



# MULTI STRAND HOUSE WIRE

HR-FR | FR-LSH | ZH-FR | COMIT

THE QUALITY  
RE<sup>Q</sup>OLUTION



BUILD YOUR  
**DREAM  
HOME**  
WITH ORBIT

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# About Company

Orbit Group of Companies is a renowned wiring and cabling solution partner, established in 1996. We have dominated the trade and engineering of wires and cables for over two decades with dynamic and pioneering technology.

Orbit wires and cables are designed and manufactured by the industry's best and are continually evolving to stay ahead of market demands. Our trusted products are designed and fabricated with efficiency and focus on the minutiae to ensure a satisfactory experience for every customer.

Orbit wires and cables are credited to be a one-stop enterprise that manufactures and sells a variety of wiring and cabling solutions for diverse applications. As an established enterprise we promise to deliver reliable and standard wiring and cabling solutions for your specific needs at a competitive price.



# Message From The Chairman



**Mr. RK Agarwal**  
Founder

One of the core purposes of Orbit Wires India Pvt. Ltd. is to build a long term relationship with people and organizations across the globe. Orbit Wires Company has proactively worked towards creating brand credibility and recognition by maintaining the industry standards of our products. We strive to be an innocuous company with safety as our precedence and aim to ultimately have zero accidents. We aspire to be the best cable manufacturer in the country and establish our brand identity through quality product delivery and commitment towards customer value.



**Mr. Amit Agarwal**  
Managing Director



**Ms. Neelam Bansel**  
Managing Director



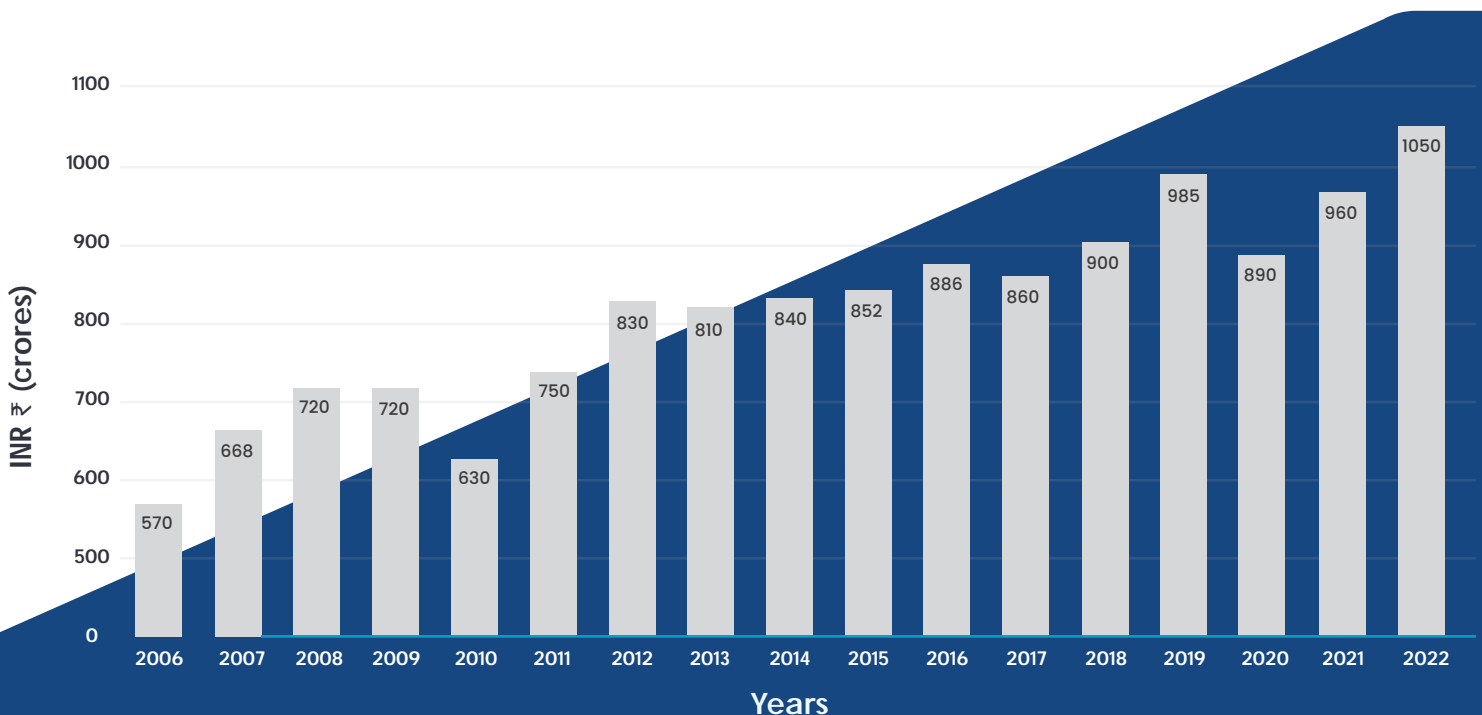
**Mr. Govinda Agarwal**  
Managing Director

