

### TSMB-J13

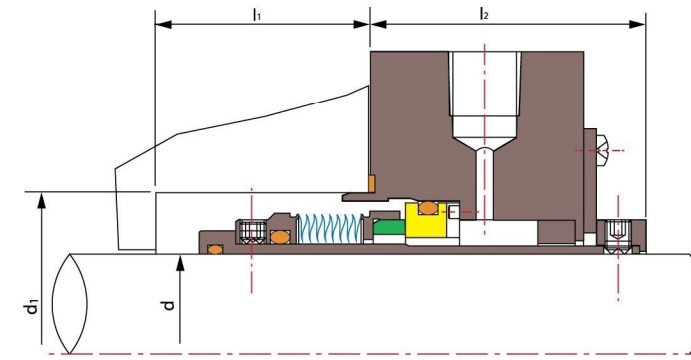
#### Operating Limits

Pressure: ≤2MPa  
 Speed: ≤25m/s  
 Temperature: -30°C ~+200°C

- Rotary Ring(SiC/Carbon/TC)
- Stationary Ring(SiC/TC)
- Secondary Seal(VITON/Encapsulated Ring/PTFE)
- Metal Bellows(SUS316L/AM350/Inconel718/Titanium/Hastelloy-C/Alloy-20)
- Other Parts(SUS304/SUS316/Titanium/Hastelloy-C)

d (inches)	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	h	d <sub>4</sub>
1.125	1.687	1.937	2.375	0.687	1.687	2.437	0.562	4.375
1.125	1.687	1.937	3.250	0.687	1.687	3.312	0.437	4.500
1.375	1.937	2.062	2.375	0.687	1.562	2.437	0.562	4.375
1.375	1.937	2.812	3.250	0.687	1.562	3.437	0.500	5.250
1.500	2.187	2.937	2.750	0.750	1.687	2.812	0.562	5.125
1.625	2.312	2.437	2.812	0.750	1.687	2.875	0.562	5.250
1.750	2.437	2.562	3.125	0.750	1.687	3.187	0.562	5.250
1.750	2.437	3.437	4.250	0.750	1.687	4.562	0.562	6.500
1.875	2.562	2.687	3.250	0.750	1.687	3.312	0.562	5.375
1.875	2.562	3.562	4.250	0.750	1.687	4.437	0.562	6.500
2.000	2.687	2.812	3.250	0.750	1.750	3.312	0.687	5.500
2.125	2.812	2.937	3.500	0.875	1.687	3.562	0.687	5.437
2.500	3.312	3.437	4.250	1.000	1.687	4.312	0.812	6.250
2.500	3.312	4.375	5.500	1.000	1.687	5.625	0.750	8.000
2.625	3.437	3.562	4.375	1.187	1.625	4.437	0.562	6.500
2.625	3.437	4.375	5.375	1.187	1.625	5.437	0.565	7.000
2.750	3.625	3.750	4.500	1.062	1.625	4.562	0.750	7.000
3.000	3.875	4.000	4.812	1.125	1.656	4.875	0.812	7.750
3.250	4.125	4.250	4.937	1.125	1.656	5.000	0.812	7.500
3.500	4.375	4.687	5.625	1.250	1.656	5.687	0.812	8.500

d (mm)	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	h	d <sub>4</sub>
28	42.8	49.2	60.3	17.4	42.9	61.9	14.3	111.1
33	49.2	52.4	60.3	17.4	39.7	61.9	14.3	106.0
35	49.2	52.4	60.3	17.4	39.7	61.9	14.3	106.0
38	55.5	58.7	69.8	19.0	42.9	71.5	14.3	130.2
40	58.7	61.9	71.4	19.1	42.8	73.0	14.3	133.4
43	61.9	65.7	79.4	19.1	42.9	81.0	14.3	133.4
45	61.9	65.1	79.4	19.1	42.9	81.0	14.3	133.4
48	65.1	68.3	82.6	19.0	44.5	84.2	17.4	139.7
50	68.2	71.4	82.6	19.0	44.5	84.2	17.4	138.0
53	71.4	74.6	88.9	22.2	42.9	90.5	17.4	138.0
55	71.4	74.6	88.9	22.2	42.9	90.5	17.4	138.0
60	80.9	84.1	96.8	25.4	41.3	98.4	17.4	158.8
65	87.3	90.5	109.5	30.2	41.2	111.1	17.4	177.8
70	92.1	95.2	114.3	27.0	41.2	115.9	17.5	190.0
75	98.4	101.6	122.2	28.5	42.1	123.8	20.6	196.9
80	104.8	108.0	125.4	28.5	42.1	127.0	19.1	190.0
85	108.0	111.1	125.4	31.7	42.1	127.0	19.1	203.2
100	128.6	131.8	154.0	34.9	42.1	155.6	22.2	228.6



### TSMB-FS02

#### Operating Limits

Pressure: ≤2.7MPa  
 Speed: ≤23m/s  
 Temperature: -30°C ~+204°C

- Rotary Ring(SiC/Carbon/TC)
- Stationary Ring(SiC/TC)
- Secondary Seal(VITON/Encapsulated Ring/PTFE)
- Metal Bellows(SUS316L/AM350/Inconel718 /Titanium/Hastelloy-C/Alloy-20)
- Other Parts(SUS304/SUS316/Titanium/Hastelloy-C)

d <sub>1</sub> (inches)	d	l <sub>1</sub>	l <sub>2</sub>
1.625	0.750	1.437	1.937
1.687	0.812	1.468	1.968
1.750	0.875	1.468	1.968
1.875	1.000	1.406	2.000
2.000	1.125	1.281	2.312
2.125	1.250	1.375	2.312
2.250	1.375	1.531	2.343
2.562	1.437	1.625	2.375
2.687	1.562	1.937	2.500
2.812	1.687	1.968	2.500
2.937	1.812	1.937	2.531
3.187	1.937	1.906	2.656
3.312	2.062	1.906	2.656
3.437	2.187	1.906	2.718
3.562	2.250	2.062	2.718
3.562	2.375	2.062	2.718
3.687	2.500	2.125	2.875
3.937	2.625	2.062	3.000
4.062	2.750	2.062	3.000
4.250	2.875	2.156	3.156
4.375	3.000	2.156	3.156
4.500	3.125	2.156	3.156
4.625	3.250	2.156	3.156
4.875	3.500	2.156	3.156
5.187	3.750	2.156	3.375
5.500	4.000	2.156	3.406
5.750	4.250	2.156	3.406
6.250	4.750	2.250	3.406

d (mm)	d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>
41.3	19.0	28.6	30.2
42.8	20.6	29.4	50.0
44.4	22.2	29.4	30.2
47.6	25.4	27.8	30.2
50.8	28.6	24.6	34.9
54.0	31.8	26.2	34.9
57.1	34.9	30.2	34.9
65.1	36.5	32.5	34.9
68.3	39.7	34.1	34.9
71.4	42.9	34.9	34.9
74.8	46.0	34.1	34.9
81.0	49.2	33.3	34.9
84.1	52.4	33.3	34.9
87.3	55.6	33.3	34.9
90.5	57.1	37.3	34.9
90.5	60.3	37.3	34.9
93.7	63.5	38.9	34.9
100.0	66.7	38.1	38.1
103.2	69.9	38.1	38.1
107.9	73.0	39.7	42.9
111.1	76.2	39.7	42.9
114.3	79.4	39.7	42.9
117.5	82.5	39.7	42.9
123.8	88.9	39.7	42.9
131.8	95.3	39.7	42.9
139.7	101.6	39.7	86.5
146.1	107.9	39.7	43.7
158.8	120.6	39.7	43.7