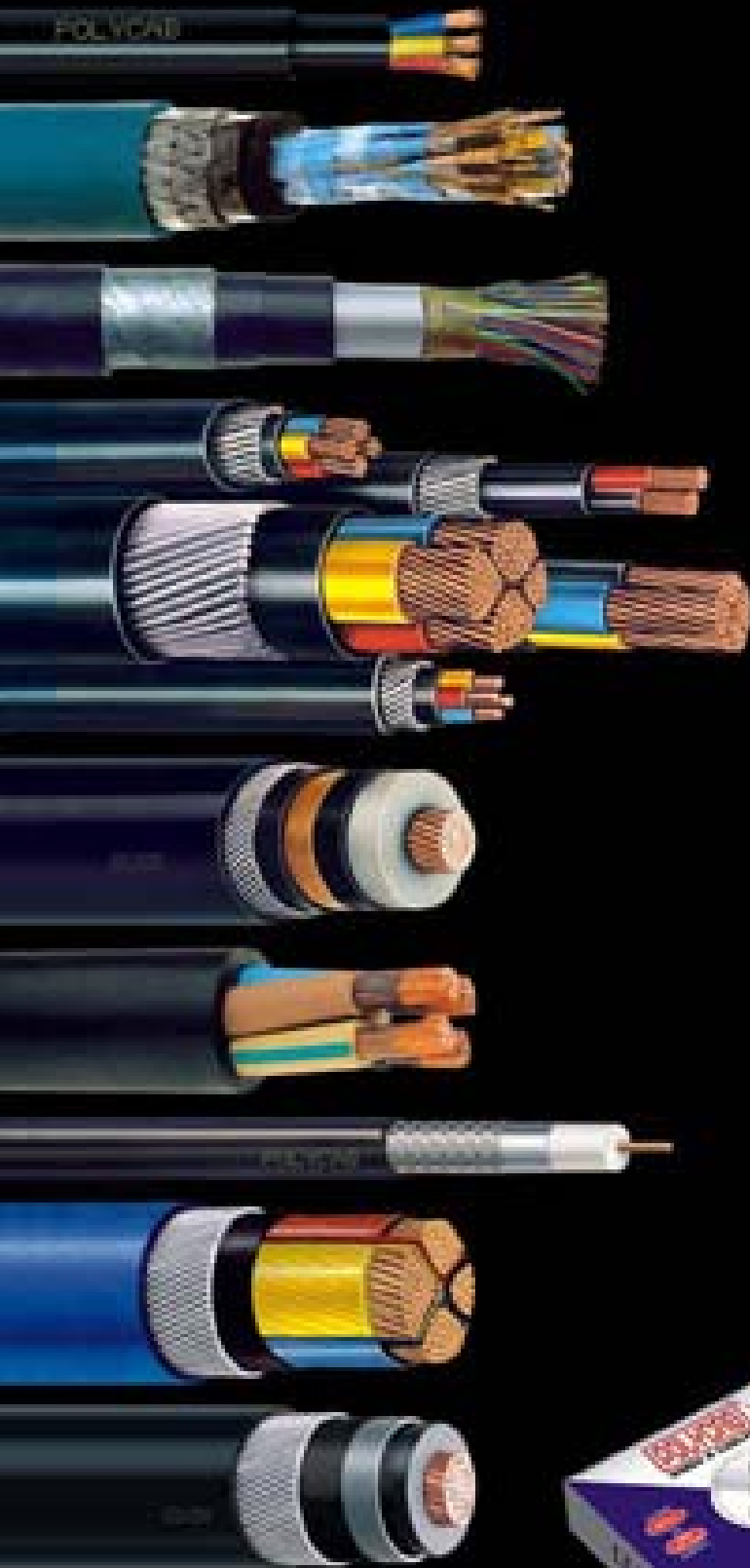


**ISO  
9001:2000**

**POLYCAB**<sup>®</sup>  
**WIRES & CABLES**

**P R O F I L E  
& TECHNICAL CATALOGUE**

## PRODUCT RANGE



- L.T. PVC & XLPE POWER CABLES WITH COPPER / ALUMINIUM CONDUCTOR (1100 V. UPTO 4 CRORE X 630 SQ. MM., 1 CORE X 1000 SQ. MM.)
- L.T PVC & XLPE CONTROL CABLES (1100 V. UPTO 61 CORE X 1.5 & 2.5 SQ.MM.)
- H.T. XLPE CABLES UPTO 66 kV
- SUBMERSIBLE CABLES
- BUILDING WIRES & FLEXIBLES (SINGLE & MULTICORE)
- INSTRUMENTATION CABLES SCREENED / UNSCREENED
- FRLS / FR / HR / ZHFR – POWER, CONTROL & INSTRUMENTATION CABLES
- HT / LT AERIAL BUNCHED CABLES
- RAILWAY SIGNALLING CABLES
- TELEPHONE CABLES – DRY & JELLY FILLED
- FIRE SURVIVAL, ZERO HALOGEN CABLES
- COAXIAL CABLES
- LAN CAT-5 / 5E, 6 CABLES



# INDIA'S FOREMOST MANUFACTURER OF WIRES & CABLES

Establishing, strengthening and sustaining the development of a strong company not only means deploying resources, expertise and know how, but also great determination and confidence in the future. Through all these years of intensive activity and quick expansions, the action towards common goal to stand out as a strong, consistent group, constantly striving for improvement have driven Polycab to attain and achieve a leading position in the Indian cable industry.

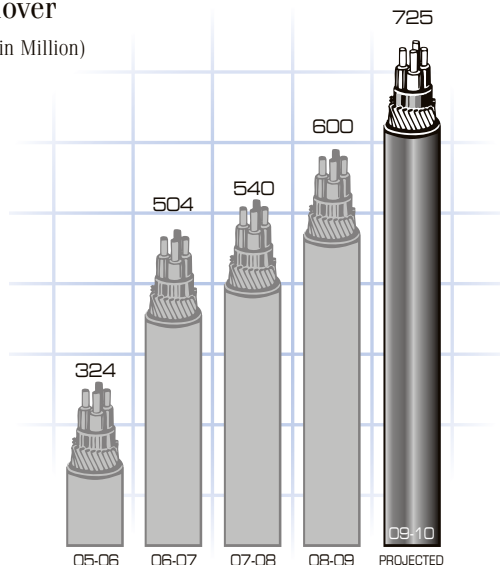
Polycab, an ISO 9001:2000 company is the largest Wire & Cable Manufacturer in India with a proven track record of over three decades. The fastest growing company in the Indian cable industry, Polycab group has projected sales turnover of 725 million US\$ in the FY 09-10 and has targeted to cross 900 million US\$ sales turnover in FY 10-11.

From a modest beginning with Wires & cables, over three decades ago, Polycab set up a state-of-the-art manufacturing facility at Daman in 1996. The last 3 decades have seen the core business develop along different product lines: - Panel board wires, Building wires, Low voltage cables, Medium voltage cables, Extra high voltage cables, Fire survival & Fire resistant cables, Telecommunication cables, Instrumentation cables and Aerial bunched cables. In the manufacture of cables, a competitive edge lies not so much in product innovation as in providing consistent quality, guaranteeing reliability and ready availability. Polycab's Daman factory was created to address these key market determinants.

## THE GROWTH

### Turnover

(US \$ in Million)



The manufacturing set up is sourced out from the world renowned Machinery and Technology suppliers with constant upgradation. Polycab is now expanding to three times its existing capacity at their new premises in Halol, Gujrat, which is spread over an area of 150 acres. On completion it shall be one of the largest Cable manufacturing company in Asia.

