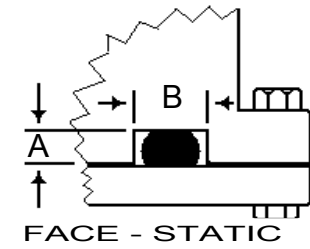
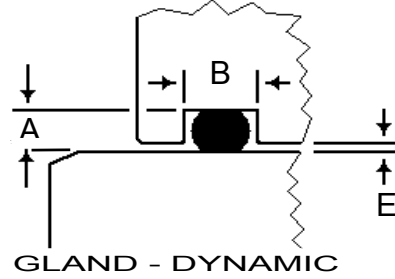
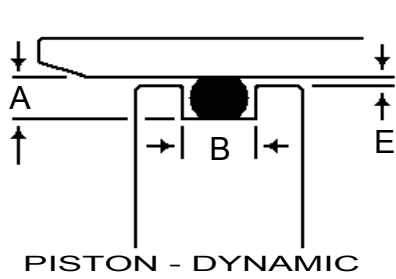


O-RING MACHINING



GROOVE SIZES DYNAMIC APPLICATIONS HYDRAULICS		
CROSS SEC. mm	A mm	B mm
1	0.9	1.3
1.5	1.3	1.9
1.6	1.4	2
1.78	1.5	2.3
1.9	1.6	2.4
2	1.7	2.4
2.4	2.1	2.9
2.5	2.2	3
2.62	2.3	3.1
2.7	2.4	3.2
3	2.6	3.6
3.5	3.1	4.2
3.53	3.1	4.2
3.6	3.2	4.3
4	3.5	4.8
4.5	4	5.4
5	4.45	6
5.33	4.7	6.4
5.5	4.95	6.6
5.7	5.1	6.9
6	5.4	7.2
6.5	5.8	7.8
6.99	6.3	8.4
7	6.3	8.4
7.5	6.7	9
8	7.2	9.6
8.4	7.6	10.1
8.5	7.7	10.2
9	8.2	10.8
9.5	8.6	11.4
10	9.1	12

GROOVE SIZES DYNAMIC APPLICATIONS PNEUMATICS		
CROSS SEC. mm	A mm	B mm
1	0.95	1.3
1.5	1.35	1.9
1.6	1.45	2
1.78	1.55	2.3
1.9	1.75	2.4
2	1.8	2.4
2.4	2.15	2.9
2.5	2.25	3
2.62	2.35	3.1
2.7	2.45	3.2
3	2.75	3.6
3.5	3.25	4.2
3.53	3.25	4.2
3.6	3.35	4.3
4	3.7	4.8
4.5	4.2	5.4
5	4.65	6
5.33	4.95	6.4
5.5	5.15	6.6
5.7	5.35	6.9
6	5.65	7.2
6.5	6.1	7.8
6.99	6.6	8.4
7	6.6	8.4
7.5	7.1	9
8	7.6	9.6
8.4	7.9	10.1
8.5	8	10.2
9	8.5	10.8
9.5	9	11.4
10	9.5	12

STATIC APPLICATIONS		
CROSS SEC. mm	A mm	B mm
1	0.8	1.3
1.5	1.1	1.9
1.6	1.2	2.1
1.78	1.3	2.3
1.9	1.4	2.4
2	1.5	2.6
2.4	1.8	3.1
2.5	1.9	3.2
2.62	2	3.4
2.7	2.1	3.5
3	2.3	3.9
3.5	2.7	4.5
3.53	2.7	4.5
3.6	2.8	4.7
4	3.15	5.2
4.5	3.6	5.8
5	4	6.5
5.33	4.3	6.9
5.5	4.5	7.1
5.7	4.65	7.4
6	4.95	7.8
6.5	5.4	8.4
6.99	5.85	9.1
7	5.85	9.1
7.5	6.3	9.7
8	6.75	10.4
8.4	7.15	10.9
8.5	7.25	11
9	7.7	11.7
9.5	8.2	12.3
10	8.65	13

When using back-up rings " B " should be increased by width of the back-up ring.

ORING X SECTION	BACKUP THICKNESS (WIDTH)
up to 1.6mm	1.0mm
1.78 to 3.53mm	1.4mm
4 to 6mm	1.7mm
6.99 to 8.4mm	2.5mm

PRESSURE (PSI)		100	200	300	400	600	800	1000	1500	2000	3000	4000	5000	6000
E	WITH BACKUP (inch)	.036"	.032"	.028"	.026"	.024"	.021"	.018"	.014"	.010"	.006"	.004"	.003"	.002"
E	WITHOUT BACKUP (inch)	.031"	.025"	.022"	.018"	.014"	.010"	.007"	.004"	.002"				

