



FEC Cables (M) Sdn. Bhd.



Low Voltage Cables

CORPORATE HISTORY

FEC Cables (M) Sdn. Bhd. was first established in 1967 and was previously known as Furukawa Electric Cables (M) Sdn. Bhd. In all the years until 2003, the company had been under the management and control of Furukawa Electric Co. Ltd. of Japan.

In 2003, the company was renamed FEC Cables (M) Sdn. Bhd. following the acquisition of its major equity stake by Permodalan Nasional Berhad, Malaysia's government-owned premier multi-billion dollar investment institution.

The Company had started a technical collaboration from world renowned cable manufacturer, The Furukawa Electric Co. Ltd Japan (Furukawa Japan).

FEC Cables has benefited enormously from the technical collaboration and the subsequent technology transfer with Furukawa Japan. FEC Cables inherited from Furukawa Japan not only its advanced technology and technical know-how but also the disciplines of producing quality products using material conforming to the international standards of manufacturing cables.

Today FEC Cables plays a prominent role as a forerunner in the cable industry.

FEC Cables has been actively involved in serving various industrial sectors, namely the power, telecommunications, construction as well as the oil and gas sectors.

INTRODUCTION OF COMPANY

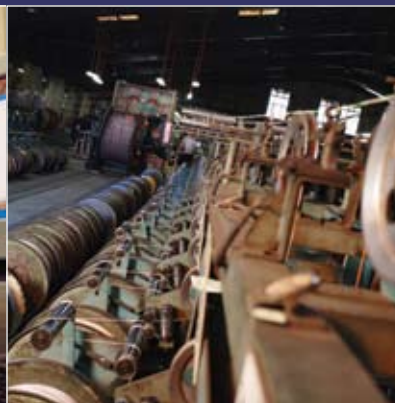
When there is talk of high quality electric wires and cables, the one company that comes to mind is FEC Cables (Malaysia) Sdn. Bhd. FEC is a subsidiary of Permodalan Nasional Berhad and was formerly known as Furukawa Electric Cables (M) Sdn. Bhd. Having established its Shah Alam plant in 1967 on a 7-acre site at the Shah Alam Industrial Estate, Furukawa has come a long way.

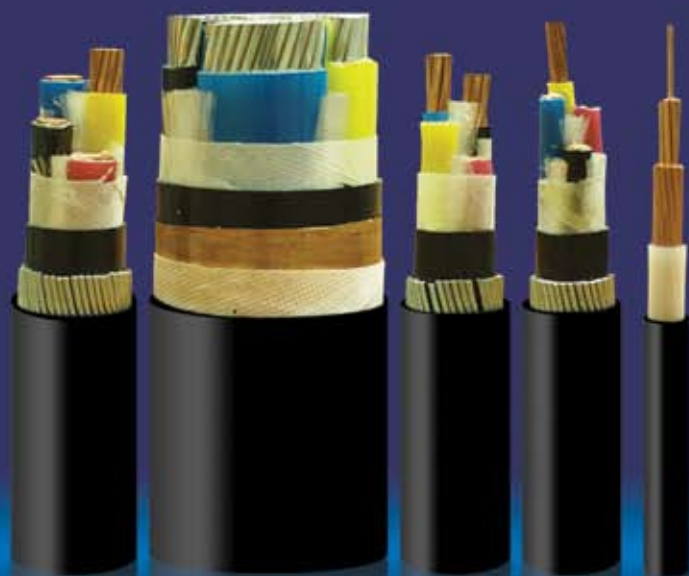
The technical collaboration with our Japanese counterpart, Furukawa Japan, has brought about an amazing success for us. In terms of quality, we have climbed the ladders of product manufacturing, steadily and successfully, pushing FEC towards the pinnacle of excellence.

Putting our customers' demands and needs as our number one priority, we opened our second plant in 1995, on a 27-acre freehold land site in Bukit Raja Industrial area, Klang. In our quest for excellence, we equip the plant with the latest technological aids for the manufacture of a wide range of low and medium voltage cables.

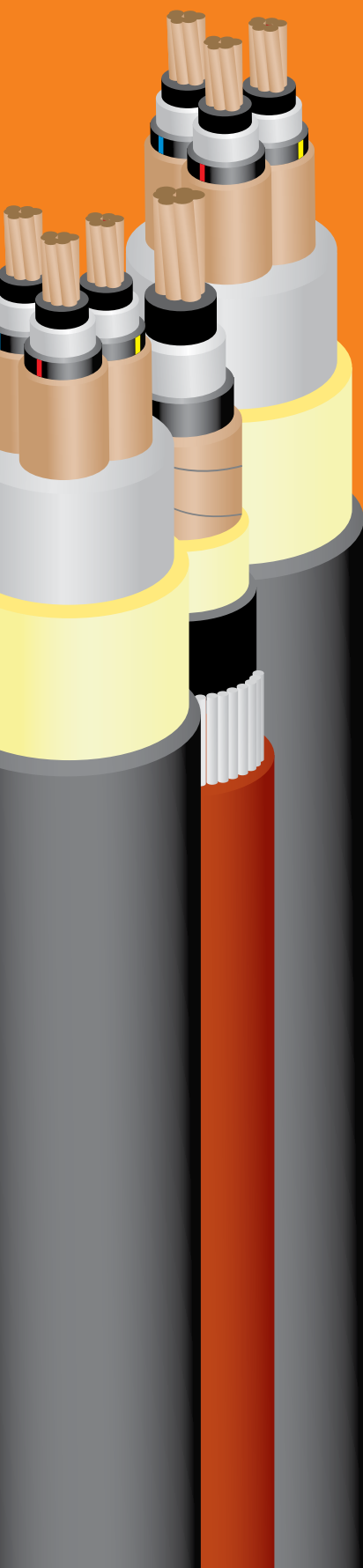
The certification of the ISO 9001 for both plants only proves that we do not compromise on quality and customer satisfaction. Our dedicated and hard-working employees are the backbone of our success. This was greatly helped by the state-of-the-art technology equipment which has led us towards excellence.

Moving towards a new century, we pledge to continually strive towards progressive and dynamic growth as FEC Cables continues its efforts in contributing to the development Malaysia.





Low Voltage Cables



1. BS 6004

a. U/PVC Non-Sheathed Cables For General Purpose 450/750 V	6
b. CU/PVC/PVC/PVC Sheathed Light Cables 300/500 V	7
c. CU/PVC/PVC Sheathed Cables 300/500 V	8
d. CU/PVC Non-Sheathed Cables For Internal Wiring 300/500 V	9

2. BS 6346(MS 274) (600/1000V)

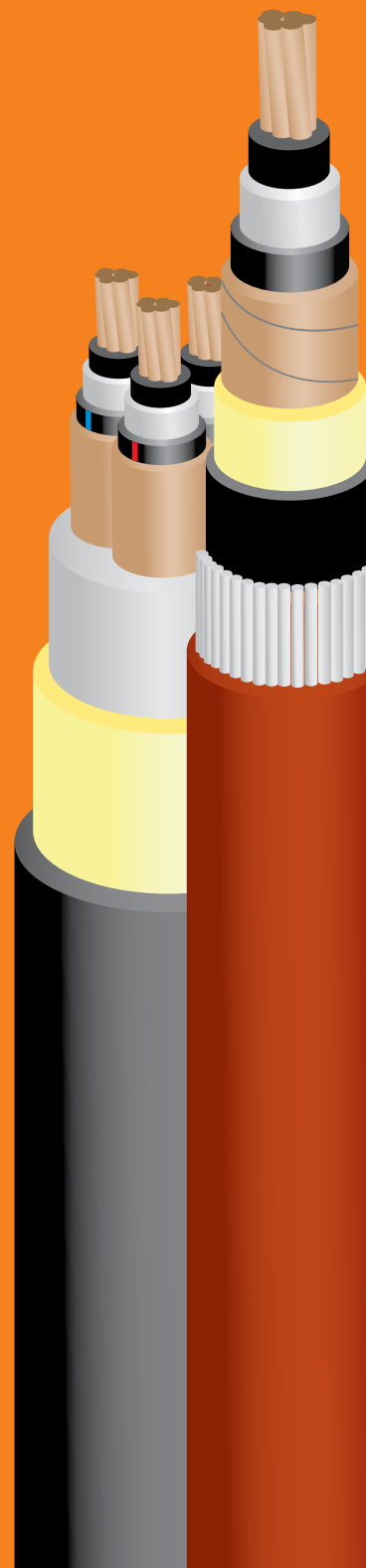
a. CU/PVC/PVC/SWA(AL)/PVC Sheathed Power Cable(1-CORE)	10
b. CU/PVC/PVC/SWA/PVC Sheathed Power Cable	
(i) 2-Core	11
(ii) 3-Core	12
(iii) 4-Core	13
(iv) 3 ½-Core	14
c. CU/PVC/PVC/SWA/PVC Sheathed Control Cable	
(i) 1.5 mm ²	15
(ii) 2.5 mm ²	16
(iii) 4 mm ²	17

3. IEC 60502-1 (600/1000 V)

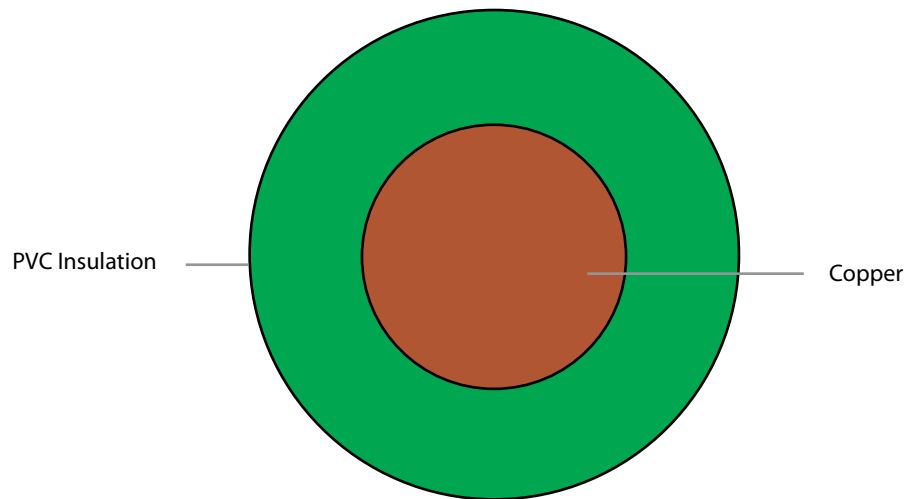
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Circular Stranded Copper Conductor, PVC Non-seathed Cables For General Purpose



1 Core

Dimensional

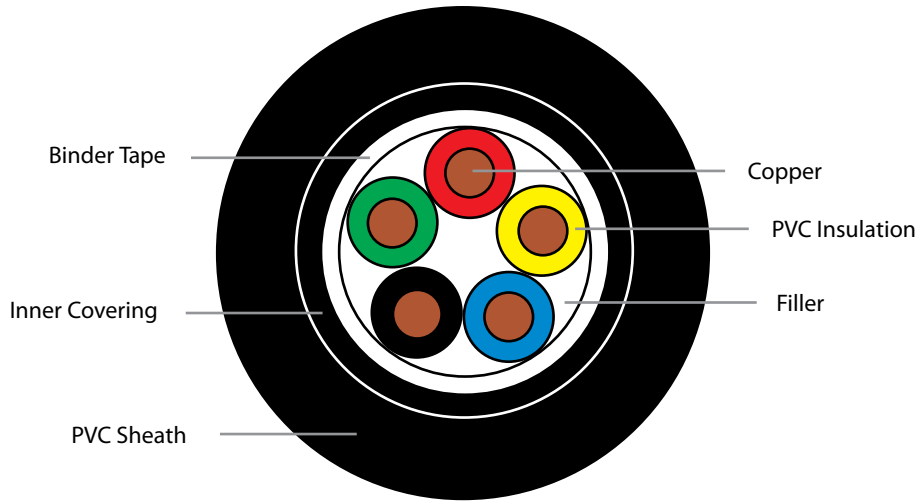
Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400	500	630
No./Diameter of Wires	No./mm	7/0.53	7/0.67	7/0.85	7/1.04	7/1.35	7/1.70	7/2.14	19/1.53	19/1.78	19/2.14	19/2.52	37/2.03	37/2.25	37/2.52	61/2.25	61/2.52	61/2.85	61/3.20	127/2.52
Nominal insulation thickness	mm	0.7	0.8	0.8	0.8	1.0	1.0	1.2	1.2	1.4	1.4	1.6	1.6	1.8	2.0	2.2	2.4	2.6	2.8	2.8
Mean Overall Diameter(mm)	Lower Limit	2.7	3.3	3.8	4.3	5.6	6.4	8.1	9.0	10.6	12.1	14.1	15.6	17.3	19.3	22.0	24.5	27.5	30.5	34.0
	Upper Limit	3.3	4.0	4.6	5.2	6.7	7.8	9.7	10.9	12.8	14.6	17.1	18.8	20.9	23.3	26.6	29.6	33.2	36.9	41.1
Cable net. weight (approx.)	kg/km	23	35	52	73	120	181	283	377	513	721	994	1,234	1,517	1,904	2,485	3,112	3,960	4,968	6,325

Electrical Data

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Max. conductor resistance DC at 20°C	Ω/km	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283
Min. insulation resistance at 70°C	MΩ /km	0.010	0.009	0.0077	0.0065	0.0065	0.0050	0.0050	0.0043	0.0043	0.0035	0.0035	0.0032	0.0032	0.0032	0.0032	0.0030	0.0028	0.0028	0.0025

Core Identification : Green/Yellow

Circular Stranded Copper Conductor, PVC Insulated, Pvc Inner Covering, PVC Sheathed Light Cables



5 Core

Dimensional

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	1.5	2.5	4	6	10	1.5	2.5	4	6	10	1.5	2.5	4	6	10
No. of cores		2					3					4					5				
No./Diameter of Wires	No./mm	7/0.53	7/0.67	7/0.85	7/1.04	7/1.35	7/0.53	7/0.67	7/0.85	7/1.04	7/1.35	7/0.53	7/0.67	7/0.85	7/1.04	7/1.35	7/0.53	7/0.67	7/0.85	7/1.04	7/1.35
Nominal insulation thickness	mm	0.7	0.8	0.8	0.8	1.0	0.7	0.8	0.8	0.8	1.0	0.7	0.8	0.8	0.8	1.0	0.7	0.8	0.8	0.8	1.0
Nominal inner covering thickness	mm	0.4	0.4	0.4	0.4	0.6	0.4	0.4	0.4	0.4	0.6	0.4	0.4	0.4	0.6	0.6	0.4	0.4	0.6	0.6	0.6
Nominal sheath thickness	mm	1.2	1.2	1.2	1.2	1.4	1.2	1.2	1.2	1.4	1.4	1.2	1.2	1.4	1.4	1.4	1.2	1.2	1.4	1.4	1.4
Mean Overall Diameter(mm)	Lower Limit	8.4	9.6	10.5	11.5	15.0	8.8	10.0	11.0	12.5	15.5	9.6	11.0	12.5	14.0	17.0	10.0	12.0	14.0	15.5	18.5
	Upper Limit	10.5	12.0	13.0	14.0	17.5	10.5	12.5	13.5	15.5	19.0	12.0	13.5	15.0	17.0	20.5	12.5	14.5	17.0	18.5	22.0
Cable net. weight (approx.)	kg/km	114	155	200	255	417	140	193	255	347	542	169	237	333	447	682	201	284	413	539	829

Electrical Data

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	1.5	2.5	4	6	10	1.5	2.5	4	6	10	1.5	2.5	4	6	10
No. of cores		2					3					4					5				
Max. conductor resistance DC at 20°C	Ω/km	12.10	7.41	4.61	3.08	1.83	12.10	7.41	4.61	3.08	1.83	12.10	7.41	4.61	3.08	1.83	12.10	7.41	4.61	3.08	1.83
Min. insulation resistance at 70°C	MΩ /km	0.010	0.009	0.0077	0.0065	0.0065	0.010	0.009	0.0077	0.0065	0.0065	0.010	0.009	0.0077	0.0065	0.0065	0.010	0.009	0.0077	0.0065	0.0065

Core Identification :

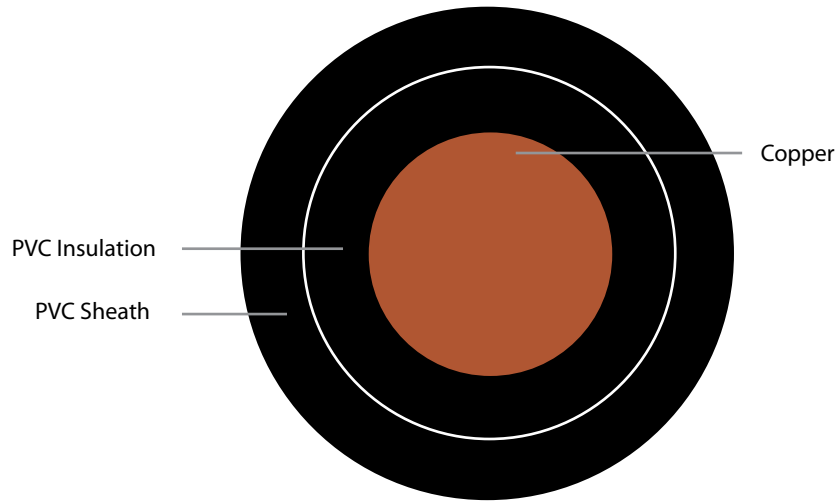
Two-core = Red & Black

Three-core = Red, Yellow & Blue.

Four-core = Red, Yellow, Blue & Black

Five-core = Red, Yellow, Blue, Black & Green/Yellow

Circular Stranded Copper Conductor, PVC Insulation, PVC Sheathed Cables



1 Core

Dimensional

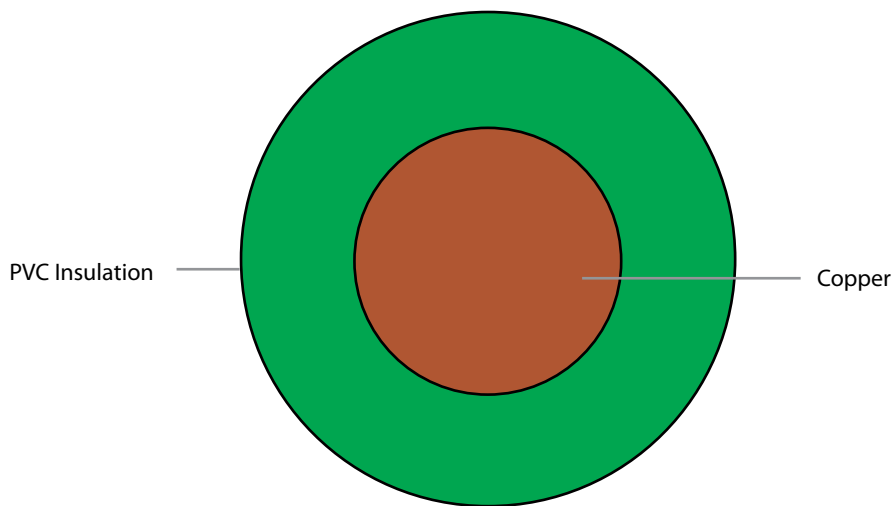
Nominal cross sectional area	mm ²	1.0	1.25	1.5	1.5	2.5	4	6	10	16	25	35
No./Diameter of Wires	No./mm	1/1.13	3/0.73	1/1.38	7/0.53	7/0.67	7/0.85	7/1.04	7/1.35	7/1.70	7/2.14	19/1.53
Nominal insulation thickness	mm	0.6	0.7			0.8			1.0		1.2	
Nominal sheath thickness	mm	0.8					0.9			1.0	1.1	
Mean Overall Diameter(mm)	Lower Limit	3.8	4.3	4.2	4.3	5.0	5.4	6.0	7.2	8.4	10.0	11.0
	Upper Limit	4.5	5.1	4.9	5.0	6.0	6.8	7.4	8.8	10.5	12.5	13.5
Cable net. weight (approx.)	kg/km	27	36	35	38	54	75	99	152	221	337	438

Electrical Data

Nominal cross sectional area	mm ²	1.0	1.25	1.5	1.5	2.5	4	6	10	16	25	35
Max. conductor resistance DC at 20°C	Ω/km	18.10	14.60	12.10	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524
Min. insulation resistance at 70°C	MΩ/km	0.011	0.011	0.011	0.010	0.009	0.0077	0.0065	0.0065	0.0052	0.0050	0.0044

Core Identification: Black

Solid Copper Conductor, PVC Non-Sheathed Cables For Internal Wiring



1 Core

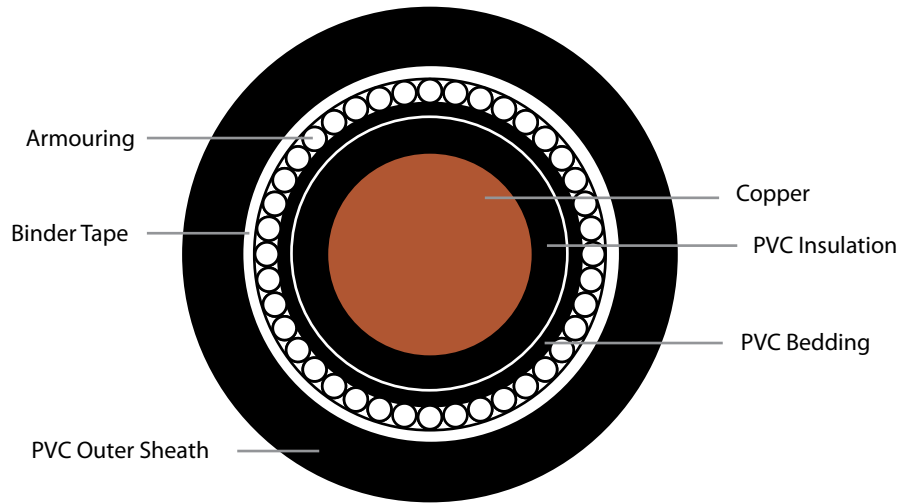
Dimensional

Nominal cross sectional area	mm ²	0.5	0.75	1.0
No./Diameter of Wires	No./mm	1/0.80	1/0.98	1/1.13
Nominal insulation thickness	mm	0.6	0.6	0.6
Mean Overall Diameter(mm)	Lower Limit	1.9	2.1	2.2
	Upper Limit	2.3	2.5	2.7
Cable net. weight (approx.)	kg/km	9	11	14

Electrical Data

Nominal cross sectional area	mm ²	0.5	0.75	1.0
Max. conductor resistance DC at 20°C	Ω/km	36.0	24.5	18.1
Min. insulation resistance at 70°C	MΩ/km	0.015	0.012	0.011

Copper Conductor, PVC Insulated, PVC Bedded, Aluminium Wire Armour, PVC Sheathed


1 Core
Dimensional

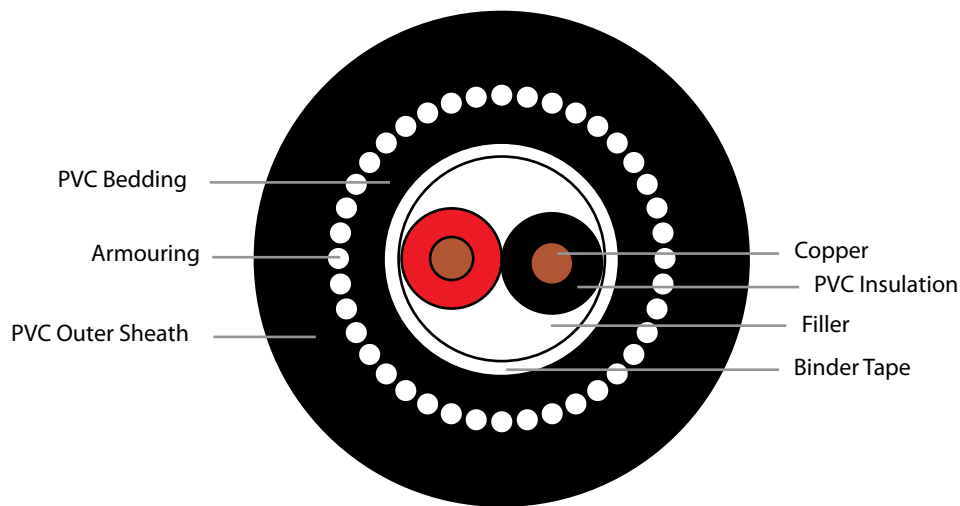
Nominal cross sectional area	mm ²	50	70	95	120	150	185	240	300	400	500	630	800	1000
Shape of Conductor		Circular Compacted										Circular Non-Compacted		
Conductor dia. (approx)		8.1	9.7	11.4	12.8	14.3	16.0	18.4	20.6	23.3	26.3	32.76	37.05	41.60
Nominal insulation thickness	mm	1.4		1.6			1.8	2.0	2.2	2.4	2.6	2.8		3.0
Nominal bedding thickness	mm	0.8			1.0					1.2			1.4	
Bedding dia. (approx)	mm	12.6	14.2	16.3	18.1	20.0	22.2	25.0	27.7	31.2	34.6	41.1	45.8	50.8
Nominal of hard-drawn Al wire	mm	1.25			1.6					2.0			2.5	
Nominal outer-sheath thickness	mm	1.5	1.6		1.7		1.8	1.9		2.1		2.2	2.4	2.5
Approx. overall dia.	mm	19.1	21.1	23.4	26.3	28.3	30.8	34.1	37.0	42.0	45.6	49.7	55.8	61.0
Cable net weight (approx)	kg/km	740	980	1,280	1,620	1,940	2,380	3,020	3,690	4,750	5,820	7,530	9,560	11,830

