



PT. SUMI INDO KABEL Tbk.

AFFILIATE OF
SUMITOMO ELECTRIC INDUSTRIES, LTD - JAPAN



XLPE Insulated, Copper Tape Shielded and PVC Sheathed Cables

(3.6/6 kV ~ 18/30 kV) XLPE/PVC 1 CORE

According to : IEC 60502-2



Note : Special application upon request

- * Available product in accordance to: SPLN, ICEA/NEMA, AS standard or other requirement.
- * Flame retardant test acc. to IEC 60332-3 cat. A, B or C.
- * Longitudinally Water Blocking characteristic.
- * Anti termite performance.
- * Tin coated Copper conductor.
- * Copper wire screen.
- * Polyethylene/Low Smoke halogen Free sheath.

(A)

XLPE Insulated, Copper Tape Shielded and PVC Sheathed Cables

3.6/6 (7.2) kV XLPE / PVC 1 x (25 - 800) mm²

CONSTRUCTION DATA

No. of Core	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Nom. Cross-section area	mm ²	25	35	50	70	95	120	150	185	240	300	400	500	630	800
No. of Wire	-	7	7	19	19	19	37	37	37	37	61	61	61	61	61
Diameter of Conductor, approx. **)	mm	5.9	7.1	8.1	9.7	11.6	12.9	14.3	16.0	18.3	20.7	23.4	26.5	30.3	34.3
Nom. Thickness of Insulation	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.8	3.0	3.2	3.2	3.2
Nom. Thickness of Copper tape	mm	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nom. Thickness of Outer sheath	mm	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.1	2.2	2.3	2.5
Overall Diameter of cable	mm	17.5	18.5	19.5	21.0	23.0	24.5	26.0	27.5	30.0	33.0	36.5	40.0	44.0	49.0
Weight of cable, approximate	kg/km	500	610	740	955	1230	1475	1755	2105	2670	3295	4130	5210	6600	8380

ELECTRICAL DATA

AC Voltage test for 5 min.	kV	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
Partial Discharge test at max. 10pC	kV	6.23	6.23	6.23	6.23	6.23	6.23	6.23	6.23	6.23	6.23	6.23	6.23	6.23	6.23
DC Resistance at 20°C	Ω / km	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
AC Resistance at 90°C	Ω / km	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0979	0.0789	0.0628	0.0504	0.0409	0.0341
Insulation Resistance at 20°C	M Ω. km	2500	2000	2000	1500	1500	1500	1500	1500	1000	900	900	900	800	700
Capacitance	mF / km	0.266	0.300	0.328	0.373	0.427	0.463	0.502	0.550	0.593	0.615	0.641	0.673	0.755	0.842
Inductance (Trefoil)	mH / km	0.406	0.380	0.364	0.343	0.326	0.317	0.308	0.297	0.287	0.282	0.278	0.271	0.263	0.260
Reactance (Trefoil)	Ω / km	0.128	0.119	0.114	0.108	0.102	0.100	0.0968	0.0932	0.0903	0.0885	0.0871	0.0851	0.0827	0.0816

Current Carrying Capacity :

- Buried direct in ground at 20°C ***) (Trefoil)	A	140	166	196	239	285	323	361	406	469	526	590	* 655	* 740	* 840
(Flat spaced)	A	144	172	203	246	293	332	366	410	470	524	572	* 650	* 730	* 820
- In Air at 30°C (Trefoil)	A	163	198	238	296	361	417	473	543	641	735	845	* 940	* 1080	* 1250
(Flat spaced)	A	196	238	286	356	434	500	559	637	745	846	938	* 1075	* 1235	* 1420
(Flat touching)	A	167	203	243	303	369	426	481	550	647	739	837	* 945	* 1080	* 1250
Short circuit current rating at 1 sec. (approx.)	kA	3.58	5.01	7.15	10.01	13.59	17.16	21.45	26.46	34.32	42.90	57.20	71.50	90.09	114.40

