.2 | 209.3 |
| 145 | 305.6 | 170.2 | 196.9 | 73.9 | 7.4 | 87.6 | | | | | | 233.6 | 235.6 | 237.6 | 209.6 | 215.6 |
| 150 | 312 | 175.2 | 203.2 | 73.9 | 7.4 | 87.6 | | | | | | 240 | 242 | 244 | 215.9 | 222 |
| 155 | 318 | 180.1 | 209.6 | 73.9 | 7.4 | 87.6 | | | | | | 246.3 | 248.3 | 250.3 | 222.3 | 228.3 |
| 160 | 324.7 | 185.1 | 215.9 | 73.9 | 7.4 | 87.6 | | | | | | 253 | 255 | 257 | 228.6 | 235 |
| 165 | 324.7 | 190.1 | 215.9 | 73.9 | 7.4 | 87.6 | | | | | | 253 | 255 | 257 | 228.6 | 235 |
| 170 | 331 | 195.1 | 222.3 | 73.9 | 7.4 | 87.6 | | | | | | 259.3 | 261.3 | 263.3 | 235 | 241.3 |
| 175 | 337.5 | 200.2 | 228.6 | 73.9 | 7.4 | 87.6 | | | | | | 265.7 | 267.7 | 269.7 | 241.3 | 247.7 |
| 180 | 337.5 | 205.2 | 228.6 | 73.9 | 7.4 | 87.6 | | | | | | 272 | 274 | 276 | 247.7 | 254 |
| 185 | 343.9 | 210.2 | 235 | 73.9 | 7.4 | 87.6 | | | | | | 272 | 274 | 276 | 247.7 | 254 |
| 190 | 350.2 | 215.1 | 241.3 | 73.9 | 7.4 | 87.6 | | | | | | 278.4 | 280.4 | 282.4 | 254 | 260.4 |
| 195 | 356.6 | 220.1 | 247.7 | 73.9 | 7.4 | 87.6 | | | | | | 284.7 | 286.7 | 288.7 | 260.4 | 266.7 |

# GBCGSH



## 产品特点：

串联式泵用干气密封，冲洗方案常采用Plan11/21+Plan72+76.介质不会泄漏进入大气环境。通常内侧微量泄漏需排入火炬系统。当用于芳烃、醋酸等饱和蒸汽压低于大气压的介质时，冲洗方案常采用Plan11/21+Plan72+75.
典型应用：石油化工及煤化工等行业中的轻烃、芳烃、环氧乙烷、醋酸等泵。

## Features:

Tandem dry gas seals for pumps, especially suitable for light hydrocarbons. Plan 11/21+Plan72+76 is always used.near-zero leakage of the pumped fluid goes to atmosphere. In general, a small amount of the inner seal leakage flows into the vapor collection system. If the vapor pressure of the pumped fluid is less than atmospheric pressure, Plan 11/21+Plan72+75 is always used.
typicalApplications:light hydrocarbons,aromatic hydrocarbons,ethylene epoxide, acetic acid pumps, etc. in petrochemical and coal-chemical industry

## 材料组合：

密封面：石墨，反应碳化硅，
无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，
乙丙橡胶，全氟橡胶
弹簧及金属件：304，316，
哈氏合金，双相钢、Ti

## Material:

Seal Ring:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton,
EPDM,Kalrez

Spring and metal parts:304,316,
HAST.C,
dual-phase steel、Ti

## 技术参数：

密封腔温度：–20～230℃
线速度：≤30m/s
密封腔压力：≤35bar
轴径尺寸：20~110mm

## Operating Limits:

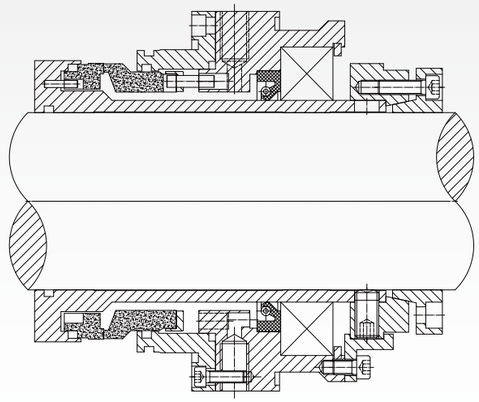
Temperature:-20～230℃
Speed:≤≤30m/s
Pressure:≤35bar
Standard Size:20~110mm





# GBSCB428





## 适用范围

介质：石膏浆料等
温度：<120℃
压力：<0.8Mpa
线速度：<10m/s

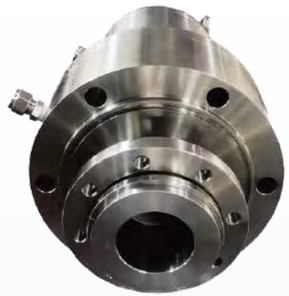
## 材料

密封面：碳化硅，碳化钨等。
密封圈：乙丙橡胶，硅橡胶，包覆圈，全氟橡胶，等。
弹簧及金属件： 304，316，合氏合金，等。

## 结构特点

1：与旋转方向无关
2：独特的无水机封，专为现场无水冷却时设计，密封可靠。

# 磁流体机封

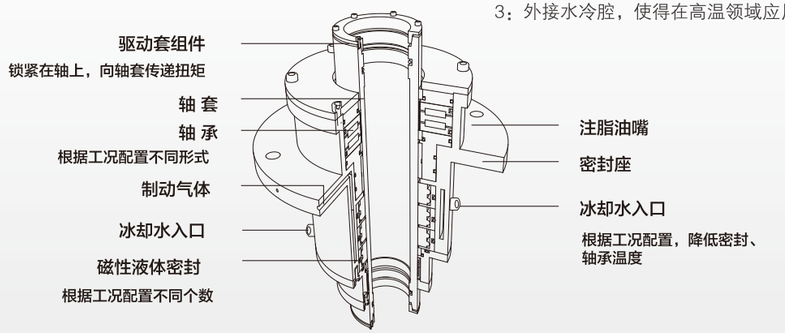


## 适用范围

介质：气体，液体，固体
温度：<300℃
压力：真空–1Mpa
线速度：<50m/s

## 材料

永磁铁选用烧结钕铁硼，轴套为导磁材料，可做喷涂工艺
结构特点
1：密封间隙被磁性液体填充，利用磁场力，来达到密封
2：零泄漏，基本无磨损，寿命长，免维护
3：外接水冷腔，使得在高温领域应用





# GBEspey WD200



## 特 点:

多部分密封环，径向切割
分体式外壳设计
非常小的操作间隙－低泄漏
干运行
自调整密封圈
径向和轴向轴偏转补偿
轴上没有安装密封部件，因此无额外的轴振动
无接触运行的密封圈–滑动面和机器不消耗额外的动力

## Features:

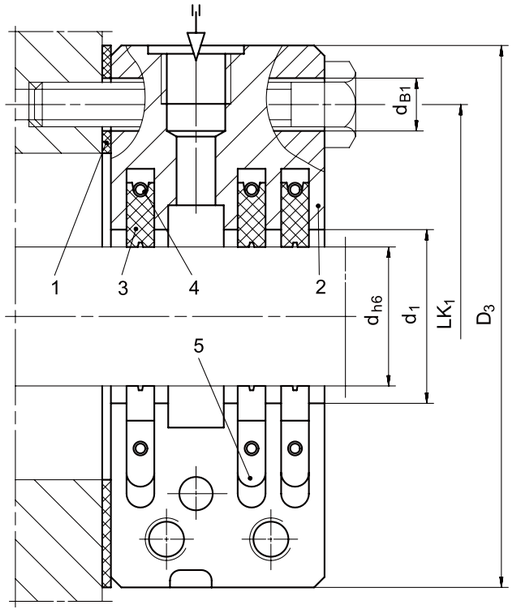
Multi-part seal rings, radially cut
Split housing design
Very small operation gap – low leakage
Dry running
Self-adjusting seal rings
Compensation of radial and axial shaft deflections
No sealing components mounted on the shaft and hence no additional shaft vibrations
Seal rings running contact-free – sliding faces and machine consume no additional power

## 优 点:

分体式外壳设计，安装方便（不需要拆卸轴）
高可靠性
维修性
分段式密封圈便于更换
免维护

## Advantages:

Easy installation by split housing design (shaft removal not required)
High reliability
Maintainability
Segmented seal rings for easy replacement
Maintenance-free