IMPERIAL O-RING SIZE GUIDE



ID	CROSS SECTION					ID	CROSS SECTION					ID	CROSS SECTION			
	1/16	3/32	1/8	3/16	1/4		1/16	3/32	1/8	3/16	1/4		3/32	1/8	3/16	1/4
	1.78	2.62	3.53	5.33	6.99		1.78	2.62	3.53	5.33	6.99		2.62	3.53	5.33	6.99
1/32	001					2-1/4	035	140	228	331	407	7-1/2	169	264	367	443
3/64	002					2-5/16		141	836			7-3/4	170	265	368	444
1/16	003	102				2-3/8	036	142	229	332	408	8	171	266	369	445
5/64	004					2-7/16		143	838			8-1/4	172	267	370	445A
3/32	005	103				2-1/2	037	144	230	333	409	8-1/2	173	268	371	446
1/8	006	104				2-9/16		145	840			8-3/4	174	269	372	446A
5/32	007	105				2-5/8	038	146	231	334	410	9	175	270	373	447
3/16	008	106	201			2-11/16		147	842			9-1/4	176	271	374	447A
7/32	009	107				2-3/4	039	148	232	335	411	9-1/2	177	272	375	448
1/4	010	108	202			2-13/16		149	844			9-3/4	178	273	376	448A
5/16	011	109	203			2-7/8	040	150	233	336	412	10		274	377	449
3/8	012	110	204			3	041	151	234	337	413	10-1/4				449A
7/16	013	111	205	309		3-1/8	532		235	338	414	10-1/2		275	378	450
1/2	014	112	206	310		3-1/4	042	152	236	339	415	10-3/4				450A
9/16	015	113	207	311		3-3/8	534		237	340	416	11		276	379	451
5/8	016	114	208	312		3-1/2	043	153	238	341	417	11-1/4				451A
11/16	017	115	209	313		3-5/8	536		239	342	418	11-1/2		277	380	452
3/4	018	116	210	314		3-3/4	044	154	240	343	419	11-3/4				452A
13/16	019	117	211	315		3-7/8	538		241	344	420	12		278	381	453
7/8	020	117	212	316		4	045	155	242	345	421	12-1/2				454
15/16	021	119	213	317		4-1/8	540		243	346	422	13		279	382	455
1	022	120	214	318		4-1/4	046	156	244	347	423	13-1/2				456
1-1/16	023	121	215	319		4-3/8	542		245	348	424	14		280	383	457
1-1/8	024	122	216	320		4-1/2	047	157	246	349	425	14-1/2				458
1-3/16	025	123	217	321		4-5/8	544		247	350	426	15		281	384	459
1-1/4	026	124	218	322	400	4-3/4	048	158	248	351	427	15-1/2				460
1-5/16	027	125	219	323		4-7/8	546		249	352	428	16		282	385	461
1-3/8	028	126	220	324		5	049	159	250	353	429	16-1/2				462
1-7/16	517	127	221			5-1/8			251	354	430	17		283	386	463
1-1/2	029	128	222	325	401	5-1/4	050	160	252	355	431	17-1/2				464
1-9/16	519	129	824			5-3/8			253	356	432	18		284	387	465
1-5/8	030	130	223	326	402	5-1/2		161	254	357	433	18-1/2				466
1-11/16		131	826			5-5/8			255	358	434	19			388	467
1-3/4	031	132	224	327	403	5-3/4		162	256	359	435	19-1/2				468
1-13/16		133	828			5-7/8			257	360	436	20			389	469
1-7/8	032	134	225	328	404	6		163	258	361	437	21			390	470
1-15/16		135	830			6-1/4		164	259	362	438	22			391	471
2	033	136	226	329	405	6-1/2		165	260	363	439	23			392	472
2-1/16		137	832			6-3/4		166	261	364	440	24			393	473
2-1/8	034	138	227	330	406	7		167	262	365	441	25			394	474
2-3/16		139	834			7-1/4		168	263	366	442	26			395	475

IMPERIAL O-RINGS



NOMINAL INCHES

ACTUAL MILLIMETRES

Part#	ID	OD	X SECTION
001	1/32	3/32	-
002	3/64	9/64	-
003	1/16	3/16	-
004	5/64	13/16	1/16
005	3/32	15/16	1/16
006	1/8	1/4	1/16
007	5/32	9/32	1/16
008	3/16	5/16	1/16
009	7/32	11/32	1/16
010	1/4	3/8	1/16
011	5/16	7/16	1/16
012	3/8	1/2	1/16
013	7/16	9/16	1/16
014	1/2	5/8	1/16
015	9/16	11/16	1/16
016	5/8	3/4	1/16
017	11/16	13/16	1/16
018	3/4	7/8	1/16
019	13/16	15/16	1/16
020	7/8	1	1/16
021	15/16	1.1/16	1/16
022	1	1.1/8	1/16
023	1.1/16	1.3/16	1/16
024	1.1/8	1.1/4	1/16
025	1.3/16	1.5/16	1/16
026	1.1/4	1.3/8	1/16
027	1.5/16	1.7/16	1/16
028	1.3/8	1.1/2	1/16
029	1.1/2	1.5/8	1/16
030	1.5/8	1.3/4	1/16
031	1.3/4	1.7/8	1/16
032	1.7/8	2	1/16
033	2	2.1/8	1/16
034	2.1/8	2.1/4	1/16
035	2.1/4	2.3/8	1/16
036	2.3/8	2.1/2	1/16
037	2.1/2	2.5/8	1/16
038	2.5/8	2.3/4	1/16
039	2.3/4	2.7/8	1/16
040	2.7/8	3	1/16
041	3	3.1/8	1/16
042	3.1/4	3.3/8	1/16
043	3.1/2	3.5/8	1/16
044	3.3/4	3.7/8	1/16
045	4	4.1/8	1/16
046	4.1/4	4.3/8	1/16
047	4.1/2	4.5/8	1/16
048	4.3/4	4.7/8	1/16
049	5	5.1/8	1/16
050	5.1/4	5.3/8	1/16
102	1/16	1/4	3/32

