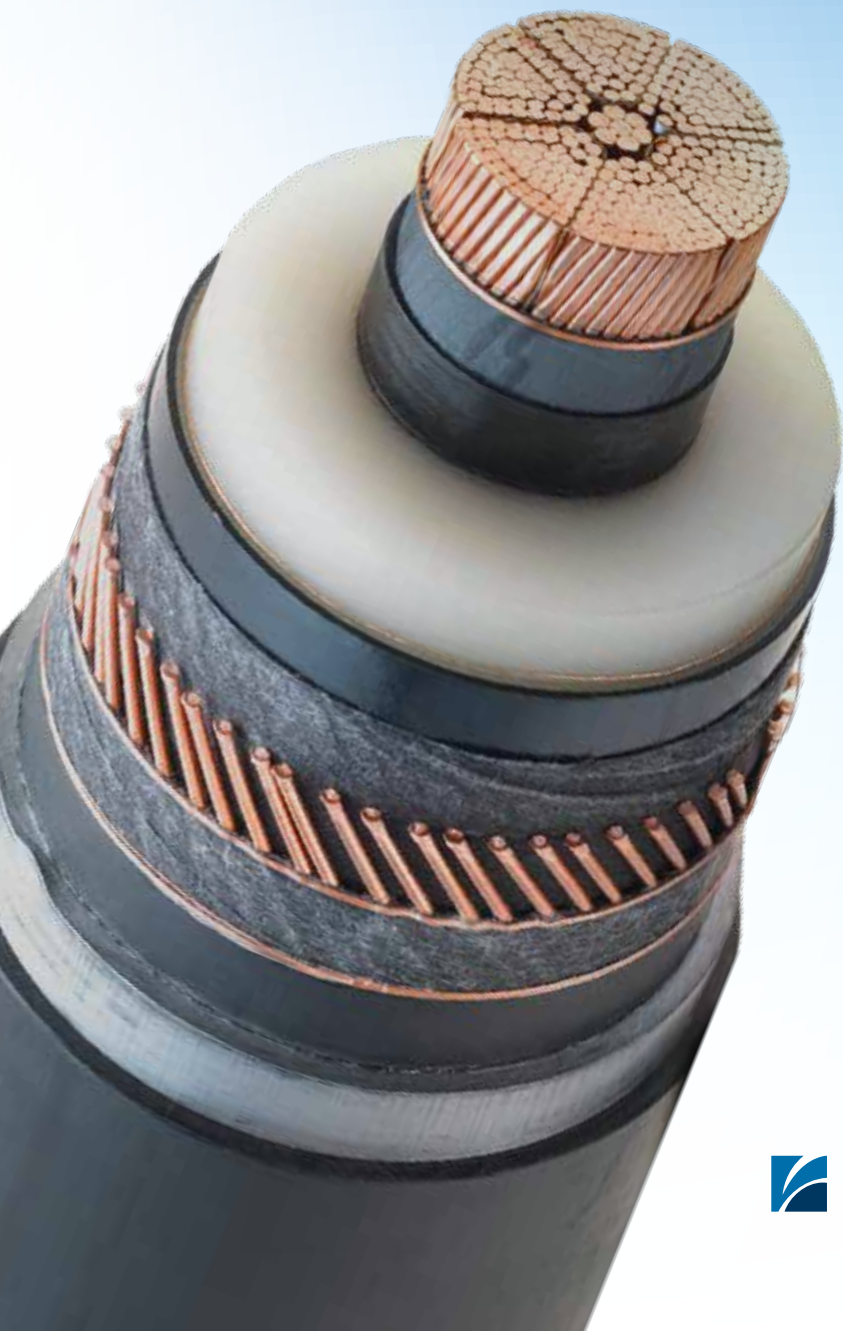


Borlink™ Cable Insulation System Solutions



AC Cable Insulation Systems

Borealis recommendation

Land Application	≤ 36 kV	≤ 69 kV (Um ≤ 72,5 kV)	≤ 161 kV (Um ≤ 170 kV)	≤ 230 kV (Um ≤ 245 kV)	> 230 kV (Um ≤ 245 kV)
XLPE (MFR 2)	LS4201R (dry design), LH4201R (wet design)		LS4201H	LS4201S	LS4201EHV
XLPE (MFR 0,8)	LE4244R		LE4244S	LE4244S	LE4244EHV
Semicon	LE0592, LE0595 (bonded) LE0520 (strippable – up to 46 kV)		LE0592 LE0595	LE0592S LE8280	LE0500

