

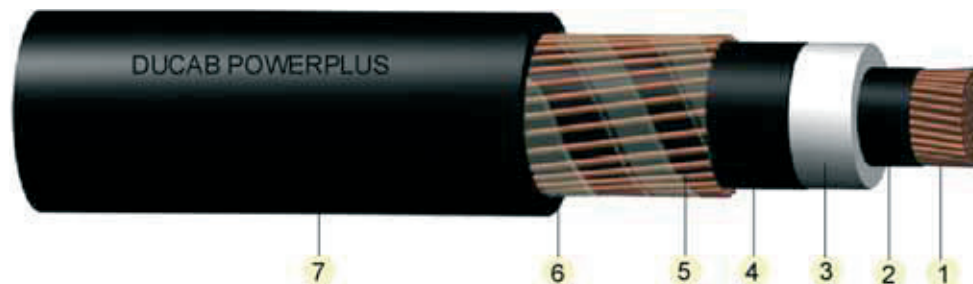
Table 6

Nominal Area of Conductor	mm ²	50	70	95	120	150	185	240	300	400	500	630	800	1000
Conductor Diameter (Max)	mm	8.4	9.9	11.6	13	14.5	16.1	18.4	20.6	23.7	26.6	29.8	33.6	37.6
Weight of Conductor (Approx)	Kg/Km	420	605	839	1056	1297	1629	2141	2686	3421	4335	5585	7346	9160
Insulation Thickness (Nominal)	mm	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Outersheath Thickness (Nominal)	mm	1.6	1.7	1.7	1.8	1.8	1.9	2	2	2.1	2.2	2.3	2.5	2.6
Approximate Overall Diameter	mm	22.0	23.5	25.5	27.0	28.5	30.0	32.5	35.0	38.0	41.5	44.5	49.0	53.0
Approximate Cable Weight	Kg/Km	900	1150	1470	1730	2040	2460	3070	3710	4600	5690	7150	8650	10530
Standard Drum Length	m	500	500	500	500	500	500	500	500	500	500	500	400	300
Minimum Bending Radius of Cable (during installation)	mm	434	466	502	532	564	598	648	694	760	822	890	972	1056
Maximum DC resistance of Conductor at 20°C	ohm/Km	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047	0.0366	0.0283	0.0221	0.0176
Approximate AC resistance of Conductor at 90°C	ohm/Km	0.494	0.342	0.247	0.196	0.159	0.128	0.098	0.079	0.063	0.050	0.041	0.039	0.029
Approximate Reactance at 50 Hertz	ohm/Km	0.13	0.12	0.11	0.11	0.11	0.10	0.10	0.10	0.09	0.09	0.09	0.08	0.08
Approximate Impedance at 50 Hertz	ohm/Km	0.51	0.36	0.27	0.22	0.19	0.16	0.14	0.12	0.11	0.10	0.10	0.09	0.09
Approximate Capacitance of Cable	µf/Km	0.25	0.29	0.35	0.38	0.41	0.47	0.51	0.54	0.58	0.66	0.74	0.78	0.8
Approx. Charging Current per phase at U _o = 6kV and f = 50Hz	mA/m	0.47	0.55	0.66	0.72	0.77	0.89	0.96	1.0	1.1	1.2	1.4	1.5	1.5
Sustained Current Ratings														
1. Laid Direct, Ground Temp. 30°C & g = 1.2°C m/W, depth of laying = 0.8m, laid in trefoil touching	A	196	240	285	320	365	409	472	534	605	668	739	819	890
2. Drawn into Ducts, Ground Temp. 30°C & g = 1.2°C m/W, depth of laying = 0.8m, laid singly	A	200	240	285	320	356	392	449	498	543	605	668	739	810
3. Laid in Air in trefoil touching, Ambient Temp. 35° C	A	217	262	331	382	432	497	589	681	773	865	1021	1168	1288
One Second Short Circuit Current Rating of Conductor	kA	7.15	10.01	13.60	17.20	21.50	26.50	34.30	42.90	57.20	71.50	90.10	115	143

FOR ALL CABLES THE MAXIMUM CONDUCTOR OPERATING TEMPERATURE IS 90°C AND LIMITING CONDUCTOR TEMPERATURE AFTER SHORT CIRCUIT IS 250°C.
LONGER DRUM LENGTHS ARE AVAILABLE TO SPECIFIC CUSTOMER REQUIREMENTS.