ID	OD	X SECTION
0.74	2.22	0.74
1.07	3.61	1.27
1.42	4.46	1.52
1.78	5.34	1.78
2.57	6.13	1.78
2.9	6.46	1.78
3.68	7.24	1.78
4.47	8.03	1.78
5.28	8.84	1.78
6.07	9.63	1.78
7.65	11.21	1.78
9.25	12.81	1.78
10.82	14.38	1.78
12.42	15.98	1.78
14	17.56	1.78
15.6	19.16	1.78
17.17	20.73	1.78
18.77	22.33	1.78
20.35	23.91	1.78
21.95	25.51	1.78
23.52	27.08	1.78
25.12	28.68	1.78
26.7	30.26	1.78
28.3	31.86	1.78
29.87	33.43	1.78
31.47	35.03	1.78
33.05	36.61	1.78
34.65	38.21	1.78
37.82	41.38	1.78
41	44.56	1.78
44.17	47.73	1.78
47.37	50.93	1.78
50.52	54.08	1.78
53.67	57.23	1.78
56.87	60.43	1.78
60.05	63.61	1.78
63.22	66.78	1.78
66.4	69.96	1.78
69.57	73.13	1.78
72.75	76.31	1.78
75.92	79.48	1.78
82.27	85.83	1.78
88.62	92.18	1.78
94.97	98.53	1.78
101.34	104.90	1.78
107.7	111.26	1.78
114	117.56	1.78
120.4	123.96	1.78
126.76	130.32	1.78
133.07	136.63	1.78
1.24	6.48	2.62

IMPERIAL O-RINGS



NOMINAL INCHES

Part#	ID	OD	X SECTION
103	3/32	9/32	3/32
104	1/8	5/16	3/32
105	5/32	11/32	3/32
106	3/16	3/8	3/32
107	7/32	13/32	3/32
108	1/4	7/16	3/32
109	5/16	1/2	3/32
110	3/8	9/16	3/32
111	7/16	5/8	3/32
112	1/2	11/16	3/32
113	9/16	3/4	3/32
114	5/8	13/16	3/32
115	11/16	7/8	3/32
116	3/4	15/16	3/32
117	13/16	1	3/32
118	7/8	1.1/16	3/32
119	15/16	1.1/8	3/32
120	1	1.3/16	3/32
121	1.1/16	1.1/4	3/32
122	1.1/8	1.5/16	3/32
123	1.3/16	1.3/8	3/32
124	1.1/4	1.7/16	3/32
125	1.5/16	1.1/2	3/32
126	1.3/8	1.9/16	3/32
127	1.7/16	1.5/8	3/32
128	1.1/2	1.11/16	3/32
129	1.9/16	1.3/4	3/32
130	1.5/8	1.13/16	3/32
131	1.11/16	1.7/8	3/32
132	1.3/4	1.15/16	3/32
133	1.13/16	2	3/32
134	1.7/8	2.1/16	3/32
135	1.15/16	2.1/8	3/32
136	2	2.3/16	3/32
137	2.1/16	2.1/4	3/32
138	2.1/8	2.5/16	3/32
139	2.3/16	2.3/8	3/32
140	2.1/4	2.7/16	3/32
141	2.5/16	2.1/2	3/32
142	2.3/8	2.9/16	3/32
143	2.7/16	2.5/8	3/32
144	2.1/2	2.11/16	3/32
145	2.9/16	2.3/4	3/32
146	2.5/8	2.13/16	3/32
147	2.11/16	2.7/8	3/32
148	2.3/4	2.15/16	3/32
149	2.13/16	3	3/32
150	2.7/8	3.1/16	3/32
151	3	3.3/16	3/32
152	3.1/4	3.7/16	3/32
153	3.1/2	3.11/16	3/32

ACTUAL MILLIMETRES

ID	OD	X SECTION
2.06	7.30	2.62
2.84	8.08	2.62
3.63	8.87	2.62
4.42	9.66	2.62
5.23	10.47	2.62
6.02	11.26	2.62
7.59	12.83	2.62
9.19	14.43	2.62
10.77	16.01	2.62
12.37	17.61	2.62
13.94	19.18	2.62
15.54	20.78	2.62
17.12	22.36	2.62
18.72	23.96	2.62
20.29	25.53	2.62
21.89	27.13	2.62
23.47	28.71	2.62
25.07	30.31	2.62
26.64	31.88	2.62
28.24	33.48	2.62
29.82	35.06	2.62
31.42	36.66	2.62
32.99	38.23	2.62
34.59	39.83	2.62
36.17	41.41	2.62
37.77	43.01	2.62
39.34	44.58	2.62
40.94	46.18	2.62
42.52	47.76	2.62
44.12	49.36	2.62
45.69	50.93	2.62
47.29	52.53	2.62
48.9	54.14	2.62
50.47	55.71	2.62
52.07	57.31	2.62
53.64	58.88	2.62
55.25	60.49	2.62
56.82	62.06	2.62
58.42	63.66	2.62
60	65.24	2.62
61.6	66.84	2.62
63.17	68.41	2.62
64.77	70.01	2.62
66.34	71.58	2.62
67.95	73.19	2.62
69.52	74.76	2.62
71.12	76.36	2.62
72.69	77.93	2.62
75.87	81.11	2.62
82.22	87.46	2.62
88.57	93.81	2.62

