

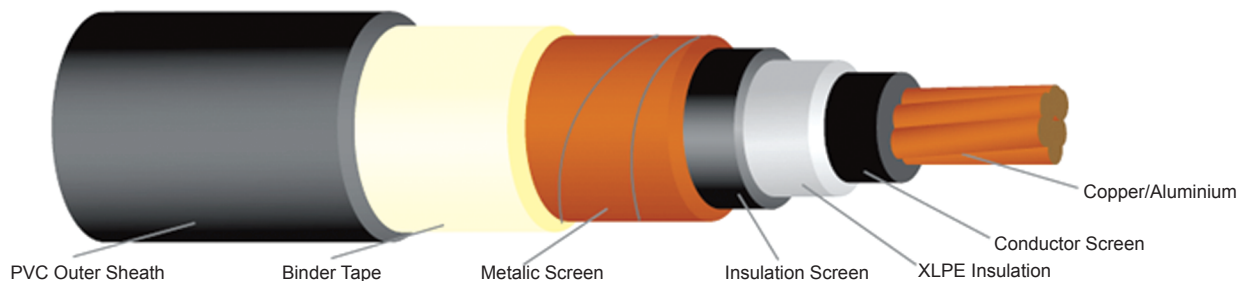
MEDIUM VOLTAGE CABLES

3.6/6 (MAX. 7.2 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SHEATHED

1 Core



DIMENSIONAL

Nominal Cross Sectional	mm²	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Conductor Dia. (Approx.)	mm	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	30.3
Nominal Insulation Thickness	mm	2.5										2.6	2.8	3.0	3.2
Nominal Outer-Sheath Thickness	mm	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7
Approx. Overall Dia.	mm	17.5	18.5	20.0	21.5	23.0	25.0	26.5	28.0	30.0	32.5	35.5	38.5	42.5	47.0
Cable Net. Weight (Approx.)	kg/km	Cu	420	540	670	820	1060	1350	1610	1910	2300	2930	3570	4460	5510
	kg/km	Al	-	380	450	520	620	750	860	980	1130	1390	1650	2000	2410

ELECTRICAL DATA

Nominal Cross Sectional	mm²	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047	0.0366
	Ω/km	Al	-	1.200	0.868	0.641	0.443	0.320	0.253	0.206	1.164	1.125	0.100	0.0778	0.0605
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	1.470	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0983	0.0794	0.0635	0.0512
	Ω/km	Al	-	1.540	1.110	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.130	0.102	0.080
Capacitance	μF/km	Cu	0.21	0.24	0.28	0.31	0.35	0.40	0.43	0.47	0.52	0.56	0.57	0.60	0.62
Reactance at 50Hz	Ω/km	Cu	0.134	0.125	0.119	0.114	0.108	0.104	0.100	0.0973	0.0946	0.0920	0.0904	0.0883	0.0868
Current Rating in Air at 40°C	A	Cu	105	135	165	200	250	305	355	410	470	560	645	750	865
	A	Al	-	105	130	155	195	240	280	320	365	435	505	590	690
Current Rating in Ground at 25°C	A	Cu	110	145	170	205	250	300	340	380	430	495	560	635	720
	A	Al	-	110	135	160	195	235	265	300	340	390	445	505	580
Short Circuit Current for 1 sec.	kA	Cu	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
	kA	Al	-	2.48	3.45	4.89	6.8	9.19	11.5	14.4	17.7	22.9	28.6	38.1	47.6

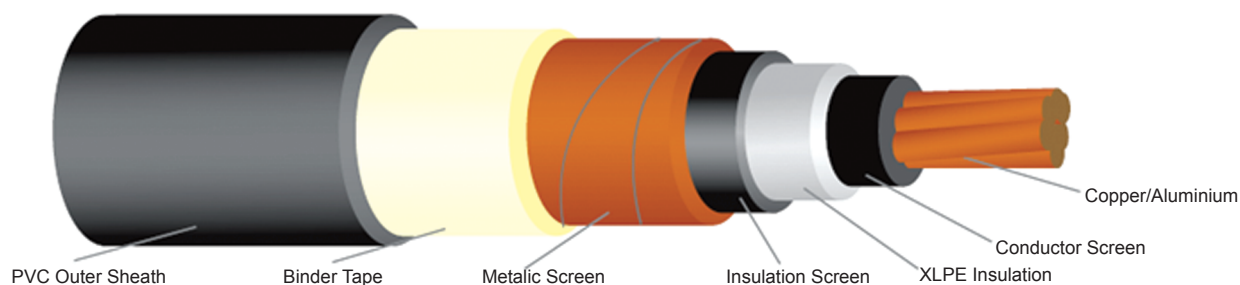
MEDIUM VOLTAGE CABLES

6/10 (MAX. 12 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SHEATHED

1 Core



DIMENSIONAL

Nominal Cross Sectional	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Conductor Dia. (Approx.)	mm	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	30.3
Nominal Insulation Thickness	mm	3.4													
Nominal Outer-Sheath Thickness	mm	1.5		1.6		1.7		1.8		1.9	2.0		2.1	2.2	2.3
Approx. Overall Dia.	mm	19.5	20.5	22.0	23.0	25.0	27.0	28.5	30.0	32.0	34.5	36.5	39.5	42.5	47.5
Cable Net. Weight (Approx.)	kg/km	Cu	490	600	740	880	1140	1430	1710	2000	2400	3030	3640	4510	5540
		Al	-	440	520	580	710	830	950	1070	1240	1490	1720	2050	2440

ELECTRICAL DATA

Nominal Cross Sectional	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047	0.0366
		Al	-	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	1.47	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0981	0.0793	0.0634	0.0511
		Al	-	1.54	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.130	0.102	0.080
Capacitance	μF/km	Cu	0.17	0.19	0.22	0.24	0.27	0.31	0.33	0.36	0.40	0.44	0.48	0.53	0.59
Reactance at 50Hz	Ω/km	Cu	0.142	0.132	0.126	0.120	0.114	0.109	0.106	0.102	0.0994	0.0958	0.0927	0.0900	0.0876
Current Rating in Air at 40°C	A	Cu	105	140	170	205	255	310	360	415	475	565	645	750	865
		Al	-	110	130	160	200	245	280	320	370	440	505	590	690
Current Rating in Ground at 25°C	A	Cu	110	145	170	205	250	300	340	380	430	500	560	635	720
		Al	-	110	135	160	195	235	265	300	340	390	445	505	580
Short Circuit Current for 1 sec.	kA	Cu	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
		Al	-	2.48	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	38.1	47.6

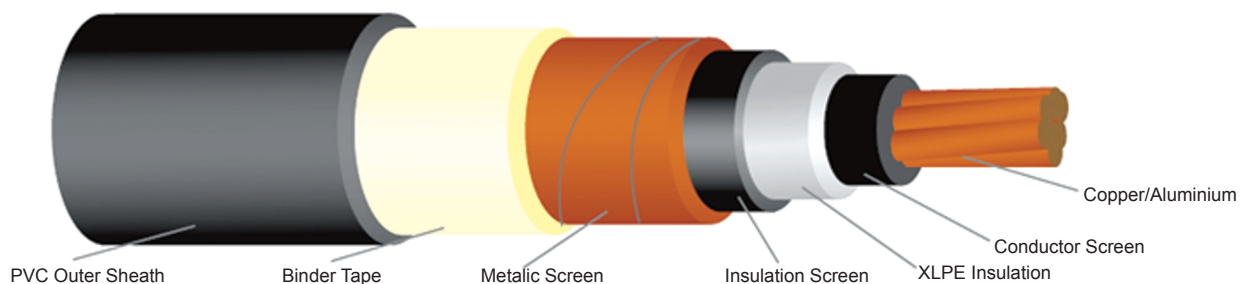
MEDIUM VOLTAGE CABLES

8.7/15 (MAX. 17.5 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SHEATHED

1 Core



DIMENSIONAL

Nominal Cross Sectional	mm²	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Conductor Dia. (Approx.)	mm	-	5.9	7.0	8.1	9.7	11.4	12.8	14.3	16.0	18.4	20.6	23.3	26.3	30.3
Nominal Insulation Thickness	mm	-	4.5												
Nominal Outer-Sheath Thickness	mm	-	1.6	1.7			1.8	1.9		2.0		2.1	2.2	2.3	2.4
Approx. Overall Dia.	mm	-	23.0	24.5	25.5	27.5	29.0	31.0	32.5	34.0	36.5	39.0	42.0	45.0	50.0
Cable Net. Weight (Approx.)	kg/km	Cu	-	700	840	990	1240	1550	1840	2140	2550	3170	3810	4690	5730
		Al	-	540	620	690	810	950	1080	1210	1380	1630	1890	2230	2630

ELECTRICAL DATA

Nominal Cross Sectional	mm²	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	-	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366
		Al	-	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	-	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0979	0.0790	0.0630	0.0507
		Al	-	1.54	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.130	0.102	0.0798
Capacitance	μF/km	Cu	-	0.16	0.18	0.20	0.22	0.25	0.27	0.29	0.31	0.35	0.38	0.42	0.46
Reactance at 50Hz	Ω/km	Cu	-	0.142	0.136	0.130	0.122	0.117	0.113	0.110	0.106	0.102	0.0986	0.0955	0.0926
Current Rating in Air at 40°C	A	Cu	-	140	175	210	260	320	365	420	480	570	655	760	875
		Al	-	110	135	160	200	245	285	325	375	445	510	595	695
Current Rating in Ground at 25°C	A	Cu	-	145	170	205	250	300	340	380	430	500	560	640	720
		Al	-	110	135	160	195	235	265	300	340	390	445	505	580
Short Circuit Current for 1 sec.	kA	Cu	-	3.72	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7	72.1
		Al	-	2.48	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	38.1	47.6

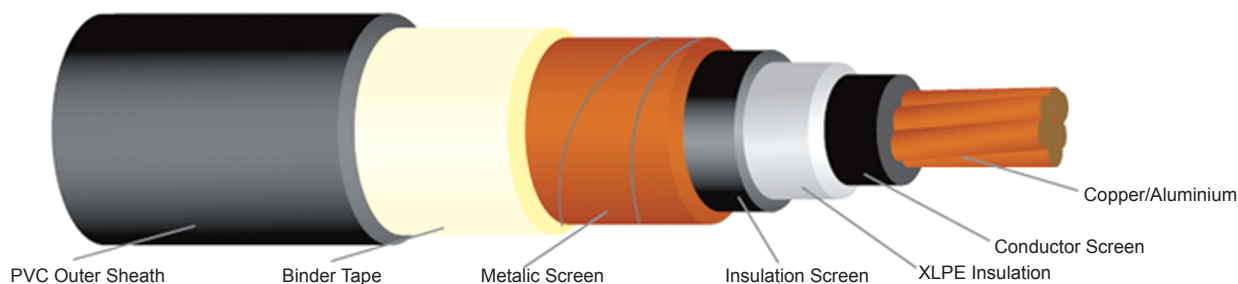
MEDIUM VOLTAGE CABLES

12/20 (MAX. 24kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SHEATHED

1 Core



DIMENSIONAL

Nominal Cross Sectional	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Conductor Dia. (Approx.)	mm	-	-	7.0	8.1	9.7	11.4	12.8	14.3	16.0	18.4	20.6	23.3	26.3	30.3
Nominal Insulation Thickness	mm	-	-	5.5											
Nominal Outer-Sheath Thickness	mm	-	-	1.7	1.8		1.9		2.0		2.1	2.2	2.3	2.4	2.5
Approx. Overall Dia.	mm	-	-	26.0	27.5	29.5	31.0	32.5	34.5	36.0	38.5	41.0	44.0	47.5	52.0
Cable Net. Weight (Approx.)	kg/km	Cu	-	-	920	1080	1340	1660	1930	2250	2650	3300	3940	4830	5900
		Al	-	-	700	790	910	1060	1180	1320	1490	1760	2020	2370	2810

ELECTRICAL DATA

Nominal Cross Sectional	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	-	-	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366
		Al	-	-	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	-	-	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0978	0.0788	0.0629	0.0505
		Al	-	-	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.129	0.101	0.0797
Capacitance	μF/km	Cu	-	-	0.16	0.17	0.19	0.21	0.23	0.25	0.27	0.3	0.32	0.35	0.39
Reactance at 50Hz	Ω/km	Cu	-	-	0.141	0.135	0.128	0.122	0.117	0.114	0.11	0.105	0.102	0.0988	0.0956
Current Rating in Air at 40°C	A	Cu	-	-	175	210	265	320	370	420	485	575	660	760	880
		Al	-	-	135	165	205	250	285	325	375	445	510	595	695
Current Rating in Ground at 25°C	A	Cu	-	-	170	205	250	300	340	380	430	500	565	640	725
		Al	-	-	135	160	195	235	265	300	340	390	445	505	575
Short Circuit Current for 1 sec.	kA	Cu	-	-	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7	72.1
		Al	-	-	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	38.1	47.6

www.southerncable.cc

All of the above information, including drawings, illustrations and graphic designs, reflects our present understanding and is to the best of our knowledge and belief correct and reliable. Users, however, should independently evaluate the suitability of each product for the desired application. Under no circumstances does this constitute an assurance of any particular quality or performance. Such an assurance is only provided in the context of our product specifications or explicit contractual arrangements. Our liability for these products is set forth in our standard terms and conditions of sale.

