

# ASSORTMENT OF WIRES



SPEZIALDRÄHTE

	<b>Bare wires</b> (in mm)	<b>Rectangular and round wires</b> Insulated with polyimide sheet (in mm)	<b>Rectangular and round wires</b> Insulated with mica sheet (in mm)	<b>Rectangular and round wires</b> Insulated with paper or aramid paper (in mm)	<b>Rectangular and round wires</b> Enamelled (in mm)	<b>Rectangular wires</b> Insulated with glass filament and/or mixed yarn (in mm)	<b>Litz wire</b> Insulated with mica and/or PET sheet
Conductor material	Rectangular wire Round wire	Rectangular wire Round wire	Rectangular wire Round wire	Rectangular wire Round wire	Rectangular wire Round wire	Rectangular wire	Single round wire
Dimensions of rectangular wire acc. to DIN EN	Rectangular wire Width: 3.35...30.00 Thickness: 1.00...7.00	Rectangular wire Width: 3.35...16.00 Thickness: 1.00...7.00	Rectangular wire Width: 3.35...25.00 Thickness: 1.00...7.00	Rectangular wire Width: 3.35...25.00 Thickness: 1.00...7.00	Rectangular wire Width: 3.35...14.00 Thickness: 1.00...5.60	Rectangular wire Width: 3.35...20.00 Thickness: 1.00...5.00	Single wire Cross section of litz wire: 1.5 mm <sup>2</sup> ... 150 mm <sup>2</sup>
Dimensions of round wire acc. to DIN EN	Round wire Ø: 0.50...11.00	Round wire Ø: 0.85...6.00	Round wire Ø: 0.85...6.00	Round wire Ø: 0.85...6.00	Round wire Ø: 0.50...2.60		
Insulation/design		<ul style="list-style-type: none"> <li>▪ Polyimide sheet, FEP coated and hot-sealed, also corona resistant</li> </ul>	<ul style="list-style-type: none"> <li>▪ Mica sheet</li> <li>▪ Combinations with enamelled wire and/or PET sheet possible                             <ul style="list-style-type: none"> <li>▪ High-temperature-resistant glass fibre Mica tape with and without PET sheet</li> <li>▪ TI 155°C</li> <li>▪ Further variants possible at the customer's specifications</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ Kraft paper, also with high thermal stability</li> <li>▪ Nomex®</li> <li>▪ Possible in combination with enamelled</li> </ul>	<ul style="list-style-type: none"> <li>Rectangular wire                             <ul style="list-style-type: none"> <li>▪ Enamel</li> <li>▪ Polyamidimide acc. to DIN EN</li> <li>▪ TI 155°C</li> </ul> </li> <li>Round wire                             <ul style="list-style-type: none"> <li>▪ Base coat Polyesterimide, over coat Polyamidimide acc. to DIN EN</li> <li>▪ UL-file: MW35-C</li> <li>▪ TI 200°C</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ Combinations with bare, enamelled or polyimide-sheet insulated wires possible</li> <li>▪ Glass filament and/or mixed yarn, impregnated</li> <li>▪ TI 155°C...180°C</li> </ul>	<ul style="list-style-type: none"> <li>▪ PET sheet</li> <li>▪ Mica sheet</li> <li>▪ TI 155°C</li> <li>▪ Further variants possible at the customer's specifications</li> </ul>
Increase		Acc. to the customer's specifications	Acc. to the customer's specifications	Acc. to the customer's specifications	<ul style="list-style-type: none"> <li>▪ Class 1</li> <li>▪ Class 2</li> <li>▪ Class 3</li> </ul> Acc. to the DIN EN or customer's specifications	Acc. to the customer's specifications	Acc. to the customer's specifications
Number of layers/taping		<ul style="list-style-type: none"> <li>▪ 1 layer</li> <li>▪ 2 layers, opposite directions</li> </ul>	<ul style="list-style-type: none"> <li>▪ 1... 4 layers</li> <li>▪ Same and opposite directions</li> <li>▪ Further layers on request</li> </ul>	<ul style="list-style-type: none"> <li>▪ 1... 8 layers</li> <li>▪ Same or opposite</li> <li>▪ Further layers on request</li> </ul>		<ul style="list-style-type: none"> <li>▪ 1 layer</li> <li>▪ 2 layers same direction</li> </ul>	<ul style="list-style-type: none"> <li>▪ 1... 3 layers, same direction</li> <li>▪ 2 layers, opposite direction</li> </ul>
Overlap		Steplessly variable, max. 75%	Edge to edge, steplessly variable, max. 75%	Edge to edge, steplessly variable <ul style="list-style-type: none"> <li>▪ Rectangular wire max. 80%</li> <li>▪ Round wire max. 50%</li> </ul>			Steplessly variable, min. 30% to max. 80%
Application examples	<ul style="list-style-type: none"> <li>▪ Conductor material for further insulation</li> <li>▪ Rotor bars</li> </ul>	<ul style="list-style-type: none"> <li>▪ Traction motors</li> <li>▪ Special-purpose motors</li> <li>▪ Motors for high-temperature applications</li> <li>▪ *</li> </ul>	<ul style="list-style-type: none"> <li>▪ High- and low-voltage machines</li> <li>▪ Frequency-converter-proof extraction</li> <li>▪ Gas motors</li> <li>▪ Fire resistant cables</li> <li>▪ Transformers</li> <li>▪ *</li> </ul>	<ul style="list-style-type: none"> <li>▪ Transformer windings</li> <li>▪ Reactors</li> <li>▪ *</li> </ul>	<ul style="list-style-type: none"> <li>▪ Motors</li> <li>▪ Generators</li> <li>▪ Transformers</li> </ul>	<ul style="list-style-type: none"> <li>▪ Traction motors</li> <li>▪ Generators</li> <li>▪ High-voltage motors</li> <li>▪ Special-purpose motors</li> <li>▪ *</li> </ul>	<ul style="list-style-type: none"> <li>▪ HF motors</li> <li>▪ Reactors</li> <li>▪ Transformers</li> </ul>

\* Insulated round wire is not suited for drawing-in technology!



**Copper round wire**  
Bare



**Round wire**  
Insulated with polyimide sheet



**Round wire**  
Insulated with glass fibre mica tape



**Round wire**  
Enamelled with mica tape



**Round wire**  
Insulated with Nomex® aramid paper



**Round wire**  
Enamelled



**Stranded copper wire**  
6 mm<sup>2</sup> Insulated with PET film



**Copper rectangular wire**  
Bare



**Copper rectangular wire**  
Insulated with 2 layers of polyimide sheet



**Copper rectangular wire**  
Mica-insulated



**Copper rectangular wire**  
Insulated with Nomex® aramid paper



**Copper rectangular wire**  
Enamelled



**Copper rectangular wire**  
Enamelled and braided with 1 layer of mixed yarn



**Stranded copper wire**  
35 mm<sup>2</sup> Insulated with PET film

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