# Mission Vision & Values

One of the core purposes of Orbit Wires India Pvt. Ltd. is to build a long term relationship with people and organizations across the globe. Orbit Wires Company has proactively worked towards creating brand credibility and recognition by maintaining the industry standards of our products.

We strive to be an innocuous company with safety as our precedence and aim to ultimately have zero accidents.

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# Certificates



QMS



EMS



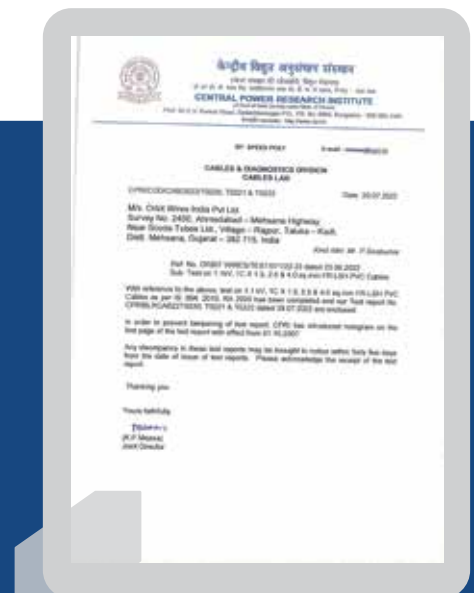
HEALTH & SAFETY



CE

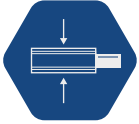


ROHS



CPRI

# Attributes



## TRIPLE LAYER INSULATION FOR TRIPLE PROTECTION

Orbit Cables come with a unique triple layer insulation to ensure three times the protection a one of its kind feature unique to Orbit.



## TEMPERATURE RATING

The base layer consist of temperature rating as against the 70°C to 160°C (to Conductor temperature for short circuit) of any ordinary cable. The middle and top layers are exceptionally flame retardant (FR) / FRLS / ZHFR. Orbit thus ensures Triple protection of your life and property.





## 99.9% PURE COPPER – PUREST TO THE CORE

At the core of Orbit Cables is the highest purity Electrolytic Grade Copper as against lower grade copper used in ordinary cables that offer poor conductivity. With greater than 100% conductivity as per IACS (International Annealed Copper Standard), the energy losses are minimal resulting in lower power bills.



## PURE PVC INSULATION

Pure, superior grade Virgin PVC resin and compounding ingredients are used to produce and tailor-made PVC compound for each type of cable that has higher insulation resistance, thermal stability and exceptional fire retarding properties. The purity inside ensures safety, reliability and long cable life.

## HEAT RESISTANT – FLAME RETARDANT (HRFR)

Orbit HRFR Cables: Superior Heat Resistant Flame Retardant Solutions

Orbit, a leading innovator in cable technology, presents its Heat Resistant Flame Retardant (HRFR) cables, designed to set new standards in safety, reliability, and performance.

With a focus on mitigating heat generation and preventing fire propagation, Orbit's HRFR cables offer exceptional qualities to meet your most demanding electrical needs.

### KEY FEATURES OF ORBIT HRFR CABLES

#### Heat Dissipation and Flame Retardation

The HRFR layer serves as the primary defence against heat build-up caused by current flow. This layer also exhibits effective flame retardant properties to enhance safety.

#### Triple-Layer Flame Retardancy

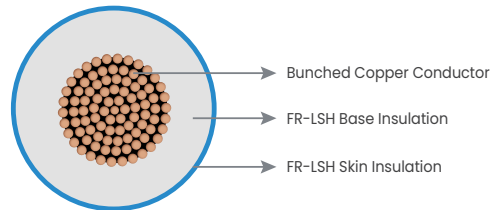
The middle and top Flame Retardant (FR) layers work synergistically to impede flame propagation in the event of a fire, bolstering fire safety measures.

