

# BGMFL85

- ◎ 单端面
- ◎ 平衡型
- ◎ 任意旋向
- ◎ 金属波纹管
- ◎ 符合EN12756(DIN24960)标准

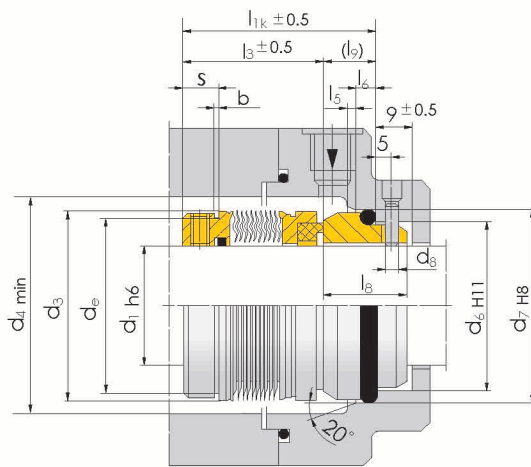
**BGMFL85**系列应用广泛、适用于高温高粘度介质。动环"O"形圈不起补偿作用,因此波纹管移动没有阻尼。

**Single seal**

**Balanced**

**Independent of direction of rotation**  
**To EN12756 (DIN24960)**

BGMFL85 series is widely used for high temperature and high viscosity medium. Its rotating "O" ring has no compensational function so that the bellows can move without damp.



## 运行参数

规格: 16~100 mm  
压力: ≤2.5 Mpa  
(双层波片 ≤5.0 Mpa)  
温度: -20~300°C  
线速度: ≤15 m/s  
轴向窜动量: ±1.0mm

## 材料组合

密封端面:

石墨、碳化硅、碳化钨

辅助密封:

丁腈胶、氟橡胶、乙丙胶、硅橡胶、柔性石墨、PTFE

金属构件:

不锈钢、合金钢

## Operating limits

Specification: 16~100 mm  
Pressure: ≤2.5 Mpa  
(Double layer wave plate ≤5.0 Mpa)  
Temperature -20~300°C  
Linear speed: ≤15m/s  
Axial movement: ±1.0mm

## Combination of material s

**Sealing face**

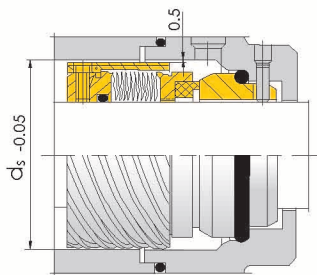
Graphite, Silicon carbide, Tungsten carbide

**Secondary sealing**

Acrylonitrile rubber, Fluorine rubber, Ethylene propylene rubber, Flexible graphite, PTFE

**Metal component**

Stainless steel, Alloy steel



**BGMFL85F带波纹管泵密封**, 适用于机封腔液体需自循环场合。

BGMFL85F whorl pump seal is mainly used in the working condition that the liquid in the seal chamber needing self-cycle.

注:BGMFL85金属波纹管系列机械密封, 外装式时, 温度<120°C, 机封承压≤1.0Mpa; 温度<220°C, 机封承压≤0.5Mpa。

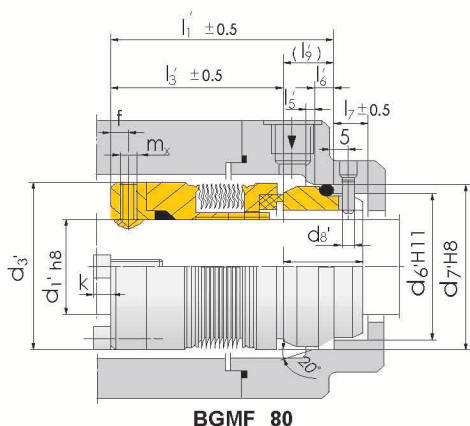
1) 压力超过此范围时请与公司联系。

2) 请正确选用静止环。

Note: For BGMFL85 metal bellows series mechanical seal, when using build-in, the wave plate accepts the pressure from outside, which is ≤2.5Mpa; when using external fitting, the wave plate accepts the pressure from inside, the temperature<120°C, the pressure which the mechanical seal accept≤1.0Mpa, the temperature<220°C, the pressure which the mechanical seal accepts; ≤0.5Mpa

1) Higher pressures possible with special designs-please refer to Bogeman.

2) Positively retained stationary seat necessary.



