

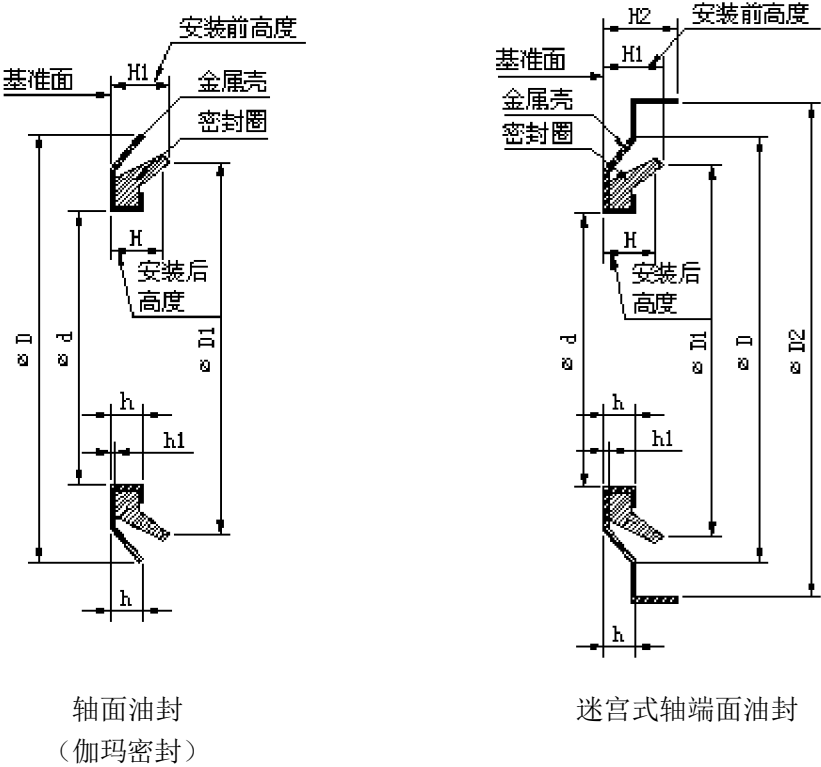
电机轴面油封（伽玛密封）和迷宫式轴端面油封介绍

电机轴面油封（伽玛密封）和迷宫式轴端面油封，是吴江天龙电子机械设备有限公司与上海 ABB 电机有限公司持续十多年的研究结果，它将机械密封与唇形密封相结合，使防护等级与功率损耗得到了一个最佳的有机统一。

特别是近五年来上海 ABB 在高效电机（M3BP）与超高效电机（M4BP）的大量试验中，带上轴面油封（伽玛密封）和迷宫式轴端面油封，既使出厂电机能效达到欧盟能效一级标准，同时又满足了电机 IP55~IP66 的防护要求。比较好的彻底地克服了轴承室的温升难题，使上海 ABB 高效电机与超高效电机趋向于理想化。为此现把联合试验成果形成标准，推荐给设计师们。

