

# ELEKTRISOLA Copper Magnet Wire Types

ELEKTRISOLA - Product - Name ELEKTRISOLA - Product - Code	Polysol 155 P155
<p><b>General</b></p> <p>Description</p> <p>Standards <b>IEC</b> (including the following norms) <b>NEMA</b> (including the following norms)</p> <p>UL-approval</p> <p>Diameters available</p> <p><b>Technical values</b></p> <p><b>1. Thermal values</b></p> <p>Temperature index 20.000 h acc. to IEC 60172</p> <p>Cut through temperature min °C acc. To IEC 60851.6.4 Elektrisola typical values for 0.05 mm/0.25 mm, Grade 1</p> <p>Heat shock min °C acc. to IEC 60851.6.3 Elektrisola typical values for 0.05 mm/0.25 mm, Grade 1</p> <p><b>2. Electrical values</b></p> <p>Low voltage continuity max. acc. to IEC 60851.5.1 for 0.05 mm/0.025 mm Elektrisola typical values for 0.05 mm/0.25 mm, Grade 1</p> <p>High voltage continuity max. acc. to IEC 60851.5.2 for 0.05 mm/0.25 mm Elektrisola typical values for 0.05 mm/0.25 mm, Grade 1</p> <p>Pin hole acc. to IEC 60851.5.7, with 0 % and 3 % elongation</p> <p>Breakdown voltage (at 20°C, 35% humidity), acc. to IEC 60851.5.4 Elektrisola typical values acc. to cylinder test 0.05 mm/0.25 mm, Grade 1</p> <p>Decrease of breakdown voltage in % at elevated temperature Elektrisola typical values for 0.05 mm/0.25 mm, Grade 1, in % at °C</p> <p><b>3. Mechanical values</b></p> <p>Elongation min. acc. to IEC 60851.3.3 for 0.05 mm/0.25 mm, Grade 1 Elektrisola typical values for 0.05 mm/0.25 mm, Grade 1</p> <p>Tensile strength Elektrisola typical values for 0.05 mm/0.25 mm, Grade 1</p> <p><b>4. Chemical compatibility</b></p> <p>Standard solution Pencil Hardness acc. to IEC 60851.4.3 / untreated Decrease of breakdown voltage in %</p> <p>General statements about chemical compatibility are not possible due to the high number of influencing factors such as winding, impregnationmoulding and cleaning materials etc.</p> <p><b>5. Solderability</b></p> <p>acc. to IEC 60851.4.5, max. seconds at °C für 0.05mm/0.25mm Elektrisola-typical values acc. to IEC 60851.4.5 for 0.05 mm, Grade 1, seconds at °C for 0.25 mm, Grade 1, seconds at °C</p> <p><b>Properties</b></p> <p><b>Applications</b></p>	<p>mod. Polyurethane <b>IEC 60317-20</b>, IEC 60317-4 <b>MW79</b> , MW2, MW75 yes 0.01 - 0.50 mm</p> <p><b>158°C</b></p> <p>≥ 200°C <b>225 / 230°C</b></p> <p>≥ 175°C <b>190 / 180°C</b></p> <p>≤ 40 / ≤ 10 <b>0 / 0</b></p> <p>≤ 40 / ≤ 10 <b>2 / 1</b></p> <p>not resistant</p> <p><b>240 / 180 V/μm</b></p> <p><b>25 % at 155°C</b></p> <p>≥ 14% / ≥ 25% <b>23% / 40%</b></p> <p><b>57 / 1370 cN</b></p> <p><b>4H / 4H</b> <b>5 %</b></p> <p>2s/390°C / 2s/390°C <b>0.3s/370°C / 0.2s/390°C</b> <b>0.7s/370°C / 0.5s/390°C</b></p> <p>Very good solderability, good thermal properties, low sensitivity against humidity.</p> <p>Used in small transformers, linear motors, relays, solenoids, small motors, clock coils, fly-back-transformers, magnetic heads, instruments.</p>
06/09	ELEKTRISOLA typical values are the result of various tests and represent average values.