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

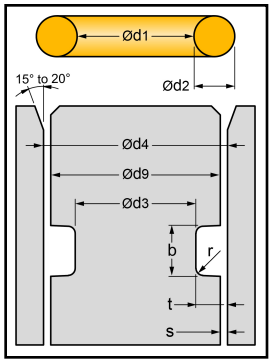
Hardware Configuration

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	74×10^{-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	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**	
ød4	Bore	11.350	0.000	0.027	11.350	11.377	mm
ød9	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

Results

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	0...6	0.5	5.4			%
Compression of OR ød2	13...26	14.4	25.2	(-1)	38.2	%
Gland fill	60...90		89.6			%
Total deformation force		26	79			N

Notes

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