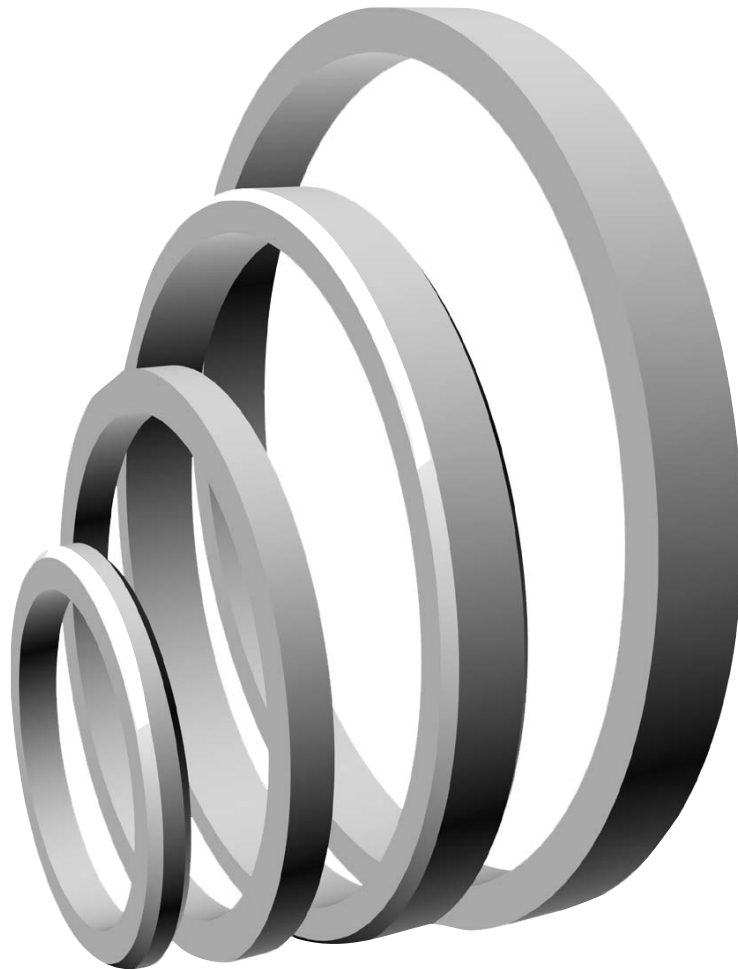




MACROTECH POLYSEAL, INC.

Service, Solutions, Performance

Piston Ring Product Guide



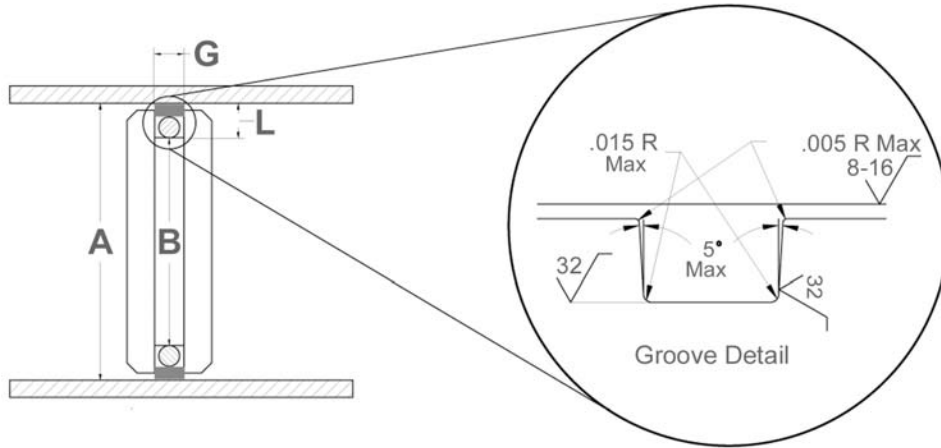
REV # 1999-D

PPR-1000



MPI Piston Ring Product Guide

The MPI Piston Rings are a superior answer to single and double-acting applications. MPI Piston Seals are machined to close tolerances. They are used in conjunction with an o-ring or square-ring loader. They are excellent for reciprocating situations, slow rotary and oscillating applications because of their self-lubricating qualities - virtually eliminating slip-stick. MPI Piston Rings can be produced for oversize bores when the application requires. In addition, metric sizes are available. MPI Piston Seals are a low-cost alternative for many uses.



NOTE: Most solid PTFE seals require stretching in order to be installed properly and without damage. Instructions for installation tools are available from the MPI Engineering Department.