## Our primary focus ....customer satisfaction

POLYCAB derives its strength from its customers. The growth of the customer is a prerequisite to the growth of the company and hence customers' satisfaction is its prime objective. In an on going process to improve Customer Satisfaction Polycab offers a variety of services:

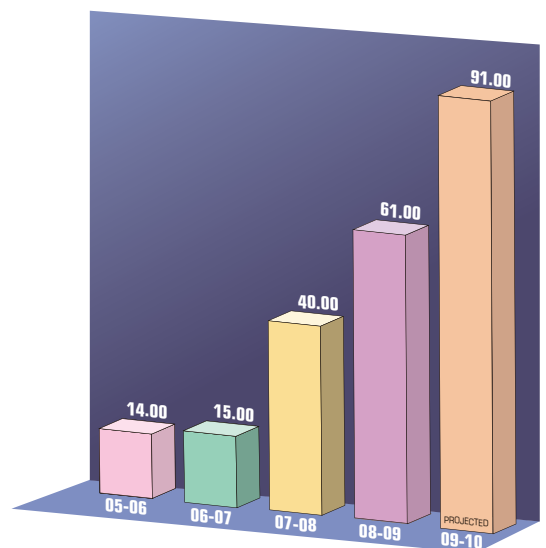
- Competitive prices
- Consistent quality
- Just in time delivery
- Product development for a changing market
- A targeted stocking policy
- Technical Support for Applications / Projects

## A growing international reputation

The Polycab reputation for robust, long life, top quality electric wires & cables is well established in India where many cables are still in operation after more than 20 years of service. In the recent years we have also earned international recognition by supplying cables to various Utilities, EPC Contractors and turnkey projects world over.

## THE EXPORTS

(US \$ in Million)



## QUALITY & RELIABILITY

Our aim is to achieve the highest level of product quality, reliability and safety, but we also know that this must be achieved at the lowest practical cost.

## QUALITY ASSURANCE AND QUALITY MANUFACTURING

Quality assurance is intrinsic to POLYCAB. We confirm to ISO 9001:2000 standards in our manufacturing processes and overall company operation. Our management system has been defined by experienced personnel who develop, implement and monitor quality assurance procedures. The same rigour is applied to the monitoring of materials and services provided by the vendors so that these also meet our quality system standards.

## QUALITY PEOPLE

No quality is possible without the right people to carry through on the program. Everyone, from administrative staff to expert engineers, are committed to constant improvement. This commitment is backed by intensive training and education within an environment of Trust, Respect, Participation and Recognition.

## MISSION

*To build a strong brand and maintain superior quality for customer satisfaction*

## VISION

*Achieve Numero Uno position in the cable industry in terms of quality, volume and turnover in the Asian continent.*

## QUEST FOR QUALITY

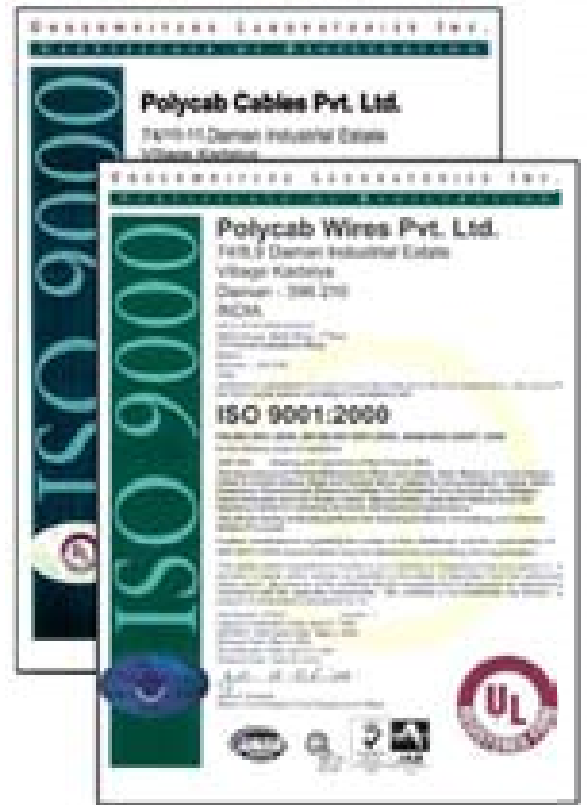
*POLYCAB Wires and Cables serves as a testimonial that attention to detail, production of top quality products & timely service are still as much in style as they were over 30 years ago.*

*It starts with careful selection of raw materials, on-line computerised control system on all its critical processes, culminating with a final product that provides consistency and long life in performance.*

*We recognize that quality inspires quality, and the best attracts the best. And by any measures it is clear that the constant quest for quality is central to the very core of our leadership aspirations.*

## QUALITY CERTIFICATIONS

- Quality systems certification by underwriters laboratories, USA for ISO 9001:2000
- Approved by BSNL for jelly filled telephone cables upto 2000 pair
- BIS licenses for IS- 694, IS 1554-1, IS 1554- 2, IS 7098-1, IS 7098-2, IS 9857, IS 2465, IS 9968, IS 8783-4
- All products have been successfully tested by testing house of international repute such as KEMA, CPRI & ERDA
- BASEC approved for product certification



## QUALITY POLICY

*We at POLYCAB, constantly aim to produce quality product to the customer's satisfaction through our Quality Management System.*



## APPROVALS

WE ARE APPROVED BY ALL THE MAJOR CONSULTANTS / SPECIFIERS LIKE :

- AKER KVAERNER
- BECHTEL LTD.,U.K.
- MOTT MCDONALD
- DESEIN
- EIL
- FITCHNER
- GHERZI EASTERN
- HOLTEC
- JACOBS H & G
- M.N. DASTUR
- MECON
- PDIL
- TCE
- TECHNIMONT ICB
- TOYO ENGG.
- UHDE INDIA
- SPECTRAL
- AVANTE GARDE
- LURGI

## 3RD PARTY APPROVALS

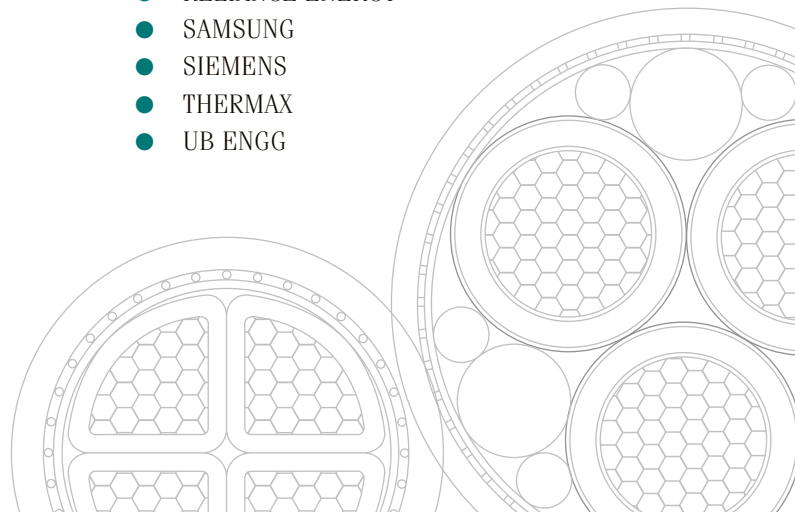
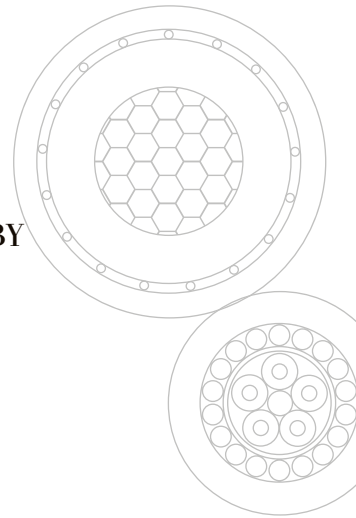
OUR CABLES ARE TYPE TESTED AND ACCEPTED FOR QUALITY BY THE FOLLOWING 3RD PARTY INSPECTING AGENCIES :

- BVIS
- CEIL
- CPRI
- DNV
- ERDA
- IRS
- LLOYDS
- MECON
- RITES
- SGS
- TUV
- KEMA

## MAJOR GLOBAL CONTRACTORS

WE ARE PREFERRED VENDORS TO ALL THE MAJOR CONTRACTORS LIKE :

- ABB
- ALSTOM
- BAJAJ ELECTRICALS
- BHEL
- CROMPTON GREAVES
- DAELIM
- GE POWER
- HINDUSTAN DORR-OLIVER
- HYUNDAI
- DODSAL ENGINEERING
- LINDE ENGINEERING
- IRCON
- JYOTI STRUCTURES
- LARSEN & TOUBRO
- PUNJ LLOYD
- RELIANCE ENERGY
- SAMSUNG
- SIEMENS
- THERMAX
- UB ENGG







