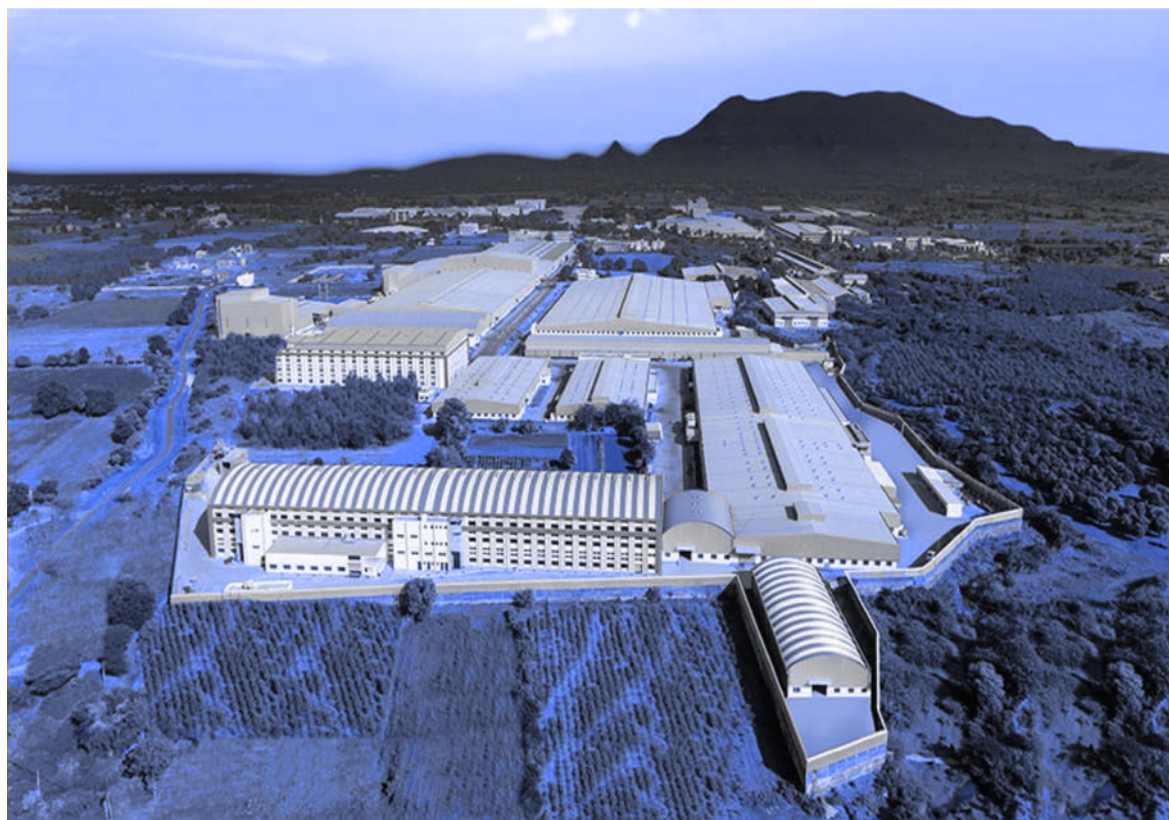




## RUBBER CABLE CATALOGUE

THE UNMATCHED  
FLEXIBILITY, TOUGHNESS  
& RESISTANCE!





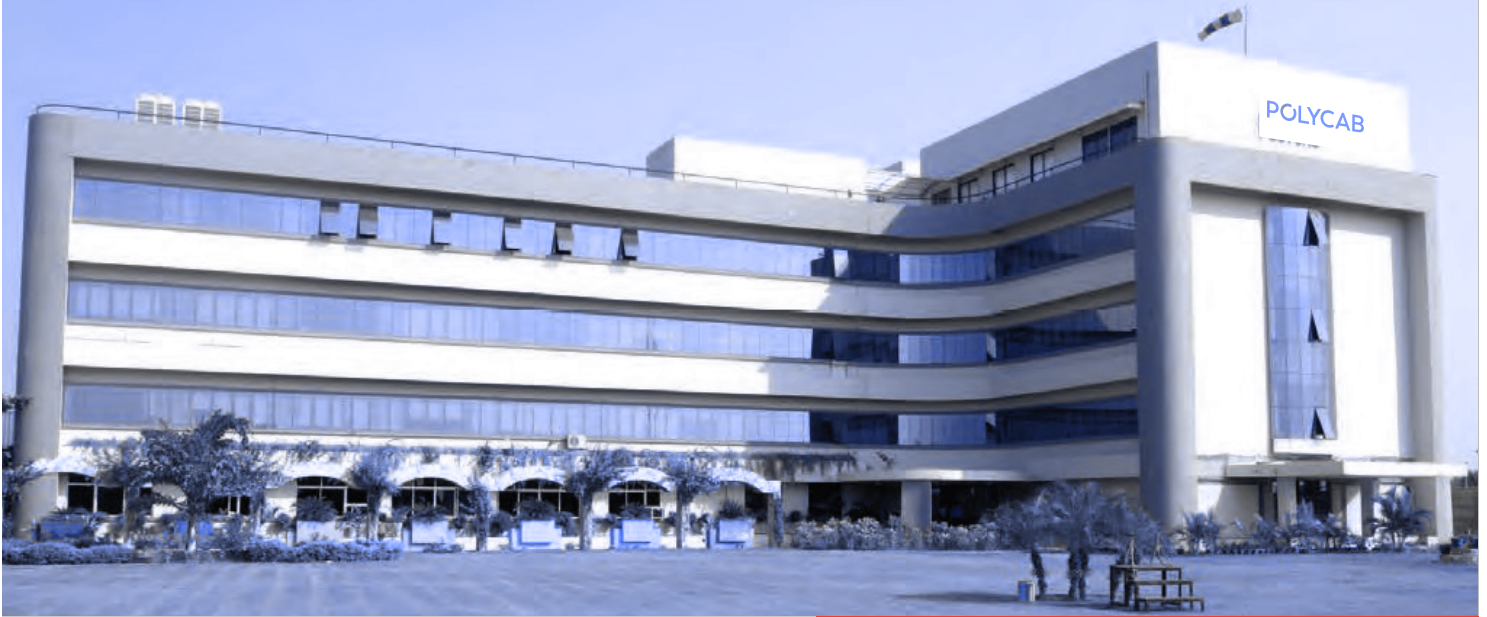
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## COMPANY PROFILE

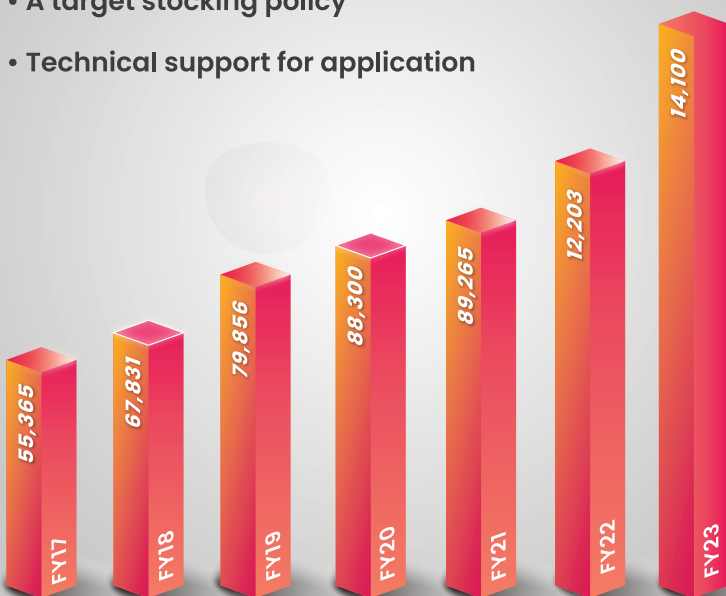
Polycab an ISO 9001 : 2015, ISO 14001 : 2015, ISO 45001 : 2018 company is India's **No.1 cables & wires company** with a glorious track record of over 4 decades. our manufacturing facilities at **Halol (vadodara), Daman, Nashik and Roorkee** in India, addresses to the specific needs with state-of-the-art machinery and technology.

Polycab's turnover has crossed **INR 14100 crore's in the fiscal year 2022-23**. Polycab derives its strength from its customers and those being in sectors like utilities, power generation, transmission & distribution, petroleum & oil refineries, OEMs, EPC Contractors, Steel & Metal, Cement, Chemical, atomic energy, nuclear plants, as well as government and private telecom companies.



Polycab offers a variety of services

- Commercially reasonable prices
- Reliable & consistent quality
- Product development as per market
- A target stocking policy
- Technical support for application



Things you didn't know about Polycab

- Between its facilities in Daman, Halol (vadodara), Nashik and Roorkee the company has **3.5 million square feet of manufacturing space**.
- Polycab manufactures enough cable each year to circumnavigate the earth **three and a half times** and enough wire to go to the moon and come back - four times.
- Polycab has increased its **turnover 100 times** in sixteen years.
- Over **4300+ distributors service** its India needs and its overseas interests.

## POLYCAB WELDING CABLE

Polycab offers comprehensive range of Rubber insulated welding cable as per IS 9857.

Polycab Welding cable is designed to use in automatic welding as well as manual welding operation at different duty cycle.

**Conductor:** High conductivity bunched extra flexible (class 6) copper conductor produced in-house from state-of-the art Machine.

**Covering:** In-house developed cross linked elastomeric heat & oil resistant flame retardant compound.

The construction is based on the application and requirement of duty cycle mentioned in IS 9857



**POLYCAB  
Cu HOFR  
Welding Cable,  
IS 9857**

**POLYCAB  
Al HOFR  
Welding Cable,  
IS 9857**



OUR CERTIFICATION



# POLYCAB HOFR WELDING CABLE, IS 9857 WELDING CABLE WITH COPPER CONDUCTOR



## Compliance

Conductor resistance test	IS 8130
Covering resistance test	IS 6380:1984*
Flammability	IS 10810-53



## Construction

- Annealed plain bunched electrolytic grade copper conductor to IS 8130, class 6
- Covered by SE3 (HOFR) to IS 6380



## Application

POLYCAB HOFR Welding Cable, Conform the construction and performance as per IS 9857. These cables are designed to use in machine welding & hand welding to work at dry and wet locations as well as outdoor use.



## Bending Radius

Fixed installation	5 x Overall Diameter
--------------------	----------------------



## Standard and References

IS 8130:2013  
IS 6380:1984\*  
IS 9857:1990\*



## Operation Temperature

Fixed: -20°C to 90°C



## Test Voltage

1000 V AC



## Colour Of Covering

Black  
Orange (without ISI mark)

## Approval



## OUR CERTIFICATION



PRODUCT CODE	Nominal cross sectional area	Nominal thickness of covering	Overall diameter	Weight (Approx.)
	mm <sup>2</sup>	mm	mm	kg/km
WCIS00CRUARE001C016S	16	2	9.4	200
WCIS00CRUARE001C025S	25	2	10.8	280
WCIS00CRUARE001C035S	35	2	11.9	375
WCIS00CRUARE001C050S	50	2.2	13.8	525
WCIS00CRUARE001C070S	70	2.4	15.7	725
WCIS00CRUARE001C095S	95	2.6	17.7	925

**Electrical characteristics**

Current carrying capacity and maximum DC conductor resistance.

Nominal cross Sectional area  mm <sup>2</sup>	Current carrying capacity at different duty cycle				Maximum DC conductor resistance at 20°C Ω/km
	100%	85%	60%	30%	
	Amp.	Amp.	Amp.	Amp.	
16	135	146	174	246	1.21
25	177	192	228	343	0.780
35	221	240	285	403	0.554
50	279	303	360	509	0.386
70	352	382	454	643	0.272
95	424	460	547	774	0.206

Air temperature: 30°C

Maximum Conductor temperature: 90°C

The above table in accordance with the IS 9857

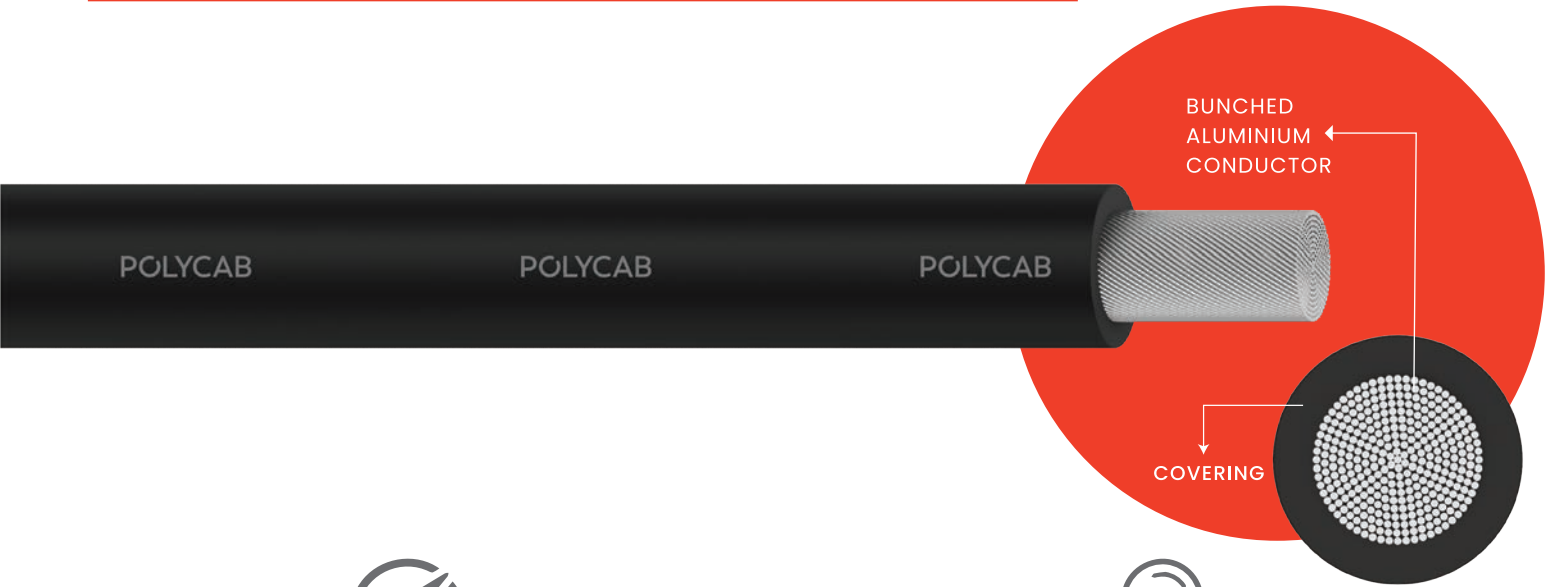
**De-Rating Factor**

De-rating factor at various ambient temperature

Ambient Temperature	25°C	30°C	35°C	40°C	45°C	50°C
De-Rating Factor	1.04	1	0.96	0.91	0.87	0.82



# POLYCAB HOFR WELDING CABLE, IS 9857 WELDING CABLE WITH ALUMINIUM CONDUCTOR



### Compliance

Conductor resistance test	IS 8130
Covering resistance test	IS 6380:1984 Latest
Flammability	IS 10810-53



### Application

POLYCAB HOFR Welding cable, IS 9857, is designed to use in machine welding & hand welding at dry and wet locations as well as outdoor use wherever light weight is essential. This is also suitable for automatic welding.



### Construction

- Flexible Aluminium conductor to IS 8130
- Covered by SE3 (HOFR) to IS 6380



### Bending Radius

Fixed installation	10 x Overall Diameter
--------------------	-----------------------



### Standard and References

IS 8130:2013  
IS 6380:1984\*  
IS 9857:1990\*



### Operation Temperature

Fixed: -20°C to 90°C



### Test Voltage

1000 V AC



### Colour Of Covering

Black  
Orange (without ISI mark)

### Approval



### OUR CERTIFICATION



PRODUCT CODE	Nominal cross sectional area	Nominal thickness of covering	Overall diameter (Approx.)	Weight (Approx.)
	mm <sup>2</sup>	mm	mm	kg/km
WCIS00ARUARE001C025S	25	2	10.5	144
WCIS00ARUARE001C035S	35	2	11.7	182
WCIS00ARUARE001C050S	50	2.2	13.6	247
WCIS00ARUARE001C070S	70	2.4	15.6	331
WCIS00ARUARE001C095S	95	2.6	17.8	433
WCIS00ARUARE001C120S	120	2.8	19.7	534

**Electrical characteristics**

Current carrying capacity and maximum DC conductor resistance.

Nominal cross sectional area mm <sup>2</sup>	Current carrying capacity at different duty cycle				Maximum DC conductor resistance at 20°C Ω/km
	100%	85%	60%	30%	
	Amp.	Amp.	Amp.	Amp.	
25	144	156	186	263	1.23
35	176	191	227	321	0.901
50	222	241	287	405	0.634
70	280	304	361	511	0.445
95	339	368	438	619	0.334
120	404	438	522	738	0.256

Air temperature: 30°C

Maximum Conductor temperature: 90°C

The above table in accordance with the IS 9857

**De-Rating Factor**

De-rating factor at various ambient temperature

Ambient Temperature	25°C	30°C	35°C	40°C	45°C	50°C
De-Rating Factor	1.04	1	0.96	0.91	0.87	0.82





## POLYCAB RUBBER INSULATED FLEXIBLE ELASTOMERIC CABLE CONFORMING TO IS 9968-1.

Polycab offers a comprehensive range of Rubber flexible cable conforming to IS 9968-1 for various application.

