

VOLTIS® Hgw 2083

Composition

VOLTIS® Hgw 2083 is a phenolic woven cotton cloth laminate conforming PF CC 203 acc. IEC 60893 and Hgw 2083 acc. DIN 7735. For this type a fine weave (≥ 30 threads/cm) is used.

Application

VOLTIS® Hgw 2083 is used for applications like gear running and friction wheels or friction surfaces.

Technical Data

Properties	Testmethod	Unit	Value
Density	ISO 1183 / A	g/cm ³	approx. 1,4
Flexural strength	ISO 178	MPa	150
Flexural modulus of elasticity	ISO 178	MPa	approx. 7000
Impact strength (Charpy) parallel to laminations	ISO 179/3 C	kJ/m ²	7,0
Tensile strength	ISO 527	MPa	90
Electric strength at 90°C in oil perpendicular to laminations (thickness 3mm)	IEC 243	kV/mm	2,7
Breakdown voltage at 90°C in oil parallel to laminations	IEC 243	kV	5
Permittivity at 50 Hz and 1 MHz	IEC 250	-	approx. 5
Insulation resistance after immersion in water	IEC 167	Ohm	10 ⁶
Comparative tracking index	IEC 112	-	CTI 100
Thermal endurance	IEC 216	T.I.	120
Water absorption (thickness 3 mm)	ISO 62 / 1	mg	100

Availability:	thickness:	0,2 - 200 mm
	thickness tolerances:	up to 29 mm thickness: according IEC 60893
		30 – 40 mm: +2,5/-0 mm
		45 – 60 mm: +3,0/-0 mm
		65 – 70 mm: +3,5/-0 mm
		75 – 80 mm: +4,0/-0 mm
		90 – 150 mm: +5,0/-0 mm
		160 - 200 mm: +7,0/-0 mm

sheet size:

thickness	standard size	on request	size tolerances
0,2 - 40 mm	2150 x 1250 mm	1450 x 950 mm 2140 x 1450 mm	+30/-10 mm
	2800 x 1240 mm	-	+20/-0 mm
41 - 100 mm	2150 x 1250 mm 1450 x 950 mm	-	±20 mm
101 - 200 mm	1450 x 950 mm	-	

Cuttings are available on request.