

# Medium/High Voltage Polyethylene Cables

		Key Points	Medium Voltage: 1 – 35 kV	High Voltage: 66 - 132 kV	Very High Voltage: > 132 kV
Internal semi-conductor		<ul style="list-style-type: none"> <li>Carbon black dispersion</li> <li>Low viscosity</li> <li>No scorch</li> <li>Surface smoothness</li> <li>Conductor and insulation interfaces</li> <li>Thermal stability</li> </ul>	<b>Lotryl® 17BA07 (*)</b> with: <ul style="list-style-type: none"> <li>35-40% carbon black</li> <li>0-20% <b>Lotryl® 28BA175</b> or <b>35BA40</b> (to adjust viscosity)</li> <li><b>Luperox® DC, F or 101</b></li> </ul> (*) <b>Evatane®</b> possible with aluminium conductors up to 150°C	<b>Lotryl® 17BA07</b> with: <ul style="list-style-type: none"> <li>35-40% carbon black</li> <li>0-20% <b>Lotryl® 28BA175</b> or <b>35BA40</b> (to adjust viscosity)</li> <li><b>Luperox® DC, F or 101</b></li> </ul>	<b>Lotryl® 17BA07</b> with: <ul style="list-style-type: none"> <li>35-40% acetylene carbon-black</li> <li>0-20% <b>Lotryl® 28BA175</b> or <b>35BA40</b> (to adjust viscosity)</li> <li><b>Luperox® DC, F or 101</b></li> </ul>
	Insulation layer	<ul style="list-style-type: none"> <li>Perfectly clean raw materials</li> <li>No scorch</li> <li>Water-treeing control</li> </ul>	LDPE with: <ul style="list-style-type: none"> <li>10-15% <b>Lotryl® 17BA04</b></li> <li><b>Luperox® DC</b> (<b>Luperox 801</b> for DPI)</li> </ul>	LDPE <b>Luperox® DC</b> ( <b>Luperox 801</b> for DPI)	LDPE <b>Luperox® DC</b>
External semi-conductor	Fully Bonded	<ul style="list-style-type: none"> <li>Carbon black dispersion</li> <li>Low temperature extrusion</li> </ul>	<b>Evatane® or Lotryl®</b> with: <ul style="list-style-type: none"> <li>35-40 % carbon-black</li> <li><b>Luperox® DC, F or 101</b> (neat or formulated for internal mixing)</li> </ul>		
	Strippable	<ul style="list-style-type: none"> <li>Tubular EVA for controlled and unfluctuating strip force</li> <li>Room temperature soaking in liquid peroxide</li> </ul>	<b>Evatane® (28-40% VA)</b> with: <ul style="list-style-type: none"> <li>35-40% carbon black</li> <li>5-20 % NBR (~33% ACN)</li> <li><b>Luperox® F40, F40MG (or Luperox 801 for soaking)</b></li> </ul>	—	
Jacketing	Regular	<ul style="list-style-type: none"> <li>Stress cracking resistance</li> <li>Water insulation</li> </ul>	LL/LD/MD/HDPE with 5-8% <b>Evatane® (28-40% VA)</b>		
	HFFR	<ul style="list-style-type: none"> <li>Filler dispersion</li> <li>Coupling agent selection</li> </ul>	<b>Evatane® or Lotryl®</b> with 60-65% ATH or MDH coupled with <b>Orevac® 18340 or 18342</b>		