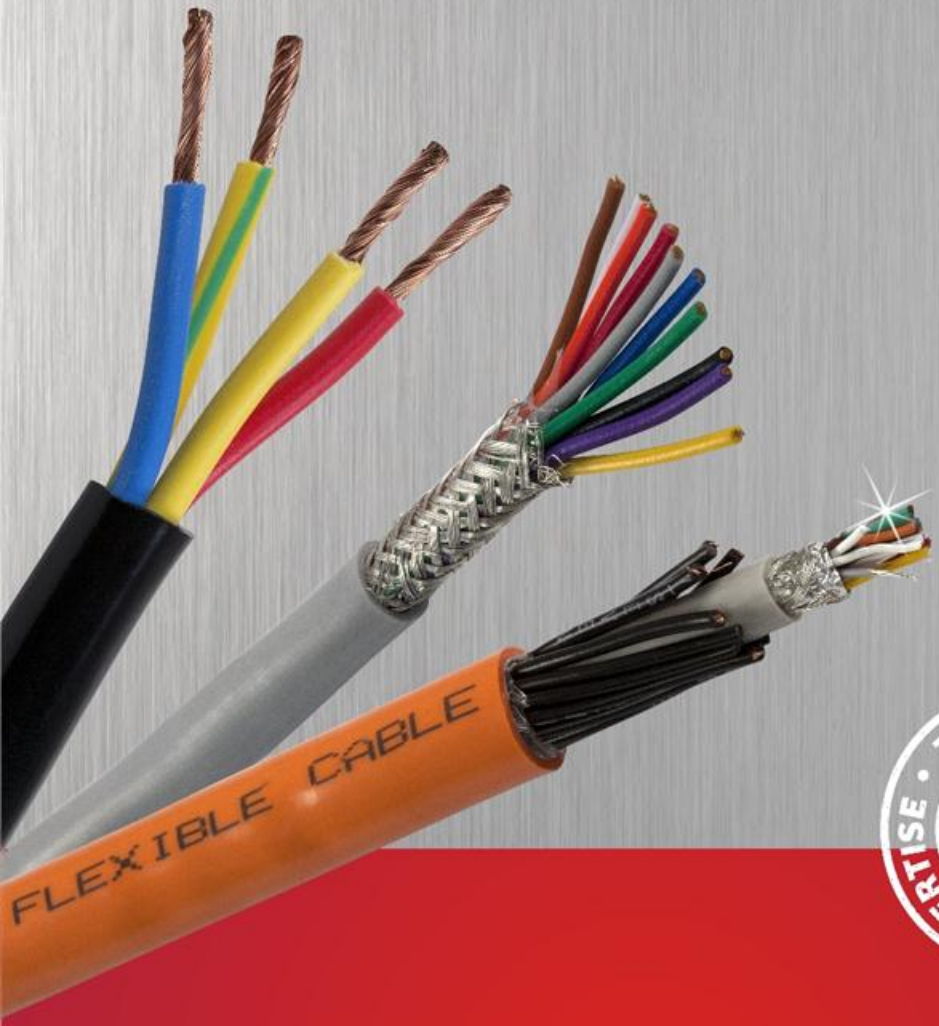
vision International

Ultimate *Cable* Source



TRUST • COMMITMENT • EXPERTISE

30 YEARS

QUALITY
through innovation.

about us

Vision International is a professionally managed organisation based at Ahmedabad in the State of Gujarat, India. It is a dynamic, target oriented, customer caring organisation incorporated by technocrat professional. Company has proven successful track record. The organisation is dedicated to market high quality and innovative cables of following types processed by units having quality approvals such as **CE, BIS, UL** etc.

- **HT & LT Power Cables**
- **Telecomunication Cables**
- **Instrumentation Cables**
- **Rubber Cables**
- **PTFE Cables**
- **Solar Cables**
- **Marine Cables**
- **Spiral Cords**
- **Cathodic Protection Cables**
- **CCTV Cables**

& other special industrial requirements and host of product range.

our vision

Our aim is to be a leading and ultimate source for any kind of cables starting from the simplest single core to multi pair and custom designed cables. We wish to create a unique Super Mall for cables where the customers search for cable will end.

corporate goals

We will be Customer focused company committed to innovations and leadership through excellence in quality. We will strive for building trustful relationships with customers, vendors, business associates, employees, selling distributors and the community at large. We shall always look upon to build an effective marketing team to work together to achieve business goals by harnessing spirit, will and intelligence of dedicated and motivated human resource of the organization keeping the following principles in mind.

- **To provide the ultimate satisfaction by delivering the excellent quality materials.**
- **Timely and targeted deliveries shall always remain the essence of our business.**
- **Building strong and trust full relationship with our valued customers, mighty principles and dedicated employees.**
- **Shall meet the technical requirement and exceed the expectations.**

THE ORGANISATION

Vision International is truly a **Better Choice** in the myriad of other companies in the field of cables. There are many factors separating us from the rest of existing companies but a few of plus points are...

30 Years rich & exclusive technical experience in cables

The Widest Range

Products as per National & International specs.

Well in time deliveries

Customised cables

vision International

Flexible Cables

We Offer High Quality Single Core & Multicore Flexible Cables confirming to IS/UL Standards. These Cables are used in Panel Wiring, House Wiring, Electrical Appliances, and Motors Etc.

RANGE
- Single Core Panel wires
- House Wiring Cable
- Multi Core Flexible Cable

CONDUCTOR
- Annealed Plain Electrolytic Grade, Bunched.

PURITY
- 99% as per IS:8130

INSULATION
- PVC Compounds - FR/FRLS/ZHFR

SHEATH
- PVC-FR
- FRLS
- ZHFR

Single Core Cable

PVC INSULATED SINGLE CORE CABLES FOR PANEL/BUILDING (660/1100 V) WIRING AS PER IS : 694/1990

Area in Sq. mm	Conductor Construction in General	Max DC Resistance Ohm/Km at 20° c	Insulation Thickness (in mm Nominal)	Approx. Dia in mm	Current Rating in Amp.
0.50	16/0.20	39.00	0.60	2.40	4
0.75	24/0.20	26.00	0.60	2.60	7
1.00	14/0.30	19.50	0.60	2.80	12
1.50	22/0.30	13.30	0.60	3.35	16
2.50	50/0.25	7.98	0.70	3.80	22
4.00	56/0.30	4.95	0.80	4.60	29
6.00	84/0.30	3.300	0.80	5.40	37
10.00	140/0.30	1.910	1.00	7.50	51
16.00	226/0.30	1.210	1.00	9.00	68

