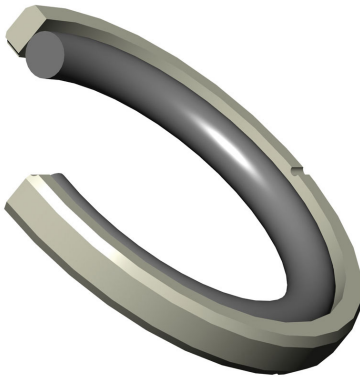


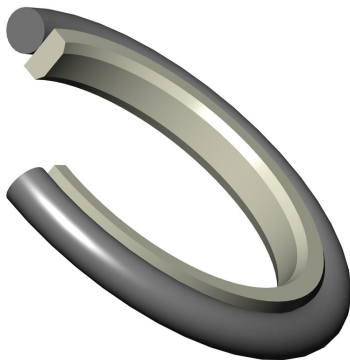


Glidetec™

O-Ring Energized Cap Seals



Glidetec™ Piston

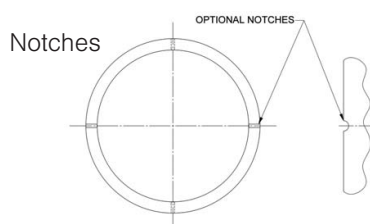


Glidetec™ Rod

Glidetec™ Options

Notches

Glidetec™ seals can be supplied with notches to optimize pressure response, in accordance with SAE AIR 1243. The piston designs typically have notched caps since they are bidirectional; rod types are typically unnotched.



Bi-Directional Sealing

Greene Tweed's Glidetec™ o-ring energized cap seal offers simplicity and low cost. Suitable for use in spool valves or where AS or MIL spec grooves are not required, the Glidetec™ seal consists of a low-cost energizer and a heavy section cap. The Glidetec™ seal offers bidirectional sealing, low friction, and easy installation in compact single-piece glands.

Features and Benefits

- Avalon® cap reduces dynamic and breakout friction versus single o-ring seals
- Installs easily in compact single-piece glands, decreasing costs associated with maintenance
- Use of industry standard o-rings means special designs are unnecessary, keeping costs low
- Heavy section cap creates more stability in the gland
- Cost-effective design for valve applications

Applications

- Control modules in utility actuators
- Linear actuators in landing gear systems
- Valves in engine systems

Glidetec™ Design

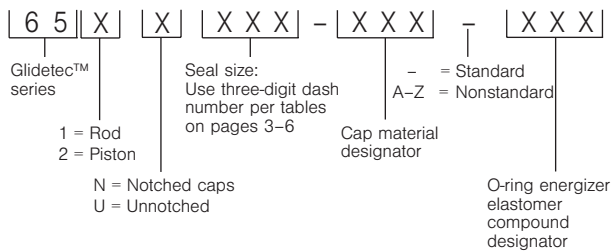
The Glidetec™ seal combines a cap typically made from our Avalon® (PTFE) material with an industry standard elastomeric energizer. Greene Tweed can also easily design o-rings and caps to fit custom nonstandard gland sizes.

Note: See dimensional tables for Greene Tweed standard gland sizes.

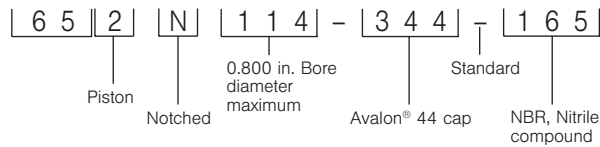


Glidetec™ Part Numbering System

The part numbering system requires the use of the material designator tables found in the next column. For nonstandard designs, contact Greene Tweed engineering.



Part Numbering Example



Contact your local Greene Tweed representative for specific recommendations to suit higher performance requirements.

Material Designator Tables

Code	Elastomer Compound
160	NBR, Nitrile
161	NBR, Nitrile
165	NBR, Nitrile
193	NBR, Nitrile
409	FMVQ, Fluorosilicone
410	FMVQ, Fluorosilicone
735	FKM, Fluorocarbon
757	FKM, Fluorocarbon
772	FKM, Fluorocarbon
952	EPM, Ethylene Propylene
954	EPDM, Ethylene Propylene
963	EPDM, Ethylene Propylene
964	NBR, Nitrile

Code	Cap Material
301	Avalon® 01
043	Avalon® 07
019	Avalon® 09
344	Avalon® 44
069	Avalon® 50
357	Avalon® 57
379	Avalon® 69

See Greene Tweed Surface Finish guidelines.