## 技术参数:

轴径：d=40~340毫米
工作压力：p=真空~20绝对压力。
工作温度：t=－120℃~+800摄氏度对于碳，PTFE化合物最高225℃
滑动速度：对于碳，vg=最大150 m/s
PTFE化合物最大40 m/s
径向游隙：±1.0~5.0毫米
轴向运动：理论上无限制
建议磨损防护罩：>300 HB（低压），>58 HRC（高压）

## Material:

Shaft diameter: d = 40–340 mm
Operating pressure: p = vacuum–20 bar abs.
Operating temperature: t = －120 ℃– +800 ℃ for carbon, max. 225 ℃ for PTFE compound
Sliding velocity: vg = max. 150 m/s for carbon, max. 40 m/s for PTFE compound
Radial play: ± 1.0 –5.0 mm
Axial movement: theoretically unlimited
Recommended wear guard: > 300 HB (low pressure), > 58 HRC (high pressure)

## 材料组合:

密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：氟橡胶，乙丙橡胶
弹簧及金属件：301，316，哈氏合金

## Material:

Seal Ring:Sic、Ssic
Secondary seal:Viton,EPDM
Spring and metal parts:301,316,HAST.C



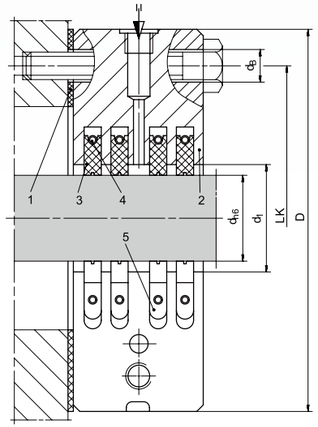


## 产品变型

**EspeyWD200-WDK**，较短的设计和石墨密封环–WDKF型，以及较小的外壳直径（适用于清洁介质，不可用于含有颗粒的介质）。适用于有毒有害气体，和ATEX认证的轴封GBEspey WD200–WDKS,较短的设计和较小的外径设计简洁的隔离气体端口。

**Espey WD200-WDK** with short design and grease barrier port – type WDKF in addition with reduced outside housing diameter (for clean media, not for solids containing gases).

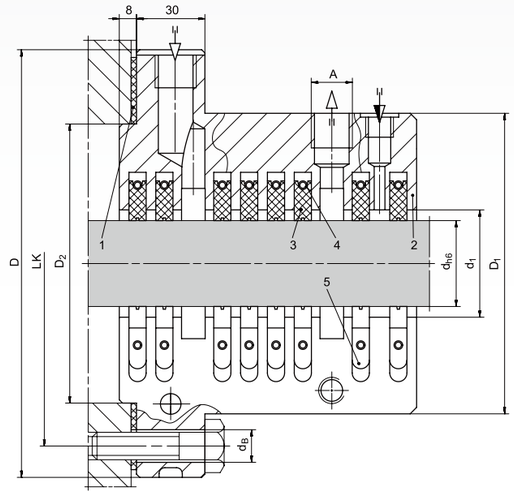
For toxic and solids containing gases as well as Atex applications type shaft seal Espey WD200-WDKS with short design, reduced housing outside diameter and barrier gas port is used.




## Product variants

**EspeyWD200-WDSA** 带隔离气体和润滑脂的阻隔口（例如，有毒气体和含有固体的气体冷凝液形成以及Atex应用。

**Espey WD200-WDSA** with barrier gas and grease barrier port (for e.g. toxic and solids containing gases with condensate formation as well as Atex applications).




| dh6 | $d1_{ND}$ | $d1_{HD}$ | D | D1 | D2 | LK | A | d8 | D3 | LK1 | $d_{B1}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 45 | 50 | 48 | 210 | 140 | 115 | 175 | G1/2 | 15 | 165 | 135 | 15 |
| 50 | 58 | 54 | 220 | 150 | 125 | 185 | G1/2 | 15 | 170 | 140 | 15 |
| 60 | 68 | 64 | 230 | 160 | 135 | 195 | G3/4 | 15 | 180 | 150 | 15 |
| 70 | 78 | 74 | 240 | 170 | 145 | 205 | G3/4 | 15 | 190 | 160 | 15 |
| 80 | 90 | 84 | 260 | 180 | 155 | 220 | G3/4 | 15 | 200 | 170 | 15 |
| 90 | 100 | 94 | 270 | 190 | 165 | 230 | G3/4 | 15 | 210 | 180 | 15 |
| 100 | 110 | 104 | 280 | 200 | 175 | 240 | G1 | 15 | 220 | 190 | 15 |
| 110 | 120 | 114 | 290 | 210 | 185 | 250 | G1 | 15 | 230 | 200 | 15 |
| 120 | 130 | 124 | 300 | 220 | 195 | 260 | G1 | 15 | 240 | 210 | 15 |
| 130 | 140 | 134 | 310 | 230 | 205 | 270 | G1 | 15 | 250 | 220 | 15 |
| 140 | 150 | 144 | 320 | 240 | 215 | 280 | G1 | 15 | 260 | 230 | 15 |
| 150 | 160 | 154 | 330 | 250 | 225 | 290 | G1 | 15 | 270 | 240 | 15 |
| 160 | 170 | 164 | 340 | 260 | 235 | 300 | G1 | 19 | 280 | 250 | 15 |
| 170 | 180 | 174 | 350 | 270 | 245 | 310 | G1 | 19 | 290 | 260 | 15 |
| 180 | 190 | 184 | 360 | 280 | 255 | 320 | G1 | 19 | 300 | 270 | 15 |
| 190 | 200 | 194 | 370 | 290 | 265 | 330 | G1 | 15 | 310 | 280 | 15 |
| 200 | 210 | 204 | 420 | 310 | 275 | 365 | G1 | 15 | 320 | 290 | 15 |
| 220 | 230 | 224 | 440 | 330 | 295 | 385 | G1 | 19 | 340 | 310 | 15 |
| 240 | 250 | 244 | 460 | 350 | 315 | 405 | G1 | 19 | 360 | 330 | 15 |
| 260 | 270 | 264 | 480 | 370 | 335 | 425 | G1 | 19 | 380 | 350 | 15 |
| 280 | 290 | 284 | 500 | 390 | 355 | 445 | G1 | 19 | 400 | 370 | 15 |
| 300 | 310 | 304 | 520 | 410 | 375 | 465 | G1 | 19 | 420 | 390 | 15 |
| 320 | 330 | 324 | 540 | 430 | 395 | 485 | G1 | 19 | 440 | 410 | 15 |
| 340 | 350 | 344 | 560 | 450 | 415 | 505 | G1 | 19 | 460 | 430 | 15 |

# GBHS-D

## 特 点:

顶驱入口
多密封旋转
不平衡
双端面密封
与旋转方向无关
液体润滑卡桥装置

## Features:

For top drive entries
Multiple seals rotating
Unbalanced
Double seal
Independent of direction of rotation
Liquid-lubricateCartridge unit

## 优 点:

专利水动力沟槽
可靠性高，使用寿命长
设计用于中压范围
准备安装和工厂测试单元
连接尺寸符合客户要求
由于液压产品压力以及叠加的屏障压力关闭密封。

## Advantages:

Patented hydrodynamic grooves
High reliability and long service life
Designed for medium pressure range
Ready-to-fit and factory-tested units
Connection dimensions to customer's requirements
Due to the hydraulic product pressure as well overlaying barrier pressure closes the seal.

