



Images not to scale. Follow table for dimensions

APPLICATION

POLYCAT 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
- Metallic Insulation Screen: Copper Wires + Helically applied Copper Foil Tape
- Separator: Semi Conducting Water Blocking Tape
- Shield: Poly-Al. laminated Tape
- Outer Sheath: Extruded High-density polyethylene (HDPE), 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



POLYCAP HV CS+PAL IEC 60840 76/132 KV (145 KV)

HV Cable with Cu Conductor, Cu Screen and Poly Al.

laminated

POLYCAP

IDEAS. CONNECTED.

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
EHIS26CXUAPH001C300SAXXXX	1	300	Compact	18	3.6	74.0	7800
EHIS26CXUAPH001C400SAXXXX	1	400	Compact	18	3.6	77.0	8700
EHIS26CXUAPH001C500SAXXXX	1	500	Compact	18	3.8	80.0	9800
EHIS26CXUAPH001C630SAXXXX	1	630	Compact	18	4	84.0	11300
EHIS26CXUAPH001C800SAXXXX	1	800	Compact	18	4	88.0	13100
EHIS26CXUAPH001C01KSAXXXX	1	1000	Compact	18	4	93.0	15400
EHIS26CXUAPH001C1K2SAXXXX	1	1200	Milliken	18	4	100.0	17400
EHIS26CXUAPH001C1K4SAXXXX	1	1400	Milliken	18	4	104.0	19500
EHIS26CXUAPH001C1K6SAXXXX	1	1600	Milliken	18	4	107.0	21600
EHIS26CXUAPH001C1K8SAXXXX	1	1800	Milliken	18	4	110.0	23600
EHIS26CXUAPH001C02KSAXXXX	1	2000	Milliken	18	4	114.0	25600
EHIS26CXUAPH001C2K5SAXXXX	1	2500	Milliken	18	4	119.0	30600

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	0.0780	0.143	0.163	0.15	55	0.141	0.0896	0.167
400	0.0470	0.0617	0.137	0.150	0.16	52	0.128	0.0841	0.153
500	0.0366	0.0491	0.131	0.140	0.17	50	0.118	0.0785	0.142
630	0.0283	0.0392	0.126	0.132	0.19	46	0.110	0.0736	0.132
800	0.0221	0.0321	0.122	0.126	0.20	44	0.105	0.0693	0.126
1000	0.0176	0.0272	0.117	0.120	0.22	41	0.101	0.0653	0.120
1200	0.0151	0.0205	0.113	0.115	0.24	39	0.0953	0.0615	0.113
1400	0.0129	0.0179	0.110	0.111	0.25	37	0.0933	0.0592	0.110
1600	0.0113	0.0160	0.108	0.109	0.27	36	0.0918	0.0572	0.108
1800	0.0101	0.0147	0.106	0.107	0.28	35	0.0907	0.0557	0.106
2000	0.0090	0.0135	0.105	0.106	0.29	34	0.0898	0.0540	0.105
2500	0.0072	0.0116	0.101	0.102	0.31	32	0.0882	0.0510	0.102

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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	491	515	686	761	42.9
400	559	588	793	883	57.2
500	635	671	918	1027	71.5
630	720	763	1059	1191	90.1
800	805	859	1204	1363	114.4
1000	885	954	1348	1540	143.0
1200	1034	1100	1604	1811	171.6
1400	1116	1193	1752	1987	200.2
1600	1187	1274	1884	2146	228.8
1800	1248	1343	1999	2286	257.4
2000	1311	1418	2120	2438	286.0
2500	1432	1567	2363	2747	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