

The **FDI®** -O-Ring model 51 is reinforced developed to withstand high pressure applications at large gap situations.

\*with antisticking coating ( reduced friction )

The risk of gap extrusion is quite low as shown in graph beside.

**Pressure load:** max. 100 MPa / 1000 Bar

material:	Range of temperature°C		chemical resistance
	min.	max.	
<b>FDI®</b> 1000	-40	+100	as NBR
<b>FDI®</b> 1004 *	-40	+120	as NBR
<b>FDI®</b> 2000	-40	+170	as HNBR
<b>FDI®</b> 2004 *	-40	+170	as HNBR
<b>FDI®</b> 3000	-30	+200	as FPM
<b>FDI®</b> 3004 *	-30	+200	as FPM

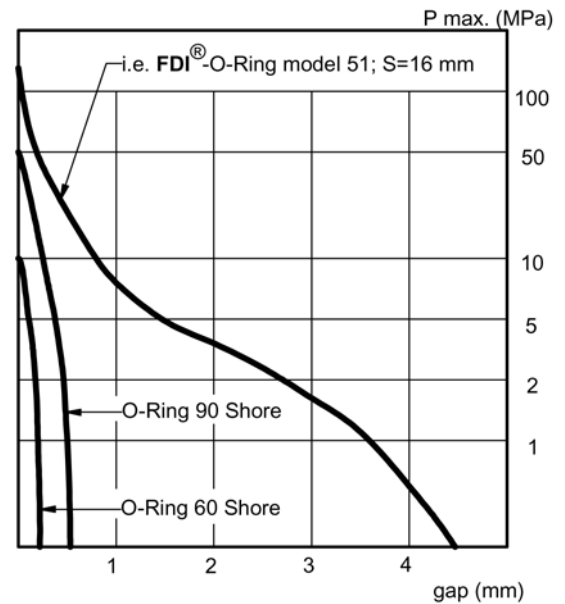


Figure 1

### Fitting instructions:

- don't fit over sharp corners (threads, nuts) !
- don't twist
- ratio of extension: approx. max. 2 % .  
shaft design:  $d \geq A \times 100$   
or equal to achieve max. extension allowed.

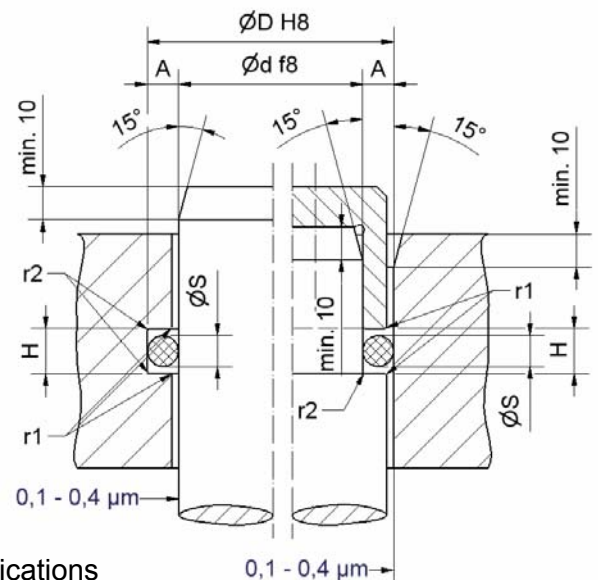


Figure 2

Recommended cross sections for static and dynamic applications as shown in following table.

d (mm)	S (mm)	r1 max.	r2 max.	static use		dynamic use	
				A (mm)	H (mm)	A (mm)	H (mm)
< 100	6	0,2	0,5	4,8	7 ± 0,1	5,1	7,5 ± 0,1
100 - 200	8	0,2	0,5	6,4	9,4 ± 0,1	6,8	10 ± 0,1
200 - 300	10	0,4	0,8	8	11,7 ± 0,1	8,5	12,5 ± 0,1
300 - 450	12	0,4	0,8	9,6	14 ± 0,2	10,2	15 ± 0,2
450 - 600	14	0,4	0,8	11,2	16,4 ± 0,2	11,9	17,5 ± 0,2
600 - 900	16	0,5	1	12,8	18,7 ± 0,2	13,6	20 ± 0,2
> 900	18	0,5	1	14,4	21,1 ± 0,3	15,3	22,5 ± 0,3

Other sizes and core dia available on request.

The data shown above are based on long lasting experience in the manufacturing and use of sealing elements. As there are many unknown possible parameters and conditions in practice, which may limit standard performance, it is requested that the user runs practical tests. Except as expressly stated, Friedrich's liability, expressed or implied, is limited to the published selling price of our defective item.

**FDI®** and **FDI-DICHTUNGEN®** are registered trademarks of Friedrich GmbH.