The highly flexible and robust Polycab Rubber cable makes its use in portable electrical equipment and devices. The mechanical force involved in moving apparatus requires cables to withstand high degree of wear and tear, extreme weather condition, oil/grease prone area and high heat zone. These flexible rubber cables are also suitable for wide range of application in lighting, appliances or equipment including heavy industrial equipment requires flexible connection to power supply.

**Conductor:** High conductivity solid or stranded or bunched & tin coated copper conductor produced in-house from state-of-the art Machine.

**Separator:** Only Polyester tape are applied between conductor and insulation.

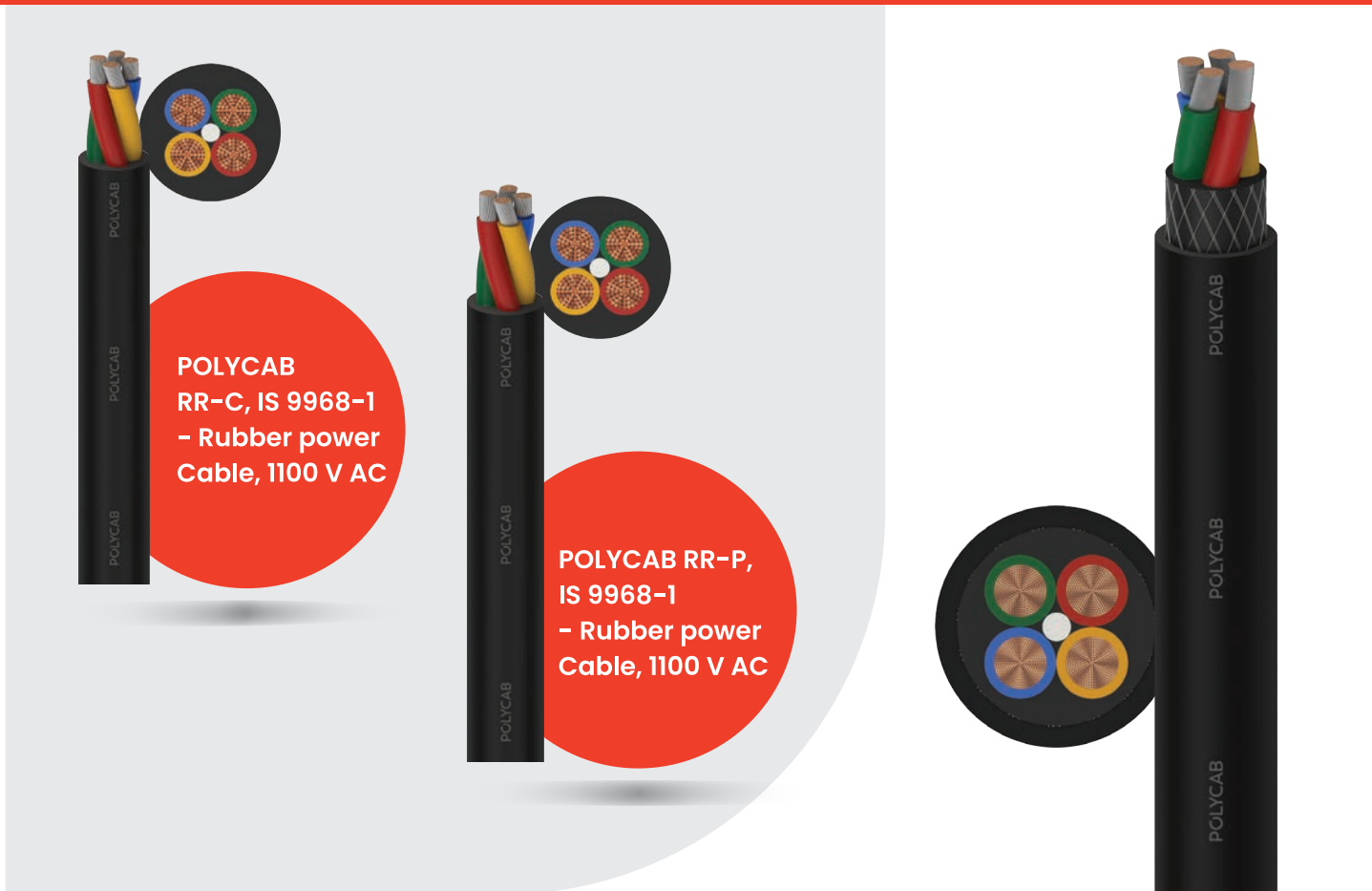
**Insulation:** In-house developed cross linked elastomeric compound ethylene propylene rubber (EPR) or Silicon rubber.

**Bedding:** Bedding of zero halogen elastomeric compound or elastomeric compound.

**Braiding:** Magnetic or non-magnetic wire braiding or glass fibre braiding or textile braiding.

**Sheath:** In-house developed crossed linked Heat and oil resistant flame retardant (HOFR) elastomer sheathing based on polycholorene (PCP), Chlorosulphonated polyethylene (CSP), NBR-PVC blend or suitable synthetic rubber type SE3 or SE4.

The construction is based on the application and requirement of the user against IS 9968 or generally conforming to IS 9968-1.





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



**POLYCAB RR-C  
MC, IS 9968-1**  
- Rubber control  
Cable, 1100 V AC



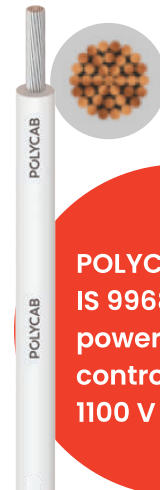
**POLYCAB RR-E  
MC, IS 9968-1**  
- Rubber control  
Cable, 1100 V AC



**POLYCAB RR-P  
MC, IS 9968-1**  
- Rubber control  
Cable, 1100 V AC



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



**POLYCAB SiR,  
IS 9968-1 - Rubber  
power and  
control Cable,  
1100 V AC**



**POLYCAB SiR-G,  
IS 9968-1**  
- Rubber power  
and control  
Cable, 1100 V AC

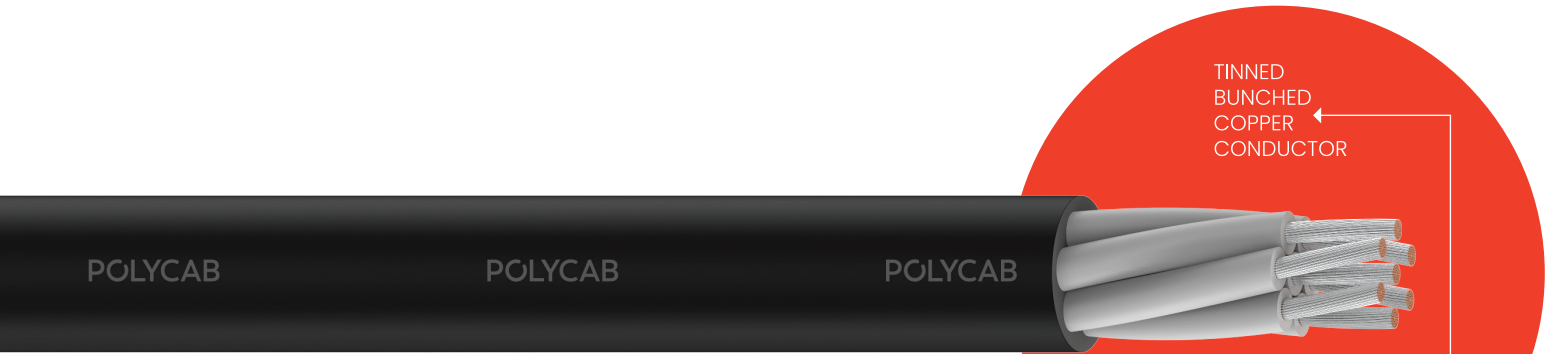


**POLYCAB SiR-SC,  
IS 9968-1 - Rubber  
power and control  
Cable, 1100 V AC**



**POLYCAB SiR-S,  
IS 9968-1 - Rubber  
power and control  
Cable, 1100 V**

# POLYCAB RR-E MC, IS 9968-1 RUBBER CONTROL CABLE, 1100 V AC



## Compliance

Conductor resistance test	IS 8130
Insulation resistance	IS 6380:1984*
Flammability	IS 10810-53



## Construction

- Annealed tinned electrolytic grade copper conductor to IS 8130, class 5.
- Insulated with elastomeric compound IE2 to IS 6380.
- Sheathed with HOFR (Heat and Oil resistant flame retardant) elastomer as per IS 6380.



## Bending Radius

Fixed installation	12 x Overall Diameter
Occasional	10 x Overall Diameter



## Standard and References

IS 8130:2013  
IS 6380:1984\*  
IS 9968:1988



## Operation Temperature

Fixed: -40°C to 90°C  
Maximum short circuit temperature 250°C



## Test Voltage

3000 V AC

## Voltage Rating

1100 V AC



## Colour Of Covering

Black  
Orange or any colour of covering can be given as mutually agreed between supplier and customer.



## Application

POLYCAB RR-E MC, 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 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, oil, abrasion and tear resistant is prime importance.



## Core Identification

Single	Red / Black / White / Yellow / Blue
Twin	Red, Black
Three	Red, Black, Green
Four	Red, Yellow, Blue, Green
Five	Red, Yellow, Blue, Black, Green
More than five core	White with black number or black with white number

## Approval



## OUR CERTIFICATION



# POLYCAB RR-E MC, IS 9968-1 RUBBER CONTROL CABLE, 1100 V AC

PRODUCT CODE	Nominal cross sectional area	No. of core	Nominal thickness of insulation	Overall diameter (Approx.)
	mm <sup>2</sup>	no.	mm	mm
RCIS09TRUARE002C1.5SA002S	1.5	2	0.8	8
RCIS09TRUARE003C1.5SA002S	1.5	3	0.8	8.5
RCIS09TRUARE004C1.5SA002S	1.5	4	0.8	9.5
RCIS09TRUARE005C1.5SA002S	1.5	5	0.8	10.5
RCIS09TRUARE006C1.5SA002S	1.5	6	0.8	11.5
RCIS09TRUARE007C1.5SA002S	1.5	7	0.8	11.5
RCIS09TRUARE008C1.5SA002S	1.5	8	0.8	12.5
RCIS09TRUARE010C1.5SA002S	1.5	10	0.8	16
RCIS09TRUARE012C1.5SA002S	1.5	12	0.8	16.5
RCIS09TRUARE014C1.5SA002S	1.5	14	0.8	17.5
RCIS09TRUARE016C1.5SA002S	1.5	16	0.8	18.5
RCIS09TRUARE019C1.5SA002S	1.5	19	0.8	19.5
RCIS09TRUARE020C1.5SA002S	1.5	20	0.8	20.5
RCIS09TRUARE024C1.5SA002S	1.5	24	0.8	23
RCIS09TRUARE025C1.5SA002S	1.5	25	0.8	23
RCIS09TRUARE027C1.5SA002S	1.5	27	0.8	23.5
RCIS09TRUARE030C1.5SA002S	1.5	30	0.8	24
RCIS09TRUARE036C1.5SA002S	1.5	36	0.8	27
RCIS09TRUARE037C1.5SA002S	1.5	37	0.8	27
RCIS09TRUARE002C2.5SA002S	2.5	2	0.9	9.5
RCIS09TRUARE003C2.5SA002S	2.5	3	0.9	10
RCIS09TRUARE004C2.5SA002S	2.5	4	0.9	11.5
RCIS09TRUARE005C2.5SA002S	2.5	5	0.9	12.5
RCIS09TRUARE006C2.5SA002S	2.5	6	0.9	13.5
RCIS09TRUARE007C2.5SA002S	2.5	7	0.9	13.5
RCIS09TRUARE008C2.5SA002S	2.5	8	0.9	16
RCIS09TRUARE010C2.5SA002S	2.5	10	0.9	19
RCIS09TRUARE012C2.5SA002S	2.5	12	0.9	19.5
RCIS09TRUARE014C2.5SA002S	2.5	14	0.9	20.5
RCIS09TRUARE016C2.5SA002S	2.5	16	0.9	20.5
RCIS09TRUARE019C2.5SA002S	2.5	19	0.9	23
RCIS09TRUARE020C2.5SA002S	2.5	20	0.9	24.5
RCIS09TRUARE024C2.5SA002S	2.5	24	0.9	27.5
RCIS09TRUARE025C2.5SA002S	2.5	25	0.9	27.5
RCIS09TRUARE027C2.5SA002S	2.5	27	0.9	28
RCIS09TRUARE030C2.5SA002S	2.5	30	0.9	30
RCIS09TRUARE036C2.5SA002S	2.5	36	0.9	32
RCIS09TRUARE037C2.5SA002S	2.5	37	0.9	32



#### OUR CERTIFICATION



# POLYCAB RR-E MC, IS 9968-1 RUBBER CONTROL CABLE, 1100 V AC

## Electrical characteristics

Current carrying capacity and maximum DC conductor resistance.

Nominal cross-sectional area of conductor	Current carrying capacity		Maximum DC conductor resistance at 20°C
	2 Core Cable	3 Core Cable	
mm <sup>2</sup>	Amp.	Amp.	Ω/km
1.5	26	23	13.7
2.5	36	32	8.21

Ambient temperature: 30 °C

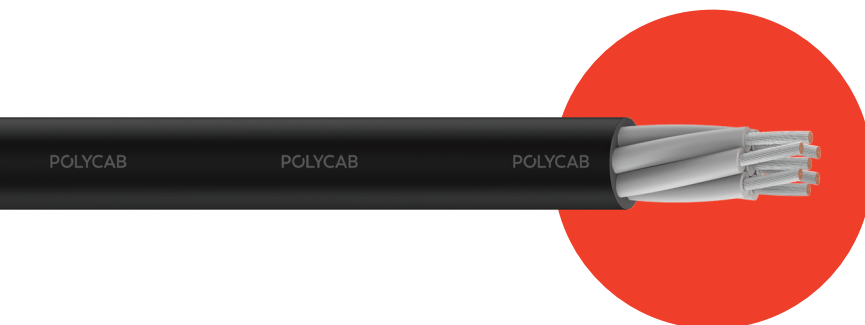
Conductor temperature: 90 °C

\* 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

Ambient Temperature	20°C	30°C	40°C	50°C	60°C	70°C	80°C
De-Rating Factor	1.08	1	0.91	0.82	0.71	0.58	0.41



# POLYCAB RR-C MC, IS 9968-1 RUBBER CONTROL CABLE, 1100 V AC



## Compliance

Conductor resistance test	IS 8130
Insulation resistance	IS 6380:1984*
Flammability	IS 10810-53



## Construction

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



## Bending Radius

Fixed installation	12 x Overall Diameter
Occasional	10 x Overall Diameter



## Application

POLYCAB RR-C MC, IS 9968-1 tinned copper conductor, EPR insulated and CSP 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 chemical resistance is prime importance.



## Core Identification

Single	Red / Black / White / Yellow / Blue
Twin	Red, Black
Three	Red , Black , Green
Four	Red, Yellow, Blue, Green
Five	Red, Yellow, Blue, Black, Green
More than five core	White with black number or black with white number



## Standard and References

IS 8130:2013  
IS 6380:1984\*  
IS 9968:1988



## Operation Temperature

Fixed: -40°C to 90°C  
Maximum short circuit temperature 250°C



## Test Voltage

3000 V AC

## Voltage Rating

1100 V AC

## Approval



## OUR CERTIFICATION



# POLYCAB RR-C MC, IS 9968-1 RUBBER CONTROL CABLE, 1100 V AC

PRODUCT CODE	Nominal cross sectional area	No. of core	Nominal thickness of insulation	Overall diameter (Approx.)
	mm <sup>2</sup>	no.	mm	mm
RCIS09TRUARC002C1.5SA002S	1.5	2	0.8	8
RCIS09TRUARC003C1.5SA002S	1.5	3	0.8	8.5
RCIS09TRUARC004C1.5SA002S	1.5	4	0.8	9.5
RCIS09TRUARC005C1.5SA002S	1.5	5	0.8	10.5
RCIS09TRUARC006C1.5SA002S	1.5	6	0.8	11.5
RCIS09TRUARC007C1.5SA002S	1.5	7	0.8	11.5
RCIS09TRUARC008C1.5SA002S	1.5	8	0.8	12.5
RCIS09TRUARC010C1.5SA002S	1.5	10	0.8	16
RCIS09TRUARC012C1.5SA002S	1.5	12	0.8	16.5
RCIS09TRUARC014C1.5SA002S	1.5	14	0.8	17.5
RCIS09TRUARC016C1.5SA002S	1.5	16	0.8	18.5
RCIS09TRUARC019C1.5SA002S	1.5	19	0.8	19.5
RCIS09TRUARC020C1.5SA002S	1.5	20	0.8	20.5
RCIS09TRUARC024C1.5SA002S	1.5	24	0.8	23
RCIS09TRUARC025C1.5SA002S	1.5	25	0.8	23
RCIS09TRUARC027C1.5SA002S	1.5	27	0.8	23.5
RCIS09TRUARC030C1.5SA002S	1.5	30	0.8	24
RCIS09TRUARC036C1.5SA002S	1.5	36	0.8	27
RCIS09TRUARC037C1.5SA002S	1.5	37	0.8	27
RCIS09TRUARC002C2.5SA002S	2.5	2	0.9	9.5
RCIS09TRUARC003C2.5SA002S	2.5	3	0.9	10
RCIS09TRUARC004C2.5SA002S	2.5	4	0.9	11.5
RCIS09TRUARC005C2.5SA002S	2.5	5	0.9	12.5
RCIS09TRUARC006C2.5SA002S	2.5	6	0.9	13.5
RCIS09TRUARC007C2.5SA002S	2.5	7	0.9	13.5
RCIS09TRUARC008C2.5SA002S	2.5	8	0.9	16
RCIS09TRUARC010C2.5SA002S	2.5	10	0.9	19
RCIS09TRUARC012C2.5SA002S	2.5	12	0.9	19.5
RCIS09TRUARC014C2.5SA002S	2.5	14	0.9	20.5
RCIS09TRUARC016C2.5SA002S	2.5	16	0.9	20.5
RCIS09TRUARC019C2.5SA002S	2.5	19	0.9	23
RCIS09TRUARC020C2.5SA002S	2.5	20	0.9	24.5
RCIS09TRUARC024C2.5SA002S	2.5	24	0.9	27.5
RCIS09TRUARC025C2.5SA002S	2.5	25	0.9	27.5
RCIS09TRUARC027C2.5SA002S	2.5	27	0.9	28
RCIS09TRUARC030C2.5SA002S	2.5	30	0.9	30
RCIS09TRUARC036C2.5SA002S	2.5	36	0.9	32
RCIS09TRUARC037C2.5SA002S	2.5	37	0.9	32



#### OUR CERTIFICATION



# POLYCAB RR-C MC, IS 9968-1 RUBBER CONTROL CABLE, 1100 V AC

## Electrical characteristics

Current carrying capacity and maximum DC conductor resistance.

