OVER 20,000 SIZES | ALL MAJOR APPROVALS | £5.1 MILLION INVENTORY

O RINGS

THE UK'S LARGEST INDEPENDENT SUPPLIER, STOCKIST, AND DISTRIBUTOR OF O RINGS AND BACK-UP RINGS.

BARNWELL

THE SEAL OF APPROVAL

IMPERIAL RANGE ISO3601 (BS1806) O RING SIZE CHART

Part No.	Nominal Size C x A x W	Inside Diameter				Cross Section				Bore Ø A	Piston Groove Ø B		Gland Groove Ø D		Rod Ø C
		inch	±	mm	±	inch	±	mm	±	inch	STAT	DYN	STAT	DYN	
*001	1/32 x 3/32 x 1/32	.029	± .004	0.74	± 0.10	.040	± .003	1.02	± 0.08	.094	.036		.089		.031
*002	3/64 x 9/64 x 3/64	.042	± .004	1.07	± 0.10	.050	± .003	1.27	± 0.08	.125	.053		.119		.047
003	1/16 x 3/16 x 1/16	.056	± .004	1.42	± 0.10	.060	± .003	1.52	± 0.08	.156	.068		.150		.062
606		.070	± .005	1.78	± 0.13	.040	± .003	1.02	± 0.08						
*004	5/64 x 13/64 x 1/16	.070	± .005	1.78	± 0.13	.070	± .003	1.78	± 0.08	.188	.084		.182		.078
607		.100	± .005	2.54	± 0.13	.040	± .003	1.02	± 0.08						
*005	7/64 x 15/64 x 1/16	.101	± .005	2.57	± 0.13	.070	± .003	1.78	± 0.08	.219	.117	.107	.211	.221	.109
*006	1/8 x 1/4 x 1/16	.114	± .005	2.90	± 0.13	.070	± .003	1.78	± 0.08	.250	.148	.138	.227	.237	.125
801		.125	± .005	3.17	± 0.13	.070	± .003	1.78	± 0.08						
*007	5/32 x 9/32 x 1/16	.145	± .005	3.68	± 0.13	.070	± .003	1.78	± 0.08	.281	.179	.169	.258	.268	.156
*008	3/16 x 5/16 x 1/16	.176	± .005	4.47	± 0.13	.070	± .003	1.78	± 0.08	.312	.210	.200	.289	.299	.187
802		.187	± .005	4.76	± 0.13	.070	± .003	1.78	± 0.08						
*009	7/32 x 11/32 x 1/16	.208	± .005	5.28	± 0.13	.070	± .003	1.78	± 0.08	.344	.241	.231	.321	.331	.219
*010	1/4 x 3/8 x 1/16	.239	± .005	6.07	± 0.13	.070	± .003	1.78	± 0.08	.375	.273	.263	.352	.362	.250
803		.250	± .005	6.35	± 0.13	.070	± .003	1.78	± 0.08						
610		.266	± .005	6.75	± 0.13	.070	± .003	1.78	± 0.08						
*011	5/16 x 7/16 x 1/16	.301	± .005	7.65	± 0.13	.070	± .003	1.78	± 0.08	.437	.335	.325	.414	.424	.312
804		.312	± .005	7.94	± 0.13	.070	± .003	1.78	± 0.08						
611	11/32 x 15/32 x 1/16	.344	± .005	8.73	± 0.13	.070	± .003	1.78	± 0.08						
*012	3/8 x 1/2 x 1/16	.364	± .005	9.25	± 0.13	.070	± .003	1.78	± 0.08	.500	.398	.388	.477	.487	.375
013	7/16 x 9/16 x 1/16	.426	± .005	10.82	± 0.13	.070	± .003	1.78	± 0.08	.562	.462		.537		.437
806		.437	± .005	11.11	± 0.13	.070	± .003	1.78	± 0.08						
014	1/2 x 5/8 x 1/16	.489	± .005	12.42	± 0.13	.070	± .003	1.78	± 0.08	.625	.525		.600		.500
015	9/16 x 11/16 x 1/16	.551	± .007	14.00	± 0.18	.070	± .003	1.78	± 0.08	.687	.587		.662		.562
016	5/8 x 3/4 x 1/16	.614	± .009	15.60	± 0.23	.070	± .003	1.78	± 0.08	.750	.650		.725		.625
017	11/16 x 13/16 x 1/16	.676	± .009	17.17	± 0.23	.070	± .003	1.78	± 0.08	.812	.712		.787		.687
018	3/4 x 7/8 x 1/16	.739	± .009	18.77	± 0.23	.070	± .003	1.78	± 0.08	.875	.775		.850		.750
019	13/16 x 15/16 x 1/16	.801	± .009	20.35	± 0.23	.070	± .003	1.78	± 0.08	.937	.837		.912		.812
020	7/8 x 1 x 1/16	.864	± .009	21.95	± 0.23	.070	± .003	1.78	± 0.08	1.000	.900		.975		.875
021	15/16 x 1 1/16 x 1/16	.926	± .009	23.52	± 0.23	.070	± .003	1.78	± 0.08	1.062	.962		1.037		.937
022	1 x 1 1/8 x 1/16	.989	± .010	25.12	± 0.25	.070	± .003	1.78	± 0.08	1.125	1.025		1.100		1.000
023	1 1/16 x 1 3/16 x 1/16	1.051	± .010	26.70	± 0.25	.070	± .003	1.78	± 0.08	1.188	1.088		1.162		1.062
024	1 1/8 x 1 1/4 x 1/16	1.114	± .010	28.30	± 0.25	.070	± .003	1.78	± 0.08	1.250	1.150		1.225		1.125
025	1 3/16 x 1 5/16 x 1/16	1.176	± .011	29.87	± 0.28	.070	± .003	1.78	± 0.08	1.312	1.212		1.288		1.188
026	1 1/4 x 1 3/8 x 1/16	1.239	± .011	31.47	± 0.28	.070	± .003	1.78	± 0.08	1.375	1.275		1.350		1.250
027	1 5/16 x 1 7/16 x 1/16	1.301	± .011	33.05	± 0.28	.070	± .003	1.78	± 0.08	1.437	1.337		1.412		1.312
028	1 3/8 x 1 1/2 x 1/16	1.364	± .013	34.65	± 0.33	.070	± .003	1.78	± 0.08	1.500	1.400		1.475		1.375
517	1 7/16 x 1 9/16 x 1/16	1.428	± .015	36.27	± 0.38	.070	± .003	1.78	± 0.08						
029	1 1/2 x 1 5/8 x 1/16	1.489	± .010	37.82	± 0.33	.070	± .003	1.78	± 0.08	1.625	1.525		1.600		1.500
519	1 9/16 x 1 11/16 x 1/16	1.553	± .015	39.45	± 0.38	.070	± .003	1.78	± 0.08						
030	1 5/8 x 1 3/4 x 1/16	1.614	± .013	41.00	± 0.33	.070	± .003	1.78	± 0.08	1.750	1.650		1.725		1.625
031	1 3/4 x 1 7/8 x 1/16	1.739	± .015	44.17	± 0.38	.070	± .003	1.78	± 0.08	1.875	1.775		1.850		1.750
032	1 7/8 x 2 x 1/16	1.864	± .015	47.35	± 0.38	.070	± .003	1.78	± 0.08	2.000	1.900		1.975		1.875
033	2 x 2 1/8 x 1/16	1.989	± .018	50.52	± 0.46	.070	± .003	1.78	± 0.08	2.125	2.025		2.100		2.000
034	2 1/8 x 2 1/4 x 1/16	2.114	± .018	53.70	± 0.46	.070	± .003	1.78	± 0.08	2.250	2.150		2.225		2.125
035	2 1/4 x 2 3/8 x 1/16	2.239	± .018	56.87	± 0.46	.070	± .003	1.78	± 0.08	2.375	2.275		2.350		2.250
036	2 3/8 x 2 1/2 x 1/16	2.364	± .018	60.05	± 0.46	.070	± .003	1.78	± 0.08	2.500	2.400		2.475		2.375
037	2 1/2 x 2 5/8 x 1/16	2.489	± .018	63.22	± 0.46	.070	± .003	1.78	± 0.08	2.625	2.525		2.600		2.500
038	2 5/8 x 2 3/4 x 1/16	2.614	± .020	66.40	± 0.51	.070	± .003	1.78	± 0.08	2.750	2.650		2.725		2.625
039	2 3/4 x 2 7/8 x 1/16	2.739	± .020	69.57	± 0.51	.070	± .003	1.78	± 0.08	2.875	2.775		2.850		2.750
040	2 7/8 x 3 x 1/16	2.864	± .020	72.75	± 0.51	.070	± .003	1.78	± 0.08	3.000	2.900		2.975		2.875
041	3 x 3 1/8 x 1/16	2.989	± .024	75.92	± 0.61	.070	± .003	1.78	± 0.08	3.125	3.025		3.100		3.000
532	3 1/8 x 3 1/4 x 1/16	3.110	± .020	79.00	± 0.51	.070	± .003	1.78	± 0.08						
042	3 3/4 x 3 3/8 x 1/16	3.239	± .024	82.27	± 0.61	.070	± .003	1.78	± 0.08	3.375	3.275		3.350		3.250
534	3 3/8 x 3 1/2 x 1/16	3.360	± .020	85.34	± 0.51	.070	± .003	1.78	± 0.08						
043	3 1/2 x 3 5/8 x 1/16	3.489	± .024	88.62	± 0.61	.070	± .003	1.78	± 0.08	3.625	3.525		3.600		3.500
536	3 5/8 x 3 3/4 x 1/16	3.610	± .020	91.70	± 0.51	.070	± .003	1.78	± 0.08						
044	3 3/4 x 3 7/8 x 1/16	3.739	± .027	94.97	± 0.69	.070	± .003	1.78	± 0.08	3.875	3.775		3.850		3.750
538	3 7/8 x 4 x 1/16	3.860	± .020	98.05	± 0.51	.070	± .003	1.78	± 0.08						
045	4 x 4 1/8 x 1/16	3.989	± .027	101.32	± 0.69	.070	± .003	1.78	± 0.08	4.125	4.025		4.100		
540	4 1/8 x 4 1/4 x 1/16	4.110	± .020	104.40	± 0.51	.070	± .003	1.78	± 0.08						
046	4 1/4 x 4 3/8 x 1/16	4.239	± .030	107.67	± 0.76	.070	± .003	1.78	± 0.08	4.375	4.275		4.350		4.250
542	4 3/8 x 4 1/2 x 1/16	4.360	± .020	110.74	± 0.51	.070	± .003	1.78	± 0.08						
047	4 1/2 x 4 5/8 x 1/16	4.489	± .030	114.02	± 0.76	.070	± .003	1.78	± 0.08	4.625	4.525		4.600		4.500
544	4 5/8 x 4 3/4 x 1/16	4.610	± .020	117.10	± 0.51	.070	± .003	1.78	± 0.08						
048	4 3/4 x 4 7/8 x 1/16	4.739	± .030	120.37	± 0.76	.070	± .003	1.78	± 0.08	4.875	4.775		4.850		4.750
546	4 7/8 x 5 x 1/16	4.860	± .020	123.44	± 0.51	.070	± .003	1.78	± 0.08						
049	5 x 5 1/8 x 1/16	4.989	± .037	126.72	± 0.94	.070	± .003	1.78	± 0.08	5.125	5.025		5.100		5.000
548	5 1/8 x 5 1/4 x 1/16	5.095	± .028	129.40	± 0.71	.070	± .003	1.78	± 0.08						
050	5 1/4 x 5 3/8 x 1/16	5.239	± .037	133.07	± 0.94	.070	± .003	1.78	± 0.08	5.375	5.275		5.350		5.250
550	5 3/8 x 5 1/2 x 1/16	5.345	± .028	135.76	± 0.71	.070	± .003	1.78	± 0.08						
551	5 1/2 x 5 5/8 x 1/16	5.470	± .028	138.94	± 0.71	.070	± .003	1.78	± 0.08						
552	5 5/8 x 5 3/4 x 1/16	5.595	± .028	142.11	± 0.71	.070	± .003	1.78	± 0.08						
553	5 3/4 x 5 7/8 x 1/16	5.720	± .028	145.29	± 0.71	.070	± .003	1.78	± 0.08						

