Sealing MaterialsCharacteristics

Depending on the media, application and requirement, we recommend different types of sealing materials.

Material	NBR/ Nitril	EPDM	FKM
Specification	NBR	Ethylen-Propylene-Terpolymer	Fluor elastomer/ FPM
Description	Resistance to mineral based oils and carbon hydrate cont- aining gasolines	 Excellent resistance to water, alkali, mild acids and oxygenic containing solvents* High resistance vs. aging 	Very good for use of various oils and greases*
Pressure resistance	Best	Best	Best
High temperature resistance	Good	Good	Best
Low temperature resistance	Best	Best	Good
Typical application	Hydraulics, Pneumatics	Brake fluids based on glycol and hot water as well as hot steam, hot water and heated air up to 150°C	Hydraulics, Aviation, Automotive
Industries			

PTFE (Teflon)	Hypalon	TFEP	FFKM
Polytetraflourethylen	Chlorosulfonated-Polyethylene (CSPE) Synthetic Rubber/ CSM	Tetrafluorethylene/ Propylene	Perflouroelastomer
 High particle crystalline plastics Not meltable-liquid, only rubber like and soft Excellent gliding properties Barely wettable To be used in a wide temperature range Excellent chemical resistance Weather resistance 	 Highly resistant to chemicals Extremely resistant to oxidants, light and weather (especially with strong sunlight and ozone) 	Excellent resistance against various media and chemicals*, in particular media with amine containing corrosion inhibitors	 Similar chemical resistance like PTFE Elastic features of FPM/ FKM Extraordinary pressure and recovery properties
Best	Best	Best	Best
Best	Best	Best	Best
Best	Best	Good	Best
Tank processing, chemical pumps, coating for repellent surfaces, bearing, seals and thread sealing tapes, electronic insulating fittings, bearing constructions, antiadhesive coatings	Cable coverage, acid resistant hoses, inner coating of tanks, seals, membranes	Chemical plants, engine manufacturing	Chemical plants, oil production, aviation, engine manufacturing and fittings

^{*}Complete overview of the media resistance can be seen on page 410.