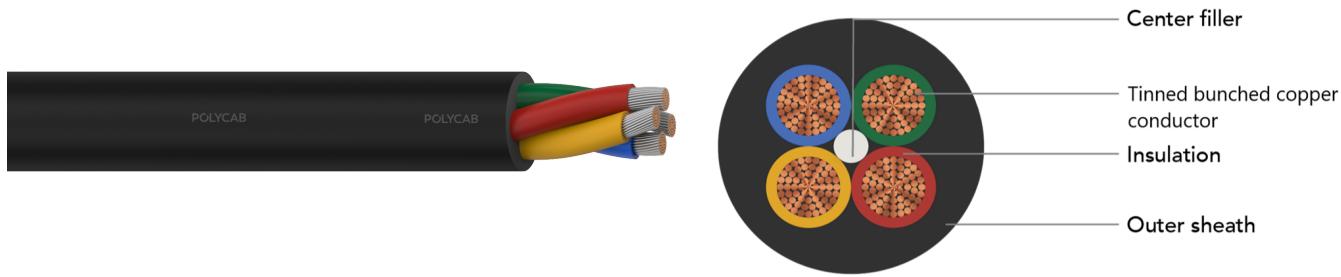


# POLY CAB RR-E, IS 9968-1

## Rubber power Cable, 1100 V AC

**POLY CAB**  
IDEAS. CONNECTED.



Images not to scale. Follow table for dimensions

### APPLICATION

POLY CAB RR-E, IS 9968-1 tinned copper conductor, EPR insulated and HOFR elastomer sheathed cable conforming to IS 9968-1 is designed to use for fixed wiring, single phase or three phase (earthed or unearthing) system for rated voltage up to and including 1100 V. These cables may be used on DC system for rated voltage grade 1500 V to earth. Suitable to use in elevator, lifts, cranes, mines, heater leads and electric iron leads etc.

### CHARACTERISTICS

#### Voltage Rating

1100 V

#### Operation Temperature

Fixed: -40°C to 90°C

Maximum short circuit temperature 250°C

#### Bending Radii

Fixed installation >12 x Overall Diameter

Occasional >10 x Overall Diameter

### CONSTRUCTION

- Annealed tinned electrolytic grade copper conductor to IS 8130, class 5
- Insulated with elastomeric compound IE 2 (EPR) to IS 6380
- Sheathed with HOFR elastomer as per IS 6380.

#### Core Identification

Single core - Red/Black/White/Yellow/Blue

Two core - Red, Black

Three core - Red, Yellow, Blue

Four core - Red, Yellow, Blue, Green

Five core - Red, Yellow, Blue, Black, Green

#### Test Voltage

3000 V AC

### STANDARD FOLLOWS

IS 8130:2013

IS 6380:1984\*

IS 9968:1988

### COMPLIANCE

Conductor resistance test IS 8130

Insulation resistance IS 6380:1984\*

Flammability IEC 60332-1-2

### OUR ACCREDITATIONS



### APPROVAL



**POLY CAB RR-E, IS 9968-1**  
**Rubber power Cable, 1100 V AC**

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**WEIGHT & DIMENSION DATA :**