6/10 (12)kV

Single Core Copper Conductors XLPE Insulated to IEC 60502-2 Unarmoured



- 1.HCC⁺™ Copper Conductor
- 2.Semiconductive conductor screen
- 3.DFI™ XLPE Insulation
- 4.Semiconductive insulation screen
- 5.Copper wire screen
6. Tape binder
7. Outer sheath

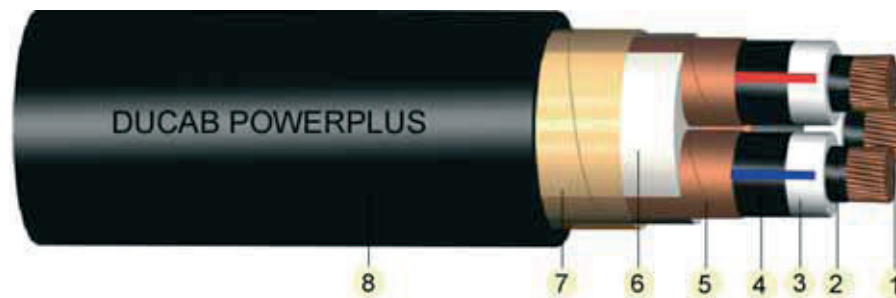
Table 7

Nominal Area of Conductor	mm ²	50	70	95	120	150	185	240	300	400
Conductor Diameter (Max)	mm	8.4	9.9	11.6	13	14.5	16.1	18.4	20.6	23.7
Weight of Conductor (Approx)	Kg/Km	1281	1845	2558	3219	3954	4966	6526	8187	10428
Insulation Thickness (Nominal)	mm	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Outersheath Thickness (Nominal)	mm	2.4	2.5	2.6	2.7	2.8	2.9	3.1	3.2	3.5
Approximate Overall Diameter	mm	45.0	48.5	52.5	55.5	59.0	62.5	68.0	73.0	80.5
Approximate Cable Weight	Kg/Km	3230	4070	5090	6080	7070	8400	10570	12790	14290
Standard Drum Length	m	500	500	500	500	500	500	400	300	250
Minimum Bending Radius of Cable (during installation)	mm	671	726	782	831	882	938	1017	1094	1202
Maximum DC resistance of Conductor at 20°C	ohm/Km	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047
Approximate AC resistance of Conductor at 90°C	ohm/Km	0.493	0.342	0.247	0.196	0.159	0.128	0.098	0.080	0.064
Approximate Reactance at 50 Hertz	ohm/Km	0.11	0.11	0.10	0.10	0.09	0.09	0.09	0.09	0.08
Approximate Impedance at 50 Hertz	ohm/Km	0.51	0.36	0.27	0.22	0.18	0.16	0.13	0.12	0.10
Approximate Capacitance of Cable	µf/Km	0.25	0.29	0.35	0.38	0.41	0.47	0.51	0.54	0.58
Approx. Charging Current per phase at U _o = 6kV and f = 50Hz	mA/m	0.47	0.55	0.66	0.72	0.77	0.89	0.96	1.0	1.1
Sustained Current Ratings										
1. Laid Direct, Ground Temp. 30°C & g = 1.2°C m/W, depth of laying = 0.8m, laid singly	A	198	241	283	321	358	406	462	510	566
2. Drawn into Ducts, Ground Temp. 30°C & g = 1.2°C m/W, depth of laying = 0.8m, laid singly	A	170	202	241	273	312	349	401	443	500
3. Laid singly in Air, Ambient Temp. 35° C	A	210	258	316	359	412	469	545	622	708
One Second Short Circuit Current Rating of Conductor	kA	7.15	10.01	13.60	17.20	21.50	26.50	34.30	42.90	57.20

FOR ALL CABLES THE MAXIMUM CONDUCTOR OPERATING TEMPERATURE IS 90°C AND LIMITING CONDUCTOR TEMPERATURE AFTER SHORT CIRCUIT IS 250°C.
LONGER DRUM LENGTHS ARE AVAILABLE TO SPECIFIC CUSTOMER REQUIREMENTS.

6/10 (12) kV

**Three Core
Copper Conductors
XLPE Insulated to
IEC 60502-2
Unarmoured**



- 1.HCC⁺™ Copper Conductor
- 2.Semiconductive conductor screen
- 3.DFI™ XLPE Insulation
- 4.Semiconductive insulation screen
- 5.Copper tape screen
6. Fillers
7. Tape binder
8. Outer sheath

