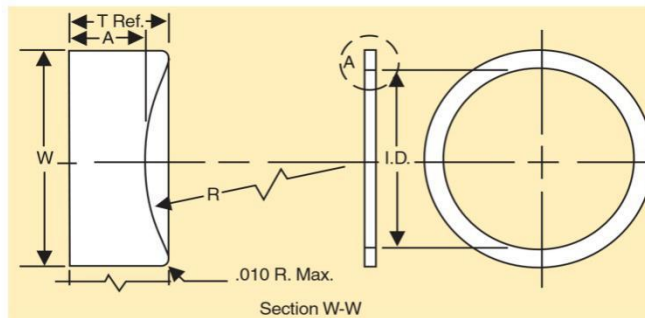
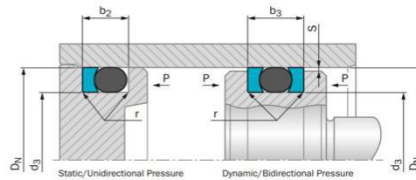


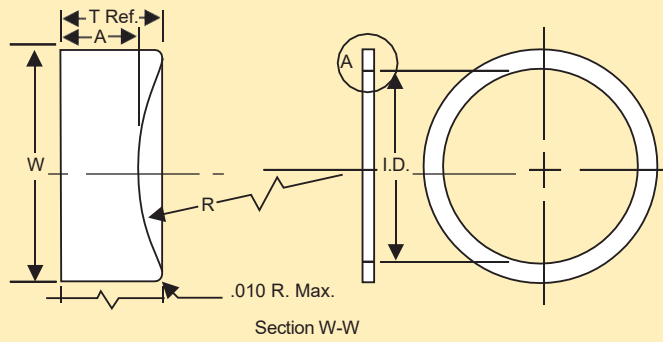


GUIDE BOOK

CONTOUR BACKUP RINGS



8-Series Dimensions



XIAMEN SEALS backup rings were developed primarily for service in petro- leum based hydraulic fluids, at -4°C to 121°C (-40°F to 250°F). SEALS's standard compounds, provides the maximum benefits in back-up ring service. Compounds for use in other fluids and for temperatures up to 204°C (400°F) are available upon request.

SEALS will stretch up to 50%, and are quickly and easily installed. Advantages of the contour design are obtained regardless of how Backup rings are installed — they may be in- stalled with the concave face in either direction, toward or away from the O-ring.