### 450 / 750 VOLT PVC INSULATED STRANDED WIRES AS PER BS 6004

Nominal Conductor Area (mm <sup>2</sup> )	Conductor (No/mm)	Insulation Thickness (mm)	Maximum O/D (mm)	Approx. Weight (Kg/Km)
1.5	7/0.53	0.7	3.5	23
2.5	7/0.67	0.8	4.2	35
4	7/0.85	0.8	4.8	51
6	7/1.04	0.8	5.4	71
10	7/1.35	1.0	6.8	120
16	7/1.70	1.0	8.0	180
25	7/2.14	1.2	9.8	285
35	19/1.53	1.2	11.0	380
50	19/1.78	1.4	13.0	510
70	19/2.14	1.4	15.0	720
95	19/2.52	1.6	17.0	990
120	37/2.03	1.6	19.0	1230
150	37/2.25	1.8	21.0	1510
185	37/2.52	2.0	23.5	1900
240	61/2.25	2.2	26.5	2490
300	61/2.52	2.4	29.5	3100
400	61/2.85	2.6	33.5	3950

- **Standard** : BS 6004.
- **Voltage** : 450/750 V.
- **Conductor** : Stranded Copper Class 2.
- **Insulation** : PVC.
- **Colour** : Red, Yellow, Blue, Black, Green/Yellow.
- **Temperature Rating** : 70°C operating temperature.

**Note :**

- 1) Above data is approximate and subject to manufacture tolerance.
- 2) Wires can be offered with HR & LSF properties.
- 3) Other colours are available on request.
- 4) Wires can be offered with IEC & VDE specification.

### 450/750 VOLT PVC INSULATED FLEXIBLE WIRES AS PER BS 6004

Nominal Conductor Area (mm <sup>2</sup> )	Conductor (No/mm)	Insulation Thickness (mm)	Maximum O/D (mm)	Approx. Weight (Kg/Km)
0.5	16/0.2	0.6	2.2	8.5
0.75	24/0.2	0.6	2.5	11
1	14/0.3	0.6	2.8	13.5
1.5	22/0.3	0.7	2.9	20.5
2.5	36/0.3	0.8	3.5	30
4	56/0.3	0.8	4.3	45
6	84/0.3	0.8	5.3	65
10	80/0.4	1.0	6.7	110
16	126/0.4	1.0	8.2	170
25	196/0.4	1.2	10.0	270
35	276/0.4	1.2	11.3	360
50	396/0.4	1.4	13.5	510
70	360/0.5	1.4	15.5	700
95	485/0.5	1.6	18.5	1000
120	608/0.5	1.6	20.9	1250
150	750/0.5	1.8	22.5	1500
185	925/0.5	2.0	24.6	1900
240	1221/0.5	2.2	27.6	2500
300	1527/0.5	2.4	32.2	3150
400	2036/0.5	2.6	35.7	4150

- **Standard** : BS 6004.
- **Voltage** : 450/750 V.
- **Conductor** : Flexible Copper Class 5.
- **Insulation** : PVC.
- **Colour** : Red, Yellow, Blue, Black, Green/Yellow.
- **Temperature Rating** : 70°C operating temperature.

**Note :**

- 1) Above data is approximate and subject to manufacture tolerance.
- 2) Wires can be offered with HR & LSF properties.
- 3) Other colours are available on request.
- 4) Wires can be offered with IEC & VDE specification.





### 450/750 VOLT PVC INSULATED AND SHEATHED FLEXIBLE CABLE

Nominal Conductor Area (mm <sup>2</sup> )	Nominal Conductor Stranding (#/mm)	Average Insulation Thickness (mm)	Maximum O/D (mm)	Approx. Cable Weight (Kg/Km)
<b>Two core round</b>				
0.75	24/0.20	0.6	7.6	59
1.0	32/0.20	0.6	8.0	67
1.5	30/0.25	0.7	9.0	90
2.5	50/0.25	0.8	11.0	141
4.0	56/0.30	0.8	12.0	190
<b>Three core round</b>				
0.75	24/0.20	0.6	8.0	69
1.0	32/0.20	0.6	8.4	80
1.5	30/0.25	0.7	9.8	113
2.5	50/0.25	0.8	12.0	176
4.0	56/0.30	0.8	13.0	236
<b>Four core round</b>				
0.75	24/0.20	0.6	8.6	78
1.0	32/0.20	0.6	9.4	101
1.5	30/0.25	0.7	11.0	141
2.5	50/0.25	0.8	13.0	214
4.0	56/0.30	0.8	14.0	286

- **Standard** : BS 6500.
- **Nominal Voltage** : 450/750 V.
- **Conductor** : Flexible Copper Class 5.
- **Insulation** : PVC.
- **Core Identification** :  
2 Core - Blue, Brown  
3 Core - Green/Yellow, Blue, Brown  
4 Core - Green/Yellow, Black, Blue, Brown
- **Sheath** : PVC.
- **Temperature Rating** :  
70°C operating temperature.

**Note :**

- 1) Above data is approximate and subject to manufacture tolerance.
- 2) Cables can be offered with HR & LSF properties.
- 3) Cables can be offered with IEC & VDE specification.

### 450/750 VOLT PVC INSULATED AND SHEATHED TWIN CORE FLAT CABLE

Nominal Conductor Area (mm <sup>2</sup> )	Nominal Conductor Stranding (#/mm)	Average Insulation Thickness (mm)	Average Sheath Thickness (mm)	Maximum O/D (mm)	Approx. Cable Weight (Kg/Km)
<b>Without Earth Conductor</b>					
2 x 1.5	1/1.38	0.7	0.9	5.4 x 8.4	60
2 x 2.5	1/1.78	0.8	1	6.2 x 9.8	92
2 x 4.0	7/0.85	0.8	1	7.2 x 11.5	140
2 x 6.0	7/1.04	0.8	1.1	8.0 x 13.0	192
<b>With Earth Conductor</b>					
2 x 1.5 + 1	1/1.38	0.7	0.9	5.4 x 9.6	75
2 x 2.5 + 1	1/1.78	0.8	1	6.2 x 11.5	108
2 x 4.0 + 1.5	7/0.85	0.8	1	7.2 x 13.0	105
2 x 6.0 + 2.5	7/1.04	0.8	1.1	8.0 x 15.0	230

- **Standard** : BS 6004.
- **Nominal Voltage** : 450/750 V.
- **Conductor** : Solid / Stranded Copper.
- **Insulation** : PVC.
- **Core Identification** : 2 Core - Red, Black
- **Sheath** : PVC.
- **Temperature Rating** : 70°C operating temperature.

**Note :**

- 1) Above data is approximate and subject to manufacture tolerance.
- 2) Cables can be offered with HR & LSF properties.
- 3) Cables can be offered with IEC & VDE specification.

### 450/750 VOLT PVC INSULATED AND SHEATHED ROUND SUBMERSIBLE CABLE

Conductor		Average Insulation thickness (mm)	Approx. thickness of Inner Sheath (mm)		Approx. thickness of Outersheath		Maximum Overall diameter Nominal	
Area (Sq.mm)	Number an. of Wire (mm)		3 Core (mm)	4 core (mm)	3 Core (mm)	4 Core (mm)	3 Core (mm)	4 Core (mm)
1.5	30/0.25	0.6	1.0	1.0	1.2	1.2	10.8	12.0
2.5	50/0.25	0.7	1.0	1.0	1.2	1.2	13.2	13.8
4.0	56/0.30	0.8	1.0	1.0	1.2	1.4	14.2	15.2
6.0	84/0.30	0.8	1.0	1.0	1.4	1.4	16.5	18.5
10.0	140/0.30	1.0	1.0	1.0	1.4	1.4	19.1	22.0
16.0	126/0.40	1.0	1.0	1.0	1.4	1.4	23.5	25.0
25.0	196/0.40	1.2	1.0	1.0	1.6	1.6	28.5	31.0
35.0	276/0.40	1.2	1.0	1.0	2.0	2.0	30.5	32.8
50.0	396/0.40	1.4	1.0	1.0	2.2	2.2	35.9	39.2

- **Nominal Voltage** : 450/750 V.
- **Conductor** : Flexible class 5 Copper.
- **Insulation** : PVC.
- **Sheath** : PVC.
- **Temperature Rating** : 70°C operating temperature.

