

# SIOEAGLE-BURGMANN9001<sup>®</sup>



Mechanical Seal

伊格尔博格曼机械密封（张家港）有限公司

YigeerBorgmann Mechanical Seal(ZhangJiaGang ) Co., Ltd.

地址:张家港市金港镇德积福民村（天霸路）



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# INTRODUCTION

伊格尔博格曼机械密封(张家港)有限公司是一家致力于机械密封件的研发、制造、销售一体化经营。拥有先进的生产设备、雄厚的技术力量,完善的管理理念,经过多年发展,我们的客户遍布全国各地。生产的产品包括:泵用机械密封、釜用机械密封、集装箱机械密封、搅拌机机械密封等产品,产品规格品种齐全,具有经久耐用等优点。产品广泛应用于石油、化工、印染、泵阀、食品、制药、农药、船舶、冶金、火电站等行业。

产品适用于连成、凯泉、东方、南方、凯士比、格兰富、石家庄工业泵、襄樊五二五、飞力、柳州酸王、安德里茨、苏尔寿,黄山工业泵等知名品牌水泵厂家及莱宁、夏普、长城等知名搅拌机厂家。

主要生产系列有: m7n,h7n,m74d,h74d,101,103,104,105,106,108,113,116,119b,109,112,120,124,1527,108u,116u,1523,224,f01d,f02d,uk,gx,gy,hj92n,CM1,CM1B,CM4,CM4B,CM8,CM8B,ZU1,ZB1,ZU2,ZB2,ZU3,ZB3,ZU4,ZB4,ZU5,ZB5,ZU6,ZB6,ZU39,ZB39,ZMW96,ZML95,ZUU6,ZUB6,M7N,H7N,M74D,H74D,224。FGD 脱硫系统密封适用于石家庄水泵集团(ZGJ,TLJ 型密封),石家庄工业泵厂(DT,SGB 型双端面密封),淄博华成泵业(TLD,YTBB 型密封),山东双轮集团(SLJY,SLTX 型密封),襄阳 525 泵业(HTM,HRM 型密封)、江苏法尔泵业(TL,JF 型密封)等大型渣浆、脱硫泵生产厂家。产品可以替代德国进口的 KSB 泵,澳大利亚 WARMAN 泵,美国 Chemineer 搅拌机,德国 EKATO 搅拌机,德国 MUT 搅拌机,澳大利亚 SADIK 搅拌机,SHARPE 等搅拌设备上使用的进口密封件。

## 发展历程

回首过往发展,2016 年我司与中铁合作,2017 年我司与上海凯泉泵业合作,2018 年我司与石家庄奥星制药设备合作,2019 年我司与江苏扬州化工设备合作,2020 年 我司与恒丰泰搅拌设备合作,并于 11 月获得江苏省民营科技企业荣誉称号。

### 公司优势

人才战略创新,采用新举措实现跨越发展。伊格尔博格曼机械密封(张家港)有限公司坚持“管理增效、人才强企、文化兴企”的发展理念,大力发展人才引进战略,以组建精英团队为抓手,推动经营管理进入制度化、规范化、专业化、年轻化的高效运行轨道。在人才战略中,逐步形成了一套特有的“项目 + 人才 + 科技 + 管理”的市场化选人用人机制和培养激励机制,充分发挥了全体员工的创造活力和创造动力,为公司承揽项目、提升资质、扩大规模打下了坚实的基础。

## 伊格尔博格曼机械密封(张家港)有限公司

YigeerBorgmann Mechanical Seal(ZhangJiaGang) Co., Ltd.



YIGER BORGMAN MECHANICAL SEAL (ZHANGJIAGANG) CO., LTD. IS A COMPANY DEDICATED TO THE INTEGRATION OF DEVELOPMENT, MANUFACTURING AND SALES OF MECHANICAL SEALER. With advanced production equipment, strong technical force, perfect management concept, after years of development, our customers all over the country. Our products include: mechanical seal for pump, mechanical seal for kettle, mechanical seal for assembled type, mechanical seal for agitator, etc. Our products are complete in specifications and varieties and have the advantages of durability. Products are widely used in petroleum, chemical industry, printing and dyeing, pump valve, food, pharmaceutical, pesticide, shipping, metallurgy, thermal power stations and other industries.

Products are suitable for Liancheng, Kaiquan, Dongfang, South, Cashby, Grundfos, Shijiazhuang industrial pump, Xiangfan 525, Feili, Liuzhou acid king, Andritz, Sulzer, Huangshan industrial pump and other well-known brands of pump manufacturers and LaNing, Sharp, the Great Wall and other well-known agitator manufacturers.

The main production series are: M7N, H7N, M74D, H74D, 101, 103, 104, 105, 106, 108, 116,119 B, 109,112,120,124,1527,108 U, 116U, 1523,224, F01D, F02D, UK, GX, GY, HJ92N, CM1, CM1B CM4, CM4B CM8, CM8B, ZU1, ZB1, ZU2, ZB2, ZU3, ZB3, ZU4, ZB4, ZU5, ZB5, ZU6, ZB6, ZU39, ZB39, ZMW96, ZML95, ZUU6, ZUB6, M7N, H7N, M74D, H74D, 224. Seal of FGD desulfurization system applicable to shijiazhuang pump group (ZGJ, TLJ type seal), shijiazhuang industrial pump factory (DT, SGB type double end face seal), zibo hua cheng pump industry (TLD, YTBB type seal), shandong two-wheel group (SLJY, SLTX type seal), xiangyang 525 pump industry (HTM, HRM type seal), jiangsu fire pump industry (TL, JF type seal) and other large slurry, desulphurization pump manufacturers. Products can replace KSB pump imported from Germany, Australia WARMAN pump, Chemineer agitator, Germany EKATO agitator, Germany MUT agitator, Australia SADIK agitator SHARPE and other mixing equipment with imported seals. Imported seals are used for mixing equipment such as SHARPE.



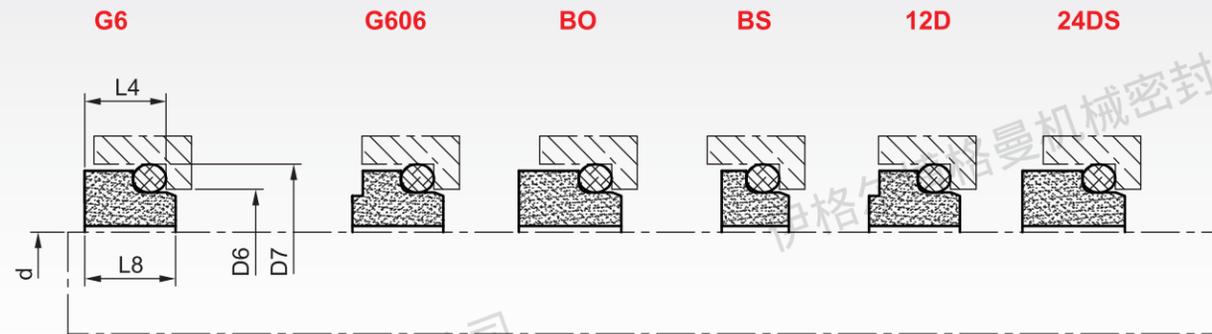
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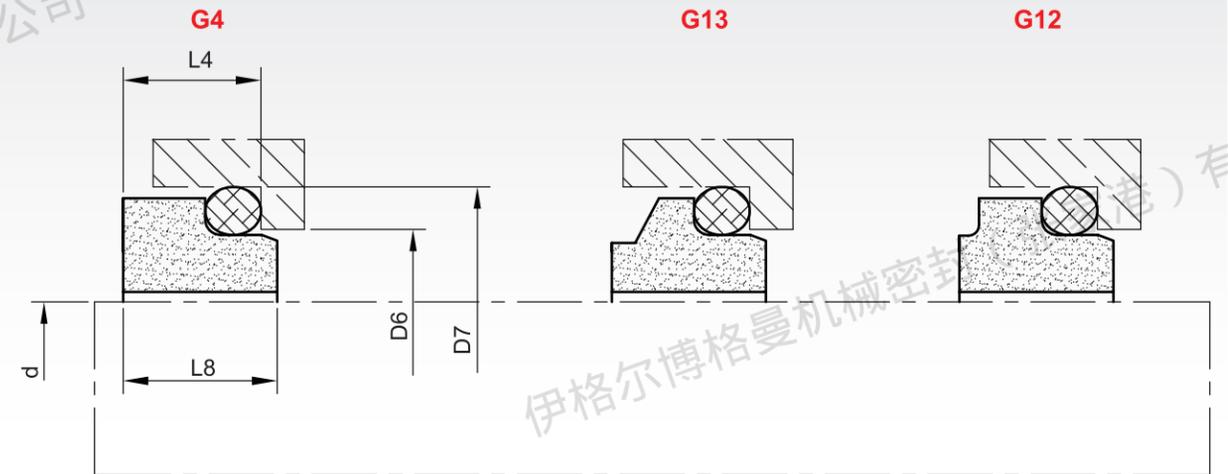


**GBG6/G606/BO/BS/12D/24DS**



Size/ Metric	GBG6/G606			GBBO		GBBS		GB12D		GB24DS			
	d	D6	D7	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	d	GBG4		GBG13			
		D6	D7	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	



静环

Seat Series

# GBG9/G16/G46/24DL



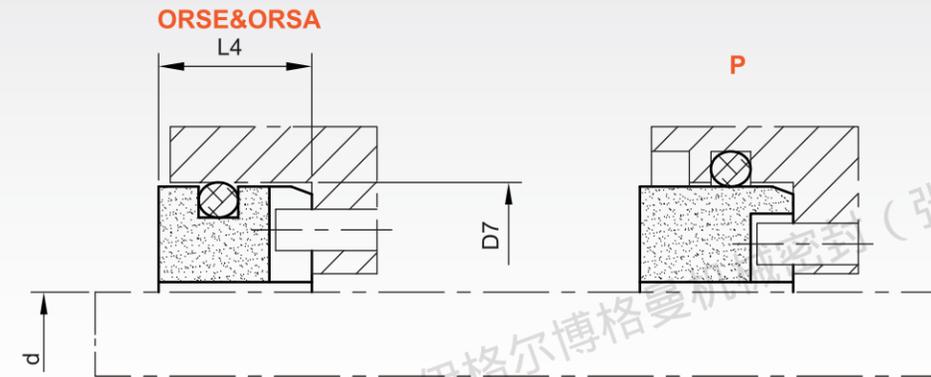
Size/ Metric	GBG9				GBG16		GBG46		GB24DL			
	d	D6	D7	D8	L4	L8	L4	L8	L4	L8	L4	L8
10	10	17	21	3	10.0	17.5	—	—	—	—	8.6	15.0
12	12	19	23	3	10.0	17.5	—	—	—	—	8.6	15.0
14	14	21	25	3	10.0	17.5	—	—	—	—	8.6	15.0
16	16	23	27	3	10.0	17.5	—	—	—	—	8.6	15.0
18	18	27	33	3	11.5	19.5	7.0	15.0	9.0	17.0	10.0	17.0
20	20	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

符合ISO3069 DIN24960 GB6556标准

静环

Seat Series

# 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



静环

Seat Series

MACHINERY SEAL

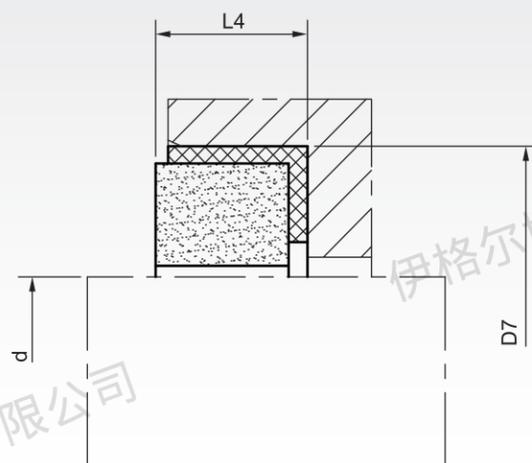
符合ISO3069 DIN24960 GB6556标准

静环

Seat Series



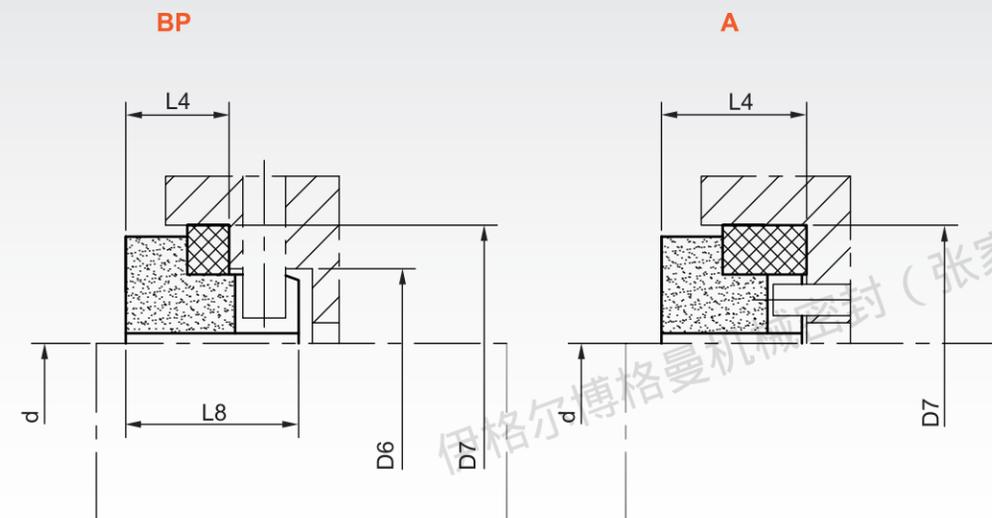
GBG60/24/210/20/11



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



静环

MACHINERY SEAL

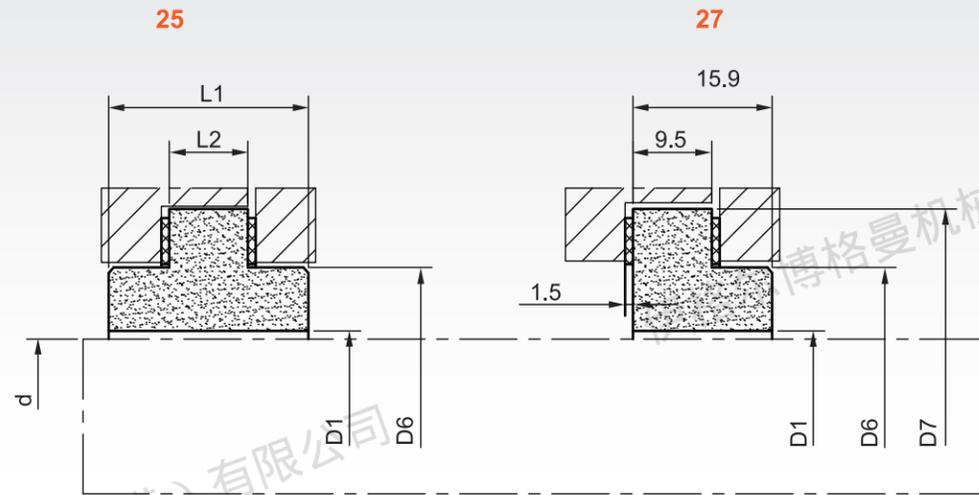
符合ISO3069 DIN24960 GB6556标准

静环

Seat Series

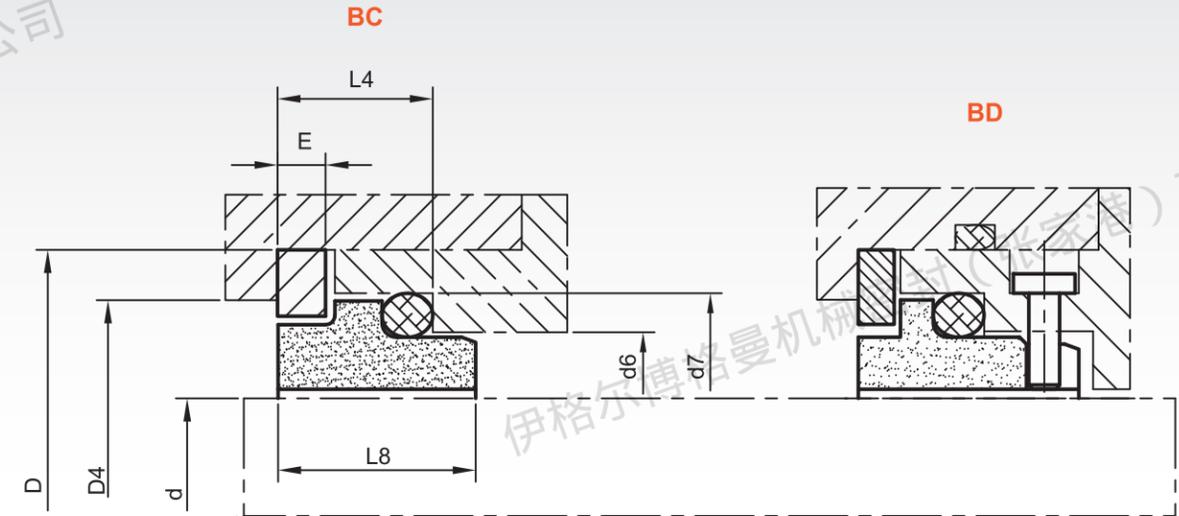
Seat Series

GB25/27



Size/ Inch	Inch d	Metric Size d	GB25				Gasket Thick	GB27		
			D1	D6	L1	L2		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	20.0	36.21	17.4	7.9	0.8	21.60	34.80	44.45
0.875	0.875	25	23.2	39.90	17.4	7.9	0.8	24.75	37.95	47.65
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
1.250	1.250	30	31.0	48.69	26.9	11.1	1.6	-	-	-
1.375	1.375		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
2.000	2.000	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	Bal	Unbal	Bal					L8	L8
		Seal	Seal	Seal	Seal						
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

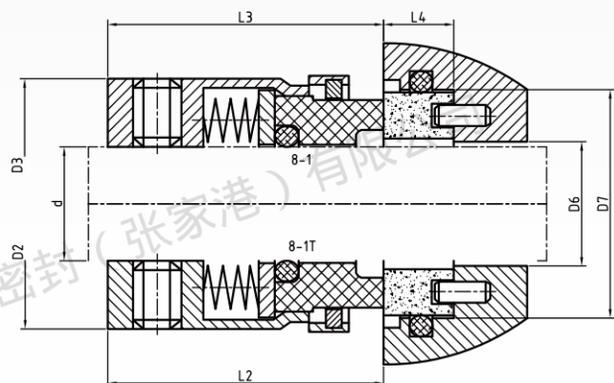


## 小弹簧式机械密封

## MACHINERY SEAL

### Multiple Spring Mechanical Seals

# GB8-1/8-1T



#### 技术参数:

密封腔温度:  $-40^{\circ}\text{C}+260^{\circ}\text{C}$   
 线速度:  $\leq 25\text{m/s}$   
 密封腔压力:  $\leq 16\text{bar}$   
 轴径尺寸:  $0.5''-4''$

#### Operating Limits:

Temperature:  $-40^{\circ}\text{C}+260^{\circ}\text{C}$   
 Speed:  $\leq 25\text{m/s}$   
 Pressure:  $\leq 16\text{bar}$   
 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

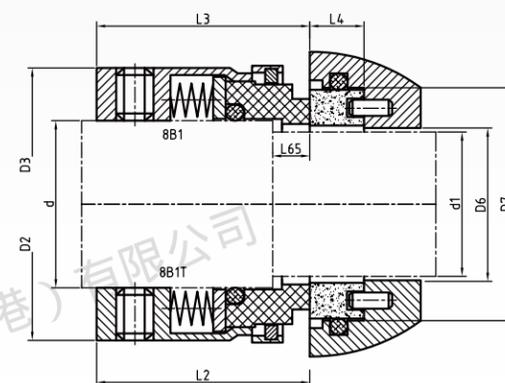
Size	d	D2	D3	D6	D7	L2	L3	L4
0.500	12.70	23.80	26.7	14.50	25.60	23.80	21	7.90
0.625	15.87	26.97	30.7	17.50	31.95	23.80	19	10.30
0.750	19.05	30.15	34.0	21.00	35.12	23.80	22	10.30
0.875	22.22	32.32	37.2	24.00	38.30	23.80	24	11.15
1.000	25.40	36.50	40.3	27.50	41.48	25.40	25	11.15
1.125	28.57	39.67	43.5	30.50	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

符合ISO3069 DIN24960 GB6556标准

## 小弹簧式机械密封

### Multiple Spring Mechanical Seals

# GB8B1/8B1T



#### 技术参数:

密封腔温度:  $-40^{\circ}\text{C}+260^{\circ}\text{C}$   
 线速度:  $\leq 25\text{m/s}$   
 密封腔压力:  $\leq 24\text{bar}$   
 轴径尺寸:  $0.5''-4''$

#### Operating Limits:

Temperature:  $-40^{\circ}\text{C}+260^{\circ}\text{C}$   
 Speed:  $\leq 25\text{m/s}$   
 Pressure:  $\leq 24\text{bar}$   
 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

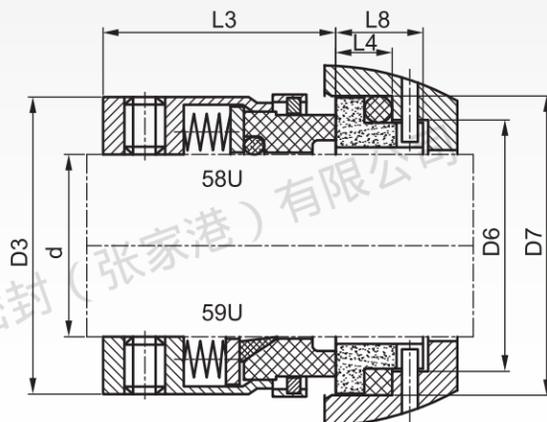


## 小弹簧式机械密封

## MACHINERY SEAL

### Multiple Spring Mechanical Seals

# GB58U/59U



#### 技术参数:

密封腔温度:  $-20^{\circ}\text{C}+250^{\circ}\text{C}$   
 线速度:  $\leq 15\text{m/s}$   
 密封腔压力:  $\leq 12\text{bar}$   
 轴径尺寸: 14-100mm

#### Operating Limits:

Temperature:  $-20^{\circ}\text{C}+250^{\circ}\text{C}$   
 Speed:  $\leq 15\text{m/s}$   
 Pressure:  $\leq 12\text{bar}$   
 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:

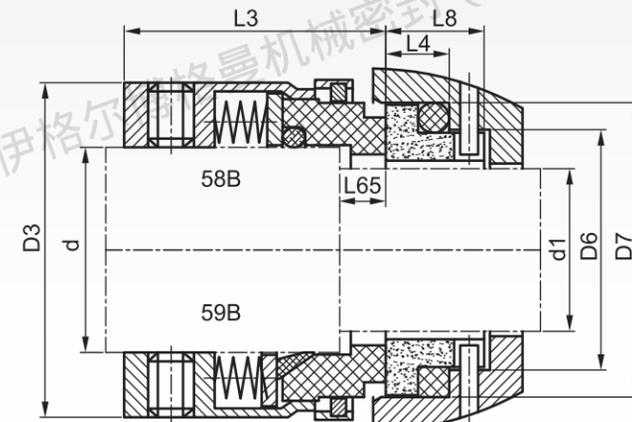
Seal ring: Car, Sic, Ssic, TC  
 Secondary seal: NBR, Viton, EPDM, Kalrez, PTFE.  
 Spring and metal parts: 304, 316, HAST.C

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

## 符合ISO3069 DIN24960 GB6556标准 小弹簧式机械密封

### Multiple Spring Mechanical Seals

# GB58B/59B



#### 技术参数:

密封腔温度:  $-20^{\circ}\text{C}+250^{\circ}\text{C}$   
 线速度:  $\leq 15\text{m/s}$   
 密封腔压力:  $\leq 25\text{bar}$   
 轴径尺寸: 14-100mm

#### Operating Limits:

Temperature:  $-20^{\circ}\text{C}+250^{\circ}\text{C}$   
 Speed:  $\leq 15\text{m/s}$   
 Pressure:  $\leq 25\text{bar}$   
 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



## 小弹簧式机械密封

## MACHINERY SEAL

### Multiple Spring Mechanical Seals

# GBM74-D



#### 技术参数:

密封腔温度:  $-20^{\circ}\text{C}+220^{\circ}\text{C}$   
 线速度:  $\leq 20\text{m/s}$   
 密封腔压力:  $\leq 16\text{bar}$   
 轴径尺寸: 18-100mm