IMPERIAL O-RINGS



NOMINAL INCHES

Part#	ID	OD	X SECTION
154	3.3/4	3.15/16	3/32
155	4	4.3/16	3/32
156	4.1/4	4.7/16	3/32
157	4.1/2	4.11/16	3/32
158	4.3/4	4.15/16	3/32
159	5	5.3/16	3/32
160	5.1/4	5.7/16	3/32
161	5.1/2	5.11/16	3/32
162	5.3/4	5.15/16	3/32
163	6	6.3/16	3/32
164	6.1/4	6.7/16	3/32
165	6.1/2	6.11/16	3/32
166	6.3/4	6.15/16	3/32
167	7	7.3/16	3/32
168	7.1/4	7.7/16	3/32
169	7.1/2	7.11/16	3/32
170	7.3/4	7.15/16	3/32
171	8	8.3/16	3/32
172	8.1/4	8.7/16	3/32
173	8.1/2	8.11/16	3/32
174	8.3/4	8.15/16	3/32
175	9	9.3/16	3/32
176	9.1/4	9.7/16	3/32
177	9.1/2	9.11/16	3/32
178	9.3/4	9.15/16	3/32
201	3/16	7/16	1/8
202	1/4	1/2	1/8
203	5/16	9/16	1/8
204	3/8	5/8	1/8
205	7/16	11/16	1/8
206	1/2	3/4	1/8
207	9/16	13/16	1/8
208	5/8	7/8	1/8
209	11/16	15/16	1/8
210	3/4	1	1/8
211	13/16	1.1/16	1/8
212	7/8	1.1/8	1/8
213	15/16	1.3/16	1/8
214	1	1.1/4	1/8
215	1.1/16	1.5/16	1/8
216	1.1/8	1.3/8	1/8
217	1.3/16	1.7/16	1/8
218	1.1/4	1.1/2	1/8
219	1.5/16	1.9/16	1/8
220	1.3/8	1.5/8	1/8
221	1.7/16	1.11/16	1/8
222	1.1/2	1.3/4	1/8
223	1.5/8	1.7/8	1/8
224	1.3/4	2	1/8
225	1.7/8	2.1/8	1/8
226	2	2.1/4	1/8

ACTUAL MILLIMETRES

ID	OD	X SECTION
94.92	100.16	2.62
101.27	106.51	2.62
107.62	112.86	2.62
113.97	119.21	2.62
120.32	125.56	2.62
126.67	131.91	2.62
133	138.24	2.62
139.37	144.61	2.62
145.72	150.96	2.62
152.07	157.31	2.62
158.42	163.66	2.62
164.77	170.01	2.62
171.12	176.36	2.62
177.47	182.71	2.62
183.82	189.06	2.62
190.17	195.41	2.62
196.52	201.76	2.62
202.87	208.11	2.62
209.22	214.46	2.62
215.57	220.81	2.62
221.92	227.16	2.62
228.27	233.51	2.62
234.62	239.86	2.62
240.97	246.21	2.62
247.32	252.56	2.62
4.34	11.40	3.53
5.94	13.00	3.53
7.52	14.58	3.53
9.12	16.18	3.53
10.69	17.75	3.53
12.29	19.35	3.53
13.87	20.93	3.53
15.47	22.53	3.53
17.04	24.10	3.53
18.64	25.70	3.53
20.22	27.28	3.53
21.82	28.88	3.53
23.4	30.46	3.53
24.99	32.05	3.53
26.58	33.64	3.53
28.17	35.23	3.53
29.75	36.81	3.53
31.35	38.41	3.53
32.92	39.98	3.53
34.52	41.58	3.53
36.09	43.15	3.53
37.7	44.76	3.53
40.87	47.93	3.53
44.04	51.10	3.53
47.22	54.28	3.53
50.39	57.45	3.53

IMPERIAL O-RINGS



NOMINAL INCHES

Part#	ID	OD	X SECTION
227	2.1/8	2.3/8	1/8
228	2.1/4	2.1/2	1/8
229	2.3/8	2.5/8	1/8
230	2.1/2	2.3/4	1/8
231	2.5/8	2.7/8	1/8
232	2.3/4	3	1/8
233	2.7/8	3.1/8	1/8
234	3	3.1/4	1/8
235	3.1/8	3.3/8	1/8
236	3.1/4	3.1/2	1/8
237	3.3/8	3.5/8	1/8
238	3.1/2	3.3/4	1/8
239	3.5/8	3.7/8	1/8
240	3.3/4	4	1/8
241	3.7/8	4.1/8	1/8
242	4	4.1/4	1/8
243	4.1/8	4.3/8	1/8
244	4.1/4	4.1/2	1/8
245	4.3/8	4.5/8	1/8
246	4.1/2	4.3/4	1/8
247	4.5/8	4.7/8	1/8
248	4.3/4	5	1/8
249	4.7/8	5.1/8	1/8
250	5	5.1/4	1/8
251	5.1/8	5.3/8	1/8
252	5.1/4	5.1/2	1/8
253	5.3/8	5.5/8	1/8
254	5.1/2	5.3/4	1/8
255	5.5/8	5.7/8	1/8
256	5.3/4	6	1/8
257	5.7/8	6.1/8	1/8
258	6	6.1/4	1/8
259	6.1/4	6.1/2	1/8
260	6.1/2	6.3/4	1/8
261	6.3/4	7	1/8
262	7	7.1/4	1/8
263	7.1/4	7.1/2	1/8
264	7.1/2	7.3/4	1/8
265	7.3/4	8	1/8
266	8	8.1/4	1/8
267	8.1/4	8.1/2	1/8
268	8.1/2	8.3/4	1/8
269	8.3/4	9	1/8
270	9	9.1/4	1/8
271	9.1/4	9.1/2	1/8
272	9.1/2	9.3/4	1/8
273	9.3/4	10	1/8
274	10	10.1/4	1/8
275	10.1/2	10.3/4	1/8
276	11	11.1/4	1/8
277	11.1/2	11.3/4	1/8

