



SINGLE CORE PANEL WIRES &
MULTI CORE
CABLES

www.orbitcables.com

THE QUALITY
REOLUTION



CONNECTING
INDIA
WITH **SAFEST WIRES**

CONTENTS

ABOUT US **03**

CHAIRMAN'S WORD **04**

MISSION & VISION **05**

CERTIFICATES **06**

ATTRIBUTES **07-08**

SINGLE CORE **09-10**

MULTI CORE **11-14**

OUR PRESENCE **15-16**

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



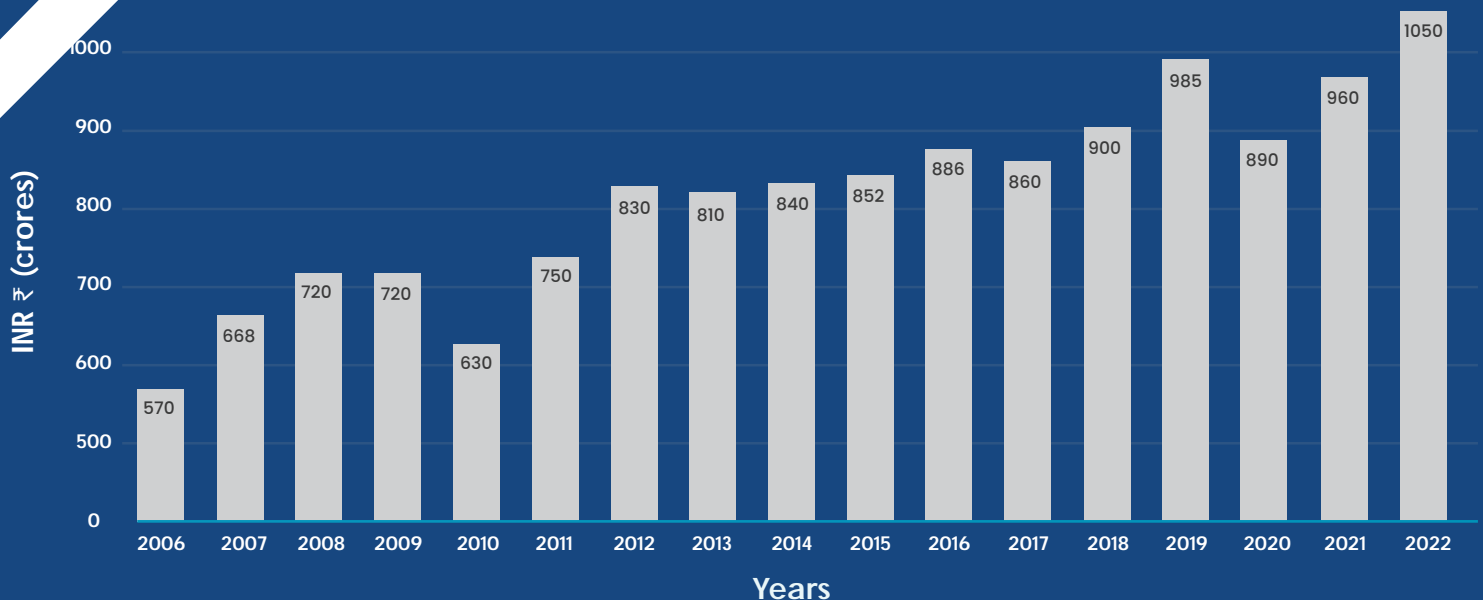
Mr. Govinda Agarwal
Managing Director

Mission Vision & Values

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Certificates



QMS



EMS



HEALTH & SAFETY



CE

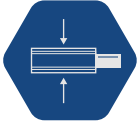


ROHS



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.



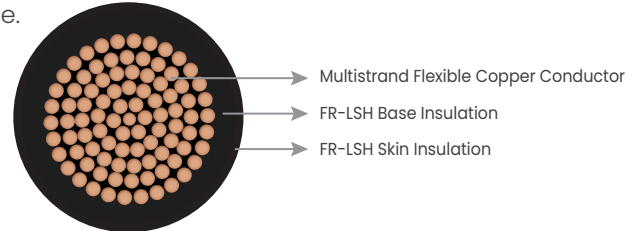
PURE PVC INSULATION

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.

SINGLE CORE CABLES

Orbit Single Core Cables: Power and Precision Redefined

Orbit, a trailblazer in cable innovation, presents its Single Core Cables—a testament to precision engineering and reliable power transmission. These cables are meticulously designed to meet a wide range of electrical needs, boasting exceptional characteristics that ensure efficiency and performance.