Area in Sq. mm	Conductor Construction in General	Max DC Resistance Ohm/Km at 20° c	Nominal Insulation Thickness in mm	Approx. Dia in mm	Current Rating in Amp.
25	350/0.30	0.780	1.20	9.50	75
35	495/0.30	0.554	1.20	11.30	95
50	396/0.40	0.386	1.40	13.80	125
70	360/0.50	0.272	1.6	15.20	170
95	485/0.50	0.206	1.8	18.00	210
120	608/0.50	0.161	2.0	19.50	235
150	750/0.50	0.129	2.0	21.80	295
185	925/0.50	0.106	2.2	24.00	330
240	1221/0.50	0.0801	2.2	-	400

Multi Core Round Flexible Cables

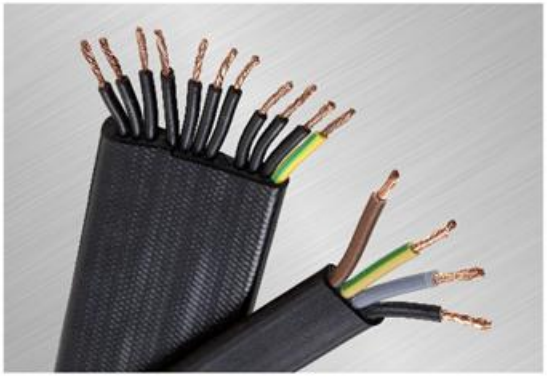
PVC INSULATED & SHEATHED MULTICORE FLEXIBLE CABLES (660/1100 V) AS PER IS : 694/1990

Area in Sq. mm	Conductor No./Dia	Conductor Dia in mm	Max. DC Resistance Ohm/Km	Insulation Thickness Nominal at 20° C	Core Dia	Sheath Thickness in mm Nominal			Overall Diameter in mm approx.			Current Rating Amp.
					mm	2 Core mm	3 Core mm	4 Core mm	2 Core mm	3 Core mm	4 Core mm	
0.50	16/0.20	0.94	39.00	0.60	2.20	0.90	0.90	0.90	6.20	6.60	7.20	4
0.75	24/0.20	1.20	26.00	0.60	2.50	0.90	0.90	0.90	6.80	7.20	7.90	7
1.00	32/0.20	1.34	19.50	0.60	2.60	0.90	0.90	0.90	7.00	7.50	8.10	12
1.50	30/0.25	1.64	13.30	0.60	2.90	0.90	0.90	1.00	7.60	8.10	9.00	16
2.50	50/0.25	2.08	7.98	0.70	3.50	1.00	1.00	1.00	9.00	9.60	10.50	22
4.00	56/0.30	2.61	4.95	0.80	4.30	1.00	1.00	1.00	10.60	11.30	12.40	29
6.00	84/0.30	3.50	3.30	0.80	5.10	1.15	1.15	1.40	12.60	13.40	15.20	37
10.00	140/0.30	4.60	1.91	1.00	6.60	1.40	1.40	1.40	16.00	17.00	18.80	51
16.00	226/0.30	6.00	1.21	1.00	8.00	1.40	1.40	1.40	18.80	20.10	22.20	68
25.00	350/0.30	7.60	0.780	1.20	10.00	2.00	2.00	2.00	24.00	25.60	28.20	86
35.00	495/0.30	8.70	0.554	1.20	11.10	2.00	2.00	2.00	26.30	28.00	31.00	110
50.00	396/0.40	10.60	0.386	1.40	13.40	2.00	2.00	2.00	30.90	33.00	36.50	145

APPROVALS

Submersible Flat Cable

As the name suggests submersible cables are mainly used for submersible pumps installed under water. These cables are designed to perform & withstand restrictive & Harsh Environment.
The Major Applications are Dewatering Pumps, Sewage Pumps, Irrigation, Offshore Drilling Rigs etc.



PVC INSULATED & SHEATHED 3 CORE FLAT CABLE AS PER IS:694-1990

CONDUCTOR		PVC INSULATION		PVC SHEATH			Current Rating at 20°C Amps.	Approx Weight Kg./Km
Area in Sq. mm	Nos. & Dia. of Wire	Normal Thickness mm	Normal Core Dia. mm	Normal Thickness mm	Approx Overall Dimensions			
					Thickness mm	Width mm		
1.5	22/0.30	0.8	3.25	1.15	6.0	12.8	15	125
2.5	36/0.30	0.9	3.84	1.15	6.4	14.6	20	175
4.0	56/0.30	1.0	4.65	1.15	7.4	17.2	27	235
6.0	85/0.30	1.0	5.30	1.15	7.9	18.7	31	325
10.0	140/0.30	1.0	6.60	1.40	9.9	23.7	42	525
16.0	226/0.30	1.0	8.20	1.40	11.4	28.0	60	785
25.0	354/0.30	1.2	10.10	2.00	14.7	35.5	75	1270
35.0	495/0.30	1.2	11.50	2.00	16.2	39.5	90	1640
50.0	703/0.30	1.4	13.60	2.20	18.3	45.5	120	2080
70.0	440/0.45	1.4	15.30	2.20	20.0	51.0	150	2830
95.0	484/0.50	1.6	18.00	2.40	23.5	60.0	180	3620

APPLICATION

To supply power to the submersible pumps for...

- Irrigation • Industries • Offshore Drilling Rigs • Sea Water Handling • Drinking Water-Supply
- D-Watering Cable • Sewage Treatments Plants • Fire Fighting

MULTICORE FLAT ELEVATOR CABLES

CONDUCTOR			PVC INSULATION		PVC SHEATH			Current Carrying Capacity (Amps)	Approx Weight Kg./Km
No. of Cores	Area in Sq. mm	No & Dia of Wires (mm)	Nominal Thickness (mm)	Core Dia Nominal (mm)	Approx Overall Dimensions				
					Sheath Thickness mm	Cable Thickness mm	Width mm		
12	0.5	16/0.2	0.60	2.00	1.2	4.4	26.4	4	200
12	0.75	24/0.2	0.60	2.30	1.2	4.7	30.0	7	258
12	1.00	32/0.2	0.60	2.50	1.2	4.9	32.80	12	309
12	1.50	48/0.2	0.60	2.70	1.2	5.1	35.20	16	475

APPROVALS

LT Power / Control Cables

Vision offers complete range of LT-HT power cables in Aluminium as well as in Copper conductors. LT Cables find used in transmission of power up to 1100 Volts & HT cables for 3.3 KV & above. Strict quality controls create cables for good performance.

