



# DAMIDOGLAS 155

Rectangular enamelled conductor of copper, covered with polyester-glassfibre yarn, class 155

**Product name:**

Damidoglas 155 1  
 Damidoglas 155 2

**Properties:**

- Excellent resistance to mechanical stress
- Very good adhesion to conductor

**Specifications:**

IEC 60317-60 or customer specification

**Field of application:**

- Generators
- Electric motors

**UL approval:**

Not approved

**Standard packaging:**

K500, VM630

**Class: 155**

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

**Shelf life:**

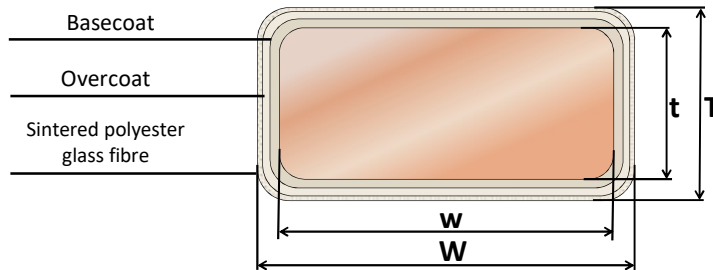
5 years, under normal ambient conditions

**Insulation:**

Basecoat: THEIC-modified polyester or polyesterimide  
 Overcoat: Polyamide-imide  
 1-2 layers of polyester glass fibre yarn

**Conductor material**

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



$T - t =$  Increase in thickness

$W - w =$  Increase in width

**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                                | -                   | 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  | -                   | 0,100              |

Certified according to ISO 9001, IATF 16949, ISO 14001

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## Insulation increase

| Designation      | Nominal width of conductor | Increase in thickness | Increase in width |
|------------------|----------------------------|-----------------------|-------------------|
| Damidoglas 155 1 | $2,00 \leq w \leq 3,15$    | $0,27 \pm 0,06$       | max. 0,33         |
|                  | $3,15 < w \leq 6,30$       | $0,29 \pm 0,06$       | max. 0,35         |
|                  | $6,30 < w \leq 12,50$      | $0,31 \pm 0,07$       | max. 0,38         |
|                  | $12,50 < w \leq 20,50$     | $0,33 \pm 0,09$       | max. 0,41         |
| Damidoglas 155 2 | $2,00 \leq w \leq 3,15$    | $0,40 \pm 0,08$       | max. 0,48         |
|                  | $3,15 < w \leq 6,30$       | $0,43 \pm 0,09$       | max. 0,52         |
|                  | $6,30 < w \leq 12,50$      | $0,45 \pm 0,10$       | max. 0,55         |
|                  | $12,50 < w \leq 20,50$     | $0,47 \pm 0,10$       | max. 0,57         |

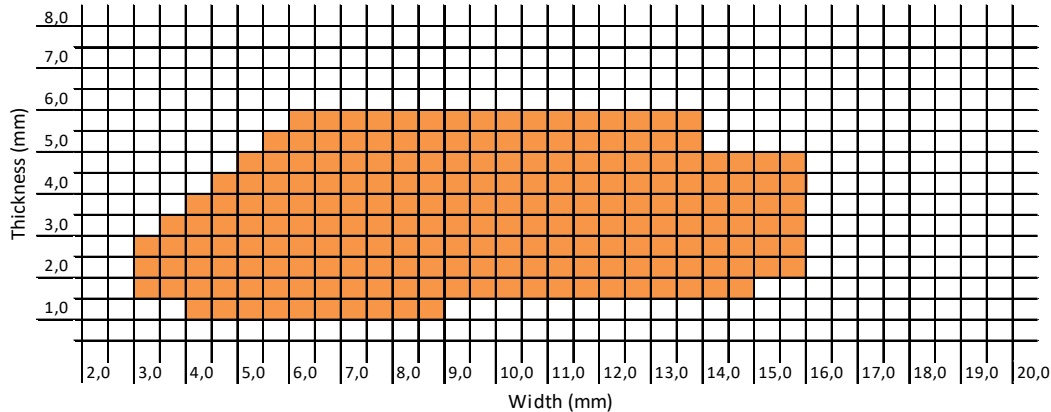
## Properties for DAMIDOGLAS 155

| Main characteristics                     | Test method     | Interval                | Acceptance criteria                   |
|--|-----------------|-------------------------|---------------------------------------|
| <b>Electrical properties</b>             |                 |                         |                                       |
| Conductor resistance                     | IEC 60851 - 5.3 | 1)                      | $0,01724 \Omega \text{mm}^2/\text{m}$ |
| Conductivity                             | 1/R             | 1)                      | $> 58 \text{ m}/(\Omega \text{mm}^2)$ |
| Breakdown voltage                        | IEC 60851 - 5.4 | All sizes               | 2350 V                                |
| - Damidoglas 155 1<br>- Damidoglas 155 2 |                 |                         | 2560 V                                |
| <b>Mechanical properties</b>             |                 |                         |                                       |
| Elongation                               | IEC 60851-3.3   | $1,00 \leq t \leq 2,50$ | $\geq 30\%$                           |
|  |                 | $t > 2,50$              | $\geq 32\%$                           |
| Springback angle                         | IEC 60851-3.4   | All sizes               | $\leq 5,5^\circ$                      |
| Flexibility                              | IEC 60851-3.5   | $w \leq 8 \text{ mm}$   | 10 x width                            |
| - Bending edgewise                       |                 | $w > 8 \text{ mm}$      | 15 x width                            |
| - Bending flatwise                       |                 | All sizes               | 10 x thickness                        |
| Adherence                                | IEC 60851-3.5   | All sizes               | 20 % stretch, no loss of adhesion     |
| -Stretch                                 |                 |                         |                                       |

1. Dependence of dimension is expressed by the unit

## Dimension range

### DAMIDOGLAS



The technical data included is up to date at the time of printing.

LWW reserves the right to make any amendments deemed necessary. Ed.A(2)