Surge arresters limit lightning and switching transients providing excellent protection. Transient voltages caused by traveling waves enter a cable and may lead to doubling of the voltage at the other end. Although the steepness of transient overvoltage is reduced by the cable capacitance, high overvoltages could arise on both ends. Special design of ABB surge arresters allows their installation at the entrance or on both sides of the cable.

If HV and long MV cable sheaths of power cables are earthed on one side only for power loss reduction, a surge arrester is needed on the unearthed end. In this case ABB surge arresters will protect the cable sheath insulation from slow and fast-front overvoltages.

Key features
- Designed and tested according to IEC 60099-4
- Maximum safety (safe short-circuit behavior for high personal and equipment security)
- Additional fire safety tests
- Suitable for various ambient conditions
- Compact size
- Available for indoor and outdoor installation

Customer benefits and savings
- Easy and fast to install
- Maintenance-free
- Decreased power losses in cables
- Lower chance of flashover between cable sheath and the earth
- Prolongs cable lifetime
- Lower grave-damage risk
- Reduced additional voltage reflections effect on other equipment
- Lightning protection for cables in between overhead lines

ABB as your competitive edge
- More than 100 years of experience in overvoltage protection
- More than 30 years of experience with silicone insulation
- Global supplier with local support teams
- Proven track record with many customer references worldwide
- In-house metal-oxide resistors production
- All equipment manufactured internally by ABB with full monitoring and control of the entire design, production and delivery process
## Product range of surge arresters for MV cable terminations and HV cable sheaths

<table>
<thead>
<tr>
<th>Type</th>
<th>POLIM-D</th>
<th>POLIM-K</th>
<th>MWK</th>
<th>POLIM-C..N</th>
<th>POLIM-C..LB</th>
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</thead>
<tbody>
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<td><img src="Image1.png" alt="Diagram" /></td>
<td><img src="Image2.png" alt="Diagram" /></td>
<td><img src="Image3.png" alt="Diagram" /></td>
<td><img src="Image4.png" alt="Diagram" /></td>
<td><img src="Image5.png" alt="Diagram" /></td>
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### Technical data

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<tr>
<th></th>
<th>POLIM-D</th>
<th>POLIM-K</th>
<th>MWK</th>
<th>POLIM-C..N</th>
<th>POLIM-C..LB</th>
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</thead>
<tbody>
<tr>
<td>Maximum system voltage $U_s$, kV</td>
<td>52</td>
<td>52</td>
<td>52</td>
<td>7.5</td>
<td>52</td>
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<td>IEC 60099-4 class (Ed. 3.0)</td>
<td>DH</td>
<td>SL</td>
<td>SL</td>
<td>SL</td>
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<tr>
<td>MV cable and cable termination</td>
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<td>x</td>
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<td>x</td>
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<td>MV, HV cable sheath</td>
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<tr>
<td>Rated voltage $U_r$, kV$_{nom}$</td>
<td>5-45</td>
<td>5-55</td>
<td>5-55</td>
<td>1.13-9.38</td>
<td>2.88-6.0</td>
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<tr>
<td>Continuous voltage $U_c$, kV$_{nom}$</td>
<td>4-36</td>
<td>4-44</td>
<td>4-44</td>
<td>0.9-7.5</td>
<td>2.3-4.8</td>
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