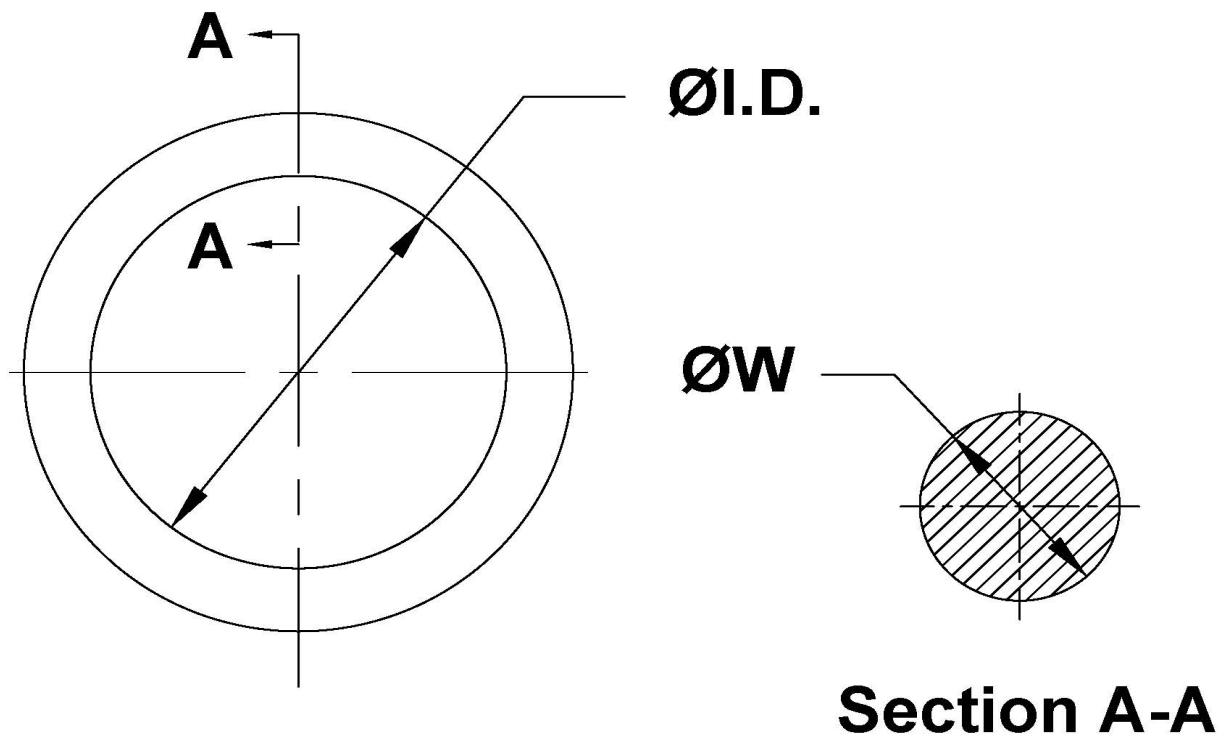


RATIONALE

A part standard is required to address the dimensions and quality requirements for O-rings molded from AMS7601 rubber.

1. SCOPE

This standard establishes the dimensional and visual quality requirements, lot requirements and packaging and labeling requirements for O-rings molded from AMS7601 butyl rubber. It shall be used for procurement purposes.



NOTE: DIMENSIONS AND TOLERANCING PER ASME Y14.5

Figure 1 - O-ring dimensions - width (ØW) and inside diameter (Ø ID)

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Table 1 - Part numbers and dimensions