#### Temperature Resistance

The HRFR PVC layer is engineered to endure temperature elevations of up to 105°C, which may arise from factors such as high power consumption, voltage fluctuations, or electrical spikes.

### TECHNICAL DATA

Nominal Voltage (U0/U)	:	600/1100 V
Max Operating Temperature	:	85°C
Temperature Range	:	-15°C to + 85°C
Approvals	:	IS 8130:2013
Flammability	:	IEC 60332 - 1:2004
Minimum Bending Radius	:	8D
Oxygen Index	:	Minimum 29 %
Temperature Index	:	Minimum 250°C



**SINGLE CORE UNSHEATHED PVC INSULATION COPPER CONDUCTOR CABLES  
( CONFIRMING TO IS: 694 - 2010 )**

<b>SINGLE CORE, UNSHEATHED CABLES IN VOLTAGE GRADE 1100 V</b>						
Nominal area of Conductor (Sq mm)	No. of Wire/ Nominal diameter (Sq mm)	Thickness of Insulation (Sq mm)	Overall Diameter (Sq mm)	Curent carrying capacity 2 cables (single phase)		Max DC Resistance @ 20° C (Ohm/Km)
				In conduit / trunking (Amps)	Unenclosed-clipped directly to a surface or cable tray (Amps)	
0.50	16/0.2	0.6	2.2	4	6	39.00
0.75	24/0.2	0.6	2.4	7	7	26.00
1.0	14/0.3	0.6	2.7	13	12	18.10
1.5	22/0.3	0.7	3.0	16	16	12.10
2.5	36/0.3	0.8	3.6	22	22	7.41
4.0	56/0.3	0.8	4.1	29	29	4.95
6.0	84/0.3	0.8	4.7	37	37	3.30

Standard Colours : Black, Red, Blue, Yellow and Green (for earthing).  
 Supplied in 90 metre lengths in attractive cartons. | BIS licence No. CML-7300109204  
 As per IS 3961 (Part V) : 1968 | As per conductor Class 5 of IS 8130 : 2013



**COLOUR: RED, YELLOW, BLUE, BLACK & GREEN**

## FLAME RETARDANT – LOW SMOKE (FR-LSH)

Orbit FRLS Cables: Advanced Flame Retardant Low Smoke Solutions

Orbit presents its Flame Retardant Low Smoke (FRLSH) cables, redefining safety and performance standards.

With a strong emphasis on flame retardancy and reduced smoke emission, Orbit's FRLS cables offer a comprehensive solution for applications demanding heightened fire safety.

### KEY FEATURES OF ORBIT FR-LSH CABLES

#### Enhanced Flame Retardancy and Low Smoke

Orbit's FRLS cables feature an insulation that blends flame retardant and low smoke characteristics. These cables emit significantly less smoke during combustion, ensuring better visibility for safe evacuation and efficient firefighting operations. Reduced halogen acid and toxic gas emissions contribute to a safer environment during fire incidents.

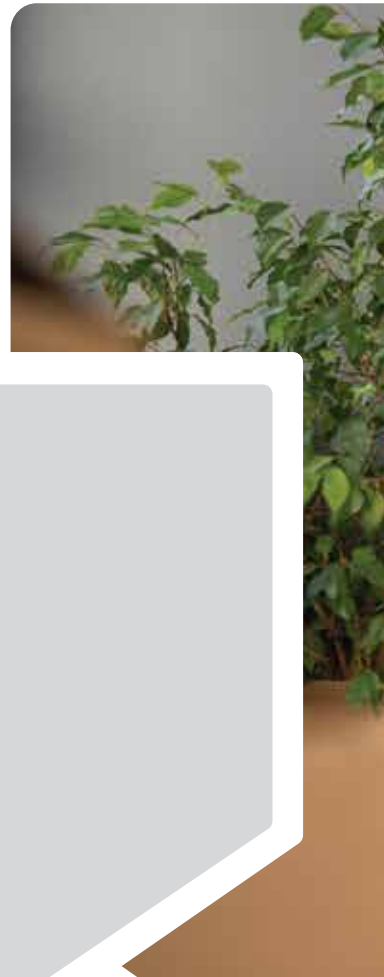
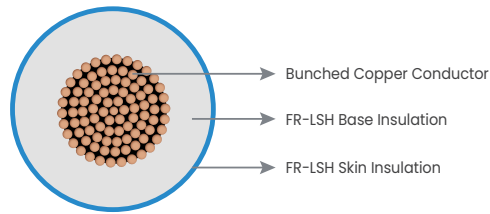
#### Versatile Applications