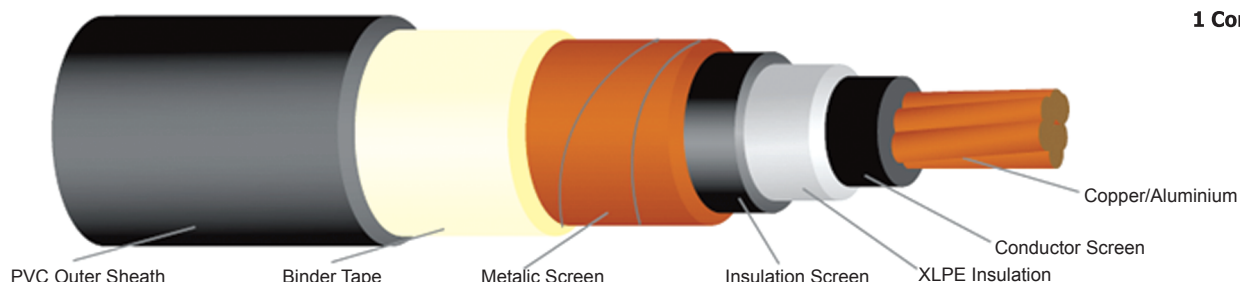
MEDIUM VOLTAGE CABLES

18/30 (MAX. 36kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SHEATHED

1 Core



DIMENSIONAL

DIMENSIONAL																
Nominal Cross Sectional	mm²		16	25	35	50	70	95	120	150	185	240	300	400	500	630
Conductor Dia. (Approx.)	mm		-	-	-	8.1	9.7	11.4	12.8	14.3	16	18.4	20.6	23.3	26.3	30.3
Nominal Insulation Thickness	mm		-	-	-	8.0										
Nominal Outer-Sheath Thickness	mm		-	-	-	1.9	2.0	2.1			2.2	2.3		2.5		2.7
Approx. Overall Dia.	mm		-	-	-	33.0	35.0	36.5	38.0	39.5	41.5	44.0	46.5	49.5	52.5	57.5
Cable Net. Weight (Approx.)	kg/km	Cu	-	-	-	1350	1640	1970	2260	2570	3000	3670	4320	5270	6330	7950
		Al	-	-	-	1050	1210	1370	1500	1640	1840	2130	2390	2820	3230	3940

ELECTRICAL DATA

Nominal Cross Sectional		mm²	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	-	-	-	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283
		Al	-	-	-	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	-	-	-	0.494	0.342	0.247	0.196	0.159	0.127	0.0976	0.0786	0.0625	0.0501	0.0405
		Al	-	-	-	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.129	0.101	0.0795	0.0627
Capacitance	μF/km	Cu	-	-	-	0.13	0.15	0.16	0.18	0.19	0.20	0.22	0.24	0.26	0.29	0.32
Reactance at 50Hz	Ω/km	Cu	-	-	-	0.147	0.139	0.132	0.127	0.123	0.119	0.115	0.110	0.106	0.102	0.0993
Current Rating in Air at 40°C	A	Cu	-	-	-	215	270	325	375	430	490	580	665	770	885	1020
		Al	-	-	-	165	210	255	290	330	380	450	515	600	700	820
Current Rating in Ground at 25°C	A	Cu	-	-	-	205	250	300	340	380	430	500	565	640	725	820
		Al	-	-	-	160	195	235	265	300	340	390	445	505	580	660
Short Circuit Current for 1 sec.	kA	Cu	-	-	-	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7	72.1	90.8
		Al	-	-	-	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	38.1	47.6	59.8

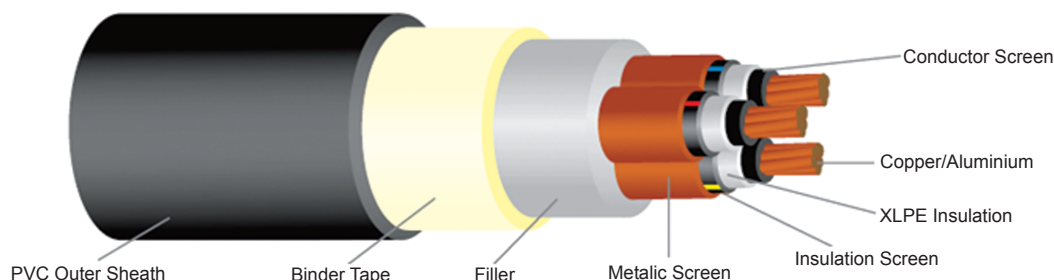
MEDIUM VOLTAGE CABLES

3.6/6 (MAX. 7.2 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SHEATHED

3 Core



DIMENSIONAL

Nominal Cross Sectional	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500
Conductor Dia. (Approx.)	mm	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
Nominal Insulation Thickness	mm	2.5										2.6	2.8	3.0
Nominal Outer-Sheath Thickness	mm	2.0	2.1	2.1	2.2	2.3	2.5	2.6	2.7	2.8	3.0	3.2	3.4	3.7
Approx. Overall Dia.	mm	34.0	36.5	39.5	42.0	46.0	50.5	53.5	57.0	61.0	67.0	73.0	80.0	88.0
Cable Net. Weight (Approx.)	kg/km	Cu	1370	1750	2150	2610	3400	4370	5240	6180	7430	9460	11530	14380
		Al	-	1270	1480	1710	2100	2560	2950	3370	3900	4780	5710	6930

ELECTRICAL DATA

Nominal Cross Sectional	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047
		Al	-	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	1.47	0.927	0.668	0.494	0.342	0.247	0.196	0.160	0.1280	0.0988	0.0800	0.0643
		Al	-	1.54	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.130	0.102
Capacitance	μF/km	Cu	0.21	0.24	0.28	0.31	0.35	0.40	0.43	0.47	0.52	0.56	0.57	0.60
Reactance at 50Hz	Ω/km	Cu	0.118	0.109	0.105	0.100	0.0949	0.0914	0.0885	0.086	0.0837	0.0817	0.0805	0.079
Current Rating in Air at 40°C	A	Cu	100	130	160	195	240	295	340	385	445	525	600	690
		Al	-	105	125	150	190	230	265	300	350	410	475	550
Current Rating in Ground at 25°C	A	Cu	110	140	170	200	245	290	330	370	420	485	545	620
		Al	-	110	130	155	190	225	255	290	325	380	430	490
Short Circuit Current for 1 sec.	kA	Cu	2.41	3.72	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7
		Al	-	2.48	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	38.1

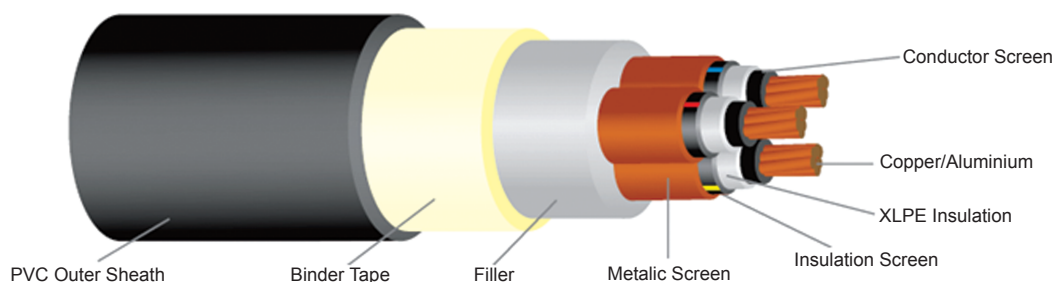
MEDIUM VOLTAGE CABLES

6/10 (MAX. 12 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SHEATHED

3 Core



DIMENSIONAL

Nominal Cross Sectional	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500
Conductor Dia. (Approx.)	mm	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
Nominal Insulation Thickness	mm	3.4												
Nominal Outer-Sheath Thickness	mm	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.1	3.3	3.5	3.7
Approx. Overall Dia.	mm	38.0	41.0	44.0	46.5	50.5	54.5	57.5	61.0	65.0	70.5	75.5	82.0	89.0
Cable Net. Weight (Approx.)	kg/km	Cu	1590	1990	2420	2920	3730	4680	5570	6530	7800	9820	11830	14610
		Al	-	1500	1750	2010	2430	2870	3270	3710	4270	5140	6000	7160

ELECTRICAL DATA

Nominal Cross Sectional	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047
		Al	-	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	1.47	0.927	0.668	0.494	0.342	0.247	0.196	0.160	0.128	0.0986	0.0798	0.0641
		Al	-	1.54	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.130	0.102
Capacitance	μF/km	Cu	0.17	0.19	0.22	0.24	0.27	0.31	0.33	0.36	0.40	0.44	0.48	0.53
Reactance at 50Hz	Ω/km	Cu	0.128	0.118	0.113	0.108	0.102	0.0976	0.0944	0.0915	0.0888	0.0856	0.0833	0.0809
Current Rating in Air at 40°C	A	Cu	105	135	165	195	245	300	345	390	450	530	600	690
		Al	-	105	130	155	190	235	270	305	350	415	475	550
Current Rating in Ground at 25°C	A	Cu	110	140	170	200	245	295	330	375	420	485	545	620
		Al	-	110	130	155	190	225	260	290	325	380	430	490
Short Circuit Current for 1 sec.	kA	Cu	2.41	3.72	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7
		Al	-	2.48	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	38.1

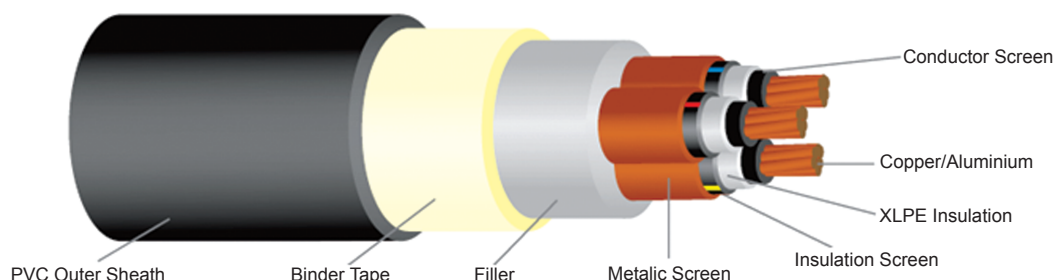
MEDIUM VOLTAGE CABLES

8.7/15 (MAX. 17.5 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SHEATHED

3 Core



DIMENSIONAL

Nominal Cross Sectional		mm²	16	25	35	50	70	95	120	150	185	240	300	400	500	
Conductor Dia. (Approx.)		mm	-	5.9	7.0	8.1	9.7	11.4	12.8	14.3	16.0	18.4	20.6	23.3	26.3	
Nominal Insulation Thickness		mm	4.5													
Nominal Outer-Sheath Thickness		mm	-	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.3	3.4	3.7	3.9	
Approx. Overall Dia.		mm	-	46.0	49.0	51.5	56.0	59.5	63.0	66.5	70.0	76.0	80.5	87.0	94.0	
Cable Net. Weight (Approx.)		kg/km	Cu	-	2370	2830	3330	4170	5150	6060	7050	8350	10410	12420	15290	18640
			Al	-	1890	2160	2420	2870	3340	3770	4240	4820	5740	6600	7840	9250

ELECTRICAL DATA

Nominal Cross Sectional		mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	-	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366
		Al	-	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	-	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0983	0.0794	0.0636	0.0515
		Al	-	1.54	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.130	0.102	0.0799
Capacitance	μF/km	Cu	-	0.16	0.18	0.20	0.22	0.25	0.27	0.29	0.31	0.35	0.38	0.42	0.46
Reactance at 50Hz	Ω/km	Cu	-	0.131	0.124	0.118	0.112	0.107	0.103	0.0994	0.0962	0.0924	0.0896	0.0868	0.0842
Current Rating in Air at 40°C	A	Cu	-	140	170	200	250	305	350	395	455	530	610	695	795
		Al	-	105	130	155	195	235	270	310	355	420	480	555	645
Current Rating in Ground at 25°C	A	Cu	-	140	170	200	245	295	335	375	420	485	550	620	700
		Al	-	110	130	155	190	225	260	290	330	380	430	495	565
Short Circuit Current for 1 sec.	kA	Cu	-	3.72	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7	72.1
		Al	-	2.48	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	38.1	47.6

