



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB 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.

## 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 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
- 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



**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 <sup>2</sup>		mm	mm	mm	Kg/Km
EHIS26AXATPH001C300SAXXXX	1	300	Compact	18	3.8	81.0	7100
EHIS26AXATPH001C400SAXXXX	1	400	Compact	18	4	84.0	7600
EHIS26AXATPH001C500SAXXXX	1	500	Compact	18	4	88.0	8300
EHIS26AXATPH001C630SAXXXX	1	630	Compact	18	4	91.0	9000
EHIS26AXATPH001C800SAXXXX	1	800	Compact	18	4	95.0	9400
EHIS26AXATPH001C1KSAXXXX	1	1000	Compact	18	4	100.0	10400
EHIS26AXATPH001C1K2SAXXXX	1	1200	Milliken	18	4	107.0	11900
EHIS26AXATPH001C1K4SAXXXX	1	1400	Milliken	18	4	111.0	12800
EHIS26AXATPH001C1K6SAXXXX	1	1600	Milliken	18	4	114.0	13700
EHIS26AXATPH001C1K8SAXXXX	1	1800	Milliken	18	4	117.0	14600
EHIS26AXATPH001C02KSAXXXX	1	2000	Milliken	18	4	120.0	15300
EHIS26AXATPH001C2K5SAXXXX	1	2500	Milliken	18	4	126.0	17300

**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 <sup>2</sup>	Ω/km	Ω/km	Ω/km	Ω/km	μF/km	Ω	Ω/km	Ω/km	Ω/km
300	0.100	0.129	0.151	0.199	0.15	57	0.184	0.0967	0.208
400	0.0778	0.101	0.145	0.177	0.16	54	0.161	0.0910	0.185
500	0.0605	0.0790	0.139	0.160	0.17	51	0.143	0.0850	0.166
630	0.0469	0.0620	0.134	0.148	0.19	47	0.129	0.0802	0.152
800	0.0367	0.0495	0.129	0.138	0.20	45	0.118	0.0753	0.140
1000	0.0291	0.0404	0.124	0.130	0.22	42	0.107	0.0710	0.128
1200	0.0247	0.0320	0.119	0.123	0.24	40	0.0956	0.0669	0.117
1400	0.0212	0.0276	0.117	0.120	0.25	39	0.0894	0.0644	0.110
1600	0.0186	0.0243	0.114	0.117	0.27	37	0.0847	0.0623	0.105
1800	0.0165	0.0217	0.112	0.114	0.28	36	0.0807	0.0606	0.101
2000	0.0149	0.0197	0.111	0.113	0.29	35	0.0772	0.0589	0.0971
2500	0.0127	0.0170	0.107	0.108	0.31	33	0.0715	0.0556	0.0906

**CURRENT RATING:**

Core Cross sectional Area  mm <sup>2</sup>	Continuous current ratings for 3 single core cables, single ended bonded				Short Circuit Rating for 1 Sec.  KAmps	
	In ground		In air			
	Trefoil 	Flat 	Trefoil 	Flat 		
300	376	398	524	576	28.2	
400	428	455	606	669	37.6	
500	487	520	703	780	47.0	
630	552	594	810	905	59.2	
800	619	671	927	1045	75.2	
1000	686	753	1049	1193	94.0	
1200	766	845	1201	1369	112.8	
1400	821	912	1307	1501	131.6	
1600	868	974	1402	1624	150.4	
1800	911	1033	1492	1742	169.2	
2000	949	1086	1574	1853	188.0	
2500	1007	1171	1715	2051	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