

THREE - CORES CABLE

COPPER OR ALUMINIUM CONDUCTOR, XLPE INSULATED
 COPPER TAPE SCREENED, DOUBLE STEEL TAPES ARMoured AND PVC SHEATHED

Type :
N2XSEBY
NA2XSEBY

Nominal Voltage (max system voltage) :
 3.5/6 kV (7.2 kV)
 6/10 kV (12 kV)
 8.7/15 kV (17.5 kV)
 12/20 kV (24 kV)
 18/30 kV (36 kV)

Application :
 Suitable for Distribution indoor and outdoor Installation, Direct Burial or on Trays.

Specification :
 IEC 60502-2 : 2005



CONSTRUCTION

- 1. Conductor : Copper or Aluminium (Compact Circular Stranded)
- 2. Conductor Screen : Extruded Semiconductive Compound
- 3. Insulation : Extruded Crosslinked Polyethylene (XLPE)
- 4. Insulation Screen : Extruded Strippable Semiconductive Compound
- 5. Metallic Screen : Helicaly Overlapped Copper Tape
- 6. Inner Sheath : Extruded PVC 90°C Grade
- 7. Armour : Helicaly Overlapped Galvanized Steel Tape (Double Tape)
- 8. Outer Sheath : Extruded PVC 90°C Grade

N2XSEBY & NA2XSEBY

COPPER OR ALUMINIUM CONDUCTOR, XLPE INSULATED,
 COPPER TAPE SCREENED, DOUBLE STEEL TAPES ARMoured AND PVC SHEATHED

Nominal Voltage : 3.6/6 kV
 Maximum System Voltage : 7.2 kV
 Specification : IEC 60502-2 : 2005
 Other specifications are available on request

N2XSEBY - COPPER CONDUCTOR

3 CORES

Nominal cross sectional area		mm ²	10	16	25	35	50	70	95	120	150	185	240	300	400
Conductor	Approx. diameter	mm	3.7	4.6	5.8	6.9	8.0	9.6	11.3	12.7	14.1	15.8	18.1	20.3	23.2
	Max. DC resistance at 20°C	Ohm/km	1.830	1.150	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047
Insulation	Nominal thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.8	3.0
	Min. DC resistance at 20°C	m.ohm.km	3700	3200	2800	2500	2200	1900	1700	1500	1400	1300	1200	1100	1100
Nominal sheath thickness		mm	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	3.0	3.2	3.4	3.7
Overall diameter	approx.	mm	32.2	34.4	38.4	40.9	43.7	47.4	51.5	54.9	58.1	62.3	68.4	74.5	83.9
Cable Net. Weight	approx.	kg/km	1503	1807	2582	3033	3597	4461	5530	6507	7554	8967	11159	13526	17600
Standard length per reel		m	1000	1000	1000	1000	1000	1000	500	500	500	500	300	300	250
Minimum bending radius		mm	386	413	461	491	524	569	618	659	697	748	821	894	1007
Capacitance		µF/km	0.172	0.195	0.225	0.253	0.280	0.320	0.362	0.397	0.432	0.474	0.513	0.531	0.560
Inductance		mH/km	0.149	0.131	0.114	0.101	0.091	0.080	0.071	0.064	0.059	0.054	0.050	0.048	0.046
Current carrying capacity at 30°C	in air	A	95	106	133	172	205	256	312	359	409	468	552	627	758
	in ground	A	92	104	132	170	201	245	294	334	375	424	492	552	623
Short circuit current at 1 sec.		kA	1.4	2.3	3.6	5.0	7.1	9.9	13.5	17.0	21.3	26.3	34.1	42.6	56.8
AC voltage test		kV/5 min	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

