



DAFIBRE 155 AL

Rectangular conductor of aluminium, covered with glassfibre yarn, class 155

Product name:

Dafibre 155 1 AL

Dafibre 155 2 AL

Dafibre 155 3 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: $\geq 175^{\circ}\text{C}$

Insulation:

1-3 layers of glass-fibre yarn

Impregnation: Polyurethane

Properties:

- Excellent resistance to mechanical stress
- Suitable in lightweight designs

Field of application:

- Generators
- Large motors
- Magnet coils
- Welding equipment

Standard packaging:

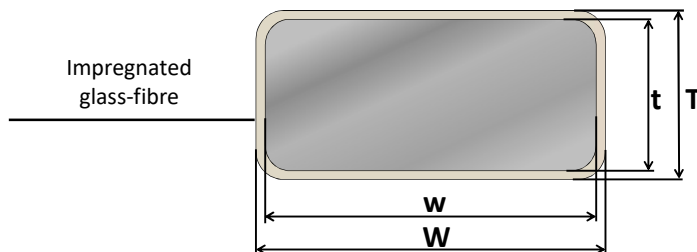
Drum 500 and 630

Shelf life:

5 years, under normal ambient conditions

Conductor material

EN 1715 - EN AW1370 [Al 99.7]



$T - t$ = 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

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Insulation increase

Designation	Nominal width of conductor	Increase in thickness	Increase in width
Dafibre 155 1 AL	$2,00 \leq w \leq 3,15$	$0,16 \pm 0,04$	max. 0,20
	$3,15 < w \leq 6,30$	$0,18 \pm 0,04$	max. 0,22
	$6,30 < w \leq 12,50$	$0,21 \pm 0,05$	max. 0,26
	$12,50 < w \leq 20,50$	$0,24 \pm 0,06$	max. 0,30
Dafibre 155 2 AL	$2,00 \leq w \leq 3,15$	$0,27 \pm 0,06$	max. 0,33
	$3,15 < w \leq 6,30$	$0,30 \pm 0,07$	max. 0,37
	$6,30 < w \leq 12,50$	$0,35 \pm 0,08$	max. 0,43
	$12,50 < w \leq 20,50$	$0,39 \pm 0,08$	max. 0,47
Dafibre 155 3 AL	$2,00 \leq w \leq 3,15$	$0,44 \pm 0,09$	max. 0,53
	$3,15 < w \leq 6,30$	$0,46 \pm 0,09$	max. 0,55
	$6,30 < w \leq 12,50$	$0,50 \pm 0,11$	max. 0,61
	$12,50 < w \leq 20,50$	$0,64 \pm 0,14$	max. 0,78

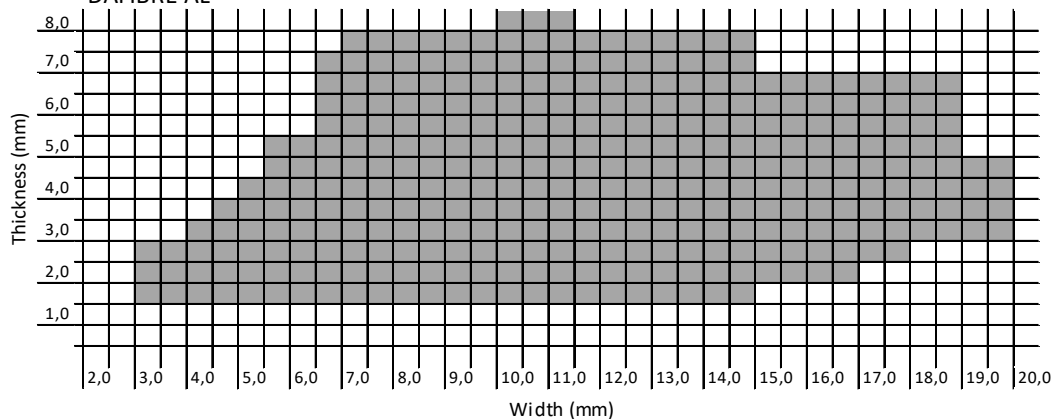
Properties for DAFIBRE 155 AL

Main characteristics	Test method	Interval	Acceptance criteria
<u>Electrical properties</u>			
Conductor resistance	IEC 60851 - 5.3	1)	0,02817 Ωmm²/m
Conductivity	1/R	1)	> 35,5 m/(Ωmm²)
Breakdown voltage	IEC 60851 - 5.4	All sizes	
- Dafibre 155 1 AL			350 V
- Dafibre 155 2 AL			560 V
- Dafibre 155 3 AL			750 V
<u>Mechanical properties</u>			
Elongation	IEC 60851-3.3	t ≤ 3,15	≥ 15%
		t > 3,15	≥ 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

DAFIBRE AL



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(4)