Electrical Data

Nominal cross sectional area	mm ²	50	70	95	120	150	185	240	300	400	500	630	800	1000	
Max. conductor resistance DC at 20°C	Ω/km	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221	0.0176	
Current rating In air at 30°C	A	Trefoil	193	243	298	347	395	452	532	607	690	776	869	937	1,010
		Spaced*	223	279	339	386	433	486	555	618	666	718	778	819	873
Current rating In the ground at 15°C	A	Trefoil	203	248	297	337	376	423	485	542	600	660	721	756	797
		Spaced*	211	257	305	341	377	417	469	515	549	586	627	648	679
Voltage drop	mV	Trefoil	0.82	0.58	0.44	0.36	0.31	0.27	0.23	0.20	0.19	0.18	0.16	0.16	0.15
		Spaced*	0.87	0.65	0.52	0.45	0.41	0.38	0.35	0.33	0.32	0.31	0.31	-	-

* Installed vertically spaced
Depth of laying = 500 mm

Copper Conductor, PVC Insulated, PVC Bedded, Zinc-Coated Steel Wire Armour, PVC Sheathed



2 Core

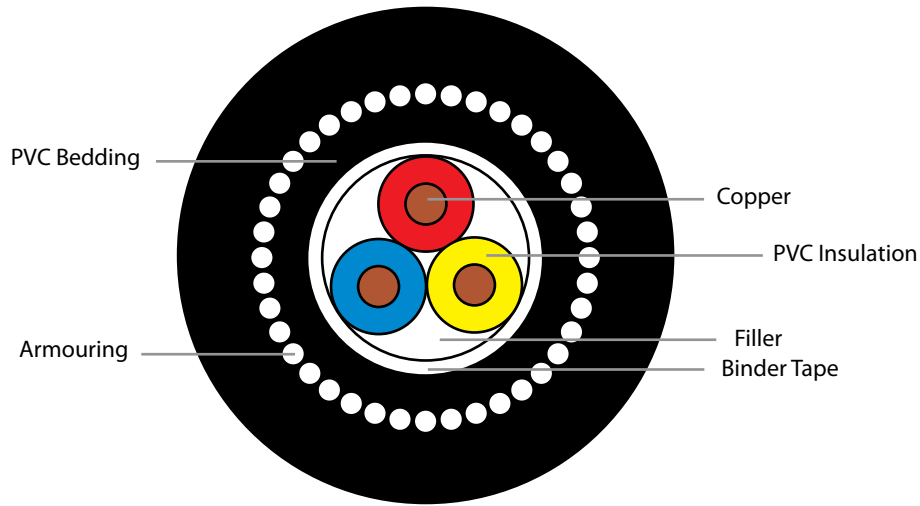
Dimensional

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400	
Shape of Conductor		Circular Non-Compacted					CC		Shaped Stranded										
Nominal insulation thickness	mm	0.6	0.7	0.8	0.8	1.0		1.2		1.4		1.6		1.8	2.0	2.2	2.4	2.6	
Nominal bedding thickness	mm	0.8					1.0		1.2			1.4		1.6					
Bedding dia. (approx)	mm	7.3	8.6	10.3	11.4	13.4	15.4	16.3	17.7	20.5	23.1	26.9	28.9	31.7	35.7	40.1	44.7	49.1	
Nominal of galvanized steel wire	mm	0.9					1.25		1.6			2.0		2.5					
Nominal outer-sheath thickness	mm	1.4			1.5	1.6		1.7	1.8	1.9		2.1	2.2	2.3	2.4	2.5	2.7	2.9	
Approx. overall dia.	mm	12.3	13.6	15.1	16.5	20.1	21.9	23.0	24.9	27.8	30.4	35.5	38.0	41.3	46.4	51.2	56.4	61.9	
Cable net weight (approx)	kg/km	260	320	410	490	740	930	1,300	1,570	1,970	2,490	3,480	4,080	4,810	6,200	7,730	9,260	11,330	

Electrical Data

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400
Max. conductor resistance DC at 20°C	Ω/km	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
Current rating In air at 30°C	A	23	32	42	54	74	102	136	166	201	252	312	360	409	473	558	636	729
Current rating In the ground at 15°C	A	30	40	53	66	88	119	158	190	225	277	332	377	422	478	551	616	693
Voltage Drop	(mV)	29	18	12	7.4	4.3	2.8	1.7	1.3	0.94	0.66	0.49	0.40	0.34	0.29	0.24	0.21	0.19

Copper Conductor, PVC Insulated, PVC Bedded, Zinc-Coated Steel Wire Armour, PVC Sheathed



3 Core

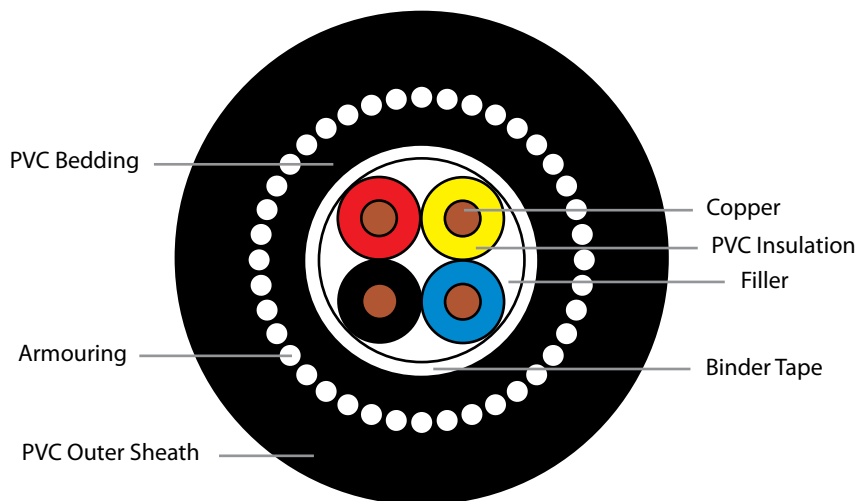
Dimensional

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400
Shape of Conductor		Circular Non-Compacted				CC		Shaped Stranded										
Nominal insulation thickness	mm	0.6	0.7	0.8		1.0		1.2		1.4		1.6		1.8	2.0	2.2	2.4	2.6
Nominal bedding thickness	mm	0.8						1.0		1.2			1.4		1.6			
Bedding dia. (approx)	mm	7.8	9.1	10.9	12.2	14.3	16.4	18.6	20.6	23.8	27.2	31.6	33.7	37.0	41.6	47.2	52.0	57.6
Nominal of galvanized steel wire	mm	0.9			1.25		1.6			2.0			2.5					
Nominal outer-sheath thickness	mm	1.4			1.5	1.6		1.7	1.8	1.9	2.0	2.1	2.2	2.4	2.5	2.6	2.8	3.0
Approx. overall dia.	mm	12.8	14.1	15.8	18.0	21.2	23.1	25.0	27.3	30.5	35.0	39.3	42.2	47.5	51.9	57.8	63.2	69.6
Cable net weight (approx)	kg/km	290	360	470	670	880	1,140	1,650	2,040	2,590	2,630	4,690	5,530	6,990	8,440	10,670	12,770	15,810

Electrical Data

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400
Max. conductor resistance DC at 20°C	Ω/km	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
Current rating In air at 30°C	A	20	27	36	46	63	87	116	142	172	218	268	310	355	407	480	547	627
Current rating In the ground at 15°C	A	26	34	45	57	75	101	132	159	188	233	279	317	355	401	462	517	580
Voltage Drop	(mV)	25	16	9.6	6.3	3.8	2.4	1.5	1.1	0.82	0.57	0.42	0.35	0.29	0.25	0.21	0.18	0.17

Copper Conductor, PVC Insulated, PVC Bedded, Zinc-Coated Steel Wire Armour, Sheathed



4 Core

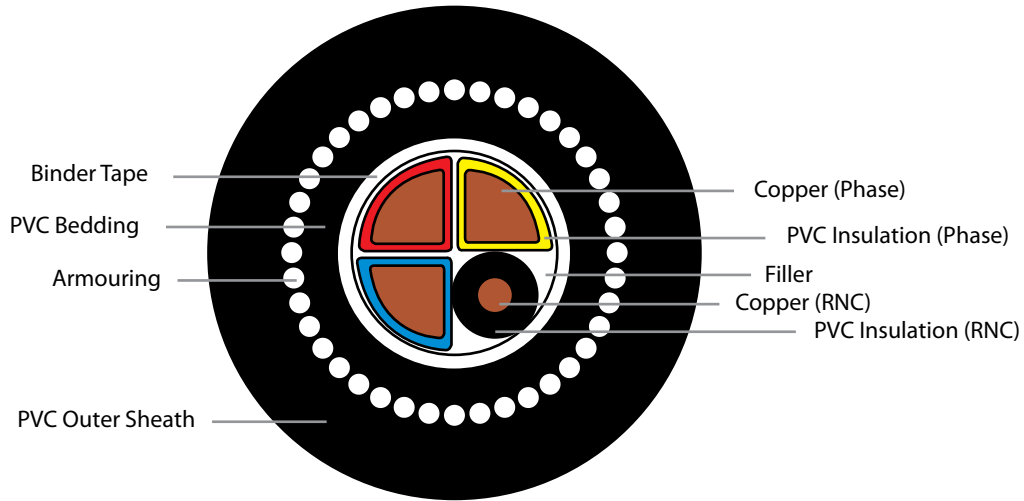
Dimensional

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400	
Shape of Conductor		Circular Non-Compacted				CC				Shaped Stranded									
Nominal insulation thickness	mm	0.6	0.7	0.8		1.0		1.2		1.4		1.6		1.8	2.0	2.2	2.4	2.6	
Nominal bedding thickness	mm	0.8				1.0				1.2			1.4		1.6			1.8	
Bedding dia. (approx)	mm	8.5	10	12.1	13.4	15.8	18.6	20.4	22.7	26.6	30.1	34.6	37.8	42.0	47.3	52.9	59.0	66.0	
Nominal of galvanized steel wire	mm	0.9		1.25				1.6			2.0			2.5				3.15	
Nominal outer-sheath thickness	mm	1.4			1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.4	2.5	2.6	2.8	3.0	3.3	
Approx. overall dia.	mm	13.5	15.0	17.8	19.2	22.8	26.3	27.8	30.5	35.4	39.2	44.3	49.3	53.6	59.0	65.7	72.0	81.3	
Cable net weight (approx)	kg/km	330	420	650	790	1,050	1,550	2,020	2,510	3,460	4,500	5,810	7,420	8,820	10,750	13,550	16,470	21,260	

Electrical Data

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400
Max. conductor resistance DC at 20°C	Ω/km	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
Current rating In air at 30°C	A	20	27	36	46	63	87	116	142	172	218	268	310	355	407	480	547	627
Current rating In the ground at 15°C	A	26	34	45	57	75	101	132	159	188	233	279	317	355	401	462	517	580
Voltage Drop	(mV)	25	16	9.6	6.3	3.8	2.4	1.5	1.1	0.82	0.57	0.42	0.35	0.29	0.25	0.21	0.18	0.17

Copper Conductor, PVC Insulated, PVC Bedded, Zinc-Coated Steel Wire Armour, PVC Sheathed



3 1/2 Core

Dimensional

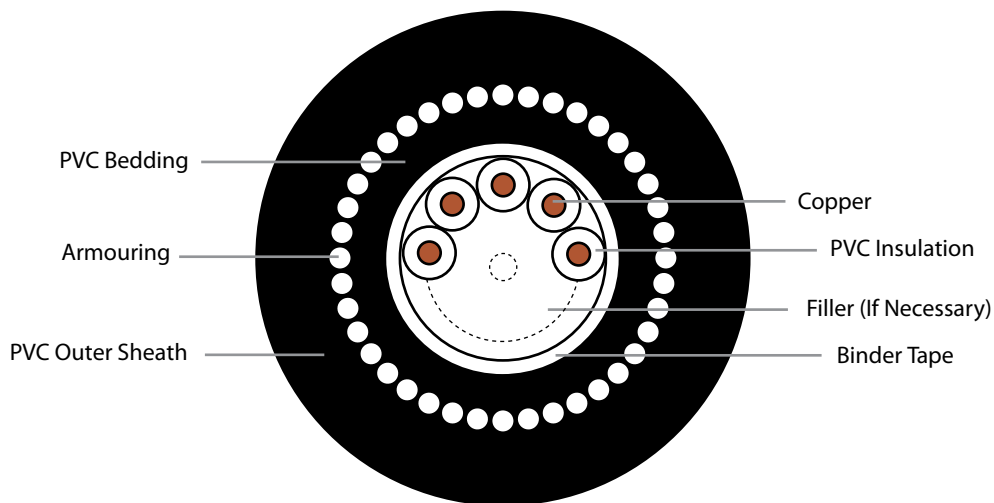
Nominal cross sectional area(Phase)	mm ²	25	35	50	70	95	120	150	185	240	300	300	400
Shape of Conductor(Phase)		Shaped Stranded											
Nominal insulation thickness(Phase)	mm	1.2		1.4		1.6		1.8	2.0	2.2	2.4		2.6
Nominal cross sectional area(RNC)	mm ²	16		25	35	50	70		95	120	150	185	
Shape of Conductor(RNC)		Circular Non-Compacted											
Nominal insulation thickness(RNC)	mm	1.0		1.2		1.4			1.6		1.8	2.0	
Nominal bedding thickness	mm	1.0			1.2		1.4			1.6			1.8
Bedding dia. (approx)	mm	20.1	22.3	25.7	29.6	34.0	37.1	41.2	46.1	51.9	57.9	64.8	
Nominal of galvanized steel wire	mm	1.6			2.0		2.5					3.15	
Nominal outer-sheath thickness	mm	1.8		1.9	2.0	2.2	2.3	2.4	2.5	2.7	2.9		3.1
Approx. overall dia.	mm	27.8	29.6	33.1	38.0	43.7	49.0	52.0	57.2	63.7	69.8	71.8	78.6
Cable net weight (approx)	kg/km	1,920	2,310	2,980	4,150	5,350	6,890	8,050	9,810	12,330	14,840	15,190	19,270

Electrical Data

Nominal cross sectional area	mm ²	25	35	50	70	95	120	150	185	240	300	300	400
Max. conductor resistance DC at 20°C(Phase)	Ω/km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0601	0.0470
Max. conductor resistance DC at 20°C(RNC)	Ω/km	1.15	1.15	0.727	0.524	0.387	0.268	0.268	0.193	0.153	0.124	0.0991	0.0991

Note :- RNC = Reduced Neutral Conductor

Copper Conductor, PVC Insulated, PVC Bedded, Zinc Coated Steel Wire Armour, PVC Sheathed Control



1.5 mm²

Dimensional

No. of cores		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		1.59																	
Nominal insulation thickness	mm	0.6																	
Nominal bedding thickness	mm	0.8																	
Bedding dia. (approx.)	mm	10.2	11.1	12.0	12.9	14.0	14.5	14.8	15.3	15.7	16.1	16.6	17.0	17.6	17.9				
Nominal of galvanized steel wire	mm	0.9						1.25											
Nominal outer-sheath thickness	mm	1.4			1.5						1.6								
Approx. overall dia.	mm	14.4	15.3	16.4	18.0	19.1	19.6	20.1	20.6	21.0	21.4	21.9	22.3	22.9	23.2				
Cable net weight (approx.)	kg/km	390	440	450	510	650	700	720	760	800	840	880	910	960	990	1,000	1,060	1,090	

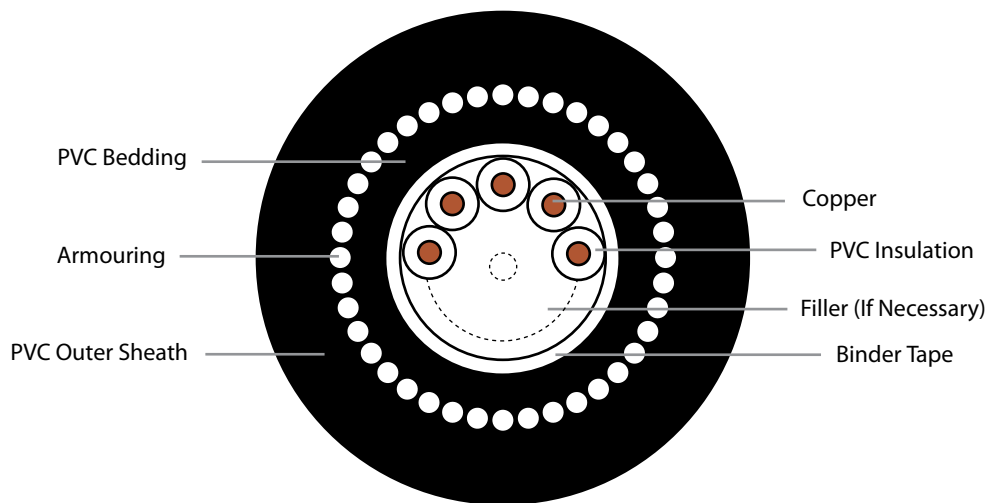
No. of cores		22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded													
Conductor dia. (approx.)		1.59													
Nominal insulation thickness	mm	0.6													
Nominal bedding thickness	mm	1.0													
Bedding dia. (approx.)	mm	18.9	19.3	20.4			20.9		21.1	21.7	23.4	24.3	26.9		
Nominal of galvanized steel wire	mm	1.6													
Nominal outer-sheath thickness	mm	1.7										1.8		1.9	
Approx. overall dia.	mm	25.1	25.5	26.6			27.1		27.4	27.9	29.8	30.7	33.5		
Cable net weight (approx.)	kg/km	1,300	1,350	1,400	1,430	1,450	1,490	1,510	1,540	1,580	1,810	1,930	2,230	2,270	

Max. conductor resistance DC at 20°C = 12.10 Ω /km

Core Identification : Black numbers on white cores(for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, PVC Insulated, PVC Bedded, Zinc-Coated Steel Wire Armour, PVC Sheathed Control



2.5 mm²

Dimensional

No. of cores		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21		
Shape of Conductor		Circular Stranded																		
Conductor dia. (approx.)		2.01																		
Nominal insulation thickness	mm	0.7																		
Nominal bedding thickness	mm	0.8									1.0									
Bedding dia. (approx.)	mm	11.8	12.9	14.0	15.1	16.5	17.1	17.4	18.4	18.9	19.5	20.0	20.5	21.2	21.6					
Nominal of galvanized steel wire	mm	0.9	1.25									1.6								
Nominal outer-sheath thickness	mm	1.5				1.6				1.7				1.8						
Approx. overall dia.	mm	16.2	18.0	19.1	20.4	21.8	22.4	22.7	24.6	25.1	25.7	26.3	26.8	27.6	28.1					
Cable net weight (approx.)	kg/km	510	650	670	760	850	920	950	1,000	1,050	1,260	1,330	1,380	1,440	1,490	1,510	1,590	1,650		

Electrical Data

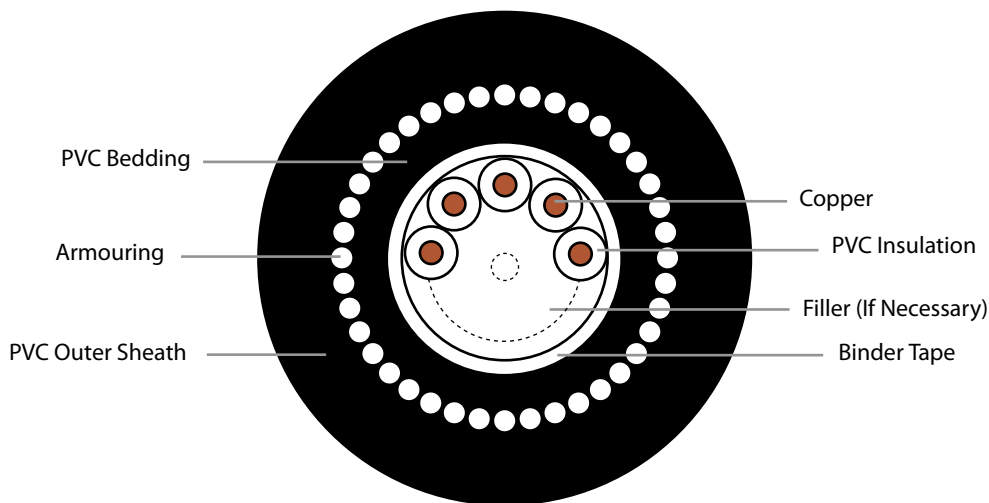
No. of cores		22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded													
Conductor dia. (approx.)		2.01													
Nominal insulation thickness	mm	0.7													
Nominal bedding thickness	mm	1.0											1.2		
Bedding dia. (approx.)	mm	22.3	22.7	24.1	24.4	24.7	25.0	25.6	27.8	29.3	32.3				
Nominal of galvanized steel wire	mm	1.6											2.0		
Nominal outer-sheath thickness	mm	1.8					1.9					2.0	2.1		
Approx. overall dia.	mm	28.7	29.2	30.6	30.6	31.1	31.6	32.3	34.4	36.9	40.2				
Cable net weight (approx.)	kg/km	1,710	1,770	1,860	1,890	1,920	1,980	2,010	2,070	2,140	2,460	2,880	3,330	3,400	

Max. conductor resistance DC at 20°C = 7.41 Ω/km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, PVC Insulated, PVC Bedded, Zinc-Coated Steel Wire Armour, PVC Sheathed Control



4 mm²

Dimensional

No. of cores		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		2.55																	
Nominal insulation thickness	mm	0.8																	
Nominal bedding thickness	mm	0.8						1.0											
Bedding dia. (approx.)	mm	13.8	15.1	16.5	18.2	19.9	20.6	20.9	21.7	22.3	22.9	23.6	24.2	25.0	25.6				
Nominal of galvanized steel wire	mm	1.25						1.6											
Nominal outer-sheath thickness	mm	1.5	1.6			1.7						1.8						1.9	2.0
Approx. overall dia.	mm	18.9	20.4		21.8	24.4	26.1		26.8	27.1	28.1	28.7	29.4	30.1	30.7		31.7	32.4	
Cable net weight (approx.)	kg/km	750	860	890	1,000	1,280	1,380	1,430	1,510	1,580	1,670	1,760	1,820	1,930	2,000	2,020	2,130	2,220	

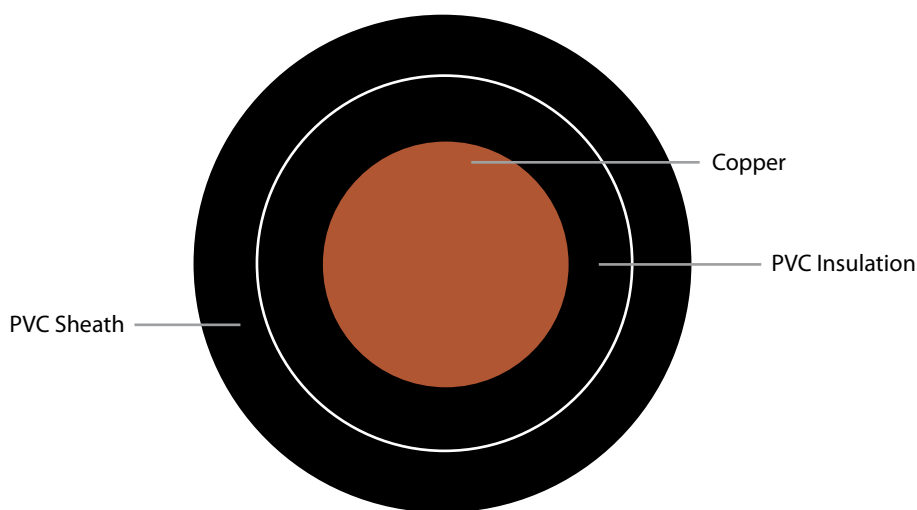
No. of cores		22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded													
Conductor dia. (approx.)		2.55													
Nominal insulation thickness	mm	0.8													
Nominal bedding thickness	mm	1.0						1.2							
Bedding dia. (approx.)	mm	26.4	26.9	28.6		29.0	29.7		30.0	30.8	33.3	34.7	38.4		
Nominal of galvanized steel wire	mm	1.6						2.0							
Nominal outer-sheath thickness	mm	2.0										2.1	2.1	2.2	
Approx. overall dia.	mm	33.2	33.7	35.4		36.6	37.3		37.7	38.4	41.2	42.5	46.4		
Cable net weight (approx.)	kg/km	2,320	2,410	2,510	2,560	2,880	2,960	3,010	3,100	3,180	3,660	3,900	4,540	4,640	