**BGMFL80系列** (安装尺寸不符合DIN24960标准)。

**BGMFL WT80**为高温型金属波纹管机封,适用温度-20~400℃(加冷却系统时高温可达600℃)。

**BGMFL CT80**为低温型金属波纹管机封,适用温度为-100~100℃。

**BGMFL W80** 为无叉口扭矩传递的金属波纹管机封。

**BGMFL80 series** (installation dimension comply with DIN24960).

**BGMFL WT80** is high temperature metal bellow mechanical seal. The suitable temperature is -20℃~400℃ (the temperature can reach to 600℃ when it is with cooling system).

**BGMFL CT80** is low temperature metal bellow mechanical seal. The suitable temperature is -100℃~100℃.

**BGMFL W80** is metal bellow mechanical seal without crotch torque

单位 (Unit): mm

**BGMFL 85**

**BGMFL 80**

| d <sub>1</sub> | d <sub>3</sub> | d <sub>4</sub> | d <sub>6</sub> | d <sub>7</sub> | d <sub>8</sub> | d <sub>9</sub> | d <sub>5</sub> | l <sub>1k</sub> | l <sub>3</sub> | l <sub>5</sub> | l <sub>6</sub> | l <sub>8</sub> | l <sub>9</sub> | b   | s    | d <sub>3</sub> | d <sub>6</sub> | d <sub>7</sub> | d <sub>8</sub> | l <sub>1</sub> | l <sub>3</sub> | l <sub>5</sub> | l <sub>6</sub> | l <sub>7</sub> | l <sub>8</sub> | l <sub>9</sub> | f | k | m <sub>x</sub> |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|----------------|----------------|----------------|----------------|-----|------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---|---|----------------|
| 16             | 30.0           | 32             | 23             | 27             | 3              | 25.0           | 38             | 42.5            | 32.5           | 1.5            | 4              | 17.5           | 10.0           | 1.6 | 9.0  | 38             | 29.0           | 35.0           | 3              | 58.0           | 46.5           | 2.0            | 5              | 9              | 19.5           | 11.5           | 5 | 5 | M5             |
| 18             | 32.0           | 34             | 27             | 33             | 3              | 28.0           | 39             | 37.5            | 30.5           | 2.0            | 5              | 14.0           | 7.0            | 1.6 | 10.0 | 40             | 31.0           | 37.0           | 3              | 58.0           | 46.5           | 2.0            | 5              | 9              | 19.5           | 11.5           | 5 | 5 | M5             |
| 20             | 33.5           | 36             | 29             | 35             | 3              | 29.5           | 41             | 37.5            | 30.5           | 2.0            | 5              | 14.0           | 7.0            | 1.6 | 10.0 | 42             | 34.0           | 40.0           | 3              | 58.0           | 46.5           | 2.0            | 5              | 9              | 19.5           | 11.5           | 5 | 5 | M5             |
| 22             | 36.5           | 39             | 31             | 37             | 3              | 32.0           | 44             | 37.5            | 30.5           | 2.0            | 5              | 14.0           | 7.0            | 1.6 | 10.0 | 44             | 37.0           | 43.0           | 3              | 58.0           | 46.5           | 2.0            | 5              | 9              | 19.5           | 11.5           | 5 | 5 | M5             |
| 24             | 39.0           | 41             | 33             | 39             | 3              | 34.5           | 47             | 40.0            | 28.5           | 2.0            | 5              | 19.5           | 11.5           | 1.6 | 8.2  | 46             | 37.0           | 43.0           | 3              | 58.0           | 46.5           | 2.0            | 5              | 9              | 19.5           | 11.5           | 5 | 5 | M5             |
| 25             | 39.6           | 42             | 34             | 40             | 3              | 35.5           | 48             | 40.0            | 28.5           | 2.0            | 5              | 19.5           | 11.5           | 1.6 | 8.5  | 47             | 39.0           | 45.0           | 3              | 58.0           | 46.5           | 2.0            | 5              | 9              | 19.5           | 11.5           | 5 | 5 | M5             |
| 28             | 42.8           | 45             | 37             | 43             | 3              | 38.5           | 51             | 42.5            | 31.0           | 2.0            | 5              | 19.5           | 11.5           | 1.6 | 9.0  | 50             | 42.0           | 48.0           | 3              | 58.0           | 46.5           | 2.0            | 5              | 9              | 19.5           | 11.5           | 5 | 5 | M6             |
| 30             | 45.0           | 47             | 39             | 45             | 3              | 40.5           | 53             | 42.5            | 31.0           | 2.0            | 5              | 19.5           | 11.5           | 1.6 | 8.5  | 52             | 44.0           | 50.0           | 3              | 58.0           | 46.5           | 2.0            | 5              | 9              | 19.5           | 11.5           | 5 | 5 | M6             |
| 32             | 46.0           | 48             | 42             | 48             | 3              | 42.0           | 55             | 42.5            | 31.0           | 2.0            | 5              | 19.5           | 11.5           | 1.6 | 9.2  | 54             | 49.0           | 56.0           | 4              | 60.5           | 46.5           | 2.0            | 6              | 9              | 22.0           | 14.0           | 5 | 5 | M6             |
