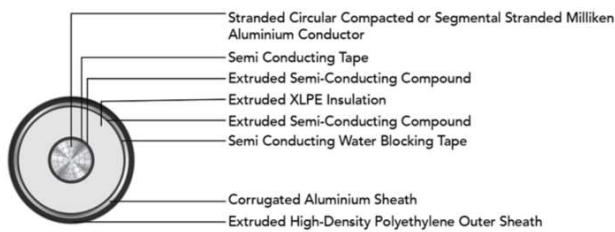


# POLY CAB HV. AL.COR IEC 60840 38/66 KV (72.5 KV) HV Cable with Aluminium Conductor, Aluminium Corrugated Sheath

**POLY CAB**  
IDEAS. CONNECTED.



Images not to scale. Follow table for dimensions

## APPLICATION

POLY CAB HV 38/66 KV (72.5 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: 38/66 kV (72.5 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

325kV

## 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



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**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
EHIS24AXATPH001C400SAXXXX	1	400	Compact	11	3.4	69.0	5700
EHIS24AXATPH001C500SAXXXX	1	500	Compact	11	3.6	73.0	6400
EHIS24AXATPH001C630SAXXXX	1	630	Compact	11	3.6	76.0	7000
EHIS24AXATPH001C800SAXXXX	1	800	Compact	11	3.8	80.0	7400
EHIS24AXATPH001C01KSAXXXX	1	1000	Compact	11	4	86.0	8400
EHIS24AXATPH001C1K2SAXXXX	1	1200	Milliken	11	4	93.0	9700
EHIS24AXATPH001C1K4SAXXXX	1	1400	Milliken	11	4	97.0	10600
EHIS24AXATPH001C1K6SAXXXX	1	1600	Milliken	11	4	100.0	11400
EHIS24AXATPH001C1K8SAXXXX	1	1800	Milliken	11	4	103.0	12200
EHIS24AXATPH001C02KSAXXXX	1	2000	Milliken	11	4	106.0	12900
EHIS24AXATPH001C2K5SAXXXX	1	2500	Milliken	11	4	112.0	14700

**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
400	0.0778	0.101	0.134	0.168	0.22	44	0.165	0.0782	0.183
500	0.0605	0.0791	0.128	0.150	0.25	40	0.148	0.0726	0.165
630	0.0469	0.0622	0.123	0.138	0.27	38	0.133	0.0684	0.150
800	0.0367	0.0498	0.118	0.128	0.29	36	0.121	0.0640	0.137
1000	0.0291	0.0408	0.114	0.121	0.32	34	0.113	0.0598	0.128
1200	0.0247	0.0321	0.110	0.115	0.35	32	0.107	0.0560	0.121
1400	0.0212	0.0277	0.107	0.111	0.38	30	0.102	0.0540	0.115
1600	0.0186	0.0244	0.105	0.108	0.40	29	0.0966	0.0522	0.110
1800	0.0165	0.0218	0.104	0.106	0.41	28	0.0916	0.0511	0.105
2000	0.0149	0.0199	0.102	0.104	0.43	28	0.0875	0.0496	0.101
2500	0.0127	0.0172	0.0992	0.101	0.47	26	0.0805	0.0469	0.0932

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**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		
400	428	455	613	690	37.6	
500	486	520	712	805	47.0	
630	550	592	820	935	59.2	
800	617	671	939	1080	75.2	
1000	683	751	1063	1237	94.0	
1200	769	846	1224	1423	112.8	
1400	825	914	1334	1562	131.6	
1600	874	977	1432	1689	150.4	
1800	918	1036	1523	1811	169.2	
2000	956	1089	1606	1925	188.0	
2500	1015	1176	1749	2131	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