Max. conductor resistance DC at 20°C = 4.61 Ω /km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, PVC Insulated, PVC Sheathed



1 Core

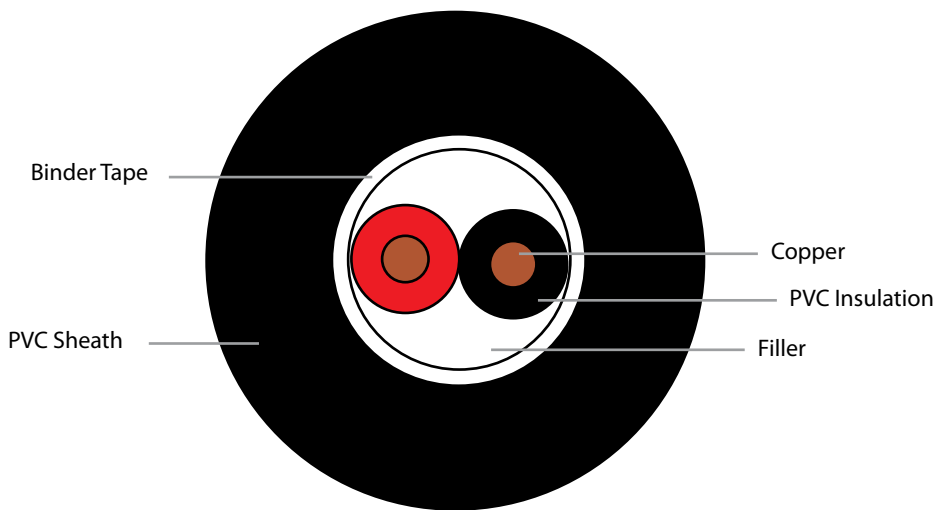
Dimensional

Nominal cross sectional area	mm ²	10	16	25	35	50	70	95	120	150	185	240	300	400	500	630	800	1000	
Shape of Conductor		Circular Compacted							Shaped Stranded										
Conductor dia. (approx.)		3.7	4.7	5.9	7.0	8.1	9.7	11.4	12.8	14.3	16.0	18.4	20.6	23.3	26.3	32.76	37.05	41.6	
Nominal insulation thickness	mm	1.0		1.2		1.4		1.6		1.8	2.0	2.2	2.4	2.6	2.8			3.0	
Nominal sheath thickness	mm	1.4							1.5	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.5
Approx. overall dia.	mm	9.0	10.0	12.0	13.0	14.5	16.0	18.5	20.0	22.0	24.5	27.5	30.5	33.5	37.0	44.0	48.5	54.0	
Cable net. weight (approx.)	kg/km	170	230	340	440	580	800	1,080	1,330	1,630	2,040	2,640	3,300	4,170	5,200	6,770	8,520	10,700	

Electrical Data

Nominal cross sectional area	mm ²	10	16	25	35	50	70	95	120	150	185	240	300	400	500	630	800	1000
Max. conductor resistance DC at 20°C	Ω/km	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221	0.0176
Max. conductor resistance 50Hz at 70°C	Ω/km	2.19	1.38	0.870	0.627	0.463	0.321	0.232	0.184	0.150	0.120	0.0926	0.0748	0.0600	0.0486	0.0395	0.0333	0.0290
Reactance at 50Hz	Ω/km	0.115	0.107	0.102	0.0967	0.0950	0.0903	0.0887	0.0860	0.0855	0.0850	0.0836	0.0831	0.0819	0.0807	0.0773	0.0757	0.0753
Current rating In air at 40°C	A	52	69	90	115	140	175	220	255	295	340	405	470	550	635	760	865	970
Current rating In the ground at 25°C	A	75	98	125	150	175	215	260	295	330	375	435	490	555	630	720	795	870

Copper Conductor, PVC Insulated, PVC Sheathed



2 Core

Dimensional

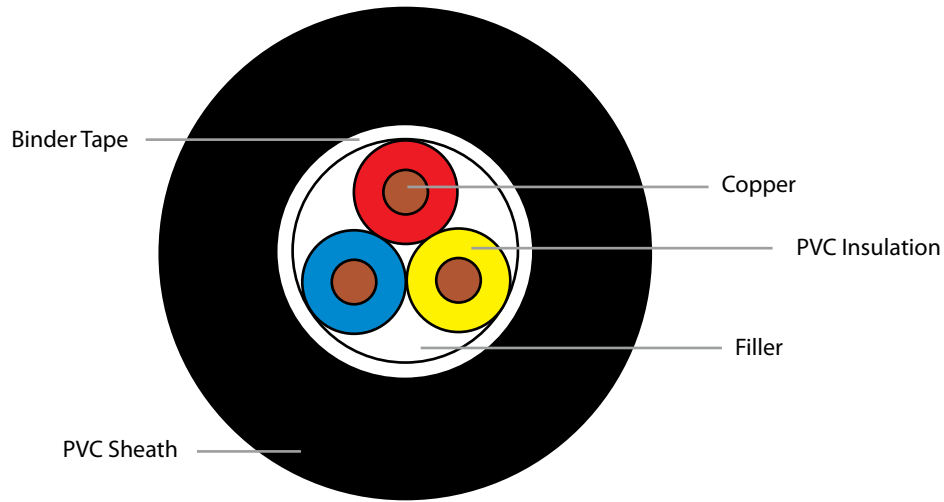
Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400		
Shape of Conductor		Circular Stranded				CC				Shaped Stranded										
Nominal insulation thickness	mm	0.8		1.0				1.2		1.4		1.6		1.8	2.0	2.2	2.4	2.6		
Nominal sheath thickness	mm	1.8										1.8	1.9	2.0	2.1	2.2	2.4	2.6	2.7	3.0
Approx. overall dia.	mm	11.0	12.0	14.0	15.0	16.0	18.0	18.5	20.0	23.0	26.0	29.5	31.5	34.5	38.5	43.5	48.0	53.0		
Cable net weight (approx.)	kg/km	140	170	230	290	380	530	720	930	1,230	1,680	2,280	2,800	3,410	4,270	5,580	6,820	8,710		

Electrical Data

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400
Max. conductor resistance DC at 20°C	Ω/km	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
Max. conductor resistance 50Hz at 70°C	Ω/km	14.5	8.87	5.52	3.69	2.19	1.38	0.870	0.627	0.464	0.321	0.232	0.185	0.150	0.121	0.0931	0.0755	0.0610
Reactance at 50Hz	Ω/km	0.107	0.0994	0.0983	0.0928	0.0886	0.0834	0.0879	0.0847	0.0851	0.0812	0.0805	0.0786	0.0788	0.0789	0.0780	0.0778	0.0772
Current rating In air at 40°C	A	20	26	35	45	61	81	100	125	150	190	235	275	310	360	430	490	565
Current rating In the ground at 25°C	A	30	39	51	64	85	110	135	165	195	240	290	330	370	415	480	545	610

Note : CC = Circular Compacted

Copper Conductor, PVC Insulated, PVC Sheathed



3 Core

Dimensional

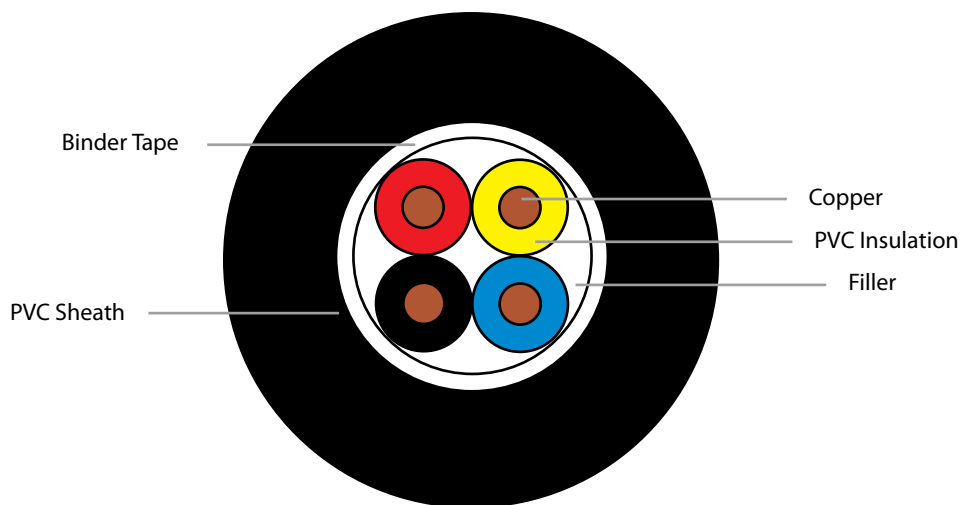
Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400	
Shape of Conductor		Circular Stranded				CC				Shaped Stranded									
Nominal insulation thickness	mm	0.8		1.0				1.2		1.4		1.6		1.8	2.0	2.2	2.4	2.6	
Nominal sheath thickness	mm	1.8								1.8	2.0	2.1	2.2	2.3	2.5	2.7	2.9	3.1	
Approx. overall dia.	mm	11.5	12.5	14.5	16.0	17.0	19.0	21.0	23.0	26.0	29.5	34.0	36.5	39.5	44.5	50.5	55.5	61.5	
Cable net weight (approx.)	kg/km	170	210	290	370	500	700	1,010	1,320	1,750	2,440	3,310	4,070	4,950	6,220	8,130	9,980	12,720	

Electrical Data

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400
Max. conductor resistance DC at 20°C	Ω/km	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
Max. conductor resistance 50Hz at 70°C	Ω/km	14.5	8.87	5.52	3.69	2.19	1.38	0.870	0.627	0.463	0.321	0.232	0.184	0.150	0.121	0.0928	0.0751	0.0603
Reactance at 50Hz	Ω/km	0.107	0.0994	0.0983	0.0928	0.0886	0.0834	0.0879	0.0847	0.0851	0.0812	0.0805	0.0786	0.0788	0.0789	0.0780	0.0778	0.0772
Current rating In air at 40°C	A	17	22	30	38	52	69	90	110	135	170	210	245	280	325	385	445	510
Current rating In the ground at 25°C	A	25	33	43	54	72	94	120	140	170	205	250	280	315	360	415	465	525

Note : CC = Circular Compacted

Copper Conductor, PVC Insulated, PVC Sheathed



4 Core

Dimensional

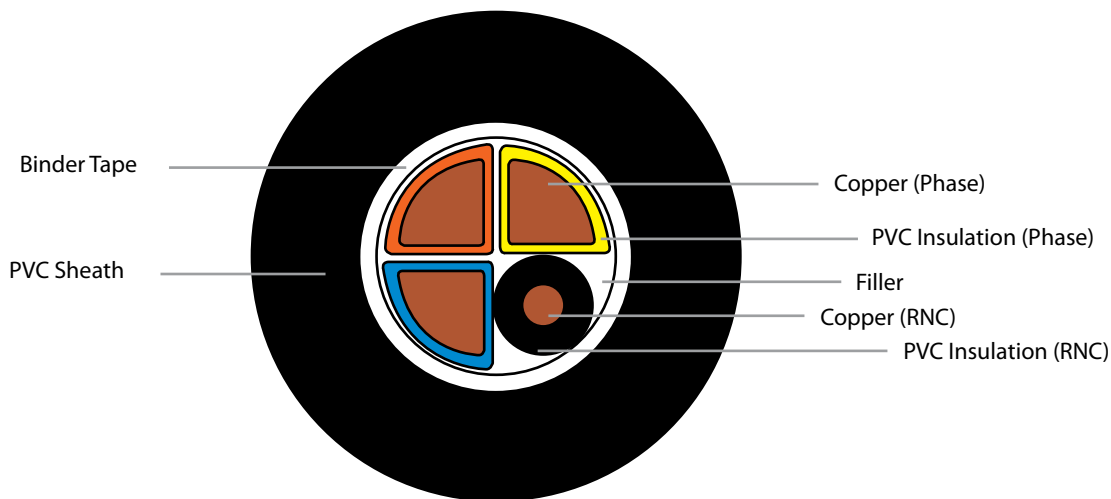
Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400		
Shape of Conductor		Circular Stranded				CC		Shaped Stranded												
Nominal insulation thickness	mm	0.8		1.0				1.2		1.4		1.6		1.8	2.0	2.2	2.4	2.6		
Nominal sheath thickness	mm	1.8										1.9	2.1	2.2	2.4	2.5	2.7	2.9	3.1	3.4
Approx. overall dia.	mm	12.5	13.5	16.0	17.0	18.5	21.0	23.0	25.0	29.0	33.0	37.5	40.5	45.0	50.5	56.5	63.0	70.5		
Cable net weight (approx.)	kg/km	200	250	360	470	630	900	1,300	1,700	2,290	3,170	4,310	5,360	6,560	8,200	10,720	13,190	16,870		

Electrical Data

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400
Max. conductor resistance DC at 20°C	Ω/km	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
Max. conductor resistance 50Hz at 70°C	Ω/km	14.5	8.87	5.52	3.69	2.19	1.38	0.870	0.627	0.463	0.321	0.232	0.184	0.150	0.121	0.0928	0.0751	0.0603
Reactance at 50Hz	Ω/km	0.107	0.0994	0.0983	0.0928	0.0886	0.0834	0.0879	0.0847	0.0851	0.0812	0.0805	0.0786	0.0788	0.0789	0.0780	0.0778	0.0772
Current rating In air at 40°C	A	17	22	30	38	52	69	90	110	135	170	210	245	280	325	385	445	510
Current rating In the ground at 25°C	A	25	33	43	54	72	94	120	140	170	205	250	280	315	360	415	465	525

Note : CC = Circular Compacted

Copper Conductor, PVC Insulated, PVC Sheathed



3 1/2 Core

Dimensional

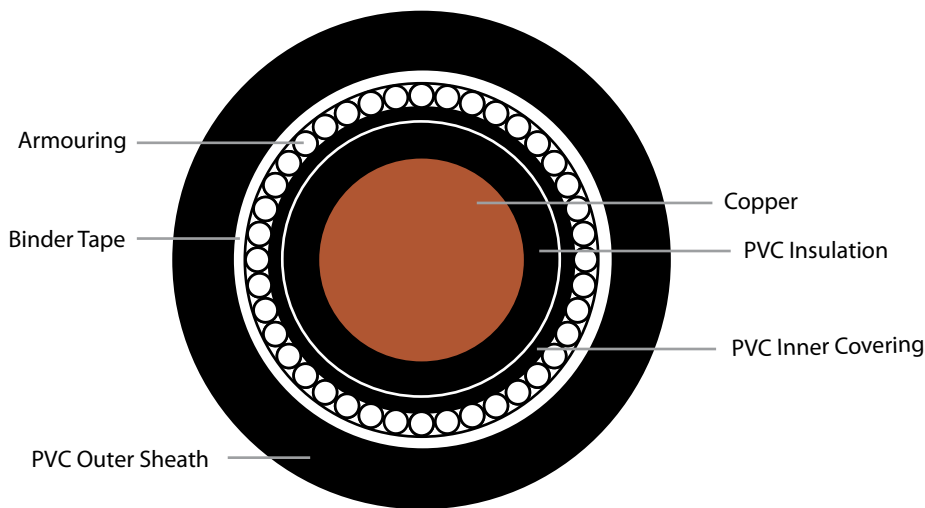
Nominal cross sectional area(Phase)	mm ²	25	35	50	70	95	120	150	185	240	300	400
Shape of Conductor(Phase)		Shaped Stranded										
Nominal insulation thickness(Phase)	mm	1.2	1.2	1.4	1.4	1.6	1.6	1.8	2.0	2.2	2.4	2.6
Nominal cross sectional area(RNC)	mm ²	16	16	25	35	50	70	70	95	120	150	185
Shape of Conductor(RNC)		Circular Compacted										
Nominal insulation thickness(RNC)	mm	1.0	1.0	1.2	1.2	1.4	1.4	1.4	1.6	1.6	1.8	2.0
Nominal sheath thickness	mm	1.8	1.8	1.9	2.0	2.2	2.3	2.4	2.6	2.8	3.0	3.2
Approx. overall dia.	mm	22.5	24.5	28.5	32.0	37.0	39.5	44.0	49.5	55.0	62.0	68.5
Cable net weight (approx)	kg/km	1,200	1,520	2,070	2,840	3,870	4,860	5,810	7,350	9,520	11,730	14,910

Electrical Data

Nominal cross sectional area	mm ²	25	35	50	70	95	120	150	185	240	300	400
Max. conductor resistance DC at 20°C(Phase)	Ω/km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
Max. conductor resistance DC at 20°C(RNC)	Ω/km	1.15	1.15	0.727	0.524	0.387	0.268	0.268	0.193	0.153	0.124	0.0991

Note : RNC = Reduced Neutral Conductor

Copper Conductor, PVC Insulated, PVC Inner Covering, Aluminium Wire Armour, Sheathed



1 Core

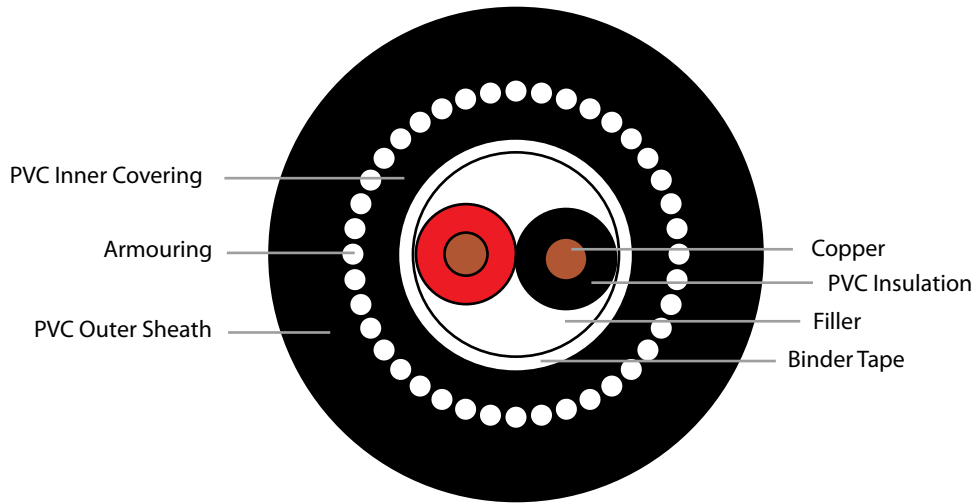
Dimensional

Nominal cross sectional area	mm ²	10	16	25	35	50	70	95	120	150	185	240	300	400	500	630	800	1000	
Shape of Conductor		Circular Compacted							Shaped Stranded										
Conductor dia. (approx.)		3.7	4.7	5.9	7.0	8.1	9.7	11.4	12.8	14.3	16.0	18.4	20.6	23.3	26.3	32.76	37.05	41.6	
Nominal insulation thickness	mm	1.0		1.2		1.4		1.6		1.8	2.0	2.2	2.4	2.6	2.8			3.0	
Nominal inner covering thickness	mm	1.0											1.2			1.4			
Inner covering dia. (approx.)	mm	7.9	8.9	10.5	11.6	13.0	14.6	16.7	18.1	20.0	22.2	25.0	27.7	31.2	34.6	41.1	45.8	50.8	
Nominal of hard-drawn Al wire	mm	1.0			1.25			1.6			2.0			2.5					
Nominal outer-sheath thickness	mm	1.8										1.9	2.0	2.1	2.2	2.4	2.5	2.7	
Approx. overall dia.	mm	13.5	14.5	16.0	17.5	19.5	21.0	23.0	25.0	27.0	29.5	32.5	36.0	39.5	43.5	50.5	56.0	61.5	
Cable net. weight (approx.)	kg/km	280	360	480	600	790	1,020	1,330	1,640	1,960	2,380	3,020	3,800	4,750	5,850	7,580	9,580	11,900	

Electrical Data

Nominal cross sectional area	mm ²	10	16	25	35	50	70	95	120	150	185	240	300	400	500	630	800	1000
Max. conductor resistance DC at 20°C	Ω /km	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221	0.0176
Max. conductor resistance 50Hz at 70°C	Ω /km	2.19	1.38	0.870	0.627	0.463	0.321	0.232	0.184	0.149	0.120	0.0921	0.0743	0.0593	0.0478	0.0387	0.0323	0.0279
Reactance at 50Hz	Ω /km	0.141	0.130	0.123	0.116	0.113	0.107	0.103	0.101	0.0988	0.0967	0.0941	0.0939	0.0923	0.0902	0.0859	0.0849	0.0837
Current rating In air at 40°C	A	57	73	100	125	150	190	235	275	310	360	430	500	580	670	795	910	1020
Current rating In the ground at 25°C	A	80	105	135	155	180	220	265	300	335	380	440	500	570	645	735	820	900

Copper Conductor, PVC Insulated, PVC Inner Covering, Zinc-Coated Steel Wire Armour, PVC Sheathed



2 Core

Dimensional

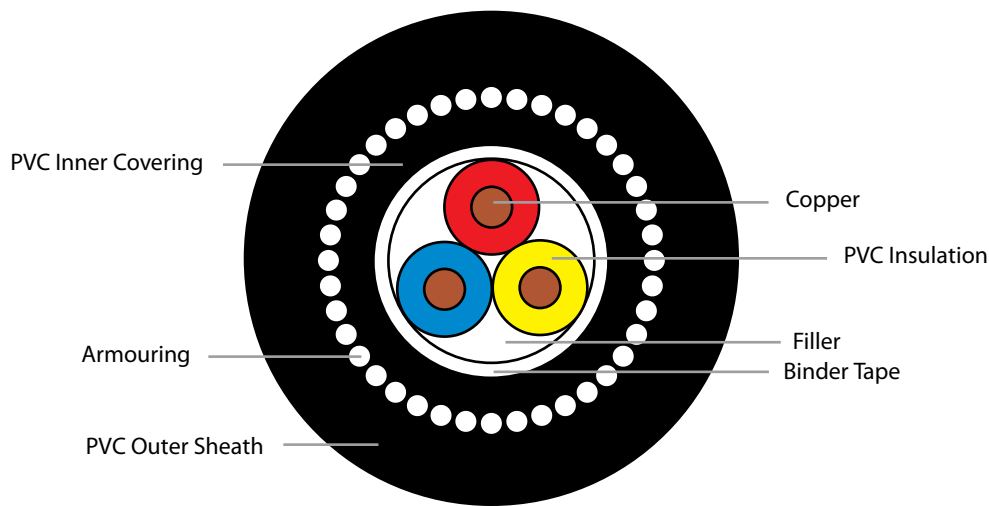
Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400									
Shape of Conductor		Circular Stranded				CC				Shaped Stranded																	
Nominal insulation thickness	mm	0.8		1.0				1.2		1.4		1.6		1.8		2.0		2.2		2.4		2.6					
Nominal inner covering thickness	mm	1.0										1.2			1.4			1.6									
Inner covering dia. (approx.)	mm	8.7	9.6	11.5	12.6	13.8	15.8	16.3	17.7	20.5	23.1	26.9	28.9	31.7	35.7	40.1	44.7	49.1									
Nominal of galvanized steel wire	mm	0.9						1.6			2.0				2.5												
Nominal outer-sheath thickness	mm	1.8								1.9		2.0		2.2		2.3		2.4		2.6		2.8		2.9		3.2	
Approx. overall dia.	mm	14.0	15.0	17.0	18.0	19.0	21.0	23.0	24.5	27.5	31.0	35.5	37.5	40.5	46.0	50.5	55.5	60.5									
Cable net weight (approx.)	kg/km	340	380	490	570	680	870	1,310	1,570	1,970	2,700	3,500	4,110	4,830	6,240	7,810	9,320	11,420									

Electrical Data

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400
Max. conductor resistance DC at 20°C	Ω/km	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
Max. conductor resistance 50Hz at 70°C	Ω/km	14.48	8.87	5.52	3.69	2.19	1.38	0.870	0.627	0.464	0.321	0.232	0.185	0.150	0.121	0.0931	0.0755	0.0610
Reactance at 50Hz	Ω/km	0.107	0.0994	0.0983	0.0928	0.0886	0.0834	0.0879	0.0847	0.0851	0.0812	0.0805	0.0786	0.0788	0.0789	0.0780	0.0788	0.0772
Current rating In air at 40°C	A	21	28	37	47	63	84	105	130	155	200	245	280	320	370	435	495	560
Current rating In the ground at 25°C	A	30	39	51	64	85	110	140	165	195	240	290	330	365	415	475	535	595

