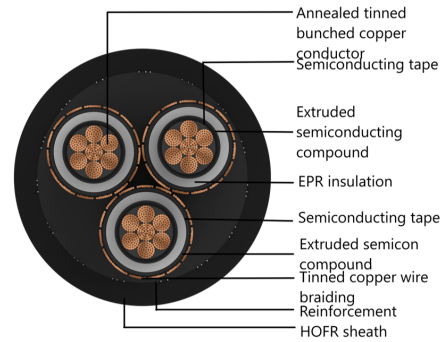
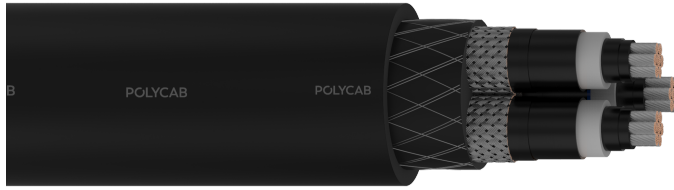


# POLYCAB MV CU IS 9968-2 12.7/22(E) or 11/11 (UE) KV Medium Voltage Rubber Flexible Cable

**POLYCAB**  
IDEAS. CONNECTED.



Images not to scale. Follow table for dimensions

## 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 for steel mills, wind power mills, ships, textile machines, turbines etc.

## CHARACTERISTICS

### Voltage Rating

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

### Operation Temperature

Max. operating temperature: +90°C

Max. Short Circuit Temperature: 250°C

### Bending Radius:

Single core cable 6 x Overall diameter

Three core cable 8 x Overall diameter

## OUTSTANDING FEATURES

- Flexible
- High life
- UV resistant
- Oil resistant
- Chemical resistant
- Ozone resistant

## STANDARD FOLLOWS

IS 8130

IS 6380

IS 9968-2

## COMPLIANCE

Conductor resistance IS 8130

Insulation resistance IS 9968-2

Flammability IS 9968-2

Partial Discharge test IS 9968-2

## 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: Semi-conducting tape followed by extruded Semi-conductive compound
- 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

### Core Identification

White colour with number printing

### Test Voltage

32 kV AC

### Impulse Test Voltage

Peak 125 kV AC

## OUR ACCREDITATIONS



## APPROVAL



WEIGHT & DIMENSION DATA :

Product Code	No. of Cores	Nominal Cross sectional Area	Nominal Insulation Thickness	Overall Diameter	Weight (Approx.)
		mm <sup>2</sup>	mm	mm	Kg/km
RCIS12TRUEARE001C035S	1	35	6	33	2600
RCIS12TRUEARE001C050S	1	50	6	37	3900
RCIS12TRUEARE001C070S	1	70	6	38	4300
RCIS12TRUEARE001C095S	1	95	6	40	4800
RCIS12TRUEARE001C120S	1	120	6	43	5400
RCIS12TRUEARE001C150S	1	150	6	45	5850
RCIS12TRUEARE001C185S	1	185	6	47	6450
RCIS12TRUEARE001C240S	1	240	6	49	7300
RCIS12TRUEARE001C300S	1	300	6	54	8450
RCIS12TRUEARE003C035S	3	35	6	69	6000
RCIS12TRUEARE003C050S	3	50	6	74	7700
RCIS12TRUEARE003C070S	3	70	6	78	8700
RCIS12TRUEARE003C095S	3	95	6	84	10250
RCIS12TRUEARE003C120S	3	120	6	87	11350
RCIS12TRUEARE003C150S	3	150	6	92	12950
RCIS12TRUEARE003C185S	3	185	6	96	14500
RCIS12TRUEARE003C240S	3	240	6	104	17050
RCIS12TRUEARE003C300S	3	300	6	109	19500

Electrical characteristics:

No. of Cores No.	Nominal Cross sectional Area mm <sup>2</sup>	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Reactance (Approx.) Ω/km	Current carrying capacity in air	
						Trefoil Amp.	Flat touching Amp.
1	35	0.565	0.721	5.01	0.1500	185	188
1	50	0.393	0.501	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

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No. of Cores No.	Nominal Cross sectional Area mm <sup>2</sup>	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Reactance (Approx.) Ω/km	Current carrying capacity in air	
						Trefoil Amp.	Flat touching Amp.
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 No.	Nominal Cross sectional Area mm <sup>2</sup>	Max. DC Resistance at 20°C Ω/km	Max. AC Resistance at 90°C Ω/km	Short circuit current rating kA/s	Reactance (Approx.) Ω/km	Current carrying capacity in air Amp.
3	35	0.565	0.721	5.01	0.1329	164
3	50	0.393	0.501	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 Factor

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