SynFlex Elektro GmbH
Auf den Kreuzen 24
D-32825 Blomberg Germany
Telefon +49-5235-968-0
E-Mail info@synflex.de

Teonex® Q5100

Teonex® Q5100 is a flexible, slightly cloudy, biaxially oriented polyethylenenaphthalate (PEN) film.

Attributes

Compared to PET polyester film, Teonex® Q5100 has optimum properties in every respect.
The increased temperature resistance results in film approval in thermal class F (155 °C). It has a electrical relative temperature index (RTI) of 180 °C and a mechanical RTI of 160 °C according to UL.
Further advantages of Teonex® Q5100 are:

- extremely high dielectric strength
- very good mechanical strength
- high-level of stiffnes
- low water absorption
- easy to laminate

Application

Teonex® Q5100 was specially developed for use in electric motors with increased load as slot insulation, phase insulation and wedges.

Standards

- Class F (155 °C) insulating material
- UL approved, file no. E51743

Delivery forms

Film thicknesses in µm:

- from 16, 25, 38, 50, 75,100, 125, 250

Teonex® Q5100 can be supplied:

- in slit rolls from widths of 6 mm (depending on thickness) and above.
- in rolls up to a width of 1,000 mm

Overall diameter of the slit rolls/ rolls

- approx. 240, 330 or 450 mm.

The information on this data sheet is based on the information provided by our supplier. It does not represent any specification or agreements regarding conditions or properties. The indicated values are standard values. Deviations from those values due to production and application cannot be excluded. The information on this data sheet is addressed to experts who use it at their own discretion and at their own risk. We do not guarantee results, or accept liability for the indicated specifications or for results obtained based on the specifications. Please contact us for more detailed information. Non-toxic and toxic substances are listed on the safety data sheet.
Updated 06/24

SynFlex Elektro GmbH
Auf den Kreuzen 24
D-32825 Blomberg Germany
Telefon +49-5235-968-0
E-Mail info@synflex.de

Feathering:

- depth approx. 1 - 12 mm, distance approx. 1 - 10 mm
- from widths of 10 to 240 mm and thickness of 0.125 mm

Base

Polyethylennaphthalte

The information on this data sheet is based on the information provided by our supplier. It does not represent any specification or agreements regarding conditions or properties. The indicated values are standard values. Deviations from those values due to production and application cannot be excluded. The information on this data sheet is addressed to experts who use it at their own discretion and at their own risk. We do not guarantee results, or accept liability for the indicated specifications or for results obtained based on the specifications. Please contact us for more detailed information. Non-toxic and toxic substances are listed on the safety data sheet.
Updated 06/24

SynFlex Elektro GmbH
Auf den Kreuzen 24
D-32825 Blomberg Germany
Telefon +49-5235-968-0
E-Mail info@synflex.de

Mechanical	Unit of measure						
Nominal thickness	µm	16	25	38	50	75	100
Elongation at break longitudinal	%	40	45	55	60	65	80
Elongation at break transversal	%	40	40	55	60	65	70
Shrinkage (30 min at 150 °C) longitudinal	%	1.0	1.0	0.5	0,4	0.5	0.3
Shrinkage (30 min at 150 °C) transversal	%	0,3	0.4	0.3	0.3	0.4	0.4
Shrinkage at 200 °C longitudinal	%	2.7	2.7	1.2	0.8	1.0	0.9
Shrinkage at 200 °C transversal	%	1.7	1.9	1.3	0.8	1.0	1.1
Tensile strength longitudinal*	N/mm²	190	190	200	200	200	190
Tensile strength transversal*	N/mm²	190	200	200	195	200	200

Mechanical	Unit of measure			Test method
Nominal thickness	µm	125	250	

The information on this data sheet is based on the information provided by our supplier. It does not represent any specification or agreements regarding conditions or properties. The indicated values are standard values. Deviations from those values due to production and application cannot be excluded. The information on this data sheet is addressed to experts who use it at their own discretion and at their own risk. We do not guarantee results, or accept liability for the indicated specifications or for results obtained based on the specifications. Please contact us for more detailed information. Non-toxic and toxic substances are listed on the safety data sheet.
Updated 06/24

SynFlex Elektro GmbH
Auf den Kreuzen 24
D-32825 Blomberg Germany
Telefon +49-5235-968-0
E-Mail info@synflex.de

Mechanical	Unit of measure			Test method
Elongation at break longitudinal	%	85	105	JIS C2318
Elongation at break transversal	%	80	100	JIS C2318
Shrinkage (30 min at 150 °C) longitudinal	%	0,2	0.2	JIS C2318
Shrinkage (30 min at 150 °C) transversal	%	0.3	0.3	JIS C2318
Shrinkage at 200 °C longitudinal	%	1.0	0.9	JIS C2318
Shrinkage at 200 °C transversal	%	0.8	0.7	JIS C2318
Tensile strength longitudinal*	N/mm²	185	185	JIS C2318
Tensile strength transversal*	N/mm²	185	180	JIS C2318

Electrical	Unit of measure						
Nominal thickness	µm	16	25	38	50	75	100
Dielectic strength	kV	5.5	7.5	10,5	12.5	16.0	19.0

The information on this data sheet is based on the information provided by our supplier. It does not represent any specification or agreements regarding conditions or properties. The indicated values are standard values. Deviations from those values due to production and application cannot be excluded. The information on this data sheet is addressed to experts who use it at their own discretion and at their own risk. We do not guarantee results, or accept liability for the indicated specifications or for results obtained based on the specifications. Please contact us for more detailed information. Non-toxic and toxic substances are listed on the safety data sheet.
Updated 06/24

SynFlex Elektro GmbH
Auf den Kreuzen 24
D-32825 Blomberg Germany
Telefon +49-5235-968-0
E-Mail info@synflex.de

Electrical	Unit of measure			Test method
Nominal thickness	µm	125	250	
Dielectic strength	kV	22.0	23.0	

The information on this data sheet is based on the information provided by our supplier. It does not represent any specification or agreements regarding conditions or properties. The indicated values are standard values. Deviations from those values due to production and application cannot be excluded. The information on this data sheet is addressed to experts who use it at their own discretion and at their own risk. We do not guarantee results, or accept liability for the indicated specifications or for results obtained based on the specifications. Please contact us for more detailed information. Non-toxic and toxic substances are listed on the safety data sheet.
Updated 06/24