Note : CC = Circular Compacted

Copper Conductor, PVC Insulated, PVC Inner Covering, Zinc-Coated Steel Wire Armour, PVC Sheathed



3 Core

Dimensional

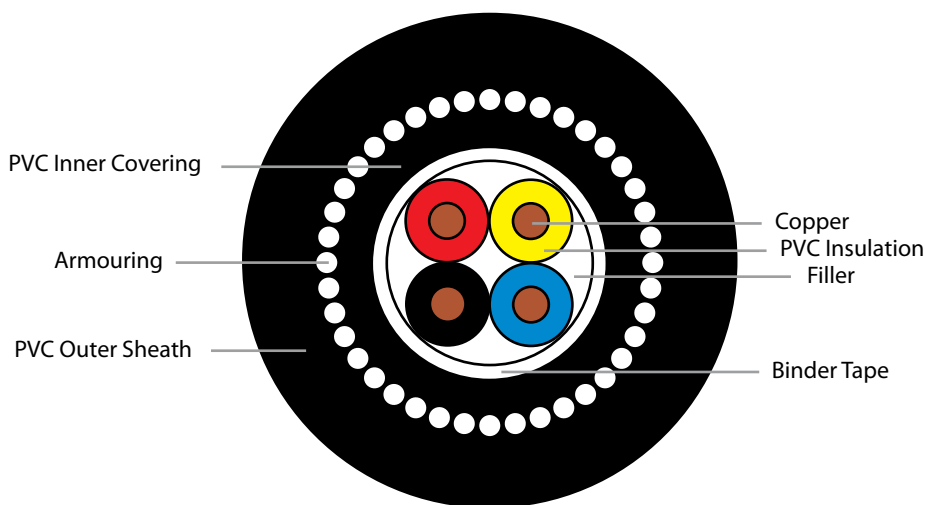
Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400	
Shape of Conductor		Circular Stranded						CC	Shaped Stranded										
Nominal insulation thickness	mm	0.8		1.0				1.2		1.4		1.6		1.8	2.0	2.2	2.4	2.6	
Nominal inner covering thickness	mm	1.0						1.2				1.4		1.6					
Inner covering dia. (approx.)	mm	9.3	10.2	12.2	13.4	14.7	16.8	18.6	20.6	23.8	27.2	31.6	33.7	37.0	41.6	47.2	52.0	57.6	
Nominal of galvanized steel wire	mm	0.9						1.6			2.0			2.5			3.15		
Nominal outer-sheath thickness	mm	1.8								2.0	2.1	2.2	2.3	2.5	2.7	2.9	3.1	3.4	
Approx. overall dia.	mm	14.5	15.5	17.5	19.0	20.0	22.0	25.5	27.5	31.0	35.5	40.0	42.0	47.0	52.0	58.0	63.0	70.5	
Cable net weight (approx.)	kg/km	370	430	560	660	820	1,070	1,670	2,050	2,610	3,650	4,720	5,560	7,010	8,490	10,750	12,870	16,680	

Electrical Data

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400
Max. conductor resistance DC at 20°C	Ω/km	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
Max. conductor resistance 50Hz at 70°C	Ω/km	14.48	8.87	5.52	3.69	2.19	1.38	0.870	0.627	0.463	0.321	0.232	0.185	0.150	0.121	0.0928	0.0751	0.0603
Reactance at 50Hz	Ω/km	0.107	0.0994	0.0983	0.0928	0.0886	0.0834	0.0879	0.0847	0.0851	0.0812	0.0805	0.0786	0.0788	0.0789	0.0780	0.0778	0.0772
Current rating In air at 40°C	A	18	23	31	40	53	71	94	115	140	175	215	245	280	325	380	435	490
Current rating In the ground at 25°C	A	25	33	43	54	72	93	120	140	170	205	245	280	310	350	400	450	490

Note : CC = Circular Compacted

Copper Conductor, PVC Insulated, PVC Inner Covering, Zinc-Coated Steel Wire Armour, PVC Sheathed



4 Core

Dimensional

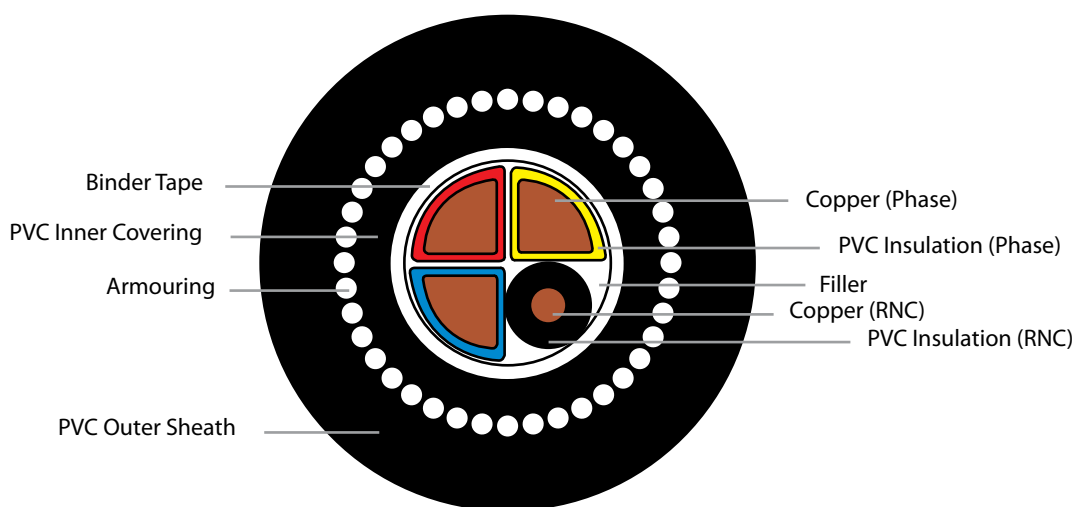
Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400											
Shape of Conductor		Circular Stranded				CC				Shaped Stranded																			
Nominal insulation thickness	mm	0.8		1.0				1.2		1.4		1.6		1.8		2.0		2.2		2.4		2.6							
Nominal inner covering thickness	mm	1.0								1.2				1.4				1.6				1.8							
Inner covering dia. (approx.)	mm	10.1	11.2	13.4	14.8	16.2	18.6	20.4	22.7	26.6	30.1	34.6	37.8	42.0	47.3	52.9	59.0	66.0											
Nominal of galvanized steel wire	mm	0.9				1.6				2.0				2.5				3.15		3.15									
Nominal outer-sheath thickness	mm	1.8								1.9		2.1		2.2		2.4		2.5		2.7		2.9		3.1		3.3		3.6	
Approx. overall dia.	mm	15.5	16.5	19.0	20.0	21.5	25.5	27.0	29.5	34.5	38.5	44.5	47.5	52.5	58.0	64.0	72.0	79.5											
Cable net weight (approx.)	kg/km	430	500	650	790	980	1,560	2,030	2,520	3,480	4,520	6,220	7,440	8,880	10,830	13,650	17,240	21,390											

Electrical Data

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400
Max. conductor resistance DC at 20°C	Ω/km	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
Max. conductor resistance 50Hz at 70°C	Ω/km	14.48	8.87	5.52	3.69	2.19	1.38	0.870	0.627	0.463	0.321	0.232	0.184	0.150	0.121	0.0928	0.0751	0.0603
Reactance at 50Hz	Ω/km	0.107	0.0994	0.0983	0.0928	0.0886	0.0834	0.0879	0.0847	0.0851	0.0812	0.0805	0.0786	0.0788	0.0789	0.0780	0.0778	0.0772
Current rating In air at 40°C	A	18	23	31	40	53	71	94	115	140	175	215	245	280	325	380	435	490
Current rating In the ground at 25°C	A	25	33	43	54	72	93	120	140	170	205	245	280	310	350	400	450	490

Note : CC = Circular Compacted

Copper Conductor, PVC Insulated, PVC Inner Covering, Zinc-Coated Steel Wire Armour, PVC Sheathed



3 1/2 Core

Dimensional

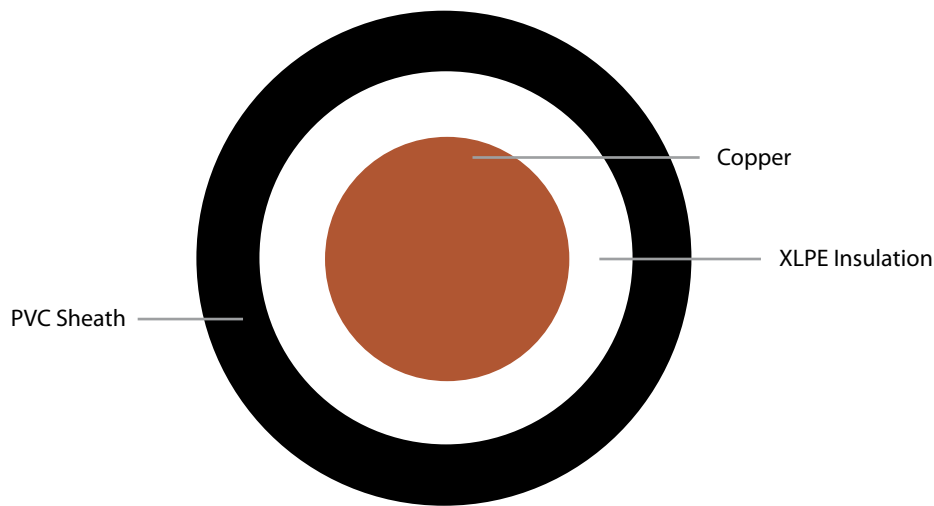
Nominal cross sectional area(Phase)	mm ²	25	35	50	70	95	120	150	185	240	300	400
Shape of Conductor(Phase)		Shaped Stranded										
Nominal insulation thickness(Phase)	mm	1.2	1.2	1.4	1.4	1.6	1.6	1.8	2.0	2.2	2.4	2.6
Nominal cross sectional area(RNC)	mm ²	16	16	25	35	50	70	70	95	120	150	185
Shape of Conductor(RNC)		Circular Compacted										
Nominal insulation thickness(RNC)	mm	1.0	1.0	1.2	1.2	1.4	1.4	1.4	1.6	1.6	1.8	2.0
Nominal inner covering thickness	mm	1.0	1.0	1.2	1.2	1.2	1.4	1.4	1.4	1.6	1.6	1.8
Inner covering dia. (approx)	mm	20.1	22.3	26.1	29.6	34.0	37.1	41.2	46.1	51.9	57.9	64.8
Nominal of galvanized steel wire	mm	1.6	1.6	2.0	2.0	2.0	2.5	2.5	2.5	2.5	2.5	3.15
Nominal outer-sheath thickness	mm	1.8	1.9	2.0	2.1	2.3	2.5	2.6	2.7	2.9	3.1	3.4
Approx. overall dia.	mm	27.0	29.5	34.0	37.5	42.5	47.0	51.5	56.5	62.5	69.0	77.5
Cable net weight (approx)	kg/km	1,920	2,320	3,250	4,160	5,360	6,920	8,080	9,860	12,390	14,900	19,370

Electrical Data

Nominal cross sectional area	mm ²	25	35	50	70	95	120	150	185	240	300	400
Max. conductor resistance DC at 20°C(Phase)	Ω /km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
Max. conductor resistance DC at 20°C(RNC)	Ω /km	1.15	1.15	0.727	0.524	0.387	0.268	0.268	0.193	0.153	0.124	0.0991

Note : RNC = Reduced Neutral Conductor

Copper Conductor, XLPE Insulated, PVC Sheathed



1 Core

Dimensional

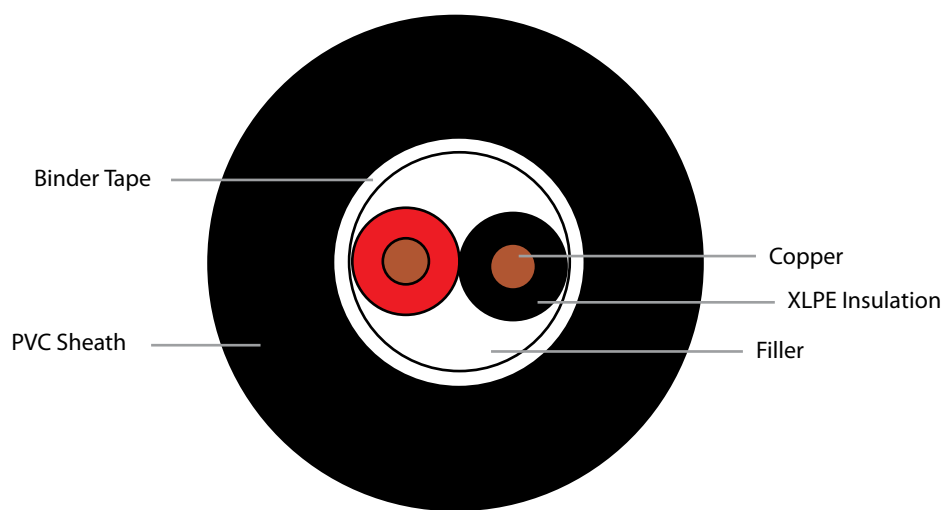
Nominal cross sectional area	mm ²	10	16	25	35	50	70	95	120	150	185	240	300	400	500	630	800	1000									
Shape of Conductor		Circular Compacted														Circular Stranded											
Conductor dia. (approx.)		3.7	4.7	5.9	7.0	8.1	9.7	11.4	12.8	14.3	16.0	18.4	20.6	23.3	26.3	32.76	37.05	41.6									
Nominal insulation thickness	mm	0.7		0.9		1.0		1.1		1.2		1.4		1.6		1.7		2.0		2.2		2.4		2.6		2.8	
Nominal outer-sheath thickness	mm	1.4						1.5			1.6			1.7		1.8		1.9		2.0		2.2		2.3		2.4	
Approx. overall dia.	mm	8.5	9.5	11.0	12.5	13.5	15.5	17.5	19.0	21.0	23.0	26.0	28.5	32.0	35.5	43.0	48.0	53.0									
Cable net. weight (approx.)	kg/km	150	210	310	410	540	750	1,020	1,270	1,560	1,930	2,510	3,120	3,970	4,980	6,510	8,260	10,350									

Electrical Data

Nominal cross sectional area	mm ²	10	16	25	35	50	70	95	120	150	185	240	300	400	500	630	800	1000
Max. conductor resistance DC at 20°C	Ω/km	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221	0.0176
Max. conductor resistance 50Hz at 90°C	Ω/km	2.33	1.47	0.927	0.669	0.494	0.342	0.247	0.196	0.160	0.128	0.0988	0.0801	0.0643	0.0521	0.0428	0.0363	0.0317
Reactance at 50Hz	Ω/km	0.110	0.102	0.0979	0.0934	0.0905	0.0870	0.0851	0.0837	0.0837	0.0826	0.0812	0.0801	0.0792	0.0785	0.0776	0.0759	0.0749
Current rating In air at 40°C	A	68	91	120	150	185	235	290	340	390	455	545	630	735	850	985	1150	1280
Current rating In the ground at 25°C	A	89	115	145	170	205	250	295	340	380	430	495	560	635	715	800	895	970
Short circuit current for 1 sec.	kA	1.52	2.41	3.72	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7	72.1	90.8	115.2	143.9

Core Identification : Neutral

Copper Conductor, XLPE Insulated, PVC Sheathed



2 Core

Dimensional

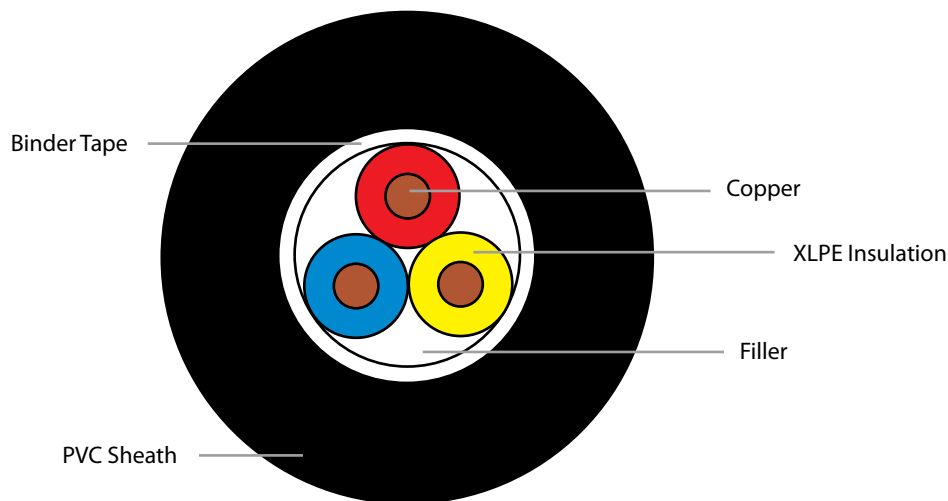
Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400	
Shape of Conductor		Circular Stranded				CC		Shaped Stranded											
Conductor dia. (approx.)		1.59	2.01	2.55	3.12	3.7	4.7	4.5	5.2	6.1	7.4	8.7	9.7	10.7	12.0	13.8	15.4	17.2	
Nominal insulation thickness	mm	0.7				0.9		1.0		1.1		1.2	1.4	1.6	1.7	1.8	2.0		
Nominal sheath thickness	mm	1.8										1.8	2.0	2.1	2.2	2.3	2.5	2.7	2.9
Approx. overall dia.	mm	10.0	11.0	12.0	13.0	14.5	16.5	17.0	18.5	20.5	24.0	27.0	29.5	32.5	36.0	40.5	44.5	49.5	
Cable net weight (approx.)	kg/km	110	140	180	230	330	460	640	830	1,090	1,520	2,060	2,570	3,150	3,920	5,130	6,290	8,050	

Electrical Data

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400
Max. conductor resistance DC at 20°C	Ω/km	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
Max. conductor resistance 50Hz at 90°C	Ω/km	15.43	9.45	5.88	3.93	2.33	1.47	0.927	0.669	0.494	0.342	0.247	0.196	0.160	0.128	0.0987	0.0798	0.0640
Reactance at 50Hz	Ω/km	0.103	0.0961	0.0899	0.0853	0.0785	0.0771	0.0776	0.0752	0.0744	0.0731	0.0713	0.0713	0.0719	0.0720	0.0713	0.0707	0.0704
Current rating In air at 40°C	A	25	32	44	57	79	100	135	165	205	255	315	370	420	485	580	665	770
Current rating In the ground at 25°C	A	35	45	60	76	98	125	160	195	230	285	340	385	435	490	565	640	725
Short circuit current for 1 sec.	kA	0.255	0.409	0.636	0.935	1.52	2.41	3.72	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7

Note : CC = Circular Compacted

Copper Conductor, XLPE Insulated, PVC Sheathed



3 Core

Dimensional

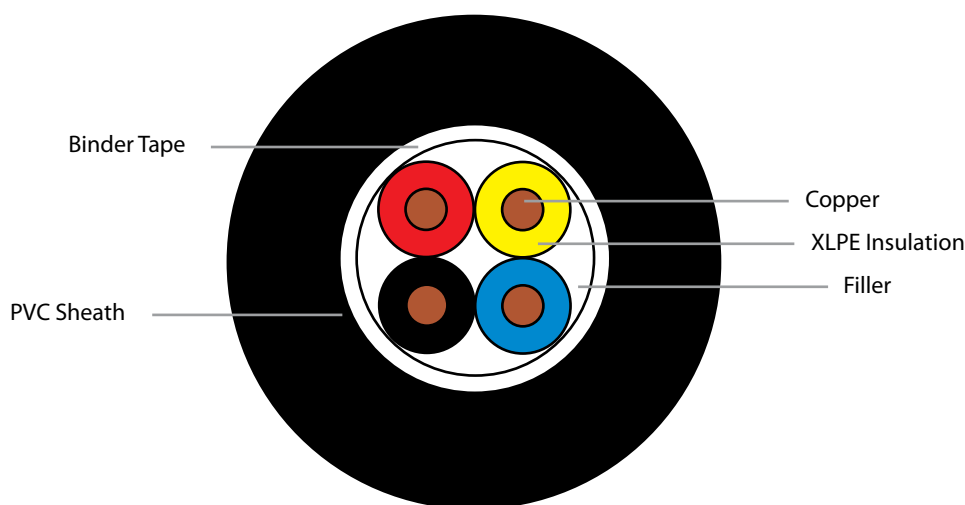
Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400	
Shape of Conductor		Circular Stranded				CC		Shaped Stranded											
Conductor dia. (approx.)		1.59	2.01	2.55	3.12	3.7	4.7	5.2	6.2	7.2	8.7	10.4	11.4	12.4	14.1	16.2	18.0	20.3	
Nominal insulation thickness	mm	0.7				0.9		1.0	1.1		1.2	1.4	1.6	1.7	1.8	2.0			
Nominal outer-sheath thickness	mm	1.8							1.9	2.0	2.1	2.3	2.4	2.6	2.8	3.1			
Approx. overall dia.	mm	10.5	11.5	12.5	14.0	15.5	17.5	19.0	21.5	24.0	27.5	31.5	34.0	37.5	42.0	47.0	51.5	58.0	
Cable net. weight (approx.)	kg/km	130	170	230	300	430	620	900	1,190	1,570	2,230	3,010	3,760	4,610	5,760	7,540	9,240	11,880	

Electrical Data

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400
Max. conductor resistance DC at 20°C	Ω/km	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
Max. conductor resistance 50Hz at 90°C	Ω/km	15.43	9.45	5.88	3.93	2.33	1.47	0.927	0.669	0.494	0.343	0.248	0.197	0.160	0.129	0.0996	0.0809	0.0653
Reactance at 50Hz	Ω/km	0.103	0.0961	0.0899	0.0853	0.0785	0.0771	0.0776	0.0752	0.0744	0.0731	0.0713	0.0713	0.0719	0.0720	0.0713	0.0707	0.0704
Current rating In air at 40°C	A	21	26	37	48	65	87	115	140	175	220	270	315	360	420	495	570	655
Current rating In the ground at 25°C	A	28	37	48	60	81	105	135	160	190	235	285	325	365	410	475	535	605
Short circuit current for 1 sec.	kA	0.255	0.409	0.636	0.935	1.52	2.41	3.72	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7

Note : CC = Circular Compacted

Copper Conductor, XLPE Insulated, PVC Sheathed



4 Core

Dimensional

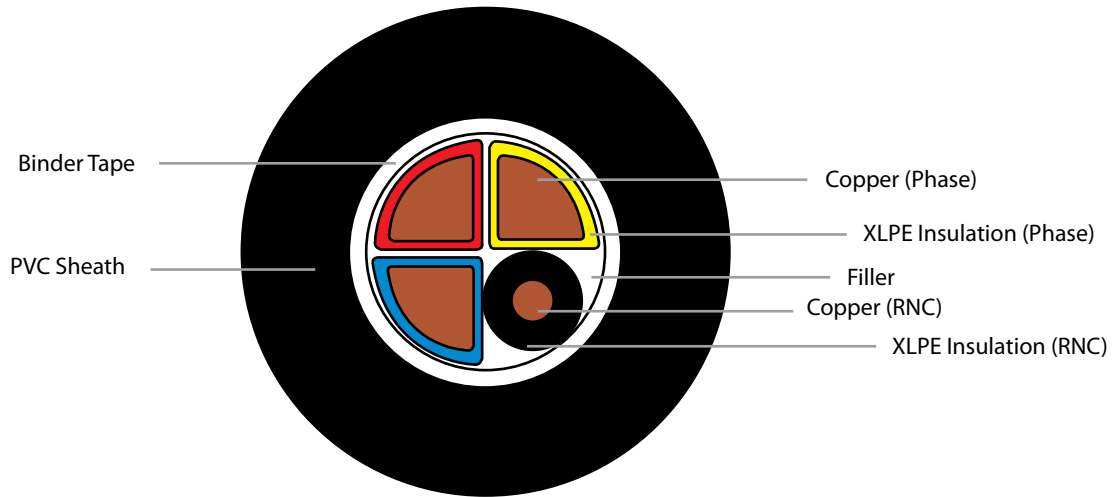
Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400	
Shape of Conductor		Circular Stranded				CC		Shaped Stranded											
Conductor dia. (approx.)		1.59	2.01	2.55	3.12	3.7	4.7	5.9	7.0	8.1	9.8	11.5	12.8	14.4	16.2	18.4	20.8	23.5	
Nominal insulation thickness	mm	0.7				0.9		1.0	1.1			1.2	1.4	1.6	1.7	1.8	2.0		
Nominal sheath thickness	mm	1.8							1.8	1.9	2.0	2.1	2.3	2.4	2.6	2.8	3.0	3.3	
Approx. overall dia.	mm	11.5	12.5	13.5	15.0	17.0	19.5	21.0	23.5	26.5	30.5	34.5	38.0	42.5	47.5	53.0	59.0	66.5	
Cable net. weight (approx.)	kg/km	160	210	280	380	550	800	1,160	1,550	2,060	2,910	3,940	4,970	6,090	7,620	9,980	12,250	15,740	