IMPERIAL RANGE ISO3601 (BS1806) O RING SIZE CHART

Part No.	Nominal Size C x A x W	Inside Diameter				Cross Section				Bore Ø A	Piston Groove Ø B		Gland Groove Ø D		Rod Ø C
		inch	±	mm	±	inch	±	mm	±	inch	STAT	DYN	STAT	DYN	
554	5 7/8 x 6 x 1/16	5.845	± .028	148.46	± 0.71	.070	± .003	1.78	± 0.08						
555	6 x 6 1/8 x 1/16	5.970	± .028	151.64	± 0.71	.070	± .003	1.78	± 0.08						
556	6 1/8 x 6 1/4 x 1/16	6.095	± .028	154.81	± 0.71	.070	± .003	1.78	± 0.08						
557	6 1/4 x 6 3/8 x 1/16	6.220	± .028	158.00	± 0.71	.070	± .003	1.78	± 0.08						
558	6 3/8 x 6 1/2 x 1/16	6.345	± .028	161.16	± 0.71	.070	± .003	1.78	± 0.08						
559	6 1/2 x 6 5/8 x 1/16	6.470	± .028	164.34	± 0.71	.070	± .003	1.78	± 0.08						
560	6 5/8 x 6 3/4 x 1/16	6.595	± .028	167.51	± 0.71	.070	± .003	1.78	± 0.08						
561	6 3/4 x 6 7/8 x 1/16	6.720	± .028	170.69	± 0.71	.070	± .003	1.78	± 0.08						
562	6 7/8 x 7 x 1/16	6.845	± .028	173.87	± 0.71	.070	± .003	1.78	± 0.08						
102	1/16 x 1/4 x 3/32	.049	± .005	1.24	± 0.13	.103	± .003	2.62	± 0.08	.250	.090	.076	.222	.236	.062
103	3/32 x 9/32 x 3/32	.081	± .005	2.06	± 0.13	.103	± .003	2.62	± 0.08	.281	.121	.107	.253	.267	.093
104	1/8 x 5/16 x 3/32	.112	± .005	2.84	± 0.13	.103	± .003	2.62	± 0.08	.313	.153	.139	.285	.299	.125
105	5/32 x 11/32 x 3/32	.143	± .005	3.63	± 0.13	.103	± .003	2.62	± 0.08	.344	.184	.170	.316	.330	.156
106	3/16 x 3/8 x 3/32	.174	± .005	4.42	± 0.13	.103	± .003	2.62	± 0.08	.375	.215	.201	.347	.361	.187
107	7/32 x 13/32 x 3/32	.206	± .005	5.23	± 0.13	.103	± .003	2.62	± 0.08	.406	.246	.232	.378	.392	.218
108	1/4 x 7/16 x 3/32	.237	± .005	6.02	± 0.13	.103	± .003	2.62	± 0.08	.438	.278	.270	.410	.424	.250
109	5/16 x 1/2 x 3/32	.299	± .005	7.59	± 0.13	.103	± .003	2.62	± 0.08	.500	.340	.336	.472	.486	.312
*110	3/8 x 9/16 x 3/32	.362	± .005	9.19	± 0.13	.103	± .003	2.62	± 0.08	.562	.402	.388	.535	.549	.375
613	25/64 x 37/64 x 3/32	.391	± .005	9.92	± 0.13	.103	± .003	2.62	± 0.08						
*111	7/16 x 5/8 x 3/32	.424	± .005	10.77	± 0.13	.103	± .003	2.62	± 0.08	.625	.465	.451	.597	.611	.437
614	15/32 x 21/32 x 3/32	.469	± .005	11.91	± 0.13	.103	± .003	2.62	± 0.08						
*112	1/2 x 11/16 x 3/32	.487	± .005	12.37	± 0.13	.103	± .003	2.62	± 0.08	.687	.527	.513	.660	.674	.500
807		.500	± .005	12.70	± 0.13	.103	± .003	2.62	± 0.08						
615	33/64 x 45/64 x 3/32	.516	± .005	13.10	± 0.13	.103	± .003	2.62	± 0.08						
*113	9/16 x 3/4 x 3/32	.549	± .007	13.94	± 0.18	.103	± .003	2.62	± 0.08	.750	.590	.576	.722	.736	.562
616	19/32 x 25/32 x 3/32	.594	± .005	15.08	± 0.13	.103	± .003	2.62	± 0.08						
*114	5/8 x 13/16 x 3/32	.612	± .009	15.54	± 0.23	.103	± .003	2.62	± 0.08	.812	.652	.638	.785	.799	.625
809		.625	± .005	15.88	± 0.13	.103	± .003	2.62	± 0.08						
*115	11/16 x 7/8 x 3/32	.674	± .009	17.12	± 0.23	.103	± .003	2.62	± 0.08	.875	.715	.701	.848	.862	.688
810		.687	± .005	17.46	± 0.13	.103	± .003	2.62	± 0.08						
617		.703	± .005	17.86	± 0.13	.103	± .003	2.62	± 0.08						
*116	3/4 x 15/16 x 3/32	.737	± .009	18.72	± 0.23	.103	± .003	2.62	± 0.08	.937	.777	.763	.910	.924	.755
117	13/16 x 1 x 3/32	.799	± .010	20.29	± 0.25	.103	± .003	2.62	± 0.08	1.000	.840		.972		.812
812		.812	± .006	20.64	± 0.15	.103	± .003	2.62	± 0.08						
118	7/8 x 1 1/16 x 3/32	.862	± .010	21.89	± 0.25	.103	± .003	2.62	± 0.08	1.062	.902		1.035		.875
813		.875	± .006	22.23	± 0.15	.103	± .003	2.62	± 0.08						
119	15/16 x 1 1/8 x 3/32	.924	± .010	23.47	± 0.25	.103	± .003	2.62	± 0.08	1.125	.965		1.097		.937
814		.937	± .006	23.81	± 0.15	.103	± .003	2.62	± 0.08						
120	1 x 1 3/16 x 3/32	.987	± .010	25.07	± 0.25	.103	± .003	2.62	± 0.08	1.187	1.027		1.160		1.000
121	1 1/16 x 1 1/4 x 3/32	1.049	± .010	26.64	± 0.25	.103	± .003	2.62	± 0.08	1.250	1.090		1.222		1.062
122	1 1/8 x 1 5/16 x 3/32	1.112	± .010	28.24	± 0.25	.103	± .003	2.62	± 0.08	1.312	1.152		1.285		1.125
123	1 3/16 x 1 3/8 x 3/32	1.174	± .012	29.82	± 0.30	.103	± .003	2.62	± 0.08	1.375	1.215		1.348		1.188
124	1 1/4 x 1 7/16 x 3/32	1.237	± .012	31.42	± 0.30	.103	± .003	2.62	± 0.08	1.437	1.277		1.410		1.250
125	1 5/16 x 1 1/2 x 3/32	1.299	± .012	32.99	± 0.30	.103	± .003	2.62	± 0.08	1.500	1.340		1.472		1.312
126	1 3/8 x 1 9/16 x 3/32	1.362	± .012	34.59	± 0.30	.103	± .003	2.62	± 0.08	1.562	1.402		1.535		1.375
127	1 7/16 x 1 5/8 x 3/32	1.424	± .012	36.17	± 0.30	.103	± .003	2.62	± 0.08	1.625	1.465		1.597		1.437
128	1 1/2 x 1 11/16 x 3/32	1.487	± .012	37.77	± 0.30	.103	± .003	2.62	± 0.08	1.687	1.527		1.660		1.500
129	1 9/16 x 1 3/4 x 3/32	1.549	± .015	39.34	± 0.38	.103	± .003	2.62	± 0.08	1.750	1.590		1.722		1.562
130	1 5/8 x 1 13/16 x 3/32	1.612	± .015	40.94	± 0.38	.103	± .003	2.62	± 0.08	1.812	1.652		1.785		1.625
131	1 11/16 x 1 7/8 x 3/32	1.674	± .015	42.52	± 0.38	.103	± .003	2.62	± 0.08	1.875	1.715		1.848		1.688
132	1 3/4 x 1 15/16 x 3/32	1.737	± .015	44.12	± 0.38	.103	± .003	2.62	± 0.08	1.937	1.777		1.910		1.750
133	1 13/16 x 2 x 3/32	1.799	± .015	45.69	± 0.38	.103	± .003	2.62	± 0.08	2.000	1.840		1.972		1.812
134	1 7/8 x 2 1/16 x 3/32	1.862	± .017	47.29	± 0.43	.103	± .003	2.62	± 0.08	2.062	1.902		2.035		1.875
135	1 15/16 x 2 1/8 x 3/32	1.925	± .017	48.90	± 0.43	.103	± .003	2.62	± 0.08	2.125	1.965		2.097		1.937
136	2 x 2 3/16 x 3/32	1.987	± .017	50.47	± 0.43	.103	± .003	2.62	± 0.08	2.187	2.027		2.160		2.000
137	2 1/16 x 2 1/4 x 3/32	2.050	± .017	52.07	± 0.43	.103	± .003	2.62	± 0.08	2.250	2.090		2.222		2.062
138	2 1/8 x 2 5/16 x 3/32	2.112	± .017	53.64	± 0.43	.103	± .003	2.62	± 0.08	2.312	2.152		2.285		2.125
139	2 3/16 x 2 3/8 x 3/32	2.175	± .017	55.25	± 0.43	.103	± .003	2.62	± 0.08	2.375	2.215		2.348		2.188
140	2 1/4 x 2 7/16 x 3/32	2.237	± .017	56.82	± 0.43	.103	± .003	2.62	± 0.08	2.437	2.277		2.410		2.250
141	2 5/16 x 2 1/2 x 3/32	2.300	± .020	58.42	± 0.51	.103	± .003	2.62	± 0.08	2.500	2.340		2.472		2.312
142	2 3/8 x 2 9/16 x 3/32	2.362	± .020	59.99	± 0.51	.103	± .003	2.62	± 0.08	2.562	2.402		2.535		2.375
143	2 7/16 x 2 5/8 x 3/32	2.425	± .020	61.60	± 0.51	.103	± .003	2.62	± 0.08	2.625	2.465		2.597		2.437
144	2 1/2 x 2 11/16 x 3/32	2.487	± .020	63.17	± 0.51	.103	± .003	2.62	± 0.08	2.687	2.527		2.660		2.500
145	2 9/16 x 2 3/4 x 3/32	2.550	± .020	64.77	± 0.51	.103	± .003	2.62	± 0.08	2.750	2.590		2.722		2.562
146	2 5/8 x 2 13/16 x 3/32	2.612	± .020	66.34	± 0.51	.103	± .003	2.62	± 0.08	2.812	2.652		2.785		2.625
147	2 11/16 x 2 7/8 x 3/32	2.675	± .022	67.95	± 0.56	.103	± .003	2.62	± 0.08	2.875	2.715		2.848		2.688
148	2 3/4 x 2 15/16 x 3/32	2.737	± .022	69.52	± 0.56	.103	± .003	2.62	± 0.08	2.937	2.777		2.910		2.750
149	2 13/16 x 3 x 3/32	2.800	± .022	71.12	± 0.56	.103	± .003	2.62	± 0.08	3.000	2.840		2.972		2.812
150	2 7/8 x 3 1/16 x 3/32	2.862	± .022	72.69	± 0.56	.103	± .003	2.62	± 0.08	3.062	2.902		3.035		2.875
640	2 15/16 x 3 1/8 x 3/32	2.924	± .015	74.30	± 0.38	.103	± .003	2.62	± 0.08						
151	3 x 3 3/16 x 3/32	2.987	± .024	75.87	± 0.61	.103	± .003	2.62	± 0.08	3.187	3.027		3.160		3.000
641	3 1/16 x 3 1/4 x 3/32	3.049	± .015	77.50	± 0.38	.103	± .003	2.62	± 0.08						
642	3 3/16 x 3 3/8 x 3/32	3.174	± .015	80.60	± 0.38	.103	± .003	2.62	± 0.08						
152	3 1/4 x 3 7/16 x 3/32	3.237	± .024	82.22	± 0.61	.103	± .003	2.62	± 0.08	3.437	3.277		3.410		3.250

IMPERIAL RANGE ISO3601 (BS1806) O RING SIZE CHART

Part No.	Nominal Size C x A x W	Inside Diameter				Cross Section				Bore Ø A	Piston Groove Ø B		Gland Groove Ø D		Rod Ø C
		inch	±	mm	±	inch	±	mm	±	inch	STAT	DYN	STAT	DYN	
643	3 5/16 x 3 1/2 x 3/32	3.299	± .015	83.80	± 0.38	.103	± .003	2.62	± 0.08						
153	3 1/2 x 3 11/16 x 3/32	3.487	± .024	88.57	± 0.61	.103	± .003	2.62	± 0.08	3.687	3.527		3.660		3.500
154	3 3/4 x 3 15/16 x 3/32	3.737	± .028	94.92	± 0.71	.103	± .003	2.62	± 0.08	3.937	3.777		3.910		3.750
155	4 x 4 3/16 x 3/32	3.987	± .028	101.27	± 0.71	.103	± .003	2.62	± 0.08	4.187	4.027		4.160		4.000
156	4 1/4 x 4 7/16 x 3/32	4.237	± .030	107.62	± 0.76	.103	± .003	2.62	± 0.08	4.437	4.277		4.410		4.250
157	4 1/2 x 4 11/16 x 3/32	4.487	± .030	113.97	± 0.76	.103	± .003	2.62	± 0.08	4.687	4.527		4.660		4.500
158	4 3/4 x 4 15/16 x 3/32	4.737	± .030	120.32	± 0.76	.103	± .003	2.62	± 0.08	4.937	4.777		4.910		4.750
159	5 x 5 3/16 x 3/32	4.987	± .035	126.67	± 0.89	.103	± .003	2.62	± 0.08	5.187	5.027		5.160		5.000
160	5 1/4 x 5 7/16 x 3/32	5.237	± .035	133.02	± 0.89	.103	± .003	2.62	± 0.08	5.437	5.277		5.410		5.250
161	5 1/2 x 5 11/16 x 3/32	5.487	± .035	139.37	± 0.89	.103	± .003	2.62	± 0.08	5.687	5.527		5.660		5.500
162	5 3/4 x 5 15/16 x 3/32	5.737	± .035	145.72	± 0.89	.103	± .003	2.62	± 0.08	5.937	5.777		5.910		5.750
163	6 x 6 3/16 x 3/32	5.987	± .035	152.07	± 0.89	.103	± .003	2.62	± 0.08	6.187	6.027		6.160		6.000
164	6 1/4 x 6 7/16 x 3/32	6.237	± .040	158.42	± 1.02	.103	± .003	2.62	± 0.08	6.437	6.277		6.410		6.250
165	6 1/2 x 6 11/16 x 3/32	6.487	± .040	164.77	± 1.02	.103	± .003	2.62	± 0.08	6.687	6.527		6.660		6.500
166	6 3/4 x 6 15/16 x 3/32	6.737	± .040	171.12	± 1.02	.103	± .003	2.62	± 0.08	6.937	6.777		6.910		6.750
167	7 x 7 3/16 x 3/32	6.987	± .040	177.47	± 1.02	.103	± .003	2.62	± 0.08	7.187	7.027		7.160		7.000
168	7 1/4 x 7 7/16 x 3/32	7.237	± .045	183.82	± 1.14	.103	± .003	2.62	± 0.08	7.437	7.277		7.410		7.250
169	7 1/2 x 7 11/16 x 3/32	7.487	± .045	190.17	± 1.14	.103	± .003	2.62	± 0.08	7.687	7.527		7.660		7.500
170	7 3/4 x 7 15/16 x 3/32	7.737	± .045	196.52	± 1.14	.103	± .003	2.62	± 0.08	7.937	7.777		7.910		7.750
171	8 x 8 3/16 x 3/32	7.987	± .045	202.87	± 1.14	.103	± .003	2.62	± 0.08	8.187	8.027		8.160		8.000
172	8 1/4 x 8 7/16 x 3/32	8.237	± .050	209.22	± 1.27	.103	± .003	2.62	± 0.08	8.437	8.277		8.410		8.250
173	8 1/2 x 8 11/16 x 3/32	8.487	± .050	215.57	± 1.27	.103	± .003	2.62	± 0.08	8.687	8.527		8.660		8.500
174	8 3/4 x 8 15/16 x 3/32	8.737	± .050	221.92	± 1.27	.103	± .003	2.62	± 0.08	8.937	8.777		8.910		8.750
175	9 x 9 3/16 x 3/32	8.987	± .050	228.27	± 1.27	.103	± .003	2.62	± 0.08	9.187	9.027		9.160		9.000
176	9 1/4 x 9 7/16 x 3/32	9.237	± .055	234.62	± 1.40	.103	± .003	2.62	± 0.08	9.437	9.277		9.410		9.250
177	9 1/2 x 9 11/16 x 3/32	9.487	± .055	240.97	± 1.40	.103	± .003	2.62	± 0.08	9.687	9.527		9.660		9.500
178	9 3/4 x 9 15/16 x 3/32	9.737	± .055	247.32	± 1.40	.103	± .003	2.62	± 0.08	9.937	9.777		9.910		9.750
201	3/16 x 7/16 x 1/8	.171	± .005	4.34	± 0.13	.139	± .003	3.53	± 0.08	.437	.215	.199	.409	.425	.187
202	1/4 x 1/2 x 1/8	.234	± .005	5.94	± 0.13	.139	± .003	3.53	± 0.08	.500	.277	.261	.472	.488	.250
203	5/16 x 9/16 x 1/8	.296	± .005	7.52	± 0.13	.139	± .004	3.53	± 0.10	.562	.340	.324	.514	.530	.312
204	3/8 x 5/8 x 1/8	.359	± .005	9.12	± 0.13	.139	± .004	3.53	± 0.10	.625	.403	.387	.597	.613	.375
205	7/16 x 11/16 x 1/8	.421	± .005	10.69	± 0.13	.139	± .004	3.53	± 0.10	.687	.465	.449	.659	.675	.437
206	1/2 x 3/4 x 1/8	.484	± .005	12.29	± 0.13	.139	± .004	3.53	± 0.10	.750	.527	.511	.722	.738	.500
207	9/16 x 13/16 x 1/8	.546	± .007	13.87	± 0.18	.139	± .004	3.53	± 0.10	.812	.590	.574	.814	.830	.562
208	5/8 x 7/8 x 1/8	.609	± .009	15.47	± 0.23	.139	± .004	3.53	± 0.10	.875	.653	.637	.847	.863	.625
209	11/16 x 15/16 x 1/8	.671	± .009	17.04	± 0.23	.139	± .004	3.53	± 0.10	.937	.715	.699	.909	.925	.687
*210	3/4 x 1 x 1/8	.734	± .010	18.66	± 0.25	.139	± .004	3.53	± 0.10	1.000	.778	.762	.972	.988	.750
*211	13/16 x 1 1/16 x 1/8	.796	± .010	20.22	± 0.25	.139	± .004	3.53	± 0.10	1.062	.840	.824	1.034	1.050	.812
*212	7/8 x 1 1/8 x 1/8	.859	± .010	21.82	± 0.25	.139	± .004	3.53	± 0.10	1.125	.903	.887	1.097	1.113	.875
*213	15/16 x 1 3/8 x 1/8	.921	± .010	23.40	± 0.25	.139	± .004	3.53	± 0.10	1.188	.966	.950	1.159	1.175	.937
*214	1 x 1 1/4 x 1/8	.984	± .010	25.00	± 0.25	.139	± .004	3.53	± 0.10	1.250	1.028	1.012	1.222	1.238	1.000
618		1.016	± .006	25.80	± 0.15	.139	± .004	3.53	± 0.10						
*215	1 1/16 x 1 5/16 x 1/8	1.046	± .010	26.58	± 0.25	.139	± .004	3.53	± 0.10	1.312	1.090	1.074	1.284	1.300	1.062
*216	1 1/8 x 1 3/8 x 1/8	1.109	± .012	28.17	± 0.30	.139	± .004	3.53	± 0.10	1.375	1.153	1.137	1.347	1.363	1.125
*217	1 3/16 x 1 7/16 x 1/8	1.171	± .012	29.75	± 0.30	.139	± .004	3.53	± 0.10	1.437	1.215	1.199	1.410	1.426	1.188
*218	1 1/4 x 1 1/2 x 1/8	1.234	± .012	31.35	± 0.30	.139	± .004	3.53	± 0.10	1.500	1.278	1.262	1.472	1.488	1.250
*219	1 5/16 x 1 9/16 x 1/8	1.296	± .012	32.92	± 0.30	.139	± .004	3.53	± 0.10	1.562	1.340	1.324	1.534	1.550	1.312
*220	1 3/8 x 1 5/8 x 1/8	1.359	± .012	34.52	± 0.30	.139	± .004	3.53	± 0.10	1.625	1.403	1.387	1.597	1.613	1.375
*221	1 7/16 x 1 11/16 x 1/8	1.421	± .012	36.09	± 0.30	.139	± .004	3.53	± 0.10	1.688	1.466	1.450	1.659	1.675	1.437
*222	1 1/2 x 1 3/4 x 1/8	1.484	± .015	37.70	± 0.38	.139	± .004	3.53	± 0.10	1.750	1.528	1.512	1.722	1.738	1.500
824	1 9/16 x 1 13/16 x 1/8	1.563	± .010	39.70	± 0.25	.139	± .004	3.53	± 0.10						
223	1 5/8 x 1 7/8 x 1/8	1.609	± .015	40.87	± 0.38	.139	± .004	3.53	± 0.10	1.875	1.653		1.847		1.625
825		1.625	± .010	41.28	± 0.25	.139	± .004	3.53	± 0.10						
826	1 11/16 x 1 15/16 x 1/8	1.687	± .010	42.86	± 0.25	.139	± .004	3.53	± 0.10						
224	1 3/4 x 2 x 1/8	1.734	± .015	44.04	± 0.38	.139	± .004	3.53	± 0.10	2.000	1.778		1.972		1.750
827		1.750	± .010	44.45	± 0.25	.139	± .004	3.53	± 0.10						
828	1 13/16 x 2 1/16 x 1/8	1.812	± .010	46.04	± 0.25	.139	± .004	3.53	± 0.10						
225	1 7/8 x 2 1/8 x 1/8	1.859	± .018	47.22	± 0.46	.139	± .004	3.53	± 0.10	2.125	1.903		2.097		1.875
829		1.875	± .010	47.62	± 0.25	.139	± .004	3.53	± 0.10						
830	1 15/16 x 2 3/16 x 1/8	1.937	± .010	49.20	± 0.25	.139	± .004	3.53	± 0.10						
226	2 x 2 1/4 x 1/8	1.984	± .018	50.39	± 0.46	.139	± .004	3.53	± 0.10	2.250	2.028		2.222		2.000
831		2.000	± .010	50.80	± 0.25	.139	± .004	3.53	± 0.10						
832	2 1/16 x 2 5/16 x 1/8	2.062	± .010	52.40	± 0.25	.139	± .004	3.53	± 0.10						
227	2 1/8 x 2 3/8 x 1/8	2.109	± .018	53.37	± 0.46	.139	± .004	3.53	± 0.10	2.375	2.153		2.347		2.125
833		2.125	± .010	53.97	± 0.25	.139	± .004	3.53	± 0.10						
834	2 3/16 x 2 7/16 x 1/8	2.187	± .010	55.56	± 0.25	.139	± .004	3.53	± 0.10						
228	2 1/4 x 2 1/2 x 1/8	2.234	± .020	56.74	± 0.51	.139	± .004	3.53	± 0.10	2.500	2.278		2.472		2.250
835		2.250	± .010	57.15	± 0.25	.139	± .004	3.53	± 0.10						
836	2 5/16 x 2 9/16 x 1/8	2.312	± .010	58.74	± 0.25	.139	± .004	3.53	± 0.10						
229	2 3/8 x 2 5/8 x 1/8	2.359	± .020	59.92	± 0.51	.139	± .004	3.53	± 0.10	2.625	2.403		2.597		2.375
837		2.375	± .010	60.32	± 0.25	.139	± .004	3.53	± 0.10						
838	2 7/16 x 2 11/16 x 1/8	2.437	± .010	61.90	± 0.25	.139	± .004	3.53	± 0.10						
230	2 1/2 x 2 3/4 x 1/8	2.484	± .020	63.09	± 0.51	.139	± .004	3.53	± 0.10	2.750	2.528		2.722		2.500
839		2.500	± .010	63.50	± 0.25	.139	± .004	3.53	± 0.10						