#### Operating Limits:

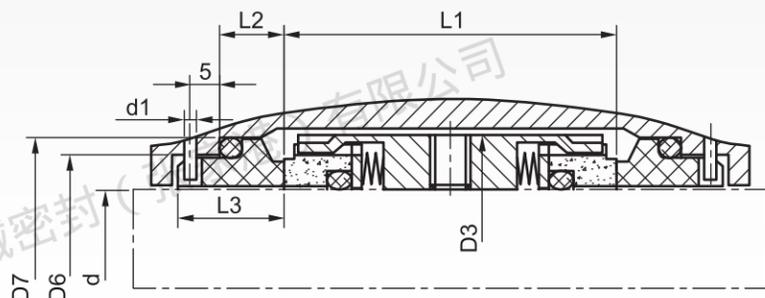
Temperature:  $-20^{\circ}\text{C}+220^{\circ}\text{C}$   
 Speed:  $\leq 20\text{m/s}$   
 Pressure:  $\leq 16\text{bar}$   
 Standard Size: 18-100mm

#### 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

符合ISO3069 DIN24960 GB6556标准

## 小弹簧式机械密封

### Multiple Spring Mechanical Seals

# GBH74-D



#### 技术参数:

密封腔温度:  $-20^{\circ}\text{C}+220^{\circ}\text{C}$   
 线速度:  $\leq 20\text{m/s}$   
 密封腔压力:  $\leq 25\text{bar}$   
 轴径尺寸: 14-100mm

#### Operating Limits:

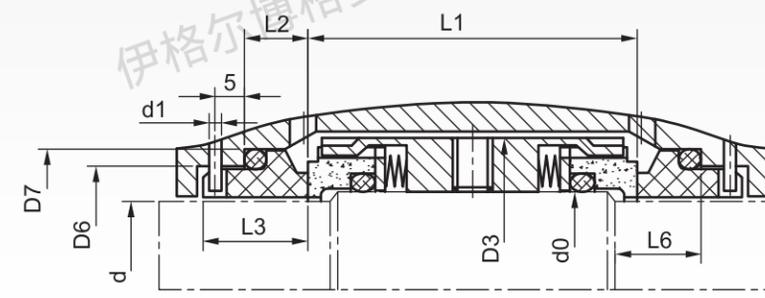
Temperature:  $-20^{\circ}\text{C}+220^{\circ}\text{C}$   
 Speed:  $\leq 20\text{m/s}$   
 Pressure:  $\leq 25\text{bar}$   
 Standard Size: 14-100mm

#### 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



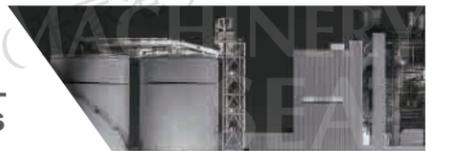
Size	d	d0	D3	D6	D7	d1	L6	L1	L2	L3
14	14	18	33	21	25	3	18	53.0	10.0	17.5
16	16	20	35	23	27	3	18	53.0	10.0	17.5
18	18	22	37	27	33	3	20	53.0	11.5	19.5
20	20	24	39	29	35	3	20	53.0	11.5	19.5
22	22	26	41	31	37	3	20	53.0	11.5	19.5
24	24	28	43	33	39	3	20	54.0	11.5	19.5
25	25	30	45	34	40	3	20	54.0	11.5	19.5
28	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



# 波形弹簧式机械密封

# MACHINERY SEAL

符合ISO3069 DIN24960 GB6556标准 波形弹簧式机械密封



## Wave Spring Mechanical Seals

## Wave Spring Mechanical Seals

### GBM7N/M74

### GBH7N/H74

#### 技术参数:

密封腔温度: -20°C+220°C  
 线速度: ≤20m/s  
 密封腔压力: ≤16bar  
 轴径尺寸: 14-100mm

#### Operating Limits:

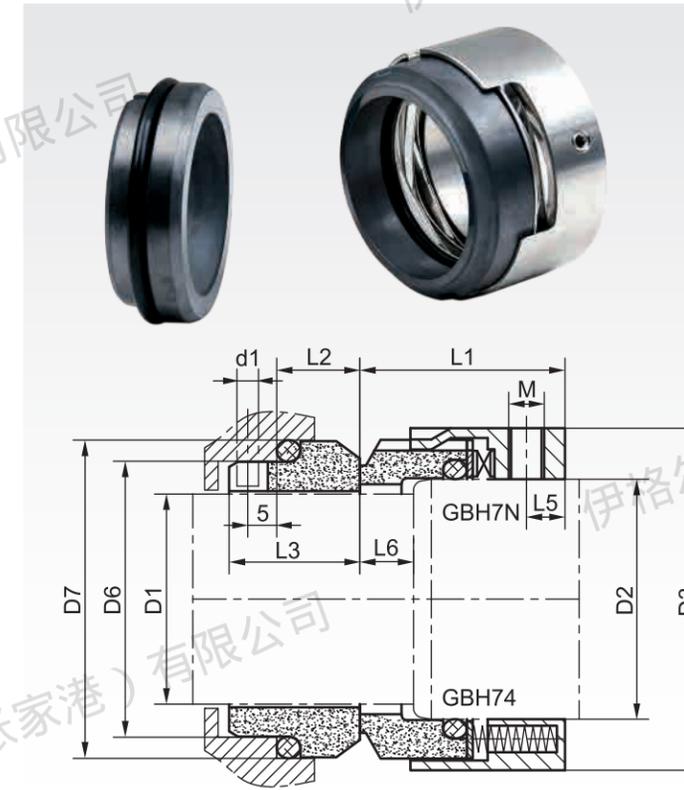
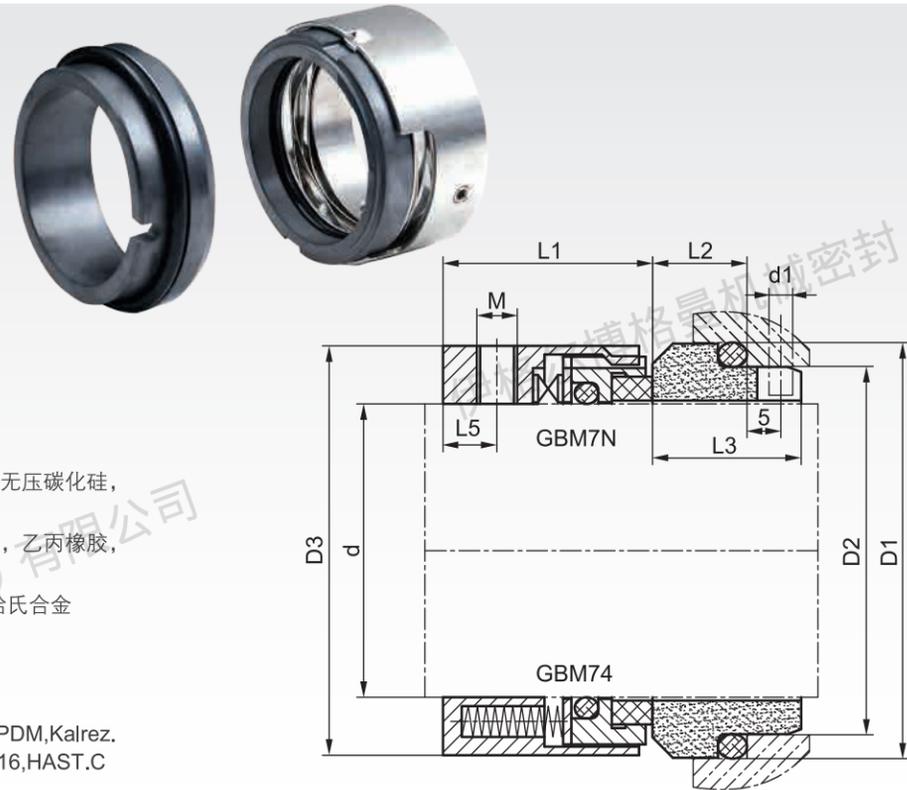
Temperature: -20°C+220°C  
 Speed: ≤20m/s  
 Pressure: ≤16bar  
 Standard Size: 14-100mm

#### 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



#### 技术参数:

密封腔温度: -20°C+220°C  
 线速度: ≤20m/s  
 密封腔压力: ≤25bar  
 轴径尺寸: 14-100mm

#### Operating Limits:

Temperature: -20°C+220°C  
 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	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

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



## 波形弹簧机械密封

## MACHINERY SEAL

符合ISO3069 DIN24960 GB6556标准

## 大弹簧式机械密封



### Wave Spring Mechanical Seals

### Single Spring Mechanical Seals

# GBHJ92N

# GBM3N/M32/M37/M37G

#### 技术参数:

密封腔温度:  $-20^{\circ}\text{C}+220^{\circ}\text{C}$   
 线速度:  $\leq 20\text{m/s}$   
 密封腔压力:  $\leq 25\text{bar}$   
 轴径尺寸: 18-100mm

#### Operating Limits:

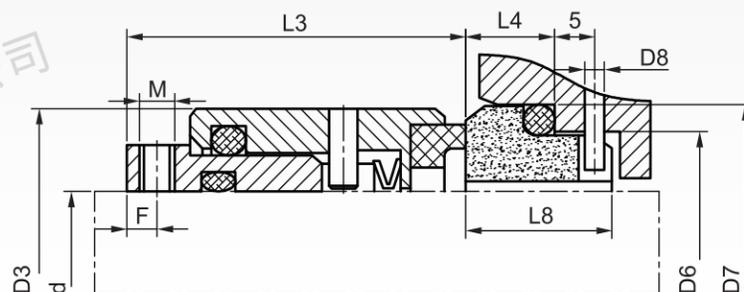
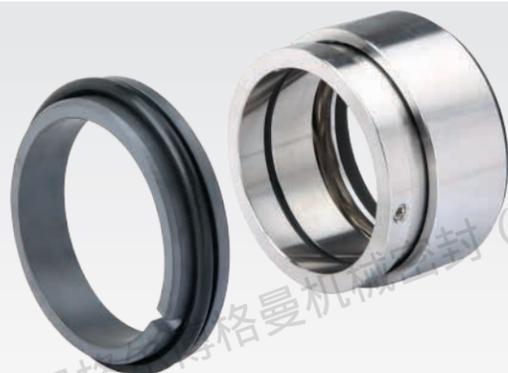
Temperature:  $-20^{\circ}\text{C}+220^{\circ}\text{C}$   
 Speed:  $\leq 20\text{m/s}$   
 Pressure:  $\leq 25\text{bar}$   
 Standard Size: 18-100mm

#### 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



#### 技术参数:

密封腔温度:  $-20^{\circ}\text{C}+180^{\circ}\text{C}$   
 线速度:  $\leq 15\text{m/s}$   
 密封腔压力:  $\leq 10\text{bar}$   
 轴径尺寸: 10-80mm

#### Operating Limits:

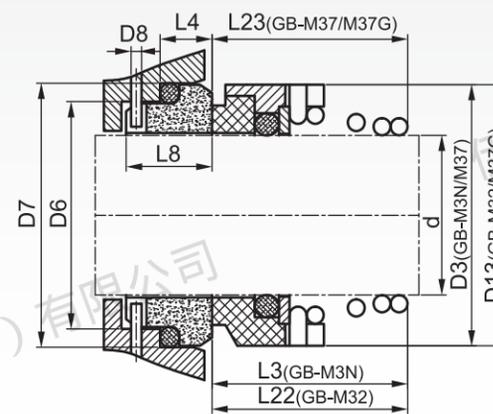
Temperature:  $-20^{\circ}\text{C}+180^{\circ}\text{C}$   
 Speed:  $\leq 15\text{m/s}$   
 Pressure:  $\leq 10\text{bar}$   
 Standard Size: 10-80mm

#### 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



# 大弹簧式机械密封

## Single Spring Mechanical Seals

# MACHINERY SEAL

符合ISO3069 DIN24960 GB6556标准

# 大弹簧式机械密封



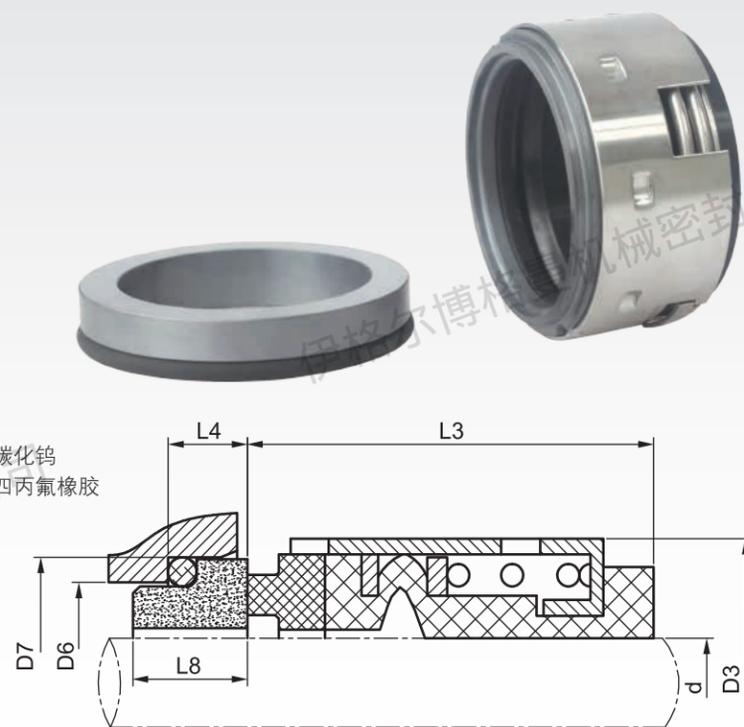
## GB502

**技术参数:**  
 密封腔温度:  $-20^{\circ}\text{C}+120^{\circ}\text{C}$   
 线速度:  $\leq 15\text{m/s}$   
 密封腔压力:  $\leq 25\text{bar}$   
 轴径尺寸: 14-100mm

**Operating Limits:**  
 Temperature:  $-20^{\circ}\text{C}+120^{\circ}\text{C}$   
 Speed:  $\leq 15\text{m/s}$   
 Pressure:  $\leq 25\text{bar}$   
 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

## Single Spring Mechanical Seals



**技术参数:**  
 密封腔温度:  $-40^{\circ}\text{C}+150^{\circ}\text{C}$   
 线速度:  $\leq 15\text{m/s}$   
 密封腔压力:  $\leq 16\text{bar}$   
 轴径尺寸: 10-100mm

**Operating Limits:**  
 Temperature:  $-40^{\circ}\text{C}+150^{\circ}\text{C}$   
 Speed:  $\leq 15\text{m/s}$   
 Pressure:  $\leq 16\text{bar}$   
 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	107	120	40	52.5	77.5	12.5
100	100	124	112	125	40	52.5	77.5	12.5



## 橡胶波纹管机械密封

## MACHINERY SEAL

符合ISO3069 DIN24960 GB6556标准

## 橡胶波纹管机械密封



### Elastomer Bellow Mechanical Seals

### Elastomer Bellow Mechanical Seals

# GBBIA

#### 技术参数:

密封腔温度:  $-20^{\circ}\text{C}+120^{\circ}\text{C}$   
 线速度:  $\leq 15\text{m/s}$   
 密封腔压力:  $\leq 10\text{bar}$   
 轴径尺寸: 14-90mm

#### Operating Limits:

Temperature:  $-20^{\circ}\text{C}+120^{\circ}\text{C}$   
 Speed:  $\leq 15\text{m/s}$   
 Pressure:  $\leq 10\text{bar}$   
 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: 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



# GBEA560

#### 技术参数:

密封腔温度:  $-20^{\circ}\text{C}+100^{\circ}\text{C}$   
 线速度:  $\leq 5\text{m/s}$   
 密封腔压力:  $\leq 7\text{bar}$   
 轴径尺寸: 8-50mm (0.375"-2.000")

#### Operating Limits:

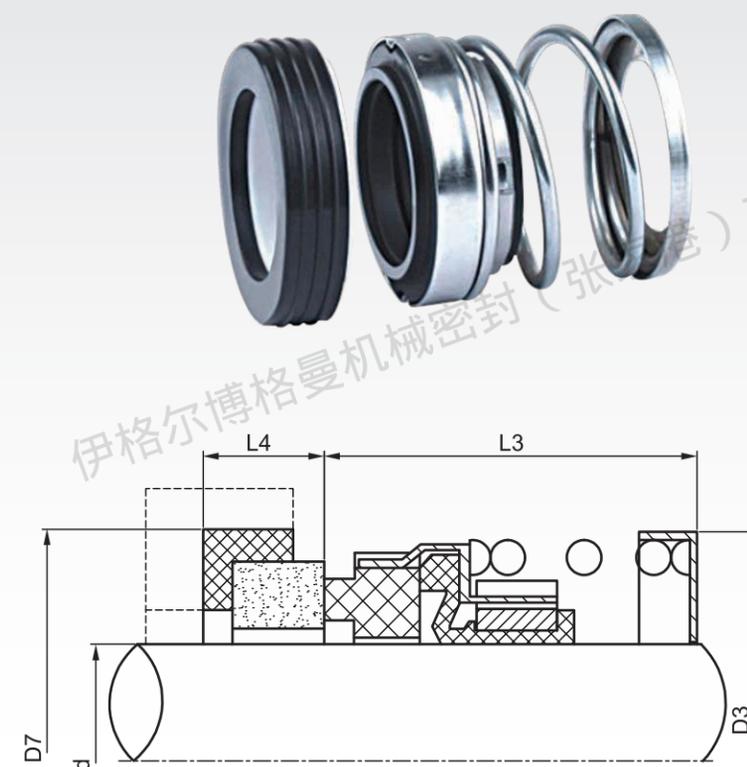
Temperature:  $-20^{\circ}\text{C}+100^{\circ}\text{C}$   
 Speed:  $\leq 5\text{m/s}$   
 Pressure:  $\leq 7\text{bar}$   
 Standard size: 8-50mm or 0.375"-2"

#### 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



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

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



## 橡胶波纹管机械密封

### Elastomer Bellow Mechanical Seals

## MACHINERY SEAL

符合ISO3069 DIN24960 GB6556标准

## 橡胶波纹管机械密封

### Elastomer Bellow Mechanical Seals



# GBMG1/MG12/MG13

# GBMG9

#### 技术参数:

密封腔温度:  $-20^{\circ}\text{C}+120^{\circ}\text{C}$   
 线速度:  $\leq 10\text{m/s}$   
 密封腔压力:  $\leq 12\text{bar}$   
 轴径尺寸: 10-100mm

#### Operating Limits:

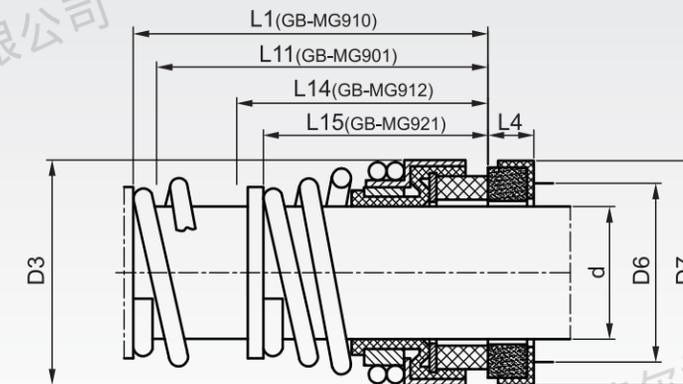
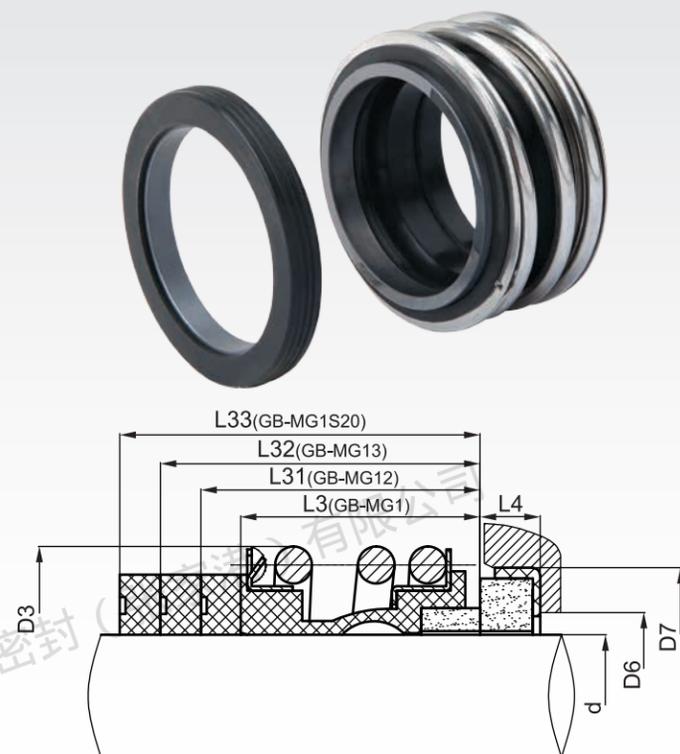
Temperature:  $-20^{\circ}\text{C}+120^{\circ}\text{C}$   
 Speed:  $\leq 10\text{m/s}$   
 Pressure:  $\leq 12\text{bar}$   
 Standard size: 10-100mm

#### 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



#### 技术参数:

密封腔温度:  $-20^{\circ}\text{C}+140^{\circ}\text{C}$   
 线速度:  $\leq 10\text{m/s}$   
 密封腔压力:  $\leq 12\text{bar}$   
 轴径尺寸: 10-100mm

#### Operating Limits:

Temperature:  $-20^{\circ}\text{C}+140^{\circ}\text{C}$   
 Speed  $\leq 10\text{ m/s}$   
 Pressure:  $\leq 12\text{ bar}$   
 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	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

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	47.0	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	79	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

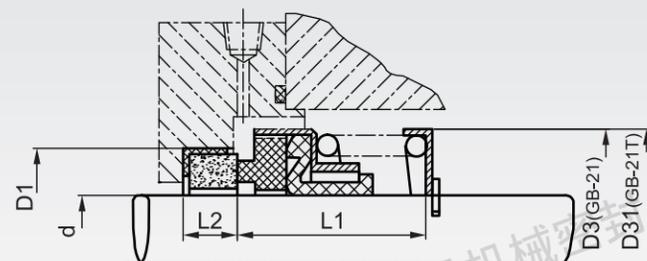


# 橡胶波纹管机械密封

# MACHINERY SEAL

## Elastomer Bellow Mechanical Seals

### GB21/21T



#### 技术参数:

密封腔温度:  $-20^{\circ}\text{C}+120^{\circ}\text{C}$   
 线速度:  $\leq 15\text{m/s}$   
 密封腔压力:  $\leq 10\text{bar}$   
 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:

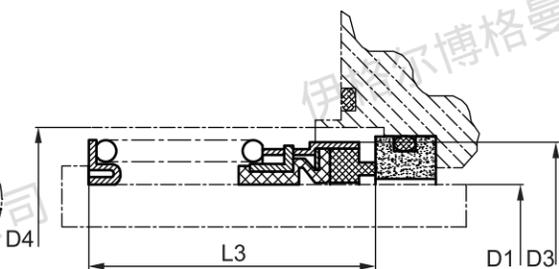
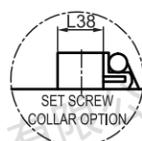
Temperature:  $-20^{\circ}\text{C}+120^{\circ}\text{C}$   
 Speed:  $\leq 15\text{m/s}$   
 Pressure:  $\leq 10\text{bar}$   
 Standard Size:  $0.5-3.000''$

#### 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:  $-20^{\circ}\text{C}+120^{\circ}\text{C}$   
 线速度:  $\leq 15\text{m/s}$   
 密封腔压力:  $\leq 14\text{bar}$   
 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:  $-20^{\circ}\text{C}+120^{\circ}\text{C}$   
 Speed:  $\leq 15\text{m/s}$   
 Pressure:  $\leq 14\text{bar}$   
 Standard size:  $1''-4.0''$

#### Material:

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

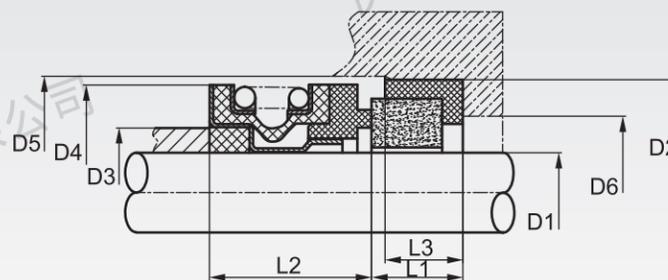
Size	D1	D3	D4	L3	L38
1.000	1.000	1.500	1.750	1.562	0.375
1.125	1.125	1.625	1.875	1.625	0.375
1.250	1.250	1.812	2.000	1.625	0.375
1.375	1.375	1.875	2.125	1.687	0.375
1.500	1.500	2.000	2.250	1.687	0.375
1.625	1.625	2.250	2.500	2.000	0.375
1.750	1.750	2.375	2.625	2.000	0.375
1.875	1.875	2.500	2.750	2.125	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

