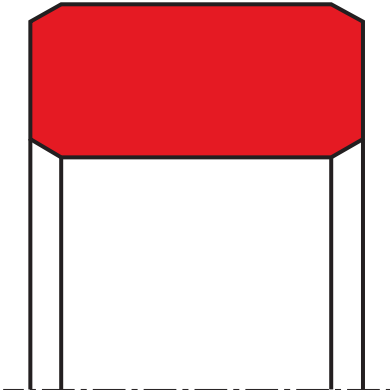


static seal R14

seal spec



description

well known, simple square ring, mainly used for static applications or as gaskets. excellent adaptation possibilities for diverse temperatures and media by selection of suitable seal material. the R14 is a good alternative to the R13 (O-Ring) as an axial static seal in cases where particular demands are made. the application and handling of R14 is comparable with those of R13. the R14 is used as a static seal so that the square form remains practically constant even under high pressures.

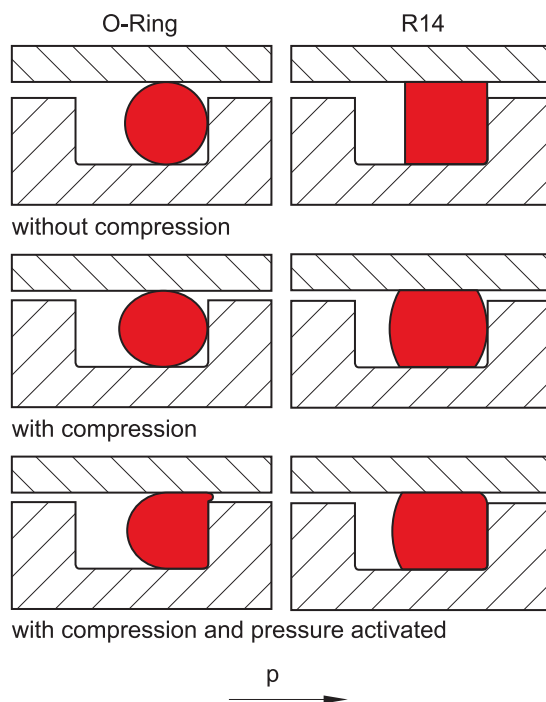
application



category of profile

machined or molded/standard/trade product.

application for flanges, valves, plates & locks



installatioin comparison R13 & R14

**advantages**

- high resistance to extrusion, not sensitive to gap extrusion
- minimum mechanical deformation of the cross-section
- outstanding sealing behaviour over long periods
- good compression set
- no twisting in the groove
- no relative movements during pressure cycles
- dimensionally stable under pressure
- no additional Back-up Ring required
- no parting line or flash on the seal
- long service life
- high leak tightness

media

depending on the used material oil-based hydraulic fluids, lubricating oils, water, air and further media.

operating parameters & materials

diameter range: up to 600 mm

material	temperature	max. surface speed	max. pressure
all material possible	choice is dependent upon application (preload, ...)		

the stated operation conditions represent general indications. it is recommended not to use all maximum values simultaneously. surface speed limits apply only to the presence of adequate lubrication film.

seal housing is dependent upon application (e.g.: as a bearing box) according to profile description

surface quality

type of load	surface roughness	Rtmax (µm)	Rx (µm)	Ra (µm)
axial - static	axial - static	≤ 10,0	≤ 6,3	≤ 1,6
	groove surface (groove bottom, groove flanks)	≤ 16,0	≤ 6,3	≤ 1,6
under pulsating pressures	axial - static	≤ 10,0	≤ 6,3	≤ 0,8
	groove surface (groove bottom, groove flanks)	≤ 16,0	≤ 6,3	≤ 1,6

tolerances for R14 inside Ød

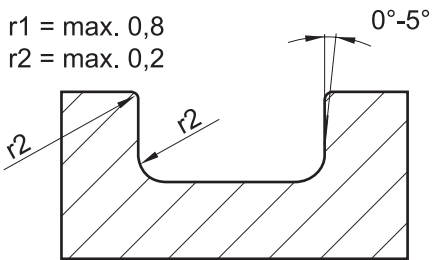
inside Ød	tolerance ±
4,00 - 14,00	0,13
14,01 - 15,60	0,18
15,61 - 25,12	0,23
25,13 - 29,78	0,25
29,79 - 34,65	0,28
34,66 - 44,17	0,33
44,18 - 50,52	0,38
50,53 - 66,40	0,46
66,41 - 75,92	0,51
75,93 - 94,97	0,61
94,98 - 107,67	0,69
107,68 - 126,72	0,76
126,73 - 133,07	0,94
133,08 - 158,42	0,89
158,43 - 183,82	1,02
183,83 - 209,22	1,14
209,23 - 234,62	1,27
234,63 - 278,99	1,4
279,00 - 405,26	1,65
405,27 - 430,66	1,91
430,67 - 456,07	2,03



tolerances dimension

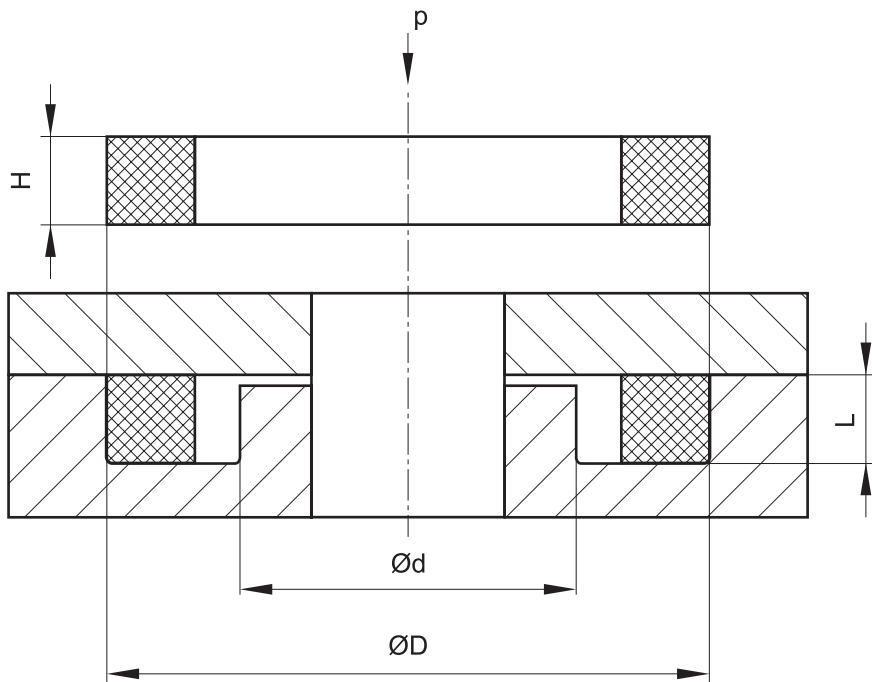
cs	tolerance ±	H	tolerance ±
1.68	0.15	1.68	0.08
2.51	0.15	2.51	0.10
3.40	0.15	3.40	0.10
5.16	0.15	5.16	0.10
6.73	0.15	6.73	0.10

groove specifications



seal & housing recommendations

please note that we are able to produce those profiles to your specific need or any non standard housing. for detail measurements, please see seal-mart catalog...



don't hesitate to contact our technical department for further information or for special requirements (temperature, speed etc.), so that suitable materials and/or designs can be recommended.