KEY FEATURES OF ORBIT SINGLE CORE CABLES

Copper Conductor Excellence

Made with high-quality copper conductors, Orbit's Single Core Cables ensure efficient power transmission and reduced electrical resistance.

Unsheathed PVC Insulation

These cables feature robust unsheathed PVC insulation, safeguarding the conductor and enhancing durability.

Wide Range of Options

Orbit offers a variety of options, including different nominal areas of copper conductors, wire diameters, insulation thicknesses, and overall diameters, ensuring a tailored solution for various applications.

Impressive DC Resistance

Orbit's cables exhibit low DC resistance, enhancing energy efficiency and minimizing power loss.

Current Ratings

These cables are engineered to handle diverse current loads, making them suitable for both single-phase AC and DC applications.



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

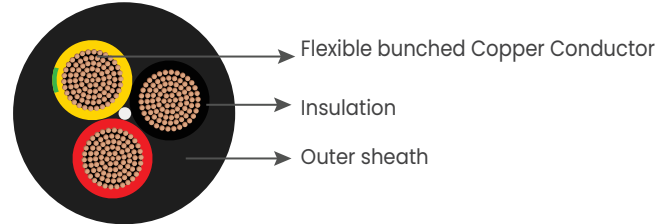
Area	No. of Wire/ Nominal diameter	Insulation Thickness	Approx. Overall Outer Diameter	Conductor Resistance at 20° C (Max)	Current Carrying Capacity 2 wires (Single Phase)
					Unenclosed clipped directly to a surface
(Sq. mm)	(No./mm)	(mm)	(mm)	(Ohm/Km)	(Amp)
0.50	1	0.6	2.10	39	4.5
0.75	2	0.6	2.30	26	8
1.00	3	0.6	2.50	19.5	12
1.50	30	0.7	2.75	13.3	16
2.50	50	0.8	3.40	7.98	22
4.00	5	0.8	4.10	4.95	29
6.00	8	0.8	4.75	3.3	37
10.00	8	1.0	6.00	1.91	51
16.00	12	1.0	7.10	1.21	68
25.00	19	1.2	8.85	0.78	86
35.00	27	1.2	9.85	0.55	110
50.00	39	1.4	12.00	0.38	145
70.00	35	1.4	13.60	0.27	215
95.00	47	1.6	15.70	0.20	260
120.0	61	1.6	17.30	0.16	305
150.0	76	1.8	19.40	0.12	355
185.0	94	2.0	21.50	0.10	415
240.0	122/0.5	2.2	24.35	0.080	500
300.0	1528/0.5	2.4	27.05	0.064	585



MULTICORE CORE CABLES

Orbit Multicore Cables: Unleashing Connectivity and Performance

Orbit's Multicore Cables are a testament to unrivalled connectivity and performance, designed to cater to diverse industrial needs. With precision engineering and a focus on reliability, these cables empower various applications with seamless power transmission and communication capabilities.



KEY FEATURES OF ORBIT MULTI CORE CABLES

Robust Copper Conductor

Orbit Multicore Cables feature high-quality copper conductors, ensuring efficient signal transmission and minimal resistance.

PVC Insulation and Sheathing

These cables are equipped with durable PVC insulation and sheathing, safeguarding the conductors against environmental factors and enhancing longevity.

Diverse Core Configurations

Orbit offers a wide range of core configurations, including 2-core, 3-core, 4-core, 6-core, and beyond, allowing tailored solutions for various applications.

Precise Diameter and Thickness

Each cable is meticulously designed with specific core diameters and insulation thicknesses, ensuring optimal signal integrity and protection.

Impressive Current Ratings

Orbit's Multicore Cables are engineered to handle varying current loads, making them versatile for diverse industrial setups.



ORBIT COPPER CONDUCTOR, PVC INSULATED AND SHEATHED 1100V MULTICORE INDUSTRIAL CABLES (CONFIRMING TO IS: 694 - 2010)

