



# INDIA'S FIRST 100% LEAD FREE WIRES

Started up as a small-scale cable unit more than 60 years ago and became one of the nation's leading cables manufacturing company.

INDUSTRIAL CABLES



Paramount Communications Ltd., part of the Paramount Cables Group started up as a small- scale cable unit more than 60 years ago and became one of the nation's leading cables manufacturing company. Our journey has been laced with hard work and perseverance and today we have our presence in the public and the private sectors dealing with Power, Telecom, Defense, Railways, Infrastructure and Space Research. With the experience, expertise and efficiency, we have carved a niche in the global cable industry.

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## MESSAGE FROM THE CHAIRMAN

*It has been an incredible journey that started with a simple dream of providing world class and cost effective products to feed the growing Indian market.*

Our founder, Late Mr Shyam Sundar Aggarwal established Paramount Cables as a small firm in 1955 with a manufacturing setup of one machine and a handful of employees.

Today, more than 60 years later, we have grown into an industry leader with a group turnover of Rs 400 crore with a complete range of cables including House Wiring, CATV Cables, Optical Fiber cables for Telecom & Defence, High Voltage & Low Voltage Power Cables, Control & Instrumentation Cables etc, with almost all the esteemed customers and approvals in India and exports to more than 50 countries.

Paramount has always laid a great emphasis on manufacturing excellence, technological advancement and customer satisfaction. We believe that the relationship built with our customers is our biggest asset and is our motivation to keep providing them with the best-in-class products.

*Thank you for choosing Paramount Cables as your trusted Wires & Cables partner.*

*~ Sanjay Aggarwal*  
CEO & CHAIRMAN PARAMOUNT GROUP



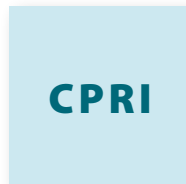
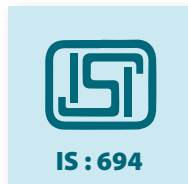
# ACCREDITATIONS

**Bureau of Indian Standards (BIS)**  
**British Standard Specifications (BSS)**  
**American Standard for Testing Methods (ASTM)**  
**Indian Railway Specifications (IRS)**  
**Indian Telecom Department (ITD)**  
**Telecom Engineering Centre (TEC)**



**Toyo Engineering India Ltd**  
**Tata Projects**  
**Bongaigaon Refinery & Petrochemical Ltd**  
**Andhra Pradesh Power Generation Corp Ltd**

<b>L&amp;T</b>	<b>HUDA</b>	<b>BESCOM</b>
<b>PWD</b>	<b>PGCIL</b>	<b>DHBVN</b>
<b>NTPC</b>	<b>CPWD</b>	<b>UHBVN</b>
<b>BHEL</b>	<b>SAIL</b>	<b>NALCO</b>
<b>BSNL</b>	<b>HPCL</b>	<b>CIDCO</b>
<b>BSES</b>	<b>IOCL</b>	<b>MECON</b>
<b>RDSO</b>	<b>NBCC</b>	<b>PGCIL</b>
<b>HPCL</b>	<b>NPCIL</b>	<b>OPTCL</b>

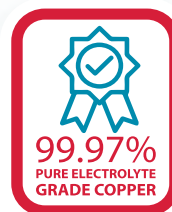


*Our quality is ensured by the Tariff Advisory Committee & has Fire Insurance Approval.*

- High-tech German multi-draw and bunching machines for greater flexibility.
- Easy to pull through conduits.
- PVC –fire retardant-high oxygen and temperature index.
- The insulation for high resistance and dielectric strength.
- Wires subjected to High Voltage Spark Testing to ensure quality.
- IS 694:2010 certification gives safety from electrical shocks, short circuits & fires.
- Products subjected to stringent tests and quality control measures at Quality Assurance & Testing Labs.
- Guaranteed 90 meters packing length.



