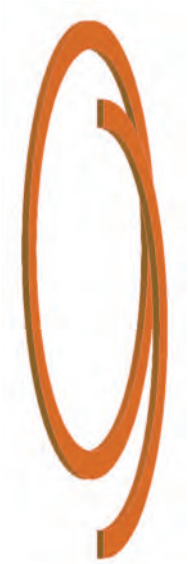
Back-up Ring
8700 Profile



8700 Profile, Low Profile Modular Back-up for PolyPak® and U-cup Seals

8700 back-ups provide added extrusion resistance to u-cups and PolyPak® seals with only minimal increase in gland width. This pro le of back-ups was originally designed to dramatically increase the pressure rating of rubber u-cups in situations where temperature or uid compatibility prevent the use of urethane seals. As such, 8700 back-ups share a part numbering system very similar to many of our rubber u-cup pro les for easy matching of components. Additionally, they are perfect for adding heavy duty pressure capabilities to medium duty urethane sealing systems.

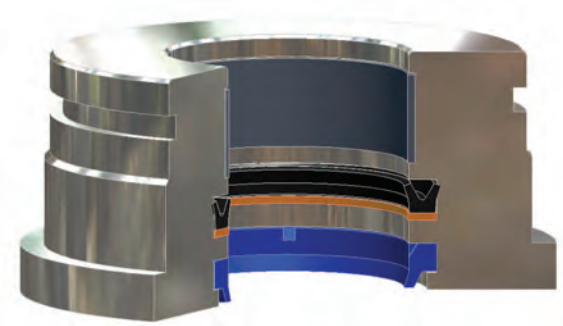
Technical Data

Standard Materials*	Temperature	Max. Pressure Range**
Z4651D60	-65°F to 275°F (-54°C to 135°C)	7,000 psi (482 bar)
Z4729D65	-65°F to 275°F (-54°C to 135°C)	7,000 psi (482 bar)

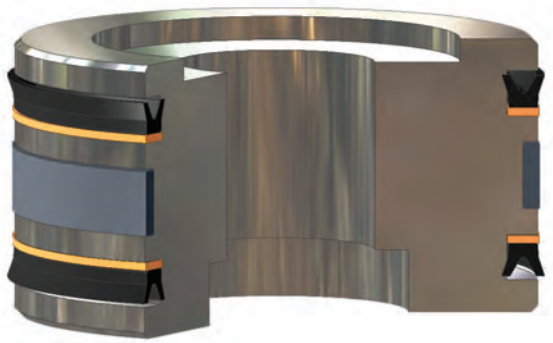
***Alternate Materials:** For applications that may require an alternate material, please contact your local Parker Seal representative.

** 4,900 psi (337 bar) with tight-tolerance wear rings.
3,500 psi (241 bar) with standard-tolerance wear rings.

8700 Cross-Section



8700 installed in Rod Gland



8700 installed in Piston Gland

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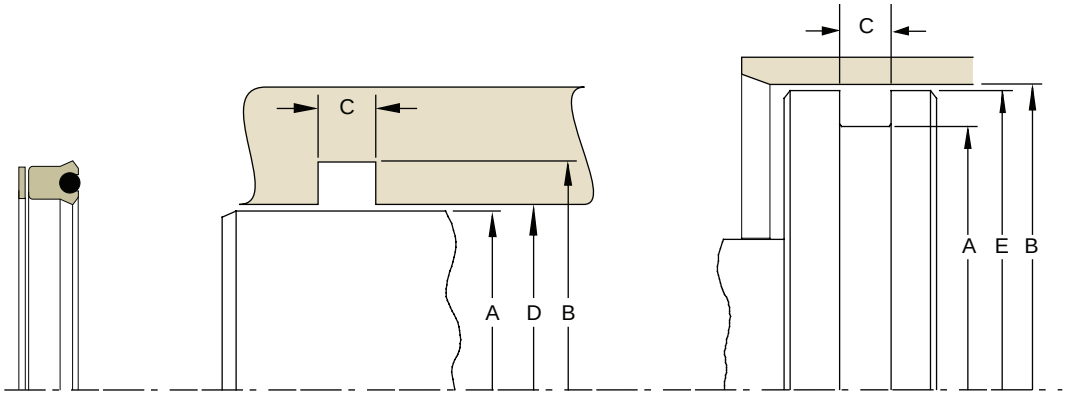
Part Number Nomenclature — 8700 Profile

Table 10-5. 8700 Profile — Inch

4	6	5	1	87	0	8	0	2	0	0	0	$KIVE
Seal Compound 4-Digit Material Code Example: 4651 = Polymyte® 4729 = Hytrel®				Pro le	Cross-Section (XX/32") Example: 08 = 1/4"		Nominal Part I.D. (x1000) Example: 2.000" I.D. x 1000 = 02000					Split option available $KIVE = Bevel