Parker Parbak 8-Series Dimensions

Dash No.	I.D. (in.)	Tol. ±	R ±.010	T (Ref.)	A (in.)	Tol. ±	W (in.)	Tol. ±	Dash No.	I.D. (in.)	Tol. ±	R ±.010	T (Ref.)	A (in.)	Tol. ±	W (in.)	Tol. ±
004	.096	.005	.087	.049	.045	.003	.053	.003	041	3.018	.024	.087	.049	.045	.003	.053	.003
005	.127	↑	↑	↑	↑	↑	↑	↑	042	3.268	.024	↑	↑	↑	↑	↑	↑
006	.140	↑	↑	↑	↑	↑	↑	↑	043	3.518	.024	↑	↑	↑	↑	↑	↑
007	.171	↑	↑	↑	↑	↑	↑	↑	044	3.768	.027	↑	↑	↑	↑	↑	↑
008	.202	↑	↑	↑	↑	↑	↑	↑	045	4.018	.027	↑	↑	↑	↑	↑	↑
009	.234	↓	↓	↓	↓	↓	↓	↓	046	4.268	.030	↓	↓	↓	↓	↓	↓
010	.265	↓	↓	↓	↓	↓	↓	↓	047	4.518	.030	↓	↓	↓	↓	↓	↓
011	.327	↓	↓	↓	↓	↓	↓	↓	048	4.768	.030	↓	↓	↓	↓	↓	↓
012	.390	↓	↓	↓	↓	↓	↓	↓	049	5.018	.037	↓	↓	↓	↓	↓	↓
013	.455	.005	↓	↓	↓	↓	↓	↓	050	5.268	.037	.087	.049			.053	
014	.518	.005	↓	↓	↓	↓	↓	↓	102	.077	.005	.129	.053			.086	
015	.580	.007	↓	↓	↓	↓	↓	↓	103	.109	↑	↑	↑			↑	
016	.643	.009	↓	↓	↓	↓	↓	↓	104	.140	↑	↑	↑			↑	
017	.705	↑	↓	↓	↓	↓	↓	↓	105	.171	↑	↑	↑			↑	
018	.768	↑	↓	↓	↓	↓	↓	↓	106	.202	↑	↑	↑			↑	
019	.830	↓	↓	↓	↓	↓	↓	↓	107	.234	↓	↓	↓			↓	
020	.893	↓	↓	↓	↓	↓	↓	↓	108	.265	↓	↓	↓			↓	
021	.955	.009	↓	↓	↓	↓	↓	↓	109	.327	↓	↓	↓			↓	
022	1.018	.010	↓	↓	↓	↓	↓	↓	110	.390	↓	↓	↓			↓	
023	1.080	.010	↓	↓	↓	↓	↓	↓	111	.452	↓	↓	↓			↓	
024	1.143	.010	↓	↓	↓	↓	↓	↓	112	.515	.005	↓	↓	↓		↓	
025	1.205	.011	↓	↓	↓	↓	↓	↓	113	.577	.007	↓	↓	↓		↓	
026	1.268	.011	↓	↓	↓	↓	↓	↓	114	.640	.009	↓	↓	↓		↓	
027	1.330	.011	↓	↓	↓	↓	↓	↓	115	.702	.009	↓	↓	↓		↓	
028	1.393	.013	↓	↓	↓	↓	↓	↓	116	.765	.009	↓	↓	↓		↓	
029	1.518	.013	↓	↓	↓	↓	↓	↓	117	.831	.010	↓	↓	↓		↓	
030	1.643	.013	↓	↓	↓	↓	↓	↓	118	.893	↑	↓	↓	↓		↓	
031	1.768	.015	↓	↓	↓	↓	↓	↓	119	.956	↑	↓	↓	↓		↓	
032	1.893	.015	↓	↓	↓	↓	↓	↓	120	1.018	↑	↓	↓	↓		↓	
033	2.018	.018	↓	↓	↓	↓	↓	↓	121	1.081	↓	↓	↓	↓		↓	
034	2.143	↑	↓	↓	↓	↓	↓	↓	122	1.143	.010	↓	↓	↓		↓	
035	2.268	↑	↓	↓	↓	↓	↓	↓	123	1.206	.012	↓	↓	↓		↓	
036	2.393	↓	↓	↓	↓	↓	↓	↓	124	1.268	↑	↓	↓	↓		↓	
037	2.518	.018	↓	↓	↓	↓	↓	↓	125	1.331	↑	↓	↓	↓		↓	
038	2.643	.020	↓	↓	↓	↓	↓	↓	126	1.393	↑	↓	↓	↓		↓	
039	2.768	.020	↓	↓	↓	↓	↓	↓	127	1.456	↓	↓	↓	↓		↓	
040	2.893	.020	.087	.049	.045	.003	.053	.003	128	1.518	.012	.129	.053	.045	.003	.086	.003

Notes: 1. sizes are designed to correspond with AS568A series O-ring with which they are used.

8-Series Dimensions (Continued)