**Note :**

- 1) Above data is approximate and subject to manufacture tolerance.
- 2) Cables can be offered with FRLS & LSF properties.
- 3) Cables can be offered with IEC & VDE specification.
- 4) Three core flat with or without Earth Conductor can be offered.





## LOW VOLTAGE CABLE

Nominal Cross Section Core x mm <sup>2</sup>	Nominal Insulation Thickness (mm)	Dia Under Armour (mm)	Armour Wire (mm)	Nominal O/D (mm)	Approx. Weight (Kg/Km)
2 x 4	0.7	10.1	0.9	14.7	409
2 x 6	0.7	11.3	0.9	15.9	485
2 x 10	0.7	13.2	0.9	18.0	635
2 x 16	0.7	14.5	1.25	20.4	900
3 x 4	0.7	10.7	0.9	15.3	470
3 x 6	0.7	12.0	0.9	16.6	570
3 x 10	0.7	14.0	1.25	19.5	880
3 x 16	0.7	15.5	1.25	21.6	1070
3 x 25	0.9	20.1	1.6	23.6	1550
3 x 35	0.9	22.8	1.6	25.7	1940
3 x 50	1.0	21.7	1.6	28.5	2360
3 x 70	1.1	25.2	1.6	32.2	3120
3 x 95	1.1	28.8	2.0	37.0	4310
3 x 120	1.2	32.0	2.0	40.4	5160
3 x 150	1.4	35.9	2.5	45.5	6610
3 x 185	1.6	40.0	2.5	49.8	7920
3 x 240	1.7	44.9	2.5	55.1	9950
3 x 300	1.8	49.8	2.5	60.2	11970
3 x 400	2.0	55.8	2.5	66.6	14770
4 x 4	0.7	11.8	0.9	16.4	560
4 x 6	0.7	13.2	1.25	18.7	790
4 x 10	0.7	15.6	1.25	21.1	1040
4 x 16	0.7	17.2	1.25	23.4	1300
4 x 25	0.9	22.3	1.6	26.1	1880
4 x 35	0.9	25.3	1.6	28.6	2350
4 x 50	1.0	25.0	1.6	32.0	2950
4 x 70	1.1	29.5	2.0	37.7	4230
4 x 95	1.1	33.3	2.0	41.7	5390
4 x 120	1.2	37.5	2.5	47.1	6890
4 x 150	1.4	41.6	2.5	51.4	8300
4 x 185	1.6	46.4	2.5	56.6	10070
4 x 240	1.7	52.6	2.5	63.0	12680
4 x 300	1.8	58.0	2.5	68.8	15380
4 x 400	2.0	65.4	3.15	78.1	19950

Nominal Cross Section Core x mm <sup>2</sup>	Nominal Insulation Thickness (mm)	Dia Under Armour (mm)	Steel/Wire Diameter (mm)	Approx. O/D (mm)	Approx. Cable Weight (Kg/Km)
2 x 1.5	0.6	7.7	0.9	12.3	295
3 x 1.5	0.6	8.2	0.9	12.8	330
4 x 1.5	0.6	8.9	0.9	13.5	380
5 x 1.5	0.6	9.7	0.9	14.3	410
7 x 1.5	0.6	10.6	0.9	15.2	470
10 x 1.5	0.6	13.5	1.25	19.0	730
12 x 1.5	0.6	13.9	1.25	19.4	780
19 x 1.5	0.6	16.5	1.25	22.2	1020
27 x 1.5	0.6	20.1	1.6	26.7	1510
37 x 1.5	0.6	22.4	1.6	29.2	1830
48 x 1.5	0.6	25.9	1.6	32.9	2200
2 x 2.5	0.7	9.0	0.9	13.6	345
3 x 2.5	0.7	9.5	0.9	14.1	390
4 x 2.5	0.7	10.4	0.9	15.0	450
5 x 2.5	0.7	11.5	0.9	16.3	530
7 x 2.5	0.7	12.5	1.25	18.0	730
10 x 2.5	0.7	16.2	1.25	21.9	950
12 x 2.5	0.7	16.7	1.25	22.4	1050
19 x 2.5	0.7	20.0	1.6	26.6	1600
27 x 2.5	0.7	23.9	1.6	30.7	2040
37 x 2.5	0.7	27.0	1.6	34.0	2520
48 x 2.5	0.7	31.3	2.0	39.5	3340

- **Standard** : BS 5467.
- **Rated Voltage** : 0.6 / 1 kv.
- **Conductor** : Stranded Compact Copper Conductor.
- **Insulation** : XLPE.
- **Bedding** : Extruded PVC.
- **Armouring** : Single layer of Galvanised Steel Wire.
- **Sheathing** : Extruded PVC.
- **Operating Temperature** : 90°C for continuous operation 250°C for short circuit condition.

### Note :

- 1) Above data is approximate and subject to manufacture tolerance.
- 2) Cables are also available with Aluminium Conductor, PVC Insulation and LS sheath.
- 3) Cables can be offered with FR & LSF properties.
- 4) Cables can be offered with IEC 60502-1 specification.

- **Standard** : BS 6346
- **Rated Voltage** : 0.6 / 1 kv.
- **Conductor** : Stranded Compact Copper Conductor.
- **Insulation** : PVC.
- **Bedding** : Extruded PVC.
- **Armouring** : Single layer of Galvanised Steel Wire.
- **Sheathing** : Extruded PVC.
- **Operating Temperature** : 70°C for continuous operation 160°C for short circuit condition.

### Note :

- 1) Above data is approximate and subject to manufacture tolerance.
- 2) Cables are also available with XLPE Insulation.
- 3) Cables can be offered with FR & LSF properties.
- 4) Cables can be offered with IEC 60502-1 specification.



## MEDIUM VOLTAGE CABLE

Core	Nominal Cross Section (mm <sup>2</sup> )	Nominal Insulation Thickness (mm)	Steel Wire Diameter (mm)	Nominal Sheath Thickness (mm)	Approx. O/D. (mm)	Approx. Cable Weight (Kg/Km)
3.6/6 (7.2) kv.	3 x 35	2.5	2.0	2.3	42.9	3400
	3 x 50	2.5	2.5	2.4	46.5	4400
	3 x 70	2.5	2.5	2.5	50.6	5400
	3 x 95	2.5	2.5	2.6	54.5	6300
	3 x 120	2.5	2.5	2.8	58.1	7200
	3 x 150	2.5	2.5	2.9	61.1	8300
	3 x 185	2.5	2.5	3.0	65.2	9600
	3 x 240	2.6	2.5	3.2	70.7	11800
	3 x 300	2.8	3.15	3.4	78.5	15000
3 x 400	3.0	3.15	3.6	85.5	18300	
6/10 (12) kv.	3 x 35	3.4	2.5	2.4	48.5	4300
	3 x 50	3.4	2.5	2.5	51.0	5000
	3 x 70	3.4	2.5	2.7	55.3	5800
	3 x 95	3.4	2.5	2.8	59.2	6900
	3 x 120	3.4	2.5	2.9	62.6	8000
	3 x 150	3.4	2.5	3.0	65.6	8900
	3 x 185	3.4	2.5	3.1	69.7	10300
	3 x 240	3.4	3.15	3.3	75.0	13900
3 x 300	3.4	3.15	3.5	81.5	15500	
8.7/15 (17.5) kv.	3 x 35	4.5	2.5	2.6	54.0	4900
	3 x 50	4.5	2.5	2.7	56.6	5500
	3 x 70	4.5	2.5	2.8	60.7	6500
	3 x 95	4.5	2.5	2.9	64.5	7600
	3 x 120	4.5	2.5	3.1	68.2	8700
	3 x 150	4.5	2.5	3.2	71.2	9600
	3 x 185	4.5	3.15	3.3	75.2	11300
	3 x 240	4.5	3.15	3.5	81.7	14100
	3 x 300	4.5	3.15	3.6	86.8	16500
3 x 400	4.5	3.15	3.9	93.3	19500	
12/20 (24) kv.	3 x 35	5.5	2.5	2.8	61.5	6130
	3 x 50	5.5	2.5	2.9	64.2	6770
	3 x 70	5.5	2.5	3.0	68.2	7780
	3 x 95	5.5	2.5	3.1	72.1	8930
	3 x 120	5.5	2.5	3.2	75.8	10030
	3 x 150	5.5	3.15	3.4	80.7	12400
	3 x 185	5.5	3.15	3.5	84.5	13880
	3 x 240	5.5	3.15	3.6	90.4	16200
	3 x 300	5.5	3.15	3.8	95.2	18600
3 x 400	5.5	3.15	4.0	102.1	21560	
18/30 (36) kv.	3 x 50	8.0	2.5	3.3	74	8740
	3 x 70	8.0	3.15	3.4	81.7	10470
	3 x 95	8.0	3.15	3.5	85.8	11770
	3 x 120	8.0	3.15	3.6	89.1	12950
	3 x 150	8.0	3.15	3.7	92.7	14480
	3 x 185	8.0	3.15	3.9	96.5	16010
3 x 240	8.0	3.15	4.0	102.4	18500	
3 x 300	8.0	3.15	4.2	107.2	20950	

