

# XLP CROSSLINKED POLYETHYLENE INSULATIONS (Medium Voltage)

## Physical and Electrical Specification Data

Test Requirements	2001-5000 Volts		0-35,000 Volts	
	Guaranteed Value	Typical Value	Guaranteed Value	Typical Value
<b>PHYSICAL PROPERTIES</b>				
Original Tensile Strength, psi	1800 min.	3500	1800 min.	3500
Original Elongation, percent	250 min.	450	250 min.	550
Aged - Air Oven - 168 Hr. @ 121°C				
Percent of Original				
Tensile	75 min.	95	75 min.	95
Elongation	75 min.	95	75 min.	95
Hot Creep, 150°C				
Elongation, %	175 max.	75	175 max.	100
Set, %	10 max.	0	10 max.	0
<b>ELECTRICAL PROPERTIES</b>				
Insulation Resistance Constant (K)	20,000 min.	>100,000	20,000 min.	>100,000
SIC at R.T.	3.5 max.	2.4	3.5 max.	2.3
D.F. at R.T., %	2.0 max.	< 0.5	0.1 max.	0.04
Accelerated Water Absorption				
SIC, 75°C Water	3.5 max.	2.4	3.5 max.	2.3
% Change in SIC, 75°C Water				
1 - 14 days	3.0 max.	0.5	3.0 max.	< 0.5
7 - 14 days	1.5 max.	0.5	1.5 max.	< 0.5
Stability Factor after 14 Days	1.0 max.	0.5	1.0 max.	< 0.3
or Stability Factor Difference	0.5 max.	0.2	0.5 max.	< 0.1
<b>SURFACETRACKING</b>				
(ASTM D 2132-62T) Hours	200 min.	> 500	N/A	N/A
<b>COLD BEND</b>				
1 Hr. @ 3 X O.D.	- 30°C	< - 40°C	- 30°C	< - 40°C
<b>U-BEND</b>				
@ 13 kV, Hours	6 min.	> 6	N/A	N/A
<b>SURFACE RESISTIVITY</b> , Megohms	200,000 min.	>500,000	N/A	N/A
Complies with:				
ICEA S-96-659 / NEMA WC 71		TypeX-1		N/A
ICEA S-93-639 / NEMA WC 74		N/A		UnfilledXLPE
ICEA S-97-682		N/A		UnfilledXLPE
ICEA S-94-649		N/A		UnfilledXLPE