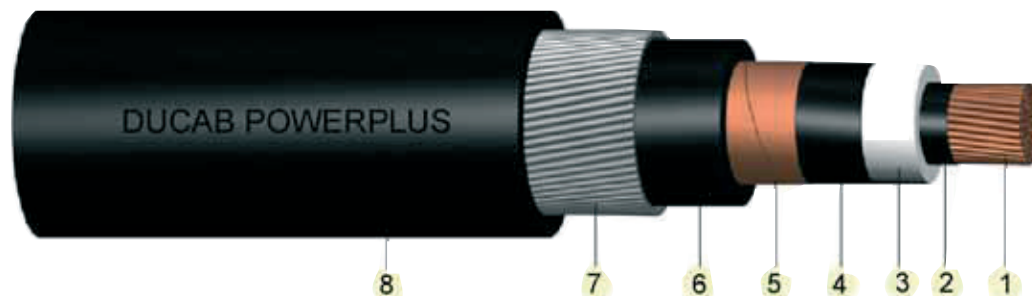
Table 8

Nominal Area of Conductor	mm ²	50	70	95	120	150	185	240	300	400	500	630	800	1000
Conductor Diameter (Max)	mm	8.4	9.9	11.6	13	14.5	16.1	18.4	20.6	23.7	26.6	29.8	33.6	37.6
Weight of Conductor (Approx)	Kg/Km	420	605	839	1056	1297	1629	2141	2686	3421	4335	5585	7346	9160
Insulation Thickness (Nominal)	mm	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Separation Sheath Thickness	mm	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.4	1.4	1.5
Armour Wire Diameter (Nominal)	mm	1.6	1.6	1.6	1.6	1.6	2	2	2	2	2.5	2.5	2.5	2.5
Outersheath Thickness (Nominal)	mm	1.8	1.8	1.9	1.9	2	2	2.1	2.2	2.3	2.5	2.6	2.7	2.9
Approximate Overall Diameter	mm	28.0	29.5	31.5	33.0	35.5	37.0	39.5	41.5	46.5	49.5	53.0	57.0	61.5
Approximate Cable Weight	Kg/Km	1200	1600	1950	2270	2690	3100	3800	4500	5650	6910	8560	10070	12120
Standard Drum Length	m	500	500	500	500	500	500	500	500	500	500	400	300	250
Minimum Bending Radius of Cable (during installation)	mm	416	440	467	489	527	552	568	623	692	738	792	855	921
Maximum DC resistance of Conductor at 20°C	ohm/Km	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047	0.0366	0.0283	0.0221	0.0176
Approximate AC resistance of Conductor at 90°C	ohm/Km	0.493	0.342	0.246	0.196	0.160	0.127	0.098	0.079	0.063	0.050	0.041	0.039	0.029
Approximate Reactance at 50 Hertz	ohm/Km	0.14	0.13	0.12	0.12	0.12	0.11	0.11	0.10	0.10	0.10	0.10	0.09	0.09
Approximate Impedance at 50 Hertz	ohm/Km	0.51	0.37	0.27	0.23	0.20	0.17	0.15	0.13	0.12	0.11	0.10	0.10	0.091
Approximate Capacitance of Cable	µf/Km	0.25	0.29	0.35	0.38	0.41	0.47	0.51	0.54	0.58	0.66	0.74	0.78	0.80
Approx. Charging Current per phase at U _o = 6kV and f = 50Hz	mA/m	0.47	0.55	0.66	0.72	0.77	0.89	0.96	1.0	1.1	1.2	1.4	1.5	1.5
Sustained Current Ratings														
1. Laid Direct, Ground Temp. 30°C & g = 1.2°C m/W, depth of laying = 0.8m, laid in trefoil touching	A	196	240	285	320	365	405	463	516	579	632	676	721	765
2. Drawn into Ducts, Ground Temp. 30°C & g = 1.2°C m/W, depth of laying = 0.8m, laid singly	A	196	231	271	303	334	365	418	445	472	507	552	587	614
3. Laid in Air in trefoil touching, Ambient Temp. 35° C	A	230	285	345	396	451	506	598	681	773	856	957	1049	1132
One Second Short Circuit Current Rating of Conductor	kA	7.15	10.01	13.60	17.20	21.50	26.50	34.30	42.90	57.20	71.50	90.10	115	143

FOR ALL CABLES THE MAXIMUM CONDUCTOR OPERATING TEMPERATURE IS 90°C AND LIMITING CONDUCTOR TEMPERATURE AFTER SHORT CIRCUIT IS 250°C.
LONGER DRUM LENGTHS ARE AVAILABLE TO SPECIFIC CUSTOMER REQUIREMENTS.

