

# Aerial Insulated Cable (Single Core) - IEC 60502-2

Overhead cable for aerial distribution and service connection

Aerial Insulated Cable (Single Core) - IEC 60502-2 is prepared for preliminary product selection and quotation review. This product is used for overhead distribution routes where conductor arrangement, insulation, messenger or neutral support and installation environment determine cable selection.



## VOLTAGE

10kV, 20kV, 26/35kV

## CONDUCTOR

Aluminum / aluminum alloy  
conductor route, confirmed  
by technical table

## TYPICAL USE

Aerial bundled cable systems

## STANDARDS

IEC 60502-2; EN 50397

## DATA SCOPE

2 technical table(s) included  
for preliminary selection

## SELECTION NOTE

Confirm voltage, conductor,  
core arrangement,  
messenger/neutral and  
installation span.

**For quotation review, provide cable type, standard, size, quantity and project destination.**

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## Application & Selection Summary

### Typical applications

- Aerial bundled cable systems
- overhead service drops
- rural and urban distribution networks
- utility line upgrade projects.

### Selection logic

- Confirm voltage grade, conductor material, core arrangement, messenger/neutral requirement, installation span and applicable utility standard.

## Construction Overview

| Item          | Website-ready content                                                                                                 |
|---------------|-----------------------------------------------------------------------------------------------------------------------|
| Product route | Aluminum or copper conductor with insulation and optional messenger or bundled arrangement according to product type. |
| Voltage       | 10kV, 20kV, 26/35kV                                                                                                   |
| Conductor     | Aluminum / aluminum alloy conductor route, confirmed by technical table                                               |
| Standards     | IEC 60502-2; EN 50397                                                                                                 |
| Confirmation  | Final structure, dimensions and packing should follow selected standard, quotation review and order specification.    |

## Readable Data Index

| Data route                                                  | Size / rating range | Construction | Diameter / OD             | Resistance / weight / rating |
|-------------------------------------------------------------|---------------------|--------------|---------------------------|------------------------------|
| 6/10(12)kV or 8.7/15(17.5)kV - Single Core (Compacted Alum) | 35 - 240            | See table    | 15.0 / 17.2 - 27.2 / 29.2 | 190 / 235 - 835 / 920        |
| 26/35(40.5)kV - Single Core (Compacted Aluminum / XLPE)     | 50 - 400            | See table    | 28.5 - 45.5               | 545 - 1840                   |

Data boundary: these tables support website launch, quotation review and preliminary product selection. For project execution, final dimensions, electrical performance, packing and compliance documents should be confirmed against the selected project standard and order specification.

## 6/10(12)kV or 8.7/15(17.5)kV - Single Core (Compacted Aluminum / XLPE)

Reference table for preliminary selection and quotation review.

| Nominal Area (mm²)                                                     | Conductor Type | Min. XLPE Thickness (mm) | Approx. Overall Dia. (mm) | Approx. Weight (kg/km) | Calculated Pulling Tension (kN) |
|------------------------------------------------------------------------|----------------|--------------------------|---------------------------|------------------------|---------------------------------|
| 6/10(12)kV or 8.7/15(17.5)kV - Single Core (Compacted Aluminum / XLPE) |                |                          |                           |                        |                                 |
| 35                                                                     | Compacted Al   | 3.4 / 4.5                | 15.0 / 17.2               | 190 / 235              | 2.10                            |
| 50                                                                     | Compacted Al   | 3.4 / 4.5                | 16.5 / 18.5               | 235 / 285              | 3.00                            |
| 70                                                                     | Compacted Al   | 3.4 / 4.5                | 18.2 / 20.2               | 300 / 355              | 4.20                            |
| 95                                                                     | Compacted Al   | 3.4 / 4.5                | 20.2 / 22.2               | 385 / 445              | 5.70                            |
| 120                                                                    | Compacted Al   | 3.4 / 4.5                | 21.5 / 23.5               | 465 / 530              | 7.20                            |
| 150                                                                    | Compacted Al   | 3.4 / 4.5                | 23.0 / 25.0               | 555 / 625              | 9.00                            |
| 185                                                                    | Compacted Al   | 3.4 / 4.5                | 24.8 / 26.8               | 670 / 745              | 11.10                           |
| 240                                                                    | Compacted Al   | 3.4 / 4.5                | 27.2 / 29.2               | 835 / 920              | 14.40                           |

## 26/35(40.5)kV - Single Core (Compacted Aluminum / XLPE)

Reference table for preliminary selection and quotation review.

| Nominal Area (mm²)                                      | Conductor Type | Min. XLPE Thickness (mm) | Approx. Overall Dia. (mm) | Approx. Weight (kg/km) | Calculated Pulling Tension (kN) |
|---------------------------------------------------------|----------------|--------------------------|---------------------------|------------------------|---------------------------------|
| 26/35(40.5)kV - Single Core (Compacted Aluminum / XLPE) |                |                          |                           |                        |                                 |
| 50                                                      | Compacted Al   | 9.3                      | 28.5                      | 545                    | 3.00                            |
| 70                                                      | Compacted Al   | 9.3                      | 30.0                      | 635                    | 4.20                            |
| 95                                                      | Compacted Al   | 9.3                      | 32.0                      | 745                    | 5.70                            |
| 120                                                     | Compacted Al   | 9.3                      | 33.5                      | 840                    | 7.20                            |
| 150                                                     | Compacted Al   | 9.3                      | 35.0                      | 945                    | 9.00                            |
| 185                                                     | Compacted Al   | 9.3                      | 36.8                      | 1080                   | 11.10                           |
| 240                                                     | Compacted Al   | 9.3                      | 39.5                      | 1275                   | 14.40                           |
| 300                                                     | Compacted Al   | 9.3                      | 42.0                      | 1500                   | 18.00                           |
| 400                                                     | Compacted Al   | 9.3                      | 45.5                      | 1840                   | 24.00                           |