

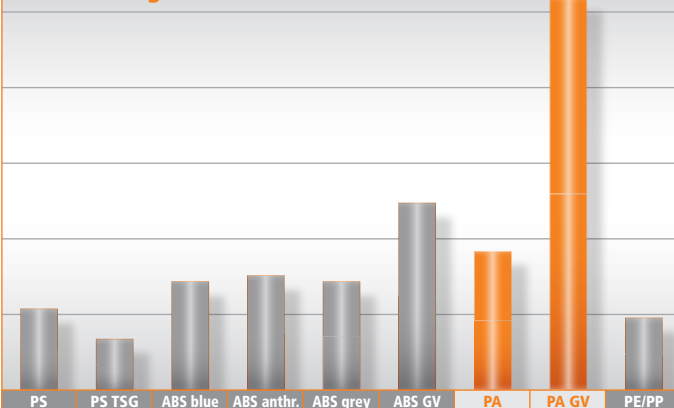
Polyamide (PA)

Material Data Sheet

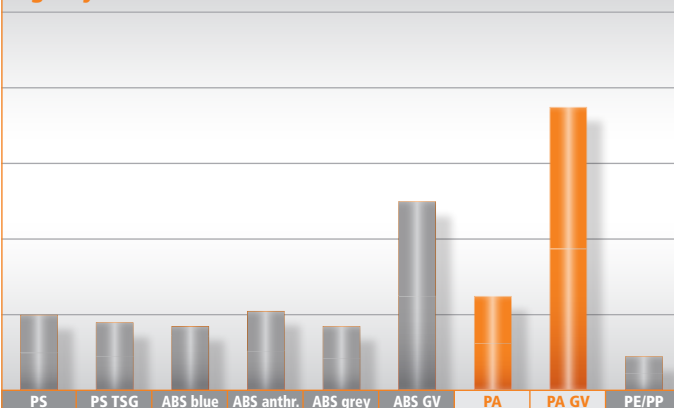

HÄFNER

Different characteristics in comparison:

Tensile strength

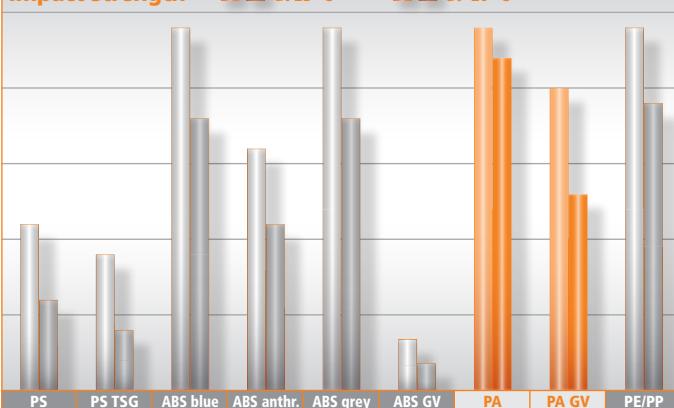


Rigidity



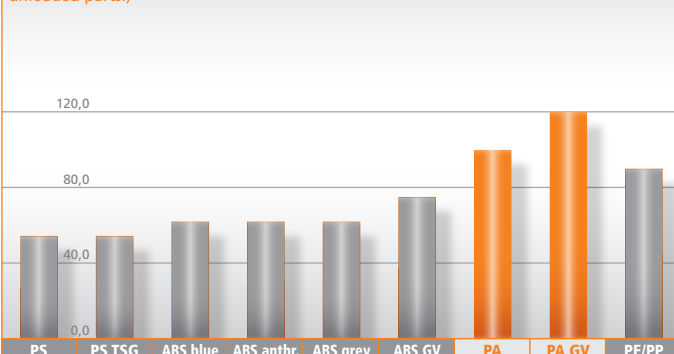
Impact strength

at 23 °C at -20 °C



Shape stability in heat (°C)

(Reference values for maximum working temperatures with unloaded parts.)



▣ Abbreviation:

PA = Polyamide

PA GV = Glassfibre reinforced polyamide

▣ Colours:

Basic colours: anthracite, natural (uncoloured)

Other cover colours available on request.

▣ Physical characteristics:

Tends to absorb water (increase of volume). When conditioned (content of moisture balanced) the PA material is ductile and rigid, when dry (fresh-shot) it is brittle. Glassfibers improve the strength and rigidity.

▣ Texture:

semi-crystalline

▣ Density:

 PA = 1,10 - 1,15 g/cm³

 PA GV = 1,30 - 1,40 g/cm³

▣ Coefficient of thermal expansion:

 PA = $7 - 10 \cdot 1/K \cdot 10^{-5}$

 PA GV = $2 - 3 \cdot 1/K \cdot 10^{-5}$

▣ Absorption of water:

PA = 3,0 - 4,0 %

PA GV = 1,5 - 2,5 %

▣ Chemical resistance:

good chemical resistance

▣ Resistant:

e. g. against oils, grease, alcohol, ester and aromatic hydro carbons.

▣ Not resistant:

e. g. against oxidation compounds, acids and substances containing acids.

▣ Gluing:

Gluing of these parts is possible with suitable adhesive products.