IMPERIAL RANGE ISO3601 (BS1806) O RING SIZE CHART

Part No.	Nominal Size C x A x W	Inside Diameter				Cross Section				Bore Ø A	Piston Groove Ø B		Gland Groove Ø D		Rod Ø C
		inch	±	mm	±	inch	±	mm	±	inch	STAT	DYN	STAT	DYN	
840	2 9/16 x 2 13/16 x 1/8	2.563	± .010	65.10	± 0.25	.139	± .004	3.53	± 0.10						
231	2 5/8 x 2 7/8 x 1/8	2.609	± .020	66.27	± 0.51	.139	± .004	3.53	± 0.10	2.875	2.653		2.847		2.625
841		2.625	± .015	66.67	± 0.38	.139	± .004	3.53	± 0.10						
842	2 11/16 x 2 15/16 x 1/8	2.687	± .015	68.28	± 0.38	.139	± .004	3.53	± 0.10						
232	2 3/4 x 3 x 1/8	2.734	± .024	69.44	± 0.61	.139	± .004	3.53	± 0.10	3.000	2.778		2.972		2.750
843		2.750	± .015	69.85	± 0.38	.139	± .004	3.53	± 0.10						
844		2.812	± .015	71.44	± 0.38	.139	± .004	3.53	± 0.10						
233	2 7/8 x 3 1/8 x 1/8	2.859	± .024	72.62	± 0.61	.139	± .004	3.53	± 0.10	3.125	2.903		3.097		2.875
845		2.875	± .015	73.02	± 0.38	.139	± .004	3.53	± 0.10						
846	2 15/16 x 3 3/16 x 1/8	2.937	± .015	74.60	± 0.38	.139	± .004	3.53	± 0.10						
234	3 x 3 1/4 x 1/8	2.984	± .024	75.79	± 0.61	.139	± .004	3.53	± 0.10	3.250	3.028		3.222		3.000
235	3 1/8 x 3 3/8 x 1/8	3.109	± .024	78.97	± 0.61	.139	± .004	3.53	± 0.10	3.375	3.153		3.347		3.125
236	3 1/4 x 3 1/2 x 1/8	3.234	± .024	82.14	± 0.61	.139	± .004	3.53	± 0.10	3.500	3.278		3.472		3.250
237	3 3/8 x 3 5/8 x 1/8	3.359	± .024	85.32	± 0.61	.139	± .004	3.53	± 0.10	3.625	3.403		3.597		3.375
238	3 1/2 x 3 3/4 x 1/8	3.484	± .024	88.49	± 0.61	.139	± .004	3.53	± 0.10	3.750	3.528		3.722		3.500
239	3 5/8 x 3 7/8 x 1/8	3.609	± .028	91.67	± 0.71	.139	± .004	3.53	± 0.10	3.875	3.653		3.847		3.625
240	3 3/4 x 4 x 1/8	3.734	± .028	94.84	± 0.71	.139	± .004	3.53	± 0.10	4.000	3.778		3.972		3.750
241	3 7/8 x 4 1/8 x 1/8	3.859	± .028	98.02	± 0.71	.139	± .004	3.53	± 0.10	4.125	3.903		4.097		3.875
242	4 x 4 1/4 x 1/8	3.984	± .028	101.19	± 0.71	.139	± .004	3.53	± 0.10	4.250	4.028		4.222		4.000
243	4 1/8 x 4 3/8 x 1/8	4.109	± .028	104.37	± 0.71	.139	± .004	3.53	± 0.10	4.375	4.153		4.347		4.125
244	4 1/4 x 4 1/2 x 1/8	4.234	± .030	107.54	± 0.76	.139	± .004	3.53	± 0.10	4.500	4.278		4.472		4.250
245	4 3/8 x 4 5/8 x 1/8	4.359	± .030	110.72	± 0.76	.139	± .004	3.53	± 0.10	4.625	4.403		4.597		4.375
246	4 1/2 x 4 3/4 x 1/8	4.484	± .030	113.89	± 0.76	.139	± .004	3.53	± 0.10	4.750	4.528		4.722		4.500
247	4 5/8 x 4 7/8 x 1/8	4.609	± .030	117.07	± 0.76	.139	± .004	3.53	± 0.10	4.875	4.653		4.847		4.625
248	4 3/4 x 5 x 1/8	4.734	± .030	120.24	± 0.76	.139	± .004	3.53	± 0.10	5.000	4.778		4.972		4.750
249	4 7/8 x 5 1/8 x 1/8	4.859	± .035	123.42	± 0.89	.139	± .004	3.53	± 0.10	5.125	4.903		5.097		4.875
250	5 x 5 1/4 x 1/8	4.984	± .035	126.59	± 0.89	.139	± .004	3.53	± 0.10	5.250	5.028		5.222		5.000
251	5 1/8 x 5 3/8 x 1/8	5.109	± .035	129.77	± 0.89	.139	± .004	3.53	± 0.10	5.375	5.153		5.347		5.125
252	5 1/4 x 5 1/2 x 1/8	5.234	± .035	132.94	± 0.89	.139	± .004	3.53	± 0.10	5.500	5.278		5.472		5.250
253	5 3/8 x 5 5/8 x 1/8	5.359	± .035	136.12	± 0.89	.139	± .004	3.53	± 0.10	5.625	5.403		5.597		5.375
254	5 1/2 x 5 3/4 x 1/8	5.484	± .035	139.29	± 0.89	.139	± .004	3.53	± 0.10	5.750	5.528		5.722		5.500
255	5 5/8 x 5 7/8 x 1/8	5.609	± .035	142.47	± 0.89	.139	± .004	3.53	± 0.10	5.875	5.653		5.847		5.625
256	5 3/4 x 6 x 1/8	5.734	± .035	145.64	± 0.89	.139	± .004	3.53	± 0.10	6.000	5.778		5.972		5.750
257	5 7/8 x 6 1/8 x 1/8	5.859	± .035	148.82	± 0.89	.139	± .004	3.53	± 0.10	6.125	5.903		6.097		5.875
258	6 x 6 1/4 x 1/8	5.984	± .035	151.99	± 0.89	.139	± .004	3.53	± 0.10	6.250	6.028		6.222		6.000
259	6 1/4 x 6 1/2 x 1/8	5.234	± .040	158.34	± 1.02	.139	± .004	3.53	± 0.10	6.500	6.278		6.472		6.250
260	6 1/2 x 6 3/4 x 1/8	6.484	± .040	164.69	± 1.02	.139	± .004	3.53	± 0.10	6.750	6.528		6.722		6.500
261	6 3/4 x 7 x 1/8	6.734	± .040	171.04	± 1.02	.139	± .004	3.53	± 0.10	7.000	6.778		6.972		6.750
262	7 x 7 1/4 x 1/8	6.984	± .040	177.39	± 1.02	.139	± .004	3.53	± 0.10	7.250	7.028		7.222		7.000
263	7 1/4 x 7 1/2 x 1/8	7.234	± .045	183.74	± 1.14	.139	± .004	3.53	± 0.10	7.500	7.278		7.472		7.250
264	7 1/2 x 7 3/4 x 1/8	7.484	± .045	190.09	± 1.14	.139	± .004	3.53	± 0.10	7.750	7.528		7.722		7.500
265	7 3/4 x 8 x 1/8	7.734	± .045	196.44	± 1.14	.139	± .004	3.53	± 0.10	8.000	7.778		7.972		7.750
266	8 x 8 1/4 x 1/8	7.984	± .045	202.79	± 1.14	.139	± .004	3.53	± 0.10	8.250	8.028		8.222		8.000
267	8 1/4 x 8 1/2 x 1/8	8.234	± .050	209.14	± 1.27	.139	± .004	3.53	± 0.10	8.500	8.278		8.472		8.250
268	8 1/2 x 8 3/4 x 1/8	8.484	± .050	215.49	± 1.27	.139	± .004	3.53	± 0.10	8.750	8.528		8.722		8.500
269	8 3/4 x 9 x 1/8	8.734	± .050	221.84	± 1.27	.139	± .004	3.53	± 0.10	9.000	8.778		8.972		8.750
270	9 x 9 1/4 x 1/8	8.984	± .050	228.19	± 1.27	.139	± .004	3.53	± 0.10	9.250	9.028		9.222		9.000
271	9 1/4 x 9 1/2 x 1/8	9.234	± .055	234.54	± 1.40	.139	± .004	3.53	± 0.10	9.500	9.278		9.472		9.250
272	9 1/2 x 9 3/4 x 1/8	9.484	± .055	240.89	± 1.40	.139	± .004	3.53	± 0.10	9.750	9.528		9.722		9.500
273	9 3/4 x 10 x 1/8	9.734	± .055	247.24	± 1.40	.139	± .004	3.53	± 0.10	10.000	9.778		9.972		9.750
274	10 x 10 1/4 x 1/8	9.984	± .055	253.59	± 1.40	.139	± .004	3.53	± 0.10	10.250	10.028		10.222		10.000
275	10 1/2 x 10 3/4 x 1/8	10.484	± .055	266.29	± 1.40	.139	± .004	3.53	± 0.10	10.750	10.528		10.722		10.500
276	11 x 11 1/4 x 1/8	10.984	± .065	278.99	± 1.40	.139	± .004	3.53	± 0.10	11.250	11.028		11.222		11.000
277	11 1/2 x 11 3/4 x 1/8	11.484	± .065	291.69	± 1.40	.139	± .004	3.53	± 0.10	11.750	11.528		11.722		11.500
278	12 x 12 1/4 x 1/8	11.984	± .065	304.39	± 1.65	.139	± .004	3.53	± 0.10	12.250	12.028		12.222		12.000
279	13 x 13 1/4 x 1/8	12.984	± .065	329.79	± 1.65	.139	± .004	3.53	± 0.10	13.250	13.028		13.222		13.000
280	14 x 14 1/4 x 1/8	13.984	± .065	355.19	± 1.65	.139	± .004	3.53	± 0.10	14.250	14.028		14.222		14.000
281	15 x 15 1/4 x 1/8	14.984	± .065	380.59	± 1.65	.139	± .004	3.53	± 0.10	15.250	15.028		15.222		15.000
282	16 x 16 1/4 x 1/8	15.955	± .075	405.26	± 1.90	.139	± .004	3.53	± 0.10	16.250	16.028		16.222		16.000
283	17 x 17 1/4 x 1/8	16.955	± .080	430.66	± 2.16	.139	± .004	3.53	± 0.10	17.250	17.028		17.222		17.000
284	18 x 18 1/4 x 1/8	17.955	± .085	456.06	± 2.42	.139	± .004	3.53	± 0.10	18.250	18.028		18.222		18.000
309	7/16 x 13/16 x 3/16	.412	± .005	10.46	± 0.13	.210	± .005	5.33	± 0.13	.812	.462	.446	.787	.803	.437
310	1/2 x 7/8 x 3/16	.475	± .005	12.07	± 0.13	.210	± .005	5.33	± 0.13	.875	.525	.509	.850	.866	.500
311	9/16 x 15/16 x 3/16	.537	± .007	13.64	± 0.18	.210	± .005	5.33	± 0.13	.937	.587	.571	.912	.928	.562
312	5/8 x 1 x 3/16	.600	± .009	15.24	± 0.23	.210	± .005	5.33	± 0.13	1.000	.650	.634	.975	.991	.625
313	11/16 x 1 1/16 x 3/16	.662	± .009	16.81	± 0.23	.210	± .005	5.33	± 0.13	1.062	.712	.696	1.037	1.053	.687
314	3/4 x 1 1/8 x 3/16	.725	± .010	18.42	± 0.25	.210	± .005	5.33	± 0.13	1.125	.774	.758	1.100	1.116	.750
315	13/16 x 1 3/16 x 3/16	.787	± .010	19.99	± 0.25	.210	± .005	5.33	± 0.13	1.187	.837	.821	1.162	1.178	.812
316	7/8 x 1 1/4 x 3/16	.850	± .010	21.59	± 0.25	.210	± .005	5.33	± 0.13	1.250	.900	.884	1.225	1.241	.875
317	15/16 x 1 5/16 x 3/16	.912	± .010	23.16	± 0.25	.210	± .005	5.33	± 0.13	1.312	.962	.946	1.287	1.303	.937
318	1 x 1 3/8 x 3/16	.975	± .010	24.77	± 0.25	.210	± .005	5.33	± 0.13	1.375	1.025	1.009	1.350	1.366	1.000
319	1 1/16 x 1 7/16 x 3/16	1.037	± .010	26.34	± 0.25	.210	± .005	5.33	± 0.13	1.437	1.087	1.071	1.412	1.428	1.062
320	1 1/8 x 1 1/2 x 3/16	1.100	± .012	27.94	± 0.30	.210	± .005	5.33	± 0.13	1.500	1.150	1.134	1.475	1.491	1.125
321	1 3/16 x 1 9/16 x 3/16	1.162	± .012	29.51	± 0.30	.210	± .005	5.33	± 0.13	1.562	1.212	1.196	1.537	1.553	1.187