Electrical Data

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400
Max. conductor resistance DC at 20°C	Ω/km	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
Max. conductor resistance 50Hz at 90°C	Ω/km	15.43	9.45	5.88	3.93	2.33	1.47	0.927	0.669	0.494	0.343	0.248	0.197	0.160	0.129	0.0996	0.0809	0.0653
Reactance at 50Hz	Ω/km	0.103	0.0961	0.0899	0.0853	0.0785	0.0771	0.0776	0.0752	0.0744	0.0731	0.0713	0.0713	0.0719	0.0720	0.0713	0.0707	0.0704
Current rating In air at 40°C	A	21	26	37	48	65	87	115	140	175	220	270	315	360	420	495	570	655
Current rating In the ground at 25°C	A	28	37	48	60	81	105	135	160	190	235	285	325	365	410	475	535	605
Short circuit current for 1 sec.	kA	0.255	0.409	0.636	0.935	1.52	2.41	3.72	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7

Note : CC = Circular Compacted

Copper Conductor, XLPE Insulated, PVC Sheathed



3 1/2 Core

Dimensional

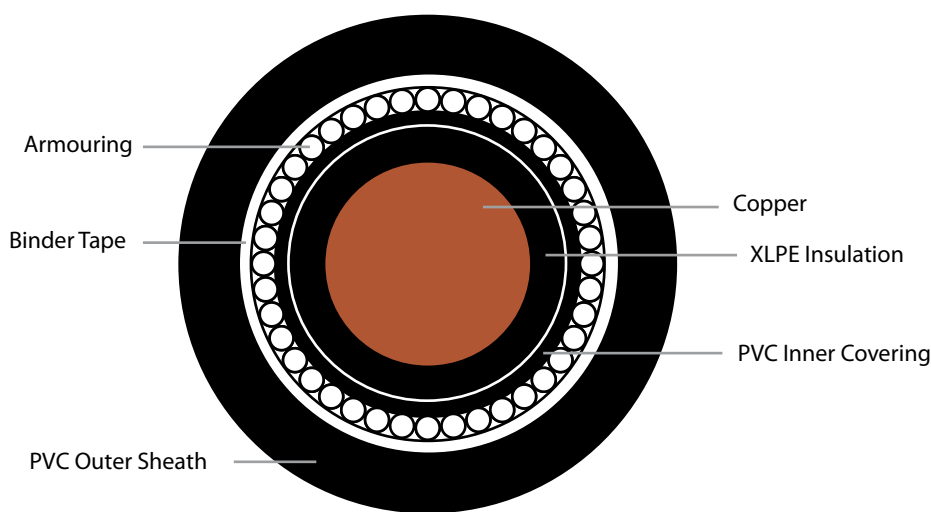
Nominal cross sectional area(Phase)	mm ²	25	35	50	70	95	120	150	185	240	300	400
Shape of Conductor(Phase)		Shaped Stranded										
Nominal insulation thickness(Phase)	mm	0.9	0.9	1.0	1.1	1.1	1.2	1.4	1.6	1.7	1.8	2.0
Nominal cross sectional area(RNC)	mm ²	16	16	25	35	50	70	70	95	120	150	185
Shape of Conductor(RNC)		Circular Compacted										
Nominal insulation thickness(RNC)	mm	0.7	0.7	0.9	0.9	1.0	1.1	1.1	1.1	1.2	1.4	1.6
Nominal sheath thickness	mm	1.8	1.8	1.8	1.9	2.1	2.2	2.3	2.5	2.7	2.9	3.1
Approx. overall dia.	mm	20.5	23.0	25.5	30.0	34.0	37.0	41.5	46.5	52.0	58.0	64.5
Cable net weight (approx)	kg/km	1,080	1,380	1,850	2,600	3,530	4,500	5,380	6,810	8,870	10,890	13,910

Electrical Data

Nominal cross sectional area	mm ²	25	35	50	70	95	120	150	185	240	300	400
Max. conductor resistance DC at 20°C(Phase)	Ω/km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
Max. conductor resistance DC at 20°C(RNC)	Ω/km	1.15	1.15	0.727	0.524	0.387	0.268	0.268	0.193	0.153	0.124	0.0991

Note : RNC = Reduced Neutral Conductor

Copper Conductor, XLPE Insulated, PVC Sheathed, PVC Bedded, Aluminium Wire Armour, PVC Sheathed



1 Core

Dimensional

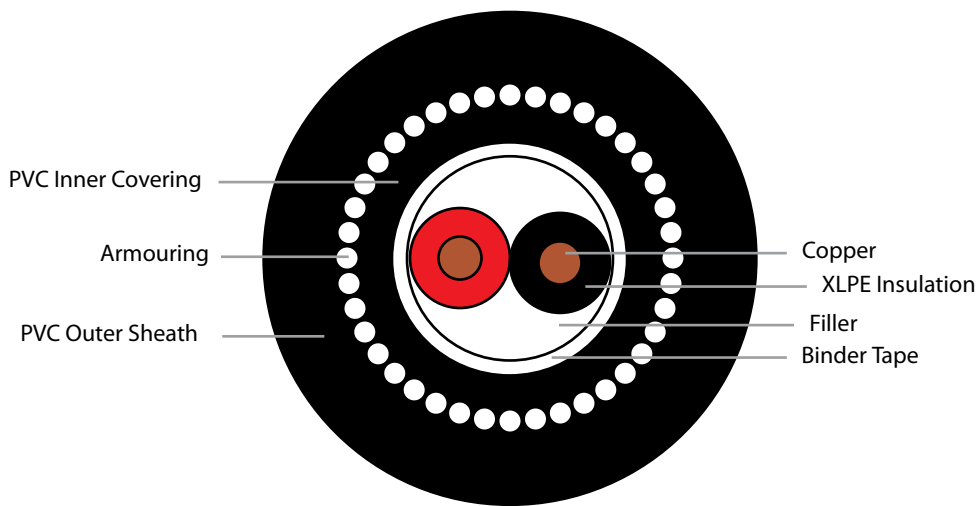
Nominal cross sectional area	mm ²	10	16	25	35	50	70	95	120	150	185	240	300	400	500	630	800	1000
Shape of Conductor		Circular Compacted														Circular Stranded		
Conductor dia. (approx.)		3.7	4.7	5.9	7.0	8.1	9.7	11.4	12.8	14.3	16.0	18.4	20.6	23.3	26.3	32.76	37.05	41.6
Nominal insulation thickness	mm	0.7	0.7	0.9		1.0	1.1		1.2	1.4	1.6	1.7	1.8	2.0	2.2	2.4	2.6	2.8
Nominal inner covering thickness	mm	1.0												1.2			1.4	
Inner covering dia. (approx.)	mm	7.3	8.0	9.7	10.8	12.1	13.9	15.6	17.2	19.2	21.3	23.9	26.3	29.9	33.3	40.3	45.4	50.3
Nominal of hard-drawn Al wire	mm	1.0							1.6					2.0			2.5	
Nominal outer-sheath thickness	mm	1.8										1.9		2.1	2.2	2.3	2.5	2.7
Approx. overall dia.	mm	13.0	14.0	15.5	16.5	18.0	20.0	21.5	24.5	26.5	28.5	31.0	33.5	38.5	42.0	49.5	55.5	61.0
Cable net. weight (approx.)	kg/km	260	330	450	560	710	940	1,210	1,560	1,870	2,270	2,890	3,520	4,550	5,620	7,290	9,320	11,580

Electrical Data

Nominal cross sectional area	mm ²	10	16	25	35	50	70	95	120	150	185	240	300	400	500	630	800	1000
Max. conductor resistance DC at 20°C	Ω/km	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221	0.0176
Max. conductor resistance 50Hz at 90°C	Ω/km	2.33	1.47	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0982	0.0793	0.0632	0.0509	0.0415	0.0347	0.0300
Reactance at 50Hz	Ω/km	0.137	0.126	0.119	0.113	0.113	0.107	0.102	0.101	0.0999	0.0975	0.0946	0.0920	0.0923	0.0903	0.0878	0.0863	0.0847
Current rating In air at 40°C	A	77	100	135	165	200	255	310	365	415	480	570	650	760	870	995	1150	1250
Current rating In the ground at 25°C	A	90	115	150	170	205	250	300	340	385	435	500	565	635	715	800	890	940
Short circuit current for 1 sec.	kA	1.52	2.41	3.72	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7	72.1	90.8	115.2	143.9

Core Identification : Neutral

Copper Conductor, XLPE Insulated, PVC Sheathed, PVC Bedded, Zinc-Coated Steel Wire Armour, PVC Sheathed



2 Core

Dimensional

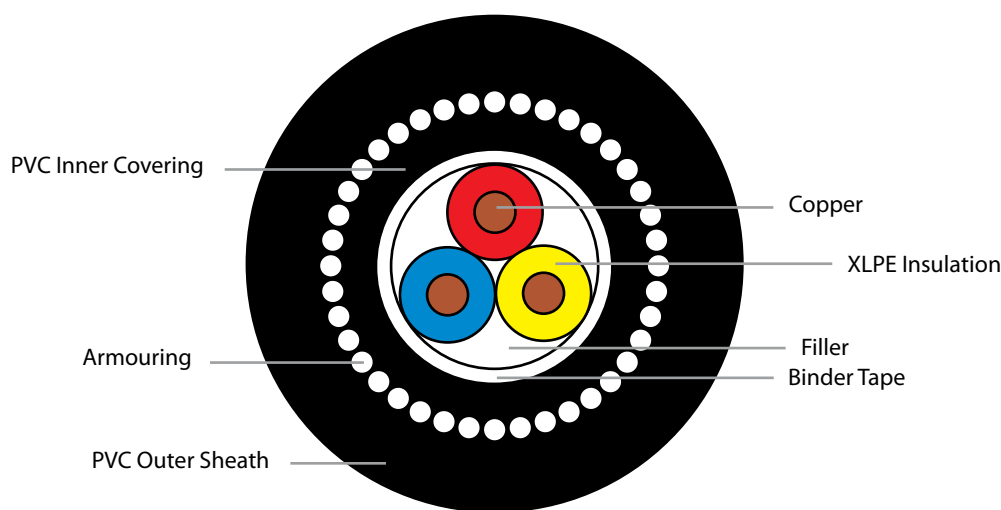
Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400	
Shape of Conductor		Circular Stranded				CC		Shaped Stranded											
Conductor dia. (approx.)		1.59	2.01	2.55	3.12	3.7	4.7	4.5	5.2	6.1	7.4	8.7	9.7	10.7	12.0	13.8	15.4	17.2	
Nominal insulation thickness	mm	0.7				0.9		1.0		1.1		1.2		1.4		1.6		1.7	
Nominal inner covering thickness	mm	1.0										1.2			1.4		1.6		
Inner covering dia. (approx.)	mm	8.9	9.7	10.8	11.9	13.5	15.5	15.9	17.3	19.5	22.6	25.6	28.0	30.8	34.6	38.6	42.6	47.0	
Nominal of galvanized steel wire	mm	0.9		1.25			1.6			2.0			2.5						
Nominal outer-sheath thickness	mm	1.8									2.0		2.1	2.2	2.3	2.5	2.7	2.8	3.1
Approx. overall dia.	mm	14.0	14.5	16.5	17.5	19.0	21.0	22.5	23.5	26.0	29.5	33.5	36.0	39.0	44.5	48.5	53.0	58.0	
Cable net weight (approx.)	kg/km	320	370	500	590	730	920	1,210	1,460	1,790	2,360	3,220	3,850	4,550	5,870	7,320	8,720	10,750	

Electrical Data

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400
Max. conductor resistance DC at 20°C	Ω/km	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
Max. conductor resistance 50Hz at 90°C	Ω/km	15.43	9.45	5.88	3.93	2.33	1.47	0.927	0.669	0.494	0.342	0.247	0.196	0.160	0.128	0.0987	0.0798	0.0640
Reactance at 50Hz	Ω/km	0.103	0.0961	0.0899	0.0853	0.0780	0.0767	0.0770	0.0746	0.0738	0.0726	0.0808	0.0709	0.0719	0.0720	0.0713	0.0707	0.0704
Current rating In air at 40°C	A	29	38	45	58	79	105	140	170	210	260	320	370	425	485	575	650	745
Current rating In the ground at 25°C	A	33	45	59	75	98	125	160	195	230	280	335	380	425	480	555	620	695
Short circuit current for 1 sec.	kA	0.255	0.409	0.636	0.935	1.52	2.41	3.72	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7

Note : CC = Circular Compacted

Copper Conductor, XLPE Insulated, PVC Bedded, Zinc-Coated Steel Wire Armour, PVC Sheathed



3 Core

Dimensional

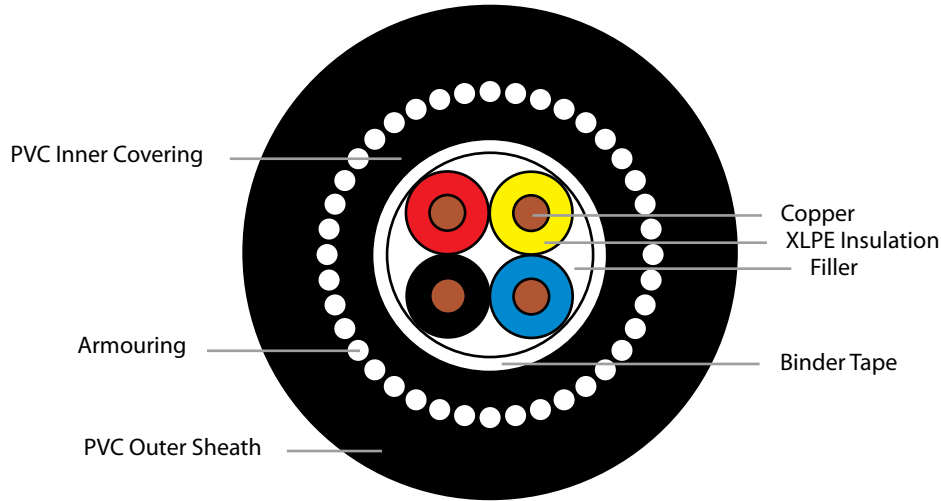
Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400					
Shape of Conductor		Circular Stranded				CC		Shaped Stranded															
Conductor dia. (approx.)		1.59	2.01	2.55	3.12	3.7	4.7	4.5	6.2	7.2	8.7	10.4	11.4	12.4	14.1	16.2	18.0	20.3					
Nominal insulation thickness	mm	0.7				0.9		1.0		1.1		1.2		1.4		1.6		1.8		2.0			
Nominal inner covering thickness	mm	1.0				1.2		1.4		1.6		1.8		2.0		2.2		2.5		2.8			
Inner covering dia. (approx.)	mm	9.4	10.3	11.4	12.7	14.3	16.5	18.0	20.1	22.6	26.6	30.1	32.6	35.9	40.3	45.4	49.6	55.2					
Nominal of galvanized steel wire	mm	0.9	1.25				1.6		2.0		2.5		3.0		3.5		4.0		4.5		5.0		
Nominal outer-sheath thickness	mm	1.8				1.9		2.0		2.2		2.3		2.5		2.6		2.8		3.0		3.2	
Approx. overall dia.	mm	14.5	16.0	17.0	18.5	20.0	22.0	24.5	26.5	29.0	34.0	38.0	41.0	45.5	50.0	55.5	60.5	66.5					
Cable net. weight (approx.)	kg/km	360	480	570	680	860	1,110	1,550	1,920	2,400	3,420	4,390	5,230	6,640	8,020	10,140	12,080	15,020					

Electrical Data

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400
Max. conductor resistance DC at 20°C	Ω/km	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
Max. conductor resistance 50Hz at 90°C	Ω/km	15.43	9.45	5.88	3.93	2.33	1.47	0.927	0.669	0.494	0.343	0.248	0.197	0.160	0.129	0.0996	0.0809	0.0653
Reactance at 50Hz	Ω/km	0.103	0.0961	0.0899	0.0853	0.0780	0.0767	0.0770	0.0746	0.0738	0.0726	0.0808	0.0709	0.0719	0.0720	0.0713	0.0707	0.0704
Current rating In air at 40°C	A	21	27	38	49	65	89	120	145	175	225	275	315	365	420	490	555	635
Current rating In the ground at 25°C	A	28	37	48	60	81	105	135	160	190	235	280	320	355	405	465	515	580
Short circuit current for 1 sec.	kA	0.255	0.409	0.636	0.935	1.52	2.41	3.72	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7

Note : CC = Circular Compacted

Copper Conductor, XLPE Insulated, PVC Bedded, Zinc-Coated Steel Wire Armour, PVC Sheathed



4 Core

Dimensional

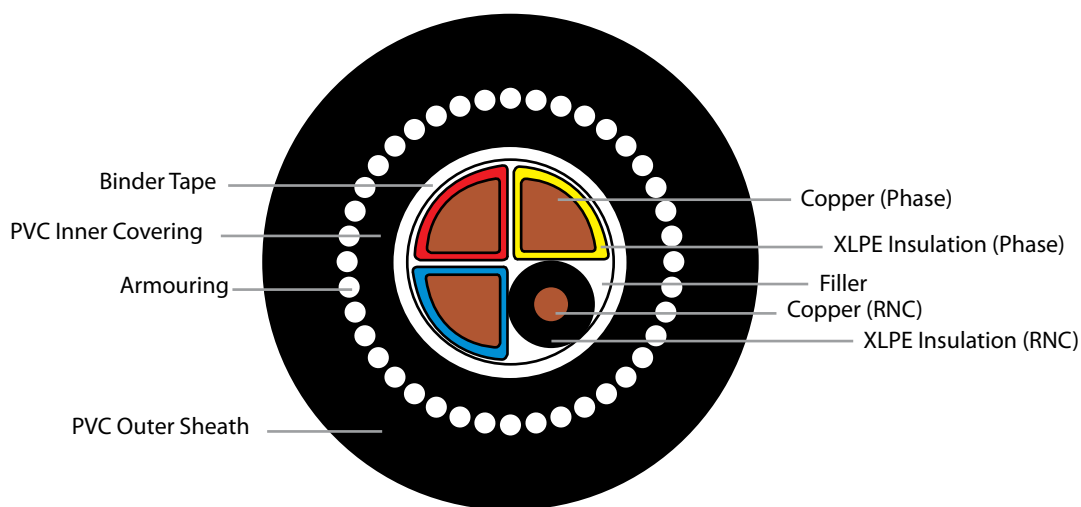
Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400			
Shape of Conductor		Circular Stranded				CC		Shaped Stranded													
Conductor dia. (approx.)		1.59	2.01	2.55	3.12	3.7	4.7	5.9	7.0	8.1	9.8	11.5	12.8	14.4	16.2	18.4	20.8	23.5			
Nominal insulation thickness	mm	0.7				0.9		1.0		1.1		1.2		1.4		1.6		1.8			
Nominal inner covering thickness	mm	1.0				1.2		1.4		1.6		1.8		2.0		2.2		2.5			
Inner covering dia. (approx.)	mm	10.2	11.2	12.5	13.9	15.8	18.2	19.9	22.2	24.9	29.5	33.1	36.6	40.9	45.6	51.1	56.6	63.5			
Nominal of galvanized steel wire	mm	0.9	1.25				1.6				2.0		2.5				3.15				
Nominal outer-sheath thickness	mm	1.8				1.9		2.0		2.2		2.3		2.5		2.6		2.8		3.0	
Approx. overall dia.	mm	15	17.0	18.0	19.5	21.5	24.5	26.5	29.0	32.0	37.5	41.5	46.5	51.0	56.0	62.0	67.5	76.5			
Cable net. weight (approx.)	kg/km	400	540	660	790	1,010	1,460	1,890	2,360	2,970	4,270	5,450	7,010	8,400	10,180	12,900	15,470	20,230			

Electrical Data

Nominal cross sectional area	mm ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400
Max. conductor resistance DC at 20°C	Ω/km	12.10	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
Max. conductor resistance 50Hz at 90°C	Ω/km	15.43	9.45	5.88	3.93	2.33	1.47	0.927	0.669	0.494	0.343	0.248	0.197	0.160	0.129	0.0996	0.0809	0.0653
Reactance at 50Hz	Ω/km	0.103	0.0961	0.0899	0.0853	0.0780	0.0767	0.0770	0.0746	0.0738	0.0726	0.0708	0.0709	0.0719	0.0720	0.0713	0.0707	0.0704
Current rating In air at 40°C	A	21	27	38	49	65	89	120	145	175	225	275	315	365	420	490	555	635
Current rating In the ground at 25°C	A	28	37	48	60	81	105	135	160	190	235	280	320	355	405	465	515	580
Short circuit current for 1 sec.	kA	0.255	0.409	0.636	0.935	1.52	2.41	3.72	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7

Note : CC = Circular Compacted

Copper Conductor, XLPE Insulated, PVC Inner Covering, Zinc-Coated Steel Wire Armour, PVC Sheathed



3 1/2 Core

Dimensional

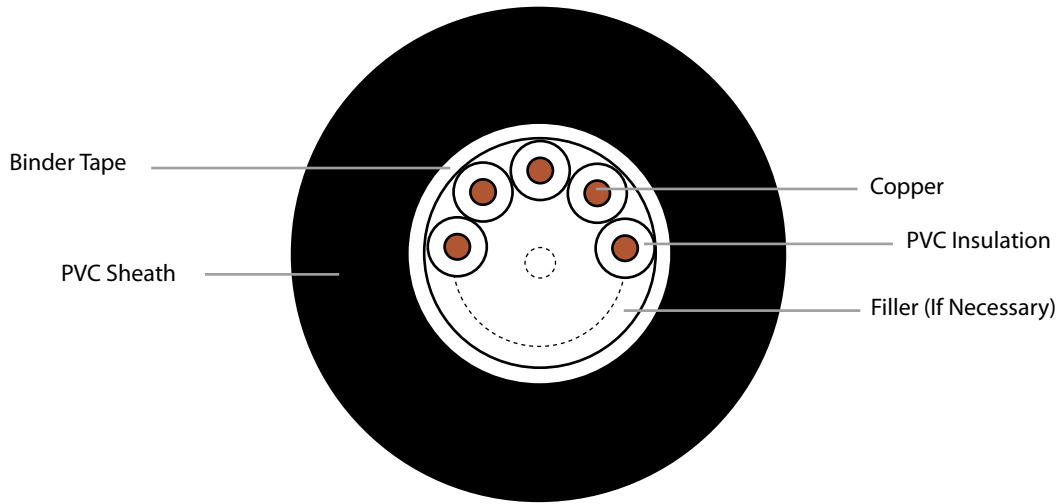
Nominal cross sectional area(Phase)	mm ²	25	35	50	70	95	120	150	185	240	300	400
Shape of Conductor(Phase)		Shaped Stranded										
Nominal insulation thickness(Phase)	mm	0.9	0.9	1.0	1.1	1.1	1.2	1.4	1.6	1.7	1.8	2.0
Nominal cross sectional area(RNC)	mm ²	16	16	25	35	50	70	70	95	120	150	185
Shape of Conductor(RNC)		Circular Compacted										
Nominal insulation thickness(RNC)	mm	0.7	0.7	0.9	0.9	1.0	1.1	1.1	1.1	1.2	1.4	1.6
Nominal inner covering thickness	mm	1.0	1.0	1.0	1.2	1.2	1.2	1.4	1.4	1.6	1.6	1.6
Inner covering dia. (approx)	mm	19.5	21.8	24.5	29.0	32.5	35.6	40.2	44.7	50.1	55.5	61.9
Nominal of galvanized steel wire	mm	1.6	1.6	1.6	2.0	2.0	2.0	2.5	2.5	2.5	2.5	3.15
Nominal outer-sheath thickness	mm	1.8	1.8	1.9	2.1	2.2	2.4	2.5	2.7	2.9	3.0	3.3
Approx. overall dia.	mm	26.0	28.0	31.0	37.0	40.5	44.0	50.0	55.0	60.5	66.0	74.5
Cable net weight (approx)	kg/km	1,810	2,190	2,770	3,970	5,030	6,170	7,720	9,390	11,800	14,080	18,290

Electrical Data

Nominal cross sectional area	mm ²	25	35	50	70	95	120	150	185	240	300	400
Max. conductor resistance DC at 20°C(Phase)	Ω/km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
Max. conductor resistance DC at 20°C(RNC)	Ω/km	1.15	1.15	0.727	0.524	0.387	0.268	0.268	0.193	0.153	0.124	0.0991

Note : RNC = Reduced Neutral Conductor

Copper Conductor, PVC Insulated, PVC Sheathed Control



1.5 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		1.59																	
Nominal insulation thickness	mm	0.8																	
Nominal sheath thickness	mm	1.8																	
Approx. overall dia.	mm	11.0	11.5	12.5	13.5	14.5		15.5	16.5	18.0		18.5		19.5		20.0	21.0		
Cable net weight (approx.)	kg/km	140	170	200	240	270	280	330	370	400	420	450	480	510	550	570	610	630	