*) typical data

**) Diameter compacted shape

***) Thermal Resistivity of soil : 1.5°K.m/W, Depth of laying : 0.8 m

(A-1)

XLPE Insulated, Copper Tape Shielded and PVC Sheathed Cables

6/10 (12) kV XLPE/PVC 1x (25 - 800) mm²

CONSTRUCTION DATA

No. of Core	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Nom. Cross-section area	mm ²	25	35	50	70	95	120	150	185	240	300	400	500	630	800
No. of Wire	-	7	7	19	19	19	37	37	37	37	61	61	61	61	61
Diameter of Conductor, approx. **)	mm	5.9	7.1	8.1	9.7	11.6	12.9	14.3	16.0	18.3	20.7	23.4	26.5	30.3	34.3
Nom. Thickness of Insulation	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	3.4
Nom. Thickness of Copper tape	mm	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nom. Thickness of Outer sheath	mm	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.0	2.2	2.2	2.4	2.5
Overall Diameter of cable	mm	19.0	20.5	21.5	23.0	25.0	26.0	27.5	29.5	32.0	34.0	37.5	40.5	44.5	49.0
Weight of cable, approximate	kg/km	555	670	800	1025	1305	1550	1835	2190	2765	3360	4195	5235	6630	8415

ELECTRICAL DATA

AC Voltage test for 5 min.	kV	21	21	21	21	21	21	21	21	21	21	21	21	21	21
Partial Discharge test at max. 10pC	kV	10.38	10.38	10.38	10.38	10.38	10.38	10.38	10.38	10.38	10.38	10.38	10.38	10.38	10.38
DC Resistance at 20°C	Ω / km	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
AC Resistance at 90°C	Ω / km	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0978	0.0788	0.0627	0.0503	0.0409	0.0341
Insulation Resistance at 20°C	M.Ω .km	3000	2500	2500	2000	2000	2000	1500	1500	1500	1500	1000	900	800	700
Capacitance	mF / km	0.211	0.236	0.257	0.291	0.330	0.357	0.386	0.421	0.468	0.518	0.573	0.637	0.715	0.797
Inductance (Trefoil)	mH / km	0.423	0.401	0.384	0.361	0.342	0.329	0.319	0.311	0.300	0.288	0.283	0.273	0.265	0.260
Reactance (Trefoil)	Ω / km	0.133	0.126	0.121	0.113	0.108	0.103	0.100	0.0977	0.0943	0.0904	0.0888	0.0859	0.0834	0.0816

Current Carrying Capacity :

- Buried direct in ground at 20°C ***) (Trefoil)	A	140	166	196	239	285	323	361	406	469	526	590	* 655	* 740	* 840
	(Flat spaced) A	144	172	203	246	293	332	366	410	470	524	572	* 650	* 730	* 820
- In Air at 30°C	(Trefoil) A	163	198	238	296	361	417	473	543	641	735	845	* 940	* 1080	* 1250
	(Flat spaced) A	196	238	286	356	434	500	559	637	745	846	938	* 1075	* 1235	* 1420
	(Flat touching) A	167	203	243	303	369	426	481	550	647	739	837	* 945	* 1080	* 1250
Short circuit current rating at 1 sec. (approx.)	kA	3.58	5.01	7.15	10.01	13.59	17.16	21.45	26.46	34.32	42.90	57.20	71.50	90.09	114.40

*) typical data

**) Diameter compacted shape

***) Thermal Resistivity of soil : 1.5°K.m/W, Depth of laying : 0.8 m

XLPE Insulated, Copper Tape Shielded and PVC Sheathed Cables

8.7/15 (17.5) kV XLPE / PVC 1x (25 - 630) mm²

CONSTRUCTION DATA

No. of Core	-	1	1	1	1	1	1	1	1	1	1	1	1	1
Nom. Cross-section area	mm ²	25	35	50	70	95	120	150	185	240	300	400	500	630
No. of Wire	-	7	7	19	19	19	37	37	37	37	61	61	61	61
Diameter of Conductor, approx. **)	mm	5.9	7.1	8.1	9.7	11.6	12.9	14.3	16.0	18.3	20.7	23.4	26.5	30.3
Nom. Thickness of Insulation	mm	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Nom. Thickness of Copper tape	mm	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nom. Thickness of Outer sheath	mm	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.0	2.1	2.1	2.2	2.3	2.4
Overall Diameter of cable	mm	21.5	22.5	23.5	25.0	27.0	28.5	30.0	31.5	34.0	36.5	39.5	43.0	46.5
Weight of cable, approximate	kg/km	630	750	885	1110	1400	1650	1940	2315	2900	3505	4330	5400	6790