符合ISO3069 DIN24960 GB6556标准

# 橡胶波纹管机械密封

## Elastomer Bellow Mechanical Seals

### GB6



#### 技术参数:

密封腔温度:  $-45^{\circ}\text{C}+205^{\circ}\text{C}$   
 线速度:  $\leq 5\text{m/s}$   
 密封腔压力:  $\leq 5\text{bar}$   
 轴径尺寸:  $0.375''-1.0''$

#### Operating Limits:

Temperature:  $-45^{\circ}\text{C}+205^{\circ}\text{C}$   
 Speed:  $\leq 5\text{m/s}$   
 Pressure:  $\leq 5\text{bar}$   
 Standard Size:  $0.375''-1.0''$

#### 材料组合:

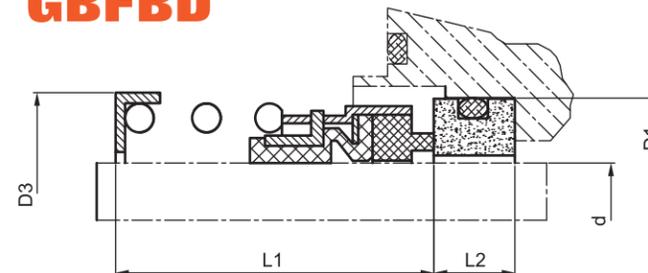
密封面: 石墨, 反应碳化硅, 无压碳化硅, 碳化钨  
 辅助密封: 丁腈橡胶, 氟橡胶, 乙丙橡胶, 四丙氟橡胶  
 弹簧及金属件: 304, 316

#### 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:  $-20^{\circ}\text{C}+120^{\circ}\text{C}$   
 线速度:  $\leq 15\text{m/s}$   
 密封腔压力:  $\leq 14\text{bar}$   
 轴径尺寸:  $16-120\text{mm}$

#### Operating Limits:

Temperature:  $-20^{\circ}\text{C}+120^{\circ}\text{C}$   
 Speed:  $\leq 15\text{m/s}$   
 Pressure:  $\leq 14\text{bar}$   
 Standard Size:  $16-120\text{mm}$

#### 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	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



## 四氟波纹管机械密封

## MACHINERY SEAL

符合ISO3069 DIN24960 GB6556标准

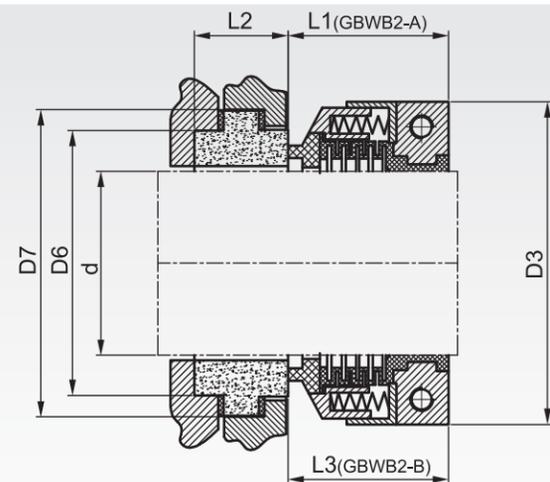
## 四氟波纹管机械密封



### GBWB2

### GB20/20R

### PTFE Bellow Mechanical Seals



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

#### 技术参数:

密封腔温度: -20°C+120°C  
 线速度: ≤10m/s  
 密封腔压力: ≤5bar  
 轴径尺寸: 25-65mm  
 (1"-2.375")

#### Operating Limits:

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

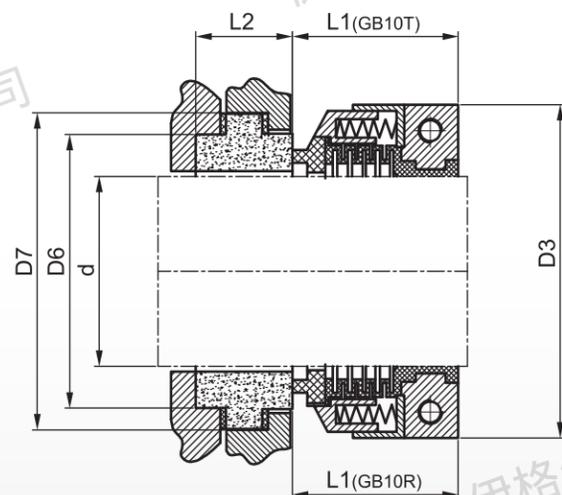
#### 材料组合:

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

#### Material:

Seal ring: Car, SiC, Ssic, PTFE  
 Secondary seal: PTFE  
 Spring and metal parts: 304, 316

### GB10R/10T



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

#### 技术参数:

密封腔温度: -20°C+120°C  
 线速度: ≤10m/s  
 密封腔压力: ≤5bar  
 轴径尺寸: 25-65mm  
 (1"-2.375")

#### Operating Limits:

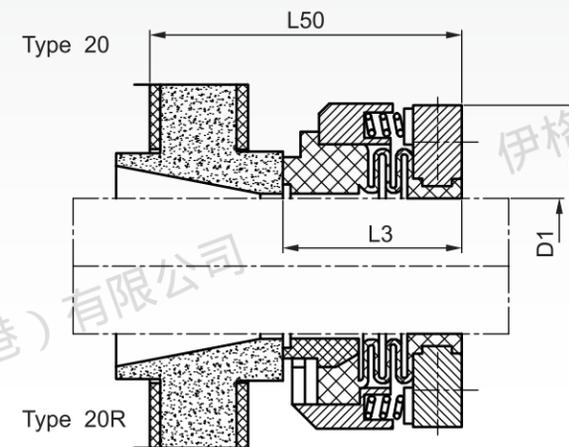
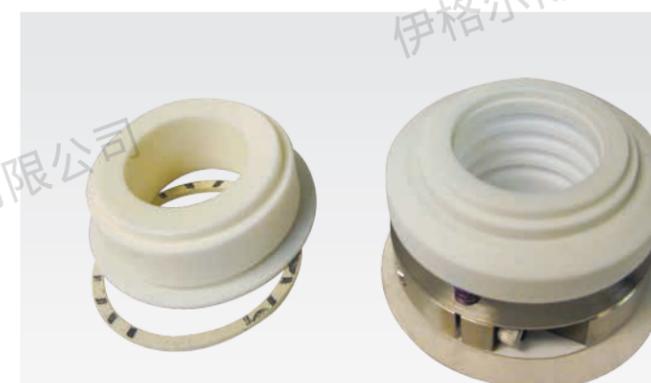
Temperature: -20°C+120°C  
 Speed: ≤10m/s  
 Pressure: ≤5bar  
 Standard size: 25-65mm or  
 1"-2.375"

#### 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

#### Material:

Seal ring: Car, SiC, Ssic, PTFE  
 Secondary seal: PTFE  
 Spring and metal parts: 304, 316



#### 技术参数:

密封腔温度: -20°C+120°C  
 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°C+120°C  
 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



## 金属波纹管机械密封

## MACHINERY SEAL

符合ISO3069 DIN24960 GB6556标准

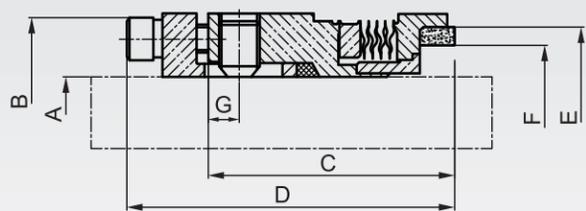
## 金属波纹管机械密封



### Metal Bellow Mechanical Seals

### Metal Bellow Mechanical Seals

# GB606



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	

#### 技术参数:

密封腔温度: -20°C+425°C  
 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

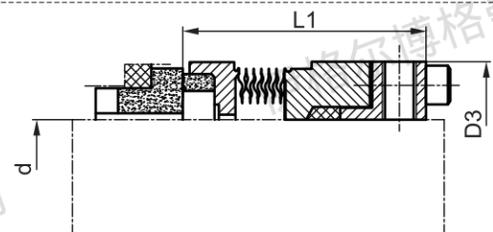
#### Operating Limits:

Temperature:-20°C+425°C  
 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

# GB609



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	79.38	44.65
2.625	66.68	82.55	45.44
2.750	69.85	85.73	45.44
2.875	73.03	88.90	47.83
3.000	76.20	92.08	47.83
3.125	79.38	95.25	47.83
3.250	82.55	98.43	47.83
3.375	85.73	101.60	47.83
3.500	88.90	104.78	47.83
3.625	92.08	107.95	47.83
3.750	95.25	111.13	47.83
3.875	98.43	114.30	47.83
4.000	101.60	117.48	47.83

#### 技术参数:

密封腔温度: -20°C+425°C  
 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

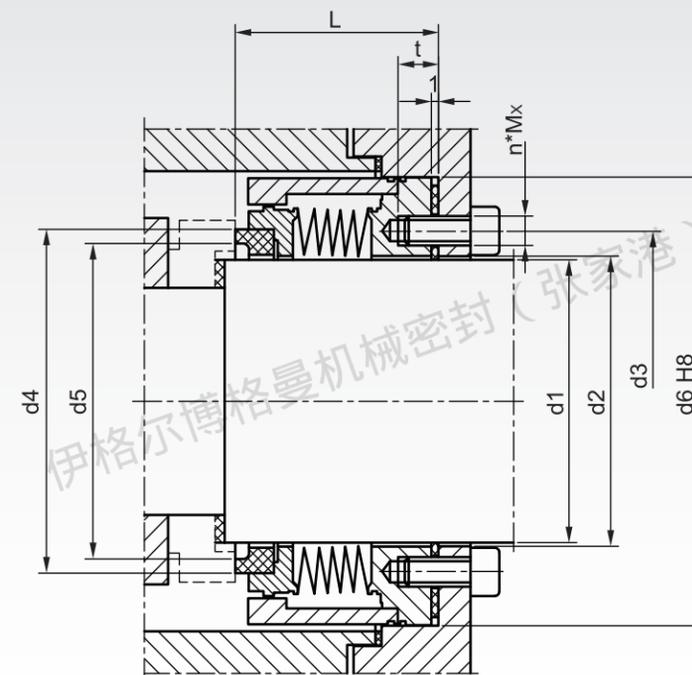
#### Operating Limits:

Temperature:-20°C+425°C  
 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

# GBMFL65



#### 技术参数:

密封腔温度: -20°C+400°C  
 线速度: ≤50m/s  
 密封腔压力: ≤25bar  
 轴径尺寸: 16-100mm

#### Operating Limits:

Temperature:-20°C+400°C  
 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

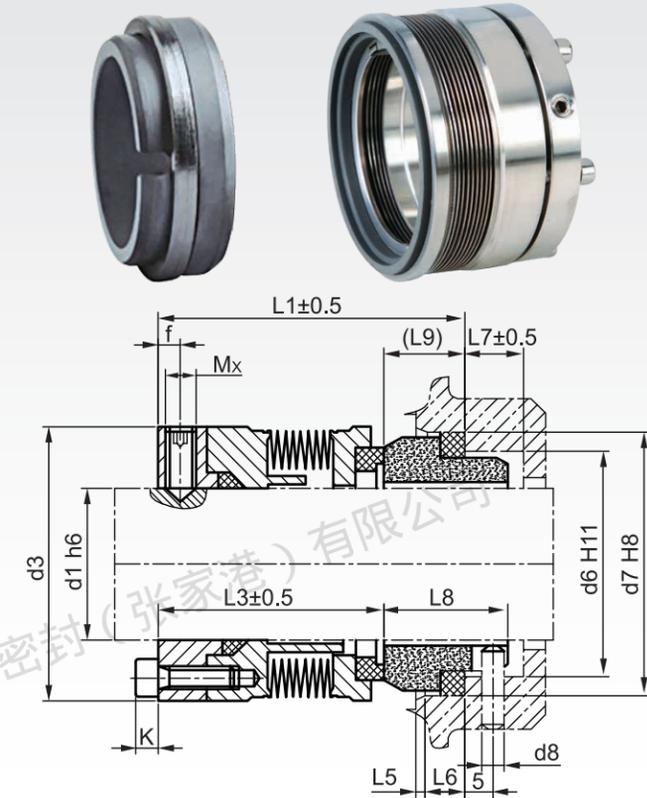


# 金属波纹管机械密封

# MACHINERY SEAL

## Metal Bellow Mechanical Seals

### GBMFLWT



**技术参数:**

密封腔温度: -40°C+400°C  
 线速度: ≤20m/s  
 密封腔压力: ≤25bar  
 轴径尺寸: 16-100mm

**Operating Limits:**

Temperature:-40°C+400°C  
 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

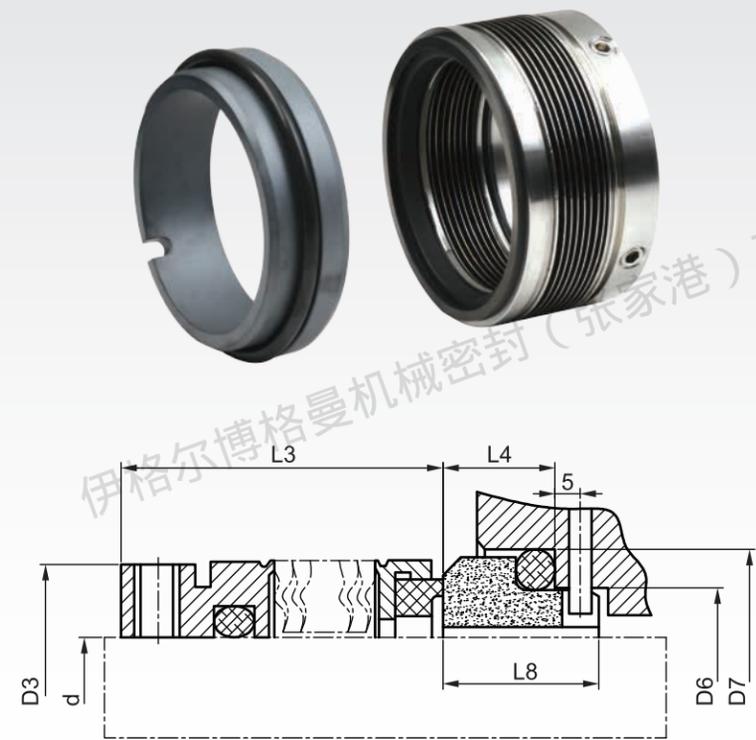


# 符合ISO3069 DIN24960 GB6556标准

# 金属波纹管机械密封

## Metal Bellow Mechanical Seals

### GBMFL85N



**技术参数:**

密封腔温度: -40°C+220°C  
 线速度: ≤20m/s  
 密封腔压力: ≤25bar  
 轴径尺寸: 16-100mm

**Operating Limits:**

Temperature:-40°C+220°C  
 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



# 金属波纹管机械密封

# MACHINERY SEAL

# 符合ISO3069 DIN24960 GB6556标准 金属波纹管机械密封



## Metal Bellow Mechanical Seals

## Metal Bellow Mechanical Seals

### GBYE400

#### 技术参数:

密封腔温度: -240°C+425°C  
 线速度: ≤50m/s  
 密封腔压力: ≤35bar  
 轴径尺寸: 14-90mm

#### Operating Limits:

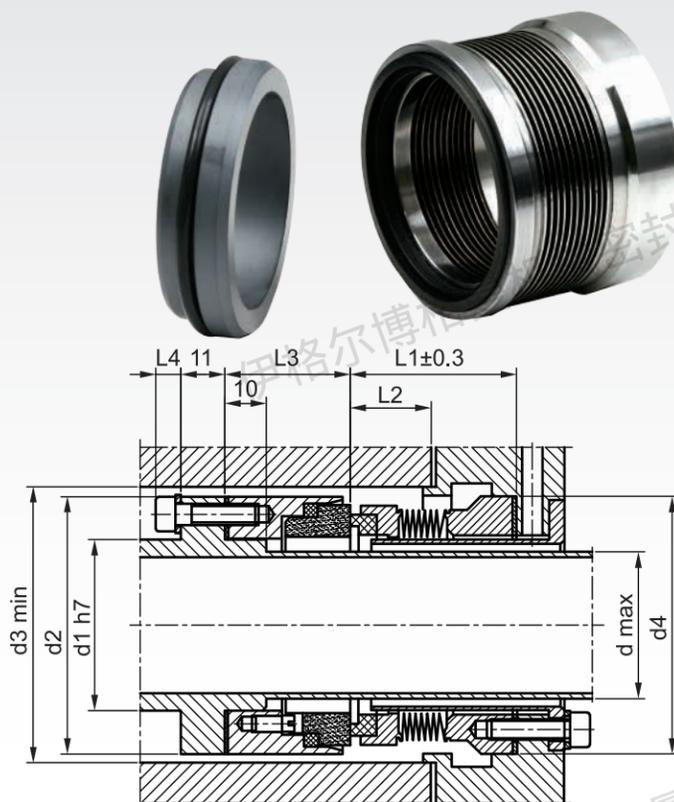
Temperature: -240°C+425°C  
 Speed: ≤50 m/s  
 Pressure: ≤35 bar  
 Standard Size: 14-90mm

#### 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°C+220°C  
 线速度: ≤20m/s  
 密封腔压力: ≤25bar  
 轴径尺寸: 18-115mm (0.75-5.25")

#### Operating Limits:

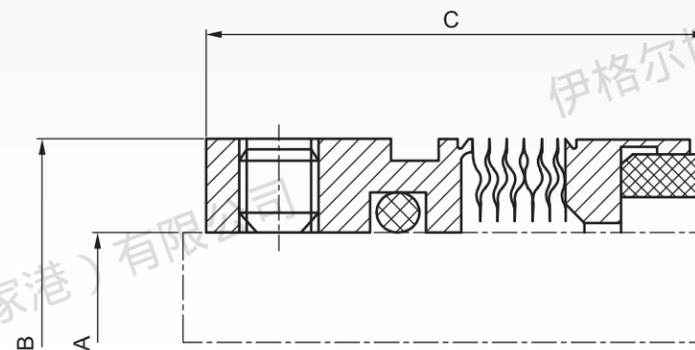
Temperature: -40°C+220°C  
 Speed: ≤20mps  
 Pressure: ≤ 25bar  
 Standard size: 18-115mm or 0.75"-5.25"

#### 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, Titanium



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

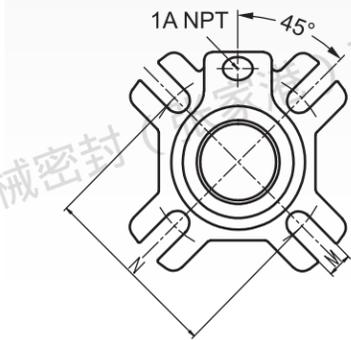
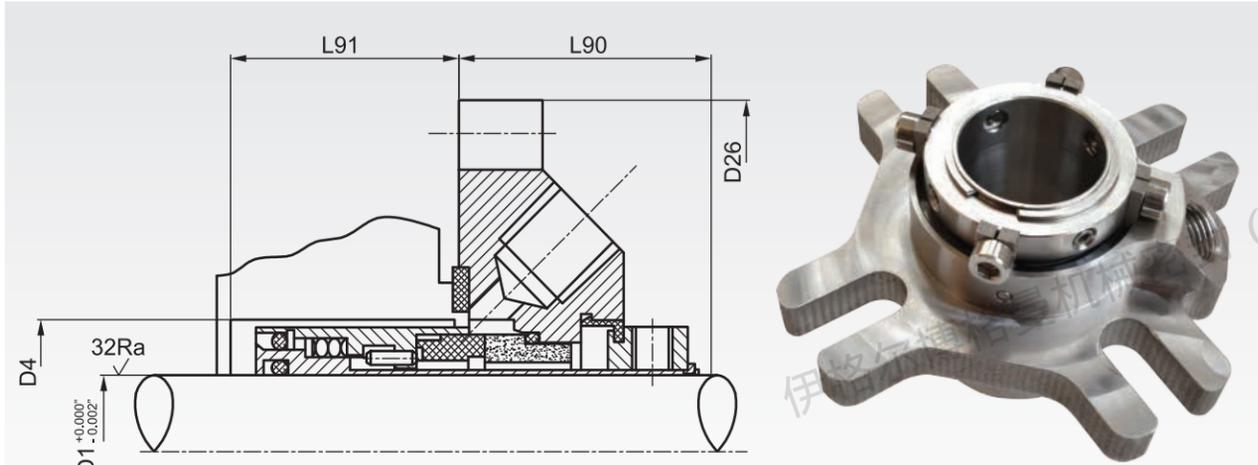
Size	A	B	C
0.750	0.750	1.312	1.250
0.875	0.875	1.437	1.250
0.937	0.937	1.500	1.250
1.000	1.000	1.562	1.250
1.125	1.125	1.687	1.250
1.250	1.250	1.812	1.312
1.375	1.375	1.937	1.437
1.500	1.500	2.062	1.437
1.625	1.625	2.187	1.437
1.750	1.750	2.312	1.437
1.875	1.875	2.437	1.500
2.000	2.000	2.562	1.500
2.125	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



集装箱式机械密封  
Cartridge Mechanical Seals

MACHINERY SEAL

GB4610



**技术参数:**  
密封腔温度: -20°C+205°C  
线速度: ≤15m/s  
密封腔压力: ≤21bar  
轴径尺寸: 24-70mm (1-2.75")

**Operating Limits:**

Temperature: -20°C+205°C  
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(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

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

符合ISO3069 DIN24960 GB6556标准 集装箱式机械密封

Cartridge Mechanical Seals

GB4620/4620P

**技术参数:**

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

**Operating Limits:**

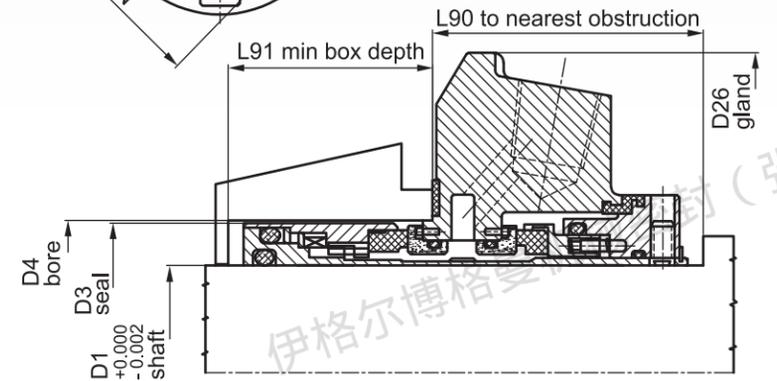
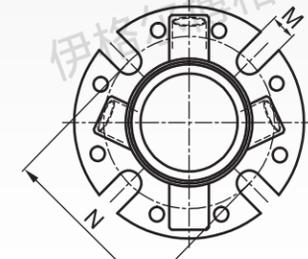
Temperature: -50°C+204°C  
Speed: ≤23m/s  
Pressure: ≤20bar  
Standard Size: 1"-2.75"

**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)

Cartridge Mechanical Seals

Cartridge Mechanical Seals

特点:

- 集装箱式设计
- 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。
- 集装箱式设计, 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

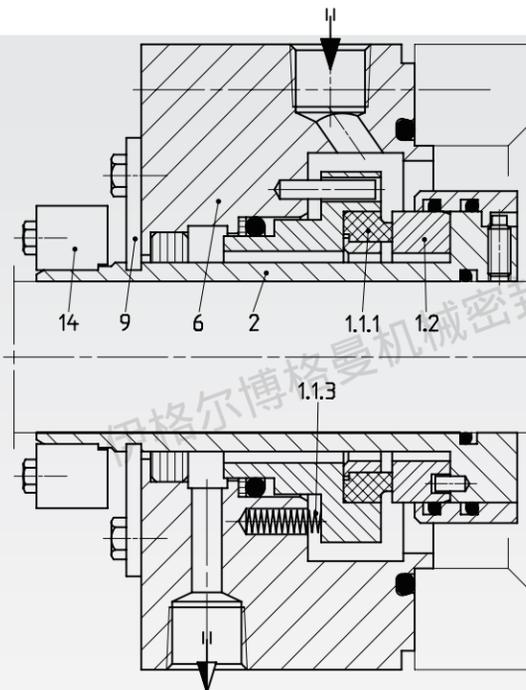
技术参数:

轴径轴径尺寸:  $d1^* = 40 \sim 250 \text{mm}$  (1.57"~9.84")  
 压力:  $p1 = 150 \text{bar}$  (2175PSI)  
 温度:  $t = 200^\circ\text{C}$  (394° F)  
 滑动速度:  $v_g = 60 \text{m/s}$  (197 ft/s)  
 轴向移动:  $\pm 3 \text{mm}$

Operating Limits:

Shaft diameter:  $d1^* = 40 \sim 250 \text{mm}$  (1.57"- 9.84")  
 Pressure:  $p1 = 150 \text{bar}$  (2,175 PSI)  
 Temperature:  $t = 200^\circ\text{C}$  (394° F)  
 Sliding velocity:  $v_g = 60 \text{m/s}$  (197 ft/s)  
 Axial movement:  $\pm 3 \text{mm}$

\*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, Titanium

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:  $p1 = 200 \text{bar}$  (2900PSI)

SH(V)I Same design as SH(V) but with loosely inserted seal face for extreme applications.

