

In case of large radial runout **FDI[®]-Seal model Y or YS** is recommended.

The seal will rotate with the shaft. The dynamic movement/contact will be at the top axial lip sections, which are in contact with the housing (or cover plates).

Axial movement of the shaft is allowed at the same time.

For large axial movement **model Y-G or Y-SG** is recommended.

FDI[®]-Y Seal are designed for pressure load as well. The radial runout is limited acc. indicated gap C between shaft and housing. For larger runout special seals are available on request.

spring: stainless steel

model: **Y**

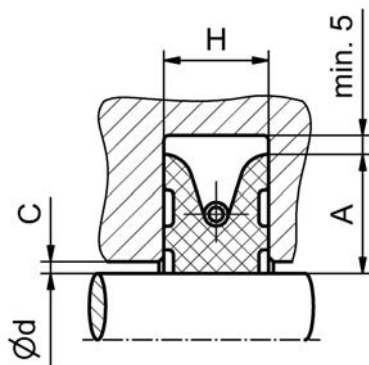


Figure 1

Y-S

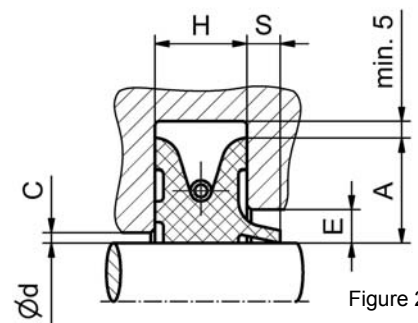


Figure 2

Y-G

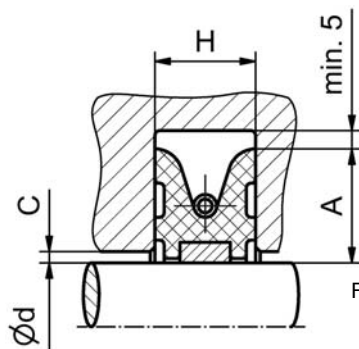


Figure 3

Y-SG

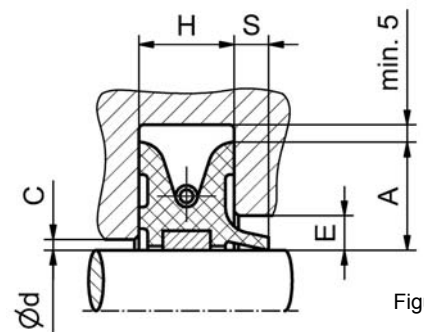


Figure 4

lubrication: requested!
media to be sealed: oil, grease, water, slurry, suspension with hard particles

model		radial runout	operating pressure max.	
		mm max.	Bar	MPa
Y + Y-G	endless	Pls. see „C“ 5	50	5
YS + Y-SG	endless	Pls. see „C“ 5	50	5

Split version possible.

material:	temperature °C		speed	chemical resistance
	min.	max.	m/s max.	
FDI[®] 1002	-40	+120	15	as NBR
FDI[®] 2002	-40	+170	25	as HNBR
FDI[®] 3002	-30	+200	30	as FPM

The indicated data are limits and can't be combined!
 PV max. = 5 MPa x m/s (50 Bar x m/s)

Ø range of d (mm) h 11	cross section radial width Tol. height			C	E min.	S
	A	H	+ / -			
< 50	11	10	± 0,1	2	6	5
50 - 100	16	12,5	± 0,1	3	7	6
100 - 250	20	16	± 0,1	3	7	6
250 - 400	22	20	± 0,1	4	9	8
400 - 600	25	22	± 0,2	4	10	8
> 600	32	25	± 0,2	5	11	9

Indicated sizes are dimensions of housing!

except "A" = height of profile!

To allow radial movement of the seal: A + max. 5 mm.
 (according radial runout)

Running surface:	hardness min. HRc	roughness Ra
- axial surface	45	0,2 - 0,3 helix free
- Ø shaft	30	0,6 - 1

Size list:

Ø d h11	Ø O.D. (seal)	H	A	Type			
				Y	Y-S	Y-G	Y-SG
(mm)	(mm)	(mm)	(mm)				
80	112	12,5	16	x			
90	116	12	13	x			
124	164	16/22	20		x		
140	180	16	20				x
160	200	16	20	x			x
170	210	16	20	x		x	
180	220	16	20				x
200	240	16	20	x			x
220	245	12	12,5	x			
220	260	16	20	x			
250	290	16	20	x			x
260	285	16	12,5	x			
260	304	20	22	x			
270	314	20	22				x
280	324	20	22	x			
300	344	20	22				x
350	394	20	22				x
560	610	22	25				x
640	704	25	32	x			
840	904	25	18			x	
1000	1064	25/33	32				x
1270	1416	28/38	73				x
1350	1414	25	32				x
1700	1764	25	32				x
1880	1920	16	20	x			
1880	1924	28	22	x			

Other sizes on request.

The data shown above is 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.