Dash No.	I.D. (in.)	Tol. ±	R ±.010	T (Ref.)	A (in.)	Tol. ±	W (in.)	Tol. ±	Dash No.	I.D. (in.)	Tol. ±	R ±.010	T (Ref.)	A (in.)	Tol. ±	W (in.)	Tol. ±
129	1.581	.015	↑	↑	↑	↑	↑	↑	206	.518	.005	↑	↑	↑	↑	↑	↑
130	1.643	↑	↑	↑	↑	↑	↑	↑	207	.580	.007	↑	↑	↑	↑	↑	↑
131	1.706	↑	↑	↑	↑	↑	↑	↑	208	.643	.009	↑	↑	↑	↑	↑	↑
132	1.768	↑	↑	↑	↑	↑	↑	↑	209	.705	.009	↑	↑	↑	↑	↑	↑
133	1.831	↓	↑	↑	↑	↑	↑	↑	210	.766	.010	↑	↑	↑	↑	↑	↑
134	1.893	.015	↑	↑	↑	↑	↑	↑	211	.828	↑	↑	↑	↑	↑	↑	↑
135	1.956	.017	↑	↑	↑	↑	↑	↑	212	.891	↓	↑	↑	↑	↑	↑	↑
136	2.018	↑	↑	↑	↑	↑	↑	↑	213	.953	↑	↑	↑	↑	↑	↑	↑
137	2.081	↓	↑	↑	↑	↑	↑	↑	214	1.016	.010	↑	↑	↑	↑	↑	↑
138	2.143	.017	↑	↑	↑	↑	↑	↑	215	1.078	.010	↑	↑	↑	↑	↑	↑
139	2.206	.017	↑	↑	↑	↑	↑	↑	216	1.141	.012	↑	↑	↑	↑	↑	↑
140	2.268	.017	↑	↑	↑	↑	↑	↑	217	1.203	↑	↑	↑	↑	↑	↑	↑
141	2.331	.020	↑	↑	↑	↑	↑	↑	218	1.266	↑	↑	↑	↑	↑	↑	↑
142	2.393	↑	↑	↑	↑	↑	↑	↑	219	1.334	↑	↑	↑	↑	↑	↑	↑
143	2.456	↑	↑	↑	↑	↑	↑	↑	220	1.397	↓	↑	↑	↑	↑	↑	↑
144	2.518	↑	↑	↑	↑	↑	↑	↑	221	1.459	.012	↑	↑	↑	↑	↑	↑
145	2.581	↓	↑	↑	↑	↑	↑	↑	222	1.522	.015	↑	↑	↑	↑	↑	↑
146	2.643	.020	↑	↑	↑	↑	↑	↑	223	1.647	.015	↑	↑	↑	↑	↑	↑
147	2.706	.022	↑	↑	↑	↑	↑	↑	224	1.772	.015	↑	↑	↑	↑	↑	↑
148	2.768	↑	↑	↑	↑	↑	↑	↑	225	1.897	.018	↑	↑	↑	↑	↑	↑
149	2.831	↓	↑	↑	↑	↑	↑	↑	226	2.022	.018	↑	↑	↑	↑	↑	↑
150	2.893	.022	↑	↑	↑	↑	↑	↑	227	2.147	.018	↑	↑	↑	↑	↑	↑
151	3.018	.024	↑	↑	↑	↑	↑	↑	228	2.272	.020	↑	↑	↑	↑	↑	↑
152	3.268	.024	↑	↑	↑	↑	↑	↑	229	2.397	.020	↑	↑	↑	↑	↑	↑
153	3.518	.024	↑	↑	↑	↑	↑	↑	230	2.522	.020	↑	↑	↑	↑	↑	↑
154	3.768	.028	↑	↑	↑	↑	↑	↑	231	2.631	.020	↑	↑	↑	↑	↑	↑
155	4.018	.028	↑	↑	↑	↑	↑	↑	232	2.756	.024	↑	↑	↑	↑	↑	↑
