

# Fibre-insulated wires

## GU 600 flat

- Flat bare copper wire insulated with impregnated glass braid

**General Description:**

Copper wires of rectangular cross-section are insulated with a single braid of glass-yarn fibres and impregnated with a modified polyester-imide Class H based varnish. The glass fibre is made of a special alkali-free glass fibre (E-glass), ensuring thereby no loss of the good dielectric properties even at high temperatures.

Temperature Index is 180 °C.

**Dimensions:**

Cross-section: 2 to 60 mm<sup>2</sup>  
 Width: 2 to 15 mm  
 Thickness: 2 to 6 mm  
 Width/Thickness ratio: max. 10 : 1

The standard dimensions of the conductors (nominal dimensions and corner radii), the tolerances and the overall dimensions of the enamelled wire comply with the standard IEC 60317-0-2.

**Insulation Construction:**

Type	Construction
GU 600	Single braid of glass yarn, impregnated with polyester-imide varnish

**Standards:**

No specific standards exist for coverings made of varnished glass braid.

The test methods when applicable are based on IEC-Publications 60851:

60851 - 1	General
60851 - 2	Determination of the dimensions
60851 - 3	Mechanical properties
60851 - 4	Chemical properties
60851 - 5	Electrical properties
60851 - 6	Thermal properties

**Advantages:**

- Excellent resistance to high temperatures in continuous mode
- Good chemical resistance

	Value	Test standard
<b>Increase in insulation</b>		
Thickness increase due insulation	mm	0.40 +/-0.1
<b>Mechanical properties</b>		
Elongation at break		
Thickness up to 2.50 mm	%	≥ 30 IEC 60851-3 Test 6
Elongation at break		
Thickness above 2.50 mm	%	≥ 32 IEC 60851-3 Test 6
Springiness	°	≤ 5.0 IEC 60851-3 Test 6
<b>Electrical properties</b>		
Breakdown voltage		
Straight samples	V	min. 400 IEC 60851-3 Test 6
<b>Thermal properties</b>		
Thermal endurance	TI	180

**Appearance**

Slight color variations are raw material or process-related and have no influence on the technical properties of the wire.

**Order data :**

Quantity, Designation and Mode of Supply

The designation shall contain:

Type of wire	rectangular (FL)
Dimensions bare	8.00 x 3.00 mm
Conductor material	Cu
Designation of the insulation	GU 600

The mode of supply shall indicate the type of reel required, e.g. cylindrical reel according to IEC 60264-2 or other types.

Example of complete order:  
 500 kg FL GU600 3.00x8.00 mm D500

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