- **Standard** : IEC 60502.
- **Conductor** : Circular Stranded Compact Copper conductor.
- **Conductor Screen** : Extruded Layer of Semi Conducting Material.
- **Insulation** : XLPE.
- **Insulation Screen** : Extruded Layer of stripable Semi-conducting Material.
- **Metallic Screen** : Copper Tape.
- **Bedding** : Extruded PVC over non-hygroscopic filler.
- **Armouring** : Single layer of galvanised Steel Wire.
- **Sheating** : Extruded PVC.
- **Operating Temperature** : 90°C for continuous operation  
250°C for short circuit conditions.

**Note :**

- 1) Above data is approximate and subject to manufacture tolerance.
- 2) Cables are also available with Aluminium conductors, Copper wire Screen and LSF Outersheath.
- 3) Single core cables are also available on request.
- 4) Cables can be offered with BS & 6622



## OVERALL SCREENED ARMoured INSTRUMENTATION CABLE

No. of Pairs /	Nominal Conductor Area (mm <sup>2</sup> )	Nominal Conductor Stranding (# / mm)	Insulation Thickness (mm)	Nominal Diameter Under Armour (mm)	Armour Wire Diameter (mm)	Nominal O/D (mm)	Approx. Cable Weight (Kg/Km)
1P	0.50	16/0.2	0.6	7.00	0.90	11.40	255.00
2P	0.50	16/0.2	0.6	7.90	0.90	12.30	305.00
5P	0.50	16/0.2	0.6	13.10	0.90	17.90	610.00
10P	0.50	16/0.2	0.6	17.20	1.25	22.90	1060.00
20P	0.50	16/0.2	0.6	22.30	1.60	29.10	1800.00
1T	0.50	16/0.2	0.6	7.30	0.90	11.70	280.00
1P	0.75	24/0.2	0.6	7.30	0.90	11.70	305.00
2P	0.75	24/0.2	0.6	8.30	0.90	12.90	360.00
5P	0.75	24/0.2	0.6	14.30	1.25	19.80	820.00
10P	0.75	24/0.2	0.6	18.70	1.60	25.30	1380.00
20P	0.75	24/0.2	0.6	24.50	1.60	31.30	2080.00
1T	0.75	24/0.2	0.6	7.70	0.90	12.10	330.00
1P	1.50	7/0.53	0.6	8.30	0.90	12.90	360.00
2P	1.50	7/0.53	0.6	9.70	0.90	14.30	460.00
5P	1.50	7/0.53	0.6	16.40	1.25	22.10	1040.00
10P	1.50	7/0.53	0.6	21.60	1.60	28.40	1610.00
20P	1.50	7/0.53	0.6	28.50	1.60	35.70	2630.00
1T	1.50	7/0.53	0.6	8.90	0.90	13.50	380.00

- Note :**
- 1) Above data is approximate and subject to manufacture tolerance.
  - 2) Cables are also available with LDPE Insulation and LSF Outersheath.

## INDIVIDUAL & OVERALL SCREENED ARMoured INSTRUMENTATION CABLE

No. of Pairs /	Nominal Conductor Area (mm <sup>2</sup> )	Nominal Conductor Stranding (# / mm)	Insulation Thickness (mm)	Nominal Diameter Under Armour (mm)	Armour Wire Diameter (mm)	Nominal O/D (mm)	Approx. Cable Weight (Kg/Km)
2P	0.5	16/0.20	0.6	12.0	0.9	16.8	505
5P	0.5	16/0.20	0.6	15.2	1.25	20.9	830
10P	0.5	16/0.20	0.6	21.1	1.6	27.9	1420
20P	0.5	16/0.20	0.6	27.3	1.6	34.3	2040
2P	0.75	24/0.20	0.6	12.8	0.9	17.6	545
5P	0.75	24/0.20	0.6	16.3	1.25	22.0	1005
10P	0.75	24/0.20	0.6	22.7	1.6	29.5	1760
20P	0.75	24/0.20	0.6	29.8	2	37.8	2640
2P	1.5	7/0.53	0.6	14.7	1.25	20.4	800
5P	1.5	7/0.53	0.6	18.8	1.6	25.4	1290
10P	1.5	7/0.53	0.6	26.5	1.6	33.5	1990
20P	1.5	7/0.53	0.6	34.4	2	42.6	3310

- Note :**
- 1) Above data is approximate and subject to manufacture tolerance.
  - 2) Cables are also available with LDPE Insulation and LSF Outersheath.

- **Standard :** BS 5308
- **Conductors :** Stranded (Class2) or Flexible (Class 5) Copper conductors.
- **Insulation :** PVC Insulation.
- **Pair Identification :** Pairs will be numbered, each pair containing 1 white and 1 blue core.
- **Collective Screen :** Aluminium Mylar tape with tinned Copper Drain Wire.
- **Bedding :** PVC.
- **Armouring :** Galvanised Steel Wires.
- **Outer Sheath :** PVC.
- **Voltage Rating :** 300 / 500 V.
- **Temp. Rating :** 70°C max. conductor operating temperature.

- **Standard :** BS 5308
- **Conductors :** Stranded (Class2) or Flexible (Class 5) Copper conductors.
- **Insulation :** PVC Insulation.
- **Pair Identification :** Pairs will be numbered, each pair containing 1 white and 1 blue core.
- **Individual Screen :** Aluminium Mylar Tape with Tinned Copper Drain Wire.
- **Pair Identification :** Numbered tape applied over each individually screened pair.
- **Collective Screen :** Aluminium Mylar tape with tinned Copper Drain Wire.
- **Bedding :** PVC.
- **Armouring :** Galvanised Steel Wires.
- **Outer Sheath :** PVC.
- **Voltage Rating :** 300 / 500 V.
- **Temp. Rating :** 70°C max. conductor operating temperature.



## FOAM SKIN UNARMoured & ARMoured TELEPHONE CABLES

No. of Pairs /	Solid Conductor Dia (Nominal)	Insulation Thickness Nominal (mm)	Diameter Over Inner Sheath (Nominal)	G. S. Tape Armour Size & Thickness (Nominal)	Outer Dia Nominal (mm)	Approx. Cable Weight (Kg/Km)
10	0.4	0.16	9.3	25 x 0.4	14.1	292
20	0.4	0.16	11.2	25 x 0.4	16.0	377
30	0.4	0.16	12.7	25 x 0.4	17.5	450
50	0.4	0.16	15.0	25 x 0.4	20.0	580
100	0.4	0.16	19.3	30 x 0.4	24.1	867
200	0.4	0.16	25.8	30 x 0.4	31.0	1416
300	0.4	0.16	30.4	30 x 0.4	35.6	1893
400	0.4	0.16	34.7	40 x 0.4	40.3	2400
600	0.4	0.16	41.5	40 x 0.4	47.0	3315
800	0.4	0.16	47.5	40 x 0.4	53.5	4248
900	0.4	0.16	50.0	40 x 0.4	56.0	4677
1000	0.4	0.16	52.5	40 x 0.4	58.4	5101
1200	0.4	0.16	57.2	40 x 0.4	63.6	6019
1600	0.4	0.16	65.5	40 x 0.4	72.3	7767
1800	0.4	0.16	69.0	40 x 0.4	75.9	8589

- **Standard** : IEC 708 - 1 & 2
- **Conductors** : Solid round wire of annealed copper.
- **Insulation** : Foam – Skin.
- **Pair Identification** : As per IEC.
- **Filling Compound** : Jelly.
- **Core Wrap** : Polyester Film.
- **Inner Sheath** : Polythelene.
- **Armouring Tape** : G. S. Tape.
- **Outer Sheathing** : Polythelene.

