

Copper and Alu-Price Calculation

The material price for cables and wires is usually based on a copper price of 150,00 EUR/100 kg. For invoicing, as copper surcharge – the difference to the daily copper rate will be calculated.

The **Formula for calculating** the copper surcharge:

$$\text{Copper surcharge in EUR/km} = \text{Copper value (kg/km)} \times \frac{(\text{DEL} + 1\% \text{ delivery charge}) - \text{copper basis}}{100}$$

DEL

The DEL (German electrolytic copper for guiding purpose) is the Stock Exchange Quotation for 99,5% pure copper. The value is given per EUR/100 kg in the economic part of daily newspapers.

Example: DEL quotation = 194,29 i. e.,
100 kg copper cost 194,29 EUR and
1% delivery charge is added to the daily quotation for cables and wires.

Copper basis

In our catalogue, for almost all cables and wires, a certain portion of copper price is already included.

- Standard cables – copper basis = EUR 150,0/100 kg
- Telephone cables – copper basis = EUR 100,0/100 kg
- Power cables – copper basis = EUR 0,—/100 kg (copper base = 0)

Copper value

The copper value is stated in our catalogue. It is the copper weight of a cable or a wire.

Example: JZ-500 8x0,75 mm², Part-No. 10040
Copper value 58 kg/km

Calculation example: for

JZ-500 8x0,75 mm²

DEL 194,29 EUR/100 kg (assuming value)

Copper basis
150,0 EUR/100 kg

Copper value
58 kg/km

$$\begin{aligned} \text{Copper surcharge} &= \frac{(194,29 + 1,9429) - 150,0}{100} \times 58 \text{ kg/km} && (\text{calculated value } 1,9429 = 1\% \text{ of } 194,29) \\ &= 26,82 \text{ EUR/km} \end{aligned}$$

The net price including copper is calculated as follows:

Gross price
./ individual discount
+ Copper surcharge

Note: The copper surcharge is indicated separately in our invoices.

Continuation ►

T

Copper and Alu-Price Calculation

Calculation examples:

- Assumption: ● DEL-Quotation 194,29 EUR/100 kg for copper
 ● Daily rate 173,84 EUR/100 kg for aluminium
 ● Individual discount, e. g. 20%

1. NYY-J 3x70/35 sm, 0,6/1 kV, Part no. 32038

Quantity ordered 1000 m

Copper base = 0	4900,00 EUR/km
minus 20% (discount)	<u>980,00 EUR/km</u>
	3920,00 EUR/km

+ Copper surcharge:

$\frac{(194,29+1,9429)-0}{100} \times \text{Copper value}$

equal, 1,962 EUR/kg x 2352 kg/km =	<u>4614,62 EUR/km</u>
	8534,62 EUR/km

2. NYCWY 3x70/35 sm, 0,6/1 kV, Part No. 32268

Quantity ordered 1000 m

Copper base = 0	7930,00 EUR/km
minus 20% (discount)	<u>1586,00 EUR/km</u>
	6344,00 EUR/km

+ Copper surcharge (Conductor + screen):

$\frac{(194,29+1,9429)-0}{100} \times \text{Copper value}$

equal, 1,962 EUR/kg x 2410 kg/km =	<u>4728,42 EUR/km</u>
	11072,42 EUR/km

3. NA2XSJ 1x70 sm/16, 12/20 kV, Part No. 32454

Quantity ordered 1000 m

- Aluminium conductor
- Copper screen

Copper base = 0	9500,00 EUR/km
minus 20% (discount)	<u>1900,00 EUR/km</u>
	7600,00 EUR/km

+ Copper surcharge (screen):

$\frac{(194,29+1,9429)-0}{100} \times \text{Copper value}$

equal, 1,962 EUR/kg x 182 kg/km =	357,08 EUR/km
-----------------------------------	---------------

+ Aluminium (Conductor):

Aluminium value x daily rate

203 kg/km x 1,74 EUR/kg	<u>353,22 EUR/km</u>
	8310,30 EUR/km