

## **Pressure**

In most applications there is no or little differential pressure. Where the rotary shaft seal is exposed to pressure, however, the sealing lip is pressed against the shaft, thus increasing temperature. In some cases the pressure can even cause overturning of the sealing lip.

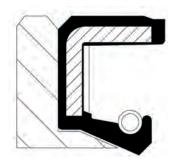
Over 0,2 bar at higher peripheral speeds or over 0,5 bar at low peripheral speeds back up rings or special designed rotary shaft seals with stronger sealing lip and supporting metal insert must be used. For the latter we refer to our P-types (e.g. AS-P). Nevertheless permissible overpressures with P-type shaft seals are limited (see diagram below).

## 10 bar 9 Shaft diameter Ø 25 8 Ø 50 7 Ø 100 6 Ø 150 5 4 3 2 1 0 1000 7000 RPM 0 2000 3000 4000 5000 6000

## Rotary shaft seals AS-P. Permissible Overpressure

On request we can supply shaft seals with special reinforced lip to withstand pressure over the indicated value.

If back up rings are installed, standard rotary shaft seals can be used. However, back up rings increase costs and often the necessary space for installation is not available. Sometimes the use of back up rings is even not possible, since it requires a very accurate fitting as well as very low eccentricity of the shaft.



Specially designed rotary shaft seals (P-types) are therefore preferred, even if more accurate fitting and lower eccentricity of the shaft than normal cases is required.