APP NOTE	PART NUMBER	Ø ID	Ø ID	ØW	ØW	APPROX MASS	
		INCHES	mm	INCHES	mm	LB/100	KG/100
	AS7985-001	.025/ .033	0.64/ 0.84	.037/.043	0.94/1.09	.0005	0.0002
	AS7985-002	.038/ .046	0.97/ 1.17	.047/.053	1.19/1.35	.0011	0.001
	AS7985-003	.052/ .060	1.32/ 1.52	.057/.063	1.45/1.60	.002	0.001
	AS7985-004	.065/ .075	1.65/ 1.91	.067/.073	1.70/1.85	.004	0.002
	AS7985-005	.096/ .106	2.44/ 2.69	.067/.073	1.70/1.85	.005	0.002
	AS7985-006	.109/ .119	2.77/ 3.02	.067/.073	1.70/1.85	.006	0.003
	AS7985-007	.140/ .150	3.56/ 3.81	.067/.073	1.70/1.85	.007	0.003
	AS7985-008	.171/ .181	4.34/ 4.60	.067/.073	1.70/1.85	.009	0.004
	AS7985-009	.203/ .213	5.16/ 5.41	.067/.073	1.70/1.85	.011	0.005
	AS7985-010	.234/ .244	5.94/ 6.20	.067/.073	1.70/1.85	.012	0.006
(a)	AS7985-011	.296/ .306	7.52/ 7.77	.067/.073	1.70/1.85	.015	0.007
	AS7985-012	.359/ .369	9.12/ 9.37	.067/.073	1.70/1.85	.019	0.009
	AS7985-013	.421/ .431	10.69/ 10.95	.067/.073	1.70/1.85	.022	0.010
	AS7985-014	.484/ .494	12.29/ 12.55	.067/.073	1.70/1.85	.025	0.011
	AS7985-015	.544/ .558	13.82/ 14.17	.067/.073	1.70/1.85	.028	0.013
	AS7985-016	.605/ .623	15.37/ 15.82	.067/.073	1.70/1.85	.032	0.014
	AS7985-017	.667/ .685	16.94/ 17.40	.067/.073	1.70/1.85	.035	0.016
	AS7985-018	.730/ .748	18.54/ 19.00	.067/.073	1.70/1.85	.038	0.017
	AS7985-019	.792/ .810	20.12/ 20.57	.067/.073	1.70/1.85	.041	0.019
	AS7985-020	.855/ .873	21.72/ 22.17	.067/.073	1.70/1.85	.044	0.020
(b)							
	AS7985-021	.917/ .935	23.29/ 23.75	.067/.073	1.70/1.85	.048	0.022
	AS7985-022	.979/ .999	24.87/ 25.37	.067/.073	1.70/1.85	.051	0.023
	AS7985-023	1.041/1.061	26.44/ 26.95	.067/.073	1.70/1.85	.054	0.025
	AS7985-024	1.104/1.124	28.04/ 28.55	.067/.073	1.70/1.85	.057	0.026
	AS7985-025	1.165/1.187	29.59/ 30.15	.067/.073	1.70/1.85	.061	0.027