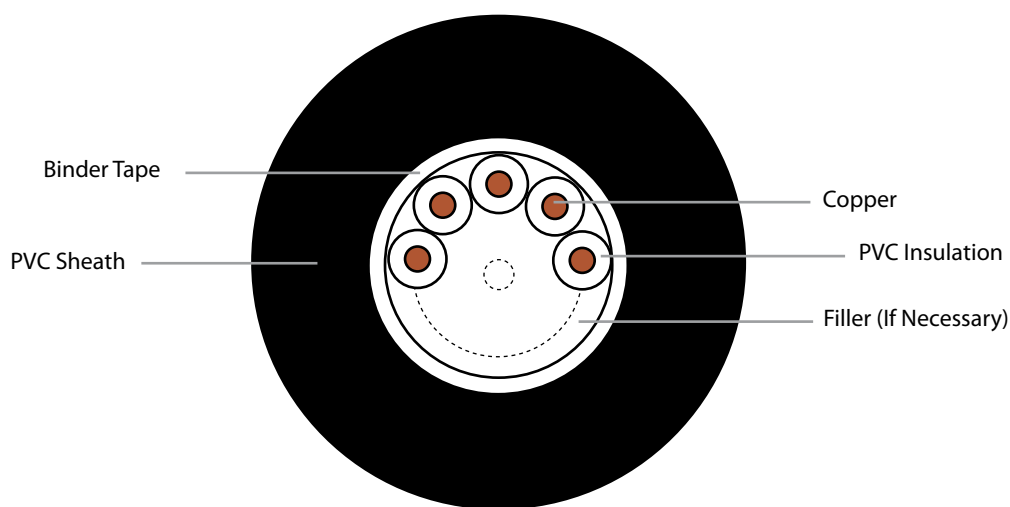
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		1.59																
Nominal insulation thickness	mm	0.8																
Nominal sheath thickness	mm	1.8															1.9	
Approx. overall dia.	mm	21.0	22.0	22.5	23.0	23.5	24.5		25.0		25.5	26.0	28.0	29.0	32.0			
Cable net weight (approx.)	kg/km	650	690	710	750	790	810	840	860	890	910	950	970	1,160	1,250	1,500	1,550	

Max. conductor resistance DC at 20°C = 12.10 Ω/km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, PVC Insulated, PVC Sheathed Control



2.5 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		2.01																	
Nominal insulation thickness	mm	0.8																	
Nominal sheath thickness	mm	1.8																	
Approx. overall dia.	mm	12.0	12.5	13.5	14.5	15.5		17.0	18.0	19.5		20.0	20.5	21.0	21.5	22.0	23.0	23.5	
Cable net weight (approx.)	kg/km	170	210	250	300	350	370	430	490	520	560	600	640	680	730	760	810	850	

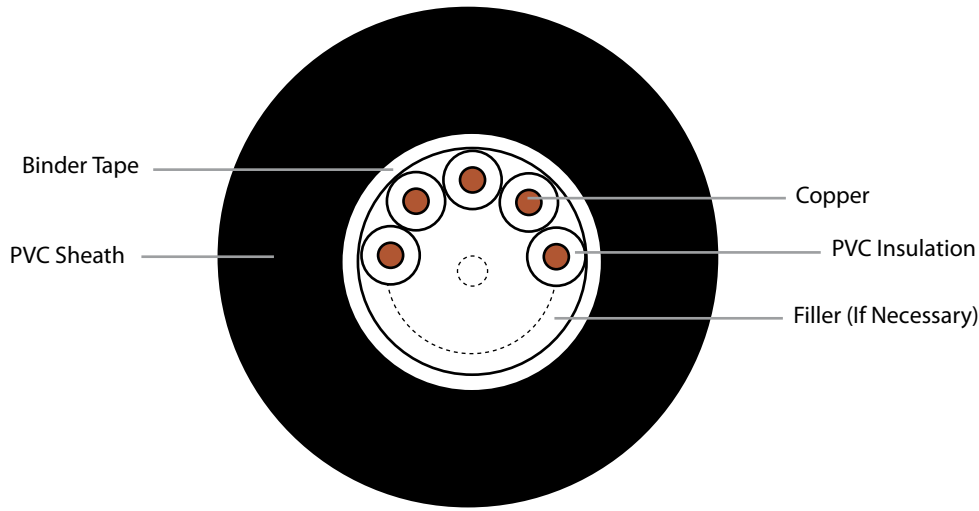
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		2.01																
Nominal insulation thickness	mm	0.8																
Nominal sheath thickness	mm	1.8													1.9	1.9	2.0	
Approx. overall dia.	mm	23.5	24.0	24.5	25.0	25.5	27.0			27.5		28.0	28.5	31.5	32.5	36.0		
Cable net weight (approx.)	kg/km	870	920	960	1,010	1,060	1,090	1,120	1,160	1,200	1,240	1,280	1,320	1,600	1,730	2,060	2,130	

Max. conductor resistance DC at 20°C = 7.41 Ω /km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, PVC Insulated, PVC Sheathed Control



4 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		2.55																	
Nominal insulation thickness	mm	1.0																	
Nominal sheath thickness	mm	1.8																	
Approx. overall dia.	mm	14.0	14.5	16.0	17.0	18.5	20.0	21.5	23.5	24.0	24.5	25.5	26.0	26.5	27.5	28.0			
Cable net weight (approx.)	kg/km	230	290	360	440	510	540	630	720	770	830	890	950	1,010	1,090	1,140	1,220	1,270	

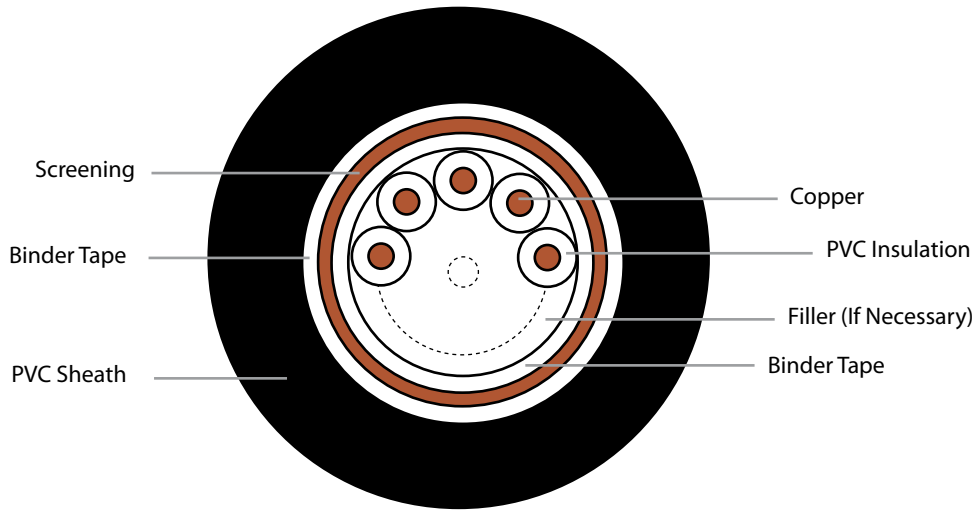
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		2.55																
Nominal insulation thickness	mm	1.0																
Nominal sheath thickness	mm	1.8			1.9				2.0				2.1		2.3			
Approx. overall dia.	mm	28.0	29.0	29.5	30.5	31.5	33.0			34.0		34.5	35.5	38.0	39.5	44.0		
Cable net weight (approx.)	kg/km	1,300	1,390	1,450	1,540	1,620	1,670	1,720	1,780	1,860	1,910	1,980	2,040	2,460	2,670	3,200	3,310	

Max. conductor resistance DC at 20°C = 4.61 Ω /km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, PVC Insulated, PVC Sheathed (Screened-CU Tape) Control



1.5 mm²

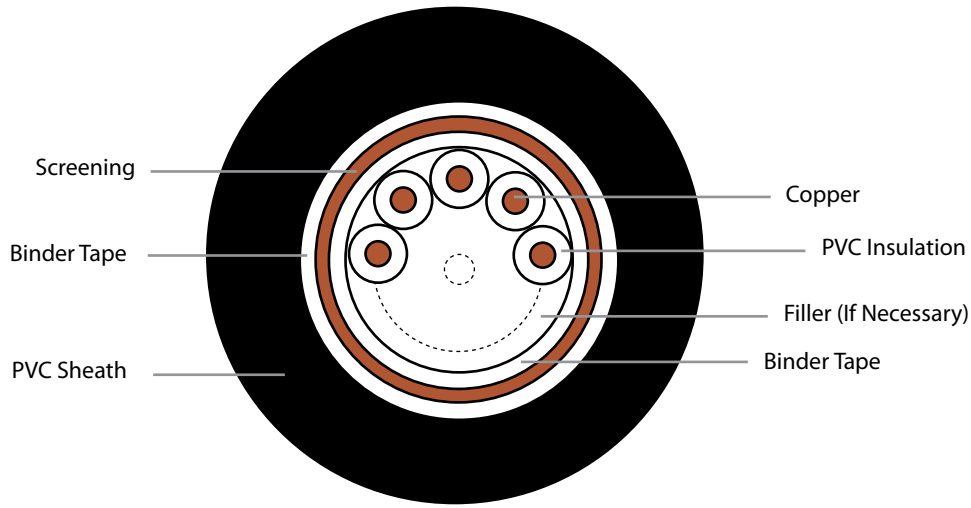
Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
Shape of Conductor		Circular Stranded																		
Conductor dia. (approx.)		1.59																		
Nominal insulation thickness	mm	0.8																		
Nominal sheath thickness	mm	1.8																		
Approx. overall dia.	mm	11.5	12.0	13.0	14.0	15.0	16.0	17.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5					
Cable net weight (approx.)	kg/km	170	200	230	270	310	330	370	420	450	480	510	540	570	610	630	680	700		

No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		1.59																
Nominal insulation thickness	mm	0.8																
Nominal sheath thickness	mm	1.8												1.9		2.0		
Approx. overall dia.	mm	21.5	22.5		23.5	24.0	25.0			25.5		26.0	26.5	29.0	30.0	33.0		
Cable net weight (approx.)	kg/km	710	760	780	820	860	890	910	940	970	990	1,030	1,060	1,270	1,360	1,620	1,670	

Max. conductor resistance DC at 20°C = 12.10 Ω/km
 Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)
 For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, PVC Insulated, PVC Sheathed (Screened-CU Tape) Control



2.5 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
Shape of Conductor		Circular Stranded																		
Conductor dia. (approx.)		2.01																		
Nominal insulation thickness	mm	0.8																		
Nominal sheath thickness	mm	1.8																		
Approx. overall dia.	mm	12.5	13.0	14.0	15.0	16.0	17.5	18.5	20.0	20.5	21.0	21.5	22.0	22.5	23.5	24.0				
Cable net weight (approx.)	kg/km	200	240	290	340	400	410	480	540	580	620	660	700	740	790	830	890	920		

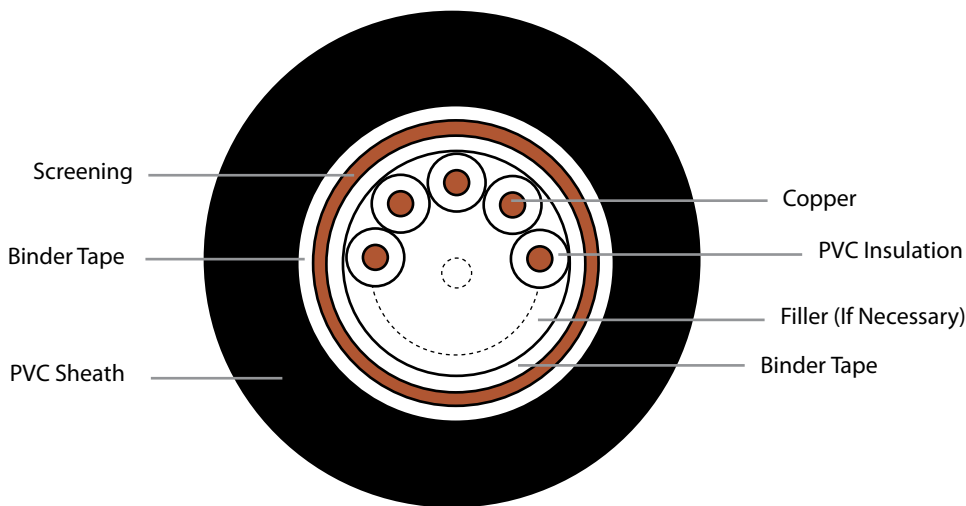
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		2.01																
Nominal insulation thickness	mm	0.8																
Nominal sheath thickness	mm	1.8							1.9					2.0		2.1	2.2	
Approx. overall dia.	mm	24.0	24.5	25.0	25.5	26.0	27.5			28.5		29.0	29.5	32.0	33.0	36.5		
Cable net weight (approx.)	kg/km	940	1,000	1,030	1,090	1,140	1,170	1,210	1,250	1,310	1,340	1,390	1,430	1,710	1,840	2,190	2,280	

Max. conductor resistance DC at 20°C = 7.41 Ω/km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, PVC Insulated, PVC Sheathed (Screened-CU Tape) Control



4 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		2.55																	
Nominal insulation thickness	mm	1.0																	
Nominal sheath thickness	mm	1.8																1.9	
Approx. overall dia.	mm	14.0	15.0	16.0	17.5	19.0		20.5	22.0	23.5		24.5	25.0	25.5	26.5	27.0	28.0	29.0	
Cable net weight (approx.)	kg/km	270	330	410	490	570	600	690	790	840	900	960	1,030	1,090	1,170	1,230	1,330	1,380	

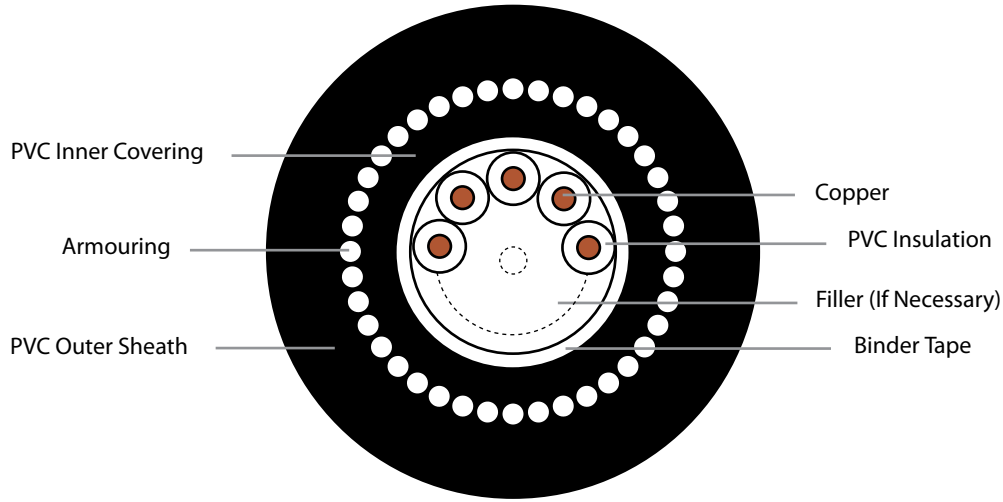
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		2.55																
Nominal insulation thickness	mm	1.0																
Nominal sheath thickness	mm	1.9			2.0					2.1				2.2	2.3	2.4		
Approx. overall dia.	mm	29.0	29.5	30.0	31.5	32.0	33.5			34.5		35.0	36.0	39.0	40.5	45.0		
Cable net weight (approx.)	kg/km	1,410	1,500	1,560	1,660	1,730	1,790	1,840	1,900	1,980	2,040	2,110	2,170	2,600	2,830	3,370	3,480	

Max. conductor resistance DC at 20°C = 4.61 Ω /km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, PVC Insulated, PVC Inner Covering, Zinc-Coated Steel Wire Armour, PVC Sheathed Control



1.5 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		1.59																	
Nominal insulation thickness	mm	0.8																	
Nominal inner covering thickness	mm	1.0																	
Inner covering dia. (approx.)	mm	8.7	9.3	10.1	11.1	12.1	13.2	14.2	15.5	16.0	16.3	16.9	17.4	17.9	18.4	18.9			
Nominal of galvanized steel wire	mm	0.9																1.6	
Nominal outer-sheath thickness	mm	1.8																	
Approx. overall dia.	mm	14.0	14.5	15.5	16.5	17.5	18.5	19.5	21.0	21.5	22.5	23.0	25.0	25.5					
Cable net weight (approx.)	kg/km	340	370	430	480	540	550	610	680	730	760	800	830	870	920	950	1,270	1,310	

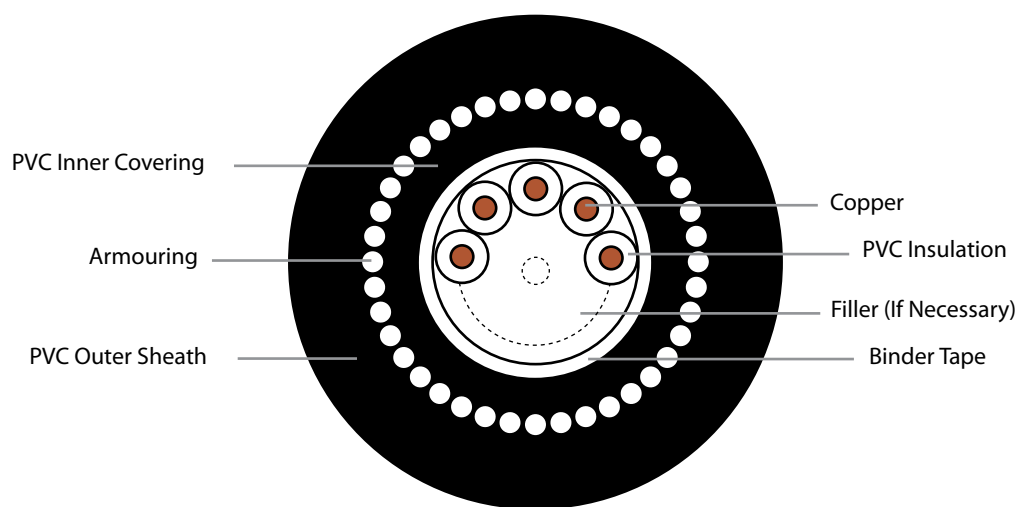
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		1.59																
Nominal insulation thickness	mm	0.8																
Nominal inner covering thickness	mm	1.0																
Inner covering dia. (approx.)	mm	18.9	19.5	19.9	20.6	21.0	22.3	22.8	23.1	23.7	25.7	26.7	29.6					
Nominal of galvanized steel wire	mm	1.6																2.0
Nominal outer-sheath thickness	mm	1.8												1.9		2.0		
Approx. overall dia.	mm	25.5	26.5	27.5	29.0	29.5	30.0	30.5	32.5	33.5	37.5							
Cable net weight (approx.)	kg/km	1,320	1,380	1,430	1,480	1,530	1,590	1,620	1,640	1,690	1,720	1,760	1,810	2,080	2,210	2,790	2,840	

Max. conductor resistance DC at 20°C = 12.10 Ω /km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, PVC Insulated, PVC Inner Covering, Zinc-Coated Steel Wire Armour, PVC Sheathed Control



2.5 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		2.01																	
Nominal insulation thickness	mm	0.8																	
Nominal inner covering thickness	mm	1.0																	
Inner covering dia. (approx.)	mm	9.6	10.2	11.2	12.2	13.4	13.4	14.5	15.7	17.2		17.8	18.1	18.8	19.3	19.9	20.5	21.0	
Nominal of galvanized steel wire	mm	0.9												1.6					
Nominal outer-sheath thickness	mm	1.8																	
Approx. overall dia.	mm	15.0	15.5	16.5	17.5	18.5		20.0	21.0	22.5		23.0	25.0	25.5	26.0	26.5	27.0	27.5	
Cable net weight (approx.)	kg/km	380	430	500	570	640	660	740	830	890	920	980	1,280	1,360	1,420	1,470	1,550	1,590	

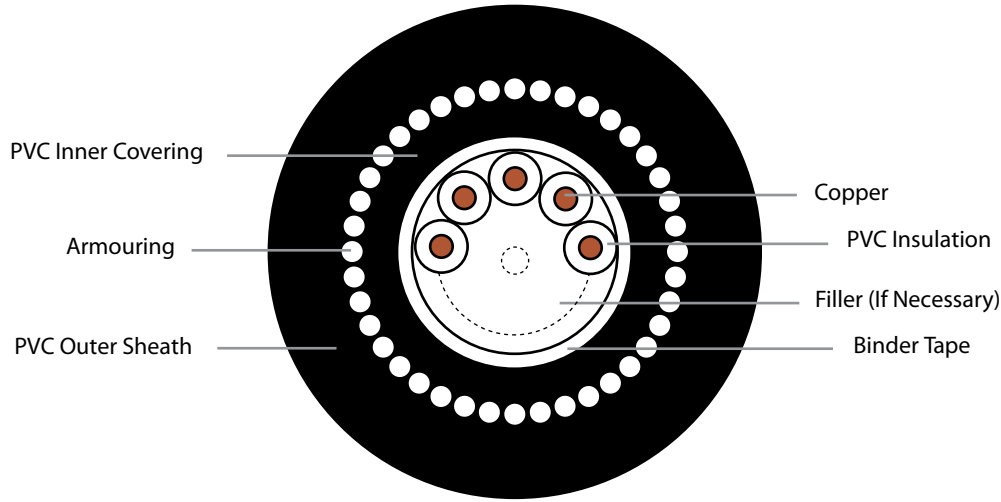
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		2.01																
Nominal insulation thickness	mm	0.8																
Nominal inner covering thickness	mm	1.0																
Inner covering dia. (approx.)	mm	21.0	21.7	22.2	22.9	23.3	24.8		25.4		25.7	26.4	28.6	29.8	33.4			
Nominal of galvanized steel wire	mm	1.6												2.0				
Nominal outer-sheath thickness	mm	1.8					1.9						2.0		2.1	2.2		
Approx. overall dia.	mm	27.5	28.5	29.0	29.5	30.0	32.0		32.5		33.5		36.0	37.5	41.5	42.0		
Cable net weight (approx.)	kg/km	1,610	1,690	1,740	1,810	1,870	1,970	2,010	2,050	2,100	2,140	2,200	2,250	2,600	3,010	3,540	3,630	

Max. conductor resistance DC at 20°C = 7.41 Ω /km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, PVC Insulated, PVC Inner Covering, Zinc-Coated Steel Wire Armour, PVC Sheathed Control



4 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		2.55																	
Nominal insulation thickness	mm	1.0																	
Nominal inner covering thickness	mm	1.0																	
Inner covering dia. (approx.)	mm	11.5	12.2	13.4	14.8	16.2	17.6	19.1	21.0	21.7	22.1	22.9	23.6	24.3	25.1	25.7			
Nominal of galvanized steel wire	mm	0.9						1.6											
Nominal outer-sheath thickness	mm	1.8																1.9	
Approx. overall dia.	mm	17.0	17.5	19.0	20.0	21.5	24.5	26.0	27.5	28.5	29.0	29.5	30.5	31.0	32.0	32.5			
Cable net weight (approx.)	kg/km	490	560	650	760	860	890	1,270	1,400	1,520	1,570	1,650	1,740	1,810	1,920	1,990	2,110	2,190	

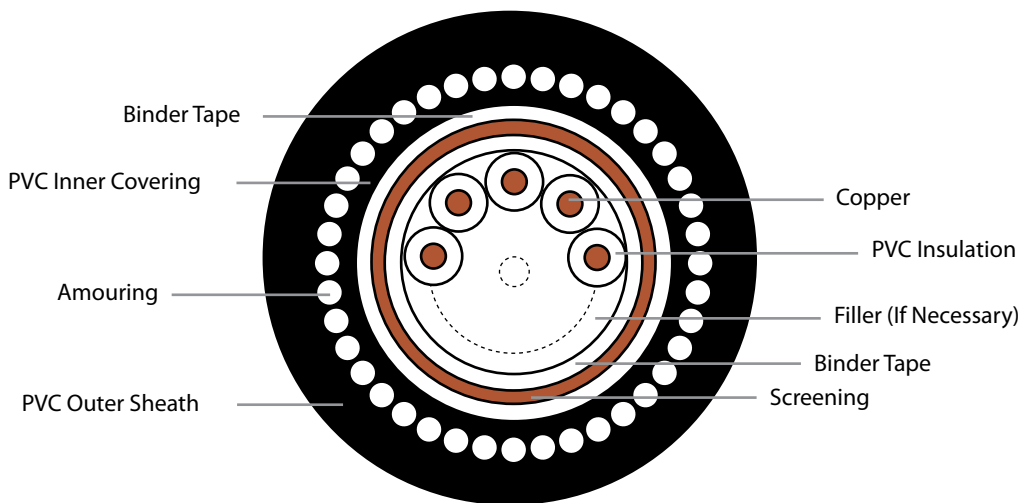
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		2.55																
Nominal insulation thickness	mm	1.0																
Nominal inner covering thickness	mm	1.0						1.2									1.4	
Inner covering dia. (approx.)	mm	25.7	26.5	27.1	28.1	28.6	30.9	31.6	32.0	32.8	35.6	37.0	41.5					
Nominal of galvanized steel wire	mm	1.6					2.0										2.5	
Nominal outer-sheath thickness	mm	1.9				2.0			2.1						2.2	2.3	2.4	
Approx. overall dia.	mm	32.5	33.5	34.0	36.0	36.5	39.0	39.5	40.0	41.0	44.0	45.5	51.0					
Cable net weight (approx.)	kg/km	2,220	2,330	2,400	2,780	2,850	3,050	3,110	3,170	3,260	3,310	3,380	3,490	4,030	4,310	5,460	5,580	

