



# DAMIDFIBRE 155 AL

Rectangular enamelled and glass-fibre covered conductor of aluminium, class 155

**Product name:**

Damidfibre 155 AL

**Specifications:**

Internal LWW or customer specification

**UL approval:**

Not approved

**Class: 155**

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

Heat shock:  $\geq 155^{\circ}\text{C}$

**Insulation:**

Basecoat: THEIC-modified polyester(imide)

Overcoat: Polyamide-imide

1-2 layers of glass-fibre yarn

Impregnation: Polyurethane

**Properties:**

- Good resistance to mechanical stress
- Heat resistant

**Field of application:**

- Generators
- Electric machines

**Standard packaging:**

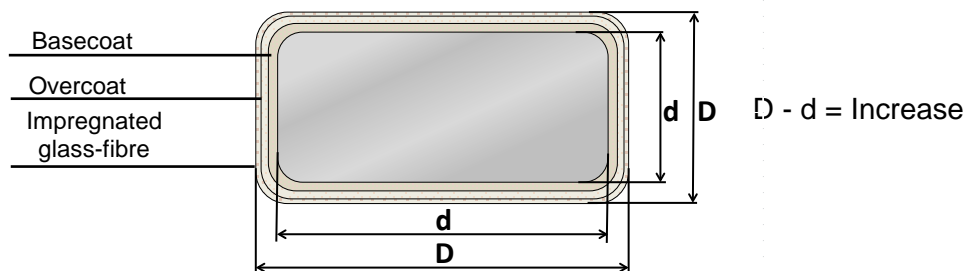
Drum 500 and 630

**Shelf life:**

5 years, under normal ambient conditions

**Conductor material:**

AL according to EN 1715



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

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%

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## Insulation increase

Designation	Nominal width of conductor	Increase in thickness	Increase in width
Damidfibre 155 AL 1	$2,00 \leq W \leq 3,15$	$0,30 \pm 0,06$	max. 0,36
	$3,15 < W \leq 6,30$	$0,32 \pm 0,06$	max. 0,38
	$6,30 < W \leq 12,50$	$0,35 \pm 0,07$	max. 0,42
	$12,50 < W \leq 20,50$	$0,38 \pm 0,08$	max. 0,46
Damidfibre 155 AL 2 <sup>1)</sup>	$2,00 \leq W \leq 3,15$	$0,37 \pm 0,06$	max. 0,51
	$3,15 < W \leq 6,30$	$0,37 \pm 0,06$	max. 0,53
	$6,30 < W \leq 12,50$	$0,42 \pm 0,08$	max. 0,57
	$12,50 < W \leq 20,50$	$0,47 \pm 0,08$	max. 0,63

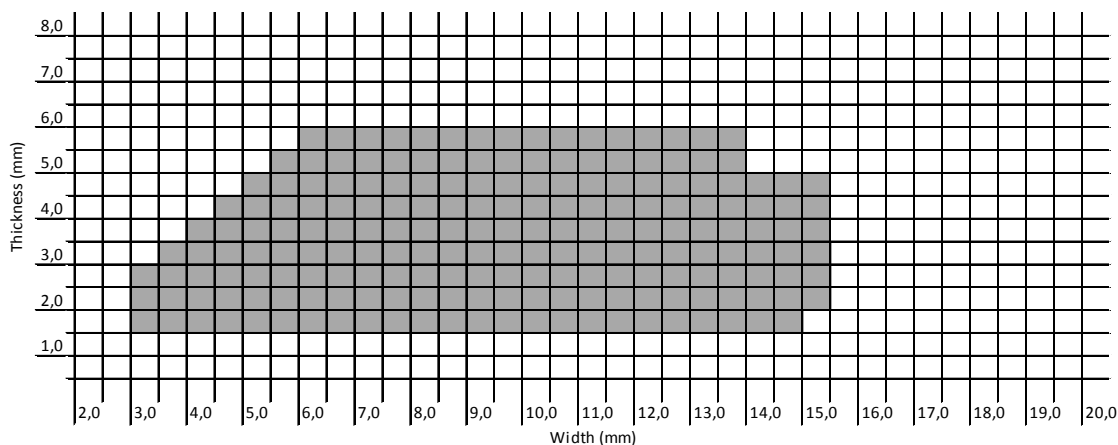
1. Not IEC standard, values modified to suit LWW production process

## Properties for DAMIDFIBRE 155 AL

Main characteristics	Test method	Interval	Acceptance criteria
<b>Electrical properties</b>			
Conductor resistance	IEC 60851 - 5.3	1)	0,02789 $\Omega\text{mm}^2/\text{m}$
Conductivity	1/R	1)	> 35,5 $\text{m}/(\Omega\text{mm}^2)$
Breakdown voltage	IEC 60851 - 5.4	All sizes	1,5 kV
- Damidfibre 155 AL 1 - Damidfibre 155 AL 2			2,0 kV
<b>Mechanical properties</b>			
Elongation	IEC 60851-3.3	$T \leq 3,15$	$\geq 15\%$
		$T > 3,15$	$\geq 20\%$
Flexibility	IEC 60851-3.5	All sizes	10 x thickness
- Bending flatwise			
Adherence	IEC 60851-3.5	All sizes	10 % stretch, no loss of adhesion
- Stretch			

1. Dependence of dimension is expressed by the unit

## Dimension range



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

LWW reserve the right to make any amendments deemed necessary

Liljedahl Winding Wire

dahréntråd

isodraht

ślaska

利里达尔电磁线  
liljedahl winding wire