156	4.268	.030	↑	↑	↑	↑	↑	↑	233	2.881	↑	↑	↑	↑	↑	↑	↑
157	4.518	.030	↑	↑	↑	↑	↑	↑	234	3.006	↑	↑	↑	↑	↑	↑	↑
158	4.768	.030	↑	↑	↑	↑	↑	↑	235	3.131	↑	↑	↑	↑	↑	↑	↑
159	5.018	.035	↑	↑	↑	↑	↑	↑	236	3.256	↑	↑	↑	↑	↑	↑	↑
160	5.268	↑	↑	↑	↑	↑	↑	↑	237	3.381	↓	↑	↑	↑	↑	↑	↑
161	5.518	↑	↑	↑	↑	↑	↑	↑	238	3.506	.024	↑	↑	↑	↑	↑	↑
162	5.768	↓	↑	↑	↑	↑	↑	↑	239	3.631	.028	↑	↑	↑	↑	↑	↑
163	6.018	.035	↑	↑	↑	↑	↑	↑	240	3.756	↑	↑	↑	↑	↑	↑	↑
164	6.268	.040	↑	↑	↑	↑	↑	↑	241	3.881	↑	↑	↑	↑	↑	↑	↑
165	6.518	↑	↑	↑	↑	↑	↑	↑	242	4.006	↓	↑	↑	↑	↑	↑	↑
166	6.768	↓	↑	↑	↑	↑	↑	↑	243	4.131	.028	↑	↑	↑	↑	↑	↑
167	7.018	.040	↑	↑	↑	↑	↑	↑	244	4.256	.030	↑	↑	↑	↑	↑	↑
168	7.268	.045	↑	↑	↑	↑	↑	↑	245	4.381	↑	↑	↑	↑	↑	↑	↑
169	7.518	↑	↑	↑	↑	↑	↑	↑	246	4.506	↑	↑	↑	↑	↑	↑	↑
170	7.768	↓	↑	↑	↑	↑	↑	↑	247	4.631	↓	↑	↑	↑	↑	↑	↑
171	8.018	.045	↑	↑	↑	↑	↑	↑	248	4.768	.030	↑	↑	↑	↑	↑	↑
172	8.268	.050	↑	↑	↑	↑	↑	↑	249	4.893	.035	↑	↑	↑	↑	↑	↑
173	8.518	↑	↑	↑	↑	↑	↑	↑	250	5.018	↑	↑	↑	↑	↑	↑	↑
174	8.768	↑	↑	↑	↑	↑	↑	↑	251	5.143	↑	↑	↑	↑	↑	↑	↑
175	9.018	.050	↑	↑	↑	↑	↑	↑	252	5.268	↑	↑	↑	↑	↑	↑	↑
176	9.268	.055	↑	↑	↑	↑	↑	↑	253	5.393	↑	↑	↑	↑	↑	↑	↑
177	9.518	.055	↓	↓	↓	↓	↓	↓	254	5.518	↑	↑	↑	↑	↑	↑	↑
178	9.768	.055	.129	.053	.045	↓	.086	.003	255	5.643	↑	↑	↑	↑	↑	↑	↑
201	.202	.005	.174	.050	.040	↓	.118	.004	256	5.768	↓	↓	↓	↓	↓	↓	↓
202	.265	↑	↑	↑	↑	↓	↑	↑	257	5.893	↓	↓	↓	↓	↓	↓	↓
203	.327	↓	↑	↑	↑	↓	↑	↑	258	6.018	.035	↓	↓	↓	↓	↓	↓
204	.390	↓	↑	↑	↑	↓	↑	↑	259	6.268	.040	↓	↓	↓	↓	↓	↓
205	.455	.005	.174	.050	.040	.003	.118	.004	260	6.518	.040	↓	↓	↓	↓	↓	↓
									261	6.768	.040	.174	.050	.040	.003	.118	.004

