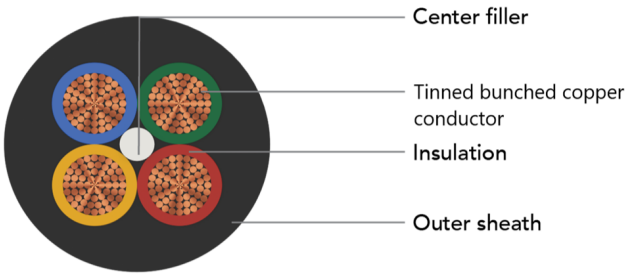
# POLYCAB RR-P, IS 9968-1
## Rubber power Cable, 1100 V AC


Images not to scale. Follow table for dimensions

## APPLICATION
POLYCAB RR-P, IS 9968-1 tinned copper conductor, EPR insulated and PCP sheathed cable conforming to IS 9968-1 is designed to use for fixed wiring, single phase or three phase (earthed or unearthed) 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 where heat and oil resistant is prime importance.

## 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 elastomer type PCP (Polychloroprene polymer) 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
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## APPROVAL

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POLYCAB
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**WEIGHT & DIMENSION DATA :**

| Product Code | Construction<br>n x mm² | Nominal thickness of insulation<br>mm | Overall diameter (Approx.)<br>mm |
|---|---|---|---|
| RCIS09TRUARP001C004SA001S | 1 C X 4 | 1 | 6.5 |
| RCIS09TRUARP002C004SA001S | 2 C X 4 | 1 | 11 |
| RCIS09TRUARP003C004SA001S | 3 C X 4 | 1 | 11.5 |
| RCIS09TRUARP004C004SA001S | 4 C X 4 | 1 | 13 |
| RCIS09TRUARP005C004SA001S | 5 C X 4 | 1 | 14.5 |
| RCIS09TRUARP001C006SA001S | 1 C X 6 | 1 | 8 |
| RCIS09TRUARP002C006SA001S | 2 C X 6 | 1 | 14 |
| RCIS09TRUARP003C006SA001S | 3 C X 6 | 1 | 14.5 |
| RCIS09TRUARP004C006SA001S | 4 C X 6 | 1 | 16.5 |
| RCIS09TRUARP001C010SA001S | 1 C X 10 | 1.2 | 10 |
| RCIS09TRUARP002C010SA001S | 2 C X 10 | 1.2 | 17.5 |
| RCIS09TRUARP003C010SA001S | 3 C X 10 | 1.2 | 18.5 |
| RCIS09TRUARP004C010SA001S | 4 C X 10 | 1.2 | 20.5 |
| RCIS09TRUARP001C016SA001S | 1 C X 16 | 1.2 | 11 |
| RCIS09TRUARP002C016SA001S | 2 C X 16 | 1.2 | 20 |
| RCIS09TRUARP003C016SA001S | 3 C X 16 | 1.2 | 22 |
| RCIS09TRUARP004C016SA001S | 4 C X 16 | 1.2 | 24 |
| RCIS09TRUARP001C025SA001S | 1 C X 25 | 1.4 | 12.5 |
| RCIS09TRUARP002C025SA001S | 2 C X 25 | 1.4 | 24.5 |
| RCIS09TRUARP003C025SA001S | 3 C X 25 | 1.4 | 26 |
| RCIS09TRUARP3.5C025SA001S | 3.5 C X 25 | 1.4 | 28.5 |
| RCIS09TRUARP004C025SA001S | 4 C X 25 | 1.4 | 28.5 |
| RCIS09TRUARP001C035SA001S | 1 C X 35 | 1.4 | 14 |
| RCIS09TRUARP002C035SA001S | 2 C X 35 | 1.4 | 26.5 |
| RCIS09TRUARP003C035SA001S | 3 C X 35 | 1.4 | 28.5 |
| RCIS09TRUARP3.5C035SA001S | 3.5 C X 35 | 1.4 | 32.5 |
| RCIS09TRUARP004C035SA001S | 4 C X 35 | 1.4 | 31.5 |
| RCIS09TRUARP001C050SA001S | 1 C X 50 | 1.6 | 16.5 |
| RCIS09TRUARP002C050SA001S | 2 C X 50 | 1.6 | 31 |
| RCIS09TRUARP003C050SA001S | 3 C X 50 | 1.6 | 33 |
| RCIS09TRUARP3.5C050SA001S | 3.5 C X 50 | 1.6 | 37.5 |