Nominal cross-sectional area of conductor	Current carrying capacity		Maximum DC conductor resistance at 20°C
	2 Core Cable	3 Core Cable	
mm <sup>2</sup>	Amp.	Amp.	Ω/km
1.5	26	23	13.7
2.5	36	32	8.21

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

Ambient Temperature	20°C	30°C	40°C	50°C	60°C	70°C	80°C
De-Rating Factor	1.08	1	0.91	0.82	0.71	0.58	0.41





# POLYCAB RR-P MC, IS 9968-1 RUBBER CONTROL CABLE, 1100 V AC



## Compliance

Conductor resistance test	IS 8130
Insulation resistance	IS 6380:1984*
Flammability	IS 10810-53



## Construction

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



## Bending Radius

Fixed installation	12 x Overall Diameter
Occasional	10 x Overall Diameter



## Standard and References

IS 8130:2013  
IS 6380:1984\*  
IS 9968:1988



## Operation Temperature

Fixed: -40°C to 90°C  
Maximum short circuit temperature 250°C



## Test Voltage 3000 V AC Voltage Rating 1100 V



## Core Identification

Single	Red / Black / White / Yellow / Blue
Twin	Red, Black
Three	Red , Black , Green
Four	Red, Yellow, Blue, Green
Five	Red, Yellow, Blue, Black, Green
More than five core	White with black number or black with white number



## Application

POLYCAB RR-P MC, 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, oil, abrasion and tear resistant is prime importance.

## Approval



## OUR CERTIFICATION



# POLYCAB RR-P MC, IS 9968-1 RUBBER CONTROL CABLE, 1100 V AC

PRODUCT CODE	Nominal cross sectional area	No. of core	Nominal thickness of insulation	Overall diameter (Approx.)
	mm <sup>2</sup>	no.	mm	mm
RCIS09TRUARP002C1.5SA002S	1.5	2	0.8	8
RCIS09TRUARP003C1.5SA002S	1.5	3	0.8	8.5
RCIS09TRUARP004C1.5SA002S	1.5	4	0.8	9.5
RCIS09TRUARP005C1.5SA002S	1.5	5	0.8	10.5
RCIS09TRUARP006C1.5SA002S	1.5	6	0.8	11.5
RCIS09TRUARP007C1.5SA002S	1.5	7	0.8	11.5
RCIS09TRUARP008C1.5SA002S	1.5	8	0.8	12.5
RCIS09TRUARP010C1.5SA002S	1.5	10	0.8	16
RCIS09TRUARP012C1.5SA002S	1.5	12	0.8	16.5
RCIS09TRUARP014C1.5SA002S	1.5	14	0.8	17.5
RCIS09TRUARP016C1.5SA002S	1.5	16	0.8	18.5
RCIS09TRUARP019C1.5SA002S	1.5	19	0.8	19.5
RCIS09TRUARP020C1.5SA002S	1.5	20	0.8	20.5
RCIS09TRUARP024C1.5SA002S	1.5	24	0.8	23
RCIS09TRUARP025C1.5SA002S	1.5	25	0.8	23
RCIS09TRUARP027C1.5SA002S	1.5	27	0.8	23.5
RCIS09TRUARP030C1.5SA002S	1.5	30	0.8	24
RCIS09TRUARP036C1.5SA002S	1.5	36	0.8	27
RCIS09TRUARP037C1.5SA002S	1.5	37	0.8	27
RCIS09TRUARP002C2.5SA002S	2.5	2	0.9	9.5
RCIS09TRUARP003C2.5SA002S	2.5	3	0.9	10
RCIS09TRUARP004C2.5SA002S	2.5	4	0.9	11.5
RCIS09TRUARP005C2.5SA002S	2.5	5	0.9	12.5
RCIS09TRUARP006C2.5SA002S	2.5	6	0.9	13.5
RCIS09TRUARP007C2.5SA002S	2.5	7	0.9	13.5
RCIS09TRUARP008C2.5SA002S	2.5	8	0.9	16
RCIS09TRUARP010C2.5SA002S	2.5	10	0.9	19
RCIS09TRUARP012C2.5SA002S	2.5	12	0.9	19.5
RCIS09TRUARP014C2.5SA002S	2.5	14	0.9	20.5
RCIS09TRUARP016C2.5SA002S	2.5	16	0.9	20.5
RCIS09TRUARP019C2.5SA002S	2.5	19	0.9	23
RCIS09TRUARP020C2.5SA002S	2.5	20	0.9	24.5
RCIS09TRUARP024C2.5SA002S	2.5	24	0.9	27.5
RCIS09TRUARP025C2.5SA002S	2.5	25	0.9	27.5
RCIS09TRUARP027C2.5SA002S	2.5	27	0.9	28
RCIS09TRUARP030C2.5SA002S	2.5	30	0.9	30
RCIS09TRUARP036C2.5SA002S	2.5	36	0.9	32
RCIS09TRUARP037C2.5SA002S	2.5	37	0.9	32



#### OUR CERTIFICATION



# POLYCAB RR-P MC, IS 9968-1 RUBBER CONTROL CABLE, 1100 V AC

## Electrical characteristics

Current carrying capacity and maximum DC conductor resistance.

Nominal cross-sectional area of conductor	Current carrying capacity		Maximum DC conductor resistance at 20°C
	2 Core Cable	3 Core Cable	
mm <sup>2</sup>	Amp.	Amp.	Ω/km
1.5	26	23	13.7
2.5	36	32	8.21

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

Ambient Temperature	20°C	30°C	40°C	50°C	60°C	70°C	80°C
De-Rating Factor	1.08	1	0.91	0.82	0.71	0.58	0.41

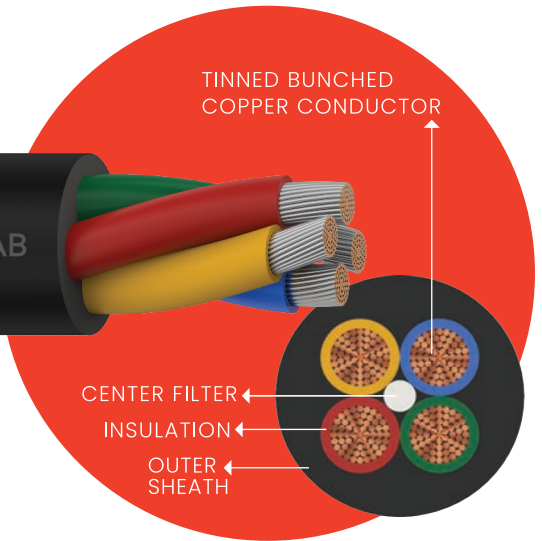


# POLYCAB RR-E, IS 9968-1 RUBBER POWER CABLE, 1100 V AC

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## Compliance

Conductor resistance test	IS 8130
Insulation resistance	IS 6380:1984*
Flammability	IS 10810-53



## 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.



## Bending Radius

Fixed installation	12 x Overall Diameter
Occasional	10 x Overall Diameter



## Application

POLYCAB 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 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 in elevator, lifts, cranes, mines, heater leads and electric iron leads etc.



## Core Identification

Single	Red / Black / White / Yellow / Blue
Twin	Red, Black
Three	Red, Black, Green (up to 4 sq.mm), Red, Yellow, Blue (above 4 sq.mm)
Four	Red, Yellow, Blue, Green
More than five core	Red, Yellow, Blue, Black, Green



## Standard and References

IS 8130:2013  
IS 6380:1984\*  
IS 9968:1988



## Operation Temperature

Fixed: -40°C to 90°C  
Maximum short circuit temperature 250°C



## Test Voltage

3000 V AC

## Voltage Rating

1100 V

## Approval



## OUR CERTIFICATION



# POLYCAB RR-E, IS 9968-1 RUBBER POWER CABLE, 1100 V AC

Product Code	Construction	Nominal thickness of insulation	Overall Diameter (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
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
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
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
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
RCIS09TRUARE004C095SA001S	4 C X 95	1.8	46
RCIS09TRUARE001C120SA001S	1 C X 120	1.8	23

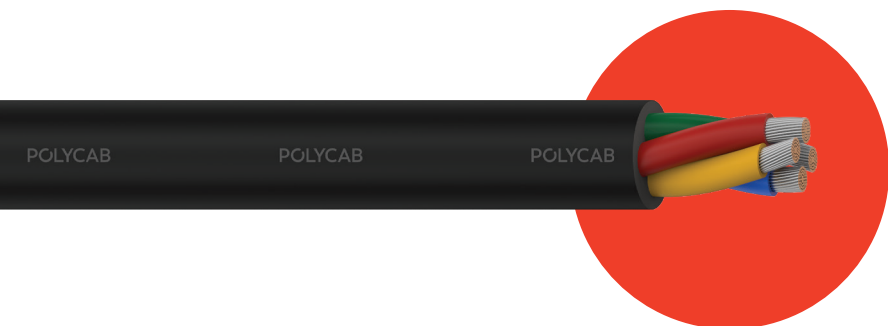


#### OUR CERTIFICATION



# POLYCAB RR-E, IS 9968-1 RUBBER POWER CABLE, 1100 V AC

Product Code	Construction	Nominal thickness of insulation	Overall Diameter (Approx.)
	n x mm <sup>2</sup>	mm	mm
RCIS09TRUARE002C120SA001S	2 C X 120	1.8	42.5
RCIS09TRUARE003C120SA001S	3 C X 120	1.8	46
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
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
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
RCIS09TRUARE004C240SA001S	4 C X 240	2.4	69
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
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
RCIS09TRUARE004C400SA001S	4 C X 400	2.8	85
RCIS09TRUARE001C500SA001S	1 C X 500	3	41
RCIS09TRUARE001C630SA001S	1 C X 630	3	45



#### OUR CERTIFICATION



**Electrical characteristics**

Current carrying capacity and maximum DC conductor resistance.

Nominal cross-sectional area of conductor	Current carrying capacity			Maximum DC conductor resistance at 20°C
	Multi-core cables		Single-core cables	
	2 Core Cable	3 Core Cable	Two loaded conductors touching	
mm <sup>2</sup>	Amp.	Amp.	Amp.	Ω/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
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

Ambient Temperature	20°C	30°C	40°C	50°C	60°C	70°C	80°C
De-Rating Factor	1.08	1	0.91	0.82	0.71	0.58	0.41

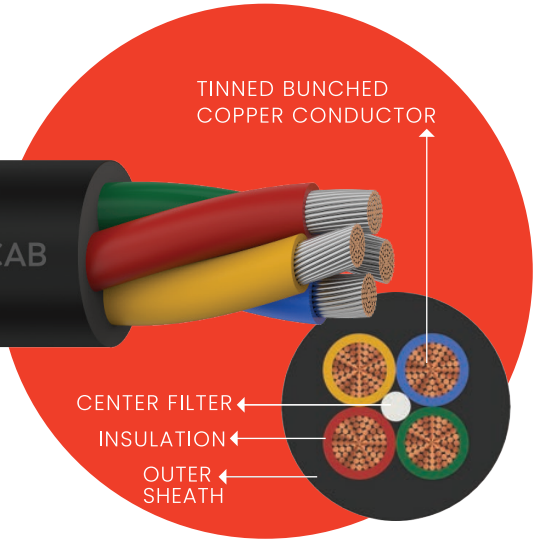


# POLYCAB RR-C, IS 9968-1 RUBBER POWER CABLE, 1100 V AC

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## Compliance

Conductor resistance test	IS 8130
Insulation resistance	IS 6380:1984*
Flammability	IS 10810-53



## 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 CSP (Chloro sulphonated polyethylene) as per IS 6380.



## Bending Radius

Fixed installation	12 x Overall Diameter
Occasional	10 x Overall Diameter



## Application

POLYCAB RR-C, IS 9968-1 tinned copper conductor, EPR insulated and CSP 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 chemical resistance is prime importance.



## Core Identification

Single	Red / Black / White / Yellow / Blue
Twin	Red, Black
Three	Red, Black, Green (up to 4 sq.mm), Red, Yellow, Blue (above 4 sq.mm)
Four	Red, Yellow, Blue, Green
Five	Red, Yellow, Blue, Black, Green



## Standard and References

IS 8130:2013  
IS 6380:1984\*  
IS 9968-1:1988



## Operation Temperature

Fixed: -40°C to 90°C  
Maximum short circuit temperature 250°C



## Test Voltage

3000 V AC

## Voltage Rating

1100 V AC

## Approval



## OUR CERTIFICATION





# POLYCAB RR-C, IS 9968-1 RUBBER POWER CABLE, 1100 V AC

Product Code	Construction	Nominal thickness of insulation	Overall Diameter (Approx.)
	n x mm <sup>2</sup>	mm	mm
RCIS09TRUARC001C004SA001S	1 C X 4	1	6.5
RCIS09TRUARC002C004SA001S	2 C X 4	1	11
RCIS09TRUARC003C004SA001S	3 C X 4	1	11.5
RCIS09TRUARC004C004SA001S	4 C X 4	1	13
RCIS09TRUARC005C004SA001S	5 C X 4	1	14.5
RCIS09TRUARC001C006SA001S	1 C X 6	1	8
RCIS09TRUARC002C006SA001S	2 C X 6	1	14
RCIS09TRUARC003C006SA001S	3 C X 6	1	14.5
RCIS09TRUARC004C006SA001S	4 C X 6	1	16.5
RCIS09TRUARC001C010SA001S	1 C X 10	1.2	10
RCIS09TRUARC002C010SA001S	2 C X 10	1.2	17.5
RCIS09TRUARC003C010SA001S	3 C X 10	1.2	18.5
RCIS09TRUARC004C010SA001S	4 C X 10	1.2	20.5
RCIS09TRUARC001C016SA001S	1 C X 16	1.2	11
RCIS09TRUARC002C016SA001S	2 C X 16	1.2	20
RCIS09TRUARC003C016SA001S	3 C X 16	1.2	22
RCIS09TRUARC004C016SA001S	4 C X 16	1.2	24
RCIS09TRUARC001C025SA001S	1 C X 25	1.4	12.5
RCIS09TRUARC002C025SA001S	2 C X 25	1.4	24.5
RCIS09TRUARC003C025SA001S	3 C X 25	1.4	26
RCIS09TRUARC004C025SA001S	4 C X 25	1.4	28.5
RCIS09TRUARC001C035SA001S	1 C X 35	1.4	14
RCIS09TRUARC002C035SA001S	2 C X 35	1.4	26.5
RCIS09TRUARC003C035SA001S	3 C X 35	1.4	28.5
RCIS09TRUARC004C035SA001S	4 C X 35	1.4	31.5
RCIS09TRUARC001C050SA001S	1 C X 50	1.6	16.5
RCIS09TRUARC002C050SA001S	2 C X 50	1.6	31
RCIS09TRUARC003C050SA001S	3 C X 50	1.6	33
RCIS09TRUARC004C050SA001S	4 C X 50	1.6	36.5
RCIS09TRUARC001C070SA001S	1 C X 70	1.6	18.5
RCIS09TRUARC002C070SA001S	2 C X 70	1.6	34.5
RCIS09TRUARC003C070SA001S	3 C X 70	1.6	38
RCIS09TRUARC004C070SA001S	4 C X 70	1.6	41
RCIS09TRUARC001C095SA001S	1 C X 95	1.8	21
RCIS09TRUARC002C095SA001S	2 C X 95	1.8	38.5
RCIS09TRUARC003C095SA001S	3 C X 95	1.8	42.5



#### OUR CERTIFICATION



# POLYCAB RR-C, IS 9968-1 RUBBER POWER CABLE, 1100 V AC

Product Code	Construction	Nominal thickness of insulation	Overall Diameter (Approx.)
	n x mm <sup>2</sup>	mm	mm
RCIS09TRUARC004C095SA001S	4 C X 95	1.8	46
RCIS09TRUARC001C120SA001S	1 C X 120	1.8	23
RCIS09TRUARC002C120SA001S	2 C X 120	1.8	42.5
RCIS09TRUARC003C120SA001S	3 C X 120	1.8	46
RCIS09TRUARC004C120SA001S	4 C X 120	1.8	50.5
RCIS09TRUARC001C150SA001S	1 C X 150	2	25
RCIS09TRUARC002C150SA001S	2 C X 150	2	47
RCIS09TRUARC003C150SA001S	3 C X 150	2	51
RCIS09TRUARC004C150SA001S	4 C X 150	2	55.5
RCIS09TRUARC001C185SA001S	1 C X 185	2.2	27.5
RCIS09TRUARC002C185SA001S	2 C X 185	2.2	51
RCIS09TRUARC003C185SA001S	3 C X 185	2.2	55.5
RCIS09TRUARC004C185SA001S	4 C X 185	2.2	61
RCIS09TRUARC001C240SA001S	1 C X 240	2.4	31
RCIS09TRUARC002C240SA001S	2 C X 240	2.4	58
RCIS09TRUARC003C240SA001S	3 C X 240	2.4	63
RCIS09TRUARC004C240SA001S	4 C X 240	2.4	69
RCIS09TRUARC001C300SA001S	1 C X 300	2.6	33
RCIS09TRUARC002C300SA001S	2 C X 300	2.6	63
RCIS09TRUARC003C300SA001S	3 C X 300	2.6	68.5
RCIS09TRUARC004C300SA001S	4 C X 300	2.6	75.5
RCIS09TRUARC001C400SA001S	1 C X 400	2.8	37.5
RCIS09TRUARC002C400SA001S	2 C X 400	2.8	71
RCIS09TRUARC003C400SA001S	3 C X 400	2.8	77
RCIS09TRUARC004C400SA001S	4 C X 400	2.8	85
RCIS09TRUARC001C500SA001S	1 C X 500	3	41
RCIS09TRUARC001C630SA001S	1 C X 630	3	45



#### OUR CERTIFICATION



**Electrical characteristics**

Current carrying capacity and maximum DC conductor resistance.

