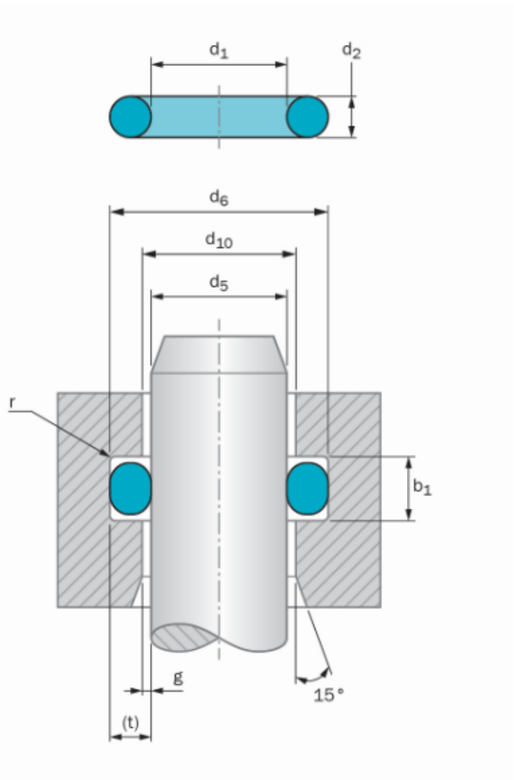
Trelleborg Sealing Solutions

Radial Inner Sealing (dynamic)

Input (in.)		Nominal Size	Standard/Fit	Lower Tolerance Limit (73°F)	Upper Tolerance Limit (73°F)	Min. Dimension (73°F)	Max. Dimension (73°F)
Bore-Ø	d_{10}	0.1260	H8*	0.0000	0.0007	0.1260	0.1267
Rod-Ø	d_5	0.1250	f7*	-0.0009	-0.0004	0.1241	0.1246
Groove-Ø	d_6	0.2350	H9*	0.0000	0.0012	0.2350	0.2362
Groove Width	b_1	0.1500	recom.	0.0000	0.0098	0.1500	0.1598
Groove Radius	r	0.0118	recom.	-0.0039	0.0039	0.0079	0.0157
O-Ring Inside-Ø	d_1	0.114	ISO	-0.005	0.005	0.109	0.119
OR Cross-Section-Ø	d_2	0.070	ISO	-0.003	0.003	0.067	0.073

Temperature	°F	73	Linear Thermal Expansion Coefficient 10^{-6} K^{-1}		0
O-Ring Material Group		---	O-Ring Material Hardness (IRHD)		---



Version 5.1

ISO = in accordance with ISO 3601-1 Class B
R = Reduction in cross section due to elongation
OR = O-Ring
t = Radial Housing Depth (incl. gap)
* = in accordance with ISO 286-2

Calculation Results	Concentric Position Min.	Concentric Position Max.		Eccentric Position Min.	Eccentric Position Max.
Compression incl. R (%)	9.05	22.03	Compression incl. R (%)	6.96	23.52
Compression incl. R (in.)	0.006	0.016	Compression incl. R (in.)	0.004	0.017
Gap g (in.)	0.0007	0.0013	Gap g (in.)		0.0026
Housing Fill (%)	38.63	55.07	Selected O-Ring	-	-
Stretch OR Inside-Ø (%)	4.31	14.32	**TSS Part No:**		**ORAR00006**
R (%)	3.02	8.06			
OR Cross-Section-Ø incl. R (in.)	0.062	0.071			
t (in.)	0.055	0.056			
Compression OR Outside-Ø (%)	2.81	11.32			
Total Compression Force (N)	-	-			

Warning Messages

1. Circumferential compression at the OR Outside-Ø > 5%
2. Stretch > 6%

My Notes

Recommendations in accordance with ISO 3601-2

Cross-sectional Compression

radial inner/outer sealing, static:	10-35%
radial inner/outer sealing, dynamic:	6-27%
Axial sealing, static:	13-36%

Stretch OR inside -Ø

radial inner/outer sealing, static:	2 - 8% (min. 0.5% /max. 9%)
radial inner/outer sealing, dynamic:	2 - 5% (min. 0.5% /max. 6%)
Axial sealing:	max. 3%

Compression OR outside-Ø
(radial inner sealing, only)

for OR Inside-Ø > 250mm (9.843 in.):	max. 3%
OR-Innen-Ø ≤ 250mm (9.843 in.):	max. 5%
Axial sealing:	max. 2%

Housing fill: max. 85%

Recommendations for FFKM O-Rings

Cross - sectional Compression:	12-18%
Stretch OR Inside-Ø-:	max. 3%

Contact

Please find your local TSS contact **here**

Disclaimer

Trelleborg Sealing Solutions products have diverse application uses. The utilization, selection and designation of any specific Trelleborg Sealing Solutions product in any specific application is the sole responsibility of the O-Ring calculation program user, customer and/or purchaser. Trelleborg Sealing Solutions is not obliged to the user of the O-Ring calculation program, customer and/or purchaser to provide any consultation in conjunction with or as a result thereof.

Any measurements, values and/or dimensions obtained through the O-Ring calculation program are guidelines only and as such are intended for orientation purposes only with the sole function to ease the selection of a possible Trelleborg Sealing Solutions product that may be suitable for the use in a particular application. Any Trelleborg Sealing Solutions product ascertained as a result of using data obtained through the O-Ring calculation program for use in a specific application must be assayed by the O-Ring calculation program end user, customer and/or purchaser through the appropriate test methods in order to ensure product suitability. Media contact, operating temperature and assembly conditions can result in significant divergences from the calculated values.

No warranty is therefore provided or implied by Trelleborg Sealing Solutions with regards to applicability of any of its products in conjunction with the specific application intended by the O-Ring calculation program user, customer and/or purchaser. In no event shall Trelleborg Sealing Solutions, or any agent or representative thereof, be liable for any damages whatsoever resulting from non-compliance with this advice.