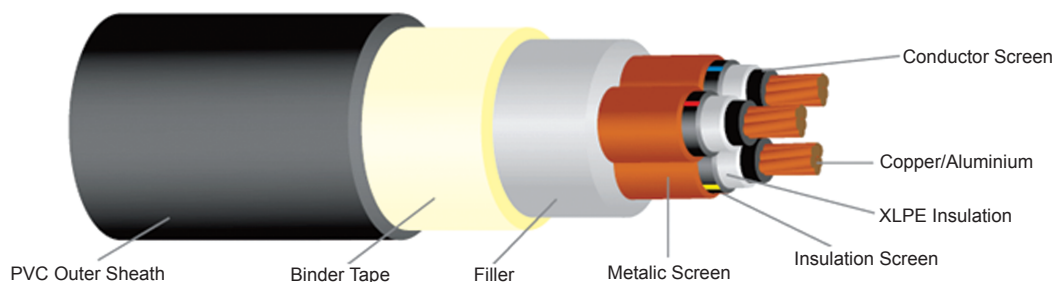
MEDIUM VOLTAGE CABLES

12/20 (MAX. 24kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SHEATHED

3 Core



DIMENSIONAL

Nominal Cross Sectional		mm²	16	25	35	50	70	95	120	150	185	240	300	400	500
Conductor Dia. (Approx.)		mm	-	-	7.0	8.1	9.7	11.4	12.8	14.3	16.0	18.4	20.6	23.3	-
Nominal Insulation Thickness		mm	-	-	5.5										-
Nominal Outer-Sheath Thickness		mm	-	-	2.6	2.7	2.8	2.9	3.0	3.1	3.3	3.4	3.6	3.8	-
Approx. Overall Dia.		mm	-	-	53.0	56.0	60.0	64.0	67.0	70.5	74.5	80.0	85.0	91.0	-
Cable Net. Weight (Approx.)	kg/km	Cu	-	-	3130	3650	4520	5520	6440	7450	8810	10870	12940	15800	-
		Al	-	-	2470	2750	3210	3710	4150	4640	5280	6190	7120	8360	-

ELECTRICAL DATA

Nominal Cross Sectional		mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	-	-	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047	-
		Al	-	-	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	-
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	-	-	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0981	0.0792	0.0634	-
		Al	-	-	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.130	0.101	-
Capacitance	μF/km	Cu	-	-	0.16	0.17	0.19	0.21	0.23	0.25	0.27	0.30	0.32	0.35	-
Reactance at 50Hz	Ω/km	Cu	-	-	0.130	0.124	0.117	0.112	0.108	0.104	0.100	0.0963	0.0933	0.0902	-
Current Rating in Air at 40°C	A	Cu	-	-	170	205	250	305	350	400	455	535	610	700	-
		Al	-	-	130	160	195	240	275	310	355	420	480	555	-
Current Rating in Ground at 25°C	A	Cu	-	-	170	200	245	295	335	375	420	490	550	620	-
		Al	-	-	130	155	190	225	260	290	330	380	430	495	-
Short Circuit Current for 1 sec.	kA	Cu	-	-	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7	-
		Al	-	-	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	38.1	-

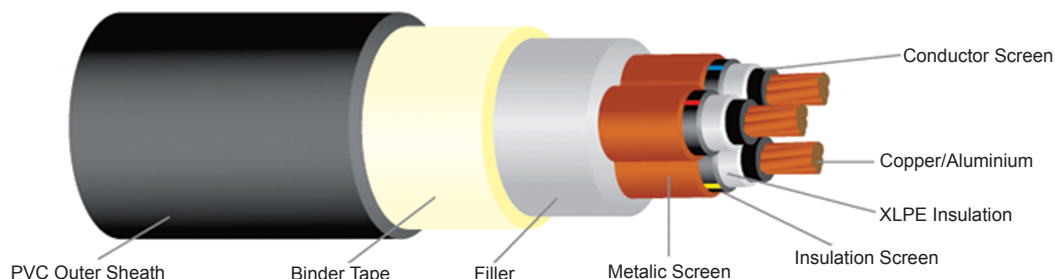
MEDIUM VOLTAGE CABLES

18/30 (MAX. 36kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SHEATHED

3 Core



DIMENSIONAL

Nominal Cross Sectional	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500
Conductor Dia. (Approx.)	mm	-	-	-	8.1	9.7	11.4	12.8	14.3	16.0	18.4	-	-	-
Nominal Insulation Thickness	mm	-	-	-	8.0							-	-	-
Nominal Outer-Sheath Thickness	mm	-	-	-	3.1	3.2	3.3	3.4	3.5	3.6	3.8	-	-	-
Approx. Overall Dia.	mm	-	-	-	67.5	71.5	75.5	79	82	86	91.5	-	-	-
Cable Net. Weight (Approx.)	kg/km	Cu	-	-	-	4720	5650	6710	7690	8750	10140	12320	-	-
		Al	-	-	-	3810	4340	4900	5400	5940	6610	7640	-	-

ELECTRICAL DATA

Nominal Cross Sectional	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	-	-	-	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	-	-
		Al	-	-	-	0.641	0.443	0.320	0.253	0.206	0.164	0.125	-	-
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	-	-	-	0.494	0.342	0.247	0.196	0.159	0.128	0.0978	-	-
		Al	-	-	-	0.822	0.568	0.411	0.325	0.265	0.211	0.161	-	-
Capacitance	μF/km	Cu	-	-	-	0.13	0.15	0.16	0.18	0.19	0.20	0.22	-	-
Reactance at 50Hz	Ω/km	Cu	-	-	-	0.137	0.129	0.123	0.118	0.114	0.110	0.105	-	-
Current Rating in Air at 40°C	A	Cu	-	-	-	205	255	310	355	400	460	540	-	-
		Al	-	-	-	160	200	240	280	315	360	425	-	-
Current Rating in Ground at 25°C	A	Cu	-	-	-	200	245	295	330	375	420	490	-	-
		Al	-	-	-	155	190	225	260	290	330	380	-	-
Short Circuit Current for 1 sec.	kA	Cu	-	-	-	7.36	10.2	13.8	17.4	21.8	26.8	34.7	-	-
		Al	-	-	-	4.89	6.80	9.19	11.5	14.4	17.7	22.9	-	-

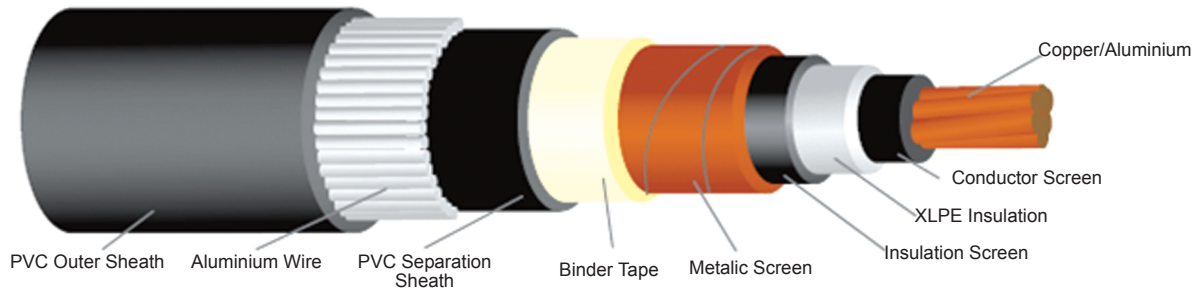
MEDIUM VOLTAGE CABLES

3.6/6 (MAX. 7.2 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SEPERATION SHEATHED, ALUMINIUM WIRE ARMOUR, PVC SHEATHED

1 Core



DIMENSIONAL

Nominal Cross Sectional Area	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Conductor Dia. (Approx.)	mm	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	30.3
Nominal Insulation Thickness	mm	2.5										2.6	2.8	3.0	3.2
Nominal Separation Thickness	mm	1.2												1.3	1.4
Separation Sheath Dia.	mm	16.3	17.5	18.8	19.9	21.7	23.4	24.8	26.3	28.0	30.6	33.2	36.3	39.9	44.7
Nominal of Hard-Drawn Al Wire	mm	1.0	1.6								2.0			2.5	2.5
Nominal Outer- Sheath	mm	1.8					1.9			2.0		2.1	2.2	2.3	2.5
Approx. Overall Dia.	mm	22.0	24.5	26.0	27.0	28.5	30.5	32.0	33.5	36.0	39.0	42.0	45.0	50.0	55.0
Cable Net. Weight (Approx.)	kg/km	Cu	660	870	1020	1180	1440	1770	2050	2380	2870	3560	4250	5200	6500
		Al	-	710	800	880	1010	1170	1300	1450	1710	2010	2330	2740	3400

ELECTRICAL DATA

Nominal Cross Sectional Area	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	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
		Al	-	1.2	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	1.47	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.127	0.0976	0.0786	0.0625	0.0499
		Al	-	1.540	1.110	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.129	0.101	0.0796
Capacitance	μF/km	Cu	0.21	0.24	0.28	0.31	0.35	0.40	0.43	0.47	0.52	0.56	0.57	0.60	0.71
Reactance at 50Hz	Ω/km	Cu	0.150	0.142	0.135	0.128	0.120	0.114	0.109	0.106	0.104	0.0999	0.0973	0.0944	0.0937
Current Rating in Air at 40°C	A	Cu	110	145	180	215	265	325	375	425	490	580	665	770	890
		Al	-	115	140	165	205	250	290	330	385	455	520	605	710
Current Rating in Ground at 25°C	A	Cu	115	145	175	210	255	305	345	385	440	505	570	645	725
		Al	-	115	135	160	195	235	270	300	340	395	445	510	580
Short Circuit Current for 1 sec.	kA	Cu	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
		Al	-	2.48	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	38.1	47.6

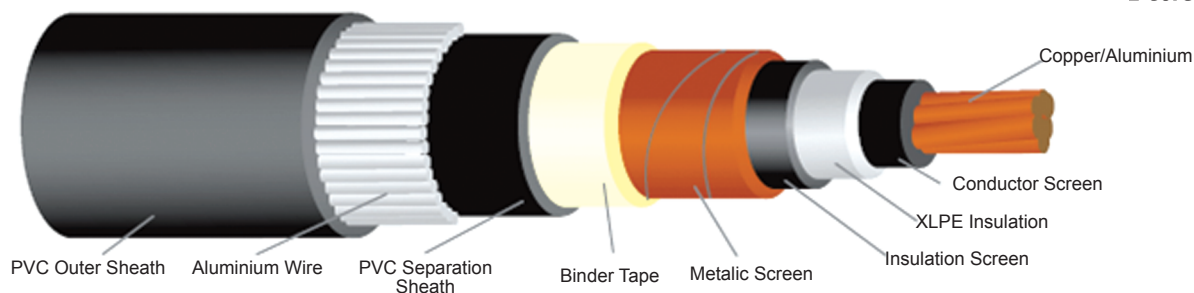
MEDIUM VOLTAGE CABLES

6/10 (MAX. 12 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SEPERATION SHEATHED, ALUMINIUM WIRE ARMOUR, PVC SHEATHED

1 Core



DIMENSIONAL

Nominal Cross Sectional Area	mm²		16	25	35	50	70	95	120	150	185	240	300	400	500	630
Conductor Dia. (Approx.)	mm		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	30.3
Nominal Insulation Thickness	mm		3.4													
Nominal Separation Thickness	mm		1.2												1.3	1.4
Separation Sheath Dia.	mm		18.1	19.3	20.6	21.7	23.5	25.2	26.6	28.1	29.8	32.2	34.4	37.1	40.3	45.1
Nominal of Hard-Drawn Al Wire	mm		1.6							2.0					2.5	2.5
Nominal Outer- Sheath	mm		1.8				1.9		2.0	2.1		2.2		2.4	2.5	2.6
Approx. Overall Dia.	mm		25.0	26.5	27.5	28.5	30.5	32.5	34.0	36.5	38.0	41.0	43.0	46.0	50.5	55.5
Cable Net. Weight (Approx.)	kg/km	Cu	820	970	1110	1270	1560	1880	2180	2600	3010	3700	4340	5280	6550	8200
		Al	-	810	890	970	1130	1280	1420	1670	1850	2150	2420	2820	3450	4190

ELECTRICAL DATA

Nominal Cross Sectional Area		mm²	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	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
		Al	-	1.2	0.868	0.641	0.443	0.32	0.253	0.206	0.164	0.125	0.10	0.0778	0.0605	0.0469
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	1.47	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.127	0.0976	0.0785	0.0624	0.0499	0.0402
		Al	-	1.54	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.129	0.101	0.0796	0.0628
Capacitance	μF/km	Cu	0.17	0.19	0.22	0.24	0.27	0.31	0.33	0.36	0.40	0.44	0.48	0.53	0.59	0.68
Reactance at 50Hz	Ω/km	Cu	0.158	0.147	0.139	0.132	0.125	0.118	0.113	0.111	0.107	0.102	0.0991	0.0957	0.0942	0.0921
Current Rating in Air at 40°C	A	Cu	115	150	180	215	270	325	375	430	495	585	665	770	890	1030
		Al	-	115	140	165	210	255	290	335	385	455	520	610	710	830
Current Rating in Ground at 25°C	A	Cu	115	145	175	205	255	305	345	390	435	505	570	645	725	815
		Al	-	115	135	160	195	235	270	300	340	395	445	510	580	660
Short Circuit Current for 1 sec.	kA	Cu	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
		Al	-	2.48	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	38.1	47.6	59.8