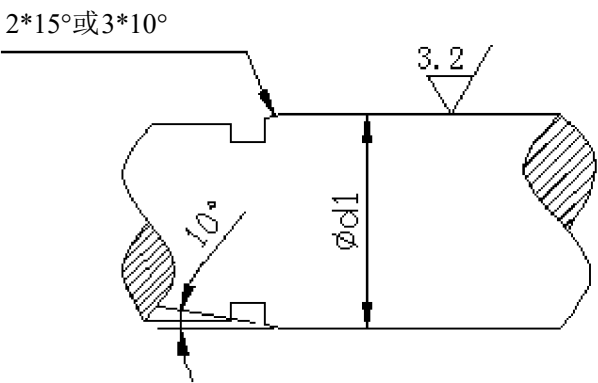
一：类型及安装关系

(一)类型



※ 重要提示：H=H1-1mm

(二)转轴



※ 重要提示
 $2*15^\circ$ 或 $3*10^\circ$
为顺利安装轴面油封导向角

(三): 轴面油封（伽玛密封）型号、规格、尺寸表。（本公司标准）

型号	尺寸公差 规格	$\varnothing d$	$\varnothing D$	$\varnothing DI$	H1	H	h	h1	$\varnothing d1$	备注
		+0.08 -0.02	+0.1 -0.3	参考尺寸	参考尺寸	+0.25 0	+0.3 0		-0.15 -0.2	
TLA0012	RB12*26*4	11.7	26	23	5.5	4.5	3	0.5	12	
TLA0015	RB15*30*4	14.7	30	27	5.5	4.5	3	0.5	15	
TLA0017	RB17*32*4	16.7	32	29	5.5	4.5	3	0.5	17	
TLA0020	RB20*35*4	19.7	35	32	5.5	4.5	3	0.5	20	
TLA0025	RB25*40*4	24.7	40	37	5.5	4.5	3	0.5	25	
TLA0030	RB30*47*4.5	29.7	47	44	6.5	5	3.5	0.5	30	
TLA0035	RB35*52*4.5	34.7	52	49	6.5	5	3.5	0.5	35	
TLA0040	RB40*57*4.5	39.7	57	54	6.5	5	3.5	0.5	40	
TLA0045	RB45*62*4.5	44.7	62	59	6.5	5	3.5	0.5	45	
TLA0050	RB50*70*5.5	49.7	70	67	7.5	6	4.5	0.8	50	
TLA0055	RB55*75*5.5	54.7	75	72	7.5	6	4.5	0.8	55	
TLA0060	RB60*80*5.5	59.7	80	77	7.5	6	4.5	0.8	60	
TLA0065	RB65*85*5.5	64.7	85	82	7.5	6	4.5	0.8	65	
TLA0070	RB70*90*5.5	69.7	90	87	7.5	6	4.5	0.8	70	
TLA0075	RB75*95*5.5	74.7	95	92	7.5	6	4.5	0.8	75	
TLA0080	RB80*100*5.5	79.7	100	97	7.5	6	4.5	0.8	80	
TLA0085	RB85*105*5.5	84.7	105	102	7.5	6	4.5	0.8	85	
TLA0090	RB90*110*5.5	89.7	110	107	7.5	6	4.5	0.8	90	
TLA0095	RB95*115*5.5	94.7	115	112	7.5	6	4.5	0.8	95	
TLA0100	RB100*120*5.5	99.7	120	117	7.5	6	4.5	0.8	100	
TLA0105	RB105*125*5.5	104.7	125	122	7.5	6	4.5	0.8	105	
TLA0110	RB110*130*5.5	109.7	130	127	7.5	6	4.5	0.8	110	
TLA0115	RB115*135*5.5	114.7	135	132	7.5	6	4.5	0.8	115	
TLA0120	RB120*140*5.5	119.7	140	137	7.5	6	4.5	0.8	120	
TLA0125	RB125*145*5.5	124.7	145	142	7.5	6	4.5	0.8	125	
TLA0130	RB130*150*5.5	129.7	150	147	7.5	6	4.5	0.8	130	
TLA0135	RB135*155*5.5	134.7	155	152	7.5	6	4.5	0.8	135	
TLA0140	RB140*160*5.5	139.7	160	157	7.5	6	4.5	0.8	140	
TLA0145	RB145*165*5.5	144.7	165	162	7.5	6	4.5	0.8	145	
TLA0150	RB150*170*5.5	149.7	170	167	7.5	6	4.5	0.8	150	
TLA0155	RB155*175*5.5	154.7	175	172	7.5	6	4.5	0.8	155	
TLA0160	RB160*180*5.5	159.7	180	177	7.5	6	4.5	0.8	160	

(四): 轴面油封(伽玛密封)型号、规格、尺寸表。(适用于 GB1801-79 轴 f9 公差带和 GB304.3-81 轴承公差带 n6~h7)

型号	尺寸公差 规格	$\varnothing d$	$\varnothing D$	$\varnothing D_1$	H1	H	h	h1	$\varnothing d_1$
			+0.1 -0.3	参考 尺寸	参考 尺寸	+0.25 0	+0.3 0		GBf9 以上
TLA0012GB	RB12*26*4	$\varnothing 12_{-0.11}^{-0.19}$	26	23	5.5	4.5	3	0.5	f9
TLA0015GB	RB15*30*4	$\varnothing 15_{-0.11}^{-0.19}$	30	27	5.5	4.5	3	0.5	f9
TLA0020GB	RB20*35*4	$\varnothing 20_{-0.11}^{-0.19}$	35	32	5.5	4.5	3	0.5	f9
TLA0025GB	RB25*40*4	$\varnothing 25_{-0.11}^{-0.19}$	40	37	5.5	4.5	3	0.5	f9
TLA0030GB	RB30*47*4.5	$\varnothing 30_{-0.12}^{-0.20}$	47	44	6.5	5	3.5	0.5	f9
TLA0040GB	RB40*57*4.5	$\varnothing 40_{-0.12}^{-0.20}$	57	49	6.5	5	3.5	0.5	f9
TLA0045GB	RB45*62*4.5	$\varnothing 45_{-0.14}^{-0.22}$	62	54	6.5	5	3.5	0.5	f9
TLA0050GB	RB50*70*5.5	$\varnothing 50_{-0.16}^{-0.25}$	70	59	7.5	6	4.5	0.8	f9
TLA0055GB	RB55*75*5.5	$\varnothing 55_{-0.16}^{-0.25}$	75	67	7.5	6	4.5	0.8	f9
TLA0060GB	RB60*80*5.5	$\varnothing 60_{-0.16}^{-0.25}$	80	72	7.5	6	4.5	0.8	f9
TLA0065GB	RB65*85*5.5	$\varnothing 65_{-0.16}^{-0.25}$	85	77	7.5	6	4.5	0.8	f9
TLA0070GB	RB70*90*5.5	$\varnothing 70_{-0.16}^{-0.25}$	90	82	7.5	6	4.5	0.8	f9

(五): 轴面油封(伽玛密封)型号、规格、尺寸表。(中国防爆研究所轴面油封标准)

型号	尺寸公差 规格	ϕd	ϕD	ϕD_1	H1	H	h	h1	ϕd_1	备注
		+0.08 -0.02	+0.1 -0.3	参考 尺寸	参考 尺寸	+0.25 0	+0.3 0		-0.15 -0.20	
TLA0012F	RB12*26*4	11.30	26	23	5.5	4.5	3	0.5	11.60	
TLA0015F	RB15*30*4	14.30	30	27	5.5	4.5	3	0.5	14.60	
TLA0020F	RB20*35*4	19.30	35	32	5.5	4.5	3	0.5	19.60	
TLA0025F	RB25*40*4	24.60	40	37	5.5	4.5	3	0.5	24.90	
TLA0030F	RB30*47*4.5	29.15	47	44	6.5	5	3.5	0.5	29.45	
TLA0040F	RB40*57*4.5	39.20	57	49	6.5	5	3.5	0.5	39.50	
TLA0040F 以下产品型号、规格、尺寸与本公司标准相同										

