



# NS75 CSA Quadruplex LLDPE/PVC Service Drop. ACSR Neutral - Messenger

Aluminum Conductors With Linear Low Density Polyethylene And Polyvinyl Chloride Insulation.

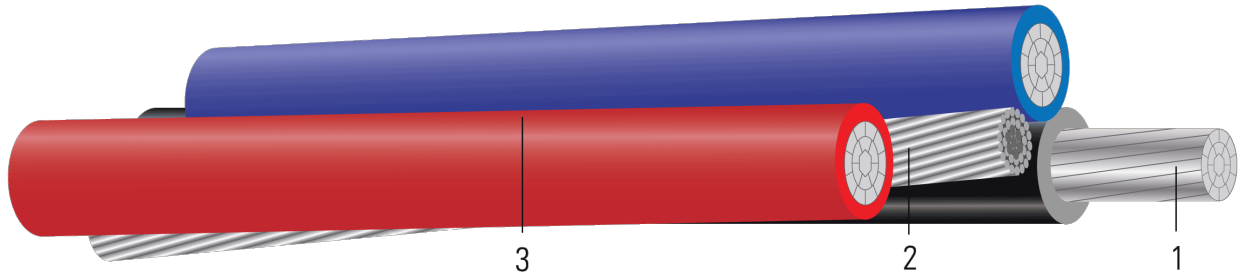


Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

- Conductor:** Conductors are stranded, compact 1350-H19 aluminum
- Messenger:** ACSR Neutral
- Insulation:** Linear Low Density Polyethylene (LLDPE) and Polyvinyl Chloride (PVC)

## APPLICATIONS AND FEATURES:

Used to supply power, usually from a pole-mounted transformer, to the user's service head where connection to the service entrance cable is made. To be used at voltages of 600 volts phase-to-phase or less and at conductor temperatures 75°C for Linear Low Density Polyethylene (LLDPE) and Polyvinyl Chloride (PVC) insulated conductors.

## SPECIFICATIONS:

- ASTM B230 Aluminum, 1350-H19 Wire for Electrical Purposes
- ASTM B231 Standard Specification for Concentric-Lay-Stranded Aluminum 1350 Conductors
- ASTM B400 Standard Specification for Compact Round Concentric-Lay-Stranded, Aluminum 1350 Conductors
- ASTM B901 Standard Specification for Compressed Round Stranded Aluminum Conductors Using Single Input Wire Construction. *(The number of strands for both phase and neutral may differ)*
- CSA 22.2 No. 129 Neutral Supported Cable

**Table 1 – Weights and Measurements**

| Stock Number | Phase Cond. Size | Phase Strand | Dia. Over Phase Conductor | Phase Insul. Thickness | Dia. Over Phase Insulation | Neutral Cond. Size | Approx. OD | Approx. Weight |
|--------------|------------------|--------------|---------------------------|------------------------|----------------------------|--------------------|------------|----------------|
|              | AWG/Kcmil        | No.          | inch                      | mil                    | inch                       | AWG/Kcmil          | inch       | lb/1000ft      |
| 662272       | 6                | 7            | 0.169                     | 75                     | 0.319                      | 6                  | 0.77       | 196            |
| 663160       | 2                | 7            | 0.268                     | 75                     | 0.418                      | 2                  | 1.009      | 401            |
| 663122       | 2/0              | 7            | 0.376                     | 105                    | 0.586                      | 2/0                | 1.415      | 801            |
| 663204       | 3/0              | 7            | 0.423                     | 105                    | 0.633                      | 3/0                | 1.528      | 972            |
| 663148       | 4/0              | 7            | 0.475                     | 105                    | 0.685                      | 4/0                | 1.654      | 1185           |

All dimensions are nominal and subject to normal manufacturing tolerances

1. The actual number of strands may differ for single input wire per ASTM B901

TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.



**Table 2 – Electrical and Engineering Data**

| Phase Cond. Size<br>AWG/Kcmil | DC Resistance @ 25°C<br>Ω/1000ft | AC Resistance @ 75°C<br>Ω/1000ft | Inductive Reactance @ 60Hz<br>Ω/1000ft | GMR<br>ft |
|-------------------------------|----------------------------------|----------------------------------|--|-----------|
| 6                             | 0.6742                           | 0.9237                           | 0.0365                                 | 0.0054    |
| 2                             | 0.2666                           | 0.3652                           | 0.0336                                 | 0.0086    |
| 2/0                           | 0.1303                           | 0.1821                           | 0.0331                                 | 0.0121    |
| 3/0                           | 0.1054                           | 0.1444                           | 0.032                                  | 0.0139    |
| 4/0                           | 0.0837                           | 0.1146                           | 0.0314                                 | 0.0157    |

Notes:

1. DC resistances include a 1% length factor for plexing.
2. Inductive reactance assumes the neutral is carrying current.
3. Phase conductors assumed to be reverse lay stranded, compressed construction.
4. Phase spacing assumes cables are touching.
5. Resistances shown are for the phase conductor only.
6. Ampacity based on conductor temperature of 75°; ambient temperature of 40°C; emissivity 0.9; 2 ft./sec. wind in sun.

**Neutral Code Word**

| Size | Code Word | OD (inches) |
|------|-----------|-------------|
| #6   | Bass      | 0.182       |
| #2   | Carp      | 0.290       |
| 2/0  | Hake      | 0.410       |
| 3/0  | Cusk      | 0.461       |
| 4/0  | Scup      | 0.517       |