



DAMIDSOL 180

Round enamelled winding wire of copper, solderable, class 180

Product name:

Damidsol 180 - Gr 1
Damidsol 180 - Gr 2

Specifications:

IEC 60317-23

UL approval:

Approved: DAMIDSOL 180
UL-file no: E101843

Class: 180

Temperature index $\geq 180\text{ }^{\circ}\text{C}$
Heat shock: $\geq 200\text{ }^{\circ}\text{C}$

Conductor material:

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

Insulation:

Modified polyesterimide

Properties:

- Very good hairline crack avoidance
- Solderable at $470\text{ }^{\circ}\text{C}$

Field of application:

- Motor applications
- Equipment construction

Dimension range:

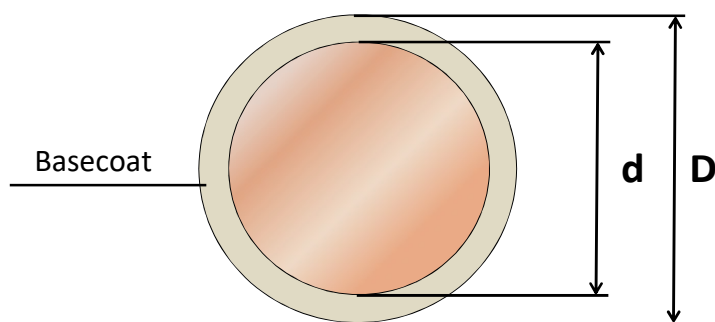
Damid 180 Gr 1	$0,150 \leq \varnothing \leq 0,80\text{ mm}$
Damid 180 Gr 2	$0,150 \leq \varnothing \leq 0,80\text{ mm}$

Standard packaging:

$0,150 \leq \varnothing \leq 0,80\text{ mm}$ A250/400, A315/500

Shelf life:

6 years, under normal ambient conditions



$D - d = \text{Increase}$

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Properties for DAMIDSOL 180

Main characteristics	Test method	Acceptance criteria	Test values for a Damidsol 180 sample (0,50 mm, Gr1)
<u>Thermal properties</u>			
Heat shock	IEC 60851 - 6.3	$\geq 200\text{ }^{\circ}\text{C}$	$\geq 200\text{ }^{\circ}\text{C}$
Cut-through	IEC 60851 - 6.4	$\geq 265\text{ }^{\circ}\text{C}$	$> 340\text{ }^{\circ}\text{C}$
Temperature index	IEC 60172	$\geq 180\text{ }^{\circ}\text{C}^{1)}$	$\geq 180\text{ }^{\circ}\text{C}^{1)}$
<u>Electrical properties</u>			
Conductor resistance	IEC 60851 - 5.3	0,01724 $\Omega\text{mm}^2/\text{m}$	0,01724 $\Omega\text{mm}^2/\text{m}$
Conductivity	1/R	$> 58,5\text{ m}/(\Omega\text{mm}^2)$	$> 58,5\text{ m}/(\Omega\text{mm}^2)$
Breakdown voltage	IEC 60851 - 5.4	IEC 60317-0-1 ²⁾	$> 4,0\text{ kV cyl.}$
<u>Mechanical properties</u>			
Elongation	IEC 60851-3.3	IEC 60317-0-1 ²⁾	40%
Springiness	IEC 60851-3.4	IEC 60317-0-1 ²⁾	39°
Flexibility	IEC 60851-3.5 Mandrel wind.	1xØ	10 % elongation + 1xØ
Adherence	IEC 60851-3.5 Jerktest ³⁾ Peeltest ⁴⁾	No loss of adhesion	OK
		min. 110 ⁵⁾	-

1. According to supplier certificate

2. Values depend on dimension and grade

3. Up to an including 1,00 mm

4. Over 1,00 mm

5. Revolutions x nominal dimension

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

The technical data included is up to date at the time of printing.
We reserves the right to make any amendments deemed necessary

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