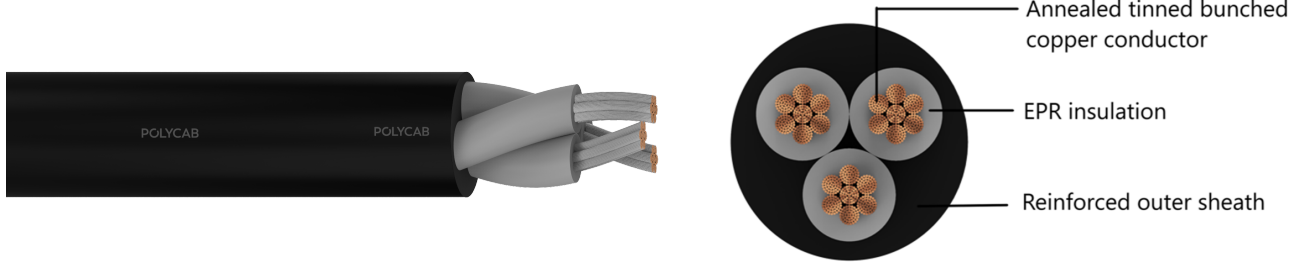


POLYCAB MV CU IS 9968-2 3.8/6.6(E) KV

Medium Voltage Rubber Flexible Cable, 3.8/6.6 (E) KV AC



Images not to scale. Follow table for dimensions

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.

CHARACTERISTICS

Voltage Rating

Nominal Voltage: 3.8/6.6 (E) 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

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

Core Identification

White colour with number printing

Test Voltage

12 kV AC

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

OUR ACCREDITATIONS



APPROVAL



POLYCAB MV CU IS 9968-2 3.8/6.6(E) KV

Medium Voltage Rubber Flexible Cable, 3.8/6.6 (E) KV AC

WEIGHT & DIMENSION DATA :

| Product Code | No. of Cores | Nominal Cross-sectional Area | Nominal Insulation Thickness | Overall Diameter | Weight (Approx.) |
|----------------------|--------------|------------------------------|------------------------------|------------------|------------------|
| | | mm ² | 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 |

Electrical characteristics:

| No. of Cores No. | Nominal Cross sectional Area mm ² | 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 | 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 |

POLYCAB MV CU IS 9968-2 3.8/6.6(E) KV

Medium Voltage Rubber Flexible Cable, 3.8/6.6 (E) KV AC

| No. of Cores No. | Nominal Cross sectional Area mm ² | 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 | 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 No. | Nominal Cross sectional Area mm ² | 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 | 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-Ratting 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 |