| 33             | 48.0           | 50             | 42             | 48             | 3              | 43.0           | 56             | 42.5            | 31.0           | 2.0            | 5              | 19.5           | 11.5           | 1.6 | 9.2  | 55             | 49.0           | 56.0           | 4              | 60.5           | 46.5           | 2.0            | 6              | 9              | 22.0           | 14.0           | 5 | 5 | M6             |
| 35             | 49.2           | 52             | 44             | 50             | 3              | 45.5           | 58             | 42.5            | 31.0           | 2.0            | 5              | 19.5           | 11.5           | 1.6 | 9.5  | 57             | 51.0           | 58.0           | 4              | 60.5           | 46.5           | 2.0            | 6              | 9              | 22.0           | 14.0           | 5 | 5 | M6             |
| 38             | 52.3           | 58             | 49             | 56             | 4              | 48.0           | 61             | 45.0            | 31.0           | 2.0            | 6              | 22.0           | 14.0           | 1.6 | 9.2  | 60             | 54.0           | 61.0           | 4              | 60.5           | 46.5           | 2.0            | 6              | 9              | 22.0           | 14.0           | 5 | 5 | M6             |
| 40             | 55.5           | 60             | 51             | 58             | 4              | 50.0           | 64             | 45.0            | 31.0           | 2.0            | 6              | 22.0           | 14.0           | 1.6 | 9.2  | 66             | 56.0           | 63.0           | 4              | 61.5           | 47.5           | 2.0            | 6              | 9              | 22.0           | 14.0           | 5 | 6 | M6             |
| 43             | 57.5           | 63             | 54             | 61             | 4              | 53.0           | 67             | 45.0            | 31.0           | 2.0            | 6              | 22.0           | 14.0           | 1.6 | 9.2  | 69             | 59.0           | 66.0           | 4              | 61.5           | 47.5           | 2.0            | 6              | 9              | 22.0           | 14.0           | 5 | 6 | M6             |
| 45             | 58.7           | 65             | 56             | 63             | 4              | 55.0           | 69             | 45.0            | 31.0           | 2.0            | 6              | 22.0           | 14.0           | 1.6 | 9.5  | 71             | 62.0           | 70.0           | 4              | 62.5           | 47.5           | 2.5            | 6              | 9              | 23.0           | 15.0           | 5 | 6 | M6             |
| 48             | 61.9           | 68             | 59             | 66             | 4              | 58.0           | 72             | 45.0            | 31.0           | 2.0            | 6              | 22.0           | 14.0           | 1.6 | 9.2  | 74             | 65.0           | 73.0           | 4              | 62.5           | 47.5           | 2.5            | 6              | 9              | 23.0           | 15.0           | 5 | 6 | M6             |
| 50             | 65.0           | 70             | 62             | 70             | 4              | 60.5           | 74             | 47.5            | 32.5           | 2.5            | 6              | 23.0           | 15.0           | 1.6 | 10.5 | 76             | 67.0           | 75.0           | 4              | 62.5           | 47.5           | 2.5            | 6              | 9              | 23.0           | 15.0           | 5 | 6 | M6             |
| 53             | 68.2           | 73             | 65             | 73             | 4              | 64.0           | 77             | 47.5            | 32.5           | 2.5            | 6              | 23.0           | 15.0           | 1.6 | 10.5 | 79             | 70.0           | 78.0           | 4              | 62.5           | 47.5           | 2.5            | 6              | 9              | 23.0           | 15.0           | 5 | 6 | M6             |
| 55             | 70.0           | 75             | 67             | 75             | 4              | 65.5           | 80             | 47.5            | 32.5           | 2.5            | 6              | 23.0           | 15.0           | 1.6 | 10.0 | 81             | 72.0           | 80.0           | 4              | 62.5           | 47.5           | 2.5            | 6              | 9              | 23.0           | 15.0           | 5 | 6 | M6             |
| 58             | 71.7           | 83             | 70             | 78             | 4              | 67.0           | 83             | 52.5            | 37.5           | 2.5            | 6              | 23.0           | 15.0           | 3.0 | 14.0 | 85             | 75.0           | 83.0           | 4              | 68.0           | 53.0           | 2.5            | 6              | 9              | 23.0           | 15.0           | 5 | 6 | M6             |