\* conditions apply



A 'PARAMOUNT' EDGE



- The 100% Lead-free factor makes our wires non-toxic and completely safe
- The 99.97% pure Copper wires are high on quality and energy saving
- 100% conductivity which helps save energy and lower electricity bills.
- LFHR FRLS wires emit very low smoke and gas
- Environment friendly as there is NO release of Halogen into the atmosphere; thus protection of the ozone layer

*These factors are predominant in the manufacturing of the Paramount Cables at our state-of-the-art plant in Khushkhera, Rajasthan and Dharuhera, Haryana.*

*Our wires have a long life and with our safe wiring solutions, you ensure that your family has a secure & long life too!*

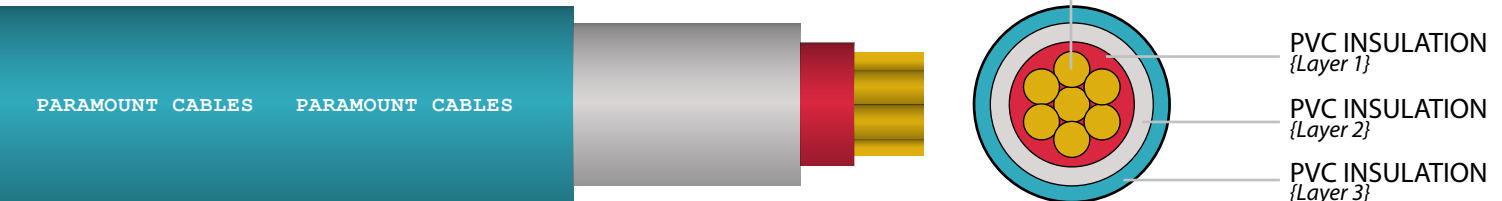




*THE 'PARAMOUNT'  
ENVIRONMENT  
ADVANTAGE*



# PVC INSULATED INDUSTRIAL CABLES



## ● LF FR ELECTRICAL WIRES: (LEAD-FREE FIRE RETARDANT)

- » PVC used is fire-retardant because of the high oxygen & temperature index.
- » Insulation has high resistance and dielectric strength and is applied over the conductor by dual extrusion using sophisticated machinery.
- » The wires are subjected to High Voltage Spark Testing to ensure quality.

### APPLICATIONS:

Designed for use in fire situations where the spread of flames along a cable route needs to be retarded.

## ● LFHR FRLS ELECTRICAL WIRES: (LEAD FREE HEAT RESISTANT FLAME RETARDANT LOW SMOKE)

- » In addition to the basic properties of LF FR; LFHR FRLS wires have toxic fumes suppressing properties.
- » Emit very little smoke and gas aiding easy evacuation in case of a fire.

### APPLICATIONS:

Ideal for concealed and conduit wiring in high-rise buildings like hotels, hospitals, factories, commercial or residential complexes.

## ● LFHR ZHLS ELECTRICAL WIRES: (LEAD FREE HEAT RESISTANT ZERO HALOGEN LOW SMOKE)

- » Wires manufactured using the specially-formulated insulation material from the hydrocarbon family of insulants which contain ZERO HALOGEN.
- » Ensure the visibility in the rare case of a fire.
- » People trapped can breathe and be rescued faster.

### APPLICATIONS:

Ideal for enclosed spaces like shopping malls, metro stations, sports stadium, schools, high safety and security complexes like nuclear power plants and military installations.





CONDUCTOR AREA	NOMINAL THICKNESS OF INSULATION	NO. OF WIRE/ DIA OF CONDUCTOR	MAXIMUM OVERALL DIAMETER	CONDUCTOR RESISTANCE AT 20° C MAX	CURRENT RATING # 2 CABLES SINGLE PHASE		AS PER SPECIFICATION
					CASING	CONCEALED	
Sq.mm	(mm)	(mm)	(mm)	Ohm/km	(Amps)	(Amps )	
1.00	0.7	14/0.3	3.2	18.10	14	13	Conductor Class 2 of IS 8130 : 1984 as per amendment no. 3
1.50	0.7	22/0.3	3.4	12.10	18	16	Conductor Class 2 of IS 8130 : 1984
2.50	0.7	50/0.25	4.1	7.98	24	20	Conductor Class 5 of IS 8130 : 1984
4.00	0.8	56/0.3	4.8	4.95	32	26	Conductor Class 5 of IS 8130 : 1984
6.00	0.8	84/0.3	5.6	3.30	42	35	Conductor Class 5 of IS 8130 : 1984

**INDUSTRIAL CABLES**

# As per IS 3961 (Part V) - 1968 ## For guidance only BIS license No. : CML2044565 \*According to Class- 2 of IS 8130 : 1984, \*\* According to Class 5 of IS 8130 : 1984 Special colours on order, standard coil length 90mtrs.