IMPERIAL RANGE ISO3601 (BS1806) O RING SIZE CHART

Part No.	Nominal Size C x A x W	Inside Diameter				Cross Section				Bore Ø A	Piston Groove Ø B		Gland Groove Ø D		Rod Ø C
		inch	±	mm	±	inch	±	mm	±	inch	STAT	DYN	STAT	DYN	
322	1 ¼ x 1 ⅝ x 3⁄16	1.225	± .012	31.12	± 0.30	.210	± .005	5.33	± 0.13	1.625	1.275	1.259	1.600	1.616	1.250
323	1 5⁄16 x 1 11⁄16 x 3⁄16	1.287	± .012	32.69	± 0.30	.210	± .005	5.33	± 0.13	1.687	1.357	1.341	1.662	1.678	1.312
324	1 ⅜ x 1 ¾ x 3⁄16	1.350	± .012	34.29	± 0.30	.210	± .005	5.33	± 0.13	1.750	1.400	1.384	1.725	1.741	1.375
*325	1 ½ x 1 ⅞ x 3⁄16	1.475	± .015	37.47	± 0.38	.210	± .005	5.33	± 0.13	1.875	1.525	1.509	1.850	1.866	1.500
*326	1 ⅝ x 2 x 3⁄16	1.600	± .015	40.64	± 0.38	.210	± .005	5.33	± 0.13	2.000	1.650	1.634	1.975	1.991	1.625
*327	1 ¾ x 2 ⅛ x 3⁄16	1.725	± .015	43.82	± 0.38	.210	± .005	5.33	± 0.13	2.125	1.775	1.759	2.100	2.116	1.750
*328	1 ⅞ x 2 ¼ x 3⁄16	1.850	± .015	46.99	± 0.38	.210	± .005	5.33	± 0.13	2.250	1.900	1.884	2.225	2.241	1.875
*329	2 x 2 ⅜ x 3⁄16	1.975	± .018	50.17	± 0.46	.210	± .005	5.33	± 0.13	2.375	2.025	2.009	2.350	2.366	2.000
*330	2 ⅛ x 2 ½ x 3⁄16	2.100	± .018	53.34	± 0.46	.210	± .005	5.33	± 0.13	2.500	2.150	2.134	2.475	2.491	2.125
*331	2 ¼ x 2 ⅝ x 3⁄16	2.225	± .018	56.52	± 0.46	.210	± .005	5.33	± 0.13	2.625	2.275	2.259	2.600	2.616	2.250
*332	2 ⅜ x 2 ¾ x 3⁄16	2.350	± .018	59.69	± 0.46	.210	± .005	5.33	± 0.13	2.750	2.400	2.384	2.725	2.741	2.375
*333	2 ½ x 2 ⅞ x 3⁄16	2.475	± .020	62.87	± 0.51	.210	± .005	5.33	± 0.13	2.875	2.525	2.509	2.850	2.866	2.500
*334	2 ⅝ x 3 x 3⁄16	2.600	± .020	66.04	± 0.51	.210	± .005	5.33	± 0.13	3.000	2.650	2.634	2.975	2.991	2.625
*335	2 ¾ x 3 ⅛ x 3⁄16	2.725	± .020	69.22	± 0.51	.210	± .005	5.33	± 0.13	3.125	2.775	2.759	3.100	3.116	2.750
*336	2 ⅞ x 3 ¼ x 3⁄16	2.850	± .020	72.39	± 0.51	.210	± .005	5.33	± 0.13	3.250	2.900	2.884	3.225	3.241	2.875
*619	2 15⁄16 x 3 5⁄16 x 3⁄16	2.938	± .015	74.63	± 0.36	.210	± .005	5.33	± 0.13						
*337	3 x 3 ⅜ x 3⁄16	2.975	± .024	75.57	± 0.61	.210	± .005	5.33	± 0.13	3.375	3.025	3.009	3.350	3.366	3.000
*338	3 ⅛ x 3 ½ x 3⁄16	3.100	± .024	78.74	± 0.61	.210	± .005	5.33	± 0.13	3.500	3.150	3.134	3.475	3.491	3.125
*620		3.141	± .015	79.77	± 0.38	.210	± .005	5.33	± 0.13						
*339	3 ¼ x 3 ⅝ x 3⁄16	3.225	± .024	81.92	± 0.61	.210	± .005	5.33	± 0.13	3.625	3.275	3.259	3.600	3.616	3.250
*340	3 ⅜ x 3 ¾ x 3⁄16	3.350	± .024	85.09	± 0.61	.210	± .005	5.33	± 0.13	3.750	3.400	3.384	3.725	3.741	3.375
*341	3 ½ x 3 ⅞ x 3⁄16	3.475	± .024	88.27	± 0.61	.210	± .005	5.33	± 0.13	3.875	3.525	3.509	3.850	3.866	3.500
*621	3 9⁄16 x 3 15⁄16 x 3⁄16	3.531	± .015	89.69	± 0.38	.210	± .005	5.33	± 0.13						
*342	3 ⅝ x 4 x 3⁄16	3.600	± .028	91.44	± 0.71	.210	± .005	5.33	± 0.13	4.000	3.650	3.634	3.975	3.991	3.625
*343	3 ¾ x 4 ⅛ x 3⁄16	3.725	± .028	94.62	± 0.71	.210	± .005	5.33	± 0.13	4.125	3.775	3.759	4.100	4.116	3.750
*344	3 ⅞ x 4 ¼ x 3⁄16	3.850	± .028	97.79	± 0.71	.210	± .005	5.33	± 0.13	4.250	3.900	3.884	4.225	4.241	3.875
*622	3 15⁄16 x 4 5⁄16 x 3⁄16	3.937	± .015	100.00	± 0.38	.210	± .005	5.33	± 0.13						
*345	4 x 4 ⅜ x 3⁄16	3.975	± .028	100.97	± 0.71	.210	± .005	5.33	± 0.13	4.375	4.025	4.009	4.350	4.366	4.000
*346	4 ⅛ x 4 ½ x 3⁄16	4.100	± .028	104.14	± 0.71	.210	± .005	5.33	± 0.13	4.500	4.150	4.134	4.475	4.491	4.125
*347	4 ¼ x 4 ⅝ x 3⁄16	4.225	± .030	107.32	± 0.76	.210	± .005	5.33	± 0.13	4.625	4.275	4.259	4.600	4.616	4.250
*623		4.312	± .015	109.54	± 0.38	.210	± .005	5.33	± 0.13						4.375
*348	4 ⅜ x 4 ¾ x 3⁄16	4.350	± .030	110.49	± 0.76	.210	± .005	5.33	± 0.13	4.750	4.400	4.384	4.725	4.741	
*349	4 ½ x 4 ⅞ x 3⁄16	4.475	± .030	113.67	± 0.76	.210	± .005	5.33	± 0.13	4.875	4.525	4.509	4.850	4.866	4.500
350	4 ⅝ x 5 x 3⁄16	4.600	± .030	116.84	± 0.76	.210	± .005	5.33	± 0.13	5.000	4.650		4.975		4.625
860		4.625	± .015	117.48	± 0.38	.210	± .005	5.33	± 0.13						
351	4 ¾ x 5 ⅛ x 3⁄16	4.725	± .030	120.02	± 0.76	.210	± .005	5.33	± 0.13	5.125	4.775		5.100		4.750
861		4.750	± .015	120.65	± 0.38	.210	± .005	5.33	± 0.13						
352	4 ⅞ x 5 ¼ x 3⁄16	4.850	± .030	123.19	± 0.76	.210	± .005	5.33	± 0.13	5.250	4.900		5.225		4.875
862		4.875	± .015	123.83	± 0.38	.210	± .005	5.33	± 0.13						
353	5 x 5 ⅜ x 3⁄16	4.975	± .037	126.37	± 0.94	.210	± .005	5.33	± 0.13	5.375	5.025		5.350		5.000
863		5.000	± .023	127.00	± 0.58	.210	± .005	5.33	± 0.13						
354	5 ⅛ x 5 ½ x 3⁄16	5.100	± .037	129.54	± 0.95	.210	± .005	5.33	± 0.13	5.500	5.150		5.475		5.125
864		5.125	± .023	130.18	± 0.58	.210	± .005	5.33	± 0.13						
355	5 ¼ x 5 ⅝ x 3⁄16	5.225	± .037	132.72	± 0.94	.210	± .005	5.33	± 0.13	5.625	5.275		5.600		5.250
865		5.250	± .023	133.35	± 0.58	.210	± .005	5.33	± 0.13						
356	5 ⅜ x 5 ¾ x 3⁄16	5.350	± .037	135.89	± 0.94	.210	± .005	5.33	± 0.13	5.750	5.400		5.725		5.375
866		5.375	± .023	136.53	± 0.58	.210	± .005	5.33	± 0.13						
357	5 ½ x 5 ⅞ x 3⁄16	5.475	± .037	139.07	± 0.94	.210	± .005	5.33	± 0.13	5.875	5.525		5.850		5.500
867		5.500	± .023	139.70	± 0.58	.210	± .005	5.33	± 0.13						
358	5 ⅝ x 6 x 3⁄16	5.600	± .037	142.24	± 0.94	.210	± .005	5.33	± 0.13	6.000	5.650		5.975		5.625
868		5.625	± .023	142.88	± 0.58	.210	± .005	5.33	± 0.13						
359	5 ¾ x 6 ⅛ x 3⁄16	5.725	± .037	145.42	± 0.94	.210	± .005	5.33	± 0.13	6.125	5.775		6.100		5.750
869		5.750	± .023	146.05	± 0.58	.210	± .005	5.33	± 0.13						
360	5 ⅞ x 6 ¼ x 3⁄16	5.850	± .037	148.59	± 0.94	.210	± .005	5.33	± 0.13	6.250	5.900		6.225		5.875
870		5.875	± .023	149.23	± 0.58	.210	± .005	5.33	± 0.13						
361	6 x 6 ⅜ x 3⁄16	5.975	± .037	151.77	± 0.94	.210	± .005	5.33	± 0.13	6.375	6.025		6.350		6.000
644	6 ⅛ x 6 ½ x 3⁄16	6.100	± .023	155.00	± 0.58	.210	± .005	5.33	± 0.13						
362	6 ¼ x 6 ⅝ x 3⁄16	6.225	± .040	158.12	± 1.02	.210	± .005	5.33	± 0.13	6.625	6.275		6.600		6.250
645	6 ⅜ x 6 ¾ x 3⁄16	6.350	± .023	161.30	± 0.58	.210	± .005	5.33	± 0.13						
363	6 ½ x 6 ⅞ x 3⁄16	6.475	± .040	164.47	± 1.02	.210	± .005	5.33	± 0.13	6.875	6.525		6.850		6.500
646	6 ⅝ x 7 x 3⁄16	6.600	± .023	167.70	± 0.58	.210	± .005	5.33	± 0.13						
364	6 ¾ x 7 ⅛ x 3⁄16	6.725	± .040	170.82	± 1.02	.210	± .005	5.33	± 0.13	7.125	6.775		7.100		6.750
647	6 ⅞ x 7 ¼ x 3⁄16	6.850	± .023	174.00	± 0.58	.210	± .005	5.33	± 0.13						
365	7 x 7 ⅜ x 3⁄16	6.975	± .040	177.17	± 1.02	.210	± .005	5.33	± 0.13	7.375	7.025		7.350		7.000
366	7 ¼ x 7 ⅝ x 3⁄16	7.225	± .045	183.52	± 1.14	.210	± .005	5.33	± 0.13	7.625	7.275		7.600		7.250
367	7 ½ x 7 ⅞ x 3⁄16	7.475	± .045	189.87	± 1.14	.210	± .005	5.33	± 0.13	7.875	7.525		7.850		7.500
368	7 ¾ x 8 ⅛ x 3⁄16	7.725	± .045	196.22	± 1.14	.210	± .005	5.33	± 0.13	8.125	7.775		8.100		7.750
369	8 x 8 ⅜ x 3⁄16	7.975	± .045	202.57	± 1.14	.210	± .005	5.33	± 0.13	8.375	8.025		8.350		8.000
370	8 ¼ x 8 ⅝ x 3⁄16	8.225	± .050	208.92	± 1.30	.210	± .005	5.33	± 0.13	8.625	8.275		8.600		8.250
371	8 ½ x 8 ⅞ x 3⁄16	8.475	± .050	215.27	± 1.30	.210	± .005	5.33	± 0.13	8.875	8.525		8.850		8.500
372	8 ¾ x 9 ⅛ x 3⁄16	8.725	± .050	221.62	± 1.30	.210	± .005	5.33	± 0.13	9.125	8.775		9.100		8.750
373	9 x 9 ⅜ x 3⁄16	8.975	± .050	227.97	± 1.30	.210	± .005	5.33	± 0.13	9.375	9.025		9.350		9.000
374	9 ¼ x 9 ⅝ x 3⁄16	9.225	± .055	234.32	± 1.40	.210	± .005	5.33	± 0.13	9.625	9.275		9.600		9.250
375	9 ½ x 9 ⅞ x 3⁄16	9.475	± .055	240.67	± 1.40	.210	± .005	5.33	± 0.13	9.875	9.525		9.850		9.500