6/10 (12)kV

**Single Core
Copper Conductors
XLPE Insulated to
IEC 60502-2
Aluminium Wire
Armoured**



- 1.HCC[™] Copper Conductor
- 2.Semiconductive conductor screen
- 3.DF1[™] XLPE Insulation
- 4.Semiconductive insulation screen
- 5.Copper tape screen
6. Bedding
7. Aluminium Armour
8. Outer sheath

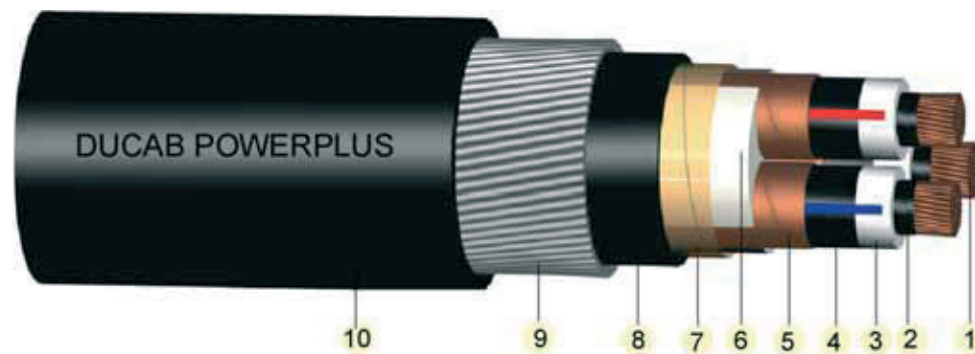
Table 9

Nominal Area of Conductor	mm ²	50	70	95	120	150	185	240	300	400
Conductor Diameter (Max)	mm	8.4	9.9	11.6	13	14.5	16.1	18.4	20.6	23.7
Weight of Conductor (Approx)	Kg/Km	1281	1845	2558	3219	3954	4966	6526	8187	10428
Insulation Thickness (Nominal)	mm	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Separation Sheath Thickness	mm	1.4	1.4	1.5	1.6	1.6	1.7	1.8	1.9	2
Armour Wire Diameter (Nominal)	mm	2.5	2.5	2.5	2.5	2.5	2.5	3.15	3.15	3.15
Outersheath Thickness (Nominal)	mm	2.6	2.7	2.9	3	3.1	3.2	3.4	3.6	3.8
Approximate Overall Diameter	mm	53.0	56.5	61.0	64.0	67.5	71.5	79.0	83.5	91.0
Approximate Cable Weight	Kg/Km	5250	6250	7350	8500	9550	11000	14250	16600	19750
Standard Drum Length	m	500	500	500	400	300	300	250	200	200
Minimum Bending Radius of Cable (during installation)	mm	636	678	727	768	810	857	940	1002	1092
Maximum DC resistance of Conductor at 20°C	ohm/Km	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047
Approximate AC resistance of Conductor at 90°C	ohm/Km	0.493	0.342	0.247	0.196	0.159	0.128	0.098	0.078	0.064
Approximate Reactance at 50 Hertz	ohm/Km	0.11	0.11	0.10	0.10	0.09	0.09	0.09	0.09	0.08
Approximate Impedance at 50 Hertz	ohm/Km	0.51	0.36	0.27	0.22	0.18	0.16	0.13	0.12	0.10
Approximate Capacitance of Cable	µf/Km	0.25	0.29	0.35	0.38	0.41	0.47	0.51	0.54	0.58
Approx. Charging Current per phase at U ₀ = 6kV and f = 50Hz	mA/m	0.47	0.55	0.66	0.72	0.77	0.89	0.96	1.0	1.1
Sustained Current Ratings										
1. Laid Direct, Ground Temp. 30°C & g = 1.2°C m/W, depth of laying = 0.8m, laid singly	A	187	227	267	303	338	383	436	481	534
2. Drawn into ducts, Ground Temp. = 30°C & g = 1.2°C m/W, depth of laying = 0.8m, laid singly	A	161	191	227	258	294	329	378	418	472
3. Laid singly in Air, Ambient Temp. 35° C	A	203	248	304	345	396	451	524	598	681
One Second Short Circuit Current Rating of Conductor	kA	7.15	10.0	13.60	17.20	21.50	26.50	34.30	42.90	57.20

FOR ALL CABLES THE MAXIMUM CONDUCTOR OPERATING TEMPERATURE IS 90°C AND LIMITING CONDUCTOR TEMPERATURE AFTER SHORT CIRCUIT IS 250°C.
LONGER DRUM LENGTHS ARE AVAILABLE TO SPECIFIC CUSTOMER REQUIREMENTS.

