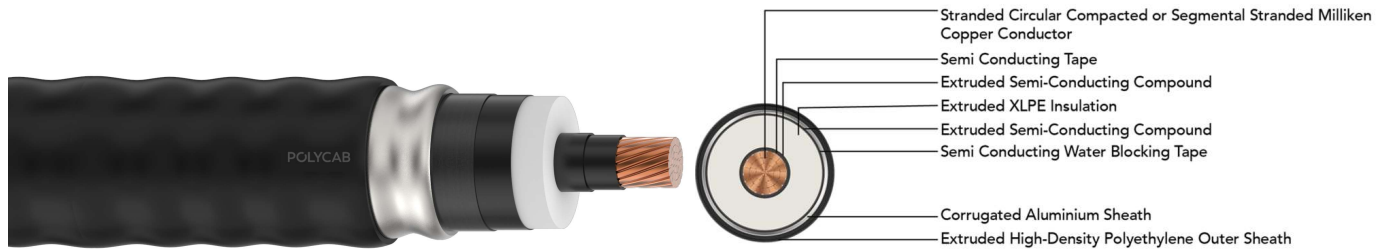


POLYCAB HV AL.COR IEC 60840 76/132 KV (145 KV) HV Cable with Cu Conductor, Aluminium Corrugated Sheath



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAB HV 76/132 KV (145 kV) XLPE insulated cable with Copper conductor is suitable to use in high voltage transmission for external and direct burial applications in power network system.

CHARACTERISTICS

Voltage Rating

Nominal Voltage: 76/132 kV (145 kV)

Operation Temperature

Max. operating temperature: +90°C

Max. Short Circuit Temperature: 250°C

Bending Radius: 20D

: D is overall diameter of cable

Impulse Test Voltage

650kV

CONSTRUCTION

- Conductor: Circular Compacted or segmental stranded Milliken Copper conductor as per IEC 60228, class 2
- Separator: Semi Conducting Tape
- Conductor Screen: Extruded Semi-conductive compound
- Insulation: Crosslinked polyethylene
- Non-Metallic Insulation Screen: Extruded Semi-conductive compound
- Separator: Semi Conducting Water Blocking Tape
- Shield: Aluminium Corrugated Sheath
- Outer Sheath: Extruded High-density polyethylene (HDPE) (PVC, also available per request), Colour: Black
- Optional Semi-conductive layer

OUTSTANDING FEATURES

- High life
- UV resistance
- Longitudinal water resistant
- Radial water resistant

STANDARD FOLLOWS

IEC 60228

IEC 60840

IS 7098-3

ICEA S-108-720

COMPLIANCE

- Conductor resistance IEC 60228

OUR ACCREDITATIONS



APPROVAL



POLYCAB HV AL.COR IEC 60840 76/132 KV (145 KV)

HV Cable with Cu Conductor, Aluminium Corrugated Sheath

DIMENSIONS AND WEIGHT:





Product Code	No. of Cores	Core Cross sectional Area	Conductor type	Insulation thickness (Approx.)	Sheath thickness (Approx.)	Diameter Overall (Nominal)	Weight (Approx.)
	No.	mm ²		mm	mm	mm	Kg/Km
EHIS26CXATPH001C300SAXXXX	1	300	Compact	18	3.8	81.0	9000
EHIS26CXATPH001C400SAXXXX	1	400	Compact	18	4	84.0	10000
EHIS26CXATPH001C500SAXXXX	1	500	Compact	18	4	88.0	11500
EHIS26CXATPH001C630SAXXXX	1	630	Compact	18	4	91.0	13000
EHIS26CXATPH001C800SAXXXX	1	800	Compact	18	4	95.0	14200
EHIS26CXATPH001C01KSAXXXX	1	1000	Compact	18	4	100.0	16500
EHIS26CXATPH001C1K2SAXXXX	1	1200	Milliken	18	4	107.0	19200
EHIS26CXATPH001C1K4SAXXXX	1	1400	Milliken	18	4	111.0	21300
EHIS26CXATPH001C1K6SAXXXX	1	1600	Milliken	18	4	114.0	23400
EHIS26CXATPH001C1K8SAXXXX	1	1800	Milliken	18	4	117.0	25500
EHIS26CXATPH001C02KSAXXXX	1	2000	Milliken	18	4	120.0	27400
EHIS26CXATPH001C2K5SAXXXX	1	2500	Milliken	18	4	126.0	32400

ELECTRICAL CHARACTERISTICS:

Core Cross sectional Area	Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Approx. Star Reactance	Approx. Star Impedance	Approx. Capacitance	Surge Impedance	Cable Zero sequence Resistance	Cable Zero sequence Reactance	Cable Zero sequence Impedance
mm ²	Ω/km	Ω/km	Ω/km	Ω/km	μF/km	Ω	Ω/km	Ω/km	Ω/km
300	0.0601	0.0779	0.151	0.170	0.15	57	0.144	0.0969	0.174
400	0.0470	0.0616	0.145	0.158	0.16	54	0.131	0.0910	0.160
500	0.0366	0.0489	0.139	0.147	0.17	51	0.120	0.0850	0.147
630	0.0283	0.0390	0.133	0.139	0.19	47	0.111	0.0797	0.137
800	0.0221	0.0319	0.128	0.132	0.20	45	0.105	0.0751	0.129
1000	0.0176	0.0269	0.124	0.127	0.22	42	0.0963	0.0710	0.120
1200	0.0151	0.0204	0.119	0.121	0.24	40	0.0869	0.0669	0.110
1400	0.0129	0.0178	0.117	0.118	0.25	39	0.0821	0.0644	0.104
1600	0.0113	0.0159	0.114	0.115	0.27	37	0.0785	0.0623	0.100
1800	0.0101	0.0146	0.112	0.113	0.28	36	0.0755	0.0606	0.0968
2000	0.0090	0.0133	0.111	0.112	0.29	35	0.0726	0.0589	0.0935
2500	0.0072	0.0114	0.107	0.108	0.31	33	0.0675	0.0556	0.0875

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CURRENT RATING:

Core Cross sectional Area	Continuous current ratings for 3 single core cables, single ended bonded				Short Circuit Rating for 1 Sec.
	In ground		In air		
	Trefoil 	Flat 	Trefoil 	Flat 	
mm ²	Amps				KAmps
300	479	510	669	739	42.9
400	541	580	769	855	57.2
500	610	658	885	990	71.5
630	683	745	1012	1144	90.1
800	755	834	1141	1304	114.4
1000	819	917	1265	1464	143.0
1200	925	1042	1468	1704	171.6
1400	980	1117	1582	1857	200.2
1600	1024	1181	1680	1992	228.8
1800	1060	1237	1763	2111	257.4
2000	1095	1293	1847	2236	286.0
2500	1156	1396	2006	2484	357.5

Current ratings based on IEC 60287

Supply frequency	50 Hz
Maximum conductor temperature	90°C
Ambient air temperature	40°C
Ground temperature	30°C
Depth of laying	1000 m
Thermal resistivity of soil	1.5 K.m/W