Spiral wound Polyester/ Nomex® Heat-Shrink Tubing

FITCOTUBE® FT-M/N-HS

Heat-Shrink Tube with fast shrinking Polyester layer to coil a high-performance Nomex® insulator around the application in varnish impregnated electric motors.
The FT-M/N-HS prevents line failures in electric motors by securing and insulating electrical connections. Rapid shrink-on fitting provides comprehensive mechanical and electrical protection.

Operating temperature: +155°C, short time +160°C

Shrink ratio: 30%

Standard color: Nature/White
Colors on request

Special designs: Non-shrinking (NS); End caps; Low shrink rate

Key Benefits:

- Available with internal diameters from 2.5mm to 8.0mm
- Wall thicknesses from 0.24mm
- Colour coding allows fast identification of sizes and components in motor windings
- Tight manufacturing tolerances and product resilience suits bulk process engineering environments
- Improved product performance under overload

Inner Nomex® Film

Properties of Base Film	Test Method	Requirements	Typical Value
Mechanical			
Tensile strength	ASTM D 828-60	MD 28 N/cm TD 17 N/cm	17 N/cm 9 N/cm
Elongation	ASTM D 828-60	MD 3.5 TD 5	3.5 4.8

Properties of Base Film	Test Method	Requirements	Material thickness 0.130mm / 0.180mm	
Electrical				
Dielectric strength	ASTM D 149	AC Rapid Rise	12 kV/mm	12 kV/mm
Dielectric constant	ASTM D 150	10^3 Hz	1.3	1.3
Dissipation Factor	ASTM D 150	10^3 Hz	0.005	0.005

Spiral wound Polyester/Aramid Heat-Shrink Tubing

FITCOTUBE® FT-M/N-HS

Outer Polyester Film

Properties of Base Film	Test Method	Requirements	Typical Value [37.5 HS film (37 µm)]
Mechanical			
Tensile strength:			
Machine Direction (MD)	ASTM D 882	-	190
Transverse Direction (TD)	ASTM D 882	-	260
Yield	-	-	19.10 m^2 /kg
Modulus	ASTM D 882	MD TD	2,100 MPa 3,600 MPa
Elongation	ASTM D 882	MD TD	170% 110%
Thermal			
Melt Point	ASTM D 3148-82	-	253-255°C (526-528K)
Electrical			
Dielectric strength	ASTM D 149	-	Min. 4 kV
Chemical			
Water Vapour Transmission Rate	ASTM F 1249	38°C, 90% Relative Humidity	15 g/m2/ 24h
Oxygen Permeability	ASTM D 3985	Before shrinkage After shrinkage	75 cc/m^2 /24 h 30-45 cc/m^2 /24 h

Processing note: Care for clean and straight cutting edges. Start shrinkage on the end.
Pre-heat metal body.

Packaging: On spools, cut lengths or printed tubing on request.
Special sizes on request.