ACTUAL MILLIMETRES

ID	OD	X SECTION
53.57	60.63	3.53
56.74	63.80	3.53
59.92	66.98	3.53
63.09	70.15	3.53
66.27	73.33	3.53
69.44	76.50	3.53
72.62	79.68	3.53
75.79	82.85	3.53
78.97	86.03	3.53
82.14	89.20	3.53
85.32	92.38	3.53
88.49	95.55	3.53
91.67	98.73	3.53
94.84	101.90	3.53
98.02	105.08	3.53
101.19	108.25	3.53
104.37	111.43	3.53
107.54	114.60	3.53
110.72	117.78	3.53
113.89	120.95	3.53
117.07	124.13	3.53
120.24	127.30	3.53
123.42	130.48	3.53
126.59	133.65	3.53
129.77	136.83	3.53
132.94	140.00	3.53
136.12	143.18	3.53
139.29	146.35	3.53
142.47	149.53	3.53
145.64	152.70	3.53
148.82	155.88	3.53
151.99	159.05	3.53
158.34	165.40	3.53
164.69	171.75	3.53
171.04	178.10	3.53
177.39	184.45	3.53
183.74	190.80	3.53
190.09	197.15	3.53
196.44	203.50	3.53
202.79	209.85	3.53
209.14	216.20	3.53
215.49	222.55	3.53
221.84	228.90	3.53
228.19	235.25	3.53
234.54	241.60	3.53
240.89	247.95	3.53
247.24	254.30	3.53
253.59	260.65	3.53
266.29	273.35	3.53
278.99	286.05	3.53
291.69	298.75	3.53

IMPERIAL O-RINGS



NOMINAL INCHES

Part#	ID	OD	X SECTION
278	12	12.1/4	1/8
279	13	13.1/4	1/8
280	14	14.1/4	1/8
281	15	15.1/4	1/8
282	16	16.1/4	1/8
283	17	17.1/4	1/8
284	18	18.1/4	1/8
309	7/16	13/16	3/16
310	1/2	7/8	3/16
311	9/16	15/16	3/16
312	5/8	1	3/16
313	11/16	1.1/16	3/16
314	3/4	1.1/8	3/16
315	13/16	1.3/16	3/16
316	7/8	1.1/4	3/16
317	15/16	1.5/16	3/16
318	1	1.3/8	3/16
319	1.1/16	1.7/16	3/16
320	1.1/8	1.1/2	3/16
321	1.3/16	1.9/16	3/16
322	1.1/4	1.5/8	3/16
323	1.5/16	1.11/16	3/16
324	1.3/8	1.3/4	3/16
325	1.1/2	1.7/8	3/16
326	1.5/8	2	3/16
327	1.3/4	2.1/8	3/16
328	1.7/8	2.1/4	3/16
329	2	2.3/8	3/16
330	2.1/8	2.1/2	3/16
331	2.1/4	2.5/8	3/16
332	2.3/8	2.3/4	3/16
333	2.1/2	2.7/8	3/16
334	2.5/8	3	3/16
335	2.3/4	3.1/8	3/16
336	2.7/8	3.1/4	3/16
337	3	3.3/8	3/16
338	3.1/8	3.1/2	3/16
339	3.1/4	3.5/8	3/16
340	3.3/8	3.3/4	3/16
341	3.1/2	3.7/8	3/16
342	3.5/8	4	3/16
343	3.3/4	4.1/8	3/16
344	3.7/8	4.1/4	3/16
345	4	4.3/8	3/16
346	4.1/8	4.1/2	3/16
347	4.1/4	4.5/8	3/16
348	4.3/8	4.3/4	3/16
349	4.1/2	4.7/8	3/16
350	4.5/8	5	3/16
351	4.3/4	5.1/8	3/16
352	4.7/8	5.1/4	3/16

ACTUAL MILLIMETRES

ID	OD	X SECTION
304.39	311.45	3.53
329.79	336.85	3.53
355.19	362.25	3.53
380.59	387.65	3.53
405.26	412.32	3.53
430.66	437.72	3.53
456.06	463.12	3.53
10.46	21.12	5.33
12.07	22.73	5.33
13.64	24.30	5.33
15.24	25.90	5.33
16.81	27.47	5.33
18.42	29.08	5.33
19.99	30.65	5.33
21.59	32.25	5.33
23.16	33.82	5.33
24.77	35.43	5.33
26.34	37.00	5.33
27.94	38.60	5.33
29.51	40.17	5.33
31.12	41.78	5.33
32.69	43.35	5.33
34.29	44.95	5.33
37.47	48.13	5.33
40.64	51.30	5.33
43.82	54.48	5.33
47	57.66	5.33
50.17	60.83	5.33
53.34	64.00	5.33
56.52	67.18	5.33
59.69	70.35	5.33
62.87	73.53	5.33
66.04	76.70	5.33
69.22	79.88	5.33
72.39	83.05	5.33
75.57	86.23	5.33
78.74	89.40	5.33
81.92	92.58	5.33
85.09	95.75	5.33
88.27	98.93	5.33
91.44	102.10	5.33
94.62	105.28	5.33
97.79	108.45	5.33
100.97	111.63	5.33
104.14	114.80	5.33
107.32	117.98	5.33
110.49	121.15	5.33
113.67	124.33	5.33
116.84	127.50	5.33
120.02	130.68	5.33
123.19	133.85	5.33