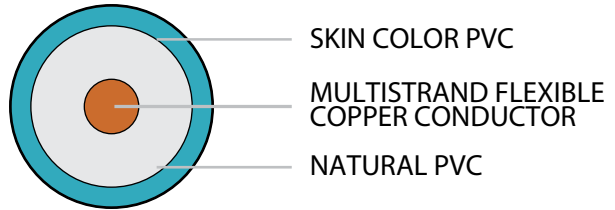
## COMPARATIVE PROPERTIES OF PARAMOUNT WIRES

	NORMAL PVC WIRES	HEAT RESISTANT (HR PVC)	FIRE RETARDANT (FR PVC)	FIRE RETARDANT LOW SMOKE (FRLS)	ZERO HALOGEN LOW SMOKE (ZHLS)
<b>INSULATION MATERIAL</b>	PVC	PVC	Special PVC	Special PVC	Special Polymer
<b>INSULATION PROPERTY</b>	Normal	Good	Good	Good	Very Good
<b>TEMPERATURE RATING</b>	70°C	85°C	70°C	70°C	85°C
<b>THERMAL STABILITY</b>	Normal	Good	Good	Good	Very Good
<b>FLAME RETARDANCY</b>	Good	Good	Very Good	Very Good	Excellent
<b>SAFETY DURING BURNING</b>	Average	Average	Good	Good	Excellent
<b>REQUIREMENT OF OXYGEN TO CATCH FIRE (% IN AIR)</b>	> 21 < 29	> 21 < 29	> 30	> 30	> 32
<b>TEMPERATURE REQUIREMENT TO CATCH FIRE (WITH 21 % OXYGEN )</b>	Room Temperature	Room Temperature	> 250°C	> 250°C	> 300°C
<b>VISIBILITY DURING CABLE BURNING (%)</b>	< 20	< 20	< 35	> 40	> 80
<b>RELEASE OF HALOGEN GAS DURING BURNING</b>	Normal	Normal	Normal	Normal	Less than 1% of cable weight
<b>ABRASION RESISTANCE DURING INSTALLATION</b>	Good	Good	Good	Good	Good

# FLEXIBLE CABLES

## ● SINGLE CORE FLEXIBLE CABLES

- » Cost-effective.
- » Color coding apart from the regular ones (Red/ Yellow/Blue/Black/ Green) can be provided on request subject to economical run.



### APPLICATIONS:

The flexible single core wire could be a good solution for any locations where the environment or corrosion could cause damage to the wiring.