## 技术参数:

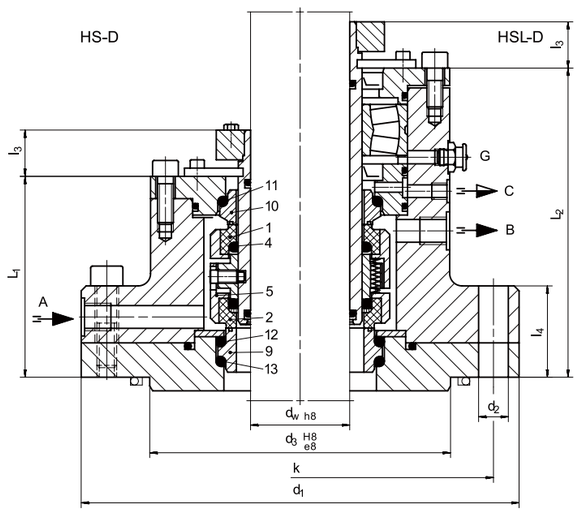
轴径：dw=20~500mm
工作压力：p1=真空~30 bar abs.
工作温度：t= - 40℃~+200 (350) ℃
滑动速度：vg=0~5 m/s
超出此范围的应用，请查询。

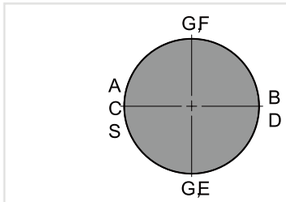
## Material:

Shaft diameter: d w = 20 ... 500 mm (0.79" ... 19.69")
Pressure: p 1 = vacuum ... 30 bar (... 435 PSI)
Temperature: t = - 40 ° C ... +200 (350) ° C
( - 40 ° F ... +392 (662) ° F)
Sliding velocity: v g = 0 ... 5 m/s (0 ... 16 ft/s)
For applications beyond this range, please inquire.

## 材料组合:

根据应用和客户要求
According to application and customer's specification




| | | |
|---|---|---|
| A | Barrier fluid IN | A液体中的屏障 |
| B | Barrier fluid OUT | B隔离液流出 |
| C | Drainage | C排水 |
| D | Leakage drain G1/8" | D泄漏孔G1/8" |
| E | Cooling IN G3/8" | E G3/8" 冷却 |
| F | Cooling OUT G3/8" | F冷却G3/8" |
| G | Grease | G润滑脂 |
| S | Flush | S冲洗 |

## 选项:

冷却或加热法兰
泄漏孔、冲洗或加热法兰
泄漏排放或冲洗
聚合屏障、泄漏排放或冲洗

## Options:

Cooling or heating flange
Leakage drain, flush or heating flange
Leakage drain or flush
Polymerization barrier, leakage drain or flush



# GBHSH-D

## 特 点:

顶驱入口
多弹簧旋转
平衡的
双重密封
与旋转方向无关
液体润滑
弹簧式
按要求提供集成轴承

## Features:

For top drive entries
Multiple springs rotating
Balanced
Double seal
Independent of direction of rotation
Liquid-lubricated
Cartridge unit
on request with integrated bearing

## 优 点:

专利水动力沟槽
高可靠性和长寿命
设计用于中高压范围
可装配且经过工厂测试的装置
连接尺寸符合客户要求
由于液压产品压力以及叠加
屏障压力关闭密封。

## Advantages:

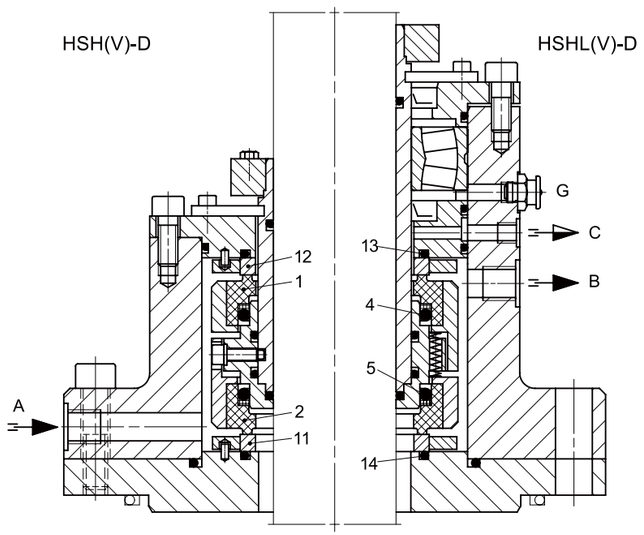
Patented hydrodynamic grooves
High reliability and long service life
Designed for medium and high pressure range
Ready-to-fit and factory-tested units
Connection dimensions to customer's requirements
Due to the hydraulic product pressure as well overlaying barrier pressure closes the seal.

## 技术参数:

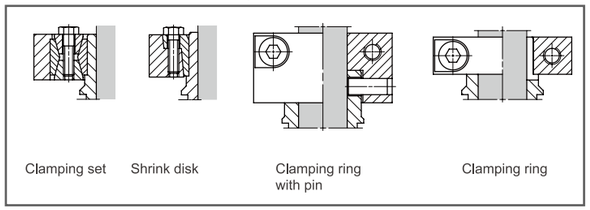
轴径：dw=20~400mm
工作压力：p1=真空~250 bar P3=P1+10%
工作温度：t= - 40℃~+200 (350) ℃
滑动速度：vg=0~5 m/s
根据大小,从 100~150 巴
作为串联密封执行 ( 分两个阶段减压 ) 。

## Material:

Shaft diameter: d w = 20 ... 400 mm (0.79" ... 15.75")
Pressure: p 1 = vacuum ... 250 bar (... 3,625 PSI)*,
p 3 = p 1 + 10 %
Temperature: t = –40 °C ... +200 (350) °C
(–40 °F ... +392 (662) °F)
Sliding velocity: v g = 0 ... 5 m/s (0 ... 16 ft/s)
* Depending on size, from 100 ... 150 bar (1,450 ... 2,175 PSI) executed as tandem seal (pressure reduction in 2 stages).




## Torque transmissions (HS-D, HSH-D)

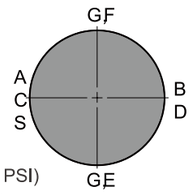



## 推荐应用

化学工业
制药工业
适用于所有介质
搅拌器
干燥器
搅拌机
过滤器
特殊旋转设备

## Recommended applications

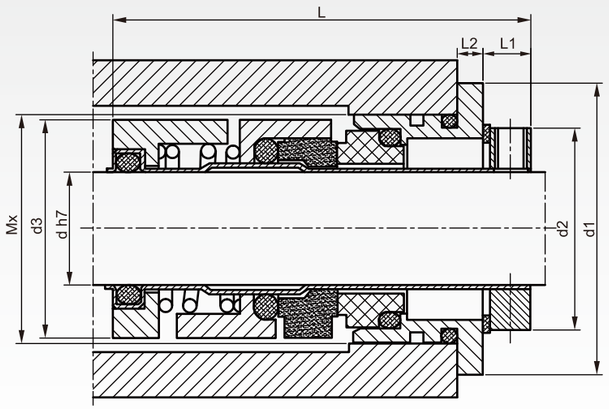
Chemical industry
Pharmaceutical industry
Suitable for all media
Agitators
Dryers
Mixers
Filter
Special rotating equipment




| | | |
|---|---|---|
| A液体中的屏障 | A | Barrier fluid IN |
| B隔离液流出 | B | Barrier fluid OUT |
| C排水 | C | Drainage |
| D泄漏孔G1/8" | D | Leakage drain G1/8" |
| E G3/8" 冷却 | E | Cooling IN G3/8" |
| F冷却G3/8" | F | Cooling OUT G3/8" |
| G润滑脂 | G | Grease |
| S冲洗 | S | Flush |

# GBH-12/H-16






**技术参数：**
密封腔温度：–20℃+180℃
密封腔压力：≤12bar
线速度：≤10m/s

**Operating Limits:**
Temperature:-20℃+180℃
Pressure: ≤12bar
Speed: ≤10m/s

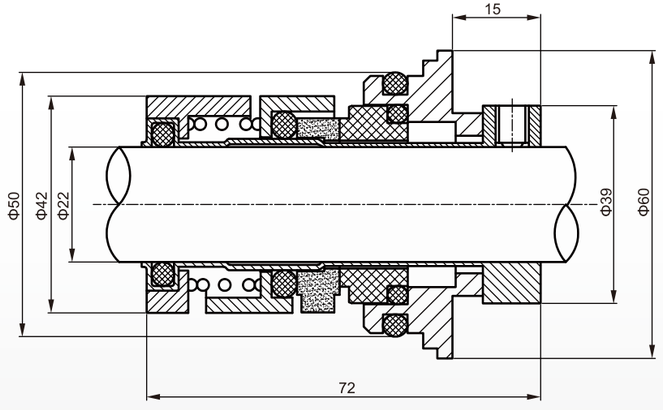
**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶
弹簧及金属件：304，316

**Material:**
Stationary Ring: Carbon, Silicon Carbide, TC
Secondary Seal: NBR,EPDM, Viton
Spring and Metal Parts: 304,316

| d | Mx | d1 | d2 | d3 | L | L1 | L2 |
|---|---|---|---|---|---|---|---|
| 12 | 28x1.5 | 40.6 | 26.0 | 24.9 | 57 | 7 | 4 |
| 16 | 32x1.5 | 46.1 | 29.0 | 29.0 | 57 | 7 | 4 |

