

Electrical insulating material

Flexiso® NKN FI 15070

Description: Flexiso® NKN FI 15070 is made of polyimide film, which is laminated with Nomex® on both sides.

Properties: Flexiso® NKN FI 15070 is a flexible material, which is used in a temperature range of 180 – 200°C. It offers good mechanical properties, e. g. high tensile and tear strength as well as dielectric strength. Flexiso® NKN FI 15070 has a smooth surface, which allows trouble free manufacturing of low voltage motors and other electrical machines.

Application: Flexiso® NKN FI 15070 wird als Nutisolation und -verschluss sowie Phaseninsolation in Elektromotoren verwendet, die hohen thermischen Belastungen ausgesetzt sind. Des Weiteren findet das Material Verwendung als Zwischenlageninsolation in Transformatoren und anderen elektronischen Maschinen und Anwendungen.

Delivery forms: Flexiso® NKN FI 15070 is available in a thickness of 0,30 – 0,40 mm on a roll with 900 mm width and 50 m length. Other delivery forms upon customer request.

Storage conditions: Flexiso® NKN FI 15070 can be stored unlimited under normal conditions (room temperature, 50% humidity) in its original packaging.

Flexiso® NKN FI 15070

Properties	Test method	Unit	Value				
			150	170	200	230	200
Nominal thickness	IEC 60626	µm	150	170	200	230	200
Composition	IEC 60626	mil	2/1/2	2/2/2	2/3/2	2/5/2	3/1/3
Nomex® (2x)	IEC 60626	µm	50	50	50	50	80
Polyimid	IEC 60626	µm	25	50	75	125	25
Thicknesstolerance	IEC 60626	±%	15	15	15	15	10
weight/m ² ca.	IEC 60626	g/m ²	143	179	216	284	195
Area/kg	IEC 60626	m ² /kg	7,0	5,6	4,6	3,5	5,1
Tensile strength	IEC 60626	N/10 mm					
längs			120	160	180	200	160
quer			70	90	120	150	120
elongation	IEC 60626	%					
längs			15	17	17	17	15
quer			15	17	17	17	15
Insulation class	UL1446		180°C	180°C	180°C	180°C	180°C

Properties	Test method	Unit	Value				
			220	260	300	330	350
Nominal thickness	IEC 60626	µm	220	260	300	330	350
Composition	IEC 60626	mil	3/2/3	3/3/3	3/5/3	5/1/5	5/25/
Nomex® (2x)	IEC 60626	µm	80	80	80	130	130
Polyimid	IEC 60626	µm	50	75	125	25	50
Thicknesstolerance	IEC 60626	±%	10	10	10	10	10
weight/m ² ca.	IEC 60626	g/m ²	231	240	336	297	333
Area/kg	IEC 60626	m ² /kg	4,3	4,2	3,0	3,4	3,0
Tensile strength	IEC 60626	N/10 mm					
längs			200	250	280	270	300
quer			180	200	220	180	210
elongation	IEC 60626	%					
längs			15	17	17	15	15
quer			15	17	17	15	15
Insulation class	UL1446		180°C	180°C	180°C	180°C	180°C

Dr. Dietrich Müller GmbH

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Properties	Test method	Unit	Value				
Nominal thickness	IEC 60626	µm	350	400	400	430	450
Composition	IEC 60626	mil	5/3/5	5/5/5	7/1/7	7/2/7	7/3/7
Nomex® (2x)	IEC 60626	µm	130	130	180	180	180
Polyimid	IEC 60626	µm	75	125	25	50	75
Thicknesstolerance	IEC 60626	±%	10	10	10	10	10
weight/m ² ca.	IEC 60626	g/m ²	370	438	413	449	486
Area/kg	IEC 60626	m ² /kg	2,7	2,3	2,4	2,2	2,1
Tensile strength	IEC 60626	N/10 mm					
längs			390	520	400	400	400
quer			250	320	250	250	250
elongation	IEC 60626	%					
längs			17	17	15	15	15
quer			17	17	15	15	15
Insulation class	UL1446		180°C	180°C	180°C	180°C	180°C

Trademark information: Flexiso® is a registered trademark of Dr. Dietrich Müller GmbH, Germany.
 Nomex® is a registered trademark of DuPont.

Please note:

The information in this data sheet is based on our current knowledge and experience. They do not disengage the fabricator and the user from own tests and inspections because of the plenty of possible effects. There is no judicial binding assurance of certain properties or of the qualification for a concrete application in our declaration. We recommend consulting us in individual cases. The acceptor of our products has to observe possible industrial property rights as well as present laws by himself.