



# DASOL 180

Round enamelled winding wire of copper, solderable, class 180

## Product name:

Dasol 180 - Gr 1  
Dasol 180 - Gr 2

## Specifications:

IEC 60317-51 / NEMA MW82

## UL approval:

Approved: Dasol 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:

Basecoat: Polyurethane

## Properties:

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

## Field of application:

- Small motors and transformers
- Solenoid coils
- Relays

## Dimension range:

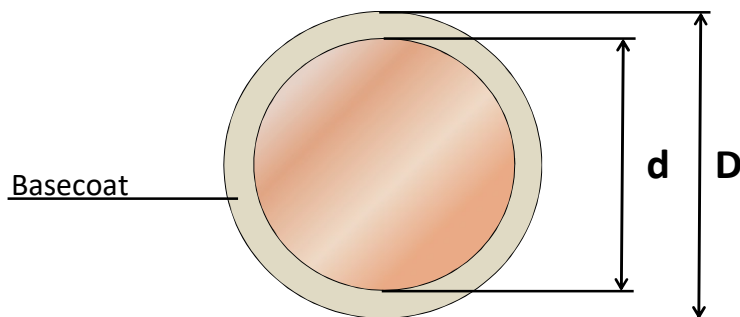
Dasol 180 - Gr 1  $0,315 \leq \varnothing \leq 2,000$  mm  
Dasol 180 - Gr 2  $0,315 \leq \varnothing \leq 2,000$  mm

## Standard packaging:

A250/400

## Shelf life:

6 years, under normal ambient conditions



$D - d = \text{Increase}$

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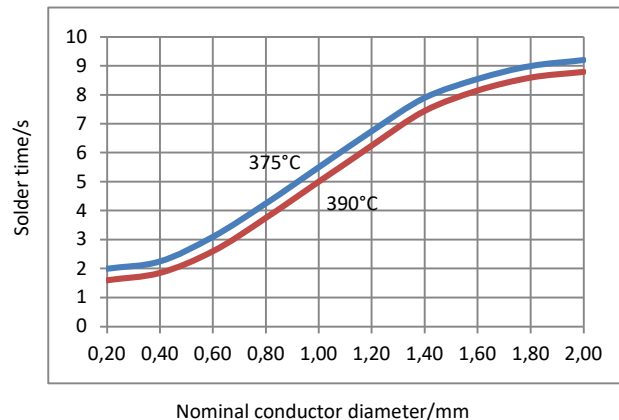
## Properties for DASOL 180

Main characteristics	Test method	Property values	Test values for a DASOL 180 sample (1,00 mm, Gr1)
<b>Thermal properties</b>			
Heat shock	IEC 60851 - 6.3	≥ 200°C	≥ 200°C
Cut-through	IEC 60851- 6.4	≥ 230°C	≥ 240°C
Temperature index	IEC 60172	≥ 180°C <sup>1)</sup>	≥ 180°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	> 58,5 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>	6,7 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>	1 x Ø
		Stretching <sup>4)</sup>	min. 32%
Adherence	IEC 60851-3.5	Jerktest <sup>5)</sup>	No loss of adhesion
		Peeltest <sup>6)</sup>	min. 110 <sup>7)</sup>

1. According to supplier certificate
2. Values depend on dimension
3. Up to an including 1,60 mm
4. Over 1,60 mm
5. Up to and 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.

### Approximate solder time, independent of grade



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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