- **Conductor : Aluminium / Copper as per IS: 8130**
- **Insulation : XLPE • Inner Sheath : PVC Type ST-1 as per IS: 5831**
- **Armor : GI Wire/ Flat Strip as per IS: 1554**
- **Outer Sheath : PVC Type ST -1 as per IS: 5831**
- **Reference Specs : IS : 1554, IS : 7098 (Part – 1)**

Technical Data for 3.5 Core LT Power Cables

Dimension of 3 ½ Core, Aluminium PVC Armoured Power Cables								
Type	No. of Cores & Cross Section Area	Minimum No. of Wires	Thickness of PVC Insulation (Nom.) (mm)	Overall Diameter (Approx.) (mm)		Approx Net Wt. of Cable		Max D.C. Resistance at 20 ohms/km
				Strip Armor	Wire Armor	Strip Armor	Wire Armor	
Aywy/Ayfy	3.5Cx25 Sq.mm	6/6	1.2/1.0	25.0	26.5	1000	1260	1.2000
Aywy/Ayfy	3.5Cx35 Sq.mm	6/6	1.2/1.0	26.0	27.5	1170	1450	0.8680
Aywy/Ayfy	3.5Cx50 Sq.mm	6/6	1.4/1.2	29.5	31.0	1470	1805	0.6410
Aywy/Ayfy	3.5Cx70 Sq.mm	12/6	1.4/1.2	33.5	36.0	1810	2405	0.4430
Aywy/Ayfy	3.5Cx95 Sq.mm	15/6	1.6/1.4	37.5	40.0	23.5	3015	0.3200
Aywy/Ayfy	3.5Cx120 Sq.mm	15/12	1.6/1.4	41.0	43.0	2760	3545	0.2530
Aywy/Ayfy	3.5Cx150 Sq.mm	15/12	1.8/1.4	45.5	48.0	3215	4030	0.2060
Aywy/Ayfy	3.5Cx185 Sq.mm	30/15	2.0/1.6	50.0	53.5	3900	5300	0.1640
Aywy/Ayfy	3.5Cx240/120	30/15	2.2/1.6	57.0	60.0	4840	6390	0.1250
Aywy/Ayfy	3.5Cx300/150	30/15	2.4/1.8	61.5	66.0	5835	210	0.1000
Aywy/Ayfy	3.5Cx400/185	53/30	2.6/2.0	70.0	75.0	7250	9900	0.0778

Copper Conductor LT Control Cable

Dimension of Control Cable IS : 1554 (Pt-I) 1988								
		UN-ARMOURED			ARMOURED		CURRENT RATING	
No. of Cores & Cross Sectional Area No X mm 2	Thickness of PVC Insulation (Nom.) (mm)	Thickness of PVC Inner Sheath (Min.) Extruded mm	Approx. O.D. mm	Approx. Net Weight of Cable Kg/Km	Approx. O.D. mm	Approx. Net Weight of Cable Kg/Km	Direct in Ground AMPS	In Air/ Duct AMPS
2 x 1.5	0.8	0.3	11.8	185	13.6	415	23	20
3 x 1.5	0.8	0.3	12.3	190	14.1	430	21	17
4 x 1.5	0.8	0.3	13.2	225	15.0	490	21	17
5 x 1.5	0.8	0.3	14.1	260	15.9	545	16	14
6 x 1.5	0.8	0.3	15.1	295	16.9	605	15	13
7 x 1.5	0.8	0.3	15.1	315	16.9	630	14	13
10 x 1.5	0.8	0.3	18.4	425	20.6	835	13	11
12 x 1.5	0.8	0.3	18.9	480	21.5	950	12	10
14 x 1.5	0.8	0.3	18.9	480	22.4	1040	11	10
16 x 1.5	0.8	0.3	20.7	595	23.3	1130	11	9
19 x 1.5	0.8	0.3	22.5	720	24.7	1265	10	9
24 x 1.5	0.8	0.3	25.8	880	28.0	1510	9	8
27 x 1.5	0.8	0.3	26.3	960	28.5	1610	9	8
30 x 1.5	0.8	0.3	27.2	1040	29.4	1700	9	7
37 x 1.5	0.8	0.3	29.1	1230	31.3	1960	8	7
2 x 2.5	0.9	0.3	13.0	230	14.8	500	32	27
3 x 2.5	0.9	0.3	13.6	240	15.4	520	27	24
4 x 2.5	0.9	0.3	14.6	290	16.4	590	27	24
5 x 2.5	0.9	0.3	15.7	335	17.5	660	23	19
6 x 2.5	0.9	0.3	16.9	385	18.7	745	21	18
7 x 2.5	0.9	0.3	16.9	420	18.7	780	20	17
10 x 2.5	0.9	0.3	20.8	570	23.4	1110	18	15
12 x 2.5	0.9	0.3	22.2	690	24.4	1240	17	14
14 x 2.5	0.9	0.3	23.2	775	25.4	1340	16	13
16 x 2.5	0.9	0.3	24.3	860	26.5	1455	15	13
19 x 2.5	0.9	0.3	25.5	985	27.7	1605	14	12
24 x 2.5	0.9	0.3	29.4	1215	32.0	1970	13	11
27 x 2.5	0.9	0.3	30.0	1330	32.6	2100	12	10
30 x 2.5	0.9	0.3	31.0	1450	33.6	2250	12	10
37 x 2.5	0.9	0.4	34.1	1790	37.1	2900	11	9

Rubber Cables

A Wide range of rubber cables is offered under these categories. The Rubber insulation offers high flexibility, good Di-electric value and performance under very harsh temperature up to 90 Degrees. Normally used in overhead cranes, Material Handling cranes, Ship wiring and marine purposes.

- Welding cables as per IS:9857:1990
- Trailing & composite cables as per IS:9968 (Part-1) & (Part-2)
- Silicon cables as per IS:9968 (Part-1) : 1988

- **Conductor : Annealed Plain Copper / Annealed Tinned Copper**
- **Insulation : EPR / VIR / Silicon**
- **Sheath : PCP / CSP / Silicon**
- **Voltage Grade : 1.9 KV/3.3 KV/6.6 KV/11 KV/22 KV**
- **Standard : IS : 9968-Pt. II/2002 & IS : 9857/1990**