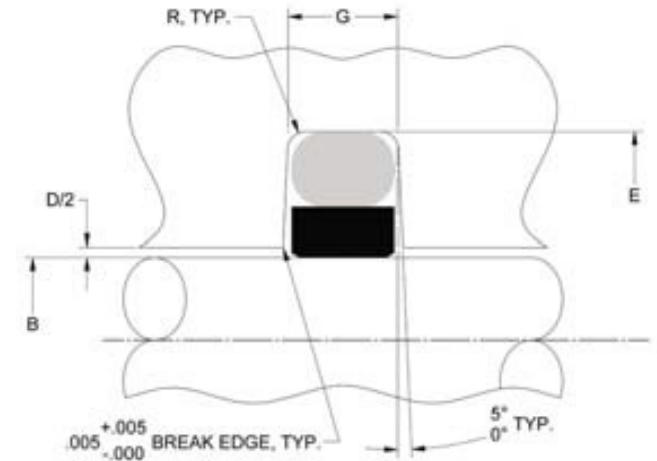
Rod Dimensional Information (in Inches)

Dash No.	E	B	O-Ring Dash No.
	+0.001 -0.000	+0.000 -0.001	
006	0.259	0.123	007
007	0.290	0.154	008
008	0.321	0.185	009
009	0.353	0.217	010
010	0.422	0.248	011
011	0.484	0.310	012
012	0.547	0.373	013
	+0.002 -0.000	+0.000 -0.002	
013	0.609	0.435	014
014	0.672	0.498	015
015	0.734	0.560	016
016	0.797	0.623	017
017	0.859	0.685	018
018	0.922	0.748	019
019	0.984	0.810	020
020	1.047	0.873	021
021	1.109	0.935	022
022	1.172	0.998	023
023	1.234	1.060	024
024	1.297	1.123	025
025	1.359	1.185	026
026	1.422	1.248	027
027	1.484	1.310	028
028	1.547	1.373	028
110	0.623	0.373	111
111	0.685	0.435	112
112	0.748	0.498	113
113	0.810	0.560	114
114	0.873	0.623	115
115	0.935	0.685	116
116	0.998	0.748	117
117	1.060	0.810	118
118	1.123	0.873	119
119	1.185	0.935	120
120	1.248	0.998	121
121	1.310	1.060	122
122	1.373	1.123	123
123	1.435	1.185	124
124	1.498	1.248	125
125	1.560	1.310	126
126	1.623	1.373	127
127	1.685	1.435	128

Dash No.	E	B	O-Ring Dash No.
	+0.002 -0.000	+0.000 -0.002	
128	1.748	1.498	129
129	1.810	1.560	130
130	1.873	1.623	131
131	1.935	1.685	132
132	1.998	1.748	133
133	2.060	1.810	134
134	2.123	1.873	135
135	2.186	1.936	136
136	2.248	1.998	137
137	2.311	2.061	138
138	2.373	2.123	139
139	2.436	2.186	140
140	2.498	2.248	141
141	2.561	2.311	142
142	2.623	2.373	143
143	2.686	2.436	144
144	2.748	2.498	145
145	2.811	2.561	146
146	2.873	2.623	147
147	2.936	2.686	148
148	2.998	2.748	149
149	3.061	2.811	150
210	1.122	0.748	212
211	1.184	0.810	213
212	1.247	0.873	214
213	1.309	0.935	215
214	1.372	0.998	216
215	1.434	1.060	217
216	1.497	1.123	218
217	1.559	1.185	219
218	1.622	1.248	220
219	1.684	1.310	221
220	1.747	1.373	222
221	1.809	1.435	222
222	1.872	1.498	223
223	1.997	1.623	224
224	2.122	1.748	225
225	2.247	1.873	226
226	2.372	1.998	227
227	2.497	2.123	228
228	2.622	2.248	229
229	2.747	2.373	230

Rod Seal Installation

Rod Seal



Note: Rod diameters per AS4716. See Capabilities section for more information.