## FOAM SKIN UNARMoured & ARMoured TELEPHONE CABLES

No. of Pairs /	Solid Conductor Dia (Nominal)	Insulation Thickness Nominal (mm)	Diameter Over Inner Sheath (Nominal)	G. S. Tape Armour Size & Thickness (Nominal)	Outer Dia Nominal (mm)	Approx. Cable Weight (Kg/Km)
10	0.5	0.2	10.25	25 x 0.4	15.00	334
20	0.5	0.2	12.50	25 x 0.4	17.50	447
30	0.5	0.2	14.30	25 x 0.4	19.20	547
50	0.5	0.2	17.10	30 x 0.4	22.00	727
100	0.5	0.2	22.25	30 x 0.4	27.00	1129
200	0.5	0.2	30.00	30 x 0.4	35.20	1900
300	0.5	0.2	36.00	40 x 0.4	41.50	2640
400	0.5	0.2	40.50	40 x 0.4	46.20	3310
600	0.5	0.2	49.00	40 x 0.4	55.00	4714
800	0.5	0.2	56.20	40 x 0.4	62.50	6072
900	0.5	0.2	59.20	40 x 0.4	65.60	6707
1000	0.5	0.2	62.00	40 x 0.4	68.50	7337
1200	0.5	0.2	67.80	40 x 0.4	74.50	8675
1600	0.5	0.2	77.25	40 x 0.4	84.00	11144
1800	0.5	0.2	81.80	40 x 0.4	88.80	12419

- **Standard** : IEC 708 - 1 & 2.
- **Conductors** : Solid round wire of annealed copper.
- **Insulation** : Foam – Skin.
- **Pair Identification** : As per IEC.
- **Filling Compound** : Jelly.
- **Core Wrap** : Polyester Film.
- **Inner Sheath** : Polythelene.
- **Armouring Tape** : G. S. Tape.
- **Outer Sheathing** : Polythelene.

## XLPE INSULATED LEAD SHEATHED POWER AND CONTROL CABLES TO BS 5467 & 600/1000V EEMUA 133

	Nominal area of conductor  mm <sup>2</sup>	Approximate Diameter			Approximate	
		Over Lead  mm	Armour Cable  mm	Overall Cable  mm	Cable Weight Copper  kg/km	Cable Weight Aluminium  kg/km
S I N G L E	50*	13.0	1.6	20.8	1300	1005
	70*	15.0	1.6	22.6	1620	1190
	95*	16.8	1.6	24.5	2040	1451
	120*	18.5	1.6	26.2	2380	1621
	150	20.5	1.6	28.5	2840	1928
	185	22.8	1.6	30.8	3365	2222
	240	25.5	1.6	33.5	4180	2676
	300	28.1	1.6	36.4	5060	3174
	400	32.3	2.0	41.8	6400	4003
	500	37.0	2.0	46.6	8000	4942
C O R E	630	40.8	2.0	50.8	9720	5734
	800	47.5	2.5	59.2	12700	7561
	1000	52.5	2.5	64.2	15400	9034
	1.5	8.6	0.9	14.0	640	–
	2.5	9.5	0.9	15.0	730	–
T W O	4	10.8	0.9	16.5	840	–
	6	11.6	0.9	17.5	960	–
	10	13.7	0.9	19.8	1180	–
	16	15.5	1.25	21.8	1540	–
	25	18.9	1.25	25.5	2060	1745
	35	21.3	1.6	30.0	2670	2230
	50+	19.0	1.6	27.2	2640	2062
	70	22.2	1.6	30.5	3400	2570
	95	24.8	2.0	34.5	4530	3380
	T H R E E	1.5	9.2	0.9	14.5	700
2.5		10.4	0.9	16.0	815	–
4		11.4	0.9	17.0	920	–
6		13.0	0.9	18.5	1080	–
10		14.8	1.25	21.5	1500	–
16		16.5	1.25	23.0	1750	–
25		20.5	1.6	28.6	2650	2180
35		23.0	1.6	31.2	3220	2560
50+		24.0	1.6	32.0	3630	2764
70		26.5	1.6	35.0	4560	3315
95		30.5	2.0	40.5	6110	4385
120		33.5	2.0	43.5	7300	5129
150		37.8	2.5	49.4	8980	6325
185		42.8	2.5	54.5	10870	7530
240		48.2	2.5	60.2	13500	9110
300	52.2	2.5	65.2	16150	10630	
F O U R	1.5	10.1	0.9	15.6	765	–
	2.5	11.1	0.9	16.8	870	–
	4	12.8	0.9	18.5	1030	–
	6	13.8	1.25	20.3	1330	–
	10	16.5	1.25	22.8	1670	–
	16	18.8	1.25	25.5	2120	–
	25+	20.5	1.6	28.5	2800	2160
	35	23.2	1.6	31.3	3430	2550
	50	26.2	1.6	34.6	4200	3050
	70	30.5	2.0	40.5	5850	4150
	95	34.8	2.0	44.8	7340	4975
	120	37.8	2.5	49.8	9400	6432
	150	43.2	2.5	55.0	11280	7630
	185	47.8	2.5	60.0	13600	9020
	240	53.8	2.5	66.5	17000	10980

- Note :**
- 1) Cable with 1.6mm wire armour, a deviation from BS 5467.
  - 2) Tolerance on the above dimensions are -0.3mm and +0.5 mm.
  - 3) Cable sizes marked + and higher have sector shaped conductors.

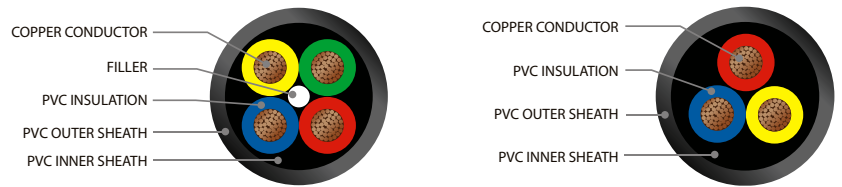
## LEAD SHEATHED XLPE INSULATED CABLES TO BS 5467 AND EEMUA 133 600/1000V

No. of Cores	Approximate Diameter			Approx. weight kg/km
	Over Lead mm	Armour Wire mm	Overall Cable mm	
Nominal area of conductor 1.5 mm <sup>2</sup>				
5	10	0.9	16.2	780
7	11.12	0.9	17.5	875
10	13.6	1.25	20.7	1230
12	14.2	1.25	21.3	1265
19	16.6	1.25	23.9	1620
24	19.4	1.6	28.0	2122
27	20.1	1.6	28.7	2553
32	21.5	1.6	30.1	2567
37	22.6	1.6	31.2	2732
48	26.3	1.6	35.1	3355
Nominal area of conductor 2.5 mm <sup>2</sup>				
5	11.6	0.9	17.8	953
7	12.6	0.9	18.8	1080
10	16.0	1.25	23.4	1460
12	16.8	1.25	24.0	1600
19	20.0	1.6	28.5	2318
24	23.4	1.6	31.8	2810
27	24.2	1.6	32.4	3064
32	26.0	1.6	35.0	3400
37	27.2	1.6	36.0	3656
48	31.7	2.0	42.1	4908
Nominal area of conductor 4.0 mm <sup>2</sup>				
5	12.9	0.9	19.3	1140
7	14.1	1.25	21.2	1370
10	18.3	1.6	26.7	2070
12	18.9	1.6	27.3	2205
19	22.5	1.6	31.1	2990
24	26.6	1.6	34.6	3590
27	27.3	1.6	36.3	3775
37	30.8	2.0	41.2	4990
48	35.8	2.0	46.4	6125

## COPPER CONDUCTOR XLPE INSULATED LEAD SHEATHED 3 CORE CABLES TO BS 5467 & 1900/3300V EEMUA 133

Nominal Area of Conductor mm <sup>2</sup>	Approximate Diameter			Approx. weight kg/km
	Over Lead mm	Armour Wire mm	Overall Cable mm	
16	22.5	1.6	31.0	2640
25	25.0	1.6	33.5	3230
35	27.5	1.6	36.0	3775
50+	26.0	2.0	36.0	4360
70	31.0	2.0	41.0	5500
95	35.2	2.0	45.5	6900
120	37.0	2.5	49.0	8450
150	41.2	2.5	53.2	9800
185	44.0	2.5	56.0	11350
240	49.4	2.5	62.2	14000
300	53.0	2.5	66.0	16350

- Note :**
- 1) Cable marked + and higher have sector shaped conductors.
  - 2) Tolerance on the above dimensions are -0.3mm and +0.5mm.



