

# Covered and Taped wires

## 2GL FO331

- **Round wire nickel plated wire , with fiber glass covering and taped with Polyester film**

**Description:**

2GL FO331 is a nickel plated round wire, with a fiber glass covering, and a taping with PET film on the outer surface with an overlapp of 45-50%. A suitable heat treatment melts the PET and thus bonds firmly the films overlapping.

**Dimension :**

Round copper wire with diameter from 0.50 to 2.00 mm, nickel plated with 3 µm mini.

Diameter and tolerances acc. to IEC 60317-0-1

**Standards:**

IEC-Publication doesn't exist for such product.

The test methods are based on IEC Publication 60851:

60851-1 General

60851-2 Definition of dimensions

60851-3 Mechanical properties

60851-4 Chemical properties

60851-5 Electrical properties

60851-6 Thermal properties

**Advantages:**

Thanks to the good temperature resistance and the very good mechanical and chemical properties, 2GLFO331 wires are particularly suitable for applications that are exposed to high temperatures.

**Application:**

Special motors and magnetic coils that have to meet very high requirements.

**Process Notes:**

Due to the glass yarn behaviour, and PET film insulation, precautions are necessary:

- Hard and sharp edges on the tools during winding and forming of the coils must be avoided.
- The best method of stripping the insulation for this type of wire is mechanically by hand or with a rotating knife.

**Value for Ø 1.00 mm Standard**

**Insulation**

Thickness increase due to insulation	mm	max. 0.22
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**Mechanical properties**

Elongation at break	%	> 20	IEC 60851-3, Test 6
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Springiness	°	max. 60	IEC 60851-3, Test 7
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**Electrical properties**

Nominal resistance D.C. at 20 °C	Ohm/m	max. 0.02176	IEC 608515, Test 5
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Breakdown voltage Mandrel Ø =10 x d in metal shot bath	V	> 500	IEC 608515, Test 13
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**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	round (DR)
Conductor nominal Ø	0.80 mm
Conductor material	Cu nickel plated (3µm mini)
Insulation designation	2GL FO331

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

Example of complete order:

200 kg DR Cu Ni plated 0.80 mm 2GL FO331, reels D250

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