Designed for a wide spectrum of scenarios, including fire and explosion-prone areas, chemical factories, densely wired spaces, public buildings, educational institutions, healthcare facilities, commercial complexes, and more.

Ideal for modern residences with multiple high-power electrical appliances, high-rise residential buildings, commercial complexes, public spaces, schools, and hospitals.

### TECHNICAL DATA

Nominal Voltage (U0/U)	: 600/1100 V
Max Operating Temperature	: 70°C
Temperature Range	: -15°C to + 70°C
Approvals	: IS 8130:2013
Flammability	: IEC 60332 - 1:2004
Minimum Bending Radius	: 8D
Oxygen Index	: Minimum 29 %
Temperature Index	: Minimum 250°C
Smoke Density Rating	: Maximum 60 %
Acid Gas Generation ( HCL % )	: Maximum 20 %





**SINGLE CORE UNSHEATHED PVC INSULATION COPPER CONDUCTOR CABLES  
( CONFIRMING TO IS: 694 - 2010 )**

Area (mm)	No./size of Wire Nominal diameter (mm)	Nominal Thickness of Insulation (mm)	Approx Overall Diameter (mm)	Max DC Resistance @ 20° C (Ohm/km)	Current Rating 2 Cable (Single Phase) (AC/DC Amp)
1	14/0.3	0.6	2.7	18.10	13
1.5	22/0.3	0.7	3.0	12.10	16
2.5	36/0.3	0.8	3.6	7.41	22
4	56/0.3	0.8	4.1	4.95	29
6	84/0.3	0.8	4.7	3.30	37
10	140/0.3	1.0	6.2	1.91	51
16	126/0.4	1.0	7.3	1.21	69



**COLOUR: RED, YELLOW, BLUE, BLACK & GREEN**



## ZERO HALOGEN FLAME RETARDANT (ZHFR)

Orbit ZHFR Cables: Uncompromised Safety with Zero Halogen Flame Retardant Technology

Orbit introduces its Zero Halogen Flame Retardant (ZHFR) cables, designed to elevate safety standards and redefine reliability. Employing the finest imported ZHFR insulation, Orbit's ZHFR cables promise an emission-free performance in the face of fire, ensuring the utmost safety for various environments.

### KEY FEATURES OF ORBIT ZHFR CABLES

#### Zero Halogen Flame Retardant Insulation

Crafted with premium-grade imported ZHFR insulation, Orbit's cables ensure absolute zero emission of harmful halogen gases and smoke during fire incidents.

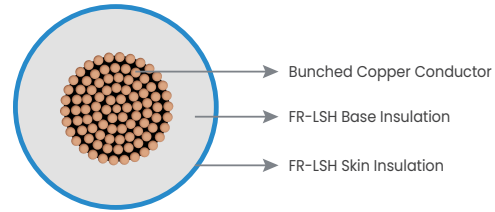
This revolutionary feature drastically enhances safety, making these cables an ideal choice for critical settings like residential and commercial complexes, metro railways, chemical and nuclear plants, high-security installations, and defence facilities.

#### Unrivalled Safety Assurance

Orbit ZHFR cables offer a level of safety that transcends traditional standards, as they prevent the release of toxic gases and smoke, contributing to the preservation of human life and property.

