

Guide Rings|made of|KRÜTEX® 100

Guide rings have the task to guide precisely the piston rod of a hydraulic-cylinder and to absorb the existing lateral forces. There must be no metallic contact between the sliding parts, i.e. with the counter surface.

Krütex 100[®] is distinguished for careful characteristics of the gliding surface and high absorption ability for defilement particles. The laminate material consists of cotton woven fabric, impregnated with phenolic-resin according to EN 61212 – PF CC 22.

Our manufacturing process involves the complete line, starting with phenolic-resin plus woven fabric, resulting in finished wear-rings, bushes or bearings, with excellent tolerances. This procedure includes prepreg-fabrication, tube-production on modern winding machines and the use of CNC revolving automatons, each step accompanied by careful quality control. For this reason, we are able to react fast and flexible to special requests of our clients with respect to dimensions.

Standard range of dimensions and tolerances:

Inside diameter:	15 mm – 500 mm	Width:	from 3 mm
Wall thickness:	1,5 mm – 25 mm	Tolerances:	0,03 mm – 0,08 mm

Technical terms	Uni	Norm	Krütex 100
Compressive strenght flatwise	N/mm ²	ISO 604	270
Flexural strenght	N/mm ²	ISO 178	80
Tensile strenght	N/mm ²	ISO 527	50
Flexural Modulus	N/mm ²	ISO 604	6000
Friction coefficient against steel	μ	ASTM D 1894	0,25
Density	g/cm ³	DIN 53479	1,25
Water absorbtion	%	DIN 53495	1 bis 2
Temperature absorbtion	°C	ISO75-3	120
Ball pressure hardness vertical to laminate	N/mm ²	ISO 2039	130
Ball pressure hardness parallel to laminate	N/mm ²	ISO 2039	115
Ball shear strenght	N/mm ²	internal	130

The above called specifications were made to the best of our knowledge. It is recommended to prove the material in case of doubt for special applications. All values are the minimum requirement!