ELECTRICAL DATA

AC Voltage test for 5 min.	kV	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
Partial Discharge test at max. 10pC	kV	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1
DC Resistance at 20°C	Ω / km	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
AC Resistance at 90°C	Ω / km	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0977	0.0786	0.0626	0.0501	0.0406
Insulation Resistance at 20°C	M.Ω .km	3500	3000	3000	2500	2500	2000	2000	2000	1500	1500	1500	1500	1000
Capacitance	mF / km	0.173	0.192	0.208	0.234	0.264	0.284	0.307	0.333	0.369	0.407	0.449	0.497	0.556
Inductance (Trefoil)	mH / km	0.447	0.419	0.402	0.378	0.358	0.347	0.337	0.324	0.313	0.302	0.293	0.285	0.274
Reactance (Trefoil)	Ω / km	0.140	0.132	0.126	0.119	0.112	0.109	0.106	0.102	0.0981	0.0948	0.0921	0.0896	0.0861
Current Carrying Capacity :														
- Buried direct in ground at 20°C ***) (Trefoil)	A	140	166	196	239	285	323	361	406	469	526	590	* 655	* 740
(Flat spaced)	A	144	172	203	246	293	332	366	410	470	524	572	* 650	* 730
- In Air at 30°C (Trefoil)	A	163	198	238	296	361	417	473	543	641	735	845	* 940	* 1080
(Flat spaced)	A	196	238	286	356	434	500	559	637	745	846	938	* 1075	* 1235
(Flat touching)	A	167	203	243	303	369	426	481	550	647	739	837	* 945	* 1080
Short circuit current rating at 1 sec. (approx.)	kA	3.58	5.01	7.15	10.01	13.59	17.16	21.45	26.46	34.32	42.90	57.20	71.50	90.09

*) typical data

**) Diameter compacted shape

***) Thermal Resistivity of soil : 1.5°K.m/W, Depth of laying : 0.8 m

XLPE Insulated, Copper Tape Shielded and PVC Sheathed Cables

12/20 (24) kV XLPE / PVC 1 x (35 - 630) mm²

CONSTRUCTION DATA

No. of Core	-	1	1	1	1	1	1	1	1	1	1	1	1
Nom. Cross-section area	mm ²	35	50	70	95	120	150	185	240	300	400	500	630
No. of Wire	-	7	19	19	19	37	37	37	37	61	61	61	61
Diameter of Conductor, approx. **)	mm	7.1	8.1	9.7	11.6	12.9	14.3	16.0	18.3	20.7	23.4	26.5	30.3
Nom. Thickness of Insulation	mm	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Nom. Thickness of Copper tape	mm	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nom. Thickness of Outer sheath	mm	1.8	1.8	1.8	1.9	1.9	2.0	2.0	2.1	2.2	2.3	2.4	2.5
Overall Diameter of cable	mm	25.0	26.0	27.5	29.5	30.5	32.0	34.0	36.5	39.0	42.0	45.0	49.0
Weight of cable, approximate	kg/km	840	975	1205	1500	1755	2065	2430	3025	3655	4495	5555	6975