Rod Gland Dimensions (in Inches)

Dash No.	G Groove Width	R Radius	D
	+0.005/-0.000		
006 – 012	0.081	0.005/0.015	0.004
013 – 028	0.081	0.005/0.015	0.005
110 – 149	0.126	0.005/0.015	0.005
210 – 247	0.166	0.010/0.025	0.006
325 – 349	0.247	0.020/0.035	0.007
425 – 460	0.320	0.020/0.035	0.010

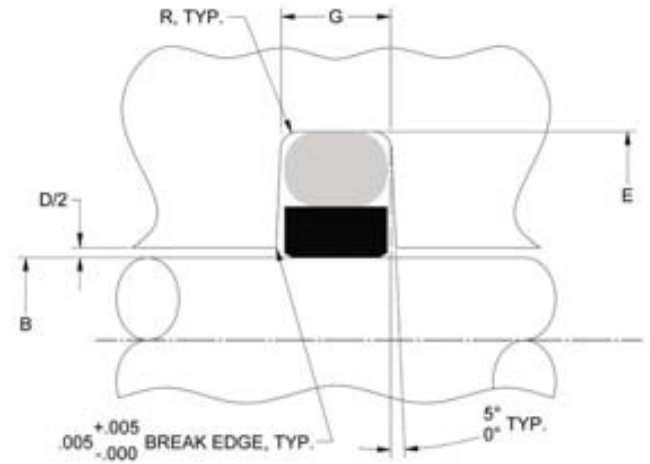


Rod Dimensional Information

Continued (in Inches)

Dash No.	E	B	O-Ring Dash No.	Dash No.	E	B	O-Ring Dash No.
	+0.002 -0.000	+0.000 -0.002			+0.003 -0.000	+0.000 -0.003	
230	2.872	2.498	231	425	5.247	4.497	427
231	2.997	2.623	232	426	5.372	4.622	428
232	3.122	2.748	233	427	5.497	4.747	429
233	3.247	2.873	234	428	5.622	4.872	430
234	3.371	2.997	235	429	5.747	4.997	431
235	3.496	3.122	236	430	5.872	5.122	432
236	3.621	3.247	237	431	5.997	5.247	433
237	3.746	3.372	238	432	6.122	5.372	434
238	3.871	3.497	239	433	6.247	5.497	435
239	3.996	3.622	240	434	6.372	5.622	436
240	4.121	3.747	241	435	6.497	5.747	437
241	4.246	3.872	242	436	6.622	5.872	437
242	4.371	3.997	243	437	6.747	5.997	438
243	4.496	4.122	244	438	6.997	6.247	439
244	4.621	4.247	245	439	7.247	6.497	440
245	4.746	4.372	246	440	7.497	6.747	441
246	4.871	4.497	247	441	7.747	6.997	442
247	4.996	4.622	248	442	7.997	7.247	443
325	2.052	1.498	326	443	8.247	7.497	444
326	2.177	1.623	327	444	8.497	7.747	445
327	2.302	1.748	328	445	8.747	7.997	445
328	2.427	1.873	329	446	9.247	8.497	446
329	2.552	1.998	330		+0.004 -0.000	+0.000 -0.003	
330	2.677	2.123	331	447	9.747	8.997	447
331	2.802	2.248	332	448	10.247	9.497	448
332	2.927	2.373	333	449	10.747	9.997	449
333	3.052	2.498	334	450	11.247	10.497	450
334	3.177	2.623	335	451	11.747	10.997	451
335	3.302	2.748	336	452	12.247	11.497	452
336	3.427	2.873	337	453	12.747	11.997	453
337	3.551	2.997	338	454	13.247	12.497	454
338	3.676	3.122	339	455	13.747	12.997	455
339	3.801	3.247	340	456	14.247	13.497	456
340	3.926	3.372	341	457	14.747	13.997	457
341	4.051	3.497	342	458	15.247	14.497	458
342	4.176	3.622	343	459	15.747	14.997	459
343	4.301	3.747	344	460	16.247	15.497	460
344	4.426	3.872	345				
345	4.551	3.997	346				
346	4.676	4.122	347				
347	4.801	4.247	348				
348	4.926	4.372	349				
349	5.051	4.497	350				

Rod Seal



Note: Rod diameters per AS4716. See Capabilities section for more information.