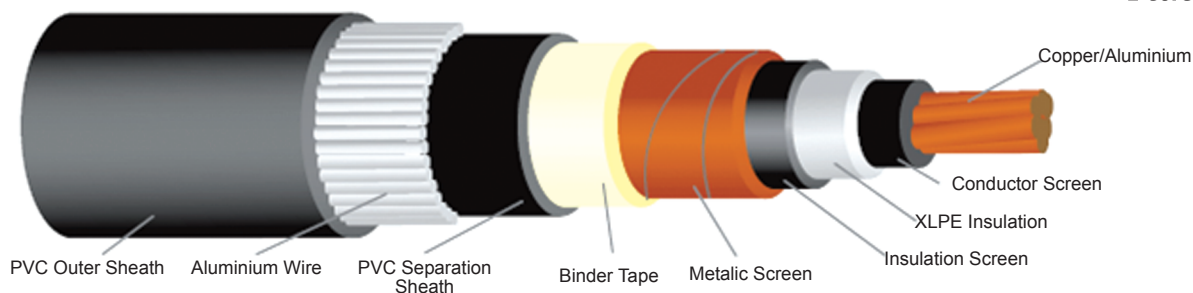
MEDIUM VOLTAGE CABLES

8.7/15 (MAX. 17.5 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SEPERATION SHEATHED, ALUMINIUM WIRE ARMOUR, PVC SHEATHED

1 Core



DIMENSIONAL

Nominal Cross Sectional Area	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Conductor Dia. (Approx.)	mm	-	5.9	7.0	8.1	9.7	11.4	12.8	14.3	16.0	18.4	20.6	23.3	26.3	30.3
Nominal Insulation Thickness	mm	-	4.5												
Nominal Separation Thickness	mm	-	1.2										1.3	1.3	1.4
Separation Sheath Dia.	mm	-	21.5	22.8	23.9	25.7	27.4	28.8	30.3	32.0	34.4	36.6	39.5	42.5	47.3
Nominal of Hard-Drawn Al Wire	mm	-	1.6					2.0					2.5		
Nominal Outer- Sheath	mm	-	1.8	1.9			2.0	2.1	2.1	2.2	2.3	2.3	2.5	2.6	2.7
Approx. Overall Dia.	mm	-	28.5	30.0	31.0	33.0	35.5	37.0	38.5	40.5	43.0	45.5	49.5	53.0	58.0
Cable Net. Weight (Approx.)	kg/km	Cu	-	1090	1250	1420	1700	2120	2440	2760	3210	3890	4550	5680	6800
		Al	-	930	1030	1120	1270	1530	1680	1830	2050	2350	2630	3220	3700

ELECTRICAL DATA

Nominal Cross Sectional Area	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	-	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366
		Al	-	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	-	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.127	0.0975	0.0784	0.0623	0.0497
		Al	-	1.54	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.129	0.101	0.0795
Capacitance	μF/km	Cu	-	0.16	0.18	0.20	0.22	0.25	0.27	0.29	0.31	0.35	0.38	0.42	0.46
Reactance at 50Hz	Ω/km	Cu	-	0.152	0.144	0.137	0.129	0.124	0.119	0.115	0.111	0.106	0.102	0.100	0.0972
Current Rating in Air at 40°C	A	Cu	-	150	180	215	270	330	380	435	495	585	670	775	890
		Al	-	115	140	170	210	255	295	335	385	455	520	610	710
Current Rating in Ground at 25°C	A	Cu	-	145	175	205	255	305	345	385	435	505	565	645	725
		Al	-	115	135	160	195	235	270	300	340	395	445	510	580
Short Circuit Current for 1 sec.	kA	Cu	-	3.72	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7	72.1
		Al	-	2.48	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	38.1	47.6

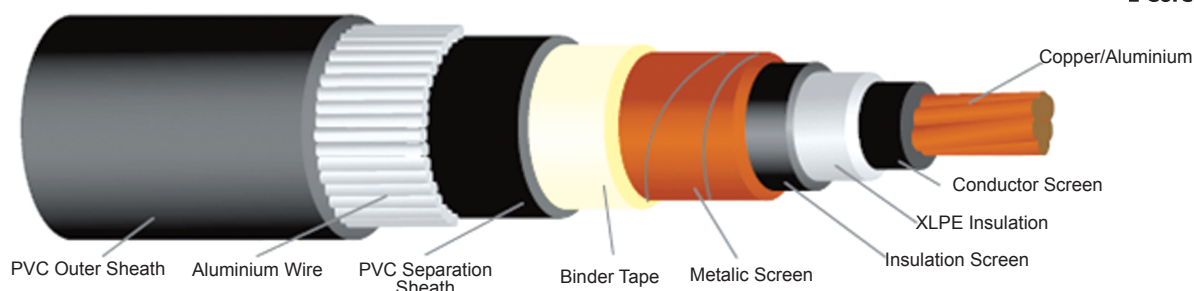
MEDIUM VOLTAGE CABLES

12/20 (MAX. 24 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SEPERATION SHEATHED, ALUMINIUM WIRE ARMOUR, PVC SHEATHED

1 Core



DIMENSIONAL

Nominal Cross Sectional Area	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Conductor Dia. (Approx.)	mm	-	-	7.0	8.1	9.7	11.4	12.8	14.3	16.0	18.4	20.6	23.3	26.3	30.3
Nominal Insulation Thickness	mm	-	-	5.5											
Nominal Separation Thickness	mm	-	-	1.2								1.3		1.4	
Separation Sheath Dia.	mm	-	-	24.6	25.7	27.5	29.2	30.6	32.1	33.8	36.2	38.6	41.3	44.5	49.1
Nominal of Hard-Drawn Al Wire	mm	-	-	1.6			2.0					2.5			
Nominal Outer- Sheath	mm	-	-	1.9	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.4	2.5	2.6	2.8
Approx. Overall Dia.	mm	-	-	32.0	33.0	35.5	37.5	39.0	40.5	42.5	45.0	48.5	51.5	55.0	60.0
Cable Net. Weight (Approx.)	kg/km	Cu	-	-	1360	1540	1910	2260	2560	2910	3340	4040	4890	5840	6990
		Al	-	-	1140	1240	1480	1660	1800	1980	2180	2490	2970	3380	3890

ELECTRICAL DATA

Nominal Cross Sectional Area	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	-	-	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366
		Al	-	-	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	-	-	0.668	0.494	0.342	0.247	0.196	0.159	0.127	0.0975	0.0783	0.0622	0.0496
		Al	-	-	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.129	0.101	0.0794
Capacitance	μF/km	Cu	-	-	0.160	0.170	0.190	0.210	0.230	0.250	0.270	0.300	0.320	0.350	0.390
Reactance at 50Hz	Ω/km	Cu	-	-	0.148	0.141	0.134	0.127	0.122	0.118	0.114	0.109	0.106	0.102	0.0995
Current Rating in Air at 40°C	A	Cu	-	-	185	220	275	335	380	435	495	585	675	775	890
		Al	-	-	140	170	210	260	295	335	385	455	525	610	710
Current Rating in Ground at 25°C	A	Cu	-	-	175	205	255	305	345	385	435	505	570	645	725
		Al	-	-	135	160	195	235	270	300	340	395	445	510	580
Short Circuit Current for 1 sec.	kA	Cu	-	-	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7	72.1
		Al	-	-	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	38.1	47.6

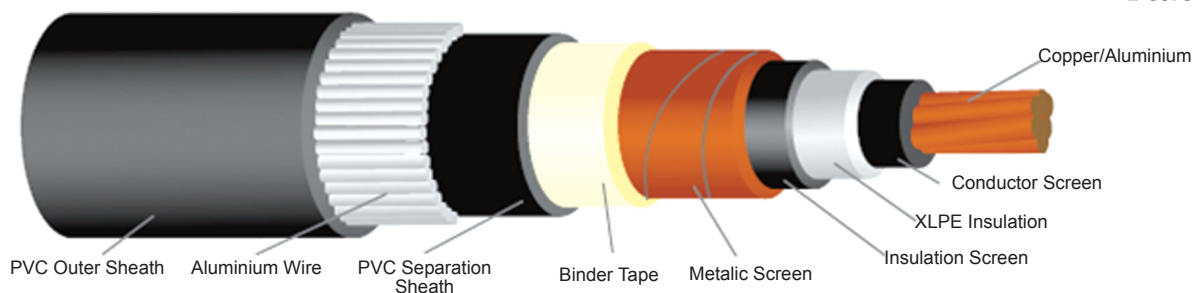
MEDIUM VOLTAGE CABLES

18/30 (MAX. 36 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SEPERATION SHEATHED, ALUMINIUM WIRE ARMOUR, PVC SHEATHED

1 Core



DIMENSIONAL

Nominal Cross Sectional Area	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500	630	
Conductor Dia. (Approx.)	mm	-	-	-	8.1	9.7	11.4	12.8	14.3	16.0	18.4	20.6	23.3	26.3	30.3	
Nominal Insulation Thickness	mm	-	-	-	8.0											
Nominal Separation Thickness	mm	-	-	-	1.2				1.3			1.4		1.5		
Separation Sheath Dia.	mm	-	-	-	30.8	32.6	34.3	35.7	37.4	39.1	41.5	43.9	46.6	49.8	54.4	
Nominal of Hard-Drawn Al Wire	mm	-	-	-	2.0				2.5							
Nominal Outer- Sheath	mm	-	-	-	2.2		2.3		2.4	2.5		2.6	2.7	2.8	2.9	
Approx. Overall Dia.	mm	-	-	-	39.5	41.0	43.0	44.5	47.5	49.5	51.5	54.5	57.0	60.5	65.5	
Cable Net. Weight (Approx.)	kg/km	Cu	-	-	-	2000	2300	2670	2990	3500	3980	4680	5420	6400	7580	9290
		Al	-	-	-	1700	1870	2070	2230	2580	2810	3140	3500	3940	4480	5280

ELECTRICAL DATA

Nominal Cross Sectional Area		mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	-	-	-	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047	0.0366	0.0283
		Al	-	-	-	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	-	-	-	0.494	0.342	0.247	0.196	0.159	0.127	0.0974	0.0782	0.062	0.0494	0.0396
		Al	-	-	-	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.129	0.101	0.0793	0.0624
Capacitance	μF/km	Cu	-	-	-	0.13	0.15	0.16	0.18	0.19	0.20	0.22	0.24	0.26	0.29	0.32
Reactance at 50Hz	Ω/km	Cu	-	-	-	0.152	0.143	0.136	0.13	0.128	0.123	0.117	0.113	0.109	0.105	0.102
Current Rating in Air at 40°C	A	Cu	-	-	-	220	275	335	385	440	500	590	675	775	890	1025
		Al	-	-	-	170	215	260	300	340	390	460	525	610	710	825
Current Rating in Ground at 25°C	A	Cu	-	-	-	205	255	305	345	385	435	505	565	640	720	810
		Al	-	-	-	160	195	235	265	300	340	395	445	505	575	655
Short Circuit Current for 1 sec.	kA	Cu	-	-	-	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7	72.1	90.8
		Al	-	-	-	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	38.1	47.6	59.8

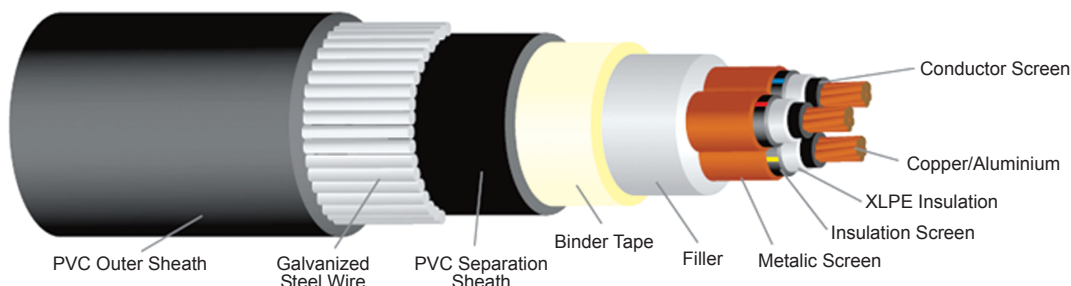
MEDIUM VOLTAGE CABLES

3.6/6 (MAX. 7.2 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SEPERATION SHEATHED, ZINC-COATED STEEL WIRE ARMOUR, PVC SHEATHED

3 Core



DIMENSIONAL

Nominal Cross Sectional Area	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500
Conductor Dia. (Approx.)	mm	4.7	5.9	7.0	8.1	9.7	11.4	12.8	14.3	16.0	18.4	20.6	23.3	-
Nominal Insulation Thickness	mm	2.5									2.6	2.8	3.0	-
Nominal Separation Thickness	mm	1.2			1.3	1.4		1.5		1.6	1.7	1.8	2.0	-
Separation Sheath Dia.	mm	31.6	34.2	37.0	39.6	43.7	47.3	50.6	53.8	57.7	63.5	69.3	76.3	-
Nominal of Galvanized Steel	mm	2.0			2.5							3.15		-
Nominal Outer- Sheath	mm	2.2	2.3		2.5	2.6	2.7	2.8	2.9	3.0	3.2	3.5	3.8	-
Approx. Overall Dia.	mm	40.5	43.0	46.0	50.0	54.0	58.0	61.5	65.0	69.0	75.0	83.0	90.5	-
Cable Net. Weight (Approx.)	kg/km	Cu	2830	3300	3840	4870	5910	7020	8080	9210	10710	13090	16410	19880
		Al	-	2850	3170	3960	4600	5200	5790	6400	7180	8420	10590	12440

