

# Wear Ring / Bearing

## WPT Profile

Catalog EPS 5370/USA



### WPT Profile, Tight-Tolerance Piston Wear Ring

WPT tight-tolerance piston wear rings are the premier bearings for light- to heavy-duty hydraulic applications. WPTs are available in standard sizes from 1" up to 12" bore diameters (larger sizes upon request). WPT wear rings feature chamfered corners on the I.D. and are designed to snap closed during assembly to hold tight against the piston, eliminating bore interference and simplifying installation.

### Technical Data

#### Standard Material

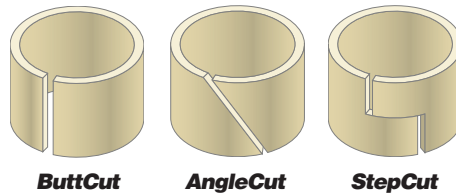
W4733 WearGard™

#### Radial Tolerance

+0.000"/-.002" (up to 6" O.D.); +0.000/-.003" (6" to 12" O.D.)

#### End Cuts

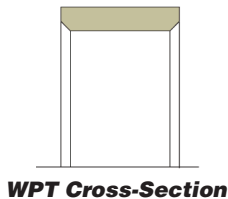
Butt Cut, Angle Cut, Step Cut



**ButtCut**

**AngleCut**

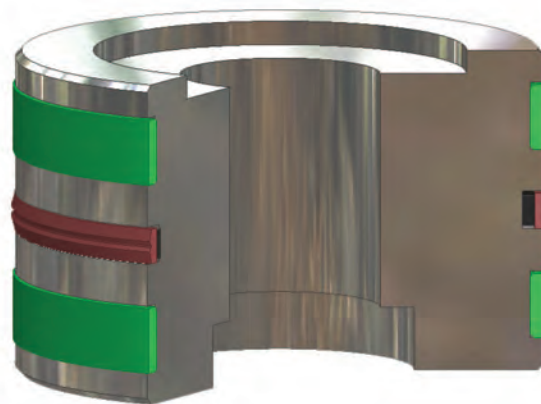
**StepCut**



**WPT Cross-Section**

#### Options

Virtually any width can be produced without assessing a setup charge. Additionally, other cross-sections not shown are available when required.