IMPERIAL O-RINGS



NOMINAL INCHES

Part#	ID	OD	X SECTION
353	5	5.3/8	3/16
354	5.1/8	5.1/2	3/16
355	5.1/4	5.5/8	3/16
356	5.3/8	5.3/4	3/16
357	5.1/2	5.7/8	3/16
358	5.5/8	6	3/16
359	5.3/4	6.1/8	3/16
360	5.7/8	6.1/4	3/16
361	6	6.3/8	3/16
362	6.1/4	6.5/8	3/16
363	6.1/2	6.7/8	3/16
364	6.3/4	7.1/8	3/16
365	7	7.3/8	3/16
366	7.1/4	7.5/8	3/16
367	7.1/2	7.7/8	3/16
368	7.3/4	8.1/8	3/16
369	8	8.3/8	3/16
370	8.1/4	8.5/8	3/16
371	8.1/2	8.7/8	3/16
372	8.3/4	9.1/8	3/16
373	9	9.3/8	3/16
374	9.1/4	9.5/8	3/16
375	9.1/2	9.7/8	3/16
376	9.3/4	10.1/8	3/16
377	10	10.3/8	3/16
378	10.1/2	10.7/8	3/16
379	11	11.3/8	3/16
380	11.1/2	11.7/8	3/16
381	12	12.3/8	3/16
382	13	13.3/8	3/16
383	14	14.3/8	3/16
384	15	15.3/8	3/16
385	16	16.3/8	3/16
386	17	17.3/8	3/16
387	18	18.3/8	3/16
388	19	19.3/8	3/16
389	20	20.3/8	3/16
390	21	21.3/8	3/16
391	22	22.3/8	3/16
392	23	23.3/8	3/16
393	24	24.3/8	3/16
394	25	25.3/8	3/16
395	26	26.3/8	3/16
400	1.1/4	1.3/4	1/4
401	1.1/2	2	1/4
402	1.5/8	2.1/8	1/4
403	1.3/4	2.1/4	1/4
404	1.7/8	2.3/8	1/4
405	2	2.1/2	1/4
406	2.1/8	2.5/8	1/4
407	2.1/4	2.3/4	1/4

ACTUAL MILLIMETRES

ID	OD	X SECTION
126.37	137.03	5.33
129.54	140.20	5.33
132.72	143.38	5.33
135.89	146.55	5.33
139.07	149.73	5.33
142.24	152.90	5.33
145.42	156.08	5.33
148.59	159.25	5.33
151.77	162.43	5.33
158.12	168.78	5.33
164.47	175.13	5.33
170.82	181.48	5.33
177.17	187.83	5.33
183.52	194.18	5.33
189.87	200.53	5.33
196.22	206.88	5.33
202.57	213.23	5.33
208.92	219.58	5.33
215.27	225.93	5.33
221.62	232.28	5.33
227.97	238.63	5.33
234.32	244.98	5.33
240.67	251.33	5.33
247.02	257.68	5.33
253.37	264.03	5.33
266.07	276.73	5.33
278.77	289.43	5.33
291.47	302.13	5.33
304.17	314.83	5.33
329.57	340.23	5.33
354.97	365.63	5.33
380.37	391.03	5.33
405.26	415.92	5.33
430.66	441.32	5.33
456.06	466.72	5.33
481.46	492.12	5.33
506.81	517.47	5.33
532.2	542.86	5.33
557.6	568.26	5.33
582.68	593.34	5.33
608.08	618.74	5.33
633.48	644.14	5.33
658.88	669.54	5.33
31.12	45.10	6.99
37.47	51.45	6.99
40.65	54.63	6.99
43.82	57.80	6.99
46.99	60.97	6.99
50.17	64.15	6.99
53.34	67.32	6.99
56.52	70.50	6.99

IMPERIAL O-RINGS



NOMINAL INCHES

Part#	ID	OD	X SECTION
408	2.3/8	2.7/8	1/4
409	2.1/2	3	1/4
410	2.5/8	3.1/8	1/4
411	2.3/4	3.1/4	1/4
412	2.7/8	3.3/8	1/4
413	3	3.1/2	1/4
414	3.1/8	3.5/8	1/4
415	3.1/4	3.3/4	1/4
416	3.3/8	3.7/8	1/4
417	3.1/2	4	1/4
418	3.5/8	4.1/8	1/4
419	3.3/4	4.1/4	1/4
420	3.7/8	4.3/8	1/4
421	4	4.1/2	1/4
422	4.1/8	4.5/8	1/4
423	4.1/4	4.3/4	1/4
424	4.3/8	4.7/8	1/4
425	4.1/2	5	1/4
426	4.5/8	5.1/8	1/4
427	4.3/4	5.1/4	1/4
428	4.7/8	5.3/8	1/4
429	5	5.1/2	1/4
430	5.1/8	5.5/8	1/4
431	5.1/4	5.3/4	1/4
432	5.3/8	5.7/8	1/4
433	5.1/2	6	1/4
434	5.5/8	6.1/8	1/4
435	5.3/4	6.1/4	1/4
436	5.7/8	6.3/8	1/4
437	6	6.1/2	1/4
438	6.1/4	6.3/4	1/4
439	6.1/2	7	1/4
440	6.3/4	7.1/4	1/4
441	7	7.1/2	1/4
442	7.1/4	7.3/4	1/4
443	7.1/2	8	1/4
444	7.3/4	8.1/4	1/4
445	8	8.1/2	1/4
445A	8.1/4	8.3/4	1/4
446	8.1/2	9	1/4
446A	8.3/4	9.1/4	1/4
447	9	9.1/2	1/4
447A	9.1/4	9.3/4	1/4
448	9.1/2	10	1/4
448A	9.3/4	10.1/4	1/4
449	10	10.1/2	1/4
449A	10.1/4	10.3/4	1/4
450	10.1/2	11	1/4
450A	10.3/4	11.1/4	1/4
451	11	11.1/2	1/4
451A	11.1/4	11.3/4	1/4