	AS7985-026	1.228/1.250	31.19/ 31.75	.067/.073	1.70/1.85	.064	0.029
	AS7985-027	1.290/1.312	32.77/ 33.33	.067/.073	1.70/1.85	.067	0.030
	AS7985-028	1.351/1.377	34.32/ 34.98	.067/.073	1.70/1.85	.070	0.032
	AS7985-029	1.476/1.502	37.49/ 38.15	.067/.073	1.70/1.85	.077	0.035
	AS7985-030	1.601/1.627	40.67/ 41.33	.067/.073	1.70/1.85	.083	0.038
	AS7985-031	1.724/1.754	43.79/ 44.55	.067/.073	1.70/1.85	.090	0.041
	AS7985-032	1.849/1.879	46.97/ 47.73	.067/.073	1.70/1.85	.096	0.044
	AS7985-033	1.971/2.007	50.06/ 50.98	.067/.073	1.70/1.85	.102	0.047
	AS7985-034	2.096/2.132	53.24/ 54.15	.067/.073	1.70/1.85	.109	0.049
	AS7985-035	2.221/2.257	56.41/ 57.33	.067/.073	1.70/1.85	.115	0.052
	AS7985-036	2.346/2.382	59.59/ 60.50	.067/.073	1.70/1.85	.122	0.055
	AS7985-037	2.471/2.507	62.76/ 63.68	.067/.073	1.70/1.85	.128	0.058
	AS7985-038	2.594/2.634	65.89/ 66.90	.067/.073	1.70/1.85	.135	0.061
	AS7985-039	2.719/2.759	69.06/ 70.08	.067/.073	1.70/1.85	.141	0.064
	AS7985-040	2.844/2.884	72.24/ 73.25	.067/.073	1.70/1.85	.147	0.067
(b)							
	AS7985-041	2.965/3.013	75.31/ 76.53	.067/.073	1.70/1.85	.154	0.070
	AS7985-042	3.215/3.263	81.66/ 82.88	.067/.073	1.70/1.85	.167	0.076
	AS7985-043	3.465/3.513	88.01/ 89.23	.067/.073	1.70/1.85	.180	0.082
	AS7985-044	3.712/3.766	94.29/ 95.66	.067/.073	1.70/1.85	.193	0.087
	AS7985-045	3.962/4.016	100.64/102.01	.067/.073	1.70/1.85	.205	0.093
	AS7985-046	4.209/4.269	106.91/108.43	.067/.073	1.70/1.85	.218	0.099
	AS7985-047	4.459/4.519	113.26/114.78	.067/.073	1.70/1.85	.231	0.105
	AS7985-048	4.709/4.769	119.61/121.13	.067/.073	1.70/1.85	.244	0.111
	AS7985-049	4.952/5.026	125.78/127.66	.067/.073	1.70/1.85	.257	0.117
	AS7985-050	5.202/5.276	132.13/134.01	.067/.073	1.70/1.85	.270	0.123

