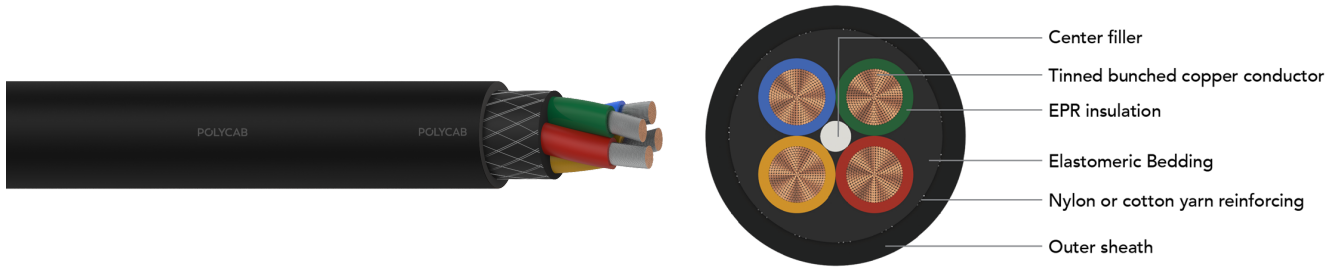


POLYCAB RR (Reinforced), IS 9968-1

Rubber Power and Control Cable, 1100 V AC



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB RR(Reinforced), EPR insulated and elastomeric sheathed cable conforming to IS 9968-1 is designed to use in fixed wiring, single phase or three phase (earthed or 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, heater leads and electric iron leads Stacker & Reclaim, Festooning & CRD application.

CHARACTERISTICS

Voltage Rating
1100 V

Operation Temperature

Fixed: -40°C to 90°C

Maximum short circuit temperature 250°C

Bending Radii

Fixed installation >10 x Overall Diameter

Occasional >8 x Overall Diameter

CONSTRUCTION

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

Core Identification

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

Two core - Red, Black

Three core - Red, Yellow, Blue

Four core - Red, Yellow, Blue, Green

Five core - Red, Blue, Black, Green

More than - Grey with Black numbering

Five core

Test Voltage

3000 V AC

STANDARD FOLLOWS

IS 8130:2013

IS 6380:1984*

IS 9968:1988

COMPLIANCE

Conductor resistance test IS 8130

Insulation resistance IS 6380:1984*

Flammability IEC 60332-1-2

OUR ACCREDITATIONS



APPROVAL



POLYCAB RR (Reinforced), IS 9968-1

Rubber Power and Control Cable, 1100 V AC

WEIGHT & DIMENSION DATA :

Product Code	Construction	Insulation thickness	Overall diameter (Approx.)	Weight (Approx.)
	n x mm ²	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
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

POLYCAB RR (Reinforced), IS 9968-1

Rubber Power and Control Cable, 1100 V AC

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

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POLYCAB RR (Reinforced), IS 9968-1

Rubber Power and Control Cable, 1100 V AC

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

POLYCAB RR (Reinforced), IS 9968-1

Rubber Power and Control Cable, 1100 V AC

Electrical characteristics

Current carrying capacity and maximum DC conductor resistance

Cross sectional Area	Multi-core cables		Single-core cables		Conductor Resistance
	2 Core Cable	3 Core Cable	Two loaded conductors touching		
	Amp.	Amp.	Amp.	?	
mm ²					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 operating temperature: 90° C

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

De-Rating Factor

De-rating factor at various ambient temperature

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