ELECTRICAL DATA

Nominal Cross Sectional Area	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	1.15	0.072	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
		Al	-	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	1.47	0.927	0.668	0.494	0.342	0.247	0.196	0.160	0.128	0.0988	0.0800	0.0643
		Al	-	1.54	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.130	0.102
Capacitance	μF/km	Cu	0.21	0.24	0.28	0.31	0.35	0.40	0.43	0.47	0.52	0.56	0.57	0.60
Reactance at 50Hz	Ω/km	Cu	0.117	0.109	0.105	0.100	0.0949	0.0914	0.0885	0.086	0.0837	0.0817	0.0805	0.0790
Current Rating in Air at 40°C	A	Cu	105	135	165	195	245	300	340	385	440	515	585	665
		Al	-	105	130	155	190	235	270	305	345	405	460	530
Current Rating in Ground at 25°C	A	Cu	110	140	170	200	245	290	330	365	415	475	530	590
		Al	-	110	130	155	190	225	255	285	320	370	415	470
Short Circuit Current for 1 sec.	kA	Cu	2.41	3.72	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7
		Al	-	2.48	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	38.1

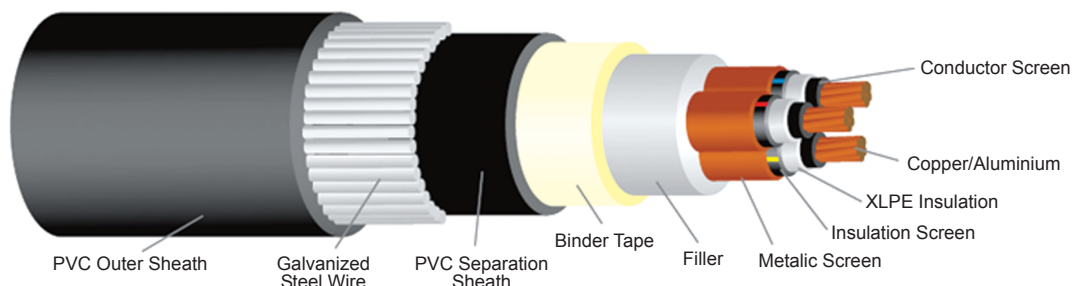
MEDIUM VOLTAGE CABLES

6/10 (MAX.12 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SEPERATION SHEATHED, ZINC-COATED STEEL WIRE ARMOUR, PVC SHEATHED

3 Core



DIMENSIONAL

DIMENSIONS															
Nominal Cross Sectional Area	mm ²		16	25	35	50	70	95	120	150	185	240	300	400	500
Conductor Dia. (Approx.)	mm		4.7	5.9	7.0	8.1	9.7	11.4	12.8	14.3	16.0	18.4	20.6	23.3	-
Nominal Insulation Thickness	mm		3.4												-
Nominal Separation Thickness	mm		1.2	1.3		1.4		1.5	1.6		1.7	1.8	1.9	2.0	-
Separation Sheath Dia.	mm		35.5	38.3	41.1	43.7	47.6	51.4	54.6	57.9	61.7	67.1	72.1	78.1	-
Nominal of Galvanized Steel	mm		2.0				2.5					3.2			-
Nominal Outer- Sheath	mm		2.3	2.4	2.5	2.6	2.7	2.9	3.0	3.1	3.2	3.4	3.6	3.8	-
Approx. Overall Dia.	mm		44.5	48.5	51.5	54.0	58.0	62.5	66.0	69.5	73.5	80.5	86.0	92.0	-
Cable Net. Weight (Approx.)	kg/km	Cu	3220	4130	4740	5380	6420	7600	8690	9840	11370	14560	16960	20210	-
		Al	-	3650	4070	4480	5110	5790	6400	7030	7840	9880	11140	12770	-

ELECTRICAL DATA

ELECTRICAL DATA															
Nominal Cross Sectional Area	mm ²		16	25	35	50	70	95	120	150	185	240	300	400	500
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	-
		Al	-	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	-
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	1.47	0.927	0.668	0.494	0.342	0.247	0.196	0.16	0.128	0.0986	0.0798	0.0641	-
		Al	-	1.54	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.130	0.102	-
Capacitance	μF/km	Cu	0.17	0.19	0.22	0.24	0.27	0.31	0.33	0.36	0.40	0.44	0.48	0.53	-
Reactance at 50Hz	Ω/km	Cu	0.128	0.118	0.113	0.108	0.102	0.0976	0.0944	0.0915	0.0888	0.0856	0.0833	0.0809	-
Current Rating in Air at 40°C	A	Cu	105	140	170	200	250	300	345	390	445	520	585	665	-
		Al	-	110	130	155	195	235	270	305	345	410	460	530	-
Current Rating in Ground at 25°C	A	Cu	110	140	170	200	245	290	330	365	410	475	525	590	-
		Al	-	110	130	155	190	225	255	285	320	370	415	470	-
Short Circuit Current for 1 sec.	kA	Cu	2.41	3.72	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7	-
		Al	-	2.48	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	38.1	-

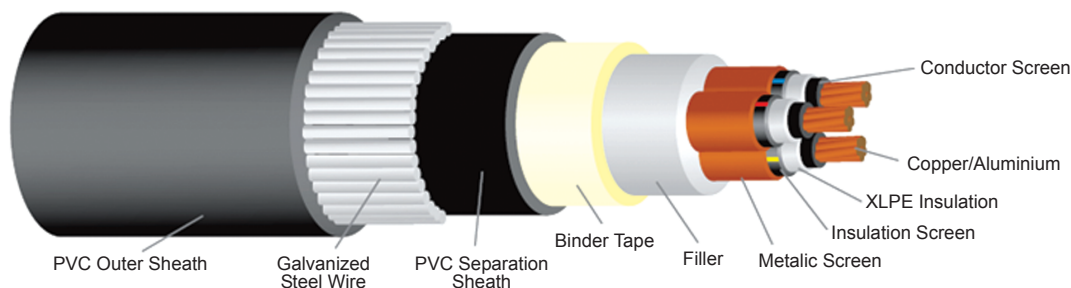
MEDIUM VOLTAGE CABLES

8.7/15 (MAX. 17.5 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SEPERATION SHEATHED, ZINC-COATED STEEL WIRE ARMOUR, PVC SHEATHED

3 Core



DIMENSIONAL

Nominal Cross Sectional Area	mm²	16	25	35	50	70	95	120	150	185	240	300	400	500	
Conductor Dia. (Approx.)	mm	-	5.9	7.0	8.1	9.7	11.4	12.8	14.3	16.0	18.4	20.6	-	-	
Nominal Insulation Thickness	mm	-	4.5										-	-	
Nominal Separation Thickness	mm	-	1.4		1.5		1.6	1.7		1.8	1.9	2.0	-	-	
Separation Sheath Dia.	mm	-	43.3	46.1	48.7	52.6	56.4	59.7	62.9	66.7	72.1	77.1	-	-	
Nominal of Galvanized Steel	mm	-	32							3.15			-	-	
Nominal Outer- Sheath	mm	-	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.4	3.6	3.7	-	-	
Approx. Overall Dia.	mm	-	54.0	57.0	59.5	63.5	67.5	71.0	74.5	80.0	86.0	91.0	-	-	
Cable Net. Weight (Approx.)	kg/km	Cu	-	4790	5420	6080	7160	8350	9460	10640	13090	15550	17950	-	-
		Al	-	4310	4760	5180	5850	6530	7170	7820	9560	10870	12130	-	-

ELECTRICAL DATA

Nominal Cross Sectional Area		mm²	16	25	35	50	70	95	120	150	185	240	300	400	500
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	-	0.727	0.5247	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	-	-
		Al	-	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	-	-
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	-	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0983	0.0794	-	-
		Al	-	1.54	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.130	-	-
Capacitance	μF/km	Cu	-	0.16	0.18	0.20	0.22	0.25	0.27	0.29	0.31	0.35	0.38	-	-
Reactance at 50Hz	Ω/km	Cu	-	0.131	0.124	0.118	0.112	0.107	0.103	0.0994	0.0962	0.0924	0.0896	-	-
Current Rating in Air at 40°C	A	Cu	-	140	170	220	250	305	350	395	450	520	590	-	-
		Al	-	110	130	155	195	235	270	305	350	410	465	-	-
Current Rating in Ground at 25°C	A	Cu	-	140	170	200	245	290	330	370	410	475	530	-	-
		Al	-	110	130	155	190	225	255	285	320	370	415	-	-
Short Circuit Current for 1 sec.	kA	Cu	-	3.72	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	-	-
		Al	-	2.48	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	-	-

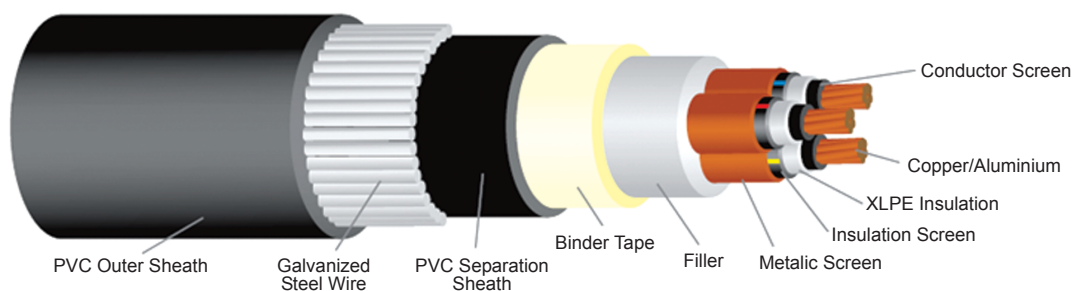
MEDIUM VOLTAGE CABLES

12/20 (MAX. 24 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SEPERATION SHEATHED, ZINC-COATED STEEL WIRE ARMOUR, PVC SHEATHED

3 Core



DIMENSIONAL

Nominal Cross Sectional Area	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500
Conductor Dia. (Approx.)	mm	-	-	7.0	8.1	9.7	11.4	12.8	14.3	16.0	18.4	20.6	-	-
Nominal Insulation Thickness	mm	-	-	5.5										-
Nominal Separation Thickness	mm	-	-	1.5	1.6	1.7	1.8	1.9	2.0	-	-	-	-	-
Separation Sheath Dia.	mm	-	-	50.2	52.8	56.6	60.5	63.5	67.0	70.8	76.2	80.9	-	-
Nominal of Galvanized Steel	mm	-	-	3.2					3.2					-
Nominal Outer- Sheath	mm	-	-	2.8	2.9	3.1	3.2	3.3	3.4	3.6	3.7	3.9	-	-
Approx. Overall Dia.	mm	-	-	61.0	64.0	68.0	72.0	76.5	80.5	84.5	90.0	95.5	-	-
Cable Net. Weight (Approx.)	kg/km	Cu	-	-	5980	6660	7740	9000	10930	12190	13870	16330	18770	-
		Al	-	-	5310	5750	6440	7190	8640	9380	10340	11650	12950	-

ELECTRICAL DATA

Nominal Cross Sectional Area	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	-	-	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	-
		Al	-	-	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	-
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	-	-	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0981	0.0792	-
		Al	-	-	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.129	-
Capacitance	μF/km	Cu	-	-	0.16	0.17	0.19	0.21	0.23	0.25	0.27	0.30	0.32	-
Reactance at 50Hz	Ω/km	Cu	-	-	0.130	0.124	0.117	0.112	0.108	0.104	0.100	0.0963	0.0933	-
Current Rating in Air at 40°C	A	Cu	-	-	170	205	250	305	350	395	450	520	590	-
		Al	-	-	135	160	195	240	275	310	350	410	465	-
Current Rating in Ground at 25°C	A	Cu	-	-	170	200	240	290	330	365	410	470	525	-
		Al	-	-	130	155	190	225	255	285	320	370	415	-
Short Circuit Current for 1 sec.	kA	Cu	-	-	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	-
		Al	-	-	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	-

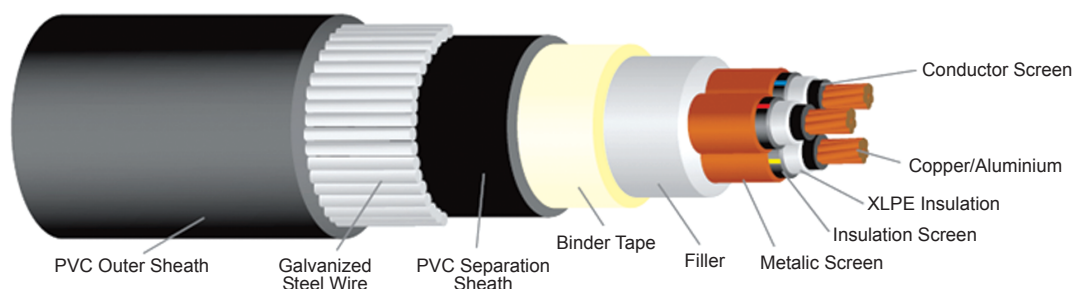
MEDIUM VOLTAGE CABLES

18/30 (MAX. 36 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SEPERATION SHEATHED, ZINC-COATED STEEL WIRE ARMOUR, PVC SHEATHED