Area (Sq mm)	Conductor			Insulation Thickness (mm)	2 Core		3 Core		4 Core		5 Core	
	No./Size of wire (mm)	Max. Resistance @ 20° C (Ohm/Km)	Current Rating (Amps)		Sheath Thickness (mm)	Overall Diameter (mm)	Sheath Thickness (mm)	Overall Diameter (mm)	Sheath Thickness (mm)	Overall Diameter (mm)	Sheath Thickness (mm)	Overall Diameter (mm)
0.50	16/0.2	39	4	0.6	0.9	6.1	0.9	6.4	0.9	7.0	0.9	7.5
0.75	24/0.2	26	7	0.6	0.9	6.5	0.9	6.9	0.9	7.5	0.9	8.2
1.00	32/0.2	19.5	12	0.6	0.9	6.9	0.9	7.3	0.9	8.0	1.0	8.9
1.50	30/0.25	13.3	15	0.6	0.9	7.5	0.9	7.9	1.0	8.8	1.0	9.6
2.50	50/0.25	7.98	20	0.7	1.0	9.0	1.0	9.5	1.0	10.4	1.0	11.4
4.00	56/0.3	4.95	27	0.8	1.0	10.4	1.0	11.1	1.0	12.2	1.1	13.5
6.00	84/0.3	33	35	0.8	1.1	11.7	1.2	12.7	1.2	13.9	-	-
10.00	80/0.4	1.91	46	1.0	1.3	14.6	1.4	16.1	1.4	17.7	-	-
16.00	127/0.4	121	57	1.0	1.4	17.4	1.4	18.5	1.4	20.4	-	-
25.00	197/0.4	0.78	71	1.2	1.4	20.5	1.5	22.6	1.6	25.1	-	-
35.00	277/0.4	0.554	91	1.2	1.6	23.4	1.6	25.0	1.7	27.8	-	-
50.00	397/0.4	0.386	120	1.4	2.0	28.6	2.0	30.5	2.0	33.7	-	-
70.00	350/0.5	0.272	150	1.4	2.2	32.6	2.2	33.8	2.2	37.3	-	-
95.00	476/0.5	0.206	175	1.6	2.4	37.2	2.4	38.7	2.4	42.8	-	-
120.00	611/0.5	0.161	200	1.6	2.5	41.6	2.5	42.4	2.5	46.9	-	-
150.00	764/0.5	0.129	220	1.8	-	-	2.6	47.1	2.6	52.1	-	-
185.00	942/0.5	0.106	245	2.0	-	-	2.8	52.0	2.8	57.6	-	-
240.00	1222/0.5	0.0801	260	2.2	-	-	3.0	58.6	3.0	64.9	-	-
300.00	1528/0.5	0.0641	285	2.4	-	-	3.2	64.8	3.2	71.9	-	-

ORBIT BARE COPPER CONDUCTOR, PVC INSULATED SHEATHED 1100 V, MULTICORE INDUSTRIAL WIRES AND CABLES (CONFIRMING TO IS: 694 – 2010)