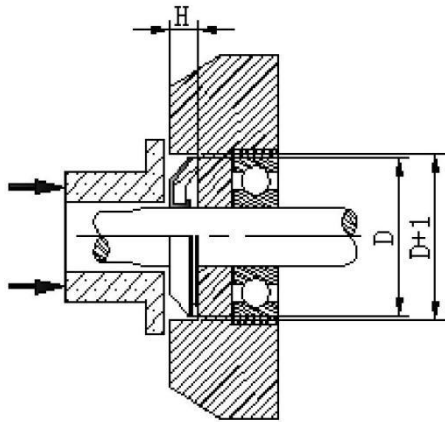
(六): 迷宫式轴端面油封型号、规格、尺寸表。

型号	尺寸公差 规格	ϕd	ϕD_2	ϕD	ϕD_1	h	H1	H2	H	ϕd_1	h1
		+0.08 -0.02	参考 尺寸	参考尺寸	参考尺寸	+0.3 0			+0.15 -0.15	-0.15 -0.20	
TLB0012	RB12*4/34*7	11.70	33	26	23	3	5.5	7	4.5	12	0.5
TLB0015	RB15*4/38*7	14.70	37	30	27	3	5.5	7	4.5	15	0.5
TLB0017											
TLB0020	RB20*4/43*7	19.70	42	35	32	3	5.5	7	4.5	20	0.5
TLB0025	RB25*4/48*7	24.70	47	40	37	3	5.5	7	4.5	25	0.5
TLB0030	RB30*4.5/55*8	29.70	54	47	44	3.5	6.5	8	5	30	0.5
TLB0035	RB35*4.5/60*8	34.70	59	52	49	3.5	6.5	8	5	35	0.5
TLB0040	RB40*4.5/65*8	39.70	64	57	54	3.5	6.5	8	5	40	0.5
TLB0045	RB45*4.5/70*8	44.70	69	62	59	3.5	6.5	8	5	45	0.5
TLB0050	RB50*5.5/78*9	49.70	76.5	70	67	4.5	7.5	9	6	50	0.8
TLB0055	RB55*5.5/83*9	54.70	81.5	75	72	4.5	7.5	9	6	55	0.8
TLB0060	RB60*5.5/88*9	59.70	86.5	80	77	4.5	7.5	9	6	60	0.8
TLB0065	RB65*5.5/93*9	64.70	91.5	85	82	4.5	7.5	9	6	65	0.8
TLB0070	RB70*5.5/98*9	69.70	96.5	90	87	4.5	7.5	9	6	70	0.8
TLB0075	RB75*5.5/103*9	74.70	101.5	95	92	4.5	7.5	9	6	75	0.8

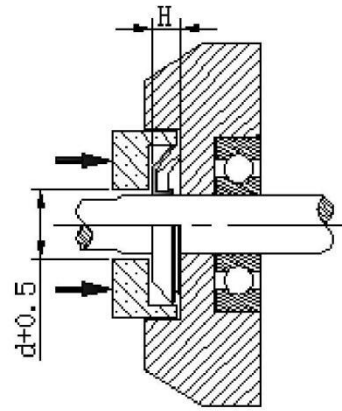
TLB0080	RB80*5.5/108*9	79.70	106.5	100	97	4.5	7.5	9	6	80	0.8
TLB0085	RB85*5.5/113*9	84.70	111.5	105	102	4.5	7.5	9	6	85	0.8
TLB0090	RB90*5.5/118*9	89.70	116.5	110	107	4.5	7.5	9	6	90	0.8
TLB0095	RB95*5.5/123*9	94.70	121.5	115	112	4.5	7.5	9	6	95	0.8
TLB0100	RB100*5.5/128*9	99.70	126.5	120	117	4.5	7.5	9	6	100	0.8
TLB0105	RB105*5.5/133*9	104.70	131.5	125	122	4.5	7.5	9	6	105	0.8
TLB0110	RB110*5.5/138*9	109.70	136.5	130	127	4.5	7.5	9	6	110	0.8
TLB0115	RB115*5.5/143*9	114.70	141.5	135	132	4.5	7.5	9	6	115	0.8
TLB0120	RB120*5.5/148*9	119.70	146.5	140	137	4.5	7.5	9	6	120	0.8
TLB0125	RB125*5.5/153*9	124.70	151.5	145	142	4.5	7.5	9	6	125	0.8
TLB0130	RB130*5.5/158*9	129.70	156.5	150	147	4.5	7.5	9	6	130	0.8
TLB0135	RB135*5.5/163*9	134.70	161.5	155	152	4.5	7.5	9	6	135	0.8
TLB0140	RB140*5.5/168*9	139.70	166.5	160	157	4.5	7.5	9	6	140	0.8
TLB0145	RB145*5.5/173*9	144.70	171.5	165	162	4.5	7.5	9	6	145	0.8
TLB0150	RB150*5.5/178*9	149.70	176.5	170	167	4.5	7.5	9	6	150	0.8
TLB0155	RB155*5.5/183*9	154.70	181.5	175	172	4.5	7.5	9	6	155	0.8
TLB0160	RB160*5.5/188*9	159.70	186.5	180	177	4.5	7.5	9	6	160	0.8

二：轴面油封和迷宫式轴端面油封几种常规安装方法

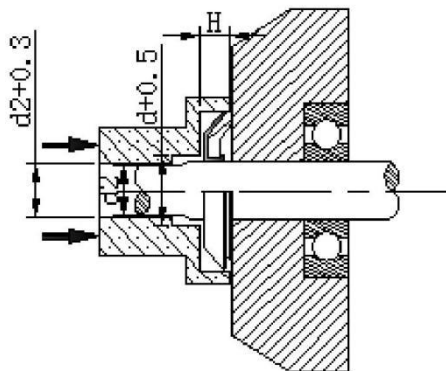
(一)安装高度 H 由端盖决定 (坑式)



