4207G-10

GREY 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	26.4
Elongation at break	%	GB/T1040.3	300	524
Heat ageing properties (Test temperature 135℃, 168hr)				
Maximum tensile strength change	%	GB/T8815	±20	10.3
Maximum elongation at break change	%		±20	2.1
Heat elongation （200±3)℃x 15min x 0.2MPa)				
Maximum elongation change under load	%	GB/T2951	≤80	45
Maximum permanent elongation change after cooled	%		≤5	-6
Impact brittle temp. (-76℃)	Failure	GB/T5470		
Impact brittle	no.		≤15/30	pass
Pressure crack test F_{50}	hr	GB/T2951	1000h	pass
Artificial atmosphere ageing properties:				
Ageing After 42days,			±30	10
Maximum tensile strength change	%		±30	2.7
Maximum elongation at break change	%	GB/T14049	±15	6
Ageing after 42days vs. after 21days			±15	-5
Maximum tensile strength change	%			
Maximum elongation at break change	%			
Dielectric Strength	MV/m	GB/T1408.1	≥22	39
Dielectric loss factor 50Hz, 20℃	--	GB/T1409	$\leq 1\times10^{-3}$	5.2×10^{-4}
Volume resistance (20℃)	Ω·m	GB/T1410	$\geq 5\times10^{13}$	1.1×10^{14}

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