NA2XSEBY - ALUMINIUM CONDUCTOR

3 CORES

Nominal cross sectional area		mm ²	10	16	25	35	50	70	95	120	150	185	240	300	400
Conductor	Approx. diameter	mm	3.6	4.6	5.8	6.8	7.9	9.6	11.3	12.7	14.0	15.7	18.0	20.1	22.9
	Max. DC resistance at 20°C	Ohm/km	3.08	1.91	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Insulation	Nominal thickness	mm	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.8	3.0
	Min. DC resistance at 20°C	m.ohm.km	3700	3200	2800	2500	2200	1900	1700	1500	1400	1300	1200	1200	1100
Nominal sheath thickness		mm	2.0	2.0	2.2	2.3	2.4	2.5	2.6	2.7	2.8	3.0	3.2	3.4	3.6
Overall diameter	approx.	mm	32.1	34.2	38.3	40.8	43.6	47.3	51.3	54.9	57.9	62.2	68.1	74.2	83.1
Cable Net. Weight	approx.	kg/km	1314	1498	2114	2394	2733	3218	3799	4343	4857	5607	6736	7962	10432
Standard length per reel		m	1000	1000	1000	1000	1000	1000	500	500	500	500	300	250	200
Minimum bending radius		mm	385	410	460	490	523	568	616	659	695	746	817	890	997
Capacitance		µF/km	0.169	0.195	0.225	0.250	0.278	0.320	0.362	0.397	0.429	0.471	0.511	0.526	0.554
Inductance		mH/km	0.151	0.131	0.114	0.102	0.092	0.080	0.071	0.064	0.060	0.054	0.050	0.049	0.046
Current carrying capacity at 30°C	in air	A	72	83	102	132	159	198	239	277	314	360	420	479	591
	in ground	A	70	82	101	130	155	190	228	259	291	330	384	412	493
Short circuit current at 1 sec.		kA	0.9	1.5	2.3	3.2	4.6	6.4	8.7	11.0	13.8	17.0	22.1	27.6	36.8
AC voltage test		kV/5 min	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

N2XSEBY & NA2XSEBY

COPPER OR ALUMINIUM CONDUCTOR, XLPE INSULATED,

COPPER TAPE SCREENED, DOUBLE STEEL TAPES ARMoured AND PVC SHEATHED

Nominal Voltage : 6/10 kV
 Maximum System Voltage : 12 kV
 Specification : IEC 60502-2 : 2005
 Other specifications are available on request

N2XSEBY - COPPER CONDUCTOR

3 CORES

Nominal cross sectional area		mm ²	16	25	35	50	70	95	120	150	185	240	300	400
Conductor	Approx. diameter	mm	4.6	5.8	6.9	8.0	9.6	11.3	12.7	14.1	15.8	18.1	20.3	23.2
	Max. DC resistance at 20°C	Ohm/km	1.150	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047
Insulation	Nominal thickness	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
	Min. DC resistance at 20°C	m.ohm.km	4000	3500	3100	2800	2500	2200	2000	1900	1700	1500	1400	1200
Nominal sheath thickness		mm	2.2	2.3	2.4	2.5	2.6	2.8	2.9	3.0	3.1	3.3	3.5	3.7
Overall diameter	approx.	mm	39.7	42.7	45.2	48.0	51.7	56.0	59.4	62.6	66.6	72.2	77.5	85.6
Cable Net. Weight	approx.	kg/km	2489	2990	3461	4048	4943	6073	7080	8154	9573	11748	14019	17920
Standard length per reel		m	1000	1000	1000	1000	1000	500	500	500	300	300	300	250
Minimum bending radius		mm	476	512	542	576	620	672	713	751	799	866	930	1027
Capacitance		µF/km	0.158	0.181	0.201	0.222	0.252	0.284	0.310	0.335	0.367	0.409	0.450	0.503
Inductance		mH/km	0.162	0.142	0.127	0.115	0.101	0.090	0.083	0.076	0.070	0.062	0.057	0.051
Current carrying capacity at 30°C	in air	A	108	134	173	206	257	313	360	410	469	553	608	686
	in ground		98	127	169	200	243	291	331	372	420	487	545	602
Short circuit current at 1 sec.		kA	2.3	3.6	5.0	7.1	9.9	13.5	17.0	21.3	26.3	34.1	42.6	56.8
AC voltage test		kV/5 min	21	21	21	21	21	21	21	21	21	21	21	21

