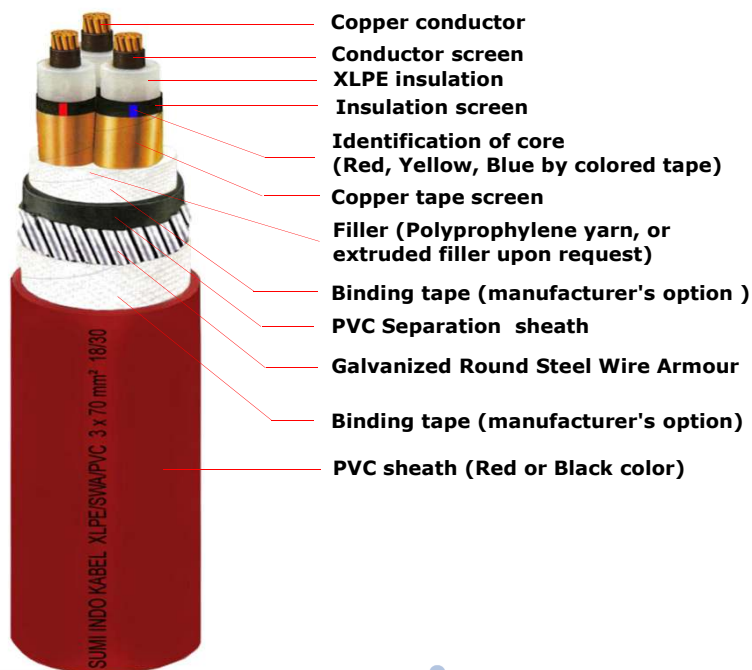


SUMI INDO KABEL

(3.6/6 kV ~ 18/30 kV) Cu/XLPE/CTS/SWA/PVC (N2XSEYRY)

SNI IEC 60502-2 / IEC 60502-2



Special application upon request :

- * Available product in accordance to SPLN, JIS, BS, 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 and anti rodent performance.
- * Tin coated Copper conductor.
- * Copper wire screen.
- * Polyethylene/Low Smoke Free Halogen sheath.

3.6/6 (7.2) kV Cu/XLPE/CTS/SWA/PVC (N2XSEYRY) 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.) ¹⁾	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	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085
Nom. Thickness of Separation Sheath	mm	1.2	1.3	1.3	1.4	1.4	1.5	1.6	1.6	1.7	1.8
Nom. Diameter of Round Steel Wire	mm	2.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.15	3.15
Nom. Thickness of Outer Sheath	mm	2.3	2.4	2.5	2.6	2.7	2.9	3.0	3.1	3.3	3.5
Overall Diameter of Cable	mm	41.0	44.5	47.0	50.5	55.0	58.5	62.0	65.5	71.0	79.0
Weight of Cable (approx.)	kg/km	2970	3810	4360	5265	6385	7360	8485	9775	11905	15090

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	μF/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 ²⁾ :											
- Buried direct in ground at 20°C	A	129	154	181	220	263	298	332	374	431	482
- In a Buried duct at 20°C	A	112	134	158	194	232	264	296	335	387	435
- In Air at 30°C	A	143	172	205	253	307	352	397	453	529	599
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

¹⁾ Diameter compacted shape

²⁾ 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

6/10 (12) kV Cu/XLPE/CTS/SWA/PVC (N2XSEYRY) 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.) ¹⁾	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	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085
Nom. Thickness of Separation Sheath	mm	1.3	1.3	1.4	1.5	1.5	1.6	1.6	1.7	1.8	1.9
Nom. Diameter of Round Steel Wire	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.15	3.15
Nom. Thickness of Outer Sheath	mm	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.4	3.6
Overall Diameter of Cable	mm	46.0	48.5	51.5	55.0	59.5	62.5	65.5	69.5	76.5	82.0
Weight of Cable (approx.)	kg/km	3755	4280	4870	5800	6905	7915	8965	10305	13260	15615

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	MΩ.km	3000	2500	2500	2000	2000	2000	1500	1500	1500	1500
Capacitance	μF/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	0.632	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 ²⁾ :											
- Buried direct in ground at 20°C	A	129	154	181	220	263	298	332	374	431	482
- In a Buried duct at 20°C	A	112	134	158	194	232	264	296	335	387	435
- In Air at 30°C	A	143	172	205	253	307	352	397	453	529	599
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