ELECTRICAL DATA

AC Voltage test for 5 min.	kV	42	42	42	42	42	42	42	42	42	42	42	42
Partial Discharge test at max. 10pC	kV	20.76	20.76	20.76	20.76	20.76	20.76	20.76	20.76	20.76	20.76	20.76	20.76
DC Resistance at 20°C	Ω / km	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283
AC Resistance at 90°C	Ω / km	0.668	0.494	0.342	0.247	0.196	0.159	0.127	0.0976	0.0785	0.0625	0.0500	0.0404
Insulation Resistance at 20°C	M.Ω .km	3500	3500	3000	2500	2500	2500	2000	2000	2000	1500	1500	1500
Capacitance	mF / km	0.165	0.178	0.199	0.224	0.240	0.258	0.279	0.309	0.339	0.373	0.412	0.459
Inductance (Trefoil)	mH / km	0.440	0.422	0.397	0.375	0.361	0.350	0.339	0.327	0.315	0.306	0.295	0.285
Reactance (Trefoil)	Ω / km	0.138	0.133	0.125	0.118	0.113	0.110	0.107	0.103	0.0990	0.0960	0.0925	0.0894
Current Carrying Capacity :													
- Buried direct in ground at 20°C ***) (Trefoil)	A	166	196	239	285	323	361	406	469	526	590	* 655	* 740
(Flat spaced)	A	172	203	246	293	332	366	410	470	524	572	* 650	* 730
- In Air at 30°C (Trefoil)	A	198	238	296	361	417	473	543	641	735	845	* 940	* 1080
(Flat spaced)	A	238	286	356	434	500	559	637	745	846	938	* 1075	* 1235
(Flat touching)	A	203	243	303	369	426	481	550	647	739	837	* 945	* 1080
Short circuit current rating at 1 sec. (approx.)	kA	5.01	7.15	10.01	13.59	17.16	21.45	26.46	34.32	42.90	57.20	71.50	90.09

*) typical data

**) Diameter compacted shape

***) Thermal Resistivity of soil : 1.5°K.m/W, Depth of laying : 0.8 m

XLPE Insulated, Copper Tape Shielded and PVC Sheathed Cables

18/30 (36) kV XLPE / PVC 1 x (50 - 630) mm²

CONSTRUCTION DATA

No. of Core	-	1	1	1	1	1	1	1	1	1	1	1
Nom. Cross-section area	mm ²	50	70	95	120	150	185	240	300	400	500	630
No. of Wire	-	19	19	19	37	37	37	37	61	61	61	61
Diameter of Conductor, approx. **)	mm	8.1	9.7	11.6	12.9	14.3	16.0	18.3	20.7	23.4	26.5	30.3
Nom. Thickness of Insulation	mm	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Nom. Thickness of Copper tape	mm	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nom. Thickness of Outer sheath	mm	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.4	2.5	2.6	2.7
Overall Diameter of cable	mm	31.0	32.5	35.0	36.0	38.0	39.5	42.0	44.5	47.5	50.5	54.5
Weight of cable, approximate	kg/km	1235	1475	1800	2065	2390	2770	3385	4020	4880	5995	7450

ELECTRICAL DATA

AC Voltage test for 5 min.	kV	63	63	63	63	63	63	63	63	63	63	63
Partial Discharge test at max. 10pC	kV	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
DC Resistance 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
AC Resistance at 90°C	Ω / km	0.494	0.342	0.247	0.196	0.159	0.127	0.0974	0.0783	0.0622	0.0497	0.0400
Insulation Resistance at 20°C	M.Ω. km	4000	4000	3500	3500	3000	3000	2500	2500	2000	2000	2000
Capacitance	mF / km	0.138	0.153	0.170	0.182	0.194	0.209	0.229	0.250	0.274	0.300	0.333
Inductance (Trefoil)	mH / km	0.457	0.430	0.409	0.394	0.384	0.369	0.355	0.342	0.330	0.318	0.306
Reactance (Trefoil)	Ω / km	0.144	0.135	0.129	0.124	0.121	0.116	0.111	0.107	0.104	0.0997	0.0961

Current Carrying Capacity :