NA2XSEBY - ALUMINIUM CONDUCTOR

3 CORES

Nominal cross sectional area		mm ²	16	25	35	50	70	95	120	150	185	240	300	400
Conductor	Approx. diameter	mm	4.6	5.8	6.8	7.9	9.6	11.3	12.7	14.0	15.7	18.0	20.1	22.9
	Max. DC resistance at 20°C	Ohm/km	1.91	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Insulation	Nominal thickness	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
	Min. DC resistance at 20°C	m.ohm.km	4000	3500	3200	2900	2500	2200	2000	1900	1700	1500	1400	1200
Nominal sheath thickness		mm	2.2	2.3	2.4	2.5	2.6	2.8	2.9	3.0	3.1	3.3	3.4	3.7
Overall diameter	approx.	mm	39.7	42.5	45.1	47.9	51.6	55.8	59.4	62.4	66.5	72.0	77.0	85.0
Cable Net. Weight	approx.	kg/km	2195	2521	2822	3184	3699	4341	4916	5456	6211	7323	8415	10790
Standard length per reel		m	1000	1000	1000	1000	1000	500	500	500	300	300	300	250
Minimum bending radius		mm	476	510	541	575	619	670	713	749	798	864	924	1020
Capacitance		µF/km	0.158	0.181	0.199	0.220	0.252	0.284	0.310	0.334	0.365	0.407	0.446	0.497
Inductance		mH/km	0.162	0.142	0.128	0.116	0.101	0.090	0.083	0.077	0.070	0.063	0.057	0.051
Current carrying capacity at 30°C	in air	A	108	123	139	160	199	242	280	318	365	431	482	545
	in ground		103	122	137	153	189	226	257	288	327	380	426	493
Short circuit current at 1 sec.		kA	1.5	2.3	3.2	4.6	6.4	8.7	11.0	13.8	17.0	22.1	27.6	36.8
AC voltage test		kV/5 min	21	21	21	21	21	21	21	21	21	21	21	21

N2XSEBY & NA2XSEBY

COPPER OR ALUMINIUM CONDUCTOR, XLPE INSULATED,

COPPER TAPE SCREENED, DOUBLE STEEL TAPES ARMoured AND PVC SHEATHED

Nominal Voltage : 8.7/15 kV
 Maximum System Voltage : 17.5 kV
 Specification : IEC 60502-2 : 2005
 Other specifications are available on request

N2XSEBY - COPPER CONDUCTOR

3 CORES

Nominal cross sectional area		mm ²	16	25	35	50	70	95	120	150	185	240	300	400
Conductor	Approx. diameter	mm	4.6	5.8	6.9	8.0	9.6	11.3	12.7	14.1	15.8	18.1	20.3	23.2
	Max. DC resistance at 20°C	Ohm/km	1.150	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047
Insulation	Nominal thickness	mm	5.1	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
	Min. DC resistance at 20°C	m.ohm.km	5300	4300	3900	3500	3100	2800	2500	2400	2200	1900	1800	1600
Nominal sheath thickness		mm	2.5	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.3	3.5	3.7	3.9
Overall diameter	approx.	mm	48.1	48.1	50.5	53.3	57.0	61.1	64.5	67.8	72.0	77.6	84.1	91.0
Cable Net. Weight	approx.	kg/km	3338	3549	4045	4662	5595	6740	7781	8887	10380	12613	15717	18962
Standard length per reel		m	1000	1000	1000	1000	500	500	500	500	300	300	300	250
Minimum bending radius		mm	577	577	606	640	684	733	774	814	864	931	1009	1092
Capacitance		µF/km	0.122	0.149	0.165	0.181	0.205	0.229	0.249	0.269	0.293	0.325	0.356	0.397
Inductance		mH/km	0.210	0.171	0.154	0.141	0.125	0.112	0.103	0.095	0.087	0.079	0.072	0.064
Current carrying capacity at 30°C	in air	A	108	134	173	206	257	313	360	410	469	553	629	714
	in ground		98	127	164	194	236	283	322	362	409	474	533	596
Short circuit current at 1 sec.		kA	2.3	3.6	5.0	7.1	9.9	13.5	17.0	21.3	26.3	34.1	42.6	56.8
AC voltage test		kV/5 min	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5

NA2XSEBY - ALUMINIUM CONDUCTOR

3 CORES

Nominal cross sectional area		mm ²	16	25	35	50	70	95	120	150	185	240	300	400
Conductor	Approx. diameter	mm	4.6	5.8	6.8	7.9	9.6	11.3	12.7	14.0	15.7	18.0	20.1	22.9
	Max. DC resistance at 20°C	Ohm/km	1.91	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Insulation	Nominal thickness	mm	5.1	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
	Min. DC resistance at 20°C	m.ohm.km	5300	4300	3900	3500	3100	2800	2500	2400	2200	2000	1800	1600
Nominal sheath thickness		mm	2.5	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.3	3.5	3.7	3.9
Overall diameter	approx.	mm	48.0	47.9	50.4	53.0	56.9	61.0	64.5	67.6	71.8	77.4	83.7	90.4
Cable Net. Weight	approx.	kg/km	3043	3078	3405	3769	4350	5006	5617	6186	7017	8186	10144	11826
Standard length per reel		m	1000	1000	1000	1000	500	500	500	500	300	300	300	250
Minimum bending radius		mm	576	575	605	636	683	732	774	811	862	929	1004	1085
Capacitance		µF/km	0.122	0.149	0.164	0.180	0.205	0.229	0.249	0.267	0.291	0.324	0.353	0.392
Inductance		mH/km	0.210	0.171	0.156	0.142	0.125	0.112	0.103	0.096	0.088	0.079	0.072	0.065
Current carrying capacity at 30°C	in air	A	102	122	139	161	204	242	282	319	365	425	481	552
	in ground		92	108	127	146	179	214	246	272	308	358	398	445
Short circuit current at 1 sec.		kA	1.5	2.3	3.2	4.6	6.4	8.7	11.0	13.8	17.0	22.1	27.6	36.8
AC voltage test		kV/5 min	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5