Multicore Trailing Cables

Welding Cables

Elastomeric, Multicore Cables

Nominal Cross Sectional Area of Conductor mm²	Nominal Thickness of Insulation (Per Core) mm	Nominal Sheath Thickness			
		Single Core mm	Two Core mm	Three Core mm	Four Core mm
0.5	1.0	1.0	1.0	1.0	1.0
0.75	1.0	1.0	1.0	1.0	1.1
1.0	1.0	1.0	1.0	1.0	1.1
1.5	1.0	1.0	1.0	1.1	1.1
2.5	1.0	1.0	1.1	1.1	1.1
4.0	1.0	1.0	1.2	2.0	1.2
6.0	1.2	1.6	2.0	2.1	2.5
10	1.2	1.8	2.4	2.5	2.7
16	1.2	1.9	2.5	2.7	2.9
25	1.4	2.0	3.2	3.3	3.4
35	1.4	2.2	3.3	3.4	3.5
50	1.6	2.4	3.5	3.6	3.7
70	1.6	2.6	3.6	3.7	3.9
95	1.8	2.8	3.8	4.0	4.1
120	1.8	3.0	4.0	4.1	4.3
150	2.0	3.2	4.2	4.3	4.5
185	2.2	3.4	4.3	4.5	4.8
240	2.4	3.5	4.6	4.8	5.1
300	2.6	3.5	4.9	5.1	5.4
400	2.8	3.8	5.0	5.4	5.8
500	3.0	4.0	-	-	-
630	3.0	4.1	-	-	-

These cables are produced with Class – 5 Copper/Aluminium conductors insulated with HOFR Grade (Heat, Oil, Fire Resistant) rubber compound which are perfect for use in Industrial atmosphere. With superior quality raw materials these cables give real value for money.

Welding Cable - Copper conductor
General Purpose & HOFR Rubber Compound Covered.

Nominal Cross Sectional Area mm²	No/Dia of Starands	Thickness of Insulation	General Purpose			HOFR		
			Current Rating at Max. Duty Cycle Amps					
			100%	60%	30%	100%	60%	30%
16	510/0.2	2.0	94	121	172	135	174	246
25	796/0.2	2.0	125	161	228	177	228	343
35	1114/0.2	2.0	156	201	285	221	285	403
50	707/0.3	2.2	197	254	360	279	360	509
70	990/0.3	2.4	248	320	453	352	454	643
95	1344/0.3	2.6	299	386	546	424	547	774

Welding Cable - Aluminium
General Purpose & HOFR Compound Covered.

Nominal Cross Sectional Area mm²	No/Dia of Starands	Thickness of Insulation	General Purpose			HOFR		
			Current Rating at Max. Duty Cycle Amps					
			100%	60%	30%	100%	60%	30%
50	708/0.3	2.2	155	200	283	222	287	405
70	999/0.3	2.4	196	253	358	280	361	511
95	1350/0.3	2.6	237	306	433	339	438	619
120	1702/0.3	2.8	283	365	517	404	522	738

Silicon Rubber Cables

Silicon cables have excellent electrical & thermal resistant properties. These can withstand continuous operations of 150°C. These cables are moisture resistant & chemical resistant offering high flexibility. Find application in Blast Furnaces, Airport Lighting, Nuclear power Stations, steel plants, Textile Machineries etc.

- **Conductor : Annealed Tinned Copper Conductor**
- **Size : 0.5 Sq.mm to 150 Sq.mm**
- **No. of Cores : Single Core to Multicores**
- **Insulation : High Dielectric Strength Silicon Rubber**
- **Outer sheath : Silicon Rubber**
- **Reference Specs : BS: 6360/Bs: 6195, IEC: 245-1, IS: 6380 & IS: 9968**

GENERAL INSULATION AND SHEATH THICKNESS

Insulation Thickness

Nominal Area of Conductor	Nominal Thickness of Insulation for Power Cores			
(Sq. mm)	1.1 kv (mm)	3.3 kv (mm)	3.8/6.6 kv (mm)	3.35/11 kv (mm)
2.5	1.0	--	--	--
4	1.0	--	--	--
6	1.0	--	--	--
10	1.2	--	--	--
16	1.2	2.2	3.0	4.0
25	1.4	2.2	3.0	4.0
35	1.4	2.2	3.0	4.0
50	1.6	2.2	3.0	4.0
70	1.6	2.2	3.0	4.0
95	1.8	2.4	3.0	4.0
120	1.8	2.4	3.0	4.0
150	2.0	2.4	3.0	4.0
185	2.2	2.4	3.0	4.0

Note : (1) The nominal thickness of insulation for pilot core(s) shall be 1.00 mm. However higher thickness whenever required to build up the diameter is permitted.
(2) The thickness of covering on earth conductor(s) shall be suitably selected for covered earth conductor(s).

PTFE Cables

We offer a wide range of PTFE/FEP/ETFE insulated single core & Multicore cables. These cables carry higher currents as compared to same cross section in PVC wires. These find used in High temperature Zones, Acidic Zones & Chemical Areas.

CONDUCTOR : • Annealed Plain Copper (APC) • Silver Plated Copper (SPC) • Nickel Plated Copper (NPC)

INSULATION : PTFE / FEP

SHIELD : Annealed Plain Copper (APC) / Silver Plated Copper (SPC)

SHEATH : PTFE / FEP

STANDARD APPLICABLE : • MIL - 27500 - G - US Military Standard • JSS - 51038.2002 - Indian Defence Standard • JSS - 51034-92

GENERAL TECHNICAL PARAMETERS : • Min. Bending Radius : 10 x Cable Dia • Temperature Range : -65°C to +260°C • Insulation Resistance : 2 Gohms x kms • Radiation Resistance : 3 x 10^7 CJKM • Tensile Strength : 250 kg/Cm^2

INSULATION RADIAL THICKNESS : • ET - 250 V AC rms Grade - 0.15 mm Nominal • E - 600 V ACrms Grade - 0.25 mm Nominal • EE - 1000 V ACrms Grade - 0.40 mm Nominal

