## **FKM Shaft Seals**

Shaft seals are rotary seals. They are used to seal rotating or swivelling machine elements (mainly shafts). The areas of application are diverse and can be found in all areas of mechanical and apparatus engineering.

## **OS-F10 (WA)**



## **OS-F11 (WAS)**



The Ametric® standard Rotary Seals in FKM are the types OS-F10 (WA) and OS-F11 (WAS). The latter has an additional protective lip against intrusion of external contaminations.

There are good reasons to use exactly this design, because it allows a universal use! The metal case is fully covered with elastomer and the sealing lip is supported by a stainless steel spring. The question of the exact purpose, which often can not be answered anyway, may be omitted. However, if it is known that the FKM elastomer is only provided for thermal reasons, of course, the less expensive OS-A10 design can be used without risk!

Ametric® has more than 1000 dimensions available from stock.

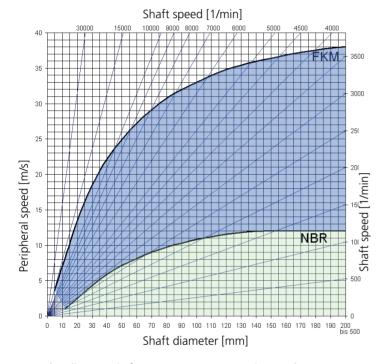
### **Typical applications**

Mechanical and apparatus engineering, agricultural machinery, construction machines, drive systems, industrial gearboxes, electric motors



For the types OS-F10 (WA) and OS-F11 (WAS) the standard material is FKM 80 brown, the spring made of stainless steel 1.4301 and the metal case out of carbon steel according to DIN EN 10139.

As further elastomer material NBR, VMQ, ACM, HNBR, CR and EPDM can be used.



The diagram is for no-pressure operation and favourable conditions with regard to lubrication and heat dissipation (type OS-F10).



#### **Special features**

- corrosion-protected metal case
- the standard materials combination (FKM + stainless steel spring) is suitable for many media and chemicals and for high shaft speeds and high temperatures
- modern sealing lip design for high dynamic sealing action
- reliable static sealing inside the housing
- for housings with high thermal expansion,
  e.g., light metal housing
- for split housings
- for housings with increased surface roughness
- for sealing low viscous and gaseous media
- no risk of fretting corrosion
- OS-F11 with protective lip: efficient protection against air side contaminations

# Application parameters for the standard materials combination:

**Temperature:** -25°C to +160°C

Pressure: depressurized, max. 0,05 MPa

Shaft speed: acc. to chart

**Media:** mineral oil based lubricants, synthetic lubricants, fuels, aromatic and chlorinated hydrocarbons, good resistance

to many chemicals