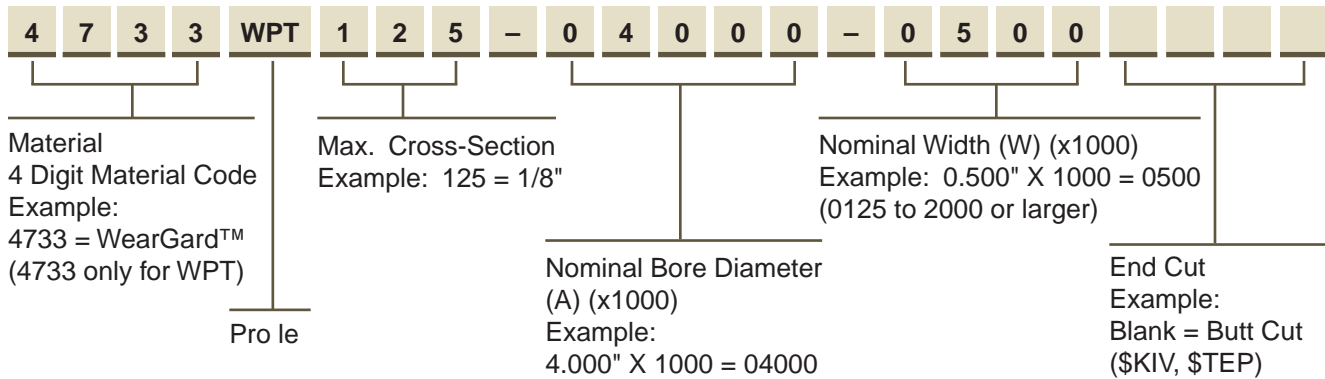


**Piston sealing system  
comprised of WPT wear rings and  
BP bi-directional piston seal**

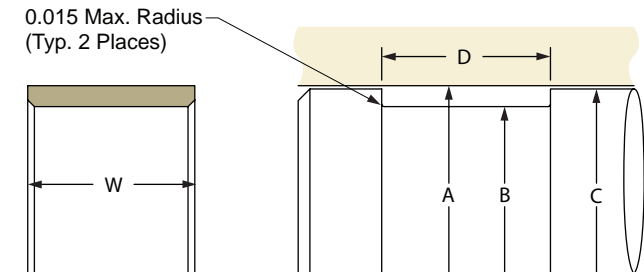
# WPT Profile

## Part Number Nomenclature — WPT Profile

Table 9-5. WPT Profile



## Gland Dimensions — WPT Profile



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

Table 9-6. WPT Gland Dimensions — Inch

A Bore Diameter	B Groove Diameter	C Piston Diameter	D Groove Width	Part Number
<b>+0.002/-0.000</b>	<b>+0.000/-0.002</b>	<b>+0.000/-0.002</b>	<b>+0.010/-0.000</b>	
1.000	0.875	0.983	D = W + 0.010"	4733WPT062-01000-XXXX
1.125	1.000	1.108	D = W + 0.010"	4733WPT062-01125-XXXX
1.250	1.125	1.233	D = W + 0.010"	4733WPT062-01250-XXXX
1.375	1.250	1.358	D = W + 0.010"	4733WPT062-01375-XXXX
1.500	1.375	1.483	D = W + 0.010"	4733WPT062-01500-XXXX
1.625	1.500	1.608	D = W + 0.010"	4733WPT062-01625-XXXX
1.750	1.625	1.733	D = W + 0.010"	4733WPT062-01750-XXXX
1.875	1.750	1.858	D = W + 0.010"	4733WPT062-01875-XXXX
2.375	2.250	2.358	D = W + 0.010"	4733WPT062-02375-XXXX
2.625	2.500	2.608	D = W + 0.010"	4733WPT062-02625-XXXX
<b>+0.002/-0.000</b>	<b>+0.000/-0.002</b>	<b>+0.000/-0.002</b>	<b>+0.010/-0.000</b>	
1.000	0.749	0.983	D = W + 0.010"	4733WPT125-01000-XXXX
1.125	0.874	1.108	D = W + 0.010"	4733WPT125-01125-XXXX
1.250	0.999	1.233	D = W + 0.010"	4733WPT125-01250-XXXX
1.375	1.124	1.358	D = W + 0.010"	4733WPT125-01375-XXXX
1.500	1.249	1.483	D = W + 0.010"	4733WPT125-01500-XXXX
1.625	1.374	1.608	D = W + 0.010"	4733WPT125-01625-XXXX
1.750	1.499	1.733	D = W + 0.010"	4733WPT125-01750-XXXX
1.875	1.624	1.858	D = W + 0.010"	4733WPT125-01875-XXXX

For custom groove calculations, see Appendix C.

09/01/07



Table 9-6. WPT Gland Dimensions — Inch (Continued)