Notes: 1. Parbak sizes are designed to correspond with AS568A series O-ring with which they are used.

8-Series Dimensions (Continued)

Dash No.	I.D. (in.)	Tol. ±	R ±.010	T (Ref.)	A (in.)	Tol. ±	W (in.)	Tol. ±	Dash No.	I.D. (in.)	Tol. ±	R ±.010	T (Ref.)	A (in.)	Tol. ±	W (in.)	Tol. ±
262	7.018	.040	.174	.050	.040	.003	.118	.004	341	3.523	.024	.262	.076	.060	.004	.183	.005
263	7.268	.045	↑	↑	↑	↑	↑	↑	342	3.648	.028	↑	↑	↑	↑	↑	↑
264	7.518	↑	↑	↑	↑	↑	↑	↑	343	3.773	↑	↑	↑	↑	↑	↑	↑
265	7.768	↓	↑	↑	↑	↑	↑	↑	344	3.898	↓	↑	↑	↑	↑	↑	↑
266	8.018	.045	↑	↑	↑	↑	↑	↑	345	4.028	↓	↑	↑	↑	↑	↑	↑
267	8.268	.050	↑	↑	↑	↑	↑	↑	346	4.153	.028	↑	↑	↑	↑	↑	↑
268	8.518	↑	↑	↑	↑	↑	↑	↑	347	4.278	.030	↑	↑	↑	↑	↑	↑
269	8.768	↓	↑	↑	↑	↑	↑	↑	348	4.403	↑	↑	↑	↑	↑	↑	↑
270	9.018	.050	↑	↑	↑	↑	↑	↑	349	4.528	↓	↑	↑	↑	↑	↑	↑
271	9.268	.055	↑	↑	↑	↑	↑	↑	350	4.653	↑	↑	↑	↑	↑	↑	↑
272	9.518	.055	↑	↑	↑	↑	↑	↑	351	4.778	↓	↑	↑	↑	↑	↑	↑
273	9.768	.055	↑	↑	↑	↑	↑	↑	352	4.903	.030	↑	↑	↑	↑	↑	↑
274	10.018	.055	↑	↑	↑	↑	↑	↑	353	5.028	.037	↑	↑	↑	↑	↑	↑
275	10.518	.055	↑	↑	↑	↑	↑	↑	354	5.153	.037	↑	↑	↑	↑	↑	↑
276	11.018	.065	↑	↑	↑	↑	↑	↑	355	5.278	.037	↑	↑	↑	↑	↑	↑
277	11.518	↑	↑	↑	↑	↑	↑	↑	356	5.403	.037	↑	↑	↑	↑	↑	↑
278	12.018	↓	↑	↑	↑	↑	↑	↑	357	5.528	↑	↑	↑	↑	↑	↑	↑
279	13.018	↓	↑	↑	↑	↑	↑	↑	358	5.653	↑	↑	↑	↑	↑	↑	↑
280	14.018	↓	↑	↑	↑	↑	↑	↑	359	5.778	↓	↑	↑	↑	↑	↑	↑
281	15.018	.065	↑	↑	↑	↑	↑	↑	360	5.903	↓	↑	↑	↑	↑	↑	↑
282	15.989	.075	↓	↓	↓	↓	↓	↓	361	6.028	.037	↑	↑	↑	↑	↑	↑
283	16.989	.080	↓	↓	↓	↓	↓	↓	362	6.278	.040	↑	↑	↑	↑	↑	↑
284	17.989	.085	.174	.050	.040	.003	.118	.004	363	6.528	↑	↑	↑	↑	↑	↑	↑
309	.450	.005	↑	↑	↑	↑	↑	↑	364	6.778	↓	↑	↑	↑	↑	↑	↑
310	.513	.005	↑	↑	↑	↑	↑	↑	365	7.028	.040	↑	↑	↑	↑	↑	↑