Pressure:  $p1 = 200 \text{bar}$  (2,900 PSI)

GBSHF/SHP

特点:

- 集装箱式设计
- 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。
- 集装箱式设计, 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 velocities and 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:  $d1^* = 40 \sim 250 \text{毫米}$  (1.57"~9.84")  
 压力:  $p1 = 50 \text{bar}$  (725PSI)  
 温度:  $t = 300^\circ\text{C}$  (572° F)  
 滑动速度:  $v_g = 60 \text{m/s}$  (197 ft/s)  
 轴向移动:  $\pm 3 \text{mm}$

Operating Limits:

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

推荐应用:

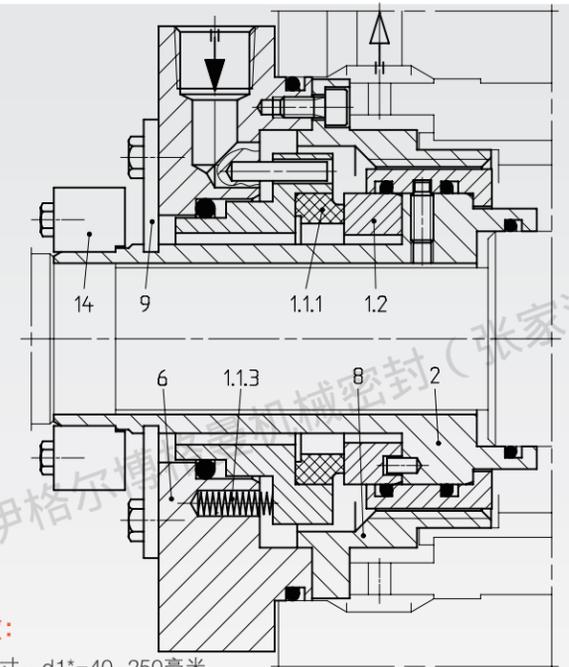
石油和天然气行业  
 精炼技术  
 化学工业  
 热水  
 酸性水  
 苛性钠  
 胺  
 结晶介质  
 原油  
 工艺用水  
 原油供给泵  
 注入泵  
 多相泵

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:

- 集装箱式设计
- 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

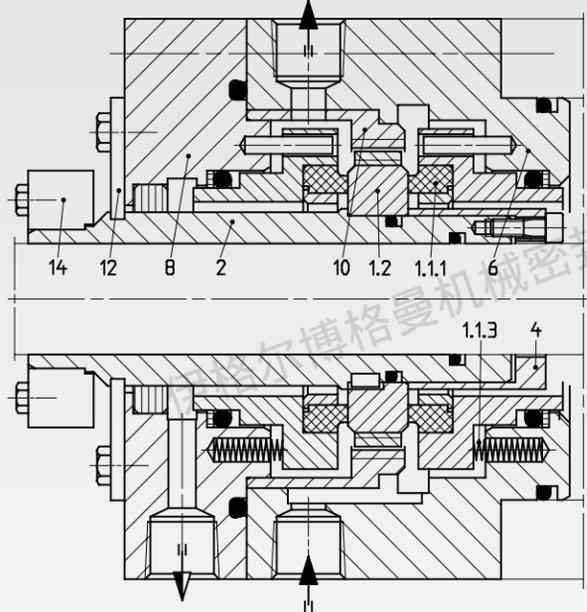
- Cartridge design
- Dual seal
- Balanced
- Integrated pumping device
- Stationary spring loaded unit
- Shrink-fitted seal face
- One rugged seat
- Multiple springs arrangement

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。
- 集装箱式设计,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 parts to 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°C (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)

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

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)

材料组合:

密封面: 石墨, 浸铈碳, 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

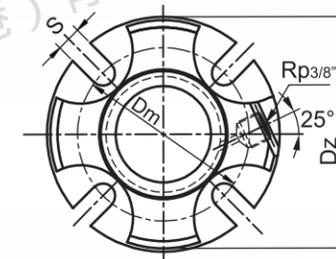
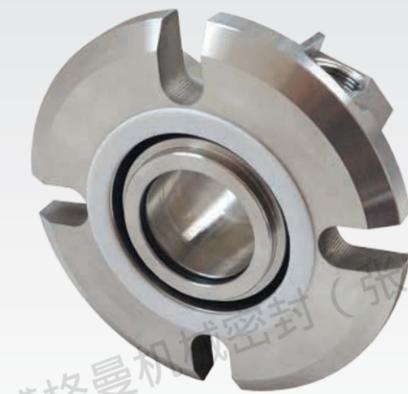
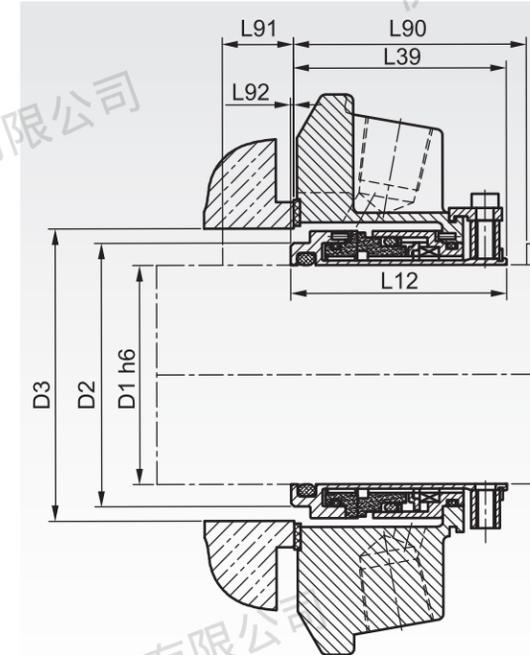
Material:

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, Titanium

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

GB5610



技术参数:

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

Operating Limits:

Temperature: -30°C+205°C  
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
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

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



# 集装箱机械密封

# MACHINERY SEAL

符合ISO3069 DIN24960 GB6556标准

# 集装箱机械密封

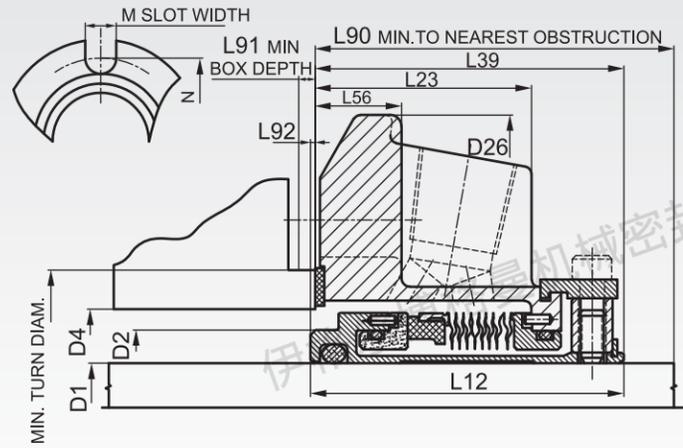


## GB5615

## Cartridge Mechanical Seals

## Cartridge Mechanical Seals

## GB5620



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
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
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
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
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
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

\*\*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	75	85.3	148.8	60.3	40.7	58.7	15.1	60.3	4.7	1.6	17.4	113.5
50	61.9	63.7	76.6	139.7	60.3	40.7	58.7	15.1	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

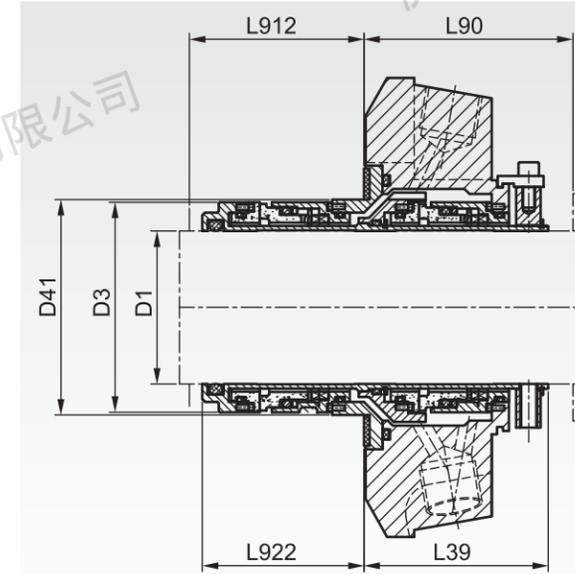
\*Not applicable. Completely outside mounted.

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

Operating Limits:  
Temperature:-30°C+205°C  
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-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	3.875
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	2.625	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	9.500	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	6.250	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

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

Operating Limits:  
Temperature:-30°C+205°C  
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(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					



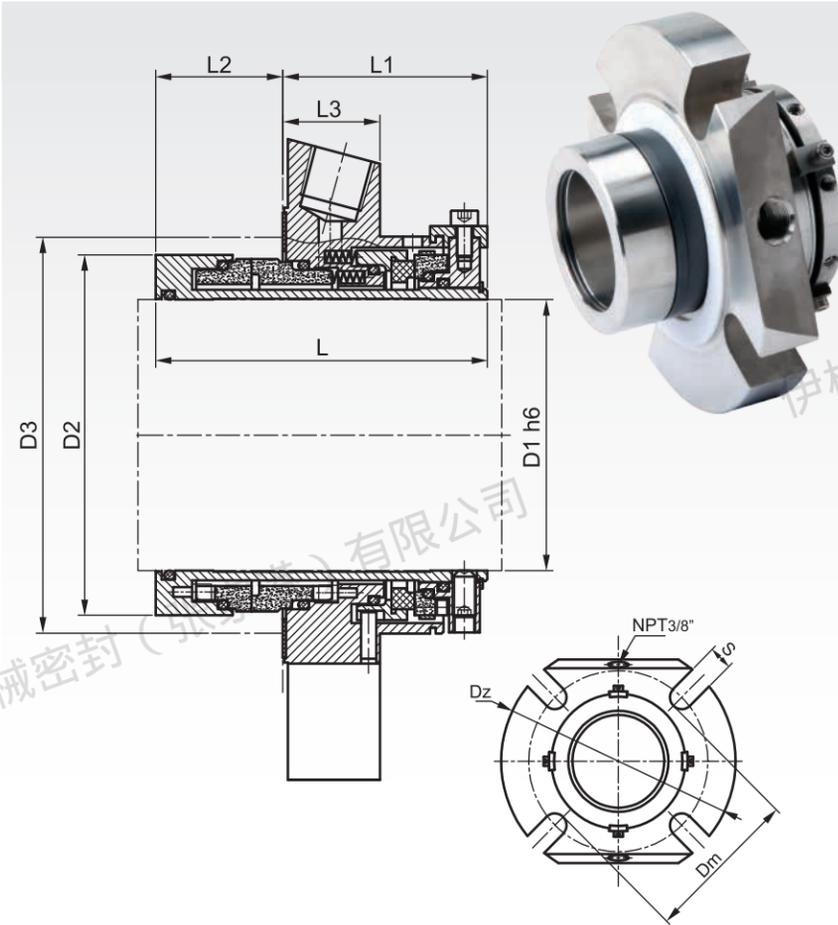
集装箱式机械密封  
Cartridge Mechanical Seals

MACHINERY SEAL

符合ISO3069 DIN24960 GB6556标准 集装箱式机械密封  
Cartridge Mechanical Seals



GBCartex-DN



**技术参数:**  
密封腔温度:  $-50^{\circ}\text{C}+204^{\circ}\text{C}$   
线速度:  $\leq 23\text{m/s}$   
密封腔压力:  $\leq 20\text{bar}$   
轴径尺寸: 25-100mm

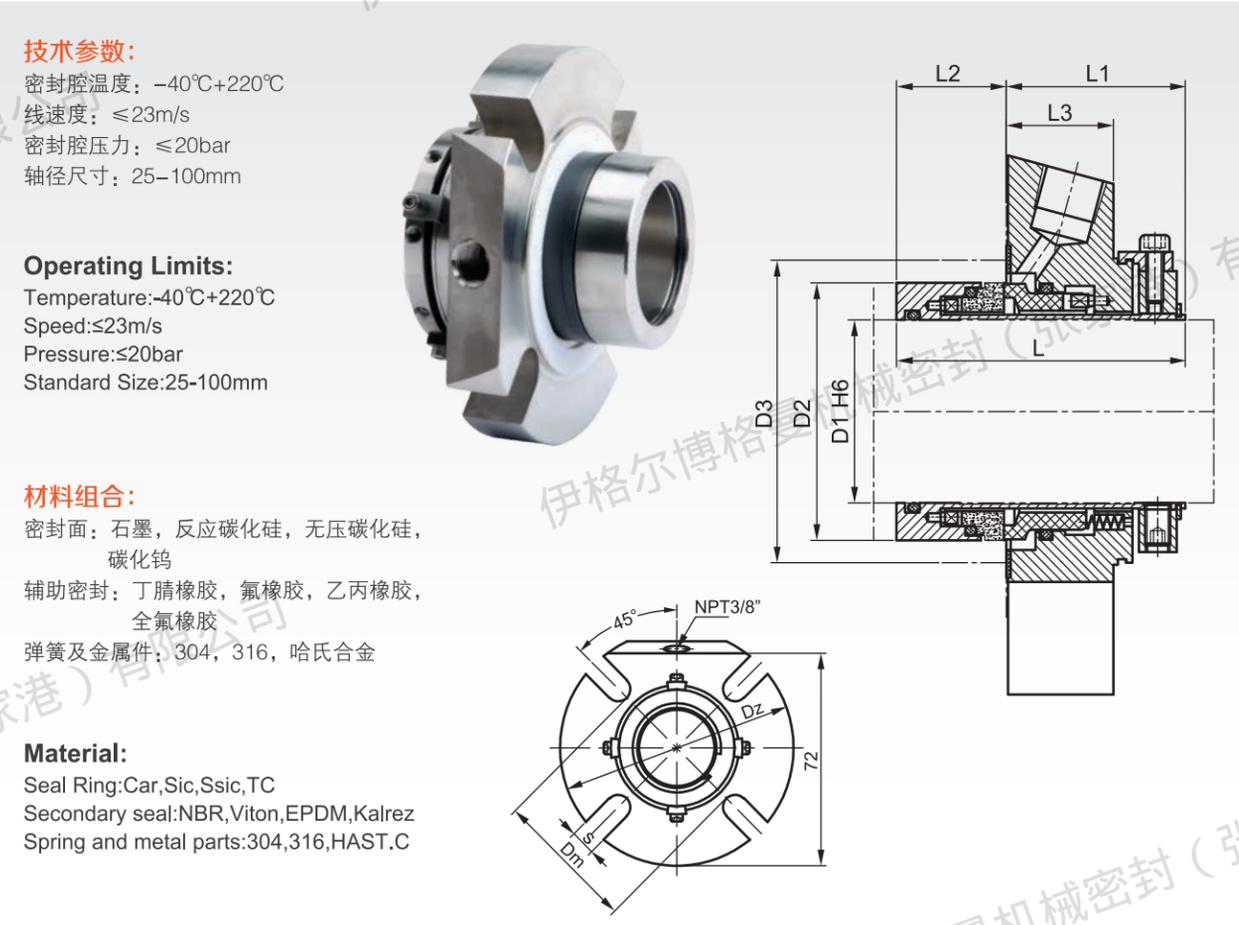
**Operating Limits:**  
Temperature:  $-50^{\circ}\text{C}+204^{\circ}\text{C}$   
Speed:  $\leq 23\text{m/s}$   
Pressure:  $\leq 20\text{bar}$   
Standard Size: 25-100mm

**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:  $-40^{\circ}\text{C}+220^{\circ}\text{C}$   
线速度:  $\leq 23\text{m/s}$   
密封腔压力:  $\leq 20\text{bar}$   
轴径尺寸: 25-100mm

**Operating Limits:**  
Temperature:  $-40^{\circ}\text{C}+220^{\circ}\text{C}$   
Speed:  $\leq 23\text{m/s}$   
Pressure:  $\leq 20\text{bar}$   
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



集装箱式机械密封  
Cartridge Mechanical Seals

MACHINERY SEAL

符合ISO3069 DIN24960 GB6556标准 集装箱式机械密封  
Cartridge Mechanical Seals



GB Converter II

技术参数:

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

Operating Limits:

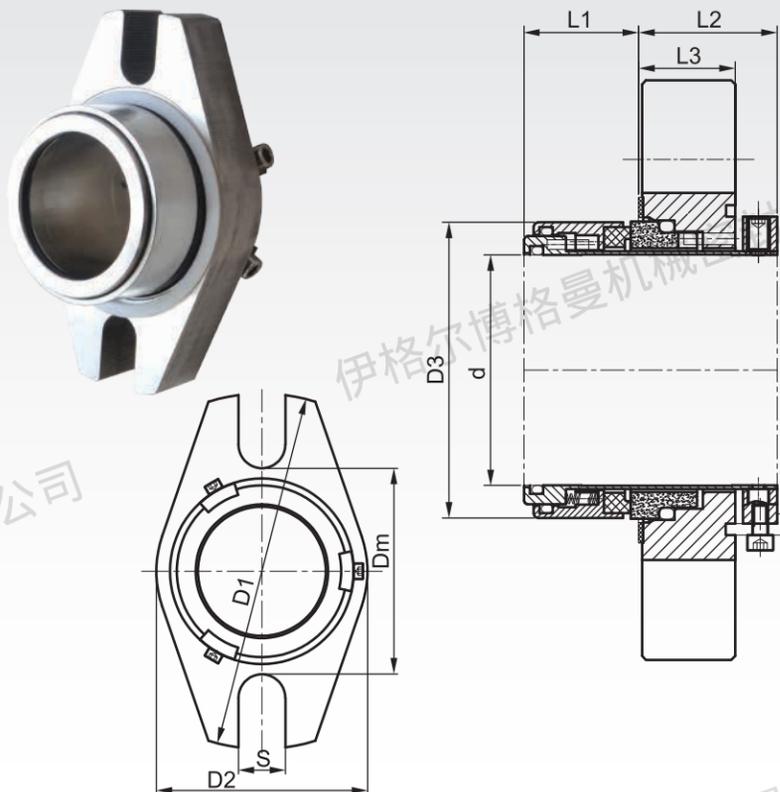
Temperature:-20°C+220°C  
Speed:≤15m/s  
Pressure:≤25bar  
Standard Size:24-100mm or 1.0"-4.0"

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:

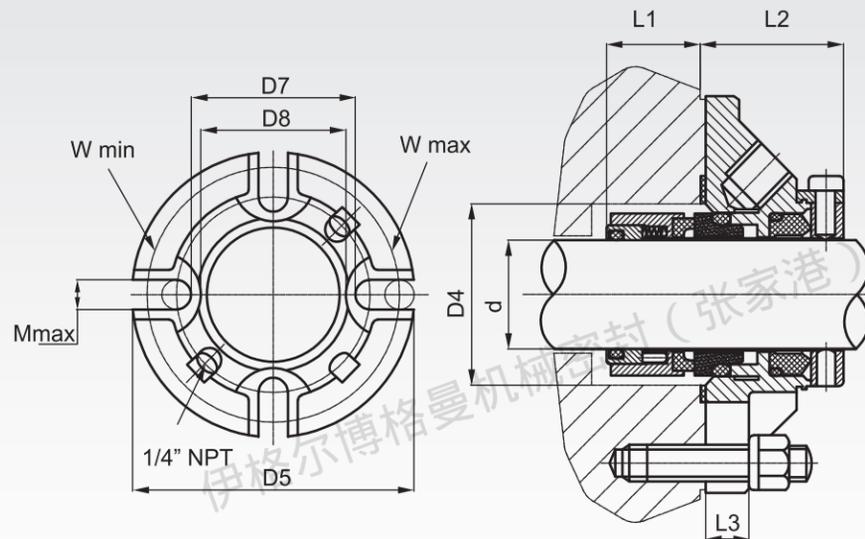
Seal ring:Car,Sic,Ssic,TC  
Secondary seal:NBR,Viton,EPDM,Kalrez  
Spring and metal parts:304,316,HAST.C



GB-Converter 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-Converter 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°C+220°C  
线速度: ≤15m/s  
密封腔压力: ≤25bar  
轴径尺寸: 24-125mm

Operating Limits:

Temperature:-20°C+220°C  
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°C+200°C
密封腔压力: ≤12bar
线速度: ≤20m/s
轴径尺寸: 35-75mm

Operating Limits:

Temperature:-40°C+200°C
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

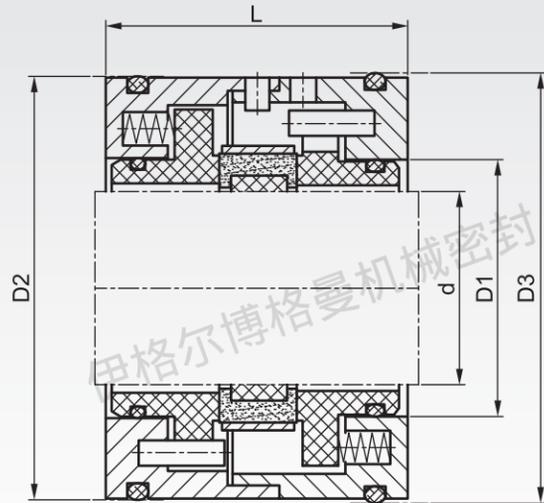


Table with 5 columns: Size, D1, D2, D3, L1. Rows for sizes 35, 50, 75.

GBH75VN

技术参数:

密封腔温度: -40°C+220°C
线速度: ≤23m/s
密封腔压力: ≤40bar
轴径尺寸: 20-110mm

Operating Limits:

Temperature:-40°C+220°C
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

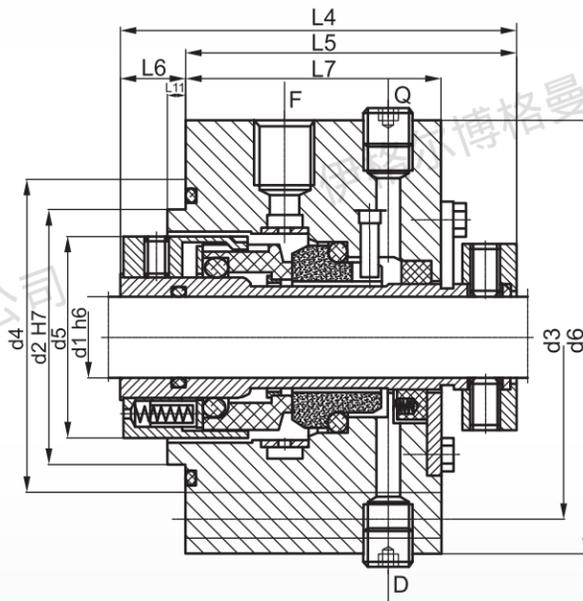


Table with 15 columns: Size, d1, d2, d3, d4, d5, d6, L4, L5, L6, L7, L11, Overall length. Rows for sizes 20 to 110.

GBHR

技术参数:

密封腔温度: -20°C+160°C
线速度: ≤10m/s
密封腔压力: ≤16bar
轴径尺寸: 20-250mm

Operating Limits:

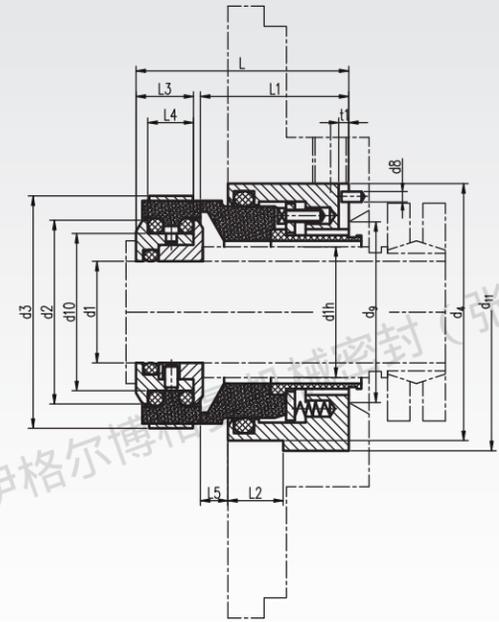
Temperature:-20°C+160°C
Speed:≤10m/s
Pressure:≤16bar
Shaft diameter:20-250 mm

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:

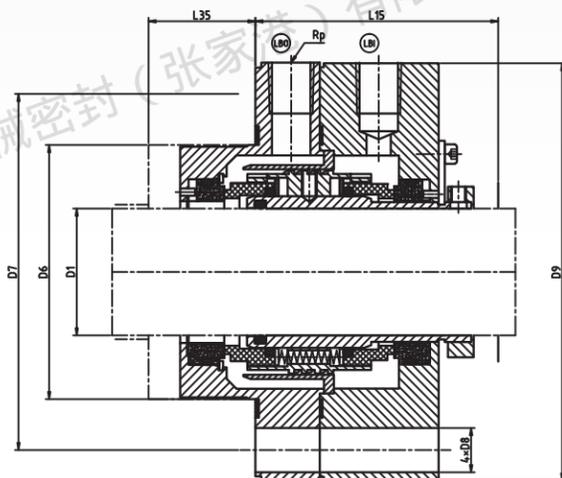
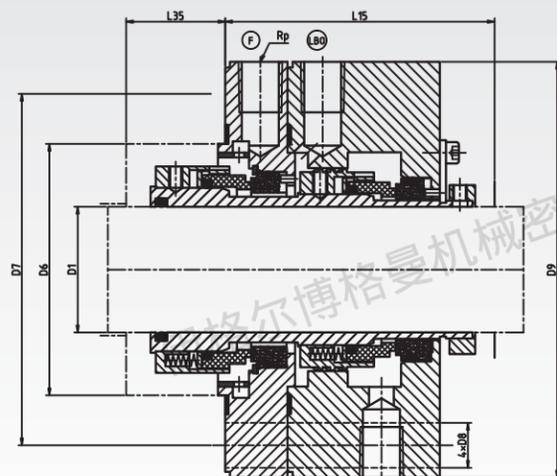
Seal face:Car、Sic、Ssic、TC
Secondary seal:NBR,Viton,EPDM, Kalrez
Spring and metal parts:304,316 HAST.C



Large table with 25 columns: 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. Rows for sizes 20 to 250.