Nominal cross-sectional area of conductor	Current carrying capacity			Maximum DC conductor resistance at 20°C
	Multi-core cables		Single-core cables	
	2 Core Cable	3 Core Cable	Two loaded conductors touching	
mm <sup>2</sup>	Amp.	Amp.	Amp.	Ω/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
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

Ambient Temperature	20°C	30°C	40°C	50°C	60°C	70°C	80°C
De-Rating Factor	1.08	1	0.91	0.82	0.71	0.58	0.41

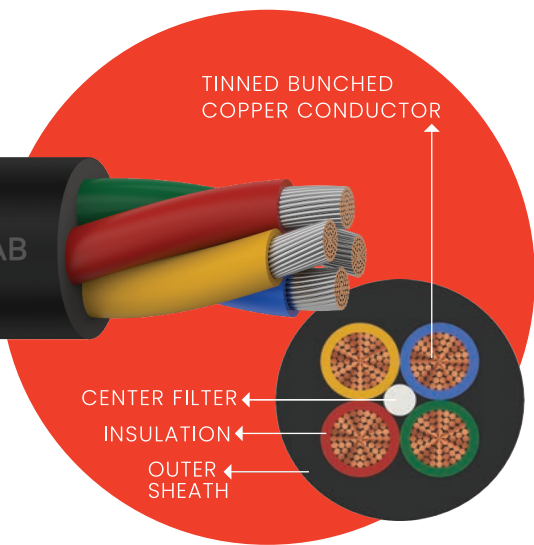


# POLYCAB RR-P, IS 9968-1 RUBBER POWER CABLE, 1100 V AC

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## Compliance

Conductor resistance test	IS 8130
Insulation resistance	IS 6380:1984*
Flammability	IS 10810-53



## 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.



## Bending Radius

Fixed installation	12 x Overall Diameter
Occasional	10 x Overall Diameter



## 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, oil, abrasion and tear resistant is of prime importance.



## Core Identification

Single	Red / Black / White / Yellow / Blue
Twin	Red, Black
Three	Red, Black, Green (up to 4 sq.mm), Red, Yellow, Blue (above 4 sq.mm)
Four	Red, Yellow, Blue, Green
Five	Red, Yellow, Blue, Black, Green



## Standard and References

IS 8130:2013  
IS 6380:1984\*  
IS 9968-1:1988



## Operation Temperature

Fixed: -40°C to 90°C  
Maximum short circuit temperature 250°C



## Test Voltage

3000 V AC

## Voltage Rating

1100 V

## Approval



## OUR CERTIFICATION



# POLYCAB RR-P, IS 9968-1 RUBBER POWER CABLE, 1100 V AC

Product Code	Construction	Nominal thickness of insulation	Overall Diameter (Approx.)
	n x mm <sup>2</sup>	mm	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
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
RCIS09TRUARE004C035SA001S	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
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
RCIS09TRUARP004C070SA001S	4 C X 70	1.6	41
RCIS09TRUARP001C095SA001S	1 C X 95	1.8	21



#### OUR CERTIFICATION



# POLYCAB RR-P, IS 9968-1 RUBBER POWER CABLE, 1100 V AC

Product Code	Construction	Nominal thickness of insulation	Overall Diameter (Approx.)
	n x mm <sup>2</sup>	mm	mm
RCIS09TRUARP002C095SA001S	2 C X 95	1.8	38.5
RCIS09TRUARP003C095SA001S	3 C X 95	1.8	42.5
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
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
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
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
RCIS09TRUARP004C240SA001S	4 C X 240	2.4	69
RCIS09TRUARP001C300SA001S	1 C X 300	2.6	33
RCIS09TRUARP002C300SA001S	2 C X 300	2.6	63
RCIS09TRUARP003C300SA001S	3 C X 300	2.6	68.5
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
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.

Nominal cross-sectional area of conductor	Current carrying capacity			Maximum DC conductor resistance at 20°C
	Multi-core cables		Single-core cables	
	2 Core Cable	3 Core Cable	Two loaded conductors touching	
mm <sup>2</sup>	Amp.	Amp.	Amp.	Ω/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
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

Ambient Temperature	20°C	30°C	40°C	50°C	60°C	70°C	80°C
De-Rating Factor	1.08	1	0.91	0.82	0.71	0.58	0.41

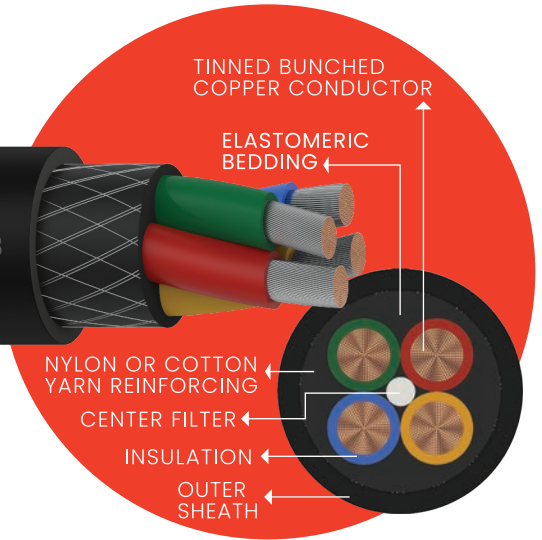


# POLYCAB RR (REINFORCED), IS 9968-1 RUBBER POWER AND CONTROL CABLE, 1100 V AC

POLYCAB

POLYCAB

POLYCAB



## Compliance

Conductor resistance test	IS 8130
Insulation resistance	IS 6380:1984*
Flammability	IS 10810-53



## Construction

- Annealed tinned electrolytic grade copper conductor to IS 8130, class 5
- Insulated with EPR (Ethylene propylene rubber) IE-2 to IS 6380
- Bedded with elastomeric compound to SE3/SE4 to IS 6380
- Reinforcing with synthetic or cotton yarn
- Sheathed with PCP/CSP/NBR-PVC/ any other synthetic HOFR SE4 as per IS 6380.



## Bending Radius

Fixed installation	12 x Overall Diameter
Occasional	10 x Overall Diameter



## Application

POLYCAB RR(Reinforced), EPR insulated and elastomeric sheathed cable Generally as per IS 9968 Pt-1 is designed to use in 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. The cable is highly suitable to use in Elevator, Lifts, Cranes, Mines, Stacker & Reclaim, Festooning & CRD application.



## Core Identification

Single	Red / Black / White / Yellow / Blue
Twin	Red, Black
Three	Red , Black , Green (up to 4 sq.mm), Red, Yellow, Blue (above 4 sq.mm)
Four	Red, Yellow, Blue, Green
Five	Red, Yellow, Blue, Black, Green
More than Five core	Black with white numbering or white with black numbering



## Standard and References

IS 8130:2013  
IS 6380:1984\*  
IS 9968-1:1988



## Operation Temperature

Fixed: -40°C to 90°C  
Maximum short circuit temperature 250°C



## Test Voltage 3000 V AC Voltage Rating

1100 V

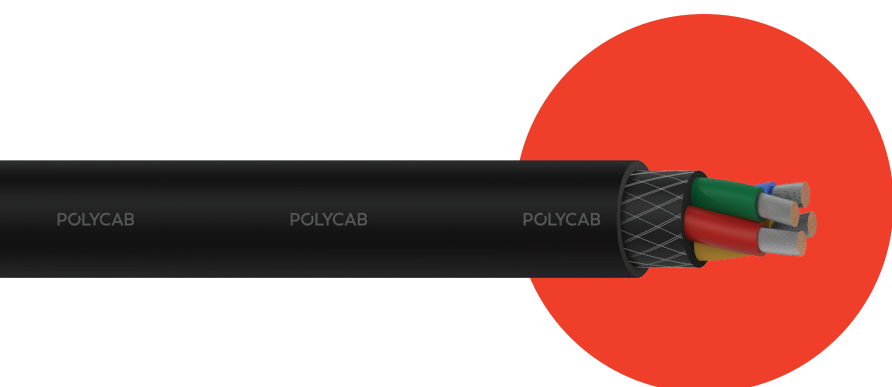
## Approval





# POLYCAB RR (REINFORCED), IS 9968-1 RUBBER POWER AND CONTROL CABLE, 1100 V AC

Product Code	Construction	Nominal thickness of insulation	Overall Diameter (Approx.)	Weight (Approx.)
	n x mm <sup>2</sup>	mm	mm	kg/km
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



# POLYCAB RR (REINFORCED), IS 9968-1 RUBBER POWER AND CONTROL CABLE, 1100 V AC

Product Code	Construction	Nominal thickness of insulation	Overall Diameter (Approx.)	Weight (Approx.)
	n x mm <sup>2</sup>	mm	mm	kg/km
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
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	61.4	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



#### OUR CERTIFICATION



# POLYCAB RR (REINFORCED), IS 9968-1 RUBBER POWER AND CONTROL CABLE, 1100 V AC

Product Code	Construction	Nominal thickness of insulation	Overall Diameter (Approx.)	Weight (Approx.)
	n x mm <sup>2</sup>	mm	mm	kg/km
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
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	5.82	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



#### OUR CERTIFICATION



# POLYCAB RR (REINFORCED), IS 9968-1 RUBBER POWER AND CONTROL CABLE, 1100 V AC

## Electrical characteristics

Current carrying capacity and maximum DC conductor resistance.

Nominal cross-sectional area of conductor	Current carrying capacity			Maximum DC conductor resistance at 20°C
	Multi-core cables		Single-core cables	
	2 Core Cable	3 Core Cable	Two loaded conductors touching	
mm <sup>2</sup>	Amp.	Amp.	Amp.	Ω/km
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 temperature: 90°C

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

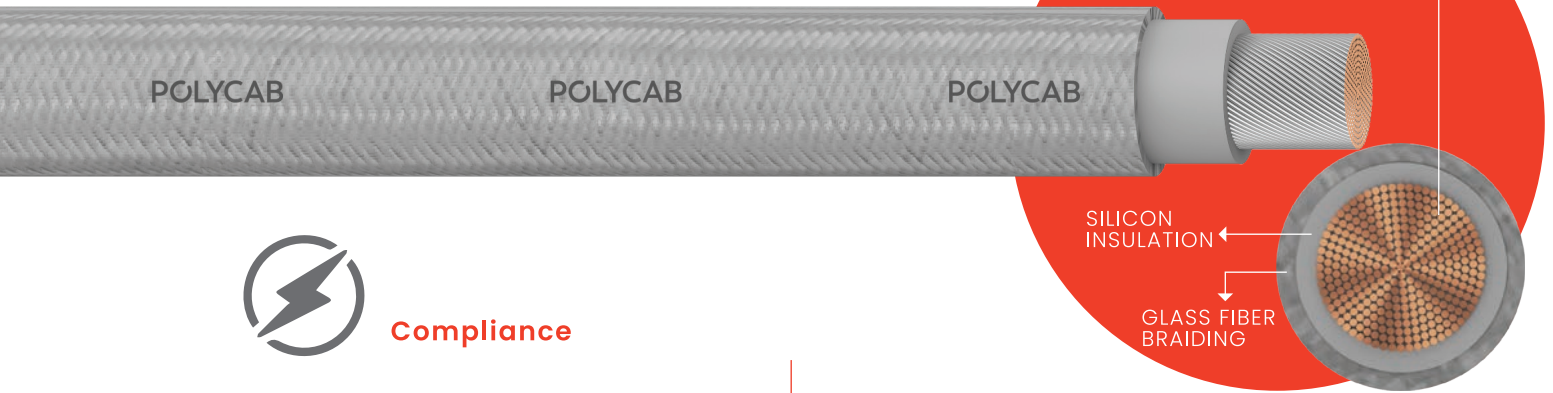
## De-Rating Factor

De-rating factor at various ambient temperature

Ambient Temperature	20°C	30°C	40°C	50°C	60°C	70°C	80°C
De-Rating Factor	1.08	1	0.91	0.82	0.71	0.58	0.41



# POLYCAB SiR-G, IS 9968-1 RUBBER POWER AND CONTROL CABLE, 1100 V AC



## Compliance

Conductor resistance test	IS 8130
Insulation resistance	IS 6380:1984*
Flammability	IS 10810-53



## Construction

- Annealed tinned bunched electrolytic grade copper conductor to IS 8130, class 5
- Insulated by silicon rubber compound to IS IE 5, 6380
- Braided with glass fibre or synthetic yarn, treated with varnish



## Application

POLYCAB SiR-G, silicon rubber insulated glass fibre braided cable conforming to IS 9968-1 are designed to use in flexible 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. These cables are suitable to use for heater leads, electric iron leads, furnace and high temperature area.



## Bending Radius

Fixed installation	12 x Overall Diameter
Occasional	10 x Overall Diameter



## Standard and References

IS 8130:2013  
IS 6380:1984\*  
IS 9968-1:1990\*



## Operation Temperature

Fixed: -50°C to 150°C  
Maximum short circuit temperature 350°C



**Test Voltage**  
3000 V AC  
**Voltage Rating**  
1100 V



**Core Identification**  
White

Approval



OUR CERTIFICATION



# POLYCAB SiR-SC, IS 9968-1 RUBBER POWER AND CONTROL CABLE, 1100 V AC

No. of core	Nominal cross sectional area	Insulation thickness	Overall diameter (Approx.)	Weight (Approx.)
no.	mm <sup>2</sup>	mm	mm	kg/km
1	0.5	1	3.14	14
1	0.75	1	3.34	17
1	1	1	3.51	20
1	1.5	1	3.79	25
1	2.5	1	4.24	36
1	4	1	4.78	53
1	6	1	5.36	73
1	10	1.2	6.70	120
1	16	1.2	7.74	178
1	25	1.4	9.41	272
1	35	1.4	10.60	370
1	50	1.6	12.50	526

## Electrical characteristics

Current carrying capacity and maximum DC conductor resistance.

Nominal cross sectional area mm <sup>2</sup>	Current rating in air Amp.						Maximum DC conductor resistance 20°C Ω/km
	30°C	60°C	90°C	120°C	150°C	170°C	
0.5	23	20	17	13	9	5	40.1
0.75	30	26	22	17	11	6	26.7
1	35	31	26	20	13	7	20
1.5	44	38	52	25	17	8	13.7
2.5	61	53	45	35	23	12	8.21
4	82	71	60	47	31	16	5.09
6	104	91	77	60	39	20	3.39
10	148	129	108	85	56	28	1.95
16	197	173	145	114	75	58	1.24
25	263	230	193	151	99	51	0.795
35	327	286	240	188	124	63	0.565
50	413	362	304	238	157	80	0.393

Nominal continuous operation temperature 150°C

## De-Rating Factor

De-rating factor for various ambient temperature

Air Temperature	150°C	155°C	160°C	170°C	180°C
De-Rating Factor	1	0.91	0.82	0.58	0.41



# POLYCAB SiR-SC, IS 9968-1 RUBBER POWER AND CONTROL CABLE, 1100 V AC



## Compliance

Conductor resistance test	IS 8130
Insulation resistance	IS 6380:1984*
Flammability	IS 10810-53



## Construction

- Annealed tinned bunched electrolytic grade copper conductor to IS 8130, class 5
- Insulated by silicon rubber compound to IS 6380
- Sheathed with CSP (Chlorosulphonated polyethylene) to IS 6380



## Application

POLYCAB SiR-SC, Silicon rubber insulated and CSP sheathed Cable is conforming Generally to IS 9968 pt-1 are designed to use in flexible 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 in heater leads, electric iron leads and high temperature area.



