



# DAMIDBOND 200

Rectangular enamelled wire of copper, bondable, class 200

**Product name:**

Damidbond 200

**Specifications:**

IEC 60317-29 + Internal Dahren standard

**UL approval:**

Approved: Damidbond 200

UL-file no: E101843

**Class: 200**

Temperature index  $\geq 200^{\circ}\text{C}$

Heat shock:  $\geq 220^{\circ}\text{C}$

**Insulation:**

Basecoat: THEIC-modified polyester or polyesterimide

Overcoat: Polyamide-imide

Bonding coat: Modified aromatic polyamide

**Properties:**

- High heat resistance
- Very good resistance to transformer oils
- Very good resistance to typical solvent
- Bondable at  $180^{\circ}\text{C}$ - $220^{\circ}\text{C}$
- High re-softening temperature

**Field of application:**

- Electric motors
- Rotor coils

**Standard**

K355, K500, VM630

**Shelf life:**

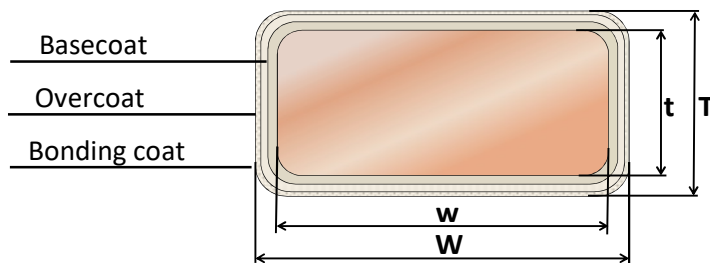
2 years, under normal ambient conditions

**Conductor material:**

EN 1977 - ETP1 CW003 A

EN 1977 - ETP CW004A

ASTM B49 - ETP C11000/C11040



T - t = Increase in thickness

W - w = Increase in width

Increase in dimension due to insulation = 0,10 - 0,20 mm

Conductor corner radius

Nominal thickness of conductor (mm)		Corner radius (mm)	Tolerance
Over	Up to and including		
-	1,00	0,5 nominal thickness	+/- 25%
1,00	1,60	0,50	+/- 25%
1,60	2,24	0,65	+/- 25%
2,24	3,55	0,80	+/- 25%
3,55	5,60	1,00	+/- 25%

Conductor tolerances

Nominal width or thickness of the conductor (mm)		Tolerance +/- (mm)
Over	Up to and including	
-	3,15	0,030
3,15	6,30	0,050
6,30	12,50	0,070
12,50	16,00	0,100

Certified according to ISO 9001, IATF 16949, ISO 14001

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## Properties for DAMIDBOND 200

Main characteristics	Test method	Interval	Acceptance criteria	Typical values
<b>Thermal properties</b>				
Heat shock	IEC 60851 - 6.3	$1,00 \leq t \leq 6,00$	$\geq 220^{\circ}\text{C}$ , 6 x t	$\geq 220^{\circ}\text{C}$ , 6 x t
Temperature index	IEC 60172	<sup>1)</sup>	$\geq 200^{\circ}\text{C}^{2)}$	$\geq 200^{\circ}\text{C}^{2)}$
<b>Electrical properties</b>				
Conductor resistance	IEC 60851 - 5.3	<sup>3)</sup>	0,01724 $\Omega\text{mm}^2/\text{m}$	0,01724 $\Omega\text{mm}^2/\text{m}$
Conductivity	1/R	<sup>3)</sup>	$> 58,5 \text{ m}/(\Omega\text{mm}^2)$	$> 58,5 \text{ m}/(\Omega\text{mm}^2)$
Breakdown voltage	IEC 60851 - 5.4	All sizes	2,0 kV	5,0 kV
<b>Mechanical properties</b>				
Elongation	IEC 60851-3.3	$1,00 \leq t \leq 2,50$	$\geq 30\%$	-
		$2,50 < t \leq 5,60$	$\geq 32\%$	40%
Springback angle	IEC 60851-3.4	All sizes	$\leq 5^{\circ}$	4,1°
Flexibility	IEC 60851-3.5	width $\leq 10 \text{ mm}$	4 x width	3 x width
		width $> 10 \text{ mm}$	5 x width	4 x width
- Bending edgewise				
- Bending flatwise		All sizes	4 x thickness	3 x thickness
Adherence	IEC 60851-3.5	All sizes	15% stretch, Loss of adhesion $< 1 \text{ x width}$	30% stretch
<b>Bonding strenght</b>	Internal Dahren	All sizes	Strong enough to bend the wire when bonding is broken apart, but not strong enough to get the enamel to release from copper conductor	

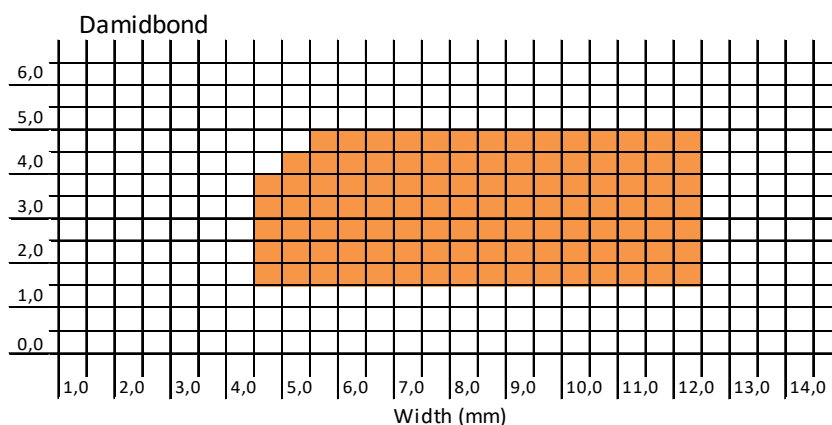
1. Test conducted on round wire, 1,00 mm grade 2, according to IEC 60172

2. According to supplier certificate

3. Dependence of dimension is expressed by the unit

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

### Dimension range



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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