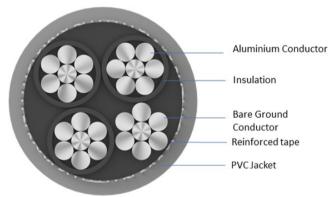


# POLY CAB ALUMINIUM SE STYLE R CABLE

## Industrial Cable, 600 V AC

**POLY CAB**  
IDEAS. CONNECTED.



Images not to scale. Follow table for dimensions

### APPLICATION

POLY CAB Aluminium SE Style R cable is recommended to use in transmitting power from service point to the meter and to the distribution panel board. Further, it is applicable to all type of SE cable requirements. SER may be used in wet or dry locations above the ground at ambient temperature not to exceed 90°C

### CHARACTERISTICS

**Voltage Rating**  
600 V

**Operation Temperature**  
-40°C to 90°C

### CONSTRUCTION

- AA-8000 series stranded compacted Aluminium Alloy conductor as per ASTM B-801
- Accompanied with bare grounding conductor
- Insulated with a sunlight resistant Type XHHW-2 or Type THHN/THWN-2 to UL 44 or UL 83 respectively.
- A reinforced tape is applied over the conductors for additional strength
- Sunlight resistant PVC jacket over the complete assembly

### Core Identification

Phase conductors are identified by a coloured stripes on the insulation.

| Number of conductors | Colour sequence<br>120/208Y  |           |        |
|----------------------|--|-----------|--------|
|                      |  | Conductor | Jacket |
| 3                    | Black, Black with Red stripe plus Bare ground  |           |        |
| 4                    | Black, Black with White stripe, and Black with Red stripe plus Bare ground                         |           |        |
| 5                    | Black, Black with White stripe, Black with Red stripe, and Black with Blue stripe plus Bare ground |           |        |

### Bending Radius

12 x Overall Diameter

**A-C Spark Test**  
As per UL 44

### OUTSTANDING FEATURES

- Heat resistant
- Sunlight resistant
- Moisture resistant
- Halogen free

### STANDARD FOLLOWS

UL 44  
UL 83  
ASTM B-801  
UL 854  
National Electrical Code/NFPA 70,2011 Edition

### COMPLIANCE

|                           |            |
|---------------------------|------------|
| Conductor resistance test | ASTM B-801 |
| Insulation resistance     | UL 44      |
| Cold bend test            | UL 44      |
| Flame test                | UL 1581    |
| Vertical tray flame test  | UL 854     |
| RoHS                      |            |
| REACH                     |            |

### OUR ACCREDITATIONS



### APPROVAL



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**Dimensional Characteristics:**

| No. of core  | Conductor size<br>AWG or kcmil | Insulation thickness<br>mils | Nominal overall diameter<br>mils | Approximate weight per<br>1000 |
|--|--------------------------------|------------------------------|----------------------------------|--------------------------------|
|  |                                |                              |                                  | lbs                            |
| SER Aluminium Two conductor with Bare ground (Formerly referred as "Three conductor")  |                                |                              |                                  |                                |
| 3  | 6-6-6                          | 45                           | 591                              | 142                            |
| 3  | 4-4-4                          | 45                           | 674                              | 196                            |
| 3  | 4-4-6                          | 45                           | 674                              | 183                            |
| 3  | 2-2-2                          | 45                           | 791                              | 282                            |
| 3  | 2-2-4                          | 45                           | 791                              | 259                            |
| 3  | 2/0-2/0-1                      | 55                           | 898                              | 445                            |
| 3  | 2/0-2/0-2/0                    | 55                           | 898                              | 491                            |
| 3  | 4/0-4/0-2/0                    | 55                           | 1263                             | 692                            |
| 3  | 4/0-4/0-4/0                    | 55                           | 1263                             | 764                            |
| SER Aluminium Three conductor with Bare ground (Formerly referred as "Four conductor") |                                |                              |                                  |                                |
| 4  | 8-8-8-8                        | 45                           | 554                              | 135                            |
| 4  | 6-6-6-6                        | 45                           | 633                              | 185                            |
| 4  | 4-4-4-6                        | 45                           | 727                              | 243                            |
| 4  | 2-2-2-4                        | 45                           | 848                              | 345                            |
| 4  | 1-1-1-3                        | 55                           | 966                              | 437                            |
| 4  | 1/0-1/0-1/0-2                  | 55                           | 1036                             | 524                            |
| 4  | 2/0-2/0-2/0-1                  | 55                           | 1122                             | 629                            |
| 4  | 3/0-3/0-3/0-1/0                | 55                           | 1223                             | 765                            |
| 4  | 4/0-4/0-4/0-2/0                | 55                           | 1336                             | 931                            |
| 4  | 250-250-250-3/0                | 65                           | 1501                             | 1127                           |
| 4  | 300-300-300-4/0                | 65                           | 1608                             | 1324                           |
| SER Aluminium Four conductor with Bare ground (Formerly referred as "Five conductor")  |                                |                              |                                  |                                |
| 5  | 2-2-2-2-4                      | 45                           | 942                              | 433                            |
| 5  | 2/0-2/0-2/0-2/0-1              | 55                           | 1249                             | 795                            |
| 5  | 4/0-4/0-4/0-4/0-2/0            | 55                           | 1488                             | 1179                           |
| 5  | 250-250-250-250-3/0            | 65                           | 1673                             | 1426                           |
| 5  | 300-300-300-300-4/0            | 65                           | 1793                             | 1674                           |

\*Above values are approximate and subject to standard manufacturing tolerance

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Electrical characteristics:

| Conductor Size<br>AWG | *Allowable ampacity<br>Amp. |      |      | Maximum DC resistance at 20°C<br>Ω/km |
|-----------------------|-----------------------------|------|------|---------------------------------------|
|                       | 60°C                        | 75°C | 90°C |                                       |
| 8                     | 35                          | 40   | 45   | 3.4464                                |
| 6                     | 40                          | 50   | 60   | 2.1684                                |
| 4                     | 55                          | 65   | 75   | 1.3633                                |
| 2                     | 75                          | 90   | 100  | 0.8573                                |
| 1                     | 85                          | 100  | 115  | 0.6798                                |
| 1/0                   | 100                         | 120  | 135  | 0.5387                                |
| 2/0                   | 115                         | 135  | 150  | 0.4275                                |
| 3/0                   | 130                         | 155  | 175  | 0.3389                                |
| 4/0                   | 150                         | 180  | 205  | 0.2690                                |
| 250                   | 170                         | 205  | 230  | 0.2277                                |
| 300                   | 195                         | 230  | 260  | 0.1896                                |

The above reflects XHHW-2 conductor \*Allowable ampacities shown are for general use as specified by the NEC 2011 Edition Section 310.16.

60°C – When terminated to equipment for circuit rated 100 ampere or less or marked for 14 through 1AWG conductor.

75°C – When terminated to equipment for circuit rated 100 ampere or less or marked for 14 through 1AWG conductor.

90°C – wet or dry locations for ampacity derating purposes