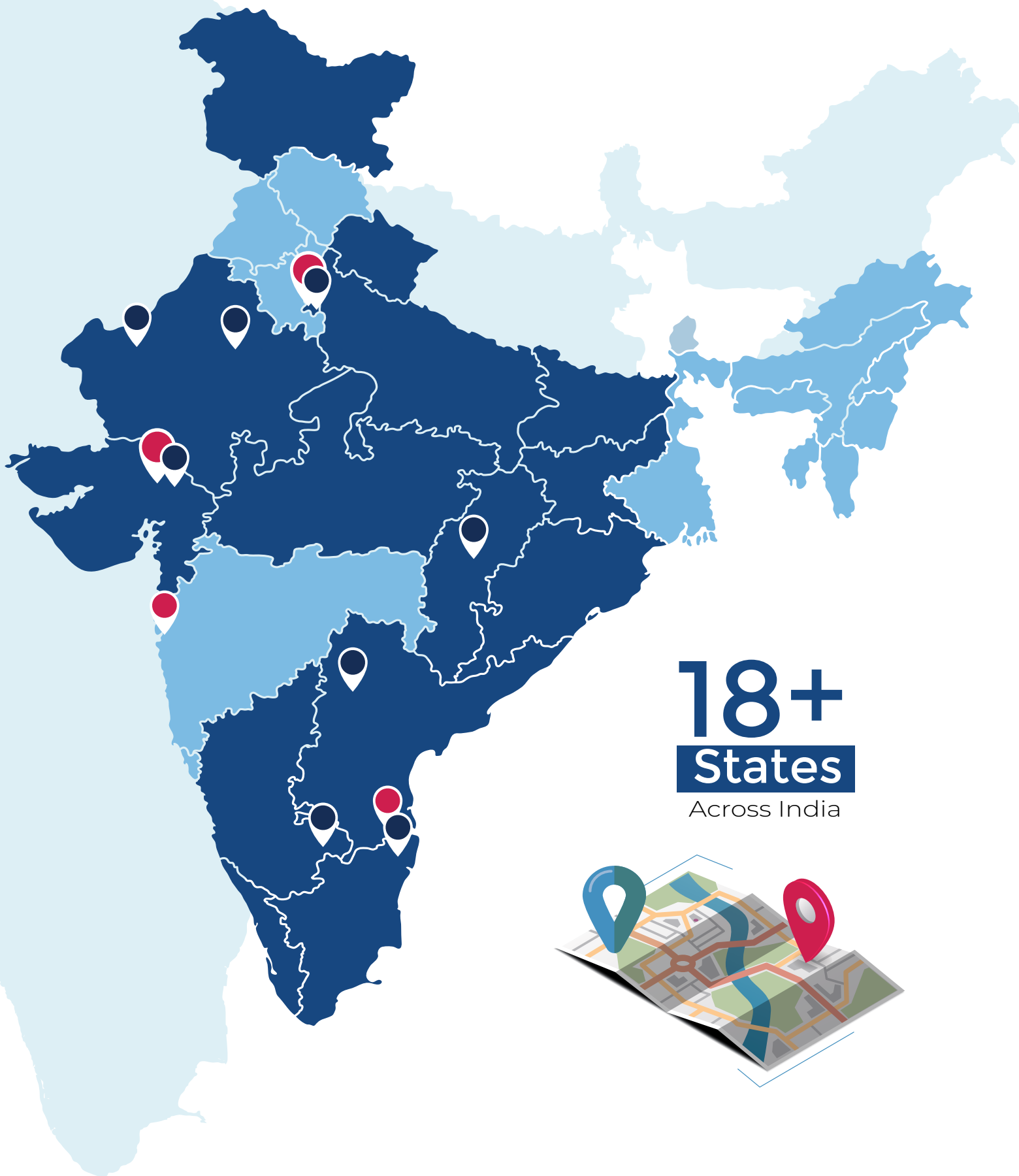
	Area (sq mm)	0.5	0.75	1.0	1.5	2.5
Conductor	No. & Size of wire (Nom.) mm	16/0.2	24/0.2	32/0.2	30/0.25	50/0.25
	Max. Resistance @ 20° C Ohm/Km	39	26	19.5	13.3	7.98
	Current Rating (Amps)	4	7	12	15	20
Insulation	Thickness (Nom.) mm	0.6	0.6	0.6	0.6	0.7
6 Core	Sheath Thickness (Nom.) mm	0.9	1.0	1.0	1.0	1.1
	Overall Diameter (Approx.) mm	7.8	8.7	9.2	10.0	12.0
7 Core	Sheath Thickness (Nom.) mm	0.9	1.0	1.0	1.0	1.1
	Overall Diameter (Approx.) mm	8.3	9.2	9.8	10.6	12.8
8 Core	Sheath Thickness (Nom.) mm	1.0	1.0	1.0	1.1	1.2
	Overall Diameter (Approx.) mm	8.9	9.7	10.4	11.4	13.7
10 Core	Sheath Thickness (Nom.) mm	1.0	1.1	1.1	1.1	1.3
	Overall Diameter (Approx.) mm	9.7	10.8	11.5	12.5	15.3
12 Core	Sheath Thickness (Nom.) mm	1.0	1.1	1.1	1.1	1.3
	Overall Diameter (Approx.) mm	10.5	12.0	12.4	13.4	16.5
14 Core	Sheath Thickness (Nom.) mm	1.1	1.1	1.1	1.2	1.3
	Overall Diameter (Approx.) mm	11.3	12.4	13.2	14.5	17.6
16 Core	Sheath Thickness (Nom.) mm	1.1	1.2	1.2	1.2	1.4
	Overall Diameter (Approx.) mm	12.0	13.3	14.2	15.4	18.8
18 Core	Sheath Thickness (Nom.) mm	1.1	1.2	1.3	1.3	1.4
	Overall Diameter (Approx.) mm	12.6	13.9	15.1	16.4	19.8
19 Core	Sheath Thickness (Nom.) mm	1.1	1.2	1.3	1.3	1.4
	Overall Diameter (Approx.) mm	12.8	14.2	15.4	16.7	20.3
24 Core	Sheath Thickness (Nom.) mm	1.2	1.3	1.4	1.4	1.5
	Overall Diameter (Approx.) mm	14.4	15.9	17.2	18.7	22.6
25 Core	Sheath Thickness (Nom.) mm	1.2	1.3	1.4	1.4	1.5
	Overall Diameter (Approx.) mm	14.6	16.2	17.5	19.0	23.0