IMPERIAL RANGE ISO3601 (BS1806) O RING SIZE CHART

Part No.	Nominal Size C x A x W	Inside Diameter				Cross Section				Bore Ø A	Piston Groove Ø B		Gland Groove Ø D		Rod Ø C
		inch	±	mm	±	inch	±	mm	±	inch	STAT	DYN	STAT	DYN	
376	9 ¾ x 10 ⅛ x 3⁄16	9.725	± .055	247.02	± 1.40	.210	± .005	5.33	± 0.13	10.125	49.775		10.100		9.750
377	10 x 10 ⅜ x 3⁄16	9.975	± .055	253.37	± 1.40	.210	± .005	5.33	± 0.13	10.375	10.025		10.350		10.000
378	10 ½ x 10 ⅞ x 3⁄16	10.475	± .060	266.07	± 1.52	.210	± .005	5.33	± 0.13	10.875	10.525		10.850		10.500
379	11 x 11 ⅜ x 3⁄16	10.975	± .060	278.77	± 1.52	.210	± .005	5.33	± 0.13	11.375	11.025		11.350		11.000
380	11 ½ x 11 ⅞ x 3⁄16	11.475	± .065	291.47	± 1.65	.210	± .005	5.33	± 0.13	11.875	11.525		11.850		11.500
381	12 x 12 ⅜ x 3⁄16	11.975	± .065	304.17	± 1.65	.210	± .005	5.33	± 0.13	12.375	12.025		12.350		12.000
382	13 x 13 ⅜ x 3⁄16	12.975	± .065	329.57	± 1.65	.210	± .005	5.33	± 0.13	13.375	13.025		13.350		13.000
383	14 x 14 ⅜ x 3⁄16	13.975	± .070	354.97	± 1.78	.210	± .005	5.33	± 0.13	14.375	14.025		14.350		14.000
384	15 x 15 ⅜ x 3⁄16	14.975	± .070	380.37	± 1.78	.210	± .005	5.33	± 0.13	15.375	15.025		15.350		15.000
385	16 x 16 ⅜ x 3⁄16	15.955	± .075	405.26	± 1.90	.210	± .005	5.33	± 0.13	16.375	16.025		16.350		16.000
386	17 x 17 ⅜ x 3⁄16	16.955	± .075	430.66	± 1.90	.210	± .005	5.33	± 0.13	17.375	17.025		17.350		17.000
387	18 x 18 ⅜ x 3⁄16	17.955	± .080	456.06	± 2.15	.210	± .005	5.33	± 0.13	18.375	18.025		18.350		18.000
388	19 x 19 ⅜ x 3⁄16	18.952	± .090	481.46	± 2.25	.210	± .005	5.33	± 0.13	19.375	19.025		19.350		19.000
389	20 x 20 ⅜ x 3⁄16	19.952	± .095	506.78	± 2.40	.210	± .005	5.33	± 0.13	20.375	20.025		20.350		20.000
390	21 x 21 ⅜ x 3⁄16	20.952	± .095	532.18	± 2.40	.210	± .005	5.33	± 0.13	21.375	21.025		21.350		21.000
391	22 x 22 ⅜ x 3⁄16	21.952	± .100	557.58	± 2.55	.210	± .005	5.33	± 0.13	22.375	22.025		22.350		22.000
392	23 x 23 ⅜ x 3⁄16	22.940	± .105	582.68	± 2.75	.210	± .005	5.33	± 0.13	23.375	23.025		23.350		23.000
393	24 x 24 ⅜ x 3⁄16	23.940	± .110	608.08	± 2.80	.210	± .005	5.33	± 0.13	24.375	24.025		24.350		24.000
394	25 x 25 ⅜ x 3⁄16	24.940	± .115	633.48	± 2.90	.210	± .005	5.33	± 0.13	25.375	25.025		25.350		25.000
395	26 x 26 ⅜ x 3⁄16	25.940	± .120	658.88	± 3.05	.210	± .005	5.33	± 0.13	26.375	26.025		26.350		26.000
*425	4 ½ x 5 x ¼	4.475	± .033	113.67	± 0.84	.275	± .006	6.99	± 0.15	5.000	4.544	4.532	4.956	4.968	4.500
*624	4 9⁄16 x 5 1⁄16 x ¼	4.516	± .015	114.70	± 0.38	.275	± .006	6.99	± 0.15						
*426	4 ⅝ x 5 ⅛ x ¼	4.600	± .033	116.84	± 0.84	.275	± .006	6.99	± 0.15	5.125	4.669	4.657	5.081	5.093	4.625
*427	4 ¾ x 5 ¼ x ¼	4.725	± .033	120.02	± 0.84	.275	± .006	6.99	± 0.15	5.250	4.794	4.782	5.206	5.218	4.750
*428	4 ⅞ x 5 ⅜ x ¼	4.850	± .015	123.19	± 0.84	.275	± .006	6.99	± 0.15	5.375	4.919	4.907	5.331	5.343	4.875
*625		4.906	± .015	124.60	± 0.38	.275	± .006	6.99	± 0.15						
*429	5 x 5 ½ x ¼	4.975	± .037	126.37	± 0.94	.275	± .006	6.99	± 0.15	5.500	5.044	5.032	5.456	5.468	5.000
*430	5 ⅛ x 5 ⅝ x ¼	5.100	± .037	129.54	± 0.94	.275	± .006	6.99	± 0.15	5.625	5.169	5.157	5.581	5.593	5.125
*431	5 ¼ x 5 ¾ x ¼	5.225	± .023	132.72	± 0.94	.275	± .006	6.99	± 0.15	5.750	5.294	5.282	5.706	5.718	5.250
*626		5.297	± .023	134.50	± 0.58	.275	± .006	6.99	± 0.15						
*432	5 ⅜ x 5 ⅞ x ¼	5.350	± .037	135.89	± 0.94	.275	± .006	6.99	± 0.15	5.875	5.419	5.407	5.831	5.843	5.375
*433	5 ½ x 6 x ¼	5.475	± .037	139.07	± 0.94	.275	± .006	6.99	± 0.15	6.000	5.544	5.532	5.956	5.968	5.500
*434	5 ⅝ x 6 ⅛ x ¼	5.600	± .037	142.24	± 0.94	.275	± .006	6.99	± 0.15	6.125	5.669	5.657	6.081	6.093	5.625
*435	5 ¾ x 6 ¼ x ¼	5.725	± .037	145.42	± 0.94	.275	± .006	6.99	± 0.15	6.250	5.794	5.782	6.206	6.218	5.750
*436	5 ⅞ x 6 ⅜ x ¼	5.850	± .037	148.59	± 0.94	.275	± .006	6.99	± 0.15	6.375	5.919	5.907	6.331	6.343	5.875
*437	6 x 6 ½ x ¼	5.975	± .023	151.77	± 0.94	.275	± .006	6.99	± 0.15	6.500	6.044	6.032	6.456	6.468	6.000
*872	6 ⅛ x 6 ⅝ x ¼	6.125	± .023	155.60	± 0.58	.275	± .006	6.99	± 0.15						
*438	6 ¼ x 6 ¾ x ¼	6.225	± .023	158.12	± 1.02	.275	± .006	6.99	± 0.15	6.750	6.294	6.282	6.706	6.718	6.250
*627		6.281	± .023	159.50	± 0.58	.275	± .006	6.99	± 0.15						
*874		6.375	± .023	161.90	± 0.58	.275	± .006	6.99	± 0.15						
*439	6 ½ x 7 x ¼	6.475	± .023	164.47	± 1.08	.275	± .006	6.99	± 0.15	7.000	6.544	6.532	6.956	6.968	6.500
*628	6 9⁄16 x 7 1⁄16 x ¼	6.563	± .023	166.70	± 0.58	.275	± .006	6.99	± 0.15						
*876	6 ⅝ x 7 ⅛ x ¼	6.625	± .023	168.30	± 0.58	.275	± .006	6.99	± 0.15						
*440	6 ¾ x 7 ¼ x ¼	6.725	± .040	170.82	± 1.02	.275	± .006	6.99	± 0.15	7.250	6.794	6.782	7.206	7.218	6.750
*878	6 ⅞ x 7 1⁄16 x ¼	6.875	± .023	174.60	± 0.58	.275	± .006	6.99	± 0.15						
*441	7 x 7 ½ x ¼	6.975	± .030	177.17	± 1.02	.275	± .006	6.99	± 0.15	7.500	7.044	7.032	7.456	7.468	7.000
*880	7 ⅛ x 7 ⅝ x ¼	7.125	± .030	181.00	± 0.76	.275	± .006	6.99	± 0.15						
*442	7 ¼ x 7 ¾ x ¼	7.225	± .030	183.52	± 1.14	.275	± .006	6.99	± 0.15	7.750	7.294	7.282	7.706	7.718	7.250
*882	7 ⅜ x 7 ⅞ x ¼	7.375	± .030	187.30	± 0.76	.275	± .006	6.99	± 0.15						
*443	7 ½ x 8 x ¼	7.475	± .030	189.87	± 1.14	.275	± .006	6.99	± 0.15	8.000	7.544	7.532	7.956	7.968	7.500
*884	7 ⅝ x 8 ⅛ x ¼	7.625	± .030	193.70	± 0.76	.275	± .006	6.99	± 0.15						
*444	7 ¾ x 8 ¼ x ¼	7.725	± .030	196.22	± 1.14	.275	± .006	6.99	± 0.15	8.250	7.794	7.782	8.206	8.218	7.750
*886	7 ⅞ x 8 ⅜ x ¼	7.875	± .030	200.00	± 0.76	.275	± .006	6.99	± 0.15						
*445	8 x 8 ½ x ¼	7.975	± .030	202.57	± 1.14	.275	± .006	6.99	± 0.15	8.500	8.044	8.032	8.456	8.468	8.000
*674	8 ¼ x 8 ¾ x ¼	8.225	± .030	208.92	± 0.76	.275	± .006	6.99	± 0.15						
*446	8 ½ x 9 x ¼	8.475	± .030	215.27	± 1.40	.275	± .006	6.99	± 0.15	9.000	8.544	8.532	8.956	8.968	8.500
*676	8 ¾ x 9 ¼ x ¼	8.725	± .030	221.62	± 0.76	.275	± .006	6.99	± 0.15						
*447	9 x 9 ½ x ¼	8.975	± .055	227.97	± 1.40	.275	± .006	6.99	± 0.15	9.500	9.044	9.032	9.456	9.468	9.000
*678	9 ¼ x 9 ¾ x ¼	9.225	± .030	234.32	± 0.76	.275	± .006	6.99	± 0.15						
*448	9 ½ x 10 x ¼	9.475	± .055	240.67	± 1.40	.275	± .006	6.99	± 0.15	10.000	9.544	9.532	9.956	9.968	9.500
*680	9 ¾ x 10 ¼ x ¼	9.725	± .030	247.00	± 0.76	.275	± .006	6.99	± 0.15						
*449	10 x 10 ½ x ¼	9.975	± .055	253.37	± 1.40	.275	± .006	6.99	± 0.15	10.500	10.044	10.032	10.456	10.468	10.000
*682	10 ¼ x 10 ¾ x ¼	10.225	± .030	259.70	± 0.76	.275	± .006	6.99	± 0.15						
*450	10 ½ x 11 x ¼	10.475	± .060	266.07	± 1.52	.275	± .006	6.99	± 0.15	11.000	10.544	10.532	10.956	10.968	10.500
*684	10 ¾ x 11 ¼ x ¼	10.725	± .030	272.40	± 0.76	.275	± .006	6.99	± 0.15			11.032		11.468	
*451	11 x 11 ½ x ¼	10.975	± .060	278.77	± 1.52	.275	± .006	6.99	± 0.15	11.500	11.044		11.456		11.000
*686	11 ¼ x 11 ¾ x ¼	11.225	± .030	285.10	± 0.76	.275	± .006	6.99	± 0.15			11.532		11.968	
*452	11 ½ x 12 x ¼	11.475	± .060	291.47	± 1.52	.275	± .006	6.99	± 0.15	12.000	11.544		11.956		11.500
*688	11 ¾ x 12 ¼ x ¼	11.725	± .030	297.80	± 0.76	.275	± .006	6.99	± 0.15			12.032		12.468	
*453	12 x 12 ½ x ¼	11.975	± .060	304.17	± 1.52	.275	± .006	6.99	± 0.15	12.500	12.044		12.456		12.000
*648	12 ¼ x 12 ¾ x ¼	12.225	± .030	310.50	± 0.76	.275	± .006	6.99	± 0.15			12.532		12.968	
*454	12 ½ x 13 x ¼	12.475	± .060	316.87	± 1.52	.275	± .006	6.99	± 0.15	13.000	12.544		12.956		12.500
*649	12 ¾ x 13 ¼ x ¼	12.725	± .030	323.20	± 0.76	.275	± .006	6.99	± 0.15			13.032		13.468	
*455	13 x 13 ½ x ¼	12.975	± .060	329.57	± 1.52	.275	± .006	6.99	± 0.15	13.500	13.044		13.456		13.000

IMPERIAL RANGE ISO3601 (BS1806) O RING SIZE CHART

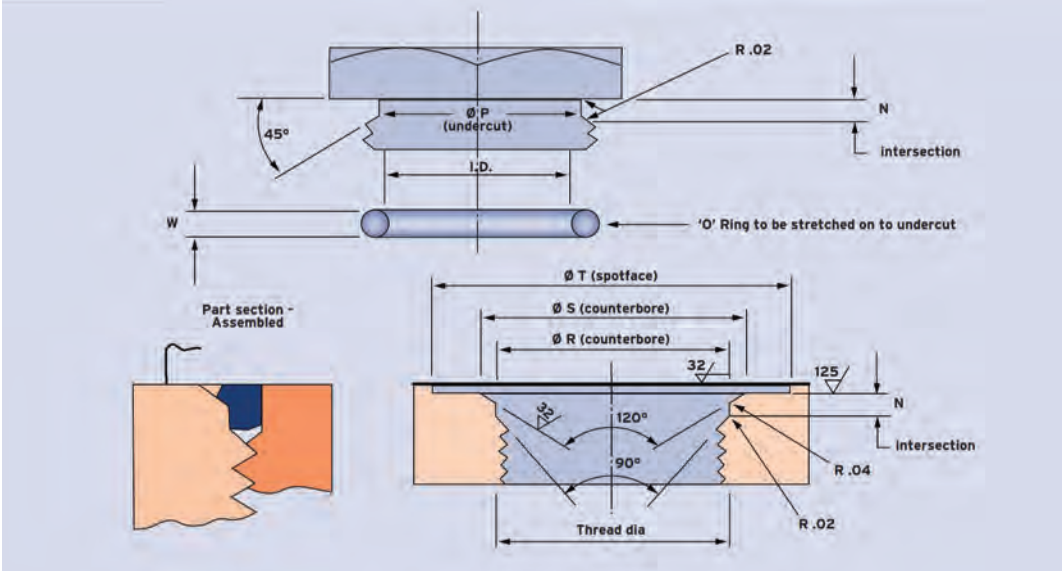
Part No.	Nominal Size C x A x W	Inside Diameter				Cross Section				Bore Ø A	Piston Groove Ø B		Gland Groove Ø D		Rod Ø C
		inch	±	mm	±	inch	±	mm	±	inch	STAT	DYN	STAT	DYN	
*650	13 ¼ x 13 ¾ x ¼	13.225	± .030	335.90	± 0.76	.275	± .006	6.99	± 0.15						
*456	13 ½ x 14 x ¼	13.475	± .070	342.27	± 1.78	.275	± .006	6.99	± 0.15	14.000	13.544	9.532	13.956	9.968	13.500
*457	14 x 14 ½ x ¼	13.975	± .070	354.97	± 1.78	.275	± .006	6.99	± 0.15	14.500	14.044		14.456		14.000
*458	14 ½ x 15 x ¼	14.475	± .070	367.67	± 1.78	.275	± .006	6.99	± 0.15	15.000	14.544	10.032	14.956	10.468	14.500
*459	15 x 15 ½ x ¼	14.975	± .070	380.37	± 1.78	.275	± .006	6.99	± 0.15	15.500	15.044		15.456		15.000
*460	15 ½ x 16 x ¼	15.475	± .070	393.07	± 1.78	.275	± .006	6.99	± 0.15	16.000	15.544	10.532	15.956	10.968	15.500
461	16 x 16 ½ x ¼	15.955	± .075	405.26	± 1.90	.275	± .006	6.99	± 0.15	16.500	16.044	11.032	16.456	11.468	16.000
462	16 ½ x 17 x ¼	16.455	± .075	417.96	± 1.90	.275	± .006	6.99	± 0.15	17.000	16.544		16.956		16.500
463	17 x 17 ½ x ¼	16.955	± .080	430.66	± 2.05	.275	± .006	6.99	± 0.15	17.500	17.044	11.532	17.456	11.968	17.000
464	17 ½ x 18 x ¼	17.455	± .085	443.36	± 2.15	.275	± .006	6.99	± 0.15	18.000	17.544		17.956		17.500
465	18 x 18 ½ x ¼	17.955	± .085	456.06	± 2.15	.275	± .006	6.99	± 0.15	18.500	18.044	12.032	18.456	12.468	18.000
466	18 ½ x 19 x ¼	18.455	± .085	468.76	± 2.15	.275	± .006	6.99	± 0.15	19.000	18.544		18.956		18.500
467	19 x 19 ½ x ¼	18.955	± .090	481.46	± 2.25	.275	± .006	6.99	± 0.15	19.500	19.044	12.532	19.456	12.968	19.000
468	19 ½ x 20 x ¼	19.455	± .090	494.16	± 2.25	.275	± .006	6.99	± 0.15	20.000	19.544		19.956		19.500
469	20 x 20 ½ x ¼	19.955	± .090	506.86	± 2.25	.275	± .006	6.99	± 0.15	20.500	20.044	13.032	20.456	13.468	20.000
470	21 x 21 ½ x ¼	20.955	± .090	532.26	± 2.25	.275	± .006	6.99	± 0.15	21.500	21.044		21.456		21.000
471	22 x 22 ½ x ¼	21.955	± .100	557.66	± 2.55	.275	± .006	6.99	± 0.15	22.500	22.044	13.532	22.456	13.968	22.000
472	23 x 23 ½ x ¼	22.940	± .105	582.68	± 2.65	.275	± .006	6.99	± 0.15	23.500	23.044	14.032	23.456	14.468	23.000
473	24 x 24 ½ x ¼	23.940	± .110	608.08	± 2.80	.275	± .006	6.99	± 0.15	24.500	24.044	14.352	24.456	14.968	24.000
474	25 x 25 ½ x ¼	24.940	± .115	633.48	± 2.90	.275	± .006	6.99	± 0.15	25.500	25.044	15.032	25.456	15.468	25.000
475	26 x 26 ½ x ¼	25.940	± .120	658.88	± 3.05	.275	± .006	6.99	± 0.15	26.500	26.044	15.532	26.456	15.968	26.000

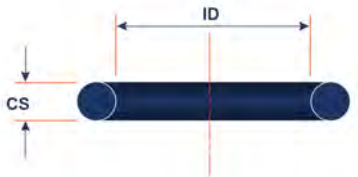
NOTES: Sizes shown in above range taken from ISO3601 may include additions to range. Above range shown to class A tolerances. Class B may be supplied without notice.

