Polymer bearing materials

DAITHERMO DTP





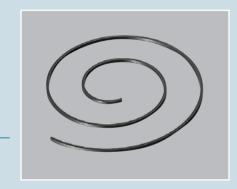




A sliding material made from polyphenylene sulphide (PPS) mixed with a special filler. This material is made by adding a special filler to heat-resistant and chemical-resistant polyphenylene sulphide (PPS), which gives it frictional properties roughly identical to those of PTFE sliding materials. Demonstrates suitable performance for a wide range of applications, including office automation equipment, textile machinery, automotive parts, conveyor equipment, and food packaging equipment.

Features

- 1.Offers a low coefficient of friction.
- 2. Stable even when exposed to a variety of chemicals and solvents.
- 3. Suitable for injection molding of complex shapes.
- 4. Also available in grades suitable for use with soft axle materials.



Material: DTP11

PPS mixed with glass-fiber-reinforcing and special filler

Material Characteristics (typical values)

Specific gravity	Tensile strength (MPa)	Elongation (%)	Hardness (HRM)	Coefficient of expansion (× 10 ⁻⁵ /°C)
1.60 – 1.72	30 or more	2 or more	32 – 48	2 – 6

Sliding Characteristics (typical values)

Material properties	Coefficient of friction (µ)	Maximum permissible load (MPa)	Maximum permissible speed (m/min)	Operating temperature range (°C)
DTP11	0.05 – 0.3	6.9	60	-40 – 200

Dimensional range

Injection-molded bearings can be made to a wide variety of complex shapes.

14



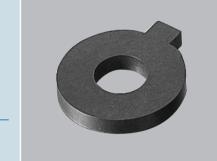




A sliding material made from polyetheretherketone (PEEK) mixed with a special filler. Polyetheretherketone (PEEK) exhibits excellent heat resistance for a thermoplastic and when mixed with a special filler, offers resistance to both heat and chemicals as well as superior tribological characteristics. Demonstrates suitable performance for a wide range of applications, including automotive parts, sports equipment, and electronic devices.

Features

- 1.Offers excellent friction and wear-resistance characteristics.
- 2. Stable even when exposed to a variety of chemicals, lubricants, and solvents.
- 3. Suitable for use throughout a wide range of operating temperatures.
- 4. Suitable for injection molding of complex shapes.
- 5. Also available in grades suitable for use with soft axle materials.



Material: DTK01

PEEK mixed with glass-fiber-reinforcing and special filler

Material Characteristics (typical values)

Specific gravity	Tensile strength (MPa)	Elongation (%)	Hardness (HRM)	Coefficient of expansion (×10 ⁻⁵ /°C)
1.50 – 1.60	70 or more	2 or more	51 – 65	3 – 6

Sliding Characteristics (typical values)

Material properties	Coefficient of friction (µ)	Maximum permissible load (MPa)	Maximum permissible speed (m/min)	Operating temperature range (°C)
DTK01	0.05 – 0.3	6.9	60	-40 – 260

Dimensional range

Injection-molded bearings can be made to a wide variety of complex shapes.