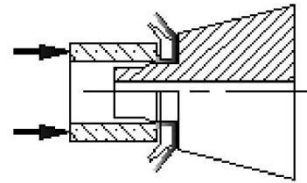
(二)安装高度 H 由安装工具决定(坑式)



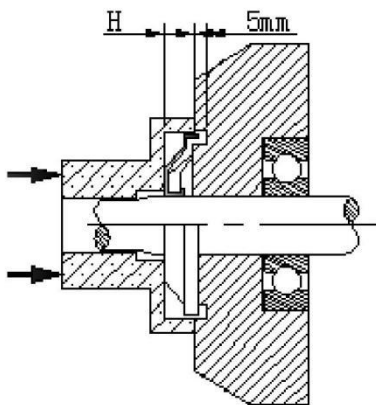
(三)安装高度 H 由安装工具决定(平面)



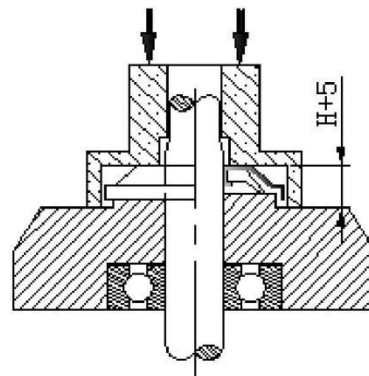
(四)轴肩定位反向安装



(五)迷宫式轴端面油封平面嵌槽式安装

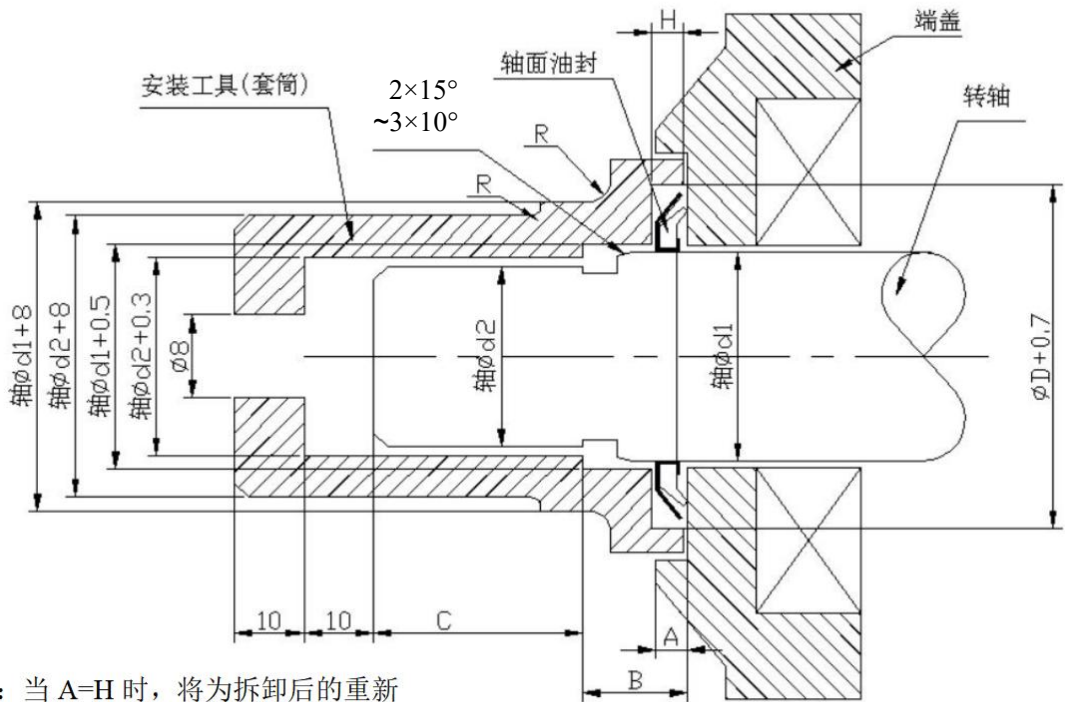


(六) 迷宫式轴端面油封端盖凸台式竖直安装



三：安装工具及安装方法

(一)安装工具参考图



注：当 A=H 时，将为拆卸后的重新安装带来极大便利。

(二) 安装方法

关于装配轴面油封（伽玛密封）的操作要领（ABB 经验）：“一轻、二重、三到位”。关键在一轻，轴面油封被推到 2*15° 或 3*10° 的台阶上，这样就能保证 100% 装配无损坏。

