

Material Data Sheet Guide Tape PG

Polyester + graphite - grey

General

Composite bearing material based on polyester fibre reinforced with polyester resin containing solid graphite lubricants in grey colour. The material has excellent physical and chemical properties to serve a wide range of applications. Guide tapes PG have excellent wear,- abrasion,- and impact resistance, high water,- and chemical resistance and outstanding insulation features. Guide tapes PG are recommended to use in heavy duty applications with high speeds (self-lubrication) and high impact forces.

Physical properties

Density:	DIN 53479	g/cm ³	1,25
Moisture absorption:	20°C / 65% rel. M.	%	< 0,1
Tensile strength:	DIN 53455	N/mm ²	65
Max. load static :	DIN 53455	N/mm ²	345
Max. load dynamic:	DIN 53455	N/mm ²	69
Hardness:		HRM	100
Coefficient of friction:		μ	< 0,05
Max. PV factor:		N/mm ² *m/s	0,22
Min. service temperature:		°C	-40
Max. service temperature:		°C	130

Chemical resistance

Water up to 90°	R	Alcohols	R
HFA, HFB, HFC fluids	R	Ozone	U
HFD	U	Air up to 100°	R
Mineral oils	R	Air up to 150°	U
Vegetable oils	R		
Fuels	R		

Key to chemical resistance: **R = resistant** **S = suitable** **U = unsuitable**

Main application

Guide rings, bushings, housings, high precision parts.

Analysis and Evaluation

The properties relate to fundamental values of Polyester composite compounds. Products values mentioned above are corresponding to ASTM or DIN standard and have been tested on standardized plates in the laboratory.