| 60             | 74.6           | 85             | 72             | 80             | 4              | 69.5           | 85             | 52.5            | 37.5           | 2.5            | 6              | 23.0           | 15.0           | 3.0 | 14.0 | 87             | 77.0           | 85.0           | 4              | 68.0           | 53.0           | 2.5            | 6              | 9              | 23.0           | 15.0           | 6 | 6 | M8             |
| 63             | 79.0           | 88             | 75             | 83             | 4              | 72.5           | 88             | 52.5            | 37.5           | 2.5            | 6              | 23.0           | 15.0           | 3.0 | 14.0 | 90             | 81.0           | 90.0           | 4              | 71.0           | 53.0           | 2.5            | 7              | 9              | 26.0           | 18.0           | 6 | 6 | M8             |
| 65             | 84.1           | 90             | 77             | 85             | 4              | 78.0           | 95             | 52.5            | 37.5           | 2.5            | 6              | 23.0           | 15.0           | 3.0 | 14.0 | 92             | 83.0           | 92.0           | 4              | 71.0           | 53.0           | 2.5            | 7              | 9              | 26.0           | 18.0           | 6 | 6 | M8             |
| 68             | 87.3           | 93             | 81             | 90             | 4              | 82.0           | 96             | 52.5            | 34.5           | 2.5            | 7              | 26.0           | 18.0           | 1.6 | 10.0 | 95             | 88.0           | 97.0           | 4              | 71.0           | 53.0           | 2.5            | 7              | 9              | 26.0           | 18.0           | 6 | 6 | M8             |
| 70             | 87.3           | 95             | 83             | 92             | 4              | 81.0           | 96             | 60.0            | 42.0           | 2.5            | 7              | 26.0           | 18.0           | 3.0 | 17.0 | 97             | 88.0           | 97.0           | 4              | 71.0           | 53.0           | 2.5            | 7              | 9              | 26.0           | 18.0           | 6 | 6 | M8             |
| 75             | 95.0           | 104            | 88             | 97             | 4              | 87.0           | 104            | 60.0            | 42.0           | 2.5            | 7              | 26.0           | 18.0           | 3.0 | 16.0 | 102            | 95.0           | 105.0          | 4              | 71.0           | 52.8           | 3.0            | 7              | 9              | 26.2           | 18.2           | 6 | 6 | M8             |
| 80             | 98.4           | 109            | 95             | 105            | 4              | 91.0           | 109            | 60.0            | 41.8           | 3.0            | 7              | 26.2           | 18.2           | 3.0 | 16.0 | 107            | 100.0          | 110.0          | 4              | 71.0           | 52.8           | 3.0            | 7              | 9              | 26.2           | 18.2           | 6 | 6 | M8             |
| 85             | 104.7          | 114            | 100            | 110            | 4              | 96.0           | 114            | 60.0            | 41.8           | 3.0            | 7              | 26.2           | 18.2           | 3.0 | 16.0 | 112            | 105.0          | 115.0          | 4              | 71.0           | 52.8           | 3.0            | 7              | 9              | 26.2           | 18.2           | 6 | 6 | M8             |
| 90             | 111.0          | 119            | 105            | 115            | 4              | 103.0          | 119            | 65.0            | 46.8           | 3.0            | 7              | 26.2           | 18.2           | 3.0 | 21.0 | 117            | 110.0          | 120.0          | 4              | 71.0           | 53.8           | 3.0            | 7              | 9              | 25.2           | 17.2           | 6 | 6 | M8             |
| 95             | 114.0          | 124            | 110            | 120            | 4              | 106.0          | 124            | 65.0            | 47.8           | 3.0            | 7              | 25.2           | 17.2           | 3.0 | 21.0 | 122            | 115.0          | 125.0          | 4              | 71.0           | 53.8           | 3.0            | 7              | 9              | 25.2           | 17.2           | 6 | 6 | M8             |
| 100            | 117.4          | 129            | 115            | 125            | 4              | 111.0          | 129            | 65.0            | 47.8           | 3.0            | 7              | 25.2           | 17.2           | 3.0 | 20.0 | 127            | 122.2          | 134.3          | 5              | 74.0           | 54.0           | 3.0            | 9              | 11             | 30.0           | 20.0           | 6 | 6 | M8             |

\* 配备其它非补偿环尺寸,请参照“可选非补偿环结构型式”(52-53页)

Please refer to the optional non-compensated ring structural specification for the details of other non compensated dimensions(52-53页)