### GBH75VK/H75VK2



**技术参数:**

密封腔温度: -50°C~204°C;  
 线速度: ≤23m/s  
 密封腔压力: ≤32bar  
 轴径尺寸: 20-110mm

**Operating Limits:**

Temperature: -50°C~204°C;  
 Speed: ≤23m/s  
 Pressure: ≤32bar  
 Standard Size: 20-110mm

**材料组合:**

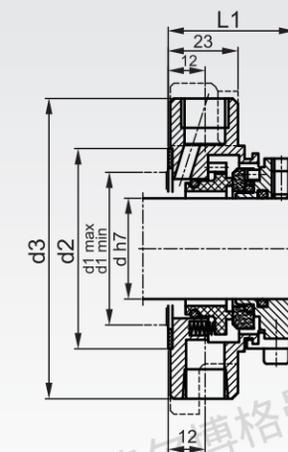
密封面: 石墨, 反应碳化硅, 无压碳化硅, 碳化钨  
 辅助密封: 丁腈橡胶, 氟橡胶, 乙丙橡胶, 全氟橡胶  
 弹簧及金属件: 304, 316, 哈氏合金

**Material:**

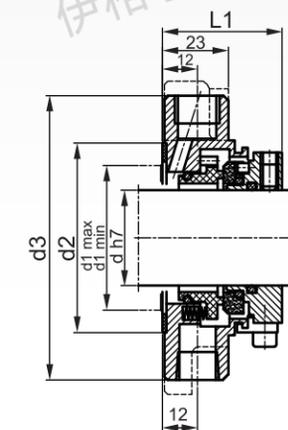
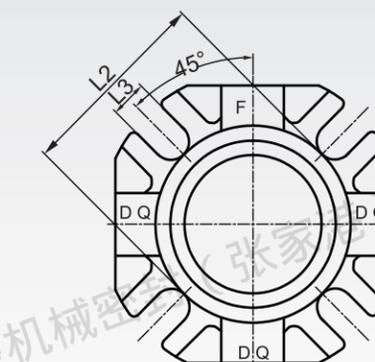
Seal Ring: Car, Sic, Ssic, TC  
 Secondary seal: NBR, Viton, EPDM, Kalrez  
 Spring and metal parts: 304, 316, HAST.C

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"

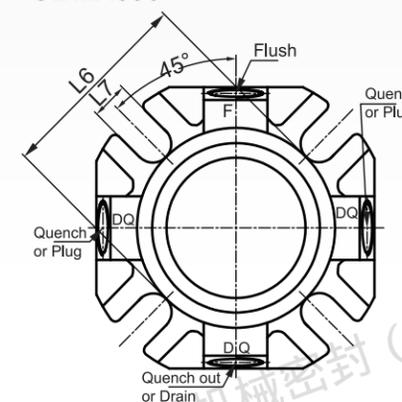
### GBMA290/MA390



**GBMA290**



**GBMA390**



**技术参数:**

密封腔温度: -20°C+160°C  
 线速度: ≤20m/s  
 密封腔压力: ≤16bar  
 轴径尺寸: 20-100mm

**Operating Limits:**

Temperature: -20°C+160°C  
 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



## 集装箱式机械密封

## MACHINERY SEAL

符合ISO3069 DIN24960 GB6556标准

## 集装箱式机械密封



### GBMt看-D

### Cartridge Mechanical Seals

### Cartridge Mechanical Seals

### GBX-100/X-200



#### 技术参数:

密封腔温度:  $-40^{\circ}\text{C}+220^{\circ}\text{C}$   
 线速度:  $\leq 20\text{m/s}$   
 密封腔压力:  $\leq 25\text{bar}$   
 轴径尺寸: 25-80mm

#### 材料组合:

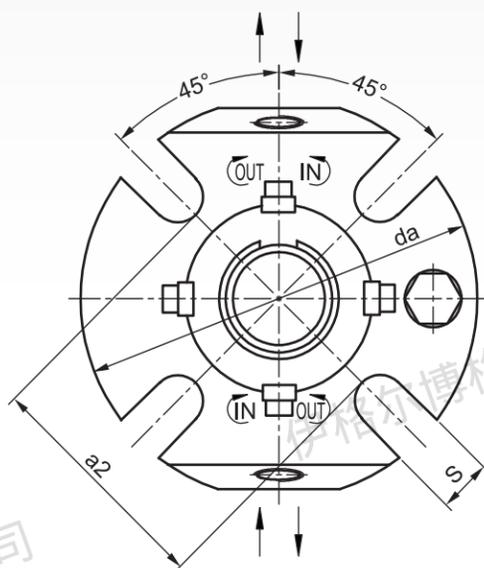
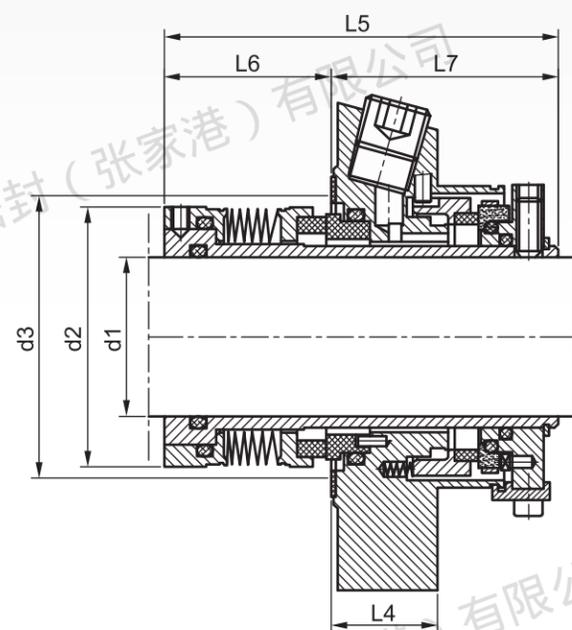
密封面: 石墨, 反应碳化硅, 无压碳化硅, 碳化钨  
 辅助密封: 丁腈橡胶, 氟橡胶, 乙丙橡胶, 全氟橡胶  
 弹簧及金属件: 304, 316, 哈氏合金

#### Operating Limits:

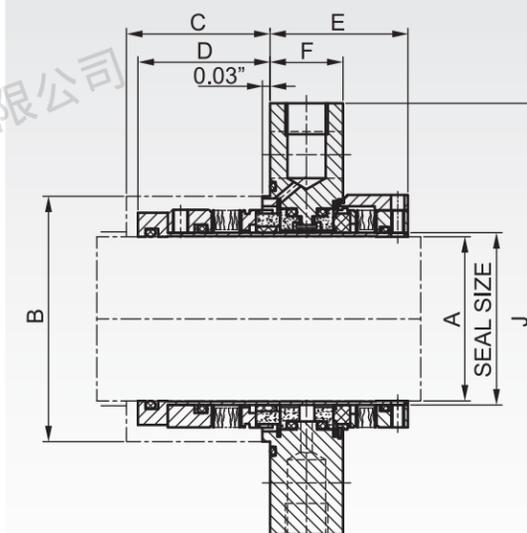
Temperature:  $-40^{\circ}\text{C}+220^{\circ}\text{C}$   
 Speed:  $\leq 20\text{ m/s}$   
 Pressure:  $\leq 25\text{ bar}$   
 Shaft diameter: 25 - 80 mm

#### Material:

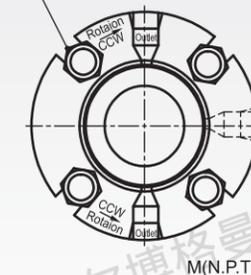
Seal Ring: Car, Sic, Ssic, TC  
 Secondary seal: NBR, Viton, EPDM, Kalrez  
 Spring and metal parts: 304, 316, HAST.C



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



4-G $\Phi$  studs equally spaced on HB.C.  
 Note: Washers may be required for stud sizes smaller than G



#### 技术参数:

密封腔温度:  $-20^{\circ}\text{C}+180^{\circ}\text{C}$   
 线速度:  $\leq 15\text{m/s}$   
 密封腔压力:  $\leq 5\text{bar}$   
 轴径尺寸: 1.125"-4.125"mm

#### Operating Limits:

Temperature:  $-20^{\circ}\text{C}+180^{\circ}\text{C}$   
 Speed:  $\leq 15\text{m/s}$   
 Pressure:  $\leq 5\text{bar}$   
 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



集装箱式机械密封  
Cartridge Mechanical Seals

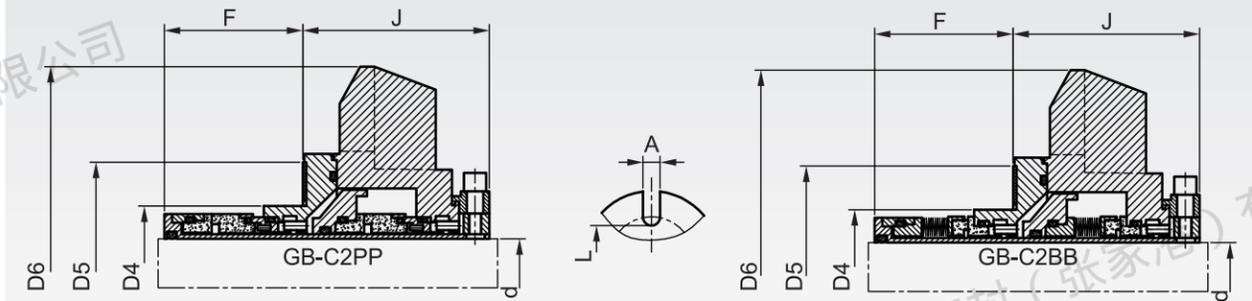
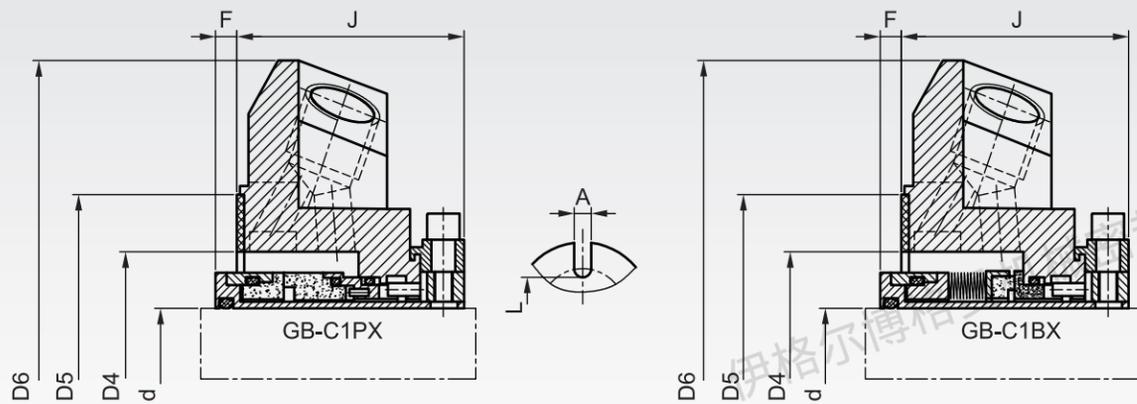
MACHINERY SEAL

符合ISO3069 DIN24960 GB6556标准 集装箱式机械密封  
Cartridge Mechanical Seals



GBC1PX/C1BX

GBC2PP/C2BB



**技术参数:**  
密封腔温度: -20°C+220°C  
线速度: ≤16m/s  
密封腔压力: ≤25bar  
轴径尺寸: 25-70mm (1-2.75")

**技术参数:**  
密封腔温度: -20°C+220°C  
线速度: ≤16m/s  
密封腔压力: ≤25bar  
轴径尺寸: 25-70mm (1-2.75")

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

**Operating Limits:**  
Temperature: -20°C+220°C  
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

**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

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

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

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

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

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

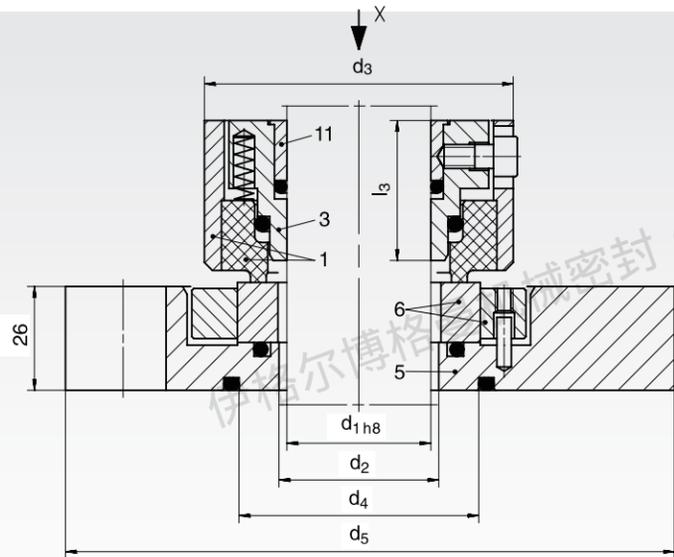
For top entry drives, on request side drive possible  
Dry-running  
Single and double seals  
Balanced  
Outboard  
Multiple springs rotating  
Independent of direction of rotation

优点:

可作为散件或者集装箱式。  
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:

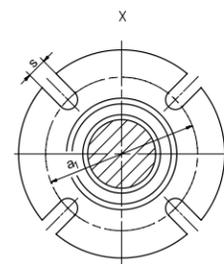
Seal face: Carbon graphite, FDA conform  
Seat: Silicon carbide  
Secondary seals and metal parts according to application and customer's specifications.

推荐应用:

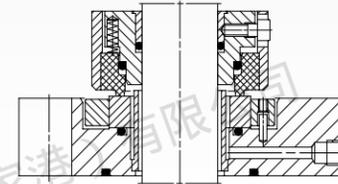
化学工业  
制药工业  
餐饮业  
单密封无毒介质  
双重密封有毒介质  
搅拌器  
反应堆

Recommended applications

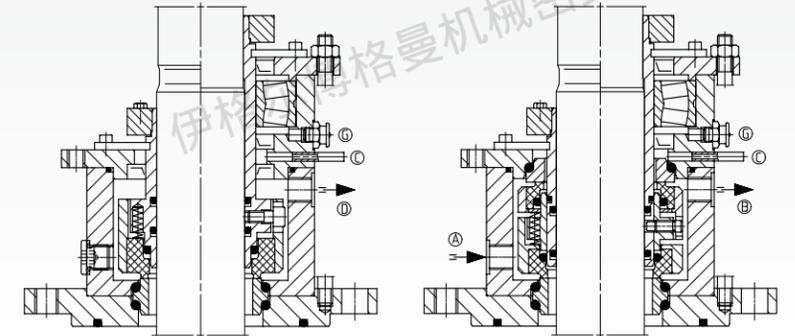
Chemical industry  
Pharmaceutical industry  
Food and beverage industry  
Non-toxic media with single seal  
Toxic media with double seal  
Agitators  
Reactors



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SeccoMix481  
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	243	44.5	43.5	190	225	14
125	125	129	163	150	257	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



## 集装箱式机械密封

### Cartridge Mechanical Seals

## MACHINERY SEAL

符合ISO3069 DIN24960 GB6556标准

## 集装箱式机械密封

### Cartridge Mechanical Seals



## 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:

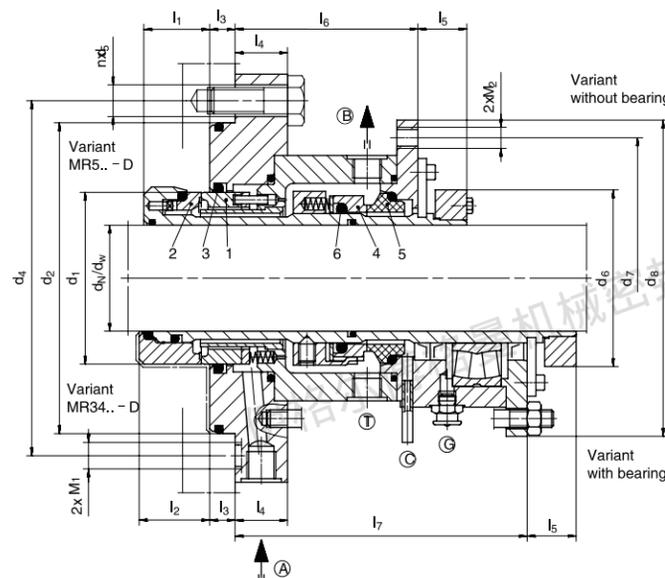
Smooth surface with no empty spaces  
CIP-/SIP  
(Cleaning in Place, Sterilization in Place)  
Sliding materials FDA conform  
Variant for sterile applications available

### 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, Titanium



### 技术参数:

轴径:  $dN/dw=30\sim 200$  (500) mm  
轴向偏移轴/壳体:  $dN/dw 30\sim 60\text{mm}$  最大  $\pm 1.5\text{mm}$   
 $dN/dw > 60\text{mm}$ : 最大  $\pm 2.0\text{mm}$   
径向偏移轴/壳体: 最大  $\pm 0.3\text{mm}$   
压力:  $p1$  (介质) = 真空~14 (23) bar  
 $p3$  (缓冲液) = 最大16 (25) bar  
 $\Delta p3 > p1$  = 最小2bar, 最大10bar  
温度:  $t1$  (介质) =  $-20^\circ\text{C}\sim +200$  (300)  $^\circ\text{C}$   
滑动速度:  $vg=20\text{ m/s}$  (66 ft/s)

### Operating Limits:

Shaft diameter:  $dN/dw = 30\sim 200$  (500) mm  
Axial offset shaft/housing:  
 $dN/dw 30\sim 60\text{mm}$ : max.  $\pm 1.5\text{mm}$   
 $dN/dw > 60\text{mm}$ : max.  $\pm 2.0\text{mm}$   
Radial offset shaft/housing: max.  $\pm 0.3\text{mm}$   
Pressure:  $p1$  (media) = vacuum-14 (23) bar  
 $p3$  (buffer fluid) = max. 16 (25) bar  
 $\Delta p3 > p1$  = min. 2 bar, max. 10 bar  
Temperature:  
 $t1$  (media) =  $-20^\circ\text{C}\sim +200$  (300)  $^\circ\text{C}$   
Sliding velocity:  $vg = 20\text{ m/s}$

### 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

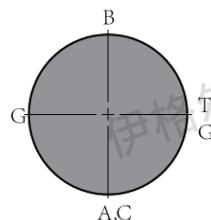
A Barrier fluid IN  
B Barrier fluid OUT  
C Drainage  
G Grease  
T Temperature measuring

### 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



## 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

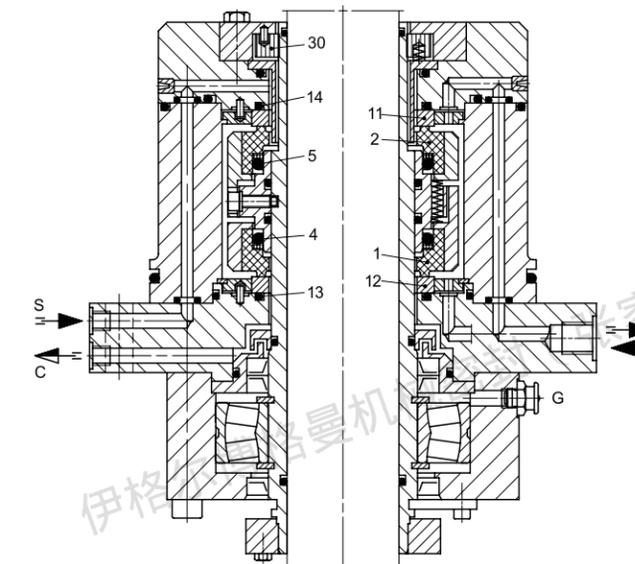
High pressure seal for process orientated solutions  
Patented hydrodynamic grooves  
Floating throttle ring on the product side  
High reliability and long service life  
Ready-to-fit and factory-tested units  
Connection dimensions to customer's requirements  
Due to the hydraulic conditions, product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

### 技术参数:

轴直径:  $dw=400\text{mm}$   
压力:  $p1$ =真空~60 bar  
温度:  $t=-40^\circ\text{C}\sim +200^\circ\text{C}$   
滑动速度:  $vg=0\sim 5\text{m/s}$

### Operating range

Shaft diameter:  $dw = 400\text{mm}$   
Pressure:  $p1 = \text{vacuum}\sim 60\text{bar}$   
Temperature:  $t = -40^\circ\text{C}\sim +200^\circ\text{C}$   
Sliding velocity:  $vg = 0\sim 5\text{ m/s}$



### 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, Titanium

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:

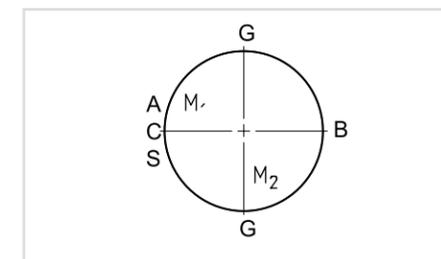
Chemical industry  
Suitable for all media  
Agitators

### 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





集装箱式机械密封  
Cartridge Mechanical Seals

MACHINERY SEAL

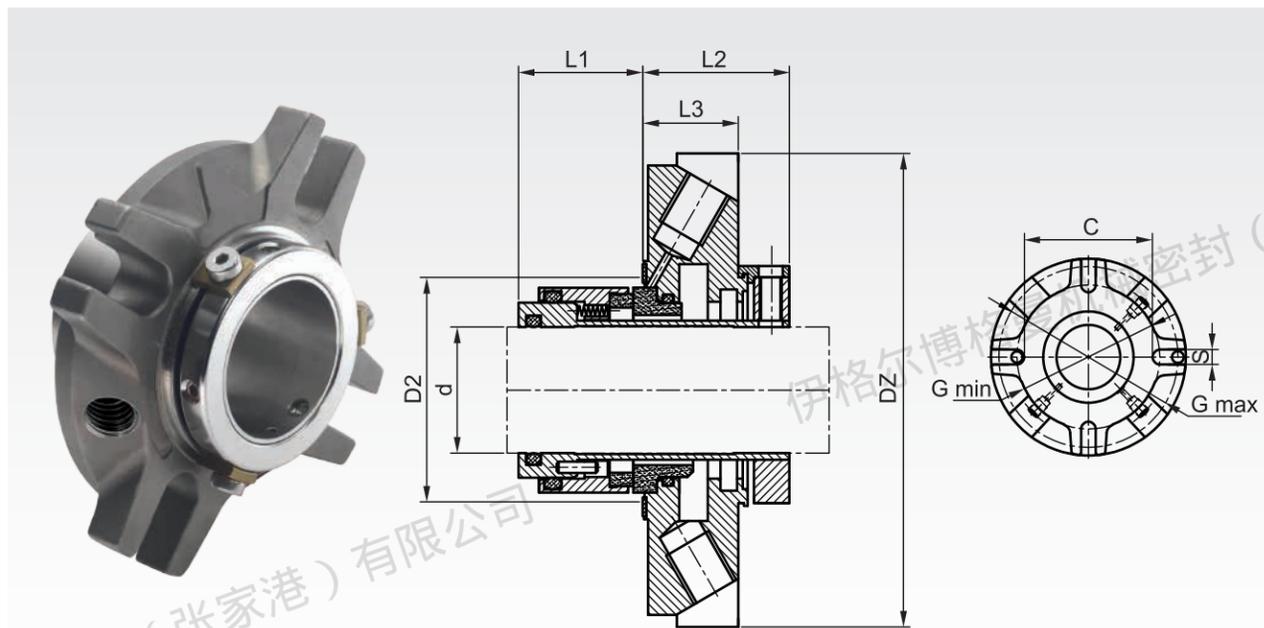
符合ISO3069 DIN24960 GB6556标准 釜用机械密封



Agitator Mechanical Seals

GBCDSS

GB204B



技术参数:

