

Rod Seal OC Profile

Catalog EPS 5370/USA



OC Profile, Compact PTFE Rod Cap Seal

The Parker OC profile is a bi-directional rod seal for use in pneumatic and low to medium duty hydraulic systems. The OC profile is a two piece design utilizing a rectangular PTFE cap and standard size Parker o-ring. The OC profile is an excellent choice for applications requiring a compact design. The unique properties of the modified PTFE provide added wear resistance for improved cycle life. Parker's OC profile will retrofit non-Parker seals of similar design.

The OC profile may be ordered without the energizer by omitting the energizer code. See part number nomenclature.

Technical Data

Standard Materials*		Temperature Range	Pressure Range†	Surface Speed
Cap				
0102	Modified PTFE	-320°F to 450°F (-195°C to 282°C)	1,500 psi (103 bar)	< 13 ft/s (4 m/sec)
Energizer				
A	70A Nitrile	-30°F to 250°F (-34°C to 121°C)		

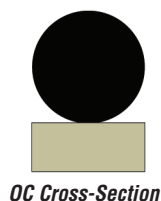
***Alternate Materials:** For applications that may require an alternate material, please see Section 3 for alternate PTFE (Table 3-4) and energizer (Table 3-5) materials.

†**Pressure Range** without wear rings (see Table 2-4, page 2-5).

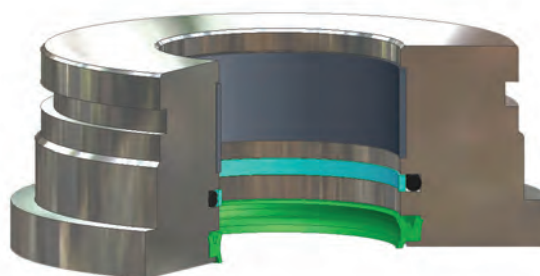
Options

Notched side walls: Notches can be added to the side walls of the PTFE cap. This can help to optimize the seal's response to fluid pressure. Notched side walls help ensure that fluid pressure fills the cavity between the side face of the seal and the side face of the seal gland. Consult your local Parker Seal representative for the availability and cost to add side notches to the OC profile.

