

SINOALUM ELT180

Round enamelled winding wire of copper, heat resistant, class 180

Product name:

ELT180 - Gr 1
ELT180 - Gr 2

Specifications:

IEC 60317-8

Class: 180

Temperature index ≥ 180 °C
Heat shock: ≥ 200 °C

Conductor material:

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

Insulation:

THEIC-modified esterimide

Properties:

- Suitable for winding in high speed machines
- Very good resistance to transformer oils
- Very good resistance to typical solvent
- Freon resistant
- Excellent resistance to mechanical stress

Field of application:

- Electrical devices
- Oil-immersed transformers
- Cast-resin transformers

Dimension range:

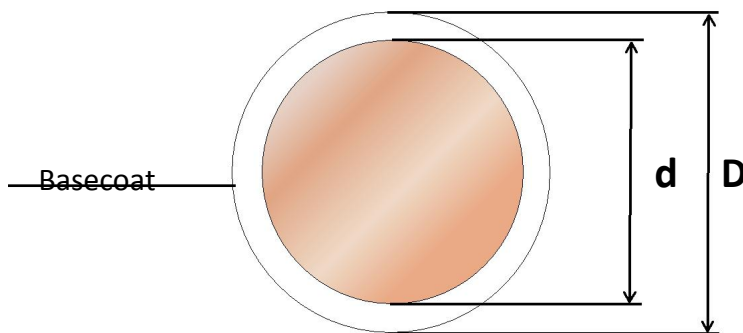
ELT 180 - Gr 1	$0,090 \leq \varnothing \leq 6,00$
ELT 180 - Gr 2	$0,090 \leq \varnothing \leq 6,00$

Standard packaging:

$0,150 \leq \varnothing \leq 3,35$ mm	A250/400, A315/500
$3,35 < \varnothing \leq 6,00$ mm	K500, K630, K710

Shelf life:

6 years, under normal ambient conditions



$D - d = \text{Increase}$

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Properties for ELT 180

Main characteristics	Test method	Acceptance criteria	Test values for a ETL 180 sample (1,00 mm, Gr2)
Thermal properties			
Heat shock	IEC 60851 - 6.3	≥ 200 °C	≥ 200 °C
Cut-through	IEC 60851 - 6.4	≥ 320°C	> 400 °C
Temperature index	IEC 60172	≥ 180 °C ¹⁾	≥ 180 °C ¹⁾
Electrical properties			
Conductor resistance	IEC 60851 - 5.3	0,01724 Ωmm ² /m	0,01724 Ωmm ² /m
Conductivity	1/R	> 58 m/(Ωmm ²)	> 58 m/(Ωmm ²)
Breakdown voltage	IEC 60851 - 5.4	IEC 60317-0-1 ²⁾	> 6,0 kV cyl.
Mechanical properties			
Elongation	IEC 60851-3.3	IEC 60317-0-1 ²⁾	40%
Springiness	IEC 60851-3.4	Springiness ³⁾	IEC 60317-0-1 ²⁾
		Springback ⁴⁾	≤ 5°
Flexibility	IEC 60851-3.5	Mandrel wind ³⁾	1x∅
		Stretching ⁴⁾	min 32%
Adherence	IEC 60851-3.5	Jerktest ⁵⁾	No loss of adhesion
		Peeltest ⁶⁾	min. 110 ⁷⁾

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.