Table 1 - Part numbers and dimensions (continued)

APP NOTE	PART NUMBER	Ø ID	Ø ID	ØW	ØW	APPROX MASS	
		INCHES	mm	INCHES	mm	LB/100	KG/100
	AS7985-102	.044/ .054	1.12/ 1.37	.100/.106	2.54/2.69	.005	0.002
	AS7985-103	.076/ .086	1.93/ 2.18	.100/.106	2.54/2.69	.009	0.004
	AS7985-104	.107/ .117	2.72/ 2.97	.100/.106	2.54/2.69	.012	0.006
	AS7985-105	.138/ .148	3.51/ 3.76	.100/.106	2.54/2.69	.016	0.007
	AS7985-106	.169/ .179	4.29/ 4.55	.100/.106	2.54/2.69	.019	0.009
	AS7985-107	.201/ .211	5.11/ 5.36	.100/.106	2.54/2.69	.023	0.010
	AS7985-108	.232/ .242	5.89/ 6.15	.100/.106	2.54/2.69	.026	0.012
	AS7985-109	.294/ .304	7.47/ 7.72	.100/.106	2.54/2.69	.033	0.015
	AS7985-110	.357/ .367	9.07/ 9.32	.100/.106	2.54/2.69	.040	0.018
	AS7985-111	.419/ .429	10.64/10.90	.100/.106	2.54/2.69	.047	0.021
	AS7985-112	.482/ .492	12.24/12.50	.100/.106	2.54/2.69	.054	0.025
	AS7985-113	.542/ .556	13.77/14.12	.100/.106	2.54/2.69	.061	0.028
	AS7985-114	.603/ .621	15.32/15.77	.100/.106	2.54/2.69	.068	0.031
	AS7985-115	.665/ .683	16.89/17.35	.100/.106	2.54/2.69	.075	0.034
	AS7985-116	.728/ .746	18.49/18.95	.100/.106	2.54/2.69	.082	0.037
	AS7985-117	.789/ .809	20.04/20.55	.100/.106	2.54/2.69	.089	0.040
	AS7985-118	.852/ .872	21.64/22.15	.100/.106	2.54/2.69	.096	0.044
	AS7985-119	.914/ .934	23.22/23.72	.100/.106	2.54/2.69	.103	0.047
	AS7985-120	.977/ .997	24.82/25.32	.100/.106	2.54/2.69	.110	0.050
	AS7985-121	1.039/1.059	26.39/26.90	.100/.106	2.54/2.69	.117	0.053
	AS7985-122	1.102/1.122	27.99/28.50	.100/.106	2.54/2.69	.124	0.056
	AS7985-123	1.162/1.186	29.52/30.12	.100/.106	2.54/2.69	.131	0.059
	AS7985-124	1.225/1.249	31.12/31.73	.100/.106	2.54/2.69	.138	0.063
	AS7985-125	1.287/1.311	32.69/33.30	.100/.106	2.54/2.69	.145	0.066
	AS7985-126	1.350/1.374	34.29/34.90	.100/.106	2.54/2.69	.152	0.069
	AS7985-127	1.412/1.436	35.87/36.47	.100/.106	2.54/2.69	.159	0.072
	AS7985-128	1.475/1.499	37.47/38.08	.100/.106	2.54/2.69	.166	0.075
	AS7985-129	1.534/1.564	38.96/39.73	.100/.106	2.54/2.69	.173	0.078
	AS7985-130	1.597/1.627	40.56/41.33	.100/.106	2.54/2.69	.180	0.082
	AS7985-131	1.659/1.689	42.14/42.90	.100/.106	2.54/2.69	.187	0.085
	AS7985-132	1.722/1.752	43.74/44.50	.100/.106	2.54/2.69	.194	0.088
	AS7985-133	1.784/1.814	45.31/46.08	.100/.106	2.54/2.69	.201	0.091
	AS7985-134	1.847/1.877	46.91/47.68	.100/.106	2.54/2.69	.208	0.094
	AS7985-135	1.908/1.942	48.46/49.33	.100/.106	2.54/2.69	.215	0.097
	AS7985-136	1.970/2.004	50.04/50.90	.100/.106	2.54/2.69	.222	0.101
	AS7985-137	2.033/2.067	51.64/52.50	.100/.106	2.54/2.69	.229	0.104
	AS7985-138	2.095/2.129	53.21/54.08	.100/.106	2.54/2.69	.235	0.107
	AS7985-139	2.158/2.192	54.81/55.68	.100/.106	2.54/2.69	.242	0.110
	AS7985-140	2.220/2.254	56.39/57.25	.100/.106	2.54/2.69	.249	0.113
	AS7985-141	2.280/2.320	57.91/58.93	.100/.106	2.54/2.69	.256	0.116
	AS7985-142	2.342/2.382	59.49/60.50	.100/.106	2.54/2.69	.263	0.120
	AS7985-143	2.405/2.445	61.09/62.10	.100/.106	2.54/2.69	.270	0.123
	AS7985-144	2.467/2.507	62.66/63.68	.100/.106	2.54/2.69	.277	0.126
	AS7985-145	2.530/2.570	64.26/65.28	.100/.106	2.54/2.69	.284	0.129
	AS7985-146	2.592/2.632	65.84/66.85	.100/.106	2.54/2.69	.291	0.132
	AS7985-147	2.653/2.697	67.39/68.50	.100/.106	2.54/2.69	.298	0.135
	AS7985-148	2.715/2.759	68.96/70.08	.100/.106	2.54/2.69	.305	0.139
	AS7985-149	2.778/2.822	70.56/71.68	.100/.106	2.54/2.69	.312	0.142
(b)	AS7985-150	2.840/2.884	72.14/73.25	.100/.106	2.54/2.69	.319	0.145