### TECHNICAL DATA

Nominal Voltage (U0/U)	:	600/1100 V
Max Operating Temperature	:	70°C
Temperature Range	:	-15°C to + 70°C
Flammability	:	IEC 60332 - 1:2004
Minimum Bending Radius	:	8D
Acid Gas Generation ( HCL % )	:	0.5 %
Oxygen Index	:	Minimum 29 %
Temperature Index	:	Minimum 250°C



**SINGLE CORE INSULATED UNSHEATHED 1100 VOLTS, COPPER CONDUCTOR CABLE  
( AS PER IS: 694 - 2010 )**

Area (mm)	No./size of Wire Nominal diameter (mm)	Nominal Thickness of Insulation (mm)	Approx Overall Diameter (mm)	Max DC Resistance @ 20° C (Ohm/Km)	Current Rating 2 Cable (Single Phase) (AC/DC Amp)
1	14/0.3	0.6	2.7	18.10	13
1.5	22/0.3	0.7	3.0	12.10	16
2.5	36/0.3	0.8	3.6	7.41	22
4	56/0.3	0.8	4.1	4.95	29
6	84/0.3	0.8	4.7	3.30	37



**COLOUR: RED, YELLOW, BLUE, BLACK & GREEN**

## COMIT

Comit Cables: Elevate Your Wiring Solutions

Comit Cables present Single Core Flexible Cables, meticulously crafted with Annealed Plain Copper and insulated with Flame Retardant PVC. These cables are designed to redefine the wiring experience across residential and commercial infrastructure projects.

### KEY FEATURES OF COMIT CABLES

**Industry Standard Compliance:** Comit Cables are fully compliant with REACH, RoHS, and CE regulations, ensuring environmentally conscious and safe solutions.

**Anti-Rodent & Anti-Termite:** These cables are fortified with anti-rodent and anti-termite properties, guaranteeing durability and protection against pests.

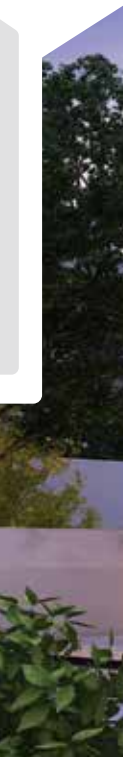
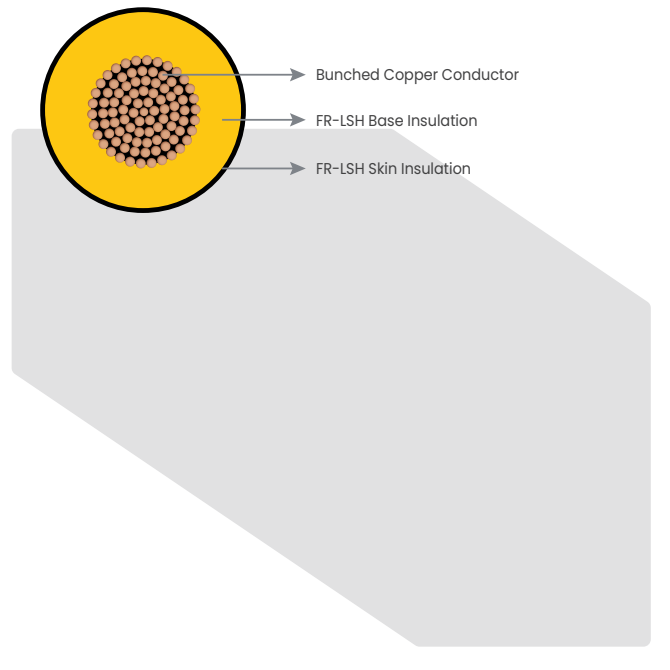
**Pure Electrolytic Copper:** Comit Cables boast 100% electrolytic copper composition, ensuring superior electrical conductivity for efficient power transmission.

**High Conductivity:** With conductivity exceeding 101%, these cables minimize power loss and maximize energy efficiency.

**Flame Retardant:** The Flame Retardant PVC insulation offers an additional layer of safety by preventing the propagation of flames, enhancing fire safety measures.

### TECHNICAL DATA

Nominal Voltage (U0/U)	:	600/1100 V
Max Operating Temperature	:	70°C
Temperature Range	:	-15°C to + 70°C
Approvals	:	IS 8130:2013 Class 2 Conductor
Flammability	:	IEC 60332 - 1:2004
Minimum Bending Radius	:	8D
Insulation Conformity	:	IS 5831, Type D FR 70°C