- Buried direct in ground at 20°C ***) (Trefoil)	A	196	239	285	323	361	406	469	526	590	* 655	* 740
	(Flat spaced) A	203	246	293	332	366	410	470	524	572	* 650	* 730
- In Air at 30°C	(Trefoil) A	238	296	361	417	473	543	641	735	845	* 940	* 1080
	(Flat spaced) A	286	356	434	500	559	637	745	846	938	* 1075	* 1235
	(Flat touching) A	243	303	369	426	481	550	647	739	837	* 945	* 1080
Short circuit current rating at 1 sec. (approx.)	kA	7.15	10.01	13.59	17.16	21.45	26.46	34.32	42.90	57.20	71.50	90.09

*) typical data

**) Diameter compacted shape

***) Thermal Resistivity of soil : 1.5°K.m/W, Depth of laying : 0.8 m



PT. SUMI INDO KABEL Tbk.

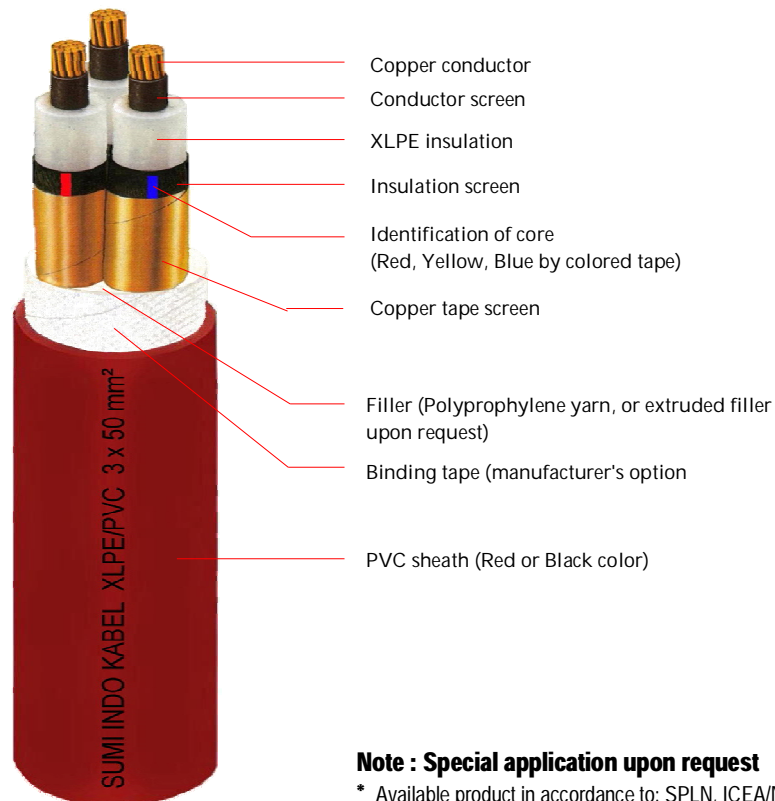
AFFILIATE OF
SUMITOMO ELECTRIC INDUSTRIES, LTD - JAPAN



XLPE Insulated, Copper Tape Shielded and PVC Sheathed Cables

(3.6/6 kV ~ 18/30 kV) XLPE/PVC 3 CORE

According to : IEC 60502-2



Note : Special application upon request

- * Available product in accordance to: SPLN, ICEA/NEMA, AS standard or other requirement.
- * Flame retardant test acc. to IEC 60332-3 cat. A, B or C.
- * Longitudinally Water Blocking characteristic.
- * Anti termite performance.
- * Tin coated Copper conductor.
- * Copper wire screen.
- * Polyethylene/Low Smoke halogen Free sheath.

