

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



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

The highly flexible and robust Silicon Rubber cable makes its use in portable electrical equipment and devices where high thermal resistance is required. These silicon rubber cables are also suitable for wide range of application in furnaces or equipment including heavy industrial equipment to power supply.

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

Insulation: In-house developed Silicon rubber compound.

Sheath: The cores shall be covered by Silicon rubber (SiR) or braided by heat resistant glass fibre.

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



[POLYCAB SiR-S, IS 9968-1 - Rubber power and control Cable, 1100 V](#)



[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-G, IS 9968-1

Rubber power and control Cable, 1100 V AC



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.

Voltage Rating

1100 V

Operation Temperature

Fixed: -50°C to 150°C

Maximum short circuit temperature 350°C

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 yarn, treated with varnish

Core Identification

White

Bending Radii

Fixed installation >12 x Overall Diameter

Occasional >10 x Overall Diameter

Standard and References

IS 8130:2013

IS 6380:1984*

IS 9968:1988

Test Voltage

3000 V AC

Compliance

Conductor resistance test

IS 8130

Insulation resistance

IS 6380:1984*

Flammability

IEC 60332-1-2

Approval



OUR ACCREDITATION



ISO
9001

ISO
14001

ISO
45001

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POLYCAB SiR-G, IS 9968-1

Rubber power and control Cable, 1100 V AC

No. of core	Nominal cross sectional area mm ²	Insulation thickness mm	Overall diameter mm	Weight (Approx.) 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 ²	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

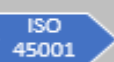
Conductor maximum operating temperature 150°C

De-rating factor

De-rating factor for 150°C insulated cable

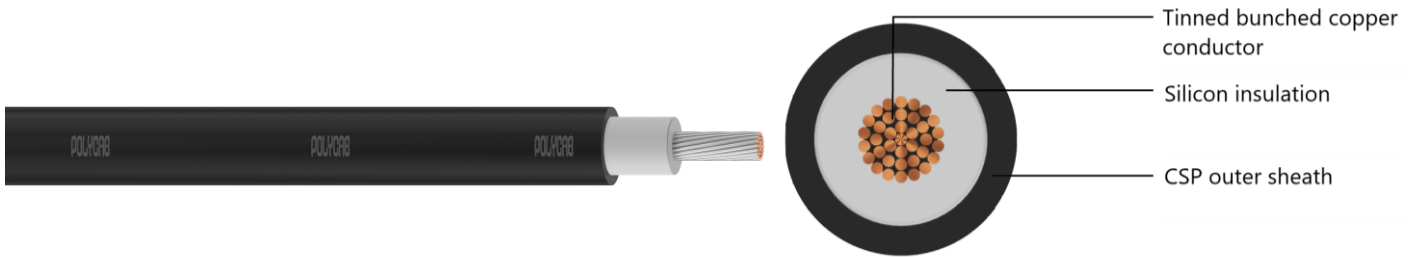
Air Temperature	150°C	155°C	160°C	170°C	180°C
De-Rating Factor	1	0.91	0.82	0.58	0.41

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POLYCAB SiR-SC, IS 9968-1

Rubber power and control Cable, 1100 V AC



Application

POLYCAB SiR-SC, Silicon rubber insulated and CSP sheathed Cable is 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. Suitable to use in heater leads, electric iron leads and high temperature area.

Voltage Rating

1100 V

Operation Temperature

Fixed: -50°C to 150°C

Maximum short circuit temperature 350°C

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

Core Identification

Single core Red/Black/White/Yellow/Blue

Bending Radii

Fixed installation >12 x Overall Diameter

Occasional >10 x Overall Diameter

Standard and References

IS 8130:2013

IS 6380:1984*

IS 9968:1988

Test Voltage

3000 V AC

Compliance

Conductor resistance test

IS 8130

Insulation resistance

IS 6380:1984*

Flammability

IEC 60332-1-2

Approval



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POLYCAB SiR-SC, IS 9968-1

Rubber power and control Cable, 1100 V AC

No. of core	Nominal cross sectional area mm ²	Insulation thickness mm	Overall diameter mm	Weight (Approx.) 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 ²	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 150°C

