

PTFE

**SP4000 PTFE spare parts**

PTFE (polytetrafluoroethylene) has the best chemical resistance among known plastics. It also has good aging stability, electrical insulation, wear resistance, and extremely low friction coefficient. The unloaded operating temperature range is $-180\sim+260^{\circ}\text{C}$.

It is widely used in mediums of corrosion condition, due to its excellent corrosion resistant to strong acid, alkali and oxidant even in high temperature.

However, PTFE has low thermal conductivity. If pure PTFE is selected as the friction material, the heat will be difficult to be conducted and the temperature will get very high, making the sealing performance worse eventually. So usually different additives are used to fill in and improve the conductivity of PTFE.

Specifications:

Material	Pure PTFE	20% fiberglass	20% graphite
Density	2.2g/cm ³	2.22~2.24g/cm ³	1.98~2.16g/cm ³
Hardness	4.65 (HRA)	5.57 (HRA)	7 (HRA)
Tensile strength	≥27.6Mpa	≥17.3Mpa	≥16.4Mpa
Bend strength	≥20.6Mpa	≥21Mpa	≥29Mpa
Elongation at break	≥250%	≥276%	≥151%