(B)

XLPE Insulated, Copper Tape Shielded and PVC Sheathed Cables

3.6/6 (7.2) kV XLPE / PVC 3 x (25 - 300) mm²

CONSTRUCTION DATA

No. of Core	-	3	3	3	3	3	3	3	3	3	3
Nom. Cross-section area	mm ²	25	35	50	70	95	120	150	185	240	300
No. of Wire	-	7	7	19	19	19	37	37	37	37	61
Diameter of Conductor, approx. *)	mm	5.9	7.1	8.1	9.7	11.6	12.9	14.3	16.0	18.3	20.7
Nom. Thickness of Insulation	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.8
Nom. Thickness of Copper tape	mm	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nom. Thickness of Outer sheath	mm	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	3.0	3.2
Overall Diameter of cable	mm	34.5	37.0	39.5	43.0	47.5	50.5	54.0	57.5	63.5	69.5
Weight of cable, approximate	kg/km	1580	1955	2375	3090	3985	4780	5700	6840	6895	10695

ELECTRICAL DATA

AC Voltage test for 5 min.	kV	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
Partial Discharge test at max. 10pC	kV	6.23	6.23	6.23	6.23	6.23	6.23	6.23	6.23	6.23	6.23
DC Resistance at 20°C	Ω / km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601
AC Resistance at 90°C	Ω / km	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0981	0.0792
Insulation Resistance at 20°C	MΩ. km	2500	2000	2000	1500	1500	1500	1500	1500	1000	900
Capacitance	mF / km	0.266	0.300	0.328	0.373	0.427	0.463	0.502	0.550	0.593	0.615
Inductance	mH / km	0.360	0.340	0.326	0.309	0.294	0.285	0.277	0.270	0.263	0.258
Reactance	Ω / km	0.113	0.107	0.102	0.0970	0.0922	0.0895	0.0871	0.0847	0.0825	0.0810

Current Carrying Capacity **):

- Buried direct in ground at 20°C	A	129	153	181	221	262	298	334	377	434	489
- In a Buried duct at 20°C	A	112	133	158	193	231	264	297	336	390	441
- In Air at 30°C	A	142	170	204	253	304	351	398	455	531	606
Short circuit current rating at 1 sec. (approx.)	kA	3.58	5.01	7.15	10.01	13.59	17.16	21.45	26.46	34.32	42.90

*) Diameter compacted shape

***) Thermal Resistivity of soil : 1.5°K.m/W, Depth of laying : 0.8 m

Thermal Resistivity of earthenware ducts : 1.2 K.m/W

XLPE Insulated, Copper Tape Shielded and PVC Sheathed Cables

6/10 (12) kV XLPE/PVC 3 x (25 - 300) mm²

CONSTRUCTION DATA

No. of Core	-	3	3	3	3	3	3	3	3	3	3
Nom. Cross-section area	mm ²	25	35	50	70	95	120	150	185	240	300
No. of Wire	-	7	7	19	19	19	37	37	37	37	61
Diameter of Conductor, approx. *)	mm	5.9	7.1	8.1	9.7	11.6	12.9	14.3	16.0	18.3	20.7
Nom. Thickness of Insulation	mm	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Nom. Thickness of Copper tape	mm	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nom. Thickness of Outer sheath	mm	2.2	2.3	2.4	2.5	2.7	2.8	2.9	3.0	3.1	3.3
Overall Diameter of cable	mm	38.5	41.5	43.5	47.5	52.0	55.0	58.0	62.0	67.0	72.0
Weight of cable, approximate	kg/km	1800	2190	2625	3355	4300	5110	6050	7215	9035	10980

ELECTRICAL DATA

AC Voltage test for 5 min.	kV	21	21	21	21	21	21	21	21	21	21
Partial Discharge test at max. 10pC	kV	10.38	10.38	10.38	10.38	10.38	10.38	10.38	10.38	10.38	10.38
DC Resistance at 20°C	Ω / km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601
AC Resistance at 90°C	Ω / km	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0980	0.0791
Insulation Resistance at 20°C	M Ω. km	3000	2500	2500	2000	2000	2000	1500	1500	1500	1500
Capacitance	mF / km	0.211	0.236	0.257	0.291	0.330	0.357	0.386	0.421	0.468	0.518
Inductance	mH / km	0.384	0.362	0.347	0.328	0.311	0.302	0.293	0.284	0.274	0.266
Reactance	Ω / km	0.121	0.114	0.109	0.103	0.0977	0.0947	0.0920	0.0892	0.0862	0.0836

Current Carrying Capacity **):