Table 1 - Part numbers and dimensions (continued)

APP NOTE	PART NUMBER	Ø ID	Ø ID	ØW	ØW	APPROX MASS	
		INCHES	mm	INCHES	mm	LB/100	KG/100
(b)	AS7985-151	2.963/3.011	75.26/ 76.48	.100/.106	2.54/2.69	.333	0.151
	AS7985-152	3.213/3.261	81.61/ 82.83	.100/.106	2.54/2.69	.361	0.164
	AS7985-153	3.463/3.511	87.96/ 89.18	.100/.106	2.54/2.69	.389	0.177
	AS7985-154	3.709/3.765	94.21/ 95.63	.100/.106	2.54/2.69	.417	0.189
	AS7985-155	3.959/4.015	100.56/101.98	.100/.106	2.54/2.69	.445	0.202
	AS7985-156	4.207/4.267	106.86/108.38	.100/.106	2.54/2.69	.472	0.214
	AS7985-157	4.457/4.517	113.21/114.73	.100/.106	2.54/2.69	.500	0.227
	AS7985-158	4.707/4.767	119.56/121.08	.100/.106	2.54/2.69	.528	0.240
	AS7985-159	4.952/5.022	125.78/127.56	.100/.106	2.54/2.69	.556	0.252
	AS7985-160	5.202/5.272	132.13/133.91	.100/.106	2.54/2.69	.584	0.265
	AS7985-161	5.452/5.522	138.48/140.26	.100/.106	2.54/2.69	.612	0.278
	AS7985-162	5.702/5.772	144.83/146.61	.100/.106	2.54/2.69	.640	0.290
	AS7985-163	5.952/6.022	151.18/152.96	.100/.106	2.54/2.69	.667	0.303
	AS7985-164	6.197/6.277	157.40/159.44	.100/.106	2.54/2.69	.685	0.311
	AS7985-165	6.447/6.527	163.75/165.79	.100/.106	2.54/2.69	.723	0.328
	AS7985-166	6.697/6.777	170.10/172.14	.100/.106	2.54/2.69	.751	0.341
	AS7985-167	6.947/7.027	176.45/178.49	.100/.106	2.54/2.69	.779	0.354
	AS7985-168	7.192/7.282	182.68/184.96	.100/.106	2.54/2.69	.807	0.366
	AS7985-169	7.442/7.532	189.03/191.31	.100/.106	2.54/2.69	.835	0.379
	AS7985-170	7.692/7.782	195.38/197.66	.100/.106	2.54/2.69	.863	0.392
	AS7985-171	7.942/8.032	201.73/204.01	.100/.106	2.54/2.69	.890	0.404
	AS7985-172	8.187/8.287	207.95/210.49	.100/.106	2.54/2.69	.918	0.417
	AS7985-173	8.437/8.537	214.30/216.84	.100/.106	2.54/2.69	.946	0.430
	AS7985-174	8.687/8.787	220.65/223.19	.100/.106	2.54/2.69	.974	0.442
	AS7985-175	8.937/9.037	227.00/229.54	.100/.106	2.54/2.69	1.002	0.455
	AS7985-176	9.182/9.292	233.22/236.02	.100/.106	2.54/2.69	1.030	0.468
	AS7985-177	9.432/9.542	239.57/242.37	.100/.106	2.54/2.69	1.058	0.480
	AS7985-178	9.682/9.792	245.92/248.72	.100/.106	2.54/2.69	1.086	0.493
	AS7985-201	.166/ .176	4.22/ 4.47	.135/.143	3.43/3.63	.035	0.016
	AS7985-202	.229/ .239	5.82/ 6.07	.135/.143	3.43/3.63	.048	0.022
	AS7985-203	.291/ .301	7.39/ 7.65	.135/.143	3.43/3.63	.060	0.027
	AS7985-204	.354/ .364	8.99/ 9.25	.135/.143	3.43/3.63	.073	0.033
	AS7985-205	.416/ .426	10.57/ 10.82	.135/.143	3.43/3.63	.085	0.039
	AS7985-206	.479/ .489	12.17/ 12.42	.135/.143	3.43/3.63	.098	0.045
	AS7985-207	.539/ .553	13.69/ 14.05	.135/.143	3.43/3.63	.111	0.050
	AS7985-208	.600/ .618	15.24/ 15.70	.135/.143	3.43/3.63	.124	0.056
	AS7985-209	.662/ .680	16.81/ 17.27	.135/.143	3.43/3.63	.136	0.062
	AS7985-210	.724/ .744	18.39/ 18.90	.135/.143	3.43/3.63	.149	0.068
	AS7985-211	.786/ .806	19.96/ 20.47	.135/.143	3.43/3.63	.162	0.073
	AS7985-212	.849/ .869	21.56/ 22.07	.135/.143	3.43/3.63	.174	0.079
	AS7985-213	.911/ .931	23.14/ 23.65	.135/.143	3.43/3.63	.187	0.085
	AS7985-214	.974/ .994	24.74/ 25.25	.135/.143	3.43/3.63	.200	0.091
	AS7985-215	1.036/1.056	26.31/ 26.82	.135/.143	3.43/3.63	.212	0.096
	AS7985-216	1.097/1.121	27.86/ 28.47	.135/.143	3.43/3.63	.225	0.102
	AS7985-217	1.159/1.183	29.44/ 30.05	.135/.143	3.43/3.63	.238	0.108
	AS7985-218	1.222/1.246	31.04/ 31.65	.135/.143	3.43/3.63	.251	0.114
	AS7985-219	1.284/1.308	32.61/ 33.22	.135/.143	3.43/3.63	.263	0.119
	AS7985-220	1.347/1.371	34.21/ 34.82	.135/.143	3.43/3.63	.276	0.125