



MACROTECH POLYSEAL, INC.

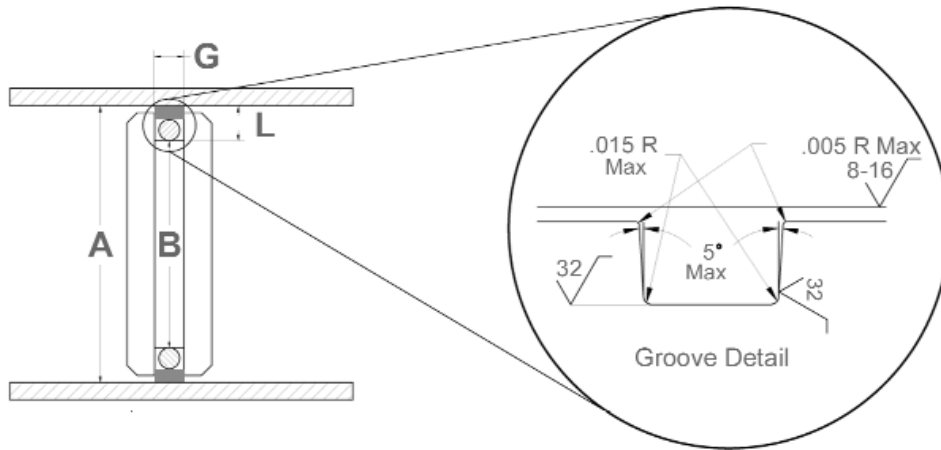
*MPI
Piston
Rings*





MPI PISTON RINGS

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 where 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

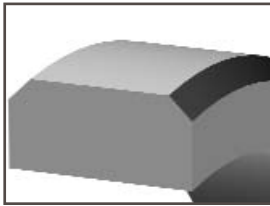


P 1B 04500 L S 702

Type and Nominal C/S

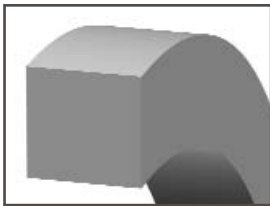
Chamfered Rectangular

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



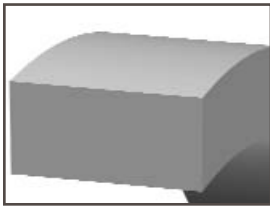
Square

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



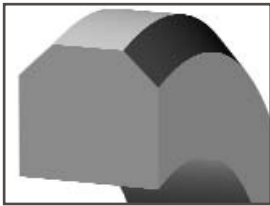
Rectangular

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



Chamfered Square

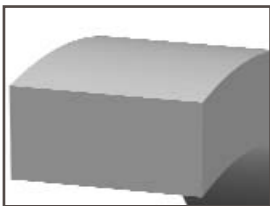
- 0D - .062"
- 1D - .094"
- 2D - .125"



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)

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

Bore Diameter

- .500 - 5.500
- 5.500 - 16.000

PSI

1000 2500 5000

- | | | |
|------|------|------|
| .024 | .009 | .005 |
| .038 | .016 | .006 |

* Service up to 200° F.