四：材料

密封圈材料： NBR70°（日本瑞翁），温度-40℃~120℃

氟胶（美国杜邦），温度-25℃~250℃

低温氟胶（美国杜邦），温度-60℃~350℃

金属壳材料：冷轧板镀锌、镀铬

不锈钢

五：技术总论

轴面油封和迷宫式轴端面油封是我公司专业设计的两个获得国家专利的产品，专利号：

ZL200320120074.6 ZL200520077996.2

(一)：轴面油封（伽玛密封）优势

(1) 防护上

①优越的动态密封（离心力作用）

②静态时金属壳对密封唇有极好的保护作用，避免受到固体污染微粒的作用（EP 规范）又阻挡了正面的水冲击。

③防护等级 IP55~IP66（南阳防爆所检测报告和上科所检测报告）

(2) 功率损耗极小

密封唇的设计具备较低的轴向力，摩擦力随着旋转速度的增加而减速少，使功率损耗极小，具体数据见功率损耗表。（上海 ABB 电机型式试验对比报告）

(3) 极窄的安装宽度，无需额外的固定方式。

这在一些应用场合中已经证实是非常具有优势的。

(二) 应用范围

(1) 传动系统（例如齿轮箱）

(2) 泵

(3) 电动马达

(4) 机械行业（例如工具机床）

(5) 车轮和重载轴

(三) 迷宫式轴端面油封的优势

在轴面油封（伽玛密封）优势相同的基础上，增加了迷宫环结构，能在任何场合和任何环境下，安全有效的达到 IP66

(四) 轴面油封（伽玛密封）迷宫式轴端油封功率损耗表

轴面油封		旋转 轴直 径 (mm)	轴面油封 线速度 24m/s 时 旋转速度 (转/分)	轴面油封 线速度 12m/s 时 旋转速度 (转/分)	电机 座号	3000 转/分 轴面油封 线速度 (m/s)	电机 功率 损耗 W	1500 转/分 轴面油封 线速度 (m/s)	电机 功率 损耗 W
型号	规格								
TLA0012	RB12*26*4	12	22000	9500	Y56~63	3.8	7	1.9	4
TLA0015	RB15*30*4	15	19000	8200	(H)Y71	4.4	9	2.2	5
TLA0020	RB20*35*4	20	15000	7000	(H)Y80	5.2	16	2.6	8
TLA0025	RB25*40*4	25	13000	6000	(H)Y90	6	23	3	12
TLA0030	RB30*47*4.5	30	11000	5100	(H)Y100	7	30	3.5	16
TLA0035	RB35*52*4.5	35	10000	4600	(H)Y112	7.9	36	3.9	19
TLA0040	RB40*57*4.5	40	9000	4200	(H)Y132	8.6	40	4.3	21
TLA0045	RB45*62*4.5	45	8000	3800	(H)Y160	9.4	47	4.7	27
TLA0050	RB50*70*5.5	50	7000	3400	(H)Y180	10.7	53	5.3	33
TLA0055	RB55*75*5.5	55	6500	3150	Y180	11.5	58	5.7	37
TLA0060	RB60*80*5.5	60	6000	2950	(H)Y200	12.2	61	6.1	41
TLA0065	RB65*85*5.5	65	5500	2750	(H)Y225	13	63	6.5	46
TLA0070	RB70*90*5.5	70	5000	2620	(H)Y250	13.8	64	6.9	51
TLA0075	RB75*95*5.5	75	4800	2480		14.6	65	7.3	55
TLA0080	RB80*100*5.5	80	4600	2350	Y280	15.4	64	7.7	60
TLA0085	RB85*105*5.5	85	4400	2230		16	66	8.1	65
TLA0090	RB90*110*5.5	90	4200	2130		17	56	8.5	70
TLA0095	RB95*115*5.5	95	4000	2040	Y315	17.7	55	8.9	75
TA0100	RB100*120*5.5	100	3900	1950		18.4	47	9.3	80
TLA0105	RB105*125*5.5	105	3800	1860		19.1	46	9.6	83
TLA0110	RB110*130*5.5	110	3700	1790	Y355	19.7	40	10	88
TLA0115	RB115*135*5.5	115	3600	1720		20.3	39	10.4	93
TLA0120	RB120*140*5.5	120	3500	1660	Y400	21.1	36	10.8	96
TLA0125	RB125*145*5.5	125	3400	1600		21.7	35	11.2	99
TLA0130	RB130*150*5.5	130	3300	1550	Y450	22.3	33	11.6	102
TLA0135	RB135*155*5.5	135	3200	1500		22.9	23	12	106
TLA0140	RB140*160*5.5	140	3100	1450	Y450~ Y630	23.5	16	12.4	107
TLA0145	RB145*165*5.5	145	3000	1400		24.1	无	12.8	111
TLA0150	RB150*170*5.5	150	2900	1360		24.8	无	13.2	113
TLA0155	RB155*175*5.5	155	2800	1320		25.5	无	13.6	116
TLA0160	RB160*180*5.5	160	2700	1295	Y800	26.2	无	14	117

注：这已在实践中被证明，在高效、节能、环保方面是非常具有优势的。
使用寿命 3 年-6 年

六：维护及售后服务

（一）重复使用：

重复使用拆卸有严格要求，小电机缓缓拆卸端盖，带出轴面油封，大电机可在轴承外盖上设计两个 M8 螺孔，用螺丝拧顶轴承外盖，带出轴面油封。

（二）重复使用特别声明

（1）拆卸后的轴面油封肉眼观察金属壳无明显的变形，唇口磨损不大，弹性依然保持。

（2）转轴处加生胶带数圈，但必须沿 $2^{\circ}15'$ 或 $3^{\circ}10'$ 装配导向处开始，以增加轴面油封与轴的过盈量，避免轴面油封在高速运动中甩落。

