

The material used for a filter and its feature

About the material of the parts which constitute a filter

Name of material	Feature
Polypropylene	It is the lightest in a plastic and its intensity and rigidity are larger than PE. It excels in heat resistance, electrical property, water resistance and chemical resistance. It is highly efficient in spite of low cost.
Polyester	It excels in intensity, rigidity, heat resistance and creep-proof performance. Since its blow performance is good, it is used in large quantities as a PET bottle. It excels in hydrophile property, tolerance of ketone and hydrocarbon system.
Nylon	There are 66, 6, 11 and 12 types distinguished with molecule structure. 6 types are used at YAMASHIN. Since its intensity is large and tenacious, its intensity per dens equal also to metal, and can't get fatigued easily.
PTFE	It can be used to -100-290 degrees C about heat resistance. It has very high tolerance to acid, alkali, oxidizer and organic solvent. And it has non-adhesiveness ability.
Polyethersulfone	It is resin of amorphism character and the material of transparent resin which has the heat resistance of the highest region. It excels in the practical use and dynamic characteristic in a high temperature region. It excels in hydrophile property so it is suitable for filtration of ultrapure water.

About the material of a gasket and O-ring

Name of material	Feature
NBR	It is Nitrile rubber. It has the tolerance which was overwhelmingly excellent to oil, such as fuel oil and lubricating oil. It is used for fuel hose, hose for industry, O-ring packing, fulham of diagram and roll etc.
Silicon	It has the heat resistance which ranks second to fluoride rubber. Its cold resistance is most excellent so the range of the temperature which can be is very wide. It excels in weatherability, ozonic proof, chemical resistance and elec insulation and it has no toxicity. It is used for O-ring, various tubes and packings, se material, food, medical article, electron, electricity and OA equipment etc.
EPR	It is Ethylene propylene rubber. It excels in heat resistance, weatherability, ozone performance especially. It is used for Autoparts, such as radiator hose, window seal and door seal, and Electric wire fields, such as high-voltage line and high-pressure cable and Building materials, such as roofing etc..
FPM	Fluoride rubber. It has very high heat resistance and excels in oil resistance, weatherability, ozonic-proof, and chemical resistance.
PTFE (Only gasket)	It has the preminent thermal characteristic and is equal to use of continuation at 2 degrees C. Its intensity is maintained very much also in a low-pitched sound region. Its chemical resistance is most excellent and doesn't melt into organic solvent. Moreover its weatherability is also preeminently good.
PFA Capsule (Only O-ring)	It is the highly efficient compound O-ring which covered its circumference by PFA. PFA which covers the surface is excellent in chemical resistance and O-ring wrapp inside has elasticity. It excels in heat resistance and can be used to 150 degrees C. It can be used for all medicine and solvent.