O RINGS FOR PIPE FITTINGS - INCH SIZES ONLY

Part No.	Nom Ø Thread	Nom O.D. Pipe	'O' Ring Dimensions		Ø P	Ø N	Ø R	Ø S	Ø T
			Inside Ø (I.D.)	Cross Section W					
901	.250	.093	.185 ± .006	.056 ± .003	-	-	-	-	-
902	.312	.125	.239 ± .006	.064 ± .003	.252	.063	.328	.438	.67
903	.375	.187	.301 ± .006	.064 ± .003	.314	.063	.390	.500	.75
904	.437	.250	.351 ± .007	.072 ± .003	.366	.075	.454	.562	.81
905	.500	.312	.414 ± .007	.072 ± .003	.428	.075	.517	.625	.90
906	.562	.375	.468 ± .007	.078 ± .003	.483	.083	.580	.688	.96
907	.625	.437	.530 ± .007	.082 ± .003	.545	.083	.643	.750	1.03
908	.750	.500	.644 ± .007	.087 ± .003	.662	.094	.769	.875	1.18
909	.812	.562	.706 ± .007	.097 ± .003	.725	.094	.832	.938	1.25
910	.875	.625	.755 ± .009	.097 ± .003	.775	.107	.896	1.000	1.34
911	1.000	.687	.863 ± .009	.116 ± .004	.884	.125	1.023	1.156	1.55
912	1.062	.750	.924 ± .009	.116 ± .004	.947	.125	1.086	1.234	1.61
913	1.125	.812	.986 ± .009	.116 ± .004	-	-	-	-	-
914	1.187	.875	1.048 ± .010	.116 ± .004	1.072	.125	1.211	1.362	1.75
916	1.312	1.000	1.171 ± .010	.116 ± .004	1.197	.125	1.336	1.487	1.91
918	1.500	1.125	1.355 ± .012	.116 ± .004	1.384	.125	1.524	1.675	2.04
920	1.625	1.250	1.475 ± .014	.118 ± .004	1.509	.125	1.648	1.800	2.17
924	1.875	1.500	1.720 ± .014	.118 ± .004	1.758	.125	1.898	2.050	2.38
928	2.250	1.750	2.090 ± .018	.118 ± .004	2.133	.125	2.273	2.425	2.86
932	2.500	2.000	2.337 ± .018	.118 ± .004	2.383	.125	2.524	2.675	3.17

HOUSING DATA FOR INCH UNIFIED STANDARD THREADS (UNF)





METRIC RANGE BS4518 O RING SIZE CHART

Part No.	Inside Diameter		Cross Section	
	ID	±	W	±
0031-16	3.1	± 0.15	1.6	± 0.08
0041-16	4.1	± 0.15	1.6	± 0.08
0051-16	5.1	± 0.15	1.6	± 0.08
0061-16	6.1	± 0.15	1.6	± 0.08
0071-16	7.1	± 0.15	1.6	± 0.08
0081-16	8.1	± 0.15	1.6	± 0.08
0091-16	9.1	± 0.15	1.6	± 0.08
0101-16	10.1	± 0.20	1.6	± 0.08
0111-16	11.1	± 0.20	1.6	± 0.08
0121-16	12.1	± 0.20	1.6	± 0.08
0131-16	13.1	± 0.20	1.6	± 0.08
0141-16	14.1	± 0.20	1.6	± 0.08
0151-16	15.1	± 0.20	1.6	± 0.08
0161-16	16.1	± 0.20	1.6	± 0.08
0171-16	17.1	± 0.20	1.6	± 0.08
0181-16	18.1	± 0.25	1.6	± 0.08
0191-16	19.1	± 0.25	1.6	± 0.08
0221-16	22.1	± 0.25	1.6	± 0.08
0251-16	25.1	± 0.25	1.6	± 0.08
0271-16	27.1	± 0.25	1.6	± 0.08
0291-16	29.1	± 0.25	1.6	± 0.08
0321-16	32.1	± 0.30	1.6	± 0.08
0351-16	35.1	± 0.30	1.6	± 0.08
0371-16	37.1	± 0.30	1.6	± 0.08
0036-24	3.6	± 0.15	2.4	± 0.08
0046-24	4.6	± 0.15	2.4	± 0.08
0056-24	5.6	± 0.15	2.4	± 0.08
0066-24	6.6	± 0.15	2.4	± 0.08
0076-24	7.6	± 0.15	2.4	± 0.08
0086-24	8.6	± 0.15	2.4	± 0.08
0096-24	9.6	± 0.15	2.4	± 0.08
0106-24	10.6	± 0.20	2.4	± 0.08
0116-24	11.6	± 0.20	2.4	± 0.08
0126-24	12.6	± 0.20	2.4	± 0.08
0136-24	13.6	± 0.20	2.4	± 0.08
0146-24	14.6	± 0.20	2.4	± 0.08
0156-24	15.6	± 0.20	2.4	± 0.08
0166-24	16.6	± 0.20	2.4	± 0.08
0176-24	17.6	± 0.20	2.4	± 0.08
0186-24	18.6	± 0.25	2.4	± 0.08
0196-24	19.6	± 0.25	2.4	± 0.08
0216-24	21.6	± 0.25	2.4	± 0.08
0246-24	24.6	± 0.25	2.4	± 0.08
0276-24	27.6	± 0.25	2.4	± 0.08
0296-24	29.6	± 0.25	2.4	± 0.08
0316-24	31.6	± 0.30	2.4	± 0.08
0346-24	34.6	± 0.30	2.4	± 0.08
0376-24	37.6	± 0.30	2.4	± 0.08
0396-24	39.6	± 0.30	2.4	± 0.08
0416-24	41.6	± 0.30	2.4	± 0.08
0446-24	44.6	± 0.30	2.4	± 0.08
0476-24	47.6	± 0.30	2.4	± 0.08
0496-24	49.6	± 0.30	2.4	± 0.08
0516-24	51.6	± 0.40	2.4	± 0.08
0546-24	54.6	± 0.40	2.4	± 0.08
0576-24	57.6	± 0.40	2.4	± 0.08
0596-24	59.6	± 0.40	2.4	± 0.08
0616-24	61.6	± 0.40	2.4	± 0.08
0646-24	64.6	± 0.40	2.4	± 0.08
0676-24	67.6	± 0.40	2.4	± 0.08
0696-24	69.6	± 0.40	2.4	± 0.08
0195-30	19.5	± 0.25	3.0	± 0.10
0215-30	21.5	± 0.25	3.0	± 0.10
0225-30	22.5	± 0.25	3.0	± 0.10
0245-30	24.5	± 0.25	3.0	± 0.10
0255-30	25.5	± 0.25	3.0	± 0.10
0265-30	26.5	± 0.25	3.0	± 0.10
0275-30	27.5	± 0.25	3.0	± 0.10
0295-30	29.5	± 0.25	3.0	± 0.10
0315-30	31.5	± 0.30	3.0	± 0.10
0325-30	32.5	± 0.30	3.0	± 0.10
0345-30	34.5	± 0.30	3.0	± 0.10
0355-30	35.5	± 0.30	3.0	± 0.10
0365-30	36.5	± 0.30	3.0	± 0.10

Part No.	Inside Diameter		Cross Section	
	ID	±	W	±
0375-30	37.5	± 0.30	3.0	± 0.10
0395-30	39.5	± 0.30	3.0	± 0.10
0415-30	41.5	± 0.30	3.0	± 0.10
0425-30	42.5	± 0.30	3.0	± 0.10
0445-30	44.5	± 0.40	3.0	± 0.10
0495-30	49.5	± 0.40	3.0	± 0.10
0545-30	54.5	± 0.40	3.0	± 0.10
0595-30	59.5	± 0.40	3.0	± 0.10
0645-30	64.5	± 0.40	3.0	± 0.10
0695-30	69.5	± 0.40	3.0	± 0.10
0745-30	74.5	± 0.40	3.0	± 0.10
0795-30	79.5	± 0.40	3.0	± 0.10
0845-30	84.5	± 0.50	3.0	± 0.10
0895-30	89.5	± 0.50	3.0	± 0.10
0945-30	94.5	± 0.50	3.0	± 0.10
0995-30	99.5	± 0.50	3.0	± 0.10
1045-30	104.5	± 0.50	3.0	± 0.10
1095-30	109.5	± 0.50	3.0	± 0.10
1145-30	114.5	± 0.50	3.0	± 0.10
1195-30	119.5	± 0.50	3.0	± 0.10
1245-30	124.5	± 0.60	3.0	± 0.10
1295-30	129.5	± 0.60	3.0	± 0.10
1345-30	134.5	± 0.60	3.0	± 0.10
1395-30	139.5	± 0.60	3.0	± 0.10
1445-30	144.5	± 0.60	3.0	± 0.10
1495-30	149.5	± 0.60	3.0	± 0.10
1545-30	154.5	± 0.60	3.0	± 0.10
1595-30	159.5	± 0.60	3.0	± 0.10
1645-30	164.5	± 0.60	3.0	± 0.10
1695-30	169.5	± 0.60	3.0	± 0.10
1745-30	174.5	± 0.60	3.0	± 0.10
1795-30	179.5	± 0.60	3.0	± 0.10
1845-30	184.5	± 0.80	3.0	± 0.10
1895-30	189.5	± 0.80	3.0	± 0.10
1945-30	194.5	± 0.80	3.0	± 0.10
1995-30	199.5	± 0.80	3.0	± 0.10
2095-30	209.5	± 0.80	3.0	± 0.10
2195-30	219.5	± 0.80	3.0	± 0.10
2295-30	229.5	± 0.80	3.0	± 0.10
2395-30	239.5	± 0.80	3.0	± 0.10
2495-30	249.5	± 0.80	3.0	± 0.10
0443-57	44.3	± 0.30	5.7	± 0.12
0453-57	45.3	± 0.30	5.7	± 0.12
0493-57	49.3	± 0.30	5.7	± 0.12
0523-57	52.3	± 0.40	5.7	± 0.12
0543-57	54.3	± 0.40	5.7	± 0.12
0553-57	55.3	± 0.40	5.7	± 0.12
0593-57	59.3	± 0.40	5.7	± 0.12
0623-57	62.3	± 0.40	5.7	± 0.12
0643-57	64.3	± 0.40	5.7	± 0.12
0693-57	69.3	± 0.40	5.7	± 0.12
0743-57	74.3	± 0.40	5.7	± 0.12
0793-57	79.3	± 0.40	5.7	± 0.12
0843-57	84.3	± 0.50	5.7	± 0.12
0893-57	89.3	± 0.50	5.7	± 0.12
0943-57	94.3	± 0.50	5.7	± 0.12
0993-57	99.3	± 0.50	5.7	± 0.12
1043-57	104.3	± 0.50	5.7	± 0.12
1093-57	109.3	± 0.50	5.7	± 0.12
1143-57	114.3	± 0.50	5.7	± 0.12
1193-57	119.3	± 0.50	5.7	± 0.12
1243-57	124.3	± 0.60	5.7	± 0.12
1293-57	129.3	± 0.60	5.7	± 0.12
1343-57	134.3	± 0.60	5.7	± 0.12
1393-57	139.3	± 0.60	5.7	± 0.12
1443-57	144.3	± 0.60	5.7	± 0.12
1493-57	149.3	± 0.60	5.7	± 0.12
1543-57	154.3	± 0.60	5.7	± 0.12
1593-57	159.3	± 0.60	5.7	± 0.12
1653-57	164.3	± 0.60	5.7	± 0.12
1693-57	169.3	± 0.60	5.7	± 0.12
1743-57	174.3	± 0.60	5.7	± 0.12
1793-57	179.3	± 0.80	5.7	± 0.12
1843-57	184.3	± 0.80	5.7	± 0.12

METRIC RANGE BS4518 O RING SIZE CHART

Part No.	Inside Diameter		Cross Section	
	ID	±	W	±
1893-57	189.3	± 0.80	5.7	± 0.12
1943-57	194.3	± 0.80	5.7	± 0.12
1993-57	199.3	± 0.80	5.7	± 0.12
2093-57	209.3	± 0.80	5.7	± 0.12
2193-57	219.3	± 0.80	5.7	± 0.12
2293-57	229.3	± 0.80	5.7	± 0.12
2393-57	239.3	± 0.80	5.7	± 0.12
2493-57	249.3	± 0.80	5.7	± 0.12
2593-57	259.3	± 1.0	5.7	± 0.12
2693-57	269.3	± 1.0	5.7	± 0.12
2793-57	279.3	± 1.0	5.7	± 0.12
2893-57	289.3	± 1.0	5.7	± 0.12
2993-57	299.3	± 1.0	5.7	± 0.12
3193-57	319.3	± 1.5	5.7	± 0.12
3393-57	339.3	± 1.5	5.7	± 0.12
3593-57	359.3	± 1.5	5.7	± 0.12
3793-57	379.3	± 1.5	5.7	± 0.12
3993-57	399.3	± 1.5	5.7	± 0.12
4193-57	419.3	± 2.0	5.7	± 0.12
4393-57	439.3	± 2.0	5.7	± 0.12
4593-57	459.3	± 2.0	5.7	± 0.12

Part No.	Inside Diameter		Cross Section	
	ID	±	W	±
4793-57	479.3	± 2.0	5.7	± 0.12
4993-57	499.3	± 2.0	5.7	± 0.12
1441-84	144.1	± 0.60	8.4	± 0.15
1491-84	149.1	± 0.60	8.4	± 0.15
1541-84	154.1	± 0.60	8.4	± 0.15
1591-84	159.1	± 0.60	8.4	± 0.15
1641-84	164.1	± 0.60	8.4	± 0.15
1741-84	174.1	± 0.60	8.4	± 0.15
1791-84	179.1	± 0.80	8.4	± 0.15
1841-84	184.1	± 0.80	8.4	± 0.15
1891-84	189.1	± 0.80	8.4	± 0.15
1941-84	194.1	± 0.80	8.4	± 0.15
1991-84	199.1	± 0.80	8.4	± 0.15
2041-84	204.1	± 0.80	8.4	± 0.15
2091-84	209.1	± 0.80	8.4	± 0.15
2191-84	219.1	± 0.80	8.4	± 0.15
2291-84	229.1	± 0.80	8.4	± 0.15
2391-84	234.1	± 0.80	8.4	± 0.15
2394-84	239.1	± 0.80	8.4	± 0.15
2491-84	249.1	± 0.80	8.4	± 0.15