# GBH-22






**技术参数：**
密封腔温度：–20℃+180℃
密封腔压力：≤12bar
线速度：≤10m/s

**Operating Limits:**
Temperature:-20℃+180℃
Pressure: ≤12bar
Speed: ≤10m/s

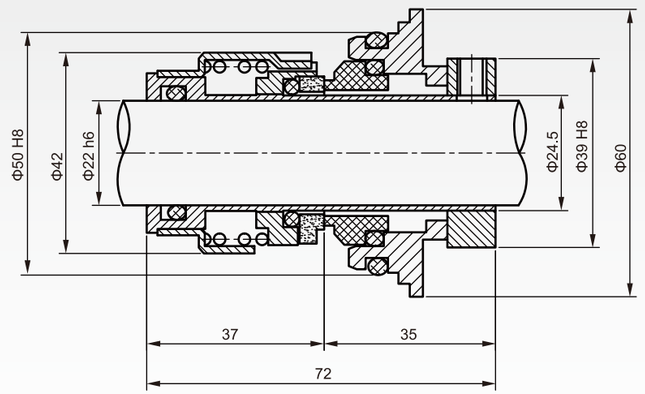
**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶
弹簧及金属件：304，316

**Material:**
Stationary Ring: Carbon, Silicon Carbide, TC
Secondary Seal: NBR,EPDM, Viton
Spring and Metal Parts: 304,316



# GBH-CR3






**技术参数：**
密封腔温度：–20℃+180℃
密封腔压力：≤12bar
线速度：≤10m/s

**Operating Limits:**
Temperature:-20℃+180℃
Pressure: ≤12bar
Speed: ≤10m/s

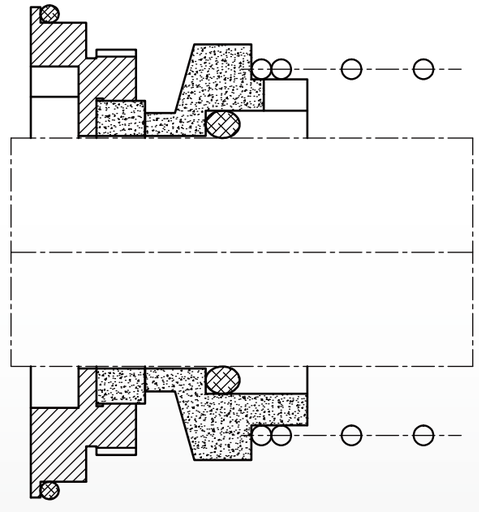
**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶
弹簧及金属件：304，316

**Material:**
Stationary Ring: Carbon, Silicon Carbide, TC
Secondary Seal: NBR,EPDM, Viton
Spring and Metal Parts: 304,316

# GBP07

(Seals For Alfa Laval Pumps)





**技术参数：**
密封腔温度：–20℃+180℃
密封腔压力：≤12bar
线速度：≤10m/s

**Operating Limits:**
Temperature:-20℃+180℃
Pressure: ≤12bar
Speed: ≤10m/s

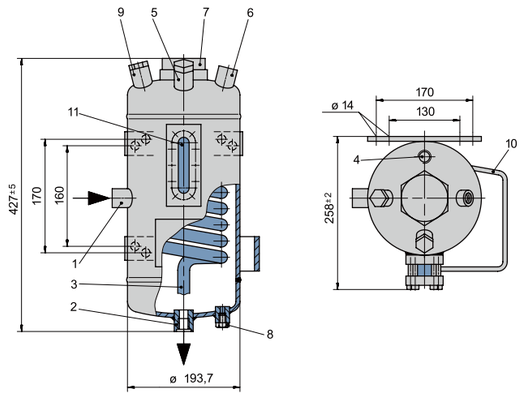
**材料组合：**
密封面：石墨，反应碳化硅，无压碳化硅，碳化钨
辅助密封：丁腈橡胶，氟橡胶，乙丙橡胶
弹簧及金属件：304，316

**Material:**
Stationary Ring: Carbon, Silicon Carbide, TC
Secondary Seal: NBR,EPDM, Viton
Spring and Metal Parts: 304,316

## Seal supply systems • Thermosiphon Systems

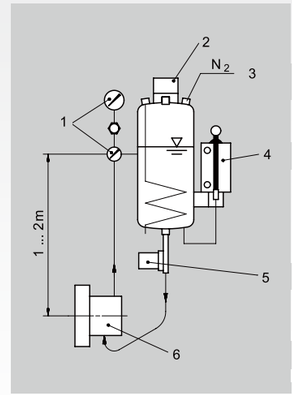
# GBTS2000






GBTS2000 系统的操作和安装图
必须始终安装 TS 容器高于机械密封。
这个缓冲液 / 屏障液通过回流管流动管道进入容器并冷却。这个流体的交换是通过热虹吸原理或强制循环，例如使用泵送螺杆。密封件的连接管应设计有尽可能小的阻力可能吧。
1 SPI 测量单元
2 SPS 液位开关
3 对于 PCV，我们建议使用反向控制压力控制阀门( PCV )
4 SPN
5 SPU
6 机械密封

Operating and installation diagram for a TS2000 system.
The TS vessel must always be installed higher than the mechanical seal. The buffer/barrier fluid flows via the return pipe into the vessel and is cooled. The exchange of fluid takes place by the thermosiphon principle or by forced circulation, e.g. with a pumping screw. Connection pipes to the seal should be designed with as little resistance as possible.
1 SPI Measuring unit
2 SPS Level switch
3 From PCV, we recommend using a reverse controlled pressure control valve (PCV)
4 SPN
5 SPU
6 Mechanical seal




## 特 点:

GBTS2000 热虹吸系统提供缓冲液 / 屏障液至双重和广泛应用的串联机械密封应用范围。范围是有两种不同的压力等级带碟形头，水平观察镜有或无冷却的监测和控制系统线圈。TS 船按标准配备所有必要的系统连接和括号。模块化系统允许 TS2000 船舶将与广泛的系统组件，如手动循环泵液位开关组件加注泵、温度计、底座等。

## Features:

With the GBTS2000 thermosiphon system it is possible to supply buffer/barrier fluid to double and tandem mechanical seals for a broad range of applications. The range is available in 2 different pressure levels with dished heads, sight–glass for level monitoring and with or without cooling coil. TS vessels are equipped as standard with all the necessary system connections and brackets. The modular system allows the GBTS2000 vessels to be combined with a wide range of system components such as, level switch, circulation pump, hand refill pump, thermometer, base frame, etc

## 优 点:

适用于各种要求苛刻的环境工作条件：
GBTS2000 高达 30bar/200℃；
GBTS2063 高达 63bar/200℃；
模块化系统：与广泛的可能的系统组件范围
1.4571 不锈钢容器 / 硼硅酸盐视镜：适用于通用应用程序
带或不带冷却盘管顶部 ( 外侧 ) 的冷却水连接和底部( IN )：最佳排水和排气
带凹垫的插座：无螺纹污染电路密封剂

## Advantages

Suitable for a wide range of demanding operating conditions: TS2000 up to 30 bar/200℃; TS2063 up to 63 bar/200 ℃
Modular system: combination with a wide range of system components possible
Vessel made of 1.4571 stainless steel/borosilicate sight–glasses: suitable for universal applications
Available with or without cooling coil
Cooling water connections at top (OUT) and bottom (IN): optimum draining and venting
Sockets with recessed gasket: no contamination of the circuit by thread sealan

## 功能描述:

缓冲 / 屏障系统的功能
双密封操作：
给缓冲 / 屏障室加压
泄漏补偿
缓冲液 / 屏障液通过热虹吸效应或外部循环系统
冷却密封件
选择性吸收产品泄漏和防止干运行 ( 串联布置 )
使用压缩空气或氮气加压。

