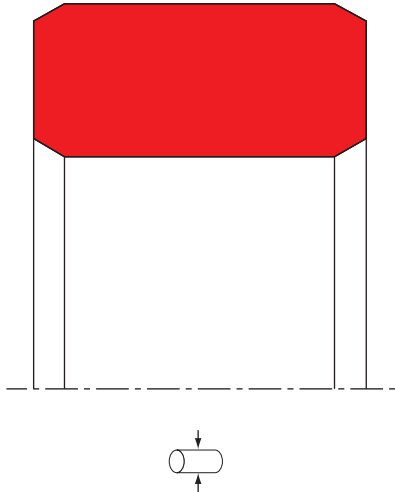


SEAL SPEC R14



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.

category of profile

machined or molded/standard/trade product.

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

operating parameter & material

sealing	temperature	max speed	max pressure ¹
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.

surface quality

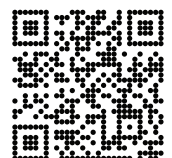
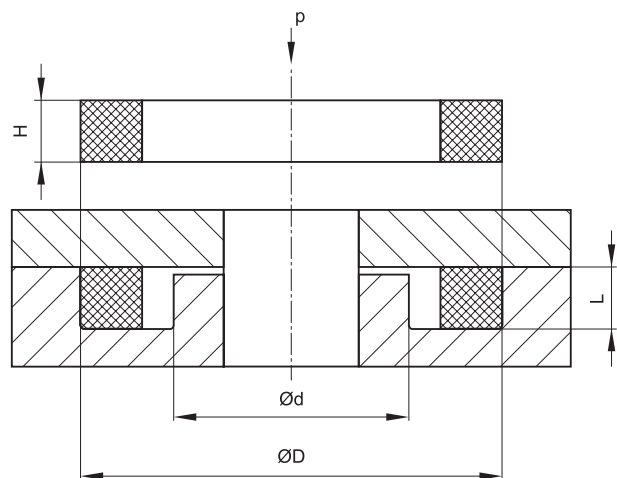
type of load	surface roughness	Rtmax (µm)	Rx (µm)	Ra (µm)
axial-static	axial-static	≤ 10	≤ 6,3	≤ 1,6
axial-static	groove surface	≤ 16	≤ 6,3	≤ 1,6
pulsating	axial-static	≤ 10	≤ 6,3	≤ 0,8
pulsating	groove surface	≤ 16	≤ 6,3	≤ 1,6

tolerance 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

seal & housing recommendations

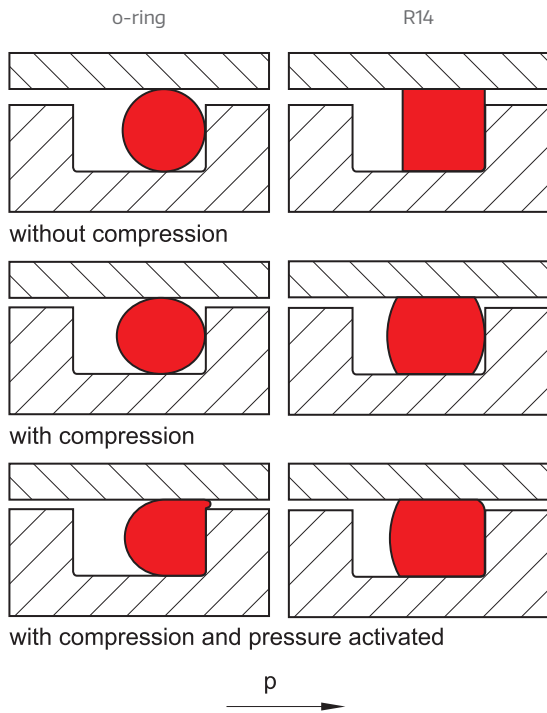
please note that we are able to produce those profiles to your specific need or any non standard housing. for detail measurements, please see seal-mart catalog...



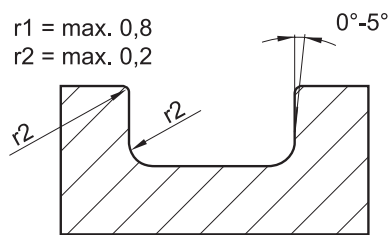
SEAL SPEC R14



application for flanges, valves, plates & locks



groove specifications



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	1,40
279,00 - 405,26	1,65
405,27 - 430,66	1,91
430,67 - 456,07	2,03

