

O-Ring Selector

Region: International

Unit: mm

Service Conditions & Defining Attributes

Operating Temperature	Minimum: 0°C Maximum: 40°C
Polymer Group	Acrylonitrile Butadiene Nitrile (NBR, XNBR)
Seal Hardness	75 SHA
Compound	

O-ring Size Code

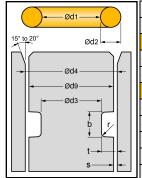
Hardware Configuration

Sealing Case	Radial - Piston Seal
Application	Hydraulic dynamic

Thermal Expansion & Volume Swelling

Seal	Group default	112 × 10 ⁻⁶ / K
Piston / Groove	Iron / Steel	12 × 10 ⁻⁶ / K
Bore	ABS	$74 \times 10^{-6} / K$
Seal max. volume swell		5 %

Sizing Selection



Back-up Rings		Amount: 0		Width: 10 mm			
O-ring Size Code							
OR		Nominal	Tolerance	Limit	Min	Max	
ød1 ød2	Inner diameter	8.000	ISO 3601-1 B ±	0.170	7.830	8.170	mm
ød2	Cross section	2.000	ISO 3601-1 B ±	0.080	1.920	2.080	mm
Groove		Nominal	Lower	Upper	Min	Max	
	Bore	11.350	0.000	0.027	11.350	11.377	mm
ød9 ød3	Piston	10.850	-0.034	-0.016	10.816	10.834	mm
ød3	Groove	8.250	-0.036	0.000	8.214	8.250	mm
b	Width	2.700	0.000	0.200	2.700	2.900	mm
r	Radius	0.100	-0.100	0.100	0.000	0.200	mm

Recommended 🛕 Warning 🥴 Critical



Results	Recommendation	Concentric		Eccentric		
		Min	Max	Min	Max	
t Depth + gap		1.542	1.588	1.283	1.874	mm
s gap		0.250	0.287		0.573	mm
Stretch of OR inner-ø	06	0.5	5.4			%
Compression of OR ød2	1326	14.4	25.2	(-1)	♀ 38.2	%
Gland fill	6090		89.6			%
Total deformation force		26	79			N

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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