

# SINOALUM ELT220

Round enamelled winding wire of copper, heat resistant, class 220

**Product name:**

ELT 220 - Gr 1  
ELT 220 - Gr 2

**Specifications:**

IEC 60317-57

**Class: 220**

Temperature index  $\geq 220$  °C  
Heat shock:  $\geq 240$  °C

**Conductor material:**

EN 1977 - ETP1 CW003A  
EN 1977 - ETP CW004A  
ASTM B49 - ETP C11000/C11040

**Insulation:**

Basecoat: Polyamide-imide

**Properties:**

- Very good abrasion resistance
- Excellent heat resistance
- Suitable for winding in high speed machines

**Field of application:**

- High thermal applications
- Hermetic compressors
- Ballasts
- Automotive components

**Dimension range:**

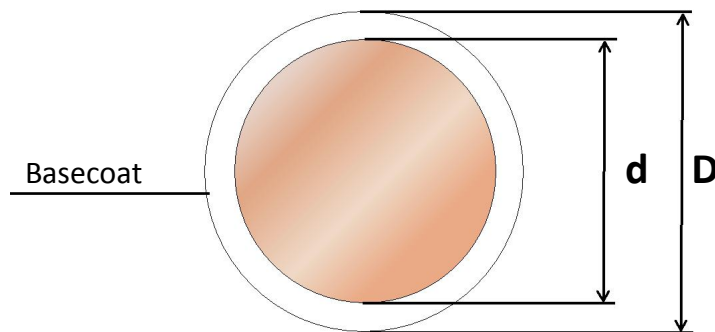
ELT 220 - Gr 1	$0,250 \leq \varnothing \leq 2,00$ mm
ELT 220 - Gr 2	$0,250 \leq \varnothing \leq 2,00$ mm

**Standard packaging:**

$0,250 \leq \varnothing \leq 2,00$ mm	A250/400, A315/500, A400/630
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**Shelf life:**

6 years, under normal ambient conditions



D - d = Increase

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## Properties for ELT 220

Main characteristics	Test method	Acceptance criteria	Test values for a Damid 220 sample (1,00 mm, Gr2)
<b>Thermal properties</b>			
Heat shock	IEC 60851 - 6.3	≥ 240 °C	≥ 240 °C
Cut-through	IEC 60851 - 6.4	≥ 350°C	> 430 °C
Temperature index	IEC 60172	≥ 220 °C <sup>1)</sup>	≥ 220 °C <sup>1)</sup>
<b>Electrical properties</b>			
Conductor resistance	IEC 60851 - 5.3	0,01724 Ωmm <sup>2</sup> /m	0,01724 Ωmm <sup>2</sup> /m
Conductivity	1/R	> 58 m/(Ωmm <sup>2</sup> )	> 58 m/(Ωmm <sup>2</sup> )
Breakdown voltage	IEC 60851 - 5.4	IEC 60317-0-1 <sup>2)</sup>	8,0 kV
<b>Mechanical properties</b>			
Elongation	IEC 60851-3.3	IEC 60317-0-1 <sup>2)</sup>	40%
Springiness	IEC 60851-3.4	Springiness <sup>3)</sup>	IEC 60317-0-1 <sup>2)</sup>
		Springback <sup>4)</sup>	≤5°
Flexibility	IEC 60851-3.5	Mandrel wind. <sup>3)</sup>	1x∅
		Stretching <sup>4)</sup>	min 32%
Adherence	IEC 60851-3.5	Jerktest <sup>5)</sup>	No loss of adhesion
		Peeltest <sup>6)</sup>	min. 75 <sup>7)</sup>

1. According to supplier certificate

2. Values depend on dimension and grade

3. Up to an including 1,60 mm

4. Over 1,60 mm

5. Up to an including 1,00 mm

6. Over 1,00 mm

7. Revolutions x nominal dimension

Values above are for information only. All values noted are typical and can vary between lots and dimensions.