## Bending Radius

Fixed installation	12 x Overall Diameter
Occasional	10 x Overall Diameter



## Standard and References

IS 8130:2013  
IS 6380:1984\*  
IS 9968-1:1988



## Operation Temperature

Fixed: -50°C to 150°C  
Maximum short circuit temperature 350°C



## Test Voltage

3000 V AC

## Voltage Rating

1100 V



## Core Identification

White / Red / Black /  
Yellow / Blue

Approval



## OUR CERTIFICATION



# POLYCAB SiR-SC, IS 9968-1 RUBBER POWER AND CONTROL CABLE, 1100 V AC

No. of core	Nominal cross sectional area	Insulation thickness	Overall diameter (Approx.)	Weight (Approx.)
no.	mm <sup>2</sup>	mm	mm	kg/km
1	0.5	1	4.5	27
1	0.75	1	4.7	31
1	1	1	5.1	37
1	1.5	1	5.6	46
1	2.5	1	6.2	62
1	4	1	7.0	85
1	6	1	8.3	124
1	10	1.2	10.1	191
1	16	1.2	11.3	263
1	25	1.4	13.2	379
1	35	1.4	14.8	503
1	50	1.6	17.1	695
1	70	1.6	19.2	928
1	95	1.8	21.7	1230
1	120	1.8	23.7	1510
1	150	2	26.0	1841

## Electrical characteristics

Current carrying capacity and maximum DC conductor resistance.

Nominal cross sectional area mm <sup>2</sup>	Current rating in air Amp.						Maximum DC conductor resistance 20°C Ω/km
	30°C	60°C	90°C	120°C	150°C	170°C	
0.5	23	20	17	13	9	5	40.1
0.75	30	26	22	17	11	6	26.7
1	35	31	26	20	13	7	20
1.5	44	38	52	25	17	8	13.7
2.5	61	53	45	35	23	12	8.21
4	82	71	60	47	31	16	5.09
6	104	91	77	60	39	20	3.39
10	148	129	108	85	56	28	1.95
16	197	173	145	114	75	58	1.24
25	263	230	193	151	99	51	0.795
35	327	286	240	188	124	63	0.565
50	413	362	304	238	157	80	0.393
70	531	465	391	306	201	103	0.277
95	623	545	458	359	236	121	0.21
120	738	645	543	425	280	143	0.164
150	850	744	626	491	323	166	0.132

Conductor maximum operating temperature 180°C



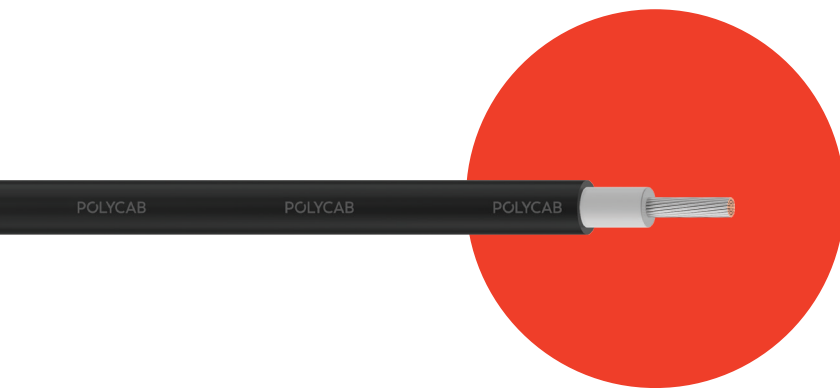


# POLYCAB SiR-SC, IS 9968-1 RUBBER POWER AND CONTROL CABLE, 1100 V AC

## De-Rating Factor

De-rating factor at various ambient temperature

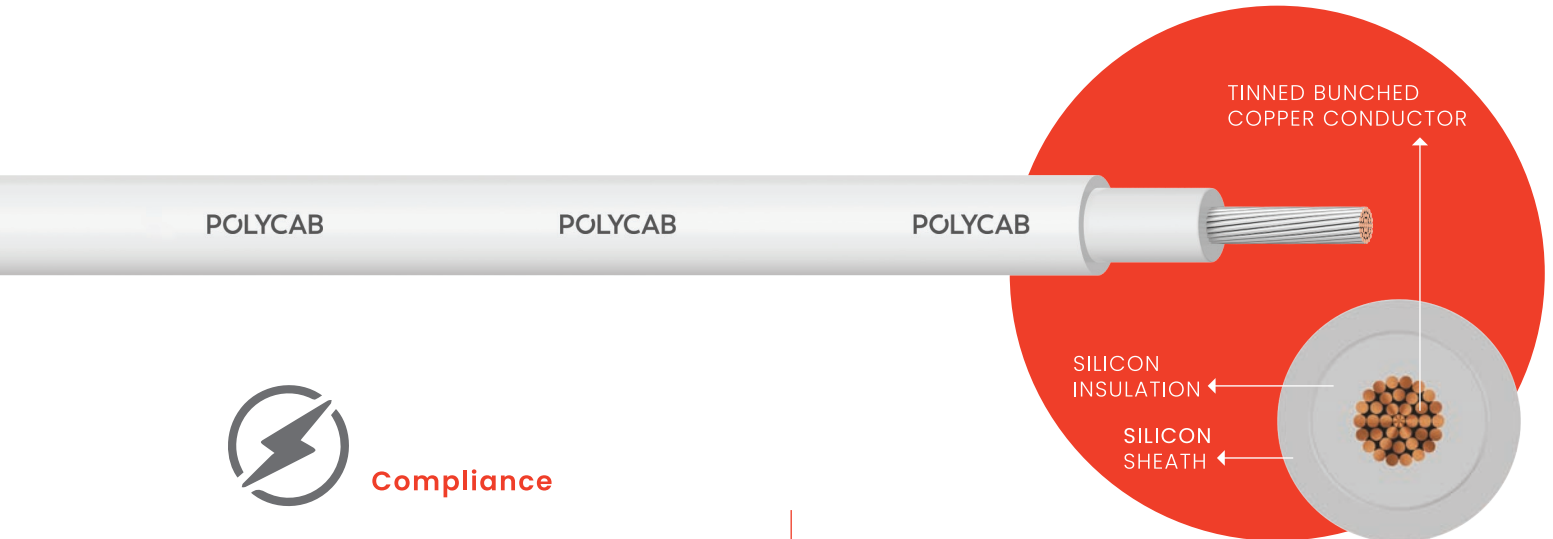
Air Temperature	150°C	155°C	160°C	170°C	180°C
De-Rating Factor	1	0.91	0.82	0.58	0.41



### OUR CERTIFICATION



# POLYCAB SiR-S, IS 9968-1 RUBBER POWER AND CONTROL CABLE, 1100 V



## Compliance

Conductor resistance test	IS 8130
Insulation resistance	IS 6380:1984*
Flammability	IS 10810-53



## Construction

- Annealed tinned bunched electrolytic grade copper conductor to IS 8130, class 5
- Insulated by silicon rubber compound to IS 6380
- Sheathed with silicone rubber compound SE5 to IS 6380



## Application

POLYCAB SiR-S, silicon rubber insulated and silicon rubber sheathed Cable generally conforming to IS 9968-1 is designed to use in flexible 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. These cables are suitable to use in high temperature area especially in furnace and windmill generator.



## Bending Radius

Fixed installation	12 x Overall Diameter
Occasional	10 x Overall Diameter



## Standard and References

IS 8130:2013  
IS 6380:1984\*  
IS 9968-1:1988



## Operation Temperature

Fixed: -50°C to 150°C  
Maximum short circuit temperature 350°C



**Test Voltage**  
3000 V AC  
**Voltage Rating**  
1100 V



**Core Identification**  
White / Red / Black /  
Yellow / Blue

## Approval



## OUR CERTIFICATION



# POLYCAB SiR-S, IS 9968-1 RUBBER POWER AND CONTROL CABLE, 1100 V

No. of core	Nominal cross sectional area	Insulation thickness	Overall diameter (Approx.)	Weight
no.	mm <sup>2</sup>	mm	mm	kg/km
1	0.5	1	4.9	28
1	0.75	1	5.1	32
1	1	1	5.3	36
1	1.5	1	5.6	42
1	2.5	1	6.0	55
1	4	1	6.6	73
1	6	1	7.1	96
1	10	1.2	8.7	151
1	16	1.2	9.7	213
1	25	1.4	11.6	318
1	35	1.4	12.8	422
1	50	1.6	14.9	592
1	70	1.6	16.8	801
1	95	1.8	18.9	1066
1	120	1.8	20.7	1319
1	150	2	22.8	1615

## Electrical characteristics

Current carrying capacity and maximum DC conductor resistance.

Nominal cross sectional area	Current rating in air Amp.						Maximum DC conductor resistance 20°C Ω/km
	30°C	60°C	90°C	120°C	150°C	170°C	
0.5	23	20	17	13	9	5	40.1
0.75	30	26	22	17	11	6	26.7
1	35	31	26	20	13	7	20
1.5	44	38	52	25	17	8	13.7
2.5	61	53	45	35	23	12	8.21
4	82	71	60	47	31	16	5.09
6	104	91	77	60	39	20	3.39
10	148	129	108	85	56	28	1.95
16	197	173	145	114	75	58	1.24
25	263	230	193	151	99	51	0.795
35	327	286	240	188	124	63	0.565
50	413	362	304	238	157	80	0.393
70	531	465	391	306	201	103	0.277
95	623	545	458	359	236	121	0.21
120	738	645	543	425	280	143	0.164
150	850	744	626	491	323	166	0.132

Conductor maximum operating temperature 180°C

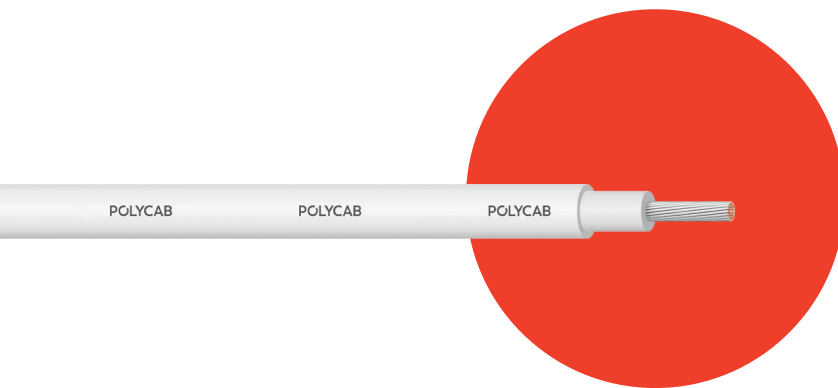


# POLYCAB SiR-S, IS 9968-1 RUBBER POWER AND CONTROL CABLE, 1100 V

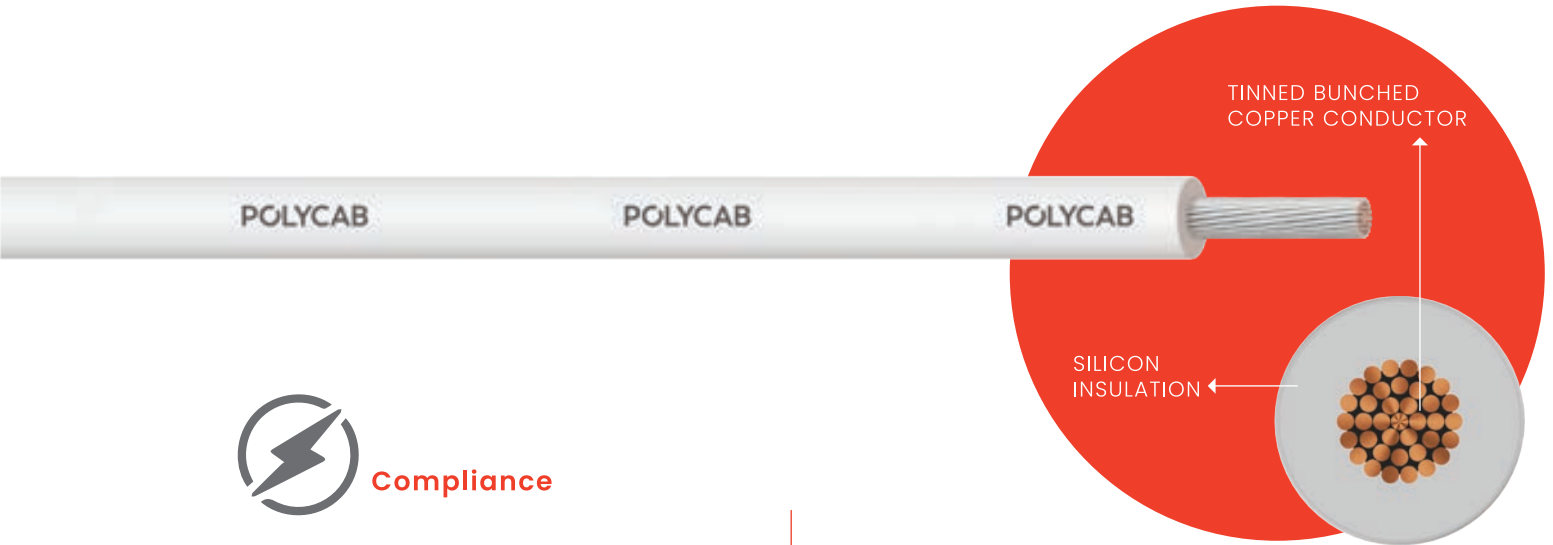
## De-Rating Factor

De-rating factor at various ambient temperature

Air Temperature	150°C	155°C	160°C	170°C	180°C
De-Rating Factor	1	0.91	0.82	0.58	0.41



# POLYCAB SiR, IS 9968-1 RUBBER POWER AND CONTROL CABLE, 1100 V AC



## Compliance

Conductor resistance test	IS 8130
Insulation resistance	IS 6380:1984*
Flammability	IS 10810-53



## Construction

- Annealed tinned bunched electrolytic grade copper conductor to IS 8130, class 5
- Insulated by silicon rubber compound to IS 6380



## Application

POLYCAB SiR IS 9968-1, silicon rubber insulated unsheathed generally conforming to IS 9968-1 is designed to use in heat resistant area 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 1500V to earth.



## Bending Radius

Fixed installation	12 x Overall Diameter
Occasional	10 x Overall Diameter



## Standard and References

IS 8130:2013  
IS 6380:1984\*  
IS 9968-1:1988



## Operation Temperature

Fixed: -50°C to 150°C  
Maximum short circuit temperature 350°C



**Test Voltage**  
3000 V AC  
**Voltage Rating**  
1100 V



**Core Identification**  
White / Red / Black /  
Yellow / Blue

Approval



OUR CERTIFICATION



# POLYCAB SiR, IS 9968-1 RUBBER POWER AND CONTROL CABLE, 1100 V AC

No. of core	Nominal cross sectional area	Insulation thickness	Overall diameter (Approx.)	Weight (Approx.)
no.	mm <sup>2</sup>	mm	mm	kg/km
1	0.5	1	4.9	28
1	0.75	1	5.1	32
1	1	1	5.3	36
1	1.5	1	5.6	42
1	2.5	1	6.0	55
1	4	1	6.6	73
1	6	1	7.1	96
1	10	1.2	8.7	151
1	16	1.2	9.7	213
1	25	1.4	11.6	318
1	35	1.4	12.8	422
1	50	1.6	14.9	592
1	70	1.6	16.8	801
1	95	1.8	18.9	1066
1	120	1.8	20.7	1319
1	150	2	22.8	1615

## Electrical characteristics

Current carrying capacity and maximum DC conductor resistance.

Nominal cross sectional area mm <sup>2</sup>	Current rating in air Amp.						Maximum DC conductor resistance 20°C Ω/km
	30°C	60°C	90°C	120°C	150°C	170°C	
0.5	23	20	17	13	9	5	40.1
0.75	30	26	22	17	11	6	26.7
1	35	31	26	20	13	7	20
1.5	44	38	52	25	17	8	13.7
2.5	61	53	45	35	23	12	8.21
4	82	71	60	47	31	16	5.09
6	104	91	77	60	39	20	3.39
10	148	129	108	85	56	28	1.95
16	197	173	145	114	75	58	1.24
25	263	230	193	151	99	51	0.795
35	327	286	240	188	124	63	0.565
50	413	362	304	238	157	80	0.393
70	531	465	391	306	201	103	0.277
95	623	545	458	359	236	121	0.21
120	738	645	543	425	280	143	0.164
150	850	744	626	491	323	166	0.132

Conductor maximum operating temperature 180°C

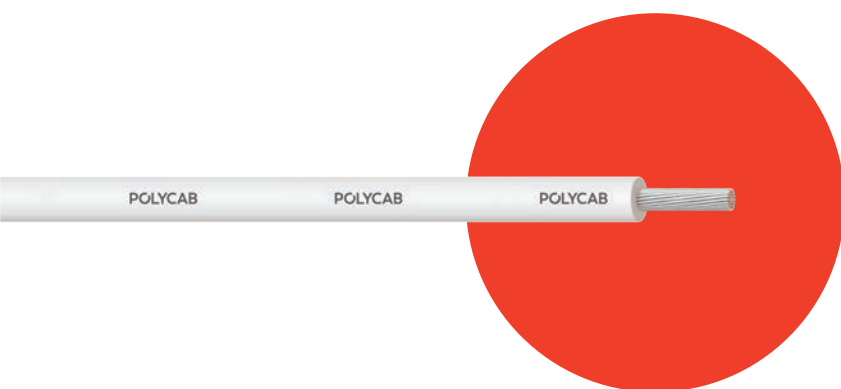


# POLYCAB SiR, IS 9968-1 RUBBER POWER AND CONTROL CABLE, 1100 V AC

## De-Rating Factor

De-rating factor for 180°C insulated cable

Air Temperature	150°C	155°C	160°C	170°C	180°C
De-Rating Factor	1	0.91	0.82	0.58	0.41



### OUR CERTIFICATION



## POLYCAB EPR INSULATED HT FLEXIBLE ELASTOMERIC CABLE CONFORMING TO IS 9968-2.

Polycab offers a comprehensive range of HT rubber flexible cable conforming to IS 9968-2. These cables are available in voltage grade of 1.9/3.3kV(E), 3.8/6.6kV(E), 6.35/11kV(E) or 6.6/6.6kV(UE), 12.7/22kV(E) or 11/11kV(UE), 19/33kV(E), single core & three core with operating temperature 90°C and short circuit conductor temperature 250°C.

