



Images not to scale. Follow table for dimensions

APPLICATION

POLY CAB RR(Reinforced), EPR insulated and elastomeric sheathed cable conforming to IS 9968-1 is designed to use in 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. The cable is highly suitable to use in elevator, lifts, cranes, mines, heater leads and electric iron leads Stacker & Reclaim, Festooning & CRD application.

CHARACTERISTICS

Voltage Rating

1100 V

Operation Temperature

Fixed: -40°C to 90°C

Maximum short circuit temperature 250°C

Bending Radii

Fixed installation >10 x Overall Diameter

Occasional >8 x Overall Diameter

CONSTRUCTION

- Annealed tinned electrolytic grade copper conductor to IS 8130, class 5
- Insulated with EPR (Ethylene propylene rubber) to IS 6380
- Bedded with elastomeric compound to SE3/SE4 to IS 6380
- Reinforcing with nylon or cotton yarn
- Sheathed with PCP/CSP/NBR-PVC/CPE HOFR 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, Blue, Black, Green

More than - Grey with Black numbering

Five core

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 (Reinforced), IS 9968-1

Rubber Power and Control Cable, 1100 V AC

POLY CAB
IDEAS. CONNECTED.

WEIGHT & DIMENSION DATA :

| Product Code | Construction | Insulation thickness mm | Overall diameter (Approx.) mm | Weight (Approx.) kg/km |
|----------------------|---------------------|----------------------------|-------------------------------------|------------------------------|
| | n x mm ² | | | |
| RCIS09TRNBRC001C1.5S | 1 x 1.5 | 0.6 | 8.70 | 89 |
| RCIS09TRNBRC001C2.5S | 1 x 2.5 | 0.6 | 9.35 | 109 |
| RCIS09TRNBRC001C004S | 1 x 4 | 0.6 | 10.10 | 135 |
| RCIS09TRNBRC001C006S | 1 x 6 | 0.8 | 10.67 | 162 |
| RCIS09TRNBRC001C010S | 1 x 10 | 0.9 | 12.02 | 223 |
| RCIS09TRNBRC001C016S | 1 x 16 | 1 | 13.06 | 293 |
| RCIS09TRNBRC001C025S | 1 x 25 | 1 | 15.52 | 432 |
| RCIS09TRNBRC001C035S | 1 x 35 | 1.2 | 17.11 | 560 |
| RCIS09TRNBRC001C050S | 1 x 50 | 1.2 | 19.01 | 742 |
| RCIS09TRNBRC001C070S | 1 x 70 | 1.4 | 21.09 | 977 |
| RCIS09TRNBRC001C095S | 1 x 95 | 1.4 | 23.68 | 1282 |
| RCIS09TRNBRC001C120S | 1 x 120 | 1.6 | 25.82 | 1576 |
| RCIS09TRNBRC001C150S | 1 x 150 | 1.6 | 27.75 | 1885 |
| RCIS09TRNBRC001C185S | 1 x 185 | 1.8 | 31.43 | 2393 |
| RCIS09TRNBRC001C240S | 1 x 240 | 1.8 | 34.16 | 2966 |
| RCIS09TRNBRC001C300S | 1 x 300 | 2 | 38.41 | 3750 |
| RCIS09TRNBRC001C400S | 1 x 400 | 2.2 | 42.66 | 4843 |
| RCIS09TRNBRC002C1.5S | 2 x 1.5 | 0.6 | 11.86 | 178 |
| RCIS09TRNBRC002C2.5S | 2 x 2.5 | 0.6 | 13.17 | 231 |
| RCIS09TRNBRC002C004S | 2 x 4 | 0.6 | 15.46 | 330 |
| RCIS09TRNBRC002C006S | 2 x 6 | 0.8 | 17.01 | 417 |
| RCIS09TRNBRC002C010S | 2 x 10 | 0.9 | 20.09 | 614 |
| RCIS09TRNBRC002C016S | 2 x 16 | 1 | 22.57 | 825 |
| RCIS09TRNBRC002C025S | 2 x 25 | 1 | 26.51 | 1187 |
| RCIS09TRNBRC002C035S | 2 x 35 | 1.2 | 29.29 | 1522 |
| RCIS09TRNBRC002C050S | 2 x 50 | 1.2 | 34.09 | 2111 |
| RCIS09TRNBRC002C070S | 2 x 70 | 1.4 | 38.85 | 2822 |
| RCIS09TRNBRC002C095S | 2 x 95 | 1.4 | 43.62 | 3673 |
| RCIS09TRNBRC002C120S | 2 x 120 | 1.6 | 46.69 | 4383 |
| RCIS09TRNBRC002C150S | 2 x 150 | 1.6 | 51.56 | 5370 |
| RCIS09TRNBRC002C185S | 2 x 185 | 1.8 | 56.93 | 6636 |