311	.575	.007	↑	↑	↑	↑	↑	↑	366	7.278	.045	↑	↑	↑	↑	↑	↑
312	.638	.009	↑	↑	↑	↑	↑	↑	367	7.528	↑	↑	↑	↑	↑	↑	↑
313	.700	.009	↑	↑	↑	↑	↑	↑	368	7.778	↓	↑	↑	↑	↑	↑	↑
314	.763	.010	↑	↑	↑	↑	↑	↑	369	8.028	.045	↑	↑	↑	↑	↑	↑
315	.825	↑	↑	↑	↑	↑	↑	↑	370	8.278	.050	↑	↑	↑	↑	↑	↑
316	.888	↑	↑	↑	↑	↑	↑	↑	371	8.528	↑	↑	↑	↑	↑	↑	↑
317	.950	↓	↑	↑	↑	↑	↑	↑	372	8.778	↓	↑	↑	↑	↑	↑	↑
318	1.013	↓	↑	↑	↑	↑	↑	↑	373	9.028	.050	↑	↑	↑	↑	↑	↑
319	1.075	.010	↑	↑	↑	↑	↑	↑	374	9.278	.055	↑	↑	↑	↑	↑	↑
320	1.138	.012	↑	↑	↑	↑	↑	↑	375	9.528	↑	↑	↑	↑	↑	↑	↑
321	1.200	.012	↑	↑	↑	↑	↑	↑	376	9.778	↓	↑	↑	↑	↑	↑	↑
322	1.263	.012	↑	↑	↑	↑	↑	↑	377	10.028	.055	↑	↑	↑	↑	↑	↑
323	1.316	.012	↑	↑	↑	↑	↑	↑	378	10.528	.060	↑	↑	↑	↑	↑	↑
324	1.388	.012	↑	↑	↑	↑	↑	↑	379	11.028	.060	↑	↑	↑	↑	↑	↑
325	1.513	.015	↑	↑	↑	↑	↑	↑	380	11.528	.065	↑	↑	↑	↑	↑	↑
326	1.638	↑	↑	↑	↑	↑	↑	↑	381	12.028	.065	↑	↑	↑	↑	↑	↑
327	1.763	↓	↑	↑	↑	↑	↑	↑	382	13.028	.065	↑	↑	↑	↑	↑	↑
328	1.888	.015	↑	↑	↑	↑	↑	↑	383	14.028	.070	↑	↑	↑	↑	↑	↑
329	2.013	.018	↑	↑	↑	↑	↑	↑	384	15.028	.070	↑	↑	↑	↑	↑	↑
330	2.138	↑	↑	↑	↑	↑	↑	↑	385	16.008	.075	↑	↑	↑	↑	↑	↑
331	2.268	↓	↑	↑	↑	↑	↑	↑	386	17.008	.080	↑	↑	↑	↑	↑	↑
332	2.393	.018	↑	↑	↑	↑	↑	↑	387	18.008	.085	↑	↑	↑	↑	↑	↑
333	2.518	.020	↑	↑	↑	↑	↑	↑	388	19.006	.090	↑	↑	↑	↑	↑	↑
334	2.643	.020	↑	↑	↑	↑	↑	↑	389	20.006	.095	↑	↑	↑	↑	↑	↑
335	2.768	.020	↑	↑	↑	↑	↑	↑	390	21.006	.095	↑	↑	↑	↑	↑	↑
336	2.893	.020	↑	↑	↑	↑	↑	↑	391	22.006	.100	↑	↑	↑	↑	↑	↑
337	3.018	.024	↑	↑	↑	↑	↑	↑	392	22.993	.105	↑	↑	↑	↑	↑	↑
338	3.143	↑	↑	↑	↑	↑	↑	↑	393	23.993	.110	↑	↑	↑	↑	↑	↑
339	3.273	↓	↓	↓	↓	↓	↓	↓	394	24.993	.115	↓	↓	↓	↓	↓	↓
340	3.398	.024	.262	.076	.060	.004	.183	.005	395	25.993	.120	.262	.076	.060	.004	.183	.005