The highly flexible and robust Polycab HT Rubber cable makes its use in Mines, Steel Mills, Wind Power Mills, Ships, Textile and Construction machines and Turbines.

**Conductor:** High conductivity tin coated flexible copper conductor produced in-house from state-of-the art Machine.

**Screening:** Conductor screened by semi-conducting tape followed by extruded semi-conducting layer for voltage rating 3.8/6.6 kV(E) and above.

**Insulation:** Special elastomeric Ethylene propylene rubber EPR compound.

**Screening:** Insulation screened by extruded semi-conducting layer followed by semi-conducting tape and tinned copper wire braiding as metallic screening for voltage rating 3.8/6.6 kV(E) and above.

**Sheath:** HOFR (Heat & Oil resistant flame retardant) reinforcing sheath.

Polycab assures the highest quality standard in every product by having stringent quality control with requisite testing which are applied at every single stage from raw material to finished goods.

The construction is based on the application and requirement of the user against IS 9968-2.





# POLYCAB EPR INSULATED HT FLEXIBLE ELASTOMERIC CABLE CONFORMING TO IS 9968-2.



**POLYCAB MV CU**  
**IS 9968-2 Medium**  
**Voltage Rubber**  
**Flexible Cable,**  
**1.9/3.3(E) or**  
**3.3/3.3(UE) KV AC**



**POLYCAB MV CU**  
**IS 9968-2**  
**Medium Voltage**  
**Rubber Flexible**  
**Cable,**  
**3.8/6.6 (E) KV AC**



**POLYCAB MV CU**  
**IS 9968-2**  
**Medium Voltage**  
**Rubber Flexible**  
**Cable 6.35/11(E) or**  
**6.6/6.6(UE) KV AC**



**POLYCAB MV CU**  
**IS 9968-2**  
**Medium Voltage**  
**Rubber Flexible**  
**Cable,**  
**19/33(E) KV AC**



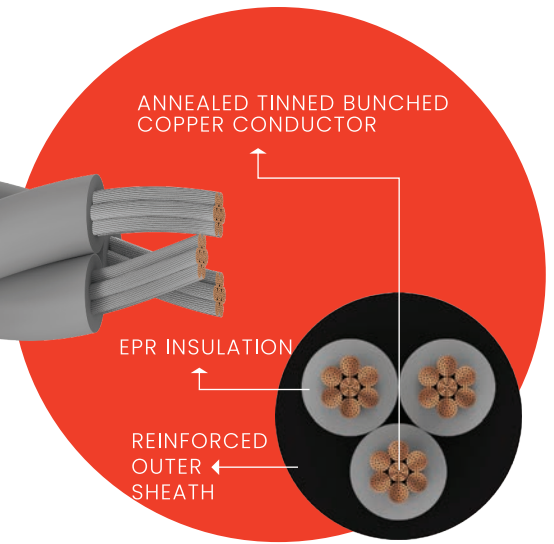
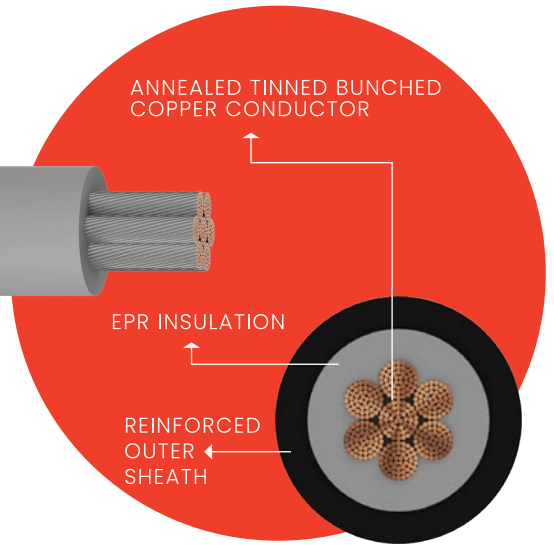
**POLYCAB MV CU**  
**IS 9968-2**  
**Medium Voltage**  
**Rubber Flexible**  
**Cable, 12.7/22(E) or**  
**11/11(UE) KV AC**



## OUR CERTIFICATION



# POLYCAB MV CU IS 9968-2 MV RUBBER CABLE, 1.9/3.3(E) or 3.3/3.3(UE) KV AC



## Outstanding Features

- Flexible
- High Life
- UV Resistant
- Oil Resistant
- Chemical Resistant
- Ozone Resistant



## Compliance

Conductor resistance test	IS 8130
Insulation resistance	IS 9968-2
Flammability	IS 10810-53



## Construction

- Conductor: Circular Bunched tinned copper conductor as per IS 8130, class 5
- Insulation: EPR as per IS 6380
- Outer Sheath: Reinforced extruded elastomeric compound type SE4 or HOFR as per IS 6380 Colour: Black



## Application

POLYCAB MV CU IS 9968-2 of voltage grade 1.9/3.3(E) or 3.3/3.3(UE) KV, annealed tinned copper conductor, EPR insulated and HOFR sheathed single & three core cable is suitable to use for steel mills, wind power mills, ships, textile machines, turbines etc



## Bending Radius

Single core cable	6 x Overall diameter
Three core cable	8 x Overall diameter



## OUR CERTIFICATION



# POLYCAB MV CU IS 9968-2 MV RUBBER CABLE, 1.9/3.3(E) or 3.3/3.3(UE) KV AC



### Standard and References

IS 8130  
IS 6380  
IS 9968-2



### Operation Temperature

Max. operating Temperature: +90°C  
Max. Short Circuit Temperature: 250°C



### Test Voltage

10000 V AC  
**Voltage Rating**  
Nominal Voltage: 1.9/3.3 (E) kV



### Core Identification

White colour with number printing

### Approval



Product Code	No. of cores	Nominal cross sectional area	Nominal Insulation Thickness	Overall diameter (Approx.)	Weight (Approx.)
	no.	mm <sup>2</sup>	mm	mm	kg/km
RCIS10TRUARE001C016S	1	16	2.2	15	400
RCIS10TRUARE001C025S	1	25	2.2	16	500
RCIS10TRUARE001C035S	1	35	2.2	17	650
RCIS10TRUARE001C050S	1	50	2.2	19	800
RCIS10TRUARE001C070S	1	70	2.2	21	1050
RCIS10TRUARE001C095S	1	95	2.4	24	1350
RCIS10TRUARE001C120S	1	120	2.4	26	1650
RCIS10TRUARE001C150S	1	150	2.4	28	1950
RCIS10TRUARE001C185S	1	185	2.4	30	2350
RCIS10TRUARE001C240S	1	240	2.4	33	2950
RCIS10TRUARE001C300S	1	300	2.4	36	3650
RCIS10TRUARE003C016S	3	16	2.2	30	1250
RCIS10TRUARE003C025S	3	25	2.2	33	1600
RCIS10TRUARE003C035S	3	35	2.2	37	2050
RCIS10TRUARE003C050S	3	50	2.2	42	2750
RCIS10TRUARE003C070S	3	70	2.2	45	3450
RCIS10TRUARE003C095S	3	95	2.4	52	4600
RCIS10TRUARE003C120S	3	120	2.4	56	5400
RCIS10TRUARE003C150S	3	150	2.4	59	6350
RCIS10TRUARE003C185S	3	185	2.4	65	7850
RCIS10TRUARE003C240S	3	240	2.4	72	9850
RCIS10TRUARE003C300S	3	300	2.4	78	11850



### OUR CERTIFICATION



# POLYCAB MV CU IS 9968-2 MV RUBBER CABLE, 1.9/3.3(E) or 3.3/3.3(UE) KV AC

## Electrical characteristics:

No. of Cores	Nominal cross sectional area	Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Short circuit current rating	Reactance (Approx.)	Current carrying capacity in Air	
						Trefoil Amp.	Flat touching Amp.
no.	mm <sup>2</sup>	Ω/km	Ω/km	kA/s	Ω/km		
1	16	1.24	1.582	2.29	0.1243	94	108
1	25	0.795	1.015	3.58	0.1158	148	151
1	35	0.565	0.722	5.01	0.1097	179	183
1	50	0.393	0.503	7.15	0.1037	214	218
1	70	0.277	0.355	10.02	0.1010	267	271
1	95	0.21	0.271	13.59	0.0976	323	327
1	120	0.164	0.213	17.17	0.0965	374	376
1	150	0.132	0.172	21.46	0.0937	422	422
1	185	0.108	0.143	26.47	0.0908	484	481
1	240	0.0817	0.11	34.34	0.0894	565	550
1	300	0.0654	0.091	42.93	0.0882	641	615

No. of Cores	Nominal cross sectional area	Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Short circuit current rating	Reactance (Approx.)	Current carrying capacity in Air
						Amp
no.	mm <sup>2</sup>	Ω/km	Ω/km	kA/s	Ω/km	
3	16	1.24	1.582	2.29	0.1007	89
3	25	0.795	1.015	3.58	0.0945	132
3	35	0.565	0.722	5.01	0.0902	159
3	50	0.393	0.503	7.15	0.0862	188
3	70	0.277	0.355	10.02	0.0829	234
3	95	0.21	0.271	13.59	0.0817	284
3	120	0.164	0.213	17.17	0.0797	326
3	150	0.132	0.172	21.46	0.0781	368
3	185	0.108	0.143	26.47	0.0764	422
3	240	0.0817	0.11	34.34	0.0748	492
3	300	0.0654	0.091	42.93	0.0734	559

Maximum conductor temperature 90°C

Ambient air temperature 40°C

Ground temperature 30°C

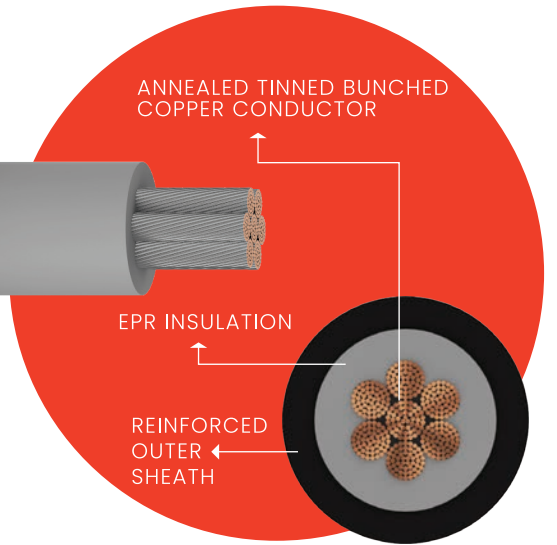
The above table in accordance with IS 3961(Part 7)

## De-rating factors for other than 40°C ambient air temperature

Ambient Temperature	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77

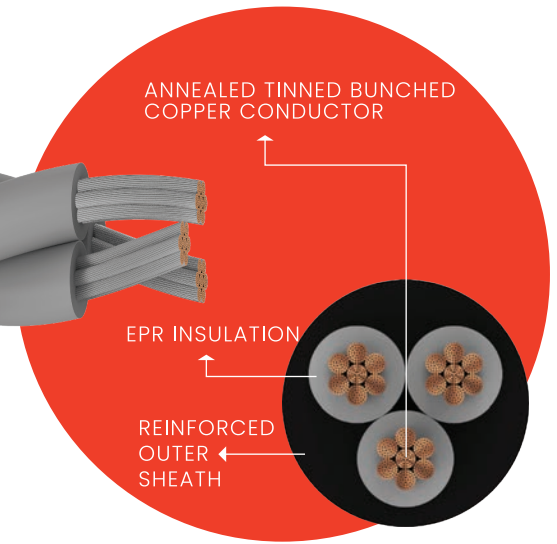


**POLYCAB MV CU IS 9968-2 3.8/6.6(E) KV  
MV RUBBER FLEXIBLE CABLE, 3.8/6.6 (E) KV AC**



**Outstanding Features**

- Flexible
- High Life
- UV Resistant
- Oil Resistant
- Chemical Resistant
- Ozone Resistant



**Compliance**

Conductor resistance test	IS 8130
Insulation resistance	IS 9968-2
Flammability	IS 9968-2



**Application**

POLYCAB MV CU IS 9968-2 of voltage grade 3.8/6.6 (E) KV, annealed tinned copper conductor, EPR insulated, HOFR sheathed single & multi core cable is suitable to use for steel mills, wind power mills, ships, textile machines, turbines etc.



**Construction**

- Conductor: Circular Bunched Copper conductor as per IS 8130, class 5
- Insulation: EPR as per IS 6380
- Outer Sheath: Reinforced extruded elastomeric compound type SE4 or HOFR as per IS 6380  
Colour: Black



**Bending Radius**

Single core cable	6 x Overall diameter
Three core cable	8 x Overall diameter



# POLYCAB MV CU IS 9968-2 3.8/6.6(E) KV MV RUBBER FLEXIBLE CABLE, 3.8/6.6 (E) KV AC



### Standard and References

IS 8130  
IS 6380  
IS 9968-2



### Operation Temperature

Max. operating Temperature: +90°C  
Max. Short Circuit Temperature: 250°C



### Test Voltage

12000 V AC

### Voltage Rating

Nominal Voltage:  
3.8/6.6 (E) kV



### Core Identification

White colour with number printing

Approval



Product Code	No. of cores	Nominal cross sectional area	Nominal Insulation Thickness	Overall diameter (Approx.)	Weight (Approx.)
	no.	mm <sup>2</sup>	mm	mm	kg/km
RCIS15TRUARE001C016S	1	16	3	18	550
RCIS15TRUARE001C025S	1	25	3	19	650
RCIS15TRUARE001C035S	1	35	3	21	800
RCIS15TRUARE001C050S	1	50	3	23	1000
RCIS15TRUARE001C070S	1	70	3	25	1250
RCIS15TRUARE001C095S	1	95	3	28	1600
RCIS15TRUARE001C120S	1	120	3	29	1850
RCIS15TRUARE001C150S	1	150	3	31	2150
RCIS15TRUARE001C185S	1	185	3	34	2700
RCIS15TRUARE001C240S	1	240	3	36	3250
RCIS15TRUARE001C300S	1	300	3	40	4050
RCIS15TRUARE003C016S	3	16	3	35	1550
RCIS15TRUARE003C025S	3	25	3	38	1900
RCIS15TRUARE003C035S	3	35	3	42	2450
RCIS15TRUARE003C050S	3	50	3	45	3000
RCIS15TRUARE003C070S	3	70	3	49	3700
RCIS15TRUARE003C095S	3	95	3	55	4800
RCIS15TRUARE003C120S	3	120	3	58	5650
RCIS15TRUARE003C150S	3	150	3	64	6850
RCIS15TRUARE003C185S	3	185	3	68	8100
RCIS15TRUARE003C240S	3	240	3	75	10150
RCIS15TRUARE003C300S	3	300	3	80	12200



### OUR CERTIFICATION



# POLYCAB MV CU IS 9968-2 3.8/6.6(E) KV MV RUBBER FLEXIBLE CABLE, 3.8/6.6 (E) KV AC

## Electrical characteristics:

No. of Cores	Nominal cross sectional area	Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Short circuit current rating	Reactance (Approx.)	Current carrying capacity in Air	
						Trefoil Amp.	Flat touching Amp.
no.	mm <sup>2</sup>	Ω/km	Ω/km	kA/s	Ω/km		
1	16	1.24	1.582	2.29	0.1370	94	108
1	25	0.795	1.015	3.58	0.1275	148	151
1	35	0.565	0.722	5.01	0.1206	179	183
1	50	0.393	0.503	7.15	0.1161	214	218
1	70	0.277	0.355	10.02	0.1100	267	271
1	95	0.21	0.271	13.59	0.1073	323	327
1	120	0.164	0.213	17.17	0.1035	374	376
1	150	0.132	0.172	21.46	0.1003	422	422
1	185	0.108	0.143	26.47	0.0998	484	481
1	240	0.0817	0.11	34.34	0.0962	565	550
1	300	0.0654	0.091	42.93	0.0953	641	615