A Bore Diameter	B Groove Diameter	C Piston Diameter	D Groove Width	Part Number
+ .002/- .000	+ .000/- .002	+ .000/- .002	+ .010/- .000	
2.000	1.749	1.983	D = W + 0.010"	4733WPT125-02000-XXXX
2.125	1.874	2.108	D = W + 0.010"	4733WPT125-02125-XXXX
2.250	1.999	2.233	D = W + 0.010"	4733WPT125-02250-XXXX
2.375	2.124	2.358	D = W + 0.010"	4733WPT125-02375-XXXX
2.500	2.249	2.483	D = W + 0.010"	4733WPT125-02500-XXXX
2.625	2.374	2.608	D = W + 0.010"	4733WPT125-02625-XXXX
2.750	2.499	2.733	D = W + 0.010"	4733WPT125-02750-XXXX
2.875	2.624	2.858	D = W + 0.010"	4733WPT125-02875-XXXX
3.000	2.749	2.983	D = W + 0.010"	4733WPT125-03000-XXXX
3.125	2.874	3.108	D = W + 0.010"	4733WPT125-03125-XXXX
3.250	2.999	3.233	D = W + 0.010"	4733WPT125-03250-XXXX
3.375	3.124	3.358	D = W + 0.010"	4733WPT125-03375-XXXX
3.500	3.249	3.483	D = W + 0.010"	4733WPT125-03500-XXXX
3.625	3.374	3.608	D = W + 0.010"	4733WPT125-03625-XXXX
3.750	3.499	3.733	D = W + 0.010"	4733WPT125-03750-XXXX
3.875	3.624	3.858	D = W + 0.010"	4733WPT125-03875-XXXX
3.937	3.687	3.920	D = W + 0.010"	4733WPT125-03937-XXXX
4.000	3.749	3.983	D = W + 0.010"	4733WPT125-04000-XXXX
4.125	3.874	4.108	D = W + 0.010"	4733WPT125-04125-XXXX
4.250	3.999	4.233	D = W + 0.010"	4733WPT125-04250-XXXX
4.375	4.124	4.358	D = W + 0.010"	4733WPT125-04375-XXXX
4.500	4.249	4.483	D = W + 0.010"	4733WPT125-04500-XXXX
4.625	4.374	4.608	D = W + 0.010"	4733WPT125-04625-XXXX
4.750	4.499	4.733	D = W + 0.010"	4733WPT125-04750-XXXX
4.875	4.624	4.858	D = W + 0.010"	4733WPT125-04875-XXXX
+ .004/- .000	+ .000/- .003	+ .000/- .003	+ .010/- .000	
5.000	4.749	4.982	D = W + 0.010"	4733WPT125-05000-XXXX
5.125	4.874	5.107	D = W + 0.010"	4733WPT125-05125-XXXX
5.250	4.999	5.232	D = W + 0.010"	4733WPT125-05250-XXXX
5.375	5.124	5.357	D = W + 0.010"	4733WPT125-05375-XXXX
5.500	5.249	5.482	D = W + 0.010"	4733WPT125-05500-XXXX
5.625	5.374	5.607	D = W + 0.010"	4733WPT125-05625-XXXX
5.750	5.499	5.732	D = W + 0.010"	4733WPT125-05750-XXXX
6.000	5.749	5.980	D = W + 0.010"	4733WPT125-06000-XXXX
6.250	5.999	6.230	D = W + 0.010"	4733WPT125-06250-XXXX
6.500	6.249	6.480	D = W + 0.010"	4733WPT125-06500-XXXX
6.750	6.499	6.730	D = W + 0.010"	4733WPT125-06750-XXXX
7.000	6.749	6.980	D = W + 0.010"	4733WPT125-07000-XXXX
7.500	7.249	7.480	D = W + 0.010"	4733WPT125-07500-XXXX

For custom groove calculations, see Appendix C.

**WPT Profile****Table 9-6. WPT Gland Dimensions Inch (Continued)**

A Bore Diameter	B Groove Diameter	C Piston Diameter	D Groove Width	Part Number
<b>+0.006/-0.000</b>	<b>+0.000/-0.004</b>	<b>+0.000/-0.004</b>	<b>+0.010/-0.000</b>	
8.000	7.749	7.979	D = W + 0.010"	<b>4733WPT125-08000-XXXX</b>
8.500	8.249	8.479	D = W + 0.010"	<b>4733WPT125-08500-XXXX</b>
<b>+0.006/-0.000</b>	<b>+0.000/-0.004</b>	<b>+0.000/-0.004</b>	<b>+0.010/-0.000</b>	
9.000	8.749	8.979	D = W + 0.010"	<b>4733WPT125-09000-XXXX</b>
9.500	9.249	9.479	D = W + 0.010"	<b>4733WPT125-09500-XXXX</b>
10.000	9.749	9.979	D = W + 0.010"	<b>4733WPT125-10000-XXXX</b>
10.500	10.249	10.479	D = W + 0.010"	<b>4733WPT125-10500-XXXX</b>
<b>+0.006/-0.000</b>	<b>+0.000/-0.004</b>	<b>+0.000/-0.004</b>	<b>+0.010/-0.000</b>	
11.000	10.749	10.979	D = W + 0.010"	<b>4733WPT125-11000-XXXX</b>
11.500	11.249	11.479	D = W + 0.010"	<b>4733WPT125-11500-XXXX</b>
12.000	11.749	11.979	D = W + 0.010"	<b>4733WPT125-12000-XXXX</b>

For custom groove calculations, see Appendix C.

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

**WPT Groove Calculation**

See Piston Wear Ring Groove Calculation in Appendix C.