N2XSEBY & NA2XSEBY

COPPER OR ALUMINIUM CONDUCTOR, XLPE INSULATED,

COPPER TAPE SCREENED, DOUBLE STEEL TAPES ARMoured AND PVC SHEATHED

Nominal Voltage : 12/20 kV
 Maximum System Voltage : 24 kV
 Specification : IEC 60502-2 : 2005
 Other specifications are available on request

N2XSEBY - COPPER CONDUCTOR

3 CORES

Nominal cross sectional area		mm ²	16	25	35	50	70	95	120	150	185	240	300	400
Conductor	Approx. diameter	mm	4.6	5.8	6.9	8.0	9.6	11.3	12.7	14.1	15.8	18.1	20.3	23.2
	Max. DC resistance at 20°C	Ohm/km	1.150	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047
Insulation	Nominal thickness	mm	6.6	6.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
	Min. DC resistance at 20°C	m.ohm.km	6100	5100	4400	4000	3600	3200	3000	2700	2500	2300	2100	1900
Nominal sheath thickness		mm	2.7	2.7	2.7	2.8	3.0	3.1	3.2	3.3	3.4	3.7	3.8	4.1
Overall diameter	approx.	mm	55.2	55.1	55.2	57.9	61.9	66.0	69.2	72.7	76.7	83.7	88.8	95.9
Cable Net. Weight	approx.	kg/km	4160	4372	4606	5218	6244	7428	8466	9638	11135	14233	16618	19970
Standard length per reel		m	1000	1000	1000	500	500	500	500	300	300	300	300	250
Minimum bending radius		mm	662	661	662	695	743	792	830	872	920	1004	1066	1151
Capacitance		µF/km	0.105	0.124	0.145	0.158	0.177	0.197	0.214	0.230	0.250	0.277	0.302	0.336
Inductance		mH/km	0.244	0.206	0.177	0.162	0.144	0.129	0.119	0.111	0.102	0.092	0.085	0.076
Current carrying capacity at 30°C	in air	A	108	134	173	206	257	313	360	410	469	553	629	760
	in ground		98	127	164	194	236	283	322	362	409	474	533	596
Short circuit current at 1 sec.		kA	2.3	3.6	5.0	7.1	9.9	13.5	17.0	21.3	26.3	34.1	42.6	56.8
AC voltage test		kV/5 min	42	42	42	42	42	42	42	42	42	42	42	42

NA2XSEBY - ALUMINIUM CONDUCTOR

3 CORES

Nominal cross sectional area		mm ²	16	25	35	50	70	95	120	150	185	240	300	400
Conductor	Approx. diameter	mm	4.6	5.8	6.8	7.9	9.6	11.3	12.7	14.0	15.7	18.0	20.1	22.9
	Max. DC resistance at 20°C	Ohm/km	1.91	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Insulation	Nominal thickness	mm	6.6	6.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
	Min. DC resistance at 20°C	m.ohm.km	6100	5100	4400	4000	3600	3200	3000	2800	2500	2300	2100	1900
Nominal sheath thickness		mm	2.7	2.7	2.7	2.8	2.9	3.1	3.2	3.3	3.4	3.7	3.8	4.0
Overall diameter	approx.	mm	55.1	55.0	55.1	57.8	61.6	65.9	69.3	72.5	76.5	83.5	88.5	95.1
Cable Net. Weight	approx.	kg/km	3864	3898	3965	4352	4968	5693	6302	6936	7770	9803	11042	12783
Standard length per reel		m	1000	1000	1000	500	500	500	500	300	300	300	300	250
Minimum bending radius		mm	661	660	661	694	739	791	832	870	918	1002	1062	1141
Capacitance		µF/km	0.105	0.124	0.144	0.157	0.177	0.197	0.214	0.229	0.249	0.276	0.300	0.332
Inductance		mH/km	0.244	0.206	0.178	0.163	0.144	0.129	0.119	0.112	0.103	0.093	0.085	0.077
Current carrying capacity at 30°C	in air	A	102	122	139	161	204	242	282	319	365	425	481	552
	in ground		92	108	127	148	179	214	246	272	308	358	398	445
Short circuit current at 1 sec.		kA	1.5	2.3	3.2	4.6	6.4	8.7	11.0	13.8	17.0	22.1	27.6	36.8
AC voltage test		kV/5 min	42	42	42	42	42	42	42	42	42	42	42	42

