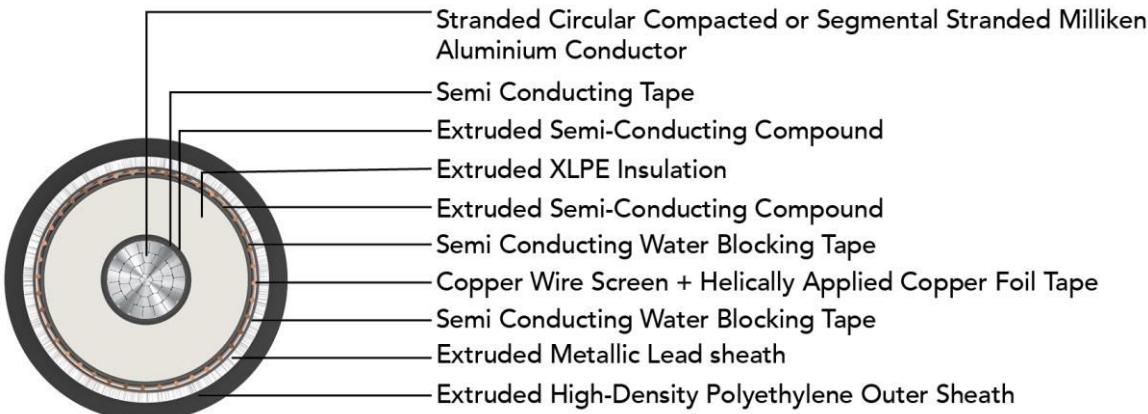


POLYCAT HV CS+PB IEC 60840 76/132 kV (145 kV)

HV Cable with Aluminium Conductor, Copper Screen and Lead Sheath



Outstanding Features

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

Application

POLYCAT 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)

Bending Radius: 20D

: D is overall diameter of cable

Operation Temperature

Max. operating temperature: +90°C

Max. Short Circuit Temperature: 250°C

Standard and References:

IEC 60228

IEC 60840

IS 7098-3

ICEA S-108-720

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
- Metallic Insulation Screen: Copper Wires + helically applied Copper foil tape
- Separator: Semi Conducting Water Blocking Tape
- Inner Sheath: Extruded Metallic Lead
- Outer Sheath: Extruded High-density polyethylene (HDPE) (PVC, available as per demand), Colour: Black
- Optional Semi-conductive layer

Impulse Test Voltage

650kV

Compliance

- Conductor resistance IEC 60228



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ISO 9001 ISO 14001 ISO 45001



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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	81.0	13000
EHIS26AXUAPH001C500SAXXXX	1	500	Compact	18	4	85.0	14500
EHIS26AXUAPH001C630SAXXXX	1	630	Compact	18	4	89.0	16000
EHIS26AXUAPH001C800SAXXXX	1	800	Compact	18	4	93.0	17000
EHIS26AXUAPH001C01KSAXXXX	1	1000	Compact	18	4	98.0	19000
EHIS26AXUAPH001C1K2SAXXXX	1	1200	Milliken	18	4	101.0	20500
EHIS26AXUAPH001C1K4SAXXXX	1	1400	Milliken	18	4	106.0	22000
EHIS26AXUAPH001C1K6SAXXXX	1	1600	Milliken	18	4	109.0	23000
EHIS26AXUAPH001C1K8SAXXXX	1	1800	Milliken	18	4	112.0	25000
EHIS26AXUAPH001C02KSAXXXX	1	2000	Milliken	18	4	115.0	26500
EHIS26AXUAPH001C2K5SAXXXX	1	2500	Milliken	18	4	120.0	29500

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



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