Notes: 1. Parbak sizes are designed to correspond with AS568A series O-ring with which they are used.

8-Series Dimensions (Continued)

Dash No.	I.D. (in.)	Tol. ±	R ±.010	T (Ref.)	A (in.)	Tol. ±	W (in.)	Tol. ±	Dash No.	I.D. (in.)	Tol. ±	R ±.010	T (Ref.)	A (in.)	Tol. ±	W (in.)	Tol. ±
425	4.551	.033	.344	.117	.096	.005	.236	.006	451	11.024	.060	.344	.117	.096	.005	.236	.006
426	4.676	↑	↑	↑	↑	↑	↑	↑	452	11.524	↑	↑	↑	↑	↑	↑	↑
427	4.801	↓	↑	↑	↑	↑	↑	↑	453	12.024	↑	↑	↑	↑	↑	↑	↑
428	4.926	.033	↑	↑	↑	↑	↑	↑	454	12.524	↓	↑	↑	↑	↑	↑	↑
429	5.051	.037	↑	↑	↑	↑	↑	↑	455	13.024	.060	↑	↑	↑	↑	↑	↑
430	5.176	↑	↑	↑	↑	↑	↑	↑	456	13.524	.070	↑	↑	↑	↑	↑	↑
431	5.301	↑	↑	↑	↑	↑	↑	↑	457	14.024	↑	↑	↑	↑	↑	↑	↑
432	5.426	↑	↑	↑	↑	↑	↑	↑	458	14.524	↑	↑	↑	↑	↑	↑	↑
433	5.551	↑	↑	↑	↑	↑	↑	↑	459	15.024	↓	↑	↑	↑	↑	↑	↑
434	5.676	↑	↑	↑	↑	↑	↑	↑	460	15.524	.070	↑	↑	↑	↑	↑	↑
435	5.801	↓	↑	↑	↑	↑	↑	↑	461	16.004	.075	↑	↑	↑	↑	↑	↑
436	5.926	↓	↑	↑	↑	↑	↑	↑	462	16.504	.075	↑	↑	↑	↑	↑	↑
437	6.051	.037	↑	↑	↑	↑	↑	↑	463	17.004	.080	↑	↑	↑	↑	↑	↑
438	6.274	.040	↑	↑	↑	↑	↑	↑	464	17.504	.085	↑	↑	↑	↑	↑	↑
439	6.524	↑	↑	↑	↑	↑	↑	↑	465	18.004	.085	↑	↑	↑	↑	↑	↑
440	6.774	↑	↑	↑	↑	↑	↑	↑	466	18.504	.085	↑	↑	↑	↑	↑	↑
441	7.024	.040	↑	↑	↑	↑	↑	↑	467	19.004	.090	↑	↑	↑	↑	↑	↑
442	7.274	.045	↑	↑	↑	↑	↑	↑	468	19.504	.090	↑	↑	↑	↑	↑	↑
443	7.524	↑	↑	↑	↑	↑	↑	↑	469	20.004	.095	↑	↑	↑	↑	↑	↑
444	7.774	↓	↑	↑	↑	↑	↑	↑	470	21.004	.095	↑	↑	↑	↑	↑	↑
445	8.024	.045	↑	↑	↑	↑	↑	↑	471	22.004	.100	↑	↑	↑	↑	↑	↑
446	8.524	.055	↑	↑	↑	↑	↑	↑	472	23.004	.105	↑	↑	↑	↑	↑	↑
447	9.024	↑	↑	↑	↑	↑	↑	↑	473	24.004	.110	↑	↑	↑	↑	↑	↑
448	9.524	↓	↑	↑	↑	↑	↑	↑	474	25.004	.115	↑	↑	↑	↑	↑	↑
449	10.024	.055	↑	↑	↑	↑	↑	↑	475	26.004	.120	.344	.117	.096	.005	.236	.006
450	10.524	.060	.344	.117	.096	.005	.236	.006									

Back-Up Rings

Comparison of XIAMEN SEALS vs. PTFE and Leather Back-Up		
XIAMEN SEALS	PTFE Back-Up Rings	Leather Back-Up Rings
Continuous ring.	Spiral or scarf-cut for most applications. This discontinuity is often a cause of leaks or damage to the O-ring.	Continuous ring.
Easiest and quickest to assemble in either piston or cylinder groove.	Moderately simple to assemble. Scarf or spiral cut can be opened, for assembling over piston or doubled over itself for assembly into cylinder groove.	Difficult to assemble over piston. Must be soaked in oil, stretched, then pounded into place. Less difficult to assemble into cylinder groove.
Good resistance to extrusion. Standard material satisfactory up to (121°C) 250°F. Other compounds available for temperatures as high as (204°C) 400°F.	Tends to soften and extrude at temperatures around (149°C) 300°F.	Tends to harden and crack at high temperature.
Does not cause overly smooth rubbing surface. Maintains lubrication.	Deposits on rubbing surface making it extremely smooth. The O-ring then wipes the surface dry.	Does not cause overly smooth rubbing surface. Maintains lubrication.
Good resistance to radiation. Can be made in compound having even better resistance when required.	Fair resistance to radiation.	No information available.
Continuous ring with no loose particles or sections.	Thin sections of spiral may become lodged under O-ring causing leakage.	Loose leather fibers may become lodged under O-ring causing leakage.
No scarf cut to open. Coefficient of thermal expansion comparable to O-ring material.	Low temperature shrinkage may open up scarf cut, causing temperature leakage.	Continuous ring.
Continuous ring, no scarf cut.	High temperature expansion may overlap scarf cut causing damage to O-ring.	Continuous ring, no scarf cut.
Absorbs slight amount of oil, aiding lubrication.	Almost completely non-absorbent, will not hold enough oil to aid lubrication.	Tends to absorb moisture, increasing possibility of corrosion.
Resists cold flow and tendency to extrude under high pressure.	Will cold flow and extrude at room temperature and high pressure.	Resists cold flow and tendency to extrude under high pressure.
Uniform dimensions.	Uniform dimensions.	Variable dimensions.

Table 6-3: Comparison of XIAMEN SEALS vs. PTFE and Leather Back-Up