CONDUCTOR AREA	NOMINAL THICKNESS OF INSULATION	NO. OF WIRE/ DIA OF CONDUCTOR	MAXIMUM OVERALL DIAMETER	CONDUCTOR RESISTANCE PER KM AT 20° C MAXIMUM	CURRENT CARRYING CAPACITY 2 CABLES SINGLE PHASE UNENCLOSED CLIPPED DIRECTLY TO A SURFACE	AS PER SPECIFICATIONS
Sq.mm	(mm)	(mm)	(mm)	Ohm/km	(Amps)	
0.50	0.6	16/0.2	2.60	39.00	6	Conductor Class 5 of IS 8130 : 1984
0.75	0.6	24/0.2	2.80	26.00	10	Conductor Class 5 of IS 8130 : 1984
1.0	0.6	32/0.2	3.00	19.50	14	Conductor Class 5 of IS 8130 : 1984
1.5	0.6	30/0.25	3.40	13.30	16	Conductor Class 5 of IS 8130 : 1984
2.5	0.7	50/0.25	4.10	7.98	26	Conductor Class 5 of IS 8130 : 1984
4.0	0.8	56/0.3	4.80	4.95	35	Conductor Class 5 of IS 8130 : 1984
6.0	0.8	84/0.3	5.30	3.30	44	Conductor Class 5 of IS 8130 : 1984
10.0	1.0	140/0.3	7.00	1.91	61	Conductor Class 5 of IS 8130 : 1984
16.0	1.0	126/0.4	8.10	1.21	82	Conductor Class 5 of IS 8130 : 1984
25.0	1.2	196/0.4	10.20	0.780	103	Conductor Class 5 of IS 8130 : 1984
35.0	1.2	276/0.4	11.70	0.554	132	Conductor Class 5 of IS 8130 : 1984
50.0	1.4	396/0.4	13.90	0.386	174	Conductor Class 5 of IS 8130 : 1984
70.0	1.4	361/0.5	16.00	0.272	256	Conductor Class 5 of IS 8130 : 1984
95.0	1.6	475/0.5	18.20	0.206	304	Conductor Class 5 of IS 8130 : 1984
120.0	1.6	608/0.5	20.20	0.161	359	Conductor Class 5 of IS 8130 : 1984
140.0	1.8	750/0.5	22.50	0.129	406	Conductor Class 5 of IS 8130 : 1984
185.0	2.0	925/0.5	24.90	0.106	466	Conductor Class 5 of IS 8130 : 1984
240.0	2.2	1221/0.5	28.40	0.080	550	Conductor Class 5 of IS 8130 : 1984

\* The number and diameter of conductor strands are for reference only. Conductors resistance as per IS: 8130 is the governing criteria. Comply with IS 694 : 2010

## MULTI- CORE FLEXIBLE CABLES



- » Insulation done with a specially formulated PVC compound of high insulation resistance & dielectric strength.
- » Sheathing done with a specially formulated PVC compound having high oxygen and temperature index which eases stripping and helps withstand mechanical abrasion while in use.

### APPLICATIONS:

Wide range of applications in machinery of any industry, tools, appliances and control panels.

## FLEXIBLE MULTI-CORE CABLES (UP-TO 5 CORE)

Generally conforming to IS 694 : 2010 Voltage Grade up-to 1100 Volts

CONDUCTOR	AREA SQ. MM	0.5	0.75	1.0	1.5	2.5	4.0	6.0	10.0	16.0	25.0	35.0	50.0	
	NO. & SIZE OF WIRE (NOM). NO/MM	16/.2	24/.2	32/.2	30/.25 or 48/.2	50/.25 or 80/.2	56/.3	84/.3	80/.4 or 140/.3	126/.4	196/.4	276/.4	396/.4	
	RESISTANCE (MAX) @ 20° C, CURRENT RATING DC OR AC	Ohms/km	39.0	26.0	19.5	13.3	7.98	4.95	3.3	1.91	1.21	0.78	0.554	0.386
	Amps	4	7	12	15	20	27	35	45	62	80	102	138	
INSULATION	THICKNESS (NOM.)	mm	0.6	0.6	0.6	0.6	0.7	0.8	0.8	1.0	1.0	1.2	1.2	1.4
SINGLE CORE UN-SHEATHED	OVERALL DIAMETER (APPROX)	mm	2.00	2.30	2.5	2.85	3.45	4.00	4.5	6.0	7.1	8.9	10.0	12.0
SINGLE CORE SHEATHED	SHEATH THICKNESS (NOM.)	mm	0.9	0.9	0.9	0.9	1.0	1.0	As per IS 694 : 2010					
	OVERALL DIAMETER MM ( MAX.)	mm	4.3	4.5	4.7	5.4	6.2	6.8						
TWIN FLAT SHEATHED	OVERALL WIDTH (MAX.)	mm	5.2	5.6	6.0	6.6	8.0	9.6						
	OVERALL HEIGHT (MAX.)	mm	2.6	2.8	3.0	3.3	4.0	4.8						
2 CORE	SHEATH THICKNESS (NOM.)	mm	0.9	0.9	0.9	0.9	1.0	1.0						
	OVERALL DIAMETER (MAX.)	mm	6.9	7.3	7.6	8.9	10.3	11.6						
3 CORE	SHEATH THICKNESS (NOM.)	mm	0.9	0.9	0.9	0.9	1.0	1.0						
	OVERALL DIAMETER (MAX.)	mm	7.3	7.7	8.1	9.4	10.9	12.4						
4 CORE	SHEATH THICKNESS (NOM.)	mm	0.9	0.9	0.9	1.0	1.0	1.0						
	OVERALL DIAMETER (MAX.)	mm	8.0	8.4	8.8	10.4	12.0	13.6						
5 CORE	SHEATH THICKNESS (NOM.)	mm	0.9	0.9	1.0	1.0	1.0	1.1						
	OVERALL DIAMETER (MAX.)	mm	8.7	9.2	9.6	11.4	13.2	15.3						