### 3 CORE AND 4 CORE ROUND SUBMERSIBLE CABLES

Nominal area of the conductor (mm <sup>2</sup> )	Nos / Size of Wire (Nos / mm)	Nominal Insulation Thickness (mm)	3 Core Round		4 Core Round		Max. Conductor Resistance at 20° C (Ohm/Km)	Current carrying capacity at 40° C (Amps.)
			Nominal Sheath Thickness (mm)	Approx. Overall Dimensions (mm)	Nominal Sheath Thickness (mm)	Approx. Overall Dimensions (mm)		
1.50	22/0.30	0.80	1.50	10.00	1.50	10.80	12.10	14.00
2.50	36/0.30	0.90	1.50	11.00	1.65	12.50	7.41	18.00
4.00	56/0.30	1.00	1.60	13.00	1.65	14.10	4.95	26.00
6.00	85/0.30	1.00	1.60	14.60	1.65	16.00	3.30	31.00
10.00	140/0.30	1.00	2.00	18.00	2.00	20.35	1.91	42.00
16.00	226/0.30	1.00	2.00	21.20	2.00	23.40	1.21	57.00
25.00	354/0.30	1.20	2.15	26.00	2.20	28.80	0.780	72.00
35.00	495/0.30	1.20	2.15	28.30	2.20	31.50	0.554	90.00
50.00	703/0.30	1.40	2.25	33.50	2.30	37.30	0.386	115.00
70.00	440/0.45	1.40	2.45	37.80	2.60	42.20	0.272	143.00
95.00	475/0.50	1.60	2.40	43.50	2.65	48.80	0.206	165.00

- **Conductor:** High purity electrolytic grade bright annealed flexible bunched bare copper conductor according to international standards like IEC- 228
- **Insulation:** PVC Type 'A' insulation
- **Inner Sheath:** PVC
- **Outer Sheath:** PVC

**Note :**

- 1) The number of wires is approximate and wire diameter is nominal; they shall be such as to satisfy the requirements of conductor resistance as per Class 5 of IEC 60228 / DIN VDE 0295 / IS 8130 / BS 6360.
- 2) In view of continuous improvements in our design and process, specifications given here in are subject change without notice.
- 3) IF REQUIRED WE CAN ALSO SUPPLY 3 CORE & 4 CORE SUBMERSIBLE CABLES WITH FLAT FORMATION.



# RECENT MAJOR PROJECTS - Setting Benchmarks

## POWER

- 1 ELECTRICITY COMPANY OF GHANA MANUFACTURED, TESTED & SUPPLIED 150 KMS OF M.V AND L.V. CABLES FOR VARIOUS ELECTRIFICATION PROJECTS IN GHANA. FURTHER EXECUTING ANOTHER 180 KMS THROUGH EPC CONTRACTORS
- 2 4 X 250 MW MEGA THERMAL POWER PLANT AT RAIGARH, A PRESTIGIOUS GREEN FIELD POWER PLANT BUILT BY JINDAL POWER LTD. FOR O.P. JINDAL SUPER THERMAL POWER PLANT AT TAMNAR, CHATTISGARH. MANUFACTURED, TESTED, & SUPPLIED 1946 KMS OF HT LT POWER AND CONTROL CABLE.
- 3 4 X 300 MW MEGA THERMAL POWER PLANT AT CHATTISGARH, A PRESTIGIOUS GREEN FIELD POWER PLANT BUILT BY LANCO INFRATECH LTD. FOR AMARKANTAK THERMAL POWER PLANT AT KORBA MANUFACTURED, TESTED, & SUPPLIED 428 KMS OF HT, LT POWER AND CONTROL CABLE.
- 4 2 X 300 MW THERMAL POWER PLANT AT YAMUNANAGAR. A PRESTIGIOUS GREEN FIELD POWER PLANT BUILT BY RELIANCE ENERGY FOR HARYANA POWER GENERATION CORPN. MANUFACTURED, TESTED, & SUPPLIED 1448 KMS OF HT, LT & INSTRUMENTATION CABLE.
- 5 4 X 330 MW THERMAL POWER PLANT AT KUTCH, GUJARAT, A PRESTIGIOUS GREEN FIELD POWER PLANT BUILT BY ADANI POWER LTD. FOR MUNDRA THERMAL POWER PROJECT EXECUTING 300 KM. OF HT LT POWER AND CONTROL CABLE ORDER.
- 6 2 X 250 MW THERMAL POWER PLANT AT MEJIA, A PRESTIGIOUS GREEN FIELD POWER PLANT BUILT BY BHARAT HEAVY ELECTRICALS FOR DVC-MEJIA THERMAL POWER PROJECT MANUFACTURED, TESTED, & SUPPLIED 1261 KMS OF HT, LT POWER & CONTROL CABLE.
- 7 2 X 125 MW CPP PLANT AT DUBURI, ORISSA A PRESTIGIOUS GREEN FIELD POWER PLANT BUILT BY JINDAL STAINLESS LTD. MANUFACTURED, TESTED, & SUPPLIED 855 KMS OF HT, LT POWER & CONTROL CABLE.
- 8 NUCLEAR POWER CORPORATION. TARAPUR - A PRESTIGIOUS BROWNFIELD PROJECT OF UNIT III & IV MANUFACTURED, SHOP TESTING, INSPECTION & SUPPLIED 475 KMS OF LT POWER & CONTROL CABLE THROUGH EPC CONTRACTOR M/S LARSEN & TOUBRO LTD.
- 9 NUCLEAR POWER CORPORATION- KAIGA A PRESTIGIOUS BROWNFIELD PROJECT OF UNIT 5 & 6 MANUFACTURED, SHOP TESTING, INSPECTION & SUPPLIED 950 KMS OF LT POWER, CONTROL CABLES & RADIATION CABLE, THROUGH EPC CONTRACTOR M/S RELIANCE ENERGY LTD.
- 10 NUCLEAR POWER CORPORATION- RAPP A PRESTIGIOUS BROWNFIELD PROJECT OF UNIT 5 & 6 MANUFACTURED, SHOP TESTING, INSPECTION & SUPPLIED 922 KMS OF LT POWER, CONTROL CABLES & RADIATION CABLE, THROUGH EPC CONTRACTOR M/S RELIANCE ENERGY LTD.
- 11 NATIONAL THERMAL POWER CORPORATION LTD (NTPC) 3 X 660MW GREENFIELD THERMAL POWER PROJECT BARH MANUFACTURED, SHOP TESTED, INSPECTION & SUPPLIED 1175 KMS OF HT CABLES & LT CABLES FOR THE ABOVE PROJECT.

## CEMENT

- 1 PRESTIGIOUS BROWN FIELD PROJECT OF ZAMBEZI PORTLAND CEMENT CO. ZAMBIA MANUFACTURED, TESTED & SUPPLIED 250 KMS OF L.V. INSTRUMENTATION AND MV CABLES.
- 2 PRESTIGIOUS BROWN FIELD PROJECT OF BINANI CEMENT FACTORY L.L.C DUBAI, UAE MANUFACTURED TESTED & SUPPLIED 80 KMS OF L.V., M.V.
- 3 A PRESTIGIOUS GREEN FIELD PROJECT BUILT BY GRASIM CEMENT FOR KOTPUTLI, GINIGERA, RAIPUR PROJECTS EXECUTING 2063 KM. OF LT POWER AND CONTROL & INSTRUMENTATION CABLE ORDERS.
- 4 A PRESTIGIOUS BROWN FIELD CEMENT PLANT BUILT BY CHETTINAD CEMENT EXECUTING 968 KM. OF HT, LT POWER AND CONTROL & INSTRUMENTATION CABLE ORDERS.