## SINGLE CORE INDUSTRIAL CABLES AS PER IS 694:2010 PVC INSULATED AND SHEATHED 1100 VOLTAGES

Area (mm)	No./size of Wire Nominal diameter (mm)	Nominal Thickness of Insulation (mm)	Approx Overall Diameter (mm)	Max DC Resistance @ 20° C (Ohm/Km)	Current Rating 2 Cable (Single Phase) (AC/DC Amp)
0.75	24/0.21	0.6	2.3	26.0	8
1	32/0.21	0.6	2.6	19.5	11
1.5	30/0.26	0.6	2.8	13.3	15
2.5	50/0.26	0.7	3.4	7.98	19
4	56/0.31	0.8	4.1	4.95	26
6	84/0.31	0.8	4.6	3.30	33

SPECIFICATION	VALUES
IS 10810 P-58	Oxygen Index Minimum 29%
IS 10810 P-64	Minimum Temperature Index 250°C



**COLOUR: RED, YELLOW, BLUE, BLACK & GREEN**

## FLAME RETARDANT, LOW SMOKE LOW HALOGEN (FRLS-H)

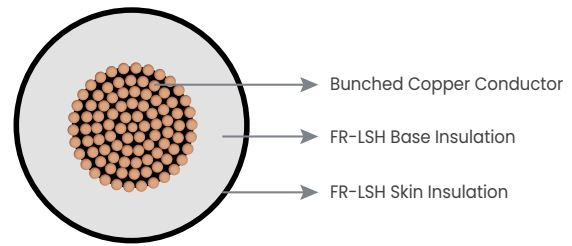
Flame Retardant, Low Smoke Low Halogen (FRLS-H) wires are designed for use in fire hazard areas where such hazardous situations exist. ORBITCables provide reliable industrial performance, with a voltage grade of up to 1100V and conductor area of 1.00 to 6.00 square millimeters. This 180m Coil Project Pack is available in five colors and is perfect for large-scale projects. Its FRLS-H construction ensures an elevated safety rating.

### KEY FEATURES OF COMIT CABLES

- \* REACH, RoHS and CE Compliant
- \* Anti-Rodent & Anti-Termite
- \* 100% Electrolytic Copper
- \* More than 101% Conductivity
- \* Flame Retardant

### TECHNICAL DATA

Nominal Voltage (U0/U)	:	600/1100 V
Pack Type	:	Project Pack
Coil	:	180 m Coil
Cable Type	:	Single Core Unsheathed
Type	:	FRLS-H Industrial Cables