N= Notched walls 



OC Cross-Section



OC installed in Rod Gland

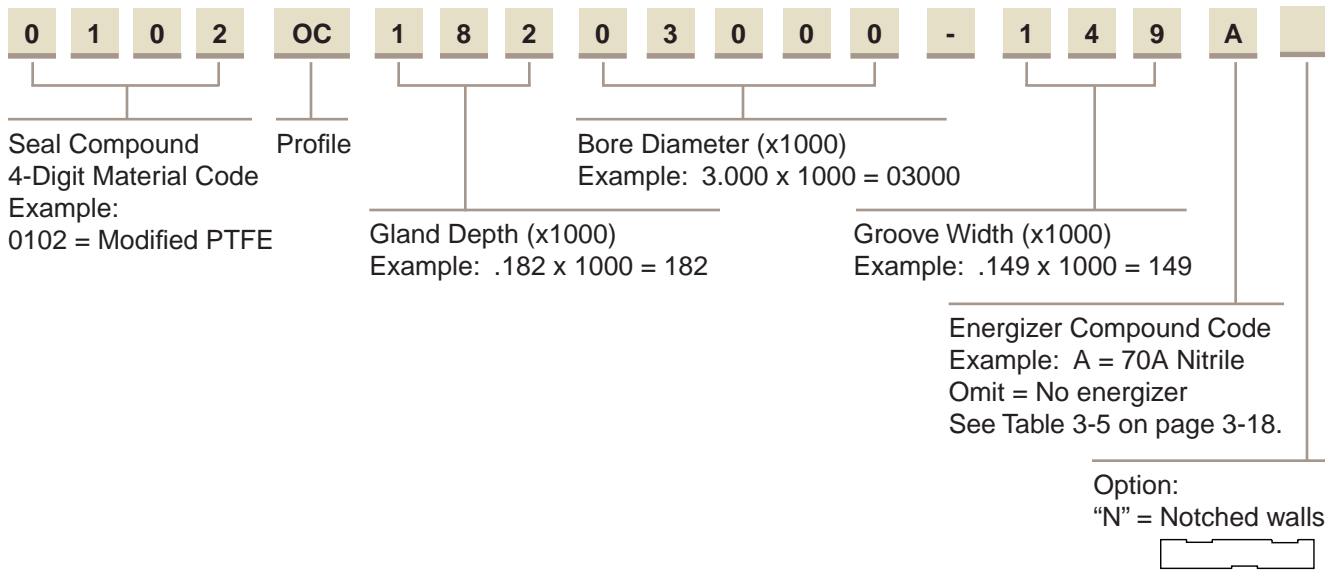
5

09/01/07

OC Profile

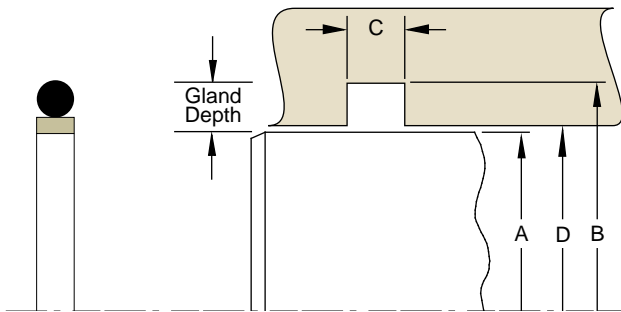
Part Number Nomenclature — OC Profile

Table 5-26. OC Profile — Inch



5

Gland Dimensions — OC Profile



Please refer to Engineering Section 2, Page 2-8 for surface finish and additional hardware considerations.

Table 5-27. OC Profile — Inch

A Rod Diameter	B Groove Diameter	C Groove Width	D Throat Diameter*	O-ring Dash Number	Part Number
+ .000/- .001	+ .001/- .000	+ .005/- .000	+ .002/- .000		
0.125	0.268	0.079	0.126	007	0102OC07200125-079A
0.156	0.299	0.079	0.157	008	0102OC07200156-079A
0.187	0.331	0.079	0.188	009	0102OC07200187-079A
0.219	0.362	0.079	0.220	010	0102OC07200219-079A
0.250	0.424	0.079	0.251	011	0102OC08700250-079A
0.312	0.487	0.079	0.313	012	0102OC08700312-079A
0.375	0.547	0.079	0.376	013	0102OC08700375-079A
+ .000/- .002	+ .002/- .000	+ .005/- .000	+ .002/- .000		
0.437	0.610	0.079	0.438	014	0102OC08700437-079A
0.500	0.672	0.079	0.501	015	0102OC08700500-079A
0.562	0.735	0.079	0.563	016	0102OC08700562-079A
0.625	0.797	0.079	0.626	017	0102OC08700675-079A
0.687	0.860	0.079	0.688	018	0102OC08700687-079A

*If used with wear rings, refer to wear ring throat diameter, see Section 9.
For custom groove calculations, see Appendix C.

Table 5-27. OC Gland Dimensions — Inch (Continued)

