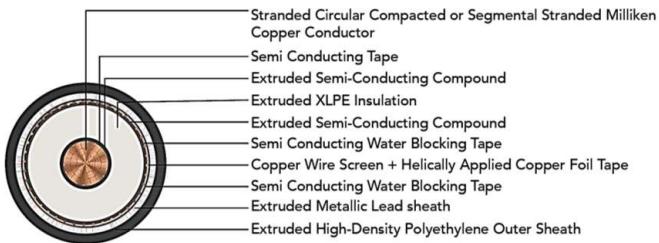


# POLYCAT HV CS+PB IEC 60840 38/66 KV (72.5 KV). HV Cable with Cu Conductor, Cu Screen and Lead Sheath

**POLYCAT**  
IDEAS. CONNECTED.



Images not to scale. Follow table for dimensions

## APPLICATION

POLYCAT HV 38/66 KV (72.5 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: 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 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
- Inner Sheath: Extruded Metallic Lead alloy
- Outer Sheath: Extruded High-density polyethylene (HDPE) (PVC, available as per demand), 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+PB IEC 60840 38/66 KV (72.5 KV). HV Cable with Cu Conductor, Cu Screen and Lead Sheath

**POLYCAP**  
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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
EHIS24CXUAPH001C240SAXXXX	1	240	Compact	11	3.2	62.0	9500
EHIS24CXUAPH001C300SAXXXX	1	300	Compact	11	3.2	64.0	10400
EHIS24CXUAPH001C400SAXXXX	1	400	Compact	11	3.4	67.0	11800
EHIS24CXUAPH001C500SAXXXX	1	500	Compact	11	3.4	71.0	13400
EHIS24CXUAPH001C630SAXXXX	1	630	Compact	11	3.6	75.0	15500
EHIS24CXUAPH001C800SAXXXX	1	800	Compact	11	3.8	79.0	18000
EHIS24CXUAPH001C01KSAXXXX	1	1000	Compact	11	4	85.0	21100
EHIS24CXUAPH001C1K2SAXXXX	1	1200	Milliken	11	4	88.0	23400
EHIS24CXUAPH001C1K4SAXXXX	1	1400	Milliken	11	4	92.0	26300
EHIS24CXUAPH001C1K6SAXXXX	1	1600	Milliken	11	4	95.0	29000
EHIS24CXUAPH001C1K8SAXXXX	1	1800	Milliken	11	4	98.0	31400
EHIS24CXUAPH001C02KSAXXXX	1	2000	Milliken	11	4	101.0	33700
EHIS24CXUAPH001C2K5SAXXXX	1	2500	Milliken	11	4	107.0	39800

## 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 Impedance	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
240	0.0754	0.0973	0.137	0.168	0.19	48	0.166	0.0809	0.185
300	0.0601	0.0781	0.132	0.153	0.21	45	0.152	0.0763	0.170
400	0.0470	0.0619	0.127	0.141	0.22	43	0.141	0.0716	0.158
500	0.0366	0.0493	0.121	0.131	0.25	39	0.132	0.0668	0.148
630	0.0283	0.0395	0.117	0.123	0.27	37	0.126	0.0625	0.141
800	0.0221	0.0325	0.113	0.118	0.29	35	0.122	0.0589	0.135
1000	0.0176	0.0277	0.109	0.112	0.32	33	0.121	0.0555	0.133
1200	0.0151	0.0206	0.105	0.107	0.35	31	0.117	0.0521	0.128
1400	0.0129	0.0180	0.103	0.105	0.38	29	0.118	0.0505	0.128
1600	0.0113	0.0162	0.101	0.102	0.40	28	0.119	0.0489	0.129
1800	0.0101	0.0148	0.0998	0.101	0.41	28	0.120	0.0477	0.129
2000	0.0090	0.0136	0.0982	0.0991	0.43	27	0.122	0.0464	0.131
2500	0.0072	0.0118	0.0954	0.0961	0.47	25	0.126	0.0440	0.133

# POLY CAB HV CS+PB IEC 60840 38/66 KV (72.5 KV). HV Cable with Cu Conductor, Cu Screen and Lead Sheath

**POLY CAB**  
IDEAS. CONNECTED.

## 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.	
	In ground		In air			
	Trefoil	Flat	Trefoil	Flat		
240	431	455	610	697	34.3	
300	483	512	694	797	42.9	
400	545	583	799	924	57.2	
500	614	662	921	1074	71.5	
630	688	750	1054	1243	90.1	
800	760	839	1190	1419	114.4	
1000	827	925	1322	1600	143.0	
1200	950	1058	1558	1873	171.6	
1400	1014	1140	1688	2045	200.2	
1600	1068	1211	1802	2203	228.8	
1800	1112	1272	1898	2339	257.4	
2000	1158	1336	2002	2488	286.0	
2500	1246	1462	2207	2791	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