6/10 (12)kV

**Three Core
Copper Conductors
XLPE Insulated to
IEC 60502-2
Steel Wire Armoured**



- 1.HCC Copper Conductor
- 2.Semiconductive conductor screen
- 3.DFI™ XLPE Insulation
- 4.Semiconductive insulation screen
- 5.Copper tape screen
6. Fillers
7. Tape binder
8. Bedding
9. Galvanised steel wire armour
10. Outer sheath

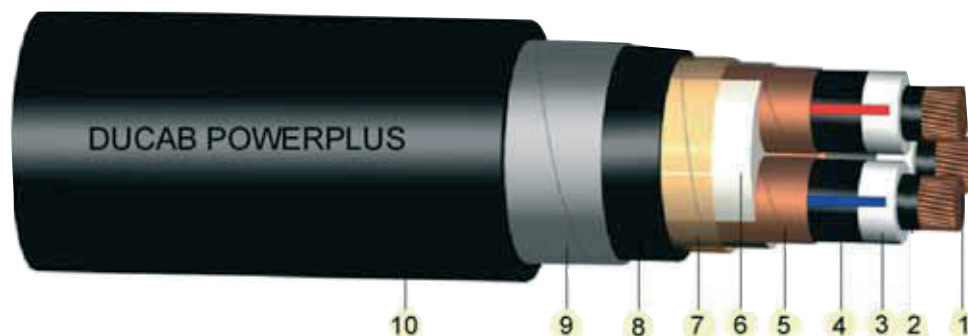
Table 10

Nominal Area of Conductor	mm ²	50	70	95	120	150	185	240	300	400
Conductor Diameter (Max)	mm	8.4	9.9	11.6	13	14.5	16.1	18.4	20.6	23.7
Weight of Conductor (Approx)	Kg/Km	1281	1845	2558	3219	3954	4966	6526	8187	10428
Insulation Thickness (Nominal)	mm	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Separation Sheath Thickness	mm	1.4	1.4	1.5	1.6	1.6	1.7	1.8	1.9	2
Steel Tape Thickness (Nominal)	mm	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.8
Outersheath Thickness (Nominal)	mm	2.6	2.7	2.8	2.9	3	3.1	3.3	3.5	3.7
Approximate Overall Diameter	mm	51.0	55.0	59.0	62.0	66.0	70.0	75.0	80.5	88.0
Approximate Cable Weight	Kg/Km	4050	4910	6010	7030	8120	9530	11810	14190	18680
Standard Drum Length	m	500	500	500	500	400	400	300	250	200
Minimum Bending Radius of Cable (during installation)	mm	612	655	704	744	787	833	899	962	1051
Maximum DC resistance of Conductor at 20°C	ohm/Km	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047
Approximate AC resistance of Conductor at 90°C	ohm/Km	0.493	0.342	0.247	0.196	0.159	0.128	0.098	0.078	0.064
Approximate Reactance at 50 Hertz	ohm/Km	0.11	0.11	0.10	0.10	0.09	0.09	0.09	0.08	0.064
Approximate Impedance at 50 Hertz	ohm/Km	0.51	0.36	0.27	0.22	0.18	0.16	0.13	0.12	0.10
Approximate Capacitance of Cable	µf/Km	0.25	0.29	0.35	0.38	0.41	0.47	0.51	0.54	0.58
Approx. Charging Current per phase at U ₀ = 6kV and f = 50Hz	mA/m	0.47	0.55	0.66	0.72	0.77	0.89	0.96	1.0	1.1
Sustained Current Ratings										
1. Laid Direct, Ground Temp. 30°C & g = 1.2°C m/W, depth of laying = 0.8m, laid singly	A	187	227	267	303	338	383	436	481	534
2. Drawn into Ducts, Ground Temp. = 30°C & g = 1.2°C m/W, depth of laying = 0.8m, laid singly	A	161	191	227	258	294	329	378	418	472
3. Laid singly in Air, Ambient Temp. 35° C	A	203	248	304	345	396	451	524	598	681
One Second Short Circuit Current Rating of Conductor	kA	7.15	10.01	13.60	17.20	21.50	26.50	34.30	42.90	57.20

FOR ALL CABLES THE MAXIMUM CONDUCTOR OPERATING TEMPERATURE IS 90°C AND LIMITING CONDUCTOR TEMPERATURE AFTER SHORT CIRCUIT IS 250°C.
LONGER DRUM LENGTHS ARE AVAILABLE TO SPECIFIC CUSTOMER REQUIREMENTS.

6/10 (12)kV

**Three Core
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XLPE Insulated to IEC
60502-2
Steel Tape Armoured**



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6. Fillers
7. Tape binder
8. Bedding
9. Galvanised steel tape armour
10. Outer sheath