Submarine Application	≤ 36 kV	≤ 69 kV (Um ≤ 72,5 kV)	≤ 230 kV (Um ≤ 245 kV)	> 230 kV (Um > 245 kV)
XLPE (MFR 2)	LH4201R (with bonded screen only) LE4212		LS4201S	LS4201EHV
XLPE (MFR 0,8)	LE4244R (for dry design cable construction only)		LE4244S	LE4244EHV
Semicon	LE0592, LE0595 (bonded) LE0520 (strippable – up to 46 kV)		LE0592S LE8280	LE0500

DC Cable Insulation Systems

Borealis recommendation

Land and Submarine Application	≤ 320 kV	> 320 kV
XLPE (MFR 2)	LS4258DCS	LS4258DCE
Semicon	LE0550DC	LE0550DC



Compounds for power cables



Solution	Application and performance	Extra benefits
Peroxide crosslinkable insulation – MFR 2		
High productivity Supercure XLPE insulation for peroxide cured cables		
Borlink™ LS4201R	AC Land application ≤ 69 kV (Um ≤ 72,5 kV)	Long extrusion runs and decreased degassing burden
Borlink™ LS4201H	AC Land application ≤ 161 kV (Um ≤ 170 kV)	Long extrusion runs and decreased degassing burden
Borlink™ LS4201S	AC Land application 230 kV (Um: 245 kV) and submarine application ≤ 230 kV (Um ≤ 245 kV)	Long extrusion runs and decreased degassing burden
Borlink™ LS4201EHV	AC Land and submarine application > 230 kV (Um > 245 kV)	Super clean insulation enabling long extrusion runs and decreased degassing burden
Borlink™ LE4253DC	DC Land and submarine application ≤ 320 kV	
Borlink™ LS4258DCS	DC Land and submarine application ≤ 320 kV	Longer extrusion runs and significantly decreased degassing burden and high electrical performance
Borlink™ LS4258DCE	DC Land and submarine application > 320 kV	Longer extrusion runs and decreased degassing burden and superior electrical performance based on high chemical and physical cleanliness
Peroxide crosslinkable insulation – MFR 0,8		
Low sagging XLPE insulation for peroxide cured cables		
Borlink™ LE4244R	AC Land application ≤ 69 kV (Um ≤ 72,5 kV)	
Borlink™ LE4244S	AC Land application and submarine application ≤ 230 kV (Um ≤ 245 kV)	
Borlink™ LE4244EHV	AC Land and submarine application > 230 kV (Um > 245 kV)	
Water Tree Retardant insulation		
High productivity and superior wet ageing performance insulation		
Borlink™ LH4201R (for bonded construction only)	Land and Submarine application ≤ 69 kV (Um ≤ 72,5 kV) Enhanced performance Copolymer WTR-XLPE with high productivity for peroxide cured cables	Superior electrical performance meeting the most stringent wet ageing requirements. Excellent scorch resistance and long production runs
Borlink™ LE4212 (for bonded and strippable constructions)	XLPE medium voltage (MV) AC cables with rated voltages up to 69 kV	Improved electrical performance (additive WTR XLPE) meeting the advanced wet ageing requirements. Easy extrusion performance. Very good scorch resistance
Semicons		
Bonded conductor and insulation screen for peroxide cured cables		
Borlink™ LE0592 Borlink™ LE0595	Land application ≤ 69 kV (Um ≤ 72,5 kV) Conductor and bonded insulation screen for peroxide cured cables	Scorch resistant and smooth conductor and bonded insulation screen
Borlink™ LE0592 Borlink™ LE0595	Land application ≤ 161 kV (Um ≤ 170 kV) Conductor and bonded insulation screen for peroxide cured cables	Scorch resistant and smooth conductor and bonded insulation screen
Borlink™ LE0592S Borlink™ LE8280	AC Land application ≤ 230 kV (Um ≤ 245 kV) and submarine application ≤ 230 kV (Um ≤ 245 kV)	Scorch resistant and smooth conductor and insulation screen
Borlink™ LE0500	AC Land and submarine application > 230 kV (Um > 245 kV)	Supersmooth semicon for highest electrical performance
Borlink™ LE0550DC	DC Land and submarine application	Supersmooth semicon for highest electrical performance
Strippable insulation screen for peroxide cured cables		
Borlink™ LE0520 (strippable)	Land application ≤ 36 kV ≤ 69 kV (Um ≤ 72,5 kV)	
Silane crosslinkable insulation system		
Extra flexibility and cost efficiency enabler insulation system for MV cables		
Visico™ LE4422M Visico™ LE4431M	Ready-to-use two-component compound system for insulation of XLPE medium voltage cables with rated voltages up to 36 kV	Very good cleanliness. Outstanding scorch performance
Borlink™ LE0542	Semicon for bonded Visico insulation system, medium voltage cable up to 36 kV	Improved properties at higher temperature, enabling a potentially reduced crosslinking time. Very good surface smoothness
Borlink™ LE0572	Semicon for strippable Visico insulation system, medium voltage cable up to 36 kV	Easier processing, lower scorch risk, good strip force. Very good surface smoothness
Jacketing		
Borstar® LE8706/LE8707	Bimodal linear low density jacketing compound (natural/black)	Abrasion resistance and low coefficient of friction combined with excellent extrudability and flexibility
Borstar® ME6053/ME6062	Bimodal medium density jacketing compound (natural/black)	Very good flexibility and toughness
Borstar® HE6063/HE6062	Bimodal high density jacketing compound (natural/black)	Physical toughness and very low water permeability combined with superior processability, reduced shrinkage, and outstanding ESCR
Casico™ FR6082 Reduced fire hazard jacketing compound for energy cables	Reduced fire hazard black jacketing compound for energy cables	
Casico™ FR6083 Reduced fire hazard jacketing compound for energy cables	Reduced fire hazard natural jacketing compound for energy cables	
LE0563	Thermoplastic semiconductive compound for grounding and diagnostic purposes	