Note : The conductor given above is indicative only and will be such that all requirements of strand diameter and conductor resistance as per IS : 694 and IS : 8130 are met

CORES	AREA SQ MM	0.5	0.75	1.0	1.5	2.5
6	Sheath Thickness (Nom.)	1.9	1.0	1.0	1.0	1.1
	Overall Diameter (max.)	9.5	10.0	10.5	12.4	12.9
7	Sheath Thickness (Nom.)	0.9	1.0	1.0	1.0	1.1
	Overall Diameter (max.)	9.5	10	10.5	12.4	14.5
8	Sheath Thickness (Nom.)	1.0	1.0	1.0	1.1	1.2
	Overall Diameter (max.)	11.1	11.8	12.4	14.7	17.3
10	Sheath Thickness (Nom.)	1.0	1.1	1.1	1.1	1.3
	Overall Diameter (max.)	12.0	12.7	13.4	16.0	18.7
12	Sheath Thickness (Nom.)	1.0	1.1	1.1	1.1	1.3
	Overall Diameter (max.)	12.4	13.1	13.9	16.5	19.4
14	Sheath Thickness (Nom.)	1.1	1.1	1.1	1.2	1.3
	Overall Diameter (max.)	13.1	13.8	14.6	17.4	20.5
16	Sheath Thickness (Nom.)	1.1	1.2	1.2	1.2	1.4
	Overall Diameter (max.)	13.8	14.6	15.4	18.4	21.7
19	Sheath Thickness (Nom.)	1.1	1.2	1.3	1.3	1.4
	Overall Diameter (max.)	14.6	15.4	16.3	19.5	23.3

Conductor	Area Sq. mm		6.0	10.0	16.0	25.0	35.0	50.0	70.0	95.0	120.0
	No. & Size of wire(Nom).	No/ mm	84/3	140/3 or 80/4	126/4	196/4	276/4	396/4	361/5	475/5	608/5
	Resistance (Max)@ 20°C, Current Rating DC or AC	Ohms/ km	3.3	1.91	1.21	0.78	0.554	0.386	0.272	0.206	0.161
		Amps	31	42	57	72	20	27	165	200	225
Insulation 3 core	Thickness	mm	0.8	1.0	1.0	1.2	1.2	1.4	As per IS : 694		
	Sheath Thickness (Nom)	mm	1.2	1.4	1.4	1.5	1.6	2.0			
	O.D (max.)	mm	13.8	17.69	20.6	25.6	29.3	34.6			
4 Core	Sheath Thickness (Nom)	mm	1.2	1.4	1.4	1.6	1.7	2.0			
	O.D (max.)	mm	15.47	19.5	23.0	28.5	32.7	38.6			

TYPE	CORE	SHEATH
Single Core Unsheathed	Red, Yellow, Blue, Black, White & Grey	Black/ Grey
Single Core Sheathed	Black	-
Twin Twisted	Red & Black	Black/ Grey
Twin Flat Sheathed	Red & Black	Black/ Grey
2 Core Round Sheathed	Red & Black	Black/ Grey
3 Core Round Sheathed	Red, yellow, blue	Black/ Grey
4 Core Round Sheathed	Red, Yellow, Blue, Black	Black/ Grey
5 Core Round Sheathed	Red , Yellow, Blue, Black & Grey	Black/ Grey