PTFE (TEFLON) INSULATED WIRES

Sr. No.	Size in AWG	No. of Strands/Dia of each Strand (mm)	Parameters of Conductor (Nominal) (As per JSS 51034)				Nominal Dia of Insulated Wire		
			Bunched Copper Dia in mm	Cross Section Sq. mm	Conductor Resistance ohm/km at 20° C	Current Rating Amps.	ET (250v) AC	E (600v) AC	EE (1000v) AC
1	26/1	1/0.4	0.40	0.1282	140	3.0	0.71	0.90	1.15
2	26/7/34	7/0.16	0.48	0.1409	133.7	3.0	0.79	0.99	1.24
3	26/19/38	19/0.1	0.50	0.1540	126.7	3.0	0.79	0.99	1.24
4	24/1	1/0.5	0.50	0.2047	88.4	4.0	0.81	1.00	1.25
5	24/7/32	7/0.2	0.60	0.2270	83.2	4.0	0.91	1.12	1.37
6	24/19/36	19/0.13	0.63	0.2407	80.2	4.0	0.91	1.12	1.37
7	22/1	1/0.65	0.65	0.3243	56.1	7.3	0.95	1.15	1.40
8	22/7/30	7/0.25	0.75	0.3547	52.5	7.3	1.07	1.27	1.52
9	22/19/34	19/0.16	0.80	0.3820	49.8	7.3	1.07	1.27	1.52
10	20/1	1.08	0.80	0.5168	34.7	11.0	1.10	1.30	1.53
11	20/7/28	7/0.32	0.97	0.5630	33.0	11.0	1.27	1.47	1.73
12	20/19/32	19/0.2	1.00	0.6162	30.3	11.0	1.27	1.47	1.73
13	18/7/26	7/0.4	1.20	0.8969	20.7	16.0	-	1.75	2.00
14	18/19/30	19/0.25	1.25	0.9627	19.1	16.0	-	1.75	2.00
15	16/19/29	19/0.29	1.45	1.2293	14.9	22.0	-	2.03	2.25
16	16/37/32	37/0.2	1.40	1.200	15.0	22.0	-	2.00	2.20
17	15/19/28	19/0.32	1.60	1.5272	12.5	26.0	-	2.15	2.40
18	14/19/27	19/0.36	1.83	1.9412	9.5	32.0	-	2.42	2.69
19	14/37/30	37/0.25	1.75	1.8886	10.0	32.0	-	2.35	2.60
20	13/19/26	19/0.4	2.00	2.3864	7.8	35.0	-	2.60	2.85
21	12/19/25	19/0.45	2.25	3.0848	6.0	41.0	-	2.90	3.17
22	12/37/28	37/0.32	2.24	2.9742	6.5	41.0	-	2.85	3.12
23	11/19/24	19/0.5	2.50	3.7287	5.0	45.0	-	3.15	3.40
24	10/19/22	19/0.65	3.20	6.3015	3.0	55.0	-	3.80	4.10
25	10/37/26	37/0.4	2.82	4.7397	3.9	50.0	-	3.40	3.68
26	8/133/29	133/0.29	4.29	8.6054	2.2	75.0	-	-	5.31
27	6/133/27	133/0.36	5.41	13.5889	1.4	100.0	-	-	6.68

PTFE Multi Core Shielded/Non Shielded Multicore Cables

- Conductor Area : 0.14 Sq. mm to 4.0 Sq. mm
- AWG Size : 26/7/34 to 11/19/24
- Shield : SPC/APC • Sheath : PTFE (Teflon)
- 0.14 Sq.mm - 26/7/34 - ET Type - 2 Core to 12 Core
- 0.22 Sq.mm - 24/7/32 - ET/E - 2 Core to 12 Core
- 0.50 Sq.mm - 20/7/28 - ET/E - 2 Core to 14 Core
- 0.75 Sq.mm - 24/0/2mm - E Type - 2 Core to 20 Core
- 1.00 Sq.mm - 18/19/30 - E Type - 2 Core to 20 Core
- 1.5 Sq.mm - 15/19/28 - E Type - 2 Core to 20 Core
- 2.5 Sq.mm - 13/19/26 - E Type - 2 Core to 20 Core
- 4.0 Sq.mm - 11/19/24 - E Type - 2 Core to 20 Core

Detailed Data Sheet can be submitted on request .

PTFE Co-Axial Cables

CO-AXIAL CABLES TECHNICAL DATA SHEET REG. MIL-C-17/JSS 51100

Type	Conductor Material Strands	No/Dia of Conductor mm	Core Diecl.	Core Dia mm	No. & Mat. of Sheld Braid	O.D on Jacket mm	Impe-dance ohms	Capaci. pf/mtr	Attenu-ation at 400 MHZ (db/10m)	Max Oper Voltage
RG-140	SCCS	1/0.63	PTFE	3.70	1SPC	5.91	75	68.90	26.20	2300
RG-142	SCCS	1/0.94	PTFE	2.94	2SPC	4.95	50	93.50	29.50	1900
RG-187	SCCS	7/0.10	PTFE	1.52	1SPC	2.79	75	65.60	68.90	1200
RG-188	SCCS	7/0.17	PTFE	1.52	1SPC	2.79	50	95.00	65.60	1200
RG-195	SCCS	7/0.10	PTFE	2.59	1SPC	3.94	95	52.50	55.80	1500
RG-196	SCCS	7/0.10	PTFE	0.86	1SPC	2.03	50	95.00	95.00	1000

PTFE (Teflon) Sleeves

SLEEVE MAKE UP

The sleeves are made by tape wrapping & sintering process.

MAIN FEATURES

• Operating temperature from -65°C to + 260°C. • Resistant to flame, Hydraulic fuilds, chemicals, aircraft & rocket fuel, even at elevated temperatures.

SIZES

Inner Dia 1.0 mm to 9.00 mm

AVAILABLE SIZES (PIECE LENGTH METER)

Inner Dia Nominal mm	Wall Thickness Nominal mm	Approx WT. (Gms/P.M.)
0.50	0.25	1.35
0.75	0.25	1.60
1.00	0.30	2.75
1.50	0.40	4.35
2.00	0.40	5.60
2.50	0.40	7.50
3.00	0.40	11.20
3.50	0.50	13.75
4.00	0.50	16.90
5.00	0.50	20.50
6.00	0.50	24.80
7.00	0.50	29.75
8.00	0.50	33.00
9.00	0.50	37.20

PTFE is chemical name of Teflon & Teflon is registered trademark of Dupont USA.

Instrumentation Cables

Vision provides high quality & vast range of aluminium Tape screened & copper braid shielded type instrumentation cables. These cables are available in 'Unarmoured' & 'Armoured' types. These versions have good protection against the capacitive effects generated due to electric fields. Normally used in Data transmission, Automation & SCADA systems.