| Product Code              | Construction        | Nominal thickness<br>of insulation | Overall               |
|---------------------------|---------------------|------------------------------------|-----------------------|
|                           |                     |                                    | Diameter<br>(Approx.) |
|                           | n x mm <sup>2</sup> | mm                                 | mm                    |
| RCIS09TRUARE001C004SA001S | 1 C X 4             | 1                                  | 6.5                   |
| RCIS09TRUARE002C004SA001S | 2 C X 4             | 1                                  | 11                    |
| RCIS09TRUARE003C004SA001S | 3 C X 4             | 1                                  | 11.5                  |
| RCIS09TRUARE004C004SA001S | 4 C X 4             | 1                                  | 13                    |
| RCIS09TRUARE005C004SA001S | 5 C X 4             | 1                                  | 14.5                  |
| RCIS09TRUARE001C006SA001S | 1 C X 6             | 1                                  | 8                     |
| RCIS09TRUARE002C006SA001S | 2 C X 6             | 1                                  | 14                    |
| RCIS09TRUARE003C006SA001S | 3 C X 6             | 1                                  | 14.5                  |
| RCIS09TRUARE004C006SA001S | 4 C X 6             | 1                                  | 16.5                  |
| RCIS09TRUARE001C010SA001S | 1 C X 10            | 1.2                                | 10                    |
| RCIS09TRUARE002C010SA001S | 2 C X 10            | 1.2                                | 17.5                  |
| RCIS09TRUARE003C010SA001S | 3 C X 10            | 1.2                                | 18.5                  |
| RCIS09TRUARE004C010SA001S | 4 C X 10            | 1.2                                | 20.5                  |
| RCIS09TRUARE001C016SA001S | 1 C X 16            | 1.2                                | 11                    |
| RCIS09TRUARE002C016SA001S | 2 C X 16            | 1.2                                | 20                    |
| RCIS09TRUARE003C016SA001S | 3 C X 16            | 1.2                                | 22                    |
| RCIS09TRUARE004C016SA001S | 4 C X 16            | 1.2                                | 24                    |
| RCIS09TRUARE001C025SA001S | 1 C X 25            | 1.4                                | 12.5                  |
| RCIS09TRUARE002C025SA001S | 2 C X 25            | 1.4                                | 24.5                  |
| RCIS09TRUARE003C025SA001S | 3 C X 25            | 1.4                                | 26                    |
| RCIS09TRUARE3.5C025SA001S | 3.5 C X 25          | 1.4                                | 28.5                  |
| RCIS09TRUARE004C025SA001S | 4 C X 25            | 1.4                                | 28.5                  |
| RCIS09TRUARE001C035SA001S | 1 C X 35            | 1.4                                | 14                    |
| RCIS09TRUARE002C035SA001S | 2 C X 35            | 1.4                                | 26.5                  |
| RCIS09TRUARE003C035SA001S | 3 C X 35            | 1.4                                | 28.5                  |
| RCIS09TRUARE3.5C035SA001S | 3.5 C X 35          | 1.4                                | 32.5                  |
| RCIS09TRUARE004C035SA001S | 4 C X 35            | 1.4                                | 31.5                  |
| RCIS09TRUARE001C050SA001S | 1 C X 50            | 1.6                                | 16.5                  |
| RCIS09TRUARE002C050SA001S | 2 C X 50            | 1.6                                | 31                    |
| RCIS09TRUARE003C050SA001S | 3 C X 50            | 1.6                                | 33                    |

**POLY CAB RR-E, IS 9968-1**  
**Rubber power Cable, 1100 V AC**

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| Product Code              | Construction<br><br>n x mm <sup>2</sup> | Nominal thickness<br>of insulation<br><br>mm | Overall<br>Diameter<br>(Approx.) |
|---------------------------|---|--|----------------------------------|
|                           |   |  | mm                               |
| RCIS09TRUARE3.5C050SA001S | 3.5 C X 50                              | 1.6  | 37.5                             |
| RCIS09TRUARE004C050SA001S | 4 C X 50                                | 1.6  | 36.5                             |
| RCIS09TRUARE001C070SA001S | 1 C X 70                                | 1.6  | 18.5                             |
| RCIS09TRUARE002C070SA001S | 2 C X 70                                | 1.6  | 34.5                             |
| RCIS09TRUARE003C070SA001S | 3 C X 70                                | 1.6  | 38                               |
| RCIS09TRUARE3.5C070SA001S | 3.5 C X 70                              | 1.6  | 42                               |
| RCIS09TRUARE004C070SA001S | 4 C X 70                                | 1.6  | 41                               |
| RCIS09TRUARE001C095SA001S | 1 C X 95                                | 1.8  | 21                               |
| RCIS09TRUARE002C095SA001S | 2 C X 95                                | 1.8  | 38.5                             |
| RCIS09TRUARE003C095SA001S | 3 C X 95                                | 1.8  | 42.5                             |
| RCIS09TRUARE3.5C095SA001S | 3.5 C X 95                              | 1.8  | 47                               |
| RCIS09TRUARE004C095SA001S | 4 C X 95                                | 1.8  | 46                               |
| RCIS09TRUARE001C120SA001S | 1 C X 120                               | 1.8  | 23                               |
| RCIS09TRUARE002C120SA001S | 2 C X 120                               | 1.8  | 42.5                             |
| RCIS09TRUARE003C120SA001S | 3 C X 120                               | 1.8  | 46                               |
| RCIS09TRUARE3.5C120SA001S | 3.5 C X 120                             | 1.8  | 51                               |
| RCIS09TRUARE004C120SA001S | 4 C X 120                               | 1.8  | 50.5                             |
| RCIS09TRUARE001C150SA001S | 1 C X 150                               | 2  | 25                               |
| RCIS09TRUARE002C150SA001S | 2 C X 150                               | 2  | 47                               |
| RCIS09TRUARE003C150SA001S | 3 C X 150                               | 2  | 51                               |
| RCIS09TRUARE3.5C150SA001S | 3.5 C X 150                             | 2  | 56.5                             |
| RCIS09TRUARE004C150SA001S | 4 C X 150                               | 2  | 55.5                             |
| RCIS09TRUARE001C185SA001S | 1 C X 185                               | 2.2  | 27.5                             |
| RCIS09TRUARE002C185SA001S | 2 C X 185                               | 2.2  | 51                               |
| RCIS09TRUARE003C185SA001S | 3 C X 185                               | 2.2  | 55.5                             |
| RCIS09TRUARE3.5C185SA001S | 3.5 C X 185                             | 2.2  | 62                               |
| RCIS09TRUARE004C185SA001S | 4 C X 185                               | 2.2  | 61                               |
| RCIS09TRUARE001C240SA001S | 1 C X 240                               | 2.4  | 31                               |
| RCIS09TRUARE002C240SA001S | 2 C X 240                               | 2.4  | 58                               |
| RCIS09TRUARE003C240SA001S | 3 C X 240                               | 2.4  | 63                               |
| RCIS09TRUARE3.5C240SA001S | 3.5 C X 240                             | 2.4  | 70                               |
| RCIS09TRUARE004C240SA001S | 4 C X 240                               | 2.4  | 69                               |