密封腔温度:  $-20^{\circ}\text{C}+200^{\circ}\text{C}$   
线速度:  $\leq 16\text{m/s}$   
密封腔压力:  $\leq 16\text{bar}$   
轴径尺寸: 1-3.5"

Operating Limits:

Temperature:  $-20^{\circ}\text{C}+200^{\circ}\text{C}$   
Speed:  $\leq 16\text{ m/s}$   
Pressure:  $\leq 16\text{ bar}$   
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

技术参数:

密封腔温度:  $-40^{\circ}\text{C}+180^{\circ}\text{C}$   
线速度:  $\leq 2\text{m/s}$   
密封腔压力:  $\leq 8\text{bar}$   
轴径尺寸: 30 -110mm

Operating Limits:

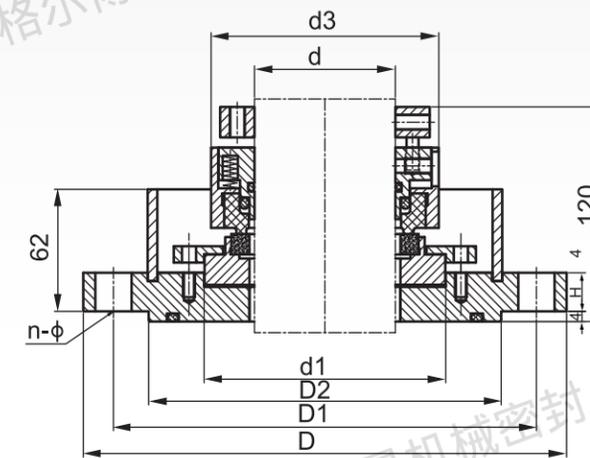
Temperature:  $-40^{\circ}\text{C}+176^{\circ}\text{C}$   
Speed:  $\leq 50\text{m/s}$   
Pressure:  $\leq 60\text{bar}$   
Standard Size: 30-180mm

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

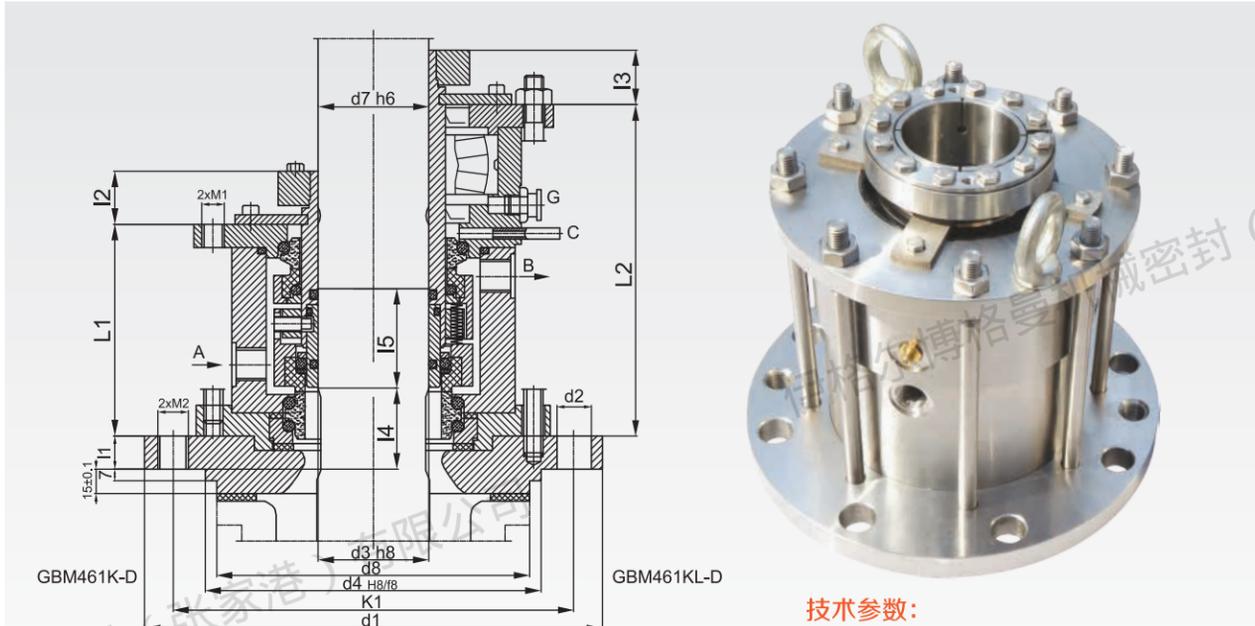


Size	d1	D	D1	D2	d3	H	n-φ
30.00	50.0	185.00	150.0	116.00	67.00	16.00	4-φ18
40.00	64.0	205.00	170.0	135.00	77.00	16.00	4-φ18
50.00	74.0	235.00	200.0	164.00	87.00	16.00	8-φ18
60.00	85.0	235.00	200.0	164.00	98.00	16.00	8-φ18
65.00	91.0	235.00	200.0	164.00	103.00	16.00	8-φ18
70.00	110.0	260.00	225.0	188.00	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**

**GBM481K/M481KL-D**



**技术参数:**

密封腔温度:  $-40^{\circ}\text{C}+200^{\circ}\text{C}$   
 线速度:  $\leq 5\text{m/s}$   
 密封腔压力:  $\leq 16\text{bar}$   
 轴径尺寸: 40-160mm

**Operating Limits:**

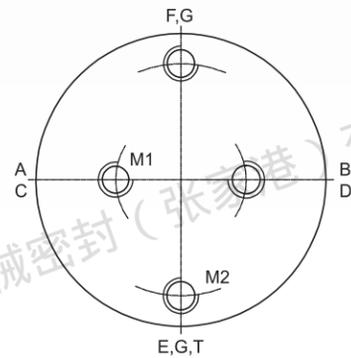
Temperature:  $-40^{\circ}\text{C}+200^{\circ}\text{C}$   
 Sliding velocity:  $\leq 5\text{ m/s}$   
 Pressure:  $\leq 16\text{ bar}$   
 Shaft diameter: 40-160mm

**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	nx d2	d4	nx d5	d6	d7	[k1]	[k2]	L1	L2	I1	I2	I3	I4	I5	M1	M2	A,B
40	38	40	E125	175	4x18	110	-	-	102	145	-	142	184	25	35	28	50	50	M12	M16	G3/8
50	48	50	E200	240	8x18	176	-	-	138	210	-	147	195	25	40	28	50	50	M12	M16	G3/8
60	58	60	E250	275	8x22	204	-	-	188	240	-	158	203	25	42	28	50	60	M12	M20	G3/8
80	78	80	E300	305	8x22	234	-	-	212	270	-	170	240	30	45	34	60	60	M16	M20	G1/2
100	98	100	E400	395	12x22	313	-	-	268	350	-	177	240	30	52	34	60	60	M16	M20	G1/2
100	98	100	E500	395	12x22	313	-	-	268	350	-	177	240	30	52	34	60	60	M16	M20	G1/2
125	120	125	E700	505	4x22	422	12x22	320	306	460	350	208	266	30	75	40	60	80	M20	M20	G1/2
140	135	140	E700	505	4x22	422	12x22	320	306	460	350	223	282	30	79	40	60	80	M20	M20	G1/2
160	150	160	E700	505	4x22	422	12x22	320	306	460	350	228	282	30	77	40	60	85	M20	M20	G1/2
160	150	160	E900	505	4x22	422	12x22	320	306	460	350	228	282	30	77	40	60	85	M20	M20	G1/2
160	150	161	E901	565	4x26	474	12x22	370	356	515	400	228	282	30	77	40	60	85	M20	M20	G1/2



**技术参数:**

密封腔温度:  $-40^{\circ}\text{C}+200^{\circ}\text{C}$   
 密封腔压力:  $\leq 16\text{bar}$   
 轴径尺寸: 40-220mm

**Operating Limits:**

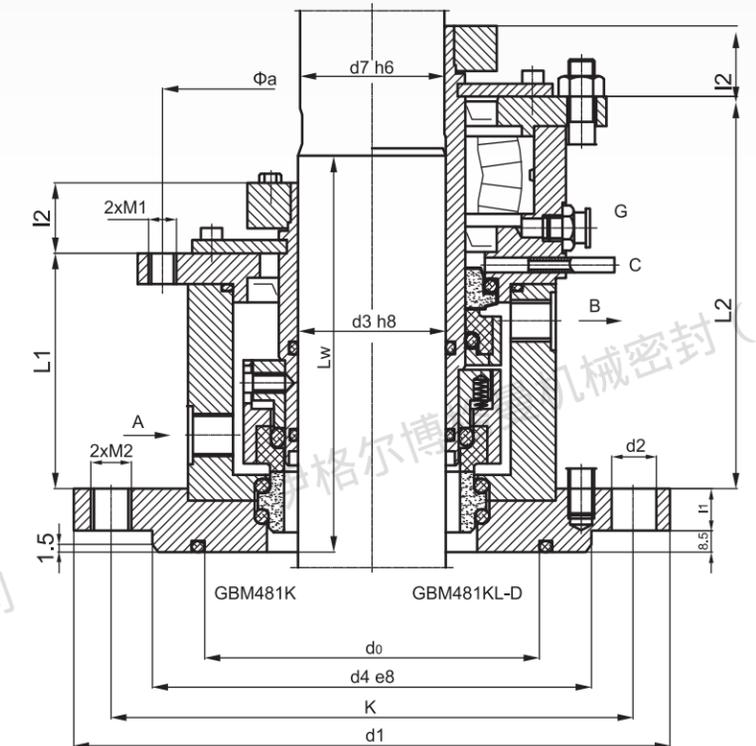
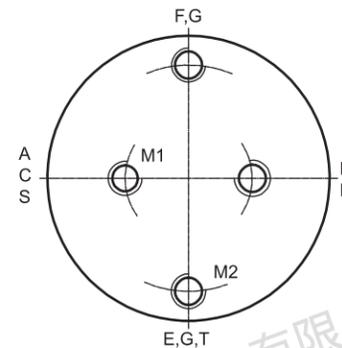
Temperature:  $-40^{\circ}\text{C}+200^{\circ}\text{C}$   
 Pressure:  $\leq 16\text{ bar}$   
 Standard Size: 40-220mm

**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 <sup>1)</sup>	d1	nx d2	d4	d0	k	L1	L2	Lw	I1	I2	A	M1	M2	A,B
40	38	175	4x18	110	90	142	87	136	143	15	28	122	M12	M16	G3/8
50	48	240	8x18	176	135	210	89	149	148	17	28	157	M12	M16	G3/8
60	58	240	8x18	176	135	210	93.5	156	158	17	28	168	M12	M16	G3/8
80	78	275	8x22	204	155	240	104.5	189	168	20	34	203	M16	M20	G1/2
100	98	305	8x22	234	190	270	109	190	178	20	34	228	M16	M20	G1/2
125	120	330	8x22	260	215	295	110	205	203	20	40	268	M20	M20	G1/2
140	135	395	12x22	313	250	350	124	222	208	20	40	285	M20	M20	G1/2
160	150	395	12x22	313	265	350	127.5	219.5	213	25	40	297	M20	M20	G1/2
180	170	445	12x22	364	310	400	132.5	230	233	25	45	332	M20	M20	G1/2
200	190	445	12x22	364	310	400	137.5	237.5	243	25	45	352	M20	M20	G1/2
220	210	505	16x22	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°C+200°C  
密封腔压力: ≤16bar  
轴径尺寸: 40-160mm

**Operating Limits:**

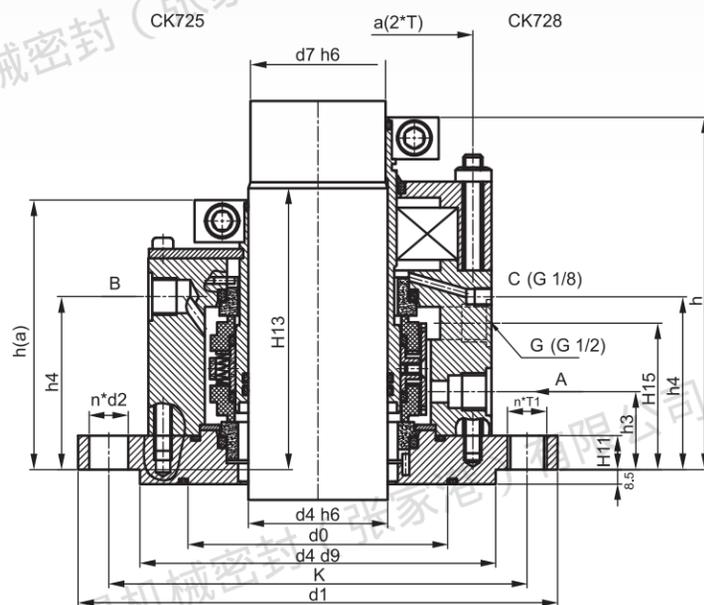
Temperature: -40°C+200°C  
Pressure: ≤16 bar  
Standard Size: 40-160mm

**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

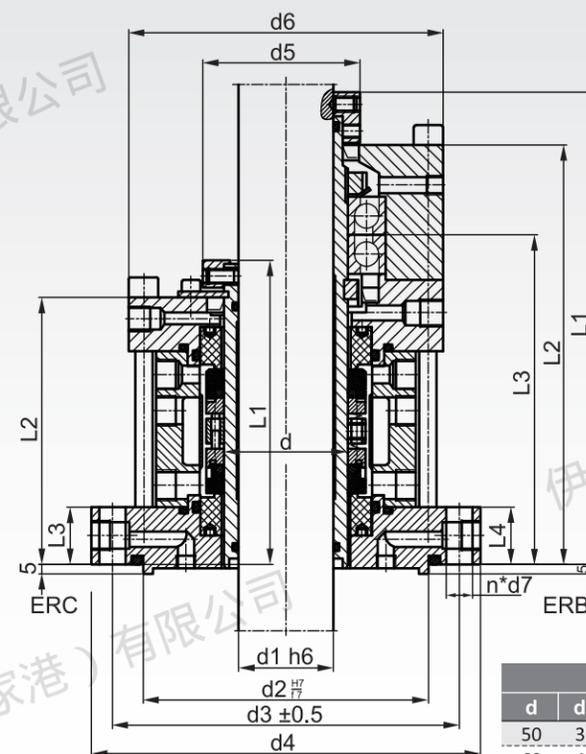
**Material:**

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



GB-CK725/CK726 Dimensions																		
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**



**技术参数:**

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

**Operating Limits:**

Temperature: -30°C+200°C  
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-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

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	



GBESD



**技术参数:**

密封腔温度:  $-40^{\circ}\text{C}+220^{\circ}\text{C}$   
 线速度:  $\leq 20\text{m/s}$   
 密封腔压力:  $\leq 25\text{bar}$   
 轴径尺寸: 60-100mm

**Operating Limits:**

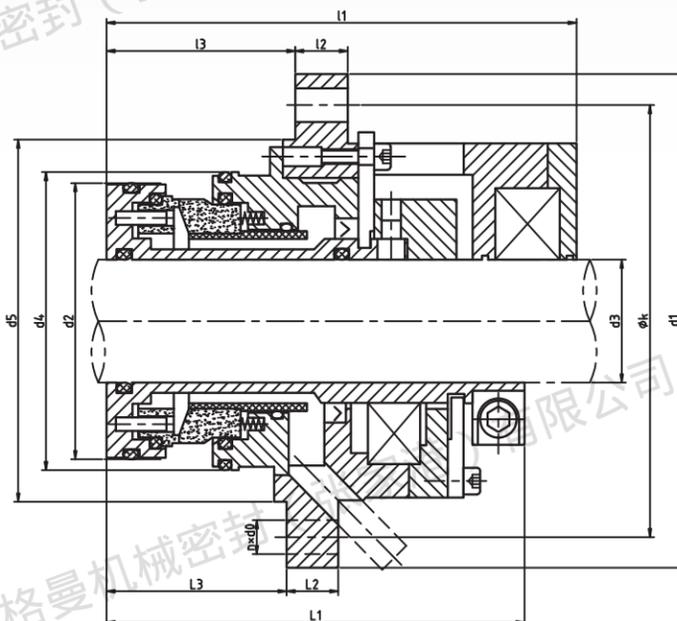
Temperature:  $-40^{\circ}\text{C}+220^{\circ}\text{C}$   
 Speed:  $\leq 20\text{m/s}$   
 Externally pressurized:  $\leq 25\text{bar}$   
 Shaft diameter: 60-100mm

**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

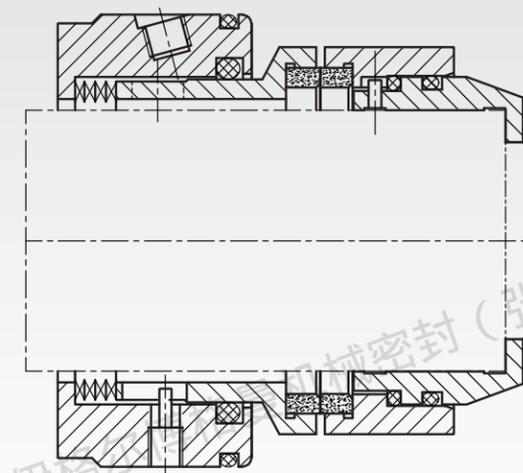
**Material:**

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	I1	I2	I3	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:  $-20^{\circ}\text{C}+120^{\circ}\text{C}$   
 线速度:  $\leq 20\text{m/s}$   
 密封腔压力:  $\leq 16\text{bar}$

**Operating Limits:**

Temperature:  $-20^{\circ}\text{C}+120^{\circ}\text{C}$   
 Speed:  $\leq 20\text{m/s}$   
 Pressure:  $\leq 16\text{bar}$

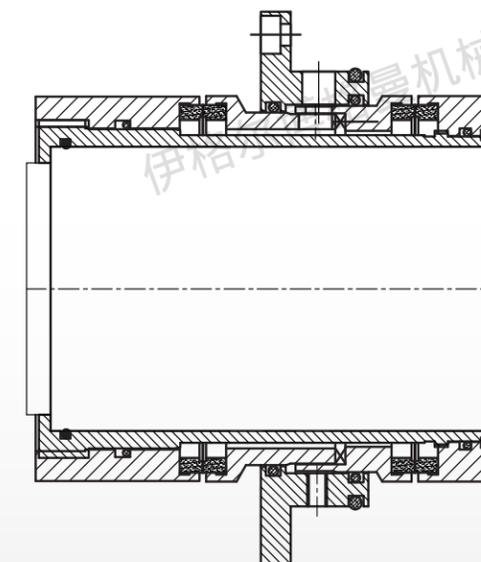
**材料组合:**

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

GBJCS2



**技术参数:**

密封腔温度:  $-20^{\circ}\text{C}+180^{\circ}\text{C}$   
 线速度:  $\leq 20\text{m/s}$   
 密封腔压力:  $\leq 15\text{bar}$

**Operating Limits:**

Temperature:  $-20^{\circ}\text{C}+180^{\circ}\text{C}$   
 Speed:  $\leq 20\text{m/s}$   
 Pressure:  $\leq 15\text{bar}$

**材料组合:**

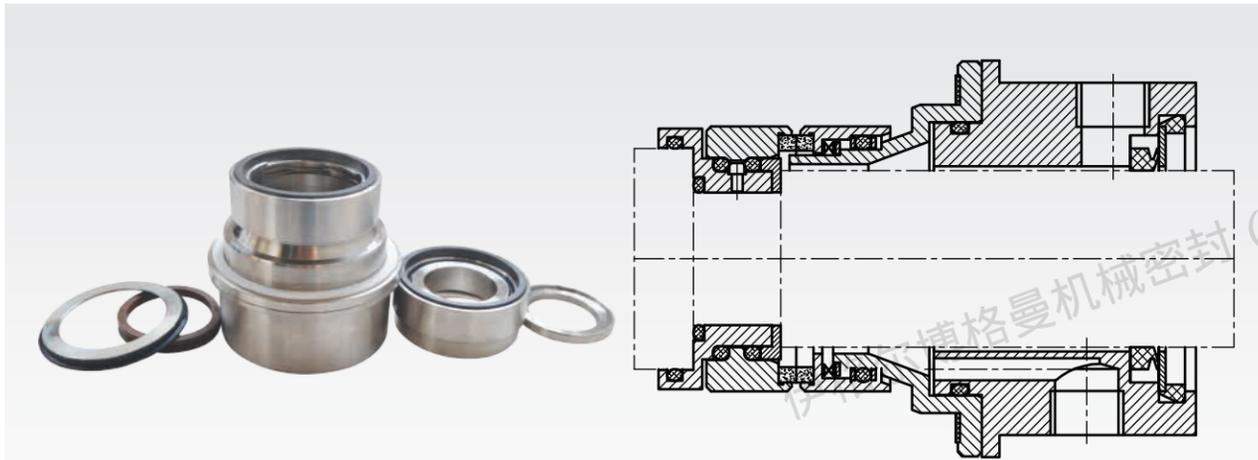
密封面: 反应碳化硅, 无压碳化硅, 碳化钨  
 辅助密封: 丁腈橡胶, 氟橡胶, 乙丙橡胶, 全氟橡胶  
 弹簧及金属件: 304, 316, 哈氏合金

**Material:**

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



### GBLP-Q



**技术参数:**

密封腔温度: -20°C+140°C  
线速度: ≤20m/s  
密封腔压力: ≤25bar

**Operating Limits:**

Temperature:-20°C+140°C  
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

### 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**

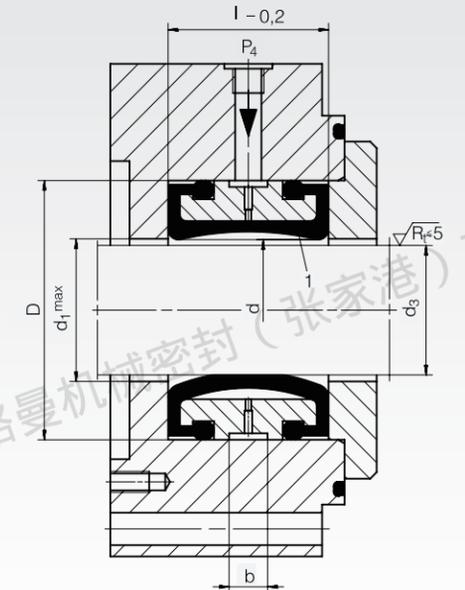
If a STD is employed, it is possible to change seals with the vessel loaded and under pressure (shaft must be stationary!). Can be installed in each position. Installation dimensions according to DIN 28138 Part 1 are possible. Material properties have to be taken into account.