A Rod Diameter	B Groove Diameter	C Groove Width	D Throat Diameter*	O-ring Dash Number	Part Number
+ .000/- .002	+ .002/- .000	+ .005/- .000	+ .002/- .000		
0.750	0.922	0.079	0.751	019	0102OC08700750-079A
0.812	0.985	0.079	0.813	020	0102OC08700812-079A
0.875	1.047	0.079	0.876	021	0102OC08700875-079A
0.937	1.110	0.079	0.938	022	0102OC08700937-079A
1.000	1.172	0.079	1.001	023	0102OC08701000-079A
1.062	1.235	0.079	1.063	024	0102OC08701062-079A
1.125	1.298	0.079	1.126	025	0102OC08701125-079A
1.188	1.360	0.079	1.189	026	0102OC08701188-079A
1.250	1.422	0.079	1.251	027	0102OC08701250-079A
1.312	1.485	0.079	1.313	028	0102OC08701312-079A
+ .000/- .003	+ .003/- .000	+ .005/- .000	+ .002/- .000		
0.375	0.611	0.112	0.376	111	0102OC11800375-112A
0.437	0.674	0.112	0.438	112	0102OC11800437-112A
0.500	0.736	0.112	0.501	113	0102OC11800500-112A
0.562	0.799	0.112	0.563	114	0102OC11800562-112A
0.625	0.862	0.112	0.626	115	0102OC11800625-112A
0.687	0.924	0.112	0.688	116	0102OC11800687-112A
0.750	0.986	0.112	0.751	117	0102OC11800750-112A
0.812	1.049	0.112	0.813	118	0102OC11800812-112A
0.875	1.111	0.112	0.876	119	0102OC11800875-112A
0.937	1.174	0.112	0.938	120	0102OC11800937-112A
1.000	1.236	0.112	1.001	121	0102OC11801000-112A
1.062	1.299	0.112	1.063	122	0102OC11801062-112A
1.125	1.362	0.112	1.126	123	0102OC11801125-112A
1.187	1.424	0.112	1.188	124	0102OC11801187-112A
1.250	1.486	0.112	1.251	125	0102OC11801250-112A
1.312	1.549	0.112	1.313	126	0102OC11801312-112A
1.375	1.611	0.112	1.376	127	0102OC11801375-112A
1.437	1.674	0.112	1.438	128	0102OC11801437-112A
1.500	1.736	0.112	1.501	129	0102OC11801500-112A
1.562	1.799	0.112	1.563	130	0102OC11801562-112A
1.625	1.862	0.112	1.626	131	0102OC11801625-112A
1.687	1.924	0.112	1.688	132	0102OC11801687-112A
1.750	1.986	0.112	1.751	133	0102OC11801750-112A
1.812	2.049	0.112	1.813	134	0102OC11801812-112A
1.875	2.111	0.112	1.876	135	0102OC11801875-112A
1.937	2.174	0.112	1.938	136	0102OC11801937-112A
2.000	2.236	0.112	2.001	137	0102OC11802000-112A
2.062	2.299	0.112	2.063	138	0102OC11802062-112A
2.125	2.632	0.112	2.126	139	0102OC11802125-112A
2.187	2.424	0.112	2.188	140	0102OC11802187-112A
2.250	2.486	0.112	2.251	141	0102OC11802250-112A
2.312	2.549	0.112	2.313	142	0102OC11802312-112A
2.375	2.611	0.112	2.376	143	0102OC11802375-112A
2.437	2.674	0.112	2.438	144	0102OC11802437-112A
2.500	2.736	0.112	2.501	145	0102OC11802500-112A
2.562	2.799	0.112	2.563	146	0102OC11802562-112A

*If used with wear rings, refer to wear ring throat diameter, see Section 9.
For custom groove calculations, see Appendix C.

OC Profile

Table 5-27. OC Gland Dimensions — Inch (Continued)

