

# Piston Seal BMP Profile

Catalog EPS 5370/USA



## BMP Profile, Rounded Lip Seal with Bumper Cushion

The Parker BMP profile is a low friction bumper and seal providing quiet deceleration and reduced end stroke noise in pneumatic piston applications. Designed to mount on the ends of the piston and to be used along with Parker's V6 profile cushion seal, the bumper pad absorbs the final inertia which prevents contact between the piston and tube ends. The BMP profile can also be used without cushion seals in less critical applications. The BMP profile has a rounded sealing edge which hydroplanes over pre-lubricated surfaces extending cycle life and reducing friction. The BMP profile is available in Parker proprietary Nitroxile compound, offering low friction and wear resistance, as well as fluorocarbon for extended temperature range.

## Technical Data

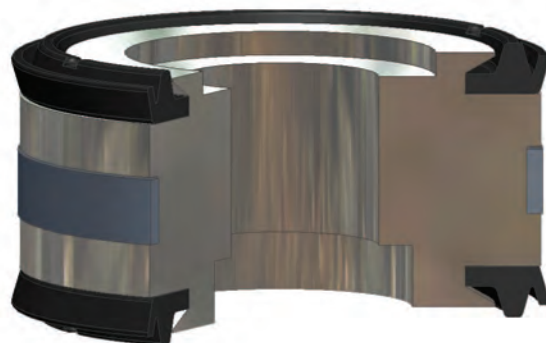
Standard Materials*	Temperature Range	Pressure Range†	Surface Speed
N4274A85	-10°F to 250°F (-23°C to 121°C)	250 psi (17 bar)	< 3 ft/s (1 m/s)
V4208A90	-5°F to 400°F (-21°C to 204°C)	250 psi (17 bar)	< 3 ft/s (1 m/s)

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

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



*BMP Cross-Section*



*BMP installed in Piston Gland*

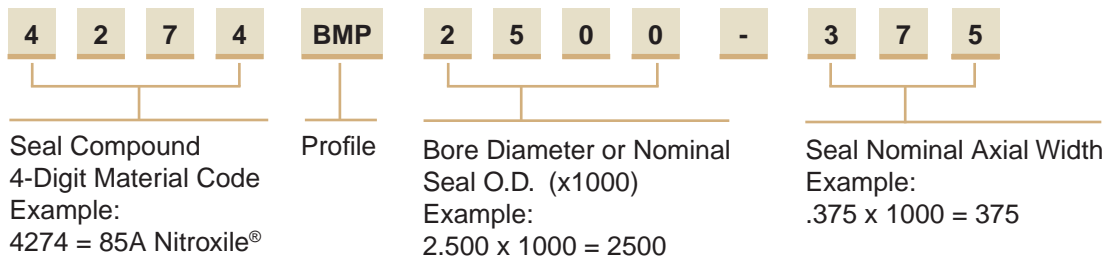
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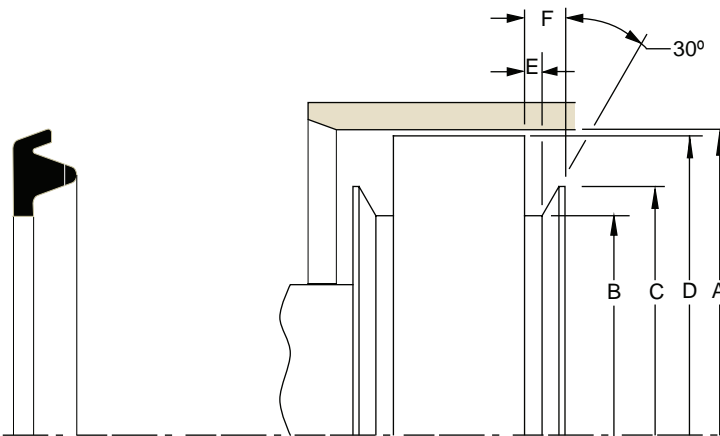
**BMP Profile**

**Part Number Nomenclature — BMP Profile**

Table 7-28. BMP Profile — Inch



**Gland Dimensions — BMP Profile**



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

Table 7-29. BMP Gland Dimensions — Inch

A Bore Diameter	B Groove Diameter	C Shoulder Diameter	D Piston Diameter*	E Groove Width	F Shoulder Height	Compound Codes		Part Number	
						4274	4208	Compound Code	
<b>+ .002/- .000</b>	<b>+ .000/- .005</b>	<b>+ .000/- .005</b>	<b>+ .000/- .002</b>	<b>+ .005/- .000</b>	<b>+ .005/- .000</b>				
1.125	0.639	0.851	1.123	0.110	0.204	X	X	XXXX	<b>BMP1125-312</b>
1.500	0.810	1.050	1.498	0.138	0.256	X	X	XXXX	<b>BMP1500-312</b>
2.000	1.202	1.440	1.998	0.138	0.256	X	X	XXXX	<b>BMP2000-312</b>
2.500	1.640	1.925	2.498	0.157	0.315	X	X	XXXX	<b>BMP2500-375</b>
3.250	2.150	2.550	3.248	0.157	0.315	X	X	XXXX	<b>BMP3250-375</b>
4.000	2.810	3.268	3.998	0.157	0.315	X	X	XXXX	<b>BMP4000-375</b>
5.000	3.525	4.095	4.998	0.157	0.315	X	X	XXXX	<b>BMP5000-500</b>

\*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.