（3）安装高度允许 $H-0.5\text{ mm}$

（三）不重复使用：

可直接用拆卸工具撬掉，重新安装新的。安装高度等于 H

（四）本公司将提供数量为 10 个小包装，小包装内附有型号、规格和简易安装工具。

（五）小包装既可发给各厂采购部或维修部，也可以直接发给使用设备的客户。

（六）售后服务电话：13913725409 0512-63290195 传真 0512-63295325

（七）技术咨询电话：13806257485（王俊华）

吴江天龙电子机械设备有限公司

2024-9-4

吴江天龙电子机械设备有限公司油封产品表

轴面油封(丁晴)系列

规格 材质	丁晴+彩锌 (一般环境)		丁晴+环彩 (ROHS)		丁晴+USU304# (WF1)		丁晴+USU316# (WF2)	
	型号	温度℃	型号	温度℃	型号	温度℃	型号	温度℃
RB12*26*4	TLA0012-dc	-40~120	TLA0012-dhc	-40~120	TLA0012-du304#	-40~120	TLA0012-du316#	-40~120
RB15*30*4	TLA0015-dc		TLA0015-dhc		TLA0015-du304#		TLA0015-du316#	
RB20*35*4	TLA0020-dc		TLA0020-dhc		TLA0020-du304#		TLA0020-du316#	
RB25*40*4	TLA0025-dc		TLA0025-dhc		TLA0025-du304#		TLA0025-du316#	
RB30*47*4.5	TLA0030-dc		TLA0030-dhc		TLA0030-du304#		TLA0030-du316#	
RB35*52*4.5	TLA0035-dc		TLA0035-dhc		TLA0035-du304#		TLA0035-du316#	
RB40*57*4.5	TLA0040-dc		TLA0040-dhc		TLA0040-du304#		TLA0040-du316#	
RB45*62*4.5	TLA0045-dc		TLA0045-dhc		TLA0045-du304#		TLA0045-du316#	
RB50*70*5.5	TLA0050-dc		TLA0050-dhc		TLA0050-du304#		TLA0050-du316#	
RB55*75*5.5	TLA0055-dc		TLA0055-dhc		TLA0055-du304#		TLA0055-du316#	
RB60*80*5.5	TLA0060-dc		TLA0060-dhc		TLA0060-du304#		TLA0060-du316#	
RB65*85*5.5	TLA0065-dc		TLA0065-dhc		TLA0065-du304#		TLA0065-du316#	
RB70*90*5.5	TLA0070-dc		TLA0070-dhc		TLA0070-du304#		TLA0070-du316#	
RB75*95*5.5	TLA0075-dc		TLA0075-dhc		TLA0075-du304#		TLA0075-du316#	
RB80*100*5.5	TLA0080-dc		TLA0080-dhc		TLA0080-du304#		TLA0080-du316#	
RB85*105*5.5	TLA0085-dc		TLA0085-dhc		TLA0085-du304#		TLA0085-du316#	
RB90*110*5.5	TLA0090-dc		TLA0090-dhc		TLA0090-du304#		TLA0090-du316#	
RB95*115*5.5	TLA0095-dc		TLA0095-dhc		TLA0095-du304#		TLA0095-du316#	
RB100*120*5.5	TLA0100-dc		TLA0100-dhc		TLA0100-du304#		TLA0100-du316#	
RB105*125*5.5	TLA0105-dc		TLA0105-dhc		TLA0105-du304#		TLA0105-du316#	
RB110*130*5.5	TLA0110-dc		TLA0110-dhc		TLA0110-du304#		TLA0110-du316#	
RB115*135*5.5	TLA0115-dc		TLA0115-dhc		TLA0115-du304#		TLA0115-du316#	
RB120*140*5.5	TLA0120-dc		TLA0120-dhc		TLA0120-du304#		TLA0120-du316#	
RB125*145*5.5	TLA0125-dc		TLA0125-dhc		TLA0125-du304#		TLA0125-du316#	
RB130*150*5.5	TLA0130-dc		TLA0130-dhc		TLA0130-du304#		TLA0130-du316#	
RB135*155*5.5	TLA0135-dc		TLA0135-dhc		TLA0135-du304#		TLA0135-du316#	
RB140*160*5.5	TLA0140-dc		TLA0140-dhc		TLA0140-du304#		TLA0140-du316#	
RB145*165*5.5	TLA0145-dc		TLA0145-dhc		TLA0145-du304#		TLA0145-du316#	
RB150*170*5.5	TLA0150-dc		TLA0150-dhc		TLA0150-du304#		TLA0150-du316#	
RB155*175*5.5	TLA0155-dc		TLA0155-dhc		TLA0155-du304#		TLA0155-du316#	
RB160*180*5.5	TLA0160-dc		TLA0160-dhc		TLA0160-du304#		TLA0160-du316#	