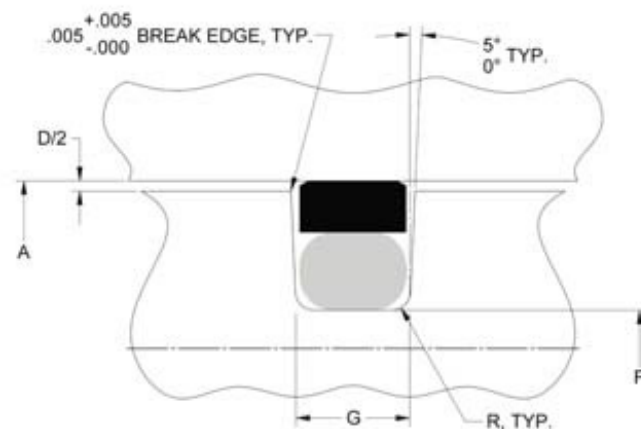
Piston Dimensional Information (in Inches)

Dash No.	A	F	O-Ring Dash No.
	+0.001 -0.000	+0.000 -0.001	
007	0.266	0.124	006
008	0.297	0.155	007
009	0.329	0.187	008
010	0.360	0.218	009
011	0.422	0.248	010
012	0.485	0.311	011
	+0.002 -0.000	+0.000 -0.002	
013	0.550	0.376	012
014	0.613	0.439	013
015	0.675	0.501	014
016	0.738	0.564	015
017	0.800	0.626	016
018	0.863	0.689	017
019	0.925	0.751	018
020	0.991	0.817	019
021	1.053	0.879	020
022	1.116	0.942	021
023	1.178	1.004	022
024	1.241	1.067	023
025	1.303	1.129	024
026	1.366	1.192	025
027	1.428	1.254	026
028	1.491	1.317	027
110	0.550	0.300	109
111	0.613	0.363	110
112	0.675	0.425	111
113	0.738	0.488	112
114	0.800	0.550	113
115	0.863	0.613	114
116	0.925	0.675	115
117	0.991	0.741	116
118	1.053	0.803	117
119	1.116	0.866	118
120	1.178	0.928	119
121	1.241	0.991	120
122	1.303	1.053	121
123	1.366	1.116	122
124	1.428	1.178	123
125	1.491	1.241	124
126	1.553	1.303	125

Dash No.	A	F	O-Ring Dash No.
	+0.002 -0.000	+0.000 -0.002	
127	1.616	1.366	126
128	1.678	1.428	127
129	1.741	1.491	128
130	1.805	1.555	129
131	1.867	1.617	130
132	1.930	1.680	131
133	1.992	1.742	132
134	2.055	1.805	133
135	2.118	1.868	134
136	2.180	1.930	135
137	2.243	1.993	136
138	2.305	2.055	137
139	2.368	2.118	138
140	2.430	2.180	139
141	2.493	2.243	140
142	2.555	2.305	141
143	2.618	2.368	142
144	2.680	2.430	143
145	2.743	2.493	144
146	2.805	2.555	145
147	2.868	2.618	146
148	2.930	2.680	147
149	2.993	2.743	148
210	0.991	0.617	208
211	1.053	0.679	209
212	1.116	0.742	210
213	1.178	0.804	211
214	1.241	0.867	212
215	1.303	0.929	213
216	1.366	0.992	214
217	1.428	1.054	215
218	1.491	1.117	216
219	1.553	1.179	217
220	1.616	1.242	218
221	1.678	1.304	219
222	1.741	1.367	220
223	1.867	1.493	222
224	1.992	1.618	223
225	2.118	1.744	224
226	2.243	1.869	225

Piston Seal Installation

Piston Seal



Note: Bore diameters per AS4716. See Capabilities section for more information.

