

TABLE A O-Ring Gland Design for Dynamic Seals

O-Ring Cross Section	Gland Depth	Squeeze		Diametrical Clearance Max.	Groove Width. \pm .005			Groove Radius	Eccentricity Max.
		Inches	%		No Backup Rings	One Backup Ring	Two Backup Rings		
.040	.031/.033	.004/.012	11-28	.004	.063	–	–	.005-.008	.002
.050	.039/.041	.006/.014	13-26	.004	.073	–	–	.005-.008	.002
.060	.047/.049	.008/.016	14-25	.004	.084	–	–	.005-.008	.002
.070	.055/.057	.010/.018	15-25	.004	.095	.150	.208	.005-.015	.002
.103	.087/.090	.010/.019	10-18	.005	.145	.187	.249	.005-.020	.003
.139	.119/.123	.012/.024	9-17	.006	.185	.222	.301	.005-.030	.004
.210	.183/.188	.017/.032	8.5-15	.006	.285	.338	.428	.005-.050	.006
.275	.234/.240	.029/.047	10.5-17	.007	.375	.440	.579	.005-.060	.008

NOTE: Table A contains general sealing guidelines. More specific information is available throughout this guide.

O-Ring Gland Design for Static Seals

O-Ring Cross Section	Gland Depth		Squeeze				Diametrical Clearance Max.	Groove Width. \pm .005			Groove Radius	Eccentricity Max.
			Radial		Axial			No Backup Rings	One Backup Ring	Two Backup Rings		
	Radial	Axial	Inches	%	Inches	%						
.020*	.013-.014	.013-.014	.004-.009	22-41	.004-.009	22-41	.002	.035	–	–	–	.0015
.030	.020-.022	.020-.022	.005-.013	19-39	.005-.013	19-39	.003	.045	–	–	–	.0015
.040	.027-.030	.027-.030	.007-.016	19-37	.007-.016	19-37	.003	.060	–	–	.005-.008	.002
.050	.035-.039	.034-.038	.008-.018	17-34	.009-.019	19-36	.004	.075	–	–	.005-.008	.002
.060	.042-.047	.042-.046	.010-.021	18-33	.011-.021	19-33	.004	.090	–	–	.005-.008	.002
.070	.050-.055	.049-.054	.012-.023	18-32	.013-.024	19-33	.004	.105	.150	.208	.005-.015	.002
.103	.080-.086	.075-.081	.014-.026	14-25	.019-.031	19-29	.005	.146	.182	.244	.005-.020	.003
.139	.110-.116	.100-.108	.019-.033	14-23	.027-.043	20-30	.006	.195	.217	.296	.005-.030	.004
.210	.170-.176	.155-.165	.029-.045	14-21	.040-.060	20-28	.006	.280	.333	.423	.005-.050	.006
.275	.225-.235	.205-.215	.034-.056	13-20	.054-.076	20-27	.007	.350	.435	.574	.005-.060	.008

***NOTE:** It is recommended that an o-ring with tighter CS tolerance (\pm .002) be requested.