

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: Proofed cotton tape/Polyester tape will be applied between conductor and insulation (optional).

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/armor 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 1.1 KV - Mining Cable, 1.1 KV AC](#)

POLYCAB FT7 IS 14494 1.1 KV

Mining Cable, 1.1 KV AC



Outstanding Features

- Highly flexible
- High life
- Oil & Heat resistant
- Chemical resistant

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.

Voltage Rating

Nominal Voltage: 1.1 KV

Operation Temperature

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

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

Bending Radius:

8 x Overall diameter

Standard and References:

IS 8130
IS 6380
IS 14494

Test Voltage

3.5 KV AC

Impulse Test Voltage

Peak 75 KV AC

Compliance

Conductor resistance	IS 8130
Insulation resistance	IS 6380
Oil resistance	IS 6380
Impulse voltage	IS 14494
Flame Retardant	IS 14494

Approval

IS 14494



Core Identification:

Power core Red, Yellow and Blue
Pilot core Black

OUR ACREDITATION



POLYCAB FT7 IS 14494 1.1 KV Mining Cable, 1.1 KV AC

Product Code	No. of Cores			Nominal Cross-sectional Area			Insulation Thickness		Overall diameter (Approx.) mm
	Power Core	Earth Core	Pilot Core	Power Core mm ²	Earth Core mm ²	Pilot Core mm ²	Power Core mm	Pilot Core 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 mm	Current carrying capacity Amp.	Maximum DC conductor resistance 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.

Air Temperature	25	30	35	40	45	50	55	60
De-rating factor	1.14	1.10	1.05	1.0	0.95	0.89	0.84	0.77

OUR ACREDITATION

