

## RUPALIT® Plus

Product datasheet

**Enameled copper wire stranded with additional outer insulation**  
RUPALIT® Plus offers enhanced electrical protection for demanding high-voltage applications while optimizing HF losses.



RUPALIT® Plus extends the proven RUPALIT technology with specially developed insulation coverings.

- Conductor cross-sections can be flexibly configured according to customer requirements

### Advantages

- Increased breakdown voltage resistance – up to 10x higher than standard RUPALIT®
- Space-saving design
- Reduced susceptibility to EMC interference
- Longer service life in humid or chemically aggressive environments
- Permanent quality control of the insulation during production
- Integrated multiple insulation

### Technical data

#### Construction

- Enamelled copper wires (0.02–0.80 mm, 20–52 AWG) in accordance with IEC 317 ff. with optimized twisting structure for symmetrical current distribution

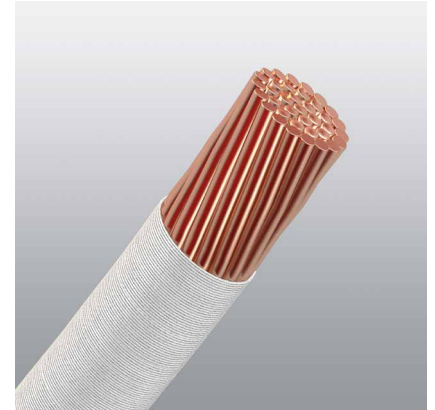
### Insulation material

#### Yarn

- Natural silk (52) - natural yarn for applications requiring maximum flexibility and high quality
- Polyamide (63, PA6.6, Nylon®) – robust textile yarn with high mechanical resistance
- Other materials on request: glass silk, rayon, acetate silk

#### Foil

- PET (polyethylene terephthalate, polyester, Mylar®) – foil as a classic insulation material with excellent dielectric strength
- PEN (polyethylene naphthalate, Teonex®) – foil for high-temperature applications
- PI (polyimide, Kapton®) – foil for extreme thermal requirements
- Other materials on request



**RUPALIT® Plus**  
with yarn

#### Extruded jacket

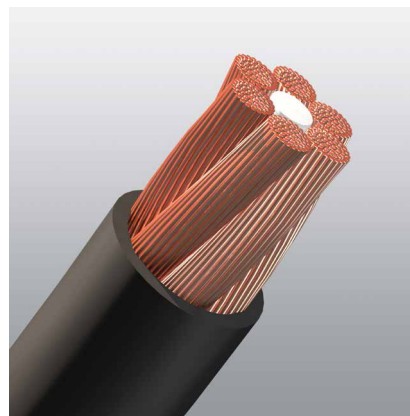
- ETFE (ethylene-tetrafluoroethylene copolymer, Tefzel®)
- FEP (fluoroethylene propylene)
- PUR (polyurethane, TPE-U)
- Si (silicone)
- PVC (polyvinyl chloride)

### Applications

- Industrial electronics:
  - Bifilar windings
  - Inductive transport systems
  - Inductive proximity switches
- Transformers for power supplies
- Renewable energy – litz wires for series production of HF windings
- Smart textiles
- Wearables & sensing



**RUPALIT® Plus**  
with foil



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with extruded jacket

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