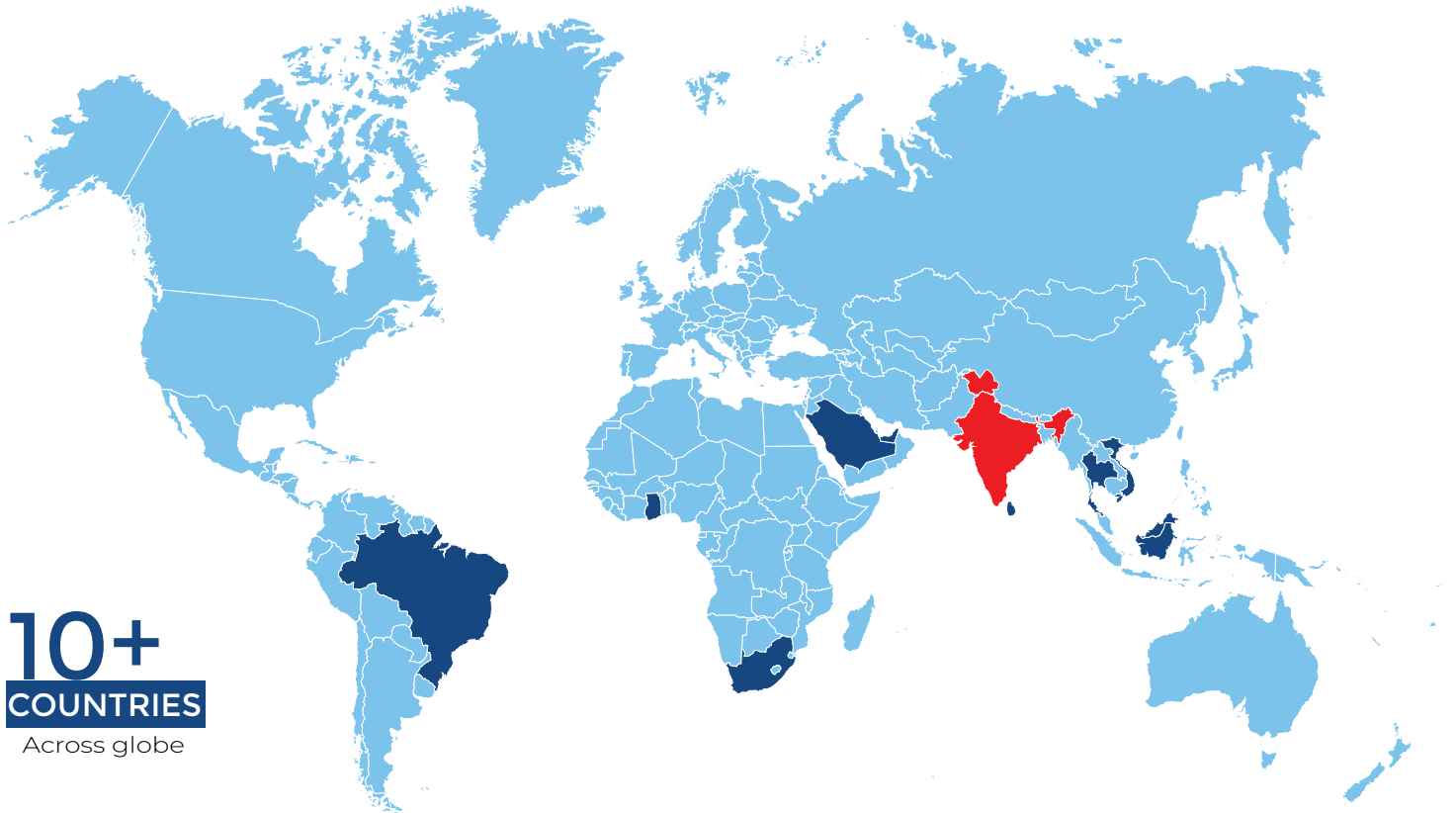
	Area (Sq mm)	0.5	0.75	1.0	1.5	2.5
30 Core	Sheath Thickness (Nom.) mm	1.3	1.3	1.4	1.4	1.5
	Overall Diameter (Approx.) mm	16.0	17.7	19.1	20.8	25.1

DE-RATING FACTOR:

De-rating Factor	Multiply the current capacity of the cable by the factor below for various ambient temperatures.				
Ambient Temperature deg	30	35	40	45	50
De-rating Factors	1.09	1.04	1.00	0.95	0.77
Also meets requirements of Flammability Test as Per IS 694: 1990					







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 Gyandeep School, Waliv, Vasai (E)-Palghar - 401 208.

AN ISO 9001 : 2015 Company
14001

ORBIT WIRES INDIA (PVT) LTD

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Taluka - Kadi, District - Mehsana, Gujarat - 382715.

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IS : 694

CM/L-7300109204



SCAN THE QR CODE

