



PRODUCT INFORMATION



ERSOL 155

round enamelled copper wire , winding wire ,
magnet wire,class 155

Properties:

- Directly solderable
- Very short soldertime
- Suitable in high speed winding machines
- Very good mechanical resistance

Field of application:

- Small motors and tranformers
- Solenoid coils
- Relays
- Automotive components
- Electronic devices&meters

Certifications:

IATF 16949
ISO 9001,ISO 14001,OHSAS 18001
RoHS,REACH

Class: 155

Temperature index $\geq 155^{\circ}\text{C}$
Heat shock: $\geq 175^{\circ}\text{C}$

Conductor material:

Cu according to EN 1977/ASTM B49

Insulation:

Basecoat: Polyurethane

Product name:

ERSOL 155 - Gr 1 / Single

ERSOL 155 - Gr 2 / Heavy

Specifications:

IEC 60317-20
MW79-C

UL approval :

Approved: ERSOL 155
UL- file no: E304215

Dimension range:

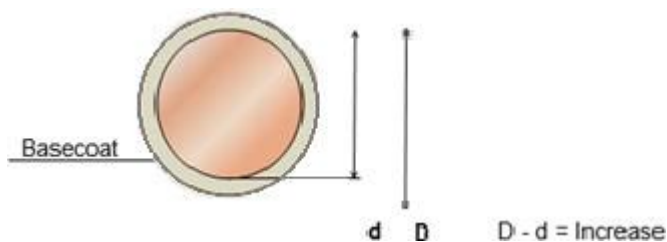
	IEC
ERSOL 155 Gr 1	$0,05 \leq \varnothing \leq 2,00 \text{ mm}$
ERSOL 155 Gr 2	$0,05 \leq \varnothing \leq 2,00 \text{ mm}$

Dimension range :

	NEMA
ERSOL 155 Single	$44 \leq \varnothing \leq 12 \text{ AWG}$
ERSOL 155 Heavy	$44 \leq \varnothing \leq 12 \text{ AWG}$

Shelf life:

6 years, under normal ambient conditions



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Properties for ERSOL 155

Main characteristics	Test method	Acceptance criteria	Test values for a ERSOL 155 sample (1,00 mm, Gr2)
Thermal properties			
Heat shock	IEC 60851 - 6.3	$\geq 175^{\circ}\text{C}$	$\geq 175^{\circ}\text{C}$
Cut-through	IEC 60851 - 6.4	$\geq 200^{\circ}\text{C}$	$> 210^{\circ}\text{C}$
Temperature index	IEC 60172	$\geq 155^{\circ}\text{C}^{(1)}$	$\geq 155^{\circ}\text{C}^{(1)}$
Chemical properties			
Solderability	IEC 60851-4.5	390°C	Max.3 sec
Resistance to Transformer oil	IEC 60851-4.6	Not applicable	-
Electrical properties			
Conductor resistance	IEC 60851 - 5.3	$0,01709 \Omega\text{mm}^2/\text{m}$	$0,01709 \Omega\text{mm}^2/\text{m}$
Conductivity	1/R	$> 58 \text{ m}/(\Omega\text{mm}^2)$	$> 58 \text{ m}/(\Omega\text{mm}^2)$
Breakdown voltage	IEC 60851 - 5.4	IEC 60317-0-1 ⁽²⁾	6,0 kV
Mechanical properties			
Elongation	IEC 60851-3.3	IEC 60317-0-1 ⁽²⁾	37%
Springiness	IEC 60851-3.4	Springiness ⁽³⁾	IEC 60317-0-1 ⁽²⁾
		Springback ⁽⁴⁾	$\leq 5^{\circ}$
Flexibility	IEC 60851-3.5	Mandrel wind. ⁽³⁾	1xØ
		Stretching ⁽⁴⁾	min 32%
	IEC 60851-3.5	Jerktest ⁽⁵⁾	No loss of adhesion
		Peeltest ⁽⁶⁾	min. 75 ⁽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.