- **Conductor : Annealed Plain / Tinned Copper Conductor**
- **Insulation : PVC - HR Grades**
- **Screen : Aluminum Mylar Types**
- **Shield : Braid of Annealed tinned copper - 85% coverage**
- **Sheath : PVC - 15°C to +70°C & -40°C to +105°C**
- **Armour : G. I. Braid/S.S. Braid/GI Wire/GI Strip as applicable**
- **Standards : IEC : 60228, IEC : 60227-5, IEC : 332-1, IS-5831**
- **Applications : To carry data signals protected from EMF currents & outside potential effects.**

Part Number	No. of Cores & area per conductor (mm.sq.)	Approx Outside Diameter in mm	Copper Weight kg/km
SH-101	1C X 0.5	4.4	19.5
SH-102	2C X 0.5	6.5	33.0
SH-103	3C X 0.5	8.3	46.0
SH-104	4C X 0.5	8.9	55.0
SH-105	5C X 0.5	9.4	66.0
SH-106	7C X 0.5	9.9	80.5
SH-107	2C X 0.75	8.4	46.0
SH-108	3C X 0.75	8.9	57.0
SH-109	4C X 0.75	9.4	64.0
SH-110	5C X 0.75	9.9	77.0
SH-111	7C X 0.75	10.7	102.0
SH-112	2C X 1.0	9.1	56.0
SH-113	3C X 1.0	9.4	65.0
SH-114	4C X 1.0	9.9	78.0
SH-115	5C X 1.0	10.7	89.0
SH-116	7C X 1.0	11.4	113.3
SH-117	2C X 1.5	11.4	65.0
SH-118	3C X 1.5	11.8	79.0
SH-119	4C X 1.5	12.8	97.0
SH-120	5C X 1.5	14.1	116.0
SH-121	7C X 1.5	15.4	149.0

Part Number	No. of Cores & area per conductor (mm.sq.)	Approx Outside Diameter in mm	Copper Weight kg/km
SH-122	3C X 2.5	13.3	146.0
SH-123	4C X 2.5	14.5	167.0
SH-124	5C X 2.5	16.1	200.0
SH-125	7C X 2.5	17.4	288.0
SH-126	4C X 4	16.6	237.0
SH-127	5C X 4	18.0	328.0
SH-128	4C X 6	18.1	318.0
SH-129	5C X 6	19.7	441.0
SH-130	4C X 10	22.6	558.0
SH-131	5C X 10	24.7	714.0
SH-132	4C X 16	25.4	804.0
SH-133	5C X 16	28.4	1050.0
SH-134	4C X 25	31.0	1289.0
SH-135	5C X 25	34.1	1446.0
SH-136	4C X 35	34.3	1693.0
SH-137	5C X 35	37.9	1975.0
SH-138	4C X 50	40.3	2342.0

GENERAL TECHNICAL PARAMETERS	
Colour Code	Up to 4 Cores : Red, Yellow, Blue, Green Above 4 Cores : Grey colour with black number printing
Temperature Range	-15°C to +70°C & -40°C to +105°C
Test Voltage	Core to Core : 1.0 Kv-DC • Core to Shield : 1.0 Kv-DC
Peak Working Voltage	250 V
Insulation Resistance	>500 m ohms
Minimum Bending Radius for Unarmoured Cables	15 x D
Mutual Capacitance	Core to Core : 120 pf/mtr (max.) • Core to Shield : 140 pf/mtr (max.)

Power Cords

Vision offers a wide range of integrally moulded power cords in 6 Amps, 10 Amps & 16 Amps capacity. Design & Durability are the main elements for lifelong performance. These find used in Electrical Appliances such as Ovens, Irons and Hair Dryers.

- **Pins :** High Purity Brass Pins
- **Inner Mould :** Virgin Nylon/Polypropylene
- **Final Mould :** FR PVC
- **Ref Specs :** IS : 1293
- **Capacity :** 6 AMPS to 16 AMPS

STANDARD TECHNICAL DATA

Configuration	Cable Specification	Length	Current Capacity	Application
2 Pin	14/0.15 mm (0.25 mm2) 2 Core Flat Cable	2 Mtrs	3 AMPS	Audio, Videos Equipments, Table Lamps, Hair Dryers Etc.
2 Pin	16/0.2 mm (0.5 mm2) 2 Core Flat Cable	2 Mtrs	3 AMPS	Audio, Videos Equipments, Table Lamps, Hair Dryers Etc.
3 Pin	16/0.2 mm (0.5 mm2) 3 Core Round Cable	2 Mtrs	6 AMPS	Ovens, Irons, Refrigerators, Water Purifiers, Mixer Grinders, Washing Machine etc.
3 Pin	32/0.2mm (1.0mm2) 3 Core Round Cable	2 Mtrs	10 AMPS	Power Tools etc.
3 Pin	48/0.2mm (1.5 mm2) 3 Core Round Cable	2 Mtrs	16 AMPS	Tea & Cofee Wending Machines, Ovens, Industrial Machines, Drill Machines etc.
3 Pin Computer Cord	16/0.2 mm (0.5 mm2) 3 Core Round Cable	2 Mtrs	6 AMPS	Computers & Printers
3 Pin Laptop Charger	16/0.2 mm (0.5 mm2)3 Core Round Cable	2 Mtrs	6 AMPS	Laptops

Note: Grommets / Locks can be provided at suitable length of the Cable

Load Cell Cables

Load cell cables are data transmission cables. These are designed for carrying capacitance signals generated in load cells to display panels. Processed from high quality tinned copper conductor and 100% shield coverage, these cables transmit accurate signals. Find application in table top weigh scales and Truck weigh Bridges.

TYPE - I

- Conductor : EC Grade Annealed Tinned Copper
- Size : 22 AWG & 24 AWG
- Insulation : PVC /HDPE
- No. of cores : 4 Cores (Normally)
- Shield : Aluminium Backed Mylar Tape or tinned copper braid
- Drain wire : 24 AWG Bunched Annealed Tinned Copper
- Outer sheath : PVC FR Grade
- Diameter : 6.3 mm Nominal

TYPE - II

- Conductor : Silver Plated Copper
- Size : 22/7/30
- Insulation : PTFE
- No. of Cores : 4
- Shield : SPC Braid 85% Coverage
- Outer Sheath : PVC or PTFE Jacker
- Outer Dia : 6.5 mm

Solar Cables

These cables are especially designed for use in photovoltaic applications. They provide the optimal cable connection between the solar cells and from the solar cells to the inverter or DC main cable. These cables are suitable for outdoor ground and roof mounted systems though not suitable for direct lying under the earth. They are also suitable laying indoors and in fixed pipe installation. Thanks to its halogen free, flame retardant and low smoke properties, these cables are also safe to care the health of inhabitants in case of life.