## Functional description

The TS system performs all the basic functions of a buffer/barrier system for the operation of double seals:
to pressurize the buffer/barrier chamber
leakage compensation
buffer/barrier fluid is circulated by thermosiphon effect or external circulation system
to cool the seal
to selectively absorb product leakage and prevent dry running (tandem arrangement)
Use compressed air or nitrogen for pressurization

| Designation | TS2000-00 | TS2001-00 | TS2063/A002 | TS2063/A001 | TS2000/A100 | TS2001/A100 | TS2063/A102 | TS2063/A101 |
|---|---|---|---|---|---|---|---|---|
| Pressure Equipment Directive | PED | PED | PED | PED | ASME | ASME | ASME | ASME |
| Integrated cooling coil | ■ | | ■ | | ■ | | ■ | |
| Volume, vessel (liters) | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| Volume, tube (liters) | 0.5 | | 0.5 | | 0.5 | | 0.5 | |
| Allowable pressure [1] | 30 bar | 30 bar | 63 bar | 63 bar | 20 bar | 20 bar | 52 bar | 52 bar |
| Allowable temperature [1] | –60 °C ~+200 °C | –60 °C ~+200 °C | –60 °C ~+200 °C | –60 °C~+200 °C | –29 °C ~ +150 °C | –29 °C ~ +150 °C | –29 °C ~ +200 °C | –29 °C~ +200 °C |
| Working volume, MAX-MIN (liters) | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| Cooling capacity – without cooling water (kW) [3] | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Cooling capacity – natural circulation (kW) [2] | 1.5 | | 1.5 | | 1.5 | | 1.5 | |
| Cooling capacity – forced circulation (kW) [2] | 4 | | 4 | | 4 | | 4 | |
| Required cooling water quantity ($m^3/h$) | 0.4 | | 0.4 | | 0.4 | | 0.4 | |
| Metal parts | 1.4571 | 1.4571 | 1.4571 | 1.4571 | 1.4571 | 1.4571 | 1.4571 | 1.4571 |
| Sight-glass | Reflex sight-glass, Borosilicate | Reflex sight-glass, Borosilicate | Reflex sight-glass, Borosilicate | Reflex sight-glass, Borosilicate | Reflex sight-glass, Borosilicate | Reflex sight-glass, Borosilicate | Reflex sight-glass, Borosilicate | Reflex sight-glass, Borosilicate |
| Seal | PTFE | PTFE | PTFE | PTFE | PTFE | PTFE | PTFE | PTFE |
| Net weight (approx.) | 15.5 kg | 12.5 kg | 28.5 kg | 26 kg | 15.5 kg | 12.5 kg | 28.5 kg | 26 kg |

## 推荐应用

| | |
|---|---|
| 化学工业 | Chemical industry |
| 石油化工 | Petrochemical industry |
| 石油和天然气行业 | Oil and gas industry |
| 精炼技术 | Refining technology |

## 产品变型

GBTS4030：无间隙 TS 容器，带酸洗钝化表面
GBTS5000:TS 容器可拆卸

## Product variants

TS4030: A gap–free TS vessel, with a pickled and passivated surface
TS5000: TS vessel can be dismantled

根据要求提供其他版本。
1 ) 设计数据、允许工作值取决于实际使用条件
2 ) 缓冲/屏障流体水60° C – 冷却水20° C的指南
3 ) 缓冲/屏障流体水60° C – 环境温度20° C的指南
( 适用于无自然循环冷却水的热虹吸系统,强制循环 )

## Other versions on request.

1)Design data, permissible working values depend on the actual conditions of service
2)Guidelines with buffer/barrier fluid water 60 ℃ – cooling water 20 ℃
3)Guidelines with buffer/barrier fluid water 60 ℃ – ambient temperature 20℃
(valid for thermosiphon systems without cooling water with natural circulation resp. forced circulation)

# GBSPA



## 特 点:

SPA 范围的屏障压力单位执行屏障的所有功能
双刀操作系统密封 ( 屏障的循环和冷却介质，屏障流体加压以及泄漏补偿 ) 。水疗中心范围有 3 个基本版本：
SPA1000：罐容量 40 l，流速 6 升 / 分钟。
SPA2000：油箱容量 100 l，流速 12 升 / 分钟。
SPA3000：油箱容量 100 l，流速 23 升 / 分钟。
这三个水疗系列是为粘度值为 12 至工作温度下 90 mm2/s ( 储罐温度 ) 。
最佳粘度要使用的油的等级必须是根据各自的应用程序

## Features

Barrier pressure units of the SPA range perform all the functions of a barrier system essential for operating double seals (circulation and cooling of the barrier medium, pressurization of the barrier fluid and compensation of leakage). The SPA range is available in 3 basic versions:
SPA1000: tank capacity 40 l, flow rate 6 l/min.
SPA2000: tank capacity 100 l, flow rate 12 l/min.
SPA3000: tank capacity 100 l, flow rate 23 l/min.
The three SPA ranges are designed for hydraulic oil with viscosity values of 12 to 90 mm2/s at operating temperature (tank temperature). The optimum viscosity of the class of the oil to be used has to be determined separately in accordance with the respective application.

## 优 点:

罐内最高工作温度
80℃ ( 回流管最大 90℃ )
带回流管的温度监测
水箱温度计
通过油冷却器的隔离液
可逆双过滤器( SPA1000：单过滤器，过滤器 )
屏障流体压力的手动控制
减压阀，用于减少阻挡流体静止压力
带最小液位触点的液位开关
测量仪器连接
适用于安装触点开关设备( NG160 )
提供额外压力
监控泵的连接
排放压力( 回路外 )

## Advantages

Max. operating temperature in the tank
80℃ (return line max. 90℃)
Temperature monitoring with a return line and tank thermometer
Barrier fluid directed through oil cooler
Reversible double filter (SPA1000: single filter)
Manual control of barrier fluid pressure
Relief valve for reducing barrier fluid pressure at standstill
Level switch with contact for MIN level
Measuring instrument connections suitable for fitting contact switching devices (NG160)
Provision of an additional pressure connection for monitoring the pump discharge pressure (outside the circuit)

## 功能描述

循环屏障压力为由齿轮泵产生。设定点在溢流阀上设置屏障压力机械密封回油管中的阀门。
从这一点上，屏障流体流动在没有压力的情况下通过过滤器和到储罐的热交换器。至使系统 ( 泵、搅拌器 ) 能够停止而不损坏如果出现故障 ( 例如。电源故障、电机损坏等 ) 屏障压力装置可配备蓄压器单元。防止蓄能器中的压力排放至无压储罐，回流管管路有一个先导式止回阀，以及供应线也有一个简单的检查阀门。屏障压力保持一段时间时间有限。然而，没有流通需要械密封不散热。

## Functional description

The barrier pressure for circulation is generated by a gear pump. The setpoint barrier pressure is set on an overflow valve in the mechanical seal return line.
From this point on the barrier fluid flows back without pressure through a filter and a heat exchanger to the storage tank. To enable systems (pump, agitator) to be stopped without causing damage to the seal in the event of a malfunction (e.g. power failure, damaged motor, etc.), the barrier pressure unit can be fitted with a pressure accumulator unit. To prevent the pressure in the accumulator discharging to the pressureless storage tank, the return line has a pilot–operated check valve, and the supply line also has a simple check valve. The barrier pressure is retained for a limited time. However, no circulation takes place and no heat is dissipated from the mechanical seal.

## 材料组合:

储罐、测量仪器、,冷却器和管道由不锈钢制成
钢配件、分配器装置、切断阀油箱盖由镀锌钢制成

## Materials

Storage tank, measuring instruments, cooler and piping are made of stainless steel
Fittings, distributor units, shut–off valves and tank lid are made of galvanized steel

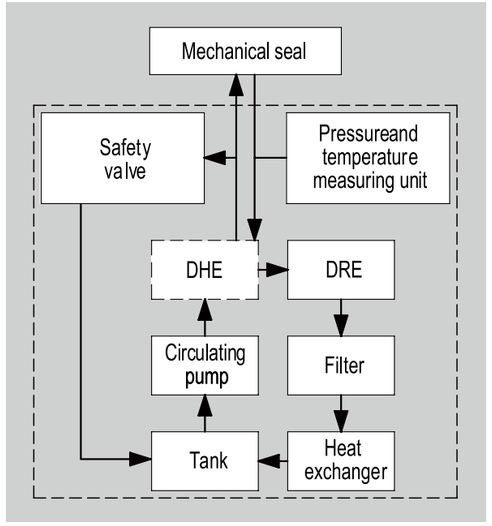
## 推荐应用

化学工业
石油化工
精炼技术
石油天然气工业

## Recommended applications

Chemical industry
Petrochemical industry
Refining technology
Oil and gas industry

GBSPA4000 版本的水和其他媒体作为一个选项提供。
GBSPA4000 versions for water and other media available as an option.