- Buried direct in ground at 20°C	A	129	153	181	221	262	298	334	377	434	489
- In a Buried duct at 20°C	A	112	133	158	193	231	264	297	336	390	441
- In Air at 30°C	A	142	170	204	253	304	351	398	455	531	606
Short circuit current rating at 1 sec. (approx.)	kA	3.58	5.01	7.15	10.01	13.59	17.16	21.45	26.46	34.32	42.90

*) Diameter compacted shape

***) Thermal Resistivity of soil : 1.5°K.m/W, Depth of laying : 0.8 m

Thermal Resistivity of earthenware ducts : 1.2 K.m/W

XLPE Insulated, Copper Tape Shielded and PVC Sheathed Cables

8.7/15 (17.5) kV XLPE / PVC 3 x (25 - 300) mm²

CONSTRUCTION DATA

No. of Core	-	3	3	3	3	3	3	3	3	3	3
Nom. Cross-section area	mm ²	25	35	50	70	95	120	150	185	240	300
No. of Wire	-	7	7	19	19	19	37	37	37	37	61
Diameter of Conductor, approx. *)	mm	5.9	7.1	8.1	9.7	11.6	12.9	14.3	16.0	18.3	20.7
Nom. Thickness of Insulation	mm	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Nom. Thickness of Copper tape	mm	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nom. Thickness of Outer sheath	mm	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.3	3.5
Overall Diameter of cable	mm	43.5	46.5	49.0	52.5	57.0	60.0	63.0	67.0	72.0	77.5
Weight of cable, approximate	kg/km	2115	2525	2975	3735	4685	5510	6475	7660	9545	11525

ELECTRICAL DATA

AC Voltage test for 5 min.	kV	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
Partial Discharge test at max. 10pC	kV	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1
DC Resistance at 20°C	Ω / km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601
AC Resistance at 90°C	Ω / km	0.927	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0979	0.0789
Insulation Resistance at 20°C	M Ω. km	3500	3000	3000	2500	2500	2000	2000	2000	1500	1500
Capacitance	mF / km	0.173	0.192	0.208	0.234	0.264	0.284	0.307	0.333	0.369	0.407
Inductance	mH / km	0.411	0.387	0.370	0.350	0.331	0.320	0.310	0.301	0.289	0.280
Reactance	Ω / km	0.129	0.121	0.116	0.110	0.104	0.101	0.0975	0.0944	0.0909	0.0879

Current Carrying Capacity **):

- Buried direct in ground at 20°C	A	129	153	181	221	262	298	334	377	434	489
- In a Buried duct at 20°C	A	112	133	158	193	231	264	297	336	390	441
- In Air at 30°C	A	142	170	204	253	304	351	398	455	531	606
Short circuit current rating at 1 sec. (approx.)	kA	3.58	5.01	7.15	10.01	13.59	17.16	21.45	26.46	34.32	42.90

*) Diameter compacted shape

***) Thermal Resistivity of soil : 1.5°K.m/W, Depth of laying : 0.8 m

Thermal Resistivity of earthenware ducts : 1.2 K.m/W

XLPE Insulated, Copper Tape Shielded and PVC Sheathed Cables

12/20 (24) kV XLPE / PVC 3 x (35 - 300) mm²

CONSTRUCTION DATA

No. of Core	-	3	3	3	3	3	3	3	3	3
Nom. Cross-section area	mm ²	35	50	70	95	120	150	185	240	300
No. of Wire	-	7	19	19	19	37	37	37	37	61
Diameter of Conductor, approx. *)	mm	7.1	8.1	9.7	11.6	12.9	14.3	16.0	18.3	20.7
Nom. Thickness of Insulation	mm	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Nom. Thickness of Copper tape	mm	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nom. Thickness of Outer sheath	mm	2.6	2.7	2.8	3.0	3.1	3.2	3.3	3.5	3.6
Overall Diameter of cable	mm	51.5	54.0	57.5	62.0	65.0	68.0	72.0	77.5	82.5
Weight of cable, approximate	kg/km	2870	3340	4120	5125	5975	6960	8170	10095	12075