轴面油封(氟胶)系列

规格 材质	氟胶+彩锌 (一般环境)		氟胶+环彩 (ROHS)		氟胶+USU304# (WF1)		氟胶+USU316# (WF2)	
	型号	温度℃	型号	温度℃	型号	温度℃	型号	温度℃
RB12*26*4	TLA0012-fc	-25~250	TLA0012-fhc	-25~250	TLA0012-fu304#	-25~250	TLA0012-fu316#	-25~250
RB15*30*4	TLA0015-fc		TLA0015-fhc		TLA0015-fu304#		TLA0015-fu316#	
RB20*35*4	TLA0020-fc		TLA0020-fhc		TLA0020-fu304#		TLA0020-fu316#	
RB25*40*4	TLA0025-fc		TLA0025-fhc		TLA0025-fu304#		TLA0025-fu316#	
RB30*47*4.5	TLA0030-fc		TLA0030-fhc		TLA0030-fu304#		TLA0030-fu316#	
RB35*52*4.5	TLA0035-fc		TLA0035-fhc		TLA0035-fu304#		TLA0035-fu316#	
RB40*57*4.5	TLA0040-fc		TLA0040-fhc		TLA0040-fu304#		TLA0040-fu316#	
RB45*62*4.5	TLA0045-fc		TLA0045-fhc		TLA0045-fu304#		TLA0045-fu316#	
RB50*70*5.5	TLA0050-fc		TLA0050-fhc		TLA0050-fu304#		TLA0050-fu316#	
RB55*75*5.5	TLA0055-fc		TLA0055-fhc		TLA0055-fu304#		TLA0055-fu316#	
RB60*80*5.5	TLA0060-fc		TLA0060-fhc		TLA0060-fu304#		TLA0060-fu316#	
RB65*85*5.5	TLA0065-fc		TLA0065-fhc		TLA0065-fu304#		TLA0065-fu316#	
RB70*90*5.5	TLA0070-fc		TLA0070-fhc		TLA0070-fu304#		TLA0070-fu316#	
RB75*95*5.5	TLA0075-fc		TLA0075-fhc		TLA0075-fu304#		TLA0075-fu316#	
RB80*100*5.5	TLA0080-fc		TLA0080-fhc		TLA0080-fu304#		TLA0080-fu316#	
RB85*105*5.5	TLA0085-fc		TLA0085-fhc		TLA0085-fu304#		TLA0085-fu316#	
RB90*110*5.5	TLA0090-fc		TLA0090-fhc		TLA0090-fu304#		TLA0090-fu316#	
RB95*115*5.5	TLA0095-fc		TLA0095-fhc		TLA0095-fu304#		TLA0095-fu316#	
RB100*120*5.5	TLA0100-fc		TLA0100-fhc		TLA0100-fu304#		TLA0100-fu316#	
RB105*125*5.5	TLA0105-fc		TLA0105-fhc		TLA0105-fu304#		TLA0105-fu316#	
RB110*130*5.5	TLA0110-fc		TLA0110-fhc		TLA0110-fu304#		TLA0110-fu316#	
RB115*135*5.5	TLA0115-fc		TLA0115-fhc		TLA0115-fu304#		TLA0115-fu316#	
RB120*140*5.5	TLA0120-fc		TLA0120-fhc		TLA0120-fu304#		TLA0120-fu316#	
RB125*145*5.5	TLA0125-fc		TLA0125-fhc		TLA0125-fu304#		TLA0125-fu316#	
RB130*150*5.5	TLA0130-fc		TLA0130-fhc		TLA0130-fu304#		TLA0130-fu316#	
RB135*155*5.5	TLA0135-fc		TLA0135-fhc		TLA0135-fu304#		TLA0135-fu316#	
RB140*160*5.5	TLA0140-fc		TLA0140-fhc		TLA0140-fu304#		TLA0140-fu316#	
RB145*165*5.5	TLA0145-fc		TLA0145-fhc		TLA0145-fu304#		TLA0145-fu316#	
RB150*170*5.5	TLA0150-fc		TLA0150-fhc		TLA0150-fu304#		TLA0150-fu316#	
RB155*175*5.5	TLA0155-fc		TLA0155-fhc		TLA0155-fu304#		TLA0155-fu316#	
RB160*180*5.5	TLA0160-fc		TLA0160-fhc		TLA0160-fu304#		TLA0160-fu316#	

轴端面油封(丁晴)系列

规格 材质	丁晴+彩锌 (一般环境)		丁晴+环彩 (ROHS)		丁晴+USU304# (WF1)		丁晴+USU316# (WF2)	
	型号	温度℃	型号	温度℃	型号	温度℃	型号	温度℃
RB12*4/34*7	TLB0012-dc	-40~120	TLB0012-dhc	-40~120	TLB0012-du304#	-40~120	TLB0012-du316#	-40~120
RB15*4/38*7	TLB0015-dc		TLB0015-dhc		TLB0015-du304#		TLB0015-du316#	
RB20*4/43*7	TLB0020-dc		TLB0020-dhc		TLB0020-du304#		TLB0020-du316#	
RB25*4/48*7	TLB0025-dc		TLB0025-dhc		TLB0025-du304#		TLB0025-du316#	
RB30*4.5/55*8	TLB0030-dc		TLB0030-dhc		TLB0030-du304#		TLB0030-du316#	
RB35*4.5/60*8	TLB0035-dc		TLB0035-dhc		TLB0035-du304#		TLB0035-du316#	
RB40*4.5/65*8	TLB0040-dc		TLB0040-dhc		TLB0040-du304#		TLB0040-du316#	
RB45*4.5/70*8	TLB0045-dc		TLB0045-dhc		TLB0045-du304#		TLB0045-du316#	
RB50*5.5/78*9	TLB0050-dc		TLB0050-dhc		TLB0050-du304#		TLB0050-du316#	
RB55*5.5/83*9	TLB0055-dc		TLB0055-dhc		TLB0055-du304#		TLB0055-du316#	
RB60*5.5/88*9	TLB0060-dc		TLB0060-dhc		TLB0060-du304#		TLB0060-du316#	
RB65*5.5/93*9	TLB0065-dc		TLB0065-dhc		TLB0065-du304#		TLB0065-du316#	
RB70*5.5/98*9	TLB0070-dc		TLB0070-dhc		TLB0070-du304#		TLB0070-du316#	
RB75*5.5/103*9	TLB0075-dc		TLB0075-dhc		TLB0075-du304#		TLB0075-du316#	
RB80*5.5/108*9	TLB0080-dc		TLB0080-dhc		TLB0080-du304#		TLB0080-du316#	
RB85*5.5/113*9	TLB0085-dc		TLB0085-dhc		TLB0085-du304#		TLB0085-du316#	
RB90*5.5/118*9	TLB0090-dc		TLB0090-dhc		TLB0090-du304#		TLB0090-du316#	
RB95*5.5/123*9	TLB0095-dc		TLB0095-dhc		TLB0095-du304#		TLB0095-du316#	
RB100*5.5/128*9	TLB0100-dc		TLB0100-dhc		TLB0100-du304#		TLB0100-du316#	
RB105*5.5/133*9	TLB0105-dc		TLB0105-dhc		TLB0105-du304#		TLB0105-du316#	
RB110*5.5/138*9	TLB0110-dc		TLB0110-dhc		TLB0110-du304#		TLB0110-du316#	
RB115*5.5/143*9	TLB0115-dc		TLB0115-dhc		TLB0115-du304#		TLB0115-du316#	
RB120*5.5/148*9	TLB0120-dc		TLB0120-dhc		TLB0120-du304#		TLB0120-du316#	
RB125*5.5/153*9	TLB0125-dc		TLB0125-dhc		TLB0125-du304#		TLB0125-du316#	
RB130*5.5/158*9	TLB0130-dc		TLB0130-dhc		TLB0130-du304#		TLB0130-du316#	
RB135*5.5/163*9	TLB0135-dc		TLB0135-dhc		TLB0135-du304#		TLB0135-du316#	
RB140*5.5/168*9	TLB0140-dc		TLB0140-dhc		TLB0140-du304#		TLB0140-du316#	
RB145*5.5/173*9	TLB0145-dc		TLB0145-dhc		TLB0145-du304#		TLB0145-du316#	
RB150*5.5/178*9	TLB0150-dc		TLB0150-dhc		TLB0150-du304#		TLB0150-du316#	
RB155*5.5/183*9	TLB0155-dc		TLB0155-dhc		TLB0155-du304#		TLB0155-du316#	
RB160*5.5/188*9	TLB0160-dc		TLB0160-dhc		TLB0160-du304#		TLB0160-du316#	