A Rod Diameter	B Groove Diameter	C Groove Width	D Throat Diameter*	O-ring Dash Number	Part Number
+ .000/- .003	+ .003/- .000	+ .005/- .000	+ .002/- .000		
2.625	2.862	0.112	2.626	147	0102OC11802625-112A
2.687	2.924	0.112	2.688	148	0102OC11802687-112A
2.750	2.986	0.112	2.751	149	0102OC11802750-112A
+ .000/- .004	+ .004/- .000	+ .005/- .000	+ .002/- .000		
0.750	1.050	0.149	0.751	211	0102OC15000750-149A
0.812	1.113	0.149	0.813	212	0102OC15000812-149A
0.875	1.175	0.149	0.876	213	0102OC15000875-149A
0.937	1.238	0.149	0.938	214	0102OC15000937-149A
1.000	1.300	0.149	1.001	215	0102OC15001000-149A
1.062	1.363	0.149	1.063	216	0102OC15001062-149A
1.125	1.426	0.149	1.126	217	0102OC15001125-149A
1.187	1.488	0.149	1.188	218	0102OC15001187-149A
1.250	1.550	0.149	1.251	219	0102OC15001250-149A
1.312	1.613	0.149	1.313	220	0102OC15001312-149A
1.375	1.675	0.149	1.376	221	0102OC15001375-149A
1.437	1.738	0.149	1.438	222	0102OC15001437-149A
1.500	1.863	0.149	1.501	223	0102OC18201500-149A
1.625	1.988	0.149	1.626	224	0102OC18201625-149A
1.750	2.113	0.149	1.751	225	0102OC18201750-149A
1.875	2.238	0.149	1.876	226	0102OC18201875-149A
2.000	2.363	0.149	2.001	227	0102OC18202000-149A
2.125	2.488	0.149	2.126	228	0102OC18202125-149A
2.250	2.613	0.149	2.251	229	0102OC18202250-149A
2.375	2.738	0.149	2.376	230	0102OC18202375-149A
2.500	2.863	0.149	2.501	231	0102OC18202500-149A
2.625	2.988	0.149	2.626	232	0102OC18202625-149A
2.750	3.113	0.149	2.751	233	0102OC18202750-149A
2.875	3.238	0.149	2.876	234	0102OC18202875-149A
3.000	3.363	0.149	3.001	235	0102OC18203000-149A
3.125	3.488	0.149	3.126	236	0102OC18203125-149A
3.250	3.613	0.149	3.251	237	0102OC18203250-149A
3.375	3.738	0.149	3.376	238	0102OC18203375-149A
3.500	3.863	0.149	3.501	239	0102OC18203500-149A
3.625	3.988	0.149	3.626	240	0102OC18203625-149A
3.750	4.113	0.149	3.751	241	0102OC18203750-149A
3.875	4.238	0.149	3.876	242	0102OC18203875-149A
4.000	4.363	0.149	4.001	243	0102OC18204000-149A
4.125	4.488	0.149	4.126	244	0102OC18204125-149A
4.250	4.613	0.149	4.251	245	0102OC18204250-149A
4.375	4.738	0.149	4.376	246	0102OC18204375-149A
4.500	4.863	0.149	4.501	247	0102OC18204500-149A
4.625	4.988	0.149	4.626	248	0102OC18204625-149A
+ .000/- .005	+ .005/- .000	+ .005/- .000	+ .003/- .000		
1.500	1.991	0.221	1.501	326	0102OC24601500-221A
1.625	2.116	0.221	1.626	327	0102OC24601625-221A
1.750	2.241	0.221	1.751	328	0102OC24601750-221A
1.875	2.366	0.221	1.876	329	0102OC24601875-221A
2.000	2.491	0.221	2.001	330	0102OC24602000-221A

*If used with wear rings, refer to wear ring throat diameter, see Section 9.
For custom groove calculations, see Appendix C.



Table 5-27. OC Gland Dimensions — Inch (Continued)