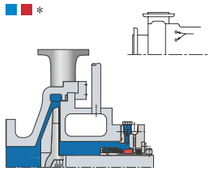

GBSPA 系统的安装和运行图
Installation and operating diagram for a SPA system

| Version, designation | Nominal pressure, max. barrier pressure | Flow rate (l/min) | Cooling capacity (kW) with hydraulic oil Δt = 10K | Pressure accumulator DHE | Tank | | Dimensions overall (mm) | | | Net weight approx. | Motor data | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Nominal capacity (liters) | Usable volume (liters) | Height | Width | Depth | | Nominal power (kW) | Voltage, frequency | Speed (min-1) | Ex-Protection |
| SPA1015/A01 | 15 bar (218 PSI) | 6 | 1.8 | | 40 | 12 | 650 | 610 | 380 | 125 kg (276 lb) | 1 | 400 V 50 Hz | 1,500 | ATEXII2G EEPe II T3 IP54 |
| SPA1015/A02 | 15 bar (218 PSI) | 6 | 1.8 | ■ | 40 | 12 | 650 | 610 | 380 | 125 kg (276 lb) | 1 | | | |
| SPA1040/A01 | 40 bar (580 PSI) | 6 | 1.8 | | 40 | 12 | 650 | 610 | 380 | 125 kg (276 lb) | 1 | | | |
| SPA1040/A02 | 40 bar (580 PSI) | 6 | 1.8 | ■ | 40 | 12 | 650 | 610 | 380 | 125 kg (276 lb) | 1 | | | |
| SPA1090/A01 | 90 bar (1,305 PSI) | 6 | 1.8 | | 40 | 12 | 650 | 610 | 380 | 125 kg (276 lb) | 2 | | | |
| SPA1090/A02 | 90 bar (1,305 PSI) | 6 | 1.8 | ■ | 40 | 12 | 650 | 610 | 380 | 125 kg (276 lb) | 2 | | | |
| SPA2020/A01 | 20 bar (290 PSI) | 12 | 3.6 | | 100 | 20 | 750 | 800 | 555 | 140 kg (309 lb) | 1 | | | |
| SPA2020/A02 | 20 bar (290 PSI) | 12 | 3.6 | ■ | 100 | 20 | 750 | 800 | 555 | 140 kg (309 lb) | 1 | | | |
| SPA2050/A01 | 50 bar (725 PSI) | 12 | 3.6 | | 100 | 20 | 750 | 800 | 555 | 140 kg (309 lb) | 2 | | | |
| SPA2050/A02 | 50 bar (725 PSI) | 12 | 3.6 | ■ | 100 | 20 | 750 | 800 | 555 | 140 kg (309 lb) | 2 | | | |
| SPA2120/A01 | 120 bar (1,740 PSI) | 12 | 3.6 | | 100 | 20 | 750 | 800 | 555 | 140 kg (309 lb) | 3.6 | | | |
| SPA2120/A02 | 120 bar (1,740 PSI) | 12 | 3.6 | ■ | 100 | 20 | 750 | 800 | 555 | 140 kg (309 lb) | 3.6 | | | |
| SPA3020/A01 | 20 bar (290 PSI) | 23 | 6.9 | | 100 | 20 | 750 | 800 | 555 | 140 kg (309 lb) | 2 | | | |
| SPA3020/A02 | 20 bar (290 PSI) | 23 | 6.9 | ■ | 100 | 20 | 750 | 800 | 555 | 140 kg (309 lb) | 2 | | | |
| SPA3050/A01 | 50 bar (725 PSI) | 23 | 6.9 | | 100 | 20 | 750 | 800 | 555 | 140 kg (309 lb) | 3.6 | | | |
| SPA3050/A02 | 50 bar (725 PSI) | 23 | 6.9 | ■ | 100 | 20 | 750 | 800 | 555 | 140 kg (309 lb) | 3.6 | | | |
| SPA3120/A01 | 120 bar (1,740 PSI) | 23 | 6.9 | | 100 | 20 | 750 | 800 | 555 | 140 kg (309 lb) | 6.8 | | | |
| SPA3120/A02 | 120 bar (1,740 PSI) | 23 | 6.9 | ■ | 100 | 20 | 750 | 800 | 555 | 140 kg (309 lb) | 6.8 | | | |

## 管路符号

- 限流孔板
- 截止阀
- 单向阀，止回阀
- 流量调节阀
- 压力控制阀
- 旋风分离器
- 过滤器
- 换热器
- 储水槽
- 活塞式蓄能器
- 气囊式蓄能器
- 过滤器
- 压力指示器
- 温度指示器
- 流量指示器
- 流量计
- 压力开关高位
- 压力开关低位
- 液位指示器
- 液位开关高位
- 液位开关低位
- 流量开关高位