Note : Any required colour can be provided on specific request

# SUBMERSIBLE CABLES

Designed Especially For Submersible Pumps

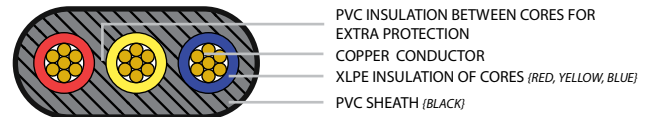
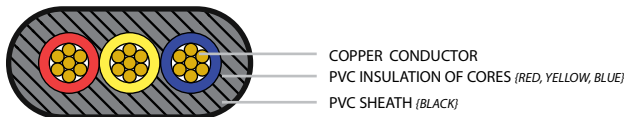
## PVC SUBMERSIBLE CABLES

- » High quality, highly durable, 3 core flat PVC insulated cables.
- » Provides uninterrupted water supply.
- » Not affected by water/oil/grease.

Now Paramount Cables also introduces XLPE for added advantage over PVC

## XLPE SUBMERSIBLE CABLES

- » PVC insulation between cores for extra protection.
- » Cross-linked Poly Ethylene used instead of PVC.
- » Light weight, flexible and high corrosion resistance.
- » Environment friendly.
- » Higher current rating and overload capacity.



### PVC CABLES

INSULATION				OVERALL DIMENSIONS		Conductor Resistance @ 20°C (Max) Ohms/km	Current carrying capacity at 40°C Amps
Nominal Area (sq.mm)	Number/ Dia of strands (mm)	Insulation Thickness (Nom.) mm	Core Dia (Nom.) mm	Width (approx) 'W' max. mm	Height (approx) 'H' max. mm		
Sq.mm	mm	mm	mm	mm	mm	Ohm/km	Amps
1.5	22/0.30	0.6	2.8	12.0	5.6	12.10	14
2.5	36/0.30	0.7	3.5	13.0	6.2	7.41	19
4.0	56/0.30	0.8	4.0	15.3	7.1	4.95	26
6.0	84/0.30	1.0	4.5	19.2	8.4	3.30	31
10.0	140/0.30	1.0	6.0	24.2	10.4	1.91	42
16.0	126/0.40	1.0	7.1	29.0	12.4	1.21	57

Note : Available in 500 + 5 % metres packing in drums. Also available in 100 metres packing on request. \*The number and diameter of conductor strands are for reference only Conductor resistance as per IS : 8130 is the governing criteria Conductor shall be of class II RV as per IS 8130

### XLPE CABLES

CONDUCTOR		Insulation Thickness (Nom.) mm	Sheath Thickness (Nom.) mm	OVERALL DIMENSIONS		Conductor Resistance @ 20°C (Max) Ohms/km	Current carrying capacity Amps
Nominal Area (sq.mm)	Number/ Dia of strands (mm)			Width (approx) 'W' mm	Height (approx) 'H' mm		
1.5	22/0.30	0.6	0.9	11.0	5.0	12.10	24
2.5	36/0.30	0.7	1.0	13.6	6.0	7.41	30
4.0	56/0.30	0.8	1.0	15.6	6.5	4.95	37
6.0	84/0.30	0.8	1.1	17.8	7.4	3.30	46
10.0	140/0.30	1.0	1.4	22.5	9.3	1.91	66

As per IS 694



*OTHER  
PRODUCTS*

**HT & LT Power  
(UG & Aerial) Cables**

**Optical Fiber  
Cables**

**Axle-Counter & Signaling  
Cables for Railways**

**Instrumentation  
Cables**

**Control  
Cables**

**PIJF  
Telecom  
Cables**

**Fire  
Survival  
Cables**

**Solar  
Cables**

**Various Special  
Cables**



# PARAMOUNT COMMUNICATIONS LIMITED

## CORPORATE OFFICE

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## PLANTS:

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