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**POLY CAB RR (Reinforced), IS 9968-1
Rubber Power and Control Cable, 1100 V AC**

POLY CAB
IDEAS. CONNECTED.

| Product Code | Construction | Insulation thickness | Overall diameter | Weight |
|----------------------|---------------------|----------------------|------------------|-----------|
| | | | (Approx.) | (Approx.) |
| | n x mm ² | mm | mm | kg/km |
| RCIS09TRNBRC002C240S | 2 x 240 | 1.8 | 63.39 | 8366 |
| RCIS09TRNBRC003C1.5S | 3 x 1.5 | 0.6 | 12.37 | 212 |
| RCIS09TRNBRC003C2.5S | 3 x 2.5 | 0.6 | 14.58 | 307 |
| RCIS09TRNBRC003C004S | 3 x 4 | 0.6 | 16.19 | 404 |
| RCIS09TRNBRC003C006S | 3 x 6 | 0.8 | 17.83 | 518 |
| RCIS09TRNBRC003C010S | 3 x 10 | 0.9 | 21.13 | 776 |
| RCIS09TRNBRC003C016S | 3 x 16 | 1 | 23.78 | 1058 |
| RCIS09TRNBRC003C025S | 3 x 25 | 1 | 27.97 | 1539 |
| RCIS09TRNBRC003C035S | 3 x 35 | 1.2 | 31.95 | 2063 |
| RCIS09TRNBRC003C050S | 3 x 50 | 1.2 | 37.45 | 2890 |
| RCIS09TRNBRC003C070S | 3 x 70 | 1.4 | 41.48 | 3760 |
| RCIS09TRNBRC003C095S | 3 x 95 | 1.4 | 46.20 | 4886 |
| RCIS09TRNBRC003C120S | 3 x 120 | 1.6 | 50.52 | 5984 |
| RCIS09TRNBRC003C150S | 3 x 150 | 1.6 | 55.50 | 7295 |
| RCIS09TRNBRC003C185S | 3 x 185 | 1.8 | 61.43 | 9059 |
| RCIS09TRNBRC003C240S | 3 x 240 | 1.8 | 68.13 | 11398 |
| RCIS09TRNBRC004C1.5S | 4 x 1.5 | 0.6 | 13.19 | 255 |
| RCIS09TRNBRC004C2.5S | 4 x 2.5 | 0.6 | 15.57 | 371 |
| RCIS09TRNBRC004C004S | 4 x 4 | 0.6 | 17.77 | 511 |
| RCIS09TRNBRC004C006S | 4 x 6 | 0.8 | 19.56 | 657 |
| RCIS09TRNBRC004C010S | 4 x 10 | 0.9 | 23.22 | 991 |
| RCIS09TRNBRC004C016S | 4 x 16 | 1 | 26.33 | 1369 |
| RCIS09TRNBRC004C025S | 4 x 25 | 1 | 31.76 | 2049 |
| RCIS09TRNBRC004C035S | 4 x 35 | 1.2 | 35.05 | 2648 |
| RCIS09TRNBRC004C050S | 4 x 50 | 1.2 | 40.64 | 3674 |
| RCIS09TRNBRC004C070S | 4 x 70 | 1.4 | 45.11 | 4807 |
| RCIS09TRNBRC004C095S | 4 x 95 | 1.4 | 51.40 | 6394 |
| RCIS09TRNBRC004C120S | 4 x 120 | 1.6 | 55.92 | 7795 |
| RCIS09TRNBRC004C150S | 4 x 150 | 1.6 | 61.59 | 9535 |
| RCIS09TRNBRC004C185S | 4 x 185 | 1.8 | 67.92 | 11802 |
| RCIS09TRNBRC004C240S | 4 x 240 | 1.8 | 75.54 | 14903 |
| RCIS09TRNBRC005C1.5S | 5 x 1.5 | 0.6 | 14.87 | 309 |
| RCIS09TRNBRC005C2.5S | 5 x 2.5 | 0.6 | 17.04 | 424 |