De-rating factor

De-rating factor for 150°C insulated cable

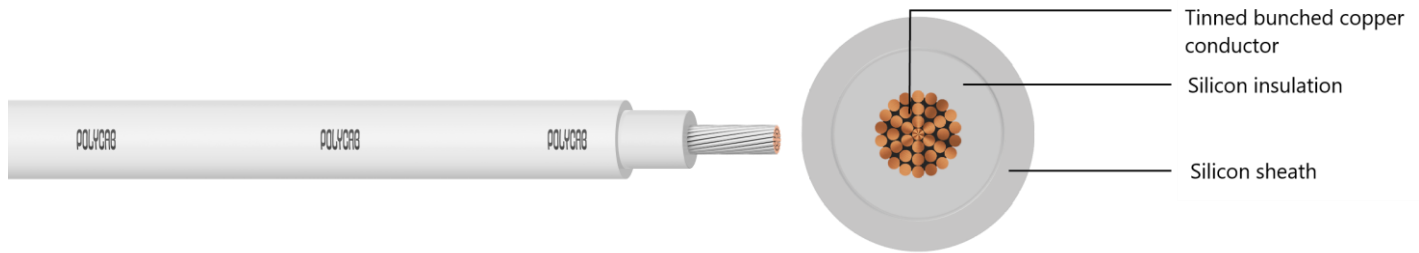
Air Temperature	150°C	155°C	160°C	170°C	180°C
De-Rating Factor	1	0.91	0.82	0.58	0.41

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POLYCAB SiR-S, IS 9968-1

Rubber power and control Cable, 1100 V



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.

Voltage Rating

1100 V

Operation Temperature

Fixed: -50°C to 180°C

Maximum short circuit temperature 350°C

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

Core Identification

White

Bending Radii

Fixed installation >12 x Overall Diameter

Occasional >10 x Overall Diameter

Standard and References

IS 8130:2013

IS 6380:1984*

IS 9968:1988

Test Voltage

3000 V AC

Compliance

Conductor resistance test

IS 8130

Insulation resistance

IS 6380:1984*

Flammability

IEC 60332-1-2

Approval



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POLYCAB SiR-S, IS 9968-1

Rubber power and control Cable, 1100 V

No. of core	Nominal cross sectional area mm ²	Insulation thickness mm	Overall diameter mm	Weight (Approx.) 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 ²	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	32	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

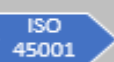
Conductor maximum operating temperature 180°C

De-rating factor

De-rating factor for 180°C insulated cable

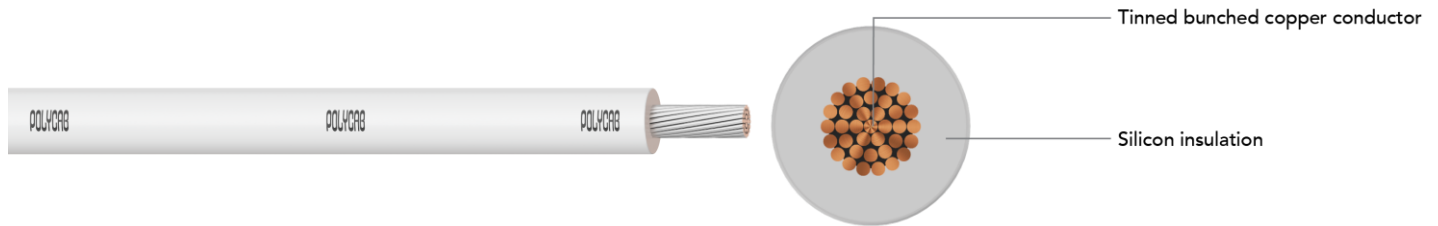
Air Temperature	150°C	155°C	160°C	170°C	180°C
De-Rating Factor	1	0.91	0.82	0.58	0.41

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POLYCAB SiR, IS 9968-1

Rubber power and control Cable, 1100 V AC



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.

Voltage Rating

1100 V

Operation Temperature

Fixed: -50°C to 180°C

Maximum short circuit temperature 350°C

Construction

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

Core Identification

White

Bending Radii

Fixed installation >12 x Overall Diameter

Occasional >10 x Overall Diameter

Standard and References

IS 8130:2013

IS 6380:1984*

IS 9968:1988

Test Voltage

3000 V AC

Compliance

Conductor resistance test

IS 8130

Insulation resistance

IS 6380:1984*

Flammability

IEC 60332-1-2

Approval



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POLYCAB SiR, IS 9968-1

Rubber power and control Cable, 1100 V AC

No. of core	Nominal cross sectional area mm ²	Insulation thickness mm	Overall diameter mm	Weight (Approx.) kg/km
1	0.5	1	2.91	12
1	0.75	1	3.12	15
1	1	1	3.29	18
1	1.5	1	3.56	23
1	2.5	1	4.02	34
1	4	1	4.56	50
1	6	1	5.13	70
1	10	1.2	6.48	116
1	16	1.2	7.52	174
1	25	1.4	9.18	266
1	35	1.4	10.38	364
1	50	1.6	12.27	519
1	70	1.6	13.95	712
1	95	1.8	16.14	964
1	120	1.8	17.68	1199
1	150	2	19.61	1475

Electrical characteristics

Current carrying capacity and maximum DC conductor resistance.

Nominal cross sectional area mm ²	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	32	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

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

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