Max. conductor resistance DC at 20°C = 4.61 Ω /km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, PVC Insulated, PVC Inner Covering, Zinc-Coated Steel Wire Armour, PVC Sheathed (Screened-CU Tape) Control



1.5 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		1.59																	
Nominal insulation thickness	mm	0.8																	
Nominal inner covering thickness	mm	1.0																	
Inner covering dia. (approx.)	mm	9.2	9.7	10.6	11.5	12.6	12.6	13.6	14.6	16.0	16.0	16.5	16.8	17.4	17.8	18.3	18.9	19.3	
Nominal of galvanized steel wire	mm	0.9												1.6					
Nominal outer-sheath thickness	mm	1.8																	
Approx. overall dia.	mm	14.5	15.0	16.0	17.0	18.0		19.0	20.0	21.5		23.0	23.5	24.0	24.5	25.0	25.5	26.0	
Cable net weight (approx.)	kg/km	370	420	470	530	590	600	670	740	800	820	1,100	1,150	1,190	1,250	1,290	1,350	1,390	

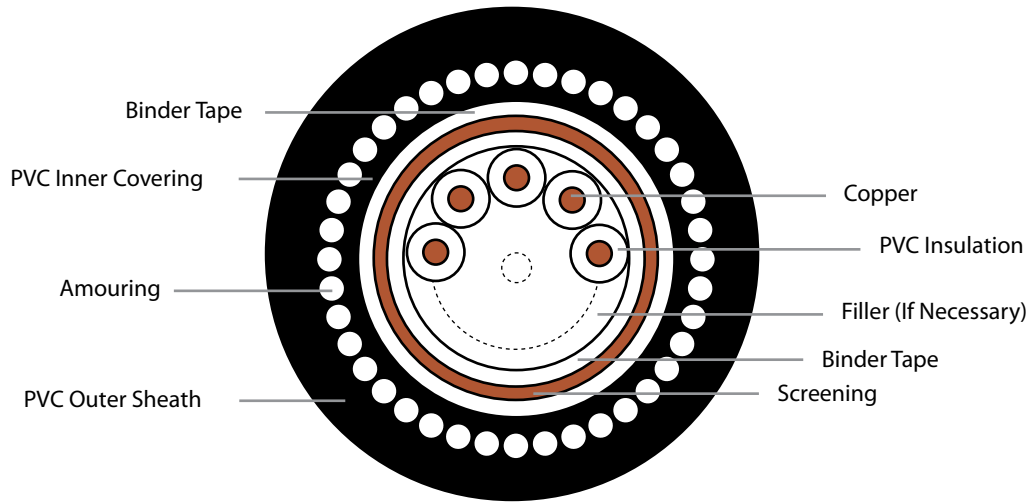
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		1.59																
Nominal insulation thickness	mm	0.8																
Nominal inner covering thickness	mm	1.0													1.2			
Inner covering dia. (approx.)	mm	19.3	20.0	20.4	21.0	21.4	22.7	22.7	22.7	23.3	23.3	23.6	24.1	26.1	27.6	30.4		
Nominal of galvanized steel wire	mm	1.6											2.0					
Nominal outer-sheath thickness	mm	1.8					1.9							2.0	2.1	2.2		
Approx. overall dia.	mm	26.0	26.5	27.0	28.0		29.5			30.0		30.5	31.0	34.0	35.5	39.0		
Cable net weight (approx.)	kg/km	1,410	1,470	1,510	1,570	1,620	1,700	1,730	1,750	1,800	1,820	1,870	1,920	2,420	2,610	2,980	3,030	

Max. conductor resistance DC at 20°C = 12.10 Ω/km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, PVC Insulated, PVC Inner Covering, Zinc-Coated Steel Wire Armour, PVC Sheathed (Screened-CU Tape) Control



2.5 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		2.01																	
Nominal insulation thickness	mm	0.8																	
Nominal inner covering thickness	mm	1.0																	
Inner covering dia. (approx.)	mm	10.0	10.6	11.6	12.7	13.8	15.0	16.2	17.6	18.2	18.5	19.2	19.7	20.3	20.9	21.4			
Nominal of galvanized steel wire	mm	0.9									1.6								
Nominal outer-sheath thickness	mm	1.8																	
Approx. overall dia.	mm	15.5	16.0	17.0	18.0	19.0	20.5	23.0	24.5	25.0	25.5	26.0	26.5	27.0	27.5	28.0			
Cable net weight (approx.)	kg/km	430	480	550	620	700	720	800	1,130	1,220	1,260	1,320	1,360	1,440	1,510	1,560	1,630	1,680	

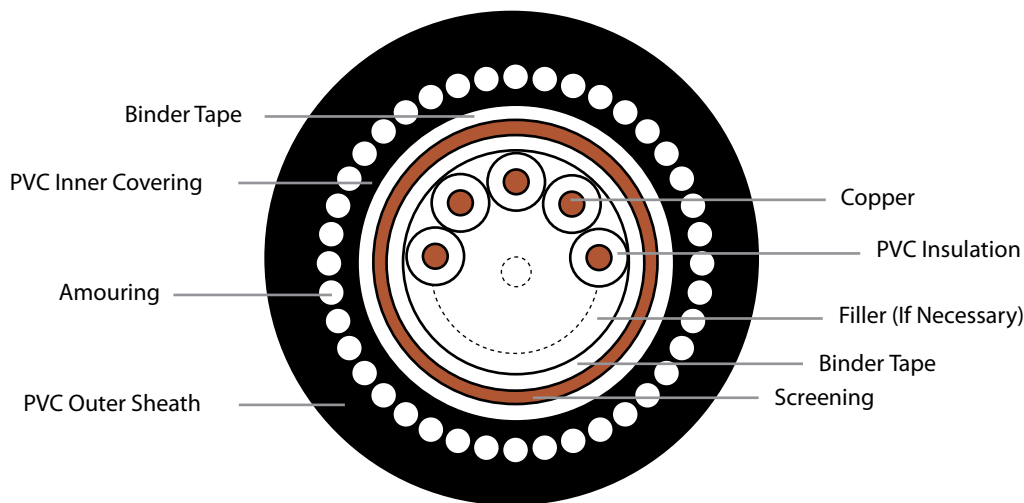
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		2.01																
Nominal insulation thickness	mm	0.8																
Nominal inner covering thickness	mm	1.0												1.2				
Inner covering dia. (approx.)	mm	21.4	22.1	22.6	23.3	23.8	25.3	25.8	26.1	26.8	29.5	30.6	33.9					
Nominal of galvanized steel wire	mm	1.6										2.0						
Nominal outer-sheath thickness	mm	1.8	1.9	1.9	2.0	2.0	2.1	2.2	2.3									
Approx. overall dia.	mm	28.0	29.0	29.5	30.5	32.5	33.0	34.0	35.0	37.5	39.0	42.5						
Cable net weight (approx.)	kg/km	1,700	1,790	1,850	1,920	1,990	2,090	2,130	2,160	2,220	2,470	2,540	2,600	3,030	3,210	3,690	3,760	

Max. conductor resistance DC at 20°C = 7.41 Ω /km

Core Identification : Black numbers on white cores(for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, PVC Insulated, PVC Inner Covering, Zinc-Coated Steel Wire Armour, PVC Sheathed (Screened-CU Tape) Control



4 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		2.55																	
Nominal insulation thickness	mm	1.0																	
Nominal inner covering thickness	mm	1.0																	
Inner covering dia. (approx.)	mm	11.9	12.6	13.9	15.2	16.6	18.1	19.6	21.4	22.1	22.5	23.4	24.0	24.7	25.5	26.1			
Nominal of galvanized steel wire	mm	0.9						1.6											
Nominal outer-sheath thickness	mm	1.8												1.9			2.0		
Approx. overall dia.	mm	17.0	18.0	19.0	20.5	23.5	25.0	26.5	28.0	29.0	29.5	30.5	31.0	31.5	32.5	33.5			
Cable net weight (approx.)	kg/km	530	610	710	810	1,170	1,200	1,330	1,480	1,610	1,660	1,740	1,840	1,920	2,020	2,110	2,230	2,310	

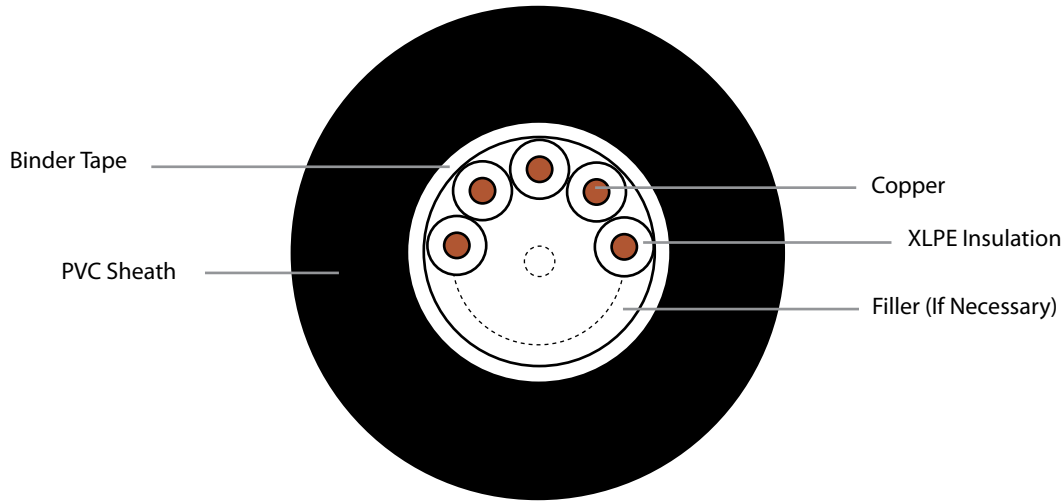
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		2.55																
Nominal insulation thickness	mm	1.0																
Nominal inner covering thickness	mm	1.0	1.2												1.4			
Inner covering dia. (approx.)	mm	26.1	27.4	28.0	28.9	29.5	31.3	32.0	32.0	32.4	33.3	36.0	37.9	41.9				
Nominal of galvanized steel wire	mm	1.6	2.0												2.5	2.5		
Nominal outer-sheath thickness	mm	2.0	2.1				2.2						2.3	2.4	2.6			
Approx. overall dia.	mm	33.5	35.5	36.0	37.0	37.5	39.5	40.5	41.0	41.5	44.5	47.5	52.0					
Cable net weight (approx.)	kg/km	2,340	2,750	2,810	2,950	3,050	3,180	3,240	3,290	3,410	3,470	3,540	3,630	4,200	4,920	5,680	5,800	

Max. conductor resistance DC at 20°C = 4.61 Ω /km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, XLPE Insulated, PVC Sheathed Control



1.5 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		1.59																	
Nominal insulation thickness	mm	0.7																	
Nominal sheath thickness	mm	1.8																	
Approx. overall dia.	mm	10.5	11.0	12.0	13.0	14.0		15.0	16.0	17.0		17.5	18.0	18.5	19.0	19.5	20.0	20.5	
Cable net weight (approx.)	kg/km	130	150	180	210	240	250	280	320	340	360	390	410	430	460	490	520	540	

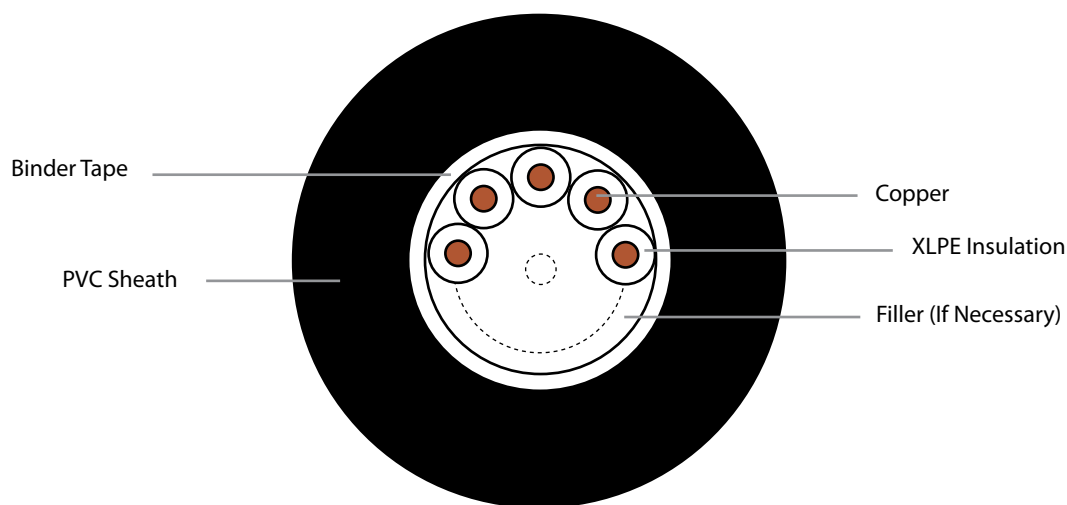
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		1.59																
Nominal insulation thickness	mm	0.7																
Nominal sheath thickness	mm	1.8																
Approx. overall dia.	mm	20.5	21.0	21.5	22.0	22.5	23.5			24.0		24.5	25.0	26.5	27.5	30.5		
Cable net weight (approx.)	kg/km	540	580	600	630	660	680	700	720	750	770	790	820	960	1,040	1,230	1,270	

Max. conductor resistance DC at 20°C = 12.10 Ω /km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, XLPE Insulated, PVC Sheathed Control



2.5 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
Shape of Conductor		Circular Stranded																		
Conductor dia. (approx.)		2.01																		
Nominal insulation thickness	mm	0.7																		
Nominal sheath thickness	mm	1.8																		
Approx. overall dia.	mm	11.5	12.0	13.0	14.0	15.0	16.5	17.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5				
Cable net weight (approx.)	kg/km	160	190	230	270	310	330	370	420	460	490	520	560	590	630	660	700	730		

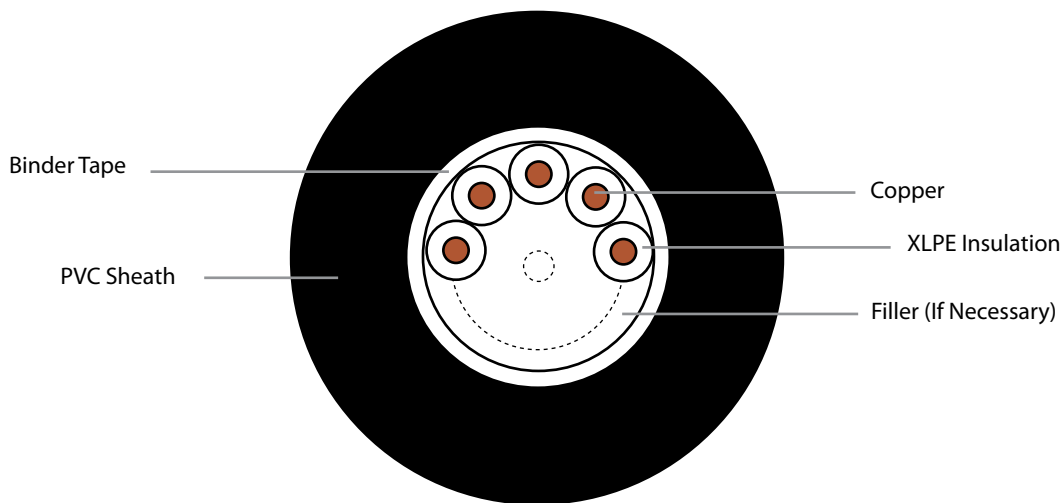
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		2.01																
Nominal insulation thickness	mm	0.7																
Nominal sheath thickness	mm	1.8															1.9	
Approx. overall dia.	mm	22.5	23.0	23.5	24.0	24.5	26.0	26.5	27.0	27.5	30.0	31.0	34.0					
Cable net weight (approx.)	kg/km	750	790	820	860	900	940	970	1,000	1,030	1,060	1,090	1,130	1,350	1,450	1,740	1,800	

Max. conductor resistance DC at 20°C = 7.41 Ω/km

Core Identification : Black numbers on white cores(for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, XLPE Insulated, PVC Sheathed Control



4 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		2.55																	
Nominal insulation thickness	mm	0.7																	
Nominal sheath thickness	mm	1.8																	
Approx. overall dia.	mm	12.5	13.0	14.0	15.5	16.5		18.0	19.0	21.0		21.5	22.0	22.5	23.0	23.5	24.5	25.0	
Cable net weight (approx.)	kg/km	200	250	300	360	420	450	510	580	630	680	720	780	830	880	930	990	1,040	

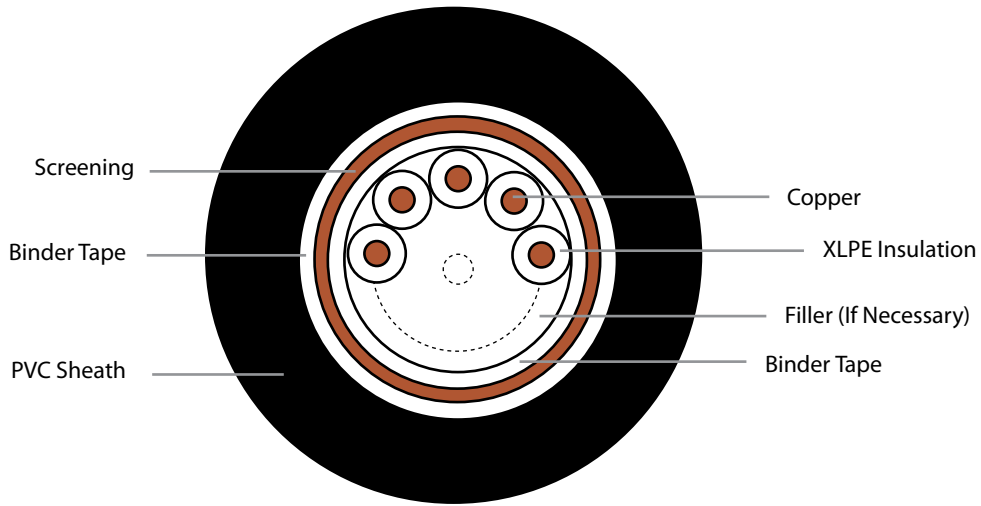
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		2.55																
Nominal insulation thickness	mm	0.7																
Nominal sheath thickness	mm	1.8				1.8	1.8			1.8			1.8	1.9		2.1		
Approx. overall dia.	mm	25.0	25.5	26.0	27.0	27.5	29.0			30.0			31.0	33.5	35.0	38.5		
Cable net weight (approx.)	kg/km	1,060	1,120	1,170	1,230	1,280	1,340	1,380	1,430	1,470	1,520	1,570	1,620	1,960	2,120	2,550	2,640	

Max. conductor resistance DC at 20°C = 4.61 Ω /km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, XLPE Insulated, PVC Sheathed (Screened-CU Tape) Control



1.5 mm²

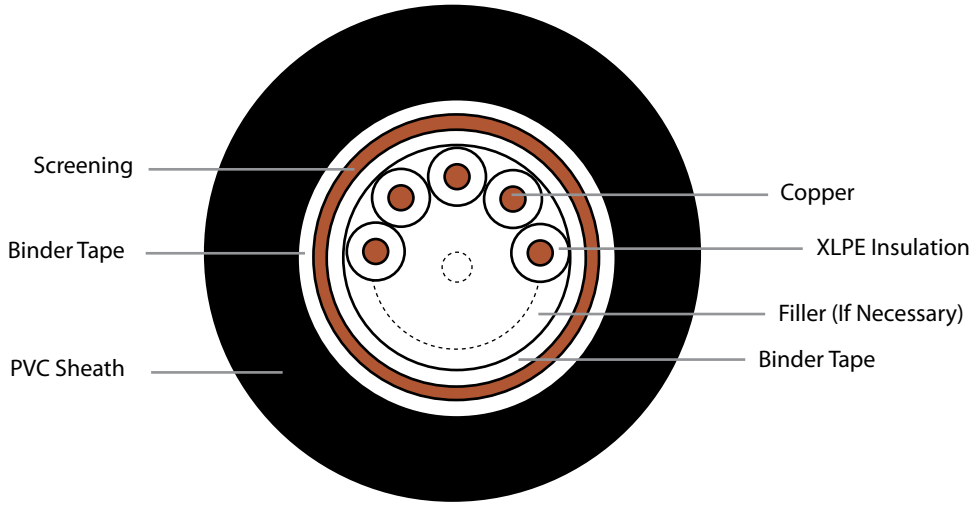
Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
Shape of Conductor		Circular Stranded																		
Conductor dia. (approx.)		1.59																		
Nominal insulation thickness	mm	0.7																		
Nominal sheath thickness	mm	1.8																		
Approx. overall dia.	mm	10.5	11.0	12.0	13.0	14.0	15.0	16.0	17.0	17.5	18.5	19.0	19.5	20.0	20.5					
Cable net weight (approx.)	kg/km	150	170	200	240	270	280	320	360	390	410	430	460	480	510	540	570	590		

No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		1.59																
Nominal insulation thickness	mm	0.7																
Nominal sheath thickness	mm	1.8																
Approx. overall dia.	mm	20.5	21.0	22.0	23.5	24.0	25.0	26.5	27.5	30.5								
Cable net weight (approx.)	kg/km	600	630	660	690	720	750	770	790	810	830	860	880	1,040	1,120	1,310	1,350	

Max. conductor resistance DC at 20°C = 12.10 Ω /km
 Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)
 For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, XLPE Insulated, PVC Sheathed (Screened-CU Tape) Control



2.5 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		2.01																	
Nominal insulation thickness	mm	0.7																	
Nominal sheath thickness	mm	1.8																	
Approx. overall dia.	mm	11.5	12.0	13.0	14.0	15.0	16.5	17.5	19.0	19.5	20.5	20.5	21.5	22.0	22.5				
Cable net weight (approx.)	kg/km	180	210	260	300	350	360	410	470	510	540	570	610	640	680	720	760	790	

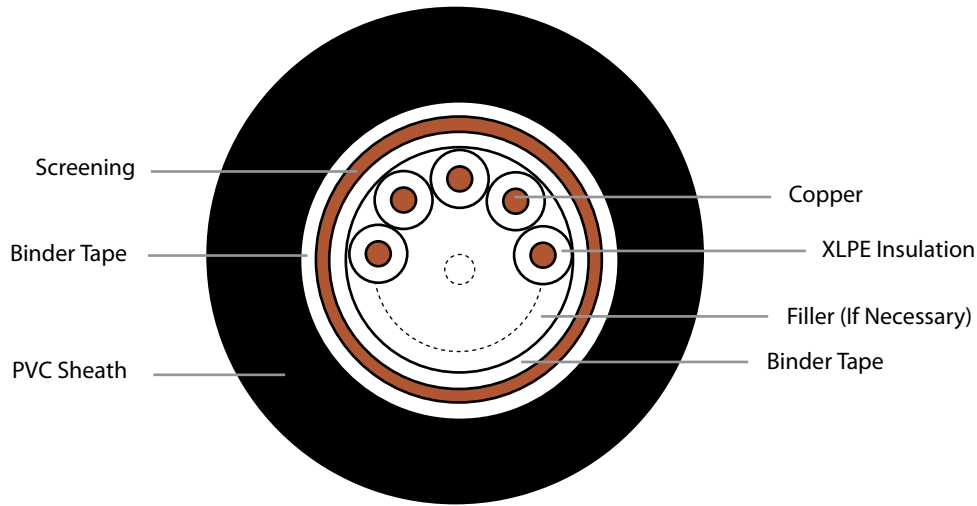
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		2.01																
Nominal insulation thickness	mm	0.7																
Nominal sheath thickness	mm	1.8															1.9	
Approx. overall dia.	mm	22.5	23.0	23.5	24.0	24.5	26.0			26.5		27.0	27.5	29.5	30.5	34.0		
Cable net weight (approx.)	kg/km	810	850	890	930	970	1,010	1,040	1,070	1,100	1,130	1,170	1,200	1,430	1,540	1,840	1,890	

