



O-Ring Selector

Region: North America

Unit: inch

Service Conditions & Defining Attributes

Operating Temperature	Minimum: 73°F Maximum: 73°F
Polymer Group	Acrylonitrile Butadiene Nitrile (NBR, XNBR)
Seal Hardness	60 SHA
Compound	N0525-60

O-ring Size Code

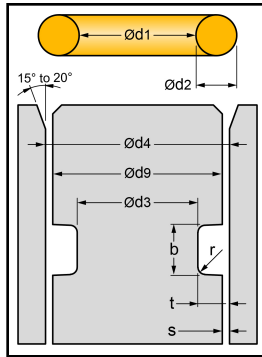
Hardware Configuration

Sealing Case	Radial - Piston Seal
Application	Static

Thermal Expansion & Volume Swelling

Seal	Group default	$112 \times 10^{-6} / K$
Piston / Groove	Aluminium	$24 \times 10^{-6} / K$
Bore	Aluminium	$24 \times 10^{-6} / K$
Seal max. volume swell		0 %

Sizing Selection



Back-up Rings			Amount : 2		Width : inch		
O-ring Size Code			2-238				
OR		Nominal	Tolerance	Limit	Min	Max	
ød1	Inner diameter	3.484	AS 568 ±	0.024	3.460	3.508	inch
ød2	Cross section	0.139	AS 568 ±	0.004	0.135	0.143	inch
Groove		Nominal	Lower	Upper	Min	Max	
ød4	Bore	3.7500	0.0000	0.0020	3.7500	3.7520	inch
ød9	Piston	3.7470	-0.0010	0.0000	3.7460	3.7470	inch
ød3	Groove	3.5280	-0.0020	0.0000	3.5260	3.5280	inch
b	Width	0.1870	0.0000	0.0050	0.1870	0.1920	inch
r	Radius	0.0150	-0.0040	0.0040	0.0110	0.0190	inch

Results

● Recommended ⚠ Warning ❌ Critical

Results	Recommendation	Concentric		Eccentric		
		Min	Max	Min	Max	
t Depth + gap		0.1110	0.1130	0.1090	0.1160	inch
s gap		0.0015	0.0030		0.0060	inch
Stretch of OR inner-Ø	0...6	● 0.5	● 2.0			%
Compression of OR Ød2	16...23	❌ 14.8	● 22.0	❌ 12.6	⚠ 23.4	%
Gland fill	60...90	● 65.3	● 78.2			%
Total deformation force		48	101			lbf

Notes

Recommendations on application design and material selection are based on available technical data and are offered as suggestions only. Each user should make his own tests to determine the suitability for his own particular use. Parker offers no express or implied warranties concerning the form, fit, or function of a product in any application.

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