

Seal materials

Abbreviation (DIN ISO 1629)	Generic designation	Trade name (registered Trademarks)	Plastic properties	Abbreviation (DIN ISO 1629)	Applications	Temperature range (check pressure/ temperature diagram)	Special properties
PTFE	Polytetrafluorethylene	Teflon Hostafion Fluon	Thermoplastic	PTFE	Ball seal	-200°C to +260°C	High chemical and temperature resistance; good slip properties. Modifying the crossage can extend the application range to 250°C or 315 bar.
PVDF	Polyvinyl-diene-fluoride	Solef Dyflor	Thermoplastic	PVDF	Ball seal	-40°C to +150°C	Mechanical properties similar to PTFE; greater stiffness than PTFE. Thermal loading capabilities lower than PTFE
PCTFE	Polychlorotrifluor-ethylene	Kel-F Neoflon Aclar	Thermoplastic	PCTFE	Ball seal	-240°C to +150°C	Mechanical properties similar to PTFE; greater stiffness than PTFE. Thermal loading capabilities lower than PTFE
POM	Polyoxymethylene/Polyacetal	Delrin Hostaform C Ultraform	Thermoplastic	POM	Ball seal	-40°C bis +100°C	High strength and stiffness, good creep strength, low humidity absorption, hydrolytic resistance (up to 60°C)
PEEK	Polyether-ether-ketone	Victrex Hostatec	Thermoplastic	PEEK	Ball seal	-60°C to +260°C	Excellent chemical and hydrolytic resistance, good creep strength even at higher temperature, very good resistance to wear under varying operating conditions
PAI	Polyamide	Torlon	Thermoplastic	PAI	Ball seal	-190°C to +260°C	Excellent retention of mechanical stability, stiffness and creep strength at broad temperature range, excellent friction and abrasion performance, excellent UV-resistance
PI	Polyimide	VespeI	Thermoplastic	PI	Ball seal	-273°C to +255°C	High mechanical strength, stiffness and creep strength even at higher temperature, good abrasion performance
NBR	Nitrile-butadien-rubber	Perbunan Chemigum Hycar Elaprim Krynac JSR-N	Elastomer	NBR	Body- and stem-seal	-30°C to +100°C*	High density, low deformation under pressure
HNBR	Hydro nitrile-butadien-rubber	Therban Zetpol	Elastomer	HNBR	Body- and stem-seal	-35°C to +150°C	Excellent physical properties and good abrasion resistance even at higher temperature, low deformation under pressure, good resistance against steam, oxygen and ozone
EPDM	Ethylene-propylene-rubber	Buna AP Vistalon Dutral Keltan	Elastomer	EPDM	Body- and stem-seal	-40°C to +140°C*	Excellent swelling resistance with heating-circuit water and steam, very good ozone-, aging- and atmospheric condition resistance
FKM	Fluor-rubber	Viton Tecnoflon Fluorel	Elastomer	FKM	Body- and stem-seal	-15°C to +200°C*	Good chemical stability and high temperature resistance, excellent tightness and low deformation under pressure
FFKM	Perfluor-rubber	Kalrez Chemraz Parofluor Isolast Simriz	Elastomer	FFKM	Body- and stem-seal	-15°C to +300°C	Elasticity and sealing properties aligned with chemical inertness and thermal stability, high temperature stress- and chemical resistance
PUR	Polyurethane-rubber	Vulkollan Desmopan Moltopren Elastollan	Elastomer	PUR	Body- and stem-seal	-30°C to +80°C	Very high mechanical stability, extraordinary abrasion performance, high tear and impact strength, high gas closeness, very good ozone-, aging- and atmospheric condition resistance

* Temperature range: DIN 3771-3
More significant compounds on request