

THREE - CORES CABLE

COPPER OR ALUMINIUM CONDUCTOR, XLPE INSULATED
COPPER TAPE SCREENED, FLAT STEEL WIRE & TAPE ARMoured AND PVC SHEATHED

Type :
N2XSEFGbY
NA2XSEFGbY

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 : Galvanized Flat Steel Wire and Tape
8. Outer Sheath : Extruded PVC 90°C Grade

N2XSEFGbY & NA2XSEFGbY

COPPER OR ALUMINIUM CONDUCTOR, XLPE INSULATED,
COPPER TAPE SCREENED, STEEL FLAT & TAPE 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

N2XSEFGbY - 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	1200	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	3.6
Overall diameter	approx.	mm	33.6	35.8	38.6	41.1	43.9	47.6	51.7	55.1	58.3	62.5	68.6	74.7	82.7
Cable Net. Weight	approx.	kg/km	1949	2301	2752	3227	3810	4684	5782	6772	7832	9250	11476	13876	17170
Standard length per reel		m	1000	1000	1000	1000	1000	1000	500	500	500	500	300	300	250
Minimum bending radius		mm	403	430	463	493	527	571	620	661	700	750	823	896	992
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

NA2XSEFGbY - 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	2.1	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	33.5	35.8	38.5	41.0	43.8	47.5	51.5	55.1	58.1	62.4	68.3	74.4	82.1
Cable Net. Weight	approx.	kg/km	1760	2008	2286	2589	2947	3441	4053	4607	5138	5892	7056	8316	10055
Standard length per reel		m	1000	1000	1000	1000	1000	1000	500	500	500	500	300	300	250
Minimum bending radius		mm	402	430	462	492	526	570	618	661	697	749	820	893	985
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

N2XSEFGbY & NA2XSEFGbY

COPPER OR ALUMINIUM CONDUCTOR, XLPE INSULATED,
COPPER TAPE SCREENED, STEEL FLAT & TAPE 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

N2XSEFGbY - 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	39.9	42.9	45.4	48.2	51.9	56.2	59.6	62.8	66.8	72.4	77.7	84.6
Cable Net. Weight	approx.	kg/km	2668	3187	3682	4263	5193	6326	7371	8460	9883	12098	14386	17516
Standard length per reel		m	1000	1000	1000	1000	1000	500	500	500	300	300	300	250
Minimum bending radius		mm	479	515	545	578	623	674	715	754	802	869	932	1015
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

NA2XSEFGbY - 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	3.5	3.7
Overall diameter	approx.	mm	39.9	42.7	45.3	48.1	51.8	56.0	59.6	62.6	66.7	72.2	77.4	84.0
Cable Net. Weight	approx.	kg/km	2375	2720	3044	3399	3950	4595	5207	5764	6523	7676	8824	10399
Standard length per reel		m	1000	1000	1000	1000	1000	500	500	500	300	300	300	250
Minimum bending radius		mm	479	512	544	577	622	672	715	751	800	866	929	1008
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

N2XSEFGbY & NA2XSEFGbY

COPPER OR ALUMINIUM CONDUCTOR, XLPE INSULATED,
COPPER TAPE SCREENED, STEEL FLAT & TAPE 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

N2XSEFGbY - 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	2600	2400	2200	2000	1800	1600
Nominal sheath thickness		mm	2.5	2.5	2.6	2.7	2.8	2.9	3.0	3.2	3.3	3.5	3.6	3.9
Overall diameter	approx.	mm	48.3	48.3	50.7	53.5	57.2	61.3	64.7	68.2	72.2	77.8	82.9	90.0
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	580	580	608	642	686	736	776	818	866	934	995	1080
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

NA2XSEFGbY - 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	3600	3100	2800	2600	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	3.6	3.8
Overall diameter	approx.	mm	51.8	51.7	54.2	56.8	60.7	65.0	68.5	71.6	76.9	82.5	87.6	94.3
Cable Net. Weight	approx.	kg/km	3283	3294	3644	4030	4617	5304	5925	6511	7345	8556	9717	11358
Standard length per reel		m	1000	1000	1000	1000	500	500	500	500	300	300	300	250
Minimum bending radius		mm	622	620	650	682	728	780	822	859	923	990	1051	1132
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	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	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5

N2XSEFGbY & NA2XSEFGbY

COPPER OR ALUMINIUM CONDUCTOR, XLPE INSULATED,
COPPER TAPE SCREENED, STEEL FLAT & TAPE 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

N2XSEFGbY - 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	6200	5200	4400	4100	3600	3300	3000	2800	2600	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	3.6	3.8	4.0
Overall diameter	approx.	mm	55.4	55.3	55.4	58.1	62.1	66.2	69.4	72.9	76.9	82.5	87.8	94.7
Cable Net. Weight	approx.	kg/km	4421	4632	4865	5500	6532	7746	8799	9983	11510	13807	16199	19489
Standard length per reel		m	1000	1000	1000	500	500	500	500	300	300	300	300	250
Minimum bending radius		mm	665	664	665	697	745	794	833	875	923	990	1054	1136
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

NA2XSEFGbY - 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	3.0	3.1	3.2	3.3	3.4	3.6	3.8	4.0
Overall diameter	approx.	mm	55.3	55.2	55.3	58.0	62.0	66.1	69.5	72.7	76.7	82.3	87.5	94.1
Cable Net. Weight	approx.	kg/km	4125	4161	4225	4635	5287	6013	6635	7283	8148	9382	10631	12335
Standard length per reel		m	1000	1000	1000	500	500	500	500	300	300	300	300	250
Minimum bending radius		mm	664	662	664	696	744	793	834	872	920	988	1050	1129
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

N2XSEFGbY & NA2XSEFGbY

COPPER OR ALUMINIUM CONDUCTOR, XLPE INSULATED,
COPPER TAPE SCREENED, STEEL FLAT & TAPE 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

N2XSEFGbY - 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	5800	5200	4600	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	3.8	4.0	4.2	4.4
Overall diameter	approx.	mm	70.3	70.4	70.3	73.9	78.2	81.6	84.9	88.9	94.5	99.8	106.7
Cable Net. Weight	approx.	kg/km	6759	7020	7255	8340	9658	10850	12075	13669	16123	18638	22060
Standard length per reel		m	500	500	500	500	300	300	300	300	250	200	200
Minimum bending radius		mm	844	845	844	887	938	979	1019	1067	1134	1198	1280
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

NA2XSEFGbY - 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	3.8	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	1065	1131	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