**SINGLE CORE INDUSTRIAL CABLES AS PER IS 694:2010 PVC INSULATED AND UNSHEATHED 1100 VOLTAGES**

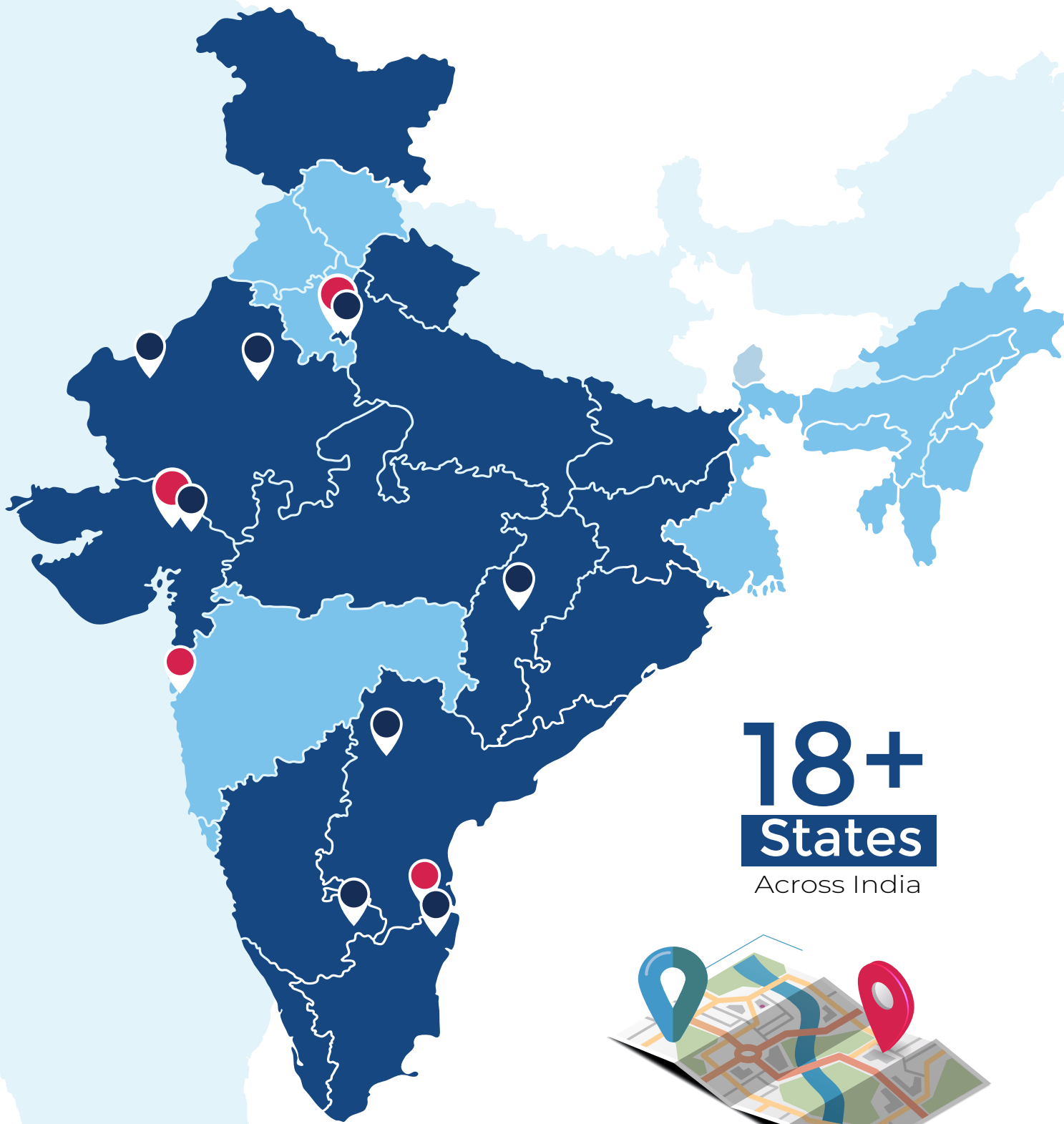
Area (mm)	No./size of Wire Nominal diameter (mm)	Nominal Thickness of Insulation (mm)	Approx Overall Diameter (mm)	Max DC Resistance @ 20° C (Ohm/Km)	Current Rating (Concealed) (AC/DC Amp)
1	32/0.2*	0.60	3.00	18.10	13
1.5	30/0.25*	0.70	3.40	12.10	17
2.5	50/0.25*	0.80	4.10	7.41	24
4	56/0.30**	0.80	4.80	4.95	30
6	84/0.30**	0.80	5.30	3.30	38

\*=CLASS-2 CONDUCTORS, \*\*=CLASS-5 CONDUCTOR AS PER IS:8130

SPECIFICATION	VALUES
IS 10810 P-58	Oxygen Index Minimum 29%
IS 10810 P-64	Minimum Temperature Index 250°C