Gland Dimensions — 8700 Profile



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

Table 10-6. 8700 Gland Dimensions (Standard) — Inch6

A	B	C	D	E		Part Number		
Rod Diameter	(Rod) Groove Diameter	(Rod) Groove Width	(Rod) Throat Diameter*					
(Bore) Groove Diameter	Bore Diameter	(Bore) Groove Width		(Bore) Piston Diameter**	Radial Cross Section	Compound Code	Profile Code	
0.375	0.625	Add .062" to seal groove width	0.376	0.624	0.1250	XXXX	87	0400375
0.500	0.750		0.501	0.749	0.1250	XXXX	87	0400500
0.625	0.875		0.626	0.874	0.1250	XXXX	87	0400625
0.750	1.000		0.751	0.999	0.1250	XXXX	87	0400750
1.000	1.250		1.001	1.249	0.1250	XXXX	87	0401000
1.000	1.312		1.001	1.311	0.1560	XXXX	87	0501000
1.187	1.500		1.188	1.499	0.1565	XXXX	87	0501187
1.250	1.625		1.251	1.624	0.1875	XXXX	87	0601250
1.250	1.750		1.251	1.749	0.2500	XXXX	87	0801250
1.375	1.687		1.376	1.686	0.1560	XXXX	87	0501375
1.375	1.750		1.377	1.749	0.1875	XXXX	87	0601375
1.500	1.812		1.501	1.811	0.1560	XXXX	87	0501500
1.500	1.875		1.502	1.874	0.1875	XXXX	87	0601500
1.500	2.250		1.501	2.249	0.2500	XXXX	87	0801500
1.625	2.000		1.627	1.999	0.1875	XXXX	87	0601625
1.750	2.125		1.752	2.124	0.1875	XXXX	87	0601750

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

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Table 10-6. 8700 Gland Dimensions — Inch (Continued)

A	B	C	D	E		Part Number		
Rod Diameter	(Rod) Groove Diameter	(Rod) Groove Width	(Rod) Throat Diameter*					
(Bore) Groove Diameter	Bore Diameter	(Bore) Groove Width		(Bore) Piston Diameter**	Radial Cross Section	Compound Code	Profile Code	
2.000	2.375	Add .062" to seal groove width	2.002	2.374	0.1875	**XXXX**	**87**	**0602000**
2.000	2.500		2.001	2.499	0.2500	**XXXX**	**87**	**0802000**
2.125	2.500		2.127	2.499	0.1875	**XXXX**	**87**	**0602125**
2.500	2.937		2.501	2.936	0.2185	**XXXX**	**87**	**0702500**
2.812	3.250		2.813	3.249	0.2190	**XXXX**	**87**	**0702812**
3.000	3.437		3.001	3.436	0.2185	**XXXX**	**87**	**0703000**
3.062	3.500		3.063	3.499	0.2190	**XXXX**	**87**	**0703062**
3.250	3.750		3.251	3.749	0.2500	**XXXX**	**87**	**0803250**
3.500	4.000		3.501	3.999	0.2500	**XXXX**	**87**	**0803500**
3.750	4.250		3.751	4.249	0.2500	**XXXX**	**87**	**0803750**
4.000	4.500		4.001	4.499	0.2500	**XXXX**	**87**	**0804000**
4.500	5.000		4.501	4.999	0.2500	**XXXX**	**87**	**0804500**
5.000	5.562		5.001	5.561	0.2810	**XXXX**	**87**	**0905000**
5.375	6.000		5.377	5.998	0.3125	**XXXX**	**87**	**1005375**
5.375	6.125		5.377	6.123	0.3750	**XXXX**	**87**	**1205375**
5.437	6.000		5.438	5.999	0.2815	**XXXX**	**87**	**0905437**
5.500	6.125		5.502	6.123	0.3125	**XXXX**	**87**	**1005500**
6.375	7.000		6.377	6.998	0.3125	**XXXX**	**87**	**1006375**
6.437	7.000		6.438	6.999	0.2815	**XXXX**	**87**	**0906437**
7.000	7.625		7.002	7.623	0.3125	**XXXX**	**87**	**1007000**
7.375	8.000		7.377	7.998	0.3125	**XXXX**	**87**	**1007375**
8.500	9.125		8.502	9.123	0.3125	**XXXX**	**87**	**1008500**
10.000	10.750		10.002	10.748	0.3750	**XXXX**	**87**	**1210000**
11.000	12.000		11.002	11.998	0.5000	**XXXX**	**87**	**1611000**
11.250	12.000		11.252	11.998	0.3750	**XXXX**	**87**	**1211250**

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

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

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