3 Core



DIMENSIONAL

Nominal Cross Sectional Area	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500
Conductor Dia. (Approx.)	mm	-	-	-	8.1	9.7	11.4	12.8	14.3	-	-	-	-	-
Nominal Insulation Thickness	mm	-	-	-	8.0					-	-	-	-	-
Nominal Separation Thickness	mm	-	-	-	1.8		1.9	2.0		-	-	-	-	-
Separation Sheath Dia.	mm	-	-	-	64.2	68.0	71.9	75.1	78.4	-	-	-	-	-
Nominal of Galvanized Steel	mm	-	-	-	3.15					-	-	-	-	-
Nominal Outer- Sheath	mm	-	-	-	3.4	3.5	3.6	3.7	3.8	-	-	-	-	-
Approx. Overall Dia.	mm	-	-	-	77.5	81.5	85.5	89.0	92.5	-	-	-	-	-
Cable Net. Weight (Approx.)	kg/km	Cu	-	-	-	9310	10470	11850	13080	14360	-	-	-	-
		Al	-	-	-	8410	9160	10040	10790	11550	-	-	-	-

ELECTRICAL DATA

Nominal Cross Sectional Area	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	-	-	-	0.387	0.268	0.193	0.153	0.124	-	-	-	-
		Al	-	-	-	0.641	0.443	0.320	0.253	0.206	-	-	-	-
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	-	-	-	0.494	0.342	0.247	0.196	0.159	-	-	-	-
		Al	-	-	-	0.822	0.568	0.411	0.325	0.265	-	-	-	-
Capacitance	μF/km	Cu	-	-	-	0.13	0.15	0.16	0.18	0.19	-	-	-	-
Reactance at 50Hz	Ω/km	Cu	-	-	-	0.137	0.129	0.123	0.118	0.114	-	-	-	-
Current Rating in Air at 40°C	A	Cu	-	-	-	205	255	310	350	395	-	-	-	-
		Al	-	-	-	160	200	240	275	310	-	-	-	-
Current Rating in Ground at 25°C	A	Cu	-	-	-	200	240	290	325	365	-	-	-	-
		Al	-	-	-	155	190	225	255	285	-	-	-	-
Short Circuit Current for 1 sec.	kA	Cu	-	-	-	7.36	10.2	13.8	17.4	21.8	-	-	-	-
		Al	-	-	-	4.89	6.80	9.19	11.5	14.4	-	-	-	-

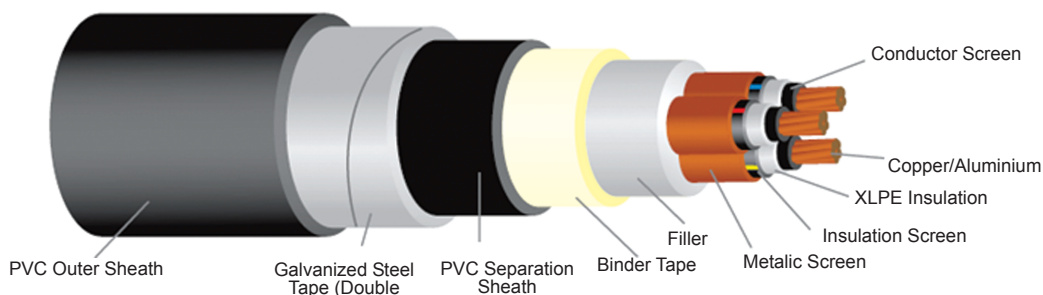
MEDIUM VOLTAGE CABLES

3.6/6 (MAX. 7.2 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SEPERATION SHEATHED, ZINC-COATED STEEL WIRE ARMOUR, PVC SHEATHED

3 Core



DIMENSIONAL

DIMENSIONS															
Nominal Cross Sectional Area	mm ²		16	25	35	50	70	95	120	150	185	240	300	400	500
Conductor Dia. (Approx.)	mm		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
Nominal Insulation Thickness	mm		2.5									2.6	2.8	3.0	3.2
Nominal Separation Thickness	mm		1.2			1.3	1.4		1.5		1.6	1.7	1.8	2.0	2.1
Separation Sheath Dia.	mm		31.6	34.2	37.0	39.6	43.7	47.3	50.6	53.8	57.7	63.5	69.3	76.3	83.9
Nominal of Galvanized Steel	mm		0.2	0.5									0.8		
Nominal Outer- Sheath	mm		2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.1	3.3	3.6	3.9
Approx. Overall Dia.	mm		37.0	41.0	44.0	46.5	51.0	55.0	58.0	61.5	65.5	72.0	78.0	87.0	95.0
Cable Net. Weight (Approx.)	kg/km	Cu	1790	2620	3110	3660	4570	5590	6560	7590	8960	11170	13420	17500	21260
		Al	-	2140	2440	2750	3260	3780	4270	4770	5430	6490	7600	10050	11870

ELECTRICAL DATA

ELECTRICAL DATA															
Nominal Cross Sectional Area	mm ²		16	25	35	50	70	95	120	150	185	240	300	400	500
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047	0.0366
		Al	-	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	1.47	0.927	0.668	0.494	0.342	0.247	0.196	0.160	0.128	0.099	0.080	0.0643	0.0522
		Al	-	1.54	1.11	0.866	0.568	0.411	0.325	0.265	0.211	0.161	0.130	0.102	0.0801
Capacitance	μF/km	Cu	0.21	0.24	0.28	0.31	0.35	0.40	0.43	0.47	0.52	0.56	0.57	0.60	0.62
Reactance at 50Hz	Ω/km	Cu	0.118	0.109	0.105	0.100	0.0949	0.0914	0.0885	0.086	0.0837	0.0817	0.0805	0.0790	0.0779
Current Rating in Air at 40°C	A	Cu	100	135	160	195	240	295	340	385	440	520	590	680	775
		Al	-	105	130	155	190	235	270	305	350	410	470	545	630
Current Rating in Ground at 25°C	A	Cu	110	140	170	200	240	290	330	370	415	480	540	610	685
		Al	-	110	130	155	190	225	255	285	325	375	425	485	555
Short Circuit Current for 1 sec.	kA	Cu	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
		Al	-	2.48	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	38.1	47.6

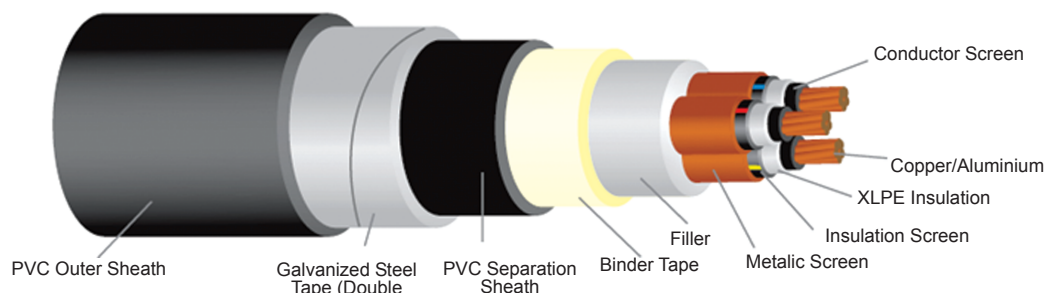
MEDIUM VOLTAGE CABLES

6/10 (MAX. 12 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SEPERATION SHEATHED, ZINC-COATED STEEL WIRE ARMOUR, PVC SHEATHED

3 Core



DIMENSIONAL

Nominal Cross Sectional Area	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500
Conductor Dia. (Approx.)	mm	4.7	5.9	7.0	8.1	9.7	11.4	12.8	14.3	16.0	18.4	20.6	23.3	-
Nominal Insulation Thickness	mm	3.4												-
Nominal Separation Thickness	mm	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	-	-	-	-
Separation Sheath Dia.	mm	35.5	38.3	41.1	43.7	47.6	51.4	54.6	57.9	61.7	67.1	72.1	78.1	-
Nominal of Galvanized Steel	mm	0.5												-
Nominal Outer- Sheath	mm	2.2	2.3	2.4	2.5	2.6	2.7	2.9	3.0	3.1	3.3	3.4	3.7	-
Approx. Overall Dia.	mm	42.0	45.0	48.0	51.0	55.0	59.0	62.5	66.0	70.0	76.0	81.0	89.0	-
Cable Net. Weight (Approx.)	kg/km	Cu	2490	2980	3480	4050	4960	6030	7050	8100	9500	11690	13830	17790
		Al	-	2500	2810	3140	3650	4220	4760	5280	5970	7020	8010	10350

ELECTRICAL DATA

Nominal Cross Sectional Area	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	1.15	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470
		Al	-	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	1.47	0.927	0.668	0.494	0.342	0.247	0.196	0.160	0.128	0.0986	0.0798	0.0641
		Al	-	1.54	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.130	0.102
Capacitance	μF/km	Cu	0.17	0.19	0.22	0.24	0.27	0.31	0.33	0.36	0.40	0.44	0.48	0.53
Reactance at 50Hz	Ω/km	Cu	0.128	0.118	0.113	0.108	0.102	0.0976	0.0944	0.0915	0.0888	0.0856	0.0833	0.0809
Current Rating in Air at 40°C	A	Cu	105	135	165	195	245	300	340	385	445	520	590	680
		Al	-	105	130	155	190	230	265	300	345	405	465	540
Current Rating in Ground at 25°C	A	Cu	110	140	170	200	240	290	330	370	415	480	540	610
		Al	-	110	130	155	190	225	255	285	325	375	425	485
Short Circuit Current for 1 sec.	kA	Cu	2.41	3.72	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7
		Al	-	2.48	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	38.1

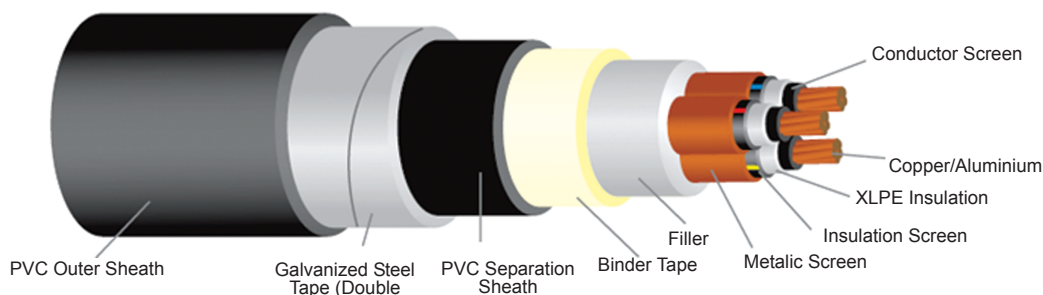
MEDIUM VOLTAGE CABLES

8.7/15 (MAX. 17.5 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SEPERATION SHEATHED, ZINC-COATED STEEL WIRE ARMOUR, PVC SHEATHED

3 Core



DIMENSIONAL

DIMENSIONS															
Nominal Cross Sectional Area	mm ²		16	25	35	50	70	95	120	150	185	240	300	400	500
Conductor Dia. (Approx.)	mm		-	5.9	7.0	8.1	9.7	1.4	12.8	14.3	16.0	18.4	20.6	23.3	-
Nominal Insulation Thickness	mm		-	4.5											-
Nominal Separation Thickness	mm		-	1.4		1.5		1.6	1.7		1.8	1.9	2.0	2.1	-
Separation Sheath Dia.	mm		-	43.3	46.1	48.7	52.6	56.4	59.7	62.9	66.7	72.1	77.1	83.1	-
Nominal of Galvanized Steel	mm		-	0.5									0.8		-
Nominal Outer- Sheath	mm		-	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.3	3.4	3.6	3.9	-
Approx. Overall Dia.	mm		-	50.5	53.5	56.5	60.5	64.5	68.0	71.5	75.5	81.0	87.5	94.5	-
Cable Net. Weight (Approx.)	kg/km	Cu	-	3490	4020	4600	5500	6650	7670	8750	10210	12420	15570	18720	-
		Al	-	3010	3350	3700	4240	4840	5380	5930	6680	7750	9750	11270	-

ELECTRICAL DATA

ELECTRICAL DATA															
Nominal Cross Sectional Area	mm ²		16	25	35	50	70	95	120	150	185	240	300	400	500
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	-	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047	-
		Al	-	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	-
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	-	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0983	0.0794	0.0636	-
		Al	-	1.54	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.130	0.102	-
Capacitance	μF/km	Cu	-	0.16	0.18	0.20	0.22	0.25	0.27	0.29	0.31	0.35	0.38	0.42	-
Reactance at 50Hz	Ω/km	Cu	-	0.131	0.124	0.118	0.112	0.107	0.103	0.0994	0.0962	0.0924	0.0896	0.0868	-
Current Rating in Air at 40°C	A	Cu	-	140	170	200	250	300	345	395	450	525	600	685	-
		Al	-	105	130	155	195	235	270	305	350	410	470	545	-
Current Rating in Ground at 25°C	A	Cu	-	140	170	200	245	290	330	370	415	480	540	610	-
		Al	-	110	130	155	190	225	255	285	325	375	425	485	-
Short Circuit Current for 1 sec.	kA	Cu	-	3.72	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	57.7	-
		Al	-	2.48	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	38.1	-