¹⁾ Diameter compacted shape²⁾ 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

8.7 / 15 (17.5) kV Cu/XLPE/CTS/SWA/PVC (N2XSEYRY) 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.) ¹⁾	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	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085
Nom. Thickness of Separation Sheath	mm	1.4	1.4	1.5	1.5	1.6	1.7	1.7	1.8	1.9	2.0
Nom. Diameter of Round Steel Wire	mm	2.5	2.5	2.5	2.5	2.5	2.5	3.15	3.15	3.15	3.15
Nom. Thickness of Outer Sheath	mm	2.6	2.7	2.8	2.9	3.1	3.2	3.3	3.4	3.6	3.8
Overall Diameter of Cable	mm	51.0	54.0	56.5	60.0	64.5	67.5	72.0	76.0	81.5	87.5
Weight of Cable (approx.)	kg/km	4335	4840	5440	6380	7575	8540	10455	11885	14150	16450

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	15.05	15.05	15.05	15.05	15.05	15.05	15.05	15.05	15.05	15.05
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	MΩ.km	3500	3000	3000	2500	2500	2000	2000	2000	1500	1500
Capacitance	μF/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 ²⁾ :											
- Buried direct in ground at 20°C	A	129	154	181	220	263	298	332	374	431	482
- In a Buried duct at 20°C	A	112	134	158	194	232	264	296	335	387	435
- In Air at 30°C	A	143	172	205	253	307	352	397	453	529	599
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

¹⁾ Diameter compacted shape²⁾ 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

12 / 20 (24) kV Cu/XLPE/CTS/SWA/PVC (N2XSEYRY) 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.) ¹⁾	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	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085
Nom. Thickness of Separation Sheath	mm	1.5	1.6	1.6	1.7	1.8	1.8	1.9	2.0	2.1
Nom. Diameter of Round Steel Wire	mm	2.5	2.5	2.5	2.5	3.15	3.15	3.15	3.15	3.15
Nom. Thickness of Outer Sheath	mm	2.9	3.0	3.1	3.2	3.4	3.5	3.6	3.8	3.9
Overall Diameter of Cable	mm	59.0	62.0	65.0	69.5	74.0	77.5	81.5	87.0	92.0
Weight of Cable (approx.)	kg/km	5495	6120	7055	8215	10030	11255	12715	14985	17345

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	MΩ.km	3500	3500	3000	2500	2500	2500	2000	2000	2000
Capacitance	μF/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 ²⁾ :										
- Buried direct in ground at 20°C	A	154	181	220	263	298	332	374	431	482
- In a Buried duct at 20°C	A	134	158	194	232	264	296	335	387	435
- In Air at 30°C	A	172	205	253	307	352	397	453	529	599
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

¹⁾ Diameter compacted shape²⁾ 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

18 / 30 (36) kV Cu/XLPE/CTS/SWA/PVC (N2XSEYRY) 3 x (50 - 240) 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.) ¹⁾	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	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085
Nom. Thickness of Separation Sheath	mm	1.8	1.8	1.9	2.0	2.0	2.1	2.2	2.3
Nom. Diameter of Round Steel Wire	mm	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15
Nom. Thickness of Outer Sheath	mm	3.4	3.5	3.7	3.8	3.9	4.0	4.2	4.3
Overall Diameter of Cable	mm	75.0	78.5	83.0	86.5	89.5	93.5	99.0	105.0
Weight of Cable (approx.)	kg/km	8520	9570	10930	12070	13255	14845	17185	19685

ELECTRICAL DATA

AC Voltage Test for 5 min.	kV	63	63	63	63	63	63	63	63
Partial Discharge Test at max. 10pC	kV	31.14	31.14	31.14	31.14	31.14	31.14	31.14	31.14
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	MΩ.km	4000	4000	3500	3500	3000	3000	2500	2500
Capacitance	μF/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 ²⁾ :									
- Buried direct in ground at 20°C	A	181	220	263	298	332	374	431	482
- In a Buried duct at 20°C	A	158	194	232	264	296	335	387	435
- In Air at 30°C	A	205	253	307	352	397	453	529	599
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

¹⁾ Diameter compacted shape²⁾ 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