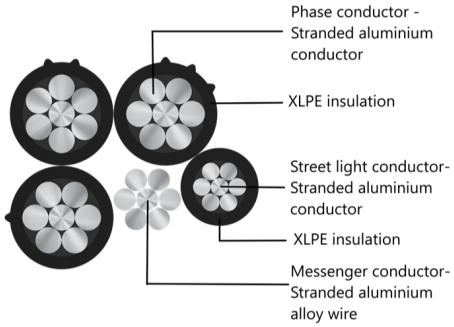
POLYCAB Aerial Bunched Cable (ABC) 1.1kV
Overhead Power Distribution Cable, 1100 V



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB Aerial Bunched Cable (ABC) is recommended as overhead distribution feeder in rural or residential areas and hill area where underground installation is not possible.

CHARACTERISTICS

Voltage Rating
1100 V

Operation Temperature
Max.: 90°C

Bending Radius
10 x Overall diameter

CONSTRUCTION

- **Phase conductor**
  - Stranded compacted aluminium conductor to IS 8130, Class 2
  - Insulated with in-housed developed compounded XLPE (Cross linked polyethylene)
- **Messenger conductor**
  - Stranded circular or compacted heat-treated aluminium-magnesium alloy wire to IS 398 (part 4)
  - Insulated with in-housed developed compounded XLPE (if required)
- **Streetlight conductor**

  - Stranded aluminium conductor to IS 8130, class 2
  - Insulated with in-housed developed compounded XLPE

Core Identification

Phase conductor	one, two or three ridges
Neutral conductor	four ridges
Street lighting & Messenger (if insulated)	No identification mark

Test Voltage
3000 V AC

STANDARD FOLLOWS

IS 8130:2013
IS 398 (Part 4)
IS 14255:1995

COMPLIANCE

Conductor resistance IS 8130
Insulation resistance IS 14255:1995
Elongation test IS 14255:1995
Water absorption test IS 14255:1995
Tensile test IS 14255:1995

OUR ACCREDITATIONS

APPROVAL

NOTES

Configuration : Single phase or three phase system cable with or without street light conductor

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POLYCAB
IDEAS. CONNECTED.

WEIGHT & DIMENSION DATA :

Phase Conductor + Messenger(Bare)

Construction n x mm²	Insulation thickness mm	Phase conductor Overall diameter mm	messenger Overall diameter mm	Weight (Approx.)	Minimum Breaking load of messenger
1 x16 +1 x 25	1.20	7.53	6.45	139	7
3 x16 +1 x 25	1.20	7.53	6.45	278	7
1 x25 +1 x 25	1.20	8.85	6.45	170	7
3 x25 +1 x 25	1.20	8.85	6.45	371	7
1 x35 +1 x 25	1.20	10.00	6.45	202	7
3 x35 +1 x 25	1.20	10.00	6.45	466	7
1 x50 +1 x 35	1.50	12.05	7.60	286	9.8
3 x50 +1 x 35	1.50	12.05	7.60	667	9.8
1 x70 +1 x 50	1.50	13.73	9.05	391	14
3 x70 +1 x 50	1.50	13.73	9.05	899	14
1 x95 +1 x 70	1.50	15.52	10.77	526	19.7
3 x95 +1 x 70	1.50	15.52	10.77	1191	19.7

Phase Conductor + Messenger(Insulated)

Construction n x mm²	Insulation thickness mm		Phase conductor Overall diameter mm	messenger Overall diameter mm	Weight (Approx.)	Minimum Breaking load of messenger
	Phase mm	Messenger mm				
1 x16 +1 x 25	1.20	1.20	7.5	8.9	7	7
3 x16 +1 x 25	1.20	1.20	7.5	8.9	7	7
1 x25 +1 x 25	1.20	1.20	8.9	8.9	7	7
3 x25 +1 x 25	1.20	1.20	8.9	8.9	7	7
1 x35 +1 x 25	1.20	1.20	10.0	8.9	7	7
3 x35 +1 x 25	1.20	1.20	10.0	8.9	7	7
1 x50 +1 x 35	1.50	1.20	12.0	10.0	9.8	9.8
3 x50 +1 x 35	1.50	1.20	12.0	10.0	9.8	9.8
1 x70 +1 x 50	1.50	1.50	13.7	12.0	14	14
3 x70 +1 x 50	1.50	1.50	13.7	12.0	14	14

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Construction n x mm²	Insulation thickness mm		Phase conductor Overall diameter mm	messenger Overall diameter mm	Weight (Approx.)	Minimum Breaking load of messenger
	Phase mm	Messenger mm				
1 x95 +1 x 70	1.50	1.50	15.5	13.8	19.7	19.7
3 x95 +1 x 70	1.50	1.50	15.5	13.8	19.7	19.7

Phase Conductor + Messenger(Bare) + Street Light

Construction n x mm²	Insulation thickness mm		Phase conductor Overall diameter mm	messenger Overall diameter mm	Street light Overall diameter mm	Weight (Approx.)	Minimum Breaking load of messenger
	Phase mm	Street light					
3 x16 +1 x 25+1 x 16	1.2	1.2	7.5	6.5	7.5	7.0	7.0
3 x25 +1 x 25+1 x 16	1.2	1.2	8.9	6.5	7.5	7.0	7.0
3 x35 +1 x 25+1 x 16	1.2	1.2	10.0	6.5	7.5	7.0	7.0
3 x50 +1 x 35+1 x 16	1.5	1.2	12.0	7.6	7.5	9.8	9.8
3 x70 +1 x 50+1 x 16	1.5	1.2	13.7	9.0	7.5	14.0	14.0
3 x95 +1 x 70+1 x 16	1.5	1.2	15.5	10.8	7.5	19.7	19.7

Phase Conductor + Messenger(Insulated) + Street Light

Construction n x mm²	Insulation thickness mm			Phase conductor Overall diameter mm	messenger Overall diameter mm	Street light Overall diameter mm	Weight (Approx.)	Minimum Breaking load of messenger
	Phase mm	Messenger	Street light					
3 x16 +1 x 25+1 x 16	1.2	1.2	1.2	7.5	8.9	7.5	240	7.0
3 x25 +1 x 25+1 x 16	1.2	1.2	1.2	8.9	8.9	7.5	379	7.0
3 x35 +1 x 25+1 x 16	1.2	1.2	1.2	10.0	8.9	7.5	271	7.0
3 x50 +1 x 35+1 x 16	1.5	1.2	1.2	12.0	10.0	7.5	472	9.8
3 x70 +1 x 50+1 x 16	1.5	1.5	1.2	13.7	12.0	7.5	302	14.0
3 x95 +1 x 70+1 x 16	1.5	1.5	1.2	15.5	13.8	7.5	567	19.7

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Electrical characteristics

Current carrying capacity and maximum DC conductor resistance.

Nominal cross sectional area mm²	Maximum DC conductor resistance at 20°C		Reactance Ω/km	Current carrying capacity in Air @ 40°C Amp.
	Phase Ω/km	Messenger Ω/km		
16	1.91	1.38	0.0834	72
25	1.2	1.38	0.0791	98
35	0.868	1.38	0.0765	119
50	0.641	0.986	0.0772	145
70	0.443	0.689	0.0748	185
95	0.32	0.492	0.0728	235

De-Rating Factor

Air-Temperature	25°C	30°C	35°C	40°C	45°C	50°C	55°C	60°C
De-rating factor	1.14	1.1	1.05	1	0.95	0.89	0.84	0.77