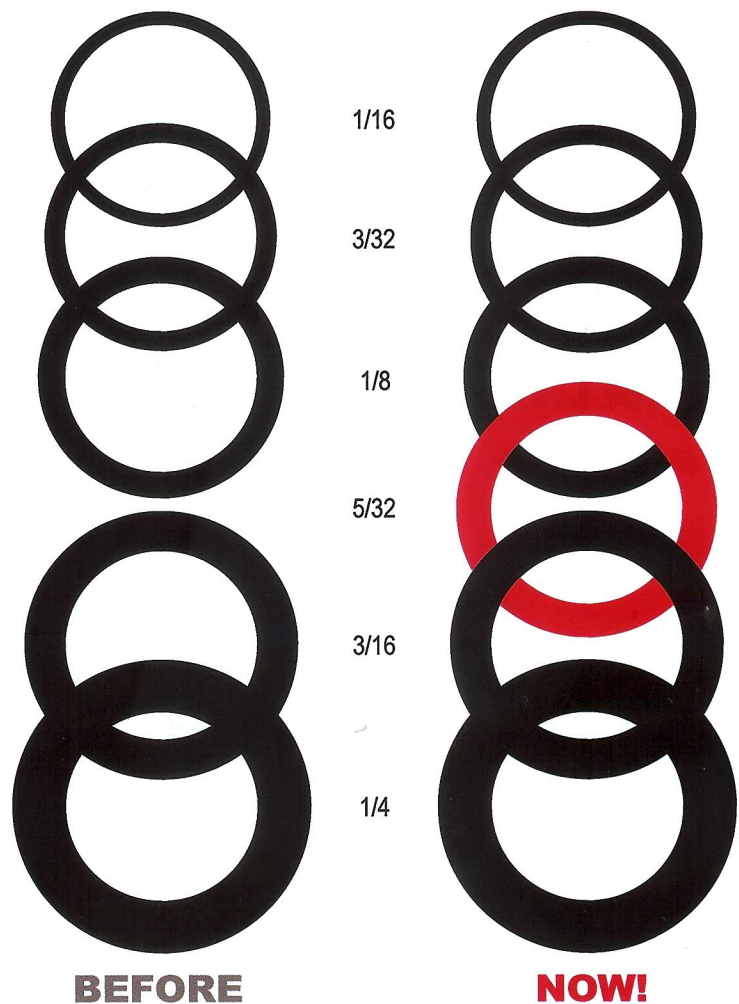


For some time AS-568 has been the standard used for choosing seals to build products using off-the shelf materials. Standard O-Ring cross sections were developed for 1/16", 3/32", 1/8", 3/16", and 1/4". Unfortunately, when the standard was designed, a gap in nominal cross section was left between 1/8" and 3/16". Engineers desiring an O-Ring cross section larger than 1/8" have been forced to jump a full 1/16 of an inch, or try to find a non-standard solution.

R.F. Carlson now has a series of 5/32" cross section seals to fill the gap left by AS-568. We've labeled these O-Rings our 5 series. Use the table below for seal gland design. See the reverse side of this page for dimensional information on individual O-Rings.

O-RING CROSS SECTION	.176
R.F. Carlson Size Number Range	-514 thru -572
O-Ring ID Size Range	1" thru 4-7/8"
AXIAL	
Squeeze (min.)	.027
Gland Depth (max.)	.147 ± .003
Groove Width (wall to wall)	.235 ± .005
RADIAL	
Squeeze (min.) Per Side	.022
Gland Depth (max.)	.150 - .004
Groove Width (Wall to Wall)	.210 ± .005
DYNAMIC	
Squeeze (min.) Per Side	.015
Gland Depth (max.)	.156
Groove Width	
With Roll	.235 ± .005
No Roll	.210 ± .005
DIAMETRAL CLEARANCE*	
500 PSI	.013
1500 PSI	.007
R Radius (max.)	.040
Eccentricity (max.)	.004

*Diametral Clearance based on 70 Durometer Compound



The Gland dimensions provided are only intended to be a starting point for your design. We recommend that you test each application to meet your requirements.

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