## Plan02

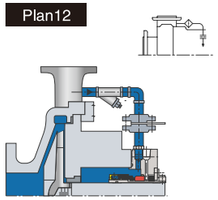


**描述：**
Plan 02 是一种非流通的冲洗方案。

**优点：**
固体不会持续地被引进密封腔，不需要另接冲洗管路。

**说明：**
理想情况是与 ANSI/ASME B73.1 大径孔 / 锥形孔，或者专门的 ISO3069 密封腔，或者与带冷却夹套的热流程泵一起使用，通常搭配 Plan 62 一起使用。

## Plan12

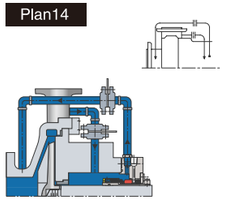


**描述：**
Plan 12 类似于 Plan 11，区别在于在泵出口与孔板之间的管路上增设过滤器。

**优点：**
没有介质污染，介质中的固体颗粒随冲洗液被带走，从而保持密封洁净。

**说明：**
一般情况下不推荐使用过滤器，因为过滤器堵塞会导致密封失效。

## Plan14

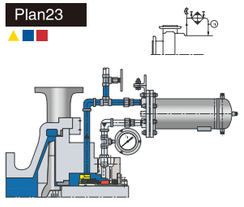


**描述：**
Plan 14 是 Plan 11 与 Plan 13 的结合。从泵的出口通过限流孔板到密封腔，并同时从密封腔通过限流孔板（如果需要）到泵入口的循环过程。

**优点：**
冷却液被直接引向密封端面，同时继续排气而减小密封腔内的压力。

**说明：**
对于立式泵而言，Plan 14 是最常用的冲洗方式。

## Plan23

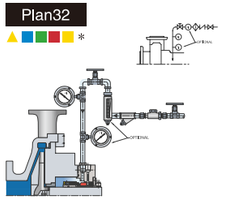


**描述：**
Plan 13Plan 23 是从密封腔内的泵送环通过换热器回到密封腔的循环过程。

**优点：**
比 Plan 21 效率更高，热交换器积垢更少，能用在温度较高的环境中，可以以较小的换热器达到较佳的降温效果。

**说明：**
须加装喉部衬套及辅助循环装置，在换热器的至高点必须有排气设计，启动前须先排气。

## Plan32

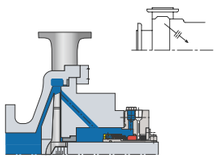


**描述：**
Plan 32 是将外来的冲洗液注入到密封腔内。通常在自身流体不适合作冲洗时使用。

**优点：**
可用于含杂质、受污染的流体以及高温、易聚合等流体，选择合适的外来冲洗液，可极大地延长密封使用寿命。

**说明：**
需要谨慎选择合适的密封冲洗液来源，以消除引起注入的液体发生蒸发的隐患，并避免随同注入的冲洗液一起被泵送的液体收到污染；需加装喉部衬套来恒定密封腔内压力或是保持流速。

## Plan01

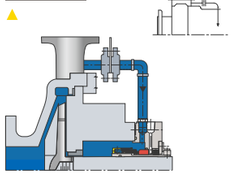


**描述：**
Plan01 是一种从泵的出口区域进入密封腔的内部循环的冲洗方案，类似于 Plan 11，但是没有外露管道。

**优点：**
没有介质污染和外露管道，优势是用于较低温度下或高粘度流体中，可以尽量减少由于外露管道发生冻结或聚合的风险。

**说明：**
本方案只推荐应用洁净的工作介质，须确保整个过程充分循环，不建议用在立式泵上。

## Plan11

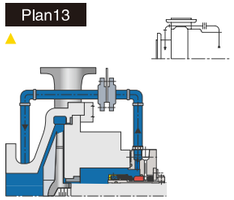


**描述：**
Plan 11 是如今最普遍被使用的冲洗方案。该方案是从泵的出口通过限流孔板流入密封腔的循环过程，对密封端面提供冷却和润滑。

**优点：**
没有介质污染、管路装置十分简单。

**说明：**
如果密封设置成多点冲洗的方式，系统的冲洗 / 冷却效果将会得到改善。

## Plan13

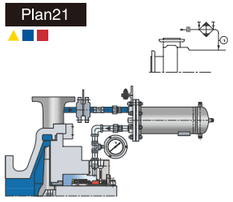


**描述：**
Plan 13 是从泵的密封腔通过限流孔板然后回到泵入口的循环过程。

**优点：**
在 Plan 13 中，合适的孔板尺寸和喉部衬套间隙，会增加或者减少密封腔内的压力。

**说明：**
典型的 Plan 13 用于立式涡轮泵，启动前须先将管线排气；必须搭配限流孔板，孔径最小为 3mm；Plan 13 在散热方面不如 Plan 11 效率高，因此要求有更高的流量。

## Plan21

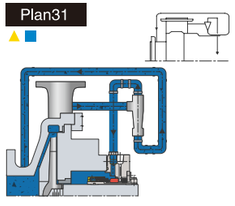


**描述：**
Plan 21 是从泵的出口通过限流孔板和换热器然后进入密封腔的循环过程。

**优点：**
利用工艺介质冷却和润滑密封，因此没有过程流体的稀释。在密封腔里，冷却可以改善润滑和降低汽化的可能性。

**说明：**
无论是对于 API 还是其他用户而言，Plan 21 不是最佳方案。

## Plan31

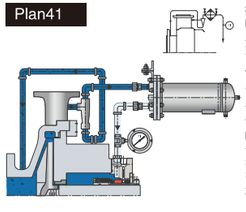


**描述：**
Plan 31 是从泵的出口通过旋风分离器把洁净流体输送到密封腔的循环过程，固体颗粒被送到泵的入口管线。

**优点：**
与滤网或者过滤器不同，旋风分离器不需要清洗。

**说明：**
Plan 31 是 Plan 11 的改良方案，这个方案必须用于含有固体杂质的情况，且当固体的比重至少为流体的 2 倍时，旋风分离器的使用效果最佳；旋风分离器至少需要 15 psi（1bar）的压力差才能正常运转。

## Plan41



**描述：**
Plan 41 是 Plan 21 和 Plan 31 的结合，是从泵的出口通过旋液分离器把洁净液体输送到换热器然后再到密封腔的循环过程。

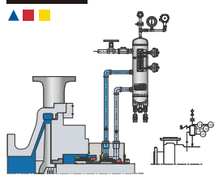
**优点：**
介质中的固体被去除，且介质温度被降低，从而改善密封环境。

**说明：**
Plan 41 是典型的用于夹杂有固体杂质的场合；要产生正确的流向，轴封室压力必须很接近泵的进口压力；在换热器的至高点必须有排气设计，启动前须先排气；整个流程的温度、运营成本会很高。





## Plan52

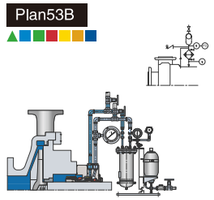


**描述：**
Plan52 是一种使用外部储液罐来为一个非加压型、双端面密封提供缓冲液的方案。

**优点：**
介质泄漏量非常小，介质不会被污染，适用于高温、高蒸汽压、危险或有毒介质。

**说明：**
正常操作时，有内部泵送环来保持缓冲液的循环；储液罐通常连续排放蒸汽至蒸汽回收系统，并保持比密封腔小的压力。

## Plan53B

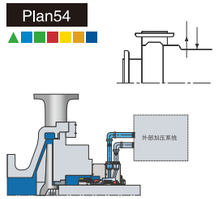


**描述：**
Plan53B 被称为 Plan53A 的改良方案，是一种使用预先加了压的气囊蓄压器来提供压力给循环系统的方案。通过加装泵送环实现隔离液的循环。

**优点：**
隔离工艺介质，其工艺介质完全不外漏，隔离液压力比 Plan53A 更高。适用于高温、高蒸汽压、强腐蚀、易聚合、含杂质、危险或有毒等介质。

**说明：**
管线回路必须于启动前完全排气，蓄压器须时常保持加压状态，通常以气体加压。储液罐中的隔离液必须能与工艺介质相匹配。

## Plan54

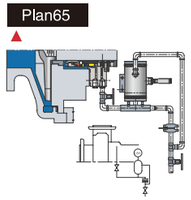



**描述：**
Plan 54 是一种通过外设加压隔离液储罐或系统，为密封腔提供洁净的液体。循环由外部泵或压力系统来完成。储液罐的压力大于被密封的工艺介质压力。

**优点：**
隔离工艺介质，且工艺介质完全不外漏，隔离液压力比 Plan53A 更高，提供一个辅助系统来维持隔离液压力高于密封腔压力。

**说明：**
管线回路必须于启动前完全排气，循环系统必须确保持续加压状态，隔离液必须能与工艺介质相匹配。本方案用于配置方式 3 的密封。

## Plan65

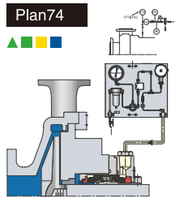


**描述：**
Plan 65 是一种液体泄漏检测方案，通常用于单端面密封。外部排液管道的布置是用浮子型液位开关测量密封泄漏量，对高泄漏量进行报警。

**优点：**
提供一个在检测到密封过度泄漏时的警报指示器，这样，必要的时候可以关闭设备。

**说明：**
这个系统包含有一个限流孔板的回路，其孔径通常为 5mm（0.25in），以防止密封大气侧压力升高。

## Plan74

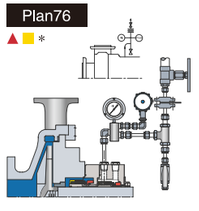


**描述：**
Plan 74 通入外部供应的隔离气体，用来有效地防止工艺介质泄漏到大气中。隔离气体的压力高于工艺介质侧的压力。

**优点：**
与双端面加压液体系统 Plan54 相比，具有更低的初始成本和维修费用。泄漏到大气中的是一种惰性气体，不会污染环境。

**说明：**
Plan 74 常用于布置方式 3（双端面加压密封），最常用的隔离气体是加压的工业氮气，密封供气压力一般高于密封腔压力 0.175Mpa(1.75bar)。

## Plan76

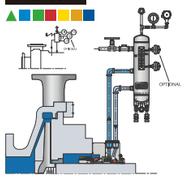


**描述：**
Plan 76 是一种将主密封泄漏的非凝结性气体转移到火炬或者蒸汽回收系统的方案。

**优点：**
比使用 Plan 52 的双端面非加压型密封更低的初始成本和维修成本。

**说明：**
Plan 76 典型用于布置方式 2（无压双端面密封），在这种情况下也可采用干运转外部密封，内部密封的泄漏物不凝结成液体，这种布置方式可以采用阻封气体（Plan72）也可不采用。

## Plan53A

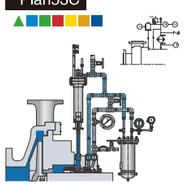


**描述：**
Plan 53A 是一种使用外部储液罐来为加压型、双端面密封提供隔离液的方案。通过加装泵送环实现隔离液的循环。

**优点：**
隔离工艺介质，且工艺介质完全不外漏，适用于高温、高蒸汽压、强腐蚀、易聚合、含杂质、危险或有毒等介质，常用于搅拌器及真空设备等。

