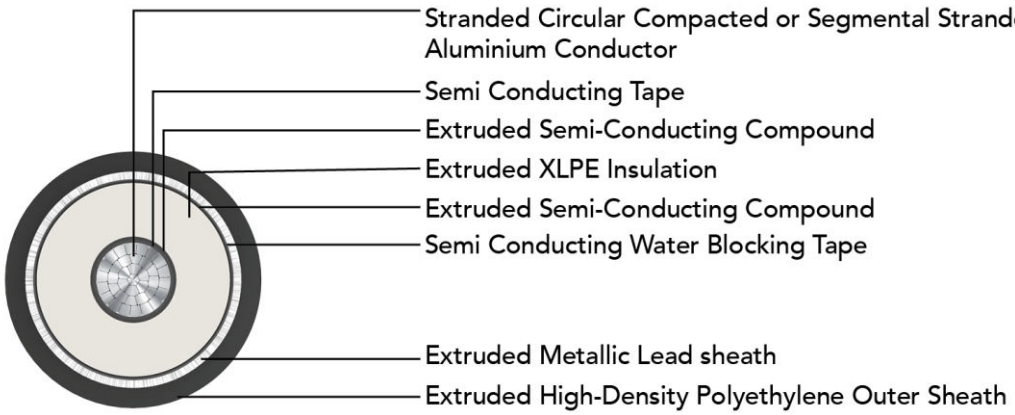
POLYCAB HV PB IEC 60840 76/132 kV (145 kV)

HV Cable with Aluminium Conductor, Lead Sheath



Outstanding Features

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

Application

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

Voltage Rating

Nominal Voltage: 76/132 kV (145 kV)

Operation Temperature

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

Construction

- Conductor: Circular Compacted or segmental stranded Milliken Aluminium 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
- Inner Sheath: Extruded Metallic Lead alloy
- Outer Sheath: Extruded High-density polyethylene (HDPE) (PVC, available as per demand), Colour: Black
- Optional Semi-conductive layer

Bending Radius: 20D

: D is overall diameter of cable

Standard and References:

IEC 60228
IEC 60840
IS 7098-3
ICEA S-108-720

Impulse Test Voltage

650kV

Compliance

- Conductor resistance IEC 60228

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DIMENSIONS AND WEIGHT:

Product Code	No. of Cores No.	Core Cross sectional Area mm^2	Conductor type	Insulation thickness (Approx.) mm	Sheath thickness (Approx.) mm	Diameter Overall (Nominal) mm	Weight (Approx.) Kg/Km
EHIS26AXUAPH001C400SAXXXX	1	400	Compact	18	3.8	79.0	10900
EHIS26AXUAPH001C500SAXXXX	1	500	Compact	18	3.8	83.0	11700
EHIS26AXUAPH001C630SAXXXX	1	630	Compact	18	4	86.0	13000
EHIS26AXUAPH001C800SAXXXX	1	800	Compact	18	4	90.0	14400
EHIS26AXUAPH001C01KSAXXXX	1	1000	Compact	18	4	96.0	16800
EHIS26AXUAPH001C1K2SAXXXX	1	1200	Milliken	18	4	103.0	18500
EHIS26AXUAPH001C1K4SAXXXX	1	1400	Milliken	18	4	107.0	19900
EHIS26AXUAPH001C1K6SAXXXX	1	1600	Milliken	18	4	111.0	21400
EHIS26AXUAPH001C1K8SAXXXX	1	1800	Milliken	18	4	114.0	22900
EHIS26AXUAPH001C02KSAXXXX	1	2000	Milliken	18	4	116.0	24000
EHIS26AXUAPH001C2K5SAXXXX	1	2500	Milliken	18	4	122.0	27000

ELECTRICAL CHARACTERISTICS:

Core Cross sectional Area mm^2	Max. DC Resistance at 20˚C Ω/km	Max. AC Resistance at 90˚C Ω/km	Approx. Star Reactance Ω/km	Approx. Star Impedance Ω/km	Approx. Capacitance µF/km	Surge Impedance Ω	Cable Zero sequence Resistance Ω/km	Cable Zero sequence Reactance Ω/km	Cable Zero sequence Impedance Ω/km
400	0.0778	0.101	0.140	0.173	0.16	53	0.178	0.0867	0.198
500	0.0605	0.0790	0.134	0.156	0.17	50	0.162	0.0810	0.181
630	0.0469	0.0621	0.130	0.144	0.19	47	0.152	0.0766	0.170
800	0.0367	0.0496	0.125	0.134	0.20	45	0.145	0.0719	0.162
1000	0.0291	0.0406	0.120	0.127	0.22	42	0.140	0.0675	0.155
1200	0.0247	0.0320	0.115	0.119	0.24	39	0.137	0.0637	0.151
1400	0.0212	0.0276	0.113	0.116	0.25	38	0.138	0.0615	0.151
1600	0.0186	0.0244	0.111	0.114	0.27	36	0.137	0.0595	0.149
1800	0.0165	0.0217	0.109	0.111	0.28	35	0.137	0.0579	0.149
2000	0.0149	0.0198	0.107	0.109	0.29	34	0.137	0.0562	0.148
2500	0.0127	0.0171	0.103	0.104	0.31	33	0.145	0.0531	0.154

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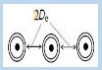
CURRENT RATING:

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
400	433	459	623	695	37.6
500	493	525	723	811	47.0
630	560	599	835	942	59.2
800	630	679	958	1090	75.2
1000	700	762	1088	1249	94.0
1200	789	860	1254	1438	112.8
1400	852	932	1374	1583	131.6
1600	906	998	1481	1717	150.4
1800	958	1062	1584	1846	169.2
2000	1004	1121	1679	1969	188.0
2500	1085	1221	1854	2195	235.0

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