METRIC SIZE RANGE TOLERANCE CHART (CLASS B)

O Ring Inside-Ø (ID)					Tolerance ±
mm					mm
		ID	≤	1.71	± 0.12
1.71	<	ID	≤	2.93	± 0.13
2.93	<	ID	≤	4.17	± 0.14
4.17	<	ID	≤	5.44	± 0.15
5.44	<	ID	≤	6.72	± 0.16
6.72	<	ID	≤	8.01	± 0.17
8.01	<	ID	≤	9.31	± 0.18
9.31	<	ID	≤	10.62	± 0.19
10.62	<	ID	≤	11.94	± 0.20
11.94	<	ID	≤	13.27	± 0.21
13.27	<	ID	≤	14.61	± 0.22
14.61	<	ID	≤	15.95	± 0.23
15.95	<	ID	≤	17.29	± 0.24
17.29	<	ID	≤	18.64	± 0.25
18.64	<	ID	≤	20.00	± 0.26
20.00	<	ID	≤	21.36	± 0.27
21.36	<	ID	≤	22.73	± 0.28
22.73	<	ID	≤	24.10	± 0.29
24.10	<	ID	≤	25.47	± 0.30
25.47	<	ID	≤	26.85	± 0.31
26.85	<	ID	≤	28.23	± 0.32
28.23	<	ID	≤	29.61	± 0.33
29.61	<	ID	≤	31.00	± 0.34
31.00	<	ID	≤	32.39	± 0.35
32.39	<	ID	≤	33.78	± 0.36
33.78	<	ID	≤	35.18	± 0.37
35.18	<	ID	≤	36.58	± 0.38
36.58	<	ID	≤	37.98	± 0.39
37.98	<	ID	≤	39.38	± 0.40
39.38	<	ID	≤	40.79	± 0.41
40.79	<	ID	≤	42.20	± 0.42
42.20	<	ID	≤	43.61	± 0.43
43.61	<	ID	≤	45.02	± 0.44
45.02	<	ID	≤	46.44	± 0.45
46.44	<	ID	≤	47.86	± 0.46
47.86	<	ID	≤	49.28	± 0.47
49.28	<	ID	≤	50.70	± 0.48
50.70	<	ID	≤	52.12	± 0.49
52.12	<	ID	≤	53.55	± 0.50
53.55	<	ID	≤	54.98	± 0.51
54.98	<	ID	≤	56.41	± 0.52
56.41	<	ID	≤	57.84	± 0.53
57.84	<	ID	≤	59.27	± 0.54
59.27	<	ID	≤	60.71	± 0.55
60.71	<	ID	≤	62.14	± 0.56

O Ring Inside-Ø (ID)					Tolerance ±
mm					mm
62.14	<	ID	≤	63.58	± 0.57
63.58	<	ID	≤	65.02	± 0.58
65.02	<	ID	≤	66.47	± 0.59
66.47	<	ID	≤	67.91	± 0.60
67.91	<	ID	≤	69.35	± 0.61
69.35	<	ID	≤	70.80	± 0.62
70.80	<	ID	≤	72.25	± 0.63
72.25	<	ID	≤	73.70	± 0.64
73.70	<	ID	≤	75.15	± 0.65
75.15	<	ID	≤	76.60	± 0.66
76.60	<	ID	≤	78.05	± 0.67
78.05	<	ID	≤	79.51	± 0.68
79.51	<	ID	≤	80.97	± 0.69
80.97	<	ID	≤	82.42	± 0.70
82.42	<	ID	≤	83.88	± 0.71
83.88	<	ID	≤	85.34	± 0.72
85.34	<	ID	≤	86.80	± 0.73
86.80	<	ID	≤	88.27	± 0.74
88.27	<	ID	≤	89.73	± 0.75
89.73	<	ID	≤	91.20	± 0.76
91.20	<	ID	≤	92.66	± 0.77
92.66	<	ID	≤	94.13	± 0.78
94.13	<	ID	≤	95.60	± 0.79
95.60	<	ID	≤	97.07	± 0.80
97.07	<	ID	≤	98.54	± 0.81
98.54	<	ID	≤	100.01	± 0.82
100.01	<	ID	≤	101.48	± 0.83
101.48	<	ID	≤	102.96	± 0.84
102.96	<	ID	≤	104.43	± 0.85
104.43	<	ID	≤	105.91	± 0.86
105.91	<	ID	≤	107.39	± 0.87
107.39	<	ID	≤	108.86	± 0.88
108.86	<	ID	≤	110.34	± 0.89
110.34	<	ID	≤	111.82	± 0.90
111.82	<	ID	≤	113.30	± 0.91
113.30	<	ID	≤	114.79	± 0.92
114.79	<	ID	≤	116.27	± 0.93
116.27	<	ID	≤	117.75	± 0.94
117.75	<	ID	≤	119.24	± 0.95
119.24	<	ID	≤	120.72	± 0.96
120.72	<	ID	≤	122.21	± 0.97
122.21	<	ID	≤	123.70	± 0.98
123.70	<	ID	≤	125.19	± 0.99
125.19	<	ID	≤	126.68	± 1.00
126.68	<	ID	≤	128.17	± 1.01

METRIC SIZE RANGE TOLERANCE CHART (CLASS B)

O Ring Inside-Ø (ID) mm					Tolerance ± mm
128.17	<	ID	≤	129.66	± 1.02
129.66	<	ID	≤	131.15	± 1.03
131.15	<	ID	≤	132.64	± 1.04
132.64	<	ID	≤	134.14	± 1.05
134.14	<	ID	≤	135.63	± 1.06
135.63	<	ID	≤	137.13	± 1.07
137.13	<	ID	≤	138.62	± 1.08
138.62	<	ID	≤	140.12	± 1.09
140.12	<	ID	≤	141.62	± 1.10
141.62	<	ID	≤	143.12	± 1.11
143.12	<	ID	≤	144.62	± 1.12
144.62	<	ID	≤	146.12	± 1.13
146.12	<	ID	≤	147.62	± 1.14
147.62	<	ID	≤	149.12	± 1.15
149.12	<	ID	≤	150.62	± 1.16
150.62	<	ID	≤	152.13	± 1.17
152.13	<	ID	≤	153.63	± 1.18
153.63	<	ID	≤	155.13	± 1.19
155.13	<	ID	≤	156.64	± 1.20
156.64	<	ID	≤	158.15	± 1.21
158.15	<	ID	≤	159.65	± 1.22
159.65	<	ID	≤	161.16	± 1.23
161.16	<	ID	≤	162.67	± 1.24
162.67	<	ID	≤	164.18	± 1.25
164.18	<	ID	≤	165.69	± 1.26
165.69	<	ID	≤	167.20	± 1.27
167.20	<	ID	≤	168.71	± 1.28
168.71	<	ID	≤	170.22	± 1.29
170.22	<	ID	≤	171.73	± 1.30
171.73	<	ID	≤	173.25	± 1.31
173.25	<	ID	≤	174.76	± 1.32
174.76	<	ID	≤	176.28	± 1.33
176.28	<	ID	≤	177.79	± 1.34
177.79	<	ID	≤	179.31	± 1.35
179.31	<	ID	≤	180.82	± 1.36
180.82	<	ID	≤	182.34	± 1.37
182.34	<	ID	≤	183.86	± 1.38
183.86	<	ID	≤	185.38	± 1.39
185.38	<	ID	≤	186.89	± 1.40
186.89	<	ID	≤	188.41	± 1.41
188.41	<	ID	≤	189.93	± 1.42
189.93	<	ID	≤	191.45	± 1.43
191.45	<	ID	≤	192.98	± 1.44
192.98	<	ID	≤	194.50	± 1.45
194.50	<	ID	≤	196.02	± 1.46
196.02	<	ID	≤	197.54	± 1.47
197.54	<	ID	≤	199.07	± 1.48
199.07	<	ID	≤	200.59	± 1.49
200.59	<	ID	≤	202.12	± 1.50
202.12	<	ID	≤	203.64	± 1.51
203.64	<	ID	≤	205.17	± 1.52
205.17	<	ID	≤	206.69	± 1.53
206.69	<	ID	≤	208.22	± 1.54
208.22	<	ID	≤	209.75	± 1.55
209.75	<	ID	≤	211.28	± 1.56
211.28	<	ID	≤	212.81	± 1.57
212.81	<	ID	≤	214.34	± 1.58
214.34	<	ID	≤	215.87	± 1.59
215.87	<	ID	≤	217.40	± 1.60
217.40	<	ID	≤	218.93	± 1.61
218.93	<	ID	≤	220.46	± 1.62
220.46	<	ID	≤	221.99	± 1.63
221.99	<	ID	≤	223.52	± 1.64
223.52	<	ID	≤	225.06	± 1.65
225.06	<	ID	≤	226.59	± 1.66
226.59	<	ID	≤	228.12	± 1.67
228.12	<	ID	≤	229.66	± 1.68
229.66	<	ID	≤	231.19	± 1.69
231.19	<	ID	≤	232.73	± 1.70
232.73	<	ID	≤	234.27	± 1.71
234.27	<	ID	≤	235.80	± 1.72
235.80	<	ID	≤	237.34	± 1.73
237.34	<	ID	≤	238.88	± 1.74
238.88	<	ID	≤	240.42	± 1.75

O Ring Inside-Ø (ID) mm					Tolerance ± mm
240.42	<	ID	≤	241.95	± 1.76
241.95	<	ID	≤	243.49	± 1.77
243.49	<	ID	≤	245.03	± 1.78
245.03	<	ID	≤	246.57	± 1.79
246.57	<	ID	≤	248.11	± 1.80
248.11	<	ID	≤	249.66	± 1.81
249.66	<	ID	≤	251.20	± 1.82
251.20	<	ID	≤	252.74	± 1.83
252.74	<	ID	≤	254.28	± 1.84
254.28	<	ID	≤	255.82	± 1.85
255.82	<	ID	≤	257.37	± 1.86
257.37	<	ID	≤	258.91	± 1.87
258.91	<	ID	≤	260.46	± 1.88
260.46	<	ID	≤	262.00	± 1.89
262.00	<	ID	≤	263.55	± 1.90
263.55	<	ID	≤	265.09	± 1.91
265..09	<	ID	≤	266.64	± 1.92
266.64	<	ID	≤	268.18	± 1.93
268.18	<	ID	≤	269.73	± 1.94
269.73	<	ID	≤	271.28	± 1.95
271.28	<	ID	≤	272.83	± 1.96
272.83	<	ID	≤	274.38	± 1.97
274.38	<	ID	≤	275.92	± 1.98
275.92	<	ID	≤	277.47	± 1.99
277.47	<	ID	≤	279.02	± 2.00
279.02	<	ID	≤	280.57	± 2.01
280.57	<	ID	≤	282.12	± 2.02
282.12	<	ID	≤	283.68	± 2.03
283.68	<	ID	≤	285.23	± 2.04
285.23	<	ID	≤	286.78	± 2.05
286.78	<	ID	≤	288.33	± 2.06
288.33	<	ID	≤	289.88	± 2.07
289.88	<	ID	≤	291.44	± 2.08
291.44	<	ID	≤	292.99	± 2.09
292.99	<	ID	≤	294.54	± 2.10
294.54	<	ID	≤	296.10	± 2.11
296.10	<	ID	≤	297.65	± 2.12
297.65	<	ID	≤	299.21	± 2.13
299.21	<	ID	≤	300.76	± 2.14
300.76	<	ID	≤	302.32	± 2.15
302.32	<	ID	≤	303.88	± 2.16
303.88	<	ID	≤	305.43	± 2.17
305.43	<	ID	≤	306.99	± 2.18
306.99	<	ID	≤	308.55	± 2.19
308.55	<	ID	≤	310.11	± 2.20
310.11	<	ID	≤	311.66	± 2.21
311.66	<	ID	≤	313.22	± 2.22
313.22	<	ID	≤	314.78	± 2.23
314.78	<	ID	≤	316.34	± 2.24
316.34	<	ID	≤	317.90	± 2.25
317.90	<	ID	≤	319.46	± 2.26
319.46	<	ID	≤	321.02	± 2.27
321.02	<	ID	≤	322.58	± 2.28
322.58	<	ID	≤	324.15	± 2.29
324.15	<	ID	≤	325.71	± 2.30
325.71	<	ID	≤	327.27	± 2.31
327.27	<	ID	≤	328.83	± 2.32
328.83	<	ID	≤	330.39	± 2.33
330.39	<	ID	≤	331.96	± 2.34
331.96	<	ID	≤	333.52	± 2.35
333.52	<	ID	≤	335.09	± 2.36
335.09	<	ID	≤	336.65	± 2.37
336.65	<	ID	≤	338.21	± 2.38
338.21	<	ID	≤	339.78	± 2.39
339.78	<	ID	≤	341.35	± 2.40
341.35	<	ID	≤	342.91	± 2.41
342.91	<	ID	≤	344.48	± 2.42
344.48	<	ID	≤	346.04	± 2.43
346.04	<	ID	≤	347.61	± 2.44
347.61	<	ID	≤	349.18	± 2.45
349.18	<	ID	≤	350.75	± 2.46
350.75	<	ID	≤	352.31	± 2.47
352.31	<	ID	≤	353.88	± 2.48
353.88	<	ID	≤	355.45	± 2.49

METRIC SIZE RANGE TOLERANCE CHART (CLASS B)

O Ring Inside-Ø (ID) mm					Tolerance ± mm
355.45	<	ID	≤	357.02	± 2.50
357.02	<	ID	≤	358.59	± 2.51
358.59	<	ID	≤	360.16	± 2.52
360.16	<	ID	≤	361.73	± 2.53
361.73	<	ID	≤	363.30	± 2.54
363.30	<	ID	≤	364.87	± 2.55
364.87	<	ID	≤	366.44	± 2.56
366.44	<	ID	≤	368.01	± 2.57
368.01	<	ID	≤	369.58	± 2.58
369.58	<	ID	≤	371.16	± 2.59
371.16	<	ID	≤	372.73	± 2.60
372.73	<	ID	≤	374.30	± 2.61
374.30	<	ID	≤	375.87	± 2.62
375.87	<	ID	≤	377.45	± 2.63
377.45	<	ID	≤	379.02	± 2.64
379.02	<	ID	≤	380.59	± 2.65
380.59	<	ID	≤	382.17	± 2.66
382.17	<	ID	≤	383.74	± 2.67
383.74	<	ID	≤	385.32	± 2.68
385.32	<	ID	≤	386.89	± 2.69
386.89	<	ID	≤	388.47	± 2.70
388.47	<	ID	≤	390.05	± 2.71
390.05	<	ID	≤	391.62	± 2.72
391.62	<	ID	≤	393.20	± 2.73
393.20	<	ID	≤	394.78	± 2.74
394.78	<	ID	≤	396.35	± 2.75
396.35	<	ID	≤	397.93	± 2.76
397.93	<	ID	≤	399.51	± 2.77
399.51	<	ID	≤	401.09	± 2.78
401.09	<	ID	≤	402.66	± 2.79
402.66	<	ID	≤	404.24	± 2.80
404.24	<	ID	≤	405.82	± 2.81
405.82	<	ID	≤	407.40	± 2.82
407.40	<	ID	≤	408.98	± 2.83
408.98	<	ID	≤	410.56	± 2.84
410.56	<	ID	≤	412.14	± 2.85
412.14	<	ID	≤	413.72	± 2.86
413.72	<	ID	≤	415.30	± 2.87
415.30	<	ID	≤	416.89	± 2.88
416.89	<	ID	≤	418.47	± 2.89
418.47	<	ID	≤	420.05	± 2.90
420.05	<	ID	≤	421.63	± 2.91
421.63	<	ID	≤	423.21	± 2.92
423.21	<	ID	≤	424.80	± 2.93
424.80	<	ID	≤	426.38	± 2.94
426.38	<	ID	≤	427.96	± 2.95

