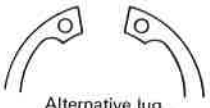
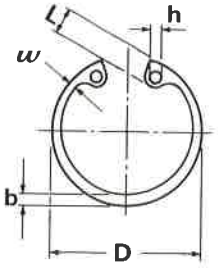
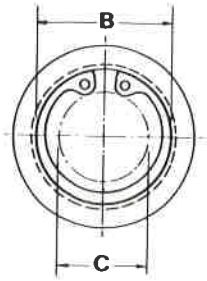
STANDARD INTERNAL CIRCLIPS AMERICAN SPECIFICATIONS

N1300 EQUIVALENT TO MIL-R-21248/MS 16625

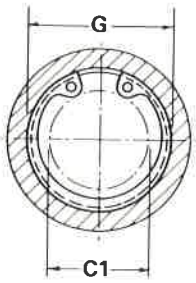
All dimensions in inches



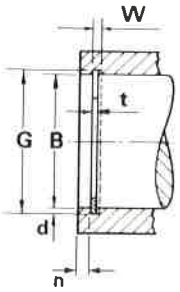




Circlip in bore



Circlip in groove



† Thrust load calculations see pages 9 & 10

SIZE CODE	Bore (B)		Groove (G)						Circlip (F)										Wt.	Tc†	Tg†
	B		G	Tol.	W	Tol.	n (min)	d ~	t	Tol.	D	Tol.	C	C1	L (max)	b ~	w ~	h (min)	(lb/k)	(lb.f)	(lb.f)
	(frac)	(dec)																			
0025	1/4	0.250	0.268	± .001	.018	+ .002 − .000	.027	.009	.015	± .002	0.280	+ .010 − .005	0.11	0.13	.068	.025	.015	.029	0.08	530	130
0031	5/16	0.312	0.330		.018		.027	.009	.015		0.346		0.17	0.19	.069	.033	.018	.029	0.11	660	160
0037	3/8	0.375	0.397		.029		.033	.011	.025		0.415		0.20	0.22	.085	.040	.028	.039	0.25	1320	235
0043	7/16	0.438	0.461		.029		.036	.012	.025		0.482		0.23	0.25	.101	.049	.029	.039	0.37	1550	285
0045	29/64	0.453	0.477		.029		.036	.012	.025		0.498		0.25	0.27	.101	.050	.030	.045	0.43	1600	310
0050	1/2	0.500	0.530	± .002	.039		.045	.015	.035		0.548		0.26	0.29	.117	.053	.035	.045	0.70	2470	425
0051	—	0.512	0.542		.039		.045	.015	.035		0.560		0.27	0.30	.119	.053	.035	.045	0.77	2530	435
0056	9/16	0.562	0.596		.039		.051	.017	.035		0.620		0.28	0.32	.137	.053	.035	.045	0.86	2780	540
0062	5/8	0.625	0.665		.039		.060	.020	.035		0.694		0.35	0.39	.137	.060	.035	.060	1.0	3090	705
0068	11/16	0.688	0.732		.039		.066	.022	.035		0.763		0.41	0.45	.137	.063	.036	.060	1.2	3400	855
0075	3/4	0.750	0.796		.039	+ .003 − .000	.069	.023	.035		0.831		0.45	0.50	.147	.070	.040	.060	1.3	3710	975
0077	—	0.777	0.825		.046		.072	.024	.042		0.859		0.47	0.52	.151	.074	.044	.060	1.7	4610	1050
0081	13/16	0.812	0.862		.046		.075	.025	.042		0.901		0.49	0.53	.160	.077	.044	.060	1.9	4820	1150
0086	—	0.866	0.920		.046		.081	.027	.042		0.961		0.54	0.59	.160	.081	.045	.060	2.0	5140	1320
0087	7/8	0.875	0.931	± .003	.046		.084	.028	.042		0.971		0.55	0.60	.160	.084	.045	.060	2.1	5190	1390
0090	—	0.901	0.959		.046		.087	.029	.042		1.000	+ .015 − .010	0.58	0.63	.160	.087	.047	.060	2.2	5350	1480
0093	15/16	0.938	1.000		.046		.093	.031	.042		1.041		0.61	0.67	.160	.091	.050	.060	2.4	5570	1640
0100	1	1.000	1.066		.046		.099	.033	.042		1.111		0.68	0.74	.160	.104	.052	.060	2.7	5940	1870
