



APPLICATION

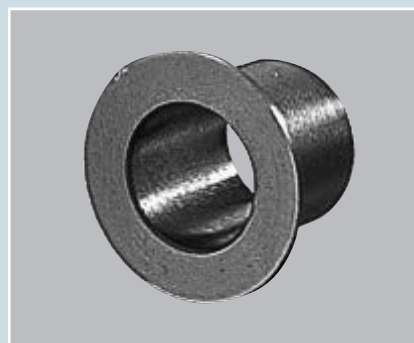
Fiber-reinforced nylon sliding material.

The addition of fiber reinforcing and special filler to nylon (polyamide or PA) provides a low coefficient of linear expansion as well as enhanced strength and tribological properties. Demonstrates suitable performance for a wide range of applications, including building materials, office automation equipment, textile machinery, and electronic devices.

MANUFACTURE

Features

1. Is more heat resistant than polyoxymethylene and suitable for applications in high heat.
2. Offers excellent friction and wear-resistance characteristics.
3. Suitable for injection molding of complex shapes.
4. Also available in grades suitable for use with soft axle materials.



Polymer MATERIALS AND SIZE

Material : DHA01

PA66 mixed with glass-fiber-reinforcing and special filler

Metallic

PLANNING

Material Characteristics (typical values)

Specific gravity	Tensile strength (MPa)	Elongation (%)	Hardness (HRM)	Coefficient of expansion ($\times 10^{-5}/^{\circ}\text{C}$)
1.37 – 1.47	160 or more (100 or more)	1 or more (2 or more)	77 – 93 (72 – 88)	2 – 6

NB: Figures in parenthesis are at 23°C and 50% water absorption.

CORPORATE PROFILE

Sliding Characteristics (typical values)

Material properties	Coefficient of friction (μ)	Maximum permissible load (MPa)	Maximum permissible speed (m/min)	Operating temperature range ($^{\circ}\text{C}$)
DHA01	0.1 – 0.3	6.9	30	-40 – 140

SPECIFICATION SHEET

Dimensional range

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



A sliding material made from polyester elastomer mixed with a special filler. This material is made by adding a special filler to extremely flexible polyester elastomer. 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. Suitable for use with soft axle materials.
3. Offers extremely high flexibility, suitable for use in countermeasures for percussive noise.
4. Offers superior absorption of contamination.
5. Suitable for injection molding of complex shapes.



Material : DHR01

Polyester elastomer mixed with a special filler

Material Characteristics (typical values)

Specific gravity	Tensile strength (MPa)	Elongation (%)	Hardness (Shore D-scale)	Coefficient of expansion ($\times 10^{-5}/^{\circ}\text{C}$)
1.28 – 1.36	20 or more	100 or more	65 – 73	20

Sliding Characteristics (typical values)

Material properties	Coefficient of friction (μ)	Maximum permissible load (MPa)	Maximum permissible speed (m/min)	Operating temperature range ($^{\circ}\text{C}$)
DHR01	0.1 – 0.3	4.9	15	-40 – 60

Dimensional range

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