ELECTRICAL DATA

AC Voltage test for 5 min.	kV	42	42	42	42	42	42	42	42	42
Partial Discharge test at max. 10pC	kV	20.76	20.76	20.76	20.76	20.76	20.76	20.76	20.76	20.76
DC Resistance at 20°C	Ω / km	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601
AC Resistance at 90°C	Ω / km	0.668	0.494	0.342	0.247	0.196	0.159	0.128	0.0978	0.0788
Insulation Resistance at 20°C	M Ω. km	3500	3500	3000	2500	2500	2500	2000	2000	2000
Capacitance	mF / km	0.165	0.178	0.199	0.224	0.240	0.258	0.279	0.309	0.339
Inductance	mH / km	0.408	0.391	0.369	0.349	0.337	0.327	0.316	0.303	0.293
Reactance	Ω / km	0.128	0.123	0.116	0.109	0.106	0.103	0.0991	0.0953	0.0920

Current Carrying Capacity **):

- Buried direct in ground at 20°C	A	153	181	221	262	298	334	377	434	489
- In a Buried duct at 20°C	A	133	158	193	231	264	297	336	390	441
- In Air at 30°C	A	170	204	253	304	351	398	455	531	606
Short circuit current rating at 1 sec. (approx.)	kA	5.01	7.15	10.01	13.59	17.16	21.45	26.46	34.32	42.90

*) Diameter compacted shape

***) Thermal Resistivity of soil : 1.5°K.m/W, Depth of laying : 0.8 m

Thermal Resistivity of earthenware ducts : 1.2 K.m/W

XLPE Insulated, Copper Tape Shielded and PVC Sheathed Cables

18/30 (36) kV XLPE / PVC 3 x (50 - 300) mm²

CONSTRUCTION DATA

No. of Core	-	3	3	3	3	3	3	3	3
Nom. Cross-section area	mm ²	50	70	95	120	150	185	240	300
No. of Wire	-	19	19	19	37	37	37	37	61
Diameter of Conductor, approx. *)	mm	8.1	9.7	11.6	12.9	14.3	16.0	18.3	20.7
Nom. Thickness of Insulation	mm	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Nom. Thickness of Copper tape	mm	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nom. Thickness of Outer sheath	mm	3.1	3.2	3.3	3.4	3.6	3.7	3.8	4.0
Overall Diameter of cable	mm	66.0	69.5	73.5	76.5	80.0	84.0	89.0	94.5
Weight of cable, approximate	kg/km	4370	5205	6250	7150	8220	9495	11465	13560

ELECTRICAL DATA

AC Voltage test for 5 min.	kV	63	63	63	63	63	63	63	63
Partial Discharge test at max. 10pC	kV	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
DC Resistance at 20°C	Ω / km	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601
AC Resistance at 90°C	Ω / km	0.494	0.342	0.247	0.196	0.159	0.127	0.0976	0.0785
Insulation Resistance at 20°C	M Ω. km	4000	4000	3500	3500	3000	3000	2500	2500
Capacitance	mF / km	0.138	0.153	0.170	0.182	0.194	0.209	0.229	0.250
Inductance	mH / km	0.433	0.408	0.385	0.372	0.360	0.347	0.333	0.318
Reactance	Ω / km	0.136	0.128	0.121	0.117	0.113	0.109	0.105	0.100

Current Carrying Capacity **):

- Buried direct in ground at 20°C	A	181	221	262	298	334	377	434	489
- In a Buried duct at 20°C	A	158	193	231	264	297	336	390	441
- In Air at 30°C	A	204	253	304	351	398	455	531	606
Short circuit current rating at 1 sec. (approx.)	kA	7.15	10.01	13.59	17.16	21.45	26.46	34.32	42.90

*) Diameter compacted shape

***) Thermal Resistivity of soil : 1.5°K.m/W, Depth of laying : 0.8 m

Thermal Resistivity of earthenware ducts : 1.2 K.m/W