0102	—	1.023	1.091		.046		.102	.034	.042		1.136		0.70	0.76	.160	.106	.054	.060	2.8	6070	1970
0106	1.1/16	1.062	1.130		.056		.102	.034	.050		1.180		0.69	0.75	.185	.110	.055	.076	3.7	7500	2040
0112	1.1/8	1.125	1.197		.056		.108	.036	.050		1.249	+ .025 − .020	0.75	0.82	.185	.116	.057	.076	4.0	7950	2290
0118	1.3/16	1.188	1.262		.056		.111	.037	.050		1.319		0.81	0.88	.185	.120	.058	.076	4.3	8400	2490
0125	1.1/4	1.250	1.330		.056		.120	.040	.050		1.388		0.88	0.95	.185	.124	.062	.076	4.8	8850	2830
0131	1.5/16	1.312	1.396	± .004	.056		.126	.042	.050		1.456		0.94	1.02	.185	.130	.062	.076	5.0	9300	3120
0137	1.3/8	1.375	1.461		.056		.129	.043	.050		1.526		1.00	1.08	.185	.130	.063	.076	5.1	9700	3340
0143	1.7/16	1.438	1.528		.056		.135	.045	.050		1.596	+ .035 − .025	1.06	1.15	.185	.133	.065	.076	5.8	10200	3660
0145	—	1.456	1.548		.056		.138	.046	.050		1.616		1.08	1.17	.185	.133	.065	.076	6.0	10300	3790
0150	1.1/2	1.500	1.594		.056	+ .004 − .000	.141	.047	.050		1.660		1.13	1.22	.185	.133	.066	.076	6.1	10600	3990
0156	1.9/16	1.562	1.658		.068		.144	.048	.062		1.734		1.15	1.24	.205	.157	.079	.076	9.1	11400	4240
0162	1.5/8	1.625	1.725		.068		.150	.050	.062		1.804		1.21	1.31	.205	.160	.090	.076	10.1	11800	4590
0165	—	1.653	1.755		.068		.153	.051	.062		1.835		1.24	1.34	.205	.167	.083	.076	10.4	12100	4760
0168	1.11/16	1.688	1.792		.068		.156	.052	.062		1.874		1.27	1.38	.205	.170	.085	.076	10.8	12300	4960
0175	1.3/4	1.750	1.858	± .005	.068		.162	.054	.062		1.942		1.34	1.44	.205	.175	.082	.076	11.5	12800	5340
0181	1.13/16	1.812	1.922		.068		.165	.055	.062		2.012		1.40	1.51	.205	.170	.084	.091	12.0	13200	5630
0185	—	1.850	1.962		.068		.168	.056	.062		2.054		1.44	1.55	.205	.170	.085	.091	12.8	13500	5860
0187	1.7/8	1.875	1.989		.068		.171	.057	.062		2.072		1.46	1.58	.205	.170	.085	.091	12.8	13700	6040
0193	1.15/16	1.938	2.056		.068		.177	.059	.062		2.141		1.52	1.64	.205	.165	.079	.091	13.3	14100	6470
0200	2	2.000	2.122		.068		.183	.061	.062		2.210		1.59	1.71	.205	.170	.085	.091	13.0	14600	6900
0206	2.1/16	2.062	2.186		.086		.186	.062	.078		2.280		1.61	1.73	.225	.186	.091	.091	18.0	18900	7230
0212	2.1/8	2.125	2.251		.086		.189	.063	.078		2.350		1.65	1.78	.236	.195	.096	.091	19.4	19500	7570
0218	2.3/16	2.188	2.318		.086		.195	.065	.078		2.415		1.71	1.84	.236	.199	.098	.091	19.6	20000	8040
0225	2.1/4	2.250	2.382		.086		.198	.066	.078		2.490		1.77	1.91	.236	.203	.107	.091	21.8	20600	8400