- Conductor : Class 5 Flexible tinned copper according to DIN VDE 0295,IEC/EN 60228
- Insulation : Halogen Free Cross – linked compound
- Sheath : Halogen Free Cross – linked compound
- Sheath Colour : Black, Red, Blue, Brown and Grey available on request
- Voltage Rating : AC : 600/1000V, DC : 900/1800V
- Temperature Rating : -40°C to +90°C
- Minimum bending radius : Fixed : 4 x Overall Diameter, Flexing : 5 x Overall Diameter
- Rated Voltage Uo/U : 0.6/1Kv AC – 0.9/1.8 KV DC
- Max. Voltage Umax : 1.8kV DC (Conductor/Conductor, Non Earthed system, circuit not under load)
- Max temperature at conductor : +120°C (for 20000 h)
- Test Voltage : 6.5KV AC according to EN 50395

No. of Cores & Nominal Cross Section Area	Overall Dia Nominal (in mm)	Current Capacity (AMPS)	Normal Weight (Kg / km)	MV/A/M
1 x 2.5	4.50	41	39	19
1 x 4.0	5.20	55	57	12
1 x 6.0	5.90	70	79	7.90
1 x 10.0	6.90	98	122	4.70
1 x 16.0	8.30	132	181	2.90
1 x 25.0	9.70	176	273	1.85
1 x 35.0	11.00	218	364	1.35
1 x 50	13.20	276	520	1.00
1 x 70	15.40	347	713	0.73
1 x 95	17.40	416	930	0.56
1 x 120	20.10	488	1191	0.47
1 x 150	22.50	566	1514	0.41
1 x 185	26.00	644	1828	0.36
1 x 240	26.80	775	2324	0.31

Co-axial Cables

Co-axial cables are also known as Radio frequency cables. These are produced with specific raw materials & strict dimensions & design control for accurate impedance, capacitance & attenuation losses etc. Normally used in Radio frequency Applications such as Antennas and Video Transmissions.

- **Conductor : Annealed Plain/Tinned/Silver Plated/CCS Wires**
- **Insulation : Foam/PTFE/Solid Polyethylene.**
- **Shield : Annealed Plain/Tinned Copper**
- **Outer Sheath : PVC/PTFE**
- **Temperature Range : -20 °C to +85 °C**

RADIO FREQUENCY COAXIAL CABLES

Item	Conductor Size (mm)	Dia Over Dielectric (mm)	Overall Diameter (mm)	Impedance OHMS ± 3 OHMS	Attenuation at 200 MHz (db/100 m)	Max R. F. Operating Voltage (kv)
Characteristic Impedance 50-55 OHMS						
RG-58 C/U	19/0.18 (T)	2.95	5.0	50	24	1.9 rms
RG-58/U	0.81 (P)	2.95	5.0	53.5	23	1.9 rms
RG-174/U	7/0.16 (C)	1.50	2.5	50	40	1.5 rms
RG-213/U	7/0.75 (S)	7.25	10.8	50	11	5.0 rms
RG-217/U	2.7 (P)	9.8	13.8	50	7	7.0 rms
	4.95 (P)	17.3	22.1	50	4	11.0 rms
Characteristic Impedance 70-75 OHMS						
RG-11 A/U	7/0.41 (P)	7.25	10.3	75	11	5.0 rms
RG-59/U	0.63 (P)	3.70	6.2	73	16	2.3 rms
RG-59 B/U	0.58 (C)	3.70	6.1	75	16	2.3 rms
RG-6	1.02 (C)	4.57	7.25	75	9.50	1.0 rms
RG-11	1.63 (C)	7.11	10.30	75	6.23	1.0 rms

CCTV Cables

We have the best designs of CCTV Camera Cables. High conductivity, EC Grade tinned copper, FR Grade PVC for audio wires and 100% shield on video wire makes a perfect CCTV Cable. The overall shield type cables provide perfect & highly clear picture quality. Find application in CCTV Camera Installations.

TYPE - I

- Conductor : Annealed Tinned Copper Conductor
- Size : 14/0.15 mm & 14/0.12 mm
- Insulation : FR Grade PVC
- Coaxial Cable : 75 Ohms
- Outer sheath : PVC - FR Grade
- Overall Dia : 6.2 mm

TYPE - II

- Power Cores : 0.5 Sq.mm Plain Copper
- Coaxial Cable : RG - 6 A/U
- Outer Sheath : PVC - FR Grade

Different Versions i.e. 3 Power + 1 Video
4 Power + 1 Video
5 Power + 1 Video

We have developed CCTV to with stand -60°C for Cold Storage applications.
More designs as per customer requirements can be developed.

Telephone Cables

Adopting the latest technology and superior copper and other ingredients, the jelly filled cables and switchboard cables are produced for the perfect performance. Jelly filled cablesNormally find used for underground telephone connections and switchboard cables are used for indoor wiring of telecommunication equipments.

1. Drop Wire Confirming to TEC/BS Specs
2. Switchboard Telephone Cables as per TEC/BS/BT Specifications.
3. Jelly filled Unarmoured Telephone Cables
4. Jelly filled Armoured Telephone Cables
5. Aerial Telephone Cables as per IEC Specs

- **Conductor : Annealed Plain / Tinned Copper** • **Size : 0.5 mm/0.63 mm / 0.9 mm**
- **Insulation : MDPE / HDPE** • **Filling Compound : Water resistant petroleum Jelly**
- **Moisture Barrier & Screen : Aluminium Tape Polyester coated**
- **Armour : Single or Double Steel Tape Armour as required** • **Jacket : LDPE Black**

J.F.T.C. Cable as per DOT Specn. No. G/CUG-01/02, Feb. '96

Nominal Dia of Conductor in mm	No. of Pairs	Nominal Sheath thickness mm	Max. OD of U/A Cable (mm)	Nominal Thickness of Steel tape mm	Jacket Thickness Nominal mm	Max. O.D. of Armd. Cable (mm)	Approx wt. of U/A cable per Km (kg)	Approx Wt. of Armd Cable/Km (kg.)	Standard Packing Length with tolerance of +10%, -25%
0.5	10	2.0	13.2	0.5	1.4	20.2	140	480	1000
0.5	20	2.0	17.0	0.5	1.4	24.0	230	630	1000
0.5	50	2.0	22.0	0.5	1.4	29.0	470	1000	1000
0.5	100	2.0	26.0	0.5	1.4	36.0	840	1500	500
0.5	200	2.2	37.6	0.5	1.4	45.5	1560	2400	400
0.5	400	2.4	49.0	0.8	1.8	67.5	3000	5000	400
0.5	800	2.6	68.0	0.8	2.2	77.5	6000	8700	200
0.5	1200	3.0	82.0	0.8	2.2	92.0	9100	12300	200
0.63	20	2.0	19.0	0.5	1.4	26.0	320	780	1000
0.63	50	2.0	25.5	0.5	1.4	32.5	680	1300	1000
0.63	100	2.0	34.0	0.5	1.4	42.0	1250	2000	500
0.63	200	2.2	46.0	0.8	1.4	54.0	2440	4100	400
0.63	400	2.6	62.0	0.8	1.8	71.0	4700	7000	200
0.63	800	3.0	85.0	0.8	2.2	94.5	9200	12700	200
0.9	5	1.6	12.00	0.2	2.0	16.0	150	380	1000
0.9	10	1.6	14.00	0.2	2.0	21.3	270	535	1000
0.9	20	1.8	19.0	0.2	2.0	25.8	486	819	1000
0.9	50	2.0	27.9	0.2	2.0	34.30	1088	1548	400
0.9	100	2.4	37.8	0.2	2.0	44.20	2076	2685	400
0.9	200	2.7	51.3	0.2	2.0	57.70	3975	4786	200
0.9	400	3.0	70.2	0.2	2.0	76.60	7681	8775	200