O Ring Inside-Ø (ID) mm					Tolerance ± mm
427.96	<	ID	≤	429.55	± 2.96
429.55	<	ID	≤	431.13	± 2.97
431.13	<	ID	≤	432.71	± 2.98
432.71	<	ID	≤	434.30	± 2.99
434.30	<	ID	≤	435.88	± 3.00
435.88	<	ID	≤	437.47	± 3.01
437.47	<	ID	≤	439.05	± 3.02
439.05	<	ID	≤	440.64	± 3.03
440.64	<	ID	≤	442.22	± 3.04
442.22	<	ID	≤	443.81	± 3.05
443.81	<	ID	≤	445.40	± 3.06
445.40	<	ID	≤	446.98	± 3.07
446.98	<	ID	≤	448.57	± 3.08
448.57	<	ID	≤	450.16	± 3.09
450.16	<	ID	≤	451.75	± 3.10
451.75	<	ID	≤	453.33	± 3.11
453.33	<	ID	≤	454.92	± 3.12
454.92	<	ID	≤	456.51	± 3.13
456.51	<	ID	≤	458.10	± 3.14
458.10	<	ID	≤	459.69	± 3.15
459.69	<	ID	≤	461.28	± 3.16
461.28	<	ID	≤	462.87	± 3.17
462.87	<	ID	≤	464.46	± 3.18
464.46	<	ID	≤	466.05	± 3.19
466.05	<	ID	≤	467.64	± 3.20
467.64	<	ID	≤	469.23	± 3.21
469.23	<	ID	≤	470.82	± 3.22
470.82	<	ID	≤	472.41	± 3.23
472.41	<	ID	≤	474.00	± 3.24
474.00	<	ID	≤	475.59	± 3.25
475.59	<	ID	≤	477.19	± 3.26
477.19	<	ID	≤	478.78	± 3.27
478.78	<	ID	≤	480.37	± 3.28
480.37	<	ID	≤	481.96	± 3.29
481.96	<	ID	≤	483.56	± 3.30
483.56	<	ID	≤	485.15	± 3.31
485.15	<	ID	≤	486.74	± 3.32
486.74	<	ID	≤	488.34	± 3.33
488.34	<	ID	≤	489.93	± 3.34
489.93	<	ID	≤	491.52	± 3.35
491.52	<	ID	≤	493.12	± 3.36
493.12	<	ID	≤	494.71	± 3.37
494.71	<	ID	≤	496.31	± 3.38
496.31	<	ID	≤	497.90	± 3.39
497.90	<	ID	≤	499.50	± 3.40
499.50	<	ID	≤	500.00	± 3.41

Tolerances for O Ring cross sections (CS) complying with ISO3601-1, class B, table - Metric

O Ring Cross Section-Ø (CS) mm					Tolerance ± mm
	<	CS	≤	0.80	on request
0.80	<	CS	≤	2.25	± 0.08
2.25	<	CS	≤	3.15	± 0.09
3.15	<	CS	≤	4.50	± 0.10
4.50	<	CS	≤	6.30	± 0.13
6.30	<	CS	≤	8.40	± 0.15

IDENTIFICATION STATEMENT

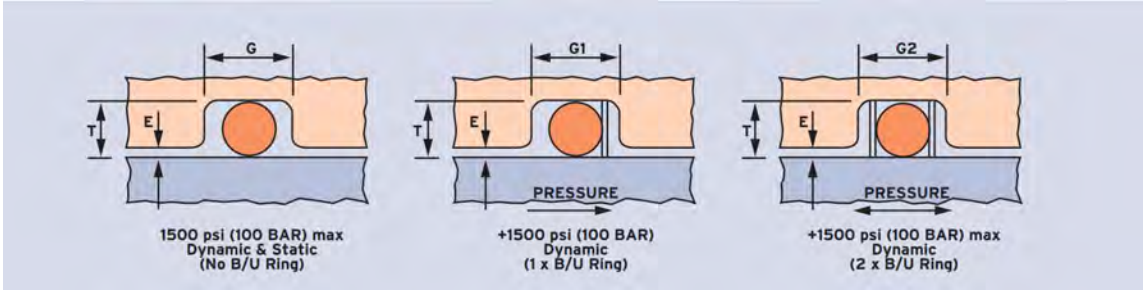
O-ring inside diameters, tolerances and designation code are in accordance with ISO 3601-1:2011, Fluid power systems - O-rings - Part 1: Inside diameters, cross-sections, tolerances and designation codes.

See Notes	Section W		Gland Depth T mm	Width G no B-U mm	Width G1 1B-U mm	Width G2 2B-U mm	Radial Gap E mm		Gland Depth H mm	Width K mm
	Ref ins.	mm					70° Shore A	90° Shore A		
	-	1.0	0.86 / 0.81	1.6 / 1.5	-	-	0.05	0.10	0.9 / 0.8	1.7 / 1.6
	-	1.5	1.32 / 1.26	2.2 / 2.1	-	-	0.05	0.10	1.3 / 1.2	1.8 / 1.7
2)	.062	1.6	1.42 / 1.36	2.5 / 2.3	3.9 / 3.7	5.2 / 5.0	0.05	0.10	1.4 / 1.3	1.9 / 1.8
1)	.070	1.78	1.57 / 1.52	2.5 / 2.3	3.9 / 3.7	5.4 / 5.3	0.05	0.10	1.5 / 1.3	2.5 / 2.4
3)	-	1.9	1.64 / 1.58	2.6 / 2.4	4.1 / 3.9	5.6 / 5.5	0.05	0.10	1.6 / 1.5	2.6 / 2.5
	-	2.0	1.79 / 1.72	2.7 / 2.6	4.2 / 4.1	5.7 / 5.6	0.05	0.10	1.7 / 1.6	2.9 / 2.8
2)	-	2.4	2.09 / 1.97	3.4 / 3.2	4.8 / 4.6	6.2 / 6.0	0.07	0.13	1.8 / 1.7	3.3 / 3.2
	-	2.5	2.25 / 2.17	3.5 / 3.3	4.8 / 4.6	6.3 / 6.2	0.07	0.13	2.1 / 2.0	3.5 / 3.3
1)	.103	2.62	2.39 / 2.31	3.7 / 3.5	5.1 / 5.0	6.6 / 6.5	0.07	0.13	2.3 / 2.2	3.7 / 3.5
3)	-	2.7	2.43 / 2.35	3.7 / 3.5	5.3 / 5.1	6.8 / 6.6	0.07	0.13	2.3 / 2.2	3.7 / 3.6
2)	-	3.0	2.65 / 2.50	4.2 / 4.0	5.6 / 5.4	7.0 / 6.8	0.08	0.13	2.3 / 2.2	4.6 / 4.4
1)	.139	3.53	3.18 / 3.10	4.9 / 4.7	6.4 / 6.2	7.9 / 7.7	0.08	0.15	3.0 / 2.8	5.0 / 4.8
3)	-	3.6	3.22 / 3.12	5.0 / 4.8	6.5 / 6.3	7.9 / 7.7	0.08	0.15	3.1 / 2.9	5.0 / 4.8
	-	4.0	3.62 / 3.52	5.3 / 5.1	6.8 / 6.6	8.3 / 8.1	0.08	0.15	3.4 / 3.2	5.7 / 5.5
	-	5.0	4.54 / 4.42	6.6 / 6.4	8.4 / 8.2	10.2 / 10.0	0.09	0.18	4.3 / 4.1	6.9 / 6.7
1)	.210	5.33	4.78 / 4.67	7.2 / 7.0	9.0 / 8.8	10.8 / 10.6	0.09	0.18	4.5 / 4.3	7.3 / 7.1
2)	-	5.7	5.18 / 4.95	7.7 / 7.5	9.5 / 9.3	11.3 / 11.1	0.09	0.18	4.6 / 4.4	7.8 / 7.6
	-	6.0	5.45 / 5.31	8.0 / 7.8	9.8 / 9.6	11.6 / 11.4	0.09	0.18	5.2 / 5.0	8.1 / 7.9
1)	.275	6.99	6.35 / 6.22	9.6 / 9.4	12.2 / 12.0	14.8 / 14.6	0.10	0.18	6.4 / 5.9	9.7 / 9.5
2)	-	8.4	7.75 / 7.50	11.2 / 11.0	13.8 / 13.6	16.4 / 16.2	0.10	0.20	7.2 / 7.0	11.5 / 11.3
	-	10.0	9.10 / 8.90	14.0 / 13.8	17.3 / 17.1	20.6 / 20.4	0.11	0.20	8.6 / 8.4	14.3 / 14.1
	.500	12.7	11.39 / 11.13	18.8 / 18.5	22.1 / 21.8	25.4 / 25.1	0.13	0.20	10.8 / 10.5	19.1 / 18.9

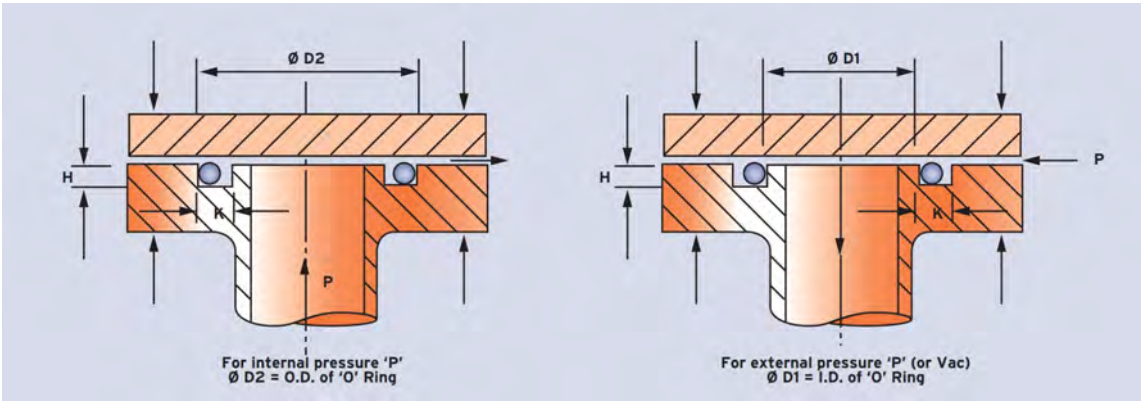
NOTES: 1) ISO3601 - Imperial Range, 2) BS4518 - Metric Range, 3) Previously French metric series / All others now in metric size range.
GAP E - Depends on cross section, system pressure and material hardness. Figures shown are for guidance only.

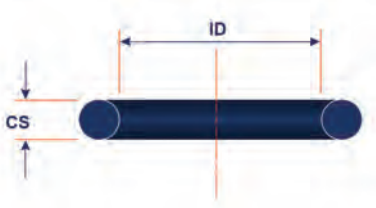
GROOVE DIMENSIONS FOR RADIAL SEALING (STATIC AND DYNAMIC)

*only sizes marked thus in this brochure are suitable for dynamic applications (see ISO3601 range)



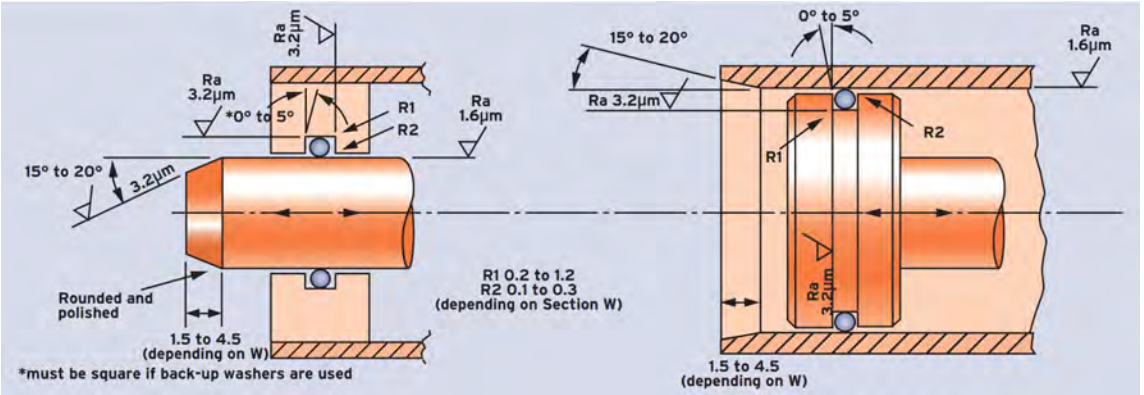
GROOVE DIMENSIONS FOR AXIAL SEALING (STATIC ONLY)





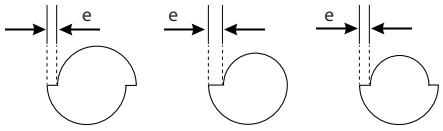
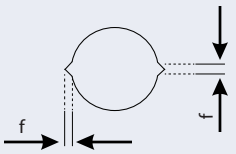
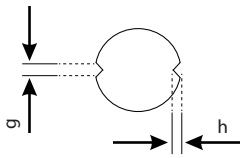
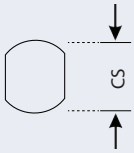
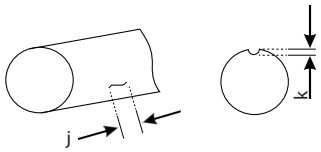
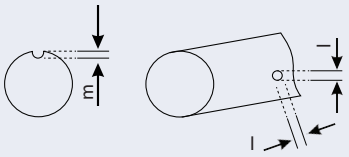
TYPICAL ROD SEAL

TYPICAL PISTON SEAL



NOTE

These housing dimensions and surface finishes will be suitable for the majority of applications regardless of the O Ring material. They generally refer to metal components, so for other materials such as 'plastics' and nylon, your own research and experience will be essential in finding the optimum sealing solution.

Types of deviation	Cross sections in principle	Size	Limits for permissible form and surface deviations in accordance with ISO3601/3									
			Type Characteristic N					Type Characteristic S				
			1.8	2.65	3.55	5.3	7.0	1.8	2.65	3.55	5.3	7.0
			CS Maximum Size					CS				
Offset and form deviations		e	0.08	0.10	0.13	0.15	0.15	0.08	0.08	0.10	0.12	0.13
Bead, burr, offset combined		f	0.10	0.12	0.14	0.16	0.18	0.10	0.10	0.13	0.15	0.15
Notch		g	0.18	0.27	0.36	0.53	0.70	0.10	0.15	0.20	0.20	0.30
		h	0.08	0.08	0.10	0.10	0.13	0.08	0.08	0.10	0.10	0.13
Deburring area		-	Deviations from the round cross section are permissible if the flattening has a smooth transition into the round surface and CS is maintained.									
Flow lines (radial elongation is not permissible)		j	0.05 x ID or [1]					0.03 x ID or [1]				
			1.50	1.50	6.50	6.50	6.50	1.50	1.50	5	5	5
		k	0.08					0.05				
Recesses, distortion		l	0.60	0.80	1.00	1.30	1.70	0.15	0.25	0.40	0.63	1.00
		m	0.08	0.08	0.10	0.10	0.13	0.08	0.08	0.10	0.10	0.13
Foreign particles			Not permissible									

[1] Depending on which value is larger

The cost-effective use of O Rings is influenced to a great extent by the definition of quality criteria. The choice of the compound according to the quality characteristics influence the costs and the reliability of use. ISO3601/3 defines permissible form and surface deviations. Distinctions are made in the table between the limits for permissible form and surface deviations according to type characteristics.

TYPE CHARACTERISTIC N

O Rings falling under Type characteristic N meet the requirements made of a standard quality. They satisfy the demands made on static and dynamic seals. If no other demands are specified, M Barnwell Services supply O Rings with Type characteristic N.

TYPE CHARACTERISTIC S

O Rings falling under Type characteristic S are subject to exceptional demands. The limits for permissible form and surface deviations are very limited. This demands a greater process technology and stricter quality control procedures.

TYPE CHARACTERISTIC CS (not shown in the table above)

O Rings designed for installations where a high level of precision and quality is required with regards to surface deviations and dimensional tolerances. In this Type Characteristic the surface of an O Ring must be virtually ideal to perform in an acceptable manner, for instance in medical or critical aerospace applications.

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