



## • Application

NTP 370.254 LV CAAI-S cables are a type of low-voltage, self-supporting aerial bundled cable designed for overhead power distribution networks. They are particularly used in urban and rural settings for reliable and efficient power transmission with below applications:

Used for low power distribution overhead networks.  
Suitable for installation on poles or attached to walls.  
Ideal for areas where insulators are not needed, reducing installation costs.

## • Performance

Voltage Rating: 0.6/1kV.  
Temperature Resistance:  
Normal operation: 90°C.  
Short-circuit conditions: 250°C (for up to 5 seconds).  
Emergency conditions: 130°C.  
Minimum service temperature: -10°C.  
Mechanical Strength: Minimum bending radius is 10 times the overall diameter of the phase conductor.  
Chemical and UV Resistance: Provides durability against environmental stressors.

## • Construction

Phase Conductor: Hard drawn aluminum conductor (Class 2).  
Neutral Messenger Conductor: Insulated galvanized steel conductor.  
Lighting Conductor: Hard drawn aluminum conductor (Class 2).  
Insulation: Cross-linked polyethylene (XLPE).  
Support: Steel supporting structures ensure mechanical strength and stability.

## • Specification

-NTP 370.254 standard  
-ICEA S-76-474 standard

## • Eastful Cable Lab



We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction.

CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

## • Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TÜV Rheinland and CCS.



## • National Green Factory



Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China. We are committed to the development of high-end, intelligent and green manufacturing industry.

\*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

## ● Technical Parameters

| Phase conductor (Aluminum Conductor) |                           |              |                        |                   |                 |                |                                           |
|--------------------------------------|---------------------------|--------------|------------------------|-------------------|-----------------|----------------|-------------------------------------------|
| Nominal Cross Section Area           | Construction of Conductor |              |                        | XLPE Insulation   |                 | Approx. Weight | Max. D.C. Resistance at 20°C of Conductor |
|                                      | No. of Wires              | Dia. of Wire | Approx. Conductor Dia. | Nominal Thickness | Insulation Dia. |                |                                           |
| mm <sup>2</sup>                      | No.                       | mm           | mm                     | mm                | mm              | kg/km          | Ω/km                                      |
| 16                                   | 7                         | 1.72         | 4.8                    | 1.14              | 7.08            | 63.35          | 1.91                                      |
| 25                                   | 7                         | 2.18         | 6                      | 1.14              | 8.28            | 91.75          | 1.2                                       |
| 35                                   | 7                         | 2.55         | 7                      | 1.14              | 9.28            | 120.56         | 0.868                                     |
| 50                                   | 7                         | 2.97         | 8                      | 1.52              | 11.04           | 168.55         | 0.641                                     |
| 70                                   | 19                        | 2.2          | 10                     | 1.52              | 13.04           | 235.51         | 0.443                                     |
| 95                                   | 19                        | 2.58         | 11.6                   | 1.52              | 14.64           | 310.92         | 0.32                                      |

| Neutral Conductor ( Galvanized Steel Conductor ) |                           |              |                        |                   |                 |                |  |
|--------------------------------------------------|---------------------------|--------------|------------------------|-------------------|-----------------|----------------|--|
| Nominal Cross Section Area                       | Construction of Conductor |              |                        | XLPE Insulation   |                 | Approx. Weight |  |
|                                                  | No. of Wires              | Dia. of Wire | Approx. Conductor Dia. | Nominal Thickness | Insulation Dia. |                |  |
| mm <sup>2</sup>                                  | No.                       | mm           | mm                     | mm                | mm              | kg/km          |  |
| 3.18                                             | 7                         | 1.04 ± 0.03  | 3.12                   | 0.8               | 4.72            | 56.32          |  |
| 6.35                                             | 7                         | 2.03± 0.03   | 6.09                   | 0.8               | 7.69            | 195.35         |  |

| Street Lighting Conductor ( Aluminum Conductor ) |                           |              |                        |                   |                 |                |                                           |
|--------------------------------------------------|---------------------------|--------------|------------------------|-------------------|-----------------|----------------|-------------------------------------------|
| Nominal Cross Section Area                       | Construction of Conductor |              |                        | XLPE Insulation   |                 | Approx. Weight | Max. D.C. Resistance at 20°C of Conductor |
|                                                  | No. of Wires              | Dia. of Wire | Approx. Conductor Dia. | Nominal Thickness | Insulation Dia. |                |                                           |
| mm <sup>2</sup>                                  | No.                       | mm           | mm                     | mm                | mm              | kg/km          | Ω/km                                      |
| 16                                               | 7                         | 1.72         | 4.8                    | 1.14              | 7.08            | 63.35          | 1.91                                      |
| 25                                               | 7                         | 2.18         | 6                      | 1.14              | 8.28            | 91.75          | 1.2                                       |

| Completed Cable                           |                      |                |                                           |                      |                |
|-------------------------------------------|----------------------|----------------|-------------------------------------------|----------------------|----------------|
| No. of Cores × Nominal Cross Section Area | Approx. Overall Dia. | Approx. Weight | No. of Cores × Nominal Cross Section Area | Approx. Overall Dia. | Approx. Weight |
| mm <sup>2</sup>                           | mm                   | kg/km          | mm <sup>2</sup>                           | mm                   | kg/km          |
| 3x25+2x16+P3.18                           | 21.9                 | 455            | 2x16+P3.18                                | 12.5                 | 184            |
| 3x35+2x16+P3.18                           | 23.4                 | 544            | 3x70+2x35+P3.18                           | 31.2                 | 1004           |
| 3x50+2x25+P3.18                           | 27.4                 | 748            | 3x95+2x16+P6.35                           | 29.6                 | 1252           |