flexibles

Acuflex® 515, 600

Acuflex® 515 and 600 Varnished Polyester Glass

- Flexible, tough construction for ease of insertion
- Good punch-through and abrasion resistance
- High degree of conformability
- High dielectric strength
- Class 155° C thermal properties
- Excellent upgrade from cotton based materials
- Compatible with most varnish and resin systems

General description

Acuflex® 515 (yellow) and 600 (black) series materials are polyester resin coated, straight woven polyester/glass fabrics with 155°C thermal capability, excellent flexibility, good tear strength, and high tensile strength. The polyester warp threads allow for some stretch and improved conformability over glass only constructions. Additional treatments are available including oil and silicone slip coats, pressure sensitive adhesives and liners.

Application

Acuflex® 515 and 600 series coated products are recommended for a wide variety of uses in the motor and transformer industry including phase separators, slot liners, barrier and layer insulation, bus bar, coil wrapping and other applications where good elongation and conformability along with exceptional flexibility and toughness are required. Thermal aging tests conducted in accordance with both ASTM D902 (Volatility Index of Coated Woven Glass Cloth) and ASTM D1830 (Curved Electrode Test) have proven that Acuflex® 515 and 600 series coated products have a thermal endurance in excess of 50,000 hours at 155°C.

Features	Benefits
• High temperature class (155°C)	• Wide range of applications for motors and transformers as primary and secondary insulation up to 155°C
• Very Flexible	• Easily conforms to various configurations
• Wide range of thicknesses available (.005" - .012")	• Optimize material usage for the application
• Available with pressure sensitive adhesive	• Aids in manufacturing • Excellent outer wrap for bobbin type transformers
• Available with slip coats	• Aids in gaining proper tension and elongation over irregular surfaces

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Construction:

Tan		515-205	515-207	515-208	515-210	515-212
Black		600-205	600-207	600-208	600-210	600-212
Thickness, inches	ASTM D2400	.005	.007	.008	.010	.012
tolerance	"	±.0005	±.001	±.001	±.001	±.001
Base Fabric Thickness	"	.004	.004	.004	.004	.004
Approx. Weight, lb/yd²	"	.30	.39	.49	.61	.66

Technical Information: Typical Values

Tensile Strength, pounds	"	45	45	48	50	48
Elmendorf Tear, grams	"	500	500	500	500	500
Elongation, % 25 P.I.W., 3 min	"	8.9 %	8.9 %	8.9 %	8.9 %	8.9 %
Dielectric Strength, volts/mil	"					
Short term, unstressed		1750	1500	1400	1300	1300
After hot oil	"	1750	1500	1400	1300	1300
Under 6% elongation	"	1000	1000	1000	1100	1100
Volume Resistivity, ohm-cm	"	1×10^{14}	1×10^{14}	3×10^{14}	3×10^{14}	3×10^{14}
Dissipation Factor 60 Hz	"	.045	.045	.045	.045	.045
Continuous use temperature C	ASTM D1830	155°C +	155°C +	155°C +	155°C +	155°C +