0.5 mm Conductor PIJF Cables

Thickness of Inner & Outer Sheath (except) for collective metallic screened and pliable wire armoured cables

Calculate Dia. Under Inner Sheath		Thickness of Sheath	
Over mm	Up to and Including mm	Inner Min. mm	Outer Nom mm
--	10	1.4	2.0
10	15	1.6	2.4
15	20	1.8	2.6
20	25	2.0	2.8
25	30	2.2	3.0
30	40	2.4	3.2
40	50	2.8	3.6
50	60	3.2	4.0
60	70	3.6	4.5
70	80	4.0	5.0
80	--	4.4	5.5

Note : Additional Properties & Special Designs like Copper Braid Shield & SS Wire Braiding, Fibre Glass Braiding etc can be provided.

0.9 mm Conductor PIJF Cables

Thickness of Inner & Outer Sheath for collective metallic screened and pliable wire armourad cables

Calculate Dia. Under Inner Sheath		Thickness of Sheath	
Over mm	Up to and Including mm	Inner Min. mm	Outer Nom mm
--	10	1.6	2.5
10	15	1.8	2.8
15	20	2.0	3.2
20	25	2.2	3.6
25	30	2.4	4.0
30	40	2.6	4.5
40	50	3.0	5.0
50	60	3.5	5.7
60	70	4.0	6.4
70	80	4.5	7.1
80	90	5.0	7.8
90	100	5.5	8.5
100	--	6.0	9.0

Spiral Cords

As the name says these are cables in spiral forms and designed for expansion and retraction. Starting from 2 cores to 25 Core these cables are available in shielded & non shielded formats. Normally insulated with PVC and outer sheath with PU and TPE Materials. Normally used in CNC machines, Wireless equipments, Medical equipments, Road levelling machines, portable Antennas, Automatic Warning Lights etc.

These have high following properties		
1	Temperature Range	-30°C to +60°C
2	Conductor	Class 5
3	Core Identification	VDE 0293-308
4	Nominal Voltage	440/600 V
5	Insulation Resistant	20G ohms x cm
6	Test Voltage	3000 V

ADVANTAGES

- Especially flame-retardant outer sheath of Poly Urethane. • Extremely cut and wear resistant.
- Highly resistant against oil, low temperature, microbes and hydrolysis.
- The strength of recoiling & the extension length up to 3 times of the original length are other feature of high quality.
- Chemical resistant to Benzols, Benzines, Microbes, Minerals oils etc.

PHYSICAL DIMENSIONS

- General Parameter • Length of the straight ends:
- First end : 200 mm • Second end : 300 mm
- Other dimensions, lengths, colours and dimensions as per request
- Minimum order quantity : 100 Nos.

Part Number	No. of Cores & mm2 per conductor	Unextended Spiral Length mm	Max. Unextended Length of Spiral mm	Approx Cable Diameter mm (+ 0.1)	Approx outer Diameter of Spiral (mm)
SL-01	2x0.25	1000	3000	4.5	20
SL-02	2x0.25	1500	4500	4.5	20
SL-03	5CX0.25	1000	3000	5.5	21.5
SL-04	5CX0.25	1500	4500	5.8	21.5
SL-05	7CX0.25	1000	3000	4.55	20.5
SL-06	7CX0.25	1500	4500	4.55	20.5
SL-07	12CX0.25	1000	3000	8.20	30
SL-08	12CX0.25	1500	4500	8.20	30
SL-09	18CX0.25	1000	3000	9.45	36
SL-10	18CX0.25	1500	4500	9.45	36
SL-11	25CX0.25	1000	3000	9.8	45
SL-12	25CX0.25	1500	4500	9.8	45
SL-13	2X0.5	1000	3000	5.6	20
SL-14	2X0.5	1500	4500	5.6	20
SL-15	5CX0.5	1000	3000	7.00	27
SL-16	5CX0.5	1500	4500	7.00	27
SL-17	7CX0.5	1000	3000	8.15	30
SL-18	7CX0.5	1500	4500	8.15	30
SL-19	12CX0.5	1000	3000	9.70	37
SL-20	12CX0.5	1500	4500	9.70	37
SL-21	18CX0.5	1000	3000	11.20	40
SL-22	18CX0.5	1500	4500	11.20	40
SL-23	2X0.75	1000	3000	5.4	19.5
SL-24	2X0.75	1500	4500	5.4	19.5

Part Number	No. of Cores & mm2 per conductor	Unextended Spiral Length mm	Max. Unextended Length of Spiral mm	Approx Cable Diameter mm (+ 0.1)	Approx outer Diameter of Spiral (mm)
SL-25	5CX0.75	1000	3000	6.2	21
SL-26	5CX0.75	1500	4500	6.2	21
SL-27	7CX0.75	1000	3000	7.3	27
SL-28	7CX0.75	1500	4500	7.3	27
SL-29	12CX0.75	500	1500	9.9	35
SL-30	12CX0.75	1000	3000	9.9	35
SL-31	18CX0.75	500	1500	11.7	40
SL-32	18CX0.75	1000	3000	11.7	40
SL-33	2X1.0	1000	3000	5.7	20
SL-34	2X1.0	1500	4500	5.7	20
SL-35	5CX1.0	1000	3000	6.5	24
SL-36	5CX1.0	1500	4500	6.5	24
SL-37	7CX1.0	1000	2500	8.0	30
SL-38	7CX1.0	1500	3750	8.0	30
SL-41	2X1.5	1000	3000	6.3	23
SL-42	2X1.5	1500	4500	6.3	23
SL-43	5CX1.5	1000	2500	8.1	30
SL-44	5CX1.5	1500	3750	8.1	30
SL-45	7CX1.5	1000	2500	8.9	31
SL-46	7CX1.5	1500	3750	8.9	31
SL-49	3CX2.5	1000	2500	8.1	28.5
SL-50	3CX2.5	1500	3750	8.1	28.5
SL-51	5CX2.5	1000	2500	10.0	37
SL-52	5CX2.5	1500	3750	10.0	37

LT & HT

PTFE

Rubber

CCTV

Telecommunication

Silicon Rubber

Shielded

Thermocouple

Spiral Cords

Power Cords

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Ultimate *Cable* Source

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