



# 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  $\geq 180$  °C  
Heat shock:  $\geq 200$  °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 °C

## Field of application:

- Motor applications
- Equipment construction

## Dimension range:

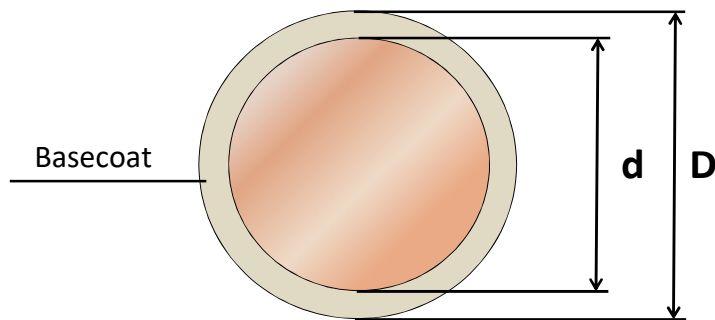
Damid 180 Gr 1	$0,150 \leq \varnothing \leq 0,80$ mm
Damid 180 Gr 2	$0,150 \leq \varnothing \leq 0,80$ mm

## Standard packaging:

$0,150 \leq \varnothing \leq 0,80$ mm	A250/400, A315/500
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## 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)
<b><u>Thermal properties</u></b>			
Heat shock	IEC 60851 - 6.3	≥ 200 °C	≥ 200 °C
Cut-through	IEC 60851 - 6.4	≥ 265 °C	> 340 °C
Temperature index	IEC 60172	≥ 180 °C <sup>1)</sup>	≥ 180 °C <sup>1)</sup>
<b><u>Electrical properties</u></b>			
Conductor resistance	IEC 60851 - 5.3	0,01724 Ωmm <sup>2</sup> /m	0,01724 Ωmm <sup>2</sup> /m
Conductivity	1/R	> 58,5 m/(Ωmm <sup>2</sup> )	> 58,5 m/(Ωmm <sup>2</sup> )
Breakdown voltage	IEC 60851 - 5.4	IEC 60317-0-1 <sup>2)</sup>	> 4,0 kV cyl.
<b><u>Mechanical properties</u></b>			
Elongation	IEC 60851-3.3	IEC 60317-0-1 <sup>2)</sup>	40%
Springiness	IEC 60851-3.4	IEC 60317-0-1 <sup>2)</sup>	39°
Flexibility	IEC 60851-3.5 Mandrel wind.	1x∅	10 % elongation + 1x∅
Adherence	IEC 60851-3.5	Jerktest <sup>3)</sup>	OK
		Peeltest <sup>4)</sup>	min. 110 <sup>5)</sup>

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.