

4207W-10

BLACK XLPE COMPOUND FOR 10KV AND BELOW AERIAL HANGING CABLE

Main Properties & Typical Values

Test Items	Unit	Test Method	Standard	Typical value
Tensile strength	MPa	GB/T1040.3	13.0	23.6
Elongation at break	%	GB/T1040.3	300	487
Heat ageing properties (Test temperature 135°C, 168hr)				
Maximum tensile strength change	%	GB/T8815	±20	8.9
Maximum elongation at break change	%		±20	3.7
Heat elongation (200±3)°C x 15min x 0.2MPa)				
Maximum elongation change under load	%	GB/T2951	≤80	48
Maximum permanent elongation change after cooled	%		≤5	-4
Impact brittle temp. (-76°C)				
Impact brittle	Failure no.	GB/T5470	≤15/30	pass
Pressure crack test F ₅₀	hr	GB/T2951	1000h	pass
Artificial atmosphere ageing properties:				
Ageing After 42days,				
Maximum tensile strength change	%		±30	-18
Maximum elongation at break change	%	GB/T14049	±30	-25
Ageing after 42days vs. after 21days				
Maximum tensile strength change	%		±15	-2
Maximum elongation at break change	%		±15	-8
Dielectric Strength	MV/m	GB/T1408.1	≥22	38
Dielectric loss factor 50Hz, 20°C	--	GB/T1409	≤1×10 ⁻³	5×10 ⁻⁴
Volume resistance (20°C)	Ω·m	GB/T1410	≥5×10 ¹³	1×10 ¹⁴

Note: All typical values were tested by press moulding sample under the condition of 180±2 °C, 15min, and pressure over 15MPa, then cooling to room temperature