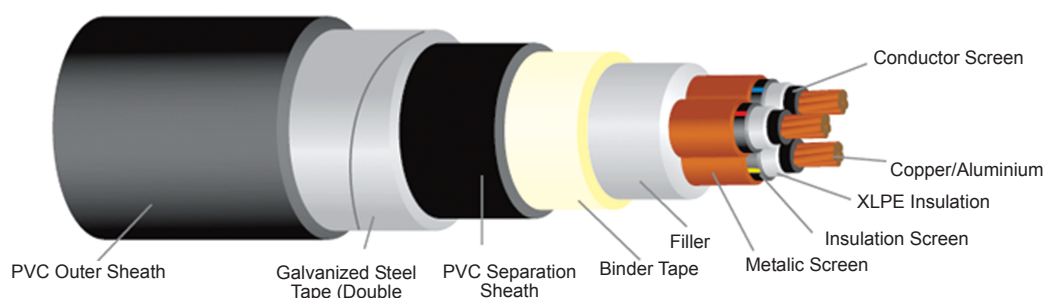
MEDIUM VOLTAGE CABLES

12/20 (MAX. 24 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SEPERATION SHEATHED, ZINC-COATED STEEL WIRE ARMOUR, PVC SHEATHED

3 Core



DIMENSIONAL

Nominal Cross Sectional Area	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500
Conductor Dia. (Approx.)	mm	-	-	7.0	8.1	9.7	11.4	12.8	14.3	16.0	18.4	20.6	-	-
Nominal Insulation Thickness	mm	-	-	5.5										-
Nominal Separation Thickness	mm	-	-	1.5	1.6	1.7	1.8	1.9	2.0	2.0	-	-	-	-
Separation Sheath Dia.	mm	-	-	50.2	52.8	56.6	60.5	63.5	67.0	70.8	76.2	80.9	-	-
Nominal of Galvanized Steel	mm	-	-	0.5								0.8	-	-
Nominal Outer- Sheath	mm	-	-	2.7	2.8	2.9	3.1	3.2	3.3	3.4	3.6	3.8	-	-
Approx. Overall Dia.	mm	-	-	58.0	60.5	64.5	69.0	72.0	76.0	80.0	87.0	92.0	-	-
Cable Net. Weight (Approx.)	kg/km	Cu	-	-	4450	5050	6020	7180	8190	9320	10780	13980	16240	-
		Al	-	-	3780	4150	4720	5370	5900	6510	7250	9300	10420	-

ELECTRICAL DATA

Nominal Cross Sectional Area	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	-	-	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	-
		Al	-	-	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	-
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	-	-	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0981	0.0792	-
		Al	-	-	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.130	-
Capacitance	μF/km	Cu	-	-	0.16	0.17	0.19	0.21	0.23	0.25	0.27	0.30	0.32	-
Reactance at 50Hz	Ω/km	Cu	-	-	0.13	0.124	0.117	0.112	0.108	0.104	0.100	0.0963	0.0933	-
Current Rating in Air at 40°C	A	Cu	-	-	170	200	250	305	350	395	450	530	600	-
		Al	-	-	130	155	190	235	270	305	350	415	470	-
Current Rating in Ground at 25°C	A	Cu	-	-	170	200	245	290	330	370	415	480	545	-
		Al	-	-	130	155	190	225	255	285	325	375	425	-
Short Circuit Current for 1 sec.	kA	Cu	-	-	5.18	7.36	10.2	13.8	17.4	21.8	26.8	34.7	43.4	-
		Al	-	-	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	-

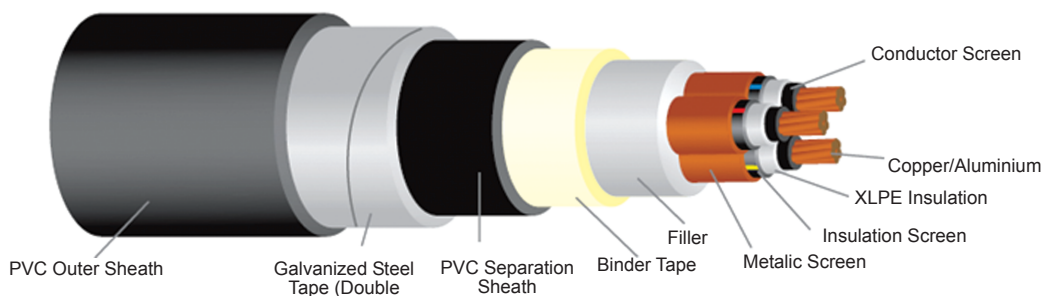
MEDIUM VOLTAGE CABLES

18/30 (MAX. 36 kV)

IEC 60502-2

COPPER AND ALUMINIUM CONDUCTOR XLPE INSULATED, COPPER TAPE SCREENED, PVC SEPERATION SHEATHED, ZINC-COATED STEEL WIRE ARMOUR, PVC SHEATHED

3 Core



DIMENSIONAL

Nominal Cross Sectional Area	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500
Conductor Dia. (Approx.)	mm	-	-	-	8.1	9.7	11.4	12.8	14.3	16.0	-	-	-	-
Nominal Insulation Thickness	mm	-	-	-	8.0						-	-	-	-
Nominal Separation Thickness	mm	-	-	-	1.8		1.9	2.0	2.0	2.1	-	-	-	-
Separation Sheath Dia.	mm	-	-	-	64.2	68.0	71.9	75.1	78.4	82.2	-	-	-	-
Nominal of Galvanized Steel	mm	-	-	-	0.5			0.8			-	-	-	-
Nominal Outer- Sheath	mm	-	-	-	3.2	3.3	3.5	3.6	3.7	3.9	-	-	-	-
Approx. Overall Dia.	mm	-	-	-	73.0	77.0	81.0	86.0	89.0	93.5	-	-	-	-
Cable Net. Weight (Approx.)	kg/km	Cu	-	-	6480	7520	8750	10760	11950	13570	-	-	-	-
		Al	-	-	5580	6210	6940	8470	9140	10040	-	-	-	-

ELECTRICAL DATA

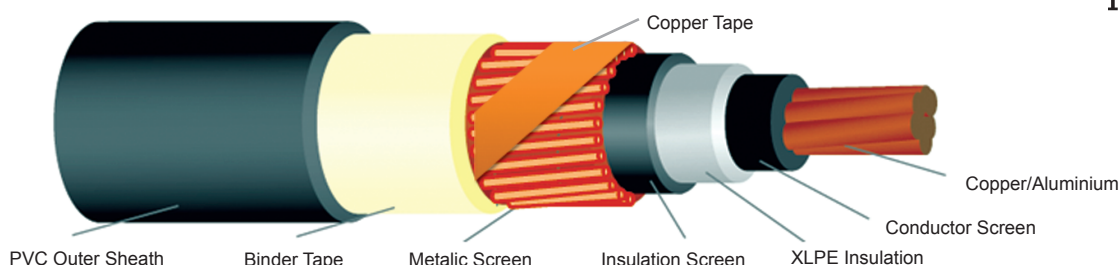
Nominal Cross Sectional Area	mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	-	-	0.387	0.268	0.193	0.153	0.124	0.0991	-	-	-	-
		Al	-	-	0.641	0.443	0.320	0.253	0.206	0.164	-	-	-	-
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	-	-	0.494	0.342	0.247	0.196	0.159	0.128	-	-	-	-
		Al	-	-	0.822	0.568	0.411	0.325	0.265	0.211	-	-	-	-
Capacitance	μF/km	Cu	-	-	0.13	0.15	0.16	0.18	0.19	0.20	-	-	-	-
Reactance at 50Hz	Ω/km	Cu	-	-	0.137	0.129	0.123	0.118	0.114	0.110	-	-	-	-
Current Rating in Air at 40°C	A	Cu	-	-	205	255	305	350	395	450	-	-	-	-
		Al	-	-	160	195	240	275	310	355	-	-	-	-
Current Rating in Ground at 25°C	A	Cu	-	-	200	240	290	330	370	415	-	-	-	-
		Al	-	-	155	190	225	255	285	325	-	-	-	-
Short Circuit Current for 1 sec.	kA	Cu	-	-	7.36	10.2	13.8	17.4	21.8	26.8	-	-	-	-
		Al	-	-	4.89	6.80	9.19	11.5	14.4	17.7	-	-	-	-

MEDIUM VOLTAGE CABLES 3.6/6 (MAX. 7.2 kV)

IEC 60502-2

SINGLE-CORE, UNARMoured XLPE INSULATED, COPPER WIRE SCREENED, PVC SHEATHED

1 Core



DIMENSIONAL

Conductor Nominal Sectional Area		mm²	25	35	50	70	95	120	150	185	240	300	400	500	630
Conductor Nominal Diameter		mm	5.9	7.0	8.0	9.7	11.4	12.8	14.3	15.8	18.3	20.5	23.3	26.4	30.2
Insulation Nominal Thickness		mm	2.5								2.6	2.8	3.0	3.2	
Nominal Sectional Area of Screening		mm²	16			35									
Sheath Nominal Thickness		mm	1.5	1.6		1.7		1.8		1.9	2.0		2.2	2.3	2.4
Approximate Overall Diameter		mm	21.0	22.0	23.0	25.0	27.0	29.0	30.0	32.0	35.0	37.0	41.0	45.0	49.0
Approx. Weight	kg/km	Cu	650	780	1110	1340	1600	1870	2180	2540	3120	3770	4810	5850	7170
		Al	490	550	800	900	1000	1120	1230	1380	1610	1860	2260	2670	3150

ELECTRICAL DATA

Nominal Cross Sectional Area		mm ²		25	35	50	70	95	120	150	185	240	300	400	500	630
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047	0.0366	0.0283	
		Al	1200	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0983	0.0794	0.0635	0.0512	0.0418	
		Al	1.540	1.110	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.130	0.102	0.080	0.0633	
Capacitance	μF/km	Cu	0.24	0.28	0.31	0.35	0.40	0.43	0.47	0.52	0.56	0.57	0.60	0.62	0.71	
Reactance at 50Hz	Ω/km	Cu	0.125	0.119	0.114	0.108	0.104	0.100	0.0973	0.0946	0.0920	0.0904	0.0883	0.0868	0.0849	
Current Rating in Air at 40°C	A	Cu	135	165	200	250	305	355	410	470	560	645	750	865	1000	
		Al	105	130	155	195	240	280	320	365	435	505	590	690	815	
Current Rating in Ground at 25°C	A	Cu	145	170	205	250	300	340	380	430	495	560	635	720	810	
		Al	110	135	160	195	235	265	300	340	390	445	505	580	660	
Short Circuit Current for 1 sec.	kA	Cu	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	
		Al	2.48	3.45	4.89	6.8	9.19	11.5	14.4	17.7	22.9	28.6	38.1	47.6	59.8	

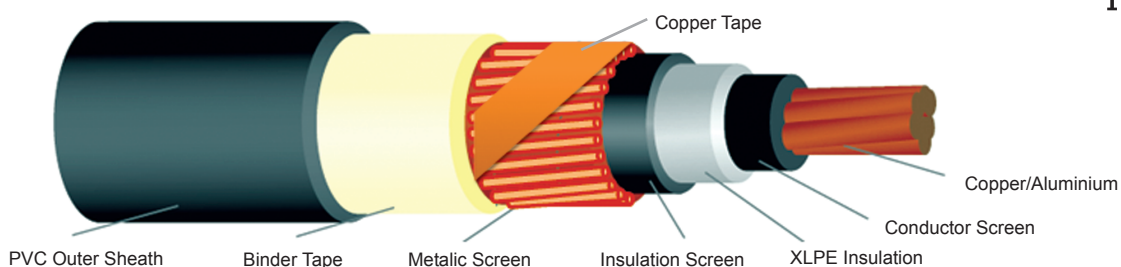
MEDIUM VOLTAGE CABLES

6/10 (MAX. 12 kV)

IEC 60502-2

SINGLE-CORE, UNARMoured XLPE INSULATED, COPPER WIRE SCREENED, PVC SHEATHED

1 Core



DIMENSIONAL

Conductor Nominal Sectional Area	mm²		25	35	50	70	95	120	150	185	240	300	400	500	630
Conductor Nominal Diameter	mm		5.9	7.0	8.0	9.7	11.4	12.8	14.3	15.8	18.3	20.5	23.3	26.4	30.2
Insulation Nominal Thickness	mm		3.4												
Nominal Sectional Area of Screening	mm²		16			35									
Sheath Nominal Thickness	mm		1.6		1.7		1.8		1.9		2.0	2.1	2.2	2.3	2.4
Approximate Overall Diameter	mm		23	24	25	27	29	30	32	34	36	39	42	45	49
Approx. Weight	kg/km	Cu	720	840	1190	1410	1690	1950	2280	2630	3210	3850	4860	5880	7200
		Al	560	620	870	970	1090	1190	1330	1460	1690	1940	2310	2700	3180

ELECTRICAL DATA

Nominal Cross Sectional Area		mm²	25	35	50	70	95	120	150	185	240	300	400	500	630
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	7.277	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047	0.0366	0.0283
		Al	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0981	0.0793	0.0634	0.0511	0.0417
		Al	1.54	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.130	0.102	0.080	0.0633
Capacitance	μF/km	Cu	0.19	0.22	0.24	0.27	0.31	0.33	0.36	0.40	0.44	0.48	0.53	0.59	0.68
Reactance at 50Hz	Ω/km	Cu	0.132	0.126	0.120	0.114	0.109	0.106	0.102	0.0994	0.0958	0.0927	0.0900	0.0876	0.0856
Current Rating in Air at 40°C	A	Cu	140	170	205	255	310	360	415	475	565	645	750	865	1000
		Al	110	130	160	200	245	280	320	370	440	505	590	690	815
Current Rating in Ground at 25°C	A	Cu	145	170	205	250	300	340	380	430	500	560	635	720	810
		Al	110	135	160	195	235	265	300	340	390	445	505	580	660
Short Circuit Current for 1 sec.	kA	Cu	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
		Al	2.48	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	38.1	47.6	59.8