Max. conductor resistance DC at 20°C = 7.41 Ω/km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, XLPE Insulated, PVC Sheathed (Screened-CU Tape) Control



4 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		2.55																	
Nominal insulation thickness	mm	0.7																	
Nominal sheath thickness	mm	1.8																	
Approx. overall dia.	mm	12.5	13.0	14.5	15.5	16.5	18.0	19.5	21.0	21.5	22.0	22.5	23.0	24.0	24.5	25.0			
Cable net weight (approx.)	kg/km	230	280	340	400	470	490	560	630	690	740	790	840	890	950	1,000	1,060	1,110	

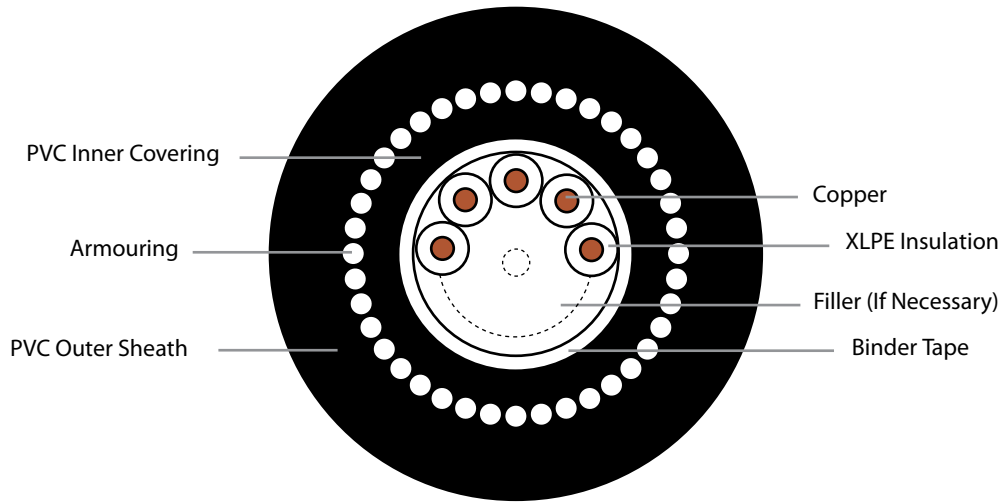
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		2.55																
Nominal insulation thickness	mm	0.7																
Nominal sheath thickness	mm	1.8							1.9						2.0	2.1		
Approx. overall dia.	mm	25.0	26.0	26.5	27.0	27.5	29.0			30.0			30.5	31.0	33.5	35.0	39.0	
Cable net weight (approx.)	kg/km	1,130	1,200	1,250	1,310	1,370	1,420	1,470	1,510	1,560	1,620	1,680	1,730	2,060	2,240	2,670	2,760	

Max. conductor resistance DC at 20°C = 4.61 Ω/km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, XLPE Insulated, PVC Inner Covering, Zinc-Coated Steel Wire Armour, PVC Sheated Control



1.5 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		1.59																	
Nominal insulation thickness	mm	0.7																	
Nominal inner covering thickness	mm	1.0																	
Inner covering dia. (approx.)	mm	9.0	9.5	10.3	11.2	12.2		13.1	14.1	15.3		15.8	16.1	16.7	17.1	17.6	18.1	18.5	
Nominal of galvanized steel wire	mm	0.9							1.25										
Nominal outer-sheath thickness	mm	1.8																	
Approx. overall dia.	mm	14.0	14.5	15.5	16.0	17.0		19.0	20.0	21.0		21.5	22.0	22.5	23.0	23.5	24.0	24.5	
Cable net weight (approx.)	kg/km	350	380	420	470	520	530	680	750	800	820	860	890	920	960	1,000	1,050	1,080	

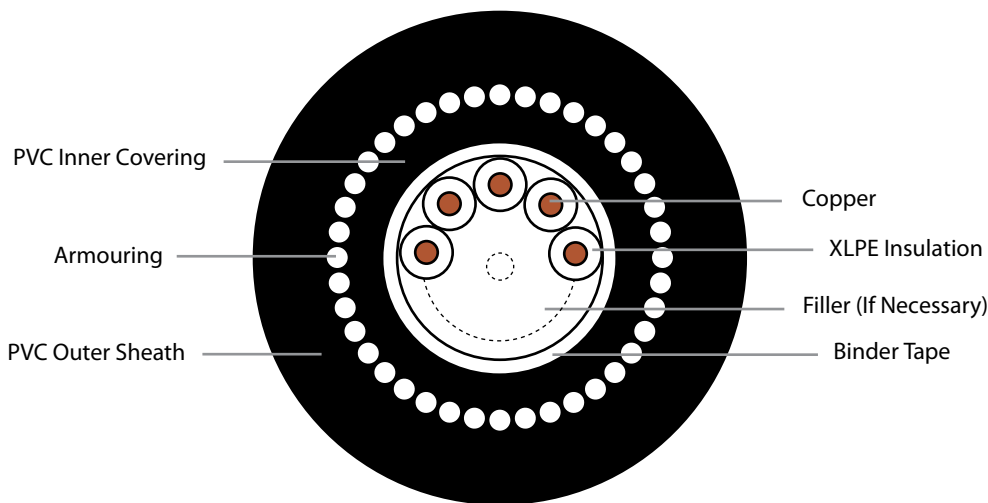
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50		
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		1.59																	
Nominal insulation thickness	mm	0.7																	
Nominal inner covering thickness	mm	1.0																	
Inner covering dia. (approx.)	mm	18.5	19.1	19.5	20.1	20.5	21.7		22.2		22.5	23.0	24.9	25.9	28.6				
Nominal of galvanized steel wire	mm	1.25	1.6																
Nominal outer-sheath thickness	mm	1.8													1.9				
Approx. overall dia.	mm	24.5	25.5	26.0	26.5	27.0	28.0		28.5		29.0	29.5	31.5	32.5	35.5				
Cable net weight (approx.)	kg/km	1,090	1,270	1,310	1,360	1,400	1,460	1,490	1,500	1,550	1,570	1,590	1,630	1,840	1,960	2,240	2,280		

Max. conductor resistance DC at 20°C = 12.10 Ω/km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, XLPE Insulated, PVC Inner Covering, Zinc-Coated Steel Wire Armour, PVC Sheathed Control



2.5 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		2.01																	
Nominal insulation thickness	mm	0.7																	
Nominal inner covering thickness	mm	1.0																	
Inner covering dia. (approx.)	mm	9.8	10.4	11.3	12.3	13.4	14.5	15.6	17.0	17.6	17.9	18.5	19.0	19.6	20.1	20.6			
Nominal of galvanized steel wire	mm	0.9						1.25						1.6					
Nominal outer-sheath thickness	mm	1.8																	
Approx. overall dia.	mm	15.0	15.5	16.5	17.5	19.0	20.5	21.5	23.0	23.5	24.0	25.5	26.0	26.5	27.0				
Cable net weight (approx.)	kg/km	390	430	490	560	720	730	810	880	960	980	1,040	1,080	1,130	1,320	1,370	1,430	1,480	

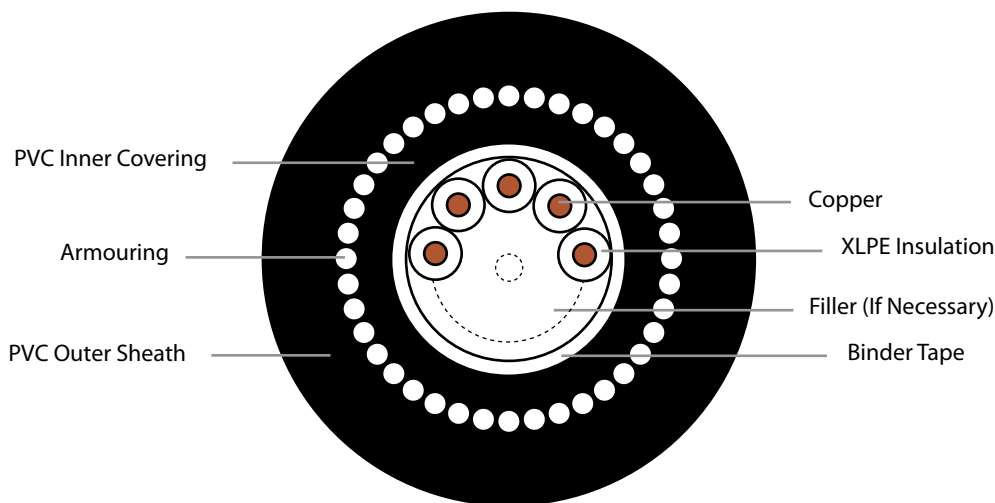
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		2.01																
Nominal insulation thickness	mm	0.7																
Nominal inner covering thickness	mm	1.0															1.2	
Inner covering dia. (approx.)	mm	20.6	21.3	21.7	22.4	22.8	24.2	24.8	25.1	25.7	27.9	29.0	32.4					
Nominal of galvanized steel wire	mm	1.6																
Nominal outer-sheath thickness	mm	1.8									1.9				2.0		2.1	
Approx. overall dia.	mm	27.0	27.5	28.5	29.0	29.5	31.0	31.5	32.0	32.5	34.5	36.0	40.5					
Cable net weight (approx.)	kg/km	1,490	1,550	1,600	1,660	1,720	1,790	1,820	1,850	1,900	1,950	2,000	2,050	2,340	2,500	3,190	3,250	

Max. conductor resistance DC at 20°C = 7.41 Ω /km

Core Identification : Black numbers on white cores(for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, XLPE Insulated, PVC Inner Covering, Zinc-Coated Steel Wire Armour, PVC Sheated Control



4 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		2.01																	
Nominal insulation thickness	mm	0.7																	
Nominal inner covering thickness	mm	1.0																	
Inner covering dia. (approx.)	mm	10.8	11.4	12.5	13.7	15.0	16.2	17.5	19.1	19.7	20.1	20.8	21.4	22.0	22.7	23.3			
Nominal of galvanized steel wire	mm	0.9			1.25					1.6									
Nominal outer-sheath thickness	mm	1.8																	
Approx. overall dia.	mm	16.0	16.5	17.5	19.5	20.5	22.0	23.0	25.5	26.0	26.5	27.0	28.0	28.5	29.0	29.5			
Cable net weight (approx.)	kg/km	460	520	590	780	870	900	990	1,090	1,320	1,370	1,440	1,500	1,570	1,650	1,710	1,790	1,860	

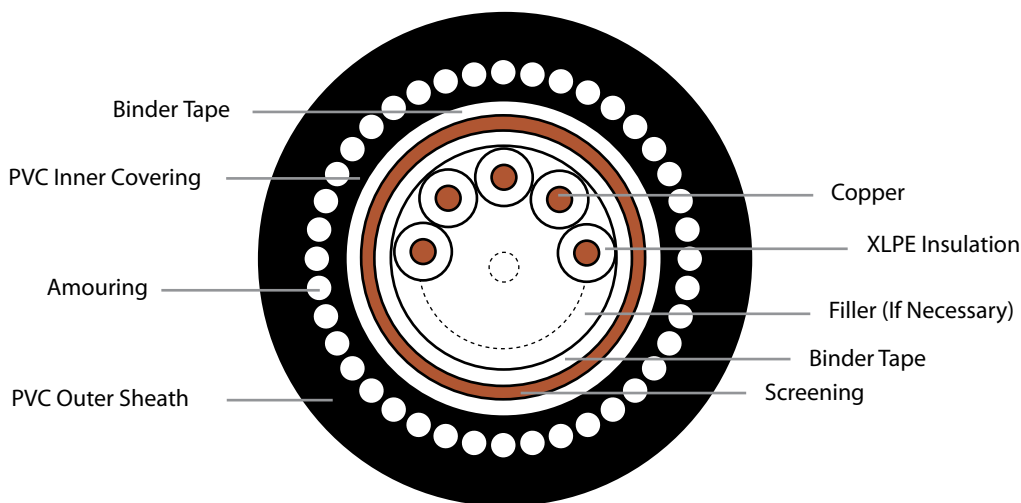
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		2.01																
Nominal insulation thickness	mm	0.7																
Nominal inner covering thickness	mm	1.0												1.2				
Inner covering dia. (approx.)	mm	23.3	24.0	24.5	25.3	25.8	27.4	28.0	28.4	29.1	32.0	33.2	36.7					
Nominal of galvanized steel wire	mm	1.6												2.0				
Nominal outer-sheath thickness	mm	1.8			1.9					2.0				2.1		2.2		
Approx. overall dia.	mm	29.5	30.5	31.0	32.0	32.5	34.0	34.5	35.0	36.0	40.0	41.0	45.0					
Cable net weight (approx.)	kg/km	1,880	1,980	2,040	2,140	2,210	2,310	2,360	2,400	2,470	2,530	2,600	2,670	3,410	3,600	4,160	4,250	

Max. conductor resistance DC at 20°C = 4.61 Ω /km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, XLPE Insulated, PVC Inner Covering, Zinc-Coated Steel Wire Armour, PVC Sheated (Screened-CU Tape) Control



1.5 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
Shape of Conductor		Circular Stranded																		
Conductor dia. (approx.)		1.59																		
Nominal insulation thickness	mm	0.7																		
Nominal inner covering thickness	mm	1.0																		
Inner covering dia. (approx.)	mm	8.9	9.4	10.2	11.1	12.1	13.0	14.0	15.3	15.8	16.0	16.6	17.0	17.5	18.0	18.5				
Nominal of galvanized steel wire	mm	0.9							1.25											
Nominal outer-sheath thickness	mm	1.8																		
Approx. overall dia.	mm	14.0	14.5	15.5	16.0	17.0	19.0	20.0	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5				
Cable net weight (approx.)	kg/km	360	400	450	500	550	560	710	770	840	860	900	930	970	1,010	1,050	1,100	1,130		

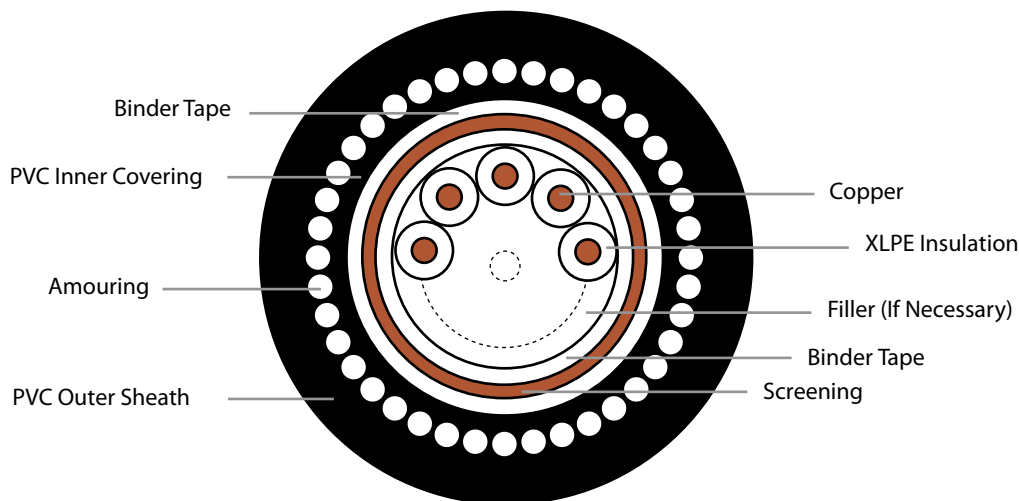
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50		
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		1.59																	
Nominal insulation thickness	mm	0.7																	
Nominal inner covering thickness	mm	1.0																	
Inner covering dia. (approx.)	mm	18.5	19.0	19.4	20.0	20.4	21.6	22.1	22.4	23.0	24.8	25.8	28.5						
Nominal of galvanized steel wire	mm	1.25	1.6																
Nominal outer-sheath thickness	mm	1.8														1.9			
Approx. overall dia.	mm	24.5	25.5	26.0	26.5	27.0	28.0	28.5	29.0	29.5	31.5	32.5	35.5						
Cable net weight (approx.)	kg/km	1,140	1,330	1,370	1,420	1,450	1,530	1,550	1,570	1,600	1,620	1,660	1,700	1,910	2,040	2,330	2,370		

Max. conductor resistance DC at 20°C = 12.10 Ω /km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, XLPE Insulated, PVC Inner Covering, Zinc-Coated Steel Wire Armour, PVC Sheated (Screened-CU Tape) Control



2.5 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
Shape of Conductor		Circular Stranded																		
Conductor dia. (approx.)		2.01																		
Nominal insulation thickness	mm	0.7																		
Nominal inner covering thickness	mm	1.0																		
Inner covering dia. (approx.)	mm	9.7	10.3	11.2	12.3	13.3	14.4	15.5	16.9	17.5	17.8	18.4	18.9	19.5	20.1	20.6				
Nominal of galvanized steel wire	mm	0.9						1.25						1.6						
Nominal outer-sheath thickness	mm	1.8																		
Approx. overall dia.	mm	15.0	15.5	16.5	17.5	19.0	20.5	21.5	23.0	23.5	24.5	25.5	26.0	26.5	27.0					
Cable net weight (approx.)	kg/km	420	460	520	580	750	770	840	930	1,000	1,030	1,080	1,130	1,180	1,380	1,430	1,490	1,540		

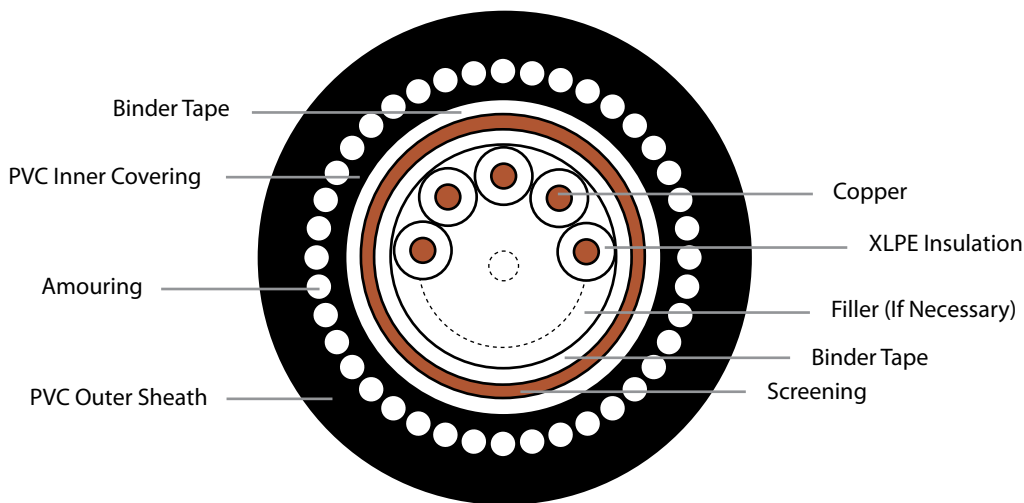
No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		2.01																
Nominal insulation thickness	mm	0.7																
Nominal inner covering thickness	mm	1.0															1.2	
Inner covering dia. (approx.)	mm	20.6	21.2	21.7	22.3	22.8	24.2	24.7	25.0	25.7	27.8	28.9	32.3					
Nominal of galvanized steel wire	mm	1.6																
Nominal outer-sheath thickness	mm	1.8										1.9					2.0	2.1
Approx. overall dia.	mm	27.0	27.5	28.0	29.0	29.5	30.5	31.0	31.5	32.0	32.5	34.5	36.0	40.5				
Cable net weight (approx.)	kg/km	1,560	1,620	1,670	1,730	1,790	1,870	1,900	1,930	1,980	2,020	2,080	2,130	2,410	2,580	3,290	3,350	

Max. conductor resistance DC at 20°C = 7.41 Ω /km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Copper Conductor, XLPE Insulated, PVC Inner Covering, Zinc-Coated Steel Wire Armour, PVC Sheated (Screened-CU Tape) Control



4 mm²

Dimensional

No. of cores		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Shape of Conductor		Circular Stranded																	
Conductor dia. (approx.)		2.55																	
Nominal insulation thickness	mm	0.7																	
Nominal inner covering thickness	mm	1.0																	
Inner covering dia. (approx.)	mm	10.9	11.5	12.6	13.8	15.0		16.3	17.6	19.2		19.8	20.2	20.9	21.5	22.1	22.8	23.3	
Nominal of galvanized steel wire	mm	0.9		1.25				1.6											
Nominal outer-sheath thickness	mm	1.8																	
Approx. overall dia.	mm	16.0	16.5	18.5	19.5	20.5		22.0	24.0	25.5		26.0	26.5	27.5	28.0	28.5	29.0	29.5	
Cable net weight (approx.)	kg/km	490	550	720	820	920	940	1,050	1,270	1,380	1,430	1,500	1,570	1,640	1,720	1,780	1,880	1,950	

No. of cores		19	20	21	22	23	24	25	26	27	28	29	30	37	40	48	50	
Shape of Conductor		Circular Stranded																
Conductor dia. (approx.)		2.55																
Nominal insulation thickness	mm	0.7																
Nominal inner covering thickness	mm	1.0													1.2			
Inner covering dia. (approx.)	mm	23.3	24.1	24.6	25.4	25.9	27.5		28.1		28.5	29.2	32.0		33.3	36.8		
Nominal of galvanized steel wire	mm	1.6										2.0						
Nominal outer-sheath thickness	mm	1.8	1.9						2.0				2.1		2.2			
Approx. overall dia.	mm	29.5	30.5	31.0	32.0	32.5	34.0		35.0		36.0		37.0	40.0	41.0	45.0		
Cable net weight (approx.)	kg/km	1,970	2,070	2,140	2,220	2,290	2,400	2,450	2,500	2,580	2,860	2,940	3,020	3,520	3,710	4,280	4,370	

Max. conductor resistance DC at 20°C = 4.61 Ω/km

Core Identification : Black numbers on white cores (for 2 cores up to 48 cores)

For 50 cores, White insulation with number 1 - 28 and Red insulation with number 1 - 22

Short Circuit Current

The thermally permissible short circuit current for a conductor of specified size may be calculated from the equations below (based on IEC 60949). For purposes of calculation, the standard short circuit duration period is up to 5 sec.

1. Copper Conductor :

$$I = \frac{143 \cdot S}{t} \sqrt{1 + 0.41 \sqrt{\frac{t}{s}} + 0.12 \left(\frac{t}{s}\right)} \quad (A)$$

2. Aluminium Conductor :

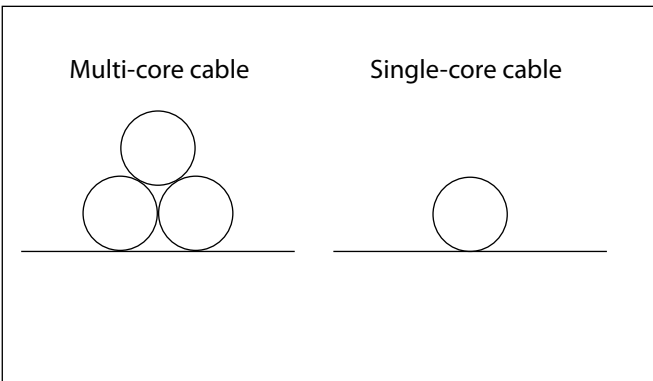
$$I = \frac{94 \cdot S}{t} \sqrt{1 + 0.57 \sqrt{\frac{t}{s}} + 0.16 \left(\frac{t}{s}\right)} \quad (A)$$

where s : conductor size in mm²
 t : short circuit period in seconds

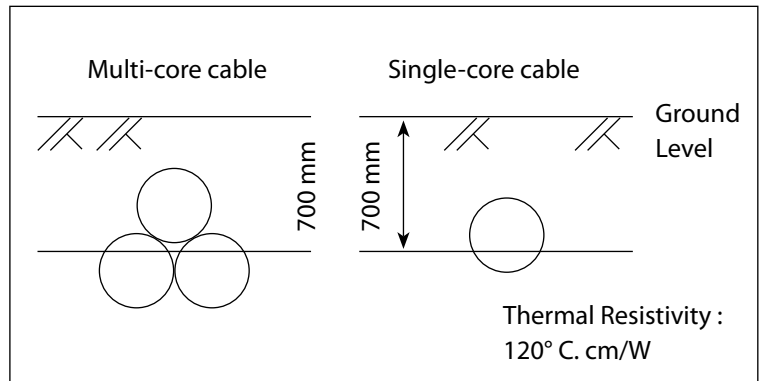
Calculation Base for Electrical Characteristics

Installation

In air (Ambient temperature : 40 °C)



In the ground (Ambient temperature : 25 °C)



Correction Factors For Continuous Current Rating

Ambient Temperature (°C)	15	20	25	30	35	40	45	50	55
Installation									
In Air	1.22	1.18	1.14	1.10	1.05	1.0	0.95	0.89	0.84
In Ground	1.07	1.04	1.0	0.96	0.92	0.88	0.83	0.78	0.73



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