**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).



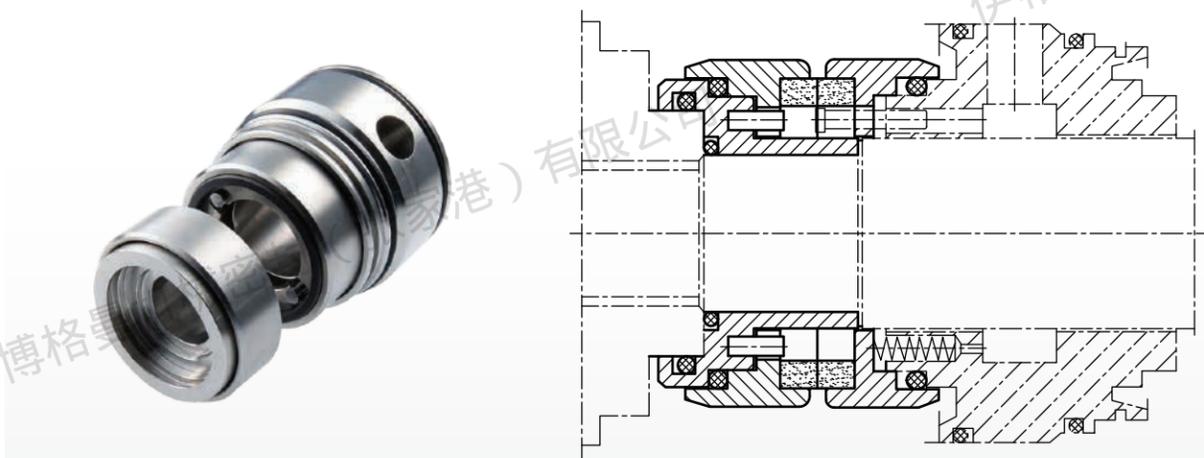
**推荐应用**

化学工业  
制药工业  
搅拌器

**Recommended applications**

Chemical industry  
Pharmaceutical industry  
Agitator

### GBLP-S



**技术参数:**

密封腔温度: -20°C+140°C  
线速度: ≤20m/s  
密封腔压力: ≤25bar

**Operating Limits:**

Temperature:-20°C+140°C  
Speed:≤20m/s  
Pressure: ≤25bar

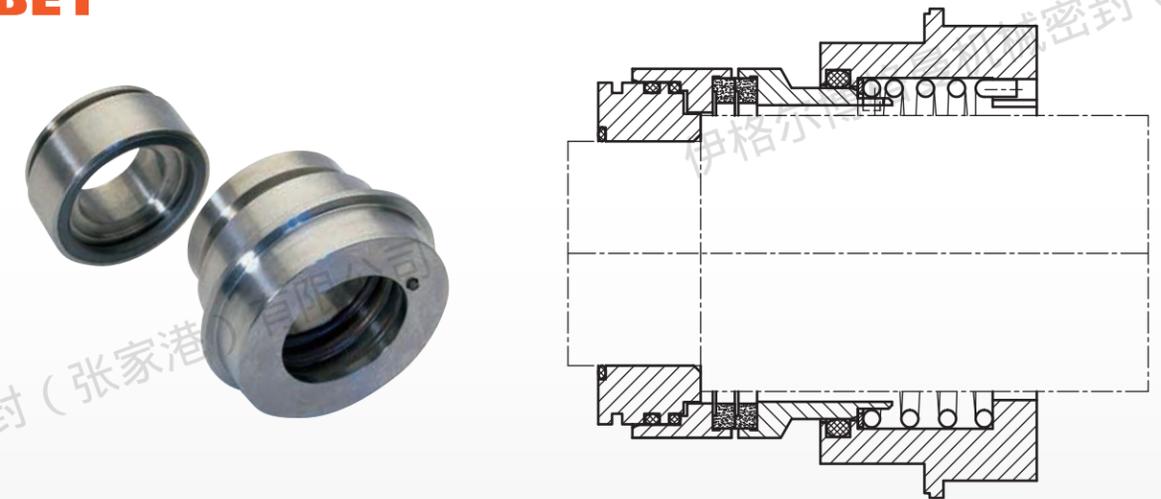
**材料组合:**

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

### GBE1



**技术参数:**

密封腔温度: -20°C+120°C  
线速度: ≤20m/s  
密封腔压力: ≤15bar

**Operating Limits:**

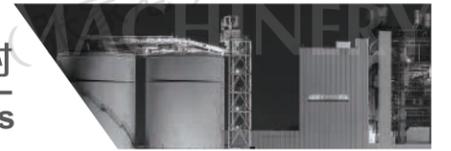
Temperature:-20°C+120°C  
Speed:≤20m/s  
Pressure:≤15bar

**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

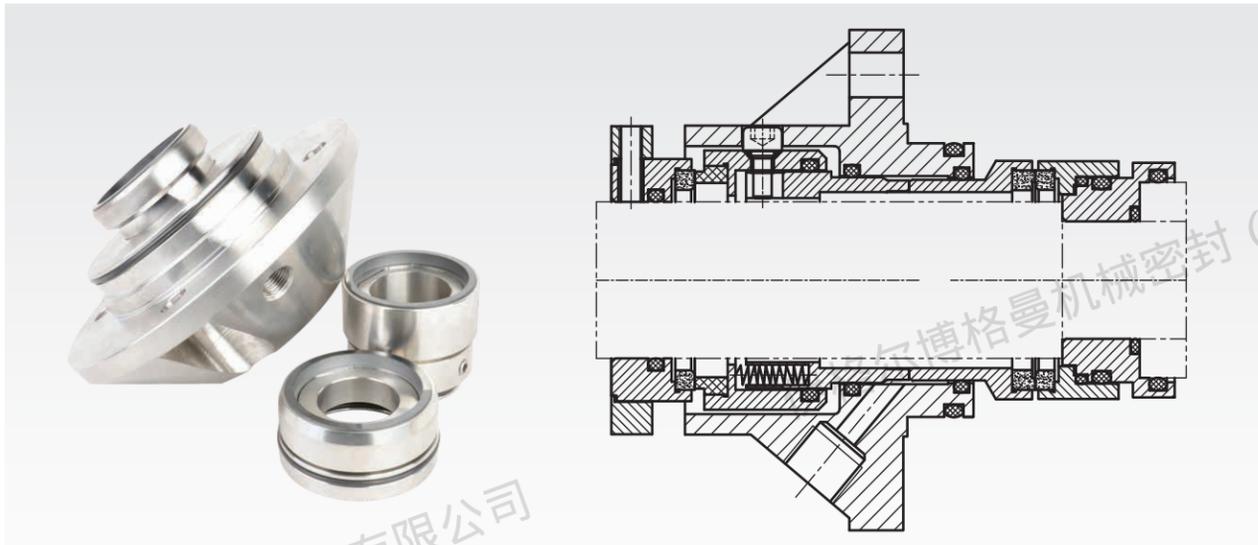
**Material:**

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



### GBE2

### GBSAF

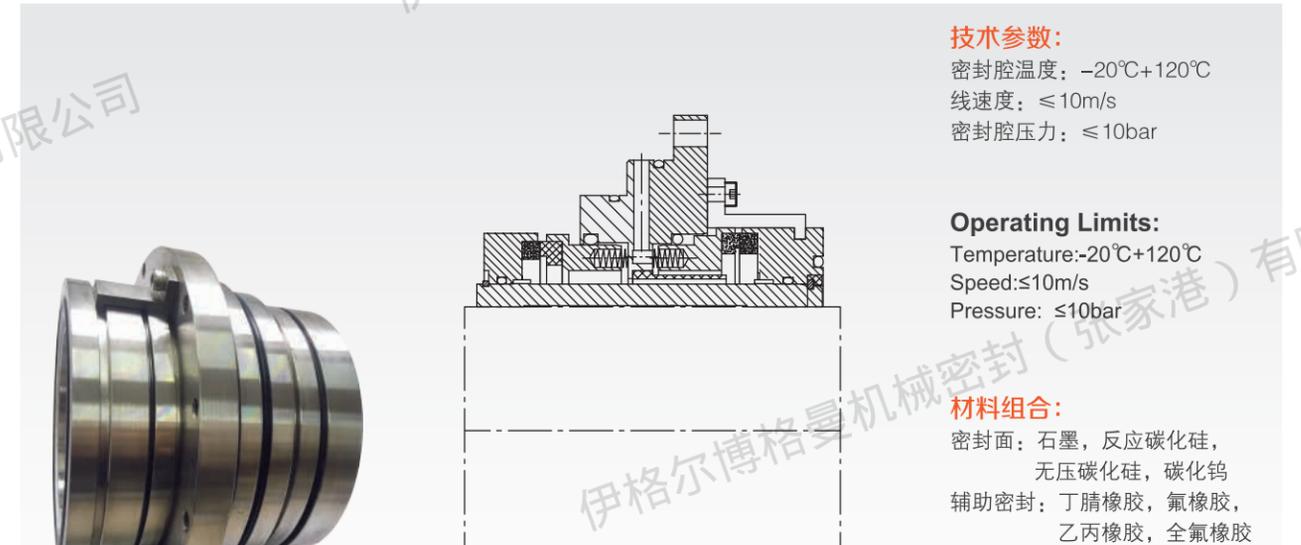


**技术参数:**  
密封腔温度:  $-20^{\circ}\text{C}+180^{\circ}\text{C}$   
线速度:  $\leq 30\text{m/s}$   
密封腔压力:  $\leq 15\text{bar}$

**Operating Limits:**  
Temperature:  $-20^{\circ}\text{C}+180^{\circ}\text{C}$   
Speed:  $\leq 30\text{m/s}$   
Pressure:  $\leq 15\text{bar}$

**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



**技术参数:**  
密封腔温度:  $-20^{\circ}\text{C}+120^{\circ}\text{C}$   
线速度:  $\leq 10\text{m/s}$   
密封腔压力:  $\leq 10\text{bar}$

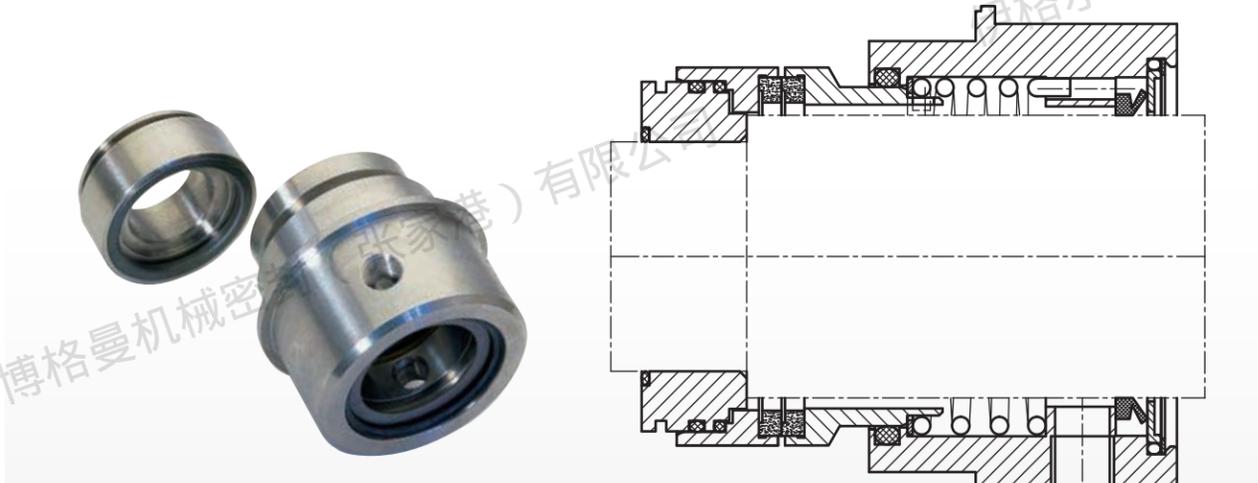
**Operating Limits:**  
Temperature:  $-20^{\circ}\text{C}+120^{\circ}\text{C}$   
Speed:  $\leq 10\text{m/s}$   
Pressure:  $\leq 10\text{bar}$

**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

### GB587

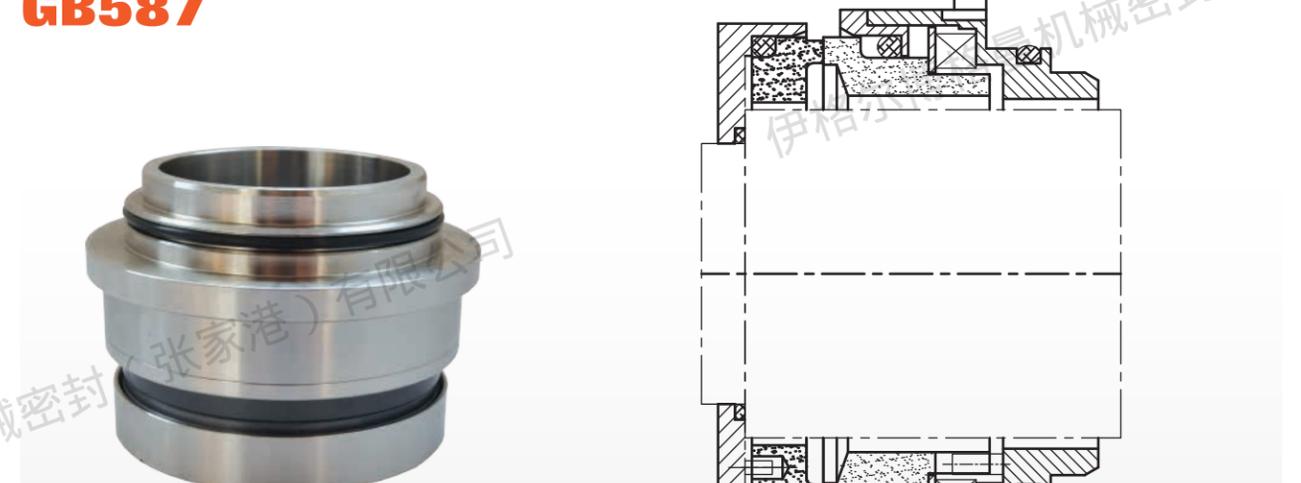


**技术参数:**  
密封腔温度:  $-20^{\circ}\text{C}+150^{\circ}\text{C}$   
线速度:  $\leq 20\text{m/s}$   
密封腔压力:  $\leq 15\text{bar}$

**Operating Limits:**  
Temperature:  $-20^{\circ}\text{C}+150^{\circ}\text{C}$   
Speed:  $\leq 20\text{m/s}$   
Pressure:  $\leq 15\text{bar}$

**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



**技术参数:**  
密封腔温度:  $-20^{\circ}\text{C}+180^{\circ}\text{C}$   
线速度:  $\leq 15\text{m/s}$   
密封腔压力:  $\leq 10\text{bar}$

**Operating Limits:**  
Temperature:  $-20^{\circ}\text{C}+180^{\circ}\text{C}$   
Speed:  $\leq 15\text{m/s}$   
Pressure:  $\leq 10\text{bar}$

**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

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



特殊机械密封  
Special Mechanical Seals

MACHINERY SEAL

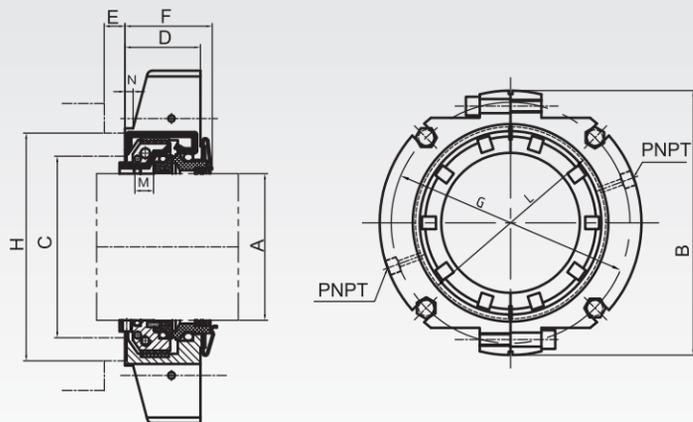
符合ISO3069 DIN24960 GB6556标准 特殊机械密封

Special Mechanical Seals



GB442

GBCGSH



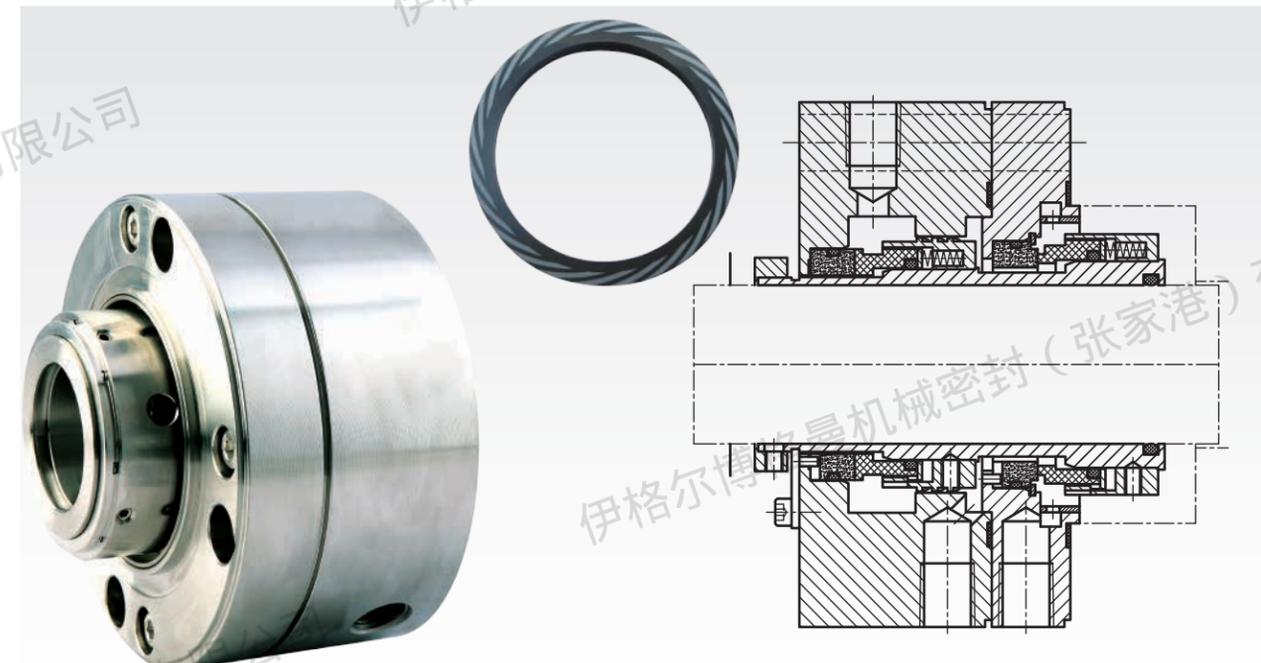
**技术参数:**  
密封腔温度: 0°C~120°C  
线速度: ≤20m/s  
密封腔压力: ≤10bar  
轴径尺寸: 32-195mm

**Operating Limits:**  
Temperature: 0°C~120°C  
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	
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	169.9	171.9	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	190.5	196.6
130	292.8	155.1	184.2	73.9	7.4	87.6						220.9	222.9	196.9	202.9
135	299.2	160.1	190.5	73.9	7.4	87.6						227.3	229.3	203.2	209.3
140	299.2	160.1	190.5	73.9	7.4	87.6						227.3	229.3	203.2	209.3
145	305.6	170.2	196.9	73.9	7.4	87.6						233.6	235.6	209.6	215.6
150	312	175.2	203.2	73.9	7.4	87.6						240	242	215.9	222
155	318	180.1	209.6	73.9	7.4	87.6						246.3	248.3	222.3	228.3
160	324.7	185.1	215.9	73.9	7.4	87.6						253	255	228.6	235
165	324.7	185.1	215.9	73.9	7.4	87.6						253	255	228.6	235
170	331	195.1	222.3	73.9	7.4	87.6						259.3	261.3	235	241.3
175	337.5	200.2	228.6	73.9	7.4	87.6						265.7	267.7	241.3	247.7
180	337.5	200.2	228.6	73.9	7.4	87.6						272	274	247.7	254
185	343.9	210.2	235	73.9	7.4	87.6						272	274	247.7	254
190	350.2	215.1	241.3	73.9	7.4	87.6						278.4	280.4	254	260.4
195	356.6	220.1	247.7	73.9	7.4	87.6						284.7	286.7	260.4	266.7



**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.  
typical Applications: 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°C  
线速度: ≤30m/s  
密封腔压力: ≤35bar  
轴径尺寸: 20~110mm

**Operating Limits:**  
Temperature: -20 ~ 230°C  
Speed: ≤30m/s  
Pressure: ≤35bar  
Standard Size: 20~110mm



**GBespey WD200**

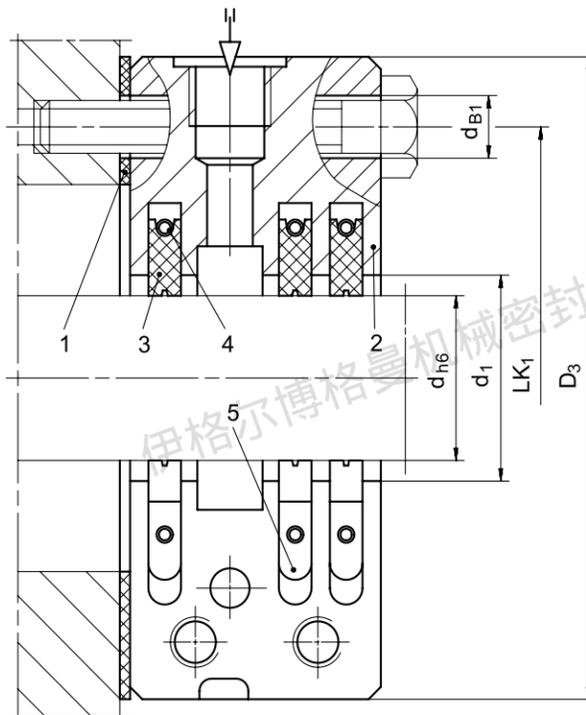


**特点:**  
 多部分密封环, 径向切割  
 分体式外壳设计  
 非常小的操作间隙 - 低泄漏  
 干运行  
 自调整密封圈  
 径向和轴向轴偏转补偿  
 轴上没有安装密封部件, 因此无额外的轴振动  
 无接触运行的密封圈-滑动面和机器不消耗额外的动力

**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:  $d=40\sim 340$ 毫米  
 工作压力:  $p=\text{真空}\sim 20$ 绝对压力。  
 工作温度:  $t=-120^{\circ}\text{C}\sim +800$ 摄氏度对于碳, PTFE化合物最高 $225^{\circ}\text{C}$   
 滑动速度: 对于碳,  $vg=\text{最大 } 150$  m/s  
 PTFE化合物最大 $40$  m/s  
 径向游隙:  $\pm 1.0\sim 5.0$ 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:  $d = 40\sim 340$  mm  
 Operating pressure:  $p = \text{vacuum}\sim 20$  bar abs.  
 Operating temperature:  $t = -120^{\circ}\text{C}\sim +800^{\circ}\text{C}$  for carbon, max.  $225^{\circ}\text{C}$  for PTFE compound  
 Sliding velocity:  $vg = \text{max. } 150$  m/s for carbon, max.  $40$  m/s for PTFE compound  
 Radial play:  $\pm 1.0\sim 5.0$  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

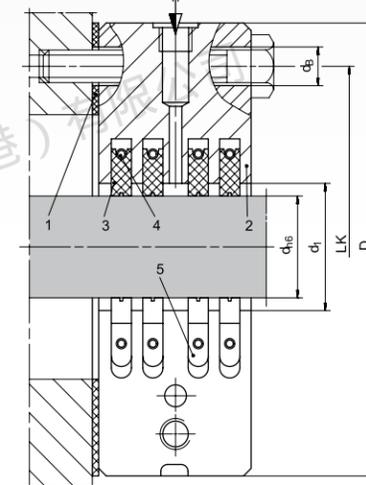


**产品变型**

**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).

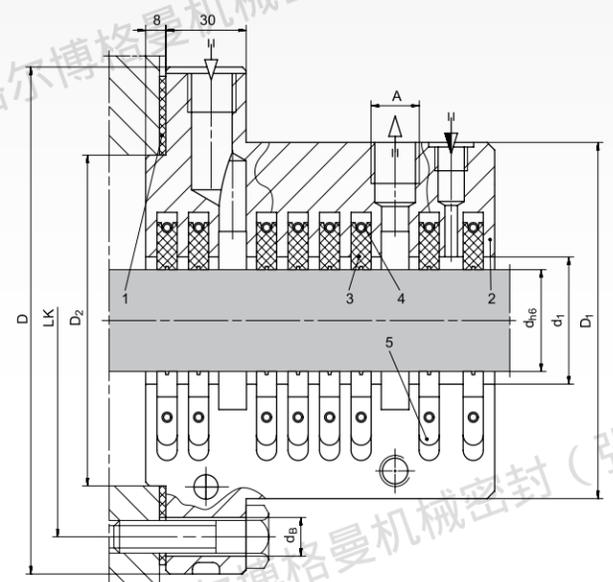
For toxic and solids containing gases as well as ATEX applications type shaft seal Espey WD200-WDKS with short design, reduced housing outside diameter and barrier gas port is used.