(800) 453-8742
 Fax (800) 825-7325
engineering@polyseal.com

Piston Ring Series	O-ring Square-ring Series	(A) Bore Diameter	(B) Groove Diametrical Tolerance	(L) Groove Depth	(G) ± .002 Groove Width
P0A	000	0.500 to 1.50"	+/- .001"	.087"	.083"
P1A	100	0.688 to 3.00"	+/- .001"	.149"	.128"
P2A	200	01.56 to 5.50"	+/- .002"	.212"	.168"
P3A	300	03.12 to 12.0"	+/- .003"	.308"	.249"
P4A	400	05.25 to 16.0"	+/- .004"	.415"	.322"
P0B	000	0.500 to 1.50"	+/- .002"	.130"	.083"
P1B	100	01.56 to 1.93"	+/- .002"	.196"	.122"
P1B	100	02.00 to 5.50"	+/- .003"	.196"	.129"
P2B	200	05.60 to 12.0"	+/- .004"	.259"	.159"
P1C	100	01.00 to 2.75"	+/- .001"	.155"	.129"
P3C	300	03.00 to 5.00"	+/- .002"	.280"	.284"
P4C	400	05.25 to 8.50"	+/- .003"	.381"	.379"
P4C	400	09.00 to 14.0"	+/- .003"	.439"	.379"
P0D	000	05.00 to 1.50"	+/- .002"	.130"	.083"
P1D	100	01.56 to 1.93"	+/- .002"	.196"	.122"
P1D	100	02.00 to 5.50"	+/- .003"	.196"	.129"
P2D	200	05.60 to 12.0"	+/- .004"	.259"	.159"
P0E	000	0.500 to 0.87"	+/- .001"	.091"	.113"
P1E	100	0.937 to 2.87"	+/- .001"	.148"	.163"
P3E	300	03.00 to 5.12"	+/- .003"	.265"	.303"
P4E	400	05.25 to 8.50"	+/- .003"	.360"	.413"
P4E	400	08.50 to 16.0"	+/- .004"	.435"	.413"

Part Numbering Guide

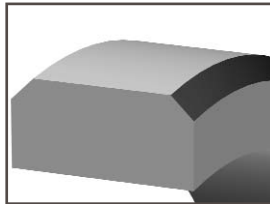


P 1B 04500 L S 702

Type and Nominal C/S

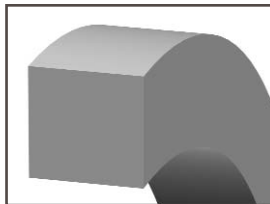
Chamfered Rectangular

- 0A - .062"
- 1A - .094"
- 2A - .125"
- 3A - .187"
- 4A - .250"



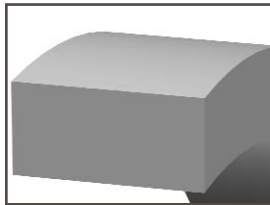
Square

- 0B - .062"
- 1B - .094"
- 2B - .125"



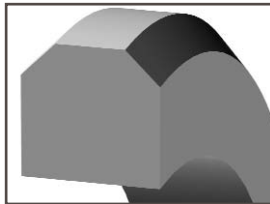
Rectangular

- 1C - .094"
- 2C - .125"
- 3C - .187"
- 4C - .250"



Chamfered Square

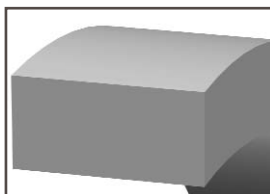
- 0D - .062"
- 1D - .094"
- 2D - .125"



Rectangular

(square-ring loader)

- 0E - .062"
- 1E - .094"
- 3E - .187"
- 4E - .250"



Seal Diameter

5 Digits for Bore Diameter, in inches (example is a 4.500 inch bore)

Cut Style

- L - Solid
- A - Angle
- B - Butt-Cut
- S - Step-Cut

Material

See Materials

Other Features

- S - Standard
- N - Notched

Materials *Compound*

- 700 - Virgin PTFE
- 701 - 25% Glass PTFE
- 702 - 15% Glass, 5% Moly PTFE
- 706 - 15% Glass PTFE
- 711 - 25% Carbon Graphite PTFE
- 712 - 5% Moly PTFE
- 713 - 60% Bronze PTFE

- 714 - 55% Bronze, 5% Moly PTFE
- 716 - 15% Graphite PTFE
- 721 - 15% Mineral PTFE
- 741 - 40% Bronze PTFE
- 771 - Mineral Moly PTFE
- 780 - Aqua Blue Virgin PTFE
- U1003 - Lubrithane 95A
(solid rectangular only)

Maximum Recommended Clearance Gaps

(in inches)

PSI

Clearance gap should be held as small as possible for maximum piston ring life.

<u>Bore Diameter</u>	<u>1000</u>	<u>2500</u>	<u>5000</u>
.500 - 5.500	.024	.009	.005
5.500 - 16.000	.038	.016	.006

* Service up to 200° F.

Important Notice

We reserve the right to make changes without notice in our products and in the information content of this brochure. The statements and information in the brochure are intended to serve only as guides. They are not warranties or binding descriptions of the products.

Requests for more information are welcome. In particular, we will be glad to provide samples for you to inspect and test in your assemblies and plant before you make a final decision for your application.

Notice of Exclusive Warranty and Remedy

Briefly, our exclusive warranty is against defects in materials and workmanship at the time of shipment. It is in lieu of all other warranties. There is no implied warranty of merchantability or fitness for a particular purpose. The exclusive remedy is replacement of defective products, or at our option, refund of their purchase price. All damages exceeding the purchase price are excluded, whether consequential or otherwise and regardless of cause. The terms and conditions on our printed quotation contain a much more complete statement of our Exclusive Warranty and Remedy.



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