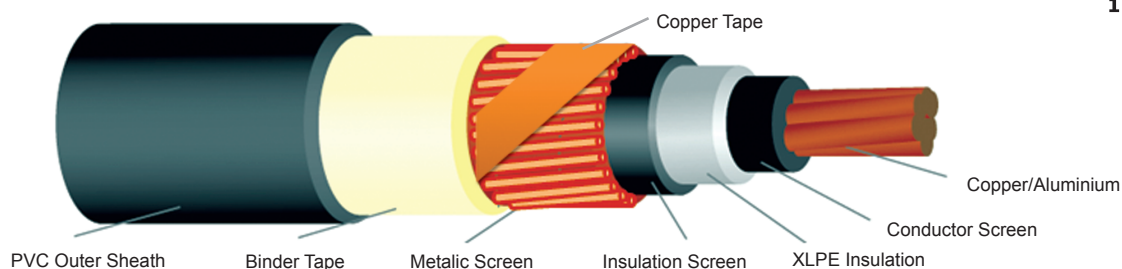
MEDIUM VOLTAGE CABLES

8.7/15 (MAX. 17.5 kV)

IEC 60502-2

SINGLE-CORE, UNARMoured XLPE INSULATED, COPPER WIRE SCREENED, PVC SHEATHED

1 Core



DIMENSIONAL

Conductor Nominal Sectional Area		mm ²	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Conductor Nominal Diameter		mm	-	5.9	7.0	8.0	9.7	11.4	12.8	14.3	15.8	18.3	20.5	23.3	26.4	30.2
Insulation Nominal Thickness		mm	-	4.5												
Nominal Sectional Area of Screening		mm ²	-	16			35									
Sheath Nominal Thickness		mm	-	1.7		1.8		1.9		2.0		2.1	2.2	2.3	2.4	2.5
Approximate Overall Diameter		mm	-	26	27	28	30	32	33	35	36	39	41	44	48	52
Approx. Weight	kg/km	Cu	-	810	930	1280	1510	1800	2070	2400	2760	3350	4010	5030	6060	7390
		Al	-	650	710	970	1070	1200	1310	1450	1590	1840	2090	2480	2870	3380

ELECTRICAL DATA

Nominal Cross Sectional Area		mm²	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	-	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
		Al	-	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	-	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0979	0.0790	0.0630	0.0507	0.0413
		Al	-	1.54	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.130	0.102	0.0798	0.0631
Capacitance	μF/km	Cu	-	0.16	0.18	0.20	0.22	0.25	0.27	0.29	0.211	0.35	0.38	0.42	0.46	0.53
Reactance at 50Hz	Ω/km	Cu	-	0.142	0.136	0.130	0.122	0.117	0.113	0.110	0.211	0.102	0.0986	0.0955	0.0926	0.0901
Current Rating in Air at 40°C	A	Cu	-	140	175	210	260	320	365	420	0.211	570	655	760	875	1010
		Al	-	110	135	160	200	245	285	325	0.211	445	510	595	695	815
Current Rating in Ground at 25°C	A	Cu	-	145	170	205	250	300	340	380	0.211	500	560	640	720	815
		Al	-	110	135	160	195	235	265	330	0.211	390	445	505	580	660
Short Circuit Current for 1 sec.	kA	Cu	-	3.72	5.18	7.36	10.2	13.8	17.4	21.8	0.211	34.7	43.4	57.7	72.1	90.8
		Al	-	2.48	3.45	4.89	6.80	9.19	11.5	14.4	0.211	22.9	28.6	38.1	47.6	59.8

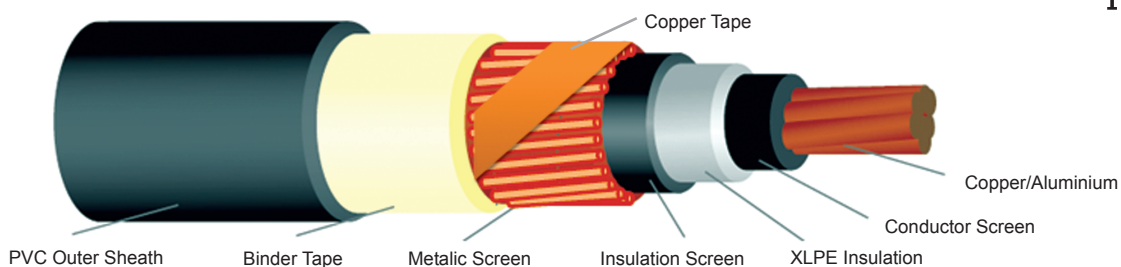
MEDIUM VOLTAGE CABLES

12/20 (MAX. 24 kV)

IEC 60502-2

SINGLE-CORE, UNARMoured XLPE INSULATED, COPPER WIRE SCREENED, PVC SHEATHED

1 Core



DIMENSIONAL

DIMENSIONAL																
Conductor Nominal Sectional Area		mm²	16	25	35	50	70	95	120	150	185	240	300	400	500	630
Conductor Nominal Diameter		mm	-	5.9	7.0	8.0	9.7	11.4	12.8	14.3	15.8	18.3	20.5	23.3	26.4	30.2
Insulation Nominal Thickness		mm	-	5.5												
Nominal Sectional Area of Screening		mm²	-	16			35									
Sheath Nominal Thickness		mm	-	1.7	1.8		1.9		2.0		2.1	2.2		2.3	2.4	2.5
Approximate Overall Diameter		mm	-	28	29	30	32	34	35	37	38	41	43	46	50	54
Approx. Weight	kg/km	Cu	-	890	1030	1370	1620	1900	2190	2510	2890	3490	4130	5160	6120	7550
		Al	-	730	800	1060	1180	1300	1430	1560	1720	1980	2220	2610	3020	3540

ELECTRICAL DATA

Nominal Cross Sectional Area		mm²		16	25	35	50	70	95	120	150	185	240	300	400	500	630
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	-	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	
		Al	-	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469	
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	-	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0978	0.0788	0.0629	0.0505	0.041	
		Al	-	1.54	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.129	0.101	0.0797	0.0629	
Capacitance	μF/km	Cu	-	0.16	0.16	0.17	0.19	0.21	0.23	0.25	0.27	0.3	0.32	0.35	0.39	0.44	
Reactance at 50Hz	Ω/km	Cu	-	0.142	0.141	0.135	0.128	0.122	0.117	0.114	0.11	0.105	0.102	0.0988	0.0956	0.0928	
Current Rating in Air at 40°C	A	Cu	-	140	175	210	265	320	370	420	485	575	660	760	880	1010	
		Al	-	110	135	165	205	250	285	325	375	445	510	595	695	815	
Current Rating in Ground at 25°C	A	Cu	-	145	170	205	250	300	340	380	430	500	565	640	725	815	
		Al	-	110	135	160	195	235	265	300	340	390	445	505	575	660	
Short Circuit Current for 1 sec.	kA	Cu	-	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	
		Al	-	2.48	3.45	4.89	6.60	9.19	11.5	14.4	17.7	22.9	28.6	38.1	47.6	59.8	

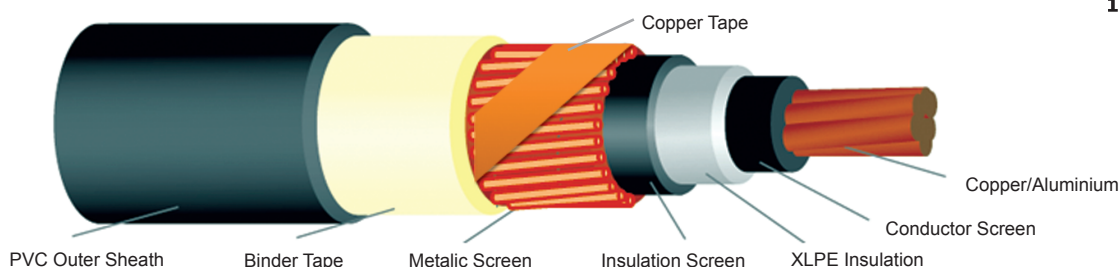
MEDIUM VOLTAGE CABLES

18/30 (MAX. 36 kV)

IEC 60502-2

SINGLE-CORE, UNARMoured XLPE INSULATED, COPPER WIRE SCREENED, PVC SHEATHED

1 Core



DIMENSIONAL

Conductor Nominal Sectional Area	mm²		16	25	35	50	70	95	120	150	185	240	300	400	500	630
Conductor Nominal Diameter	mm		-	5.9	7.0	8.0	9.7	11.4	12.8	14.3	15.8	18.3	20.5	23.3	26.4	30.2
Insulation Nominal Thickness	mm		-	8.0												
Nominal Sectional Area of Screening	mm²		-	16			35									
Sheath Nominal Thickness	mm		-	1.9		2.0	2.1		2.2		2.3		2.4	2.5	2.6	2.7
Approximate Overall Diameter	mm		-	33	34	36	38	39	41	42	44	47	49	52	55	59
Approx. Weight	kg/km	Cu	-	1140	1280	1650	1910	2210	2510	2840	3240	3840	4530	5580	6650	8030
		Al	-	980	1060	1330	1470	1610	1750	1900	2070	2330	2610	3030	3470	4020

ELECTRICAL DATA

Nominal Cross Sectional Area		mm²	-	25	35	50	70	95	120	150	185	240	300	400	500	630
Max. Conductor Resistance DC at 20°C	Ω/km	Cu	-	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
		Al	-	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778	0.0605	0.0469
Max. Conductor Resistance 50Hz at 90°C	Ω/km	Cu	-	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.127	0.0976	0.0786	0.0625	0.0501	0.0405
		Al	-	1.54	1.11	0.822	0.568	0.411	0.325	0.265	0.211	0.161	0.129	0.101	0.0795	0.0627
Capacitance	μF/km	Cu	-	0.16	0.16	0.13	0.15	0.16	0.18	0.19	0.20	0.22	0.24	0.26	0.29	0.32
Reactance at 50Hz	Ω/km	Cu	-	0.142	0.141	0.147	0.139	0.132	0.127	0.123	0.199	0.115	0.110	0.106	0.102	0.0993
Current Rating in Air at 40°C	A	Cu	-	140	175	215	270	325	375	430	490	580	665	770	885	1020
		Al	-	110	135	165	210	255	290	330	380	450	515	600	700	820
Current Rating in Ground at 25°C	A	Cu	-	145	170	205	250	300	340	380	430	500	565	640	725	820
		Al	-	110	135	160	195	235	265	300	340	390	445	505	580	660
Short Circuit Current for 1 sec.	kA	Cu	-	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
		Al	-	2.48	3.45	4.89	6.80	9.19	11.5	14.4	17.7	22.9	28.6	38.1	47.6	59.8

MEDIUM VOLTAGE CABLES

SHORT CIRCUIT CURRENT

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 :

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

2. Aluminium Conductor

$$I = \frac{143 \times S}{t} \times \sqrt{1 + 0.57 \times \sqrt{\frac{t}{s}} + 0.16 \left(\frac{t}{s}\right)} \quad (A)$$

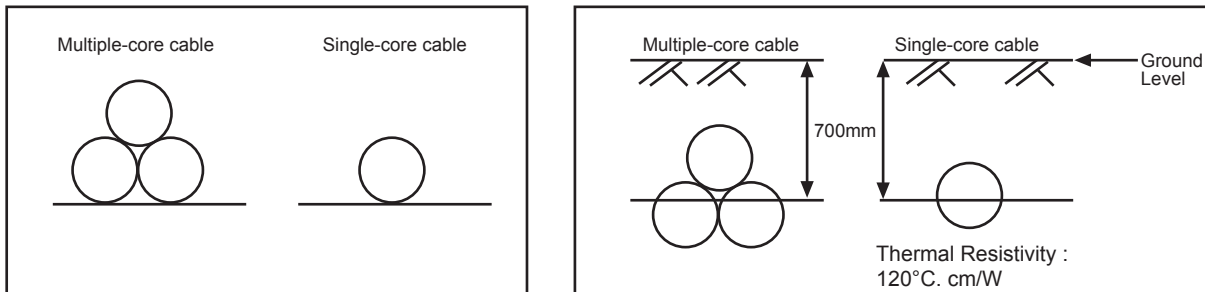
where

s : conductor size in mm²

t : short circuit period in seconds

CALCULATION BASE FOR ELECTRICAL CHARACTERISTICS

Installation



CORRECTION FACTORS FOR CONTINUOUS CURRENT RATING

Installation \ Ambient Temperature (°C)	15	20	25	30	35	40	45	50	55
In Air	1.22	1.18	1.14	1.10	1.05	1.00	0.95	0.89	0.84
In Ground	1.07	1.04	1.00	0.96	0.92	0.88	0.83	0.78	0.73