## PETROLEUM

- 1 PRESTIGIOUS BROWN FIELD PROJECT AT ABU DHABI FOR BOROUGE RUWAIS 2 PROJECT. MANUFACTURED, TESTED & SUPPLIED 1200 KMS OF L V, M.V., INSTRUMENTATION AND FLEXIBLE CABLES. THROUGH EPC CONTRACTOR LINDE ENGINEERING GERMANY.
- 2 PRESTIGIOUS BROWN FIELD PROJECT BEING BUILT FOR PETROLEUM DEPARTMENT OF OMAN. MANUFACTURED, TESTED & SUPPLIED 60 KMS OF M V CABLES. FOR QARN ALAM PROJECT THROUGH DODSAL ENGINEERING, OMAN
- 3 A PRESTIGIOUS BROWN FIELD PROJECT BUILT FOR IOCL - NAPHTHA CRACKER PROJECT EXECUTING 511 KM. OF HT, LT POWER AND CONTROL & INSTRUMENTATION CABLE ORDERS FOR THIS PROJECT THROUGH EPC CONTRACTORS LIKE L & T, TECHNIMONT, TOYO ENGG., IOTL.
- 4 A PRESTIGIOUS GREEN FIELD REFINERY PROJECT BUILT FOR BHARAT OMAN REFINERY LTD. THROUGH EIL. EXECUTING 1163 KMS. OF HT, LT POWER AND CONTROL & INSTRUMENTATION CABLE ORDERS.
- 5 A PRESTIGIOUS BROWN FIELD PROJECT BUILT FOR HINDUSTAN PETROLEUM CORPORATION LIMITED - MUMBAI FOR THEIR GREEN FUEL & EMISSION CONTROL PROJECT EXECUTED 1820 KM. OF HT, LT POWER AND CONTROL & INSTRUMENTATION CABLE ORDERS.

## STEEL

- 1 PRESTIGIOUS BROWN FIELD PROJECT OF AL GHURAIR IRON & STEEL LLC, ABU DHABI, U.A.E MANUFACTURED, TESTED & SUPPLIED 350 KMS OF M.V & L V CABLES.
- 2 A PRESTIGIOUS GREEN FIELD PROJECT BUILT BY JSW STEEL FOR SINTER PROJECT EXECUTING 1660 KM. OF LT POWER AND CONTROL & INSTRUMENTATION CABLE ORDERS.
- 3 A PRESTIGIOUS GREEN FIELD PROJECT BUILT BY JINDAL STAINLESS LTD. FOR DUBURI PROJECTS EXECUTING 960 KM. OF HT, LT POWER AND CONTROL CABLE ORDERS.



## EHV CABLES

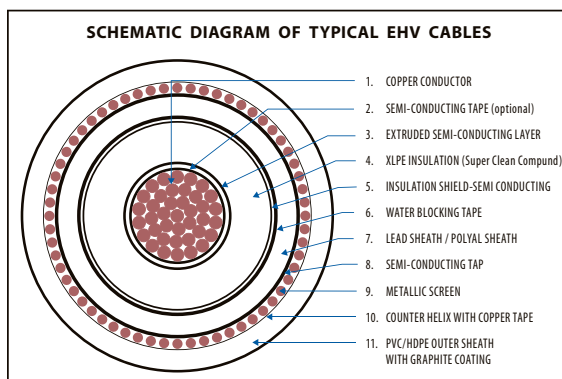
EHV cables can be used in a lot of industries like utilities, builders, government organizations, mining industries, state electricity boards, under ground railways and so on. Analysts say EHV under ground power transmission is the only solution for meeting today's growing power demand. This EHV cables will replace high voltage tower cables, which pose a risk of irreparable failure at any time and therefore will be in huge demand over the next decade.

The EHV cables can more or less survive all natural calamities and the installation can even withstand floods and earthquakes. This is huge contrast to the areas with overhead network, which are susceptible to strong flood and earthquake and have a possibility of pulling down the towers, which can be quite dangerous. EHV cables also have the following advantages as compared to others.

- More secured supply even during bad weather conditions
- Loss of transmission is lower
- Does not cause noise or air pollution
- Is underground and therefore saves space and is much better for urban transmission of electricity

### Salient features of Polycab's EHV / XLPE line

- The only manufacturer in the country to have 2 Dry cure / Dry cooled lines sourced from SCHOLZ Germany.
- Highly sophisticated extruders for conductor shield, insulation and insulation shield, employing a three layer single head triple extrusion method to eliminate contaminants in the insulating layers. These are sourced from ROYLE USA.
- Microprocessor based equipments control all the parameters required for the process within the specified limits.



- Separate pressurised rooms for semicon shield & XLPE insulation to avoid contamination and material handling by vacuum loaders.
- Air systems with air showers on doors to eliminate dust entry.

### Metallic Sheath

Metallic Sheath is must for cables above 33 kV as the cable of voltage grade 66 kV & above are working with dielectric stress of above 6 kV / mm & at this level of dielectric stress presence of water triggers tree formation in the insulation resulting in cable failure.

Water can enter the cable longitudinally as well as radially. Longitudinal water entry can be blocked by using water swellable tape on the core. Lead sheath can block the entry in radial direction.

Lead sheath is extruded by continuous lead extruder which is equipped with micro-processor based temperature controllers & drives to achieve uniform thickness, better concentricity. Lead sheath in addition to other electrical & manufacturing advantages has a life span of minimum 40 to 45 years.

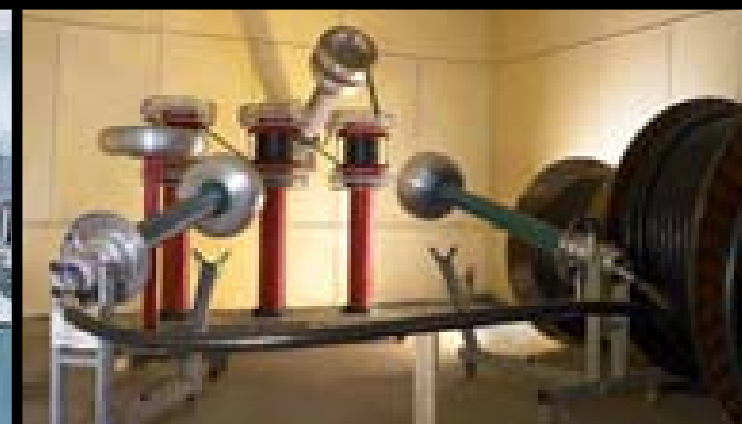
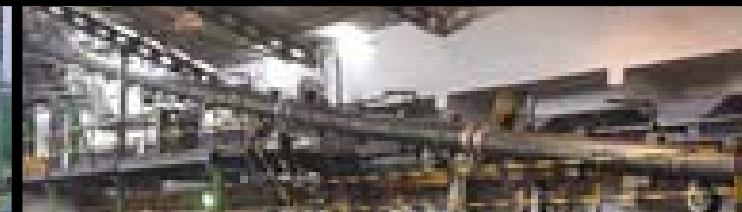
### Cable selection / Design parameters

Cable design mainly depends on

- System voltage
- Impulse level
- Fault level & duration
- Ground & air temperature
- Thermal resistivity of soil

### Breakthrough in EHV cables

Polycab has produced a sample length of 66kv cable for qualifying the electrical and other tests that are carried out at CPRI Bangalore. We tasted our success as the sample length passed all routine and type tests at CPRI. This gave us tremendous confidence and brightened our prospects to enable us to bag the first commercial order for 66kv cable from India's leading and largest power transmission company PGCIL – Bangalore. Inview of above we have now produced a sample length for 132kv cable for carrying out the tests at CPRI Bangalore. We look forward to continuously improve and upgrade our manufacturing process so that our journey to the next higher voltage grade of cables is easier, smooth and faster.



Production Facilities at Daman Factory



POLYCAB is spreading its markets abroad  
with a dedicated export cell.

**EXPORTED WORLD WIDE :**

Australia	Nigeria
Canada	Oman
Congo	Qatar
Egypt	Rwanda
Europe	South Africa
Ghana	South Korea
Iran	Sri Lanka
Iraq	Sudan
Jordan	Syria
Kuwait	Tanzania
Libya	U.A.E.
Malaysia	Uganda
Mauritius	Zambia
New Zealand	Zanzibar



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***POLYCAB CABLES PVT. LTD.***

(an ISO 9001:2000 Company)

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