**POLY CAB RR-E, IS 9968-1**  
**Rubber power Cable, 1100 V AC**

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| Product Code              | Construction<br><br>n x mm <sup>2</sup> | Nominal thickness<br>of insulation<br><br>mm | Overall                         |
|---------------------------|---|--|---------------------------------|
|                           |   |  | Diameter<br>(Approx.)<br><br>mm |
| RCIS09TRUARE001C300SA001S | 1 C X 300                               | 2.6  | 33                              |
| RCIS09TRUARE002C300SA001S | 2 C X 300                               | 2.6  | 63                              |
| RCIS09TRUARE003C300SA001S | 3 C X 300                               | 2.6  | 68.5                            |
| RCIS09TRUARE3.5C300SA001S | 3.5 C X 300                             | 2.6  | 76.5                            |
| RCIS09TRUARE004C300SA001S | 4 C X 300                               | 2.6  | 75.5                            |
| RCIS09TRUARE001C400SA001S | 1 C X 400                               | 2.8  | 37.5                            |
| RCIS09TRUARE002C400SA001S | 2 C X 400                               | 2.8  | 71                              |
| RCIS09TRUARE003C400SA001S | 3 C X 400                               | 2.8  | 77                              |
| RCIS09TRUARE3.5C400SA001S | 3.5 C X 400                             | 2.8  | 86                              |
| RCIS09TRUARE004C400SA001S | 4 C X 400                               | 2.8  | 85                              |
| RCIS09TRUARE001C500SA001S | 1 C X 500                               | 3  | 41                              |
| RCIS09TRUARE001C630SA001S | 1 C X 630                               | 3  | 45                              |

**Electrical characteristics**

Current carrying capacity and maximum DC conductor resistance.

| mm <sup>2</sup> | Multi-core cables |      | Single-core cables |      | ?/km  |  |
|-----------------|-------------------|------|--------------------|------|-------|--|
|                 | 2 Core Cable      |      | 3 Core Cable       |      |       |  |
|                 |                   | Amp. |                    | Amp. |       |  |
| 4               | 49                | 42   | —                  | —    | 5.09  |  |
| 6               | 63                | 54   | —                  | —    | 3.39  |  |
| 10              | 86                | 75   | —                  | —    | 1.95  |  |
| 16              | 115               | 100  | —                  | —    | 1.24  |  |
| 25              | 149               | 127  | 161                | —    | 0.795 |  |
| 35              | 185               | 158  | 200                | —    | 0.565 |  |
| 50              | 225               | 192  | 242                | —    | 0.393 |  |
| 70              | 289               | 246  | 310                | —    | 0.277 |  |
| 95              | 352               | 298  | 377                | —    | 0.210 |  |
| 120             | 410               | 346  | 437                | —    | 0.164 |  |

|     | Multi-core cables |              | Single-core cables             |        |
|-----|-------------------|--------------|--------------------------------|--------|
|     | 2 Core Cable      | 3 Core Cable | Two loaded conductors touching |        |
| 150 | 473               | 399          | 504                            | 0.132  |
| 185 | 542               | 456          | 575                            | 0.108  |
| 240 | 641               | 538          | 679                            | 0.0817 |
| 300 | 741               | 621          | 783                            | 0.0654 |
| 400 | —                 | —            | 940                            | 0.0495 |
| 500 | —                 | —            | 1083                           | 0.0391 |
| 630 | —                 | —            | 1254                           | 0.0292 |

Ambient temperature: 30 °C

Conductor temperature: 90 °C

Current carrying capacity in accordance with Table B.52.12 (free air) of IEC 60364 5-52

#### De-Rating Factor

De-rating factor at various ambient temperature

| Temperature (°C) | 20   | 30 | 40   | 50   | 60   | 70   | 80   |
|------------------|------|----|------|------|------|------|------|
| Rating factor    | 1.08 | 1  | 0.91 | 0.82 | 0.71 | 0.58 | 0.41 |