A Rod Diameter	B Groove Diameter	C Groove Width	D Throat Diameter*	O-ring Dash Number	Part Number
+ .000/- .005	+ .005/- .000	+ .005/- .000	+ .003/- .000		
2.125	2.616	0.221	2.126	331	0102OC24602125-221A
2.250	2.741	0.221	2.251	332	0102OC24602250-221A
2.375	2.866	0.221	2.376	333	0102OC24602375-221A
2.500	2.991	0.221	2.501	334	0102OC24602500-221A
2.625	3.116	0.221	2.626	335	0102OC24602625-221A
2.750	3.241	0.221	2.751	336	0102OC24602750-221A
2.875	3.366	0.221	2.876	337	0102OC24602875-221A
3.000	3.491	0.221	3.001	338	0102OC24603000-221A
3.125	3.616	0.221	3.126	339	0102OC24603125-221A
3.250	3.741	0.221	3.251	340	0102OC24603250-221A
3.375	3.866	0.221	3.376	341	0102OC24603375-221A
3.500	3.991	0.221	3.501	342	0102OC24603500-221A
3.625	4.116	0.221	3.626	343	0102OC24603625-221A
3.750	4.241	0.221	3.751	344	0102OC24603750-221A
3.875	4.366	0.221	3.876	345	0102OC24603875-221A
4.000	4.491	0.221	4.001	346	0102OC24604000-221A
4.125	4.616	0.221	4.126	347	0102OC24604125-221A
4.250	4.741	0.221	4.251	348	0102OC24604250-221A
4.375	4.866	0.221	4.376	349	0102OC24604375-221A
+ .000/- .006	+ .006/- .000	+ .005/- .000	+ .004/- .000		
4.500	5.093	0.297	4.502	426	0102OC29704500-297A
4.625	5.218	0.297	4.627	427	0102OC29704625-297A
4.750	5.343	0.297	4.752	428	0102OC29704750-297A
4.875	5.468	0.297	4.877	429	0102OC29704875-297A
5.000	5.593	0.297	5.002	430	0102OC29705000-297A
5.125	5.718	0.297	5.127	431	0102OC29705125-297A
5.250	5.843	0.297	5.252	432	0102OC29705250-297A
5.375	5.968	0.297	5.377	433	0102OC29705375-297A
5.500	6.093	0.297	5.502	434	0102OC29705500-297A
5.625	6.218	0.297	5.627	435	0102OC29705625-297A
5.750	6.343	0.297	5.752	436	0102OC29705750-297A
5.875	6.468	0.297	5.877	437	0102OC29705875-297A
6.000	6.718	0.297	6.002	438	0102OC35906000-297A
6.250	6.968	0.297	6.252	439	0102OC35906250-297A
6.500	7.218	0.297	6.502	440	0102OC35906500-297A
6.750	7.468	0.297	6.752	441	0102OC35906750-297A
7.000	7.718	0.297	7.002	442	0102OC35907000-297A
7.250	7.968	0.297	7.252	443	0102OC35907250-297A
7.500	8.218	0.297	7.502	444	0102OC35907500-297A
7.750	8.468	0.297	7.752	445	0102OC35907750-297A
+ .000/- .006	+ .006/- .000	+ .005/- .000	+ .005/- .000		
8.000	8.968	0.297	8.002	446	0102OC48408000-297A
8.500	9.468	0.297	8.502	447	0102OC48408500-297A
9.000	9.968	0.297	9.002	448	0102OC48409000-297A
9.500	10.468	0.297	9.502	449	0102OC48409500-297A
10.000	10.968	0.297	10.002	450	0102OC48410000-297A
10.500	11.468	0.297	10.502	451	0102OC48410500-297A
11.000	11.968	0.297	11.002	452	0102OC48411000-297A

*If used with wear rings, refer to wear ring throat diameter, see Section 9.
For custom groove calculations, see Appendix C.



OC Profile**Table 5-27. OC Gland Dimensions — Inch (Continued)**

A Rod Diameter	B Groove Diameter	C Groove Width	D Throat Diameter*	O-ring Dash Number	Part Number
+ .000/- .006	+ .006/- .000	+ .005/- .000	+ .005/- .000		
11.500	12.468	0.297	11.502	453	0102OC48411500-297A
12.000	12.968	0.297	12.002	454	0102OC48412000-297A
12.500	13.468	0.297	12.502	455	0102OC48412500-297A
13.000	13.968	0.297	13.002	456	0102OC48413000-297A
13.500	14.468	0.297	13.502	457	0102OC48413500-297A
14.000	14.968	0.297	14.002	458	0102OC48414000-297A
14.500	15.468	0.297	14.502	459	0102OC48414500-297A
15.000	15.968	0.297	15.002	460	0102OC48415000-297A

*If used with wear rings, refer to wear ring throat diameter, see Section 9.

For custom groove calculations, see Appendix C.

NOTE: For sizes larger than those shown in the table, please contact your local Parker Seal representative.