No. of Cores	Nominal cross sectional area	Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Short circuit current rating	Reactance (Approx.)	Current carrying capacity in Air
no.	mm <sup>2</sup>	Ω/km	Ω/km	kA/s	Ω/km	Amp
3	16	1.24	1.582	2.29	0.1106	89
3	25	0.795	1.015	3.58	0.1034	132
3	35	0.565	0.722	5.01	0.0983	159
3	50	0.393	0.503	7.15	0.0934	188
3	70	0.277	0.355	10.02	0.0893	234
3	95	0.21	0.271	13.59	0.0860	284
3	120	0.164	0.213	17.17	0.0836	326
3	150	0.132	0.172	21.46	0.0817	368
3	185	0.108	0.143	26.47	0.0798	422
3	240	0.0817	0.11	34.34	0.0778	492
3	300	0.0654	0.091	42.93	0.1106	559

Maximum conductor temperature 90°C

Ambient air temperature 40°C

Ground temperature 30°C

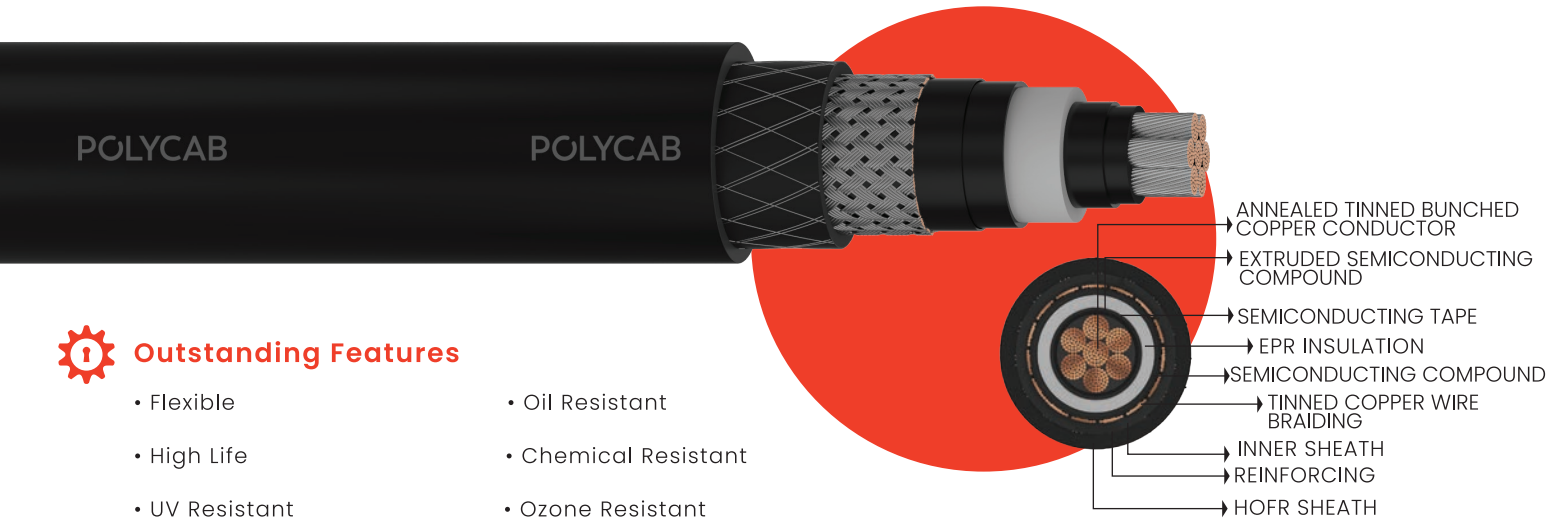
The above table in accordance with IS 3961(Part 7)

## De-rating factors for other than 40°C ambient air temperature

Ambient Temperature	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77



**POLYCAB MV CU IS 9968-2 6.35/11(E) OR 6.6/6.6 (UE) KV, MV RUBBER FLEXIBLE CABLE, 6.35/11(E) OR 6.6/6.6(UE) KV AC**



**Outstanding Features**

- Flexible
- High Life
- UV Resistant
- Oil Resistant
- Chemical Resistant
- Ozone Resistant



**Compliance**

Conductor resistance test	IS 8130
Insulation resistance	IS 9968-2
Flammability	IS 10810-53
Partial Discharge test	IS 9968-2



**Application**

POLYCAB MV CU IS 9968-2 of voltage grade 6.35/11 KV (E) or 6.6/6.6(UE) KV, annealed tinned copper conductor, conductor screening, EPR insulated, insulation screening, HOFR sheathed single & multi core cable is suitable to use in mines, steel mills, wind power mills, ships, textile and construction machines and turbines.



**Operation Temperature**

Max. operating Temperature: +90°C  
Max. Short Circuit Temperature: 250°C



**Test Voltage**  
17kV AC

**Voltage Rating**  
Nominal Voltage: 6.35/11 (E) or 6.6/6.6(UE) kV



**Bending Radius**

Single core cable	6 x Overall diameter
Three core cable	8 x Overall diameter



**OUR CERTIFICATION**





**POLYCAB MV CU IS 9968-2 6.35/11(E) OR 6.6/6.6 (UE) KV, MV RUBBER FLEXIBLE CABLE, 6.35/11(E) OR 6.6/6.6(UE) KV AC**



**Standard and References**

IS 8130 | IS 6380 | IS 9968-2



**Impulse Test Voltage**

Peak 75kV AC

**Approval**



**Construction**

Conductor: Circular Bunched Copper conductor as per IS 8130, class 5

Conductor Screen: Semi-Conducting tape followed by extruded Semiconductive compound

Insulation: EPR as per IS 6380

Non-Metallic Insulation Screen: extruded Semi-conductive compound followed by Semiconducting tape

Metallic Insulation Screen: Tinned copper wire braiding

Inner Sheath: Extruded Elastomeric type SE3 as per IS 6380

Reinforcement: Nylon or cotton or synthetic chords/yarns or proofed tape

Outer Sheath: Extruded elastomeric compound type SE4 or HOFR as per IS 6380  
Colour: Black

Product Code	No. of core	Nominal cross sectional area	Nominal Insulation Thickness	Overall diameter (Approx.)	Weight (Approx.)
	no.	mm <sup>2</sup>	mm	mm	kg/km
RCIS17TRUARE001C016S	1	16	4	25	1100
RCIS17TRUARE001C025S	1	25	4	26	1250
RCIS17TRUARE001C035S	1	35	4	28	1400
RCIS17TRUARE001C050S	1	50	4	30	1700
RCIS17TRUARE001C070S	1	70	4	32	2000
RCIS17TRUARE001C095S	1	95	4	36	2750
RCIS17TRUARE001C120S	1	120	4	38	3100
RCIS17TRUARE001C150S	1	150	4	39	3450
RCIS17TRUARE001C185S	1	185	4	43	4100
RCIS17TRUARE001C240S	1	240	4	45	4750
RCIS17TRUARE001C300S	1	300	4	48	5500
RCIS17TRUARE003C016S	3	16	4	25	1100
RCIS17TRUARE003C025S	3	25	4	26	1250
RCIS17TRUARE003C035S	3	35	4	28	1400
RCIS17TRUARE003C050S	3	50	4	30	1700
RCIS17TRUARE003C070S	3	70	4	32	2000
RCIS17TRUARE003C095S	3	95	4	36	2750
RCIS17TRUARE003C120S	3	120	4	38	3100
RCIS17TRUARE003C150S	3	150	4	39	3450
RCIS17TRUARE003C185S	3	185	4	43	4100
RCIS17TRUARE003C240S	3	240	4	45	4750
RCIS17TRUARE003C300S	3	300	4	48	5500



**OUR CERTIFICATION**



**POLYCAB MV CU IS 9968-2 6.35/11(E) OR 6.6/6.6 (UE) KV, MV RUBBER FLEXIBLE CABLE, 6.35/11(E) OR 6.6/6.6(UE) KV AC**

**Electrical characteristics:**

No. of Cores	Nominal cross sectional area	Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Short circuit current rating	Reactance (Approx.)	Current carrying capacity in Air	
						Trefoil Amp.	Flat touching Amp.
no.	mm <sup>2</sup>	Ω/km	Ω/km	kA/s	Ω/km		
1	16	1.24	1.581	2.29	0.1579		
1	25	0.795	1.014	3.58	0.1472	150	153
1	35	0.565	0.721	5.01	0.1393	181	185
1	50	0.393	0.501	7.15	0.1335	216	219
1	70	0.277	0.354	10.02	0.1264	269	273
1	95	0.21	0.268	13.59	0.1243	326	329
1	120	0.164	0.21	17.17	0.1197	376	378
1	150	0.132	0.169	21.46	0.1158	424	425
1	185	0.108	0.139	26.47	0.1138	487	480
1	240	0.0817	0.106	34.34	0.1094	568	552
1	300	0.0654	0.086	42.93	0.1055	643	616

No. of Cores	Nominal cross sectional area	Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Short circuit current rating	Reactance (Approx.)	Current carrying capacity in Air
						Amp.
no.	mm <sup>2</sup>	Ω/km	Ω/km	kA/s	Ω/km	
3	16	1.24	1.581	2.29	0.1372	
3	25	0.795	1.014	3.58	0.1035	132
3	35	0.565	0.721	5.01	0.1208	160
3	50	0.393	0.501	7.15	0.1140	191
3	70	0.277	0.354	10.02	0.1081	237
3	95	0.21	0.268	13.59	0.1053	286
3	120	0.164	0.21	17.17	0.1017	329
3	150	0.132	0.169	21.46	0.0986	371
3	185	0.108	0.139	26.47	0.0972	422
3	240	0.0817	0.106	34.34	0.0923	493
3	300	0.0654	0.086	42.93	0.0895	560

Maximum conductor temperature 90°C

Ambient air temperature 40°C

Ground temperature 30°C

The above table in accordance with IS 3961(Part 7)

**De-rating factors for other than 40°C ambient air temperature**

Ambient Temperature	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77



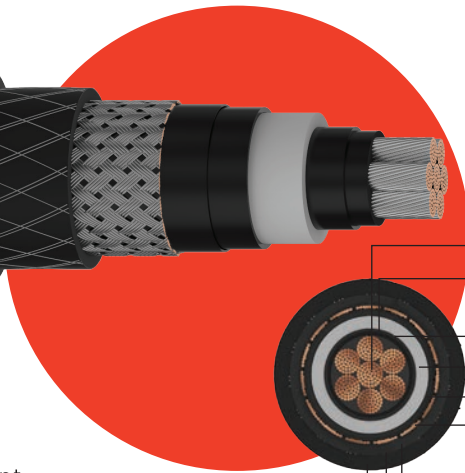
# POLYCAB MV CU IS 9968-2 19/33(E) KV MV RUBBER FLEXIBLE CABLE, 19/33(E) KV AC

POLYCAB

POLYCAB

## Outstanding Features

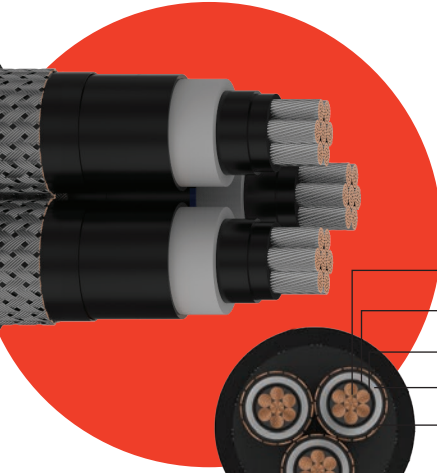
- Flexible
- High Life
- UV Resistant
- Oil Resistant
- Chemical Resistant
- Ozone Resistant



- ANNEALED TINNED BUNCHED COPPER CONDUCTOR
- EXTRUDED SEMICONDUCTING COMPOUND
- SEMICONDUCTING TAPE
- EPR INSULATION
- SEMICONDUCTING COMPOUND
- TINNED COPPER WIRE BRAIDING
- INNER SHEATH
- REINFORCING
- HOFR SHEATH



POLYCAB



- ANNEALED TINNED BUNCHED COPPER CONDUCTOR
- EXTRUDED SEMICONDUCTING COMPOUND
- SEMICONDUCTING TAPE
- EPR INSULATION
- EXTRUDED SEMICONDUCTING COMPOUND
- TINNED COPPER WIRE BRAIDING
- REINFORCING
- HOFR SHEATH



## Compliance

Conductor resistance test	IS 8130
Insulation resistance	IS 9968-2
Flammability	IS 10810-53
Partial Discharge test	IS 9968-2



## Application

POLYCAB MV CU IS 9968-2 of voltage grade 19/33(E) KV, annealed tinned copper conductor, conductor screening, EPR insulated, insulation screening, HOFR sheathed single & multi core cable is suitable to use in mines, steel mills, wind power mills, ships, textile and construction machines and turbines.



## Operation Temperature

Max. operating Temperature: +90°C  
Max. Short Circuit Temperature: 250°C



## Test Voltage

48 KV AC

**Voltage Rating**  
Nominal Voltage:  
12.7/22 (E) KV



## Bending Radius

Single core cable	6 x Overall diameter
Three core cable	8 x Overall diameter



## OUR CERTIFICATION



# POLYCAB MV CU IS 9968-2 19/33(E) KV MV RUBBER FLEXIBLE CABLE, 19/33(E) KV AC



## Standard and References

IS 8130 | IS 6380 | IS 9968-2



## Impulse Test Voltage

Peak 170kV AC

## Approval



## Construction

Conductor: Circular Bunched Copper conductor as per IS 8130, class 5

Conductor Screen: Semi-Conducting tape followed by extruded Semi-conductive compound

Insulation: EPR as per IS 6380

Non-Metallic Insulation Screen: extruded Semi-conductive compound followed by Semiconducting tape

Metallic Insulation Screen: Tinned copper wire braiding

Inner Sheath: Extruded Elastomeric type SE3 as per IS 6380

Reinforcement: Nylon or cotton or synthetic chords/yarns or proofed tape

Outer Sheath: Extruded elastomeric compound type SE4 or HOFR as per IS 6380 Colour: Black

Product Code	No. of core	Nominal cross sectional area	Nominal Insulation Thickness	Overall diameter	Weight (Approx.)
	no.	mm <sup>2</sup>	mm	(Approx.)	kg/km
RCIS13TRUARE001C035S	1	35	8.8	43	3250
RCIS13TRUARE001C050S	1	50	8.8	45	3600
RCIS13TRUARE001C070S	1	70	8.8	47	4000
RCIS13TRUARE001C095S	1	95	8.8	49	4350
RCIS13TRUARE001C120S	1	120	8.8	50	4750
RCIS13TRUARE001C150S	1	150	8.8	54	5550
RCIS13TRUARE001C185S	1	185	8.8	56	6250
RCIS13TRUARE001C240S	1	240	8.8	59	7100
RCIS13TRUARE001C300S	1	300	8.8	43	3250
RCIS13TRUARE003C035S	3	35	8.8	87	9750
RCIS13TRUARE003C050S	3	50	8.8	92	11200
RCIS13TRUARE003C070S	3	70	8.8	96	12450
RCIS13TRUARE003C095S	3	95	8.8	100	13650
RCIS13TRUARE003C120S	3	120	8.8	105	15350
RCIS13TRUARE003C150S	3	150	8.8	109	17000
RCIS13TRUARE003C185S	3	185	8.8	114	19200
RCIS13TRUARE003C240S	3	240	8.8	120	21700
RCIS13TRUARE003C300S	3	300	8.8	87	9750



## OUR CERTIFICATION



# POLYCAB MV CU IS 9968-2 19/33(E) KV MV RUBBER FLEXIBLE CABLE, 19/33(E) KV AC

No. of Cores	Nominal cross sectional area	Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Short circuit current rating	Reactance (Approx.)	Current carrying capacity in Air	
						Trefoil Amp.	Flat touching Amp.
no.	mm <sup>2</sup>	Ω/km	Ω/km	Ω/km	Ω/km		
1	35	0.565	0.721	5.01	0.1563	185	188
1	50	0.393	0.501	7.15	0.1480	224	227
1	70	0.277	0.354	10.02	0.1409	278	280
1	95	0.21	0.268	13.59	0.1357	336	336
1	120	0.164	0.21	17.17	0.1312	386	384
1	150	0.132	0.169	21.46	0.1286	434	429
1	185	0.108	0.139	26.47	0.1235	494	485
1	240	0.0817	0.106	34.34	0.1190	575	556
1	300	0.0654	0.086	42.93	0.1563	644	611

No. of Cores	Nominal cross sectional area	Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Short circuit current rating	Reactance (Approx.)	Current carrying capacity in Air
						Amp.
no.	mm <sup>2</sup>	Ω/km	Ω/km	kA/s	Ω/km	
3	35	0.565	0.721	5.01	0.1400	164
3	50	0.393	0.501	7.15	0.1325	196
3	70	0.277	0.354	10.02	0.1260	243
3	95	0.21	0.268	13.59	0.1214	293
3	120	0.164	0.21	17.17	0.1175	336
3	150	0.132	0.169	21.46	0.1133	378
3	185	0.108	0.139	26.47	0.1089	431
3	240	0.0817	0.106	34.34	0.1051	503
3	300	0.0654	0.086	42.93	0.1400	571

Maximum conductor temperature 90°C

Ambient air temperature 40°C

Ground temperature 30°C

The above table in accordance with IS 3961(Part 7)

## De-rating factors for other than 40°C ambient air temperature

Ambient Temperature	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77



**POLYCAB MV CU IS 9968-2 12.7/22(E) OR 11/11 (UE) KV, MV RUBBER FLEXIBLE CABLE, 12.7/22(E) OR 11/11(UE) KV AC**



- ANNEALED TINNED BUNCHED COPPER CONDUCTOR
- EXTRUDED SEMICONDUCTING COMPOUND
- SEMICONDUCTING TAPE
- EPR INSULATION
- SEMICONDUCTING COMPOUND
- TINNED COPPER WIRE BRAIDING
- INNER SHEATH
- REINFORCING
- HOFR SHEATH

**Outstanding Features**

- Flexible
- High Life
- UV Resistant
- Oil Resistant
- Chemical Resistant
- Ozone Resistant



- ANNEALED TINNED BUNCHED COPPER CONDUCTOR
- EXTRUDED SEMICONDUCTING COMPOUND
- SEMICONDUCTING TAPE
- EPR INSULATION
- EXTRUDED SEMICONDUCTING COMPOUND
- TINNED COPPER WIRE BRAIDING
- REINFORCING
- HOFR SHEATH



**Compliance**

Conductor resistance test	IS 8130
Insulation resistance	IS 9968-2
Flammability	IS 10810-53
Partial Discharge test	IS 9968-2



**Application**

POLYCAB MV CU IS 9968-2 of voltage grade 12.7/22 KV (E) or 11/11(UE) KV, annealed tinned copper conductor, conductor screening, EPR insulated, insulation screening, HOFR sheathed single & multi core cable is suitable to use in mines, steel mills, wind power mills, ships, textile and construction machines and turbines.