ACTUAL MILLIMETRES

ID	OD	X SECTION
59.69	73.67	6.99
62.87	76.85	6.99
66.05	80.03	6.99
69.22	83.20	6.99
72.39	86.37	6.99
75.57	89.55	6.99
78.75	92.73	6.99
81.92	95.90	6.99
85.09	99.07	6.99
88.27	102.25	6.99
91.44	105.42	6.99
94.62	108.60	6.99
97.79	111.77	6.99
100.97	114.95	6.99
104.15	118.13	6.99
107.32	121.30	6.99
110.49	124.47	6.99
113.67	127.65	6.99
116.84	130.82	6.99
120.02	134.00	6.99
123.19	137.17	6.99
126.37	140.35	6.99
129.54	143.52	6.99
132.72	146.70	6.99
135.89	149.87	6.99
139.07	153.05	6.99
142.24	156.22	6.99
145.42	159.40	6.99
148.59	162.57	6.99
151.77	165.75	6.99
158.12	172.10	6.99
164.47	178.45	6.99
170.82	184.80	6.99
177.17	191.15	6.99
183.52	197.50	6.99
189.87	203.85	6.99
196.22	210.20	6.99
202.57	216.55	6.99
208.92	222.90	6.99
215.27	229.25	6.99
221.62	235.60	6.99
227.97	241.95	6.99
234.32	248.30	6.99
240.67	254.65	6.99
247	260.98	6.99
253.57	267.55	6.99
259.7	267.55	6.99
266.07	280.05	6.99
272.4	286.38	6.99
278.77	292.75	6.99
285.1	299.08	6.99

IMPERIAL O-RINGS



NOMINAL INCHES

Part#	ID	OD	X SECTION
452	11.1/2	12	1/4
452A	11.3/4	12.1/4	1/4
453	12	12.1/2	1/4
454	12.1/2	13	1/4
455	13	13.1/2	1/4
456	13.1/2	14	1/4
457	14	14.1/2	1/4
457	14.1/2	15	1/4
458	15	15.1/2	1/4
459	15.1/2	16	1/4
461	16	16.1/2	1/4
462	16.1/2	17	1/4
463	17	17.1/2	1/4
464	17.1/2	18	1/4
465	18	18.1/2	1/4
466	18.1/2	19	1/4
467	19	19.1/2	1/4
468	19.1/2	20	1/4
469	20	20.1/2	1/4
470	21	21.1/2	1/4
471	22	22.1/2	1/4
472	23	23.1/2	1/4
473	24	24.1/2	1/4
474	25	25.1/2	1/4
475	26	26.1/2	1/4
517	1.7/16	1.9/16	1/16
519	1.9/16	1.11/16	1/16
532	3.1/8	3.1/4	1/16
534	3.3/8	3.1/2	1/16
536	3.5/8	3.3/4	1/16
538	3.7/8	4	1/16
540	4.1/8	4.1/4	1/16
542	4.3/8	4.1/2	1/16
544	4.5/8	4.3/4	1/16
546	4.7/8	5	1/16
548	5.1/8	5.1/4	1/16
550	5.3/8	5.1/2	1/16
551	5.1/2	5.5/8	1/16
552	5.5/8	5.3/4	1/16
553	5.3/4	5.7/8	1/16
554	5.7/8	6	1/16
555	6	6.1/8	1/16
556	6.1/8	6.1/4	1/16
557	6.1/4	6.3/8	1/16
558	6.3/8	6.1/2	1/16
559	6.1/2	6.5/8	1/16
560	6.5/8	6.3/4	1/16
561	6.3/4	6.7/8	1/16
562	6.7/8	7	1/16
606			-
607			-

ACTUAL MILLIMETRES

ID	OD	X SECTION
291.47	305.45	6.99
297.8	311.78	6.99
304.17	318.15	6.99
316.87	330.85	6.99
329.57	343.55	6.99
342.27	356.25	6.99
354.97	368.95	6.99
367.67	381.65	6.99
380.37	394.35	6.99
393.07	407.05	6.99
405.26	419.24	6.99
417.96	431.94	6.99
430.66	444.64	6.99
443.36	457.34	6.99
456.06	470.04	6.99
468.76	482.74	6.99
481.46	495.44	6.99
494.16	508.14	6.99
506.81	520.79	6.99
532.26	546.24	6.99
557.66	571.64	6.99
582.68	596.66	6.99
608.08	622.06	6.99
633.48	647.46	6.99
658.88	672.86	6.99
36.27	39.83	1.78
39.45	43.01	1.78
79	82.56	1.78
85.34	88.90	1.78
91.69	95.25	1.78
98.05	101.61	1.78
104.4	107.96	1.78
110.74	114.30	1.78
117.1	120.66	1.78
123.44	127.00	1.78
129.4	132.96	1.78
135.76	139.32	1.78
138.94	142.50	1.78
142.11	145.67	1.78
145.29	148.85	1.78
148.46	152.02	1.78
151.64	155.20	1.78
154.81	158.37	1.78
158	161.56	1.78
161.16	164.72	1.78
164.34	167.90	1.78
167.51	171.07	1.78
170.69	174.25	1.78
173.87	177.43	1.78
1.78	3.82	1.02
2.54	4.58	1.02

