

Where PFAS is used in hydraulic cylinders

Directly used inside the cylinder

- used Materials are PTFE, FKM, FFKM, FEPM, FVMQ, PCTFE, TFM, PVDF, PFA, FEP
- In seals such as O-rings, piston and rod seals, wiper rings
- In guiding systems such as guide bands/ wear rings
- In sliding coatings of the piston rod or the covers

Installed on the cylinder

- Electronic components (proximity switches, displacement sensors, ...)
- Cables

Why PFAS?

- High temperature > 150°C
- Better sliding properties for higher energy efficiency
 - o Less friction
 - o Less wear
 - o Less leakage
 - o Longer lifetime

PFAS replaceable?

- For seals with temperature application:
 - o No alternative known
- For seals without temperature application:
 - o with significantly worse tribological properties
 - o also worse energy efficiency, etc.
 - o No alternative known

Annex PFAS used in hydraulic cylinders Hanchen
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