Borealis and Borouge

Dedicated to Wire & Cable Solutions

For over 50 years, Borealis has provided value-creating polyolefin compounds for the global energy industry.

Because understanding project execution is critical to the success of 'Power Projects', Borealis provides unparalleled reliability with Assurance Delivered for submarine and land cable projects. In power transmission and distribution, Borealis satisfies the highest demands on performance and across a comprehensive portfolio for medium and low voltage cable applications, as well as high-performance polypropylene (PP) capacitor film solutions for the entire energy sector.

Extra-high, high voltage AC and DC, and medium voltage applications are powered by Borlink™ technology. While the Visico™ technology helps extend the lifetime of cable systems for low and medium voltage applications.

To meet safety standards for industries and buildings sustainably, Borealis also offers a low smoke and zero halogen flame retardant system. Borealis compounds also help meet network provider's requirements for communication cables, namely fibre optic, data, copper multipair and coaxial cables.

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Borealis solutions bring energy all around

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About Borealis Borealis is a leading provider of innovative solutions in the fields of polyolefins, base chemicals and fertilizers. With its head office in Vienna, Austria, the company currently has around 6,600 employees and operates in over 120 countries. Borealis generated EUR 7.5 billion in sales revenue and a net profit of EUR 1,095 million in 2017. Mubadala, through its holding company, owns 64% of the company, with the remaining 36% belonging to Austria-based OMV, an integrated, international oil and gas company. Borealis provides services and products to customers around the world in collaboration with Borouge, a joint venture with the Abu Dhabi National Oil Company (ADNOC). Borealis and Borouge aim to proactively benefit society by taking on real societal challenges and offering real solutions. Both companies are committed to the principles of Responsible Care®, an initiative to improve safety performance within the chemical industry, and work to solve the world's water and sanitation challenges through product innovation and their Water for the World programme.

For more information visit: borealisgroup.com • borouge.com • waterfortheworld.net

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