轴端面油封(氟胶)系列

规格 \ 材质	氟胶+彩锌 (一般环境)		氟胶+环彩 (ROHS)		氟胶+USU304# (WF1)		氟胶+USU316# (WF2)	
	型号	温度℃	型号	温度℃	型号	温度℃	型号	温度℃
RB12*4/34*7	TLB0012-fc	-25~250	TLB0012-fhc	-25~250	TLB0012-fu304#	-25~250	TLB0012-fu316#	-25~250
RB15*4/38*7	TLB0015-fc		TLB0015-fhc		TLB0015-fu304#		TLB0015-fu316#	
RB20*4/43*7	TLB0020-fc		TLB0020-fhc		TLB0020-fu304#		TLB0020-fu316#	
RB25*4/48*7	TLB0025-fc		TLB0025-fhc		TLB0025-fu304#		TLB0025-fu316#	
RB30*4.5/55*8	TLB0030-fc		TLB0030-fhc		TLB0030-fu304#		TLB0030-fu316#	
RB35*4.5/60*8	TLB0035-fc		TLB0035-fhc		TLB0035-fu304#		TLB0035-fu316#	
RB40*4.5/65*8	TLB0040-fc		TLB0040-fhc		TLB0040-fu304#		TLB0040-fu316#	
RB45*4.5/70*8	TLB0045-fc		TLB0045-fhc		TLB0045-fu304#		TLB0045-fu316#	
RB50*5.5/78*9	TLB0050-fc		TLB0050-fhc		TLB0050-fu304#		TLB0050-fu316#	
RB55*5.5/83*9	TLB0055-fc		TLB0055-fhc		TLB0055-fu304#		TLB0055-fu316#	
RB60*5.5/88*9	TLB0060-fc		TLB0060-fhc		TLB0060-fu304#		TLB0060-fu316#	
RB65*5.5/93*9	TLB0065-fc		TLB0065-fhc		TLB0065-fu304#		TLB0065-fu316#	
RB70*5.5/98*9	TLB0070-fc		TLB0070-fhc		TLB0070-fu304#		TLB0070-fu316#	
RB75*5.5/103*9	TLB0075-fc		TLB0075-fhc		TLB0075-fu304#		TLB0075-fu316#	
RB80*5.5/108*9	TLB0080-fc		TLB0080-fhc		TLB0080-fu304#		TLB0080-fu316#	
RB85*5.5/113*9	TLB0085-fc		TLB0085-fhc		TLB0085-fu304#		TLB0085-fu316#	
RB90*5.5/118*9	TLB0090-fc		TLB0090-fhc		TLB0090-fu304#		TLB0090-fu316#	
RB95*5.5/123*9	TLB0095-fc		TLB0095-fhc		TLB0095-fu304#		TLB0095-fu316#	
RB100*5.5/128*9	TLB0100-fc		TLB0100-fhc		TLB0100-fu304#		TLB0100-fu316#	
RB105*5.5/133*9	TLB0105-fc		TLB0105-fhc		TLB0105-fu304#		TLB0105-fu316#	
RB110*5.5/138*9	TLB0110-fc		TLB0110-fhc		TLB0110-fu304#		TLB0110-fu316#	
RB115*5.5/143*9	TLB0115-fc		TLB0115-fhc		TLB0115-fu304#		TLB0115-fu316#	
RB120*5.5/148*9	TLB0120-fc		TLB0120-fhc		TLB0120-fu304#		TLB0120-fu316#	
RB125*5.5/153*9	TLB0125-fc		TLB0125-fhc		TLB0125-fu304#		TLB0125-fu316#	
RB130*5.5/158*9	TLB0130-fc		TLB0130-fhc		TLB0130-fu304#		TLB0130-fu316#	
RB135*5.5/163*9	TLB0135-fc		TLB0135-fhc		TLB0135-fu304#		TLB0135-fu316#	
RB140*5.5/168*9	TLB0140-fc		TLB0140-fhc		TLB0140-fu304#		TLB0140-fu316#	
RB145*5.5/173*9	TLB0145-fc		TLB0145-fhc		TLB0145-fu304#		TLB0145-fu316#	
RB150*5.5/178*9	TLB0150-fc		TLB0150-fhc		TLB0150-fu304#		TLB0150-fu316#	
RB155*5.5/183*9	TLB0155-fc		TLB0155-fhc		TLB0155-fu304#		TLB0155-fu316#	
RB160*5.5/188*9	TLB0160-fc		TLB0160-fhc		TLB0160-fu304#		TLB0160-fu316#	