N2XSEBY & NA2XSEBY

COPPER OR ALUMINIUM CONDUCTOR, XLPE INSULATED,

COPPER TAPE SCREENED, DOUBLE STEEL TAPES ARMoured AND PVC SHEATHED

Nominal Voltage : 18/30 kV
 Maximum System Voltage : 36 kV
 Specification : IEC 60502-2 : 2005
 Other specifications are available on request

N2XSEBY - COPPER CONDUCTOR

3 CORES

Nominal cross sectional area		mm ²	25	35	50	70	95	120	150	185	240	300	400
Conductor	Approx. diameter	mm	5.8	6.9	8.0	9.6	11.3	12.7	14.1	15.8	18.1	20.3	23.2
	Max. DC resistance at 20°C	Ohm/km	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.047
Insulation	Nominal thickness	mm	9.1	8.6	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
	Min. DC resistance at 20°C	m.ohm.km	6600	5900	5200	4700	4200	3900	3700	3400	3100	2800	2600
Nominal sheath thickness		mm	3.2	3.2	3.2	3.3	3.5	3.6	3.7	3.9	4.1	4.2	4.5
Overall diameter	approx.	mm	70.1	70.2	70.1	73.7	78.0	82.6	85.9	90.1	95.7	100.8	107.9
Cable Net. Weight	approx.	kg/km	4372	4606	5218	6244	7428	8466	9638	11135	14233	16618	19970
Standard length per reel		m	500	500	500	500	300	300	300	300	250	200	200
Minimum bending radius		mm	841	842	841	884	936	991	1031	1081	1148	1210	1295
Capacitance		µF/km	0.098	0.110	0.124	0.138	0.152	0.164	0.175	0.189	0.208	0.226	0.249
Inductance		mH/km	0.262	0.233	0.206	0.186	0.168	0.156	0.146	0.135	0.123	0.113	0.102
Current carrying capacity at 30°C	in air	A	145	173	207	258	314	361	411	470	554	630	766
	in ground		142	172	203	247	296	336	377	426	493	555	626
Short circuit current at 1 sec.		kA	3.6	5.0	7.1	9.9	13.5	17.0	21.3	26.3	34.1	42.6	56.8
AC voltage test		kV/5 min	63	63	63	63	63	63	63	63	63	63	63

NA2XSEBY - ALUMINIUM CONDUCTOR

3 CORES

Nominal cross sectional area		mm ²	25	35	50	70	95	120	150	185	240	300	400
Conductor	Approx. diameter	mm	5.8	6.8	7.9	9.6	11.3	12.7	14.0	15.7	18.0	20.1	22.9
	Max. DC resistance at 20°C	Ohm/km	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164	0.125	0.100	0.0778
Insulation	Nominal thickness	mm	9.1	8.6	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
	Min. DC resistance at 20°C	m.ohm.km	6600	5900	5200	4700	4200	3900	3700	3400	3100	2800	2600
Nominal sheath thickness		mm	3.2	3.2	3.2	3.3	3.5	3.6	3.7	3.9	4.0	4.2	4.4
Overall diameter	approx.	mm	70.2	70.3	70.2	73.8	78.1	81.7	84.7	88.7	94.3	99.5	106.1
Cable Net. Weight	approx.	kg/km	6283	6352	6388	7093	7922	8686	9344	10303	11692	13062	14920
Standard length per reel		m	500	500	500	500	300	300	300	300	250	200	200
Minimum bending radius		mm	842	844	842	886	937	980	1016	1064	1132	1194	1273
Capacitance		µF/km	0.098	0.109	0.123	0.138	0.152	0.164	0.174	0.188	0.207	0.224	0.247
Inductance		mH/km	0.262	0.235	0.207	0.186	0.168	0.156	0.146	0.136	0.123	0.114	0.103
Current carrying capacity at 30°C	in air	A	126	139	162	205	246	283	320	365	426	482	594
	in ground		123	136	155	187	224	256	284	322	373	415	496
Short circuit current at 1 sec.		kA	2.3	3.2	4.6	6.4	8.7	11.0	13.8	17.0	22.1	27.6	36.8
AC voltage test		kV/5 min	63	63	63	63	63	63	63	63	63	63	63