0231	2.5/16	2.312	2.450		.086		.207	.069	.078		2.560		1.84	1.98	.236	.205	.106	.091	22.6	21200	9020
0237	2.3/8	2.375	2.517		.086		.213	.071	.078		2.630		1.90	2.04	.236	.207	.108	.091	23.8	21700	9540
0244	2.7/16	2.440	2.584		.086		.216	.072	.078		2.702	+ .040 − .030	1.96	2.11	.236	.205	.104	.108	25.3	22300	10100
0250	2.1/2	2.500	2.648		.086		.222	.074	.078	± .003	2.775		2.02	2.17	.236	.210	.103	.108	29.3	22900	13000
0256	2.9/16	2.562	2.714		.103		.228	.076	.093		2.844		2.02	2.18	.268	.222	.109	.108	30.4	28000	11000
0262	2.5/8	2.625	2.781		.103		.234	.078	.093		2.910		2.08	2.24	.268	.226	.118	.108	34.5	28600	11600
0268	2.11/16	2.688	2.848		.103		.240	.080	.093		2.980		2.15	2.31	.268	.236	.122	.108	36.2	29300	12200
0275	2.3/4	2.750	2.914		.103		.246	.082	.093		3.050		2.18	2.34	.284	.234	.114	.108	35.5	30000	12800
0281	2.13/16	2.812	2.980		.103		.252	.084	.093		3.121		2.24	2.40	.284	.230	.115	.108	39.2	30800	13400
0287	2.7/8	2.875	3.051	± .006	.103	+ .005 − .000	.264	.088	.093		3.191		2.30	2.47	.284	.240	.120	.108	41.0	31500	14300
0300	3	3.000	3.182		.103		.273	.091	.093		3.325		2.43	2.60	.284	.250	.124	.108	42.5	32900	15400
0306	3.1/16	3.062	3.248		.120		.279	.093	.109		3.418		2.46	2.64	.299	.254	.126	.123	54.4	39300	16100
0312	3.1/8	3.125	3.315		.120		.285	.095	.109		3.488		2.52	2.71	.299	.260	.129	.123	56.0	40100	16800
0315	—	3.149	3.348		.120		.288	.096	.109		3.523		2.55	2.74	.299	.260	.129	.123	57.1	40400	17100
0325	3.1/4	3.250	3.446		.120		.294	.098	.109		3.623		2.65	2.84	.299	.269	.135	.123	59.9	41700	18000
0334	3.11/32	3.346	3.546		.120		.300	.100	.109		3.734	± .055	2.69	2.89	.323	.276	.140	.123	63.0	43000	18900
0347	3.15/32	3.469	3.675		.120		.309	.103	.109		3.857		2.77	2.96	.350	.294	.143	.123	69.0	44500	20200
0350	3.1/2	3.500	3.710		.120		.315	.105	.109		3.890		2.80	2.90	.350	.294	.143	.123	71.0	44900	20800
0354	—	3.543	3.776		.120		.321	.107	.109		3.936		2.84	3.07	.350	.292	.142	.123	72.1	45500	21400
0362	3.5/8	3.625	3.841		.120		.324	.108	.109		4.024		2.92	3.13	.350	.305	.169	.123	73.0	46500	22100
0375	3.3/4	3.750	3.974		.120		.336	.112	.109		4.157		3.04	3.26	.350	.309	.155	.123	78.0	48200	23700
0387	3.7/8	3.875	4.107		.120		.348	.116	.109		4.291	± .065	3.17	3.40	.350	.312	.165	.123	87.1	49800	25400
0393	3.15/16	3.938	4.174		.120		.354	.118	.109		4.358		3.23	3.46	.350	.319	.166	.123	87.9	50600	26300

Standard material - carbon spring steel. Standard finish - phosphate and oil.