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**POLY CAB RR (Reinforced), IS 9968-1
Rubber Power and Control Cable, 1100 V AC**

POLY CAB
IDEAS. CONNECTED.

| Product Code | Construction n x mm ² | Insulation thickness mm | Overall diameter (Approx.) | Weight (Approx.) |
|----------------------|---|----------------------------|-------------------------------|---------------------|
| | | | mm | kg/km |
| RCIS09TRNBRC005C004S | 5 x 4 | 0.6 | 19.05 | 562 |
| RCIS09TRNBRC006C1.5S | 6 x 1.5 | 0.6 | 15.82 | 353 |
| RCIS09TRNBRC006C2.5S | 6 x 2.5 | 0.6 | 18.18 | 489 |
| RCIS09TRNBRC007C1.5S | 7 x 1.5 | 0.6 | 15.82 | 364 |
| RCIS09TRNBRC007C2.5S | 7 x 2.5 | 0.6 | 18.18 | 506 |
| RCIS09TRNBRC008C1.5S | 8 x 1.5 | 0.6 | 17.64 | 445 |
| RCIS09TRNBRC008C2.5S | 8 x 2.5 | 0.6 | 20.30 | 619 |
| RCIS09TRNBRC010C1.5S | 10 x 1.5 | 0.6 | 19.78 | 560 |
| RCIS09TRNBRC010C2.5S | 10 x 2.5 | 0.6 | 22.80 | 779 |
| RCIS09TRNBRC012C1.5S | 12 x 1.5 | 0.6 | 20.29 | 604 |
| RCIS09TRNBRC012C2.5S | 12 x 2.5 | 0.6 | 23.41 | 847 |
| RCIS09TRNBRC014C1.5S | 14 x 1.5 | 0.6 | 21.08 | 663 |
| RCIS09TRNBRC014C2.5S | 14 x 2.5 | 0.6 | 24.36 | 935 |
| RCIS09TRNBRC016C1.5S | 16 x 1.5 | 0.6 | 21.99 | 730 |
| RCIS09TRNBRC016C2.5S | 16 x 2.5 | 0.6 | 26.07 | 1072 |
| RCIS09TRNBRC019C1.5S | 19 x 1.5 | 0.6 | 23.34 | 832 |
| RCIS09TRNBRC019C2.5S | 19 x 2.5 | 0.6 | 27.21 | 1195 |
| RCIS09TRNBRC020C1.5S | 20 x 1.5 | 0.6 | 24.39 | 901 |
| RCIS09TRNBRC020C2.5S | 20 x 2.5 | 0.6 | 28.87 | 1321 |
| RCIS09TRNBRC024C1.5S | 24 x 1.5 | 0.6 | 27.10 | 1108 |
| RCIS09TRNBRC024C2.5S | 24 x 2.5 | 0.6 | 32.43 | 1649 |
| RCIS09TRNBRC025C1.5S | 25 x 1.5 | 0.6 | 27.10 | 1118 |
| RCIS09TRNBRC025C2.5S | 25 x 2.5 | 0.6 | 32.43 | 1666 |
| RCIS09TRNBRC027C1.5S | 27 x 1.5 | 0.6 | 27.58 | 1169 |
| RCIS09TRNBRC027C2.5S | 27 x 2.5 | 0.6 | 33.00 | 1744 |
| RCIS09TRNBRC030C1.5S | 30 x 1.5 | 0.6 | 29.80 | 1353 |
| RCIS09TRNBRC030C2.5S | 30 x 2.5 | 0.6 | 33.99 | 1874 |
| RCIS09TRNBRC036C1.5S | 36 x 1.5 | 0.6 | 31.66 | 1549 |
| RCIS09TRNBRC036C2.5S | 36 x 2.5 | 0.6 | 37.64 | 2289 |

Electrical characteristics

Current carrying capacity and maximum DC conductor resistance

| Cross sectional Area mm ² | Multi-core cables | | Single-core cables | | Conductor Resistance ?/km |
|---|-------------------|------|--------------------|-----------------------------------|------------------------------|
| | 2 Core Cable | | 3 Core Cable | Two loaded conductors touching | |
| | Amp. | Amp. | Amp. | Amp. | |
| 1.5 | 26 | 23 | — | — | 13.7 |
| 2.5 | 36 | 32 | — | — | 8.21 |
| 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 |
| 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 operating 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 |