**Operation Temperature**

Max. operating Temperature: +90°C  
Max. Short Circuit Temperature: 250°C



**Test Voltage**

32 KV AC

**Voltage Rating**

Nominal Voltage:  
12.7/22 (E) or  
11/11 (UE) KV



**Bending Radius**

Single core cable	6 x Overall diameter
Three core cable	8 x Overall diameter



**OUR CERTIFICATION**



# POLYCAB MV CU IS 9968-2 12.7/22(E) OR 11/11 (UE) KV, MV RUBBER FLEXIBLE CABLE, 12.7/22(E) OR 11/11(UE) KV AC



## Standard and References

IS 8130 | IS 6380 | IS 9968-2



## Impulse Test Voltage

Peak 170kV AC

## Approval



## Construction

Conductor: Circular Bunched Copper conductor as per IS 8130, class 5

Conductor Screen: Semi-Conducting tape followed by extruded Semi-conductive compound

Insulation: EPR as per IS 6380

Non-Metallic Insulation Screen: extruded Semi-conductive compound followed by Semiconducting tape

Metallic Insulation Screen: Tinned copper wire braiding

Inner Sheath: Extruded Elastomeric type SE3 as per IS 6380

Reinforcement: Nylon or cotton or synthetic chords/yarns or proofed tape

Outer Sheath: Extruded elastomeric compound type SE4 or HOFR as per IS 6380  
Colour: Black

Product Code	No. of core	Nominal cross sectional area	Nominal Insulation Thickness	Overall diameter	Weight (Approx.)
	no.	mm <sup>2</sup>	mm	mm	kg/km
RCIS12TRUARE001C035S	1	35	6	33	2600
RCIS12TRUARE001C050S	1	50	6	37	3900
RCIS12TRUARE001C070S	1	70	6	38	4300
RCIS12TRUARE001C095S	1	95	6	40	4800
RCIS12TRUARE001C120S	1	120	6	43	5400
RCIS12TRUARE001C150S	1	150	6	45	5850
RCIS12TRUARE001C185S	1	85	6	47	6450
RCIS12TRUARE001C240S	1	240	6	49	7300
RCIS12TRUARE001C300S	1	300	6	54	8450
RCIS12TRUARE003C035S	3	35	6	69	6000
RCIS12TRUARE003C050S	3	50	6	74	7700
RCIS12TRUARE003C070S	3	70	6	78	8700
RCIS12TRUARE003C095S	3	95	6	84	10250
RCIS12TRUARE003C120S	3	120	6	87	11350
RCIS12TRUARE003C150S	3	150	6	92	12950
RCIS12TRUARE003C185S	3	185	6	96	14500
RCIS12TRUARE003C240S	3	240	6	104	17050
RCIS12TRUARE003C300S	3	300	6	109	19500



## OUR CERTIFICATION



**POLYCAB MV CU IS 9968-2 12.7/22(E)  
OR 11/11 (UE) KV, MV RUBBER FLEXIBLE CABLE,  
12.7/22(E) OR 11/11(UE) KV AC**

No. of Cores	Nominal cross sectional area	Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Short circuit current rating	Reactance (Approx.)	Current carrying capacity in Air	
						Trefoil Amp.	Flat touching Amp.
no.	mm <sup>2</sup>	Ω/km	Ω/km	kA/s	Ω/km		
1	35	0.565	0.721	5.01	0.1500	185	188
1	50	0.393	0.50	7.15	0.1456	224	227
1	70	0.277	0.354	10.02	0.1378	278	280
1	95	0.21	0.268	13.59	0.1311	336	336
1	120	0.164	0.21	17.17	0.1284	386	384
1	150	0.132	0.169	21.46	0.1241	434	429
1	185	0.108	0.139	26.47	0.1196	494	485
1	240	0.0817	0.106	34.34	0.1149	575	556
1	300	0.0654	0.086	42.93	0.1130	644	611

No. of Cores	Nominal cross sectional area	Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Short circuit current rating	Reactance (Approx.)	Current carrying capacity in Air
no.	mm <sup>2</sup>	Ω/km	Ω/km	kA/s	Ω/km	Amp
3	35	0.565	0.721	5.01	0.1329	164
3	50	0.393	0.50	7.15	0.1273	196
3	70	0.277	0.354	10.02	0.1205	243
3	95	0.21	0.268	13.59	0.1148	293
3	120	0.164	0.21	17.17	0.1106	336
3	150	0.132	0.169	21.46	0.1072	378
3	185	0.108	0.139	26.47	0.1035	431
3	240	0.0817	0.106	34.34	0.0997	503
3	300	0.0654	0.086	42.93	0.0965	571

Maximum conductor temperature 90°C

Ambient air temperature 40°C

Ground temperature 30°C

The above table in accordance with IS 3961(Part 7)

**De-rating factors for other than 40°C ambient air temperature**

Ambient Temperature	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77





## POLYCAB MINING CABLE CONFORMING TO IS 14494 AND GENERALLY CONFORMING TO IS 14494.

Polycab offers a wide range of Rubber flexible cable for mining application conforming to IS 14494. Polycab also supply customised Mining cable with a guideline of different national and international specification.

The Mining industry is a challenging environment and the mining cables are to be performed at higher level with low risk. Polycab mining cable are designed to perform when exposed to harshest environment. The high abrasion properties, high flexibility and excellent electrical properties made this product highly suitable to use in underground.

**Conductor:** High conductivity tinned bunched copper conductor produced in-house from state-of-the art Machine.

**Separator:** Polyester tape will be applied between conductor and insulation

**Conductor screening:** Semi-conducting screening for voltage rating above 6.6 kV(E) .

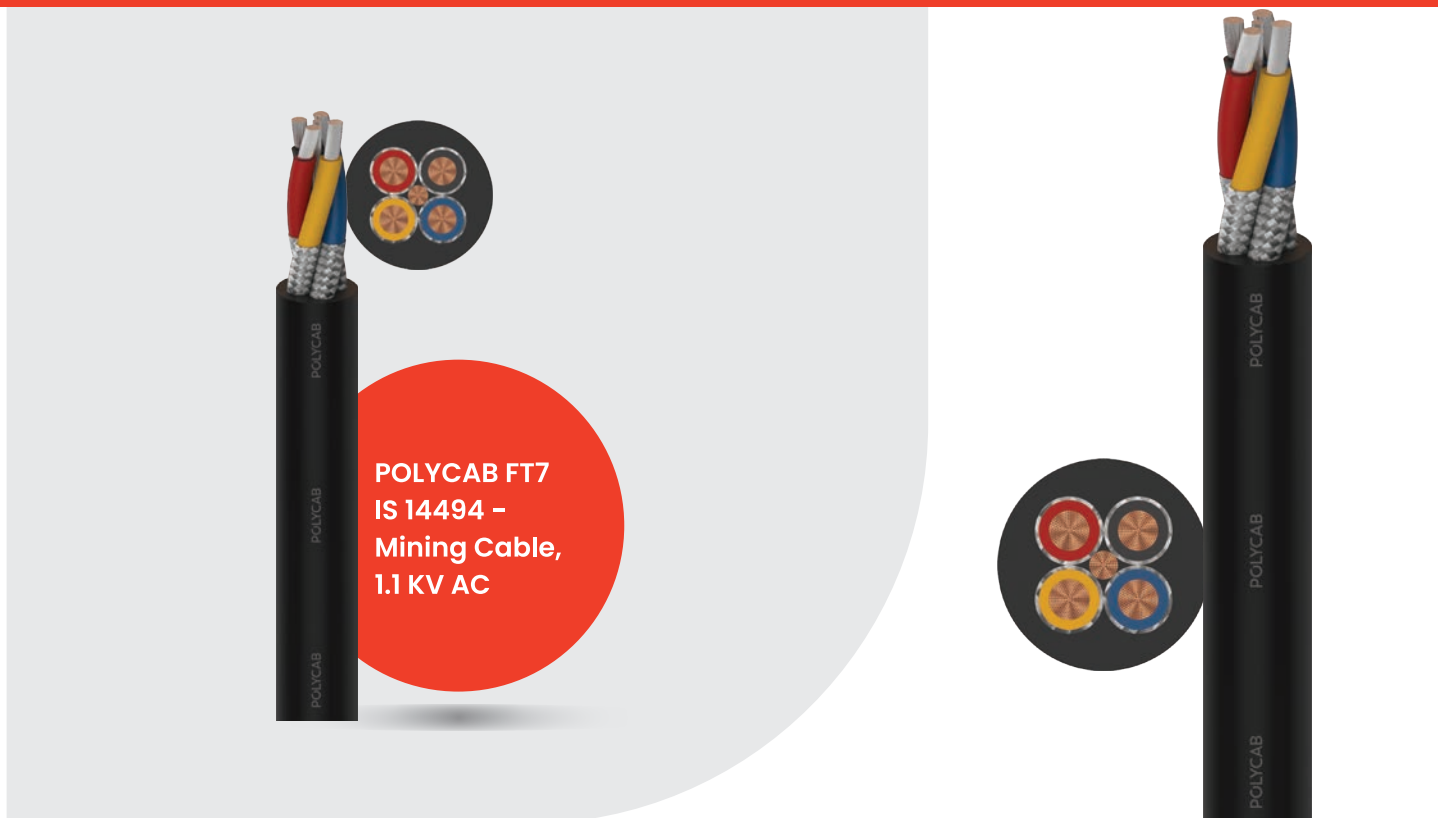
**Insulation:** In-house developed cross linked elastomeric compound ethylene propylene rubber (EPR).

**Insulation Screen:** Non-metallic part semi-conducting compound and annealed tinned copper wire shall be applied either spirally or in form of braiding over the non-metallic part

**Inner sheath:** Inner sheath will be applied over the laid-up cores wherever required.

**Sheath:** In-house developed cross linked elastomeric heavy duty sheathing applied over laid up assembly/screen/inner sheath/ armour as per requirement.

The construction is based on the application and requirement of the user against IS 14494 or generally confirming to IS 14494.

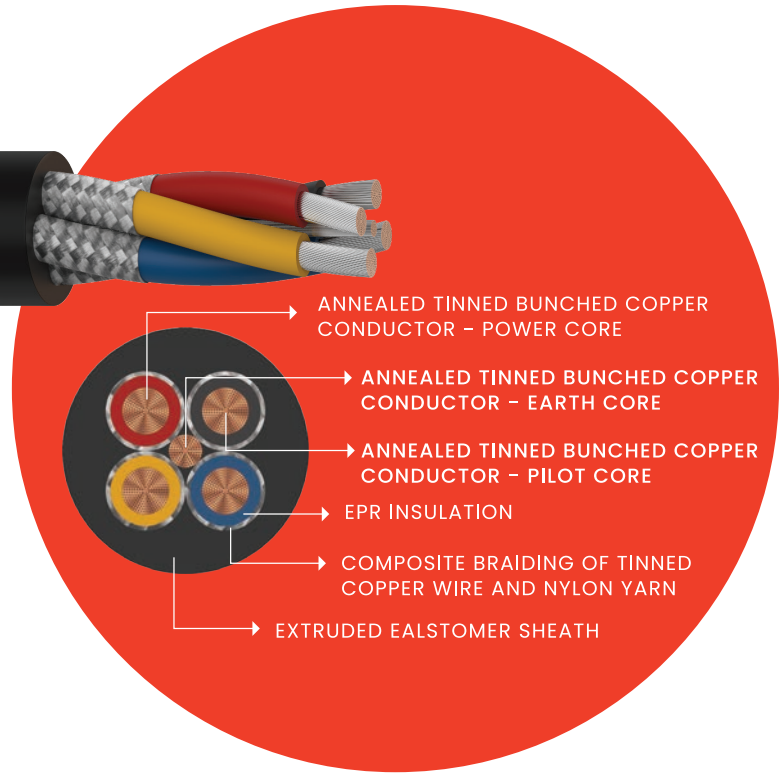


# POLYCAB FT7 IS 14494 MINING CABLE, 1.1 KV AC

POLYCAB POLYCAB POLYCAB

## Outstanding Features

- Flexible
- High Life
- High abrasion & Tear resistant
- Oil & Heat resistant
- Chemical Resistant
- Ozone Resistant



## Compliance

Conductor resistance test	IS 8130
Insulation resistance	IS 6380
Oil resistance	IS 6380
Flammability	IS 10810-53



## Application

POLYCAB FT7 IS 14494 1.1 KV Bunched copper conductor, metallic screened power core along with pilot core & bare earth conductor. This is designed to use for heavy duty trailing cable in mobile production machine for U/G application with multipurpose built-in attachment like intermediate crusher, steel tray conveyor etc.



## Operation Temperature

Max. operating Temperature: +90°C  
Max. Short Circuit Temperature: 250°C



**Test Voltage**  
3.5 KV AC  
**Voltage Rating**  
Nominal Voltage  
1.1 KV



## Bending Radius

Single core cable	6 x Overall diameter
Three core cable	8 x Overall diameter



## OUR CERTIFICATION



# POLYCAB FT7 IS 14494 MINING CABLE, 1.1 KV AC



## Standard and References

IS 8130  
IS 6380  
IS 14494



## Core Identification

Power core	Red, Yellow and Blue
Pilot core	Black



## Construction

### Conductor:

**Power Core:** Annealed tinned bunched copper conductor conforming to IS 8130, Class 5

**Pilot Core:** Annealed tinned bunched copper conductor conforming to IS 8130, Class 5

**Earth Core:** Tinned bunched copper conductor conforming to IS 8130, Class 5

### Insulation:

**Power Core:** Elastomeric compound type IE2 (EPR) conforming to IS 6380

**Pilot Core:** Elastomeric compound type IE2 (EPR) conforming to IS 6380

### Screen:

**Power Core:** Composite braiding of tinned copper wire and nylon yarn

**Pilot Core:** Composite braiding of tinned copper wire and nylon yarn

**Outer Sheath:** Extruded elastomeric compound type SE4 conforming to IS 6380,

**Colour:** Black

## Approval



### OUR CERTIFICATION



# POLYCAB FT7 IS 14494 MINING CABLE, 1.1 KV AC

Product Code	No. of Cores			Nominal Cross-sectional Area			Insulation Thickness		Overall diameter (Approx.)
	Power Core	Earth Core	Pilot Core	Power Core	Earth Core	Pilot Core	Power Core	Pilot Core	
				mm <sup>2</sup>	mm <sup>2</sup>	mm <sup>2</sup>	mm	mm	mm
RCIS09TRCBRC005C016S	3	1	1	16	16	16	1.2	1.2	40
RCIS09TRCBRC005C025S	3	1	1	25	16	25	1.4	1.4	41
RCIS09TRCBRC005C035S	3	1	1	35	16	35	1.4	1.4	41
RCIS09TRCBRC005C050S	3	1	1	50	25	50	1.6	1.6	48
RCIS09TRCBRC005C070S	3	1	1	70	35	70	1.6	1.6	57
RCIS09TRCBRC005C095S	3	1	1	95	50	95	1.8	1.8	67

## Electrical characteristics:

Nominal cross-sectional area	Current carrying capacity	Maximum DC conductor resistance
mm <sup>2</sup>	Amp.	Ω/km
16	100	1.24
25	127	0.795
35	158	0.565
50	192	0.393
70	246	0.277
95	298	0.21

Maximum conductor temperature 90°C

Ambient air temperature 40°C

Depth of laying 750 mm

Thermal resistivity of soil 1.5 K.m/W

## Current rating de-rating factors for other than 40°C ambient air temperature.

Ambient Temperature	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C
De-Rating Factor	1.14	1.10	1.05	1.00	0.95	0.89	0.84	0.77



**POLYCAB**

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**Corporate Office:**

POLYCAB INDIA LIMITED

#29, The Ruby, 21<sup>st</sup> Floor, Senapati Bapat Marg,

Tulsi Pipe Road, Dadar (West),

Mumbai - 400 028, Maharashtra (India)

**Ph.: +91-22-2432 7070/4, 6735 1400**

**Email: [enquiry@polycab.com](mailto:enquiry@polycab.com), Toll Free No.: 1800 267 0008**

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