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| Product Code | Construction<br>n x mm² | Nominal thickness of insulation<br>mm | Overall diameter (Approx.)<br>mm |
|---|---|---|---|
| RCIS09TRUARP004C050SA001S | 4 C X 50 | 1.6 | 36.5 |
| RCIS09TRUARP001C070SA001S | 1 C X 70 | 1.6 | 18.5 |
| RCIS09TRUARP002C070SA001S | 2 C X 70 | 1.6 | 34.5 |
| RCIS09TRUARP003C070SA001S | 3 C X 70 | 1.6 | 38 |
| RCIS09TRUARP3.5C070SA001S | 3.5 C X 70 | 1.6 | 42 |
| RCIS09TRUARP004C070SA001S | 4 C X 70 | 1.6 | 41 |
| RCIS09TRUARP001C095SA001S | 1 C X 95 | 1.8 | 21 |
| RCIS09TRUARP002C095SA001S | 2 C X 95 | 1.8 | 38.5 |
| RCIS09TRUARP003C095SA001S | 3 C X 95 | 1.8 | 42.5 |
| RCIS09TRUARP3.5C095SA001S | 3.5 C X 95 | 1.8 | 47 |
| RCIS09TRUARP004C095SA001S | 4 C X 95 | 1.8 | 46 |
| RCIS09TRUARP001C120SA001S | 1 C X 120 | 1.8 | 23 |
| RCIS09TRUARP002C120SA001S | 2 C X 120 | 1.8 | 42.5 |
| RCIS09TRUARP003C120SA001S | 3 C X 120 | 1.8 | 46 |
| RCIS09TRUARP3.5C120SA001S | 3.5 C X 120 | 1.8 | 51 |
| RCIS09TRUARP004C120SA001S | 4 C X 120 | 1.8 | 50.5 |
| RCIS09TRUARP001C150SA001S | 1 C X 150 | 2 | 25 |
| RCIS09TRUARP002C150SA001S | 2 C X 150 | 2 | 47 |
| RCIS09TRUARP003C150SA001S | 3 C X 150 | 2 | 51 |
| RCIS09TRUARP3.5C150SA001S | 3.5 C X 150 | 2 | 56.5 |
| RCIS09TRUARP004C150SA001S | 4 C X 150 | 2 | 55.5 |
| RCIS09TRUARP001C185SA001S | 1 C X 185 | 2.2 | 27.5 |
| RCIS09TRUARP002C185SA001S | 2 C X 185 | 2.2 | 51 |
| RCIS09TRUARP003C185SA001S | 3 C X 185 | 2.2 | 55.5 |
| RCIS09TRUARP3.5C185SA001S | 3.5 C X 185 | 2.2 | 62 |
| RCIS09TRUARP004C185SA001S | 4 C X 185 | 2.2 | 61 |
| RCIS09TRUARP001C240SA001S | 1 C X 240 | 2.4 | 31 |
| RCIS09TRUARP002C240SA001S | 2 C X 240 | 2.4 | 58 |
| RCIS09TRUARP003C240SA001S | 3 C X 240 | 2.4 | 63 |
| RCIS09TRUARP3.5C240SA001S | 3.5 C X 240 | 2.4 | 70 |
| RCIS09TRUARP004C240SA001S | 4 C X 240 | 2.4 | 69 |
| RCIS09TRUARP001C300SA001S | 1 C X 300 | 2.6 | 33 |
| RCIS09TRUARP002C300SA001S | 2 C X 300 | 2.6 | 63 |

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| Product Code | Construction<br>n x mm² | Nominal thickness of insulation<br>mm | Overall diameter (Approx.)<br>mm |
|---|---|---|---|
| RCIS09TRUARP003C300SA001S | 3 C X 300 | 2.6 | 68.5 |
| RCIS09TRUARP3.5C300SA001S | 3.5 C X 300 | 2.6 | 76.5 |
| RCIS09TRUARP004C300SA001S | 4 C X 300 | 2.6 | 75.5 |
| RCIS09TRUARP001C400SA001S | 1 C X 400 | 2.8 | 37.5 |
| RCIS09TRUARP002C400SA001S | 2 C X 400 | 2.8 | 71 |
| RCIS09TRUARP003C400SA001S | 3 C X 400 | 2.8 | 77 |
| RCIS09TRUARP3.5C400SA001S | 3.5 C X 400 | 2.8 | 86 |
| RCIS09TRUARP004C400SA001S | 4 C X 400 | 2.8 | 85 |
| RCIS09TRUARP001C500SA001S | 1 C X 500 | 3 | 41 |
| RCIS09TRUARP001C630SA001S | 1 C X 630 | 3 | 45 |

**Electrical characteristics**

**Current carrying capacity and maximum DC conductor resistance.**

| | Multi-core cables | | Single-core cables | |
|---|---|---|---|---|
| | 2 Core Cable | 3 Core Cable | Two loaded conductors touching | |
| mm² | Amp. | Amp. | Amp. | ?/km |
| 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 |

| | Multi-core cables | | Single-core cables | |
|---|---|---|---|---|
| | 2 Core Cable | 3 Core Cable | Two loaded conductors touching | |
| 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 |