IMPERIAL O-RINGS



NOMINAL INCHES

Part#	ID	OD	X SECTION
610			1/16
611	11/32	15/32	1/16
613	13/32	19/32	3/32
614	15/32	21/32	3/32
615			3/32
616			3/32
617			3/32
618			1/8
619	2.15/16	3.5/16	3/16
620	3.3/16	3.9/16	3/16
621	3.9/16	3.15/16	3/16
622	3.15/16	4.5/16	3/16
623	4.5/16	4.11/16	3/16
624	4.9/16	5.1/16	1/4
625	4.15/16	5.7/16	1/4
626	5.5/16	5.13/16	1/4
627			1/4
628	6.5/8		1/4
640	2.15/16	3.1/8	3/32
641	3.1/16	3.1/4	3/32
642	3.3/16	3.3/8	3/32
643	3.5/16	3.1/2	3/32
644	6.1/8	6.1/2	3/16
645	6.3/8	6.3/4	3/16
646	6.5/8	7	3/16
647	6.7/8	7.1/4	3/16
648	12.1/4	12.3/4	1/4
649	12.3/4	13.1/4	1/4
650	13.1/4	13.3/4	1/4
674	8.1/4	8.3/4	1/4
676	8.3/4	9.1/4	1/4
678	9.1/4	9.3/4	1/4
680	9.3/4	10.1/4	1/4
682	10.1/4	10.3/4	1/4
684	10.3/4	11.1/4	1/4
686	11.1/4	11.3/4	1/4
688	11.3/4	12.1/4	1/4
801			1/16
802			1/16
803			1/16
804			1/16
806	15/32	19/32	1/16
807			3/32
809			3/32
810			3/32
812			3/32
813			3/32
814			3/32
824	1.9/16	1.13/16	1/8
825			1/8
826			1/8

ACTUAL MILLIMETRES

ID	OD	X SECTION
6.75	10.31	1.78
8.73	12.29	1.78
9.92	15.16	2.62
11.91	17.15	2.62
13.1	18.34	2.62
15.08	20.32	2.62
17.86	23.10	2.62
25.8	32.86	3.53
74.63	85.29	5.33
79.77	90.43	5.33
89.69	100.35	5.33
100	110.66	5.33
109.54	120.20	5.33
114.7	128.68	6.99
124.6	138.58	6.99
134.5	148.48	6.99
159.5	173.48	6.99
166.7	180.68	6.99
74.3	79.54	2.62
77.5	82.74	2.62
80.6	85.84	2.62
83.8	89.04	2.62
155	165.66	5.33
161.3	171.96	5.33
167.7	178.36	5.33
174	184.66	5.33
310.5	324.48	6.99
323.2	337.18	6.99
335.9	349.88	6.99
208.92	222.90	6.99
221.62	235.60	6.99
234.32	248.30	6.99
247	260.98	6.99
259.7	273.68	6.99
272.4	286.38	6.99
285.1	299.08	6.99
297.8	311.78	6.99
3.17	6.73	1.78
4.75	8.31	1.78
6.35	9.91	1.78
7.95	11.51	1.78
11.1	14.66	1.78
12.7	17.94	2.62
15.88	21.12	2.62
17.45	22.69	2.62
20.64	25.88	2.62
22.22	27.46	2.62
23.81	29.05	2.62
39.69	46.75	3.53
41.28	48.34	3.53
42.86	49.92	3.53

IMPERIAL O-RINGS



NOMINAL INCHES

ACTUAL MILLIMETRES

Part#	ID	OD	X SECTION
827			1/8
828	1.13/16	2.1/16	1/8
829			1/8
830	1.15/16	2.3/16	1/8
831			1/8
832	2.1/6	2.5/16	1/8
833			1/8
834	2.3/16	2.7/16	1/8
835			1/8
836	2.5/16	2.9/16	1/8
837			1/8
838	2.7/16	2.11/16	1/8
839			1/8
840	2.9/16	2.13/16	1/8
841			1/8
842	2.11/16	2.15/16	1/8
843			1/8
844			1/8
845			1/8
846	2.15/16	3.3/16	1/8
860	4.11/16	5.1/16	3/16
861	4.13/16	5.3/16	3/16
862	4.15/16	5.5/16	3/16
863	5.1/16	5.7/16	3/16
864	5.3/16	5.9/16	3/16
865	5.5/16	5.11/16	3/16
866	5.7/16	5.13/16	3/16
867	5.9/16	5.15/16	3/16
868	5/11/16	6.1/16	3/16
869	5.13/16	6.3/16	3/16
870	5.15/16	6.5/16	3/16
872	6.1/8	6.5/8	1/4
874			1/4
876	6.5/8		1/4
878	6.7/8		1/4
880	7.1/8	7.5/8	1/4
882	7.3/8	7.7/8	1/4
884	7.5/8	8.1/8	1/4
886	7.7/8	8.3/8	1/4

ID	OD	X SECTION
44.45	51.51	3.53
46.04	53.10	3.53
47.62	54.68	3.53
49.2	56.26	3.53
50.8	57.86	3.53
52.4	59.46	3.53
53.98	61.04	3.53
55.56	62.62	3.53
57.15	64.21	3.53
58.74	65.80	3.53
60.33	67.39	3.53
61.9	68.96	3.53
63.5	70.56	3.53
65.09	72.15	3.53
66.68	73.74	3.53
68.26	75.32	3.53
69.85	76.91	3.53
71.44	78.50	3.53
73.03	80.09	3.53
74.61	81.67	3.53
117.5	128.16	5.33
120.7	131.36	5.33
123.8	134.46	5.33
127	137.66	5.33
130.18	140.84	5.33
133.35	144.01	5.33
136.53	147.19	5.33
139.7	150.36	5.33
142.88	153.54	5.33
146.05	156.71	5.33
149.2	159.88	5.33
155.6	169.58	6.99
161.9	175.88	6.99
168.3	182.28	6.99
174.6	188.58	6.99
181	194.98	6.99
187.3	201.28	6.99
193.7	207.68	6.99
200	214.00	6.99