**说明：**
管线回路必须于启动前完全排气，储液罐须保持持续加压状态，最大允许注入气体压力为 10–14bar（防止汽水效应），轴封内设泵送环，以提供隔离液的循环。储液罐中的隔离液必须能与工艺介质相匹配。

## Plan53C

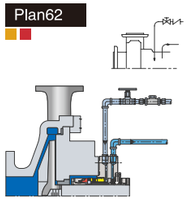


**描述：**
Plan 53C 是一种通过使用活塞式蓄能器来为系统提供压力的方案。通过加装泵送环实现隔离液的循环。

**优点：**
隔离工艺介质，且工艺介质完全不外漏，隔离液压力比 Plan53A 更高，提供一个辅助系统来维持隔离液压力高于密封腔压力。

**说明：**
管线回路必须于启动前完全排气，来自密封腔的压力参考管线，必须能承受工艺介质可能的污染而且不会被阻塞，隔离液必须能与工艺介质相匹配。

## Plan62

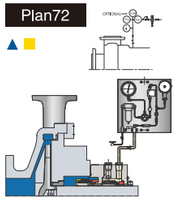


**描述：**
Plan 62 是单端面密封中最普遍被采用的冲洗方案，由外部对密封端面的大气侧引入冲洗液，冲洗液可以是低压流体（小于 0.2bar）、氮气或者清洁的水。

**优点：**
Plan 62 是一种串联式密封的低成本替代方式。急冷可以阻止或者延缓工艺介质结晶或者焦化。

**说明：**
这种方案应于法兰大气侧加装节流衬套，以引导冲洗流体流向回收管线；用于单端面密封以排除氧气的存在，防止焦化、结冰、结晶或固体颗粒的积累。

## Plan72

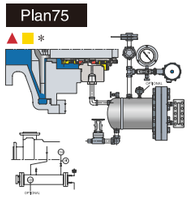


**描述：**
Plan 72 是在外部次极密封中通入低压缓冲气体，通常是氮气，通过调节控制面板把它注入到外部的密封腔里。

**优点：**
一种缓冲气体如氮气的引进，可以减少泄漏物的排放，防止在低温场合下结冰，同时为外部的密封提供冷却。

**说明：**
Plan 72 用于布置方式 2（使用干运转外部密封的无压双端面密封系统），通常与 Plan 75、Plan76 一起使用。

## Plan75



**描述：**
Plan 75 是一种收集系统，主要功能是收集在大气温度下能凝结成液体的流体，即使当工艺气体不能凝结时，也期望安装这个系统，来收集系统冷凝泄漏的流体，从而得到回流。

**优点：**
收集器包含一个压力表和一个高位压力开关，当压力表数值增强时，表明主密封泄漏或失效，并触发 PSH 设置，收集器出口处安装一个截止阀，用于隔离收集，以便于维修。

**说明：**
Plan 75 典型用于布置方式 2（无压双端面密封），在这种情况下也可采用干运转外部密封，内部密封的泄漏物凝结成液体，这种布置方式可以采用阻封气体（Plan72）也可不采用。

## 备注

- 泄漏报警和收集
- 封液系统（P 泵腔 >P 封液）
- 封液系统（P 泵腔 <P 封液）
- 冲洗 / 冷却
- ＊ 仅与其它 API 方案结合使用

特殊工况：

- 带悬浮颗粒
- 无润滑
- 高温
- 危险 / 有害物质
- 易结晶
- 易汽化

# 材料类型 Material Type

| 材料类型 Type | EN12756代号 Code | 材料简写 Symbol | 名称 Name | |
|---|---|---|---|---|
| 密封面材料 / Seal ring material | | | | |
| 石墨类 Carbon | A | M106D | 浸锑石墨 | Antimony impreg.Carbon Graphite |
| | B | M188K | 浸树脂石墨 | Resin Impregnated Carbon Graphite |
| 碳化硅类 Silicon Carbide | $Q_1$ | SSiC | 无压烧结碳化硅 | Silicon Carbide,Sintered Pressureless |
| | $Q_{12}$ | | 镶装无压烧结碳化硅 | Silicon Carbide,Sintered Pressureless(shrunk-in) |
| | $Q_2$ | SiC | 反应烧结碳化硅 | Silicon Carbide,Reaction bonded |
| | $Q_{22}$ | | 镶装反应烧结碳化硅 | Silicon Carbide,Reaction bonded(shrunk-in) |
| | $Q_3$ | | 浸硅碳 | Reaction Silicon Carbide with Graphite |
| | $Q_{32}$ | | 镶装浸硅碳 | Reaction Silicon Carbide with Graphite(shrunk-in) |
| | $Q_4$ | | 表面渗硅碳 | Sintered Silicon Carbide with SB |
| 硬质合金类 Tungsten Carbide | $U_1$ | YG6/YG8 | 钴基硬质合金 | Co-binder Tungsten Carbide |
| | $U_{12}$ | | 镶装钴基硬质合金 | Co-binder Tungsten Carbide(shrunk-in) |
| | $U_2$ | YWN8 | 镍基硬质合金 | Ni-binder Tungsten Carbide |
| | $U_{22}$ | | 镶装镍基硬质合金 | Ni-binder Tungsten Carbide(shrunk-in) |
| | $U_3$ | W7 | 镍钴钼基硬质合金 | NiCrMo-binder Tungsten Carbide |
| | $U_{32}$ | | 镶装镍钴钼基硬质合金 | NiCrMo-binder Tungsten Carbide(shrunk-in) |
| 陶瓷类 Ceramics | V | 99.7%$AL_2O_3$ | 氧化铝99.7% | Ceramic(Al-Oxide) 99.7% |
| | $V_2$ | 97.5%$AL_2O_3$ | 氧化铝97.5% | Ceramic(Al-Oxide) 97.5% |
| 塑料类 Plastic | $Y_1$ | | 填充玻璃纤维PTFE | PTFE,Glassfibre Reinforced |
| | $Y_2$ | | 填充石墨PTFE | PTFE,Carbon Reinforced |
| 辅助密封类 / Secondary seal materials | | | | |
| 橡胶类弹性体 Rubber Elastomer | B | IIR | 丁基橡胶 | Butyl Rubber |
| | E | EPDM | 三元乙丙橡胶 | Ethylene Propylene |
| | K | FFKM | 全氟橡胶 | Perfluoroelastomer(Kalrez,Chemraz) |
| | N | CR | 氯丁橡胶 | Chloroprene Rubber |
| | P | NBR | 丁腈橡胶 | Nitrile |
| | S | MVQ | 硅橡胶 | Silicon Rubber |
| | V | FPM | 氟橡胶 | Fluorocarbon Rubber |
| | X | FEPM | 四丙氟橡胶 | Tetrapropyl Fluoro Elastomer |
| 包覆弹性体 Coated Elastomer | $M_1$ | PTFE+FPM | 双层PTFE包覆的氟橡胶 | FPM,with PTFE Wrapped |
| | $M_2$ | PTFE+EPR | 双层PTFE包覆的乙丙橡胶 | EPR,with PTFE Wrapped |
| | $M_3$ | PTFE+MVQ | 双层PTFE包覆的硅橡胶 | MVQ,with PTFE Wrapped |
| | $M_4$ | PTFE+CR | 双层PTFE包覆的氯丁橡胶 | CR,with PTFE Wrapped |
| | $M_5$ | FEP | 聚全氟乙丙烯包覆的氟橡胶 | Fluorocarbon Rubber with Poly Ethylene Propylene |
| 非弹性体 Nonelastic | $Y_1$ | | 非石棉密封垫 | Non Asbestos Gasket |
| | G | | 柔性石墨 | Expanded graphite |
| | T | PTFE | 聚四氟乙烯 | Polyfluortetraethylene |
| | $T_2$ | | 填充玻璃纤维PTFE | PTFE,Glassfibre Reinforced |
| | $T_3$ | | 填充石墨PTFE | PTFE,Carbon Reinforced |
| | $T_{12}$ | | 填充碳石墨的PTFE | PTFE,Carbon Graphite |
| 弹性及其他结构材料 / Spring and other metal materials | | | | |
| 弹性材料 Spring Material | G | | 316L | |
| | M | | Hast.C4 | |
| 结构材料 Metal Material | F | | 304 | |
| | $F_1$ | | 2Cr13/3Cr13 | |
| | G | | 316L | |
| | M | | Hast.C4 | |
| | $M_1$ | | Hast.B2 | |
| | $M_3$ | | Carp.20 | |
| | $M_4$ | | Monel.K50 | |
| | $M_5$ | | Hast.c276 | |
| | $T_2$ | | TA2 | |
| | $T_4$ | | Carp.42 | |
| | $T_6$ | | AM350 | |
| | $M_6$ | | Incon.718 | |



# 石墨 碳化硅 硬质合金系列产品

## Car,Sic,Tungsten Carbide Series products