Piston Gland Dimensions (in Inches)

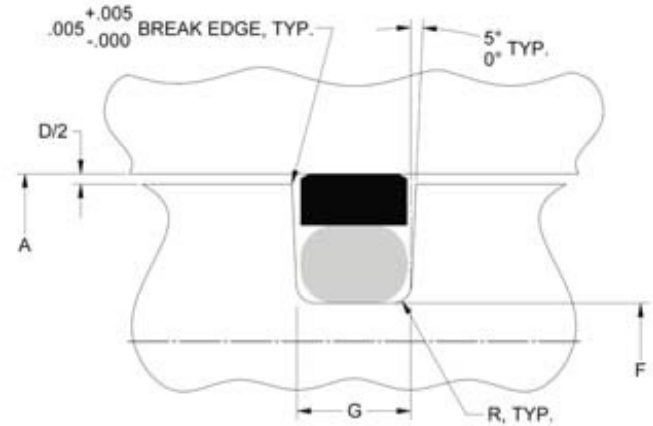
Dash No.	G Groove Width	R Radius	D
	+0.005/-0.000		
007 - 012	0.081	0.005/0.015	0.004
013 - 028	0.081	0.005/0.015	0.005
110 - 149	0.126	0.005/0.015	0.005
210 - 247	0.166	0.010/0.025	0.006
325 - 352	0.247	0.020/0.035	0.007
425 - 460	0.320	0.020/0.035	0.010



Piston Dimensional Information Continued (in Inches)

Dash No.	A	F	O-Ring Dash No.	Dash No.	A	F	O-Ring Dash No.
	+0.002 -0.000	+0.000 -0.002			+0.003 -0.000	+0.000 -0.003	
227	2.368	1.994	226	428	5.349	4.599	425
228	2.493	2.119	227	429	5.474	4.724	426
229	2.618	2.244	228	430	5.599	4.849	427
230	2.743	2.369	229	431	5.724	4.974	428
231	2.868	2.494	230	432	5.849	5.099	429
232	2.993	2.619	231	433	5.974	5.224	430
233	3.118	2.744	232	434	6.099	5.349	431
234	3.243	2.869	233	435	6.224	5.474	432
235	3.368	2.994	234	436	6.349	5.599	433
236	3.493	3.119	235	437	6.474	5.724	434
237	3.618	3.244	236	438	6.724	5.974	436
238	3.743	3.369	237	439	6.974	6.224	437
239	3.868	3.494	238	440	7.224	6.474	438
240	3.993	3.619	239	441	7.474	6.724	439
241	4.118	3.744	240	442	7.724	6.974	440
242	4.243	3.869	241	443	7.974	7.224	441
243	4.368	3.994	242	444	8.224	7.474	443
244	4.493	4.119	243	445	8.474	7.724	443
245	4.618	4.244	244	446	8.974	8.224	445
246	4.743	4.369	245		+0.004 -0.000	+0.000 -0.003	
247	4.868	4.494	246	447	9.474	8.724	446
325	1.867	1.313	323	448	9.974	9.224	447
326	1.992	1.438	324	449	10.474	9.724	448
327	2.118	1.564	325	450	10.974	10.224	449
328	2.243	1.689	326	451	11.474	10.724	450
329	2.368	1.814	327	452	11.974	11.224	451
330	2.493	1.939	328	453	12.474	11.724	452
331	2.618	2.064	329	454	12.974	12.224	453
332	2.743	2.189	330	455	13.474	12.724	454
333	2.868	2.314	331	456	13.974	13.224	455
334	2.993	2.439	332	457	14.474	13.724	456
335	3.118	2.564	333	458	14.974	14.224	457
336	3.243	2.689	334	459	15.474	14.724	458
337	3.368	2.814	335	460	15.974	15.224	459
338	3.493	2.939	336				
339	3.618	3.064	337				
340	3.743	3.189	338				
341	3.868	3.314	339				
342	3.993	3.439	340				
343	4.118	3.564	341				
344	4.243	3.689	342				
345	4.368	3.814	343				
346	4.493	3.939	344				
347	4.618	4.064	345				
348	4.743	4.189	346				
349	4.868	4.314	347				

Piston Seal



Note: Bore diameters per AS4716. See Capabilities section for more information.

Greene Tweed

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