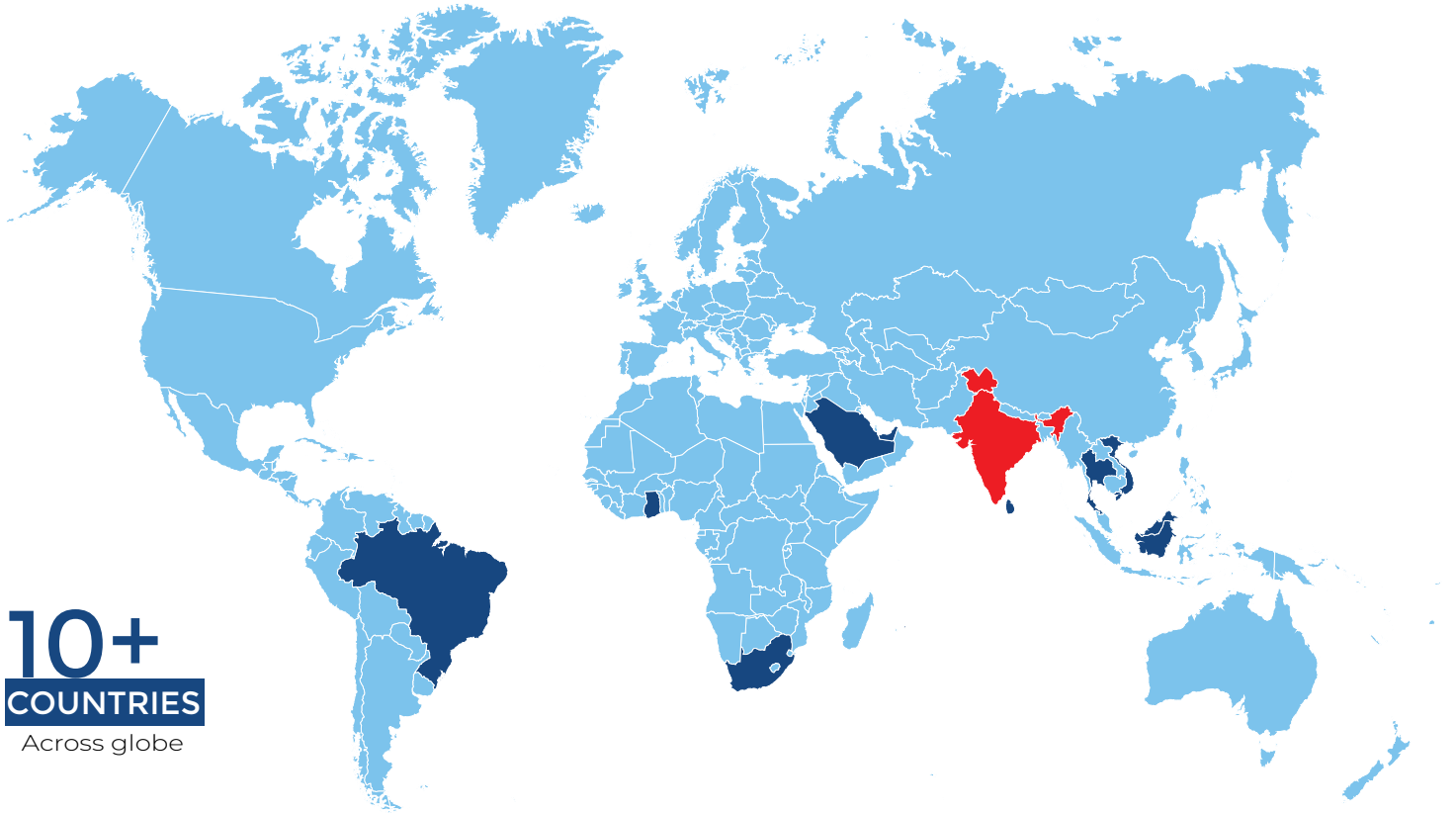
**COLORS - RED, YELLOW, BLUE, BLACK & GREEN**



**18+**  
**States**

Across India





**10+**  
**COUNTRIES**  
Across globe

**Regional Office:**

- Chennai** : No. 36, Govindappa Naicken Street, Parrys, Chennai-600 001.
- Bangalore** : No.105, Paras mansion, 025, Brigade Rd, Ashok Nagar, Bengaluru, Karnataka-560025.
- Telangana** : Suryakiran complex, 203, Second Floor, SD Road, Secunderabad, Telangana-500003.
- Jodhpur** : Panji ka Bera, Pal Rd, opp. Paliwal Hospital, Gayatri Nagar, Jodhpur, Rajasthan-342008.
- Chhattisgarh** : S P Cold Storage, Near Khamtarai Railway Cross Khamtarai, (C.G) Raipur-492001

**Manufacturing units**

- Gujarat** : Survey No. 2450, Ahmedabad-Mehsana Highway, Village - Rajpur, Taluka, Kadi, Gujarat-382715.
- Delhi** : 179, FIE Patparganj Indl Area, Delhi-110092.
- Chennai** : 40/3 Inner Ring Road, Manjambakkam, Chennai-600 060.
- Mumbai** : Shripal Industrial Estate, Bldg. No. 3, Wing-C, Gala No. 17, Near Gyandeeep School, Waliv, Vasai (E)-Palghar - 401 208.

AN ISO 9001 : 2015 <sup>14001</sup> Company

**ORBIT WIRES INDIA (PVT) LTD**

Survey No. 2450, Ahmedabad - Mehsana Highway,  
Near Scoda Tubes Limited, Village - Rajpur,  
Taluka - Kadi, District - Mehsana, Gujarat - 382715.

**Customer Care** : 79000 39000  
**Email ID**: sales@orbitcables.com  
**Website** : www.orbitcables.com





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