**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 <sub>ND</sub>	d1 <sub>HD</sub>	D	D1	D2	LK	A	d8	D3	LK1	d <sub>B1</sub>
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



# 特殊机械密封

## Special Mechanical Seals

# MACHINERY SEAL

# 符合ISO3069 DIN24960 GB6556标准 特殊机械密封

## Special Mechanical Seals



### 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-lubricate Cartridge unit

#### 优点:

- 专利水力沟槽
- 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:

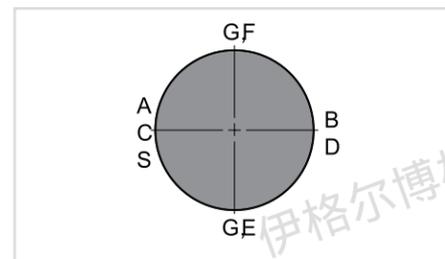
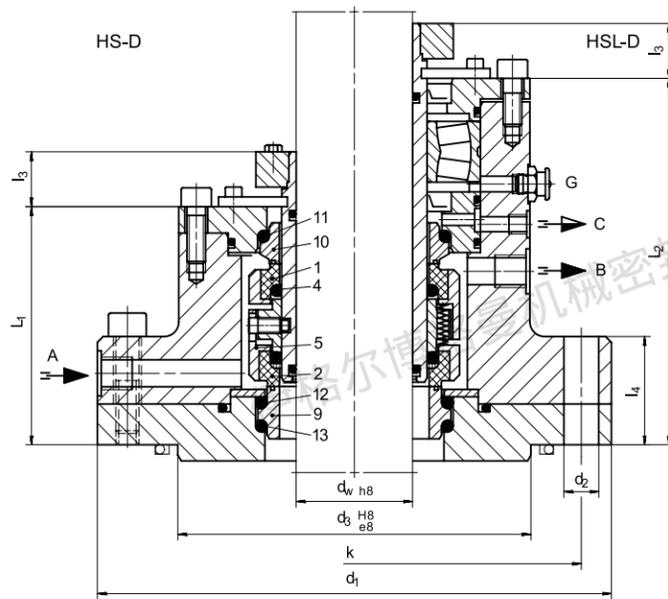
- 轴径:  $d_w = 20 \sim 500 \text{ mm}$
- 工作压力:  $p_1 = \text{真空} \sim 30 \text{ bar abs.}$
- 工作温度:  $t = -40^\circ\text{C} \sim +200 (350)^\circ\text{C}$
- 滑动速度:  $v_g = 0 \sim 5 \text{ m/s}$
- 超出此范围的应用, 请查询。

#### Material:

- Shaft diameter:  $d_w = 20 \dots 500 \text{ mm} (0.79" \dots 19.69")$
- Pressure:  $p_1 = \text{vacuum} \dots 30 \text{ bar} (\dots 435 \text{ PSI})$
- Temperature:  $t = -40^\circ\text{C} \dots +200 (350)^\circ\text{C}$   
( $-40^\circ\text{F} \dots +392 (662)^\circ\text{F}$ )
- Sliding velocity:  $v_g = 0 \dots 5 \text{ m/s} (0 \dots 16 \text{ ft/s})$
- 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

#### 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:

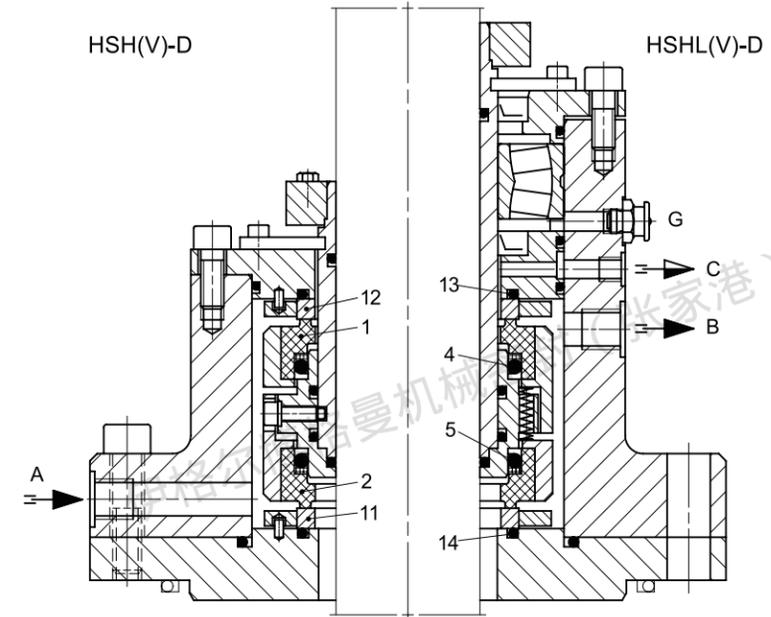
- 轴径:  $d_w = 20 \sim 400 \text{ mm}$
- 工作压力:  $p_1 = \text{真空} \sim 250 \text{ bar}$   $p_3 = p_1 + 10\%$
- 工作温度:  $t = -40^\circ\text{C} \sim +200 (350)^\circ\text{C}$
- 滑动速度:  $v_g = 0 \sim 5 \text{ m/s}$
- 根据大小, 从 100~150 巴
- 作为串联密封执行(分两个阶段减压)。

#### Material:

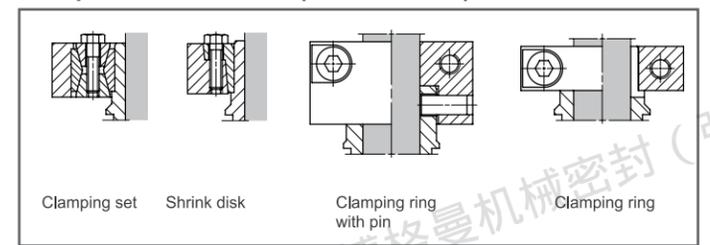
- Shaft diameter:  $d_w = 20 \dots 400 \text{ mm} (0.79" \dots 15.75")$
- Pressure:  $p_1 = \text{vacuum} \dots 250 \text{ bar} (\dots 3,625 \text{ PSI})^*$ ,  
 $p_3 = p_1 + 10\%$
- Temperature:  $t = -40^\circ\text{C} \dots +200 (350)^\circ\text{C}$   
( $-40^\circ\text{F} \dots +392 (662)^\circ\text{F}$ )
- Sliding velocity:  $v_g = 0 \dots 5 \text{ m/s} (0 \dots 16 \text{ ft/s})$
- \* Depending on size, from 100 ... 150 bar (1,450 ... 2,175 PSI) executed as tandem seal (pressure reduction in 2 stages).

### HSH(V)-D

### HSHL(V)-D



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

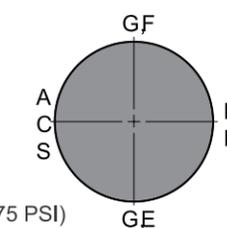


#### 推荐应用

- 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               |



OEM  
OEM

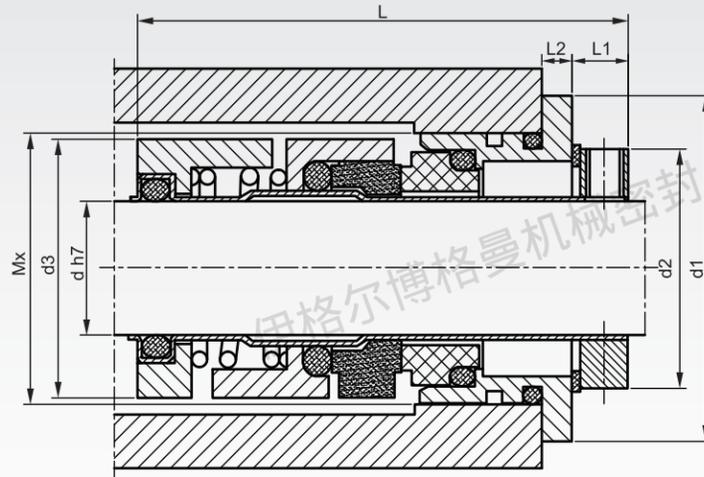
MACHINERY SEAL

符合ISO3069 DIN24960 GB6556标准

OEM  
OEM



**GBH-12/H-16**



**技术参数:**  
密封腔温度:  $-20^{\circ}\text{C}+180^{\circ}\text{C}$   
密封腔压力:  $\leq 12\text{bar}$   
线速度:  $\leq 10\text{m/s}$

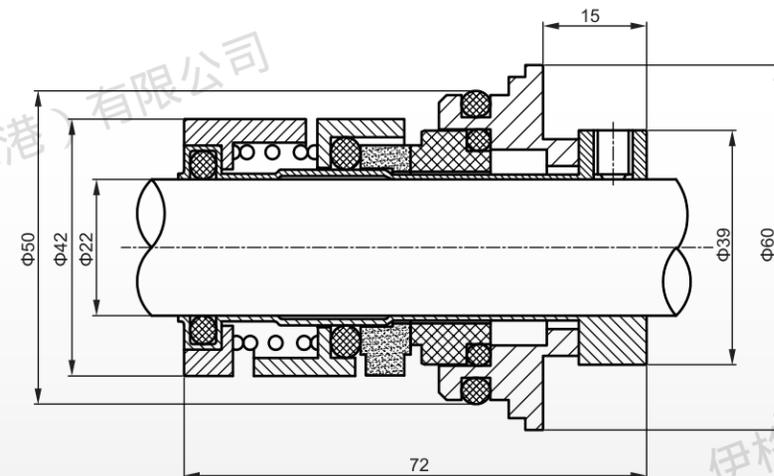
**Operating Limits:**  
Temperature:  $-20^{\circ}\text{C}+180^{\circ}\text{C}$   
Pressure:  $\leq 12\text{bar}$   
Speed:  $\leq 10\text{m/s}$

**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**



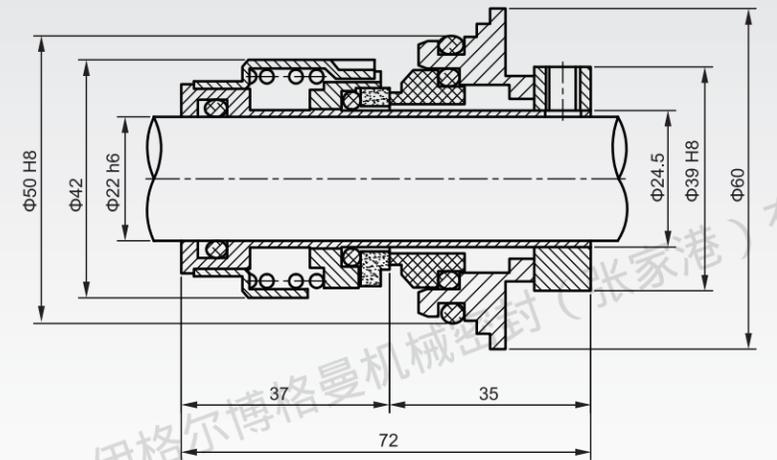
**技术参数:**  
密封腔温度:  $-20^{\circ}\text{C}+180^{\circ}\text{C}$   
密封腔压力:  $\leq 12\text{bar}$   
线速度:  $\leq 10\text{m/s}$

**Operating Limits:**  
Temperature:  $-20^{\circ}\text{C}+180^{\circ}\text{C}$   
Pressure:  $\leq 12\text{bar}$   
Speed:  $\leq 10\text{m/s}$

**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:  $-20^{\circ}\text{C}+180^{\circ}\text{C}$   
密封腔压力:  $\leq 12\text{bar}$   
线速度:  $\leq 10\text{m/s}$

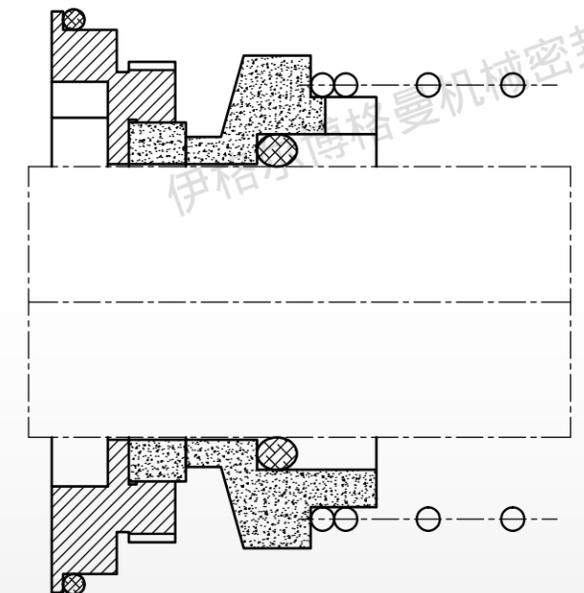
**Operating Limits:**  
Temperature:  $-20^{\circ}\text{C}+180^{\circ}\text{C}$   
Pressure:  $\leq 12\text{bar}$   
Speed:  $\leq 10\text{m/s}$

**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:  $-20^{\circ}\text{C}+180^{\circ}\text{C}$   
密封腔压力:  $\leq 12\text{bar}$   
线速度:  $\leq 10\text{m/s}$

**Operating Limits:**  
Temperature:  $-20^{\circ}\text{C}+180^{\circ}\text{C}$   
Pressure:  $\leq 12\text{bar}$   
Speed:  $\leq 10\text{m/s}$

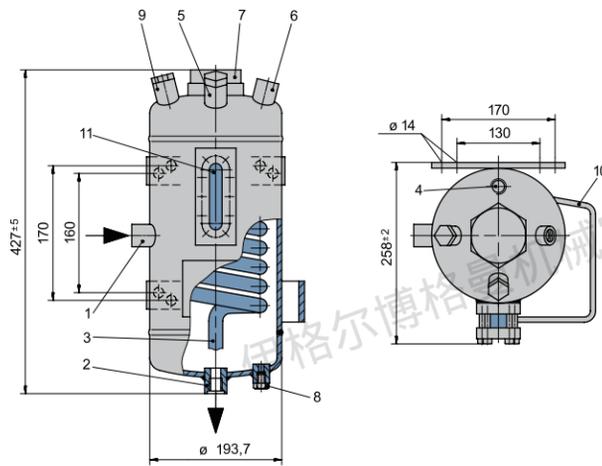
**材料组合:**  
密封面: 石墨, 反应碳化硅, 无压碳化硅, 碳化钨  
辅助密封: 丁腈橡胶, 氟橡胶, 乙丙橡胶  
弹簧及金属件: 304, 316

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



Seal supply systems • Thermosiphon Systems

GBTS2000



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

推荐应用

- 化学工业
- 石油化工
- 石油和天然气行业
- 精炼技术

优点:

适用于各种要求苛刻的环境工作条件: GBTS2000 高达 30bar/200°C; GBTS2063 高达 63bar/200°C; 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°C; TS2063 up to 63 bar/200 °C 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 sealant

Recommended applications 产品变型

- Chemical industry GBTS4030: 无间隙 TS 容器,
- Petrochemical industry 带酸洗钝化表面
- Oil and gas industry GBTS5000: TS 容器可拆卸
- Refining technology

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

Product variants

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

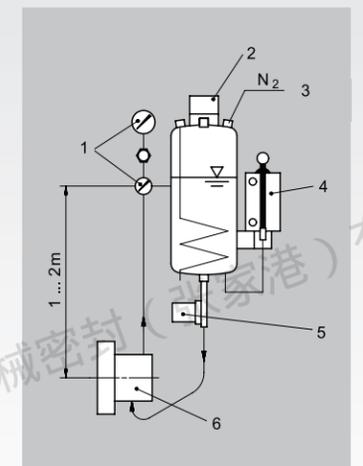
GBTS2000 系统的操作和安装图 必须始终安装 TS 容器高于机械密封。这个缓冲液 / 屏障液通过回流管流动管道进入容器并冷却。这个流体的交换是通过热虹吸原理或强制循环, 例如使用泵送螺杆。密封件的连接管应设计有尽可能小的阻力可能吧。

- 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



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	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø
Volume, vessel (liters)	9	9	9	9	9	9	9	9
Volume, tube (liters)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Allowable pressure <sup>1)</sup>	30 bar	30 bar	63 bar	63 bar	20 bar	20 bar	52 bar	52 bar
Allowable temperature <sup>1)</sup>	-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) <sup>3)</sup>	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Cooling capacity – natural circulation (kW) <sup>2)</sup>	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Cooling capacity – forced circulation (kW) <sup>2)</sup>	4	4	4	4	4	4	4	4
Required cooling water quantity (m <sup>3</sup> /h)	0.4	0.4	0.4	0.4	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							
Seal	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

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 °C – cooling water 20 °C
- 3) Guidelines with buffer/barrier fluid water 60 °C – ambient temperature 20°C (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(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 mm<sup>2</sup>/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 mm<sup>2</sup>/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.

### 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.

### 优点:

- 罐内最高工作温度 80°C (回流管最大 90°C)
- 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°C (return line max. 90°C)
- 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,没有流通需要机械密封不散热。

### 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

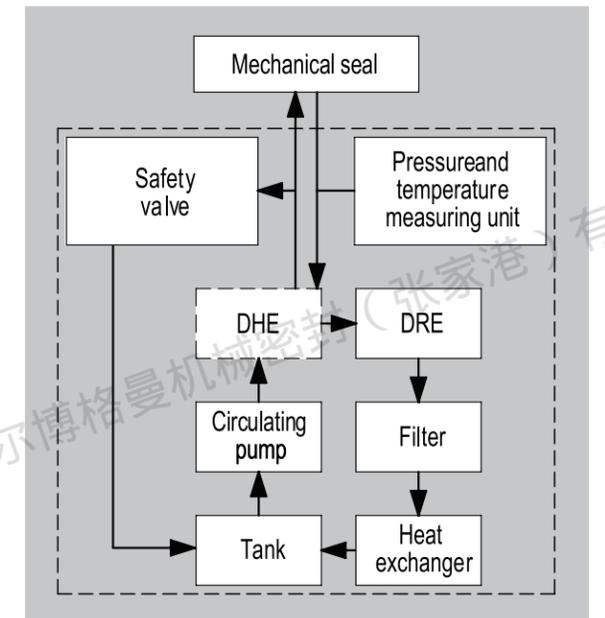
- 化学工业
- 石油化工
- 精炼技术
- 石油天然气工业

### 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 <sup>-1</sup> )	Ex-Protection
SPA1015/A01	15 bar (218 PSI)	6	1.8	Ø	40	12	650	610	380	125 kg (276 lb)	1	400 V 50 Hz	1,500	ATEXII2G EExPe II T3 IP54
SPA1015/A02	15 bar (218 PSI)	6	1.8	Ø	40	12	650	610	380	125 kg (276 lb)	1			
SPA1040/A01	40 bar (580 PSI)	6	1.8	Ø	40	12	650	610	380	125 kg (276 lb)	1			
SPA1040/A02	40 bar (580 PSI)	6	1.8	Ø	40	12	650	610	380	125 kg (276 lb)	1			
SPA1090/A01	90 bar (1,305 PSI)	6	1.8	Ø	40	12	650	610	380	125 kg (276 lb)	2			
SPA1090/A02	90 bar (1,305 PSI)	6	1.8	Ø	40	12	650	610	380	125 kg (276 lb)	2			
SPA2020/A01	20 bar (290 PSI)	12	3.6	Ø	100	20	750	800	555	140 kg (309 lb)	1			
SPA2020/A02	20 bar (290 PSI)	12	3.6	Ø	100	20	750	800	555	140 kg (309 lb)	1			
SPA2050/A01	50 bar (725 PSI)	12	3.6	Ø	100	20	750	800	555	140 kg (309 lb)	2			
SPA2050/A02	50 bar (725 PSI)	12	3.6	Ø	100	20	750	800	555	140 kg (309 lb)	2			
SPA2120/A01	120 bar (1,740 PSI)	12	3.6	Ø	100	20	750	800	555	140 kg (309 lb)	3.6			
SPA2120/A02	120 bar (1,740 PSI)	12	3.6	Ø	100	20	750	800	555	140 kg (309 lb)	3.6			
SPA3020/A01	20 bar (290 PSI)	23	6.9	Ø	100	20	750	800	555	140 kg (309 lb)	2			
SPA3020/A02	20 bar (290 PSI)	23	6.9	Ø	100	20	750	800	555	140 kg (309 lb)	2			
SPA3050/A01	50 bar (725 PSI)	23	6.9	Ø	100	20	750	800	555	140 kg (309 lb)	3.6			
SPA3050/A02	50 bar (725 PSI)	23	6.9	Ø	100	20	750	800	555	140 kg (309 lb)	3.6			
SPA3120/A01	120 bar (1,740 PSI)	23	6.9	Ø	100	20	750	800	555	140 kg (309 lb)	6.8			
SPA3120/A02	120 bar (1,740 PSI)	23	6.9	Ø	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液通过换热器回到密封腔的循环过程。

**优点:**  
比 Plan 21 效率高, 热交换器积垢更少, 能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。通常在自身液体不适合冲洗时使用。

**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:**  
需要谨慎选择适合的密封冲洗液来源, 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:**  
如果密封腔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液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 (1 bar) 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风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, 有内部泵送液来保持缓冲液的循环; 储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, 是一种使用预先加气的蓄压器来提供压力给循环系统的方案。通过加装泵送液实现隔离液的循环。

**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, 适用于高温、高蒸汽压、强腐蚀性、易聚合、含杂质、危险或有毒等介质。

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

Plan54

**描述:**  
Plan 54 是一种通过外加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:**  
管线回路必须在启动前完全排气, 循环系统必须保持持续加压状态, 隔离液必须与工艺介质相匹配。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腔内液位, 对高液位进行报警。

**优点:**  
提供一个在检测到密封过度泄漏时的报警指示器, 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 通过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 是一种将主密封腔的非凝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 4 (无压双端面密封), 在这种情况下也可用于运转外部密封, 内部密封的泄漏物不凝性气体, 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。通过加装泵送液实现隔离液的循环。

**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、强腐蚀性、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:**  
管线回路必须在启动前完全排气, 储罐须保持持续加压状态, 最大允许注入气体压力为 10~14bar (防止水汽效应), 轴封内泵送液, 以提供隔离液的循环。储罐中的隔离液必须与工艺介质相匹配。

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。通过加装泵送液实现隔离液的循环。

**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:**  
管线回路必须在启动前完全排气, 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, 隔离液必须与工艺介质相匹配。

Plan62

**描述:**  
Plan 62 是单端面密封中最普遍采用的冲洗方案, 由外部对密封腔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。急冷可以防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套, 以引导冲洗液流向回水管线; 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 是在外部次密封腔中通入低压缓冲气体, 通常是氮气, 通过调节控制阀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 (用于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成液体的流体, 即使当工艺气体不能凝成液体, 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, 表明主密封腔泄漏或失效, 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), 在这种情况下也可用于干运转外部密封, 内部密封的泄漏物凝成液体, 这种布置方式可以采用阻封气体 (Plan72) 也可不采用。

备注

- 特殊工况:**
- ▲ 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
  - 带悬浮颗粒
  - 无润滑
  - 高温
  - 危险 / 有害物质
  - 易结晶
  - 易汽化



符合ISO3069 DIN24960 GB6556标准



## 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	Q1	SiC	无压烧结碳化硅 Silicon Carbide, Sintered Pressureless
	Q12		镶装无压烧结碳化硅 Silicon Carbide, Sintered Pressureless (shrunken-in)
	Q2		反应烧结碳化硅 Silicon Carbide, Reaction bonded
	Q22		镶装反应烧结碳化硅 Silicon Carbide, Reaction bonded (shrunken-in)
	Q3		浸硅碳 Reaction Silicon Carbide with Graphite
	Q32		镶装浸硅碳 Reaction Silicon Carbide with Graphite (shrunken-in)
硬质合金类 Tungsten Carbide	U1	YG6/YG8	钴基硬质合金 Co-binder Tungsten Carbide
	U12		镶装钴基硬质合金 Co-binder Tungsten Carbide (shrunken-in)
	U2	YWN8	镍基硬质合金 Ni-binder Tungsten Carbide
	U22		镶装镍基硬质合金 Ni-binder Tungsten Carbide (shrunken-in)
	U3	W7	镍钼钨基硬质合金 NiCrMo-binder Tungsten Carbide
	U32		镶装镍钼钨基硬质合金 NiCrMo-binder Tungsten Carbide (shrunken-in)
陶瓷类 Ceramics	V	99.7%AL <sub>2</sub> O <sub>3</sub>	氧化铝99.7% Ceramic (Al-Oxide) 99.7%
	V2	97.5%AL <sub>2</sub> O <sub>3</sub>	氧化铝97.5% Ceramic (Al-Oxide) 97.5%
塑料类 Plastic	Y1		填充玻璃纤维PTFE PTFE, Glassfibre Reinforced
	Y2		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
包覆弹性体 Coated Elastomer	M1	PTFE+FPM	双层PTFE包覆的氟橡胶 FPM, with PTFE Wrapped
	M2	PTFE+EPR	双层PTFE包覆的乙丙橡胶 EPR, with PTFE Wrapped
	M3	PTFE+MVQ	双层PTFE包覆的硅橡胶 MVQ, with PTFE Wrapped
	M4	PTFE+CR	双层PTFE包覆的氯丁橡胶 CR, with PTFE Wrapped
	M5	FEP	聚全氟乙丙烯包覆的氟橡胶 Fluorocarbon Rubber with Poly Ethylene Propylene
非弹性体 Nonelastic	Y1		非石棉密封垫 Non Asbestos Gasket
	G		柔性石墨 Expanded graphite
	T	PTFE	聚四氟乙烯 Polyfluortetraethylene
	T2		填充玻璃纤维PTFE PTFE, Glassfibre Reinforced
	T3		填充石墨PTFE PTFE, Carbon Reinforced
	T12		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
	F1		2Cr13/3Cr13
	G		316L
	M		Hast. C4
	M1		Hast. B2
	M3		Carp. 20
	M4		Monel. K50
	M5		Hast. c276
	T2		TA2
	T4		Carp. 42
	T6		AM350
M6		Incon. 718	

## 石墨 碳化硅 硬质合金系列产品 Car, Sic, Tungsten Carbide Series products

